Phase 2 Mass Grading and Drainage Improvements for Project Connect at the Blythewood Business Park

Comprehensive Stormwater Pollution Prevention Plan (C-SWPPP) For Construction Activities:

Project/Site Name:

Phase 2 Mass Grading and Drainage improvements for Project Connect at the Blythewood Business Park

Project Address/Location:
Community Road
Blythewood, SC 29016

Primary Permittee:

Richland County Economic Development and State of South Carolina

Permittee/Owner Contact:
Jeff Ruble
1201 Main Street Suite 1110
Columbia, SC 29201
(803)576-1368
ruble.jeffrey@richlandcountysc.gov

SWPPP Preparer:

Thomas & Hutton
Brad Sanderson, P.E.
1501 Main Street, Suite 400
Columbia, SC 29201
(803) 451-6782
sanderson.b@tandh.com

Day-to-Day Operator:

To Be Determined

C-SWPPP Preparation Date:

12/28/2023

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C-SWPPP is acronym for Comprehensive Storm Water Pollution Prevention Plan
OS-SWPPP is acronym for On-Site Storm Water Pollution Prevention Plan

1.1 Narrative (CGP Section 3.2.1)

Construction Activities and BMP Summary

In conjunction with the State of South Carolina, Richland County proposes to mass grade the Project Connect site located in Blythewood, South Carolina, encompassing over 1,629 acres. The site is located immediately west of interstate 77 and is bounded to the North by Blythewood Road and to the East by Community Road. The site lies approximately 4.2 miles southwest of the town center of Blythewood, South Carolina. The project will eventually consist of industrial facilities, and associated roads and parking areas in later phases on construction. For the purposes of this report and resulting permit, Phase 2 of the project encompasses all proposed disturbed areas, including disturbance of jurisdictional waters within the project limits, which the previous phase had excluded. The total area of disturbance for the Phase 2 Mass Grading project is 1350.0 acres.

The construction activities will occur in accordance with the approved three-phase Erosion Prevention and Sediment Control Plan. The installation of perimeter controls, sediment control BMPs, and construction entrances will be completed prior to any land disturbance. The bulk of the construction activities, grading, and the implementation of internal stormwater management BMPs will occur next. The last construction activities to occur will be the final stabilization of the site, removal of temporary sediment controls and conversion of the sediment controls, including the conversion of the sediment basins into permanent water quality and quantity control structures.

Currently, there is an existing ±360,000 square-foot mass graded pad within the Project Connect limits. There are also two (2) existing sediment basins (sediment basin A and B) that are associated with the 360,000 SF mass graded pad. These will be utilized for sediment trapping during construction. In addition to the existing sediment basins, perimeter control Best Management Practices (BMPs) such as silt fence, and fourteen (14) additional temporary sediment basins will be installed prior to the initiation of the clearing/grubbing and grading of the project. A total of fourteen (14) sediment basins will be the primary sediment control BMPs utilized in the initial phase of construction.

Once the perimeter controls and sediment control BMPs of the initial phase of construction are installed, mass grading of the site can commence. The mass grading of the site will cause the removal of four (4) temporary sediment basins (sediment basins 2, 4, 5, and 11) and the addition of 7 temporary sediment basins as site is brought to finished grade. During the construction phase twelve (12) temporary sedimentation basins will be the primary sediment control BMPs utilized in the construction phase.

The temporary sediment basins will be the primary sediment control BMPs utilized for the remainder of the construction, until final stabilization is reached. Once final stabilization of the site is reached, the temporary sediment controls for the nine (9) permanent detention ponds can be removed and the nine (9) detention ponds can be converted into permanent water quality and quantity control structures. The five (5) remaining temporary ponds from the construction phase will be removed and stabilized. Detailed information and calculations for the proposed drainage system can be found in Appendix D of this report. This SWPPP has been prepared for the site preparation for the proposed project site as described above. All hydrologic and hydraulic calculations and design of the

proposed Phase 1 Mass Grading stormwater drainage system have been master-planned based on the interim proposed build-out conditions for the project site, which consists of grassed and stabilized mass graded area. As phases of construction progress, permit applications and SWPPP modifications will occur to accommodate construction activities in subsequent phases.

Pre-Development Conditions

The project site in its existing condition consists mostly of timberlands made up of row planted pines, but the site also includes wetlands and non-wetland waters of the United States (tributaries and ponds) located throughout the site. Additionally, there is an existing mass graded site within the project boundary. The existing mass graded site includes a ±360,000 SF pad and two (2) sediment basins. Pre-development stormwater run-off sheet flows south into and through the wetlands on site and discharges into tributaries of Beasley Creek and eventually into Beasley Creek. Beasley Creek is located on-site and flows for approximately five (5) miles to the south until its confluence with Crane Creek. Elevations on the existing site range from 352'-551' (NAV88). The soils on this site consist mostly of HSG type A, with smaller areas of HSG B, C, A/D, C/D, and B/D. Further details and a map showing these areas are shown on the attached NRCS soils exhibit within Appendix D. A Location Map and Drainage Maps can be found in the Stormwater Management Report included in Appendix D.

Post-Development Conditions

The proposed interim build-out conditions for the project site will be made up of grassed and stabilized mass graded area. The stormwater system that is to be constructed in the current phase of construction has been designed to detain and treat stormwater runoff from the current post-developed condition as described above. The current project will include multiple mass graded pads and minimal site improvements, and the nine (9) detention ponds have been designed for this condition.

The overall drainage patterns and the outfalls identified from the pre-development conditions will be generally maintained in post-development conditions. The proposed drainage system includes nine (9) detention ponds that detain and treat the post development on-site runoff. The Stormwater Management Report prepared to compare pre and post-development conditions for the project can be found within Appendix D of this C-SWPPP. It should be noted that this SWPPP is anticipated to be modified as stages of site construction progress.

Peak discharge summaries are provided in the tables below and were taken from the above referenced report.

Storm Event	Outfall_A		Outfall_B		Outfall_C	
	Exist.	***Prop.***	***Exist.***	***Prop.***	***Exist.***	***Prop.***
002-yr	230.24	208.02	30.33	30.02	77.44	67.88
010-yr	892.18	703.19	228.70	140.70	352.70	157.43
025-yr	1,427.49	1,128.11	468.20	284.48	590.54	261.13
050-yr	1,963.90	1,417.27	722.42	425.73	789.34	336.59
100-yr	2,603.11	2,059.73	1,062.79	616.54	1,114.37	405.72

Storm Event	Outfall_A		Outfall B		Outfall_C	
	Exist.	***Prop.***	***Exist.***	***Prop.***	***Exist.***	***Prop.***
500-yr	4,235.74	2,549.64	2,224.75	1,319.59	2,120.60	686.48

Flooding Issues

The project site does not have any known flooding issues and is located in FEMA Flood Zone X, with some portions of the site located in FEMA Special Flood Hazard Area zones A, AE, and Floodway (FIRM Maps: 45079C0128L, dated December 21, 2017; 45079C0110L, dated December 21, 2017; and 47079C0136L, dated December 21, 2017).

Residential Subdivision Information

N/A

1.2 Stormwater Management and Sediment Control (CGP Section 3.2.2)

Refer to Section II of the Stormwater Pollution Prevention Plan Notes, included as sheet EC0.1 of the Construction Site Plans, for a description of the site's control measures. Refer to sheets EC1.1-EC3.18 (SWPPP Plan Sheets) for the location of stormwater management and sediment control measures implemented on the site. Refer to sheets EC4.1-EC4.4 (SWPPP Details) for installation and construction details of the various BMPs. The Construction Site Plans are hereby included as a reference.

Erosion Prevention BMPs

As the existing site is cleared, grubbed, and graded to the proposed contours shown on the construction site plans, erosion prevention BMPs shall be placed throughout the construction site to aid in the prevention of sediment-laden stormwater runoff at locations shown on sheets EC1.1-EC3.18 of the construction plans. Installation shall be in accordance with the details on sheets EC4.1-EC4.4.

Sediment Control BMPs

As the existing site is cleared, grubbed, and prior to any grading, sediment control BMPs shall be placed throughout the construction site to aid in the prevention of sediment-laden stormwater runoff at locations shown on sheet EC1.1-EC3.18 of the construction plans. Installation shall be in accordance with the details on sheets EC4.1-EC4.4.

Structural Control BMPs and Floodplain Placement

This site-specific SWPPP will utilize two (2) dry detention ponds, four (4) wet detention ponds, and associated storm sewer system as structural control BMPs. These practices have been designed to detain flows and to otherwise limit the runoff and the discharge of pollutants from disturbed areas of the construction site. The six (6) proposed detention ponds are intended to serve as sediment basins during construction. Furthermore, skimmers will be used at the pond outlet spillways to promote near surface dewatering.

Throughout the lifespan of the construction project these BMPs will be installed and maintained, as required by the SWPPP and the construction site plans, until final

stabilization has been achieved for the areas draining to each BMP. Upon final stabilization, each structural control BMP must be modified to the post-construction conditions shown within the approved construction site plans.

Any Structural Control BMPs that are being proposed within the 100-yr floodplains (N/A for this project) will require approval from the local regulating agency, since SC DHEC does not have the authority to regulate within the associated flood plains. Approvals from the local agency will be located in **Appendix C, Additional Approvals/Certifications** of this SWPPP. If the required approval is not located in this SWPPP, please contact the Primary Permittee listed on the title sheet of this SWPPP before performing work within the floodplain.

Construction Entrances and Dust Control

Install Stabilized Construction Entrance at the location shown on sheets EC1.1-EC3.18 and per the detail on Sheet EC4.4 of the construction plans. Each stabilized construction entrance should be used in conjunction with Street Sweeping measures if it becomes apparent that sediment is still being tracked onto adjacent impervious areas, even with the use of the construction entrance.

During extremely dry conditions, drought, and/or excessive winds, the construction site should be treated for dust control to prevent the suspension of fine sediment particles into the air, being carried offsite, and deposited on adjacent properties or surface waters. This practice may not be directly called out for on the construction site plans. A water tanker used to spray the soil down may be an effective way to prevent excessive dust at a construction site.

Water Quality BMPs During Construction

Install silt fence, inlet protection, and rock check dams at locations shown on sheets EC1.1-EC3.18 of the construction plans. These devices must be kept in functioning order throughout the lifespan of all construction activities. Each of these BMPs must be maintained and inspected until all areas draining to these BMPs have reached final stabilization, approved by the construction site inspector or the SWPPP Preparer, and recorded within the stabilization log located as an appendix of the On-site SWPPP.

Post-Construction Water Quality

Upon final stabilization, the site will transition from temporary BMPs to permanent BMPs. This transition includes the conversion of the sediment basins to detention basins. All post-construction (permanent) water quality and water quantity BMPs are identified in the Erosion and Sediment Control located within the construction site plans.

These water quality controls must be installed and stabilized prior to terminating coverage under the CGP. These controls will require routine maintenance to remain functional; this is to be conducted by the Primary Permittee or the entity that accepts responsibility for these structures once construction has been completed. Additional information, including permanent maintenance and inspection procedures, can be found on sheet EC0.1 of the construction site plans.

Other Stormwater Management Procedures

Based on the nature, conditions, and/or procedures associated with this construction site, the following items must be followed and adopted by all those conducting land disturbing activities at this site:

- All construction debris must be stockpiled onsite within the perimeter controls and protected by the BMP's in place or additional BMP's as required to prevent the discharge of pollutants through stormwater runoff from building or other similar materials off-site or into surface waters.
- Any additional waste material or stockpile material (i.e., soil and mulch) must also be stored on site within the perimeter controls shown on the Construction Site Plans or as the contractor, responsible for day-day activities at this site, deems appropriate. Silt fence or an approved equal shall surround all stockpiled materials.
- All parties conducting work at this construction site must be informed of and make note of pollutant sources, both industrial and construction, at this site, and be informed of all controls and measures the will be implemented to prevent the discharge of these pollutants in stormwater runoff.
- Any additional non-stormwater discharges, as referenced in the CGP, should be eliminated or reduced to the maximum extent feasible. All unpreventable non-stormwater discharges shall be treated through the approved stormwater management system before release off-site. Following is a list of allowable non-stormwater discharges:
    - Fire hydrant flushing
    - Wash water without detergents
    - Water used for dust control
    - Potable water
    - Building wash down water without detergents
    - Uncontaminated pavement wash water
    - Uncontaminated condensation from mechanical equipment
    - Uncontaminated ground or spring water
    - Water from foundation of footing drains
    - Uncontaminated excavation dewatering
    - Landscape irrigation.

1.3 Sequence of Construction

Refer to sheet EC0.2 of the Construction Site Plans, for a description of the site's construction sequence.

1.4 Non-Numeric Effluent Limits

Stormwater Volume and Velocity Control

During the implementation of construction activities, all parties performing work at this construction site whose work may affect the implementation of the SWPPP must be informed of and directed on how to comply with this Non-Numeric Effluent Limit, which requires the management of stormwater runoff **within** the construction site and at **each outfall**. The purpose of this requirement is to control the stormwater volume and velocity at these locations to minimize erosion.

Specifically, each responsible party should be made aware of the practices that have been or should be implemented at the construction site to accomplish these particular stormwater management practices. Below is a list of practices that may be utilized within the disturbed area and at each outfall at construction sites to control stormwater volume and velocity:

Volume Control

- Limiting the amount of disturbed area and exposed soils
- Staging and/or phasing of the construction sequence;
- Sediment basins and sediment traps;
- Diverting off-site flow around the construction site;
- Controlling the drainage patterns within the construction site;
- Temporary stabilization of disturbed areas.

Velocity Control

- Surface roughening and/or other slope stabilization practices;
- Level spreaders, riprap plunge pools and/or other velocity dissipation BMPs located at the construction site and sediment basin outfalls;
- Use of rock checks, sediment tubes, etc. in temporary diversions swales and ditches;
- Use of erosion control blankets, turf reinforcement mats, and other non-vegetative BMPs that can be used to quickly stabilize disturbed areas.

Soil Exposure, Compaction and Preservation

Throughout construction activities, **the amount of soil exposed during construction should be kept to a minimum**. Soil exposure minimization BMPs and techniques include:

- Implement a phased stormwater management plan that limits the amount of exposed soil during construction.
- Protect areas within the construction site that are not to be disturbed.
- Stabilize exposed areas as soon as practical to limit the duration of large areas of exposed soil.
- Implement temporary seeding techniques.

Prior to implementation of any major grading activities, **topsoil is to be preserved** by placing it in the area designated for stockpiling until final grades are reached. The stockpile must be equipped with proper sediment and erosion controls to preserve the topsoil and protect adjacent areas from impacts. Once final grades have been reached, the preserved topsoil should be utilized to apply to areas identified for stabilization. Topsoil contains nutrients and organisms that aid in the growth of vegetation.

The **Compaction of Soil** should also be minimized to the degree practicable during grading activities. This is especially important during the replacement of topsoil to aid in a quick establishment of vegetative cover. Compaction of soil may also reduce rainfall's ability to infiltrate into the soil, increasing the amount of stormwater runoff.

Soil Stabilization

Throughout construction activities, soil stabilization techniques are to be initiated as soon as practicable whenever any clearing, grading, excavating, or other land-disturbing activities have permanently or temporarily ceased on any portion of the construction site and will not resume for a period exceeding 14 calendar days. For areas where initiating stabilization measures is not feasible, (e.g., where snow cover, frozen ground, or drought conditions preclude stabilization), initiate vegetative or non-vegetative stabilization measures as soon as practicable.

Steep Slopes (Slopes of 30% grade or greater)

All disturbed steep slopes (30% grade, ~3H:1V, or greater), and steep slopes to be created through grading activities must be managed in a fashion that limits the potential of erosion along the slopes. All parties whose work is/was responsible for the creation/disturbance of steep slopes must comply with the following items:

- **Minimize the Disturbance** of all steep slopes, when possible.
- **Divert Concentrated or Channelized Flows** of stormwater away from and around steep slope disturbances.
- **Use Specialized BMP Controls** including temporary and permanent seeding with soil binders, erosion control blankets, surface roughening, reducing continuous slope length with terracing or diversions, gradient terraces, interceptor dikes and swales, grass-lined channels, pipe slope drains, subsurface drains, level spreaders, check dams, seep berms, and triangular silt dikes to minimize erosion.
- **Initiate Stabilization Measures** as soon as practicable on any disturbed steep slope areas where construction activities have permanently or temporarily ceased, and will not resume for a period exceeding 7 calendar days.
- **A Vegetative and/or Non-Vegetative Cover** must be established within 3 working days from the time that stabilization measures were initiated.

Sediment Discharge Minimization

Permittees, Contractors, and all other parties responsible for conducting land-disturbing activities are required to install and maintain all erosion and sediment BMPs that are identified on the approved construction site plans. These BMPs have been designed and approved to address such factors as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soils particle sizes expected to be present on the construction site. **Proper**

installation, inspection, and maintenance will allow these BMPs to operate at maximum efficiencies in order to minimize sediment discharges to the maximum extent practical.

Pollutant Discharge Minimization

Permittees, Contractors, and all other parties responsible for conducting land-disturbing activities are required to install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, the following items must be implemented:

- **Minimize the discharge of pollutants from dewatering trenches and excavations** by managing runoff with the appropriate controls. Otherwise, these discharges are prohibited;
- **Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters**. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- **Minimize the exposure of building materials, building products, construction wastes, trash,** landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and
- **Minimize the discharge of pollutants from spills and leaks** and implement chemical spill and leak prevention and response procedures.

Prohibited Discharges

Permittees, Contractors, and all other responsible parties for conducting land-disturbing activities are prohibited to discharge, from the construction site, the following items:

- **Wastewater from washout of concrete**, unless managed by an appropriate control;
- **Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials**;
- **Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance**; and
- **Soaps or solvents used in vehicle and equipment washing**.

1.5 Buffer Zone Management

Buffer Zone Narrative (Compliance Option A)

A full undisturbed buffer zone of 50 feet will be maintained throughout the wetland areas of the project site that are to remain during and after construction. This buffer zone will be maintained and protected along the intermittent streams and wetlands throughout the project site by double row silt fence, rock outlets, rip-rap, and mulching. Buffers that are adjacent to wetlands that are proposed to be disturbed during the project will also be disturbed and ultimately removed during construction **after** receipt of a wetlands permit issued by the U.S. Army Corp of Engineers. Area of waters, wetlands, and their respective buffers that are to remain should not be disturbed and will be left in their natural preexisting state per the SC CGP.

Additional Buffer Zone Information

All construction sites that contain or are adjacent to surface waters must provide a vegetated buffer of at least 30 linear feet, or 45 linear feet when the surface water is classified as a Sensitive Waters (Section 3.2.4.C of South Carolina's CGP). This requirement is only applicable during construction. Work may be conducted within the buffer area once all disturbed areas discharging towards the buffer zone have had final stabilization measures implemented. This work must have been included within the SWPPP at the time of coverage approval.

Buffer Zones Requirements should be explained in detail during the Pre-Construction Conference. These details should include the outlining of the exact location of where the buffer starts and ends, the sediment and erosion controls precluding the buffer and all other general information pertinent to maintaining the buffer zone area during construction.

All contractors and sub-contractors shall be made aware of the buffer zones and establish a work procedure that preserves and protects these areas. The buffer zones should be flagged prior to any perimeter control placement and, most importantly, before mass clearing and grubbing. These areas must also be inspected during construction for areas of excessive sediment impacts, which may need to be removed if sediment impacts are evident within the buffer zone.

In the event that a portion of a buffer is accidentally disturbed, the contractor shall temporarily stabilize the area as soon as possible and consult with the construction site's inspector, permittee, and/or engineer on the installation of any additional sediment control or erosion prevention measure to protect the portion of the buffer still undisturbed.

1.6 Certification Statement

Name Marcus B Sanderson, P.E.

Title Civil Department Manager

Date 12/15/2023

I have placed my signature and seal on the design documents submitted signifying that I accept responsibility for the design of the system. Further, I certify to the best of my knowledge and belief that the design is consistent with the requirements of Title 48, Chapter 14 of the Code of Laws of SC, 1976 as amended, pursuant to Regulation 72-300 et seq. (if applicable), and in accordance with the terms and conditions of SCR100000.

2.1 Sources of Pollution

Throughout construction activities, each permittee, contractor, and person responsible for conducting work will need to ensure that sources of pollution are managed to prevent their discharge from the construction site. Stormwater runoff subjected to the identified pollution sources must be treated by the appropriate BMPs as directed by this SWPPP.

Construction activities that have the potential to contribute sediment pollution to stormwater discharges include:

- Clearing and grubbing operations
- Grading operations
- Paving operations
- Demolition and debris disposal
- Utility excavation and installation operations
- Dewatering operations
- Material delivery and storage
- Landscaping operations

In addition to sediment, other pollutants including nutrients, heavy metals, organic compounds, pesticides, oil and grease, bacteria and viruses, trash and debris, and other chemicals may contribute to stormwater pollution. Construction activities that may result in contributing other potential pollutants to stormwater runoff include:

- Concrete washout and waste
- Structure construction/painting/cleaning
- Demolition and debris disposal
- Dewatering operations
- Material delivery and storage
- Material use during building process
- Solid waste (trash and debris)
- Hazardous waste
- Contaminated spills
- Sanitary/septic waste
- Vehicle/equipment fueling and maintenance
- Vehicle/equipment use and storage
- Landscaping operations

Refer to Section VII of the Stormwater Pollution Prevention Plan Notes, included as sheet EC0.1 of the Construction Site Plans, for applicable erosion, sediment and pollution control notes. In addition, refer to Section VIII of the Stormwater Pollution Prevention Plan Notes, included as sheet EC0.1 of the Construction Site Plans, for applicable housekeeping notes.

2.2 Surface Waters

Stormwater runoff from the proposed construction sites discharges from the eighteen (18) dry detention ponds to the boundaries of the project site. Eighteen (18) project outfall locations have been identified for the post-development condition, which discharge to

Beasley Creek in close proximity to the project site. Beasley Creek flows to the south for approximately 5 miles until its confluence with North Branch Crane Creek.

The surface waters adjacent to the site are not classified as sensitive waters.

2.3 Impairments and TMDLs

Some Waters of the State (WoS) may be identified as not meeting the State's water quality standards for recreational swimming, fish consumption, aquatic life use, and/or shellfish harvesting for one or more pollutants even after controls for point and nonpoint source pollution have been put in place. These waterbodies have been classified as "impaired." Once these waterbodies have been identified they are listed on the State's 303(d) List of Impaired Waterbodies. South Carolina lists impairments as "stations" where samples were taken along a waterbody.

The most recently-approved 303(d) list can be found at the following link:

https://scdhec.gov/environment/your-water-coast/approved-tmdls

The proposed facility in Blythewood borders Beasley Creek, a tributary of Crane Creek and the Broad River. The nearest downstream Water Quality Monitoring Station (WQMS), B-081, is located along Crane Creek at US Hwy 321. WQMS B-081 is listed on the 2018 303(d) List for a macroinvertebrate (BIO impairment). Furthermore, the site is located within the Lower Broad River TMDL watershed for Fecal Coliform.

Site-Specific Requirements

There are no site-specific requirements for this site.

2.4 Critical Areas (CZC only)

There are no critical areas within or immediately adjacent to the proposed disturbed area of the project site.

Section 3 Compliance Requirements

3.1 SWPPP Availability

A copy of the OS–SWPPP (including all appendices and attachments, excluding Appendix D – Engineering Reports) shall be retained at the construction site or other location easily accessible during normal business hours. The SWPPP shall remain accessible from the date of commencement of construction activities to the date of final stabilization. If an on–site location is unavailable to store the SWPPP when no personnel are present, notice of the OS–SWPPP's location must be posted near the main entrance at the construction site.

3.2 Pre-Construction Conferences

A copy of the OS–SWPPP (including all appendices and attachments, excluding Appendix D – Engineering Reports) shall be retained at the construction site or other location easily accessible during normal business hours. The SWPPP shall remain accessible from the date of commencement of construction activities to the date of

final stabilization. If an on–site location is unavailable to store the SWPPP when no personnel are present, notice of the OS–SWPPP's location must be posted near the main entrance at the construction site.

3.3 Inspection Requirements

The site shall be inspected at least once every calendar week for all areas that have not reached temporary or final stabilization. Inspection frequency may be reduced in areas to at least once every month once the area has reached temporary or final stabilization.

Inspections shall be conducted by a person knowledgeable in the principles and practice of erosion and sediment controls; who possesses the skills to assess conditions at the construction site that could impact stormwater quality; and who can assess the effectiveness of any BMPs selected to control the quality of stormwater discharges from the construction site.

The person may be either the preparer of the C–SWPPP; or a person who is under the direct supervision of the preparer of the C–SWPPP and who meets the requirements in the above paragraph; or a person who has been certified through a Construction Site Inspector Certification Course approved by DHEC.

Inspections may also be conducted by a person with a registration equivalent to the registration of the preparer of the C–SWPPP and who meets the qualifications of the paragraph above or an individual who is under the direct supervision of the person with an equivalent registration and who meets the requirements above.

Site inspections shall be conducted to evaluate the overall effectiveness of the SWPPP. The main objective of the inspection is to verify that the description of potential pollutant sources is accurate, that the site maps provided in the SWPPP are accurate or have been updated to reflect current conditions, and that controls identified to reduce pollutants in storm water discharges are in place and adequately functional. The second objective of the inspection is to identify where new controls are necessary so that they may implement and incorporate the new controls into the SWPPP.

Refer to Section IV of the Stormwater Pollution Prevention Plan Notes, included as sheet EC0.1 of the Construction Site Plans, for additional inspection requirements.

All inspections shall be documented using the Construction Site Inspection Report as included in Appendix C. All completed reports are to be inserted chronologically in Appendix C. All inspections are to be noted in the Construction Inspection and Maintenance Log in Appendix C.

3.4 Maintenance Requirements

Maintenance of BMPs and other Protective Measures

All BMPs and other protective measures identified in the SWPPP shall be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance shall be performed within seven (7) calendar days, before the next inspection, or as reasonably possible. The maintenance shall be performed before the next storm event.

If periodic inspection or other information indicates that a BMP has been used inappropriately, or incorrectly, the BMP shall be replaced or modified as required to correct the BMP within a time frame of 48 hours of identification. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of the CGP and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, document this in the SWPPP. However, alternative BMPs must be implemented as soon as reasonably possible.

Sediment from sediment traps or sedimentation basins shall be removed as indicated in the SWPPP or when the design capacity has been reduced by 50 percent, whichever occurs first. Sediment collected by silt fence, or another sediment control measure, shall be removed when the deposited sediment reaches 1/3 of the height of the aboveground portion of these BMPs, or before it reaches a lower height based on the manufacturer's specifications.

Refer to Section III of the Stormwater Pollution Prevention Plan Notes, included as sheet EC0.1 of the Construction Site Plans, for additional maintenance requirements. The Construction Site Plans are included hereby as a reference.

3.5 Record Keeping

This SWPPP shall be modified if during inspections or investigations, by the SWPPP inspector(s), or by local, state, tribal or federal officials, it is determined that the SWPPP is ineffective in either eliminating, when reasonably possible, or significantly minimizing pollutants in storm water discharges from the construction site.

Based on the results of an inspection, the SWPPP shall be modified as necessary to include additional or modified BMPs designed to correct problems identified. Revisions to this SWPPP must be completed within seven (7) calendar days following the inspection. Implementation of these additional or modified BMPs shall be accomplished before the next storm event whenever practicable.

This SWPPP shall be modified and submitted for review and approval by DHEC, a regulated MS4, or an entity delegated under SC Regulation 72–300 if any of the following occur:

- A significant change in design, construction, operation, or maintenance of the construction site results in discharges that will cause, have the reasonable potential to cause, or contribute to violations to SC's Water Quality Standards.
- A change in the design, construction, operation, or maintenance of the construction site calls for a revision of this SWPPP based on the list of modifications included in Section 3.1.7 of the CGP.

The SWPPP shall be modified and a record of the modification kept of each modification within this SWPPP if any of the following conditions are met:

- Addition of BMPs. Addition of BMPS shall not involve additional wetland impacts.
- BMP Relocations.
- Removal of Disturbed Areas. Removal of disturbed area shall not remove any BMPs that are required to meet SC's Water Quality or Quantity Standards and the disturbed area shall not be disturbed (i.e., cleared, grubbed or graded).
- Modifying Individual Lot Drainage. Modification of individual lot drainage shall not affect the inflow to a detention structure or analysis point.

All SWPPP modifications shall be documented using the SWPPP Modification Forms and shall be retained in Appendix E. All SWPPP **modifications shall be logged on the SWPPP Modification Log in Appendix E.**

3.6 Final Stabilization

A Notice of Termination (NOT) shall be submitted after one or more of the following conditions have been met:

- Final stabilization has been achieved on all portions of the construction site for which you are responsible;
- Another Operator has assumed control over all areas of the Site that have not been finally stabilized;
- Coverage under an individual or alternative general NPDES permit has been obtained; or
- For residential construction only either:
    - Final stabilization has been achieved on all portions of a residential lot(s), or
    - Temporary stabilization including perimeter controls for a residential lot(s) have been achieved prior to occupation of the home and that the homeowner has been informed, about the need for, and benefits of, final stabilization.

The primary permittee is responsible to submit the NOT. The NOT shall be submitted within 30 days of one of the above conditions being met. A copy of the current NOT form is included in Appendix G. Authorization to discharge terminates at midnight of the day the NOT is signed.

The original completed and signed NOT shall be submitted to DHEC at the following address: SC Department of Health and Environmental Control, 2600 Bull Street Columbia, SC 29201

A copy of the submitted NOT will be kept in Appendix G.

Appendix A

Site Maps

See Stormwater Management Report (Appendix D)

Appendix B

Drainage Maps

See Stormwater Management Report (Appendix D)

Appendix C

Additional Approvals/Certifications

Coastal Zone Consistency Certification

(Not Applicable)

USACE's Jurisdictional Determination Request

(Attached)

USACE's Section 404 Permits

(Not Applicable)

SC DHEC 401 Water Quality Certification

(Not Applicable)

Jurisdictional Floodplain Management Certifications

(Not Applicable)

Other Local Ordinance Certifications and Approvals

(Not Applicable)

Appendix D

Stormwater Management Report

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT FOR:

PHASE 2 MASS GRADING FOR PROJECT CONNECT

RICHLAND COUNTY, SC

PREPARED FOR:
RICHLAND COUNTY ECONOMIC DEVELOPMENT

27015.0007

DECEMBER 28, 2023

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SECTION 1 – SUMMARY OF RESULTS

TABLE 1: Summary of Peak Flows at Outfalls (cfs)

Storm Event	Outfall_A		Outfall_B		Outfall_C	
	Exist.	***Prop.***	***Exist.***	***Prop.***	***Exist.***	***Prop.***
002-yr	230.24	208.02	30.33	30.02	77.44	67.88
010-yr	892.18	703.19	228.70	140.70	352.70	157.43
025-yr	1,427.49	1,128.11	468.20	284.48	590.54	261.13
050-yr	1,963.90	1,417.27	722.42	425.73	789.34	336.59
100-yr	2,603.11	2,059.73	1,062.79	616.54	1,114.37	405.72
500-yr	4,235.74	2,549.64	2,224.75	1,319.59	2,120.60	686.48

SECTION 2 – PROJECT NARRATIVE

In conjunction with the State of South Carolina, Richland County is proposing to prepare the site for a new electric vehicle manufacturing facility located near Blythewood, Richland County, South Carolina. Encompassing 1,629 acres, the site is located immediately west of Interstate-77 at Blythewood Rd. The project will consist of manufacturing facilities, associated roads, stormwater ponds, and parking areas. A previous submittal was made for the Phase 1 grading plan, which encompases grading work outside of weltand and stream buffers. This Phase 2 submittal is for the full grading and build out of the proposed manufacturing facility, including proposed wetland and stream impacts that are currently being permitted through the US Army Corps of Engineers and SCDHEC. The proposed stormwater management associated with this project will be designed to manage construction stormwater runoff and post-development stormwater runoff associated with the proposed grading work for all storm events through the 100-yr storm. The existing parcels included in this development are: 12500-02-06, 12600-03-23, 15008-01-01, 15004-01-01, 15100-01-04, 15100-01-06, 15100-01-07, 15100-02-01, 15100-03-01, 15100-03-02, 15100,03-03, 15100-03-04, 15100-03-05, 15100-03-06, 15100-03-07, 15100-03-08, 15100-03-20, 15100-03-23, and 15101-01-01.

Stormwater runoff will be collected via surface storm drainage swales and routed to one of nine (9) proposed detention ponds. The total area of disturbance for the project is 1,361 acres. The stormwater detention system that is proposed to be constructed has been designed to manage and treat stormwater runoff from the proposed site to meet local and state regulations. Due to the size and height of several of the pond embankments, Ponds 1, 2, 3, 4, and 6 will be designated as having regulated dams. A separate submittal will be made covering the dam design and dam breach analyses for these structures.

Stormwater runoff will outfall to the offsite channels of Beasley Creek and a tributary to Beasley Creek. Portions of the site are located in a FEMA Special Flood Hazard Area Zone A, Zone AE, and Floodway. A Conditional Letter of Map Revision (CLOMR) application has been submitted to FEMA for the proposed fill and piping impacts to the Beasley Creek floodway and is currently under

review. According to survey and Lidar data, the elevation on site ranges from 352'-551' (NAVD88). There are no known flooding issues associated with the site.

The soils on this site consist mostly of HSG type A, with smaller areas of HSG B, C, A/D, C/D, and B/D. Further details and a map showing these areas are shown on the attached NRCS Soils Map (Figure 3).

SECTION 3 – PURPOSE

A portion of the site is located within the Town of Blythewood limits, while the remainder is in unincorporated Richland County. Since the Blythewood portion of the site is located outside of Richland County's Municipal Separate Storm Sewer System (MS4) area and since the Richland County MS4 program Stormwater Management Plan does not currently allow for the review of projects outside of its MS4 boundary, SC Department of Health and Environmental Control (SCDHEC) and Richland County have agreed that SCDHEC will serve as the primary review authority for the project. Therefore, the following study has been prepared based on the design standards for both SCDHEC and Richland County. This report is intended to demonstrate that the proposed ponds shown on the accompanying construction plans are sufficient to meet Local & State requirements for water quantity and quality management. The report will further demonstrate that downstream properties will not be adversely affected by the proposed development. As detailed throughout this report, peak discharge rates for the 2-, 10-, 25-, 50-, and 100-year 24-hour storm events have been reduced to the Pre-Development conditions peak discharge rates, at a minimum, for each site outfall.

This drainage analysis includes pre- and post-development site runoff as well as water quality information.

The purposes of this report are as follows:

- Determine the existing site drainage conditions
- Determine and document the compliance of proposed site conditions with the State of South Carolina
- Determine and document the compliance of proposed site conditions with local Richland County stormwater management regulations and Richland County's Land Development Manual
- Determine detention pond sizing
- Demonstrate site discharge will not negatively impact surrounding or downstream properties
- Demonstrate that the proposed site will not adversely affect water quality conditions downstream

SECTION 4 – REGULATORY REQUIREMENTS

State of South Carolina. Land disturbing activities (including the construction of roads, residential neighborhoods, commercial areas, etc.) require coverage under the NPDES Construction General Permit (CGP). Coverage under the CGP requires the applicant to address water quality and quantity using thresholds based on the project's land disturbance footprint, distance to receiving water, and proximity to sensitive areas. Generally, permits are required if a land-disturbing project is greater than 1 acre of land disturbance.

For development projects that increase impervious cover and/or stormwater runoff, state regulations require that peak post–development discharge rates from the basin shall be at or below pre–development rates for the 2–year and 10–year 24–hour storm events.

The state regulations also specify a "water quality volume" be detained to improve water quality from the site. For projects that disturb ≥ 5 acres, stormwater controls are required to capture and detain onsite the first 1- or ½-inch of runoff and release that quantity over a 24-hour period. However, since the Richland County Land Development Manual requires a pre- and post-development water quality model to be run, this design requirement will be considered to supersede the DHEC water quality requirement described above (see Richland County section below for more information on the water quality model).

Richland County. Richland County's Land Development Manual states that for projects greater than 300 acres in size, stormwater management facilities should ensure that the post-development discharge rates do not exceed pre-development peak discharge rates through the 100-year design storm.

The Richland County's Land Development Manual also requires that a downstream analysis be included as part of the Stormwater Management and Sediment Control Plans. The stormwater evaluation performed for this project analyzed the downstream areas for potential impacts associated with the proposed project – see Exhibit 3 for more detail.

Post-Construction Best Management Practices (BMPs) are required to control and minimize water quality degradation resulting from changes in land uses and increased impervious area. According to the County's Land Development Manual, for the purposes of a development in a Sensitive Watershed, such as Beasley Creek, the Water Quality Design Standard applied to the site requires the applicant to demonstrate that the proposed project will not adversely affect downstream waters (see Section 10 for more information). This permit application for the complete grading plan and full build out will include a comprehensive pre- and post-construction water quality model that meets the requirements of the County's Land Development Manual.

SECTION 5 – METHODOLOGY

The existing and proposed conditions were analyzed using the Interconnected Channel and Pond Routing Model (ICPR4) computer program developed by Streamline Technologies, Inc. The program is used to model rainfall and stormwater runoff and to perform hydraulic routing through the storm drainage system. The ICPR4 program is a commonly accepted model that has undergone extensive testing and application. ICPR4 has the ability to analyze complex interconnected drainage systems dynamically over extended time periods.

ICPR4 is an advanced, powerful, and comprehensive modeling package for analyzing and designing drainage systems, stormwater sewers, and sanitary sewers. The software can simultaneously model complex hydrology, hydraulics, and water quality.

For the design of the storm drainage system, a warning stage elevation is set for each pond and node location to check for flooding during the various storm events.

SECTION 6 – HYDROLOGY

The hydraulic input data for the 1D model consists of information for each drainage basin, or sub-watershed, within the project study area. Input variables include runoff curve number, rainfall distribution pattern, hydrograph peaking factor, area of each drainage basin, and time of concentration. The ICPR program generates runoff hydrographs for each sub-watershed based on the user-specified variables. Hydrographs are generated by ICPR using the SCS Unit Hydrographic Method.

The following hydrologic parameters were used as input to the ICPR4 models:

1. The SCS Unit Hydrograph Method is used.
2. The depth of rainfall for each storm frequency was obtained from the Richland County Land Development Manual. The following rainfall depths were used in the model simulations:
    a. 2-year, 24-hour duration – 3.6 inches
    b. 10-year, 24-hour duration – 5.3 inches
    c. 25-year, 24-hour duration – 6.4 inches
    d. 50-year, 24-hour duration – 7.3 inches
    e. 100-year, 24-hour duration – 8.3 inches
    f. 500-year, 24-hour duration – 11.0 inches
3. The SCS Type II Statistical Rainfall Distribution is used. This distribution pattern is determined by the Soil Conservation Service comparing regional rain gauge data.
4. A 484 Hydrograph Peaking Factor was used for all basins, which is indicative of the terrain for the region.
5. Soils present on site are predominantly classified in Hydrologic Soil Group (HSG) A as defined by the Richland County SUURGO Soil Survey. Refer to Figure 3 - Soils Map.

6. Sub–basin composite curve numbers were determined utilizing the area weighted average of the curve numbers listed in the table below. See Appendix A for Pre-Development CN Calculations, Appendix C for Post-Development CN Calculations

TABLE 2: Curve Numbers

Land Use	A	B	C	D
Commercial	89	92	94	95
Dirt Road	72	82	87	89
Gravel	76	85	89	91
Hwy R/W	83	89	92	93
Impervious	98	98	98	98
Industrial	81	88	91	93
Newly Graded	77	86	91	94
Open Space (Grass)	39	61	74	80
Residential (1/2 ac.)	54	70	80	85
Residential (1 ac.)	51	68	79	84
Residential (2 ac.)	46	65	77	82
Water	100	100	100	100
Wetlands	89	89	89	89
Woods	30	55	70	77

7. The time of concentration for each pre- and post-development sub-basin was calculated according to the procedures set forth in Urban Hydrology for Small Watersheds (TR-55) (USDA-NRCS, 1986). A minimum time of concentration of 6 minutes was used, per accepted hydrology practices. See TC calculations included in Appendix A for Existing Conditions and Appendix D for Proposed Conditions.

SECTION 7 – HYDRAULICS

The model hydraulic input data consists of a system of nodes and links. Nodes represent locations where flows enter or exit the system, pipe or channel characteristics change, or where storage/storage/time relationships are provided. Links represent traditional types of hydraulic conveyance such as pipes, channels, drop structures, weirs, etc. For this analysis, the wetland systems were modeled as channels. Upstream and downstream cross sections were entered for each segment (or link). This will account for storage existing in these channels.

All pre-development and post-development model input information was derived from available county LiDAR and survey data that was completed for the site.

The basic equation used by ICPR to route flows through the system is:

$$\Delta s = (Q_{in} - Q_{out})\ \Delta t$$

Where: Δs = Change in storage for time step
Q_{in} = Flow into a node at time "t"
Q_{out} = Flow out of a node at time "t"
Δt = Length of time step; user defined range from 1.0 sec To 0.1 sec.

Refer to exhibits 2 and 4 for the pre-development and post-development drainage exhibits that show the 1D ICPR system.

SECTION 8 – EXISTING CONDITIONS

The site is located between Blythewood Road and Community Road, just west Interstate 77. The site is comprised primarily of undeveloped wooded area, with a small portion of cleared land with two dry detention ponds, and ten existing wet ponds mostly with no defined outfalls. In order to model natural site conditions, the previously cleared area and dry detention ponds were modeled as wooded areas without ponds to be conservative. Under existing conditions, the site sheet flows south through some onsite wetlands and a portion of Beasley Creek. Refer to Pre-Development Drainage Exhibit for more detail.

Elevations on the existing site range from 352'-551' (NAVD88). Additionally, a portion of the site is located in FEMA Special Flood Hazard Area Zone A, Zone AE, and Floodway; see the FEMA Flood Map for more detail. Each outfall is modeled using a normal flow boundary condition.

SECTION 9 – PROPOSED CONDITIONS

The proposed drainage conditions will generally follow the existing drainage conditions. Stormwater from offsite will be collected through perimeter drainage swales and routed through the site. On-site stormwater will be collected through swales, channels, and overland flow and conveyed to one of the nine (9) proposed detention ponds. All outfalls converge into Beasley Creek approximately 3,000 feet downstream of the site.

The post-development drainage basins are shown on the post-development conditions watershed map located in Appendix C of this report. The total post-development watershed area analyzed for this project is approximately 3,044 acres. This site maintains its pre-development discharge outfalls in the post-development condition. See Appendices B and D for pre- and post-development ICPR4 model input and results. See Summary of pre–development versus post–development results at the beginning of report.

The post-development stormwater system, including all nine detention ponds used for water quality and quantity metrics, has been designed to meet the state and local regulations described herein. Refer to the Summary and Conclusion Section at the end of this report for a

summary of peak flows and for detention pond staging for the varying design storm events. Each outfall is modeled using a normal boundary condition.

SECTION 10 – WATER QUALITY

The proposed facility in Blythewood will discharge into Beasley Creek, a tributary of Crane Creek and the Broad River. The nearest downstream Water Quality Monitoring Station (WQMS), B-081, is located along Crane Creek at US Hwy 321. WQMS B-081 is listed on the 2018 303(d) List for a macroinvertebrate (BIO impairment). Furthermore, the site is located within the Lower Broad River TMDL watershed for Fecal Coliform.

The Richland County Land Development Manual requires a post-construction water quality model to be run using the IDEAL (Integrated Design and Evaluation Assessment of Loadings) software. IDEAL is a process-based model that determines watershed pollutant loadings and trapping efficiencies for BMPs for common pollutants found in stormwater, including sediments, bacteria, total nitrogen and total phosphorus. The model calculates runoff rates and pollutant loadings based on watershed characteristics and land use. The flows and pollutant loadings are routed through the BMPs with removal efficiencies calculated for each BMP using the specific design parameters. In this case, the wet ponds were designed with IDEAL to meet Richland County Water Quality Standards.

Richland County requires BMPs to control and minimize water quality degradation resulting from post-construction land uses. These BMPs shall be designed according to one of the two Richland County Water Quality Design Standards. Table 5 from the Land Development Manual states the two options are:

Table 5: Richland County Water Quality Design Standards

Water Quality Design Standard	Non-sensitive Watersheds	Sensitive Watersheds[1]
WQ Design Standards #1: Water Quality Storm Event Design Standard	Manage the runoff from the Water Quality Storm Event	
WQ Design Standard #2: TSS Removal Design Standard[2]	Obtain 85% removal efficiency of the annual TSS loading	Demonstrate that the annual post-development pollutant loading does not exceed the annual pre-development pollutant loading for the pollutant(s) of concern.

For the design of the proposed site located in a Sensitive Watershed, the site and proposed wet ponds have been designed to meet 85% TSS (sediment in IDEAL) removal efficiency and to manage post-construction stormwater runoff such that the annual post-development bacteria loading does not exceed the annual pre-development bacteria loading.

IDEAL Model Inputs

When using wet ponds in a design, IDEAL requires a priming storm to be defined. StormOps recommends a precipitation value between 4 – 10" in order to prime the BMPs. Based on site conditions, the following inputs were used for the priming storm:

- Storm Type II,
- 10" precipitation,
- 24-hrs event,
- Growing season,
- Average antecedent moisture condition.

IDEAL calculates unique pollutant loading values for each defined subbasin, referred to as a watershed in the software, and each area can be defined as pervious, impervious, or a combined area. Given the anticipated build out on this site, a curve number of 95 reflecting commercial and business use was selected for each watershed.

IDEAL comes preloaded with sediment, nutrient, and bacteria loadings. The following values were used in the post development model:

Input	Land Use	Description	Value
Sediment	High density residential, industrial, commercial	Event Mean Concentration (EMC) TSS	116 (mg/l)
Nutrient	Industrial	EMC for Nitrogen	1.3 (mg/l)
Nutrient	Industrial	Fraction of EMC that is particulate Nitrogen	0.43
Nutrient	Industrial	EMC for Phosphorus	0.09 (mg/l)
Nutrient	Industrial	Fraction of EMC that is particulate Phosphorus	0.43
Bacteria	Industrial	EMC for Bacteria	7400 (cfu/100 ml)
Bacteria	Industrial	Base Decay coefficient	0.8 (1/day)
Bacteria	Industrial	Base Growth coefficient	0.4 (1/day)
Bacteria	Industrial	Radiation induced decay coefficient	0.55 (1/day)

IDEAL Model Results

The following table contains a portion of the data from IDEAL results and confirms the BMPs as designed exceed Richland County Water Quality standards by demonstrating a minimum of 85% TSS (sediment) removal efficiency and reducing the annual post-development pollutant loading for bacteria below the pre-development pollutant loading. The annual post-development pollutant loading does not exceed the pre-development loading. The full IDEAL reports can be found in Appendix E.

Table 3: IDEAL Results for Annual Storm Series		
Pollutant	**Pre-development Loading**	**Post-development Loading**
Bacteria Discharged (cfu)	1.789E+13	1.731E+13
Post-development Removal Efficiency		
Post-development Sediment Trapping Efficiency	92 %	

SECTION 11 – SEDIMENTOLOGY

During on–site construction, sediment control will be provided through the use of Best Management Practices (BMPs) including grassing, silt fence, riprap at pipe outfalls, construction entrances/exits, turf reinforcement matting, rock-check dams, and the use of sediment basins and skimmers during construction.

The 2021 CGP requires near–surface dewatering of sediment basins. Sediment trapping efficiency for the project will be accomplished by routing stormwater runoff from the proposed site to one of the twelve (12) sediment basins in Erosion Control Phase 1; and one of the ten (10) sediment basins in Erosion Control Phase 2. Sediment trapping efficiency in the detention basins will be accomplished using floating skimmers until the project site reaches final stabilization.

Sedimentology calculations were performed using SEDCAD. The sedimentology calculations assumed that for each of the two separate phases of construction, all areas outlined in the limits of disturbance will be active at the same time. The SEDCAD calculations, included in Appendix F, show that the removal efficiency of all ponds exceeds the required 80%.

Table 4: Summary of Sedimentology Calculations

Erosion Control Phase	Sediment Basin #	Skimmer Size & No.	Dewatering Time (days)	Trapping Efficiency
1	1	One (1) 8" skimmer	3.60	99.12%
	2	One (1) 8" skimmer	3.96	89.90%
	3	One (1) 8" skimmer connected to 6" PVC pipe + Three (3) 8" skimmers	3.02	99.96%
	4	Three (3) 8" skimmers connected to 6" PVC pipe	4.86	95.83%
	5	Two (2) 8" skimmers w/ 7" Orifice connected to 6" PVC pipe	3.31	95.09%

	6	One (1) 8" skimmer connected to 6" PVC pipe	4.26	97.72%
	7	One (1) 8" skimmer w/ 7" Orifice connected to 6" PVC pipe	3.55	97.48%
	8	Two (2) 8" skimmers connected to 6" PVC pipe	3.63	81.03%
	9	One (1) 6" skimmer	3.10	93.42%
	10	One (1) 8" skimmer connected to 6" PVC pipe + One (1) 6" skimmer	2.80	85.77%
	11	One (1) 8" skimmer	5.05	95.72%
	12	One (1) 6" skimmer w/ 5" Orifice	4.80	90.66%
2	1	Six (6) 8" skimmers connected to 8" PVC pipe	5.01	99.83%
	2	One (1) 6" skimmer + Three (3) 8" skimmers	4.46	99.50%
	3	One (1) 6" skimmer + Four (4) 8" skimmers	4.35	96.68%
	4	Three (3) 8" skimmers	3.40	98.97%
	5	One (1) 8" skimmer connected to 6" PVC pipe + One (2) 8" skimmers	3.71	97.03%
	6	One (1) 6" skimmer + One (1) 8" skimmer	4.57	97.31%
	7	One (1) 6" skimmer	3.78	99.26%
	8	One (1) 8" skimmer w/ 6.5" Orifice connected to 6" PVC pipe	2.43	80.63%
	9	One (1) 6" skimmer w/ 5" Orifice	3.11	98.62%
	13	One (1) 6" skimmer	3.88	94.59%
	14	One (1) 3" skimmer w/ 2.5" Orifice	3.36	95.74%

SECTION 12 – DOWNSTREAM ANALYSIS

The theory behind the "ten percent" downstream analysis is that once the site's stormwater runoff reaches the point downstream where the proposed development is less than ten percent of the total drainage basin, any increase in stormwater flow rate or volume becomes insignificant. Eleven basins totaling approximately 26,005 acres were delineated for the downstream analysis. The project site makes up approximately 1,633 acres of the overall drainage basin that was delineated, or approximately 6%. Based on the downstream analysis concept and "ten percent" assumption described above, the increase in stormwater runoff at the analysis point becomes insignificant to the overall drainage basin once the flow from the project site reaches a point downstream where the development footprint is ten percent of the overall drainage basin.

Since the site's runoff drains to one major tributary, Beasley Creek, 11 analysis points were identified at potentially critical areas along Beasley Creek between the 10% analysis point and the site's outfalls. These analysis points were selected to analyze any potential changes in flow or water surface elevations at road crossings and areas with adjacent neighborhoods or buildings. Using an expanded ICPR model that accounts for the additional drainage area at each analysis point and a cross section of the Beasley Creek channel at each location, pre- and post- development peak flow rates and water surface elevations were calculated.

See Table 3 below for a comparison of the pre-development and post development flows and water surface elevations at the analysis points described above. An Exhibit showing the Downstream Analysis basins can be found in Appendix G.

TABLE 5
Summary Results – 10% Downstream Analysis

	Storm Event	Pre-Dev Peak Flow (cfs)	Post-Dev Peak Flow (cfs)	Pre-Dev WSE (ft)	Post-Dev WSE (ft)
Analysis Pt. 1 (Adjacent homes)	10-Year, 24-Hour	1,168	949	337.0	336.7
	100-Year, 24-Hour	3,809	2,594	338.1	337.7
Analysis Pt. 2 (Adjacent homes)	10-Year, 24-Hour	2,422	2,212	322.9	322.8
	100-Year, 24-Hour	6,252	5,121	324.7	324.3

TABLE 5
Summary Results – 10% Downstream Analysis

	Storm Event	Pre-Dev Peak Flow (cfs)	Post-Dev Peak Flow (cfs)	Pre-Dev WSE (ft)	Post-Dev WSE (ft)
Analysis Pt. 3 (Turkey Farm Rd crossing)	10-Year, 24-Hour	2,426	2,232	300.2	300.1
	100-Year, 24-Hour	6,317	5,240	301.9	301.5
Analysis Pt. 4 (Fulmer Rd crossing)	10-Year, 24-Hour	3,039	2,864	275.3	275.2
	100-Year, 24-Hour	7,622	6,685	276.6	276.3
Analysis Pt. 5 (Lorick Rd crossing)	10-Year, 24-Hour	4,549	4,379	265.1	265.1
	100-Year, 24-Hour	11,346	10,444	266.7	266.5
Analysis Pt. 6 (Koon Store Rd crossing)	10-Year, 24-Hour	5,832	5,752	235.8	235.8
	100-Year, 24-Hour	14,650	13,852	237.4	237.4
Analysis Pt. 7 (Downstream analysis limit)	10-Year, 24-Hour	5,242	5,179	206.7	206.7
	100-Year, 24-Hour	11,895	11,583	206.7	206.7

SECTION 13 – SUMMARY OF RESULTS

Table 6: Proposed Pond 1
Regulated Dam: Havester Dam
Bottom of Pond = 438.2 (ft)
Normal Water Level (NWL) = 442.2 (ft)
Top of Dam Embankment = 448.7 (ft)

Storm Event	Max Elevation	Peak Inflow	Peak Outflow
	(ft)	*(cfs)*	*(cfs)*
2-Year, 24-Hour	443.82	747.59	8.95
10-Year, 24-Hour	444.79	1,310.53	24.54
25-Year, 24-Hour	445.38	1,680.39	40.94
50-Year, 24-Hour	445.78	1,985.29	64.40
100-Year, 24-Hour	446.26	2,324.45	94.92
500-Year, 24-Hour	446.94	3,239.53	624.13
Probable Maximum Flood (PMF)	447.50	3,999.92	1,351.25

Table 7: Proposed Pond 2
Regulated Dam: Terra Dam
Bottom of Pond = 450.5 (ft)
Normal Water Level (NWL) = 455.0 (ft)
Top of Dam Embankment = 466.0 (ft)

Storm Event	Max Elevation	Peak Inflow	Peak Outflow
	(ft)	*(cfs)*	*(cfs)*
2-Year, 24-Hour	457.86	453.92	2.20
10-Year, 24-Hour	459.33	730.93	9.84
25-Year, 24-Hour	460.17	909.10	16.34
50-Year, 24-Hour	460.79	1,054.12	23.94
100-Year, 24-Hour	461.48	1,214.52	33.53
500-Year, 24-Hour	463.49	1,644.51	53.38
Probable Maximum Flood (PMF)	465.17	3,499.96	2,495.66

Table 8: Proposed Pond 3
Regulated Dam: Traveler Dam
Bottom of Pond = 448.5 (ft)
Normal Water Level (NWL) = 453.5 (ft)
Top of Pond Maintenance Shelf = 458.5 (ft)
Top of Dam Embankment = 483.2 (ft)

Storm Event	Max Elevation	Peak Inflow	Peak Outflow
	(ft)	*(cfs)*	*(cfs)*
2-Year, 24-Hour	455.32	350.12	10.84
10-Year, 24-Hour	456.25	556.58	26.50
25-Year, 24-Hour	456.86	689.14	40.28
50-Year, 24-Hour	457.30	797.00	61.36
100-Year, 24-Hour	457.76	916.38	87.72
500-Year, 24-Hour	459.25	1236.73	103.02
Probable Maximum Flood (PMF)	466.14	2,799.99	137.30

Table 9: Proposed Pond 4
Regulated Dam: Spirit Dam
Bottom of Pond = 453.8 (ft)
Normal Water Level (NWL) = 457.8 (ft)
Top of Pond Maintenance Shelf = 464.8 (ft)
Top of Dam Embankment = 483.2 (ft)

Storm Event	Max Elevation	Peak Inflow	Peak Outflow
	(ft)	*(cfs)*	*(cfs)*
2-Year, 24-Hour	460.32	206.96	2.63
10-Year, 24-Hour	461.50	338.08	8.83
25-Year, 24-Hour	462.24	422.78	14.12
50-Year, 24-Hour	462.84	491.82	19.41
100-Year, 24-Hour	463.30	568.22	39.55
500-Year, 24-Hour	465.16	773.00	49.38
Probable Maximum Flood (PMF)	475.34	1,899.99	69.95

Table 10: Proposed Pond 5
Bottom of Pond = 475.0 (ft)
Normal Water Level (NWL) = 483.0 (ft)
Top of Embankment = 493.0 (ft)

Storm Event	Max Elevation	Peak Inflow	Peak Outflow
	(ft)	*(cfs)*	*(cfs)*
2-Year, 24-Hour	483.44	1.69	0.37
10-Year, 24-Hour	484.51	19.59	2.20
25-Year, 24-Hour	485.16	41.32	5.12
50-Year, 24-Hour	485.77	63.53	8.75
100-Year, 24-Hour	486.53	91.89	14.23
500-Year, 24-Hour	488.48	183.40	46.44

Table 11: Proposed Pond 6
Regulated Dam: Patriot Dam
Bottom of Pond = 409.0 (ft)
Normal Water Level (NWL) = 419.0 (ft)
Top of Dam Embankment = 435.0 (ft)

Storm Event	Max Elevation	Peak Inflow	Peak Outflow
	(ft)	*(cfs)*	*(cfs)*
2-Year, 24-Hour	421.54	103.36	1.43
10-Year, 24-Hour	423.63	202.91	3.56
25-Year, 24-Hour	424.44	266.87	7.67
50-Year, 24-Hour	425.13	317.59	12.25
100-Year, 24-Hour	425.98	362.84	18.93
500-Year, 24-Hour	428.16	492.84	44.00
Probable Maximum Flood (PMF)	434.22	1,299.99	1,181.27

Table 11: Proposed Pond 7
Bottom of Pond = 415.0 (ft)
Normal Water Level (NWL) = 419.0 (ft)
Top of Embankment = 427.0 (ft)

Storm Event	Max Elevation	Peak Inflow	Peak Outflow
	(ft)	*(cfs)*	*(cfs)*
2-Year, 24-Hour	420.87	80.27	1.20
10-Year, 24-Hour	421.95	145.43	4.51
25-Year, 24-Hour	422.62	188.71	8.32
50-Year, 24-Hour	423.17	224.53	12.07
100-Year, 24-Hour	423.78	264.45	16.81
500-Year, 24-Hour	425.44	371.95	29.00

Table 11: Proposed Pond 8
Bottom of Pond = 418.0 (ft)
Top of Embankment = 425.0 (ft)

Storm Event	Max Elevation	Peak Inflow	Peak Outflow
	(ft)	*(cfs)*	*(cfs)*
2-Year, 24-Hour	418.71	6.62	0.17
10-Year, 24-Hour	419.76	17.00	0.29
25-Year, 24-Hour	420.48	24.65	0.35
50-Year, 24-Hour	421.07	31.25	0.40
100-Year, 24-Hour	421.71	38.89	0.44
500-Year, 24-Hour	423.05	60.48	1.09

Table 11: Proposed Pond 9
Bottom of Pond = 435.0 (ft)
Normal Water Level (NWL) = 439.0 (ft)
Top of Embankment = 445.0 (ft)

Storm Event	Max Elevation	Peak Inflow	Peak Outflow
	(ft)	*(cfs)*	*(cfs)*
2-Year, 24-Hour	439.63	6.06	0.17
10-Year, 24-Hour	440.40	13.48	0.27
25-Year, 24-Hour	440.93	18.77	0.32
50-Year, 24-Hour	441.34	23.31	0.35
100-Year, 24-Hour	441.79	28.46	0.39
500-Year, 24-Hour	442.93	42.71	0.46

Table 12: Commanche Dam
Bottom of Channel = 392.7 (ft)
Top of Dam Embankment = 483.2 (ft)

Storm Event	Max Elevation	Peak Inflow	Peak Outflow
	(ft)	*(cfs)*	*(cfs)*
2-Year, 24-Hour	404.57	93.55	36.83
10-Year, 24-Hour	409.60	281.51	140.43
25-Year, 24-Hour	410.12	405.19	232.47
50-Year, 24-Hour	410.44	479.31	299.83
100-Year, 24-Hour	410.73	544.69	365.11
500-Year, 24-Hour	411.34	722.20	515.52
Probable Maximum Flood (PMF)	456.67	10,399.90	9,501.25

Table 13, below shows the drawdown times for each dam in the case of an emergency. A valve was sized for each dam in order to adequately be able to draw the permanent pool volume down to 80% of the total permanent pool volume within 10 days.

Table 13: Pond Drawdown Time for Regulated Dams

Dam Name	NWL (ft)	Bottom of Pond (ft)	WSE @ 10 days (ft)	% Perm. Pool Volume
Harvester Dam	442.2	438.2	438.72	13.0 %
Terra Dam	455.0	450.5	450.90	8.9 %
Traveler Dam	453.5	448.5	448.92	8.4 %
Spirit Dam	457.8	453.8	453.96	4.0 %
Patriot Dam	419.0	409.0	409.11	1.1 %

SECTION 14 – CONCLUSIONS AND RECOMMENDATIONS

The intent of this stormwater report was to demonstrate that the proposed Phase 2 Grading for Project Connect has been adequately designed to meet local and state regulations. Stormwater has been analyzed for all upstream stormwater discharging to the site as well as offsite downstream areas to the analysis point. No adverse impacts for neighboring properties are expected because of this development.

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STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

FIGURES

J – 27015.0007

December 2023

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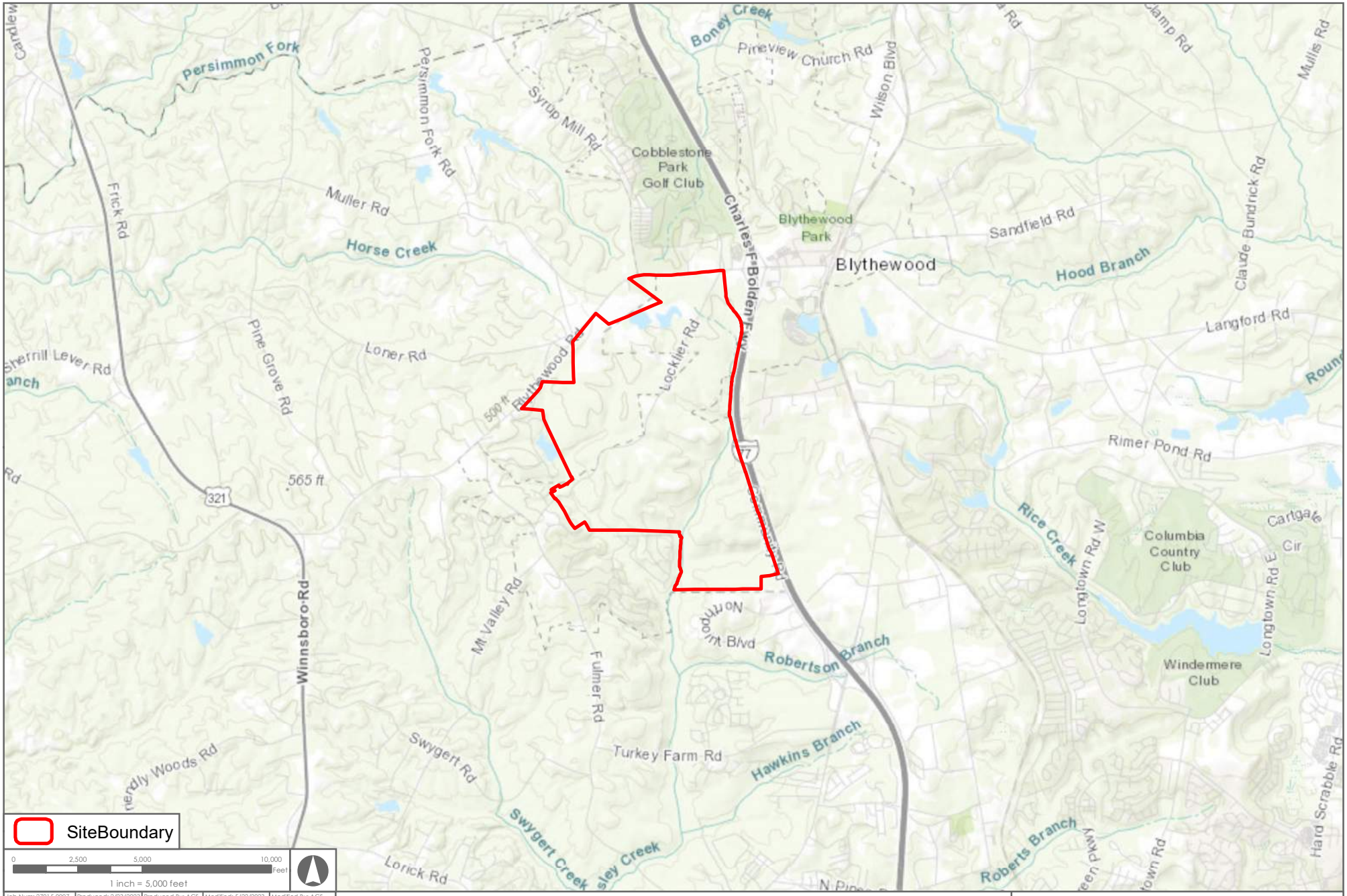

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Phase 2 Grading for Project Connect

Richland County, South Carolina

Location Map

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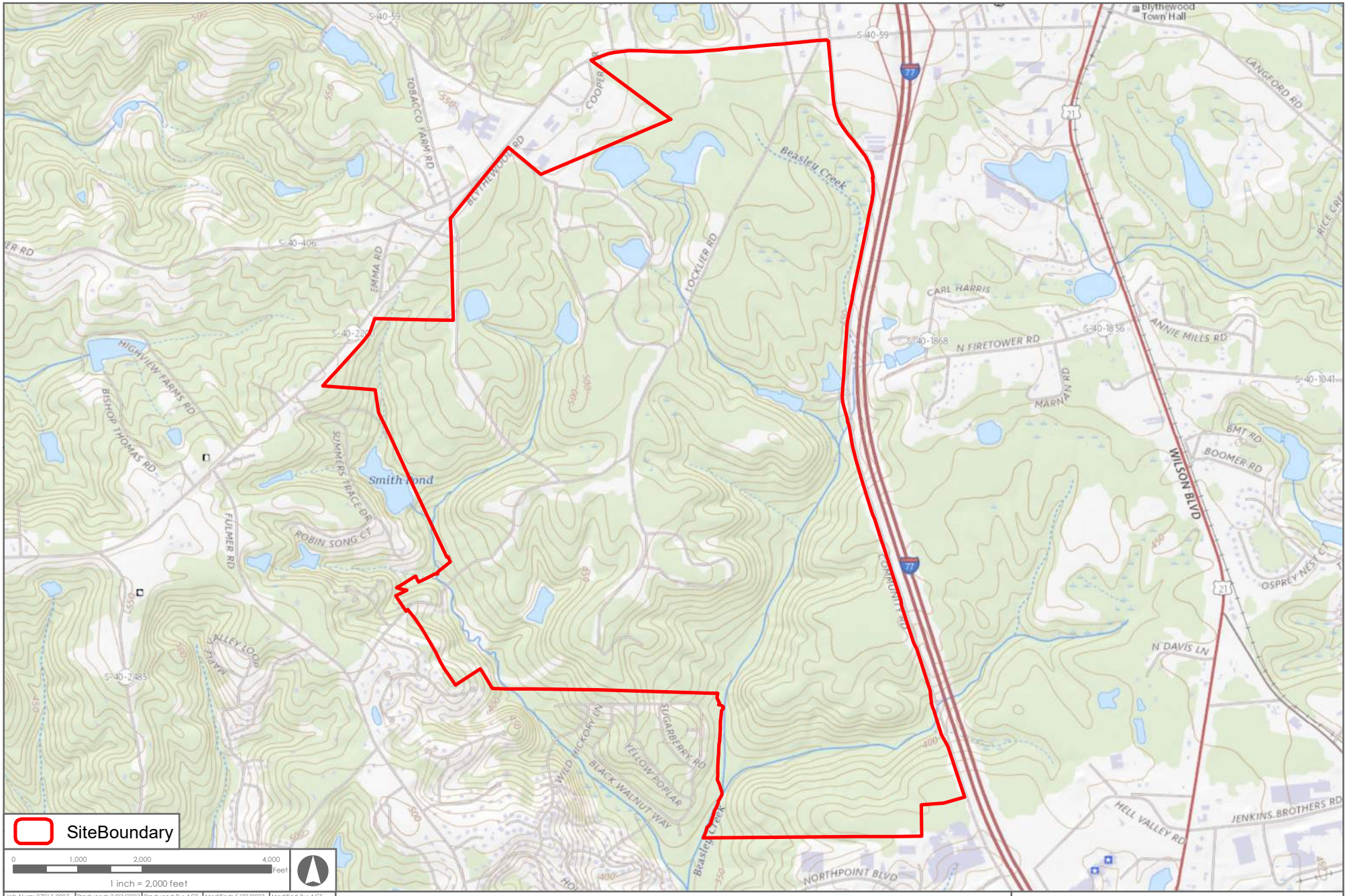

SiteBoundary

0 1,000 2,000 4,000 Feet

1 inch = 2,000 feet

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USGS Map

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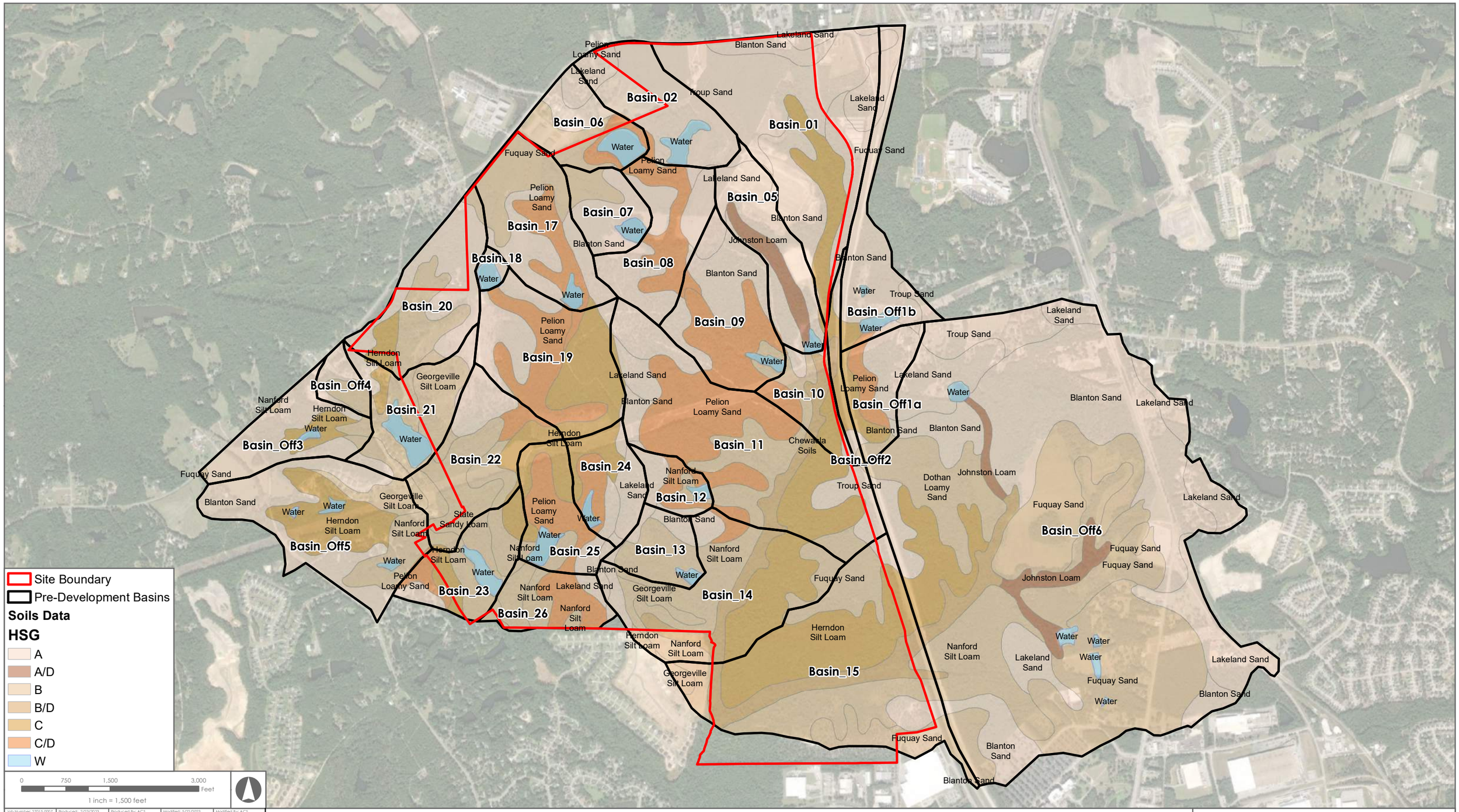

Phase 2 Grading for Project Connect

Richland County, SC

Soils Map

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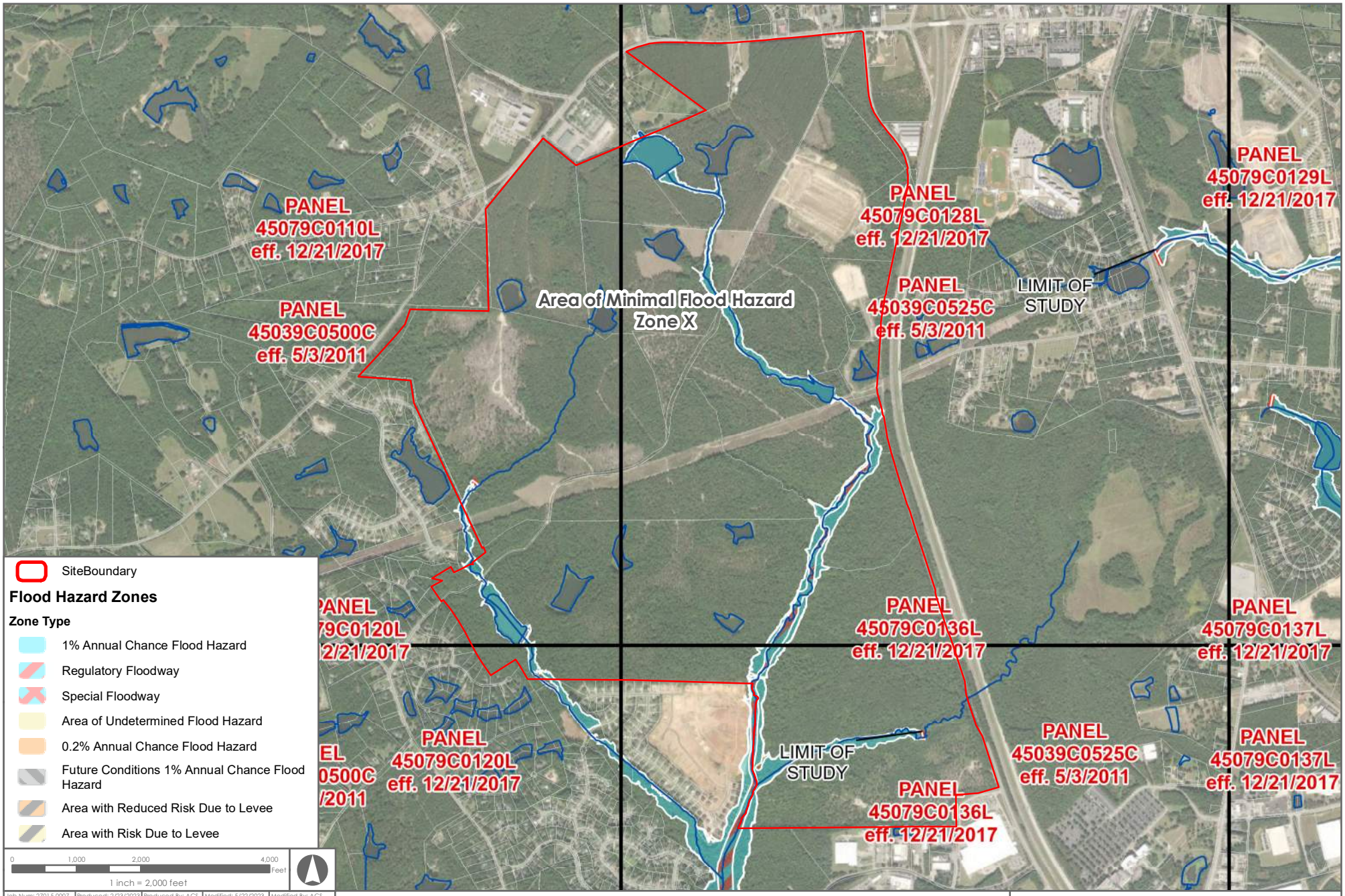

SiteBoundary

Flood Hazard Zones

Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee

0 1,000 2,000 4,000 Feet

1 inch = 2,000 feet

Job Num: 27015.0007	Produced: 2/23/2023	Produced By: ACS	Modified: 5/22/2023	Modified By: ACS
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Basemap	ESRI	2021
Flood Zones	FEMA	2022

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Phase 2 Grading for Project Connect

Richland County, South Carolina

FEMA Flood Map

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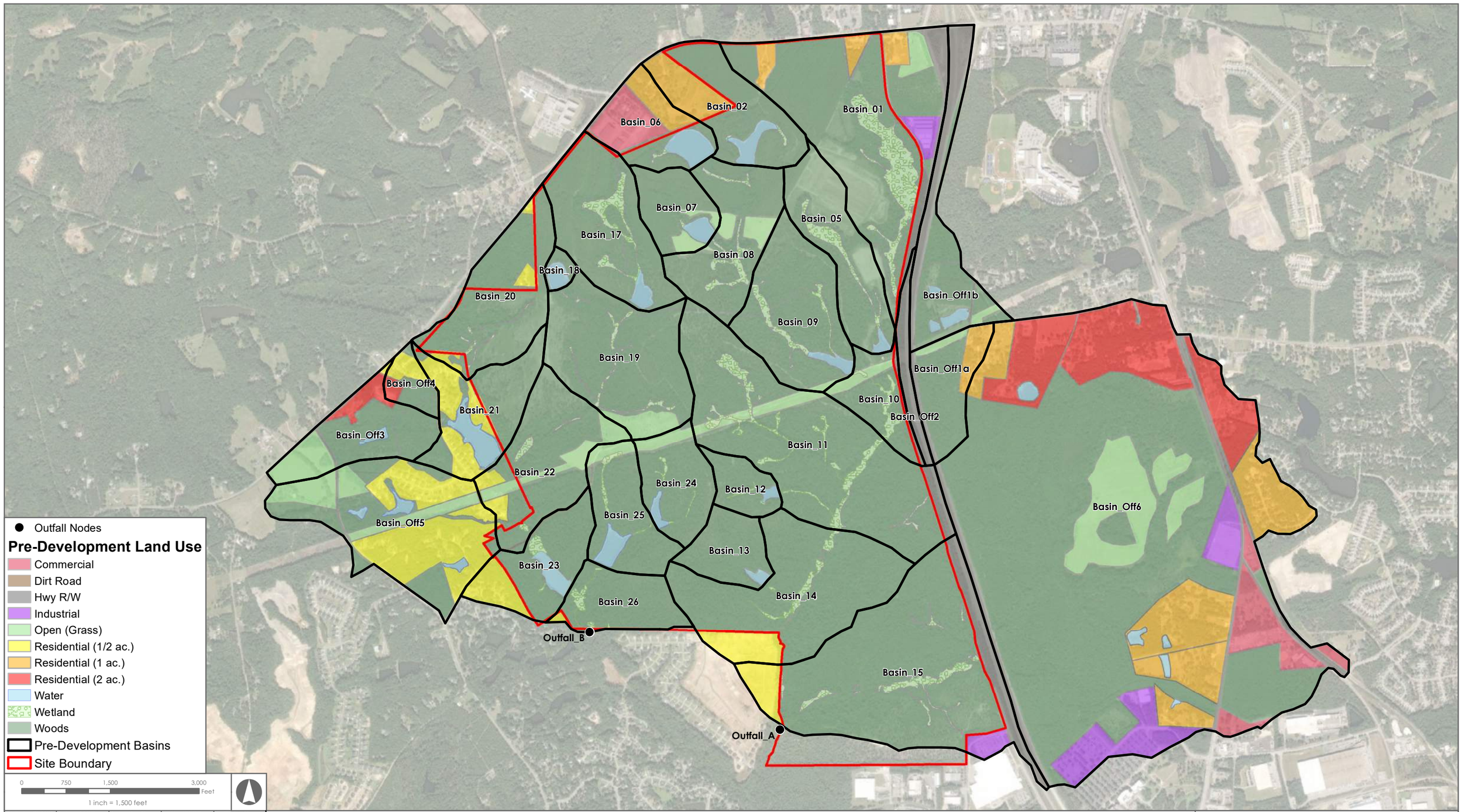

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Land Use	Thomas & Hutton	2023
Pre-Development Basins	Thomas & Hutton	2023
Site Boundary	Thomas & Hutton	2023

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Phase 2 Grading for Project Connect

Richland County, SC

Pre-Development Land Use Map

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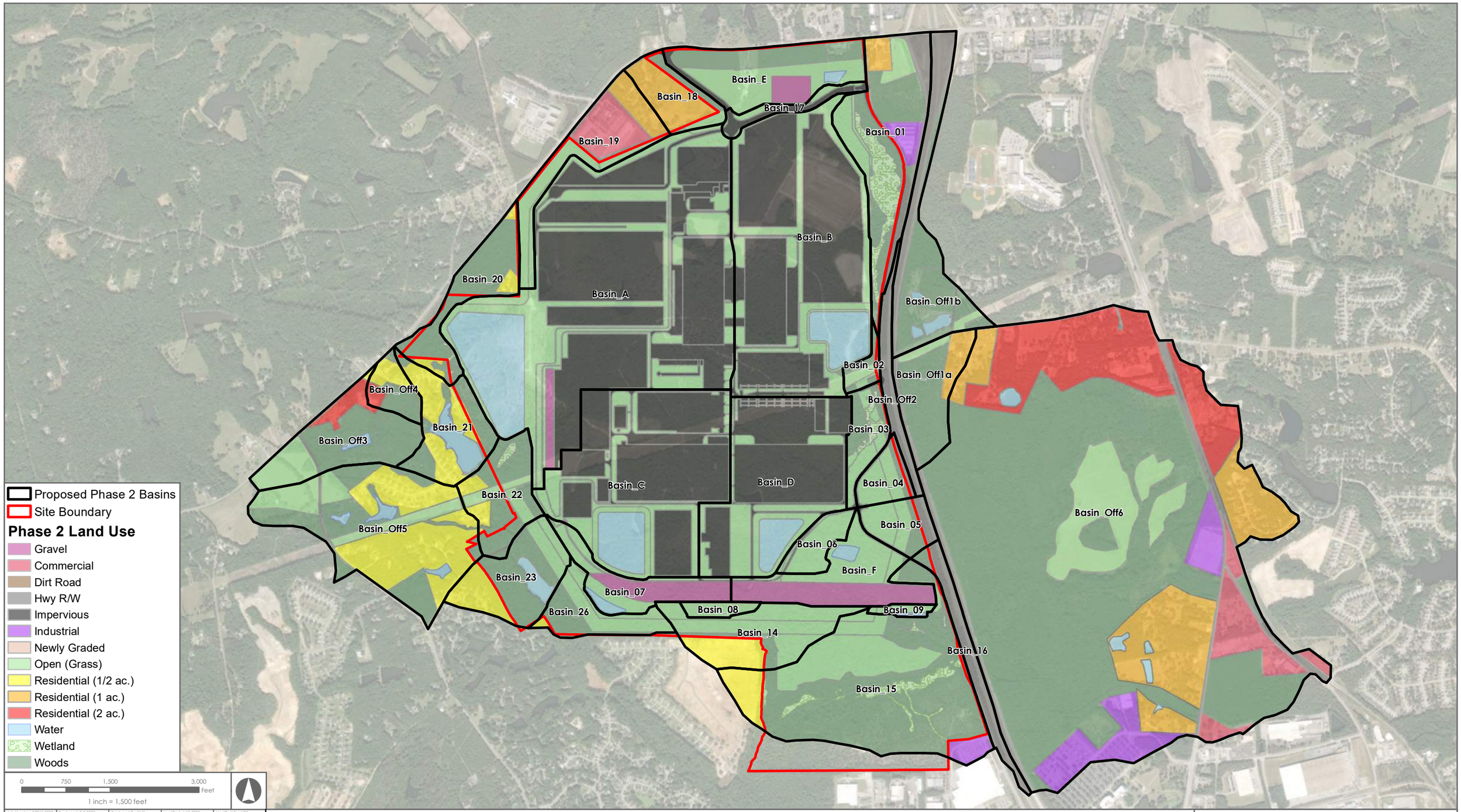

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Post-Development Basins	Thomas & Hutton	2023
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Phase 2 Grading for Project Connect

Richland County, SC

Phase 2 Post-Development Land Use Map

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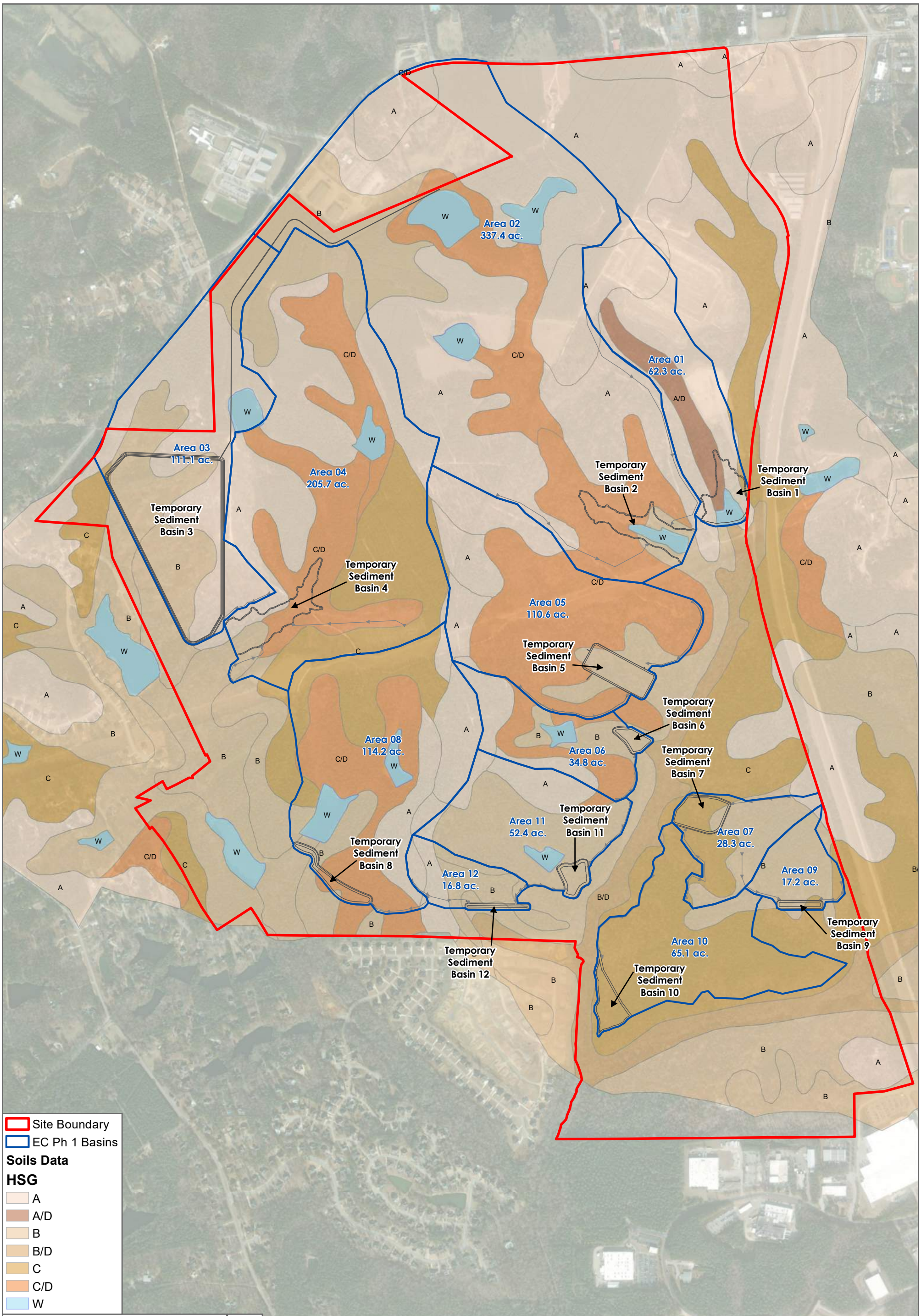

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Phase 2 Mass Grading for Project Connect

Richland County, South Carolina

Sedimentology Map - Erosion Control Phase 1

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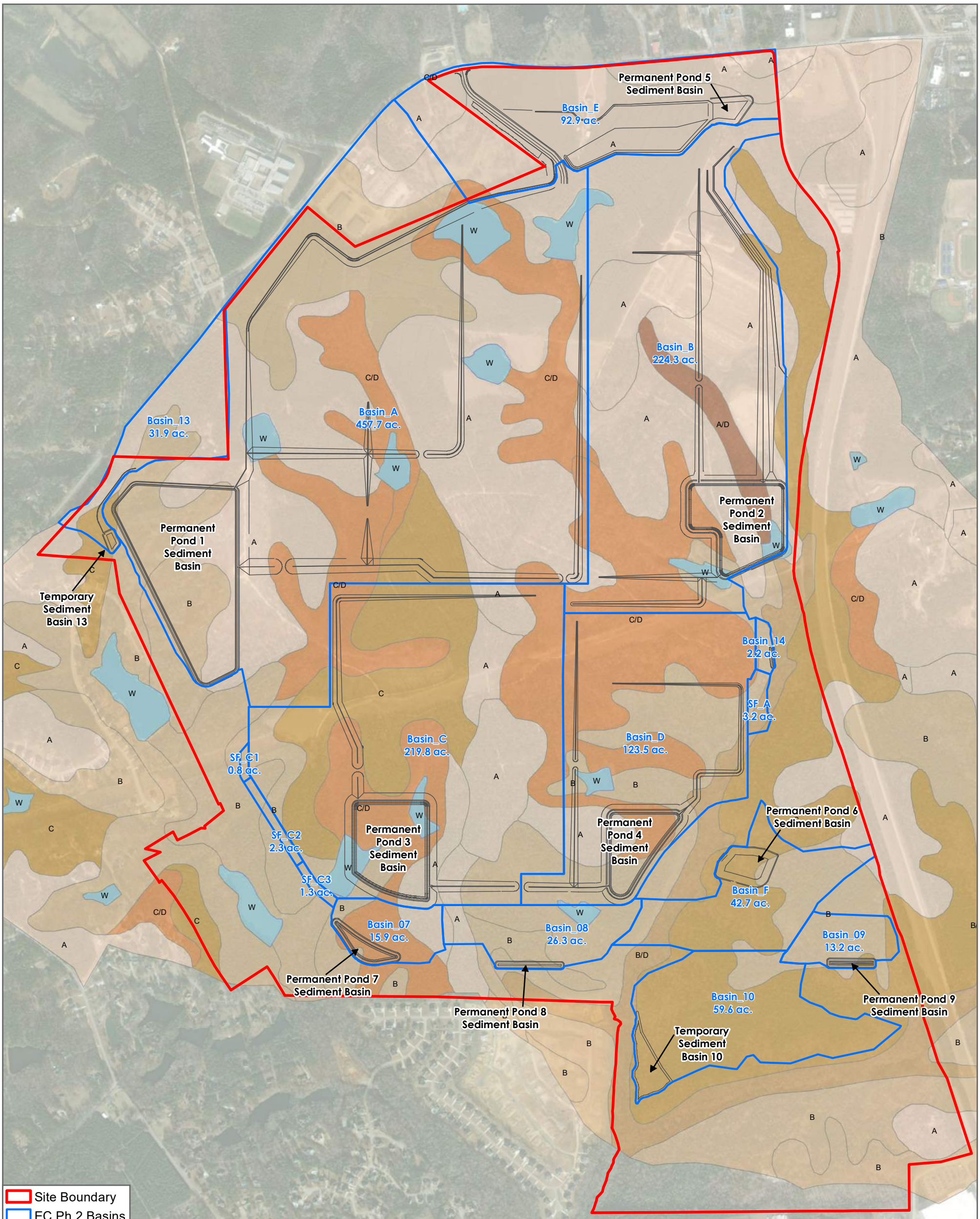

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Phase 2 Mass Grading for Project Connect

Richland County, South Carolina

Sedimentology Map - Erosion Control Phase 2

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STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX A

EXISTING CONDITIONS CN AND TC CALCULATIONS

J – 27015.0007

December 2023

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Grading for Project Connect

Existing Conditions Curve Number Calculations

6/15/2023

| Name | Area (ac.) | | |

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

PROJECT: Phase 2 Grading for Project Connect

PREPARED BY: Thomas & Hutton
PREPARED FOR: Richland County Economic Development

Job: 27015.0007
Date: 3/9/23
Revised: 6/22/23
By: ACS

DRAINAGE BASIN 01

DRAINAGE BASIN 01

Calculate Pre-Development "Tc" and Composite "CN" **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

$t = (0.007(nl)^{0.8})/((P2^{0.5})*(S^{0.4}))$

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0030 ft/ft
t_1 = 43.2 min

Shallow Concentrated Flow:

t=1/60v
where
l = 5784 ft
Paved ? No
Slope, S = 0.0122 ft/ft
v = 1.78 ft/s
t_2 = 54.0 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0060 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 19.30 sf
P = 19.71 ft => Hydraulic Radius, R = 0.98 ft
v = 1.14 ft/s
t_3 = 4.4 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 01: Tc = 102.0 min

DRAINAGE BASIN 02

DRAINAGE BASIN 02

Calculate Pre-Development "Tc" and Composite "CN" **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

$t = (0.007(nl)^{0.8})/((P2^{0.5})*(S^{0.4}))$

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0020 ft/ft
t_1 = 16.8 min

Shallow Concentrated Flow:

t=1/60v
where
l = 2145 ft
Paved ? No
Slope, S = 0.0205 ft/ft
v = 2.31 ft/s
t_2 = 15.5 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0078 ft/ft
n = Hwy. r/w grass 4-6 inches = 0.0700
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 1.49 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l=
v= 2.00 ft/s
t= 0.0 min

Basin 02: Tc = 32.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

PROJECT: Phase 2 Grading for Project Connect

PREPARED BY: Thomas & Hutton
PREPARED FOR: Richland County Economic Development

Job: 27015.0007
Date: 3/9/23
Revised: 6/22/23
By: ACS

DRAINAGE BASIN 05

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0110 ft/ft
t_1 = 25.7 min

Shallow Concentrated Flow:

t=1/60v

where
l = 3165 ft
Paved ? No
Slope, S = 0.0190 ft/ft
v = 2.23 ft/s
t_2 = 23.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0140 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 32.00 sf
P = 40.13 ft => Hydraulic Radius, R = 0.80 ft
v = 1.51 ft/s
t_3 = 3.3 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 05: Tc = 53.0 min

DRAINAGE BASIN 06

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0090 ft/ft
t_1 = 9.2 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1383 ft
Paved ? No
Slope, S = 0.0245 ft/ft
v = 2.53 ft/s
t_2 = 9.1 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0100 ft/ft
n = Not maintained, dense brush, high stage = 0.1200
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 0.98 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 06: Tc = 18.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

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DRAINAGE BASIN 07

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0110 ft/ft
t_1 = 25.7 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1035 ft
Paved ? No
Slope, S = 0.0250 ft/ft
v = 2.55 ft/s
t_2 = 6.8 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0190 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 64.24 sf
P = 58.57 ft => Hydraulic Radius, R = 1.10 ft
v = 2.18 ft/s
t_3 = 2.3 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 07: Tc = 35.0 min

DRAINAGE BASIN 08

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0300 ft/ft
t_1 = 17.2 min

Shallow Concentrated Flow:

t=1/60v

where
l = 2158 ft
Paved ? No
Slope, S = 0.0173 ft/ft
v = 2.12 ft/s
t_2 = 16.9 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0093 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 591.10 sf
P = 178.33 ft => Hydraulic Radius, R = 3.31 ft
v = 3.19 ft/s
t_3 = 1.6 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 08: Tc = 36.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 09

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0100 ft/ft
t_1 = 26.7 min

Shallow Concentrated Flow:

t=1/60v

where
l = 2397 ft
Paved ? No
Slope, S = 0.0232 ft/ft
v = 2.46 ft/s
t_2 = 16.3 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0083 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 551.50 sf
P = 139.50 ft => Hydraulic Radius, R = 3.95 ft
v = 3.39 ft/s
t_3 = 1.5 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 09: Tc = 44.0 min

DRAINAGE BASIN 10

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0090 ft/ft
t_1 = 27.9 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1338 ft
Paved ? No
Slope, S = 0.0545 ft/ft
v = 3.77 ft/s
t_2 = 5.9 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0107 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 0.50 sf
P = 4.03 ft => Hydraulic Radius, R = 0.12 ft
v = 0.38 ft/s
t_3 = 13.1 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 10: Tc = 47.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 11

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

$t = (0.007(nl)^{0.8})/((P2^{0.5})*(S^{0.4}))$

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0021 ft/ft
t_1 = 49.9 min

Shallow Concentrated Flow:

t=1/60v

where
l = 4682 ft
Paved ? No
Slope, S = 0.0245 ft/ft
v = 2.52 ft/s
t_2 = 30.9 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0067 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 29.70 sf
P = 29.97 ft => Hydraulic Radius, R = 0.99 ft
v = 1.21 ft/s
t_3 = 4.1 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 11: Tc = 85.0 min

DRAINAGE BASIN 12

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

$t = (0.007(nl)^{0.8})/((P2^{0.5})*(S^{0.4}))$

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0030 ft/ft
t_1 = 43.2 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1097 ft
Paved ? No
Slope, S = 0.0325 ft/ft
v = 2.91 ft/s
t_2 = 6.3 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0100 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 25.00 sf
P = 35.00 ft => Hydraulic Radius, R = 0.71 ft
v = 1.19 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 12: Tc = 50.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 13

DRAINAGE BASIN 13

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0130 ft/ft
t_1 = 24.1 min

Shallow Concentrated Flow:

t=1/60v

where
l = 970 ft
Paved ? No
Slope, S = 0.0679 ft/ft
v = 4.21 ft/s
t_2 = 3.8 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 120 ft
S = 0.0667 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 98.20 sf
P = 49.75 ft => Hydraulic Radius, R = 1.97 ft
v = 8.05 ft/s
t_3 = 0.2 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 13: Tc = 28.0 min

DRAINAGE BASIN 14

DRAINAGE BASIN 14

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0010 ft/ft
t_1 = 67.1 min

Shallow Concentrated Flow:

t=1/60v

where
l = 3447 ft
Paved ? No
Slope, S = 0.0281 ft/ft
v = 2.71 ft/s
t_2 = 21.2 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0143 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 27.00 sf
P = 30.22 ft => Hydraulic Radius, R = 0.89 ft
v = 2.20 ft/s
t_3 = 2.3 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 14: Tc = 91.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

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DRAINAGE BASIN 15

DRAINAGE BASIN 15

Calculate Pre-Development "Tc" and Composite "CN" **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0080 ft/ft
t_1 = 29.2 min

Shallow Concentrated Flow:

t=1/60v

where
l = 5288 ft
Paved ? No
Slope, S = 0.0202 ft/ft
v = 2.29 ft/s
t_2 = 38.5 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0097 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 48.25 sf
P = 30.49 ft => Hydraulic Radius, R = 1.58 ft
v = 2.65 ft/s
t_3 = 1.9 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 15: Tc = 70.0 min

DRAINAGE BASIN 17

DRAINAGE BASIN 17

Calculate Pre-Development "Tc" and Composite "CN" **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0280 ft/ft
t_1 = 17.7 min

Shallow Concentrated Flow:

t=1/60v

where
l = 2211 ft
Paved ? No
Slope, S = 0.0329 ft/ft
v = 2.93 ft/s
t_2 = 12.6 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0010 ft/ft
n = Flood Plains: pasture, short grass = 0.0350
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 1.07 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 17: Tc = 30.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 18

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0270 ft/ft
t_1 = 18.0 min

Shallow Concentrated Flow:

t=1/60v

where
l = 180 ft
Paved ? No
Slope, S = 0.0633 ft/ft
v = 4.06 ft/s
t_2 = 0.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0010 ft/ft
n = Flood Plains: pasture, short grass = 0.0350
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 1.07 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 18: Tc = 19.0 min

DRAINAGE BASIN 19

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0100 ft/ft
t_1 = 26.7 min

Shallow Concentrated Flow:

t=1/60v

where
l = 2256 ft
Paved ? No
Slope, S = 0.0245 ft/ft
v = 2.52 ft/s
t_2 = 14.9 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0173 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 31.28 sf
P = 29.56 ft => Hydraulic Radius, R = 1.06 ft
v = 2.03 ft/s
t_3 = 2.5 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 19: Tc = 44.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 20

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0430 ft/ft
t_1 = 14.9 min

Shallow Concentrated Flow:

t=1/60v

where
l = 3389 ft
Paved ? No
Slope, S = 0.0297 ft/ft
v = 2.78 ft/s
t_2 = 20.3 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0313 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 16.66 sf
P = 19.89 ft => Hydraulic Radius, R = 0.84 ft
v = 2.34 ft/s
t_3 = 2.1 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 20: Tc = 37.0 min

DRAINAGE BASIN 21

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0140 ft/ft
t_1 = 23.4 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1819 ft
Paved ? No
Slope, S = 0.0413 ft/ft
v = 3.28 ft/s
t_2 = 9.2 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0243 ft/ft
n = Flood Plains: heavy brush = 0.1500
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 1.23 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 21: Tc = 33.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

PROJECT: Phase 2 Grading for Project Connect

PREPARED BY: Thomas & Hutton
PREPARED FOR: Richland County Economic Development

Job: 27015.0007
Date: 3/9/23
Revised: 6/22/23
By: ACS

DRAINAGE BASIN 22

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0250 ft/ft
t_1 = 18.5 min

Shallow Concentrated Flow:

t=1/60v

where
l = 2944 ft
Paved ? No
Slope, S = 0.0327 ft/ft
v = 2.92 ft/s
t_2 = 16.8 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0080 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 23.94 sf
P = 30.04 ft => Hydraulic Radius, R = 0.80 ft
v = 1.52 ft/s
t_3 = 3.3 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 22: Tc = 39.0 min

DRAINAGE BASIN 23

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0330 ft/ft
t_1 = 16.6 min

Shallow Concentrated Flow:

t=1/60v

where
l = 981 ft
Paved ? No
Slope, S = 0.0458 ft/ft
v = 3.45 ft/s
t_2 = 4.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0103 ft/ft
n = Nat. stream, light brush on banks = 0.0500
A = 16.00 sf
P = 21.67 ft => Hydraulic Radius, R = 0.74 ft
v = 2.46 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 23: Tc = 21.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

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PREPARED FOR: Richland County Economic Development

Job: 27015.0007
Date: 3/9/23
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By: ACS

DRAINAGE BASIN 24

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0010 ft/ft
t_1 = 67.1 min

Shallow Concentrated Flow:

t=l/60v

where
l = 1218 ft
Paved ? No
Slope, S = 0.0253 ft/ft
v = 2.57 ft/s
t_2 = 7.9 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0267 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 260.23 sf
P = 79.54 ft => Hydraulic Radius, R = 3.27 ft
v = 5.35 ft/s
t_3 = 0.9 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 24: Tc = 76.0 min

DRAINAGE BASIN 25

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Short = 0.150
l = 100 ft
P2 = 3.60 in
S = 0.0200 ft/ft
t_1 = 9.2 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1230 ft
Paved ? No
Slope, S = 0.0449 ft/ft
v = 3.42 ft/s
t_2 = 6.0 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0293 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 1063.30 sf
P = 160.95 ft => Hydraulic Radius, R = 6.61 ft
v = 11.95 ft/s
t_3 = 0.4 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 25: Tc = 16.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

PROJECT: Phase 2 Grading for Project Connect

PREPARED BY: Thomas & Hutton
PREPARED FOR: Richland County Economic Development

Job: 27015.0007
Date: 3/9/23
Revised: 6/22/23
By: ACS

DRAINAGE BASIN 26

DRAINAGE BASIN 26

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0800 ft/ft
t_1 = 11.6 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1522 ft
Paved ? No
Slope, S = 0.0656 ft/ft
v = 4.13 ft/s
t_2 = 6.1 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0197 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 117.10 sf
P = 136.65 ft => Hydraulic Radius, R = 0.86 ft
v = 2.51 ft/s
t_3 = 2.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 26: Tc = 20.0 min

DRAINAGE BASIN Offsite 1a

DRAINAGE BASIN Offsite 1a

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0050 ft/ft
t_1 = 11.6 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1550 ft
Paved ? No
Slope, S = 0.0339 ft/ft
v = 2.97 ft/s
t_2 = 8.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0020 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 25.00 sf
P = 35.00 ft => Hydraulic Radius, R = 0.71 ft
v = 0.53 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 1a: Tc = 20.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

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PREPARED FOR: Richland County Economic Development

Job: 27015.0007
Date: 3/9/23
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DRAINAGE BASIN Offsite 1b — **DRAINAGE BASIN** Offsite 1b

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

$t = (0.007(nl)^{0.8})/((P2^{0.5})*(S^{0.4}))$

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0150 ft/ft
t_1 = 7.5 min

Shallow Concentrated Flow:

t=1/60v

where
l = 5150 ft
Paved ? No
Slope, S = 0.0171 ft/ft
v = 2.11 ft/s
t_2 = 40.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0020 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 25.00 sf
P = 35.00 ft => Hydraulic Radius, R = 0.71 ft
v = 0.53 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 1b: Tc = 48.0 min

DRAINAGE BASIN Offsite 2 — **DRAINAGE BASIN** Offsite 2

Calculate Pre-Development "Tc" and Composite "CN" — **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

$t = (0.007(nl)^{0.8})/((P2^{0.5})*(S^{0.4}))$

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Smooth/Paved Surfaces = 0.011
l = 100 ft
P2 = 3.60 in
S = 0.0220 ft/ft
t_1 = 1.1 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1200 ft
Paved ? Yes
Slope, S = 0.0445 ft/ft
v = 4.29 ft/s
t_2 = 4.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0277 ft/ft
n = Hwy. r/w grass 4-6 inches = 0.0700
A = 91.77 sf
P = 31.92 ft => Hydraulic Radius, R = 2.87 ft
v = 7.14 ft/s
t_3 = 0.7 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 2: Tc = 6.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

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DRAINAGE BASIN Offsite 3 **DRAINAGE BASIN** Offsite 3

Calculate Pre-Development "Tc" and Composite "CN" **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Short = 0.150
l = 100 ft
P2 = 3.60 in
S = 0.0100 ft/ft
t_1 = 12.2 min

Shallow Concentrated Flow:

t=1/60v

where
l = 2259 ft
Paved ? No
Slope, S = 0.0309 ft/ft
v = 2.84 ft/s
t_2 = 13.3 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0230 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 97.02 sf
P = 68.82 ft => Hydraulic Radius, R = 1.41 ft
v = 3.78 ft/s
t_3 = 1.3 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 3: Tc = 27.0 min

DRAINAGE BASIN Offsite 4 **DRAINAGE BASIN** Offsite 4

Calculate Pre-Development "Tc" and Composite "CN" **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Smooth/Paved Surfaces = 0.011
l = 100 ft
P2 = 3.60 in
S = 0.0010 ft/ft
t_1 = 3.8 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1203 ft
Paved ? No
Slope, S = 0.0529 ft/ft
v = 3.71 ft/s
t_2 = 5.4 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0237 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 93.84 sf
P = 68.60 ft => Hydraulic Radius, R = 1.37 ft
v = 3.76 ft/s
t_3 = 1.3 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 4: Tc = 11.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

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Date: 3/9/23
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By: ACS

DRAINAGE BASIN Offsite 5 **DRAINAGE BASIN** Offsite 5

Calculate Pre-Development "Tc" and Composite "CN" **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0140 ft/ft
t_1 = 23.4 min

Shallow Concentrated Flow:

t=1/60v

where
l = 3603 ft
Paved ? No
Slope, S = 0.0325 ft/ft
v = 2.91 ft/s
t_2 = 20.6 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0433 ft/ft
n = Earth, fairly uniform, some weeds = 0.0280
A = 13.65 sf
P = 19.70 ft => Hydraulic Radius, R = 0.69 ft
v = 8.65 ft/s
t_3 = 0.6 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 5: Tc = 45.0 min

DRAINAGE BASIN Offsite 6 **DRAINAGE BASIN** Offsite 6

Calculate Pre-Development "Tc" and Composite "CN" **"Pre"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Short = 0.150
l = 100 ft
P2 = 3.60 in
S = 0.0060 ft/ft
t_1 = 15.0 min

Shallow Concentrated Flow:

t=1/60v

where
l = 5662 ft
Paved ? No
Slope, S = 0.0150 ft/ft
v = 1.98 ft/s
t_2 = 47.8 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0213 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 39.96 sf
P = 30.22 ft => Hydraulic Radius, R = 1.32 ft
v = 3.49 ft/s
t_3 = 1.4 min

Pipe Flow: t=1/60v

l=
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 6: Tc = 64.0 min

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX B

EXISTING CONDITIONS ICPR4 MODEL REPORTS

J – 27015.0007

December 2023

thomasandhutton.com

Simulation: 002yr

Scenario: Existing
Run Date/Time: 12/14/2023 12:08:08 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	3.60 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 010yr

Scenario:	Existing
Run Date/Time:	12/14/2023 12:09:27 PM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	5.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 025yr

Scenario: Existing
Run Date/Time: 12/14/2023 12:10:49 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	6.40 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 050yr

Scenario:	Existing
Run Date/Time:	12/14/2023 12:12:13 PM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	7.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 100yr

Scenario: Existing
Run Date/Time: 12/14/2023 12:13:32 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	8.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 500yr

Scenario:	Existing
Run Date/Time:	12/14/2023 12:14:54 PM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	11.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 002yr

Scenario: Site Only
Run Date/Time: 12/14/2023 12:16:22 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	3.60 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 010yr

Scenario:	Site Only
Run Date/Time:	12/14/2023 12:17:37 PM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	5.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 025yr

Scenario: Site Only
Run Date/Time: 12/14/2023 12:18:57 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	6.40 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 050yr

Scenario:	Site Only
Run Date/Time:	12/14/2023 12:20:09 PM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	7.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 100yr

Scenario: Site Only
Run Date/Time: 12/14/2023 12:21:28 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: Flood
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	8.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 500yr

Scenario:	Site Only
Run Date/Time:	12/14/2023 12:22:49 PM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	11.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simple Basin: Basin_01

Scenario:	Existing
Node:	Trib1-05-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	102.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	199.2900 ac
Curve Number:	47.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_02

Scenario:	Existing
Node:	Trib1-03-10
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	32.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	72.0800 ac
Curve Number:	43.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_05

Scenario:	Existing
Node:	Trib1-04-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	53.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	66.1400 ac
Curve Number:	45.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_06

Scenario:	Existing
Node:	Trib1-03-12
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	18.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	51.1500 ac
Curve Number:	78.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_07

Scenario:	Existing
Node:	Trib1-03-07
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	35.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	36.5600 ac
Curve Number:	45.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_08

Scenario:	Existing
Node:	Trib1-03-04
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	36.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	71.4400 ac
Curve Number:	50.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_09

Scenario:	Existing
Node:	Trib1-03-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	44.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	88.1600 ac
Curve Number:	55.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_10

Scenario:	Existing
Node:	Trib1-00-05
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	47.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	34.7000 ac
Curve Number:	69.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_11

Scenario:	Existing
Node:	Trib1-00-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	102.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	198.4100 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_12

Scenario:	Existing
Node:	Trib1-02-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	50.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	22.1500 ac
Curve Number:	57.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_13

Scenario:	Existing
Node:	Trib1-01-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	28.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	33.8400 ac
Curve Number:	51.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_14

Scenario:	Existing
Node:	Outfall_C
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	91.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	136.9600 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_15

Scenario:	Existing
Node:	Trib1-00-00
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	70.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	219.1300 ac
Curve Number:	67.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_17

Scenario:	Existing
Node:	Trib2-03-05
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	30.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	88.7400 ac
Curve Number:	54.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_18

Scenario:	Existing
Node:	Trib2-03-07
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	19.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	6.4300 ac
Curve Number:	67.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_19

Scenario:	Existing
Node:	Trib2-03-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	44.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	109.3500 ac
Curve Number:	62.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_20

Scenario:	Existing
Node:	Trib2-04-08
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	37.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	85.2400 ac
Curve Number:	45.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_21

Scenario:	Existing
Node:	Trib2-04-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	33.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	66.3600 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_22

Scenario:	Existing
Node:	Trib2-00-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	39.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	86.1900 ac
Curve Number:	56.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_23

Scenario:	Existing
Node:	Trib2-00-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	21.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	56.1600 ac
Curve Number:	67.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_24

Scenario:	Existing
Node:	Trib2-01-04
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	76.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	45.3400 ac
Curve Number:	55.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_25

Scenario:	Existing
Node:	Trib2-01-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	16.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	52.6900 ac
Curve Number:	70.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_26

Scenario:	Existing
Node:	Outfall_B
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	42.8800 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off1a

Scenario:	Existing
Node:	Offsite01
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	43.4100 ac
Curve Number:	57.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off1b

Scenario:	Existing
Node:	Offsite02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	48.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	66.9200 ac
Curve Number:	55.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off2

Scenario:	Existing
Node:	Trib1-05-01a
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	6.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	14.8000 ac
Curve Number:	89.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off3

Scenario:	Existing
Node:	Trib2-04-04
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	27.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	58.0600 ac
Curve Number:	46.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off4

Scenario:	Existing
Node:	Trib2-04-06
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	11.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	15.7900 ac
Curve Number:	52.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off5

Scenario:	Existing
Node:	Trib2-02-01
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	45.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	134.0500 ac
Curve Number:	59.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off6

Scenario:	Existing
Node:	Trib3-00-06
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	64.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	842.9300 ac
Curve Number:	57.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_01

Scenario:	Site Only
Node:	Trib1-05-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	102.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	199.2900 ac
Curve Number:	47.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_02

Scenario:	Site Only
Node:	Trib1-03-10
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	32.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	72.0800 ac
Curve Number:	43.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_05

Scenario:	Site Only
Node:	Trib1-04-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	53.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	66.1400 ac
Curve Number:	45.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_06

Scenario:	Site Only
Node:	Trib1-03-12
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	18.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	51.1500 ac
Curve Number:	78.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_07

Scenario:	Site Only
Node:	Trib1-03-07
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	35.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	36.5600 ac
Curve Number:	45.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_08

Scenario:	Site Only
Node:	Trib1-03-04
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	36.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	71.4400 ac
Curve Number:	50.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_09

Scenario:	Site Only
Node:	Trib1-03-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	44.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	88.1600 ac
Curve Number:	55.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_10

Scenario:	Site Only
Node:	Trib1-00-05
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	47.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	34.7000 ac
Curve Number:	69.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_11

Scenario:	Site Only
Node:	Trib1-00-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	102.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	198.4100 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_12

Scenario:	Site Only
Node:	Trib1-02-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	50.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	22.1500 ac
Curve Number:	57.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_13

Scenario:	Site Only
Node:	Trib1-01-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	28.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	33.8400 ac
Curve Number:	51.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_14

Scenario:	Site Only
Node:	Outfall_C
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	91.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	136.9600 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_15

Scenario:	Site Only
Node:	Trib1-00-00
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	70.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	219.1300 ac
Curve Number:	67.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_17

Scenario:	Site Only
Node:	Trib2-03-05
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	30.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	88.7400 ac
Curve Number:	54.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_18

Scenario:	Site Only
Node:	Trib2-03-07
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	19.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	6.4300 ac
Curve Number:	67.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_19

Scenario:	Site Only
Node:	Trib2-03-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	44.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	109.3500 ac
Curve Number:	62.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_20

Scenario:	Site Only
Node:	Trib2-04-08
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	37.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	85.2400 ac
Curve Number:	45.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_21

Scenario:	Site Only
Node:	Trib2-04-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	33.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	66.3600 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_22

Scenario:	Site Only
Node:	Trib2-00-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	39.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	86.1900 ac
Curve Number:	56.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_23

Scenario:	Site Only
Node:	Trib2-00-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	21.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	56.1600 ac
Curve Number:	67.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_24

Scenario:	Site Only
Node:	Trib2-01-04
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	76.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	45.3400 ac
Curve Number:	55.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_25

Scenario:	Site Only
Node:	Trib2-01-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	16.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	52.6900 ac
Curve Number:	70.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_26

Scenario:	Site Only
Node:	Outfall_B
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	42.8800 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off2

Scenario:	Site Only
Node:	Trib1-05-01a
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	6.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	14.8000 ac
Curve Number:	89.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off3

Scenario:	Site Only
Node:	Trib2-04-04
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	27.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	58.0600 ac
Curve Number:	46.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off4

Scenario:	Site Only
Node:	Trib2-04-06
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	11.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	15.7900 ac
Curve Number:	52.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off5

Scenario:	Site Only
Node:	Trib2-02-01
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	45.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	134.0500 ac
Curve Number:	59.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Offsite01

Scenario:	Existing
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	436.00 ft
Warning Stage:	470.00 ft

Stage [ft]	Area [ac]	Area [ft2]
436.00	0.0022	96
437.00	0.0252	1098
438.00	0.0838	3650
439.00	0.2360	10280
440.00	0.5592	24359
441.00	1.1503	50107
442.00	1.7332	75498
443.00	2.1518	93732
444.00	2.6033	113400
445.00	3.0577	133193
446.00	3.5420	154290
447.00	4.0570	176723
448.00	4.6743	203613
449.00	5.3165	231587
450.00	5.9706	260079
451.00	6.5827	286742
452.00	7.2007	313662
453.00	7.7784	338827
454.00	8.4713	369010
455.00	9.3221	406071

Stage [ft]	Area [ac]	Area [ft2]
456.00	10.2166	445035
457.00	11.1193	484357
458.00	12.0711	525817
459.00	13.0447	568227
460.00	14.0428	611704
461.00	15.0974	657643
462.00	16.2069	705973
463.00	17.3087	753967
464.00	18.4385	803181
465.00	19.6051	853998
466.00	20.7405	903456
467.00	22.9941	1001623
468.00	24.7503	1078123
469.00	26.2608	1143920
470.00	27.6624	1204974

Comment: Basin Off1 storage

Node: Offsite02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 443.00 ft
Warning Stage: 459.00 ft

Stage [ft]	Area [ac]	Area [ft2]
443.00	0.0000	0
444.00	0.0069	301
445.00	0.0113	492
446.00	0.0217	945
447.00	0.0316	1376
448.00	0.0605	2635
449.00	0.0981	4273
450.00	0.1470	6403
451.00	0.2463	10729
452.00	0.3871	16862
453.00	0.5702	24838
454.00	0.8136	35440
455.00	1.1227	48905

Comment: Off1b storage

Node: Outfall_A

Scenario: Existing

Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 346.00 ft
Warning Stage: 400.00 ft
Boundary Stage:

Comment:

Node: Outfall_B

Scenario: Existing
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 378.00 ft
Warning Stage: 412.00 ft
Boundary Stage: 100yr_FloodB

Comment:

Node: Outfall_C

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 358.50 ft
Warning Stage: 390.00 ft

Comment:

Node: Trib1-00-00

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 347.00 ft
Warning Stage: 389.10 ft

Comment:

Node: Trib1-00-02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 370.00 ft
Warning Stage: 415.00 ft

Comment:

Node: Trib1-00-03

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 388.00 ft
Warning Stage: 440.00 ft

Comment:

Node: Trib1-00-04

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 394.00 ft
Warning Stage: 440.00 ft

Comment:

Node: Trib1-00-05

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 407.00 ft
Warning Stage: 440.00 ft

Comment:

Node: Trib1-00-06

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 414.00 ft
Warning Stage: 440.00 ft

Comment:

Node: Trib1-00-07

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 417.50 ft
Warning Stage: 435.00 ft

Comment:

Node: Trib1-01-01

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 388.00 ft
Warning Stage: 425.00 ft

Comment:

Node: Trib1-01-02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 409.50 ft
Warning Stage: 440.00 ft

Stage [ft]	Area [ac]	Area [ft2]
409.00	0.0000	0
410.00	1.7992	78373
411.00	1.9319	84154
412.00	2.0542	89481

Stage [ft]	Area [ac]	Area [ft2]
413.00	2.1797	94948
414.00	2.3344	101686
415.00	2.4923	108565
416.00	2.7078	117952
417.00	2.9379	127975
418.00	3.1474	137101
419.00	3.3458	145743
420.00	3.5672	155387
421.00	3.8002	165537
422.00	4.0097	174663
423.00	4.2662	185836
424.00	4.5625	198743
425.00	4.8155	209763
426.00	5.0829	221411
427.00	5.3436	232767
428.00	5.6199	244803
429.00	5.9014	257065
430.00	6.1890	269593
431.00	6.4556	281206
432.00	6.7220	292810
433.00	7.0595	307512
434.00	7.3523	320266
435.00	7.6884	334907
436.00	7.9829	347735
437.00	8.3360	363116
438.00	8.6533	376938
439.00	8.9624	390402
440.00	9.2765	404084

Comment: Basin 13 storage

Node: Trib1-02-01

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 434.00 ft
Warning Stage: 455.00 ft

Comment:

Node: Trib1-02-02

Scenario: Existing
Type: Stage/Area

Base Flow: 0.00 cfs
Initial Stage: 453.66 ft
Warning Stage: 475.00 ft

Stage [ft]	Area [ac]	Area [ft2]
453.00	0.0000	0
454.00	1.4950	65122
455.00	1.6336	71160
456.00	1.7952	78199
457.00	1.9417	84580
458.00	2.1636	94246
459.00	2.3694	103211
460.00	2.6254	114362
461.00	2.8972	126202
462.00	3.2041	139571
463.00	3.5058	152713
464.00	3.7996	165511
465.00	4.0981	178513
466.00	4.3988	191612
467.00	4.6840	204035
468.00	5.0240	218845
469.00	5.3428	232732
470.00	5.6971	248166
471.00	6.0732	264549
472.00	6.5118	283654
473.00	6.9504	302759
474.00	7.4617	325032
475.00	7.9468	346163

Comment: Basin 12 storage

Node: Trib1-03-01

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 427.70 ft
Warning Stage: 465.00 ft

Comment:

Node: Trib1-03-02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs

Initial Stage: 444.20 ft
Warning Stage: 472.00 ft

Stage [ft]	Area [ac]	Area [ft2]
444.00	0.0089	388
445.00	3.5408	154237
446.00	4.0254	175346
447.00	4.5033	196164
448.00	4.9365	215034
449.00	5.4255	236335
450.00	5.9291	258272
451.00	6.5266	284299
452.00	7.1728	312447
453.00	7.8474	341833
454.00	8.6223	375587
455.00	9.4232	410475
456.00	10.1554	442369
457.00	10.9738	478019
458.00	11.9242	519418
459.00	12.8491	559707
460.00	13.9655	608337
461.00	15.0518	655656
462.00	16.2278	706883
463.00	17.3694	756611
464.00	18.5938	809946
465.00	19.7223	859103
466.00	20.9398	912138
467.00	22.2005	967054
468.00	23.4741	1022532
469.00	24.7286	1077178
470.00	25.9844	1131880
471.00	27.3603	1191815
472.00	28.8192	1255364

Comment: Basin 9 storage

Node: Trib1-03-03

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 467.00 ft
Warning Stage: 495.00 ft

Comment:

Node: Trib1-03-04

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 469.00 ft
Warning Stage: 490.00 ft

Comment:

Node: Trib1-03-05

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 471.50 ft
Warning Stage: 500.00 ft

Comment:

Node: Trib1-03-06

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 480.50 ft
Warning Stage: 495.00 ft

Comment:

Node: Trib1-03-07

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 493.20 ft
Warning Stage: 505.00 ft

Stage [ft]	Area [ac]	Area [ft2]
493.00	0.0000	0
494.00	3.4790	151545
495.00	3.7671	164095
496.00	4.0130	174806

Stage [ft]	Area [ac]	Area [ft2]
497.00	4.3617	189996
498.00	4.8458	211083
499.00	5.3783	234279
500.00	5.9106	257466
501.00	6.6460	289500
502.00	7.4560	324783
503.00	8.2223	358163
504.00	9.1497	398561
505.00	10.5364	458966

Comment: Basin 7 storage

Node: Trib1-03-08

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 488.00 ft
Warning Stage: 510.00 ft

Comment:

Node: Trib1-03-09

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 494.00 ft
Warning Stage: 515.00 ft

Comment:

Node: Trib1-03-10

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 506.40 ft
Warning Stage: 521.00 ft

Stage [ft]	Area [ac]	Area [ft2]
506.00	0.0000	0

Stage [ft]	Area [ac]	Area [ft2]
507.00	6.4514	281023
508.00	7.9199	344991
509.00	9.6076	418507
510.00	11.4223	497555
511.00	13.4053	583935
512.00	16.5967	722952
513.00	19.9002	866853
514.00	21.9166	954687
515.00	23.6982	1032294
516.00	25.0175	1089762
517.00	26.2043	1141459
518.00	27.3857	1192921
519.00	29.7223	1294703
520.00	34.1230	1486398
521.00	37.1537	1618415

Comment: Basin 2 storage

Node: Trib1-03-11

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 502.00 ft
Warning Stage: 520.00 ft

Comment:

Node: Trib1-03-12

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 515.00 ft
Warning Stage: 530.00 ft

Stage [ft]	Area [ac]	Area [ft2]
515.00	8.5921	374272
516.00	9.1634	399158
517.00	10.0431	437477
518.00	11.6176	506063
519.00	13.0315	567652
520.00	14.2099	618983
521.00	14.9394	650760
522.00	15.7744	687133

Stage [ft]	Area [ac]	Area [ft2]
523.00	16.6529	725400
524.00	17.9623	782438
525.00	19.2505	838552
526.00	20.3172	885017
527.00	21.2127	924025
528.00	21.8838	953258
529.00	22.8648	995991
530.00	23.5564	1026117

Comment: Basin 6 storage

Node: Trib1-04-01

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 430.00 ft
Warning Stage: 445.00 ft

Comment:

Node: Trib1-04-02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 431.50 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib1-04-03

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 448.00 ft
Warning Stage: 473.00 ft

Stage [ft]	Area [ac]	Area [ft2]
448.00	1.7067	74344
449.00	1.8898	82320

Stage [ft]	Area [ac]	Area [ft2]
450.00	2.2239	96873
451.00	2.6161	113957
452.00	3.0344	132178
453.00	3.5182	153253
454.00	4.0065	174523
455.00	4.5417	197836
456.00	5.1496	224317
457.00	5.8966	256856
458.00	6.6036	287653
459.00	7.2214	314564
460.00	7.7131	335983
461.00	8.2073	357510
462.00	8.7373	380597
463.00	9.2661	403631
464.00	9.7779	425925
465.00	10.2521	446581
466.00	10.7384	467765
467.00	11.2850	491575
468.00	11.8835	517645
469.00	12.5205	545393
470.00	13.2823	578577
471.00	14.1338	615668
472.00	15.1020	657843
473.00	16.2473	707732

Comment: Basin 5 storage

Node: Trib1-05-01a

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 422.00 ft
Warning Stage: 431.00 ft

Comment:

Node: Trib1-05-01b

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 437.00 ft
Warning Stage: 460.00 ft

Comment:

Node: Trib1-05-02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 445.50 ft
Warning Stage: 458.00 ft

Comment:

Node: Trib1-05-03

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 447.50 ft
Warning Stage: 470.00 ft

Stage [ft]	Area [ac]	Area [ft2]
447.00	0.0000	0
448.00	0.0044	192
449.00	0.0155	675
450.00	0.0496	2161
451.00	0.0718	3128
452.00	0.1348	5872
453.00	0.2897	12619
454.00	0.4691	20434
455.00	0.7345	31995
456.00	1.0303	44880
457.00	1.3038	56794
458.00	1.6562	72144
459.00	2.0960	91302
460.00	2.4835	108181
461.00	2.8865	125736
462.00	3.3758	147050
463.00	3.7825	164766
464.00	4.2008	182987
465.00	4.6182	201169
466.00	5.1594	224743
467.00	5.7366	249886
468.00	6.2990	274384
469.00	6.9212	301487
470.00	7.6247	332132

Comment: Basin 1 storage

Node: Trib2-00-01

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 384.50 ft
Warning Stage: 405.00 ft

Comment:

Node: Trib2-00-02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 400.00 ft
Warning Stage: 450.00 ft

Stage [ft]	Area [ac]	Area [ft2]
400.00	0.0067	292
401.00	5.2831	230132
402.00	6.0812	264897
403.00	6.8880	300041
404.00	7.4304	323668
405.00	7.9748	347382
406.00	8.4349	367424
407.00	8.8663	386216
408.00	9.3121	405635
409.00	9.7295	423817
410.00	10.1093	440361
411.00	10.5024	457485
412.00	10.9704	477871
413.00	11.3727	495395
414.00	11.8358	515567
415.00	12.2470	533479
416.00	12.7318	554597
417.00	13.1734	573833
418.00	13.6333	593867
419.00	14.0650	612671
420.00	14.5367	633219
421.00	15.0408	655177
422.00	15.5985	679471
423.00	16.1468	703355

Stage [ft]	Area [ac]	Area [ft2]
424.00	16.6670	726015
425.00	17.2455	751214
426.00	17.8237	776400
427.00	18.4654	804353
428.00	19.1252	833094
429.00	19.7358	859691
430.00	20.4072	888938
431.00	21.1003	919129
432.00	21.8372	951228
433.00	22.6267	985619
434.00	23.4459	1021303
435.00	24.2609	1056805
436.00	25.0165	1089719
437.00	25.7857	1123225
438.00	26.4991	1154301
439.00	27.2963	1189027
440.00	28.0880	1223513
441.00	28.8748	1257786
442.00	29.6791	1292822
443.00	30.4842	1327892
444.00	31.2730	1362252
445.00	32.0949	1398054
446.00	32.8691	1431778
447.00	33.6986	1467911
448.00	34.5252	1503918
449.00	35.3402	1539419
450.00	36.1700	1575565

Comment: Basin 23 Storage

Node: Trib2-00-03

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 404.50 ft
Warning Stage: 435.00 ft

Comment:

Node: Trib2-00-04

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs

Initial Stage: 414.00 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib2-01-01

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 402.50 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib2-01-02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 425.50 ft
Warning Stage: 449.00 ft

Stage [ft]	Area [ac]	Area [ft2]
425.00	0.0074	322
426.00	4.5311	197375
427.00	4.8061	209354
428.00	5.1088	222539
429.00	5.3893	234758
430.00	5.7819	251860
431.00	6.1664	268608
432.00	6.5264	284290
433.00	6.9289	301823
434.00	7.3514	320227
435.00	7.8184	340570
436.00	8.3309	362894
437.00	8.8931	387383
438.00	9.4432	411346
439.00	9.9683	434219
440.00	10.4924	457049
441.00	11.0294	480441
442.00	11.6047	505501
443.00	12.1965	531280
444.00	12.7789	556649
445.00	13.3638	582127

Stage [ft]	Area [ac]	Area [ft2]
446.00	13.9801	608973
447.00	14.6115	636477
448.00	15.3704	669535
449.00	16.1599	703925

Comment: Basin 25 storage

Node: Trib2-01-03

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 435.00 ft
Warning Stage: 455.00 ft

Comment:

Node: Trib2-01-04

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 450.50 ft
Warning Stage: 471.00 ft

Stage [ft]	Area [ac]	Area [ft2]
450.00	0.0000	0
451.00	1.9983	87046
452.00	2.1762	94795
453.00	2.3546	102566
454.00	2.5683	111875
455.00	2.8243	123027
456.00	3.0761	133995
457.00	3.3571	146235
458.00	3.7186	161982
459.00	4.0655	177093
460.00	4.4670	194583
461.00	4.8715	212203
462.00	5.3071	231177
463.00	5.7576	250801
464.00	6.2432	271954
465.00	6.7685	294836
466.00	7.2936	317709
467.00	7.8938	343854
468.00	8.5340	371741

Stage [ft]	Area [ac]	Area [ft2]
469.00	9.1436	398295
470.00	9.7989	426840
471.00	10.4547	455407

Comment: Basin 24 storage

Node: Trib2-02-01

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 413.00 ft
Warning Stage: 450.00 ft

Stage [ft]	Area [ac]	Area [ft2]
413.00	0.0022	96
414.00	0.0269	1172
415.00	0.0514	2239
416.00	0.0907	3951
417.00	0.1693	7375
418.00	0.2531	11025
419.00	0.3428	14932
420.00	0.4392	19132
421.00	0.5556	24202
422.00	0.6542	28497
423.00	0.7795	33955
424.00	0.9374	40833
425.00	1.0723	46709
426.00	1.2198	53134
427.00	1.4113	61476
428.00	1.5922	69356
429.00	1.7568	76526
430.00	1.9582	85299

Comment: Basin Off5 Storage

Node: Trib2-03-02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 444.00 ft
Warning Stage: 470.00 ft

Comment:

Node: Trib2-03-03

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 466.00 ft
Warning Stage: 490.00 ft

Comment:

Node: Trib2-03-04

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 474.00 ft
Warning Stage: 500.00 ft

Comment:

Node: Trib2-03-05

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 488.20 ft
Warning Stage: 506.00 ft

Stage [ft]	Area [ac]	Area [ft2]
488.00	0.0966	4208
489.00	4.0004	174257
490.00	4.3122	187839
491.00	4.7352	206265
492.00	5.2358	228071
493.00	5.7807	251807
494.00	6.4219	279738
495.00	7.0908	308875
496.00	7.8215	340705
497.00	8.6026	374729
498.00	9.5858	417557
499.00	10.6249	462821
500.00	11.7663	512540
501.00	12.9302	563240
502.00	14.1897	618103
503.00	15.7007	683922
504.00	17.3140	754198

Stage [ft]	Area [ac]	Area [ft2]
505.00	19.2202	837232
506.00	22.0659	961191

Comment: Basin 17 storage

Node: Trib2-03-06

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 496.50 ft
Warning Stage: 515.00 ft

Comment:

Node: Trib2-03-07

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 511.80 ft
Warning Stage: 522.00 ft

Stage [ft]	Area [ac]	Area [ft2]
511.00	0.0000	0
512.00	3.7834	164805
513.00	3.9798	173360
514.00	4.3902	191237
515.00	4.8204	209977
516.00	5.1708	225240
517.00	5.4162	235930
518.00	5.6393	245648
519.00	5.7866	252064
520.00	5.9097	257427
521.00	6.0216	262301
522.00	6.1192	266552

Comment: Basin 18 storage

Node: Trib2-04-01

Scenario: Existing
Type: Stage/Area

Base Flow: 0.00 cfs
Initial Stage: 419.00 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib2-04-02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 442.30 ft
Warning Stage: 464.00 ft

Stage [ft]	Area [ac]	Area [ft2]
442.00	0.9577	41717
443.00	9.9049	431457
444.00	10.3047	448873
445.00	10.8738	473663
446.00	11.7011	509700
447.00	12.4679	543102
448.00	13.2186	575802
449.00	13.8764	604456
450.00	14.5522	633894
451.00	15.2389	663806
452.00	15.9550	695000
453.00	16.7677	730401
454.00	17.6244	767719
455.00	18.5869	809645
456.00	19.6534	856102
457.00	20.7367	903291
458.00	21.7770	948606
459.00	22.9213	998452
460.00	24.1348	1051312
461.00	25.2940	1101807
462.00	26.4905	1153926
463.00	27.7480	1208703
464.00	28.9964	1263083

Comment: Basin 21 Storage

Node: Trib2-04-03

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs

Initial Stage: 449.00 ft
Warning Stage: 470.00 ft

Comment:

Node: Trib2-04-04

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 450.00 ft
Warning Stage: 455.00 ft

Stage [ft]	Area [ac]	Area [ft2]
450.00	0.0000	0
451.00	0.0089	388
452.00	0.0326	1420
453.00	0.0630	2744
454.00	0.1483	6460
455.00	0.2471	10764

Comment: Basin Off3 Storage

Node: Trib2-04-05

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 454.00 ft
Warning Stage: 470.00 ft

Comment:

Node: Trib2-04-06

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 455.00 ft
Warning Stage: 459.00 ft

Stage [ft]	Area [ac]	Area [ft2]
455.00	0.0022	96

Stage [ft]	Area [ac]	Area [ft2]
456.00	0.0089	388
457.00	0.0311	1355
458.00	0.0966	4208
459.00	0.1633	7113
460.00	0.2589	11278

Comment: Basin Off4 Storage

Node: Trib2-04-07

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 447.60 ft
Warning Stage: 455.00 ft

Comment:

Node: Trib2-04-08

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 448.00 ft
Warning Stage: 453.00 ft

Stage [ft]	Area [ac]	Area [ft2]
448.00	0.0030	131
449.00	0.0297	1294
450.00	0.1701	7410
451.00	0.3310	14418
452.00	0.5223	22751
453.00	0.7000	30492
454.00	0.9157	39888
455.00	1.1371	49532

Comment: Basin 20 storage

Node: Trib3-00-01

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs

Initial Stage: 360.00 ft
Warning Stage: 370.00 ft

Comment:

Node: Trib3-00-02

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 372.50 ft
Warning Stage: 390.00 ft

Comment:

Node: Trib3-00-03

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 377.00 ft
Warning Stage: 390.00 ft

Comment:

Node: Trib3-00-04

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 386.00 ft
Warning Stage: 423.00 ft

Comment:

Node: Trib3-00-05

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs

Initial Stage: 388.50 ft
Warning Stage: 423.00 ft

Comment:

Node: Trib3-00-06

Scenario: Existing
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 390.40 ft
Warning Stage: 425.00 ft

Stage [ft]	Area [ac]	Area [ft2]
390.00	0.0000	0
391.00	0.0067	292
392.00	0.0245	1067
393.00	0.0490	2134
394.00	0.0913	3977
395.00	0.2062	8982
396.00	0.4886	21283
397.00	0.7617	33180
398.00	1.1746	51166
399.00	1.6201	70572
400.00	1.9782	86170
401.00	2.4482	106644
402.00	2.9587	128881
403.00	3.4784	151519
404.00	3.9617	172572
405.00	4.4413	193463
406.00	5.0183	218597
407.00	5.7391	249995
408.00	6.4609	281437
409.00	7.2274	314826
410.00	8.1432	354718
411.00	9.1497	398561
412.00	10.3889	452540
413.00	11.6165	506015
414.00	12.9919	565927
415.00	14.4441	629185
416.00	16.0673	699892
417.00	17.8756	778661
418.00	19.9140	867454
419.00	21.8073	949926
420.00	24.0644	1048245
421.00	26.5112	1154828
422.00	29.2163	1272662

Stage [ft]	Area [ac]	Area [ft2]
423.00	32.4116	1411849
424.00	35.5377	1548022
425.00	38.9141	1695098

Comment: Basin Off6 storage

Node: Offsite01

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 436.00 ft
Warning Stage: 470.00 ft

Stage [ft]	Area [ac]	Area [ft2]
436.00	0.0022	96
437.00	0.0252	1098
438.00	0.0838	3650
439.00	0.2360	10280
440.00	0.5592	24359
441.00	1.1503	50107
442.00	1.7332	75498
443.00	2.1518	93732
444.00	2.6033	113400
445.00	3.0577	133193
446.00	3.5420	154290
447.00	4.0570	176723
448.00	4.6743	203613
449.00	5.3165	231587
450.00	5.9706	260079
451.00	6.5827	286742
452.00	7.2007	313662
453.00	7.7784	338827
454.00	8.4713	369010
455.00	9.3221	406071
456.00	10.2166	445035
457.00	11.1193	484357
458.00	12.0711	525817
459.00	13.0447	568227
460.00	14.0428	611704
461.00	15.0974	657643
462.00	16.2069	705973
463.00	17.3087	753967
464.00	18.4385	803181
465.00	19.6051	853998
466.00	20.7405	903456
467.00	22.9941	1001623

Stage [ft]	Area [ac]	Area [ft2]
468.00	24.7503	1078123
469.00	26.2608	1143920
470.00	27.6624	1204974

Comment: Basin Off1 storage

Node: Offsite02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 443.00 ft
Warning Stage: 459.00 ft

Stage [ft]	Area [ac]	Area [ft2]
443.00	0.0000	0
444.00	0.0069	301
445.00	0.0113	492
446.00	0.0217	945
447.00	0.0316	1376
448.00	0.0605	2635
449.00	0.0981	4273
450.00	0.1470	6403
451.00	0.2463	10729
452.00	0.3871	16862
453.00	0.5702	24838
454.00	0.8136	35440
455.00	1.1227	48905

Comment: Off1b storage

Node: Outfall_A

Scenario: Site Only
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 346.00 ft
Warning Stage: 400.00 ft
Boundary Stage: 100yr_FloodA

Comment:

Node: Outfall_B

Scenario: Site Only
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 378.00 ft
Warning Stage: 412.00 ft
Boundary Stage: 100yr_FloodB

Comment:

Node: Outfall_C

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 358.50 ft
Warning Stage: 390.00 ft

Comment:

Node: Trib1-00-00

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 347.00 ft
Warning Stage: 389.10 ft

Comment:

Node: Trib1-00-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 370.00 ft
Warning Stage: 415.00 ft

Comment:

Node: Trib1-00-03

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 388.00 ft
Warning Stage: 440.00 ft

Comment:

Node: Trib1-00-04

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 394.00 ft
Warning Stage: 440.00 ft

Comment:

Node: Trib1-00-05

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 407.00 ft
Warning Stage: 440.00 ft

Comment:

Node: Trib1-00-06

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 414.00 ft
Warning Stage: 440.00 ft

Comment:

Node: Trib1-00-07

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 417.50 ft
Warning Stage: 435.00 ft

Comment:

Node: Trib1-01-01

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 388.00 ft
Warning Stage: 425.00 ft

Comment:

Node: Trib1-01-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 409.50 ft
Warning Stage: 440.00 ft

Stage [ft]	Area [ac]	Area [ft2]
409.00	0.0000	0
410.00	1.7992	78373
411.00	1.9319	84154
412.00	2.0542	89481
413.00	2.1797	94948
414.00	2.3344	101686
415.00	2.4923	108565
416.00	2.7078	117952
417.00	2.9379	127975
418.00	3.1474	137101
419.00	3.3458	145743
420.00	3.5672	155387
421.00	3.8002	165537
422.00	4.0097	174663
423.00	4.2662	185836
424.00	4.5625	198743
425.00	4.8155	209763

Stage [ft]	Area [ac]	Area [ft2]
426.00	5.0829	221411
427.00	5.3436	232767
428.00	5.6199	244803
429.00	5.9014	257065
430.00	6.1890	269593
431.00	6.4556	281206
432.00	6.7220	292810
433.00	7.0595	307512
434.00	7.3523	320266
435.00	7.6884	334907
436.00	7.9829	347735
437.00	8.3360	363116
438.00	8.6533	376938
439.00	8.9624	390402
440.00	9.2765	404084

Comment: Basin 13 storage

Node: Trib1-02-01

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 434.00 ft
Warning Stage: 455.00 ft

Comment:

Node: Trib1-02-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 453.66 ft
Warning Stage: 475.00 ft

Stage [ft]	Area [ac]	Area [ft2]
453.00	0.0000	0
454.00	1.4950	65122
455.00	1.6336	71160
456.00	1.7952	78199
457.00	1.9417	84580
458.00	2.1636	94246
459.00	2.3694	103211
460.00	2.6254	114362

Stage [ft]	Area [ac]	Area [ft2]
461.00	2.8972	126202
462.00	3.2041	139571
463.00	3.5058	152713
464.00	3.7996	165511
465.00	4.0981	178513
466.00	4.3988	191612
467.00	4.6840	204035
468.00	5.0240	218845
469.00	5.3428	232732
470.00	5.6971	248166
471.00	6.0732	264549
472.00	6.5118	283654
473.00	6.9504	302759
474.00	7.4617	325032
475.00	7.9468	346163

Comment: Basin 12 storage

Node: Trib1-03-01

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 427.70 ft
Warning Stage: 465.00 ft

Comment:

Node: Trib1-03-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 444.20 ft
Warning Stage: 472.00 ft

Stage [ft]	Area [ac]	Area [ft2]
444.00	0.0089	388
445.00	3.5408	154237
446.00	4.0254	175346
447.00	4.5033	196164
448.00	4.9365	215034
449.00	5.4255	236335
450.00	5.9291	258272
451.00	6.5266	284299

Stage [ft]	Area [ac]	Area [ft2]
452.00	7.1728	312447
453.00	7.8474	341833
454.00	8.6223	375587
455.00	9.4232	410475
456.00	10.1554	442369
457.00	10.9738	478019
458.00	11.9242	519418
459.00	12.8491	559707
460.00	13.9655	608337
461.00	15.0518	655656
462.00	16.2278	706883
463.00	17.3694	756611
464.00	18.5938	809946
465.00	19.7223	859103
466.00	20.9398	912138
467.00	22.2005	967054
468.00	23.4741	1022532
469.00	24.7286	1077178
470.00	25.9844	1131880
471.00	27.3603	1191815
472.00	28.8192	1255364

Comment: Basin 9 storage

Node: Trib1-03-03

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 467.00 ft
Warning Stage: 495.00 ft

Comment:

Node: Trib1-03-04

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 469.00 ft
Warning Stage: 490.00 ft

Comment:

Node: Trib1-03-05

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 471.50 ft
Warning Stage: 500.00 ft

Comment:

Node: Trib1-03-06

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 480.50 ft
Warning Stage: 495.00 ft

Comment:

Node: Trib1-03-07

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 493.20 ft
Warning Stage: 505.00 ft

Stage [ft]	Area [ac]	Area [ft2]
493.00	0.0000	0
494.00	3.4790	151545
495.00	3.7671	164095
496.00	4.0130	174806
497.00	4.3617	189996
498.00	4.8458	211083
499.00	5.3783	234279
500.00	5.9106	257466
501.00	6.6460	289500
502.00	7.4560	324783
503.00	8.2223	358163
504.00	9.1497	398561
505.00	10.5364	458966

Comment: Basin 7 storage

Node: Trib1-03-08

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 488.00 ft
Warning Stage: 510.00 ft

Comment:

Node: Trib1-03-09

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 494.00 ft
Warning Stage: 515.00 ft

Comment:

Node: Trib1-03-10

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 506.40 ft
Warning Stage: 521.00 ft

Stage [ft]	Area [ac]	Area [ft2]
506.00	0.0000	0
507.00	6.4514	281023
508.00	7.9199	344991
509.00	9.6076	418507
510.00	11.4223	497555
511.00	13.4053	583935
512.00	16.5967	722952
513.00	19.9002	866853
514.00	21.9166	954687
515.00	23.6982	1032294
516.00	25.0175	1089762
517.00	26.2043	1141459
518.00	27.3857	1192921
519.00	29.7223	1294703
520.00	34.1230	1486398
521.00	37.1537	1618415

Comment: Basin 2 storage

Node: Trib1-03-11

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 502.00 ft
Warning Stage: 520.00 ft

Comment:

Node: Trib1-03-12

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 515.00 ft
Warning Stage: 530.00 ft

Stage [ft]	Area [ac]	Area [ft2]
515.00	8.5921	374272
516.00	9.1634	399158
517.00	10.0431	437477
518.00	11.6176	506063
519.00	13.0315	567652
520.00	14.2099	618983
521.00	14.9394	650760
522.00	15.7744	687133
523.00	16.6529	725400
524.00	17.9623	782438
525.00	19.2505	838552
526.00	20.3172	885017
527.00	21.2127	924025
528.00	21.8838	953258
529.00	22.8648	995991
530.00	23.5564	1026117

Comment: Basin 6 storage

Node: Trib1-04-01

Scenario: Site Only
Type: Stage/Area

Base Flow: 0.00 cfs
Initial Stage: 430.00 ft
Warning Stage: 445.00 ft

Comment:

Node: Trib1-04-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 431.50 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib1-04-03

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 448.00 ft
Warning Stage: 473.00 ft

Stage [ft]	Area [ac]	Area [ft2]
448.00	1.7067	74344
449.00	1.8898	82320
450.00	2.2239	96873
451.00	2.6161	113957
452.00	3.0344	132178
453.00	3.5182	153253
454.00	4.0065	174523
455.00	4.5417	197836
456.00	5.1496	224317
457.00	5.8966	256856
458.00	6.6036	287653
459.00	7.2214	314564
460.00	7.7131	335983
461.00	8.2073	357510
462.00	8.7373	380597
463.00	9.2661	403631
464.00	9.7779	425925
465.00	10.2521	446581
466.00	10.7384	467765
467.00	11.2850	491575

Stage [ft]	Area [ac]	Area [ft2]
468.00	11.8835	517645
469.00	12.5205	545393
470.00	13.2823	578577
471.00	14.1338	615668
472.00	15.1020	657843
473.00	16.2473	707732

Comment: Basin 5 storage

Node: Trib1-05-01a

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 422.00 ft
Warning Stage: 431.00 ft

Comment:

Node: Trib1-05-01b

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 437.00 ft
Warning Stage: 460.00 ft

Comment:

Node: Trib1-05-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 445.50 ft
Warning Stage: 458.00 ft

Comment:

Node: Trib1-05-03

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 447.50 ft
Warning Stage: 470.00 ft

Stage [ft]	Area [ac]	Area [ft2]
447.00	0.0000	0
448.00	0.0044	192
449.00	0.0155	675
450.00	0.0496	2161
451.00	0.0718	3128
452.00	0.1348	5872
453.00	0.2897	12619
454.00	0.4691	20434
455.00	0.7345	31995
456.00	1.0303	44880
457.00	1.3038	56794
458.00	1.6562	72144
459.00	2.0960	91302
460.00	2.4835	108181
461.00	2.8865	125736
462.00	3.3758	147050
463.00	3.7825	164766
464.00	4.2008	182987
465.00	4.6182	201169
466.00	5.1594	224743
467.00	5.7366	249886
468.00	6.2990	274384
469.00	6.9212	301487
470.00	7.6247	332132

Comment: Basin 1 storage

Node: Trib2-00-01

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 384.50 ft
Warning Stage: 405.00 ft

Comment:

Node: Trib2-00-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 400.00 ft
Warning Stage: 450.00 ft

Stage [ft]	Area [ac]	Area [ft2]
400.00	0.0067	292
401.00	5.2831	230132
402.00	6.0812	264897
403.00	6.8880	300041
404.00	7.4304	323668
405.00	7.9748	347382
406.00	8.4349	367424
407.00	8.8663	386216
408.00	9.3121	405635
409.00	9.7295	423817
410.00	10.1093	440361
411.00	10.5024	457485
412.00	10.9704	477871
413.00	11.3727	495395
414.00	11.8358	515567
415.00	12.2470	533479
416.00	12.7318	554597
417.00	13.1734	573833
418.00	13.6333	593867
419.00	14.0650	612671
420.00	14.5367	633219
421.00	15.0408	655177
422.00	15.5985	679471
423.00	16.1468	703355
424.00	16.6670	726015
425.00	17.2455	751214
426.00	17.8237	776400
427.00	18.4654	804353
428.00	19.1252	833094
429.00	19.7358	859691
430.00	20.4072	888938
431.00	21.1003	919129
432.00	21.8372	951228
433.00	22.6267	985619
434.00	23.4459	1021303
435.00	24.2609	1056805
436.00	25.0165	1089719
437.00	25.7857	1123225
438.00	26.4991	1154301
439.00	27.2963	1189027
440.00	28.0880	1223513
441.00	28.8748	1257786

Stage [ft]	Area [ac]	Area [ft2]
442.00	29.6791	1292822
443.00	30.4842	1327892
444.00	31.2730	1362252
445.00	32.0949	1398054
446.00	32.8691	1431778
447.00	33.6986	1467911
448.00	34.5252	1503918
449.00	35.3402	1539419
450.00	36.1700	1575565

Comment: Basin 23 Storage

Node: Trib2-00-03

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 404.50 ft
Warning Stage: 435.00 ft

Comment:

Node: Trib2-00-04

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 414.00 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib2-01-01

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 402.50 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib2-01-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 425.50 ft
Warning Stage: 449.00 ft

Stage [ft]	Area [ac]	Area [ft2]
425.00	0.0074	322
426.00	4.5311	197375
427.00	4.8061	209354
428.00	5.1088	222539
429.00	5.3893	234758
430.00	5.7819	251860
431.00	6.1664	268608
432.00	6.5264	284290
433.00	6.9289	301823
434.00	7.3514	320227
435.00	7.8184	340570
436.00	8.3309	362894
437.00	8.8931	387383
438.00	9.4432	411346
439.00	9.9683	434219
440.00	10.4924	457049
441.00	11.0294	480441
442.00	11.6047	505501
443.00	12.1965	531280
444.00	12.7789	556649
445.00	13.3638	582127
446.00	13.9801	608973
447.00	14.6115	636477
448.00	15.3704	669535
449.00	16.1599	703925

Comment: Basin 25 storage

Node: Trib2-01-03

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 435.00 ft
Warning Stage: 455.00 ft

Comment:

Node: Trib2-01-04

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 450.50 ft
Warning Stage: 471.00 ft

Stage [ft]	Area [ac]	Area [ft2]
450.00	0.0000	0
451.00	1.9983	87046
452.00	2.1762	94795
453.00	2.3546	102566
454.00	2.5683	111875
455.00	2.8243	123027
456.00	3.0761	133995
457.00	3.3571	146235
458.00	3.7186	161982
459.00	4.0655	177093
460.00	4.4670	194583
461.00	4.8715	212203
462.00	5.3071	231177
463.00	5.7576	250801
464.00	6.2432	271954
465.00	6.7685	294836
466.00	7.2936	317709
467.00	7.8938	343854
468.00	8.5340	371741
469.00	9.1436	398295
470.00	9.7989	426840
471.00	10.4547	455407

Comment: Basin 24 storage

Node: Trib2-02-01

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 413.00 ft
Warning Stage: 450.00 ft

Stage [ft]	Area [ac]	Area [ft2]
413.00	0.0022	96
414.00	0.0269	1172
415.00	0.0514	2239
416.00	0.0907	3951
417.00	0.1693	7375
418.00	0.2531	11025

Stage [ft]	Area [ac]	Area [ft2]
419.00	0.3428	14932
420.00	0.4392	19132
421.00	0.5556	24202
422.00	0.6542	28497
423.00	0.7795	33955
424.00	0.9374	40833
425.00	1.0723	46709
426.00	1.2198	53134
427.00	1.4113	61476
428.00	1.5922	69356
429.00	1.7568	76526
430.00	1.9582	85299

Comment: Basin Off5 Storage

Node: Trib2-03-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 444.00 ft
Warning Stage: 470.00 ft

Comment:

Node: Trib2-03-03

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 466.00 ft
Warning Stage: 490.00 ft

Comment:

Node: Trib2-03-04

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 474.00 ft
Warning Stage: 500.00 ft

Comment:

Node: Trib2-03-05

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 488.20 ft
Warning Stage: 506.00 ft

Stage [ft]	Area [ac]	Area [ft2]
488.00	0.0966	4208
489.00	4.0004	174257
490.00	4.3122	187839
491.00	4.7352	206265
492.00	5.2358	228071
493.00	5.7807	251807
494.00	6.4219	279738
495.00	7.0908	308875
496.00	7.8215	340705
497.00	8.6026	374729
498.00	9.5858	417557
499.00	10.6249	462821
500.00	11.7663	512540
501.00	12.9302	563240
502.00	14.1897	618103
503.00	15.7007	683922
504.00	17.3140	754198
505.00	19.2202	837232
506.00	22.0659	961191

Comment: Basin 17 storage

Node: Trib2-03-06

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 496.50 ft
Warning Stage: 515.00 ft

Comment:

Node: Trib2-03-07

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 511.80 ft
Warning Stage: 522.00 ft

Stage [ft]	Area [ac]	Area [ft2]
511.00	0.0000	0
512.00	3.7834	164805
513.00	3.9798	173360
514.00	4.3902	191237
515.00	4.8204	209977
516.00	5.1708	225240
517.00	5.4162	235930
518.00	5.6393	245648
519.00	5.7866	252064
520.00	5.9097	257427
521.00	6.0216	262301
522.00	6.1192	266552

Comment: Basin 18 storage

Node: Trib2-04-01

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 419.00 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib2-04-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 442.30 ft
Warning Stage: 464.00 ft

Stage [ft]	Area [ac]	Area [ft2]
442.00	0.9577	41717
443.00	9.9049	431457
444.00	10.3047	448873
445.00	10.8738	473663

Stage [ft]	Area [ac]	Area [ft2]
446.00	11.7011	509700
447.00	12.4679	543102
448.00	13.2186	575802
449.00	13.8764	604456
450.00	14.5522	633894
451.00	15.2389	663806
452.00	15.9550	695000
453.00	16.7677	730401
454.00	17.6244	767719
455.00	18.5869	809645
456.00	19.6534	856102
457.00	20.7367	903291
458.00	21.7770	948606
459.00	22.9213	998452
460.00	24.1348	1051312
461.00	25.2940	1101807
462.00	26.4905	1153926
463.00	27.7480	1208703
464.00	28.9964	1263083

Comment: Basin 21 Storage

Node: Trib2-04-03

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 449.00 ft
Warning Stage: 470.00 ft

Comment:

Node: Trib2-04-04

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 450.00 ft
Warning Stage: 455.00 ft

Stage [ft]	Area [ac]	Area [ft2]
450.00	0.0000	0
451.00	0.0089	388
452.00	0.0326	1420
453.00	0.0630	2744

Stage [ft]	Area [ac]	Area [ft2]
454.00	0.1483	6460
455.00	0.2471	10764

Comment: Basin Off3 Storage

Node: Trib2-04-05

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 454.00 ft
Warning Stage: 470.00 ft

Comment:

Node: Trib2-04-06

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 455.00 ft
Warning Stage: 459.00 ft

Stage [ft]	Area [ac]	Area [ft2]
455.00	0.0022	96
456.00	0.0089	388
457.00	0.0311	1355
458.00	0.0966	4208
459.00	0.1633	7113
460.00	0.2589	11278

Comment: Basin Off4 Storage

Node: Trib2-04-07

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 447.60 ft
Warning Stage: 455.00 ft

Comment:

Node: Trib2-04-08

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 448.00 ft
Warning Stage: 453.00 ft

Stage [ft]	Area [ac]	Area [ft2]
448.00	0.0030	131
449.00	0.0297	1294
450.00	0.1701	7410
451.00	0.3310	14418
452.00	0.5223	22751
453.00	0.7000	30492
454.00	0.9157	39888
455.00	1.1371	49532

Comment: Basin 20 storage

Node: Trib3-00-01

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 360.00 ft
Warning Stage: 370.00 ft

Comment:

Node: Trib3-00-02

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 372.50 ft
Warning Stage: 390.00 ft

Comment:

Node: Trib3-00-03

Scenario: Site Only
Type: Stage/Area

Base Flow: 0.00 cfs
Initial Stage: 377.00 ft
Warning Stage: 390.00 ft

Comment:

Node: Trib3-00-04

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 386.00 ft
Warning Stage: 423.00 ft

Comment:

Node: Trib3-00-05

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 388.50 ft
Warning Stage: 423.00 ft

Comment:

Node: Trib3-00-06

Scenario: Site Only
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 390.40 ft
Warning Stage: 425.00 ft

Stage [ft]	Area [ac]	Area [ft2]
390.00	0.0000	0
391.00	0.0067	292
392.00	0.0245	1067
393.00	0.0490	2134
394.00	0.0913	3977
395.00	0.2062	8982
396.00	0.4886	21283

Stage [ft]	Area [ac]	Area [ft2]
397.00	0.7617	33180
398.00	1.1746	51166
399.00	1.6201	70572
400.00	1.9782	86170
401.00	2.4482	106644
402.00	2.9587	128881
403.00	3.4784	151519
404.00	3.9617	172572
405.00	4.4413	193463
406.00	5.0183	218597
407.00	5.7391	249995
408.00	6.4609	281437
409.00	7.2274	314826
410.00	8.1432	354718
411.00	9.1497	398561
412.00	10.3889	452540
413.00	11.6165	506015
414.00	12.9919	565927
415.00	14.4441	629185
416.00	16.0673	699892
417.00	17.8756	778661
418.00	19.9140	867454
419.00	21.8073	949926
420.00	24.0644	1048245
421.00	26.5112	1154828
422.00	29.2163	1272662
423.00	32.4116	1411849
424.00	35.5377	1548022
425.00	38.9141	1695098

Comment: Basin Off6 storage

Channel Link: L-0310C		Upstream		Downstream	
Scenario:	Existing	Invert:	437.00 ft	Invert:	422.00 ft
From Node:	Trib1-05-01b	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-05-01a	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0810C	Cross Section:	X-0810C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	780.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				

Energy Switch: Energy

Comment:

Channel Link: L-0350C		Upstream		Downstream	
Scenario:	Existing	Invert:	360.00 ft	Invert:	347.00 ft
From Node:	Trib3-00-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-00	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-011	Cross Section:	X-001
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1078.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0360C		Upstream		Downstream	
Scenario:	Existing	Invert:	372.50 ft	Invert:	360.00 ft
From Node:	Trib3-00-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib3-00-01	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-020	Cross Section:	X-011
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	945.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0370C		Upstream		Downstream	
Scenario:	Existing	Invert:	377.00 ft	Invert:	372.50 ft
From Node:	Trib3-00-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib3-00-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-030	Cross Section:	X-020

Flow Direction:	Both
Damping:	0.0000 ft
Length:	905.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Channel Link: L-0620C		Upstream		Downstream	
Scenario:	Existing	Invert:	445.50 ft	Invert:	437.00 ft
From Node:	Trib1-05-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-05-01b	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0830C	Cross Section:	X-0830C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	443.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: L-0640W			
Scenario:	Existing	Bottom Clip	
From Node:	Offsite02	Default:	0.00 ft
To Node:	Trib1-05-01a	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Paved Road Vertical	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	459.00 ft	Discharge Coefficients	
Control Elevation:	459.00 ft	Weir Default:	2.800
Max Depth:	10.00 ft	Weir Table:	
Max Width:	15.00 ft	Orifice Default:	0.600
Fillet:	0.00 ft	Orifice Table:	

Comment:

Pipe Link: Link-01		Upstream		Downstream	
Scenario:	Existing	Invert:	455.00 ft	Invert:	454.00 ft
From Node:	Trib2-04-06	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-04-05	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	70.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000
Comment:					

Pipe Link: Link-02		Upstream		Downstream	
Scenario:	Existing	Invert:	450.00 ft	Invert:	449.00 ft
From Node:	Trib2-04-04	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-04-03	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	70.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000
Comment:					

Pipe Link: Link-03		Upstream		Downstream	
Scenario:	Existing	Invert:	448.00 ft	Invert:	447.60 ft
From Node:	Trib2-04-08	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-04-07	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	110.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			

Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-04		Upstream		Downstream	
Scenario:	Existing	Invert:	413.00 ft	Invert:	404.50 ft
From Node:	Trib2-02-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-205	Cross Section:	XS-205
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	420.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-05		Upstream		Downstream	
Scenario:	Existing	Invert:	404.50 ft	Invert:	402.90 ft
From Node:	Trib2-00-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-204	Cross Section:	XS-204
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	310.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-06		
Scenario:	Existing	Bottom Clip

From Node:	Trib2-00-02
To Node:	Trib2-00-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	402.00 ft
Control Elevation:	402.00 ft
Cross Section:	XS-23

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Link-07

Scenario:	Existing
From Node:	Trib2-01-02
To Node:	Trib2-01-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	426.90 ft
Control Elevation:	426.90 ft
Cross Section:	XS-025

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Link: Link-08

Scenario:	Existing
From Node:	Trib2-01-01
To Node:	Trib2-00-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Length:	670.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec

Upstream

Invert:	402.50 ft
Manning's N:	0.0000

Geometry: Irregular

Cross Section:	XS-202

Downstream

Invert:	384.50 ft
Manning's N:	0.0000

Geometry: Irregular

Cross Section:	XS-202

Energy Switch: Energy

Comment:

Channel Link: Link-09		Upstream		Downstream	
Scenario:	Existing	Invert:	384.50 ft	Invert:	378.00 ft
From Node:	Trib2-00-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Outfall_B	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-201	Cross Section:	XS-201
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	720.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-10			
Scenario:	Existing	Bottom Clip	
From Node:	Trib2-04-02	Default:	0.00 ft
To Node:	Trib2-04-01	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	442.30 ft	Discharge Coefficients	
Control Elevation:	442.30 ft	Weir Default:	2.800
Cross Section:	XS-021	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Channel Link: Link-11		Upstream		Downstream	
Scenario:	Existing	Invert:	419.00 ft	Invert:	414.00 ft
From Node:	Trib2-04-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-207	Cross Section:	XS-207
Flow Direction:	Both				

Damping:	0.0000 ft
Length:	340.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Channel Link: Link-14		Upstream		Downstream	
Scenario:	Existing	Invert:	414.00 ft	Invert:	404.50 ft
From Node:	Trib2-00-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-206	Cross Section:	XS-206
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	925.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-18		Upstream		Downstream	
Scenario:	Existing	Invert:	449.00 ft	Invert:	444.00 ft
From Node:	Trib2-04-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-04-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-208	Cross Section:	XS-208
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	105.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-19		Upstream		Downstream	
Scenario:	Existing	Invert:	454.00 ft	Invert:	446.50 ft
From Node:	Trib2-04-05	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-04-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-209	Cross Section:	XS-209
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	200.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment:					

Channel Link: Link-1A		Upstream		Downstream	
Scenario:	Existing	Invert:	488.00 ft	Invert:	471.50 ft
From Node:	Trib1-03-08	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-05	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-1A	Cross Section:	XS-1A
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1380.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment:					

Channel Link: Link-20		Upstream		Downstream	
Scenario:	Existing	Invert:	447.60 ft	Invert:	442.50 ft
From Node:	Trib2-04-07	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-04-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-210	Cross Section:	XS-210
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	265.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				

Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Weir Link: Link-21

Scenario:	Existing	**Bottom Clip**	
From Node:	Trib1-03-12	Default:	0.00 ft
To Node:	Trib1-03-11	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	516.00 ft	**Discharge Coefficients**	
Control Elevation:	516.00 ft	Weir Default:	2.800
Max Depth:	99.00 ft	Weir Table:	
Max Width:	700.00 ft	Orifice Default:	0.600
Fillet:	0.00 ft	Orifice Table:	

Comment:

Weir Link: Link-22

Scenario:	Existing	**Bottom Clip**	
From Node:	Trib1-03-10	Default:	0.00 ft
To Node:	Trib1-03-09	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	507.60 ft	**Discharge Coefficients**	
Control Elevation:	507.60 ft	Weir Default:	2.800
Cross Section:	XS-002	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Channel Link: Link-23

		Upstream		Downstream	
Scenario:	Existing	Invert:	502.00 ft	Invert:	488.00 ft
From Node:	Trib1-03-11	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-08	Geometry:	Irregular	Geometry:	Irregular

Link Count:	1	Cross Section:	XS-121	Cross Section:	XS-121
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	900.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-24		Upstream		Downstream	
Scenario:	Existing	Invert:	494.00 ft	Invert:	488.00 ft
From Node:	Trib1-03-09	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-08	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-122	Cross Section:	XS-122
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	290.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-25		Upstream		Downstream	
Scenario:	Existing	Invert:	480.50 ft	Invert:	471.50 ft
From Node:	Trib1-03-06	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-05	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-118	Cross Section:	XS-118
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	497.50 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-26		Upstream		Downstream	
Scenario:	Existing	Invert:	471.50 ft	Invert:	469.00 ft
From Node:	Trib1-03-05	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-117	Cross Section:	XS-117
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	360.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-27		Upstream		Downstream	
Scenario:	Existing	Invert:	471.50 ft	Invert:	471.50 ft
From Node:	Trib1-03-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-116	Cross Section:	XS-116
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	70.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-29			
Scenario:	Existing	Bottom Clip	
From Node:	Trib1-03-07	Default:	0.00 ft
To Node:	Trib1-03-06	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	

Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	494.70 ft
Control Elevation:	494.70 ft
Cross Section:	XS-007

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Link: Link-31

Scenario:	Existing
From Node:	Trib1-03-03
To Node:	Trib1-03-02
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Length:	1450.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Upstream		Downstream	
Invert:	467.00 ft	Invert:	444.00 ft
Manning's N:	0.0000	Manning's N:	0.0000
Geometry:	Irregular	Geometry:	Irregular
Cross Section:	XS-115	Cross Section:	XS-115

Comment:

Weir Link: Link-33

Scenario:	Existing
From Node:	Trib1-03-02
To Node:	Trib1-03-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	443.60 ft
Control Elevation:	443.60 ft
Cross Section:	XS-009

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Link-36			
Scenario:	Existing	Bottom Clip	
From Node:	Trib1-04-03	Default:	0.00 ft
To Node:	Trib1-04-02	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	448.00 ft	Discharge Coefficients	
Control Elevation:	448.00 ft	Weir Default:	2.800
Cross Section:	XS-005	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Pipe Link: Link-37		Upstream		Downstream	
Scenario:	Existing	Invert:	431.00 ft	Invert:	430.00 ft
From Node:	Trib1-04-02	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-04-01	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	4.00 ft	Max Depth:	4.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	66.00 ft	Op Table:		Op Table:	
FHWA Code:	3	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-38		Upstream		Downstream	
Scenario:	Existing	Invert:	430.00 ft	Invert:	417.50 ft
From Node:	Trib1-04-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-07	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	XS-123	Cross Section:	XS-123
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	430.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				

Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Pipe Link: Link-39		Upstream		Downstream	
Scenario:	Existing	Invert:	422.00 ft	Invert:	420.00 ft
From Node:	Trib1-05-01a	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-00-07	Geometry:	Rectangular	Geometry:	Rectangular
Link Count:	2	Max Depth:	6.00 ft	Max Depth:	6.00 ft
Flow Direction:	Both	Max Width:	6.00 ft	Max Width:	6.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	63.00 ft	Bottom Clip			
FHWA Code:	11	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec	Top Clip			
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-3A		Upstream		Downstream	
Scenario:	Existing	Invert:	444.00 ft	Invert:	414.00 ft
From Node:	Trib2-03-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-3A	Cross Section:	XS-3A
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1850.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-40	Upstream	Downstream

Scenario:	Existing	Invert:	417.50 ft	Invert:	414.00 ft
From Node:	Trib1-00-07	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-06	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-112	Cross Section:	XS-112
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	295.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment:					

Channel Link: Link-41		Upstream		Downstream	
Scenario:	Existing	Invert:	427.70 ft	Invert:	414.00 ft
From Node:	Trib1-03-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-06	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-113	Cross Section:	XS-113
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	780.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment:					

Pipe Link: Link-42		Upstream		Downstream	
Scenario:	Existing	Invert:	435.00 ft	Invert:	433.00 ft
From Node:	Offsite01	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib1-05-01a	Geometry:	Circular	Geometry:	Circular
Link Count:	1	Max Depth:	4.00 ft	Max Depth:	4.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	224.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft

Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-43		Upstream		Downstream	
Scenario:	Existing	Invert:	447.50 ft	Invert:	446.00 ft
From Node:	Trib1-05-03	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-05-02	Geometry:	Rectangular	Geometry:	Rectangular
Link Count:	1	Max Depth:	6.00 ft	Max Depth:	6.00 ft
Flow Direction:	Both	Max Width:	6.00 ft	Max Width:	6.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	82.00 ft	Bottom Clip			
FHWA Code:	12	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec	Top Clip			
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-47		Upstream		Downstream	
Scenario:	Existing	Invert:	414.00 ft	Invert:	406.50 ft
From Node:	Trib1-00-06	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-05	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-111	Cross Section:	XS-111
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	840.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-52

Scenario:	Existing
From Node:	Trib1-02-02
To Node:	Trib1-02-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	454.80 ft
Control Elevation:	454.80 ft
Cross Section:	XS-012

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Link: Link-55		Upstream		Downstream	
Scenario:	Existing	Invert:	394.00 ft	Invert:	388.00 ft
From Node:	Trib1-00-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-106	Cross Section:	XS-106
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	655.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-56		Upstream		Downstream	
Scenario:	Existing	Invert:	434.00 ft	Invert:	388.00 ft
From Node:	Trib1-02-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-105	Cross Section:	XS-105
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1020.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				

Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Weir Link: Link-59			
Scenario:	Existing	Bottom Clip	
From Node:	Trib1-01-02	Default:	0.00 ft
To Node:	Trib1-01-01	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	410.90 ft	Discharge Coefficients	
Control Elevation:	410.90 ft	Weir Default:	2.800
Cross Section:	XS-013	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Channel Link: Link-5A		Upstream		Downstream	
Scenario:	Existing	Invert:	407.00 ft	Invert:	394.00 ft
From Node:	Trib1-00-05	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-5A	Cross Section:	XS-5A
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1100.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-60		Upstream		Downstream	
Scenario:	Existing	Invert:	388.00 ft	Invert:	370.00 ft
From Node:	Trib1-01-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-02	Geometry:	Irregular	Geometry:	Irregular

Link Count:	1	Cross Section:	XS-102	Cross Section:	XS-102
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	515.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-62		Upstream		Downstream	
Scenario:	Existing	Invert:	370.00 ft	Invert:	358.50 ft
From Node:	Trib1-00-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Outfall_C	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-Z	Cross Section:	X-Z
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1080.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-63		Upstream		Downstream	
Scenario:	Existing	Invert:	435.00 ft	Invert:	430.00 ft
From Node:	Trib2-01-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-01-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-203	Cross Section:	XS-203
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	200.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-64			
Scenario:	Existing	Bottom Clip	
From Node:	Trib2-01-04	Default:	0.00 ft
To Node:	Trib2-01-03	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	451.70 ft	Discharge Coefficients	
Control Elevation:	451.70 ft	Weir Default:	2.800
Cross Section:	XS-024	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: Link-65			
Scenario:	Existing	Bottom Clip	
From Node:	Trib2-03-07	Default:	0.00 ft
To Node:	Trib2-03-06	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	512.50 ft	Discharge Coefficients	
Control Elevation:	512.50 ft	Weir Default:	2.800
Cross Section:	XS-018	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Channel Link: Link-66		Upstream		Downstream	
Scenario:	Existing	Invert:	496.50 ft	Invert:	466.00 ft
From Node:	Trib2-03-06	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-03-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-216	Cross Section:	XS-216
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1660.00 ft				

Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Weir Link: Link-67

Scenario:	Existing
From Node:	Trib2-03-05
To Node:	Trib2-03-04
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	488.20 ft
Control Elevation:	488.20 ft
Cross Section:	XS-017

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Link: Link-68

Scenario:	Existing
From Node:	Trib2-03-04
To Node:	Trib2-03-03
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Length:	445.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Upstream

Invert:	474.00 ft
Manning's N:	0.0000
Geometry:	Irregular
Cross Section:	XS-215

Downstream

Invert:	466.00 ft
Manning's N:	0.0000
Geometry:	Irregular
Cross Section:	XS-215

Comment:

Channel Link: Link-6A		Upstream		Downstream	
Scenario:	Existing	Invert:	388.00 ft	Invert:	370.00 ft
From Node:	Trib1-00-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-AB	Cross Section:	X-AA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	2130.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-77			
Scenario:	Existing	Bottom Clip	
From Node:	Offsite01	Default:	0.00 ft
To Node:	Trib1-05-01a	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	442.85 ft	Discharge Coefficients	
Control Elevation:	442.85 ft	Weir Default:	2.800
Cross Section:	XS-010	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Pipe Link: Link-78		Upstream		Downstream	
Scenario:	Existing	Invert:	436.00 ft	Invert:	430.00 ft
From Node:	Offsite01	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib1-00-07	Geometry:	Circular	Geometry:	Circular
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	328.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft

Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-79		Upstream		Downstream	
Scenario:	Existing	Invert:	442.00 ft	Invert:	436.00 ft
From Node:	Offsite01	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib1-05-01a	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	232.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-7A		Upstream		Downstream	
Scenario:	Existing	Invert:	466.00 ft	Invert:	444.00 ft
From Node:	Trib2-03-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-03-02	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	XS-7A	Cross Section:	XS-7A
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1525.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Pipe Link: Link-80		Upstream		Downstream	
Scenario:	Existing	Invert:	443.00 ft	Invert:	438.00 ft
From Node:	Offsite02	Manning's N:	0.0130	Manning's N:	0.0130

To Node:	Trib1-05-01a
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Length:	266.00 ft
FHWA Code:	12
Entr Loss Coef:	0.50
Exit Loss Coef:	0.50
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Geometry: Rectangular		Geometry: Rectangular	
Max Depth:	6.00 ft	Max Depth:	6.00 ft
Max Width:	6.00 ft	Max Width:	6.00 ft
Fillet:	0.00 ft	Fillet:	0.00 ft
Bottom Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000
Top Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Weir Link: Link-87

Scenario:	Existing
From Node:	Trib1-05-01a
To Node:	Trib1-00-07
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	430.90 ft
Control Elevation:	430.90 ft
Cross Section:	XS-015

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Link-88

Scenario:	Existing
From Node:	Trib1-04-02
To Node:	Trib1-04-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	439.00 ft
Control Elevation:	439.00 ft
Cross Section:	XS-124

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600

Orifice Table:

Comment:

Channel Link: Link-90		Upstream		Downstream	
Scenario:	Existing	Invert:	358.50 ft	Invert:	347.00 ft
From Node:	Outfall_C	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-00	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-100	Cross Section:	XS-100
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1025.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-91		Upstream		Downstream	
Scenario:	Existing	Invert:	347.00 ft	Invert:	346.00 ft
From Node:	Trib1-00-00	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Outfall_A	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-000	Cross Section:	XS-000
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	100.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Pipe Link: Link-92		Upstream		Downstream	
Scenario:	Existing	Invert:	390.00 ft	Invert:	388.50 ft
From Node:	Trib3-00-06	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib3-00-05	Geometry:	Rectangular	Geometry:	Rectangular

Link Count:	1	Max Depth:	10.00 ft	Max Depth:	10.00 ft
Flow Direction:	Both	Max Width:	10.00 ft	Max Width:	10.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	278.00 ft	Bottom Clip			
FHWA Code:	11	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec	Top Clip			
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-93		Upstream		Downstream	
Scenario:	Existing	Invert:	388.50 ft	Invert:	386.00 ft
From Node:	Trib3-00-05	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib3-00-04	Geometry: Rectangular		Geometry: Rectangular	
Link Count:	1	Max Depth:	10.00 ft	Max Depth:	10.00 ft
Flow Direction:	Both	Max Width:	10.00 ft	Max Width:	10.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	30.00 ft	Bottom Clip			
FHWA Code:	11	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec	Top Clip			
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-94		Upstream		Downstream	
Scenario:	Existing	Invert:	386.00 ft	Invert:	377.00 ft
From Node:	Trib3-00-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib3-00-03	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	X-0750C	Cross Section:	X-030
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1164.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				

Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Bend Location: 0.00 dec
Energy Switch: Energy

Comment:

Weir Link: Link-95

Scenario: Existing
From Node: Trib3-00-05
To Node: Trib3-00-04
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Weir Type: Broad Crested Vertical
Geometry Type: Irregular
Invert: 404.20 ft
Control Elevation: 404.20 ft
Cross Section: XS-014

Bottom Clip
Default: 0.00 ft
Op Table:
Ref Node:

Top Clip
Default: 0.00 ft
Op Table:
Ref Node:

Discharge Coefficients
Weir Default: 2.800
Weir Table:
Orifice Default: 0.600
Orifice Table:

Comment:

Weir Link: Link-96

Scenario: Existing
From Node: Trib3-00-06
To Node: Trib3-00-05
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Weir Type: Broad Crested Vertical
Geometry Type: Irregular
Invert: 422.00 ft
Control Elevation: 422.00 ft
Cross Section: XS-011

Bottom Clip
Default: 0.00 ft
Op Table:
Ref Node:

Top Clip
Default: 0.00 ft
Op Table:
Ref Node:

Discharge Coefficients
Weir Default: 2.800
Weir Table:
Orifice Default: 0.600
Orifice Table:

Comment:

Weir Link: Weir-01

Scenario: Existing
From Node: Trib2-04-06
To Node: Trib2-04-05

Bottom Clip
Default: 0.00 ft
Op Table:

Link Count:	1		
Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	459.00 ft	Ref Node:	
Control Elevation:	459.00 ft	Discharge Coefficients	
Max Depth:	99.00 ft	Weir Default:	2.800
Max Width:	25.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: Weir-02

Scenario:	Existing	Bottom Clip	
From Node:	Trib2-04-04	Default:	0.00 ft
To Node:	Trib2-04-03	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	454.50 ft	Discharge Coefficients	
Control Elevation:	454.50 ft	Weir Default:	2.800
Max Depth:	99.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	60.00 ft	Orifice Table:	
Left Slope:	0.014 (h:v)		
Right Slope:	0.014 (h:v)		

Comment:

Weir Link: Weir-03

Scenario:	Existing	Bottom Clip	
From Node:	Trib2-04-08	Default:	0.00 ft
To Node:	Trib2-04-07	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Sharp Crested Vertical	Op Table:	
Geometry Type:	V-Notch Up	Ref Node:	
Invert:	452.50 ft	Discharge Coefficients	
Control Elevation:	452.50 ft	Weir Default:	2.800
Max Depth:	3.00 ft	Weir Table:	
Max Width:	240.00 ft	Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: Weir-84			
Scenario:	Existing	Bottom Clip	
From Node:	Trib1-05-03	Default:	0.00 ft
To Node:	Trib1-05-02	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	460.00 ft	Discharge Coefficients	
Control Elevation:	460.00 ft	Weir Default:	2.800
Max Depth:	1.00 ft	Weir Table:	
Max Width:	150.00 ft	Orifice Default:	0.600
Fillet:	0.00 ft	Orifice Table:	

Comment:

Channel Link: L-0310C		Upstream		Downstream	
Scenario:	Site Only	Invert:	437.00 ft	Invert:	422.00 ft
From Node:	Trib1-05-01b	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-05-01a	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0810C	Cross Section:	X-0810C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	780.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0350C		Upstream		Downstream	
Scenario:	Site Only	Invert:	360.00 ft	Invert:	347.00 ft
From Node:	Trib3-00-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-00	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-011	Cross Section:	X-001
Flow Direction:	Both				
Damping:	0.0000 ft				

Length:	1078.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Channel Link: L-0360C		Upstream		Downstream	
Scenario:	Site Only	Invert:	372.50 ft	Invert:	360.00 ft
From Node:	Trib3-00-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib3-00-01	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-020	Cross Section:	X-011
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	945.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0370C		Upstream		Downstream	
Scenario:	Site Only	Invert:	377.00 ft	Invert:	372.50 ft
From Node:	Trib3-00-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib3-00-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-030	Cross Section:	X-020
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	905.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0620C		Upstream		Downstream	
Scenario:	Site Only	Invert:	445.50 ft	Invert:	437.00 ft
From Node:	Trib1-05-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-05-01b	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	X-0830C	Cross Section:	X-0830C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	443.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment:					

Weir Link: L-0640W			
Scenario:	Site Only	Bottom Clip	
From Node:	Offsite02	Default:	0.00 ft
To Node:	Trib1-05-01a	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Paved Road Vertical	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	459.00 ft	Discharge Coefficients	
Control Elevation:	459.00 ft	Weir Default:	2.800
Max Depth:	10.00 ft	Weir Table:	
Max Width:	15.00 ft	Orifice Default:	0.600
Fillet:	0.00 ft	Orifice Table:	
Comment:			

Pipe Link: Link-01		Upstream		Downstream	
Scenario:	Site Only	Invert:	455.00 ft	Invert:	454.00 ft
From Node:	Trib2-04-06	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-04-05	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	70.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft

Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-02		Upstream		Downstream	
Scenario:	Site Only	Invert:	450.00 ft	Invert:	449.00 ft
From Node:	Trib2-04-04	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-04-03	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	70.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-03		Upstream		Downstream	
Scenario:	Site Only	Invert:	448.00 ft	Invert:	447.60 ft
From Node:	Trib2-04-08	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-04-07	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	110.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-04		Upstream		Downstream	
Scenario:	Site Only	Invert:	413.00 ft	Invert:	404.50 ft
From Node:	Trib2-02-01	Manning's N:	0.0000	Manning's N:	0.0000

To Node:	Trib2-00-03
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Length:	420.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Geometry: Irregular		Geometry: Irregular	
Cross Section:	XS-205	Cross Section:	XS-205

Comment:

Channel Link: Link-05	
Scenario:	Site Only
From Node:	Trib2-00-03
To Node:	Trib2-00-02
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Length:	310.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Upstream		Downstream	
Invert:	404.50 ft	Invert:	402.90 ft
Manning's N:	0.0000	Manning's N:	0.0000
Geometry: Irregular		Geometry: Irregular	
Cross Section:	XS-204	Cross Section:	XS-204

Comment:

Weir Link: Link-06	
Scenario:	Site Only
From Node:	Trib2-00-02
To Node:	Trib2-00-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	402.00 ft
Control Elevation:	402.00 ft
Cross Section:	XS-23

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Link-07			
Scenario:	Site Only	Bottom Clip	
From Node:	Trib2-01-02	Default:	0.00 ft
To Node:	Trib2-01-01	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	426.90 ft	Discharge Coefficients	
Control Elevation:	426.90 ft	Weir Default:	2.800
Cross Section:	XS-025	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Channel Link: Link-08		Upstream		Downstream	
Scenario:	Site Only	Invert:	402.50 ft	Invert:	384.50 ft
From Node:	Trib2-01-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-01	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-202	Cross Section:	XS-202
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	670.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-09		Upstream		Downstream	
Scenario:	Site Only	Invert:	384.50 ft	Invert:	378.00 ft
From Node:	Trib2-00-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Outfall_B	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-201	Cross Section:	XS-201
Flow Direction:	Both				
Damping:	0.0000 ft				

Length:	720.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Weir Link: Link-10

Scenario:	Site Only
From Node:	Trib2-04-02
To Node:	Trib2-04-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	442.30 ft
Control Elevation:	442.30 ft
Cross Section:	XS-021

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Link: Link-11

Scenario:	Site Only
From Node:	Trib2-04-01
To Node:	Trib2-00-04
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Length:	340.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Upstream

Invert:	419.00 ft
Manning's N:	0.0000
Geometry:	Irregular
Cross Section:	XS-207

Downstream

Invert:	414.00 ft
Manning's N:	0.0000
Geometry:	Irregular
Cross Section:	XS-207

Comment:

Channel Link: Link-14		Upstream		Downstream	
Scenario:	Site Only	Invert:	414.00 ft	Invert:	404.50 ft
From Node:	Trib2-00-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-206	Cross Section:	XS-206
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	925.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment:					

Channel Link: Link-18		Upstream		Downstream	
Scenario:	Site Only	Invert:	449.00 ft	Invert:	444.00 ft
From Node:	Trib2-04-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-04-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-208	Cross Section:	XS-208
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	105.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment:					

Channel Link: Link-19		Upstream		Downstream	
Scenario:	Site Only	Invert:	454.00 ft	Invert:	446.50 ft
From Node:	Trib2-04-05	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-04-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-209	Cross Section:	XS-209
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	200.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				

Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Channel Link: Link-1A		Upstream		Downstream	
Scenario:	Site Only	Invert:	488.00 ft	Invert:	471.50 ft
From Node:	Trib1-03-08	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-05	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-1A	Cross Section:	XS-1A
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1380.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-20		Upstream		Downstream	
Scenario:	Site Only	Invert:	447.60 ft	Invert:	442.50 ft
From Node:	Trib2-04-07	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-04-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-210	Cross Section:	XS-210
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	265.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-21		
Scenario:	Site Only	Bottom Clip

From Node:	Trib1-03-12		
To Node:	Trib1-03-11	Default:	0.00 ft
Link Count:	1	Op Table:	
Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	**Top Clip**	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	516.00 ft	Ref Node:	
Control Elevation:	516.00 ft	**Discharge Coefficients**	
Max Depth:	99.00 ft	Weir Default:	2.800
Max Width:	700.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: Link-22

Scenario:	Site Only	**Bottom Clip**	
From Node:	Trib1-03-10	Default:	0.00 ft
To Node:	Trib1-03-09	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	507.60 ft	**Discharge Coefficients**	
Control Elevation:	507.60 ft	Weir Default:	2.800
Cross Section:	XS-002	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Channel Link: Link-23

		Upstream		Downstream	
Scenario:	Site Only	Invert:	502.00 ft	Invert:	488.00 ft
From Node:	Trib1-03-11	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-08	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-121	Cross Section:	XS-121
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	900.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				

Energy Switch: Energy

Comment:

Channel Link: Link-24		Upstream		Downstream	
Scenario:	Site Only	Invert:	494.00 ft	Invert:	488.00 ft
From Node:	Trib1-03-09	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-08	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-122	Cross Section:	XS-122
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	290.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-25		Upstream		Downstream	
Scenario:	Site Only	Invert:	480.50 ft	Invert:	471.50 ft
From Node:	Trib1-03-06	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-05	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-118	Cross Section:	XS-118
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	497.50 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-26		Upstream		Downstream	
Scenario:	Site Only	Invert:	471.50 ft	Invert:	469.00 ft
From Node:	Trib1-03-05	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-117	Cross Section:	XS-117

Flow Direction:	Both
Damping:	0.0000 ft
Length:	360.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Channel Link: Link-27		Upstream		Downstream	
Scenario:	Site Only	Invert:	471.50 ft	Invert:	471.50 ft
From Node:	Trib1-03-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-116	Cross Section:	XS-116
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	70.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-29			
Scenario:	Site Only	Bottom Clip	
From Node:	Trib1-03-07	Default:	0.00 ft
To Node:	Trib1-03-06	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	494.70 ft	Discharge Coefficients	
Control Elevation:	494.70 ft	Weir Default:	2.800
Cross Section:	XS-007	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Channel Link: Link-31		Upstream		Downstream	
Scenario:	Site Only	Invert:	467.00 ft	Invert:	444.00 ft
From Node:	Trib1-03-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-03-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-115	Cross Section:	XS-115
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1450.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-33			
Scenario:	Site Only	Bottom Clip	
From Node:	Trib1-03-02	Default:	0.00 ft
To Node:	Trib1-03-01	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	443.60 ft	Discharge Coefficients	
Control Elevation:	443.60 ft	Weir Default:	2.800
Cross Section:	XS-009	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: Link-36			
Scenario:	Site Only	Bottom Clip	
From Node:	Trib1-04-03	Default:	0.00 ft
To Node:	Trib1-04-02	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	448.00 ft	Discharge Coefficients	
Control Elevation:	448.00 ft	Weir Default:	2.800
Cross Section:	XS-005	Weir Table:	

Orifice Default:	0.600
Orifice Table:	

Comment:

Pipe Link: Link-37		Upstream		Downstream	
Scenario:	Site Only	Invert:	431.00 ft	Invert:	430.00 ft
From Node:	Trib1-04-02	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-04-01	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	4.00 ft	Max Depth:	4.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	66.00 ft	Op Table:		Op Table:	
FHWA Code:	3	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-38		Upstream		Downstream	
Scenario:	Site Only	Invert:	430.00 ft	Invert:	417.50 ft
From Node:	Trib1-04-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-07	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	XS-123	Cross Section:	XS-123
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	430.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Pipe Link: Link-39		Upstream		Downstream	
Scenario:	Site Only	Invert:	422.00 ft	Invert:	420.00 ft
From Node:	Trib1-05-01a	Manning's N:	0.0130	Manning's N:	0.0130

		Geometry: Rectangular		Geometry: Rectangular	
To Node:	Trib1-00-07	Max Depth:	6.00 ft	Max Depth:	6.00 ft
Link Count:	2	Max Width:	6.00 ft	Max Width:	6.00 ft
Flow Direction:	Both	Fillet:	0.00 ft	Fillet:	0.00 ft
Damping:	0.0000 ft	Bottom Clip			
Length:	63.00 ft	Default:	0.00 ft	Default:	0.00 ft
FHWA Code:	11	Op Table:		Op Table:	
Entr Loss Coef:	0.50	Ref Node:		Ref Node:	
Exit Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Bend Loss Coef:	0.00	Top Clip			
Bend Location:	0.00 dec	Default:	0.00 ft	Default:	0.00 ft
Energy Switch:	Energy	Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-3A		Upstream		Downstream	
Scenario:	Site Only	Invert:	444.00 ft	Invert:	414.00 ft
From Node:	Trib2-03-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-3A	Cross Section:	XS-3A
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1850.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-40		Upstream		Downstream	
Scenario:	Site Only	Invert:	417.50 ft	Invert:	414.00 ft
From Node:	Trib1-00-07	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-06	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-112	Cross Section:	XS-112
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	295.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				

Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Channel Link: Link-41		Upstream		Downstream	
Scenario:	Site Only	Invert:	427.70 ft	Invert:	414.00 ft
From Node:	Trib1-03-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-06	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	XS-113	Cross Section:	XS-113
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	780.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Pipe Link: Link-42		Upstream		Downstream	
Scenario:	Site Only	Invert:	435.00 ft	Invert:	433.00 ft
From Node:	Offsite01	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib1-05-01a	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	4.00 ft	Max Depth:	4.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	224.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-43		Upstream		Downstream	
Scenario:	Site Only	Invert:	447.50 ft	Invert:	446.00 ft
From Node:	Trib1-05-03	Manning's N:	0.0130	Manning's N:	0.0130

		Geometry: Rectangular		Geometry: Rectangular	
To Node:	Trib1-05-02	Max Depth:	6.00 ft	Max Depth:	6.00 ft
Link Count:	1	Max Width:	6.00 ft	Max Width:	6.00 ft
Flow Direction:	Both	Fillet:	0.00 ft	Fillet:	0.00 ft
Damping:	0.0000 ft	Bottom Clip			
Length:	82.00 ft	Default:	0.00 ft	Default:	0.00 ft
FHWA Code:	12	Op Table:		Op Table:	
Entr Loss Coef:	0.50	Ref Node:		Ref Node:	
Exit Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Bend Loss Coef:	0.00	Top Clip			
Bend Location:	0.00 dec	Default:	0.00 ft	Default:	0.00 ft
Energy Switch:	Energy	Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-47		Upstream		Downstream	
Scenario:	Site Only	Invert:	414.00 ft	Invert:	406.50 ft
From Node:	Trib1-00-06	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-05	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	XS-111	Cross Section:	XS-111
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	840.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-52			
Scenario:	Site Only	Bottom Clip	
From Node:	Trib1-02-02	Default:	0.00 ft
To Node:	Trib1-02-01	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	454.80 ft	Discharge Coefficients	
Control Elevation:	454.80 ft	Weir Default:	2.800
Cross Section:	XS-012	Weir Table:	

Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Link: Link-55		Upstream		Downstream	
Scenario:	Site Only	Invert:	394.00 ft	Invert:	388.00 ft
From Node:	Trib1-00-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-106	Cross Section:	XS-106
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	655.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-56		Upstream		Downstream	
Scenario:	Site Only	Invert:	434.00 ft	Invert:	388.00 ft
From Node:	Trib1-02-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-105	Cross Section:	XS-105
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1020.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-59			
Scenario:	Site Only	Bottom Clip	
From Node:	Trib1-01-02	Default:	0.00 ft

To Node:	Trib1-01-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	410.90 ft
Control Elevation:	410.90 ft
Cross Section:	XS-013

Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Link: Link-5A		Upstream		Downstream	
Scenario:	Site Only	Invert:	407.00 ft	Invert:	394.00 ft
From Node:	Trib1-00-05	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-5A	Cross Section:	XS-5A
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1100.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-60		Upstream		Downstream	
Scenario:	Site Only	Invert:	388.00 ft	Invert:	370.00 ft
From Node:	Trib1-01-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-102	Cross Section:	XS-102
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	515.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				

Energy Switch: Energy

Comment:

Channel Link: Link-62		Upstream		Downstream	
Scenario:	Site Only	Invert:	370.00 ft	Invert:	358.50 ft
From Node:	Trib1-00-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Outfall_C	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-Z	Cross Section:	X-Z
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1080.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-63		Upstream		Downstream	
Scenario:	Site Only	Invert:	435.00 ft	Invert:	430.00 ft
From Node:	Trib2-01-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-01-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-203	Cross Section:	XS-203
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	200.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-64			
Scenario:	Site Only	Bottom Clip	
From Node:	Trib2-01-04	Default:	0.00 ft
To Node:	Trib2-01-03	Op Table:	
Link Count:	1	Ref Node:	

Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	451.70 ft
Control Elevation:	451.70 ft
Cross Section:	XS-024

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Link-65

Scenario:	Site Only
From Node:	Trib2-03-07
To Node:	Trib2-03-06
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	512.50 ft
Control Elevation:	512.50 ft
Cross Section:	XS-018

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Link: Link-66

Scenario:	Site Only
From Node:	Trib2-03-06
To Node:	Trib2-03-03
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Length:	1660.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Upstream	
Invert:	496.50 ft
Manning's N:	0.0000
Geometry:	Irregular
Cross Section:	XS-216

Downstream	
Invert:	466.00 ft
Manning's N:	0.0000
Geometry:	Irregular
Cross Section:	XS-216

Comment:

Weir Link: Link-67			
Scenario:	Site Only	**Bottom Clip**	
From Node:	Trib2-03-05	Default:	0.00 ft
To Node:	Trib2-03-04	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	488.20 ft	**Discharge Coefficients**	
Control Elevation:	488.20 ft	Weir Default:	2.800
Cross Section:	XS-017	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Channel Link: Link-68		Upstream		Downstream	
Scenario:	Site Only	Invert:	474.00 ft	Invert:	466.00 ft
From Node:	Trib2-03-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-03-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-215	Cross Section:	XS-215
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	445.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-6A		Upstream		Downstream	
Scenario:	Site Only	Invert:	388.00 ft	Invert:	370.00 ft
From Node:	Trib1-00-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-AB	Cross Section:	X-AA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	2130.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				

Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Weir Link: Link-77			
Scenario:	Site Only	Bottom Clip	
From Node:	Offsite01	Default:	0.00 ft
To Node:	Trib1-05-01a	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	442.85 ft	Discharge Coefficients	
Control Elevation:	442.85 ft	Weir Default:	2.800
Cross Section:	XS-010	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Pipe Link: Link-78		Upstream		Downstream	
Scenario:	Site Only	Invert:	436.00 ft	Invert:	430.00 ft
From Node:	Offsite01	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib1-00-07	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	328.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-79		Upstream		Downstream	
Scenario:	Site Only	Invert:	442.00 ft	Invert:	436.00 ft
From Node:	Offsite01	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib1-05-01a	Geometry: Circular		Geometry: Circular	

Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	232.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-7A		Upstream		Downstream	
Scenario:	Site Only	Invert:	466.00 ft	Invert:	444.00 ft
From Node:	Trib2-03-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-03-02	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	XS-7A	Cross Section:	XS-7A
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1525.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Pipe Link: Link-80		Upstream		Downstream	
Scenario:	Site Only	Invert:	443.00 ft	Invert:	438.00 ft
From Node:	Offsite02	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-05-01a	Geometry: Rectangular		Geometry: Rectangular	
Link Count:	1	Max Depth:	6.00 ft	Max Depth:	6.00 ft
Flow Direction:	Both	Max Width:	6.00 ft	Max Width:	6.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	266.00 ft	Bottom Clip			
FHWA Code:	12	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec	Top Clip			
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	

	Ref Node:		Ref Node:
	Manning's N: 0.0000		Manning's N: 0.0000

Comment:

Weir Link: Link-87

Scenario:	Site Only
From Node:	Trib1-05-01a
To Node:	Trib1-00-07
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	430.90 ft
Control Elevation:	430.90 ft
Cross Section:	XS-015

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Link-88

Scenario:	Site Only
From Node:	Trib1-04-02
To Node:	Trib1-04-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	439.00 ft
Control Elevation:	439.00 ft
Cross Section:	XS-124

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Link: Link-90

Scenario:	Site Only
From Node:	Outfall_C
To Node:	Trib1-00-00
Link Count:	1
Flow Direction:	Both

Upstream

Invert:	358.50 ft
Manning's N:	0.0000

Geometry: Irregular

Cross Section:	XS-100

Downstream

Invert:	347.00 ft
Manning's N:	0.0000

Geometry: Irregular

Cross Section:	XS-100

Damping:	0.0000 ft
Length:	1025.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Channel Link: Link-91		Upstream		Downstream	
Scenario:	Site Only	Invert:	347.00 ft	Invert:	346.00 ft
From Node:	Trib1-00-00	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Outfall_A	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-000	Cross Section:	XS-000
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	100.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Pipe Link: Link-92		Upstream		Downstream	
Scenario:	Site Only	Invert:	390.00 ft	Invert:	388.50 ft
From Node:	Trib3-00-06	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib3-00-05	Geometry:	Rectangular	Geometry:	Rectangular
Link Count:	1	Max Depth:	10.00 ft	Max Depth:	10.00 ft
Flow Direction:	Both	Max Width:	10.00 ft	Max Width:	10.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	278.00 ft		Bottom Clip		
FHWA Code:	11	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec		Top Clip		
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-93		Upstream		Downstream	
Scenario:	Site Only	Invert:	388.50 ft	Invert:	386.00 ft
From Node:	Trib3-00-05	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib3-00-04	Geometry:	Rectangular	Geometry:	Rectangular
Link Count:	1	Max Depth:	10.00 ft	Max Depth:	10.00 ft
Flow Direction:	Both	Max Width:	10.00 ft	Max Width:	10.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	30.00 ft	Bottom Clip			
FHWA Code:	11	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec	Top Clip			
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-94		Upstream		Downstream	
Scenario:	Site Only	Invert:	386.00 ft	Invert:	377.00 ft
From Node:	Trib3-00-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib3-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0750C	Cross Section:	X-030
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1164.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-95			
Scenario:	Site Only	Bottom Clip	
From Node:	Trib3-00-05	Default:	0.00 ft
To Node:	Trib3-00-04	Op Table:	

Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	404.20 ft
Control Elevation:	404.20 ft
Cross Section:	XS-014

Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Link-96

Scenario:	Site Only
From Node:	Trib3-00-06
To Node:	Trib3-00-05
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	422.00 ft
Control Elevation:	422.00 ft
Cross Section:	XS-011

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Weir-01

Scenario:	Site Only
From Node:	Trib2-04-06
To Node:	Trib2-04-05
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	459.00 ft
Control Elevation:	459.00 ft
Max Depth:	99.00 ft
Max Width:	25.00 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Weir-02

Scenario:	Site Only
From Node:	Trib2-04-04
To Node:	Trib2-04-03
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	454.50 ft
Control Elevation:	454.50 ft
Max Depth:	99.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	60.00 ft
Left Slope:	0.014 (h:v)
Right Slope:	0.014 (h:v)

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Weir-03

Scenario:	Site Only
From Node:	Trib2-04-08
To Node:	Trib2-04-07
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	V-Notch Up
Invert:	452.50 ft
Control Elevation:	452.50 ft
Max Depth:	3.00 ft
Max Width:	240.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Weir-84

Scenario:	Site Only
From Node:	Trib1-05-03
To Node:	Trib1-05-02
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	460.00 ft
Control Elevation:	460.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800

Max Depth: 1.00 ft
Max Width: 150.00 ft
Fillet: 0.00 ft

Weir Table:
Orifice Default: 0.600
Orifice Table:

Comment:

Channel Cross Section: X-001

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	378.47	0.0500
1	9.94	377.46	0.0500
2	19.88	376.02	0.0500
3	29.82	374.45	0.0500
4	39.76	372.81	0.0500
5	49.70	370.91	0.0500
6	59.63	368.85	0.0500
7	69.57	366.28	0.0500
8	79.51	363.88	0.0500
9	89.45	361.30	0.0500
10	99.39	358.83	0.0500
11	109.33	356.94	0.0500
12	119.27	355.10	0.0500
13	129.21	353.69	0.0500
14	139.15	352.63	0.0500
15	149.09	352.12	0.0500
16	159.03	350.56	0.0500
17	168.96	349.16	0.0500
18	178.90	350.71	0.0500
19	188.84	351.40	0.0500
20	198.78	351.17	0.0500
21	208.72	350.94	0.0500
22	218.66	351.12	0.0500
23	228.60	351.17	0.0500
24	238.54	351.04	0.0500
25	248.48	351.16	0.0500
26	258.42	351.57	0.0500
27	268.36	351.80	0.0500
28	278.30	351.90	0.0500
29	288.23	352.05	0.0500
30	298.17	352.18	0.0500
31	308.11	352.51	0.0500
32	317.93	352.98	0.0500
33	327.75	353.54	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
34	337.57	354.01	0.0500
35	347.38	354.78	0.0500
36	357.20	355.76	0.0500
37	367.02	356.83	0.0500
38	376.84	357.33	0.0500
39	386.65	357.88	0.0500
40	396.47	358.06	0.0500
41	406.29	358.15	0.0500
42	416.11	358.30	0.0500
43	425.93	358.37	0.0500
44	435.74	358.40	0.0500
45	445.56	358.43	0.0500
46	455.38	358.63	0.0500
47	465.20	358.76	0.0500
48	475.01	359.04	0.0500
49	484.83	359.16	0.0500
50	494.65	359.20	0.0500
51	504.47	359.32	0.0500
52	514.29	359.37	0.0500
53	524.10	359.50	0.0500
54	533.92	359.78	0.0500
55	543.74	359.86	0.0500
56	553.56	360.04	0.0500
57	563.37	360.23	0.0500
58	573.19	360.35	0.0500
59	583.01	360.64	0.0500
60	592.83	360.79	0.0500
61	602.65	360.91	0.0500
62	612.46	361.02	0.0500
63	622.28	361.26	0.0500
64	632.10	361.35	0.0500
65	641.92	361.51	0.0500
66	651.73	361.69	0.0500
67	661.55	361.96	0.0500
68	671.37	362.02	0.0500
69	681.19	362.32	0.0500
70	691.01	362.64	0.0500
71	700.82	362.88	0.0500
72	710.64	362.97	0.0500
73	720.46	363.18	0.0500
74	730.28	363.52	0.0500
75	740.09	363.74	0.0500
76	749.91	363.86	0.0500
77	759.73	364.00	0.0500
78	769.55	364.30	0.0500
79	779.37	364.58	0.0500
80	789.18	364.76	0.0500

Comment:

Channel Cross Section: X-011

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
16	0.00	371.61	0.0500
17	9.52	370.95	0.0500
18	19.05	370.22	0.0500
19	28.57	369.44	0.0500
20	38.09	368.63	0.0500
21	47.62	367.86	0.0500
22	57.14	367.23	0.0500
23	66.66	366.71	0.0500
24	76.19	366.32	0.0500
25	85.71	365.72	0.0500
26	95.23	365.23	0.0500
27	104.76	364.93	0.0500
28	114.28	364.59	0.0500
29	123.80	363.99	0.0500
30	133.33	362.50	0.0500
31	142.85	361.45	0.0500
32	152.37	363.41	0.0500
33	162.23	362.78	0.0500
34	172.09	362.41	0.0500
35	181.95	362.52	0.0500
36	191.81	362.87	0.0500
37	201.67	363.24	0.0500
38	211.53	363.85	0.0500
39	221.38	363.89	0.0500
40	231.24	364.15	0.0500
41	241.10	364.46	0.0500
42	250.96	365.09	0.0500
43	260.82	365.89	0.0500
44	270.68	367.65	0.0500
45	280.53	369.36	0.0500
46	290.39	370.77	0.0500
47	300.25	371.70	0.0500
48	310.11	372.67	0.0500
49	319.97	373.78	0.0500
50	329.83	375.01	0.0500
51	339.69	376.05	0.0500

Comment:

Channel Cross Section: X-020

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	390.39	0.0500
1	9.83	390.68	0.0500
2	19.67	390.39	0.0500
3	29.50	389.20	0.0500
4	39.33	387.43	0.0500
5	49.17	385.04	0.0500
6	59.00	382.01	0.0500
7	68.84	379.22	0.0500
8	78.67	377.35	0.0500
9	88.50	375.70	0.0500
10	98.34	374.45	0.0500
11	108.17	374.28	0.0500
12	118.00	374.40	0.0500
13	127.84	374.04	0.0500
14	137.67	373.63	0.0500
15	147.50	373.31	0.0500
16	157.34	373.26	0.0500
17	167.17	373.52	0.0500
18	177.00	373.86	0.0500
19	186.84	373.88	0.0500
20	196.67	373.77	0.0500
21	206.51	373.86	0.0500
22	216.34	374.09	0.0500
23	226.17	373.81	0.0500
24	236.01	372.93	0.0500
25	245.84	374.44	0.0500
26	255.67	375.45	0.0500
27	265.51	375.87	0.0500
28	275.34	376.45	0.0500
29	285.17	377.43	0.0500
30	295.01	378.32	0.0500
31	304.84	379.74	0.0500
32	314.68	381.09	0.0500
33	324.51	382.51	0.0500
34	334.34	383.36	0.0500
35	344.18	384.90	0.0500

Comment:

Channel Cross Section: X-030

Scenario: Existing

Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	397.02	0.0500
1	9.85	396.04	0.0500
2	19.71	394.87	0.0500
3	29.56	393.00	0.0500
4	39.41	390.60	0.0500
5	49.26	388.04	0.0500
6	59.12	385.48	0.0500
7	68.97	382.92	0.0500
8	78.82	380.88	0.0500
9	88.67	380.34	0.0500
10	98.53	379.34	0.0500
11	108.38	377.63	0.0500
12	118.34	380.28	0.0500
13	128.30	380.81	0.0500
14	138.26	380.33	0.0500
15	148.22	380.14	0.0500
16	158.18	380.19	0.0500
17	168.14	380.49	0.0500
18	178.10	380.43	0.0500
19	188.06	380.34	0.0500
20	198.02	380.40	0.0500
21	207.98	380.75	0.0500
22	217.94	381.58	0.0500
23	227.90	382.59	0.0500
24	237.86	383.41	0.0500
25	247.82	383.95	0.0500
26	257.78	384.31	0.0500
27	267.74	384.59	0.0500
28	277.70	385.01	0.0500
29	287.66	385.44	0.0500
30	297.62	385.94	0.0500
31	307.58	386.72	0.0500
32	317.54	387.28	0.0500

Comment:

Channel Cross Section: X-0750C

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	403.73	0.0500
1	2.96	403.18	0.0500
2	5.93	403.06	0.0500
3	8.89	402.82	0.0500
4	11.85	402.02	0.0500
5	14.81	401.29	0.0500
6	17.78	401.29	0.0500
7	20.74	401.29	0.0500
8	23.70	401.29	0.0500
9	26.66	401.12	0.0500
10	29.63	400.78	0.0500
11	32.59	400.32	0.0500
12	35.55	399.96	0.0500
13	38.51	399.88	0.0500
14	41.48	399.88	0.0500
15	44.44	399.78	0.0500
16	47.40	399.37	0.0500
17	50.36	399.37	0.0500
18	53.33	399.37	0.0500
19	56.29	399.13	0.0500
20	59.25	398.33	0.0500
21	62.21	397.82	0.0500
22	65.18	397.82	0.0500
23	68.14	397.60	0.0500
24	71.10	397.00	0.0500
25	74.06	397.00	0.0500
26	77.03	396.72	0.0500
27	79.99	395.68	0.0500
28	82.95	395.34	0.0500
29	85.91	395.34	0.0500
30	88.88	395.34	0.0500
31	91.84	395.00	0.0500
32	94.80	394.35	0.0500
33	97.76	393.98	0.0500
34	100.73	393.58	0.0500
35	103.69	392.15	0.0500
36	106.65	391.97	0.0500
37	109.61	391.97	0.0500
38	112.58	391.09	0.0500
39	115.54	390.31	0.0500
40	118.50	390.31	0.0500
41	121.46	390.31	0.0500
42	124.43	389.88	0.0500
43	127.39	388.00	0.0500
44	130.35	387.86	0.0500
45	133.31	387.86	0.0500
46	136.28	387.06	0.0500
47	139.24	386.53	0.0500
48	142.20	386.53	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
49	145.16	386.34	0.0500
50	148.13	385.84	0.0500
51	151.09	385.80	0.0500
52	154.05	385.80	0.0500
53	157.01	385.80	0.0500
54	159.98	385.70	0.0500
55	162.94	385.61	0.0500
56	165.90	385.42	0.0500
57	168.86	385.20	0.0500
58	171.83	385.11	0.0500
59	174.79	385.11	0.0500
60	177.75	385.11	0.0500
61	180.71	385.11	0.0500
62	183.68	385.11	0.0500
63	186.64	385.11	0.0500
64	189.60	385.12	0.0500
65	192.56	385.33	0.0500
66	195.53	385.47	0.0500
67	198.49	385.46	0.0500
68	201.45	385.45	0.0500
69	204.41	385.39	0.0500
70	207.38	385.39	0.0500
71	210.34	385.37	0.0500
72	213.30	385.34	0.0500
73	216.26	385.55	0.0500
74	219.23	385.55	0.0500
75	222.19	385.55	0.0500
76	225.15	385.55	0.0500
77	228.11	385.51	0.0500
78	231.08	385.50	0.0500
79	234.04	385.46	0.0500
80	237.00	385.39	0.0500
81	239.98	385.37	0.0500
82	242.96	385.37	0.0500
83	245.95	385.21	0.0500
84	248.93	384.88	0.0500
85	251.91	384.88	0.0500
86	254.89	384.88	0.0500
87	257.87	384.70	0.0500
88	260.86	384.14	0.0500
89	263.84	384.36	0.0500
90	266.82	384.36	0.0500
91	269.80	384.76	0.0500
92	272.78	385.37	0.0500
93	275.77	385.37	0.0500
94	278.75	385.30	0.0500
95	281.73	385.06	0.0500
96	284.71	385.02	0.0500
97	287.69	385.02	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
98	290.68	385.02	0.0500
99	293.66	384.91	0.0500
100	296.64	384.87	0.0500
101	299.62	385.08	0.0500
102	302.60	385.35	0.0500
103	305.58	386.05	0.0500
104	308.57	386.05	0.0500
105	311.55	386.05	0.0500
106	314.53	386.60	0.0500
107	317.51	386.90	0.0500
108	320.49	386.90	0.0500
109	323.48	386.96	0.0500
110	326.46	387.17	0.0500
111	329.44	387.51	0.0500
112	332.42	387.51	0.0500
113	335.40	387.51	0.0500
114	338.39	388.35	0.0500
115	341.37	388.68	0.0500
116	344.35	388.81	0.0500
117	347.33	389.15	0.0500
118	350.31	389.53	0.0500
119	353.30	389.53	0.0500
120	356.28	389.53	0.0500
121	359.26	389.53	0.0500
122	362.24	390.04	0.0500
123	365.22	390.25	0.0500
124	368.20	390.32	0.0500
125	371.19	390.67	0.0500
126	374.17	391.10	0.0500
127	377.15	391.10	0.0500
128	380.13	391.17	0.0500
129	383.11	391.90	0.0500
130	386.10	391.91	0.0500
131	389.08	391.87	0.0500
132	392.06	391.79	0.0500
133	395.04	392.24	0.0500
134	398.02	392.70	0.0500
135	401.01	392.70	0.0500
136	403.99	392.85	0.0500
137	406.97	393.59	0.0500
138	409.95	393.91	0.0500
139	412.93	394.22	0.0500
140	415.92	394.97	0.0500
141	418.90	395.27	0.0500
142	421.88	395.27	0.0500
143	424.86	395.27	0.0500
144	427.84	395.68	0.0500
145	430.82	396.83	0.0500
146	433.81	396.98	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
147	436.79	396.98	0.0500
148	439.77	397.34	0.0500
149	442.75	397.45	0.0500
150	445.73	397.45	0.0500
151	448.72	398.04	0.0500
152	451.70	398.85	0.0500
153	454.68	399.11	0.0500
154	457.66	399.52	0.0500
155	460.64	399.77	0.0500
156	463.63	400.74	0.0500
157	466.61	400.93	0.0500
158	469.59	400.93	0.0500
159	472.57	401.53	0.0500
160	475.55	402.68	0.0500
161	478.54	403.22	0.0500
162	481.52	403.50	0.0500
163	484.50	404.60	0.0500

Comment:

Channel Cross Section: X-0760C

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	400.19	0.0500
1	2.98	400.13	0.0500
2	5.96	400.17	0.0500
3	8.94	400.41	0.0500
4	11.92	400.41	0.0500
5	14.90	400.39	0.0500
6	17.88	400.24	0.0500
7	20.86	400.33	0.0500
8	23.84	400.33	0.0500
9	26.82	400.33	0.0500
10	29.80	400.31	0.0500
11	32.78	400.12	0.0500
12	35.76	400.13	0.0500
13	38.74	400.14	0.0500
14	41.72	400.05	0.0500
15	44.70	399.98	0.0500
16	47.68	399.98	0.0500
17	50.66	399.93	0.0500
18	53.64	399.67	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
19	56.62	399.67	0.0500
20	59.60	399.66	0.0500
21	62.58	399.63	0.0500
22	65.56	399.45	0.0500
23	68.54	399.29	0.0500
24	71.52	399.29	0.0500
25	74.50	399.30	0.0500
26	77.49	399.34	0.0500
27	80.47	399.30	0.0500
28	83.45	399.27	0.0500
29	86.43	399.61	0.0500
30	89.41	399.84	0.0500
31	92.39	399.84	0.0500
32	95.37	399.77	0.0500
33	98.35	399.44	0.0500
34	101.33	399.71	0.0500
35	104.31	399.77	0.0500
36	107.29	399.77	0.0500
37	110.27	400.04	0.0500
38	113.25	400.30	0.0500
39	116.23	400.30	0.0500
40	119.21	400.31	0.0500
41	122.19	400.42	0.0500
42	125.17	400.43	0.0500
43	128.15	400.43	0.0500
44	131.13	400.43	0.0500
45	134.11	400.26	0.0500
46	137.09	400.07	0.0500
47	140.07	400.17	0.0500
48	143.05	400.25	0.0500
49	146.03	399.64	0.0500
50	149.01	399.60	0.0500
51	151.99	399.60	0.0500
52	154.97	399.31	0.0500
53	157.95	399.02	0.0500
54	160.93	398.93	0.0500
55	163.91	398.87	0.0500
56	166.89	398.85	0.0500
57	169.87	398.02	0.0500
58	172.85	397.92	0.0500
59	175.83	397.92	0.0500
60	178.81	397.61	0.0500
61	181.79	397.25	0.0500
62	184.77	397.03	0.0500
63	187.75	396.71	0.0500
64	190.72	395.79	0.0500
65	193.69	395.79	0.0500
66	196.67	395.79	0.0500
67	199.64	395.79	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
68	202.61	394.77	0.0500
69	205.59	394.12	0.0500
70	208.56	393.98	0.0500
71	211.54	393.42	0.0500
72	214.51	392.60	0.0500
73	217.48	392.60	0.0500
74	220.46	392.45	0.0500
75	223.43	391.01	0.0500
76	226.40	390.89	0.0500
77	229.38	390.66	0.0500
78	232.35	390.45	0.0500
79	235.32	389.63	0.0500
80	238.30	389.13	0.0500
81	241.27	389.13	0.0500
82	244.25	388.68	0.0500
83	247.22	387.82	0.0500
84	250.19	387.82	0.0500
85	253.17	387.72	0.0500
86	256.14	386.26	0.0500
87	259.11	386.17	0.0500
88	262.09	386.14	0.0500
89	265.06	386.14	0.0500
90	268.04	385.17	0.0500
91	271.01	384.50	0.0500
92	273.98	384.50	0.0500
93	276.96	384.03	0.0500
94	279.93	382.92	0.0500
95	282.90	382.72	0.0500
96	285.88	382.63	0.0500
97	288.85	382.04	0.0500
98	291.82	381.99	0.0500
99	294.80	381.99	0.0500
100	297.77	381.99	0.0500
101	300.75	381.79	0.0500
102	303.72	381.69	0.0500
103	306.69	381.64	0.0500
104	309.67	381.59	0.0500
105	312.64	381.46	0.0500
106	315.61	381.46	0.0500
107	318.59	381.46	0.0500
108	321.56	380.87	0.0500
109	324.54	380.80	0.0500
110	327.51	380.80	0.0500
111	330.48	380.83	0.0500
112	333.46	380.60	0.0500
113	336.43	380.21	0.0500
114	339.40	380.21	0.0500
115	342.38	380.06	0.0500
116	345.35	379.59	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
117	348.32	379.59	0.0500
118	351.30	379.53	0.0500
119	354.27	378.62	0.0500
120	357.25	378.43	0.0500
121	360.22	378.42	0.0500
122	363.19	378.42	0.0500
123	366.17	378.05	0.0500
124	369.14	377.64	0.0500
125	372.11	377.64	0.0500
126	375.09	377.52	0.0500
127	378.06	377.16	0.0500
128	381.04	377.16	0.0500
129	384.01	377.16	0.0500
130	386.98	377.20	0.0500
131	389.96	377.21	0.0500
132	392.92	377.21	0.0500
133	395.88	377.21	0.0500
134	398.83	377.37	0.0500
135	401.79	377.45	0.0500
136	404.75	377.45	0.0500
137	407.71	377.31	0.0500
138	410.67	377.22	0.0500
139	413.63	377.22	0.0500
140	416.59	377.19	0.0500
141	419.55	377.17	0.0500
142	422.51	377.17	0.0500
143	425.47	377.17	0.0500
144	428.43	377.24	0.0500
145	431.39	377.33	0.0500
146	434.35	377.34	0.0500
147	437.31	377.52	0.0500
148	440.27	377.74	0.0500
149	443.22	377.72	0.0500
150	446.18	377.74	0.0500
151	449.14	377.78	0.0500
152	452.10	377.76	0.0500
153	455.06	377.75	0.0500
154	458.02	376.63	0.0500
155	460.98	373.61	0.0500
156	463.94	373.61	0.0500
157	466.90	374.44	0.0500
158	469.86	377.56	0.0500
159	472.82	377.56	0.0500
160	475.78	377.65	0.0500
161	478.74	378.18	0.0500
162	481.70	378.18	0.0500
163	484.66	378.18	0.0500
164	487.61	378.20	0.0500
165	490.57	378.37	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
166	493.53	378.37	0.0500
167	496.49	378.37	0.0500
168	499.45	378.49	0.0500
169	502.41	378.49	0.0500
170	505.37	378.49	0.0500
171	508.33	379.21	0.0500
172	511.29	379.26	0.0500
173	514.25	379.31	0.0500
174	517.21	379.38	0.0500
175	520.17	380.42	0.0500
176	523.13	380.59	0.0500
177	526.09	380.59	0.0500
178	529.04	381.41	0.0500
179	532.00	381.61	0.0500
180	534.96	381.59	0.0500
181	537.92	382.31	0.0500
182	540.88	382.57	0.0500
183	543.84	382.57	0.0500
184	546.80	382.57	0.0500
185	549.76	383.56	0.0500
186	552.72	384.09	0.0500
187	555.68	384.09	0.0500
188	558.64	385.20	0.0500
189	561.60	385.97	0.0500
190	564.56	385.97	0.0500
191	567.52	387.00	0.0500
192	570.48	387.91	0.0500
193	573.43	387.91	0.0500
194	576.40	387.91	0.0500
195	579.37	388.87	0.0500
196	582.33	389.97	0.0500
197	585.30	389.97	0.0500
198	588.27	390.81	0.0500
199	591.23	391.92	0.0500
200	594.20	391.92	0.0500
201	597.17	392.60	0.0500
202	600.13	393.64	0.0500
203	603.10	393.64	0.0500
204	606.07	393.64	0.0500
205	609.03	394.40	0.0500
206	612.00	395.84	0.0500
207	614.96	395.84	0.0500
208	617.93	396.43	0.0500
209	620.90	397.74	0.0500
210	623.86	397.74	0.0500
211	626.83	398.29	0.0500
212	629.80	399.77	0.0500
213	632.76	399.77	0.0500
214	635.73	399.77	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
215	638.70	400.12	0.0500
216	641.66	401.36	0.0500
217	644.63	401.36	0.0500
218	647.60	401.65	0.0500
219	650.56	402.93	0.0500
220	653.53	402.93	0.0500
221	656.49	403.22	0.0500
222	659.46	404.89	0.0500

Comment:

Channel Cross Section: X-0810C

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	451.76	0.0350
1	1.00	451.76	0.0350
2	2.00	451.76	0.0350
3	2.99	451.76	0.0350
4	3.99	451.76	0.0350
5	4.99	451.76	0.0350
6	5.99	451.76	0.0350
7	6.98	451.76	0.0350
8	7.98	451.76	0.0350
9	8.98	450.98	0.0350
10	9.98	447.52	0.0350
11	10.97	447.52	0.0350
12	11.97	447.52	0.0350
13	12.97	447.52	0.0350
14	13.97	447.52	0.0350
15	14.97	447.52	0.0350
16	15.96	447.52	0.0350
17	16.96	447.52	0.0350
18	17.96	447.52	0.0350
19	18.96	446.73	0.0350
20	19.95	442.29	0.0350
21	20.95	442.29	0.0350
22	21.95	442.29	0.0350
23	22.95	442.29	0.0350
24	23.94	442.29	0.0350
25	24.94	442.29	0.0350
26	25.94	442.29	0.0350
27	26.94	442.29	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
28	27.93	442.29	0.0350
29	28.93	441.73	0.0350
30	29.93	437.50	0.0350
31	30.93	437.50	0.0350
32	31.93	437.50	0.0350
33	32.92	437.50	0.0350
34	33.92	437.50	0.0350
35	34.92	437.50	0.0350
36	35.92	437.50	0.0350
37	36.91	437.49	0.0350
38	37.91	437.47	0.0350
39	38.91	437.36	0.0350
40	39.91	436.24	0.0350
41	40.90	436.20	0.0350
42	41.90	436.16	0.0350
43	42.90	436.12	0.0350
44	43.90	436.07	0.0350
45	44.90	436.03	0.0350
46	45.89	435.99	0.0350
47	46.89	435.95	0.0350
48	47.89	435.91	0.0350
49	48.89	435.80	0.0350
50	49.88	434.41	0.0350
51	50.88	434.40	0.0350
52	51.88	434.38	0.0350
53	52.88	434.37	0.0350
54	53.87	434.36	0.0350
55	54.87	434.34	0.0350
56	55.87	434.33	0.0350
57	56.87	434.31	0.0350
58	57.86	434.30	0.0350
59	58.86	434.21	0.0350
60	59.86	429.23	0.0350
61	60.86	429.23	0.0350
62	61.86	429.23	0.0350
63	62.85	429.23	0.0350
64	63.85	429.23	0.0350
65	64.85	429.23	0.0350
66	65.85	429.23	0.0350
67	66.84	429.23	0.0350
68	67.84	429.23	0.0350
69	68.84	429.23	0.0350
70	69.84	430.39	0.0350
71	70.83	430.41	0.0350
72	71.83	430.41	0.0350
73	72.83	430.41	0.0350
74	73.83	430.41	0.0350
75	74.83	430.41	0.0350
76	75.82	430.41	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
77	76.82	430.41	0.0350
78	77.82	430.41	0.0350
79	78.82	430.41	0.0350
80	79.81	434.72	0.0350
81	80.81	434.96	0.0350
82	81.81	434.96	0.0350
83	82.81	434.96	0.0350
84	83.80	434.96	0.0350
85	84.80	434.96	0.0350
86	85.80	434.96	0.0350
87	86.80	434.96	0.0350
88	87.80	434.96	0.0350
89	88.79	434.96	0.0350
90	89.79	435.57	0.0350
91	90.79	435.62	0.0350
92	91.79	435.62	0.0350
93	92.78	435.62	0.0350
94	93.78	435.62	0.0350
95	94.78	435.62	0.0350
96	95.78	435.62	0.0350
97	96.77	435.62	0.0350
98	97.77	435.62	0.0350
99	98.77	435.62	0.0350
100	99.77	440.08	0.0350
101	100.76	440.68	0.0350
102	101.76	440.68	0.0350
103	102.76	440.68	0.0350
104	103.76	440.68	0.0350
105	104.76	440.68	0.0350
106	105.75	440.68	0.0350
107	106.75	440.68	0.0350
108	107.75	440.68	0.0350
109	108.75	440.68	0.0350
110	109.74	443.00	0.0350
111	110.74	443.42	0.0350
112	111.74	443.42	0.0350
113	112.74	443.42	0.0350
114	113.73	443.42	0.0350
115	114.73	443.42	0.0350
116	115.73	443.42	0.0350
117	116.73	443.42	0.0350
118	117.73	443.42	0.0350
119	118.72	443.42	0.0350
120	119.72	443.77	0.0350
121	120.72	443.85	0.0350
122	121.72	443.85	0.0350
123	122.71	443.85	0.0350
124	123.71	443.85	0.0350
125	124.71	443.85	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
126	125.71	443.85	0.0350
127	126.70	443.85	0.0350
128	127.70	443.85	0.0350
129	128.70	443.85	0.0350
130	129.70	443.89	0.0350
131	130.70	443.90	0.0350
132	131.69	443.90	0.0350
133	132.69	443.90	0.0350
134	133.69	443.90	0.0350
135	134.69	443.90	0.0350

Comment:

Channel Cross Section: X-0830C

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	461.05	0.0350
1	9.87	461.65	0.0350
2	19.73	462.37	0.0350
3	29.60	463.04	0.0350
4	39.46	463.69	0.0180
5	49.33	464.04	0.0180
6	59.19	464.37	0.0180
7	69.06	464.63	0.0180
8	78.92	463.57	0.0180
9	88.79	459.38	0.0180
10	98.65	454.25	0.0350
11	108.52	449.40	0.0350
12	118.38	445.88	0.0350
13	128.25	443.29	0.0350
14	138.12	441.10	0.0350
15	147.98	442.69	0.0350
16	157.85	446.93	0.0350
17	167.71	451.07	0.0350
18	177.58	455.18	0.0350
19	187.44	457.71	0.0350
20	197.31	458.47	0.0350
21	207.17	458.60	0.0350
22	217.04	458.13	0.0350

Comment:

Channel Cross Section: X-AA

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	390.55	0.0500
1	9.89	389.46	0.0500
2	19.78	387.90	0.0500
3	29.67	386.71	0.0500
4	39.56	385.46	0.0500
5	49.45	384.15	0.0500
6	59.34	382.92	0.0500
7	69.23	381.80	0.0500
8	79.13	380.60	0.0500
9	89.02	379.95	0.0500
10	98.91	379.16	0.0500
11	108.80	378.47	0.0500
12	118.69	377.75	0.0500
13	128.58	376.89	0.0500
14	138.47	376.19	0.0500
15	148.36	375.89	0.0500
16	158.25	375.40	0.0500
17	168.14	375.27	0.0500
18	178.03	375.17	0.0500
19	187.92	375.04	0.0500
20	197.81	375.07	0.0500
21	207.70	374.88	0.0500
22	217.59	374.66	0.0500
23	227.49	374.65	0.0500
24	237.38	374.75	0.0500
25	247.27	374.99	0.0500
26	257.16	375.26	0.0500
27	267.05	375.10	0.0500
28	276.94	374.38	0.0500
29	286.83	376.22	0.0500
30	296.72	377.41	0.0500
31	306.61	378.98	0.0500
32	316.50	380.14	0.0500
33	326.39	381.13	0.0500
34	336.28	381.87	0.0500
35	346.17	382.84	0.0500
36	356.06	383.82	0.0500
37	365.95	384.12	0.0500
38	375.85	384.72	0.0500
39	385.74	385.03	0.0500
40	395.63	385.42	0.0500
41	405.52	385.93	0.0500
42	415.41	386.45	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
43	425.30	387.04	0.0500
44	435.19	387.37	0.0500
45	445.08	387.84	0.0500
46	454.97	388.32	0.0500
47	464.86	388.70	0.0500
48	474.75	389.19	0.0500
49	484.64	389.91	0.0500
50	494.53	390.60	0.0500
51	504.42	391.27	0.0500
52	514.31	391.85	0.0500

Comment:

Channel Cross Section: X-AB

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	408.43	0.0500
1	9.94	407.40	0.0500
2	19.88	406.23	0.0500
3	29.83	405.00	0.0500
4	39.77	403.81	0.0500
5	49.71	403.06	0.0500
6	59.65	402.32	0.0500
7	69.60	400.82	0.0500
8	79.54	399.33	0.0500
9	89.48	398.55	0.0500
10	99.42	397.67	0.0500
11	109.36	396.54	0.0500
12	119.31	395.46	0.0500
13	129.25	394.03	0.0500
14	139.19	392.39	0.0500
15	149.13	390.31	0.0500
16	159.07	387.61	0.0500
17	169.02	384.87	0.0500
18	178.96	383.27	0.0500
19	188.90	384.18	0.0500
20	198.84	385.16	0.0500
21	208.79	384.76	0.0500
22	218.73	384.54	0.0500
23	228.67	384.53	0.0500
24	238.61	384.37	0.0500
25	248.55	384.11	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
26	258.50	384.08	0.0500
27	268.44	384.05	0.0500
28	278.38	383.87	0.0500
29	288.32	383.82	0.0500
30	298.27	383.68	0.0500
31	308.21	384.08	0.0500
32	318.15	385.93	0.0500
33	328.09	387.58	0.0500
34	338.03	389.06	0.0500
35	347.98	390.70	0.0500
36	357.92	392.54	0.0500
37	367.86	394.36	0.0500
38	377.80	395.35	0.0500
39	387.75	397.49	0.0500
40	397.69	399.42	0.0500
41	407.63	401.54	0.0500
42	417.57	403.43	0.0500
43	427.51	405.55	0.0500
44	437.46	407.77	0.0500
45	447.40	409.51	0.0500
46	457.34	411.80	0.0500
47	467.28	413.92	0.0500
48	477.22	415.80	0.0500
49	487.17	417.79	0.0500

Comment:

Channel Cross Section: X-Z

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	378.34	0.0500
1	9.97	377.48	0.0500
2	19.95	376.41	0.0500
3	29.92	375.21	0.0500
4	39.89	374.02	0.0500
5	49.87	373.44	0.0500
6	59.84	372.15	0.0500
7	69.81	371.15	0.0500
8	79.79	370.86	0.0500
9	89.76	370.02	0.0500
10	99.74	369.01	0.0500
11	109.71	368.08	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
12	119.68	367.24	0.0500
13	129.66	365.63	0.0500
14	139.63	364.59	0.0500
15	149.60	363.94	0.0500
16	159.58	363.05	0.0500
17	169.55	362.66	0.0500
18	179.52	362.84	0.0500
19	189.50	363.02	0.0500
20	199.47	362.84	0.0500
21	209.44	361.01	0.0500
22	219.42	362.63	0.0500
23	229.39	363.06	0.0500
24	239.37	363.07	0.0500
25	249.34	363.00	0.0500
26	259.31	363.14	0.0500
27	269.29	363.24	0.0500
28	279.26	363.63	0.0500
29	289.23	363.75	0.0500
30	299.21	363.79	0.0500
31	309.18	364.45	0.0500
32	319.15	365.40	0.0500
33	329.13	366.78	0.0500
34	339.10	367.53	0.0500
35	349.07	369.21	0.0500
36	359.05	370.85	0.0500
37	369.02	372.12	0.0500
38	379.00	373.02	0.0500
39	388.97	373.45	0.0500
40	398.94	373.91	0.0500
41	408.92	374.37	0.0500
42	418.89	374.95	0.0500
43	428.86	375.95	0.0500
44	438.84	377.43	0.0500
45	448.81	378.62	0.0500
46	458.78	379.97	0.0500
47	468.76	381.62	0.0500

Comment:

Channel Cross Section: XS-000

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	375.90	0.0350
1	9.48	374.34	0.0350
2	18.96	372.79	0.0350
3	28.43	371.06	0.0350
4	37.91	369.23	0.0350
5	47.39	367.58	0.0350
6	56.87	365.46	0.0350
7	66.35	363.21	0.0350
8	75.83	360.81	0.0350
9	85.30	358.05	0.0350
10	94.78	354.83	0.0350
11	104.26	351.87	0.0350
12	113.74	350.32	0.0350
13	123.22	349.89	0.0350
14	132.69	349.87	0.0350
15	142.17	348.05	0.0350
16	151.65	348.08	0.0350
17	161.13	349.22	0.0350
18	170.61	349.75	0.0350
19	180.57	349.65	0.0350
20	190.53	349.32	0.0350
21	200.50	349.34	0.0350
22	210.46	349.45	0.0350
23	220.43	349.81	0.0350
24	230.39	350.39	0.0350
25	240.35	350.81	0.0350
26	250.32	351.00	0.0350
27	260.28	351.53	0.0350
28	270.24	352.05	0.0350
29	280.21	352.36	0.0350
30	290.17	352.60	0.0350
31	300.13	353.11	0.0350
32	310.10	353.62	0.0350
33	320.06	353.87	0.0350
34	330.03	354.15	0.0350
35	339.99	354.13	0.0350
36	349.95	353.90	0.0350
37	359.92	354.76	0.0350
38	369.88	355.42	0.0350
39	379.84	356.40	0.0350
40	389.81	357.35	0.0350
41	399.77	358.16	0.0350
42	409.73	359.02	0.0350
43	419.70	359.54	0.0350
44	429.66	360.37	0.0350
45	439.22	361.00	0.0350
46	448.79	361.74	0.0350
47	458.35	363.00	0.0350
48	467.91	364.26	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
49	477.47	365.51	0.0350
50	487.04	366.96	0.0350
51	496.60	368.34	0.0350
52	506.16	369.75	0.0350
53	515.72	371.13	0.0350
54	525.29	372.44	0.0350
55	534.85	373.65	0.0350
56	544.41	374.69	0.0350
57	553.97	375.49	0.0350
58	563.54	376.38	0.0350
59	573.10	377.36	0.0350

Comment:

Weir Cross Section: XS-002

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	512.91
1	9.39	512.04
2	18.79	512.02
3	28.18	512.02
4	37.58	511.93
5	46.97	511.92
6	56.37	512.00
7	65.76	511.91
8	75.16	511.80
9	84.55	511.84
10	93.94	511.94
11	103.34	512.16
12	112.73	512.07
13	122.13	512.08
14	131.52	511.97
15	140.92	511.82
16	150.31	512.13
17	159.97	512.26
18	169.62	512.23
19	179.28	512.20
20	188.93	512.28
21	198.58	512.21
22	208.24	512.14
23	217.89	512.56
24	227.55	513.03
25	237.20	512.77

Order	Station [ft]	Elevation [ft]
26	246.86	512.25
27	256.51	511.98
28	266.17	511.82
29	275.82	511.68
30	285.47	511.53
31	295.13	511.13
32	304.78	511.11
33	314.44	511.18
34	324.09	511.36
35	333.75	511.58
36	343.40	511.23
37	353.06	510.98
38	362.71	510.46
39	372.37	510.38
40	382.02	510.32
41	391.67	510.27
42	401.33	510.23
43	410.98	509.94
44	420.64	509.76
45	429.84	509.53
46	439.05	509.13
47	448.26	508.75
48	457.46	508.71
49	466.67	508.78
50	475.88	508.54
51	485.08	508.64
52	494.94	508.51
53	504.79	508.40
54	514.64	508.68
55	524.49	508.67
56	534.35	508.80
57	544.20	508.76
58	554.05	508.71
59	563.90	508.85
60	573.76	508.86
61	583.61	508.80
62	593.46	508.88
63	603.31	508.79
64	613.16	508.65
65	623.02	508.92
66	632.87	508.95
67	642.72	508.84
68	652.57	508.68
69	662.43	508.49
70	672.28	508.19
71	682.13	508.05
72	691.98	508.53
73	701.83	509.19
74	711.69	509.53

Order	Station [ft]	Elevation [ft]
75	721.54	509.42
76	731.39	509.20
77	741.24	508.90
78	751.10	508.88
79	760.95	508.56
80	770.80	508.16
81	780.65	507.85
82	790.50	507.66
83	800.36	507.57
84	810.21	507.64
85	820.06	507.93
86	829.91	508.38
87	839.77	508.62
88	849.35	508.58
89	858.93	508.55
90	868.51	508.47
91	878.09	508.01
92	887.67	508.34
93	897.25	508.63
94	906.83	509.20
95	916.41	509.78
96	925.84	509.89
97	935.27	509.84
98	944.69	510.01
99	954.12	510.46
100	963.55	510.42
101	972.98	510.81
102	982.41	511.00
103	991.83	510.84
104	1001.26	510.90
105	1010.69	511.23
106	1020.12	511.47
107	1029.55	511.21
108	1038.97	511.51
109	1048.40	511.69

Comment:

Weir Cross Section: XS-005

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	17.75	452.91
1	26.63	452.44

Order	Station [ft]	Elevation [ft]
2	35.50	452.04
3	44.38	451.60
4	53.25	451.28
5	62.13	450.78
6	71.58	450.01
7	81.03	449.41
8	90.49	448.37
9	99.94	447.98
10	109.39	448.12
11	117.29	448.54
12	125.19	448.67
13	133.09	448.85
14	142.51	448.56
15	151.94	448.91
16	161.36	449.26
17	170.79	449.28
18	180.21	449.69
19	189.64	450.39
20	199.06	449.96
21	208.49	449.85
22	217.91	450.49
23	226.54	450.45
24	235.18	450.10
25	243.81	450.20
26	252.45	450.43
27	261.08	450.82
28	269.48	450.48
29	277.88	450.43
30	286.27	450.29
31	294.67	450.19
32	303.07	450.20
33	311.47	450.52
34	320.39	450.60
35	329.31	450.22
36	338.24	449.88
37	347.16	449.71
38	353.42	449.85
39	359.68	450.17
40	369.03	450.18
41	378.39	449.97
42	387.75	449.79
43	397.11	449.52
44	406.46	449.46
45	415.82	449.67
46	425.18	449.53
47	434.54	449.63
48	443.89	449.49
49	452.94	449.31
50	461.98	448.75

Order	Station [ft]	Elevation [ft]
51	471.03	448.45
52	480.97	448.60
53	490.91	448.60
54	500.85	448.81
55	510.80	448.95
56	520.74	449.11
57	530.68	449.69
58	540.62	450.22
59	550.56	450.85
60	560.50	451.37

Comment:

Weir Cross Section: XS-007

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	497.54
1	9.47	497.19
2	18.94	496.91
3	28.41	496.77
4	37.88	496.19
5	47.35	495.94
6	56.82	495.86
7	66.30	495.65
8	75.77	495.52
9	85.24	495.59
10	94.71	495.12
11	104.18	494.96
12	113.65	494.79
13	123.12	494.85
14	132.59	494.85
15	142.06	494.85
16	151.66	495.09
17	161.26	495.02
18	170.86	495.11
19	180.46	494.97
20	190.06	495.01
21	199.66	494.81
22	209.26	494.92
23	218.86	494.84
24	228.46	495.35
25	238.07	494.75
26	247.67	495.38

Order	Station [ft]	Elevation [ft]
27	257.27	495.43
28	266.87	495.88
29	276.47	495.51
30	286.07	495.72
31	295.67	495.53
32	305.27	495.46
33	314.87	495.33
34	324.47	495.42
35	334.07	495.90
36	342.07	496.22
37	350.08	496.46
38	358.08	496.74
39	366.08	496.92
40	374.08	497.29

Comment:

Weir Cross Section: XS-009

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	452.45
1	9.18	451.47
2	18.36	450.81
3	27.54	449.74
4	36.72	448.56
5	45.90	447.44
6	55.09	446.23
7	64.27	444.97
8	73.33	444.30
9	82.39	443.89
10	91.45	443.65
11	100.52	444.01
12	109.58	444.42
13	118.64	444.91
14	127.70	445.03
15	136.77	444.76
16	145.83	444.59
17	155.15	445.36
18	164.47	445.92
19	173.79	446.12
20	183.12	445.86
21	192.62	445.36
22	202.12	445.87

Order	Station [ft]	Elevation [ft]
23	211.62	445.89
24	221.13	445.65
25	230.63	445.75
26	240.13	445.47
27	249.63	445.54
28	259.14	445.50
29	268.64	445.24
30	278.14	445.48
31	287.64	445.52
32	297.15	445.43
33	306.65	445.66
34	315.18	445.81
35	323.72	446.12
36	332.26	446.53
37	341.59	447.13
38	350.92	447.96
39	360.26	449.65
40	369.59	451.43

Comment:

Weir Cross Section: XS-010

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	451.58
1	9.85	451.46
2	19.70	451.40
3	29.55	451.28
4	39.40	451.16
5	49.24	451.02
6	59.09	451.00
7	68.94	450.90
8	78.79	450.79
9	88.64	450.77
10	98.49	450.64
11	108.34	450.55
12	118.19	450.47
13	128.03	450.28
14	137.88	450.14
15	147.73	450.05
16	157.58	449.92
17	167.43	449.78
18	177.28	449.70

Order	Station [ft]	Elevation [ft]
19	187.13	449.64
20	196.98	449.54
21	206.82	449.40
22	216.67	449.31
23	226.52	449.21
24	236.37	449.02
25	246.22	448.88
26	256.07	448.80
27	265.92	448.71
28	275.77	448.58
29	285.61	448.49
30	295.46	448.45
31	305.31	448.33
32	315.16	448.20
33	325.01	448.14
34	334.86	448.03
35	344.71	447.99
36	354.56	447.93
37	364.40	447.74
38	374.25	447.76
39	384.10	447.77
40	393.95	447.70
41	403.80	447.50
42	413.65	447.42
43	423.50	447.33
44	433.35	447.22
45	443.19	447.16
46	453.04	447.11
47	462.89	447.08
48	472.74	447.01
49	482.59	446.95
50	492.44	446.89
51	502.29	446.77
52	512.14	446.70
53	521.98	446.64
54	531.83	446.59
55	541.68	446.53
56	551.53	446.48
57	561.38	446.51
58	571.23	446.42
59	581.08	446.32
60	590.93	446.13
61	600.77	446.08
62	610.62	446.02
63	620.47	445.98
64	630.32	445.90
65	640.08	445.79
66	649.84	445.68
67	659.60	445.56

Order	Station [ft]	Elevation [ft]
68	669.36	445.45
69	679.12	445.38
70	688.88	445.34
71	698.63	445.30
72	708.39	445.21
73	718.15	445.06
74	727.91	444.89
75	737.67	444.85
76	747.43	444.82
77	757.19	444.69
78	766.95	444.58
79	776.71	444.51
80	786.47	444.44
81	796.23	444.37
82	805.98	444.29
83	815.74	444.20
84	825.50	444.11
85	835.26	444.03
86	845.02	443.89
87	854.78	443.89
88	864.54	443.84
89	874.30	443.75
90	884.06	443.69
91	893.82	443.62
92	903.58	443.56
93	913.33	443.50
94	923.09	443.44
95	932.85	443.36
96	942.61	443.32
97	952.37	443.29
98	962.13	443.23
99	971.89	443.24
100	981.51	443.16
101	991.13	443.11
102	1000.75	443.08
103	1010.37	443.11
104	1019.99	443.04
105	1029.61	442.98
106	1039.23	442.98
107	1048.85	442.96
108	1058.47	442.92
109	1068.09	442.93
110	1077.71	442.95
111	1087.33	442.96
112	1096.95	442.94
113	1106.57	442.87
114	1116.19	442.86
115	1125.81	442.89
116	1135.43	442.89

Order	Station [ft]	Elevation [ft]
117	1145.05	442.87
118	1154.67	442.88
119	1164.29	442.94
120	1173.91	442.99
121	1183.53	442.95
122	1193.15	443.00
123	1202.77	443.08
124	1212.39	443.06
125	1222.01	443.11
126	1232.00	443.14
127	1241.99	443.09
128	1251.98	443.13
129	1261.98	443.23
130	1271.97	443.34
131	1281.96	443.40
132	1291.95	443.37
133	1301.94	443.45
134	1311.93	443.56
135	1321.93	443.60
136	1331.92	443.61
137	1341.91	443.65
138	1351.90	443.67
139	1361.89	443.73
140	1371.88	443.85
141	1381.88	444.00
142	1391.87	444.01
143	1401.86	444.12
144	1411.85	444.12
145	1421.84	444.19
146	1431.83	444.27
147	1441.83	444.36
148	1451.82	444.49
149	1461.81	444.62
150	1471.80	444.76
151	1481.79	444.87
152	1491.78	444.96
153	1501.78	445.11
154	1511.77	445.28
155	1521.76	445.39
156	1531.75	445.52
157	1541.74	445.65
158	1551.73	445.78
159	1561.72	445.92
160	1571.72	446.10
161	1581.71	446.23
162	1591.70	446.41
163	1601.57	446.59
164	1611.43	446.76
165	1621.30	446.87

Order	Station [ft]	Elevation [ft]
166	1631.17	446.96
167	1641.03	447.15
168	1650.90	447.32
169	1660.77	447.47
170	1670.63	447.67
171	1680.50	447.87
172	1690.37	448.02
173	1700.23	448.20
174	1710.10	448.36
175	1719.97	448.54
176	1729.83	448.71
177	1739.70	448.82
178	1749.57	449.04
179	1759.44	449.26
180	1769.30	449.32
181	1779.17	449.51
182	1789.04	449.71
183	1798.90	449.94
184	1808.77	450.20
185	1818.64	450.44
186	1828.50	450.50
187	1838.37	450.76
188	1848.24	450.90
189	1858.10	451.01
190	1867.97	451.33
191	1877.84	451.48
192	1887.70	451.66
193	1897.57	451.71

Comment:

Weir Cross Section: XS-011

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	426.28
1	10.00	426.27
2	19.99	426.24
3	29.99	426.05
4	39.99	425.80
5	49.99	425.73
6	59.98	425.66
7	69.98	425.58
8	79.98	425.51

Order	Station [ft]	Elevation [ft]
9	89.98	425.42
10	99.97	425.34
11	109.97	425.20
12	119.97	425.10
13	129.97	425.11
14	139.96	424.91
15	149.96	424.98
16	159.96	424.95
17	169.96	424.69
18	179.95	424.58
19	189.95	424.39
20	199.95	424.39
21	209.95	424.33
22	219.94	424.33
23	229.94	424.17
24	239.94	424.00
25	249.94	423.91
26	259.93	423.73
27	269.93	423.70
28	279.93	423.69
29	289.92	423.57
30	299.92	423.46
31	309.92	423.32
32	319.92	423.19
33	329.91	423.12
34	339.91	422.97
35	349.91	423.08
36	359.91	422.94
37	369.90	422.87
38	379.90	422.84
39	389.90	422.78
40	399.90	422.70
41	409.89	422.66
42	419.89	422.69
43	429.89	422.54
44	439.89	422.48
45	449.88	422.48
46	459.88	422.35
47	469.88	422.30
48	479.88	422.34
49	489.87	422.29
50	499.87	422.18
51	509.87	422.22
52	519.87	422.27
53	529.86	422.11
54	539.86	422.15
55	549.86	422.25
56	559.85	422.17
57	569.85	422.25

Order	Station [ft]	Elevation [ft]
58	579.85	422.21
59	589.85	422.07
60	599.84	422.07
61	609.84	422.19
62	619.84	422.08
63	629.84	422.01
64	639.83	422.06
65	649.83	422.17
66	659.83	422.25
67	669.83	422.26
68	679.82	422.27
69	689.82	422.26
70	699.82	422.25
71	709.82	422.33
72	719.81	422.38
73	729.81	422.43
74	739.81	422.48
75	749.81	422.49
76	759.80	422.53
77	769.80	422.59
78	779.80	422.66
79	789.80	422.70
80	799.79	422.74
81	809.79	422.77
82	819.79	422.81
83	829.78	422.81
84	839.78	422.93
85	849.78	422.94
86	859.78	423.08
87	869.77	423.16
88	879.77	423.28
89	889.77	423.35
90	899.77	423.40
91	909.76	423.48
92	919.76	423.56
93	929.76	423.71
94	939.76	423.84
95	949.75	423.96
96	959.75	424.11
97	969.75	424.21
98	979.75	424.30
99	989.74	424.44
100	999.74	424.49
101	1009.74	424.62
102	1019.74	424.89
103	1029.73	425.05
104	1039.73	425.22
105	1049.73	425.40
106	1059.73	425.53

Order	Station [ft]	Elevation [ft]
107	1069.72	425.58
108	1079.72	425.75
109	1089.72	425.90
110	1099.72	426.01
111	1109.71	426.23
112	1119.71	426.43
113	1129.71	426.67
114	1139.70	426.78
115	1149.70	426.89
116	1159.70	427.12

Comment:

Weir Cross Section: XS-012

Scenario: Existing
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	462.68
1	9.24	461.62
2	18.48	460.97
3	27.71	460.24
4	36.95	459.41
5	46.19	457.49
6	55.43	454.98
7	64.66	454.92
8	73.90	454.87
9	83.14	454.96
10	92.43	455.90
11	101.73	456.79
12	111.02	457.16
13	120.78	456.97
14	130.54	456.79
15	140.30	456.56
16	150.06	456.48
17	159.82	456.41
18	169.58	456.05
19	179.34	456.03
20	189.10	456.29
21	198.86	456.59
22	208.62	456.05
23	218.38	455.87
24	228.14	456.04
25	237.89	456.70
26	247.65	456.59

Order	Station [ft]	Elevation [ft]
27	257.41	456.40
28	267.17	456.64
29	276.29	456.66
30	285.42	456.61
31	294.54	456.84
32	303.66	457.26
33	312.78	457.93
34	321.90	459.07
35	330.28	460.61
36	338.67	461.90
37	347.05	463.15
38	355.43	464.37

Comment:

Weir Cross Section: XS-013

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	417.56
1	8.48	417.04
2	16.96	416.31
3	25.45	415.58
4	33.93	414.79
5	42.41	413.87
6	50.87	412.56
7	59.32	411.48
8	67.78	410.94
9	76.24	410.93
10	84.69	411.24
11	93.15	411.58
12	103.00	412.17
13	112.85	412.77
14	122.70	412.79
15	132.54	412.94
16	142.39	413.01
17	152.24	413.20
18	162.09	413.39
19	171.94	413.21
20	181.66	413.30
21	191.37	413.41
22	201.09	413.45
23	210.81	413.37
24	220.53	413.07

Order	Station [ft]	Elevation [ft]
25	230.24	412.99
26	239.96	413.21
27	249.68	412.92
28	259.40	412.99
29	269.11	413.58
30	278.83	413.30
31	288.55	413.20
32	297.81	413.51
33	307.07	413.29
34	316.33	413.31
35	325.59	413.53
36	334.85	413.68
37	344.11	414.72
38	353.37	416.01
39	359.92	417.19
40	366.47	418.39

Comment:

Weir Cross Section: XS-014

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	415.46
1	9.72	415.20
2	19.43	414.86
3	29.15	414.51
4	38.87	414.21
5	48.58	413.78
6	58.30	413.45
7	68.02	413.11
8	77.73	412.81
9	87.45	412.42
10	97.17	412.09
11	106.88	411.68
12	116.60	411.35
13	126.32	411.03
14	136.03	410.64
15	145.75	410.28
16	155.47	409.98
17	165.18	409.63
18	174.90	409.35
19	184.62	409.03
20	194.33	408.70

Order	Station [ft]	Elevation [ft]
21	204.05	408.46
22	213.77	408.04
23	223.48	407.80
24	233.20	407.61
25	242.92	407.45
26	252.63	407.14
27	262.35	406.91
28	272.07	406.69
29	281.78	406.44
30	291.50	406.24
31	301.22	406.08
32	310.93	406.03
33	320.65	405.76
34	330.55	405.46
35	340.44	405.46
36	350.34	405.30
37	360.24	405.12
38	370.14	404.84
39	380.03	404.78
40	389.93	404.78
41	399.83	404.67
42	409.73	404.48
43	419.62	404.46
44	429.52	404.43
45	439.42	404.43
46	449.32	404.40
47	459.21	404.30
48	469.11	404.40
49	479.01	404.28
50	488.91	404.38
51	498.80	404.42
52	508.70	404.53
53	518.60	404.58
54	528.50	404.66
55	538.39	404.75
56	548.29	404.83
57	558.19	405.09
58	568.09	405.40
59	577.98	405.52
60	587.88	405.66
61	597.78	405.84
62	607.68	406.05
63	617.57	406.33
64	627.47	406.44
65	637.37	406.70
66	647.27	406.90
67	657.16	407.17
68	667.06	407.24
69	676.96	407.58

Order	Station [ft]	Elevation [ft]
70	686.66	407.86
71	696.36	408.15
72	706.06	408.28
73	715.76	408.49
74	725.46	408.88
75	735.16	409.22
76	744.86	409.46
77	754.57	409.74
78	764.27	410.18
79	773.97	410.45
80	783.67	410.64
81	793.37	410.91
82	803.07	411.41
83	812.77	411.67
84	822.47	411.97
85	832.17	412.25
86	841.87	412.53
87	851.57	412.76
88	861.27	413.02
89	870.98	413.36
90	880.68	413.71
91	890.38	414.08
92	900.08	414.27
93	909.78	414.49
94	919.48	414.81
95	929.18	415.16
96	938.88	415.42
97	948.58	415.74
98	958.28	415.98
99	967.98	416.29

Comment:

Weir Cross Section: XS-015

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	449.32
1	9.93	449.21
2	19.86	448.80
3	29.79	448.47
4	39.72	448.27
5	49.65	448.14
6	59.59	447.96

Order	Station [ft]	Elevation [ft]
7	69.52	447.56
8	79.45	447.18
9	89.38	446.92
10	99.31	446.44
11	109.24	446.32
12	119.17	446.22
13	129.10	445.85
14	139.03	445.48
15	148.96	445.22
16	158.89	445.08
17	168.83	444.91
18	178.76	444.56
19	188.69	444.27
20	198.62	443.90
21	208.55	443.78
22	218.48	443.38
23	228.41	443.04
24	238.34	442.80
25	248.27	442.52
26	258.20	442.19
27	268.13	441.79
28	278.06	441.46
29	288.00	441.20
30	297.93	440.89
31	307.86	440.54
32	317.79	440.26
33	327.72	439.92
34	337.65	439.59
35	347.55	439.20
36	357.44	438.85
37	367.34	438.59
38	377.24	438.27
39	387.14	438.06
40	397.03	437.64
41	406.93	437.40
42	416.83	437.14
43	426.73	437.01
44	436.62	436.59
45	446.52	436.25
46	456.42	435.98
47	466.32	435.73
48	476.21	435.44
49	486.11	435.20
50	496.01	434.93
51	505.91	434.74
52	515.80	434.58
53	525.70	434.37
54	535.60	434.18
55	545.49	433.97

Order	Station [ft]	Elevation [ft]
56	555.39	433.74
57	565.29	433.51
58	575.19	433.33
59	585.08	433.16
60	594.98	433.04
61	604.88	432.93
62	614.78	432.75
63	624.67	432.57
64	634.57	432.45
65	644.47	432.33
66	654.37	432.23
67	664.26	432.09
68	674.16	432.04
69	683.85	431.93
70	693.55	431.84
71	703.24	431.79
72	712.93	431.77
73	722.63	431.73
74	732.32	431.58
75	742.01	431.49
76	751.71	431.45
77	761.40	431.32
78	771.09	431.26
79	780.79	431.15
80	790.48	431.12
81	800.17	431.12
82	809.87	431.11
83	819.56	431.03
84	829.26	431.00
85	838.95	431.04
86	848.64	431.10
87	858.34	431.15
88	868.03	431.16
89	877.72	431.19
90	887.42	431.24
91	897.11	431.32
92	906.80	431.38
93	916.50	431.46
94	926.19	431.56
95	936.18	431.73
96	946.17	431.83
97	956.16	431.98
98	966.15	432.13
99	976.14	432.27
100	986.13	432.41
101	996.12	432.51
102	1006.11	432.64
103	1016.10	432.80
104	1026.09	432.99

Order	Station [ft]	Elevation [ft]
105	1036.08	433.17
106	1046.07	433.32
107	1056.06	433.47
108	1066.05	433.67
109	1076.04	433.88
110	1086.03	434.05
111	1096.02	434.29
112	1106.01	434.51
113	1115.97	434.74
114	1125.92	434.98
115	1135.88	435.19
116	1145.83	435.43
117	1155.79	435.72
118	1165.75	435.99
119	1175.70	436.24
120	1185.66	436.49
121	1195.62	436.74
122	1205.57	437.00
123	1215.53	437.35
124	1225.49	437.66
125	1235.44	437.85
126	1245.40	438.07
127	1255.36	438.34
128	1265.31	438.59
129	1275.27	438.91
130	1285.22	439.26
131	1295.18	439.49
132	1305.14	439.80
133	1315.09	440.21
134	1325.05	440.50
135	1335.01	440.70
136	1344.96	440.95
137	1354.92	441.26
138	1364.88	441.57
139	1374.83	441.86
140	1384.79	442.15
141	1394.74	442.46
142	1404.70	442.71
143	1414.66	442.97
144	1424.61	443.28
145	1434.57	443.68
146	1444.53	443.95
147	1454.48	444.26

Comment:

Weir Cross Section: XS-017

Scenario: Existing
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	496.72
1	9.78	495.04
2	19.57	493.89
3	29.35	493.42
4	39.13	493.03
5	48.92	492.78
6	58.70	492.71
7	68.48	492.84
8	76.46	492.29
9	84.45	491.82
10	92.43	491.54
11	101.82	490.56
12	111.21	489.90
13	120.60	489.65
14	130.00	489.83
15	139.39	489.75
16	148.78	489.83
17	158.17	489.44
18	167.56	489.65
19	176.95	489.83
20	186.35	490.21
21	195.74	490.17
22	205.13	490.30
23	214.86	490.99
24	224.58	490.99
25	234.31	491.24
26	244.03	490.78
27	253.76	491.49
28	263.49	490.94
29	273.21	490.66
30	282.94	490.63
31	292.67	491.01
32	300.54	490.35
33	308.41	489.86
34	316.28	489.93
35	324.38	489.49
36	332.49	489.23
37	340.59	489.45
38	348.70	489.93
39	357.60	490.13
40	366.50	490.03
41	375.40	489.70
42	384.30	489.66
43	393.20	490.09

Order	Station [ft]	Elevation [ft]
44	402.40	489.18
45	411.60	488.28
46	420.80	488.19
47	430.00	489.36
48	439.20	491.34

Comment:

Weir Cross Section: XS-018

Scenario: Existing
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	514.58
1	9.44	514.30
2	18.87	514.16
3	28.31	514.76
4	37.75	514.63
5	47.18	514.73
6	56.62	514.33
7	66.06	514.01
8	75.49	513.84
9	84.93	513.44
10	94.37	513.27
11	103.81	513.14
12	113.24	512.75
13	122.68	512.62
14	132.12	512.67
15	141.87	512.68
16	151.62	512.72
17	161.38	512.49
18	171.13	512.93
19	180.88	512.87
20	190.18	513.02
21	199.47	512.92
22	208.76	513.13
23	218.05	513.09
24	227.35	512.80
25	236.64	512.98
26	245.93	513.27
27	255.23	513.30
28	264.52	513.21
29	273.15	513.60
30	281.77	513.99
31	290.40	513.80

Order	Station [ft]	Elevation [ft]
32	299.03	514.08
33	307.66	514.34
34	316.28	514.44
35	325.16	514.76
36	334.04	514.53
37	342.92	514.61
38	351.79	514.75
39	360.67	514.46
40	369.55	514.79
41	378.43	514.47
42	387.83	514.18
43	397.22	514.46
44	406.62	514.43
45	416.02	513.84
46	425.42	514.16
47	434.82	513.72
48	444.21	513.31
49	453.61	513.77
50	462.50	513.92
51	471.38	513.47
52	480.27	513.43
53	489.15	513.36
54	498.04	513.54
55	506.93	513.80
56	515.81	513.38
57	524.70	513.11
58	533.74	513.05
59	542.78	513.06
60	551.81	513.02
61	560.85	513.15
62	569.89	513.41
63	578.93	513.35
64	587.97	513.46
65	596.86	513.72
66	605.76	513.94
67	614.66	514.10
68	623.55	514.48
69	632.45	514.67
70	641.35	514.79
71	650.24	514.98
72	659.14	514.91
73	668.04	515.31

Comment:

Weir Cross Section: XS-021

Scenario: Existing
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	451.07
1	9.93	450.55
2	19.87	449.60
3	29.80	448.70
4	39.73	448.10
5	49.67	447.38
6	59.60	446.76
7	69.54	447.00
8	79.47	447.60
9	88.85	446.91
10	98.23	447.19
11	107.61	446.31
12	117.00	443.91
13	126.38	442.94
14	135.76	442.61
15	145.14	442.54
16	154.52	442.53
17	163.90	442.53
18	173.29	442.54
19	182.67	442.53
20	192.05	442.53
21	201.43	442.55
22	210.81	442.42
23	220.19	442.34
24	229.71	442.98
25	239.22	442.98
26	248.74	442.53
27	258.25	442.98
28	267.77	443.84
29	277.28	444.92
30	286.80	445.81
31	296.31	447.03
32	305.83	448.05
33	315.62	448.45
34	325.41	448.72
35	335.20	448.66
36	345.00	448.60
37	354.79	448.73
38	364.58	448.65
39	374.07	448.67
40	383.56	448.82
41	393.05	448.40
42	402.54	446.97
43	412.03	446.73
44	421.52	445.76

Order	Station [ft]	Elevation [ft]
45	431.01	446.32
46	440.50	444.98
47	449.54	445.13
48	458.57	445.96
49	467.60	444.74
50	476.63	444.57
51	485.66	445.17
52	494.69	446.59
53	503.72	446.65
54	512.76	445.68
55	521.79	446.14
56	530.82	445.28
57	540.47	446.07
58	550.12	445.73
59	559.77	445.56
60	569.42	446.07
61	579.07	445.69
62	588.72	446.70
63	598.38	446.88
64	608.03	446.70
65	617.68	446.95
66	627.33	446.72
67	636.98	447.49
68	646.64	447.86
69	656.30	447.80
70	665.96	448.67
71	675.62	448.52
72	685.28	448.44
73	694.94	448.13
74	704.60	447.71
75	714.26	447.11
76	723.92	446.33
77	733.59	445.51
78	743.26	444.91
79	752.93	444.82
80	762.60	445.00
81	772.27	445.50
82	781.94	446.60
83	791.61	446.90
84	801.28	447.91
85	810.95	450.53
86	820.61	453.60

Comment:

Weir Cross Section: XS-024

Scenario: Existing
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	478.26
1	9.69	477.75
2	19.39	477.06
3	29.08	476.14
4	38.77	475.61
5	48.47	474.92
6	58.16	474.18
7	67.85	473.38
8	77.54	472.46
9	87.24	471.46
10	96.93	470.61
11	106.62	469.69
12	116.32	468.32
13	126.01	467.40
14	135.70	466.98
15	145.40	465.72
16	154.96	464.65
17	164.52	463.47
18	174.08	462.25
19	183.64	461.11
20	193.21	460.02
21	202.77	458.96
22	212.33	457.66
23	221.89	456.15
24	231.45	454.76
25	241.01	452.47
26	250.58	451.68
27	258.34	451.74
28	266.10	452.63
29	273.87	453.82
30	283.52	453.89
31	293.17	454.00
32	302.82	454.15
33	312.47	453.77
34	322.12	454.22
35	331.77	453.94
36	341.42	454.19
37	351.07	454.18
38	360.72	454.30
39	370.37	454.47
40	380.02	454.37
41	389.67	454.58
42	399.32	454.01
43	408.97	454.15
44	418.74	453.92

Order	Station [ft]	Elevation [ft]
45	428.52	454.02
46	438.29	454.25
47	448.07	453.86
48	457.85	454.02
49	467.62	453.79
50	477.40	453.76
51	487.18	454.12
52	496.95	453.76
53	506.73	454.00
54	516.50	453.87
55	526.28	453.74
56	536.06	454.08
57	545.83	453.48
58	555.61	453.61
59	565.39	453.98
60	575.16	454.66
61	584.94	456.07
62	594.41	456.93
63	603.89	457.55
64	613.36	458.10
65	622.84	458.86
66	632.31	459.98
67	641.79	460.93
68	651.26	461.61
69	660.74	462.73
70	670.21	463.49
71	679.69	464.32
72	689.16	465.28
73	698.64	466.39
74	708.21	467.23
75	717.79	467.87
76	727.37	468.86
77	736.94	469.79
78	746.52	470.26
79	756.09	470.97
80	765.67	471.79

Comment:

Weir Cross Section: XS-025

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	118.92	442.89

Order	Station [ft]	Elevation [ft]
1	128.83	441.71
2	138.73	439.47
3	148.64	436.15
4	158.55	432.06
5	168.46	428.27
6	178.37	427.08
7	188.28	426.99
8	198.18	426.92
9	208.09	427.61
10	218.00	429.09
11	227.91	429.69
12	237.82	430.06
13	247.54	430.58
14	257.26	430.16
15	266.98	430.32
16	276.70	430.34
17	286.42	430.19
18	296.14	430.55
19	305.87	430.29
20	315.59	430.19
21	325.31	430.33
22	335.03	430.03
23	344.75	430.18
24	354.47	430.04
25	364.19	429.86
26	373.91	429.98
27	383.64	429.77
28	393.36	429.73
29	403.08	429.76
30	412.80	429.77
31	422.52	429.96
32	432.24	429.83
33	441.96	429.89
34	451.69	430.09
35	461.41	430.03
36	471.13	430.13
37	480.85	429.99
38	490.57	430.07
39	500.32	430.10
40	510.08	430.01
41	519.83	429.99
42	529.58	429.87
43	539.33	429.92
44	549.09	429.68
45	558.84	429.82
46	568.59	429.88
47	578.35	430.31
48	588.10	430.98
49	597.85	431.82

Order	Station [ft]	Elevation [ft]
50	607.60	432.62
51	617.36	433.41
52	626.71	434.31
53	636.07	435.06
54	645.42	435.60
55	654.78	436.18
56	664.14	437.01
57	673.49	437.04
58	682.85	437.31
59	692.20	437.99
60	701.56	438.82
61	710.92	439.60
62	720.27	440.48

Comment:

Channel Cross Section: XS-100

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	391.79	0.0350
1	9.83	391.34	0.0350
2	19.66	390.72	0.0350
3	29.49	390.05	0.0350
4	39.33	389.84	0.0350
5	49.16	389.44	0.0350
6	58.99	389.09	0.0350
7	68.82	388.84	0.0350
8	78.65	388.74	0.0350
9	88.48	388.49	0.0350
10	98.31	388.14	0.0350
11	108.15	387.52	0.0350
12	117.98	386.83	0.0350
13	127.81	386.37	0.0350
14	137.64	385.87	0.0350
15	147.47	385.44	0.0350
16	157.30	385.02	0.0350
17	167.13	384.27	0.0350
18	176.97	383.68	0.0350
19	186.80	383.02	0.0350
20	196.63	382.23	0.0350
21	206.46	381.35	0.0350
22	216.29	380.80	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
23	226.12	379.71	0.0350
24	235.95	379.46	0.0350
25	245.79	378.94	0.0350
26	255.62	378.43	0.0350
27	265.45	377.62	0.0350
28	275.28	376.91	0.0350
29	285.11	376.34	0.0350
30	294.94	375.64	0.0350
31	304.77	374.93	0.0350
32	314.60	374.00	0.0350
33	324.44	373.01	0.0350
34	334.27	371.84	0.0350
35	344.10	370.91	0.0350
36	353.93	370.01	0.0350
37	363.76	369.11	0.0350
38	373.59	368.25	0.0350
39	383.42	367.53	0.0350
40	393.26	367.01	0.0350
41	403.09	366.43	0.0350
42	412.92	366.45	0.0350
43	422.75	366.23	0.0350
44	432.58	365.94	0.0350
45	442.19	365.53	0.0350
46	451.81	365.12	0.0350
47	461.42	364.88	0.0350
48	471.03	364.47	0.0350
49	480.64	363.86	0.0350
50	490.26	363.11	0.0350
51	499.87	362.21	0.0350
52	509.48	361.36	0.0350
53	519.09	360.89	0.0350
54	528.71	360.46	0.0350
55	538.32	359.95	0.0350
56	547.93	359.52	0.0350
57	557.54	359.21	0.0350
58	567.16	359.00	0.0350
59	576.77	358.81	0.0350
60	586.38	358.56	0.0350
61	595.99	358.63	0.0350
62	605.61	358.03	0.0350
63	615.22	355.22	0.0350
64	624.83	355.31	0.0350
65	634.56	358.48	0.0350
66	644.28	358.94	0.0350
67	654.01	359.10	0.0350
68	663.74	359.01	0.0350
69	673.46	359.07	0.0350
70	683.19	359.06	0.0350
71	692.92	359.57	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
72	702.64	361.05	0.0350
73	712.37	364.45	0.0350
74	722.09	368.32	0.0350
75	731.82	372.69	0.0350
76	741.55	376.97	0.0350
77	751.27	380.26	0.0350
78	761.00	382.95	0.0350
79	770.73	385.34	0.0350
80	780.45	387.35	0.0350
81	790.18	389.06	0.0350
82	799.90	390.42	0.0350
83	809.63	391.31	0.0350
84	819.36	392.01	0.0350
85	829.08	392.41	0.0350
86	838.81	392.72	0.0350
87	848.54	392.91	0.0350
88	858.26	393.16	0.0350
89	867.99	393.43	0.0350
90	877.71	393.51	0.0350
91	887.44	393.65	0.0350

Comment:

Channel Cross Section: XS-101

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	439.69	0.0350
1	9.98	439.01	0.0350
2	19.96	438.04	0.0350
3	29.94	437.06	0.0350
4	39.91	436.18	0.0350
5	49.89	435.24	0.0350
6	59.87	434.11	0.0350
7	69.85	432.97	0.0350
8	79.83	431.87	0.0350
9	89.81	430.79	0.0350
10	99.79	429.68	0.0350
11	109.76	428.56	0.0350
12	119.74	427.52	0.0350
13	129.72	426.37	0.0350
14	139.70	425.29	0.0350
15	149.68	424.33	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
16	159.66	423.25	0.0350
17	169.64	422.13	0.0350
18	179.61	421.14	0.0350
19	189.59	420.04	0.0350
20	199.57	418.73	0.0350
21	209.55	417.81	0.0350
22	219.53	417.27	0.0350
23	229.51	416.79	0.0350
24	239.49	416.39	0.0350
25	249.46	416.09	0.0350
26	259.44	415.71	0.0350
27	269.42	415.31	0.0350
28	279.40	414.80	0.0350
29	289.38	414.34	0.0350
30	299.36	413.90	0.0350
31	309.33	413.20	0.0350
32	319.31	412.35	0.0350
33	329.29	411.55	0.0350
34	339.27	410.46	0.0350
35	349.25	409.22	0.0350
36	359.23	407.84	0.0350
37	369.21	406.64	0.0350
38	379.18	404.94	0.0350
39	389.16	403.00	0.0350
40	399.14	401.03	0.0350
41	409.12	399.36	0.0350
42	419.10	397.66	0.0350
43	429.08	395.67	0.0350
44	439.06	393.98	0.0350
45	449.03	392.59	0.0350
46	459.01	391.37	0.0350
47	468.99	390.62	0.0350
48	478.97	389.63	0.0350
49	488.95	388.94	0.0350
50	498.93	388.28	0.0350
51	508.91	387.28	0.0350
52	518.88	385.80	0.0350
53	528.86	383.34	0.0350
54	538.84	380.34	0.0350
55	548.69	378.17	0.0350
56	558.54	375.27	0.0350
57	568.38	372.07	0.0350
58	578.23	369.41	0.0350
59	588.08	367.36	0.0350
60	597.92	365.95	0.0350
61	607.77	364.68	0.0350
62	617.62	363.93	0.0350
63	627.46	364.12	0.0350
64	637.31	364.04	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
65	647.16	364.17	0.0350
66	657.01	364.35	0.0350
67	666.85	364.61	0.0350
68	676.70	364.61	0.0350
69	686.55	364.73	0.0350
70	696.39	364.87	0.0350
71	706.24	364.91	0.0350
72	716.09	364.98	0.0350
73	725.93	364.98	0.0350
74	735.78	365.21	0.0350
75	745.63	365.25	0.0350
76	755.48	365.53	0.0350
77	765.32	365.12	0.0350
78	775.17	363.82	0.0350
79	785.02	363.91	0.0350
80	794.86	364.80	0.0350
81	804.71	366.09	0.0350
82	814.56	368.23	0.0350
83	824.40	370.14	0.0350
84	834.25	371.35	0.0350
85	844.10	372.44	0.0350
86	853.95	372.86	0.0350
87	863.79	373.23	0.0350
88	873.64	373.91	0.0350
89	883.49	374.77	0.0350
90	893.33	373.91	0.0350
91	903.18	371.38	0.0350
92	913.03	373.07	0.0350
93	922.87	375.67	0.0350
94	932.72	376.27	0.0350
95	942.57	376.76	0.0350
96	952.42	377.28	0.0350
97	962.26	377.75	0.0350
98	972.11	378.17	0.0350
99	982.00	378.52	0.0350
100	991.88	378.64	0.0350
101	1001.77	379.71	0.0350
102	1011.65	381.01	0.0350
103	1021.54	381.89	0.0350
104	1031.43	383.24	0.0350
105	1041.31	384.71	0.0350
106	1051.20	386.00	0.0350
107	1061.08	387.16	0.0350
108	1070.97	388.28	0.0350
109	1080.86	389.54	0.0350
110	1090.74	390.90	0.0350
111	1100.63	392.14	0.0350
112	1110.52	393.15	0.0350
113	1120.40	394.02	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
114	1130.29	394.99	0.0350
115	1140.17	396.19	0.0350
116	1150.06	397.54	0.0350
117	1159.95	398.55	0.0350
118	1169.83	399.43	0.0350
119	1179.72	400.61	0.0350
120	1189.60	401.63	0.0350
121	1199.49	402.49	0.0350
122	1209.38	403.27	0.0350
123	1219.26	404.26	0.0350
124	1229.15	404.88	0.0350
125	1239.04	405.64	0.0350
126	1248.92	406.28	0.0350
127	1258.81	407.07	0.0350
128	1268.69	407.55	0.0350
129	1278.58	408.12	0.0350
130	1288.47	408.83	0.0350
131	1298.35	409.42	0.0350
132	1308.24	410.09	0.0350
133	1318.13	410.70	0.0350
134	1328.01	411.29	0.0350
135	1337.90	411.79	0.0350
136	1347.78	412.47	0.0350
137	1357.67	413.09	0.0350
138	1367.56	413.97	0.0350
139	1377.44	414.58	0.0350
140	1387.33	415.10	0.0350
141	1397.21	415.71	0.0350
142	1407.10	416.36	0.0350
143	1416.99	416.83	0.0350
144	1426.87	417.17	0.0350
145	1436.76	417.62	0.0350
146	1446.65	418.41	0.0350
147	1456.53	418.87	0.0350
148	1466.42	419.38	0.0350
149	1476.30	420.14	0.0350
150	1486.19	420.87	0.0350
151	1496.08	421.68	0.0350
152	1505.96	422.26	0.0350
153	1515.85	422.92	0.0350
154	1525.73	423.76	0.0350
155	1535.62	424.29	0.0350
156	1545.51	424.73	0.0350
157	1555.39	425.09	0.0350
158	1565.28	425.58	0.0350
159	1575.17	426.21	0.0350
160	1585.05	426.77	0.0350
161	1594.94	427.14	0.0350
162	1604.82	427.64	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
163	1614.71	428.10	0.0350
164	1624.60	428.42	0.0350
165	1634.48	428.97	0.0350
166	1644.37	429.20	0.0350
167	1654.26	429.49	0.0350
168	1664.14	429.73	0.0350
169	1674.03	429.74	0.0350

Comment:

Channel Cross Section: XS-102

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	398.32	0.0350
1	9.90	397.50	0.0350
2	19.79	396.32	0.0350
3	29.69	395.41	0.0350
4	39.59	394.29	0.0350
5	49.49	393.24	0.0350
6	59.38	391.89	0.0350
7	69.28	390.80	0.0350
8	79.18	388.94	0.0350
9	89.08	387.52	0.0350
10	98.97	386.61	0.0350
11	108.87	386.07	0.0350
12	118.77	385.42	0.0350
13	127.87	386.36	0.0350
14	136.96	386.36	0.0350
15	146.06	386.42	0.0350
16	155.16	388.61	0.0350
17	164.26	391.56	0.0350
18	173.36	393.32	0.0350
19	182.45	395.47	0.0350
20	191.55	397.74	0.0350
21	200.65	399.45	0.0350
22	209.75	401.33	0.0350

Comment:

Channel Cross Section: XS-105

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	430.36	0.0350
1	9.52	429.96	0.0350
2	19.03	429.41	0.0350
3	28.55	429.03	0.0350
4	38.06	428.68	0.0350
5	47.58	428.00	0.0350
6	57.10	427.53	0.0350
7	66.61	427.21	0.0350
8	76.13	426.84	0.0350
9	85.64	426.29	0.0350
10	95.16	426.19	0.0350
11	104.68	425.82	0.0350
12	114.19	425.04	0.0350
13	123.71	424.78	0.0350
14	133.23	424.28	0.0350
15	142.74	423.51	0.0350
16	152.26	422.05	0.0350
17	161.77	420.64	0.0350
18	171.66	419.12	0.0350
19	181.55	417.14	0.0350
20	191.44	415.18	0.0350
21	201.33	413.47	0.0350
22	211.21	411.77	0.0350
23	221.10	410.31	0.0350
24	230.99	410.18	0.0350
25	240.88	411.41	0.0350
26	250.76	413.30	0.0350
27	260.65	415.51	0.0350
28	270.54	417.42	0.0350
29	280.43	419.57	0.0350
30	290.32	421.67	0.0350
31	300.20	423.60	0.0350
32	309.18	425.48	0.0350
33	318.17	427.63	0.0350
34	327.15	429.59	0.0350
35	336.13	431.35	0.0350

Comment:

Channel Cross Section: XS-106

Scenario: Existing

Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	450.20	0.0350
1	9.94	449.51	0.0350
2	19.89	448.80	0.0350
3	29.83	448.07	0.0350
4	39.78	447.29	0.0350
5	49.72	446.28	0.0350
6	59.66	445.25	0.0350
7	69.61	444.50	0.0350
8	79.55	443.98	0.0350
9	89.49	443.10	0.0350
10	99.44	442.18	0.0350
11	109.38	441.45	0.0350
12	119.33	440.80	0.0350
13	129.27	439.98	0.0350
14	139.21	439.04	0.0350
15	149.16	438.51	0.0350
16	159.10	438.13	0.0350
17	169.05	437.43	0.0350
18	178.99	436.93	0.0350
19	188.93	436.45	0.0350
20	198.88	435.96	0.0350
21	208.82	435.36	0.0350
22	218.77	434.77	0.0350
23	228.71	434.34	0.0350
24	238.65	433.73	0.0350
25	248.60	433.09	0.0350
26	258.54	432.45	0.0350
27	268.48	431.85	0.0350
28	278.43	431.40	0.0350
29	288.37	430.84	0.0350
30	298.32	430.23	0.0350
31	308.26	429.44	0.0350
32	318.20	428.73	0.0350
33	328.15	428.03	0.0350
34	338.09	427.10	0.0350
35	348.04	425.97	0.0350
36	357.98	424.82	0.0350
37	367.92	423.80	0.0350
38	377.87	422.66	0.0350
39	387.81	421.36	0.0350
40	397.76	420.11	0.0350
41	407.70	419.29	0.0350
42	417.64	418.20	0.0350
43	427.59	416.44	0.0350
44	437.53	415.04	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
45	447.39	413.45	0.0350
46	457.24	412.08	0.0350
47	467.10	410.65	0.0350
48	476.95	409.13	0.0350
49	486.81	408.05	0.0350
50	496.66	407.02	0.0350
51	506.52	405.58	0.0350
52	516.37	403.59	0.0350
53	526.23	402.22	0.0350
54	536.08	401.29	0.0350
55	545.93	400.10	0.0350
56	555.79	398.84	0.0350
57	565.64	397.61	0.0350
58	575.50	396.43	0.0350
59	585.35	395.47	0.0350
60	595.21	394.91	0.0350
61	605.06	394.61	0.0350
62	614.92	394.38	0.0350
63	624.77	394.27	0.0350
64	634.63	393.91	0.0350
65	644.48	393.83	0.0350
66	654.34	393.84	0.0350
67	664.19	393.58	0.0350
68	674.05	393.71	0.0350
69	683.90	394.50	0.0350
70	693.76	394.32	0.0350
71	703.61	393.92	0.0350
72	713.47	394.74	0.0350
73	723.32	395.69	0.0350
74	733.18	395.85	0.0350
75	743.03	396.22	0.0350
76	752.89	396.73	0.0350
77	762.74	397.36	0.0350
78	772.60	397.97	0.0350
79	782.45	398.71	0.0350
80	792.31	399.29	0.0350
81	802.16	400.17	0.0350
82	812.02	401.12	0.0350
83	821.87	401.96	0.0350
84	831.73	402.72	0.0350
85	841.58	403.91	0.0350
86	851.44	405.16	0.0350
87	861.29	406.23	0.0350
88	871.15	407.09	0.0350
89	881.11	408.08	0.0350
90	891.07	408.81	0.0350
91	901.03	409.49	0.0350
92	910.99	410.39	0.0350
93	920.95	411.07	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
94	930.91	411.73	0.0350
95	940.87	412.45	0.0350
96	950.84	412.82	0.0350
97	960.80	413.35	0.0350
98	970.76	413.87	0.0350
99	980.72	414.41	0.0350
100	990.68	415.17	0.0350
101	1000.64	415.78	0.0350
102	1010.60	416.61	0.0350
103	1020.56	417.55	0.0350
104	1030.53	418.21	0.0350
105	1040.49	418.77	0.0350
106	1050.45	419.48	0.0350
107	1060.41	420.54	0.0350
108	1070.37	421.42	0.0350
109	1080.33	421.90	0.0350
110	1090.29	422.19	0.0350
111	1100.25	422.51	0.0350
112	1110.22	422.92	0.0350
113	1120.18	423.43	0.0350
114	1130.14	424.10	0.0350
115	1140.10	424.72	0.0350
116	1150.06	425.77	0.0350
117	1160.02	426.61	0.0350
118	1169.98	427.59	0.0350
119	1179.94	428.84	0.0350
120	1189.90	429.67	0.0350
121	1199.87	430.39	0.0350
122	1209.83	431.10	0.0350
123	1219.79	431.65	0.0350
124	1229.75	432.40	0.0350
125	1239.71	433.24	0.0350
126	1249.67	433.80	0.0350
127	1259.63	434.40	0.0350
128	1269.59	435.16	0.0350
129	1279.56	435.91	0.0350
130	1289.52	436.91	0.0350
131	1299.48	437.61	0.0350
132	1309.44	438.36	0.0350
133	1319.40	439.28	0.0350
134	1329.36	440.41	0.0350
135	1339.32	441.44	0.0350
136	1349.28	442.31	0.0350
137	1359.25	443.21	0.0350
138	1369.21	443.80	0.0350
139	1379.17	445.03	0.0350
140	1389.13	445.43	0.0350
141	1399.09	446.65	0.0350
142	1409.05	447.86	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
143	1419.01	449.26	0.0350

Comment:

Channel Cross Section: XS-111

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	87.74	436.23	0.0350
1	97.49	433.29	0.0350
2	107.23	428.40	0.0350
3	116.98	425.57	0.0350
4	126.73	424.68	0.0350
5	136.48	424.08	0.0350
6	146.23	423.41	0.0350
7	155.98	422.75	0.0350
8	165.73	421.91	0.0350
9	175.47	421.45	0.0350
10	185.22	421.43	0.0350
11	194.97	420.67	0.0350
12	204.72	419.99	0.0350
13	214.47	419.45	0.0350
14	224.22	418.65	0.0350
15	233.96	417.96	0.0350
16	243.71	417.29	0.0350
17	253.46	416.55	0.0350
18	263.24	415.78	0.0350
19	273.02	415.29	0.0350
20	282.80	415.29	0.0350
21	292.57	414.77	0.0350
22	302.35	414.57	0.0350
23	312.13	414.42	0.0350
24	321.91	414.07	0.0350
25	331.68	413.53	0.0350
26	341.46	413.36	0.0350
27	351.24	413.03	0.0350
28	361.02	412.52	0.0350
29	370.80	412.24	0.0350
30	380.57	411.98	0.0350
31	390.35	411.48	0.0350
32	400.13	410.15	0.0350
33	409.91	409.70	0.0350
34	419.68	410.21	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
35	429.46	411.64	0.0350
36	439.24	412.82	0.0350
37	449.02	414.39	0.0350
38	458.80	417.07	0.0350
39	468.57	420.28	0.0350
40	478.35	423.27	0.0350
41	488.13	425.68	0.0350
42	497.91	427.51	0.0350
43	507.69	428.79	0.0350
44	517.46	430.07	0.0350
45	527.24	431.48	0.0350
46	537.02	432.83	0.0350
47	546.80	434.09	0.0350
48	556.57	435.30	0.0350
49	566.35	436.47	0.0350
50	575.86	437.63	0.0350

Comment:

Channel Cross Section: XS-112

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	442.97	0.0350
1	9.66	442.74	0.0350
2	19.32	442.10	0.0350
3	28.98	441.00	0.0350
4	38.64	439.69	0.0350
5	48.30	438.29	0.0350
6	57.96	436.89	0.0350
7	67.62	435.48	0.0350
8	77.28	434.07	0.0350
9	86.94	432.73	0.0350
10	96.60	431.66	0.0350
11	106.26	430.82	0.0350
12	115.91	430.92	0.0350
13	125.57	431.16	0.0350
14	135.23	431.40	0.0350
15	144.89	431.36	0.0350
16	154.55	428.19	0.0350
17	164.43	426.73	0.0350
18	174.31	426.15	0.0350
19	184.18	425.93	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
20	194.06	425.57	0.0350
21	203.94	425.20	0.0350
22	213.81	424.85	0.0350
23	223.69	423.98	0.0350
24	233.57	423.02	0.0350
25	243.44	421.68	0.0350
26	253.32	419.84	0.0350
27	263.20	419.16	0.0350
28	273.07	418.62	0.0350
29	282.95	417.89	0.0350
30	292.83	418.52	0.0350
31	302.70	418.83	0.0350
32	312.58	419.07	0.0350
33	322.46	419.46	0.0350
34	332.33	419.44	0.0350
35	342.21	419.89	0.0350
36	352.09	420.25	0.0350
37	361.96	420.95	0.0350
38	371.84	422.22	0.0350
39	381.72	423.52	0.0350
40	391.59	424.82	0.0350
41	401.47	425.07	0.0350
42	411.21	425.76	0.0350
43	420.94	426.08	0.0350
44	430.68	426.62	0.0350
45	440.42	427.44	0.0350
46	450.15	428.08	0.0350
47	459.89	428.62	0.0350
48	469.62	428.99	0.0350
49	479.36	429.29	0.0350
50	489.10	429.58	0.0350
51	498.83	429.83	0.0350
52	508.57	430.22	0.0350
53	518.30	430.67	0.0350
54	528.04	431.02	0.0350
55	537.78	431.36	0.0350
56	547.51	431.61	0.0350
57	557.25	432.04	0.0350
58	566.98	432.65	0.0350
59	576.72	433.14	0.0350
60	586.46	433.36	0.0350
61	596.19	433.61	0.0350
62	605.93	433.91	0.0350
63	615.67	434.65	0.0350
64	625.40	435.34	0.0350
65	635.14	435.78	0.0350
66	644.87	436.09	0.0350
67	654.61	436.24	0.0350
68	664.35	436.42	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
69	674.08	436.56	0.0350
70	683.82	436.65	0.0350
71	693.77	436.89	0.0350
72	703.72	437.31	0.0350
73	713.66	437.81	0.0350
74	723.61	438.22	0.0350
75	733.56	438.58	0.0350
76	743.51	439.03	0.0350
77	753.46	439.57	0.0350
78	763.41	440.16	0.0350
79	773.36	440.55	0.0350
80	783.31	441.08	0.0350

Comment:

Channel Cross Section: XS-113

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	438.74	0.0350
1	9.54	438.30	0.0350
2	19.09	438.02	0.0350
3	28.63	437.87	0.0350
4	38.17	437.70	0.0350
5	47.72	437.48	0.0350
6	57.26	437.23	0.0350
7	66.80	437.12	0.0350
8	76.35	436.57	0.0350
9	85.89	435.71	0.0350
10	95.43	434.51	0.0350
11	104.97	433.52	0.0350
12	114.52	432.82	0.0350
13	124.06	432.35	0.0350
14	133.60	431.88	0.0350
15	143.15	431.32	0.0350
16	152.69	430.27	0.0350
17	162.23	428.99	0.0350
18	171.78	427.31	0.0350
19	181.32	425.05	0.0350
20	190.86	423.92	0.0350
21	200.41	425.62	0.0350
22	210.07	426.14	0.0350
23	219.73	426.41	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
24	229.40	426.51	0.0350
25	239.06	427.10	0.0350
26	248.72	427.97	0.0350
27	258.39	429.00	0.0350
28	268.05	430.26	0.0350
29	277.72	431.75	0.0350
30	287.38	433.93	0.0350
31	297.04	436.16	0.0350
32	306.71	437.95	0.0350
33	316.37	439.57	0.0350
34	326.03	441.01	0.0350
35	335.70	442.52	0.0350
36	345.36	443.80	0.0350
37	355.02	444.60	0.0350
38	364.69	445.66	0.0350
39	374.35	446.87	0.0350
40	384.02	447.75	0.0350

Comment:

Channel Cross Section: XS-115

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	475.82	0.0350
1	9.81	474.80	0.0350
2	19.63	473.66	0.0350
3	29.44	472.70	0.0350
4	39.26	471.72	0.0350
5	49.07	470.83	0.0350
6	58.89	470.08	0.0350
7	68.70	468.68	0.0350
8	78.51	467.43	0.0350
9	88.33	466.21	0.0350
10	98.14	465.02	0.0350
11	107.96	463.55	0.0350
12	117.77	462.23	0.0350
13	127.59	461.03	0.0350
14	137.40	459.75	0.0350
15	147.21	458.68	0.0350
16	157.03	457.48	0.0350
17	166.84	456.05	0.0350
18	176.66	454.04	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
19	186.47	452.06	0.0350
20	196.29	450.92	0.0350
21	206.10	451.21	0.0350
22	215.91	450.93	0.0350
23	225.73	451.13	0.0350
24	235.54	451.19	0.0350
25	245.36	451.15	0.0350
26	255.17	451.37	0.0350
27	264.99	451.41	0.0350
28	274.80	452.03	0.0350
29	284.62	453.81	0.0350
30	294.43	455.23	0.0350
31	304.24	456.92	0.0350
32	314.06	458.64	0.0350
33	323.87	460.57	0.0350
34	333.69	462.22	0.0350
35	343.50	463.70	0.0350
36	353.32	464.93	0.0350
37	363.13	465.87	0.0350
38	372.94	467.07	0.0350
39	382.76	468.23	0.0350
40	392.57	469.59	0.0350
41	402.39	470.93	0.0350
42	412.20	471.91	0.0350

Comment:

Channel Cross Section: XS-116

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	490.43	0.0350
1	9.73	490.12	0.0350
2	19.46	489.72	0.0350
3	29.19	489.60	0.0350
4	38.92	489.11	0.0350
5	48.65	488.67	0.0350
6	58.38	488.32	0.0350
7	68.11	487.67	0.0350
8	77.85	487.31	0.0350
9	87.58	486.77	0.0350
10	97.31	486.26	0.0350
11	107.04	485.94	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
12	116.77	485.25	0.0350
13	126.50	484.61	0.0350
14	136.23	483.99	0.0350
15	145.96	483.64	0.0350
16	155.69	482.89	0.0350
17	165.42	481.92	0.0350
18	175.15	481.20	0.0350
19	184.88	480.80	0.0350
20	194.61	480.18	0.0350
21	204.34	479.74	0.0350
22	214.07	479.02	0.0350
23	223.81	478.45	0.0350
24	233.54	477.97	0.0350
25	243.27	477.40	0.0350
26	253.00	476.89	0.0350
27	262.73	476.21	0.0350
28	272.46	475.84	0.0350
29	282.10	475.39	0.0350
30	291.74	474.84	0.0350
31	301.38	474.59	0.0350
32	311.02	474.42	0.0350
33	320.66	474.05	0.0350
34	330.30	473.86	0.0350
35	339.94	473.52	0.0350
36	349.59	473.41	0.0350
37	359.23	473.04	0.0350
38	368.87	472.87	0.0350
39	378.51	472.50	0.0350
40	388.15	472.65	0.0350
41	397.49	472.48	0.0350
42	406.82	472.27	0.0350
43	416.16	471.60	0.0350
44	425.49	471.03	0.0350
45	434.83	471.29	0.0350
46	444.16	471.37	0.0350
47	453.50	471.32	0.0350
48	462.83	471.19	0.0350
49	472.17	470.89	0.0350
50	481.51	470.88	0.0350
51	490.84	471.06	0.0350
52	500.33	471.38	0.0350
53	509.81	471.79	0.0350
54	519.29	472.04	0.0350
55	528.78	472.27	0.0350
56	538.26	473.05	0.0350
57	547.74	473.22	0.0350
58	557.23	472.99	0.0350
59	566.71	473.76	0.0350
60	576.30	474.22	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
61	585.89	473.87	0.0350
62	595.48	474.10	0.0350
63	605.07	473.98	0.0350
64	614.66	474.34	0.0350
65	624.25	474.49	0.0350
66	633.83	475.43	0.0350
67	643.42	476.11	0.0350
68	653.01	476.74	0.0350
69	662.60	477.27	0.0350
70	672.19	478.28	0.0350
71	681.78	478.25	0.0350
72	691.37	478.00	0.0350
73	700.96	478.75	0.0350
74	710.55	478.97	0.0350
75	720.14	480.29	0.0350
76	729.72	480.93	0.0350
77	739.31	481.71	0.0350
78	748.90	482.66	0.0350
79	758.73	483.00	0.0350
80	768.56	483.74	0.0350
81	778.39	483.65	0.0350
82	788.22	484.42	0.0350
83	798.05	484.43	0.0350
84	807.88	485.77	0.0350
85	817.71	485.83	0.0350
86	827.54	486.30	0.0350
87	837.37	487.04	0.0350
88	847.20	487.49	0.0350
89	857.03	487.52	0.0350
90	866.86	488.17	0.0350

Comment:

Channel Cross Section: XS-117

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	482.43	0.0350
1	9.42	481.55	0.0350
2	18.83	480.96	0.0350
3	28.25	480.33	0.0350
4	37.66	479.70	0.0350
5	47.08	478.84	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
6	56.49	477.55	0.0350
7	65.91	476.14	0.0350
8	75.32	475.39	0.0350
9	84.74	474.46	0.0350
10	94.15	473.13	0.0350
11	103.57	471.99	0.0350
12	112.98	471.18	0.0350
13	122.40	470.80	0.0350
14	131.81	470.51	0.0350
15	141.23	470.43	0.0350
16	150.64	470.23	0.0350
17	160.54	470.35	0.0350
18	170.44	470.13	0.0350
19	180.34	470.07	0.0350
20	190.24	469.99	0.0350
21	200.14	469.67	0.0350
22	210.04	469.92	0.0350
23	219.94	470.41	0.0350
24	229.85	471.58	0.0350
25	239.75	473.05	0.0350
26	249.65	473.95	0.0350
27	259.55	474.80	0.0350
28	269.45	475.72	0.0350
29	279.35	476.59	0.0350
30	289.25	477.56	0.0350
31	299.15	478.54	0.0350
32	309.05	479.38	0.0350
33	318.95	480.30	0.0350
34	328.85	481.52	0.0350
35	338.75	482.26	0.0350
36	348.65	482.44	0.0350

Comment:

Channel Cross Section: XS-118

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	487.94	0.0350
1	9.39	487.37	0.0350
2	18.78	485.92	0.0350
3	28.18	484.34	0.0350
4	37.57	482.96	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
5	46.96	481.56	0.0350
6	56.35	480.17	0.0350
7	65.74	479.21	0.0350
8	75.14	479.06	0.0350
9	84.53	478.55	0.0350
10	93.92	478.94	0.0350
11	103.31	480.22	0.0350
12	112.70	481.24	0.0350
13	121.86	482.20	0.0350
14	131.02	483.53	0.0350
15	140.18	485.00	0.0350
16	149.34	486.09	0.0350
17	158.50	486.96	0.0350
18	167.65	487.99	0.0350

Comment:

Channel Cross Section: XS-121

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	506.54	0.0350
1	9.73	506.42	0.0350
2	19.47	505.82	0.0350
3	29.20	505.20	0.0350
4	38.93	504.46	0.0350
5	48.67	503.21	0.0350
6	58.40	502.80	0.0350
7	68.13	502.09	0.0350
8	77.87	502.65	0.0350
9	87.60	501.47	0.0350
10	97.33	499.53	0.0350
11	107.07	498.57	0.0350
12	116.80	497.72	0.0350
13	126.53	496.82	0.0350
14	136.27	497.11	0.0350
15	146.00	498.37	0.0350
16	155.21	499.18	0.0350
17	164.42	499.89	0.0350
18	173.63	500.91	0.0350
19	182.84	502.08	0.0350
20	192.05	503.92	0.0350
21	201.26	504.44	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
22	210.47	504.39	0.0350
23	219.68	504.57	0.0350

Comment:

Channel Cross Section: XS-122

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	501.25	0.0350
1	9.30	500.59	0.0350
2	18.60	499.67	0.0350
3	27.90	498.59	0.0350
4	37.20	498.30	0.0350
5	46.50	497.17	0.0350
6	55.80	496.44	0.0350
7	65.11	495.42	0.0350
8	74.41	494.31	0.0350
9	83.71	493.54	0.0350
10	93.01	492.72	0.0350
11	102.31	492.11	0.0350
12	111.61	492.47	0.0350
13	120.91	493.44	0.0350
14	130.21	494.49	0.0350
15	139.49	495.91	0.0350
16	148.77	497.07	0.0350
17	158.05	497.56	0.0350
18	167.33	498.30	0.0350
19	176.60	499.01	0.0350
20	185.88	499.71	0.0350
21	195.16	500.44	0.0350
22	204.44	501.04	0.0350
23	213.72	501.55	0.0350
24	223.00	502.20	0.0350

Comment:

Channel Cross Section: XS-123

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	432.24	0.0350
1	9.45	432.40	0.0350
2	18.90	432.15	0.0350
3	28.36	431.63	0.0350
4	37.81	430.83	0.0350
5	47.26	430.16	0.0350
6	56.71	428.94	0.0350
7	66.17	427.74	0.0350
8	75.62	426.45	0.0350
9	85.07	425.92	0.0350
10	94.52	425.79	0.0350
11	103.97	425.39	0.0350
12	113.43	424.81	0.0350
13	122.88	426.29	0.0350
14	132.33	428.37	0.0350
15	141.78	430.12	0.0350
16	151.23	431.07	0.0350
17	160.69	431.20	0.0350
18	170.14	430.82	0.0350

Comment:

Weir Cross Section: XS-124

Scenario: Existing

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	444.58
1	9.46	444.36
2	18.91	443.90
3	28.37	443.51
4	37.83	442.92
5	47.28	442.35
6	56.74	441.84
7	66.20	441.35
8	75.65	440.72
9	85.11	440.18
10	94.57	439.79
11	104.02	439.42
12	113.48	439.21
13	123.42	439.06
14	133.37	439.07
15	143.31	439.03

Order	Station [ft]	Elevation [ft]
16	153.26	438.98
17	163.20	439.06
18	173.14	439.01
19	183.09	439.01
20	193.03	439.05
21	202.98	439.05
22	212.92	439.20
23	222.69	439.28
24	232.46	439.19
25	242.23	439.42
26	252.00	439.24
27	261.77	439.39
28	271.53	439.49
29	280.82	439.56
30	290.10	439.63
31	299.39	439.71
32	308.67	439.87
33	317.96	440.10
34	327.24	440.34
35	336.53	440.48
36	345.81	440.61
37	355.10	440.72
38	364.38	440.81
39	373.16	440.94
40	381.94	441.09
41	390.72	441.25
42	399.50	441.36
43	408.28	441.58
44	417.06	441.84
45	425.84	442.07
46	434.83	442.79
47	443.82	443.35
48	452.80	443.94
49	461.79	444.39
50	470.77	445.03

Comment:

Channel Cross Section: XS-125

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	478.38	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
1	9.92	477.72	0.0350
2	19.85	476.95	0.0350
3	29.77	476.04	0.0350
4	39.69	475.09	0.0350
5	49.61	474.06	0.0350
6	59.54	472.66	0.0350
7	69.46	471.23	0.0350
8	79.38	469.76	0.0350
9	89.31	468.62	0.0350
10	99.23	467.98	0.0350
11	109.15	466.92	0.0350
12	119.07	466.22	0.0350
13	129.00	467.75	0.0350
14	138.92	468.45	0.0350
15	148.84	469.93	0.0350
16	158.76	471.19	0.0350
17	168.69	472.96	0.0350
18	178.61	474.71	0.0350
19	188.53	476.41	0.0350
20	198.46	478.20	0.0350
21	208.38	479.58	0.0350

Comment:

Channel Cross Section: XS-126

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	475.14	0.0350
1	9.85	474.66	0.0350
2	19.70	474.09	0.0350
3	29.54	473.43	0.0350
4	39.39	472.70	0.0350
5	49.24	471.70	0.0350
6	59.09	470.48	0.0350
7	68.94	469.58	0.0350
8	78.78	468.69	0.0350
9	88.63	467.69	0.0350
10	98.48	466.70	0.0350
11	108.33	466.17	0.0350
12	118.18	465.30	0.0350
13	128.02	463.85	0.0350
14	137.87	462.47	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
15	147.72	461.59	0.0350
16	157.57	461.14	0.0350
17	167.42	460.72	0.0350
18	177.26	459.12	0.0350
19	187.11	457.97	0.0350
20	196.96	459.37	0.0350
21	206.81	459.81	0.0350
22	216.66	459.87	0.0350
23	226.50	460.90	0.0350
24	236.35	462.02	0.0350
25	246.20	463.37	0.0350
26	256.05	464.82	0.0350
27	265.90	466.16	0.0350
28	275.74	467.41	0.0350
29	285.59	468.79	0.0350
30	295.44	470.30	0.0350
31	305.29	472.04	0.0350
32	315.14	473.62	0.0350
33	324.98	475.16	0.0350
34	334.83	476.46	0.0350
35	344.68	477.65	0.0350
36	354.53	478.48	0.0350
37	364.38	479.20	0.0350
38	374.23	479.66	0.0350
39	384.07	479.89	0.0350

Comment:

Channel Cross Section: XS-1A

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	501.93	0.0350
1	9.99	501.89	0.0350
2	19.98	501.86	0.0350
3	29.98	501.76	0.0350
4	39.97	501.64	0.0350
5	49.96	501.49	0.0350
6	59.95	501.33	0.0350
7	69.95	501.16	0.0350
8	79.94	500.97	0.0350
9	89.93	500.75	0.0350
10	99.92	500.50	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
11	109.91	500.22	0.0350
12	119.91	499.93	0.0350
13	129.90	499.69	0.0350
14	139.89	499.49	0.0350
15	149.88	498.98	0.0350
16	159.88	498.31	0.0350
17	169.87	497.78	0.0350
18	179.86	497.15	0.0350
19	189.85	496.36	0.0350
20	199.85	495.54	0.0350
21	209.84	494.40	0.0350
22	219.83	492.86	0.0350
23	229.82	491.53	0.0350
24	239.81	490.32	0.0350
25	249.81	489.11	0.0350
26	259.80	488.03	0.0350
27	269.79	487.35	0.0350
28	279.78	486.46	0.0350
29	289.78	485.46	0.0350
30	299.77	484.66	0.0350
31	309.76	484.07	0.0350
32	319.75	483.57	0.0350
33	329.74	483.16	0.0350
34	339.74	482.56	0.0350
35	349.73	481.94	0.0350
36	359.72	481.29	0.0350
37	369.71	480.37	0.0350
38	379.71	479.21	0.0350
39	389.70	478.50	0.0350
40	399.69	479.78	0.0350
41	409.68	481.10	0.0350
42	419.67	481.97	0.0350
43	429.67	482.73	0.0350
44	439.66	483.74	0.0350
45	449.65	484.92	0.0350
46	459.64	486.17	0.0350
47	469.64	487.42	0.0350
48	479.63	488.68	0.0350
49	489.62	489.91	0.0350
50	499.61	491.01	0.0350
51	509.61	491.99	0.0350
52	519.60	492.90	0.0350
53	529.59	493.94	0.0350
54	539.58	494.97	0.0350
55	549.57	495.13	0.0350
56	559.57	495.53	0.0350
57	569.56	495.99	0.0350
58	579.55	496.51	0.0350
59	589.54	496.91	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
60	599.54	497.29	0.0350
61	609.53	497.67	0.0350
62	619.52	497.93	0.0350
63	629.51	498.18	0.0350
64	639.50	498.39	0.0350
65	649.50	498.58	0.0350
66	659.49	498.71	0.0350
67	669.48	498.87	0.0350
68	679.47	499.03	0.0350
69	689.47	499.18	0.0350

Comment:

Channel Cross Section: XS-201

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	440.06	0.0350
1	9.87	439.11	0.0350
2	19.74	438.32	0.0350
3	29.60	437.34	0.0350
4	39.47	436.38	0.0350
5	49.34	435.22	0.0350
6	59.21	434.09	0.0350
7	69.08	433.06	0.0350
8	78.95	431.82	0.0350
9	88.81	430.71	0.0350
10	98.68	429.26	0.0350
11	108.55	428.39	0.0350
12	118.42	427.31	0.0350
13	128.29	426.41	0.0350
14	138.16	425.53	0.0350
15	148.02	424.17	0.0350
16	157.89	422.98	0.0350
17	167.76	421.91	0.0350
18	177.63	420.65	0.0350
19	187.50	419.61	0.0350
20	197.36	418.32	0.0350
21	207.23	416.74	0.0350
22	217.10	415.30	0.0350
23	226.97	413.28	0.0350
24	236.84	411.52	0.0350
25	246.71	410.77	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
26	256.57	409.40	0.0350
27	266.44	407.95	0.0350
28	276.31	407.03	0.0350
29	286.18	405.61	0.0350
30	296.05	403.81	0.0350
31	305.92	402.71	0.0350
32	315.78	401.98	0.0350
33	325.65	401.39	0.0350
34	335.52	400.73	0.0350
35	345.39	400.19	0.0350
36	355.26	399.66	0.0350
37	365.13	399.04	0.0350
38	375.01	398.48	0.0350
39	384.88	398.84	0.0350
40	394.75	398.42	0.0350
41	404.63	398.43	0.0350
42	414.50	397.89	0.0350
43	424.38	397.52	0.0350
44	434.25	397.02	0.0350
45	444.13	396.44	0.0350
46	454.00	395.70	0.0350
47	463.88	394.57	0.0350
48	473.75	394.01	0.0350
49	483.63	393.39	0.0350
50	493.50	392.45	0.0350
51	503.38	391.69	0.0350
52	513.25	391.06	0.0350
53	523.12	390.50	0.0350
54	533.00	390.37	0.0350
55	542.87	389.97	0.0350
56	552.75	389.57	0.0350
57	562.62	389.37	0.0350
58	572.50	388.94	0.0350
59	582.37	388.90	0.0350
60	592.25	388.77	0.0350
61	602.12	388.86	0.0350
62	612.00	388.43	0.0350
63	621.87	387.86	0.0350
64	631.74	387.09	0.0350
65	641.62	386.43	0.0350
66	651.49	386.37	0.0350
67	661.37	385.98	0.0350
68	671.24	385.36	0.0350
69	681.12	384.73	0.0350
70	690.99	384.44	0.0350
71	700.87	384.47	0.0350
72	710.74	384.56	0.0350
73	720.62	384.41	0.0350
74	730.49	384.15	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
75	740.37	384.05	0.0350
76	750.24	383.92	0.0350
77	760.11	384.17	0.0350
78	769.99	383.78	0.0350
79	779.86	383.61	0.0350
80	789.69	383.44	0.0350
81	799.51	383.41	0.0350
82	809.33	383.63	0.0350
83	819.16	383.76	0.0350
84	828.98	383.71	0.0350
85	838.80	383.88	0.0350
86	848.62	384.06	0.0350
87	858.45	384.41	0.0350
88	868.27	384.19	0.0350
89	878.09	383.92	0.0350
90	887.92	383.81	0.0350
91	897.74	380.28	0.0350
92	907.56	383.54	0.0350
93	917.39	386.73	0.0350
94	927.21	389.88	0.0350
95	937.03	393.70	0.0350
96	946.86	397.70	0.0350
97	956.68	401.27	0.0350
98	966.50	404.38	0.0350
99	976.32	407.44	0.0350
100	986.15	410.00	0.0350
101	995.97	412.22	0.0350
102	1005.79	414.38	0.0350
103	1015.62	416.23	0.0350
104	1025.44	417.86	0.0350
105	1035.26	419.46	0.0350
106	1045.09	420.92	0.0350
107	1054.91	422.36	0.0350
108	1064.73	423.71	0.0350
109	1074.55	424.97	0.0350
110	1084.38	426.06	0.0350
111	1094.20	426.93	0.0350
112	1104.02	427.83	0.0350
113	1113.85	428.56	0.0350
114	1123.44	429.42	0.0350
115	1133.02	430.42	0.0350
116	1142.61	431.45	0.0350
117	1152.20	432.47	0.0350
118	1161.79	433.09	0.0350
119	1171.38	433.95	0.0350
120	1180.96	434.91	0.0350
121	1190.55	435.72	0.0350
122	1200.14	436.84	0.0350

Comment:

Channel Cross Section: XS-202

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.29	0.0350
1	9.88	432.14	0.0350
2	19.77	430.88	0.0350
3	29.65	429.65	0.0350
4	39.53	428.73	0.0350
5	49.41	427.69	0.0350
6	59.30	426.53	0.0350
7	69.18	425.29	0.0350
8	79.06	424.43	0.0350
9	88.94	423.04	0.0350
10	98.83	421.80	0.0350
11	108.71	420.78	0.0350
12	118.59	419.55	0.0350
13	128.47	417.92	0.0350
14	138.36	416.02	0.0350
15	148.24	414.24	0.0350
16	158.12	412.66	0.0350
17	168.00	410.89	0.0350
18	177.89	409.16	0.0350
19	187.66	407.74	0.0350
20	197.43	406.58	0.0350
21	207.20	405.65	0.0350
22	216.97	404.73	0.0350
23	226.74	404.11	0.0350
24	236.51	403.05	0.0350
25	246.28	402.18	0.0350
26	256.05	401.65	0.0350
27	265.83	400.56	0.0350
28	275.60	400.80	0.0350
29	285.37	401.28	0.0350
30	295.14	402.04	0.0350
31	304.91	402.52	0.0350
32	314.68	403.03	0.0350
33	324.45	403.70	0.0350
34	334.22	406.08	0.0350
35	343.99	408.76	0.0350
36	353.76	410.93	0.0350
37	363.54	413.01	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
38	373.31	415.04	0.0350
39	383.08	416.88	0.0350
40	392.85	418.06	0.0350
41	402.62	419.21	0.0350
42	412.39	420.21	0.0350
43	421.60	421.16	0.0350
44	430.81	422.34	0.0350
45	440.02	423.08	0.0350
46	449.23	423.59	0.0350
47	458.44	424.20	0.0350
48	467.65	424.77	0.0350
49	476.86	425.25	0.0350
50	486.07	425.39	0.0350
51	495.28	425.89	0.0350

Comment:

Channel Cross Section: XS-203

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.29	0.0350
1	9.88	432.14	0.0350
2	19.77	430.88	0.0350
3	29.65	429.65	0.0350
4	39.53	428.73	0.0350
5	49.41	427.69	0.0350
6	59.30	426.53	0.0350
7	69.18	425.29	0.0350
8	79.06	424.43	0.0350
9	88.94	423.04	0.0350
10	98.83	421.80	0.0350
11	108.71	420.78	0.0350
12	118.59	419.55	0.0350
13	128.47	417.92	0.0350
14	138.36	416.02	0.0350
15	148.24	414.24	0.0350
16	158.12	412.66	0.0350
17	168.00	410.89	0.0350
18	177.89	409.16	0.0350
19	187.66	407.74	0.0350
20	197.43	406.58	0.0350
21	207.20	405.65	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
22	216.97	404.73	0.0350
23	226.74	404.11	0.0350
24	236.51	403.05	0.0350
25	246.28	402.18	0.0350
26	256.05	401.65	0.0350
27	265.83	400.56	0.0350
28	275.60	400.80	0.0350
29	285.37	401.28	0.0350
30	295.14	402.04	0.0350
31	304.91	402.52	0.0350
32	314.68	403.03	0.0350
33	324.45	403.70	0.0350
34	334.22	406.08	0.0350
35	343.99	408.76	0.0350
36	353.76	410.93	0.0350
37	363.54	413.01	0.0350
38	373.31	415.04	0.0350
39	383.08	416.88	0.0350
40	392.85	418.06	0.0350
41	402.62	419.21	0.0350
42	412.39	420.21	0.0350
43	421.60	421.16	0.0350
44	430.81	422.34	0.0350
45	440.02	423.08	0.0350
46	449.23	423.59	0.0350
47	458.44	424.20	0.0350
48	467.65	424.77	0.0350
49	476.86	425.25	0.0350
50	486.07	425.39	0.0350
51	495.28	425.89	0.0350

Comment:

Channel Cross Section: XS-204

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	447.26	0.0350
1	9.98	446.64	0.0350
2	19.95	446.04	0.0350
3	29.93	445.42	0.0350
4	39.90	444.81	0.0350
5	49.88	444.29	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
6	59.86	443.94	0.0350
7	69.83	443.29	0.0350
8	79.81	442.75	0.0350
9	89.79	442.15	0.0350
10	99.76	441.32	0.0350
11	109.74	440.90	0.0350
12	119.71	440.66	0.0350
13	129.69	440.26	0.0350
14	139.67	439.97	0.0350
15	149.64	439.63	0.0350
16	159.62	439.36	0.0350
17	169.60	439.16	0.0350
18	179.57	439.12	0.0350
19	189.55	439.20	0.0350
20	199.52	439.24	0.0350
21	209.50	438.85	0.0350
22	219.48	438.39	0.0350
23	229.45	437.82	0.0350
24	239.43	436.92	0.0350
25	249.41	435.82	0.0350
26	259.38	435.26	0.0350
27	269.36	434.84	0.0350
28	279.33	434.84	0.0350
29	289.31	434.74	0.0350
30	299.29	434.30	0.0350
31	309.26	433.80	0.0350
32	319.24	433.14	0.0350
33	329.22	432.83	0.0350
34	339.19	432.40	0.0350
35	349.17	431.68	0.0350
36	359.14	430.73	0.0350
37	369.12	430.56	0.0350
38	379.10	430.05	0.0350
39	389.07	429.72	0.0350
40	399.05	429.10	0.0350
41	409.03	428.93	0.0350
42	419.00	428.25	0.0350
43	428.98	427.72	0.0350
44	438.95	427.22	0.0350
45	448.93	426.73	0.0350
46	458.91	426.04	0.0350
47	468.88	425.37	0.0350
48	478.86	424.80	0.0350
49	488.84	423.87	0.0350
50	498.81	423.22	0.0350
51	508.79	422.69	0.0350
52	518.76	422.18	0.0350
53	528.74	421.78	0.0350
54	538.72	421.29	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
55	548.69	420.56	0.0350
56	558.66	419.82	0.0350
57	568.63	419.28	0.0350
58	578.60	418.82	0.0350
59	588.57	418.37	0.0350
60	598.53	418.20	0.0350
61	608.50	417.71	0.0350
62	618.47	417.46	0.0350
63	628.44	417.60	0.0350
64	638.41	416.94	0.0350
65	648.38	416.01	0.0350
66	658.35	414.90	0.0350
67	668.32	412.58	0.0350
68	678.29	410.82	0.0350
69	688.26	409.63	0.0350
70	698.23	408.54	0.0350
71	708.20	408.00	0.0350
72	718.17	407.52	0.0350
73	728.14	406.79	0.0350
74	738.11	406.17	0.0350
75	748.08	405.52	0.0350
76	758.05	405.32	0.0350
77	768.02	405.00	0.0350
78	777.99	404.55	0.0350
79	787.96	404.40	0.0350
80	797.93	404.35	0.0350
81	807.90	403.76	0.0350
82	817.87	403.49	0.0350
83	827.84	405.04	0.0350
84	837.81	405.63	0.0350
85	847.78	406.16	0.0350
86	857.75	407.54	0.0350
87	867.72	409.53	0.0350
88	877.69	412.33	0.0350
89	887.66	415.17	0.0350
90	897.63	418.94	0.0350
91	907.60	423.13	0.0350
92	917.57	426.75	0.0350
93	927.54	429.61	0.0350
94	937.51	432.10	0.0350
95	947.47	433.97	0.0350
96	957.44	434.99	0.0350
97	967.41	436.25	0.0350
98	977.38	436.90	0.0350
99	987.35	437.67	0.0350
100	997.32	437.75	0.0350
101	1007.18	437.99	0.0350
102	1017.03	438.19	0.0350
103	1026.89	438.43	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
104	1036.74	438.99	0.0350
105	1046.60	439.94	0.0350
106	1056.45	440.60	0.0350
107	1066.30	441.44	0.0350
108	1076.16	442.03	0.0350
109	1086.01	442.57	0.0350
110	1095.87	443.34	0.0350
111	1105.72	444.20	0.0350
112	1115.58	445.02	0.0350
113	1125.43	445.77	0.0350

Comment:

Channel Cross Section: XS-205

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	444.07	0.0350
1	9.90	443.17	0.0350
2	19.81	442.40	0.0350
3	29.71	441.27	0.0350
4	39.61	440.07	0.0350
5	49.51	439.01	0.0350
6	59.42	438.00	0.0350
7	69.32	436.85	0.0350
8	79.22	435.43	0.0350
9	89.12	434.34	0.0350
10	99.03	433.44	0.0350
11	108.93	432.33	0.0350
12	118.83	431.05	0.0350
13	128.73	429.55	0.0350
14	138.64	428.28	0.0350
15	148.54	426.42	0.0350
16	158.44	424.49	0.0350
17	168.34	422.82	0.0350
18	178.25	421.34	0.0350
19	188.15	419.48	0.0350
20	197.78	417.73	0.0350
21	207.41	416.13	0.0350
22	217.03	414.52	0.0350
23	226.66	412.92	0.0350
24	236.29	411.59	0.0350
25	245.92	410.77	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
26	255.55	410.26	0.0350
27	265.18	409.85	0.0350
28	274.80	409.74	0.0350
29	284.43	409.89	0.0350
30	294.06	408.31	0.0350
31	303.69	408.63	0.0350
32	313.32	411.26	0.0350
33	322.94	411.82	0.0350
34	332.57	413.03	0.0350
35	342.20	414.86	0.0350
36	351.83	417.46	0.0350
37	361.46	419.96	0.0350
38	371.09	422.16	0.0350
39	380.73	424.24	0.0350
40	390.36	425.47	0.0350
41	399.99	426.24	0.0350
42	409.63	427.37	0.0350
43	419.26	429.59	0.0350
44	428.90	430.27	0.0350
45	438.53	431.71	0.0350
46	448.16	432.53	0.0350
47	457.80	433.13	0.0350
48	467.43	434.03	0.0350
49	477.07	434.90	0.0350
50	486.70	435.35	0.0350
51	496.33	436.01	0.0350
52	505.97	436.78	0.0350
53	515.60	437.41	0.0350
54	525.24	438.33	0.0350
55	534.87	439.06	0.0350
56	544.50	439.78	0.0350
57	554.14	440.44	0.0350
58	563.77	440.64	0.0350
59	573.41	440.81	0.0350
60	583.04	441.13	0.0350
61	592.80	441.47	0.0350
62	602.56	441.80	0.0350
63	612.32	442.10	0.0350
64	622.09	442.48	0.0350
65	631.85	442.65	0.0350
66	641.61	442.88	0.0350
67	651.37	443.10	0.0350
68	661.13	443.40	0.0350
69	670.89	444.24	0.0350
70	680.65	444.72	0.0350
71	690.41	445.07	0.0350

Comment:

Channel Cross Section: XS-206

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	447.02	0.0350
1	9.88	446.65	0.0350
2	19.77	446.19	0.0350
3	29.65	445.64	0.0350
4	39.53	445.28	0.0350
5	49.42	444.97	0.0350
6	59.30	444.63	0.0350
7	69.19	444.58	0.0350
8	79.07	444.10	0.0350
9	88.95	443.37	0.0350
10	98.84	442.86	0.0350
11	108.72	442.21	0.0350
12	118.60	441.89	0.0350
13	128.49	441.74	0.0350
14	138.37	441.23	0.0350
15	148.26	441.42	0.0350
16	158.14	440.90	0.0350
17	168.02	440.50	0.0350
18	177.91	440.32	0.0350
19	187.79	439.62	0.0350
20	197.67	438.96	0.0350
21	207.56	438.40	0.0350
22	217.44	438.04	0.0350
23	227.33	437.23	0.0350
24	237.21	436.56	0.0350
25	247.09	435.91	0.0350
26	256.98	435.44	0.0350
27	266.86	434.80	0.0350
28	276.74	434.02	0.0350
29	286.63	432.96	0.0350
30	296.51	431.79	0.0350
31	306.40	430.99	0.0350
32	316.28	429.75	0.0350
33	326.16	428.48	0.0350
34	336.05	427.50	0.0350
35	345.93	426.68	0.0350
36	355.81	425.87	0.0350
37	365.70	425.15	0.0350
38	375.58	424.58	0.0350
39	385.46	423.88	0.0350
40	395.35	423.25	0.0350
41	405.23	422.37	0.0350
42	415.12	421.68	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
43	425.00	420.97	0.0350
44	434.88	420.42	0.0350
45	444.77	420.02	0.0350
46	454.65	419.24	0.0350
47	464.54	418.61	0.0350
48	474.43	418.25	0.0350
49	484.31	418.01	0.0350
50	494.20	417.85	0.0350
51	504.09	416.66	0.0350
52	513.97	415.13	0.0350
53	523.86	413.87	0.0350
54	533.75	413.11	0.0350
55	543.63	412.25	0.0350
56	553.52	411.44	0.0350
57	563.41	410.87	0.0350
58	573.29	410.21	0.0350
59	583.18	409.90	0.0350
60	593.06	409.79	0.0350
61	602.95	409.84	0.0350
62	612.84	409.68	0.0350
63	622.72	409.71	0.0350
64	632.61	409.94	0.0350
65	642.50	409.94	0.0350
66	652.38	410.05	0.0350
67	662.27	409.89	0.0350
68	672.16	408.62	0.0350
69	682.04	410.26	0.0350
70	691.93	412.07	0.0350
71	701.82	413.37	0.0350
72	711.70	415.19	0.0350
73	721.59	417.46	0.0350
74	731.48	419.98	0.0350
75	741.36	422.53	0.0350
76	751.25	425.06	0.0350
77	761.09	427.70	0.0350
78	770.94	430.26	0.0350
79	780.79	432.41	0.0350
80	790.63	434.56	0.0350
81	800.48	436.01	0.0350
82	810.32	437.84	0.0350
83	820.17	439.13	0.0350
84	830.01	439.99	0.0350
85	839.86	441.05	0.0350
86	849.70	442.24	0.0350
87	859.55	443.05	0.0350
88	869.40	443.84	0.0350
89	879.24	444.45	0.0350
90	889.09	444.64	0.0350
91	898.93	444.87	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
92	908.78	445.18	0.0350
93	918.62	445.63	0.0350
94	928.47	446.21	0.0350
95	938.31	446.66	0.0350
96	948.16	446.95	0.0350
97	958.01	447.46	0.0350

Comment:

Channel Cross Section: XS-207

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	436.19	0.0350
1	9.72	435.96	0.0350
2	19.44	435.54	0.0350
3	29.16	434.85	0.0350
4	38.88	434.98	0.0350
5	48.60	434.73	0.0350
6	58.32	434.39	0.0350
7	68.04	434.11	0.0350
8	77.76	433.98	0.0350
9	87.48	433.93	0.0350
10	97.25	433.83	0.0350
11	107.01	433.77	0.0350
12	116.78	433.68	0.0350
13	126.55	433.51	0.0350
14	136.31	433.38	0.0350
15	146.08	433.27	0.0350
16	155.85	433.12	0.0350
17	165.61	432.97	0.0350
18	175.38	432.78	0.0350
19	185.15	432.46	0.0350
20	194.91	432.19	0.0350
21	204.68	432.23	0.0350
22	214.45	432.04	0.0350
23	224.21	432.02	0.0350
24	233.98	431.91	0.0350
25	243.75	431.83	0.0350
26	253.58	431.51	0.0350
27	263.42	431.15	0.0350
28	273.26	430.60	0.0350
29	283.09	429.92	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
30	292.93	429.09	0.0350
31	302.77	428.40	0.0350
32	312.60	427.70	0.0350
33	322.44	426.96	0.0350
34	332.28	425.73	0.0350
35	342.11	424.25	0.0350
36	351.95	423.44	0.0350
37	361.79	422.79	0.0350
38	371.63	422.52	0.0350
39	381.46	422.16	0.0350
40	391.30	421.40	0.0350
41	401.14	420.61	0.0350
42	410.97	420.09	0.0350
43	420.81	419.80	0.0350
44	430.65	419.72	0.0350
45	440.48	419.62	0.0350
46	450.32	419.26	0.0350
47	460.15	418.87	0.0350
48	469.98	418.65	0.0350
49	479.81	419.04	0.0350
50	489.64	418.02	0.0350
51	499.47	417.35	0.0350
52	509.31	418.85	0.0350
53	519.14	420.83	0.0350
54	528.97	423.84	0.0350
55	538.80	427.93	0.0350
56	548.63	432.22	0.0350
57	558.46	436.03	0.0350
58	568.29	438.85	0.0350
59	578.12	441.01	0.0350
60	587.95	442.82	0.0350
61	597.78	444.07	0.0350
62	607.61	445.02	0.0350
63	617.45	445.70	0.0350
64	627.28	445.71	0.0350
65	636.06	446.05	0.0350
66	644.85	446.24	0.0350
67	653.64	446.28	0.0350
68	662.43	446.53	0.0350
69	671.22	446.92	0.0350

Comment:

Channel Cross Section: XS-208

Scenario: Existing

Lid: No

Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	458.76	0.0350
1	9.38	458.51	0.0350
2	18.76	457.99	0.0350
3	28.14	456.57	0.0350
4	37.52	455.36	0.0350
5	46.90	453.69	0.0350
6	56.28	451.34	0.0350
7	65.66	449.70	0.0350
8	75.04	448.46	0.0350
9	84.42	447.12	0.0350
10	94.29	445.54	0.0350
11	104.17	446.05	0.0350
12	114.04	448.52	0.0350
13	123.92	450.27	0.0350
14	133.80	450.66	0.0350
15	143.67	451.14	0.0350
16	153.55	451.45	0.0350
17	163.42	451.89	0.0350
18	173.30	452.48	0.0350
19	182.45	453.31	0.0350
20	191.60	454.51	0.0350
21	200.75	456.09	0.0350
22	209.90	457.36	0.0350
23	219.05	458.08	0.0350
24	228.20	459.03	0.0350
25	237.35	459.68	0.0350

Comment:

Channel Cross Section: XS-209

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	459.41	0.0350
1	8.89	458.11	0.0350
2	17.78	456.14	0.0350
3	26.68	454.06	0.0350
4	35.57	452.62	0.0350
5	44.46	451.82	0.0350
6	53.35	450.81	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
7	62.25	450.59	0.0350
8	71.14	450.40	0.0350
9	80.03	450.31	0.0350
10	89.16	450.62	0.0350
11	98.29	451.13	0.0350
12	107.42	452.07	0.0350
13	116.55	453.63	0.0350
14	125.68	455.24	0.0350
15	134.81	456.64	0.0350
16	143.94	458.43	0.0350

Comment:

Channel Cross Section: XS-210

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	454.13	0.0350
1	9.70	454.11	0.0350
2	19.39	454.37	0.0350
3	29.09	453.84	0.0350
4	38.78	449.63	0.0350
5	48.48	447.50	0.0350
6	58.18	446.84	0.0350
7	67.87	446.79	0.0350
8	77.57	446.43	0.0350
9	87.26	446.16	0.0350
10	96.96	446.46	0.0350
11	106.66	446.37	0.0350
12	116.22	446.32	0.0350
13	125.78	446.14	0.0350
14	135.35	446.23	0.0350
15	144.91	446.74	0.0350
16	154.47	447.78	0.0350
17	164.04	449.27	0.0350
18	173.60	451.47	0.0350
19	183.16	454.54	0.0350
20	192.73	458.03	0.0350
21	202.29	461.50	0.0350

Comment:

Channel Cross Section: XS-215

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	483.69	0.0350
1	9.44	482.74	0.0350
2	18.88	481.97	0.0350
3	28.33	481.24	0.0350
4	37.77	480.43	0.0350
5	47.21	479.17	0.0350
6	56.65	477.50	0.0350
7	66.09	476.10	0.0350
8	75.54	475.30	0.0350
9	84.98	474.42	0.0350
10	94.42	473.84	0.0350
11	103.86	473.84	0.0350
12	113.30	473.39	0.0350
13	122.75	472.91	0.0350
14	132.19	472.26	0.0350
15	142.05	471.63	0.0350
16	151.92	472.09	0.0350
17	161.79	473.82	0.0350
18	171.66	475.59	0.0350
19	181.52	477.25	0.0350
20	191.39	478.55	0.0350
21	201.26	479.53	0.0350
22	211.13	481.03	0.0350
23	220.99	482.17	0.0350
24	230.86	482.94	0.0350
25	240.73	483.51	0.0350
26	250.60	484.27	0.0350
27	260.46	485.51	0.0350
28	270.33	486.57	0.0350

Comment:

Channel Cross Section: XS-216

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	491.29	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
1	9.69	490.28	0.0350
2	19.38	489.13	0.0350
3	29.07	487.10	0.0350
4	38.76	485.56	0.0350
5	48.45	483.84	0.0350
6	58.14	482.36	0.0350
7	67.83	481.42	0.0350
8	77.52	480.39	0.0350
9	87.21	480.02	0.0350
10	96.90	480.99	0.0350
11	106.59	481.66	0.0350
12	116.28	482.01	0.0350
13	125.97	482.16	0.0350
14	135.79	482.72	0.0350
15	145.62	483.43	0.0350
16	155.44	484.50	0.0350
17	165.26	485.84	0.0350
18	175.08	487.02	0.0350
19	184.90	488.24	0.0350
20	194.72	489.98	0.0350

Comment:

Weir Cross Section: XS-23

Scenario: Existing
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	416.59
1	9.48	416.02
2	18.96	415.90
3	28.44	415.64
4	37.93	415.02
5	47.41	414.98
6	56.89	414.92
7	66.37	414.18
8	75.85	413.41
9	85.33	412.61
10	94.82	411.77
11	104.30	410.49
12	113.75	409.07
13	123.21	407.66
14	132.66	406.21
15	142.12	405.18
16	151.58	404.67

Order	Station [ft]	Elevation [ft]
17	161.03	403.97
18	170.49	403.26
19	179.94	402.70
20	189.40	402.38
21	198.85	402.19
22	208.31	402.04
23	217.76	401.96
24	227.34	402.03
25	236.92	402.50
26	246.50	403.80
27	256.08	404.47
28	265.94	404.74
29	275.79	405.01
30	285.64	404.90
31	295.49	405.06
32	305.35	404.89
33	315.20	405.17
34	325.05	404.90
35	334.90	405.20
36	344.76	404.81
37	354.61	404.99
38	364.46	404.87
39	374.31	404.95
40	384.17	404.62
41	394.02	404.86
42	403.87	404.76
43	413.72	404.84
44	423.58	404.64
45	433.43	404.55
46	443.28	404.74
47	453.13	404.71
48	462.99	404.69
49	472.31	404.33
50	481.62	404.41
51	490.94	404.10
52	500.26	404.38
53	509.58	404.23
54	518.90	404.97
55	528.22	407.74
56	537.54	410.67
57	546.86	412.50
58	555.81	413.44
59	564.77	414.46
60	573.73	415.12
61	582.68	415.43
62	591.64	415.85
63	600.60	416.31
64	609.55	416.79
65	618.51	417.14

Order	Station [ft]	Elevation [ft]
66	627.18	417.55
67	635.84	418.18
68	644.51	418.68
69	653.18	419.41
70	661.85	420.08

Comment:

Channel Cross Section: XS-301

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	411.79	0.0350
1	9.86	410.81	0.0350
2	19.71	410.29	0.0350
3	29.57	409.34	0.0350
4	39.42	408.38	0.0350
5	49.28	407.75	0.0350
6	59.13	407.15	0.0350
7	68.99	406.55	0.0350
8	78.84	405.70	0.0350
9	88.70	404.63	0.0350
10	98.55	403.67	0.0350
11	108.41	402.99	0.0350
12	118.26	402.30	0.0350
13	128.12	401.56	0.0350
14	137.97	400.89	0.0350
15	147.83	399.92	0.0350
16	157.68	399.14	0.0350
17	167.54	398.53	0.0350
18	177.40	397.55	0.0350
19	187.25	396.86	0.0350
20	197.11	396.16	0.0350
21	206.96	395.22	0.0350
22	216.82	394.71	0.0350
23	226.67	393.93	0.0350
24	236.53	392.97	0.0350
25	246.38	391.92	0.0350
26	256.24	390.93	0.0350
27	266.09	390.17	0.0350
28	275.95	389.42	0.0350
29	285.80	388.76	0.0350
30	295.66	387.84	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
31	305.51	386.68	0.0350
32	315.37	385.21	0.0350
33	325.22	384.55	0.0350
34	335.08	383.71	0.0350
35	344.94	382.70	0.0350
36	354.79	381.38	0.0350
37	364.65	380.52	0.0350
38	374.50	379.37	0.0350
39	384.41	378.32	0.0350
40	394.32	377.57	0.0350
41	404.24	376.56	0.0350
42	414.15	375.85	0.0350
43	424.06	375.45	0.0350
44	433.97	375.18	0.0350
45	443.88	375.09	0.0350
46	453.80	374.92	0.0350
47	463.71	374.61	0.0350
48	473.62	374.62	0.0350
49	483.53	375.11	0.0350
50	493.44	375.29	0.0350
51	503.35	375.24	0.0350
52	513.27	374.38	0.0350
53	523.18	374.13	0.0350
54	533.09	376.11	0.0350
55	543.00	376.98	0.0350
56	552.91	377.52	0.0350
57	562.82	378.10	0.0350
58	572.74	378.59	0.0350
59	582.65	379.29	0.0350
60	592.56	380.21	0.0350
61	602.47	381.50	0.0350
62	612.38	382.79	0.0350
63	622.29	383.92	0.0350
64	632.21	385.35	0.0350
65	642.12	386.70	0.0350
66	652.03	388.07	0.0350
67	661.94	389.32	0.0350
68	671.85	389.96	0.0350
69	681.77	391.43	0.0350
70	691.68	392.52	0.0350
71	701.59	393.47	0.0350
72	711.50	393.95	0.0350
73	721.41	395.49	0.0350
74	731.32	397.41	0.0350
75	741.24	398.93	0.0350
76	751.15	400.69	0.0350
77	761.06	402.45	0.0350
78	770.97	404.26	0.0350
79	780.88	406.69	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
80	790.79	408.54	0.0350
81	800.71	410.36	0.0350
82	810.62	412.07	0.0350
83	820.53	413.65	0.0350

Comment:

Channel Cross Section: XS-3A

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	488.19	0.0350
1	9.92	488.56	0.0350
2	19.85	487.80	0.0350
3	29.77	487.08	0.0350
4	39.69	486.23	0.0350
5	49.61	485.29	0.0350
6	59.54	484.32	0.0350
7	69.46	484.33	0.0350
8	79.38	482.82	0.0350
9	89.31	481.87	0.0350
10	99.23	481.26	0.0350
11	109.15	480.49	0.0350
12	119.07	479.15	0.0350
13	129.00	478.14	0.0350
14	138.92	476.81	0.0350
15	148.84	475.66	0.0350
16	158.76	474.56	0.0350
17	168.69	473.49	0.0350
18	178.61	472.21	0.0350
19	188.53	471.03	0.0350
20	198.46	469.70	0.0350
21	208.38	468.45	0.0350
22	218.30	467.12	0.0350
23	228.22	465.79	0.0350
24	238.15	464.76	0.0350
25	248.07	463.55	0.0350
26	257.99	462.47	0.0350
27	267.92	461.07	0.0350
28	277.84	459.17	0.0350
29	287.76	457.35	0.0350
30	297.68	455.35	0.0350
31	307.61	452.17	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
32	317.53	447.95	0.0350
33	327.45	442.87	0.0350
34	337.37	437.76	0.0350
35	347.30	434.03	0.0350
36	357.22	436.40	0.0350
37	367.14	436.37	0.0350
38	377.07	435.96	0.0350
39	386.99	436.27	0.0350
40	396.91	436.69	0.0350
41	406.83	436.68	0.0350
42	416.76	437.12	0.0350
43	426.68	437.09	0.0350
44	436.60	437.27	0.0350
45	446.53	437.86	0.0350
46	456.45	438.21	0.0350
47	466.37	438.73	0.0350
48	476.29	438.75	0.0350
49	486.22	439.51	0.0350
50	496.14	439.91	0.0350
51	506.06	440.21	0.0350
52	515.98	440.08	0.0350
53	525.91	441.00	0.0350
54	535.83	441.90	0.0350
55	545.75	442.58	0.0350
56	555.68	443.54	0.0350
57	565.60	444.63	0.0350
58	575.52	445.62	0.0350
59	585.44	446.67	0.0350
60	595.37	447.44	0.0350
61	605.29	448.35	0.0350
62	615.21	449.49	0.0350
63	625.14	450.64	0.0350
64	635.06	451.50	0.0350
65	644.98	452.52	0.0350
66	654.90	453.34	0.0350
67	664.83	454.08	0.0350
68	674.75	454.47	0.0350
69	684.67	455.08	0.0350
70	694.59	455.86	0.0350
71	704.52	456.74	0.0350
72	714.44	457.29	0.0350
73	724.36	457.73	0.0350
74	734.29	458.15	0.0350
75	744.21	458.66	0.0350
76	754.13	459.13	0.0350
77	764.05	459.80	0.0350
78	773.98	460.81	0.0350
79	783.90	461.79	0.0350
80	793.43	462.65	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
81	802.96	463.77	0.0350
82	812.49	465.18	0.0350
83	822.02	466.16	0.0350

Comment:

Channel Cross Section: XS-5A

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.16	0.0350
1	9.92	433.51	0.0350
2	19.83	433.89	0.0350
3	29.75	434.28	0.0350
4	39.67	434.55	0.0350
5	49.58	434.74	0.0350
6	59.50	434.59	0.0350
7	69.42	434.48	0.0350
8	79.33	434.25	0.0350
9	89.25	433.99	0.0350
10	99.17	433.64	0.0350
11	109.08	433.26	0.0350
12	119.00	432.70	0.0350
13	128.92	432.02	0.0350
14	138.83	431.30	0.0350
15	148.75	430.37	0.0350
16	158.67	429.49	0.0350
17	168.58	428.51	0.0350
18	178.50	427.55	0.0350
19	188.42	426.71	0.0350
20	198.33	425.75	0.0350
21	208.25	425.00	0.0350
22	218.17	423.91	0.0350
23	228.08	422.05	0.0350
24	238.00	420.33	0.0350
25	247.92	418.28	0.0350
26	257.83	416.02	0.0350
27	267.75	413.45	0.0350
28	277.67	410.93	0.0350
29	287.58	408.64	0.0350
30	297.50	406.73	0.0350
31	307.42	405.26	0.0350
32	317.33	404.33	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
33	327.25	403.86	0.0350
34	337.17	403.58	0.0350
35	347.08	403.26	0.0350
36	357.00	402.35	0.0350
37	366.92	401.86	0.0350
38	376.83	401.98	0.0350
39	386.75	402.06	0.0350
40	396.67	402.19	0.0350
41	406.58	402.13	0.0350
42	416.50	402.19	0.0350
43	426.42	402.21	0.0350
44	436.33	401.59	0.0350
45	446.25	400.96	0.0350
46	456.17	401.19	0.0350
47	466.08	402.57	0.0350
48	476.00	404.39	0.0350
49	485.92	406.78	0.0350
50	495.83	409.69	0.0350
51	505.75	412.62	0.0350
52	515.67	415.14	0.0350
53	525.58	417.33	0.0350
54	535.50	419.05	0.0350
55	545.42	420.23	0.0350
56	555.33	421.31	0.0350
57	565.25	422.48	0.0350
58	575.17	423.12	0.0350
59	585.08	423.55	0.0350
60	595.00	423.98	0.0350
61	604.92	424.13	0.0350
62	614.83	424.43	0.0350
63	624.75	424.80	0.0350
64	634.67	424.96	0.0350
65	644.58	425.09	0.0350
66	654.50	425.46	0.0350
67	664.42	425.97	0.0350
68	674.33	427.83	0.0350
69	684.25	429.30	0.0350
70	694.17	431.14	0.0350
71	704.08	432.41	0.0350
72	714.00	433.74	0.0350
73	723.92	434.73	0.0350
74	733.83	435.91	0.0350
75	743.75	437.55	0.0350
76	753.67	438.56	0.0350
77	763.58	439.05	0.0350
78	773.50	439.57	0.0350
79	783.42	440.45	0.0350
80	793.33	441.34	0.0350
81	803.25	442.14	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
82	813.17	442.66	0.0350
83	823.08	443.04	0.0350
84	833.00	443.37	0.0350
85	842.92	443.54	0.0350
86	852.83	444.02	0.0350
87	862.75	444.19	0.0350

Comment:

Channel Cross Section: XS-6A

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	425.56	0.0350
1	9.98	424.67	0.0350
2	19.96	423.98	0.0350
3	29.93	423.37	0.0350
4	39.91	422.65	0.0350
5	49.89	421.43	0.0350
6	59.87	420.41	0.0350
7	69.84	419.58	0.0350
8	79.82	418.56	0.0350
9	89.80	417.63	0.0350
10	99.78	416.46	0.0350
11	109.75	415.08	0.0350
12	119.73	414.43	0.0350
13	129.71	413.58	0.0350
14	139.69	412.70	0.0350
15	149.66	411.89	0.0350
16	159.64	410.74	0.0350
17	169.62	409.86	0.0350
18	179.60	409.31	0.0350
19	189.57	408.12	0.0350
20	199.55	407.25	0.0350
21	209.53	406.42	0.0350
22	219.51	405.72	0.0350
23	229.48	404.78	0.0350
24	239.46	403.38	0.0350
25	249.44	401.99	0.0350
26	259.42	400.71	0.0350
27	269.40	399.60	0.0350
28	279.37	398.10	0.0350
29	289.35	396.76	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
30	299.33	395.10	0.0350
31	309.31	393.71	0.0350
32	319.28	392.28	0.0350
33	329.26	390.86	0.0350
34	339.24	389.35	0.0350
35	349.22	387.88	0.0350
36	359.19	386.55	0.0350
37	369.17	385.26	0.0350
38	379.15	384.07	0.0350
39	389.13	382.86	0.0350
40	399.10	381.94	0.0350
41	409.08	380.98	0.0350
42	419.06	380.42	0.0350
43	429.04	380.10	0.0350
44	439.01	379.87	0.0350
45	448.99	379.64	0.0350
46	458.97	379.29	0.0350
47	468.95	378.37	0.0350
48	478.92	377.74	0.0350
49	488.90	378.67	0.0350
50	498.88	379.50	0.0350
51	508.86	379.28	0.0350
52	518.84	378.58	0.0350
53	528.81	378.71	0.0350
54	538.79	378.52	0.0350
55	548.77	378.54	0.0350
56	558.75	378.83	0.0350
57	568.72	379.56	0.0350
58	578.70	380.37	0.0350
59	588.68	381.30	0.0350
60	598.66	382.70	0.0350
61	608.63	384.09	0.0350
62	618.61	384.99	0.0350
63	628.59	386.08	0.0350
64	638.57	386.15	0.0350
65	648.54	386.60	0.0350
66	658.52	387.72	0.0350
67	668.50	388.73	0.0350
68	678.48	389.64	0.0350
69	688.45	390.71	0.0350
70	698.43	391.99	0.0350
71	708.41	393.06	0.0350
72	718.39	393.67	0.0350
73	728.36	395.04	0.0350
74	738.34	396.34	0.0350
75	748.32	397.43	0.0350
76	758.30	398.12	0.0350
77	768.28	398.74	0.0350
78	778.25	399.65	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
79	788.23	400.31	0.0350
80	798.21	400.91	0.0350
81	808.19	401.27	0.0350
82	818.16	401.54	0.0350
83	828.14	401.39	0.0350
84	838.12	402.55	0.0350
85	848.10	403.28	0.0350
86	858.07	403.99	0.0350
87	868.05	404.80	0.0350
88	878.03	405.61	0.0350
89	888.01	406.63	0.0350
90	897.98	407.98	0.0350
91	907.96	409.24	0.0350
92	917.94	410.19	0.0350
93	927.92	411.23	0.0350
94	937.89	412.11	0.0350
95	947.87	413.20	0.0350
96	957.85	413.61	0.0350
97	967.83	414.69	0.0350
98	977.80	415.25	0.0350
99	987.78	415.84	0.0350
100	997.76	416.31	0.0350
101	1007.74	416.50	0.0350
102	1017.71	416.94	0.0350
103	1027.69	417.22	0.0350
104	1037.67	417.39	0.0350
105	1047.65	417.86	0.0350
106	1057.63	418.33	0.0350
107	1067.60	419.01	0.0350
108	1077.58	419.14	0.0350
109	1087.56	419.72	0.0350
110	1097.54	420.40	0.0350
111	1107.51	421.18	0.0350
112	1117.49	422.01	0.0350

Comment:

Channel Cross Section: XS-7A

Scenario: Existing
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	465.21	0.0350
1	9.77	464.74	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
2	19.55	464.42	0.0350
3	29.32	463.91	0.0350
4	39.10	463.32	0.0350
5	48.87	462.91	0.0350
6	58.65	462.46	0.0350
7	68.42	461.43	0.0350
8	78.19	460.24	0.0350
9	87.97	458.85	0.0350
10	97.74	457.48	0.0350
11	107.52	456.07	0.0350
12	117.29	454.49	0.0350
13	127.07	452.73	0.0350
14	136.84	451.15	0.0350
15	146.61	450.44	0.0350
16	156.39	449.89	0.0350
17	166.16	448.32	0.0350
18	175.94	448.47	0.0350
19	185.71	449.33	0.0350
20	195.49	449.89	0.0350
21	205.26	450.48	0.0350
22	215.03	451.44	0.0350
23	224.81	453.87	0.0350
24	234.58	456.61	0.0350
25	244.36	459.25	0.0350
26	254.13	461.50	0.0350
27	263.90	463.24	0.0350
28	273.68	464.56	0.0350
29	283.45	465.82	0.0350
30	293.23	466.74	0.0350
31	303.00	467.62	0.0350
32	312.78	468.18	0.0350
33	322.55	468.69	0.0350
34	332.32	469.19	0.0350

Comment:

Channel Cross Section: X-001

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	378.47	0.0500
1	9.94	377.46	0.0500
2	19.88	376.02	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
3	29.82	374.45	0.0500
4	39.76	372.81	0.0500
5	49.70	370.91	0.0500
6	59.63	368.85	0.0500
7	69.57	366.28	0.0500
8	79.51	363.88	0.0500
9	89.45	361.30	0.0500
10	99.39	358.83	0.0500
11	109.33	356.94	0.0500
12	119.27	355.10	0.0500
13	129.21	353.69	0.0500
14	139.15	352.63	0.0500
15	149.09	352.12	0.0500
16	159.03	350.56	0.0500
17	168.96	349.16	0.0500
18	178.90	350.71	0.0500
19	188.84	351.40	0.0500
20	198.78	351.17	0.0500
21	208.72	350.94	0.0500
22	218.66	351.12	0.0500
23	228.60	351.17	0.0500
24	238.54	351.04	0.0500
25	248.48	351.16	0.0500
26	258.42	351.57	0.0500
27	268.36	351.80	0.0500
28	278.30	351.90	0.0500
29	288.23	352.05	0.0500
30	298.17	352.18	0.0500
31	308.11	352.51	0.0500
32	317.93	352.98	0.0500
33	327.75	353.54	0.0500
34	337.57	354.01	0.0500
35	347.38	354.78	0.0500
36	357.20	355.76	0.0500
37	367.02	356.83	0.0500
38	376.84	357.33	0.0500
39	386.65	357.88	0.0500
40	396.47	358.06	0.0500
41	406.29	358.15	0.0500
42	416.11	358.30	0.0500
43	425.93	358.37	0.0500
44	435.74	358.40	0.0500
45	445.56	358.43	0.0500
46	455.38	358.63	0.0500
47	465.20	358.76	0.0500
48	475.01	359.04	0.0500
49	484.83	359.16	0.0500
50	494.65	359.20	0.0500
51	504.47	359.32	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
52	514.29	359.37	0.0500
53	524.10	359.50	0.0500
54	533.92	359.78	0.0500
55	543.74	359.86	0.0500
56	553.56	360.04	0.0500
57	563.37	360.23	0.0500
58	573.19	360.35	0.0500
59	583.01	360.64	0.0500
60	592.83	360.79	0.0500
61	602.65	360.91	0.0500
62	612.46	361.02	0.0500
63	622.28	361.26	0.0500
64	632.10	361.35	0.0500
65	641.92	361.51	0.0500
66	651.73	361.69	0.0500
67	661.55	361.96	0.0500
68	671.37	362.02	0.0500
69	681.19	362.32	0.0500
70	691.01	362.64	0.0500
71	700.82	362.88	0.0500
72	710.64	362.97	0.0500
73	720.46	363.18	0.0500
74	730.28	363.52	0.0500
75	740.09	363.74	0.0500
76	749.91	363.86	0.0500
77	759.73	364.00	0.0500
78	769.55	364.30	0.0500
79	779.37	364.58	0.0500
80	789.18	364.76	0.0500

Comment:

Channel Cross Section: X-011

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
16	0.00	371.61	0.0500
17	9.52	370.95	0.0500
18	19.05	370.22	0.0500
19	28.57	369.44	0.0500
20	38.09	368.63	0.0500
21	47.62	367.86	0.0500
22	57.14	367.23	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
23	66.66	366.71	0.0500
24	76.19	366.32	0.0500
25	85.71	365.72	0.0500
26	95.23	365.23	0.0500
27	104.76	364.93	0.0500
28	114.28	364.59	0.0500
29	123.80	363.99	0.0500
30	133.33	362.50	0.0500
31	142.85	361.45	0.0500
32	152.37	363.41	0.0500
33	162.23	362.78	0.0500
34	172.09	362.41	0.0500
35	181.95	362.52	0.0500
36	191.81	362.87	0.0500
37	201.67	363.24	0.0500
38	211.53	363.85	0.0500
39	221.38	363.89	0.0500
40	231.24	364.15	0.0500
41	241.10	364.46	0.0500
42	250.96	365.09	0.0500
43	260.82	365.89	0.0500
44	270.68	367.65	0.0500
45	280.53	369.36	0.0500
46	290.39	370.77	0.0500
47	300.25	371.70	0.0500
48	310.11	372.67	0.0500
49	319.97	373.78	0.0500
50	329.83	375.01	0.0500
51	339.69	376.05	0.0500

Comment:

Channel Cross Section: X-020

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	390.39	0.0500
1	9.83	390.68	0.0500
2	19.67	390.39	0.0500
3	29.50	389.20	0.0500
4	39.33	387.43	0.0500
5	49.17	385.04	0.0500
6	59.00	382.01	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
7	68.84	379.22	0.0500
8	78.67	377.35	0.0500
9	88.50	375.70	0.0500
10	98.34	374.45	0.0500
11	108.17	374.28	0.0500
12	118.00	374.40	0.0500
13	127.84	374.04	0.0500
14	137.67	373.63	0.0500
15	147.50	373.31	0.0500
16	157.34	373.26	0.0500
17	167.17	373.52	0.0500
18	177.00	373.86	0.0500
19	186.84	373.88	0.0500
20	196.67	373.77	0.0500
21	206.51	373.86	0.0500
22	216.34	374.09	0.0500
23	226.17	373.81	0.0500
24	236.01	372.93	0.0500
25	245.84	374.44	0.0500
26	255.67	375.45	0.0500
27	265.51	375.87	0.0500
28	275.34	376.45	0.0500
29	285.17	377.43	0.0500
30	295.01	378.32	0.0500
31	304.84	379.74	0.0500
32	314.68	381.09	0.0500
33	324.51	382.51	0.0500
34	334.34	383.36	0.0500
35	344.18	384.90	0.0500

Comment:

Channel Cross Section: X-030

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	397.02	0.0500
1	9.85	396.04	0.0500
2	19.71	394.87	0.0500
3	29.56	393.00	0.0500
4	39.41	390.60	0.0500
5	49.26	388.04	0.0500
6	59.12	385.48	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
7	68.97	382.92	0.0500
8	78.82	380.88	0.0500
9	88.67	380.34	0.0500
10	98.53	379.34	0.0500
11	108.38	377.63	0.0500
12	118.34	380.28	0.0500
13	128.30	380.81	0.0500
14	138.26	380.33	0.0500
15	148.22	380.14	0.0500
16	158.18	380.19	0.0500
17	168.14	380.49	0.0500
18	178.10	380.43	0.0500
19	188.06	380.34	0.0500
20	198.02	380.40	0.0500
21	207.98	380.75	0.0500
22	217.94	381.58	0.0500
23	227.90	382.59	0.0500
24	237.86	383.41	0.0500
25	247.82	383.95	0.0500
26	257.78	384.31	0.0500
27	267.74	384.59	0.0500
28	277.70	385.01	0.0500
29	287.66	385.44	0.0500
30	297.62	385.94	0.0500
31	307.58	386.72	0.0500
32	317.54	387.28	0.0500

Comment:

Channel Cross Section: X-0750C

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	403.73	0.0500
1	2.96	403.18	0.0500
2	5.93	403.06	0.0500
3	8.89	402.82	0.0500
4	11.85	402.02	0.0500
5	14.81	401.29	0.0500
6	17.78	401.29	0.0500
7	20.74	401.29	0.0500
8	23.70	401.29	0.0500
9	26.66	401.12	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
10	29.63	400.78	0.0500
11	32.59	400.32	0.0500
12	35.55	399.96	0.0500
13	38.51	399.88	0.0500
14	41.48	399.88	0.0500
15	44.44	399.78	0.0500
16	47.40	399.37	0.0500
17	50.36	399.37	0.0500
18	53.33	399.37	0.0500
19	56.29	399.13	0.0500
20	59.25	398.33	0.0500
21	62.21	397.82	0.0500
22	65.18	397.82	0.0500
23	68.14	397.60	0.0500
24	71.10	397.00	0.0500
25	74.06	397.00	0.0500
26	77.03	396.72	0.0500
27	79.99	395.68	0.0500
28	82.95	395.34	0.0500
29	85.91	395.34	0.0500
30	88.88	395.34	0.0500
31	91.84	395.00	0.0500
32	94.80	394.35	0.0500
33	97.76	393.98	0.0500
34	100.73	393.58	0.0500
35	103.69	392.15	0.0500
36	106.65	391.97	0.0500
37	109.61	391.97	0.0500
38	112.58	391.09	0.0500
39	115.54	390.31	0.0500
40	118.50	390.31	0.0500
41	121.46	390.31	0.0500
42	124.43	389.88	0.0500
43	127.39	388.00	0.0500
44	130.35	387.86	0.0500
45	133.31	387.86	0.0500
46	136.28	387.06	0.0500
47	139.24	386.53	0.0500
48	142.20	386.53	0.0500
49	145.16	386.34	0.0500
50	148.13	385.84	0.0500
51	151.09	385.80	0.0500
52	154.05	385.80	0.0500
53	157.01	385.80	0.0500
54	159.98	385.70	0.0500
55	162.94	385.61	0.0500
56	165.90	385.42	0.0500
57	168.86	385.20	0.0500
58	171.83	385.11	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
59	174.79	385.11	0.0500
60	177.75	385.11	0.0500
61	180.71	385.11	0.0500
62	183.68	385.11	0.0500
63	186.64	385.11	0.0500
64	189.60	385.12	0.0500
65	192.56	385.33	0.0500
66	195.53	385.47	0.0500
67	198.49	385.46	0.0500
68	201.45	385.45	0.0500
69	204.41	385.39	0.0500
70	207.38	385.39	0.0500
71	210.34	385.37	0.0500
72	213.30	385.34	0.0500
73	216.26	385.55	0.0500
74	219.23	385.55	0.0500
75	222.19	385.55	0.0500
76	225.15	385.55	0.0500
77	228.11	385.51	0.0500
78	231.08	385.50	0.0500
79	234.04	385.46	0.0500
80	237.00	385.39	0.0500
81	239.98	385.37	0.0500
82	242.96	385.37	0.0500
83	245.95	385.21	0.0500
84	248.93	384.88	0.0500
85	251.91	384.88	0.0500
86	254.89	384.88	0.0500
87	257.87	384.70	0.0500
88	260.86	384.14	0.0500
89	263.84	384.36	0.0500
90	266.82	384.36	0.0500
91	269.80	384.76	0.0500
92	272.78	385.37	0.0500
93	275.77	385.37	0.0500
94	278.75	385.30	0.0500
95	281.73	385.06	0.0500
96	284.71	385.02	0.0500
97	287.69	385.02	0.0500
98	290.68	385.02	0.0500
99	293.66	384.91	0.0500
100	296.64	384.87	0.0500
101	299.62	385.08	0.0500
102	302.60	385.35	0.0500
103	305.58	386.05	0.0500
104	308.57	386.05	0.0500
105	311.55	386.05	0.0500
106	314.53	386.60	0.0500
107	317.51	386.90	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
108	320.49	386.90	0.0500
109	323.48	386.96	0.0500
110	326.46	387.17	0.0500
111	329.44	387.51	0.0500
112	332.42	387.51	0.0500
113	335.40	387.51	0.0500
114	338.39	388.35	0.0500
115	341.37	388.68	0.0500
116	344.35	388.81	0.0500
117	347.33	389.15	0.0500
118	350.31	389.53	0.0500
119	353.30	389.53	0.0500
120	356.28	389.53	0.0500
121	359.26	389.53	0.0500
122	362.24	390.04	0.0500
123	365.22	390.25	0.0500
124	368.20	390.32	0.0500
125	371.19	390.67	0.0500
126	374.17	391.10	0.0500
127	377.15	391.10	0.0500
128	380.13	391.17	0.0500
129	383.11	391.90	0.0500
130	386.10	391.91	0.0500
131	389.08	391.87	0.0500
132	392.06	391.79	0.0500
133	395.04	392.24	0.0500
134	398.02	392.70	0.0500
135	401.01	392.70	0.0500
136	403.99	392.85	0.0500
137	406.97	393.59	0.0500
138	409.95	393.91	0.0500
139	412.93	394.22	0.0500
140	415.92	394.97	0.0500
141	418.90	395.27	0.0500
142	421.88	395.27	0.0500
143	424.86	395.27	0.0500
144	427.84	395.68	0.0500
145	430.82	396.83	0.0500
146	433.81	396.98	0.0500
147	436.79	396.98	0.0500
148	439.77	397.34	0.0500
149	442.75	397.45	0.0500
150	445.73	397.45	0.0500
151	448.72	398.04	0.0500
152	451.70	398.85	0.0500
153	454.68	399.11	0.0500
154	457.66	399.52	0.0500
155	460.64	399.77	0.0500
156	463.63	400.74	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
157	466.61	400.93	0.0500
158	469.59	400.93	0.0500
159	472.57	401.53	0.0500
160	475.55	402.68	0.0500
161	478.54	403.22	0.0500
162	481.52	403.50	0.0500
163	484.50	404.60	0.0500

Comment:

Channel Cross Section: X-0760C

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	400.19	0.0500
1	2.98	400.13	0.0500
2	5.96	400.17	0.0500
3	8.94	400.41	0.0500
4	11.92	400.41	0.0500
5	14.90	400.39	0.0500
6	17.88	400.24	0.0500
7	20.86	400.33	0.0500
8	23.84	400.33	0.0500
9	26.82	400.33	0.0500
10	29.80	400.31	0.0500
11	32.78	400.12	0.0500
12	35.76	400.13	0.0500
13	38.74	400.14	0.0500
14	41.72	400.05	0.0500
15	44.70	399.98	0.0500
16	47.68	399.98	0.0500
17	50.66	399.93	0.0500
18	53.64	399.67	0.0500
19	56.62	399.67	0.0500
20	59.60	399.66	0.0500
21	62.58	399.63	0.0500
22	65.56	399.45	0.0500
23	68.54	399.29	0.0500
24	71.52	399.29	0.0500
25	74.50	399.30	0.0500
26	77.49	399.34	0.0500
27	80.47	399.30	0.0500
28	83.45	399.27	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
29	86.43	399.61	0.0500
30	89.41	399.84	0.0500
31	92.39	399.84	0.0500
32	95.37	399.77	0.0500
33	98.35	399.44	0.0500
34	101.33	399.71	0.0500
35	104.31	399.77	0.0500
36	107.29	399.77	0.0500
37	110.27	400.04	0.0500
38	113.25	400.30	0.0500
39	116.23	400.30	0.0500
40	119.21	400.31	0.0500
41	122.19	400.42	0.0500
42	125.17	400.43	0.0500
43	128.15	400.43	0.0500
44	131.13	400.43	0.0500
45	134.11	400.26	0.0500
46	137.09	400.07	0.0500
47	140.07	400.17	0.0500
48	143.05	400.25	0.0500
49	146.03	399.64	0.0500
50	149.01	399.60	0.0500
51	151.99	399.60	0.0500
52	154.97	399.31	0.0500
53	157.95	399.02	0.0500
54	160.93	398.93	0.0500
55	163.91	398.87	0.0500
56	166.89	398.85	0.0500
57	169.87	398.02	0.0500
58	172.85	397.92	0.0500
59	175.83	397.92	0.0500
60	178.81	397.61	0.0500
61	181.79	397.25	0.0500
62	184.77	397.03	0.0500
63	187.75	396.71	0.0500
64	190.72	395.79	0.0500
65	193.69	395.79	0.0500
66	196.67	395.79	0.0500
67	199.64	395.79	0.0500
68	202.61	394.77	0.0500
69	205.59	394.12	0.0500
70	208.56	393.98	0.0500
71	211.54	393.42	0.0500
72	214.51	392.60	0.0500
73	217.48	392.60	0.0500
74	220.46	392.45	0.0500
75	223.43	391.01	0.0500
76	226.40	390.89	0.0500
77	229.38	390.66	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
78	232.35	390.45	0.0500
79	235.32	389.63	0.0500
80	238.30	389.13	0.0500
81	241.27	389.13	0.0500
82	244.25	388.68	0.0500
83	247.22	387.82	0.0500
84	250.19	387.82	0.0500
85	253.17	387.72	0.0500
86	256.14	386.26	0.0500
87	259.11	386.17	0.0500
88	262.09	386.14	0.0500
89	265.06	386.14	0.0500
90	268.04	385.17	0.0500
91	271.01	384.50	0.0500
92	273.98	384.50	0.0500
93	276.96	384.03	0.0500
94	279.93	382.92	0.0500
95	282.90	382.72	0.0500
96	285.88	382.63	0.0500
97	288.85	382.04	0.0500
98	291.82	381.99	0.0500
99	294.80	381.99	0.0500
100	297.77	381.99	0.0500
101	300.75	381.79	0.0500
102	303.72	381.69	0.0500
103	306.69	381.64	0.0500
104	309.67	381.59	0.0500
105	312.64	381.46	0.0500
106	315.61	381.46	0.0500
107	318.59	381.46	0.0500
108	321.56	380.87	0.0500
109	324.54	380.80	0.0500
110	327.51	380.80	0.0500
111	330.48	380.83	0.0500
112	333.46	380.60	0.0500
113	336.43	380.21	0.0500
114	339.40	380.21	0.0500
115	342.38	380.06	0.0500
116	345.35	379.59	0.0500
117	348.32	379.59	0.0500
118	351.30	379.53	0.0500
119	354.27	378.62	0.0500
120	357.25	378.43	0.0500
121	360.22	378.42	0.0500
122	363.19	378.42	0.0500
123	366.17	378.05	0.0500
124	369.14	377.64	0.0500
125	372.11	377.64	0.0500
126	375.09	377.52	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
127	378.06	377.16	0.0500
128	381.04	377.16	0.0500
129	384.01	377.16	0.0500
130	386.98	377.20	0.0500
131	389.96	377.21	0.0500
132	392.92	377.21	0.0500
133	395.88	377.21	0.0500
134	398.83	377.37	0.0500
135	401.79	377.45	0.0500
136	404.75	377.45	0.0500
137	407.71	377.31	0.0500
138	410.67	377.22	0.0500
139	413.63	377.22	0.0500
140	416.59	377.19	0.0500
141	419.55	377.17	0.0500
142	422.51	377.17	0.0500
143	425.47	377.17	0.0500
144	428.43	377.24	0.0500
145	431.39	377.33	0.0500
146	434.35	377.34	0.0500
147	437.31	377.52	0.0500
148	440.27	377.74	0.0500
149	443.22	377.72	0.0500
150	446.18	377.74	0.0500
151	449.14	377.78	0.0500
152	452.10	377.76	0.0500
153	455.06	377.75	0.0500
154	458.02	376.63	0.0500
155	460.98	373.61	0.0500
156	463.94	373.61	0.0500
157	466.90	374.44	0.0500
158	469.86	377.56	0.0500
159	472.82	377.56	0.0500
160	475.78	377.65	0.0500
161	478.74	378.18	0.0500
162	481.70	378.18	0.0500
163	484.66	378.18	0.0500
164	487.61	378.20	0.0500
165	490.57	378.37	0.0500
166	493.53	378.37	0.0500
167	496.49	378.37	0.0500
168	499.45	378.49	0.0500
169	502.41	378.49	0.0500
170	505.37	378.49	0.0500
171	508.33	379.21	0.0500
172	511.29	379.26	0.0500
173	514.25	379.31	0.0500
174	517.21	379.38	0.0500
175	520.17	380.42	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
176	523.13	380.59	0.0500
177	526.09	380.59	0.0500
178	529.04	381.41	0.0500
179	532.00	381.61	0.0500
180	534.96	381.59	0.0500
181	537.92	382.31	0.0500
182	540.88	382.57	0.0500
183	543.84	382.57	0.0500
184	546.80	382.57	0.0500
185	549.76	383.56	0.0500
186	552.72	384.09	0.0500
187	555.68	384.09	0.0500
188	558.64	385.20	0.0500
189	561.60	385.97	0.0500
190	564.56	385.97	0.0500
191	567.52	387.00	0.0500
192	570.48	387.91	0.0500
193	573.43	387.91	0.0500
194	576.40	387.91	0.0500
195	579.37	388.87	0.0500
196	582.33	389.97	0.0500
197	585.30	389.97	0.0500
198	588.27	390.81	0.0500
199	591.23	391.92	0.0500
200	594.20	391.92	0.0500
201	597.17	392.60	0.0500
202	600.13	393.64	0.0500
203	603.10	393.64	0.0500
204	606.07	393.64	0.0500
205	609.03	394.40	0.0500
206	612.00	395.84	0.0500
207	614.96	395.84	0.0500
208	617.93	396.43	0.0500
209	620.90	397.74	0.0500
210	623.86	397.74	0.0500
211	626.83	398.29	0.0500
212	629.80	399.77	0.0500
213	632.76	399.77	0.0500
214	635.73	399.77	0.0500
215	638.70	400.12	0.0500
216	641.66	401.36	0.0500
217	644.63	401.36	0.0500
218	647.60	401.65	0.0500
219	650.56	402.93	0.0500
220	653.53	402.93	0.0500
221	656.49	403.22	0.0500
222	659.46	404.89	0.0500

Comment:

Channel Cross Section: X-0810C

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	451.76	0.0350
1	1.00	451.76	0.0350
2	2.00	451.76	0.0350
3	2.99	451.76	0.0350
4	3.99	451.76	0.0350
5	4.99	451.76	0.0350
6	5.99	451.76	0.0350
7	6.98	451.76	0.0350
8	7.98	451.76	0.0350
9	8.98	450.98	0.0350
10	9.98	447.52	0.0350
11	10.97	447.52	0.0350
12	11.97	447.52	0.0350
13	12.97	447.52	0.0350
14	13.97	447.52	0.0350
15	14.97	447.52	0.0350
16	15.96	447.52	0.0350
17	16.96	447.52	0.0350
18	17.96	447.52	0.0350
19	18.96	446.73	0.0350
20	19.95	442.29	0.0350
21	20.95	442.29	0.0350
22	21.95	442.29	0.0350
23	22.95	442.29	0.0350
24	23.94	442.29	0.0350
25	24.94	442.29	0.0350
26	25.94	442.29	0.0350
27	26.94	442.29	0.0350
28	27.93	442.29	0.0350
29	28.93	441.73	0.0350
30	29.93	437.50	0.0350
31	30.93	437.50	0.0350
32	31.93	437.50	0.0350
33	32.92	437.50	0.0350
34	33.92	437.50	0.0350
35	34.92	437.50	0.0350
36	35.92	437.50	0.0350
37	36.91	437.49	0.0350
38	37.91	437.47	0.0350
39	38.91	437.36	0.0350
40	39.91	436.24	0.0350
41	40.90	436.20	0.0350
42	41.90	436.16	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
43	42.90	436.12	0.0350
44	43.90	436.07	0.0350
45	44.90	436.03	0.0350
46	45.89	435.99	0.0350
47	46.89	435.95	0.0350
48	47.89	435.91	0.0350
49	48.89	435.80	0.0350
50	49.88	434.41	0.0350
51	50.88	434.40	0.0350
52	51.88	434.38	0.0350
53	52.88	434.37	0.0350
54	53.87	434.36	0.0350
55	54.87	434.34	0.0350
56	55.87	434.33	0.0350
57	56.87	434.31	0.0350
58	57.86	434.30	0.0350
59	58.86	434.21	0.0350
60	59.86	429.23	0.0350
61	60.86	429.23	0.0350
62	61.86	429.23	0.0350
63	62.85	429.23	0.0350
64	63.85	429.23	0.0350
65	64.85	429.23	0.0350
66	65.85	429.23	0.0350
67	66.84	429.23	0.0350
68	67.84	429.23	0.0350
69	68.84	429.23	0.0350
70	69.84	430.39	0.0350
71	70.83	430.41	0.0350
72	71.83	430.41	0.0350
73	72.83	430.41	0.0350
74	73.83	430.41	0.0350
75	74.83	430.41	0.0350
76	75.82	430.41	0.0350
77	76.82	430.41	0.0350
78	77.82	430.41	0.0350
79	78.82	430.41	0.0350
80	79.81	434.72	0.0350
81	80.81	434.96	0.0350
82	81.81	434.96	0.0350
83	82.81	434.96	0.0350
84	83.80	434.96	0.0350
85	84.80	434.96	0.0350
86	85.80	434.96	0.0350
87	86.80	434.96	0.0350
88	87.80	434.96	0.0350
89	88.79	434.96	0.0350
90	89.79	435.57	0.0350
91	90.79	435.62	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
92	91.79	435.62	0.0350
93	92.78	435.62	0.0350
94	93.78	435.62	0.0350
95	94.78	435.62	0.0350
96	95.78	435.62	0.0350
97	96.77	435.62	0.0350
98	97.77	435.62	0.0350
99	98.77	435.62	0.0350
100	99.77	440.08	0.0350
101	100.76	440.68	0.0350
102	101.76	440.68	0.0350
103	102.76	440.68	0.0350
104	103.76	440.68	0.0350
105	104.76	440.68	0.0350
106	105.75	440.68	0.0350
107	106.75	440.68	0.0350
108	107.75	440.68	0.0350
109	108.75	440.68	0.0350
110	109.74	443.00	0.0350
111	110.74	443.42	0.0350
112	111.74	443.42	0.0350
113	112.74	443.42	0.0350
114	113.73	443.42	0.0350
115	114.73	443.42	0.0350
116	115.73	443.42	0.0350
117	116.73	443.42	0.0350
118	117.73	443.42	0.0350
119	118.72	443.42	0.0350
120	119.72	443.77	0.0350
121	120.72	443.85	0.0350
122	121.72	443.85	0.0350
123	122.71	443.85	0.0350
124	123.71	443.85	0.0350
125	124.71	443.85	0.0350
126	125.71	443.85	0.0350
127	126.70	443.85	0.0350
128	127.70	443.85	0.0350
129	128.70	443.85	0.0350
130	129.70	443.89	0.0350
131	130.70	443.90	0.0350
132	131.69	443.90	0.0350
133	132.69	443.90	0.0350
134	133.69	443.90	0.0350
135	134.69	443.90	0.0350

Comment:

Channel Cross Section: X-0830C

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	461.05	0.0350
1	9.87	461.65	0.0350
2	19.73	462.37	0.0350
3	29.60	463.04	0.0350
4	39.46	463.69	0.0180
5	49.33	464.04	0.0180
6	59.19	464.37	0.0180
7	69.06	464.63	0.0180
8	78.92	463.57	0.0180
9	88.79	459.38	0.0180
10	98.65	454.25	0.0350
11	108.52	449.40	0.0350
12	118.38	445.88	0.0350
13	128.25	443.29	0.0350
14	138.12	441.10	0.0350
15	147.98	442.69	0.0350
16	157.85	446.93	0.0350
17	167.71	451.07	0.0350
18	177.58	455.18	0.0350
19	187.44	457.71	0.0350
20	197.31	458.47	0.0350
21	207.17	458.60	0.0350
22	217.04	458.13	0.0350

Comment:

Channel Cross Section: X-AA

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	390.55	0.0500
1	9.89	389.46	0.0500
2	19.78	387.90	0.0500
3	29.67	386.71	0.0500
4	39.56	385.46	0.0500
5	49.45	384.15	0.0500
6	59.34	382.92	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
7	69.23	381.80	0.0500
8	79.13	380.60	0.0500
9	89.02	379.95	0.0500
10	98.91	379.16	0.0500
11	108.80	378.47	0.0500
12	118.69	377.75	0.0500
13	128.58	376.89	0.0500
14	138.47	376.19	0.0500
15	148.36	375.89	0.0500
16	158.25	375.40	0.0500
17	168.14	375.27	0.0500
18	178.03	375.17	0.0500
19	187.92	375.04	0.0500
20	197.81	375.07	0.0500
21	207.70	374.88	0.0500
22	217.59	374.66	0.0500
23	227.49	374.65	0.0500
24	237.38	374.75	0.0500
25	247.27	374.99	0.0500
26	257.16	375.26	0.0500
27	267.05	375.10	0.0500
28	276.94	374.38	0.0500
29	286.83	376.22	0.0500
30	296.72	377.41	0.0500
31	306.61	378.98	0.0500
32	316.50	380.14	0.0500
33	326.39	381.13	0.0500
34	336.28	381.87	0.0500
35	346.17	382.84	0.0500
36	356.06	383.82	0.0500
37	365.95	384.12	0.0500
38	375.85	384.72	0.0500
39	385.74	385.03	0.0500
40	395.63	385.42	0.0500
41	405.52	385.93	0.0500
42	415.41	386.45	0.0500
43	425.30	387.04	0.0500
44	435.19	387.37	0.0500
45	445.08	387.84	0.0500
46	454.97	388.32	0.0500
47	464.86	388.70	0.0500
48	474.75	389.19	0.0500
49	484.64	389.91	0.0500
50	494.53	390.60	0.0500
51	504.42	391.27	0.0500
52	514.31	391.85	0.0500

Comment:

Channel Cross Section: X-AB

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	408.43	0.0500
1	9.94	407.40	0.0500
2	19.88	406.23	0.0500
3	29.83	405.00	0.0500
4	39.77	403.81	0.0500
5	49.71	403.06	0.0500
6	59.65	402.32	0.0500
7	69.60	400.82	0.0500
8	79.54	399.33	0.0500
9	89.48	398.55	0.0500
10	99.42	397.67	0.0500
11	109.36	396.54	0.0500
12	119.31	395.46	0.0500
13	129.25	394.03	0.0500
14	139.19	392.39	0.0500
15	149.13	390.31	0.0500
16	159.07	387.61	0.0500
17	169.02	384.87	0.0500
18	178.96	383.27	0.0500
19	188.90	384.18	0.0500
20	198.84	385.16	0.0500
21	208.79	384.76	0.0500
22	218.73	384.54	0.0500
23	228.67	384.53	0.0500
24	238.61	384.37	0.0500
25	248.55	384.11	0.0500
26	258.50	384.08	0.0500
27	268.44	384.05	0.0500
28	278.38	383.87	0.0500
29	288.32	383.82	0.0500
30	298.27	383.68	0.0500
31	308.21	384.08	0.0500
32	318.15	385.93	0.0500
33	328.09	387.58	0.0500
34	338.03	389.06	0.0500
35	347.98	390.70	0.0500
36	357.92	392.54	0.0500
37	367.86	394.36	0.0500
38	377.80	395.35	0.0500
39	387.75	397.49	0.0500
40	397.69	399.42	0.0500
41	407.63	401.54	0.0500
42	417.57	403.43	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
43	427.51	405.55	0.0500
44	437.46	407.77	0.0500
45	447.40	409.51	0.0500
46	457.34	411.80	0.0500
47	467.28	413.92	0.0500
48	477.22	415.80	0.0500
49	487.17	417.79	0.0500

Comment:

Channel Cross Section: X-Z

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	378.34	0.0500
1	9.97	377.48	0.0500
2	19.95	376.41	0.0500
3	29.92	375.21	0.0500
4	39.89	374.02	0.0500
5	49.87	373.44	0.0500
6	59.84	372.15	0.0500
7	69.81	371.15	0.0500
8	79.79	370.86	0.0500
9	89.76	370.02	0.0500
10	99.74	369.01	0.0500
11	109.71	368.08	0.0500
12	119.68	367.24	0.0500
13	129.66	365.63	0.0500
14	139.63	364.59	0.0500
15	149.60	363.94	0.0500
16	159.58	363.05	0.0500
17	169.55	362.66	0.0500
18	179.52	362.84	0.0500
19	189.50	363.02	0.0500
20	199.47	362.84	0.0500
21	209.44	361.01	0.0500
22	219.42	362.63	0.0500
23	229.39	363.06	0.0500
24	239.37	363.07	0.0500
25	249.34	363.00	0.0500
26	259.31	363.14	0.0500
27	269.29	363.24	0.0500
28	279.26	363.63	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
29	289.23	363.75	0.0500
30	299.21	363.79	0.0500
31	309.18	364.45	0.0500
32	319.15	365.40	0.0500
33	329.13	366.78	0.0500
34	339.10	367.53	0.0500
35	349.07	369.21	0.0500
36	359.05	370.85	0.0500
37	369.02	372.12	0.0500
38	379.00	373.02	0.0500
39	388.97	373.45	0.0500
40	398.94	373.91	0.0500
41	408.92	374.37	0.0500
42	418.89	374.95	0.0500
43	428.86	375.95	0.0500
44	438.84	377.43	0.0500
45	448.81	378.62	0.0500
46	458.78	379.97	0.0500
47	468.76	381.62	0.0500

Comment:

Channel Cross Section: XS-000

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	375.90	0.0350
1	9.48	374.34	0.0350
2	18.96	372.79	0.0350
3	28.43	371.06	0.0350
4	37.91	369.23	0.0350
5	47.39	367.58	0.0350
6	56.87	365.46	0.0350
7	66.35	363.21	0.0350
8	75.83	360.81	0.0350
9	85.30	358.05	0.0350
10	94.78	354.83	0.0350
11	104.26	351.87	0.0350
12	113.74	350.32	0.0350
13	123.22	349.89	0.0350
14	132.69	349.87	0.0350
15	142.17	348.05	0.0350
16	151.65	348.08	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
17	161.13	349.22	0.0350
18	170.61	349.75	0.0350
19	180.57	349.65	0.0350
20	190.53	349.32	0.0350
21	200.50	349.34	0.0350
22	210.46	349.45	0.0350
23	220.43	349.81	0.0350
24	230.39	350.39	0.0350
25	240.35	350.81	0.0350
26	250.32	351.00	0.0350
27	260.28	351.53	0.0350
28	270.24	352.05	0.0350
29	280.21	352.36	0.0350
30	290.17	352.60	0.0350
31	300.13	353.11	0.0350
32	310.10	353.62	0.0350
33	320.06	353.87	0.0350
34	330.03	354.15	0.0350
35	339.99	354.13	0.0350
36	349.95	353.90	0.0350
37	359.92	354.76	0.0350
38	369.88	355.42	0.0350
39	379.84	356.40	0.0350
40	389.81	357.35	0.0350
41	399.77	358.16	0.0350
42	409.73	359.02	0.0350
43	419.70	359.54	0.0350
44	429.66	360.37	0.0350
45	439.22	361.00	0.0350
46	448.79	361.74	0.0350
47	458.35	363.00	0.0350
48	467.91	364.26	0.0350
49	477.47	365.51	0.0350
50	487.04	366.96	0.0350
51	496.60	368.34	0.0350
52	506.16	369.75	0.0350
53	515.72	371.13	0.0350
54	525.29	372.44	0.0350
55	534.85	373.65	0.0350
56	544.41	374.69	0.0350
57	553.97	375.49	0.0350
58	563.54	376.38	0.0350
59	573.10	377.36	0.0350

Comment:

Weir Cross Section: XS-002

Scenario: Site Only
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	512.91
1	9.39	512.04
2	18.79	512.02
3	28.18	512.02
4	37.58	511.93
5	46.97	511.92
6	56.37	512.00
7	65.76	511.91
8	75.16	511.80
9	84.55	511.84
10	93.94	511.94
11	103.34	512.16
12	112.73	512.07
13	122.13	512.08
14	131.52	511.97
15	140.92	511.82
16	150.31	512.13
17	159.97	512.26
18	169.62	512.23
19	179.28	512.20
20	188.93	512.28
21	198.58	512.21
22	208.24	512.14
23	217.89	512.56
24	227.55	513.03
25	237.20	512.77
26	246.86	512.25
27	256.51	511.98
28	266.17	511.82
29	275.82	511.68
30	285.47	511.53
31	295.13	511.13
32	304.78	511.11
33	314.44	511.18
34	324.09	511.36
35	333.75	511.58
36	343.40	511.23
37	353.06	510.98
38	362.71	510.46
39	372.37	510.38
40	382.02	510.32
41	391.67	510.27
42	401.33	510.23
43	410.98	509.94

Order	Station [ft]	Elevation [ft]
44	420.64	509.76
45	429.84	509.53
46	439.05	509.13
47	448.26	508.75
48	457.46	508.71
49	466.67	508.78
50	475.88	508.54
51	485.08	508.64
52	494.94	508.51
53	504.79	508.40
54	514.64	508.68
55	524.49	508.67
56	534.35	508.80
57	544.20	508.76
58	554.05	508.71
59	563.90	508.85
60	573.76	508.86
61	583.61	508.80
62	593.46	508.88
63	603.31	508.79
64	613.16	508.65
65	623.02	508.92
66	632.87	508.95
67	642.72	508.84
68	652.57	508.68
69	662.43	508.49
70	672.28	508.19
71	682.13	508.05
72	691.98	508.53
73	701.83	509.19
74	711.69	509.53
75	721.54	509.42
76	731.39	509.20
77	741.24	508.90
78	751.10	508.88
79	760.95	508.56
80	770.80	508.16
81	780.65	507.85
82	790.50	507.66
83	800.36	507.57
84	810.21	507.64
85	820.06	507.93
86	829.91	508.38
87	839.77	508.62
88	849.35	508.58
89	858.93	508.55
90	868.51	508.47
91	878.09	508.01
92	887.67	508.34

Order	Station [ft]	Elevation [ft]
93	897.25	508.63
94	906.83	509.20
95	916.41	509.78
96	925.84	509.89
97	935.27	509.84
98	944.69	510.01
99	954.12	510.46
100	963.55	510.42
101	972.98	510.81
102	982.41	511.00
103	991.83	510.84
104	1001.26	510.90
105	1010.69	511.23
106	1020.12	511.47
107	1029.55	511.21
108	1038.97	511.51
109	1048.40	511.69

Comment:

Weir Cross Section: XS-005

Scenario: Site Only

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	17.75	452.91
1	26.63	452.44
2	35.50	452.04
3	44.38	451.60
4	53.25	451.28
5	62.13	450.78
6	71.58	450.01
7	81.03	449.41
8	90.49	448.37
9	99.94	447.98
10	109.39	448.12
11	117.29	448.54
12	125.19	448.67
13	133.09	448.85
14	142.51	448.56
15	151.94	448.91
16	161.36	449.26
17	170.79	449.28
18	180.21	449.69
19	189.64	450.39

Order	Station [ft]	Elevation [ft]
20	199.06	449.96
21	208.49	449.85
22	217.91	450.49
23	226.54	450.45
24	235.18	450.10
25	243.81	450.20
26	252.45	450.43
27	261.08	450.82
28	269.48	450.48
29	277.88	450.43
30	286.27	450.29
31	294.67	450.19
32	303.07	450.20
33	311.47	450.52
34	320.39	450.60
35	329.31	450.22
36	338.24	449.88
37	347.16	449.71
38	353.42	449.85
39	359.68	450.17
40	369.03	450.18
41	378.39	449.97
42	387.75	449.79
43	397.11	449.52
44	406.46	449.46
45	415.82	449.67
46	425.18	449.53
47	434.54	449.63
48	443.89	449.49
49	452.94	449.31
50	461.98	448.75
51	471.03	448.45
52	480.97	448.60
53	490.91	448.60
54	500.85	448.81
55	510.80	448.95
56	520.74	449.11
57	530.68	449.69
58	540.62	450.22
59	550.56	450.85
60	560.50	451.37

Comment:

Weir Cross Section: XS-007

Scenario: Site Only

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	497.54
1	9.47	497.19
2	18.94	496.91
3	28.41	496.77
4	37.88	496.19
5	47.35	495.94
6	56.82	495.86
7	66.30	495.65
8	75.77	495.52
9	85.24	495.59
10	94.71	495.12
11	104.18	494.96
12	113.65	494.79
13	123.12	494.85
14	132.59	494.85
15	142.06	494.85
16	151.66	495.09
17	161.26	495.02
18	170.86	495.11
19	180.46	494.97
20	190.06	495.01
21	199.66	494.81
22	209.26	494.92
23	218.86	494.84
24	228.46	495.35
25	238.07	494.75
26	247.67	495.38
27	257.27	495.43
28	266.87	495.88
29	276.47	495.51
30	286.07	495.72
31	295.67	495.53
32	305.27	495.46
33	314.87	495.33
34	324.47	495.42
35	334.07	495.90
36	342.07	496.22
37	350.08	496.46
38	358.08	496.74
39	366.08	496.92
40	374.08	497.29

Comment:

Weir Cross Section: XS-009

Scenario: Site Only
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	452.45
1	9.18	451.47
2	18.36	450.81
3	27.54	449.74
4	36.72	448.56
5	45.90	447.44
6	55.09	446.23
7	64.27	444.97
8	73.33	444.30
9	82.39	443.89
10	91.45	443.65
11	100.52	444.01
12	109.58	444.42
13	118.64	444.91
14	127.70	445.03
15	136.77	444.76
16	145.83	444.59
17	155.15	445.36
18	164.47	445.92
19	173.79	446.12
20	183.12	445.86
21	192.62	445.36
22	202.12	445.87
23	211.62	445.89
24	221.13	445.65
25	230.63	445.75
26	240.13	445.47
27	249.63	445.54
28	259.14	445.50
29	268.64	445.24
30	278.14	445.48
31	287.64	445.52
32	297.15	445.43
33	306.65	445.66
34	315.18	445.81
35	323.72	446.12
36	332.26	446.53
37	341.59	447.13
38	350.92	447.96
39	360.26	449.65
40	369.59	451.43

Comment:

Weir Cross Section: XS-010

Scenario: Site Only
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	451.58
1	9.85	451.46
2	19.70	451.40
3	29.55	451.28
4	39.40	451.16
5	49.24	451.02
6	59.09	451.00
7	68.94	450.90
8	78.79	450.79
9	88.64	450.77
10	98.49	450.64
11	108.34	450.55
12	118.19	450.47
13	128.03	450.28
14	137.88	450.14
15	147.73	450.05
16	157.58	449.92
17	167.43	449.78
18	177.28	449.70
19	187.13	449.64
20	196.98	449.54
21	206.82	449.40
22	216.67	449.31
23	226.52	449.21
24	236.37	449.02
25	246.22	448.88
26	256.07	448.80
27	265.92	448.71
28	275.77	448.58
29	285.61	448.49
30	295.46	448.45
31	305.31	448.33
32	315.16	448.20
33	325.01	448.14
34	334.86	448.03
35	344.71	447.99
36	354.56	447.93
37	364.40	447.74
38	374.25	447.76
39	384.10	447.77
40	393.95	447.70
41	403.80	447.50
42	413.65	447.42
43	423.50	447.33

Order	Station [ft]	Elevation [ft]
44	433.35	447.22
45	443.19	447.16
46	453.04	447.11
47	462.89	447.08
48	472.74	447.01
49	482.59	446.95
50	492.44	446.89
51	502.29	446.77
52	512.14	446.70
53	521.98	446.64
54	531.83	446.59
55	541.68	446.53
56	551.53	446.48
57	561.38	446.51
58	571.23	446.42
59	581.08	446.32
60	590.93	446.13
61	600.77	446.08
62	610.62	446.02
63	620.47	445.98
64	630.32	445.90
65	640.08	445.79
66	649.84	445.68
67	659.60	445.56
68	669.36	445.45
69	679.12	445.38
70	688.88	445.34
71	698.63	445.30
72	708.39	445.21
73	718.15	445.06
74	727.91	444.89
75	737.67	444.85
76	747.43	444.82
77	757.19	444.69
78	766.95	444.58
79	776.71	444.51
80	786.47	444.44
81	796.23	444.37
82	805.98	444.29
83	815.74	444.20
84	825.50	444.11
85	835.26	444.03
86	845.02	443.89
87	854.78	443.89
88	864.54	443.84
89	874.30	443.75
90	884.06	443.69
91	893.82	443.62
92	903.58	443.56

Order	Station [ft]	Elevation [ft]
93	913.33	443.50
94	923.09	443.44
95	932.85	443.36
96	942.61	443.32
97	952.37	443.29
98	962.13	443.23
99	971.89	443.24
100	981.51	443.16
101	991.13	443.11
102	1000.75	443.08
103	1010.37	443.11
104	1019.99	443.04
105	1029.61	442.98
106	1039.23	442.98
107	1048.85	442.96
108	1058.47	442.92
109	1068.09	442.93
110	1077.71	442.95
111	1087.33	442.96
112	1096.95	442.94
113	1106.57	442.87
114	1116.19	442.86
115	1125.81	442.89
116	1135.43	442.89
117	1145.05	442.87
118	1154.67	442.88
119	1164.29	442.94
120	1173.91	442.99
121	1183.53	442.95
122	1193.15	443.00
123	1202.77	443.08
124	1212.39	443.06
125	1222.01	443.11
126	1232.00	443.14
127	1241.99	443.09
128	1251.98	443.13
129	1261.98	443.23
130	1271.97	443.34
131	1281.96	443.40
132	1291.95	443.37
133	1301.94	443.45
134	1311.93	443.56
135	1321.93	443.60
136	1331.92	443.61
137	1341.91	443.65
138	1351.90	443.67
139	1361.89	443.73
140	1371.88	443.85
141	1381.88	444.00

Order	Station [ft]	Elevation [ft]
142	1391.87	444.01
143	1401.86	444.12
144	1411.85	444.12
145	1421.84	444.19
146	1431.83	444.27
147	1441.83	444.36
148	1451.82	444.49
149	1461.81	444.62
150	1471.80	444.76
151	1481.79	444.87
152	1491.78	444.96
153	1501.78	445.11
154	1511.77	445.28
155	1521.76	445.39
156	1531.75	445.52
157	1541.74	445.65
158	1551.73	445.78
159	1561.72	445.92
160	1571.72	446.10
161	1581.71	446.23
162	1591.70	446.41
163	1601.57	446.59
164	1611.43	446.76
165	1621.30	446.87
166	1631.17	446.96
167	1641.03	447.15
168	1650.90	447.32
169	1660.77	447.47
170	1670.63	447.67
171	1680.50	447.87
172	1690.37	448.02
173	1700.23	448.20
174	1710.10	448.36
175	1719.97	448.54
176	1729.83	448.71
177	1739.70	448.82
178	1749.57	449.04
179	1759.44	449.26
180	1769.30	449.32
181	1779.17	449.51
182	1789.04	449.71
183	1798.90	449.94
184	1808.77	450.20
185	1818.64	450.44
186	1828.50	450.50
187	1838.37	450.76
188	1848.24	450.90
189	1858.10	451.01
190	1867.97	451.33

Order	Station [ft]	Elevation [ft]
191	1877.84	451.48
192	1887.70	451.66
193	1897.57	451.71

Comment:

Weir Cross Section: XS-011

Scenario: Site Only
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	426.28
1	10.00	426.27
2	19.99	426.24
3	29.99	426.05
4	39.99	425.80
5	49.99	425.73
6	59.98	425.66
7	69.98	425.58
8	79.98	425.51
9	89.98	425.42
10	99.97	425.34
11	109.97	425.20
12	119.97	425.10
13	129.97	425.11
14	139.96	424.91
15	149.96	424.98
16	159.96	424.95
17	169.96	424.69
18	179.95	424.58
19	189.95	424.39
20	199.95	424.39
21	209.95	424.33
22	219.94	424.33
23	229.94	424.17
24	239.94	424.00
25	249.94	423.91
26	259.93	423.73
27	269.93	423.70
28	279.93	423.69
29	289.92	423.57
30	299.92	423.46
31	309.92	423.32
32	319.92	423.19
33	329.91	423.12

Order	Station [ft]	Elevation [ft]
34	339.91	422.97
35	349.91	423.08
36	359.91	422.94
37	369.90	422.87
38	379.90	422.84
39	389.90	422.78
40	399.90	422.70
41	409.89	422.66
42	419.89	422.69
43	429.89	422.54
44	439.89	422.48
45	449.88	422.48
46	459.88	422.35
47	469.88	422.30
48	479.88	422.34
49	489.87	422.29
50	499.87	422.18
51	509.87	422.22
52	519.87	422.27
53	529.86	422.11
54	539.86	422.15
55	549.86	422.25
56	559.85	422.17
57	569.85	422.25
58	579.85	422.21
59	589.85	422.07
60	599.84	422.07
61	609.84	422.19
62	619.84	422.08
63	629.84	422.01
64	639.83	422.06
65	649.83	422.17
66	659.83	422.25
67	669.83	422.26
68	679.82	422.27
69	689.82	422.26
70	699.82	422.25
71	709.82	422.33
72	719.81	422.38
73	729.81	422.43
74	739.81	422.48
75	749.81	422.49
76	759.80	422.53
77	769.80	422.59
78	779.80	422.66
79	789.80	422.70
80	799.79	422.74
81	809.79	422.77
82	819.79	422.81

Order	Station [ft]	Elevation [ft]
83	829.78	422.81
84	839.78	422.93
85	849.78	422.94
86	859.78	423.08
87	869.77	423.16
88	879.77	423.28
89	889.77	423.35
90	899.77	423.40
91	909.76	423.48
92	919.76	423.56
93	929.76	423.71
94	939.76	423.84
95	949.75	423.96
96	959.75	424.11
97	969.75	424.21
98	979.75	424.30
99	989.74	424.44
100	999.74	424.49
101	1009.74	424.62
102	1019.74	424.89
103	1029.73	425.05
104	1039.73	425.22
105	1049.73	425.40
106	1059.73	425.53
107	1069.72	425.58
108	1079.72	425.75
109	1089.72	425.90
110	1099.72	426.01
111	1109.71	426.23
112	1119.71	426.43
113	1129.71	426.67
114	1139.70	426.78
115	1149.70	426.89
116	1159.70	427.12

Comment:

Weir Cross Section: XS-012

Scenario: Site Only

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	462.68
1	9.24	461.62
2	18.48	460.97

Order	Station [ft]	Elevation [ft]
3	27.71	460.24
4	36.95	459.41
5	46.19	457.49
6	55.43	454.98
7	64.66	454.92
8	73.90	454.87
9	83.14	454.96
10	92.43	455.90
11	101.73	456.79
12	111.02	457.16
13	120.78	456.97
14	130.54	456.79
15	140.30	456.56
16	150.06	456.48
17	159.82	456.41
18	169.58	456.05
19	179.34	456.03
20	189.10	456.29
21	198.86	456.59
22	208.62	456.05
23	218.38	455.87
24	228.14	456.04
25	237.89	456.70
26	247.65	456.59
27	257.41	456.40
28	267.17	456.64
29	276.29	456.66
30	285.42	456.61
31	294.54	456.84
32	303.66	457.26
33	312.78	457.93
34	321.90	459.07
35	330.28	460.61
36	338.67	461.90
37	347.05	463.15
38	355.43	464.37

Comment:

Weir Cross Section: XS-013

Scenario: Site Only

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	417.56

Order	Station [ft]	Elevation [ft]
1	8.48	417.04
2	16.96	416.31
3	25.45	415.58
4	33.93	414.79
5	42.41	413.87
6	50.87	412.56
7	59.32	411.48
8	67.78	410.94
9	76.24	410.93
10	84.69	411.24
11	93.15	411.58
12	103.00	412.17
13	112.85	412.77
14	122.70	412.79
15	132.54	412.94
16	142.39	413.01
17	152.24	413.20
18	162.09	413.39
19	171.94	413.21
20	181.66	413.30
21	191.37	413.41
22	201.09	413.45
23	210.81	413.37
24	220.53	413.07
25	230.24	412.99
26	239.96	413.21
27	249.68	412.92
28	259.40	412.99
29	269.11	413.58
30	278.83	413.30
31	288.55	413.20
32	297.81	413.51
33	307.07	413.29
34	316.33	413.31
35	325.59	413.53
36	334.85	413.68
37	344.11	414.72
38	353.37	416.01
39	359.92	417.19
40	366.47	418.39

Comment:

Weir Cross Section: XS-014

Scenario: Site Only

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	415.46
1	9.72	415.20
2	19.43	414.86
3	29.15	414.51
4	38.87	414.21
5	48.58	413.78
6	58.30	413.45
7	68.02	413.11
8	77.73	412.81
9	87.45	412.42
10	97.17	412.09
11	106.88	411.68
12	116.60	411.35
13	126.32	411.03
14	136.03	410.64
15	145.75	410.28
16	155.47	409.98
17	165.18	409.63
18	174.90	409.35
19	184.62	409.03
20	194.33	408.70
21	204.05	408.46
22	213.77	408.04
23	223.48	407.80
24	233.20	407.61
25	242.92	407.45
26	252.63	407.14
27	262.35	406.91
28	272.07	406.69
29	281.78	406.44
30	291.50	406.24
31	301.22	406.08
32	310.93	406.03
33	320.65	405.76
34	330.55	405.46
35	340.44	405.46
36	350.34	405.30
37	360.24	405.12
38	370.14	404.84
39	380.03	404.78
40	389.93	404.78
41	399.83	404.67
42	409.73	404.48
43	419.62	404.46
44	429.52	404.43
45	439.42	404.43
46	449.32	404.40

Order	Station [ft]	Elevation [ft]
47	459.21	404.30
48	469.11	404.40
49	479.01	404.28
50	488.91	404.38
51	498.80	404.42
52	508.70	404.53
53	518.60	404.58
54	528.50	404.66
55	538.39	404.75
56	548.29	404.83
57	558.19	405.09
58	568.09	405.40
59	577.98	405.52
60	587.88	405.66
61	597.78	405.84
62	607.68	406.05
63	617.57	406.33
64	627.47	406.44
65	637.37	406.70
66	647.27	406.90
67	657.16	407.17
68	667.06	407.24
69	676.96	407.58
70	686.66	407.86
71	696.36	408.15
72	706.06	408.28
73	715.76	408.49
74	725.46	408.88
75	735.16	409.22
76	744.86	409.46
77	754.57	409.74
78	764.27	410.18
79	773.97	410.45
80	783.67	410.64
81	793.37	410.91
82	803.07	411.41
83	812.77	411.67
84	822.47	411.97
85	832.17	412.25
86	841.87	412.53
87	851.57	412.76
88	861.27	413.02
89	870.98	413.36
90	880.68	413.71
91	890.38	414.08
92	900.08	414.27
93	909.78	414.49
94	919.48	414.81
95	929.18	415.16

Order	Station [ft]	Elevation [ft]
96	938.88	415.42
97	948.58	415.74
98	958.28	415.98
99	967.98	416.29

Comment:

Weir Cross Section: XS-015

Scenario: Site Only

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	449.32
1	9.93	449.21
2	19.86	448.80
3	29.79	448.47
4	39.72	448.27
5	49.65	448.14
6	59.59	447.96
7	69.52	447.56
8	79.45	447.18
9	89.38	446.92
10	99.31	446.44
11	109.24	446.32
12	119.17	446.22
13	129.10	445.85
14	139.03	445.48
15	148.96	445.22
16	158.89	445.08
17	168.83	444.91
18	178.76	444.56
19	188.69	444.27
20	198.62	443.90
21	208.55	443.78
22	218.48	443.38
23	228.41	443.04
24	238.34	442.80
25	248.27	442.52
26	258.20	442.19
27	268.13	441.79
28	278.06	441.46
29	288.00	441.20
30	297.93	440.89
31	307.86	440.54
32	317.79	440.26

Order	Station [ft]	Elevation [ft]
33	327.72	439.92
34	337.65	439.59
35	347.55	439.20
36	357.44	438.85
37	367.34	438.59
38	377.24	438.27
39	387.14	438.06
40	397.03	437.64
41	406.93	437.40
42	416.83	437.14
43	426.73	437.01
44	436.62	436.59
45	446.52	436.25
46	456.42	435.98
47	466.32	435.73
48	476.21	435.44
49	486.11	435.20
50	496.01	434.93
51	505.91	434.74
52	515.80	434.58
53	525.70	434.37
54	535.60	434.18
55	545.49	433.97
56	555.39	433.74
57	565.29	433.51
58	575.19	433.33
59	585.08	433.16
60	594.98	433.04
61	604.88	432.93
62	614.78	432.75
63	624.67	432.57
64	634.57	432.45
65	644.47	432.33
66	654.37	432.23
67	664.26	432.09
68	674.16	432.04
69	683.85	431.93
70	693.55	431.84
71	703.24	431.79
72	712.93	431.77
73	722.63	431.73
74	732.32	431.58
75	742.01	431.49
76	751.71	431.45
77	761.40	431.32
78	771.09	431.26
79	780.79	431.15
80	790.48	431.12
81	800.17	431.12

Order	Station [ft]	Elevation [ft]
82	809.87	431.11
83	819.56	431.03
84	829.26	431.00
85	838.95	431.04
86	848.64	431.10
87	858.34	431.15
88	868.03	431.16
89	877.72	431.19
90	887.42	431.24
91	897.11	431.32
92	906.80	431.38
93	916.50	431.46
94	926.19	431.56
95	936.18	431.73
96	946.17	431.83
97	956.16	431.98
98	966.15	432.13
99	976.14	432.27
100	986.13	432.41
101	996.12	432.51
102	1006.11	432.64
103	1016.10	432.80
104	1026.09	432.99
105	1036.08	433.17
106	1046.07	433.32
107	1056.06	433.47
108	1066.05	433.67
109	1076.04	433.88
110	1086.03	434.05
111	1096.02	434.29
112	1106.01	434.51
113	1115.97	434.74
114	1125.92	434.98
115	1135.88	435.19
116	1145.83	435.43
117	1155.79	435.72
118	1165.75	435.99
119	1175.70	436.24
120	1185.66	436.49
121	1195.62	436.74
122	1205.57	437.00
123	1215.53	437.35
124	1225.49	437.66
125	1235.44	437.85
126	1245.40	438.07
127	1255.36	438.34
128	1265.31	438.59
129	1275.27	438.91
130	1285.22	439.26

Order	Station [ft]	Elevation [ft]
131	1295.18	439.49
132	1305.14	439.80
133	1315.09	440.21
134	1325.05	440.50
135	1335.01	440.70
136	1344.96	440.95
137	1354.92	441.26
138	1364.88	441.57
139	1374.83	441.86
140	1384.79	442.15
141	1394.74	442.46
142	1404.70	442.71
143	1414.66	442.97
144	1424.61	443.28
145	1434.57	443.68
146	1444.53	443.95
147	1454.48	444.26

Comment:

Weir Cross Section: XS-017

Scenario: Site Only

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	496.72
1	9.78	495.04
2	19.57	493.89
3	29.35	493.42
4	39.13	493.03
5	48.92	492.78
6	58.70	492.71
7	68.48	492.84
8	76.46	492.29
9	84.45	491.82
10	92.43	491.54
11	101.82	490.56
12	111.21	489.90
13	120.60	489.65
14	130.00	489.83
15	139.39	489.75
16	148.78	489.83
17	158.17	489.44
18	167.56	489.65
19	176.95	489.83

Order	Station [ft]	Elevation [ft]
20	186.35	490.21
21	195.74	490.17
22	205.13	490.30
23	214.86	490.99
24	224.58	490.99
25	234.31	491.24
26	244.03	490.78
27	253.76	491.49
28	263.49	490.94
29	273.21	490.66
30	282.94	490.63
31	292.67	491.01
32	300.54	490.35
33	308.41	489.86
34	316.28	489.93
35	324.38	489.49
36	332.49	489.23
37	340.59	489.45
38	348.70	489.93
39	357.60	490.13
40	366.50	490.03
41	375.40	489.70
42	384.30	489.66
43	393.20	490.09
44	402.40	489.18
45	411.60	488.28
46	420.80	488.19
47	430.00	489.36
48	439.20	491.34

Comment:

Weir Cross Section: XS-018

Scenario: Site Only
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	514.58
1	9.44	514.30
2	18.87	514.16
3	28.31	514.76
4	37.75	514.63
5	47.18	514.73
6	56.62	514.33
7	66.06	514.01

Order	Station [ft]	Elevation [ft]
8	75.49	513.84
9	84.93	513.44
10	94.37	513.27
11	103.81	513.14
12	113.24	512.75
13	122.68	512.62
14	132.12	512.67
15	141.87	512.68
16	151.62	512.72
17	161.38	512.49
18	171.13	512.93
19	180.88	512.87
20	190.18	513.02
21	199.47	512.92
22	208.76	513.13
23	218.05	513.09
24	227.35	512.80
25	236.64	512.98
26	245.93	513.27
27	255.23	513.30
28	264.52	513.21
29	273.15	513.60
30	281.77	513.99
31	290.40	513.80
32	299.03	514.08
33	307.66	514.34
34	316.28	514.44
35	325.16	514.76
36	334.04	514.53
37	342.92	514.61
38	351.79	514.75
39	360.67	514.46
40	369.55	514.79
41	378.43	514.47
42	387.83	514.18
43	397.22	514.46
44	406.62	514.43
45	416.02	513.84
46	425.42	514.16
47	434.82	513.72
48	444.21	513.31
49	453.61	513.77
50	462.50	513.92
51	471.38	513.47
52	480.27	513.43
53	489.15	513.36
54	498.04	513.54
55	506.93	513.80
56	515.81	513.38

Order	Station [ft]	Elevation [ft]
57	524.70	513.11
58	533.74	513.05
59	542.78	513.06
60	551.81	513.02
61	560.85	513.15
62	569.89	513.41
63	578.93	513.35
64	587.97	513.46
65	596.86	513.72
66	605.76	513.94
67	614.66	514.10
68	623.55	514.48
69	632.45	514.67
70	641.35	514.79
71	650.24	514.98
72	659.14	514.91
73	668.04	515.31

Comment:

Weir Cross Section: XS-021

Scenario: Site Only

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	451.07
1	9.93	450.55
2	19.87	449.60
3	29.80	448.70
4	39.73	448.10
5	49.67	447.38
6	59.60	446.76
7	69.54	447.00
8	79.47	447.60
9	88.85	446.91
10	98.23	447.19
11	107.61	446.31
12	117.00	443.91
13	126.38	442.94
14	135.76	442.61
15	145.14	442.54
16	154.52	442.53
17	163.90	442.53
18	173.29	442.54
19	182.67	442.53

Order	Station [ft]	Elevation [ft]
20	192.05	442.53
21	201.43	442.55
22	210.81	442.42
23	220.19	442.34
24	229.71	442.98
25	239.22	442.98
26	248.74	442.53
27	258.25	442.98
28	267.77	443.84
29	277.28	444.92
30	286.80	445.81
31	296.31	447.03
32	305.83	448.05
33	315.62	448.45
34	325.41	448.72
35	335.20	448.66
36	345.00	448.60
37	354.79	448.73
38	364.58	448.65
39	374.07	448.67
40	383.56	448.82
41	393.05	448.40
42	402.54	446.97
43	412.03	446.73
44	421.52	445.76
45	431.01	446.32
46	440.50	444.98
47	449.54	445.13
48	458.57	445.96
49	467.60	444.74
50	476.63	444.57
51	485.66	445.17
52	494.69	446.59
53	503.72	446.65
54	512.76	445.68
55	521.79	446.14
56	530.82	445.28
57	540.47	446.07
58	550.12	445.73
59	559.77	445.56
60	569.42	446.07
61	579.07	445.69
62	588.72	446.70
63	598.38	446.88
64	608.03	446.70
65	617.68	446.95
66	627.33	446.72
67	636.98	447.49
68	646.64	447.86

Order	Station [ft]	Elevation [ft]
69	656.30	447.80
70	665.96	448.67
71	675.62	448.52
72	685.28	448.44
73	694.94	448.13
74	704.60	447.71
75	714.26	447.11
76	723.92	446.33
77	733.59	445.51
78	743.26	444.91
79	752.93	444.82
80	762.60	445.00
81	772.27	445.50
82	781.94	446.60
83	791.61	446.90
84	801.28	447.91
85	810.95	450.53
86	820.61	453.60

Comment:

Weir Cross Section: XS-024

Scenario: Site Only

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	478.26
1	9.69	477.75
2	19.39	477.06
3	29.08	476.14
4	38.77	475.61
5	48.47	474.92
6	58.16	474.18
7	67.85	473.38
8	77.54	472.46
9	87.24	471.46
10	96.93	470.61
11	106.62	469.69
12	116.32	468.32
13	126.01	467.40
14	135.70	466.98
15	145.40	465.72
16	154.96	464.65
17	164.52	463.47
18	174.08	462.25

Order	Station [ft]	Elevation [ft]
19	183.64	461.11
20	193.21	460.02
21	202.77	458.96
22	212.33	457.66
23	221.89	456.15
24	231.45	454.76
25	241.01	452.47
26	250.58	451.68
27	258.34	451.74
28	266.10	452.63
29	273.87	453.82
30	283.52	453.89
31	293.17	454.00
32	302.82	454.15
33	312.47	453.77
34	322.12	454.22
35	331.77	453.94
36	341.42	454.19
37	351.07	454.18
38	360.72	454.30
39	370.37	454.47
40	380.02	454.37
41	389.67	454.58
42	399.32	454.01
43	408.97	454.15
44	418.74	453.92
45	428.52	454.02
46	438.29	454.25
47	448.07	453.86
48	457.85	454.02
49	467.62	453.79
50	477.40	453.76
51	487.18	454.12
52	496.95	453.76
53	506.73	454.00
54	516.50	453.87
55	526.28	453.74
56	536.06	454.08
57	545.83	453.48
58	555.61	453.61
59	565.39	453.98
60	575.16	454.66
61	584.94	456.07
62	594.41	456.93
63	603.89	457.55
64	613.36	458.10
65	622.84	458.86
66	632.31	459.98
67	641.79	460.93

Order	Station [ft]	Elevation [ft]
68	651.26	461.61
69	660.74	462.73
70	670.21	463.49
71	679.69	464.32
72	689.16	465.28
73	698.64	466.39
74	708.21	467.23
75	717.79	467.87
76	727.37	468.86
77	736.94	469.79
78	746.52	470.26
79	756.09	470.97
80	765.67	471.79

Comment:

Weir Cross Section: XS-025

Scenario: Site Only

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	118.92	442.89
1	128.83	441.71
2	138.73	439.47
3	148.64	436.15
4	158.55	432.06
5	168.46	428.27
6	178.37	427.08
7	188.28	426.99
8	198.18	426.92
9	208.09	427.61
10	218.00	429.09
11	227.91	429.69
12	237.82	430.06
13	247.54	430.58
14	257.26	430.16
15	266.98	430.32
16	276.70	430.34
17	286.42	430.19
18	296.14	430.55
19	305.87	430.29
20	315.59	430.19
21	325.31	430.33
22	335.03	430.03
23	344.75	430.18

Order	Station [ft]	Elevation [ft]
24	354.47	430.04
25	364.19	429.86
26	373.91	429.98
27	383.64	429.77
28	393.36	429.73
29	403.08	429.76
30	412.80	429.77
31	422.52	429.96
32	432.24	429.83
33	441.96	429.89
34	451.69	430.09
35	461.41	430.03
36	471.13	430.13
37	480.85	429.99
38	490.57	430.07
39	500.32	430.10
40	510.08	430.01
41	519.83	429.99
42	529.58	429.87
43	539.33	429.92
44	549.09	429.68
45	558.84	429.82
46	568.59	429.88
47	578.35	430.31
48	588.10	430.98
49	597.85	431.82
50	607.60	432.62
51	617.36	433.41
52	626.71	434.31
53	636.07	435.06
54	645.42	435.60
55	654.78	436.18
56	664.14	437.01
57	673.49	437.04
58	682.85	437.31
59	692.20	437.99
60	701.56	438.82
61	710.92	439.60
62	720.27	440.48

Comment:

Channel Cross Section: XS-100

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	391.79	0.0350
1	9.83	391.34	0.0350
2	19.66	390.72	0.0350
3	29.49	390.05	0.0350
4	39.33	389.84	0.0350
5	49.16	389.44	0.0350
6	58.99	389.09	0.0350
7	68.82	388.84	0.0350
8	78.65	388.74	0.0350
9	88.48	388.49	0.0350
10	98.31	388.14	0.0350
11	108.15	387.52	0.0350
12	117.98	386.83	0.0350
13	127.81	386.37	0.0350
14	137.64	385.87	0.0350
15	147.47	385.44	0.0350
16	157.30	385.02	0.0350
17	167.13	384.27	0.0350
18	176.97	383.68	0.0350
19	186.80	383.02	0.0350
20	196.63	382.23	0.0350
21	206.46	381.35	0.0350
22	216.29	380.80	0.0350
23	226.12	379.71	0.0350
24	235.95	379.46	0.0350
25	245.79	378.94	0.0350
26	255.62	378.43	0.0350
27	265.45	377.62	0.0350
28	275.28	376.91	0.0350
29	285.11	376.34	0.0350
30	294.94	375.64	0.0350
31	304.77	374.93	0.0350
32	314.60	374.00	0.0350
33	324.44	373.01	0.0350
34	334.27	371.84	0.0350
35	344.10	370.91	0.0350
36	353.93	370.01	0.0350
37	363.76	369.11	0.0350
38	373.59	368.25	0.0350
39	383.42	367.53	0.0350
40	393.26	367.01	0.0350
41	403.09	366.43	0.0350
42	412.92	366.45	0.0350
43	422.75	366.23	0.0350
44	432.58	365.94	0.0350
45	442.19	365.53	0.0350
46	451.81	365.12	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
47	461.42	364.88	0.0350
48	471.03	364.47	0.0350
49	480.64	363.86	0.0350
50	490.26	363.11	0.0350
51	499.87	362.21	0.0350
52	509.48	361.36	0.0350
53	519.09	360.89	0.0350
54	528.71	360.46	0.0350
55	538.32	359.95	0.0350
56	547.93	359.52	0.0350
57	557.54	359.21	0.0350
58	567.16	359.00	0.0350
59	576.77	358.81	0.0350
60	586.38	358.56	0.0350
61	595.99	358.63	0.0350
62	605.61	358.03	0.0350
63	615.22	355.22	0.0350
64	624.83	355.31	0.0350
65	634.56	358.48	0.0350
66	644.28	358.94	0.0350
67	654.01	359.10	0.0350
68	663.74	359.01	0.0350
69	673.46	359.07	0.0350
70	683.19	359.06	0.0350
71	692.92	359.57	0.0350
72	702.64	361.05	0.0350
73	712.37	364.45	0.0350
74	722.09	368.32	0.0350
75	731.82	372.69	0.0350
76	741.55	376.97	0.0350
77	751.27	380.26	0.0350
78	761.00	382.95	0.0350
79	770.73	385.34	0.0350
80	780.45	387.35	0.0350
81	790.18	389.06	0.0350
82	799.90	390.42	0.0350
83	809.63	391.31	0.0350
84	819.36	392.01	0.0350
85	829.08	392.41	0.0350
86	838.81	392.72	0.0350
87	848.54	392.91	0.0350
88	858.26	393.16	0.0350
89	867.99	393.43	0.0350
90	877.71	393.51	0.0350
91	887.44	393.65	0.0350

Comment:

Channel Cross Section: XS-101

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	439.69	0.0350
1	9.98	439.01	0.0350
2	19.96	438.04	0.0350
3	29.94	437.06	0.0350
4	39.91	436.18	0.0350
5	49.89	435.24	0.0350
6	59.87	434.11	0.0350
7	69.85	432.97	0.0350
8	79.83	431.87	0.0350
9	89.81	430.79	0.0350
10	99.79	429.68	0.0350
11	109.76	428.56	0.0350
12	119.74	427.52	0.0350
13	129.72	426.37	0.0350
14	139.70	425.29	0.0350
15	149.68	424.33	0.0350
16	159.66	423.25	0.0350
17	169.64	422.13	0.0350
18	179.61	421.14	0.0350
19	189.59	420.04	0.0350
20	199.57	418.73	0.0350
21	209.55	417.81	0.0350
22	219.53	417.27	0.0350
23	229.51	416.79	0.0350
24	239.49	416.39	0.0350
25	249.46	416.09	0.0350
26	259.44	415.71	0.0350
27	269.42	415.31	0.0350
28	279.40	414.80	0.0350
29	289.38	414.34	0.0350
30	299.36	413.90	0.0350
31	309.33	413.20	0.0350
32	319.31	412.35	0.0350
33	329.29	411.55	0.0350
34	339.27	410.46	0.0350
35	349.25	409.22	0.0350
36	359.23	407.84	0.0350
37	369.21	406.64	0.0350
38	379.18	404.94	0.0350
39	389.16	403.00	0.0350
40	399.14	401.03	0.0350
41	409.12	399.36	0.0350
42	419.10	397.66	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
43	429.08	395.67	0.0350
44	439.06	393.98	0.0350
45	449.03	392.59	0.0350
46	459.01	391.37	0.0350
47	468.99	390.62	0.0350
48	478.97	389.63	0.0350
49	488.95	388.94	0.0350
50	498.93	388.28	0.0350
51	508.91	387.28	0.0350
52	518.88	385.80	0.0350
53	528.86	383.34	0.0350
54	538.84	380.34	0.0350
55	548.69	378.17	0.0350
56	558.54	375.27	0.0350
57	568.38	372.07	0.0350
58	578.23	369.41	0.0350
59	588.08	367.36	0.0350
60	597.92	365.95	0.0350
61	607.77	364.68	0.0350
62	617.62	363.93	0.0350
63	627.46	364.12	0.0350
64	637.31	364.04	0.0350
65	647.16	364.17	0.0350
66	657.01	364.35	0.0350
67	666.85	364.61	0.0350
68	676.70	364.61	0.0350
69	686.55	364.73	0.0350
70	696.39	364.87	0.0350
71	706.24	364.91	0.0350
72	716.09	364.98	0.0350
73	725.93	364.98	0.0350
74	735.78	365.21	0.0350
75	745.63	365.25	0.0350
76	755.48	365.53	0.0350
77	765.32	365.12	0.0350
78	775.17	363.82	0.0350
79	785.02	363.91	0.0350
80	794.86	364.80	0.0350
81	804.71	366.09	0.0350
82	814.56	368.23	0.0350
83	824.40	370.14	0.0350
84	834.25	371.35	0.0350
85	844.10	372.44	0.0350
86	853.95	372.86	0.0350
87	863.79	373.23	0.0350
88	873.64	373.91	0.0350
89	883.49	374.77	0.0350
90	893.33	373.91	0.0350
91	903.18	371.38	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
92	913.03	373.07	0.0350
93	922.87	375.67	0.0350
94	932.72	376.27	0.0350
95	942.57	376.76	0.0350
96	952.42	377.28	0.0350
97	962.26	377.75	0.0350
98	972.11	378.17	0.0350
99	982.00	378.52	0.0350
100	991.88	378.64	0.0350
101	1001.77	379.71	0.0350
102	1011.65	381.01	0.0350
103	1021.54	381.89	0.0350
104	1031.43	383.24	0.0350
105	1041.31	384.71	0.0350
106	1051.20	386.00	0.0350
107	1061.08	387.16	0.0350
108	1070.97	388.28	0.0350
109	1080.86	389.54	0.0350
110	1090.74	390.90	0.0350
111	1100.63	392.14	0.0350
112	1110.52	393.15	0.0350
113	1120.40	394.02	0.0350
114	1130.29	394.99	0.0350
115	1140.17	396.19	0.0350
116	1150.06	397.54	0.0350
117	1159.95	398.55	0.0350
118	1169.83	399.43	0.0350
119	1179.72	400.61	0.0350
120	1189.60	401.63	0.0350
121	1199.49	402.49	0.0350
122	1209.38	403.27	0.0350
123	1219.26	404.26	0.0350
124	1229.15	404.88	0.0350
125	1239.04	405.64	0.0350
126	1248.92	406.28	0.0350
127	1258.81	407.07	0.0350
128	1268.69	407.55	0.0350
129	1278.58	408.12	0.0350
130	1288.47	408.83	0.0350
131	1298.35	409.42	0.0350
132	1308.24	410.09	0.0350
133	1318.13	410.70	0.0350
134	1328.01	411.29	0.0350
135	1337.90	411.79	0.0350
136	1347.78	412.47	0.0350
137	1357.67	413.09	0.0350
138	1367.56	413.97	0.0350
139	1377.44	414.58	0.0350
140	1387.33	415.10	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
141	1397.21	415.71	0.0350
142	1407.10	416.36	0.0350
143	1416.99	416.83	0.0350
144	1426.87	417.17	0.0350
145	1436.76	417.62	0.0350
146	1446.65	418.41	0.0350
147	1456.53	418.87	0.0350
148	1466.42	419.38	0.0350
149	1476.30	420.14	0.0350
150	1486.19	420.87	0.0350
151	1496.08	421.68	0.0350
152	1505.96	422.26	0.0350
153	1515.85	422.92	0.0350
154	1525.73	423.76	0.0350
155	1535.62	424.29	0.0350
156	1545.51	424.73	0.0350
157	1555.39	425.09	0.0350
158	1565.28	425.58	0.0350
159	1575.17	426.21	0.0350
160	1585.05	426.77	0.0350
161	1594.94	427.14	0.0350
162	1604.82	427.64	0.0350
163	1614.71	428.10	0.0350
164	1624.60	428.42	0.0350
165	1634.48	428.97	0.0350
166	1644.37	429.20	0.0350
167	1654.26	429.49	0.0350
168	1664.14	429.73	0.0350
169	1674.03	429.74	0.0350

Comment:

Channel Cross Section: XS-102

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	398.32	0.0350
1	9.90	397.50	0.0350
2	19.79	396.32	0.0350
3	29.69	395.41	0.0350
4	39.59	394.29	0.0350
5	49.49	393.24	0.0350
6	59.38	391.89	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
7	69.28	390.80	0.0350
8	79.18	388.94	0.0350
9	89.08	387.52	0.0350
10	98.97	386.61	0.0350
11	108.87	386.07	0.0350
12	118.77	385.42	0.0350
13	127.87	386.36	0.0350
14	136.96	386.36	0.0350
15	146.06	386.42	0.0350
16	155.16	388.61	0.0350
17	164.26	391.56	0.0350
18	173.36	393.32	0.0350
19	182.45	395.47	0.0350
20	191.55	397.74	0.0350
21	200.65	399.45	0.0350
22	209.75	401.33	0.0350

Comment:

Channel Cross Section: XS-105

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	430.36	0.0350
1	9.52	429.96	0.0350
2	19.03	429.41	0.0350
3	28.55	429.03	0.0350
4	38.06	428.68	0.0350
5	47.58	428.00	0.0350
6	57.10	427.53	0.0350
7	66.61	427.21	0.0350
8	76.13	426.84	0.0350
9	85.64	426.29	0.0350
10	95.16	426.19	0.0350
11	104.68	425.82	0.0350
12	114.19	425.04	0.0350
13	123.71	424.78	0.0350
14	133.23	424.28	0.0350
15	142.74	423.51	0.0350
16	152.26	422.05	0.0350
17	161.77	420.64	0.0350
18	171.66	419.12	0.0350
19	181.55	417.14	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
20	191.44	415.18	0.0350
21	201.33	413.47	0.0350
22	211.21	411.77	0.0350
23	221.10	410.31	0.0350
24	230.99	410.18	0.0350
25	240.88	411.41	0.0350
26	250.76	413.30	0.0350
27	260.65	415.51	0.0350
28	270.54	417.42	0.0350
29	280.43	419.57	0.0350
30	290.32	421.67	0.0350
31	300.20	423.60	0.0350
32	309.18	425.48	0.0350
33	318.17	427.63	0.0350
34	327.15	429.59	0.0350
35	336.13	431.35	0.0350

Comment:

Channel Cross Section: XS-106

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	450.20	0.0350
1	9.94	449.51	0.0350
2	19.89	448.80	0.0350
3	29.83	448.07	0.0350
4	39.78	447.29	0.0350
5	49.72	446.28	0.0350
6	59.66	445.25	0.0350
7	69.61	444.50	0.0350
8	79.55	443.98	0.0350
9	89.49	443.10	0.0350
10	99.44	442.18	0.0350
11	109.38	441.45	0.0350
12	119.33	440.80	0.0350
13	129.27	439.98	0.0350
14	139.21	439.04	0.0350
15	149.16	438.51	0.0350
16	159.10	438.13	0.0350
17	169.05	437.43	0.0350
18	178.99	436.93	0.0350
19	188.93	436.45	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
20	198.88	435.96	0.0350
21	208.82	435.36	0.0350
22	218.77	434.77	0.0350
23	228.71	434.34	0.0350
24	238.65	433.73	0.0350
25	248.60	433.09	0.0350
26	258.54	432.45	0.0350
27	268.48	431.85	0.0350
28	278.43	431.40	0.0350
29	288.37	430.84	0.0350
30	298.32	430.23	0.0350
31	308.26	429.44	0.0350
32	318.20	428.73	0.0350
33	328.15	428.03	0.0350
34	338.09	427.10	0.0350
35	348.04	425.97	0.0350
36	357.98	424.82	0.0350
37	367.92	423.80	0.0350
38	377.87	422.66	0.0350
39	387.81	421.36	0.0350
40	397.76	420.11	0.0350
41	407.70	419.29	0.0350
42	417.64	418.20	0.0350
43	427.59	416.44	0.0350
44	437.53	415.04	0.0350
45	447.39	413.45	0.0350
46	457.24	412.08	0.0350
47	467.10	410.65	0.0350
48	476.95	409.13	0.0350
49	486.81	408.05	0.0350
50	496.66	407.02	0.0350
51	506.52	405.58	0.0350
52	516.37	403.59	0.0350
53	526.23	402.22	0.0350
54	536.08	401.29	0.0350
55	545.93	400.10	0.0350
56	555.79	398.84	0.0350
57	565.64	397.61	0.0350
58	575.50	396.43	0.0350
59	585.35	395.47	0.0350
60	595.21	394.91	0.0350
61	605.06	394.61	0.0350
62	614.92	394.38	0.0350
63	624.77	394.27	0.0350
64	634.63	393.91	0.0350
65	644.48	393.83	0.0350
66	654.34	393.84	0.0350
67	664.19	393.58	0.0350
68	674.05	393.71	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
69	683.90	394.50	0.0350
70	693.76	394.32	0.0350
71	703.61	393.92	0.0350
72	713.47	394.74	0.0350
73	723.32	395.69	0.0350
74	733.18	395.85	0.0350
75	743.03	396.22	0.0350
76	752.89	396.73	0.0350
77	762.74	397.36	0.0350
78	772.60	397.97	0.0350
79	782.45	398.71	0.0350
80	792.31	399.29	0.0350
81	802.16	400.17	0.0350
82	812.02	401.12	0.0350
83	821.87	401.96	0.0350
84	831.73	402.72	0.0350
85	841.58	403.91	0.0350
86	851.44	405.16	0.0350
87	861.29	406.23	0.0350
88	871.15	407.09	0.0350
89	881.11	408.08	0.0350
90	891.07	408.81	0.0350
91	901.03	409.49	0.0350
92	910.99	410.39	0.0350
93	920.95	411.07	0.0350
94	930.91	411.73	0.0350
95	940.87	412.45	0.0350
96	950.84	412.82	0.0350
97	960.80	413.35	0.0350
98	970.76	413.87	0.0350
99	980.72	414.41	0.0350
100	990.68	415.17	0.0350
101	1000.64	415.78	0.0350
102	1010.60	416.61	0.0350
103	1020.56	417.55	0.0350
104	1030.53	418.21	0.0350
105	1040.49	418.77	0.0350
106	1050.45	419.48	0.0350
107	1060.41	420.54	0.0350
108	1070.37	421.42	0.0350
109	1080.33	421.90	0.0350
110	1090.29	422.19	0.0350
111	1100.25	422.51	0.0350
112	1110.22	422.92	0.0350
113	1120.18	423.43	0.0350
114	1130.14	424.10	0.0350
115	1140.10	424.72	0.0350
116	1150.06	425.77	0.0350
117	1160.02	426.61	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
118	1169.98	427.59	0.0350
119	1179.94	428.84	0.0350
120	1189.90	429.67	0.0350
121	1199.87	430.39	0.0350
122	1209.83	431.10	0.0350
123	1219.79	431.65	0.0350
124	1229.75	432.40	0.0350
125	1239.71	433.24	0.0350
126	1249.67	433.80	0.0350
127	1259.63	434.40	0.0350
128	1269.59	435.16	0.0350
129	1279.56	435.91	0.0350
130	1289.52	436.91	0.0350
131	1299.48	437.61	0.0350
132	1309.44	438.36	0.0350
133	1319.40	439.28	0.0350
134	1329.36	440.41	0.0350
135	1339.32	441.44	0.0350
136	1349.28	442.31	0.0350
137	1359.25	443.21	0.0350
138	1369.21	443.80	0.0350
139	1379.17	445.03	0.0350
140	1389.13	445.43	0.0350
141	1399.09	446.65	0.0350
142	1409.05	447.86	0.0350
143	1419.01	449.26	0.0350

Comment:

Channel Cross Section: XS-111

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	87.74	436.23	0.0350
1	97.49	433.29	0.0350
2	107.23	428.40	0.0350
3	116.98	425.57	0.0350
4	126.73	424.68	0.0350
5	136.48	424.08	0.0350
6	146.23	423.41	0.0350
7	155.98	422.75	0.0350
8	165.73	421.91	0.0350
9	175.47	421.45	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
10	185.22	421.43	0.0350
11	194.97	420.67	0.0350
12	204.72	419.99	0.0350
13	214.47	419.45	0.0350
14	224.22	418.65	0.0350
15	233.96	417.96	0.0350
16	243.71	417.29	0.0350
17	253.46	416.55	0.0350
18	263.24	415.78	0.0350
19	273.02	415.29	0.0350
20	282.80	415.29	0.0350
21	292.57	414.77	0.0350
22	302.35	414.57	0.0350
23	312.13	414.42	0.0350
24	321.91	414.07	0.0350
25	331.68	413.53	0.0350
26	341.46	413.36	0.0350
27	351.24	413.03	0.0350
28	361.02	412.52	0.0350
29	370.80	412.24	0.0350
30	380.57	411.98	0.0350
31	390.35	411.48	0.0350
32	400.13	410.15	0.0350
33	409.91	409.70	0.0350
34	419.68	410.21	0.0350
35	429.46	411.64	0.0350
36	439.24	412.82	0.0350
37	449.02	414.39	0.0350
38	458.80	417.07	0.0350
39	468.57	420.28	0.0350
40	478.35	423.27	0.0350
41	488.13	425.68	0.0350
42	497.91	427.51	0.0350
43	507.69	428.79	0.0350
44	517.46	430.07	0.0350
45	527.24	431.48	0.0350
46	537.02	432.83	0.0350
47	546.80	434.09	0.0350
48	556.57	435.30	0.0350
49	566.35	436.47	0.0350
50	575.86	437.63	0.0350

Comment:

Channel Cross Section: XS-112

Scenario: Site Only

Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	442.97	0.0350
1	9.66	442.74	0.0350
2	19.32	442.10	0.0350
3	28.98	441.00	0.0350
4	38.64	439.69	0.0350
5	48.30	438.29	0.0350
6	57.96	436.89	0.0350
7	67.62	435.48	0.0350
8	77.28	434.07	0.0350
9	86.94	432.73	0.0350
10	96.60	431.66	0.0350
11	106.26	430.82	0.0350
12	115.91	430.92	0.0350
13	125.57	431.16	0.0350
14	135.23	431.40	0.0350
15	144.89	431.36	0.0350
16	154.55	428.19	0.0350
17	164.43	426.73	0.0350
18	174.31	426.15	0.0350
19	184.18	425.93	0.0350
20	194.06	425.57	0.0350
21	203.94	425.20	0.0350
22	213.81	424.85	0.0350
23	223.69	423.98	0.0350
24	233.57	423.02	0.0350
25	243.44	421.68	0.0350
26	253.32	419.84	0.0350
27	263.20	419.16	0.0350
28	273.07	418.62	0.0350
29	282.95	417.89	0.0350
30	292.83	418.52	0.0350
31	302.70	418.83	0.0350
32	312.58	419.07	0.0350
33	322.46	419.46	0.0350
34	332.33	419.44	0.0350
35	342.21	419.89	0.0350
36	352.09	420.25	0.0350
37	361.96	420.95	0.0350
38	371.84	422.22	0.0350
39	381.72	423.52	0.0350
40	391.59	424.82	0.0350
41	401.47	425.07	0.0350
42	411.21	425.76	0.0350
43	420.94	426.08	0.0350
44	430.68	426.62	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
45	440.42	427.44	0.0350
46	450.15	428.08	0.0350
47	459.89	428.62	0.0350
48	469.62	428.99	0.0350
49	479.36	429.29	0.0350
50	489.10	429.58	0.0350
51	498.83	429.83	0.0350
52	508.57	430.22	0.0350
53	518.30	430.67	0.0350
54	528.04	431.02	0.0350
55	537.78	431.36	0.0350
56	547.51	431.61	0.0350
57	557.25	432.04	0.0350
58	566.98	432.65	0.0350
59	576.72	433.14	0.0350
60	586.46	433.36	0.0350
61	596.19	433.61	0.0350
62	605.93	433.91	0.0350
63	615.67	434.65	0.0350
64	625.40	435.34	0.0350
65	635.14	435.78	0.0350
66	644.87	436.09	0.0350
67	654.61	436.24	0.0350
68	664.35	436.42	0.0350
69	674.08	436.56	0.0350
70	683.82	436.65	0.0350
71	693.77	436.89	0.0350
72	703.72	437.31	0.0350
73	713.66	437.81	0.0350
74	723.61	438.22	0.0350
75	733.56	438.58	0.0350
76	743.51	439.03	0.0350
77	753.46	439.57	0.0350
78	763.41	440.16	0.0350
79	773.36	440.55	0.0350
80	783.31	441.08	0.0350

Comment:

Channel Cross Section: XS-113

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	438.74	0.0350
1	9.54	438.30	0.0350
2	19.09	438.02	0.0350
3	28.63	437.87	0.0350
4	38.17	437.70	0.0350
5	47.72	437.48	0.0350
6	57.26	437.23	0.0350
7	66.80	437.12	0.0350
8	76.35	436.57	0.0350
9	85.89	435.71	0.0350
10	95.43	434.51	0.0350
11	104.97	433.52	0.0350
12	114.52	432.82	0.0350
13	124.06	432.35	0.0350
14	133.60	431.88	0.0350
15	143.15	431.32	0.0350
16	152.69	430.27	0.0350
17	162.23	428.99	0.0350
18	171.78	427.31	0.0350
19	181.32	425.05	0.0350
20	190.86	423.92	0.0350
21	200.41	425.62	0.0350
22	210.07	426.14	0.0350
23	219.73	426.41	0.0350
24	229.40	426.51	0.0350
25	239.06	427.10	0.0350
26	248.72	427.97	0.0350
27	258.39	429.00	0.0350
28	268.05	430.26	0.0350
29	277.72	431.75	0.0350
30	287.38	433.93	0.0350
31	297.04	436.16	0.0350
32	306.71	437.95	0.0350
33	316.37	439.57	0.0350
34	326.03	441.01	0.0350
35	335.70	442.52	0.0350
36	345.36	443.80	0.0350
37	355.02	444.60	0.0350
38	364.69	445.66	0.0350
39	374.35	446.87	0.0350
40	384.02	447.75	0.0350

Comment:

Channel Cross Section: XS-115

Scenario: Site Only

Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	475.82	0.0350
1	9.81	474.80	0.0350
2	19.63	473.66	0.0350
3	29.44	472.70	0.0350
4	39.26	471.72	0.0350
5	49.07	470.83	0.0350
6	58.89	470.08	0.0350
7	68.70	468.68	0.0350
8	78.51	467.43	0.0350
9	88.33	466.21	0.0350
10	98.14	465.02	0.0350
11	107.96	463.55	0.0350
12	117.77	462.23	0.0350
13	127.59	461.03	0.0350
14	137.40	459.75	0.0350
15	147.21	458.68	0.0350
16	157.03	457.48	0.0350
17	166.84	456.05	0.0350
18	176.66	454.04	0.0350
19	186.47	452.06	0.0350
20	196.29	450.92	0.0350
21	206.10	451.21	0.0350
22	215.91	450.93	0.0350
23	225.73	451.13	0.0350
24	235.54	451.19	0.0350
25	245.36	451.15	0.0350
26	255.17	451.37	0.0350
27	264.99	451.41	0.0350
28	274.80	452.03	0.0350
29	284.62	453.81	0.0350
30	294.43	455.23	0.0350
31	304.24	456.92	0.0350
32	314.06	458.64	0.0350
33	323.87	460.57	0.0350
34	333.69	462.22	0.0350
35	343.50	463.70	0.0350
36	353.32	464.93	0.0350
37	363.13	465.87	0.0350
38	372.94	467.07	0.0350
39	382.76	468.23	0.0350
40	392.57	469.59	0.0350
41	402.39	470.93	0.0350
42	412.20	471.91	0.0350

Comment:

Channel Cross Section: XS-116

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	490.43	0.0350
1	9.73	490.12	0.0350
2	19.46	489.72	0.0350
3	29.19	489.60	0.0350
4	38.92	489.11	0.0350
5	48.65	488.67	0.0350
6	58.38	488.32	0.0350
7	68.11	487.67	0.0350
8	77.85	487.31	0.0350
9	87.58	486.77	0.0350
10	97.31	486.26	0.0350
11	107.04	485.94	0.0350
12	116.77	485.25	0.0350
13	126.50	484.61	0.0350
14	136.23	483.99	0.0350
15	145.96	483.64	0.0350
16	155.69	482.89	0.0350
17	165.42	481.92	0.0350
18	175.15	481.20	0.0350
19	184.88	480.80	0.0350
20	194.61	480.18	0.0350
21	204.34	479.74	0.0350
22	214.07	479.02	0.0350
23	223.81	478.45	0.0350
24	233.54	477.97	0.0350
25	243.27	477.40	0.0350
26	253.00	476.89	0.0350
27	262.73	476.21	0.0350
28	272.46	475.84	0.0350
29	282.10	475.39	0.0350
30	291.74	474.84	0.0350
31	301.38	474.59	0.0350
32	311.02	474.42	0.0350
33	320.66	474.05	0.0350
34	330.30	473.86	0.0350
35	339.94	473.52	0.0350
36	349.59	473.41	0.0350
37	359.23	473.04	0.0350
38	368.87	472.87	0.0350
39	378.51	472.50	0.0350
40	388.15	472.65	0.0350
41	397.49	472.48	0.0350
42	406.82	472.27	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
43	416.16	471.60	0.0350
44	425.49	471.03	0.0350
45	434.83	471.29	0.0350
46	444.16	471.37	0.0350
47	453.50	471.32	0.0350
48	462.83	471.19	0.0350
49	472.17	470.89	0.0350
50	481.51	470.88	0.0350
51	490.84	471.06	0.0350
52	500.33	471.38	0.0350
53	509.81	471.79	0.0350
54	519.29	472.04	0.0350
55	528.78	472.27	0.0350
56	538.26	473.05	0.0350
57	547.74	473.22	0.0350
58	557.23	472.99	0.0350
59	566.71	473.76	0.0350
60	576.30	474.22	0.0350
61	585.89	473.87	0.0350
62	595.48	474.10	0.0350
63	605.07	473.98	0.0350
64	614.66	474.34	0.0350
65	624.25	474.49	0.0350
66	633.83	475.43	0.0350
67	643.42	476.11	0.0350
68	653.01	476.74	0.0350
69	662.60	477.27	0.0350
70	672.19	478.28	0.0350
71	681.78	478.25	0.0350
72	691.37	478.00	0.0350
73	700.96	478.75	0.0350
74	710.55	478.97	0.0350
75	720.14	480.29	0.0350
76	729.72	480.93	0.0350
77	739.31	481.71	0.0350
78	748.90	482.66	0.0350
79	758.73	483.00	0.0350
80	768.56	483.74	0.0350
81	778.39	483.65	0.0350
82	788.22	484.42	0.0350
83	798.05	484.43	0.0350
84	807.88	485.77	0.0350
85	817.71	485.83	0.0350
86	827.54	486.30	0.0350
87	837.37	487.04	0.0350
88	847.20	487.49	0.0350
89	857.03	487.52	0.0350
90	866.86	488.17	0.0350

Comment:

Channel Cross Section: XS-117

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	482.43	0.0350
1	9.42	481.55	0.0350
2	18.83	480.96	0.0350
3	28.25	480.33	0.0350
4	37.66	479.70	0.0350
5	47.08	478.84	0.0350
6	56.49	477.55	0.0350
7	65.91	476.14	0.0350
8	75.32	475.39	0.0350
9	84.74	474.46	0.0350
10	94.15	473.13	0.0350
11	103.57	471.99	0.0350
12	112.98	471.18	0.0350
13	122.40	470.80	0.0350
14	131.81	470.51	0.0350
15	141.23	470.43	0.0350
16	150.64	470.23	0.0350
17	160.54	470.35	0.0350
18	170.44	470.13	0.0350
19	180.34	470.07	0.0350
20	190.24	469.99	0.0350
21	200.14	469.67	0.0350
22	210.04	469.92	0.0350
23	219.94	470.41	0.0350
24	229.85	471.58	0.0350
25	239.75	473.05	0.0350
26	249.65	473.95	0.0350
27	259.55	474.80	0.0350
28	269.45	475.72	0.0350
29	279.35	476.59	0.0350
30	289.25	477.56	0.0350
31	299.15	478.54	0.0350
32	309.05	479.38	0.0350
33	318.95	480.30	0.0350
34	328.85	481.52	0.0350
35	338.75	482.26	0.0350
36	348.65	482.44	0.0350

Comment:

Channel Cross Section: XS-118

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	487.94	0.0350
1	9.39	487.37	0.0350
2	18.78	485.92	0.0350
3	28.18	484.34	0.0350
4	37.57	482.96	0.0350
5	46.96	481.56	0.0350
6	56.35	480.17	0.0350
7	65.74	479.21	0.0350
8	75.14	479.06	0.0350
9	84.53	478.55	0.0350
10	93.92	478.94	0.0350
11	103.31	480.22	0.0350
12	112.70	481.24	0.0350
13	121.86	482.20	0.0350
14	131.02	483.53	0.0350
15	140.18	485.00	0.0350
16	149.34	486.09	0.0350
17	158.50	486.96	0.0350
18	167.65	487.99	0.0350

Comment:

Channel Cross Section: XS-121

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	506.54	0.0350
1	9.73	506.42	0.0350
2	19.47	505.82	0.0350
3	29.20	505.20	0.0350
4	38.93	504.46	0.0350
5	48.67	503.21	0.0350
6	58.40	502.80	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
7	68.13	502.09	0.0350
8	77.87	502.65	0.0350
9	87.60	501.47	0.0350
10	97.33	499.53	0.0350
11	107.07	498.57	0.0350
12	116.80	497.72	0.0350
13	126.53	496.82	0.0350
14	136.27	497.11	0.0350
15	146.00	498.37	0.0350
16	155.21	499.18	0.0350
17	164.42	499.89	0.0350
18	173.63	500.91	0.0350
19	182.84	502.08	0.0350
20	192.05	503.92	0.0350
21	201.26	504.44	0.0350
22	210.47	504.39	0.0350
23	219.68	504.57	0.0350

Comment:

Channel Cross Section: XS-122

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	501.25	0.0350
1	9.30	500.59	0.0350
2	18.60	499.67	0.0350
3	27.90	498.59	0.0350
4	37.20	498.30	0.0350
5	46.50	497.17	0.0350
6	55.80	496.44	0.0350
7	65.11	495.42	0.0350
8	74.41	494.31	0.0350
9	83.71	493.54	0.0350
10	93.01	492.72	0.0350
11	102.31	492.11	0.0350
12	111.61	492.47	0.0350
13	120.91	493.44	0.0350
14	130.21	494.49	0.0350
15	139.49	495.91	0.0350
16	148.77	497.07	0.0350
17	158.05	497.56	0.0350
18	167.33	498.30	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
19	176.60	499.01	0.0350
20	185.88	499.71	0.0350
21	195.16	500.44	0.0350
22	204.44	501.04	0.0350
23	213.72	501.55	0.0350
24	223.00	502.20	0.0350

Comment:

Channel Cross Section: XS-123

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	432.24	0.0350
1	9.45	432.40	0.0350
2	18.90	432.15	0.0350
3	28.36	431.63	0.0350
4	37.81	430.83	0.0350
5	47.26	430.16	0.0350
6	56.71	428.94	0.0350
7	66.17	427.74	0.0350
8	75.62	426.45	0.0350
9	85.07	425.92	0.0350
10	94.52	425.79	0.0350
11	103.97	425.39	0.0350
12	113.43	424.81	0.0350
13	122.88	426.29	0.0350
14	132.33	428.37	0.0350
15	141.78	430.12	0.0350
16	151.23	431.07	0.0350
17	160.69	431.20	0.0350
18	170.14	430.82	0.0350

Comment:

Weir Cross Section: XS-124

Scenario: Site Only
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	444.58
1	9.46	444.36
2	18.91	443.90
3	28.37	443.51
4	37.83	442.92
5	47.28	442.35
6	56.74	441.84
7	66.20	441.35
8	75.65	440.72
9	85.11	440.18
10	94.57	439.79
11	104.02	439.42
12	113.48	439.21
13	123.42	439.06
14	133.37	439.07
15	143.31	439.03
16	153.26	438.98
17	163.20	439.06
18	173.14	439.01
19	183.09	439.01
20	193.03	439.05
21	202.98	439.05
22	212.92	439.20
23	222.69	439.28
24	232.46	439.19
25	242.23	439.42
26	252.00	439.24
27	261.77	439.39
28	271.53	439.49
29	280.82	439.56
30	290.10	439.63
31	299.39	439.71
32	308.67	439.87
33	317.96	440.10
34	327.24	440.34
35	336.53	440.48
36	345.81	440.61
37	355.10	440.72
38	364.38	440.81
39	373.16	440.94
40	381.94	441.09
41	390.72	441.25
42	399.50	441.36
43	408.28	441.58
44	417.06	441.84
45	425.84	442.07
46	434.83	442.79
47	443.82	443.35
48	452.80	443.94

Order	Station [ft]	Elevation [ft]
49	461.79	444.39
50	470.77	445.03

Comment:

Channel Cross Section: XS-125

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	478.38	0.0350
1	9.92	477.72	0.0350
2	19.85	476.95	0.0350
3	29.77	476.04	0.0350
4	39.69	475.09	0.0350
5	49.61	474.06	0.0350
6	59.54	472.66	0.0350
7	69.46	471.23	0.0350
8	79.38	469.76	0.0350
9	89.31	468.62	0.0350
10	99.23	467.98	0.0350
11	109.15	466.92	0.0350
12	119.07	466.22	0.0350
13	129.00	467.75	0.0350
14	138.92	468.45	0.0350
15	148.84	469.93	0.0350
16	158.76	471.19	0.0350
17	168.69	472.96	0.0350
18	178.61	474.71	0.0350
19	188.53	476.41	0.0350
20	198.46	478.20	0.0350
21	208.38	479.58	0.0350

Comment:

Channel Cross Section: XS-126

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	475.14	0.0350
1	9.85	474.66	0.0350
2	19.70	474.09	0.0350
3	29.54	473.43	0.0350
4	39.39	472.70	0.0350
5	49.24	471.70	0.0350
6	59.09	470.48	0.0350
7	68.94	469.58	0.0350
8	78.78	468.69	0.0350
9	88.63	467.69	0.0350
10	98.48	466.70	0.0350
11	108.33	466.17	0.0350
12	118.18	465.30	0.0350
13	128.02	463.85	0.0350
14	137.87	462.47	0.0350
15	147.72	461.59	0.0350
16	157.57	461.14	0.0350
17	167.42	460.72	0.0350
18	177.26	459.12	0.0350
19	187.11	457.97	0.0350
20	196.96	459.37	0.0350
21	206.81	459.81	0.0350
22	216.66	459.87	0.0350
23	226.50	460.90	0.0350
24	236.35	462.02	0.0350
25	246.20	463.37	0.0350
26	256.05	464.82	0.0350
27	265.90	466.16	0.0350
28	275.74	467.41	0.0350
29	285.59	468.79	0.0350
30	295.44	470.30	0.0350
31	305.29	472.04	0.0350
32	315.14	473.62	0.0350
33	324.98	475.16	0.0350
34	334.83	476.46	0.0350
35	344.68	477.65	0.0350
36	354.53	478.48	0.0350
37	364.38	479.20	0.0350
38	374.23	479.66	0.0350
39	384.07	479.89	0.0350

Comment:

Channel Cross Section: XS-1A

Scenario: Site Only

Lid: No

Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	501.93	0.0350
1	9.99	501.89	0.0350
2	19.98	501.86	0.0350
3	29.98	501.76	0.0350
4	39.97	501.64	0.0350
5	49.96	501.49	0.0350
6	59.95	501.33	0.0350
7	69.95	501.16	0.0350
8	79.94	500.97	0.0350
9	89.93	500.75	0.0350
10	99.92	500.50	0.0350
11	109.91	500.22	0.0350
12	119.91	499.93	0.0350
13	129.90	499.69	0.0350
14	139.89	499.49	0.0350
15	149.88	498.98	0.0350
16	159.88	498.31	0.0350
17	169.87	497.78	0.0350
18	179.86	497.15	0.0350
19	189.85	496.36	0.0350
20	199.85	495.54	0.0350
21	209.84	494.40	0.0350
22	219.83	492.86	0.0350
23	229.82	491.53	0.0350
24	239.81	490.32	0.0350
25	249.81	489.11	0.0350
26	259.80	488.03	0.0350
27	269.79	487.35	0.0350
28	279.78	486.46	0.0350
29	289.78	485.46	0.0350
30	299.77	484.66	0.0350
31	309.76	484.07	0.0350
32	319.75	483.57	0.0350
33	329.74	483.16	0.0350
34	339.74	482.56	0.0350
35	349.73	481.94	0.0350
36	359.72	481.29	0.0350
37	369.71	480.37	0.0350
38	379.71	479.21	0.0350
39	389.70	478.50	0.0350
40	399.69	479.78	0.0350
41	409.68	481.10	0.0350
42	419.67	481.97	0.0350
43	429.67	482.73	0.0350
44	439.66	483.74	0.0350
45	449.65	484.92	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
46	459.64	486.17	0.0350
47	469.64	487.42	0.0350
48	479.63	488.68	0.0350
49	489.62	489.91	0.0350
50	499.61	491.01	0.0350
51	509.61	491.99	0.0350
52	519.60	492.90	0.0350
53	529.59	493.94	0.0350
54	539.58	494.97	0.0350
55	549.57	495.13	0.0350
56	559.57	495.53	0.0350
57	569.56	495.99	0.0350
58	579.55	496.51	0.0350
59	589.54	496.91	0.0350
60	599.54	497.29	0.0350
61	609.53	497.67	0.0350
62	619.52	497.93	0.0350
63	629.51	498.18	0.0350
64	639.50	498.39	0.0350
65	649.50	498.58	0.0350
66	659.49	498.71	0.0350
67	669.48	498.87	0.0350
68	679.47	499.03	0.0350
69	689.47	499.18	0.0350

Comment:

Channel Cross Section: XS-201

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	440.06	0.0350
1	9.87	439.11	0.0350
2	19.74	438.32	0.0350
3	29.60	437.34	0.0350
4	39.47	436.38	0.0350
5	49.34	435.22	0.0350
6	59.21	434.09	0.0350
7	69.08	433.06	0.0350
8	78.95	431.82	0.0350
9	88.81	430.71	0.0350
10	98.68	429.26	0.0350
11	108.55	428.39	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
12	118.42	427.31	0.0350
13	128.29	426.41	0.0350
14	138.16	425.53	0.0350
15	148.02	424.17	0.0350
16	157.89	422.98	0.0350
17	167.76	421.91	0.0350
18	177.63	420.65	0.0350
19	187.50	419.61	0.0350
20	197.36	418.32	0.0350
21	207.23	416.74	0.0350
22	217.10	415.30	0.0350
23	226.97	413.28	0.0350
24	236.84	411.52	0.0350
25	246.71	410.77	0.0350
26	256.57	409.40	0.0350
27	266.44	407.95	0.0350
28	276.31	407.03	0.0350
29	286.18	405.61	0.0350
30	296.05	403.81	0.0350
31	305.92	402.71	0.0350
32	315.78	401.98	0.0350
33	325.65	401.39	0.0350
34	335.52	400.73	0.0350
35	345.39	400.19	0.0350
36	355.26	399.66	0.0350
37	365.13	399.04	0.0350
38	375.01	398.48	0.0350
39	384.88	398.84	0.0350
40	394.75	398.42	0.0350
41	404.63	398.43	0.0350
42	414.50	397.89	0.0350
43	424.38	397.52	0.0350
44	434.25	397.02	0.0350
45	444.13	396.44	0.0350
46	454.00	395.70	0.0350
47	463.88	394.57	0.0350
48	473.75	394.01	0.0350
49	483.63	393.39	0.0350
50	493.50	392.45	0.0350
51	503.38	391.69	0.0350
52	513.25	391.06	0.0350
53	523.12	390.50	0.0350
54	533.00	390.37	0.0350
55	542.87	389.97	0.0350
56	552.75	389.57	0.0350
57	562.62	389.37	0.0350
58	572.50	388.94	0.0350
59	582.37	388.90	0.0350
60	592.25	388.77	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
61	602.12	388.86	0.0350
62	612.00	388.43	0.0350
63	621.87	387.86	0.0350
64	631.74	387.09	0.0350
65	641.62	386.43	0.0350
66	651.49	386.37	0.0350
67	661.37	385.98	0.0350
68	671.24	385.36	0.0350
69	681.12	384.73	0.0350
70	690.99	384.44	0.0350
71	700.87	384.47	0.0350
72	710.74	384.56	0.0350
73	720.62	384.41	0.0350
74	730.49	384.15	0.0350
75	740.37	384.05	0.0350
76	750.24	383.92	0.0350
77	760.11	384.17	0.0350
78	769.99	383.78	0.0350
79	779.86	383.61	0.0350
80	789.69	383.44	0.0350
81	799.51	383.41	0.0350
82	809.33	383.63	0.0350
83	819.16	383.76	0.0350
84	828.98	383.71	0.0350
85	838.80	383.88	0.0350
86	848.62	384.06	0.0350
87	858.45	384.41	0.0350
88	868.27	384.19	0.0350
89	878.09	383.92	0.0350
90	887.92	383.81	0.0350
91	897.74	380.28	0.0350
92	907.56	383.54	0.0350
93	917.39	386.73	0.0350
94	927.21	389.88	0.0350
95	937.03	393.70	0.0350
96	946.86	397.70	0.0350
97	956.68	401.27	0.0350
98	966.50	404.38	0.0350
99	976.32	407.44	0.0350
100	986.15	410.00	0.0350
101	995.97	412.22	0.0350
102	1005.79	414.38	0.0350
103	1015.62	416.23	0.0350
104	1025.44	417.86	0.0350
105	1035.26	419.46	0.0350
106	1045.09	420.92	0.0350
107	1054.91	422.36	0.0350
108	1064.73	423.71	0.0350
109	1074.55	424.97	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
110	1084.38	426.06	0.0350
111	1094.20	426.93	0.0350
112	1104.02	427.83	0.0350
113	1113.85	428.56	0.0350
114	1123.44	429.42	0.0350
115	1133.02	430.42	0.0350
116	1142.61	431.45	0.0350
117	1152.20	432.47	0.0350
118	1161.79	433.09	0.0350
119	1171.38	433.95	0.0350
120	1180.96	434.91	0.0350
121	1190.55	435.72	0.0350
122	1200.14	436.84	0.0350

Comment:

Channel Cross Section: XS-202

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.29	0.0350
1	9.88	432.14	0.0350
2	19.77	430.88	0.0350
3	29.65	429.65	0.0350
4	39.53	428.73	0.0350
5	49.41	427.69	0.0350
6	59.30	426.53	0.0350
7	69.18	425.29	0.0350
8	79.06	424.43	0.0350
9	88.94	423.04	0.0350
10	98.83	421.80	0.0350
11	108.71	420.78	0.0350
12	118.59	419.55	0.0350
13	128.47	417.92	0.0350
14	138.36	416.02	0.0350
15	148.24	414.24	0.0350
16	158.12	412.66	0.0350
17	168.00	410.89	0.0350
18	177.89	409.16	0.0350
19	187.66	407.74	0.0350
20	197.43	406.58	0.0350
21	207.20	405.65	0.0350
22	216.97	404.73	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
23	226.74	404.11	0.0350
24	236.51	403.05	0.0350
25	246.28	402.18	0.0350
26	256.05	401.65	0.0350
27	265.83	400.56	0.0350
28	275.60	400.80	0.0350
29	285.37	401.28	0.0350
30	295.14	402.04	0.0350
31	304.91	402.52	0.0350
32	314.68	403.03	0.0350
33	324.45	403.70	0.0350
34	334.22	406.08	0.0350
35	343.99	408.76	0.0350
36	353.76	410.93	0.0350
37	363.54	413.01	0.0350
38	373.31	415.04	0.0350
39	383.08	416.88	0.0350
40	392.85	418.06	0.0350
41	402.62	419.21	0.0350
42	412.39	420.21	0.0350
43	421.60	421.16	0.0350
44	430.81	422.34	0.0350
45	440.02	423.08	0.0350
46	449.23	423.59	0.0350
47	458.44	424.20	0.0350
48	467.65	424.77	0.0350
49	476.86	425.25	0.0350
50	486.07	425.39	0.0350
51	495.28	425.89	0.0350

Comment:

Channel Cross Section: XS-203

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.29	0.0350
1	9.88	432.14	0.0350
2	19.77	430.88	0.0350
3	29.65	429.65	0.0350
4	39.53	428.73	0.0350
5	49.41	427.69	0.0350
6	59.30	426.53	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
7	69.18	425.29	0.0350
8	79.06	424.43	0.0350
9	88.94	423.04	0.0350
10	98.83	421.80	0.0350
11	108.71	420.78	0.0350
12	118.59	419.55	0.0350
13	128.47	417.92	0.0350
14	138.36	416.02	0.0350
15	148.24	414.24	0.0350
16	158.12	412.66	0.0350
17	168.00	410.89	0.0350
18	177.89	409.16	0.0350
19	187.66	407.74	0.0350
20	197.43	406.58	0.0350
21	207.20	405.65	0.0350
22	216.97	404.73	0.0350
23	226.74	404.11	0.0350
24	236.51	403.05	0.0350
25	246.28	402.18	0.0350
26	256.05	401.65	0.0350
27	265.83	400.56	0.0350
28	275.60	400.80	0.0350
29	285.37	401.28	0.0350
30	295.14	402.04	0.0350
31	304.91	402.52	0.0350
32	314.68	403.03	0.0350
33	324.45	403.70	0.0350
34	334.22	406.08	0.0350
35	343.99	408.76	0.0350
36	353.76	410.93	0.0350
37	363.54	413.01	0.0350
38	373.31	415.04	0.0350
39	383.08	416.88	0.0350
40	392.85	418.06	0.0350
41	402.62	419.21	0.0350
42	412.39	420.21	0.0350
43	421.60	421.16	0.0350
44	430.81	422.34	0.0350
45	440.02	423.08	0.0350
46	449.23	423.59	0.0350
47	458.44	424.20	0.0350
48	467.65	424.77	0.0350
49	476.86	425.25	0.0350
50	486.07	425.39	0.0350
51	495.28	425.89	0.0350

Comment:

Channel Cross Section: XS-204

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	447.26	0.0350
1	9.98	446.64	0.0350
2	19.95	446.04	0.0350
3	29.93	445.42	0.0350
4	39.90	444.81	0.0350
5	49.88	444.29	0.0350
6	59.86	443.94	0.0350
7	69.83	443.29	0.0350
8	79.81	442.75	0.0350
9	89.79	442.15	0.0350
10	99.76	441.32	0.0350
11	109.74	440.90	0.0350
12	119.71	440.66	0.0350
13	129.69	440.26	0.0350
14	139.67	439.97	0.0350
15	149.64	439.63	0.0350
16	159.62	439.36	0.0350
17	169.60	439.16	0.0350
18	179.57	439.12	0.0350
19	189.55	439.20	0.0350
20	199.52	439.24	0.0350
21	209.50	438.85	0.0350
22	219.48	438.39	0.0350
23	229.45	437.82	0.0350
24	239.43	436.92	0.0350
25	249.41	435.82	0.0350
26	259.38	435.26	0.0350
27	269.36	434.84	0.0350
28	279.33	434.84	0.0350
29	289.31	434.74	0.0350
30	299.29	434.30	0.0350
31	309.26	433.80	0.0350
32	319.24	433.14	0.0350
33	329.22	432.83	0.0350
34	339.19	432.40	0.0350
35	349.17	431.68	0.0350
36	359.14	430.73	0.0350
37	369.12	430.56	0.0350
38	379.10	430.05	0.0350
39	389.07	429.72	0.0350
40	399.05	429.10	0.0350
41	409.03	428.93	0.0350
42	419.00	428.25	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
43	428.98	427.72	0.0350
44	438.95	427.22	0.0350
45	448.93	426.73	0.0350
46	458.91	426.04	0.0350
47	468.88	425.37	0.0350
48	478.86	424.80	0.0350
49	488.84	423.87	0.0350
50	498.81	423.22	0.0350
51	508.79	422.69	0.0350
52	518.76	422.18	0.0350
53	528.74	421.78	0.0350
54	538.72	421.29	0.0350
55	548.69	420.56	0.0350
56	558.66	419.82	0.0350
57	568.63	419.28	0.0350
58	578.60	418.82	0.0350
59	588.57	418.37	0.0350
60	598.53	418.20	0.0350
61	608.50	417.71	0.0350
62	618.47	417.46	0.0350
63	628.44	417.60	0.0350
64	638.41	416.94	0.0350
65	648.38	416.01	0.0350
66	658.35	414.90	0.0350
67	668.32	412.58	0.0350
68	678.29	410.82	0.0350
69	688.26	409.63	0.0350
70	698.23	408.54	0.0350
71	708.20	408.00	0.0350
72	718.17	407.52	0.0350
73	728.14	406.79	0.0350
74	738.11	406.17	0.0350
75	748.08	405.52	0.0350
76	758.05	405.32	0.0350
77	768.02	405.00	0.0350
78	777.99	404.55	0.0350
79	787.96	404.40	0.0350
80	797.93	404.35	0.0350
81	807.90	403.76	0.0350
82	817.87	403.49	0.0350
83	827.84	405.04	0.0350
84	837.81	405.63	0.0350
85	847.78	406.16	0.0350
86	857.75	407.54	0.0350
87	867.72	409.53	0.0350
88	877.69	412.33	0.0350
89	887.66	415.17	0.0350
90	897.63	418.94	0.0350
91	907.60	423.13	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
92	917.57	426.75	0.0350
93	927.54	429.61	0.0350
94	937.51	432.10	0.0350
95	947.47	433.97	0.0350
96	957.44	434.99	0.0350
97	967.41	436.25	0.0350
98	977.38	436.90	0.0350
99	987.35	437.67	0.0350
100	997.32	437.75	0.0350
101	1007.18	437.99	0.0350
102	1017.03	438.19	0.0350
103	1026.89	438.43	0.0350
104	1036.74	438.99	0.0350
105	1046.60	439.94	0.0350
106	1056.45	440.60	0.0350
107	1066.30	441.44	0.0350
108	1076.16	442.03	0.0350
109	1086.01	442.57	0.0350
110	1095.87	443.34	0.0350
111	1105.72	444.20	0.0350
112	1115.58	445.02	0.0350
113	1125.43	445.77	0.0350

Comment:

Channel Cross Section: XS-205

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	444.07	0.0350
1	9.90	443.17	0.0350
2	19.81	442.40	0.0350
3	29.71	441.27	0.0350
4	39.61	440.07	0.0350
5	49.51	439.01	0.0350
6	59.42	438.00	0.0350
7	69.32	436.85	0.0350
8	79.22	435.43	0.0350
9	89.12	434.34	0.0350
10	99.03	433.44	0.0350
11	108.93	432.33	0.0350
12	118.83	431.05	0.0350
13	128.73	429.55	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
14	138.64	428.28	0.0350
15	148.54	426.42	0.0350
16	158.44	424.49	0.0350
17	168.34	422.82	0.0350
18	178.25	421.34	0.0350
19	188.15	419.48	0.0350
20	197.78	417.73	0.0350
21	207.41	416.13	0.0350
22	217.03	414.52	0.0350
23	226.66	412.92	0.0350
24	236.29	411.59	0.0350
25	245.92	410.77	0.0350
26	255.55	410.26	0.0350
27	265.18	409.85	0.0350
28	274.80	409.74	0.0350
29	284.43	409.89	0.0350
30	294.06	408.31	0.0350
31	303.69	408.63	0.0350
32	313.32	411.26	0.0350
33	322.94	411.82	0.0350
34	332.57	413.03	0.0350
35	342.20	414.86	0.0350
36	351.83	417.46	0.0350
37	361.46	419.96	0.0350
38	371.09	422.16	0.0350
39	380.73	424.24	0.0350
40	390.36	425.47	0.0350
41	399.99	426.24	0.0350
42	409.63	427.37	0.0350
43	419.26	429.59	0.0350
44	428.90	430.27	0.0350
45	438.53	431.71	0.0350
46	448.16	432.53	0.0350
47	457.80	433.13	0.0350
48	467.43	434.03	0.0350
49	477.07	434.90	0.0350
50	486.70	435.35	0.0350
51	496.33	436.01	0.0350
52	505.97	436.78	0.0350
53	515.60	437.41	0.0350
54	525.24	438.33	0.0350
55	534.87	439.06	0.0350
56	544.50	439.78	0.0350
57	554.14	440.44	0.0350
58	563.77	440.64	0.0350
59	573.41	440.81	0.0350
60	583.04	441.13	0.0350
61	592.80	441.47	0.0350
62	602.56	441.80	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
63	612.32	442.10	0.0350
64	622.09	442.48	0.0350
65	631.85	442.65	0.0350
66	641.61	442.88	0.0350
67	651.37	443.10	0.0350
68	661.13	443.40	0.0350
69	670.89	444.24	0.0350
70	680.65	444.72	0.0350
71	690.41	445.07	0.0350

Comment:

Channel Cross Section: XS-206

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	447.02	0.0350
1	9.88	446.65	0.0350
2	19.77	446.19	0.0350
3	29.65	445.64	0.0350
4	39.53	445.28	0.0350
5	49.42	444.97	0.0350
6	59.30	444.63	0.0350
7	69.19	444.58	0.0350
8	79.07	444.10	0.0350
9	88.95	443.37	0.0350
10	98.84	442.86	0.0350
11	108.72	442.21	0.0350
12	118.60	441.89	0.0350
13	128.49	441.74	0.0350
14	138.37	441.23	0.0350
15	148.26	441.42	0.0350
16	158.14	440.90	0.0350
17	168.02	440.50	0.0350
18	177.91	440.32	0.0350
19	187.79	439.62	0.0350
20	197.67	438.96	0.0350
21	207.56	438.40	0.0350
22	217.44	438.04	0.0350
23	227.33	437.23	0.0350
24	237.21	436.56	0.0350
25	247.09	435.91	0.0350
26	256.98	435.44	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
27	266.86	434.80	0.0350
28	276.74	434.02	0.0350
29	286.63	432.96	0.0350
30	296.51	431.79	0.0350
31	306.40	430.99	0.0350
32	316.28	429.75	0.0350
33	326.16	428.48	0.0350
34	336.05	427.50	0.0350
35	345.93	426.68	0.0350
36	355.81	425.87	0.0350
37	365.70	425.15	0.0350
38	375.58	424.58	0.0350
39	385.46	423.88	0.0350
40	395.35	423.25	0.0350
41	405.23	422.37	0.0350
42	415.12	421.68	0.0350
43	425.00	420.97	0.0350
44	434.88	420.42	0.0350
45	444.77	420.02	0.0350
46	454.65	419.24	0.0350
47	464.54	418.61	0.0350
48	474.43	418.25	0.0350
49	484.31	418.01	0.0350
50	494.20	417.85	0.0350
51	504.09	416.66	0.0350
52	513.97	415.13	0.0350
53	523.86	413.87	0.0350
54	533.75	413.11	0.0350
55	543.63	412.25	0.0350
56	553.52	411.44	0.0350
57	563.41	410.87	0.0350
58	573.29	410.21	0.0350
59	583.18	409.90	0.0350
60	593.06	409.79	0.0350
61	602.95	409.84	0.0350
62	612.84	409.68	0.0350
63	622.72	409.71	0.0350
64	632.61	409.94	0.0350
65	642.50	409.94	0.0350
66	652.38	410.05	0.0350
67	662.27	409.89	0.0350
68	672.16	408.62	0.0350
69	682.04	410.26	0.0350
70	691.93	412.07	0.0350
71	701.82	413.37	0.0350
72	711.70	415.19	0.0350
73	721.59	417.46	0.0350
74	731.48	419.98	0.0350
75	741.36	422.53	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
76	751.25	425.06	0.0350
77	761.09	427.70	0.0350
78	770.94	430.26	0.0350
79	780.79	432.41	0.0350
80	790.63	434.56	0.0350
81	800.48	436.01	0.0350
82	810.32	437.84	0.0350
83	820.17	439.13	0.0350
84	830.01	439.99	0.0350
85	839.86	441.05	0.0350
86	849.70	442.24	0.0350
87	859.55	443.05	0.0350
88	869.40	443.84	0.0350
89	879.24	444.45	0.0350
90	889.09	444.64	0.0350
91	898.93	444.87	0.0350
92	908.78	445.18	0.0350
93	918.62	445.63	0.0350
94	928.47	446.21	0.0350
95	938.31	446.66	0.0350
96	948.16	446.95	0.0350
97	958.01	447.46	0.0350

Comment:

Channel Cross Section: XS-207

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	436.19	0.0350
1	9.72	435.96	0.0350
2	19.44	435.54	0.0350
3	29.16	434.85	0.0350
4	38.88	434.98	0.0350
5	48.60	434.73	0.0350
6	58.32	434.39	0.0350
7	68.04	434.11	0.0350
8	77.76	433.98	0.0350
9	87.48	433.93	0.0350
10	97.25	433.83	0.0350
11	107.01	433.77	0.0350
12	116.78	433.68	0.0350
13	126.55	433.51	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
14	136.31	433.38	0.0350
15	146.08	433.27	0.0350
16	155.85	433.12	0.0350
17	165.61	432.97	0.0350
18	175.38	432.78	0.0350
19	185.15	432.46	0.0350
20	194.91	432.19	0.0350
21	204.68	432.23	0.0350
22	214.45	432.04	0.0350
23	224.21	432.02	0.0350
24	233.98	431.91	0.0350
25	243.75	431.83	0.0350
26	253.58	431.51	0.0350
27	263.42	431.15	0.0350
28	273.26	430.60	0.0350
29	283.09	429.92	0.0350
30	292.93	429.09	0.0350
31	302.77	428.40	0.0350
32	312.60	427.70	0.0350
33	322.44	426.96	0.0350
34	332.28	425.73	0.0350
35	342.11	424.25	0.0350
36	351.95	423.44	0.0350
37	361.79	422.79	0.0350
38	371.63	422.52	0.0350
39	381.46	422.16	0.0350
40	391.30	421.40	0.0350
41	401.14	420.61	0.0350
42	410.97	420.09	0.0350
43	420.81	419.80	0.0350
44	430.65	419.72	0.0350
45	440.48	419.62	0.0350
46	450.32	419.26	0.0350
47	460.15	418.87	0.0350
48	469.98	418.65	0.0350
49	479.81	419.04	0.0350
50	489.64	418.02	0.0350
51	499.47	417.35	0.0350
52	509.31	418.85	0.0350
53	519.14	420.83	0.0350
54	528.97	423.84	0.0350
55	538.80	427.93	0.0350
56	548.63	432.22	0.0350
57	558.46	436.03	0.0350
58	568.29	438.85	0.0350
59	578.12	441.01	0.0350
60	587.95	442.82	0.0350
61	597.78	444.07	0.0350
62	607.61	445.02	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
63	617.45	445.70	0.0350
64	627.28	445.71	0.0350
65	636.06	446.05	0.0350
66	644.85	446.24	0.0350
67	653.64	446.28	0.0350
68	662.43	446.53	0.0350
69	671.22	446.92	0.0350

Comment:

Channel Cross Section: XS-208

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	458.76	0.0350
1	9.38	458.51	0.0350
2	18.76	457.99	0.0350
3	28.14	456.57	0.0350
4	37.52	455.36	0.0350
5	46.90	453.69	0.0350
6	56.28	451.34	0.0350
7	65.66	449.70	0.0350
8	75.04	448.46	0.0350
9	84.42	447.12	0.0350
10	94.29	445.54	0.0350
11	104.17	446.05	0.0350
12	114.04	448.52	0.0350
13	123.92	450.27	0.0350
14	133.80	450.66	0.0350
15	143.67	451.14	0.0350
16	153.55	451.45	0.0350
17	163.42	451.89	0.0350
18	173.30	452.48	0.0350
19	182.45	453.31	0.0350
20	191.60	454.51	0.0350
21	200.75	456.09	0.0350
22	209.90	457.36	0.0350
23	219.05	458.08	0.0350
24	228.20	459.03	0.0350
25	237.35	459.68	0.0350

Comment:

Channel Cross Section: XS-209

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	459.41	0.0350
1	8.89	458.11	0.0350
2	17.78	456.14	0.0350
3	26.68	454.06	0.0350
4	35.57	452.62	0.0350
5	44.46	451.82	0.0350
6	53.35	450.81	0.0350
7	62.25	450.59	0.0350
8	71.14	450.40	0.0350
9	80.03	450.31	0.0350
10	89.16	450.62	0.0350
11	98.29	451.13	0.0350
12	107.42	452.07	0.0350
13	116.55	453.63	0.0350
14	125.68	455.24	0.0350
15	134.81	456.64	0.0350
16	143.94	458.43	0.0350

Comment:

Channel Cross Section: XS-210

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	454.13	0.0350
1	9.70	454.11	0.0350
2	19.39	454.37	0.0350
3	29.09	453.84	0.0350
4	38.78	449.63	0.0350
5	48.48	447.50	0.0350
6	58.18	446.84	0.0350
7	67.87	446.79	0.0350
8	77.57	446.43	0.0350
9	87.26	446.16	0.0350
10	96.96	446.46	0.0350
11	106.66	446.37	0.0350
12	116.22	446.32	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
13	125.78	446.14	0.0350
14	135.35	446.23	0.0350
15	144.91	446.74	0.0350
16	154.47	447.78	0.0350
17	164.04	449.27	0.0350
18	173.60	451.47	0.0350
19	183.16	454.54	0.0350
20	192.73	458.03	0.0350
21	202.29	461.50	0.0350

Comment:

Channel Cross Section: XS-215

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	483.69	0.0350
1	9.44	482.74	0.0350
2	18.88	481.97	0.0350
3	28.33	481.24	0.0350
4	37.77	480.43	0.0350
5	47.21	479.17	0.0350
6	56.65	477.50	0.0350
7	66.09	476.10	0.0350
8	75.54	475.30	0.0350
9	84.98	474.42	0.0350
10	94.42	473.84	0.0350
11	103.86	473.84	0.0350
12	113.30	473.39	0.0350
13	122.75	472.91	0.0350
14	132.19	472.26	0.0350
15	142.05	471.63	0.0350
16	151.92	472.09	0.0350
17	161.79	473.82	0.0350
18	171.66	475.59	0.0350
19	181.52	477.25	0.0350
20	191.39	478.55	0.0350
21	201.26	479.53	0.0350
22	211.13	481.03	0.0350
23	220.99	482.17	0.0350
24	230.86	482.94	0.0350
25	240.73	483.51	0.0350
26	250.60	484.27	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
27	260.46	485.51	0.0350
28	270.33	486.57	0.0350

Comment:

Channel Cross Section: XS-216

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	491.29	0.0350
1	9.69	490.28	0.0350
2	19.38	489.13	0.0350
3	29.07	487.10	0.0350
4	38.76	485.56	0.0350
5	48.45	483.84	0.0350
6	58.14	482.36	0.0350
7	67.83	481.42	0.0350
8	77.52	480.39	0.0350
9	87.21	480.02	0.0350
10	96.90	480.99	0.0350
11	106.59	481.66	0.0350
12	116.28	482.01	0.0350
13	125.97	482.16	0.0350
14	135.79	482.72	0.0350
15	145.62	483.43	0.0350
16	155.44	484.50	0.0350
17	165.26	485.84	0.0350
18	175.08	487.02	0.0350
19	184.90	488.24	0.0350
20	194.72	489.98	0.0350

Comment:

Weir Cross Section: XS-23

Scenario: Site Only
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	416.59
1	9.48	416.02

Order	Station [ft]	Elevation [ft]
2	18.96	415.90
3	28.44	415.64
4	37.93	415.02
5	47.41	414.98
6	56.89	414.92
7	66.37	414.18
8	75.85	413.41
9	85.33	412.61
10	94.82	411.77
11	104.30	410.49
12	113.75	409.07
13	123.21	407.66
14	132.66	406.21
15	142.12	405.18
16	151.58	404.67
17	161.03	403.97
18	170.49	403.26
19	179.94	402.70
20	189.40	402.38
21	198.85	402.19
22	208.31	402.04
23	217.76	401.96
24	227.34	402.03
25	236.92	402.50
26	246.50	403.80
27	256.08	404.47
28	265.94	404.74
29	275.79	405.01
30	285.64	404.90
31	295.49	405.06
32	305.35	404.89
33	315.20	405.17
34	325.05	404.90
35	334.90	405.20
36	344.76	404.81
37	354.61	404.99
38	364.46	404.87
39	374.31	404.95
40	384.17	404.62
41	394.02	404.86
42	403.87	404.76
43	413.72	404.84
44	423.58	404.64
45	433.43	404.55
46	443.28	404.74
47	453.13	404.71
48	462.99	404.69
49	472.31	404.33
50	481.62	404.41

Order	Station [ft]	Elevation [ft]
51	490.94	404.10
52	500.26	404.38
53	509.58	404.23
54	518.90	404.97
55	528.22	407.74
56	537.54	410.67
57	546.86	412.50
58	555.81	413.44
59	564.77	414.46
60	573.73	415.12
61	582.68	415.43
62	591.64	415.85
63	600.60	416.31
64	609.55	416.79
65	618.51	417.14
66	627.18	417.55
67	635.84	418.18
68	644.51	418.68
69	653.18	419.41
70	661.85	420.08

Comment:

Channel Cross Section: XS-301

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	411.79	0.0350
1	9.86	410.81	0.0350
2	19.71	410.29	0.0350
3	29.57	409.34	0.0350
4	39.42	408.38	0.0350
5	49.28	407.75	0.0350
6	59.13	407.15	0.0350
7	68.99	406.55	0.0350
8	78.84	405.70	0.0350
9	88.70	404.63	0.0350
10	98.55	403.67	0.0350
11	108.41	402.99	0.0350
12	118.26	402.30	0.0350
13	128.12	401.56	0.0350
14	137.97	400.89	0.0350
15	147.83	399.92	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
16	157.68	399.14	0.0350
17	167.54	398.53	0.0350
18	177.40	397.55	0.0350
19	187.25	396.86	0.0350
20	197.11	396.16	0.0350
21	206.96	395.22	0.0350
22	216.82	394.71	0.0350
23	226.67	393.93	0.0350
24	236.53	392.97	0.0350
25	246.38	391.92	0.0350
26	256.24	390.93	0.0350
27	266.09	390.17	0.0350
28	275.95	389.42	0.0350
29	285.80	388.76	0.0350
30	295.66	387.84	0.0350
31	305.51	386.68	0.0350
32	315.37	385.21	0.0350
33	325.22	384.55	0.0350
34	335.08	383.71	0.0350
35	344.94	382.70	0.0350
36	354.79	381.38	0.0350
37	364.65	380.52	0.0350
38	374.50	379.37	0.0350
39	384.41	378.32	0.0350
40	394.32	377.57	0.0350
41	404.24	376.56	0.0350
42	414.15	375.85	0.0350
43	424.06	375.45	0.0350
44	433.97	375.18	0.0350
45	443.88	375.09	0.0350
46	453.80	374.92	0.0350
47	463.71	374.61	0.0350
48	473.62	374.62	0.0350
49	483.53	375.11	0.0350
50	493.44	375.29	0.0350
51	503.35	375.24	0.0350
52	513.27	374.38	0.0350
53	523.18	374.13	0.0350
54	533.09	376.11	0.0350
55	543.00	376.98	0.0350
56	552.91	377.52	0.0350
57	562.82	378.10	0.0350
58	572.74	378.59	0.0350
59	582.65	379.29	0.0350
60	592.56	380.21	0.0350
61	602.47	381.50	0.0350
62	612.38	382.79	0.0350
63	622.29	383.92	0.0350
64	632.21	385.35	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
65	642.12	386.70	0.0350
66	652.03	388.07	0.0350
67	661.94	389.32	0.0350
68	671.85	389.96	0.0350
69	681.77	391.43	0.0350
70	691.68	392.52	0.0350
71	701.59	393.47	0.0350
72	711.50	393.95	0.0350
73	721.41	395.49	0.0350
74	731.32	397.41	0.0350
75	741.24	398.93	0.0350
76	751.15	400.69	0.0350
77	761.06	402.45	0.0350
78	770.97	404.26	0.0350
79	780.88	406.69	0.0350
80	790.79	408.54	0.0350
81	800.71	410.36	0.0350
82	810.62	412.07	0.0350
83	820.53	413.65	0.0350

Comment:

Channel Cross Section: XS-3A

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	488.19	0.0350
1	9.92	488.56	0.0350
2	19.85	487.80	0.0350
3	29.77	487.08	0.0350
4	39.69	486.23	0.0350
5	49.61	485.29	0.0350
6	59.54	484.32	0.0350
7	69.46	484.33	0.0350
8	79.38	482.82	0.0350
9	89.31	481.87	0.0350
10	99.23	481.26	0.0350
11	109.15	480.49	0.0350
12	119.07	479.15	0.0350
13	129.00	478.14	0.0350
14	138.92	476.81	0.0350
15	148.84	475.66	0.0350
16	158.76	474.56	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
17	168.69	473.49	0.0350
18	178.61	472.21	0.0350
19	188.53	471.03	0.0350
20	198.46	469.70	0.0350
21	208.38	468.45	0.0350
22	218.30	467.12	0.0350
23	228.22	465.79	0.0350
24	238.15	464.76	0.0350
25	248.07	463.55	0.0350
26	257.99	462.47	0.0350
27	267.92	461.07	0.0350
28	277.84	459.17	0.0350
29	287.76	457.35	0.0350
30	297.68	455.35	0.0350
31	307.61	452.17	0.0350
32	317.53	447.95	0.0350
33	327.45	442.87	0.0350
34	337.37	437.76	0.0350
35	347.30	434.03	0.0350
36	357.22	436.40	0.0350
37	367.14	436.37	0.0350
38	377.07	435.96	0.0350
39	386.99	436.27	0.0350
40	396.91	436.69	0.0350
41	406.83	436.68	0.0350
42	416.76	437.12	0.0350
43	426.68	437.09	0.0350
44	436.60	437.27	0.0350
45	446.53	437.86	0.0350
46	456.45	438.21	0.0350
47	466.37	438.73	0.0350
48	476.29	438.75	0.0350
49	486.22	439.51	0.0350
50	496.14	439.91	0.0350
51	506.06	440.21	0.0350
52	515.98	440.08	0.0350
53	525.91	441.00	0.0350
54	535.83	441.90	0.0350
55	545.75	442.58	0.0350
56	555.68	443.54	0.0350
57	565.60	444.63	0.0350
58	575.52	445.62	0.0350
59	585.44	446.67	0.0350
60	595.37	447.44	0.0350
61	605.29	448.35	0.0350
62	615.21	449.49	0.0350
63	625.14	450.64	0.0350
64	635.06	451.50	0.0350
65	644.98	452.52	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
66	654.90	453.34	0.0350
67	664.83	454.08	0.0350
68	674.75	454.47	0.0350
69	684.67	455.08	0.0350
70	694.59	455.86	0.0350
71	704.52	456.74	0.0350
72	714.44	457.29	0.0350
73	724.36	457.73	0.0350
74	734.29	458.15	0.0350
75	744.21	458.66	0.0350
76	754.13	459.13	0.0350
77	764.05	459.80	0.0350
78	773.98	460.81	0.0350
79	783.90	461.79	0.0350
80	793.43	462.65	0.0350
81	802.96	463.77	0.0350
82	812.49	465.18	0.0350
83	822.02	466.16	0.0350

Comment:

Channel Cross Section: XS-5A

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.16	0.0350
1	9.92	433.51	0.0350
2	19.83	433.89	0.0350
3	29.75	434.28	0.0350
4	39.67	434.55	0.0350
5	49.58	434.74	0.0350
6	59.50	434.59	0.0350
7	69.42	434.48	0.0350
8	79.33	434.25	0.0350
9	89.25	433.99	0.0350
10	99.17	433.64	0.0350
11	109.08	433.26	0.0350
12	119.00	432.70	0.0350
13	128.92	432.02	0.0350
14	138.83	431.30	0.0350
15	148.75	430.37	0.0350
16	158.67	429.49	0.0350
17	168.58	428.51	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
18	178.50	427.55	0.0350
19	188.42	426.71	0.0350
20	198.33	425.75	0.0350
21	208.25	425.00	0.0350
22	218.17	423.91	0.0350
23	228.08	422.05	0.0350
24	238.00	420.33	0.0350
25	247.92	418.28	0.0350
26	257.83	416.02	0.0350
27	267.75	413.45	0.0350
28	277.67	410.93	0.0350
29	287.58	408.64	0.0350
30	297.50	406.73	0.0350
31	307.42	405.26	0.0350
32	317.33	404.33	0.0350
33	327.25	403.86	0.0350
34	337.17	403.58	0.0350
35	347.08	403.26	0.0350
36	357.00	402.35	0.0350
37	366.92	401.86	0.0350
38	376.83	401.98	0.0350
39	386.75	402.06	0.0350
40	396.67	402.19	0.0350
41	406.58	402.13	0.0350
42	416.50	402.19	0.0350
43	426.42	402.21	0.0350
44	436.33	401.59	0.0350
45	446.25	400.96	0.0350
46	456.17	401.19	0.0350
47	466.08	402.57	0.0350
48	476.00	404.39	0.0350
49	485.92	406.78	0.0350
50	495.83	409.69	0.0350
51	505.75	412.62	0.0350
52	515.67	415.14	0.0350
53	525.58	417.33	0.0350
54	535.50	419.05	0.0350
55	545.42	420.23	0.0350
56	555.33	421.31	0.0350
57	565.25	422.48	0.0350
58	575.17	423.12	0.0350
59	585.08	423.55	0.0350
60	595.00	423.98	0.0350
61	604.92	424.13	0.0350
62	614.83	424.43	0.0350
63	624.75	424.80	0.0350
64	634.67	424.96	0.0350
65	644.58	425.09	0.0350
66	654.50	425.46	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
67	664.42	425.97	0.0350
68	674.33	427.83	0.0350
69	684.25	429.30	0.0350
70	694.17	431.14	0.0350
71	704.08	432.41	0.0350
72	714.00	433.74	0.0350
73	723.92	434.73	0.0350
74	733.83	435.91	0.0350
75	743.75	437.55	0.0350
76	753.67	438.56	0.0350
77	763.58	439.05	0.0350
78	773.50	439.57	0.0350
79	783.42	440.45	0.0350
80	793.33	441.34	0.0350
81	803.25	442.14	0.0350
82	813.17	442.66	0.0350
83	823.08	443.04	0.0350
84	833.00	443.37	0.0350
85	842.92	443.54	0.0350
86	852.83	444.02	0.0350
87	862.75	444.19	0.0350

Comment:

Channel Cross Section: XS-6A

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	425.56	0.0350
1	9.98	424.67	0.0350
2	19.96	423.98	0.0350
3	29.93	423.37	0.0350
4	39.91	422.65	0.0350
5	49.89	421.43	0.0350
6	59.87	420.41	0.0350
7	69.84	419.58	0.0350
8	79.82	418.56	0.0350
9	89.80	417.63	0.0350
10	99.78	416.46	0.0350
11	109.75	415.08	0.0350
12	119.73	414.43	0.0350
13	129.71	413.58	0.0350
14	139.69	412.70	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
15	149.66	411.89	0.0350
16	159.64	410.74	0.0350
17	169.62	409.86	0.0350
18	179.60	409.31	0.0350
19	189.57	408.12	0.0350
20	199.55	407.25	0.0350
21	209.53	406.42	0.0350
22	219.51	405.72	0.0350
23	229.48	404.78	0.0350
24	239.46	403.38	0.0350
25	249.44	401.99	0.0350
26	259.42	400.71	0.0350
27	269.40	399.60	0.0350
28	279.37	398.10	0.0350
29	289.35	396.76	0.0350
30	299.33	395.10	0.0350
31	309.31	393.71	0.0350
32	319.28	392.28	0.0350
33	329.26	390.86	0.0350
34	339.24	389.35	0.0350
35	349.22	387.88	0.0350
36	359.19	386.55	0.0350
37	369.17	385.26	0.0350
38	379.15	384.07	0.0350
39	389.13	382.86	0.0350
40	399.10	381.94	0.0350
41	409.08	380.98	0.0350
42	419.06	380.42	0.0350
43	429.04	380.10	0.0350
44	439.01	379.87	0.0350
45	448.99	379.64	0.0350
46	458.97	379.29	0.0350
47	468.95	378.37	0.0350
48	478.92	377.74	0.0350
49	488.90	378.67	0.0350
50	498.88	379.50	0.0350
51	508.86	379.28	0.0350
52	518.84	378.58	0.0350
53	528.81	378.71	0.0350
54	538.79	378.52	0.0350
55	548.77	378.54	0.0350
56	558.75	378.83	0.0350
57	568.72	379.56	0.0350
58	578.70	380.37	0.0350
59	588.68	381.30	0.0350
60	598.66	382.70	0.0350
61	608.63	384.09	0.0350
62	618.61	384.99	0.0350
63	628.59	386.08	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
64	638.57	386.15	0.0350
65	648.54	386.60	0.0350
66	658.52	387.72	0.0350
67	668.50	388.73	0.0350
68	678.48	389.64	0.0350
69	688.45	390.71	0.0350
70	698.43	391.99	0.0350
71	708.41	393.06	0.0350
72	718.39	393.67	0.0350
73	728.36	395.04	0.0350
74	738.34	396.34	0.0350
75	748.32	397.43	0.0350
76	758.30	398.12	0.0350
77	768.28	398.74	0.0350
78	778.25	399.65	0.0350
79	788.23	400.31	0.0350
80	798.21	400.91	0.0350
81	808.19	401.27	0.0350
82	818.16	401.54	0.0350
83	828.14	401.39	0.0350
84	838.12	402.55	0.0350
85	848.10	403.28	0.0350
86	858.07	403.99	0.0350
87	868.05	404.80	0.0350
88	878.03	405.61	0.0350
89	888.01	406.63	0.0350
90	897.98	407.98	0.0350
91	907.96	409.24	0.0350
92	917.94	410.19	0.0350
93	927.92	411.23	0.0350
94	937.89	412.11	0.0350
95	947.87	413.20	0.0350
96	957.85	413.61	0.0350
97	967.83	414.69	0.0350
98	977.80	415.25	0.0350
99	987.78	415.84	0.0350
100	997.76	416.31	0.0350
101	1007.74	416.50	0.0350
102	1017.71	416.94	0.0350
103	1027.69	417.22	0.0350
104	1037.67	417.39	0.0350
105	1047.65	417.86	0.0350
106	1057.63	418.33	0.0350
107	1067.60	419.01	0.0350
108	1077.58	419.14	0.0350
109	1087.56	419.72	0.0350
110	1097.54	420.40	0.0350
111	1107.51	421.18	0.0350
112	1117.49	422.01	0.0350

Comment:

Channel Cross Section: XS-7A

Scenario: Site Only
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	465.21	0.0350
1	9.77	464.74	0.0350
2	19.55	464.42	0.0350
3	29.32	463.91	0.0350
4	39.10	463.32	0.0350
5	48.87	462.91	0.0350
6	58.65	462.46	0.0350
7	68.42	461.43	0.0350
8	78.19	460.24	0.0350
9	87.97	458.85	0.0350
10	97.74	457.48	0.0350
11	107.52	456.07	0.0350
12	117.29	454.49	0.0350
13	127.07	452.73	0.0350
14	136.84	451.15	0.0350
15	146.61	450.44	0.0350
16	156.39	449.89	0.0350
17	166.16	448.32	0.0350
18	175.94	448.47	0.0350
19	185.71	449.33	0.0350
20	195.49	449.89	0.0350
21	205.26	450.48	0.0350
22	215.03	451.44	0.0350
23	224.81	453.87	0.0350
24	234.58	456.61	0.0350
25	244.36	459.25	0.0350
26	254.13	461.50	0.0350
27	263.90	463.24	0.0350
28	273.68	464.56	0.0350
29	283.45	465.82	0.0350
30	293.23	466.74	0.0350
31	303.00	467.62	0.0350
32	312.78	468.18	0.0350
33	322.55	468.69	0.0350
34	332.32	469.19	0.0350

Comment:

Node Max Conditions [Existing]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Offsite01	002yr	470.00	436.41	-0.0017	13.59	13.50	1239
Offsite02	002yr	459.00	443.65	-0.0009	8.61	8.61	1597
Outfall_A	002yr	400.00	346.00	0.0000	230.24	0.00	0
Outfall_B	002yr	412.00	378.00	0.0000	30.33	0.00	0
Outfall_C	002yr	390.00	359.65	-0.0006	77.44	77.22	23110
Trib1-00-00	002yr	389.10	348.99	-0.0010	231.26	230.24	58929
Trib1-00-02	002yr	415.00	372.14	-0.0010	80.96	57.27	193826
Trib1-00-03	002yr	440.00	389.12	0.0010	80.01	80.96	149624
Trib1-00-04	002yr	440.00	394.58	0.0006	50.85	50.70	41591
Trib1-00-05	002yr	440.00	408.08	0.0010	58.07	50.85	37624
Trib1-00-06	002yr	440.00	414.91	0.0010	54.30	51.21	21017
Trib1-00-07	002yr	435.00	418.66	0.0010	55.53	54.14	12297
Trib1-01-01	002yr	425.00	388.00	0.0000	0.00	0.00	100
Trib1-01-02	002yr	440.00	410.02	0.0002	2.65	0.00	78471
Trib1-02-01	002yr	455.00	434.00	0.0000	0.00	0.00	100
Trib1-02-02	002yr	475.00	454.28	0.0002	3.74	0.00	66787
Trib1-03-01	002yr	465.00	428.48	0.0163	18.05	11.65	4185
Trib1-03-02	002yr	472.00	444.20	-0.0068	12.00	18.05	31308
Trib1-03-03	002yr	495.00	467.13	0.0003	1.04	1.02	21415
Trib1-03-04	002yr	490.00	471.70	0.0007	3.78	1.07	30835
Trib1-03-05	002yr	500.00	471.70	0.0010	0.60	0.10	11368
Trib1-03-06	002yr	495.00	480.50	0.0000	0.00	0.00	100
Trib1-03-07	002yr	505.00	493.46	0.0001	0.46	0.00	70298
Trib1-03-08	002yr	510.00	488.00	0.0000	0.00	0.00	100
Trib1-03-09	002yr	515.00	494.00	0.0000	0.00	0.00	100
Trib1-03-10	002yr	521.00	506.53	0.0001	0.47	0.00	148242
Trib1-03-11	002yr	520.00	502.00	0.0000	0.00	0.00	100
Trib1-03-12	002yr	530.00	515.76	0.0002	89.21	0.00	393255
Trib1-04-01	002yr	445.00	430.17	0.0017	1.74	0.51	1418
Trib1-04-02	002yr	450.00	431.50	-0.0017	0.51	1.74	100
Trib1-04-03	002yr	473.00	448.12	0.0001	0.80	0.51	75308
Trib1-05-01a	002yr	431.00	423.45	0.0010	55.85	55.53	5384
Trib1-05-01b	002yr	460.00	437.18	0.0001	3.67	3.67	4792
Trib1-05-02	002yr	458.00	446.03	-0.0007	3.67	3.67	1486
Trib1-05-03	002yr	470.00	447.87	-0.0009	3.67	3.67	588
Trib2-00-01	002yr	405.00	386.32	0.0010	28.43	28.39	8728
Trib2-00-02	002yr	450.00	402.51	0.0008	76.11	28.43	282923
Trib2-00-03	002yr	435.00	405.87	-0.0010	68.98	67.20	60361
Trib2-00-04	002yr	450.00	415.35	-0.0010	41.57	38.54	52211
Trib2-01-01	002yr	450.00	402.50	0.0000	0.00	0.00	100
Trib2-01-02	002yr	449.00	426.65	0.0003	63.31	0.00	205168
Trib2-01-03	002yr	455.00	435.00	0.0000	0.00	0.00	100
Trib2-01-04	002yr	471.00	451.34	0.0003	4.42	0.00	89680
Trib2-02-01	002yr	450.00	413.76	-0.0005	31.47	31.43	4510
Trib2-03-02	002yr	470.00	445.54	0.0008	38.08	32.85	34778
Trib2-03-03	002yr	490.00	466.72	0.0004	38.71	38.08	23377

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib2-03-04	002yr	500.00	474.34	0.0002	5.10	5.10	3318
Trib2-03-05	002yr	506.00	488.54	0.0001	12.95	5.10	95764
Trib2-03-06	002yr	515.00	496.50	0.0000	0.00	0.00	100
Trib2-03-07	002yr	522.00	511.95	0.0000	5.78	0.00	156121
Trib2-04-01	002yr	450.00	419.58	0.0004	10.65	10.65	2640
Trib2-04-02	002yr	464.00	442.59	0.0001	31.51	10.65	273401
Trib2-04-03	002yr	470.00	449.21	-0.0005	1.02	1.02	324
Trib2-04-04	002yr	455.00	450.35	-0.0008	1.02	1.02	187
Trib2-04-05	002yr	470.00	454.17	-0.0003	2.81	2.78	2485
Trib2-04-06	002yr	459.00	455.58	-0.0010	2.84	2.81	329
Trib2-04-07	002yr	455.00	447.72	-0.0002	1.07	1.07	4596
Trib2-04-08	002yr	453.00	448.37	-0.0007	1.07	1.07	657
Trib3-00-01	002yr	370.00	361.95	-0.0010	128.34	112.24	82149
Trib3-00-02	002yr	390.00	373.78	-0.0010	118.86	128.34	100504
Trib3-00-03	002yr	390.00	380.06	0.0010	126.98	118.86	110424
Trib3-00-04	002yr	423.00	387.65	0.0010	120.64	126.98	71162
Trib3-00-05	002yr	423.00	391.24	0.0010	120.65	120.64	1690
Trib3-00-06	002yr	425.00	392.77	0.0010	120.69	120.65	3284
Offsite01	010yr	470.00	437.63	-0.0017	52.15	51.34	3621
Offsite02	010yr	459.00	444.75	-0.0009	38.11	38.09	1597
Outfall_A	010yr	400.00	346.00	0.0000	892.18	0.00	0
Outfall_B	010yr	412.00	378.00	0.0000	228.70	0.00	0
Outfall_C	010yr	390.00	361.24	-0.0010	352.70	336.49	86585
Trib1-00-00	010yr	389.10	349.93	0.0010	893.47	892.18	100022
Trib1-00-02	010yr	415.00	372.70	-0.0010	249.23	276.57	242717
Trib1-00-03	010yr	440.00	389.54	0.0010	250.60	249.23	190205
Trib1-00-04	010yr	440.00	394.95	0.0007	160.35	159.84	94444
Trib1-00-05	010yr	440.00	408.50	-0.0010	160.79	160.35	76537
Trib1-00-06	010yr	440.00	415.33	0.0010	123.68	117.83	28712
Trib1-00-07	010yr	435.00	418.95	0.0010	113.96	114.60	15827
Trib1-01-01	010yr	425.00	388.12	0.0010	0.28	0.27	3402
Trib1-01-02	010yr	440.00	410.96	0.0004	19.39	0.28	83919
Trib1-02-01	010yr	455.00	434.13	0.0004	1.00	1.00	7086
Trib1-02-02	010yr	475.00	454.91	0.0004	14.31	1.00	70594
Trib1-03-01	010yr	465.00	428.94	0.0163	49.22	49.16	6710
Trib1-03-02	010yr	472.00	444.52	-0.0068	53.73	49.22	129541
Trib1-03-03	010yr	495.00	467.34	-0.0002	17.64	16.87	50855
Trib1-03-04	010yr	490.00	472.08	0.0006	30.80	24.49	30973
Trib1-03-05	010yr	500.00	472.14	0.0004	14.25	7.71	26266
Trib1-03-06	010yr	495.00	480.50	0.0000	0.00	0.00	100
Trib1-03-07	010yr	505.00	493.99	0.0002	7.99	0.00	150719
Trib1-03-08	010yr	510.00	488.56	0.0008	8.31	8.06	16506
Trib1-03-09	010yr	515.00	494.00	0.0000	0.00	0.00	100
Trib1-03-10	010yr	521.00	506.99	0.0002	11.30	0.00	278650
Trib1-03-11	010yr	520.00	502.41	0.0007	8.02	8.31	6891
Trib1-03-12	010yr	530.00	516.03	0.0003	168.72	8.02	400138
Trib1-04-01	010yr	445.00	430.46	0.0017	6.36	6.36	3211

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib1-04-02	010yr	450.00	431.98	-0.0017	6.36	6.36	108
Trib1-04-03	010yr	473.00	448.35	0.0001	11.11	6.36	77131
Trib1-05-01a	010yr	431.00	424.26	0.0010	110.15	106.42	7426
Trib1-05-01b	010yr	460.00	437.70	-0.0005	29.91	29.90	6603
Trib1-05-02	010yr	458.00	446.69	-0.0009	29.91	29.91	3051
Trib1-05-03	010yr	470.00	448.99	-0.0009	29.91	29.91	915
Trib2-00-01	010yr	405.00	388.42	0.0010	221.60	220.07	120915
Trib2-00-02	010yr	450.00	403.43	0.0010	328.80	221.60	320357
Trib2-00-03	010yr	435.00	406.83	-0.0010	310.66	305.09	94079
Trib2-00-04	010yr	450.00	415.64	-0.0010	183.52	181.11	106949
Trib2-01-01	010yr	450.00	402.84	0.0002	6.58	6.58	12219
Trib2-01-02	010yr	449.00	427.19	0.0005	139.13	6.58	212039
Trib2-01-03	010yr	455.00	435.26	0.0008	2.64	2.64	2385
Trib2-01-04	010yr	471.00	451.94	0.0003	18.48	2.64	94332
Trib2-02-01	010yr	450.00	414.39	0.0005	107.61	107.44	9163
Trib2-03-02	010yr	470.00	446.52	-0.0005	126.30	114.37	93466
Trib2-03-03	010yr	490.00	467.32	0.0007	128.08	126.30	39672
Trib2-03-04	010yr	500.00	474.66	0.0002	26.39	26.38	5419
Trib2-03-05	010yr	506.00	488.99	-0.0002	64.83	26.39	172808
Trib2-03-06	010yr	515.00	496.50	0.0000	0.00	0.00	100
Trib2-03-07	010yr	522.00	512.11	0.0001	13.83	0.00	165709
Trib2-04-01	010yr	450.00	420.22	0.0003	69.17	69.15	4974
Trib2-04-02	010yr	464.00	442.87	0.0001	120.41	69.17	391207
Trib2-04-03	010yr	470.00	449.64	0.0005	17.71	17.71	815
Trib2-04-04	010yr	455.00	451.52	-0.0008	17.75	17.71	984
Trib2-04-05	010yr	470.00	454.37	-0.0006	17.33	17.25	3184
Trib2-04-06	010yr	459.00	456.50	-0.0010	17.45	17.33	936
Trib2-04-07	010yr	455.00	447.92	-0.0003	17.32	17.53	8252
Trib2-04-08	010yr	453.00	449.58	0.0010	17.98	17.32	4994
Trib3-00-01	010yr	370.00	362.83	-0.0010	461.61	453.21	121968
Trib3-00-02	010yr	390.00	374.37	-0.0009	435.96	461.61	129791
Trib3-00-03	010yr	390.00	380.85	-0.0010	450.04	435.96	146329
Trib3-00-04	010yr	423.00	388.20	-0.0010	447.14	450.04	93272
Trib3-00-05	010yr	423.00	395.19	0.0010	447.16	447.14	1690
Trib3-00-06	010yr	425.00	396.73	-0.0010	454.44	447.16	31366
Offsite01	025yr	470.00	438.36	-0.0017	83.78	80.87	7247
Offsite02	025yr	459.00	445.48	0.0009	64.44	64.38	1597
Outfall_A	025yr	400.00	346.00	0.0000	1427.49	0.00	0
Outfall_B	025yr	412.00	378.00	0.0000	468.20	0.00	0
Outfall_C	025yr	390.00	362.62	0.0010	590.54	543.91	159870
Trib1-00-00	025yr	389.10	350.40	0.0010	1434.33	1427.49	147634
Trib1-00-02	025yr	415.00	372.90	-0.0010	427.13	466.38	260360
Trib1-00-03	025yr	440.00	389.82	0.0010	429.72	427.13	214263
Trib1-00-04	025yr	440.00	395.15	0.0006	270.00	269.76	99449
Trib1-00-05	025yr	440.00	408.70	-0.0008	270.24	270.00	81535
Trib1-00-06	025yr	440.00	415.92	0.0010	234.10	232.73	40203
Trib1-00-07	025yr	435.00	419.11	0.0010	161.85	165.53	19086

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib1-01-01	025yr	425.00	388.29	0.0003	2.28	2.28	7295
Trib1-01-02	025yr	440.00	411.08	0.0002	35.97	2.28	84589
Trib1-02-01	025yr	455.00	434.23	0.0001	4.03	4.02	8841
Trib1-02-02	025yr	475.00	454.99	0.0003	23.35	4.03	71108
Trib1-03-01	025yr	465.00	429.41	0.0163	108.02	107.97	8940
Trib1-03-02	025yr	472.00	444.87	-0.0068	126.53	108.02	193104
Trib1-03-03	025yr	495.00	467.52	0.0002	59.82	59.39	54941
Trib1-03-04	025yr	490.00	472.37	0.0009	60.19	59.82	31066
Trib1-03-05	025yr	500.00	472.49	0.0006	33.75	33.61	34917
Trib1-03-06	025yr	495.00	480.50	0.0000	0.00	0.00	100
Trib1-03-07	025yr	505.00	494.36	0.0003	18.75	0.00	156103
Trib1-03-08	025yr	510.00	489.04	0.0006	40.95	33.75	26443
Trib1-03-09	025yr	515.00	494.00	0.0000	0.00	0.00	100
Trib1-03-10	025yr	521.00	507.34	0.0003	30.42	0.00	302649
Trib1-03-11	025yr	520.00	502.85	0.0005	37.40	40.95	10368
Trib1-03-12	025yr	530.00	516.07	0.0003	222.36	37.40	401894
Trib1-04-01	025yr	445.00	430.68	0.0017	17.19	17.18	4657
Trib1-04-02	025yr	450.00	432.66	-0.0017	17.19	17.19	126
Trib1-04-03	025yr	473.00	448.55	0.0002	25.38	17.19	78716
Trib1-05-01a	025yr	431.00	424.79	0.0010	150.91	145.14	9258
Trib1-05-01b	025yr	460.00	438.09	-0.0004	59.82	59.78	9337
Trib1-05-02	025yr	458.00	447.02	-0.0009	59.82	59.82	3855
Trib1-05-03	025yr	470.00	449.86	-0.0009	59.83	59.82	2202
Trib2-00-01	025yr	405.00	388.79	0.0010	458.72	453.63	170044
Trib2-00-02	025yr	450.00	404.04	0.0009	576.27	445.76	339035
Trib2-00-03	025yr	435.00	407.32	-0.0009	543.63	538.35	102563
Trib2-00-04	025yr	450.00	415.83	-0.0010	325.08	321.21	127944
Trib2-01-01	025yr	450.00	403.01	-0.0002	17.45	17.44	15646
Trib2-01-02	025yr	449.00	427.38	0.0004	192.99	17.45	215883
Trib2-01-03	025yr	455.00	435.39	-0.0007	9.28	9.28	2546
Trib2-01-04	025yr	471.00	452.16	0.0003	31.15	9.28	96072
Trib2-02-01	025yr	450.00	414.78	-0.0009	169.96	169.79	13604
Trib2-03-02	025yr	470.00	446.79	0.0009	201.93	193.34	115530
Trib2-03-03	025yr	490.00	467.64	0.0008	204.68	201.93	49039
Trib2-03-04	025yr	500.00	474.86	0.0002	50.28	50.26	6513
Trib2-03-05	025yr	506.00	489.29	-0.0002	111.49	50.28	178221
Trib2-03-06	025yr	515.00	496.50	0.0000	0.00	0.00	100
Trib2-03-07	025yr	522.00	512.22	0.0001	19.69	0.00	166697
Trib2-04-01	025yr	450.00	420.67	0.0003	131.70	131.84	9250
Trib2-04-02	025yr	464.00	443.06	0.0001	193.72	131.70	444687
Trib2-04-03	025yr	470.00	449.84	-0.0006	33.04	33.04	878
Trib2-04-04	025yr	455.00	453.69	-0.0010	39.92	33.04	5300
Trib2-04-05	025yr	470.00	454.47	-0.0005	30.07	29.98	3720
Trib2-04-06	025yr	459.00	456.86	-0.0010	30.18	30.07	1258
Trib2-04-07	025yr	455.00	447.99	-0.0004	36.79	36.78	9048
Trib2-04-08	025yr	453.00	450.79	-0.0010	42.05	36.79	12968
Trib3-00-01	025yr	370.00	363.08	-0.0010	704.05	701.37	136130

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib3-00-02	025yr	390.00	374.67	-0.0009	706.34	704.05	141433
Trib3-00-03	025yr	390.00	381.26	-0.0010	707.60	706.34	160038
Trib3-00-04	025yr	423.00	388.54	0.0010	704.15	707.60	100180
Trib3-00-05	025yr	423.00	397.61	0.0010	704.15	704.15	1690
Trib3-00-06	025yr	425.00	399.15	-0.0010	741.62	704.15	74342
Offsite01	050yr	470.00	438.95	-0.0017	112.00	105.20	10761
Offsite02	050yr	459.00	446.07	-0.0010	88.71	88.66	1774
Outfall_A	050yr	400.00	346.00	0.0000	1963.90	0.00	0
Outfall_B	050yr	412.00	378.00	0.0000	722.42	0.00	0
Outfall_C	050yr	390.00	362.92	-0.0010	789.34	787.45	172093
Trib1-00-00	050yr	389.10	350.79	0.0010	1967.56	1963.90	178417
Trib1-00-02	050yr	415.00	373.01	-0.0010	634.04	629.38	281498
Trib1-00-03	050yr	440.00	390.07	0.0010	638.36	633.95	223021
Trib1-00-04	050yr	440.00	395.38	0.0006	432.98	431.90	104127
Trib1-00-05	050yr	440.00	408.94	-0.0008	434.62	432.98	89825
Trib1-00-06	050yr	440.00	416.69	0.0010	393.83	386.74	62569
Trib1-00-07	050yr	435.00	419.19	0.0010	204.74	211.86	21118
Trib1-01-01	050yr	425.00	388.42	0.0002	5.68	5.67	8320
Trib1-01-02	050yr	440.00	411.19	0.0002	51.64	5.68	85188
Trib1-02-01	050yr	455.00	434.35	0.0004	9.83	9.77	10320
Trib1-02-02	050yr	475.00	455.10	0.0004	31.55	9.83	71872
Trib1-03-01	050yr	465.00	429.98	0.0163	204.62	204.15	15501
Trib1-03-02	050yr	472.00	445.22	-0.0068	250.80	204.62	221966
Trib1-03-03	050yr	495.00	467.74	-0.0002	144.31	141.73	59159
Trib1-03-04	050yr	490.00	472.71	0.0009	145.77	144.31	32460
Trib1-03-05	050yr	500.00	472.83	0.0005	84.25	81.81	41353
Trib1-03-06	050yr	495.00	480.50	0.0000	0.00	0.00	100
Trib1-03-07	050yr	505.00	494.71	0.0004	30.14	0.00	160462
Trib1-03-08	050yr	510.00	489.55	0.0007	107.90	84.25	36560
Trib1-03-09	050yr	515.00	494.08	0.0008	0.16	0.16	897
Trib1-03-10	050yr	521.00	507.66	0.0003	51.65	0.16	322948
Trib1-03-11	050yr	520.00	503.29	0.0008	99.10	107.90	14201
Trib1-03-12	050yr	530.00	516.14	0.0002	266.78	99.10	404398
Trib1-04-01	050yr	445.00	430.87	0.0017	32.18	32.14	6495
Trib1-04-02	050yr	450.00	433.34	-0.0017	32.18	32.18	131
Trib1-04-03	050yr	473.00	448.70	0.0001	40.51	32.18	79897
Trib1-05-01a	050yr	431.00	425.23	0.0010	187.01	180.45	9310
Trib1-05-01b	050yr	460.00	438.48	-0.0010	90.36	90.31	11617
Trib1-05-02	050yr	458.00	447.27	-0.0010	90.36	90.36	4283
Trib1-05-03	050yr	470.00	450.61	-0.0009	90.40	90.36	2997
Trib2-00-01	050yr	405.00	389.02	0.0010	706.60	700.90	192496
Trib2-00-02	050yr	450.00	404.51	0.0009	812.75	675.46	351808
Trib2-00-03	050yr	435.00	407.68	-0.0010	769.18	762.13	103603
Trib2-00-04	050yr	450.00	416.00	-0.0010	461.06	457.44	134969
Trib2-01-01	050yr	450.00	403.16	0.0003	31.21	31.16	17548
Trib2-01-02	050yr	449.00	427.55	0.0004	238.61	31.21	218421
Trib2-01-03	050yr	455.00	435.52	0.0010	18.34	18.34	2546

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib2-01-04	050yr	471.00	452.36	0.0006	42.91	18.34	97574
Trib2-02-01	050yr	450.00	414.95	-0.0010	225.64	225.52	14835
Trib2-03-02	050yr	470.00	446.95	0.0009	277.70	270.42	122480
Trib2-03-03	050yr	490.00	467.91	0.0008	280.96	277.70	56687
Trib2-03-04	050yr	500.00	475.06	0.0002	79.52	79.47	7600
Trib2-03-05	050yr	506.00	489.53	-0.0002	154.39	79.52	181509
Trib2-03-06	050yr	515.00	496.50	0.0000	0.00	0.00	100
Trib2-03-07	050yr	522.00	512.32	0.0001	24.71	0.00	167550
Trib2-04-01	050yr	450.00	420.86	0.0004	190.32	190.79	10255
Trib2-04-02	050yr	464.00	443.20	-0.0001	282.78	190.32	448622
Trib2-04-03	050yr	470.00	450.13	0.0017	64.41	63.73	998
Trib2-04-04	050yr	455.00	454.67	0.0010	62.66	64.41	9334
Trib2-04-05	050yr	470.00	454.48	-0.0007	31.22	31.22	3772
Trib2-04-06	050yr	459.00	458.17	-0.0013	41.79	31.22	4742
Trib2-04-07	050yr	455.00	448.05	0.0002	53.72	53.73	9497
Trib2-04-08	050yr	453.00	451.79	-0.0010	67.55	53.72	21041
Trib3-00-01	050yr	370.00	363.21	-0.0010	897.45	893.16	143821
Trib3-00-02	050yr	390.00	374.95	-0.0009	899.56	897.45	146767
Trib3-00-03	050yr	390.00	381.48	0.0010	898.45	899.56	163806
Trib3-00-04	050yr	423.00	388.78	0.0010	897.98	898.45	103084
Trib3-00-05	050yr	423.00	399.69	0.0741	897.98	897.98	1690
Trib3-00-06	050yr	425.00	401.58	0.0010	1003.23	897.98	119657
Offsite01	100yr	470.00	439.57	-0.0017	145.28	130.56	18610
Offsite02	100yr	459.00	446.71	-0.0010	117.81	117.72	2050
Outfall_A	100yr	400.00	346.00	0.0000	2603.11	0.00	0
Outfall_B	100yr	412.00	378.00	0.0000	1062.79	0.00	0
Outfall_C	100yr	390.00	363.21	0.0010	1114.37	1110.57	179522
Trib1-00-00	100yr	389.10	351.19	0.0010	2607.60	2603.11	191188
Trib1-00-02	100yr	415.00	373.29	-0.0010	920.61	908.81	291235
Trib1-00-03	100yr	440.00	390.37	0.0010	917.67	908.27	232026
Trib1-00-04	100yr	440.00	395.65	-0.0006	666.45	665.21	108879
Trib1-00-05	100yr	440.00	409.23	-0.0008	669.33	666.45	98316
Trib1-00-06	100yr	440.00	417.24	0.0010	602.14	597.16	76732
Trib1-00-07	100yr	435.00	419.28	0.0010	273.92	273.95	24418
Trib1-01-01	100yr	425.00	388.60	0.0003	14.05	14.00	9543
Trib1-01-02	100yr	440.00	411.37	0.0002	70.76	14.05	86101
Trib1-02-01	100yr	455.00	434.49	0.0005	18.89	18.77	11616
Trib1-02-02	100yr	475.00	455.23	0.0003	41.30	18.89	72783
Trib1-03-01	100yr	465.00	430.45	0.0163	335.14	334.53	23418
Trib1-03-02	100yr	472.00	445.55	-0.0068	408.65	335.14	231732
Trib1-03-03	100yr	495.00	467.95	0.0002	253.06	248.10	62794
Trib1-03-04	100yr	490.00	473.00	0.0010	255.54	253.06	34247
Trib1-03-05	100yr	500.00	473.14	0.0005	157.62	145.45	47299
Trib1-03-06	100yr	495.00	480.74	0.0010	2.36	2.36	3603
Trib1-03-07	100yr	505.00	494.85	0.0003	44.84	2.36	162270
Trib1-03-08	100yr	510.00	489.97	0.0008	197.01	157.62	46041
Trib1-03-09	100yr	515.00	494.29	0.0010	3.62	3.62	2043

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib1-03-10	100yr	521.00	507.79	0.0002	79.89	3.62	331336
Trib1-03-11	100yr	520.00	503.67	0.0010	183.75	197.01	17737
Trib1-03-12	100yr	530.00	516.21	0.0003	316.38	183.75	407066
Trib1-04-01	100yr	445.00	431.08	0.0017	53.65	53.55	8230
Trib1-04-02	100yr	450.00	434.17	-0.0017	53.65	53.65	131
Trib1-04-03	100yr	473.00	448.82	0.0001	60.20	53.65	80894
Trib1-05-01a	100yr	431.00	425.72	0.0010	228.08	222.10	9408
Trib1-05-01b	100yr	460.00	438.72	-0.0010	129.44	129.40	12063
Trib1-05-02	100yr	458.00	447.54	-0.0010	129.45	129.44	4686
Trib1-05-03	100yr	470.00	451.45	-0.0009	129.54	129.45	4617
Trib2-00-01	100yr	405.00	389.27	0.0010	1042.06	1033.43	202112
Trib2-00-02	100yr	450.00	404.93	0.0010	1092.20	986.49	363374
Trib2-00-03	100yr	435.00	408.03	-0.0010	1031.30	1025.78	102211
Trib2-00-04	100yr	450.00	416.18	-0.0010	629.69	624.19	154880
Trib2-01-01	100yr	450.00	403.38	0.0003	60.29	60.02	19196
Trib2-01-02	100yr	449.00	427.81	0.0004	290.35	60.29	221142
Trib2-01-03	100yr	455.00	435.66	0.0009	31.47	31.47	2546
Trib2-01-04	100yr	471.00	452.56	0.0006	57.07	31.47	99150
Trib2-02-01	100yr	450.00	415.12	-0.0009	291.38	291.16	15937
Trib2-03-02	100yr	470.00	447.19	0.0010	381.12	365.00	144558
Trib2-03-03	100yr	490.00	468.18	0.0008	385.18	381.12	65325
Trib2-03-04	100yr	500.00	475.30	0.0003	125.47	125.35	8897
Trib2-03-05	100yr	506.00	489.77	0.0002	205.84	125.47	184703
Trib2-03-06	100yr	515.00	496.50	0.0000	0.00	0.00	100
Trib2-03-07	100yr	522.00	512.44	0.0001	30.47	0.00	168530
Trib2-04-01	100yr	450.00	421.06	0.0003	265.20	266.15	11281
Trib2-04-02	100yr	464.00	443.36	-0.0001	377.36	265.20	452685
Trib2-04-03	100yr	470.00	450.34	0.0018	91.00	90.99	1101
Trib2-04-04	100yr	455.00	454.86	-0.0010	91.52	91.00	10176
Trib2-04-05	100yr	470.00	454.55	-0.0005	42.84	42.71	4017
Trib2-04-06	100yr	459.00	459.21	-0.0015	55.62	42.84	7988
Trib2-04-07	100yr	455.00	448.13	0.0003	77.23	77.19	10463
Trib2-04-08	100yr	453.00	452.90	-0.0010	100.55	77.23	29755
Trib3-00-01	100yr	370.00	363.42	-0.0010	1129.12	1125.30	153524
Trib3-00-02	100yr	390.00	375.21	-0.0009	1128.62	1129.12	153082
Trib3-00-03	100yr	390.00	381.74	0.0010	1130.57	1128.62	168532
Trib3-00-04	100yr	423.00	389.04	0.0010	1130.36	1130.57	106633
Trib3-00-05	100yr	423.00	401.69	0.0745	1130.36	1130.36	1690
Trib3-00-06	100yr	425.00	403.58	-0.0010	1314.75	1130.36	163712
Offsite01	500yr	470.00	441.04	-0.0017	242.69	177.82	51319
Offsite02	500yr	459.00	448.35	0.0010	204.00	203.63	4003
Outfall_A	500yr	400.00	346.00	0.0000	4235.74	0.00	0
Outfall_B	500yr	412.00	378.00	0.0000	2224.75	0.00	0
Outfall_C	500yr	390.00	363.89	-0.0010	2120.60	2112.54	194515
Trib1-00-00	500yr	389.10	352.02	0.0010	4241.67	4235.74	213456
Trib1-00-02	500yr	415.00	373.99	-0.0010	1841.78	1805.84	313621
Trib1-00-03	500yr	440.00	391.14	0.0010	1812.98	1783.23	254078

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib1-00-04	500yr	440.00	396.36	-0.0007	1455.31	1458.39	130082
Trib1-00-05	500yr	440.00	409.99	0.0007	1464.74	1455.31	126569
Trib1-00-06	500yr	440.00	418.29	0.0010	1331.91	1320.66	100256
Trib1-00-07	500yr	435.00	419.84	0.0010	584.40	583.63	28417
Trib1-01-01	500yr	425.00	389.11	-0.0005	65.29	65.11	14372
Trib1-01-02	500yr	440.00	411.88	0.0003	128.34	65.29	88859
Trib1-02-01	500yr	455.00	434.83	0.0002	51.37	51.03	14509
Trib1-02-02	500yr	475.00	455.56	0.0002	69.87	51.37	75100
Trib1-03-01	500yr	465.00	431.22	0.0163	754.95	753.62	29225
Trib1-03-02	500yr	472.00	446.10	-0.0068	830.98	754.95	247342
Trib1-03-03	500yr	495.00	468.41	0.0003	554.01	547.61	67311
Trib1-03-04	500yr	490.00	473.57	0.0010	556.62	554.01	38497
Trib1-03-05	500yr	500.00	473.73	0.0005	356.56	335.12	59323
Trib1-03-06	500yr	495.00	481.05	0.0006	18.71	18.69	7083
Trib1-03-07	500yr	505.00	495.00	0.0001	92.16	18.71	164105
Trib1-03-08	500yr	510.00	490.71	0.0010	390.18	356.56	64316
Trib1-03-09	500yr	515.00	494.58	0.0002	21.24	21.24	3389
Trib1-03-10	500yr	521.00	508.04	0.0001	173.13	21.24	347645
Trib1-03-11	500yr	520.00	504.22	0.0010	391.52	390.18	24096
Trib1-03-12	500yr	530.00	516.34	0.0002	451.08	391.52	412252
Trib1-04-01	500yr	445.00	431.41	0.0017	121.28	121.22	10027
Trib1-04-02	500yr	450.00	436.68	-0.0017	121.28	121.28	131
Trib1-04-03	500yr	473.00	449.07	0.0001	124.42	121.28	83277
Trib1-05-01a	500yr	431.00	427.79	0.0010	428.65	426.72	12826
Trib1-05-01b	500yr	460.00	439.35	-0.0010	253.57	253.49	13073
Trib1-05-02	500yr	458.00	448.19	-0.0010	253.58	253.57	5583
Trib1-05-03	500yr	470.00	453.78	0.0010	255.01	253.58	18868
Trib2-00-01	500yr	405.00	389.92	-0.0010	2176.54	2164.91	213708
Trib2-00-02	500yr	450.00	405.67	0.0010	2089.71	2036.80	381494
Trib2-00-03	500yr	435.00	409.03	0.0008	1988.10	1976.56	115982
Trib2-00-04	500yr	450.00	416.76	-0.0009	1272.57	1256.40	179487
Trib2-01-01	500yr	450.00	403.92	0.0004	173.66	172.77	23327
Trib2-01-02	500yr	449.00	428.50	0.0004	432.91	173.66	228654
Trib2-01-03	500yr	455.00	435.98	-0.0003	76.88	76.88	3133
Trib2-01-04	500yr	471.00	453.04	0.0003	99.20	76.88	102937
Trib2-02-01	500yr	450.00	415.52	0.0009	482.03	481.70	19323
Trib2-03-02	500yr	470.00	447.58	0.0010	724.48	709.57	159728
Trib2-03-03	500yr	490.00	468.81	0.0008	733.16	724.48	82324
Trib2-03-04	500yr	500.00	475.93	0.0003	301.93	301.48	13512
Trib2-03-05	500yr	506.00	490.17	0.0003	358.42	301.93	191060
Trib2-03-06	500yr	515.00	496.66	0.0001	0.71	0.71	7883
Trib2-03-07	500yr	522.00	512.66	0.0001	46.60	0.71	170461
Trib2-04-01	500yr	450.00	421.67	-0.0004	560.83	563.02	17221
Trib2-04-02	500yr	464.00	443.85	-0.0002	703.17	560.83	464314
Trib2-04-03	500yr	470.00	450.87	0.0020	188.59	185.48	1380
Trib2-04-04	500yr	455.00	455.35	0.0010	182.36	188.59	10765
Trib2-04-05	500yr	470.00	454.78	-0.0004	92.95	92.83	4597

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib2-04-06	500yr	459.00	459.84	-0.0014	96.42	92.95	10595
Trib2-04-07	500yr	455.00	448.43	0.0004	203.04	202.96	12423
Trib2-04-08	500yr	453.00	453.65	-0.0010	206.78	203.04	36605
Trib3-00-01	500yr	370.00	363.81	-0.0010	1607.37	1602.33	169739
Trib3-00-02	500yr	390.00	375.65	-0.0008	1605.85	1607.37	163438
Trib3-00-03	500yr	390.00	382.24	0.0010	1608.04	1605.85	175836
Trib3-00-04	500yr	423.00	389.50	0.0010	1608.11	1608.04	111356
Trib3-00-05	500yr	423.00	404.94	0.0749	1607.26	1608.11	1690
Trib3-00-06	500yr	425.00	409.10	0.0010	2229.80	1607.26	318859

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX C

PROPOSED CONDITIONS CN AND TC CALCULATIONS

J – 27015.0007

December 2023

thomasandhutton.com

11/28/2023

Phase 2 Curve Number Calculations

J# - 27015.0007

| Name | Area (ac.) | | |

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

PROJECT: Phase 2 Grading for Project Connect

Job: 27015.0007

PREPARED BY: Thomas & Hutton
PREPARED FOR: Richland County Economic Development

Date: 4/5/23
Revised: 11/7/23
By: KNK

DRAINAGE BASIN 01

DRAINAGE BASIN 01

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.1000 ft/ft
t_1 = 3.5 min

Shallow Concentrated Flow:

t=1/60v

where
l = 4720 ft
Paved ? No
Slope, S = 0.0159 ft/ft
v = 2.03 ft/s
t_2 = 38.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0000 ft/ft
n = Concrete, Smooth = 0.0130
A = 0.00 sf
P = 0.00 ft => Hydraulic Radius, R = n/a
v = n/a
t_3 = n/a

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 01: Tc = 42.0 min

DRAINAGE BASIN 02

DRAINAGE BASIN 02

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Short = 0.150
l = 100 ft
P2 = 3.60 in
S = 0.0700 ft/ft
t_1 = 5.6 min

Shallow Concentrated Flow:

t=1/60v

where
l = 925 ft
Paved ? No
Slope, S = 0.0357 ft/ft
v = 3.05 ft/s
t_2 = 5.1 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0000 ft/ft
n = Hwy. r/w grass 4-6 inches = 0.0700
A = 0.00 sf
P = 0.00 ft => Hydraulic Radius, R = n/a
v = n/a
t_3 = n/a

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 02: Tc = 11.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

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DRAINAGE BASIN 03

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Short = 0.150
l = 100 ft
P2 = 3.60 in
S = 0.1000 ft/ft
t_1 = 4.9 min

Shallow Concentrated Flow:

t=l/60v

where
l = 1220 ft
Paved ? No
Slope, S = 0.0361 ft/ft
v = 3.06 ft/s
t_2 = 6.6 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0010 ft/ft
n = Flood Plains: pasture, short grass = 0.0350
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 1.07 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 03: Tc = 11.0 min

DRAINAGE BASIN 04

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0100 ft/ft
t_1 = 8.8 min

Shallow Concentrated Flow:

t=l/60v

where
l = 625 ft
Paved ? No
Slope, S = 0.0240 ft/ft
v = 2.50 ft/s
t_2 = 4.2 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0010 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 0.37 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 04: Tc = 13.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 05

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0600 ft/ft
t_1 = 4.3 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1095 ft
Paved ? No
Slope, S = 0.0329 ft/ft
v = 2.93 ft/s
t_2 = 6.2 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0010 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 0.37 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 05: Tc = 11.0 min

DRAINAGE BASIN 06

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0100 ft/ft
t_1 = 8.8 min

Shallow Concentrated Flow:

t=1/60v

where
l = 755 ft
Paved ? No
Slope, S = 0.1139 ft/ft
v = 5.45 ft/s
t_2 = 2.3 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0010 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 0.37 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 06: Tc = 11.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 07

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0020 ft/ft
t_1 = 16.8 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1612 ft
Paved ? No
Slope, S = 0.0422 ft/ft
v = 3.31 ft/s
t_2 = 8.1 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0010 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 0.37 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 07: Tc = 25.0 min

DRAINAGE BASIN 08

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0180 ft/ft
t_1 = 7.0 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1179 ft
Paved ? No
Slope, S = 0.0551 ft/ft
v = 3.79 ft/s
t_2 = 5.2 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0010 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 0.37 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 08: Tc = 12.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 09

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Dense = 0.240
l = 100 ft
P2 = 3.60 in
S = 0.2800 ft/ft
t_1 = 4.7 min

Shallow Concentrated Flow:

t=1/60v

where
l = 125 ft
Paved ? No
Slope, S = 0.1360 ft/ft
v = 5.95 ft/s
t_2 = 0.4 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0010 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 0.37 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 09: Tc = 5.0 min

DRAINAGE BASIN 14

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Short = 0.150
l = 100 ft
P2 = 3.60 in
S = 0.1500 ft/ft
t_1 = 4.1 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1860 ft
Paved ? No
Slope, S = 0.0074 ft/ft
v = 1.39 ft/s
t_2 = 22.3 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 270 ft
S = 0.0074 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 27.00 sf
P = 30.22 ft => Hydraulic Radius, R = 0.89 ft
v = 1.19 ft/s
t_3 = 3.8 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 14: Tc = 30.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 15

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Short = 0.150
l = 100 ft
P2 = 3.60 in
S = 0.0080 ft/ft
t_1 = 13.3 min

Shallow Concentrated Flow:

t=1/60v

where
l = 5025 ft
Paved ? No
Slope, S = 0.0202 ft/ft
v = 2.29 ft/s
t_2 = 36.5 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0097 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 48.25 sf
P = 30.49 ft => Hydraulic Radius, R = 1.58 ft
v = 2.65 ft/s
t_3 = 1.9 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 15: Tc = 52.0 min

DRAINAGE BASIN 16

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Short = 0.150
l = 100 ft
P2 = 3.60 in
S = 0.1000 ft/ft
t_1 = 4.9 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1930 ft
Paved ? No
Slope, S = 0.0228 ft/ft
v = 2.44 ft/s
t_2 = 13.2 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0000 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 0.00 sf
P = 0.00 ft => Hydraulic Radius, R = n/a
v = n/a
t_3 = n/a

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 16: Tc = 18.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 17

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Smooth/Paved Surfaces = 0.011
l = 100 ft
P2 = 3.60 in
S = 0.0050 ft/ft
t_1 = 2.0 min

Shallow Concentrated Flow:

t=l/60v

where
l = 0 ft
Paved ? No
Slope, S = 0.1000 ft/ft
v = 5.10 ft/s
t_2 = 0.0 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 2050 ft
S = 0.0049 ft/ft
n = Hwy. r/w grass 4-6 inches = 0.0700
A = 25.00 sf
P = 35.00 ft => Hydraulic Radius, R = 0.71 ft
v = 1.18 ft/s
t_3 = 28.8 min

Pipe Flow: t=1/60v

l= 125 ft
v= 2.00 ft/s
t= 1.0 min

Basin 17: Tc = 32.0 min

DRAINAGE BASIN 18

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0200 ft/ft
t_1 = 6.7 min

Shallow Concentrated Flow:

t=l/60v

where
l = 1800 ft
Paved ? No
Slope, S = 0.0322 ft/ft
v = 2.90 ft/s
t_2 = 10.4 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0010 ft/ft
n = Flood Plains: pasture, short grass = 0.0350
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 1.07 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 18: Tc = 17.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 19

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0150 ft/ft
t_1 = 7.5 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1450 ft
Paved ? No
Slope, S = 0.0214 ft/ft
v = 2.36 ft/s
t_2 = 10.2 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0100 ft/ft
n = Earth, uniform, clean = 0.0170
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 6.95 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 19: Tc = 18.0 min

DRAINAGE BASIN 20

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0300 ft/ft
t_1 = 5.7 min

Shallow Concentrated Flow:

t=1/60v

where
l = 3310 ft
Paved ? No
Slope, S = 0.0308 ft/ft
v = 2.83 ft/s
t_2 = 19.5 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0000 ft/ft
n = Earth, uniform, clean = 0.0170
A = 0.00 sf
P = 0.00 ft => Hydraulic Radius, R = n/a
v = n/a
t_3 = n/a

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 20: Tc = 25.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

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DRAINAGE BASIN 21

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.2000 ft/ft
t_1 = 2.7 min

Shallow Concentrated Flow:

t=1/60v

where
l = 820 ft
Paved ? No
Slope, S = 0.1037 ft/ft
v = 5.19 ft/s
t_2 = 2.6 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0243 ft/ft
n = Flood Plains: heavy brush = 0.1500
A = 6.00 sf
P = 8.47 ft => Hydraulic Radius, R = 0.71 ft
v = 1.23 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 21: Tc = 5.0 min

DRAINAGE BASIN 22

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.2000 ft/ft
t_1 = 2.7 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1725 ft
Paved ? No
Slope, S = 0.0319 ft/ft
v = 2.88 ft/s
t_2 = 10.0 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0000 ft/ft
n = Earth, uniform, clean = 0.0170
A = 0.00 sf
P = 0.00 ft => Hydraulic Radius, R = n/a
v = n/a
t_3 = n/a

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 22: Tc = 13.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN 23

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

$t = (0.007(nl)^{0.8})/((P2^{0.5})*(S^{0.4}))$

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0330 ft/ft
t_1 = 16.6 min

Shallow Concentrated Flow:

t=l/60v

where
l = 981 ft
Paved ? No
Slope, S = 0.0458 ft/ft
v = 3.45 ft/s
t_2 = 4.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0103 ft/ft
n = Nat. stream, light brush on banks = 0.0500
A = 16.00 sf
P = 21.67 ft => Hydraulic Radius, R = 0.74 ft
v = 2.46 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 23: Tc = 21.0 min

DRAINAGE BASIN 26

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

$t = (0.007(nl)^{0.8})/((P2^{0.5})*(S^{0.4}))$

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0300 ft/ft
t_1 = 17.2 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1430 ft
Paved ? No
Slope, S = 0.0698 ft/ft
v = 4.26 ft/s
t_2 = 5.6 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0197 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 117.10 sf
P = 136.65 ft => Hydraulic Radius, R = 0.86 ft
v = 2.51 ft/s
t_3 = 2.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin 26: Tc = 25.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN Offsite 1a **DRAINAGE BASIN** Offsite 1a

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0050 ft/ft
t_1 = 11.6 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1550 ft
Paved ? No
Slope, S = 0.0339 ft/ft
v = 2.97 ft/s
t_2 = 8.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0020 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 25.00 sf
P = 35.00 ft => Hydraulic Radius, R = 0.71 ft
v = 0.53 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 1a: Tc = 20.0 min

DRAINAGE BASIN Offsite 1b **DRAINAGE BASIN** Offsite 1b

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0150 ft/ft
t_1 = 7.5 min

Shallow Concentrated Flow:

t=1/60v

where
l = 5150 ft
Paved ? No
Slope, S = 0.0171 ft/ft
v = 2.11 ft/s
t_2 = 40.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0020 ft/ft
n = Flood Plains: medium brush = 0.1000
A = 25.00 sf
P = 35.00 ft => Hydraulic Radius, R = 0.71 ft
v = 0.53 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 1b: Tc = 48.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN Offsite 2 **DRAINAGE BASIN** Offsite 2

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Smooth/Paved Surfaces = 0.011
l = 100 ft
P2 = 3.60 in
S = 0.0220 ft/ft
t_1 = 1.1 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1200 ft
Paved ? Yes
Slope, S = 0.0445 ft/ft
v = 4.29 ft/s
t_2 = 4.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0277 ft/ft
n = Hwy. r/w grass 4-6 inches = 0.0700
A = 91.77 sf
P = 31.92 ft => Hydraulic Radius, R = 2.87 ft
v = 7.14 ft/s
t_3 = 0.7 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 2: Tc = 6.0 min

DRAINAGE BASIN Offsite 3 **DRAINAGE BASIN** Offsite 3

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Short = 0.150
l = 100 ft
P2 = 3.60 in
S = 0.0100 ft/ft
t_1 = 12.2 min

Shallow Concentrated Flow:

t=1/60v

where
l = 2259 ft
Paved ? No
Slope, S = 0.0309 ft/ft
v = 2.84 ft/s
t_2 = 13.3 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0230 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 97.02 sf
P = 68.82 ft => Hydraulic Radius, R = 1.41 ft
v = 3.78 ft/s
t_3 = 1.3 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 3: Tc = 27.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN Offsite 4 **DRAINAGE BASIN Offsite 4**

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Smooth/Paved Surfaces = 0.011
l = 100 ft
P2 = 3.60 in
S = 0.0010 ft/ft
t_1 = 3.8 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1203 ft
Paved ? No
Slope, S = 0.0529 ft/ft
v = 3.71 ft/s
t_2 = 5.4 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0237 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 93.84 sf
P = 68.60 ft => Hydraulic Radius, R = 1.37 ft
v = 3.76 ft/s
t_3 = 1.3 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 4: Tc = 11.0 min

DRAINAGE BASIN Offsite 5 **DRAINAGE BASIN Offsite 5**

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Woods: Light Underbrush = 0.400
l = 100 ft
P2 = 3.60 in
S = 0.0140 ft/ft
t_1 = 23.4 min

Shallow Concentrated Flow:

t=1/60v

where
l = 3603 ft
Paved ? No
Slope, S = 0.0325 ft/ft
v = 2.91 ft/s
t_2 = 20.6 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0433 ft/ft
n = Earth, fairly uniform, some weeds = 0.0280
A = 13.65 sf
P = 19.70 ft => Hydraulic Radius, R = 0.69 ft
v = 8.65 ft/s
t_3 = 0.6 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 5: Tc = 45.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN Offsite 6 **DRAINAGE BASIN** Offsite 6

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Grass: Short = 0.150
l = 100 ft
P2 = 3.60 in
S = 0.0060 ft/ft
t_1 = 15.0 min

Shallow Concentrated Flow:

t=1/60v

where
l = 5662 ft
Paved ? No
Slope, S = 0.0150 ft/ft
v = 1.98 ft/s
t_2 = 47.8 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 300 ft
S = 0.0213 ft/ft
n = Not maintained, clean btm, brush on sides = 0.0750
A = 39.96 sf
P = 30.22 ft => Hydraulic Radius, R = 1.32 ft
v = 3.48 ft/s
t_3 = 1.4 min

Pipe Flow: t=1/60v

l=
v= 2.00 ft/s
t= 0.0 min

Basin Offsite 6: Tc = 64.0 min

DRAINAGE BASIN A **DRAINAGE BASIN** A

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Smooth/Paved Surfaces = 0.011
l = 100 ft
P2 = 3.60 in
S = 0.0010 ft/ft
t_1 = 3.8 min

Shallow Concentrated Flow:

t=1/60v

where
l = 750 ft
Paved ? Yes
Slope, S = 0.0010 ft/ft
v = 0.64 ft/s
t_2 = 19.4 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 6550 ft
S = 0.0030 ft/ft
n = Rip-Rap Lined Sides = 0.0300
A = 1800.00 sf
P = 148.00 ft => Hydraulic Radius, R = 12.16 ft
v = 14.35 ft/s
t_3 = 7.6 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin A: Tc = 31.0 min

STORMWATER DESIGN CONSIDERATIONS

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DRAINAGE BASIN B

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Smooth/Paved Surfaces = 0.011
l = 100 ft
P2 = 3.60 in
S = 0.0010 ft/ft
t_1 = 3.8 min

Shallow Concentrated Flow:

t=l/60v

where
l = 870 ft
Paved ? No
Slope, S = 0.0010 ft/ft
v = 0.51 ft/s
t_2 = 28.4 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 3200 ft
S = 0.0030 ft/ft
n = Rip-Rap Lined Sides = 0.0300
A = 1800.00 sf
P = 148.00 ft => Hydraulic Radius, R = 12.16 ft
v = 14.35 ft/s
t_3 = 3.7 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin B: Tc = 36.0 min

DRAINAGE BASIN C

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Smooth/Paved Surfaces = 0.011
l = 100 ft
P2 = 3.60 in
S = 0.0010 ft/ft
t_1 = 3.8 min

Shallow Concentrated Flow:

t=l/60v

where
l = 875 ft
Paved ? No
Slope, S = 0.0010 ft/ft
v = 0.51 ft/s
t_2 = 28.6 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 4000 ft
S = 0.0030 ft/ft
n = Rip-Rap Lined Sides = 0.0300
A = 1800.00 sf
P = 148.00 ft => Hydraulic Radius, R = 12.16 ft
v = 14.35 ft/s
t_3 = 4.6 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin C: Tc = 37.0 min

STORMWATER DESIGN CONSIDERATIONS

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PREPARED FOR: Richland County Economic Development

Job: 27015.0007
Date: 4/5/23
Revised: 11/7/23
By: KNK

DRAINAGE BASIN D

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Smooth/Paved Surfaces = 0.011
l = 100 ft
P2 = 3.60 in
S = 0.0010 ft/ft
t_1 = 3.8 min

Shallow Concentrated Flow:

t=l/60v

where
l = 1220 ft
Paved ? No
Slope, S = 0.0010 ft/ft
v = 0.51 ft/s
t_2 = 39.9 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 2300 ft
S = 0.0030 ft/ft
n = Rip-Rap Lined Sides = 0.0300
A = 1800.00 sf
P = 148.00 ft => Hydraulic Radius, R = 12.16 ft
v = 14.35 ft/s
t_3 = 2.7 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin D: Tc = 46.0 min

DRAINAGE BASIN E

Calculate Pre-Development "Tc" and Composite "CN" — **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Smooth/Paved Surfaces = 0.011
l = 100 ft
P2 = 3.60 in
S = 0.0010 ft/ft
t_1 = 3.8 min

Shallow Concentrated Flow:

t=l/60v

where
l = 1520 ft
Paved ? No
Slope, S = 0.0010 ft/ft
v = 0.51 ft/s
t_2 = 49.7 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 1150 ft
S = 0.0030 ft/ft
n = Rip-Rap Lined Sides = 0.0300
A = 1800.00 sf
P = 148.00 ft => Hydraulic Radius, R = 12.16 ft
v = 14.35 ft/s
t_3 = 1.3 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

Basin E: Tc = 55.0 min

STORMWATER DESIGN CONSIDERATIONS

THOMAS & HUTTON

PROJECT: Phase 2 Grading for Project Connect

PREPARED BY: Thomas & Hutton
PREPARED FOR: Richland County Economic Development

Job: 27015.0007
Date: 4/5/23
Revised: 11/7/23
By: KNK

DRAINAGE BASIN F **DRAINAGE BASIN F**

Calculate Pre-Development "Tc" and Composite "CN" **"Post"**

Calculate Time of Concentration:

Use Travel Time Concept:

Overland Sheet Flow:

t = (0.007(nl)^0.8)/((P2^0.5)*(S^0.4))

where: t = Travel time for Overland Flow (min)
n = Manning's coefficient - from TR-55
l = Length of flow (ft)
P2 = 2-yr rainfall depth (in)
S = Hydraulic slope (ft/ft)

n = Pvmt. & Grass Combo (50/50) = 0.100
l = 100 ft
P2 = 3.60 in
S = 0.0890 ft/ft
t_1 = 3.7 min

Shallow Concentrated Flow:

t=1/60v

where
l = 1834 ft
Paved ? No
Slope, S = 0.0354 ft/ft
v = 3.04 ft/s
t_2 = 10.1 min

Basin F: Tc = 14.0 min

Channel Flow: t=l/60v

where: t=Travel time for Pipe Flow (min)
l=Length of flow (ft)
S=Average watercourse slope (ft/ft)
n = Manning's Coefficient for Channel Flow
A=Cross-Sectional Area (ft^2)
P=Wetted Perimeter (ft)
R=Hydraulic Radius (ft)
v=Velocity (ft/s)- From TR-55

l = 0 ft
S = 0.0030 ft/ft
n = Rip-Rap Lined Sides = 0.0300
A = 1800.00 sf
P = 148.00 ft => Hydraulic Radius, R = 12.16 ft
v = 14.35 ft/s
t_3 = 0.0 min

Pipe Flow: t=1/60v

l= 0 ft
v= 2.00 ft/s
t= 0.0 min

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX D

PROPOSED CONDITIONS ICPR4 MODEL REPORTS

J – 27015.0007

December 2023

thomasandhutton.com

Simulation: 002yr

Scenario: Proposed
Run Date/Time: 12/14/2023 10:46:36 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	3.60 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 010yr

Scenario:	Proposed
Run Date/Time:	12/14/2023 10:48:32 AM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	5.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 025yr

Scenario: Proposed
Run Date/Time: 12/14/2023 10:51:10 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	6.40 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 050yr

Scenario:	Proposed
Run Date/Time:	12/14/2023 10:53:52 AM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	7.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 100yr

Scenario: Proposed
Run Date/Time: 12/14/2023 10:57:05 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: Flood
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	8.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 500yr

Scenario:	Proposed
Run Date/Time:	12/14/2023 11:00:20 AM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	11.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simple Basin: Basin_01

Scenario:	Proposed
Node:	Trib1-05-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	42.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	95.1700 ac
Curve Number:	62.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_02

Scenario:	Proposed
Node:	Trib1-04-01
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	11.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	7.9500 ac
Curve Number:	62.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_03

Scenario:	Proposed
Node:	Trib1-00-05
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	11.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	21.5400 ac
Curve Number:	76.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_04

Scenario:	Proposed
Node:	Trib1-02-01
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	13.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	16.6500 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_05

Scenario:	Proposed
Node:	Trib1-01-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	11.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	21.1800 ac
Curve Number:	65.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_06

Scenario:	Proposed
Node:	Trib1-00-03b
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	11.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	16.8900 ac
Curve Number:	74.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_07

Scenario:	Proposed
Node:	Pond-07
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	12.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	35.8600 ac
Curve Number:	80.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_08

Scenario:	Proposed
Node:	Pond-08
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	6.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	6.8200 ac
Curve Number:	62.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_09

Scenario:	Proposed
Node:	Pond-09
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	6.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	4.3900 ac
Curve Number:	67.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_14

Scenario:	Proposed
Node:	Outfall_C
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	30.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	55.3200 ac
Curve Number:	70.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment: test: TC = 30 (was 16)

Simple Basin: Basin_15

Scenario:	Proposed
Node:	Trib1-00-00
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	52.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	184.4700 ac
Curve Number:	67.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_16

Scenario:	Proposed
Node:	Trib3-00-05
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	18.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	22.5200 ac
Curve Number:	86.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_17

Scenario:	Proposed
Node:	Trib1-05-05
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	32.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	11.8400 ac
Curve Number:	75.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment: *new; access road

Simple Basin: Basin_18

Scenario:	Proposed
Node:	Trib1-05-07
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	17.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	27.9900 ac
Curve Number:	50.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_19

Scenario:	Proposed
Node:	Trib2-04-11
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	18.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	53.4400 ac
Curve Number:	69.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_20

Scenario:	Proposed
Node:	Trib2-04-08
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	25.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	42.1100 ac
Curve Number:	45.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_21

Scenario:	Proposed
Node:	Trib2-04-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	6.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	48.1100 ac
Curve Number:	68.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_22

Scenario:	Proposed
Node:	Trib2-00-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	13.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	41.6900 ac
Curve Number:	59.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_23

Scenario:	Proposed
Node:	Trib2-00-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	21.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	49.8200 ac
Curve Number:	67.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_26

Scenario:	Proposed
Node:	Outfall_B
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	25.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	29.3400 ac
Curve Number:	62.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_A

Scenario:	Proposed
Node:	Pond-01
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	31.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	398.3300 ac
Curve Number:	86.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_B

Scenario:	Proposed
Node:	Pond-02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	36.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	239.8600 ac
Curve Number:	90.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_C

Scenario:	Proposed
Node:	Pond-03
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	37.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	182.3100 ac
Curve Number:	91.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_D

Scenario:	Proposed
Node:	Pond-04
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	46.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	132.6000 ac
Curve Number:	89.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_E

Scenario:	Proposed
Node:	Pond-05
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	55.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	64.9400 ac
Curve Number:	45.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_F

Scenario:	Proposed
Node:	Pond-06
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	24.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	55.6600 ac
Curve Number:	80.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off1a

Scenario:	Proposed
Node:	Offsite01
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	43.4100 ac
Curve Number:	57.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off1b

Scenario:	Proposed
Node:	Offsite02
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	48.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	66.9200 ac
Curve Number:	55.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off2

Scenario:	Proposed
Node:	Trib1-05-01a
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	6.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	17.3900 ac
Curve Number:	89.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off3

Scenario:	Proposed
Node:	Trib2-04-04
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	27.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	58.0600 ac
Curve Number:	46.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off4

Scenario:	Proposed
Node:	Trib2-04-06
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	11.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	15.7900 ac
Curve Number:	52.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off5

Scenario:	Proposed
Node:	Trib2-02-01
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	45.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	134.0500 ac
Curve Number:	59.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin_Off6

Scenario:	Proposed
Node:	Trib3-00-06
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	64.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	842.9300 ac
Curve Number:	57.0
% Impervious:	0.00
% DCIA:	0.00

% Direct: 0.00
Rainfall Name:

Comment:

Node: Offsite01

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 436.00 ft
Warning Stage: 470.00 ft

Stage [ft]	Area [ac]	Area [ft2]
436.00	0.0015	65
437.00	0.0220	958
438.00	0.0803	3498
439.00	0.2352	10245
440.00	0.5601	24398
441.00	1.1692	50930
442.00	1.7551	76452
443.00	2.1809	95000
444.00	2.6274	114450
445.00	3.0803	134178

Comment: Basin Off1a storage

Node: Offsite02

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 443.00 ft
Warning Stage: 459.00 ft

Stage [ft]	Area [ac]	Area [ft2]
443.00	0.0000	0
444.00	0.0069	301
445.00	0.0113	492
446.00	0.0217	945
447.00	0.0316	1376
448.00	0.0605	2635
449.00	0.0981	4273
450.00	0.1470	6403
451.00	0.2463	10729
452.00	0.3871	16862
453.00	0.5702	24838

Stage [ft]	Area [ac]	Area [ft2]
454.00	0.8136	35440
455.00	1.1227	48905

Comment: Off1b storage

Node: Outfall_A

Scenario: Proposed
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 346.00 ft
Warning Stage: 400.00 ft
Boundary Stage: 100yr_FloodA

Comment:

Node: Outfall_B

Scenario: Proposed
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 378.00 ft
Warning Stage: 412.00 ft
Boundary Stage: 100yr_FloodB

Comment:

Node: Outfall_C

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 358.50 ft
Warning Stage: 390.00 ft

Comment:

Node: Pond-01

Scenario: Proposed

Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 442.20 ft
Warning Stage: 448.70 ft

Stage [ft]	Area [ac]	Area [ft2]
438.20	39.8880	1737521
442.20	41.4700	1806433
442.20	42.8040	1864542
448.70	45.4467	1979658

Comment: Dropped pond by 1.5'

Node: Pond-02

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 455.00 ft
Warning Stage: 466.00 ft

Stage [ft]	Area [ac]	Area [ft2]
450.50	14.9450	651004
455.00	16.0300	698267
455.00	16.8500	733986
466.00	19.6581	856307
466.00	20.5413	894779

Comment: Dropped Pond by 2'

Node: Pond-03

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 453.50 ft
Warning Stage: 458.50 ft

Stage [ft]	Area [ac]	Area [ft2]
448.50	15.0474	655465
453.50	16.1705	704387
453.50	16.9376	737802
458.50	18.1152	789098
458.50	18.9186	824094
483.20	25.3091	1102462

Comment:

Node: Pond-04

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 457.80 ft
Warning Stage: 464.80 ft

Stage [ft]	Area [ac]	Area [ft2]
453.80	8.3089	361936
457.80	9.0546	394418
457.80	9.6919	422179
464.80	11.1004	483533
483.20	15.7686	686880

Comment:

Node: Pond-05

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 483.00 ft
Warning Stage: 493.00 ft

Stage [ft]	Area [ac]	Area [ft2]
475.00	1.2180	53056
493.00	2.6200	114127

Comment:

Node: Pond-06

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 419.00 ft
Warning Stage: 435.00 ft

Stage [ft]	Area [ac]	Area [ft2]
409.00	1.9600	85378
435.00	4.6900	204296

Comment:

Node: Pond-07

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 419.00 ft
Warning Stage: 427.00 ft

Stage [ft]	Area [ac]	Area [ft2]
415.00	1.2060	52533
419.00	1.6347	71208
419.00	2.0126	87669
427.00	2.9750	129591

Comment:

Node: Pond-08

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 418.00 ft
Warning Stage: 425.00 ft

Stage [ft]	Area [ac]	Area [ft2]
418.00	0.2797	12184
425.00	0.9800	42689

Comment:

Node: Pond-09

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 439.00 ft
Warning Stage: 445.00 ft

Stage [ft]	Area [ac]	Area [ft2]
435.00	0.0265	1154
439.00	0.2722	11857
445.00	0.9827	42806

Comment:

Node: Trib1-00-00

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 347.00 ft
Warning Stage: 389.10 ft

Comment:

Node: Trib1-00-02

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 367.12 ft
Warning Stage: 415.00 ft

Comment:

Node: Trib1-00-02b

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 410.73 ft
Warning Stage: 425.00 ft

Comment:

Node: Trib1-00-03a

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 392.70 ft
Warning Stage: 435.00 ft

Comment:

Node: Trib1-00-03b

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 392.70 ft
Warning Stage: 435.00 ft

Comment:

Node: Trib1-00-04

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 399.00 ft
Warning Stage: 435.00 ft

Comment:

Node: Trib1-00-05

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 405.00 ft
Warning Stage: 431.00 ft

Comment:

Node: Trib1-00-06

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 417.50 ft
Warning Stage: 440.00 ft

Comment:

Node: Trib1-00-07

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 419.50 ft
Warning Stage: 433.00 ft

Comment:

Node: Trib1-01-01

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 399.04 ft
Warning Stage: 416.63 ft

Comment:

Node: Trib1-01-02

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 399.42 ft
Warning Stage: 413.39 ft

Comment:

Node: Trib1-01-03

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 425.88 ft
Warning Stage: 473.50 ft

Stage [ft]	Area [ac]	Area [ft2]
421.00	0.0000	0
422.00	0.0094	409
423.00	0.0289	1259
424.00	0.0640	2788

Stage [ft]	Area [ac]	Area [ft2]
425.00	0.1080	4704
426.00	0.1740	7579
427.00	0.2449	10668
428.00	0.3166	13791
429.00	0.4224	18400
430.00	0.5079	22124
431.00	0.5961	25966
432.00	0.6893	30026
433.00	0.8240	35893
434.00	0.9589	41770
435.00	1.1104	48369

Comment: Add Basin_05 storage

421.78 invert?

Node: Trib1-02-01

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 430.07 ft
Warning Stage: 455.00 ft

Stage [ft]	Area [ac]	Area [ft2]
430.00	0.0000	0
431.00	0.0348	1516
432.00	0.0694	3023
433.00	0.1067	4648
434.00	0.2068	9008
435.00	0.2871	12506
436.00	0.3709	16156
437.00	0.4626	20151
438.00	0.5412	23575
439.00	0.6250	27225
440.00	0.6999	30488
441.00	0.7933	34556
442.00	0.8832	38472
443.00	0.9904	43142
444.00	1.1441	49837
445.00	1.3549	59019

Comment: used basin_04 storage

Node: Trib1-04-01

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 427.00 ft
Warning Stage: 435.00 ft

Comment: *Community Road

Node: Trib1-04-02

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 434.00 ft
Warning Stage: 445.00 ft

Comment:

Node: Trib1-04-03

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 436.61 ft
Warning Stage: 448.84 ft

Comment:

Node: Trib1-05-01a

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 422.00 ft
Warning Stage: 431.00 ft

Comment:

Node: Trib1-05-01b

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 437.00 ft
Warning Stage: 460.00 ft

Comment:

Node: Trib1-05-02

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 445.50 ft
Warning Stage: 458.00 ft

Comment:

Node: Trib1-05-03

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 447.50 ft
Warning Stage: 458.00 ft

Comment:

Node: Trib1-05-04

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 470.00 ft
Warning Stage: 480.00 ft

Comment:

Node: Trib1-05-05

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 481.00 ft
Warning Stage: 483.20 ft

Comment:

Node: Trib1-05-06

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 488.49 ft
Warning Stage: 493.10 ft

Comment:

Node: Trib1-05-07

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 489.54 ft
Warning Stage: 494.75 ft

Comment:

Node: Trib2-00-01

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 384.50 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib2-00-02

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 400.00 ft
Warning Stage: 430.00 ft

Stage [ft]	Area [ac]	Area [ft2]
400.00	0.0067	292
401.00	5.2831	230132
402.00	6.0812	264897
403.00	6.8880	300041
404.00	7.4304	323668
405.00	7.9748	347382
406.00	8.4349	367424
407.00	8.8663	386216
408.00	9.3121	405635
409.00	9.7295	423817
410.00	10.1093	440361
411.00	10.5024	457485
412.00	10.9704	477871
413.00	11.3727	495395
414.00	11.8358	515567
415.00	12.2470	533479
416.00	12.7318	554597
417.00	13.1734	573833
418.00	13.6333	593867
419.00	14.0650	612671
420.00	14.5367	633219
421.00	15.0408	655177
422.00	15.5985	679471
423.00	16.1468	703355
424.00	16.6670	726015
425.00	17.2455	751214
426.00	17.8237	776400
427.00	18.4654	804353
428.00	19.1252	833094
429.00	19.7358	859691
430.00	20.4072	888938

Comment: Basin 23 Storage

Node: Trib2-00-03

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 404.50 ft

Warning Stage: 435.00 ft

Comment:

Node: Trib2-00-04

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 414.00 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib2-01-01

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 396.00 ft
Warning Stage: 405.00 ft

Comment:

Node: Trib2-02-01

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 413.00 ft
Warning Stage: 425.00 ft

Stage [ft]	Area [ac]	Area [ft2]
413.00	0.0022	96
414.00	0.0269	1172
415.00	0.0514	2239
416.00	0.0907	3951
417.00	0.1693	7375
418.00	0.2531	11025
419.00	0.3428	14932
420.00	0.4392	19132
421.00	0.5556	24202

Stage [ft]	Area [ac]	Area [ft2]
422.00	0.6542	28497
423.00	0.7795	33955
424.00	0.9374	40833
425.00	1.0723	46709
426.00	1.2198	53134
427.00	1.4113	61476
428.00	1.5922	69356
429.00	1.7568	76526
430.00	1.9582	85299

Comment: Basin Off5 Storage

Node: Trib2-03-01

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 433.00 ft
Warning Stage: 448.70 ft

Comment:

Node: Trib2-04-01

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 419.00 ft
Warning Stage: 450.00 ft

Comment:

Node: Trib2-04-02

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 442.30 ft
Warning Stage: 464.00 ft

Stage [ft]	Area [ac]	Area [ft2]
442.00	0.9577	41717

Stage [ft]	Area [ac]	Area [ft2]
443.00	9.9049	431457
444.00	10.3047	448873
445.00	10.8738	473663
446.00	11.7011	509700
447.00	12.4679	543102
448.00	13.2186	575802
449.00	13.8764	604456
450.00	14.5522	633894
451.00	15.2389	663806
452.00	15.9550	695000
453.00	16.7677	730401
454.00	17.6244	767719
455.00	18.5869	809645
456.00	19.6534	856102
457.00	20.7367	903291
458.00	21.7770	948606
459.00	22.9213	998452
460.00	24.1348	1051312
461.00	25.2940	1101807
462.00	26.4905	1153926
463.00	27.7480	1208703
464.00	28.9964	1263083

Comment: Basin 21 Storage

Node: Trib2-04-03

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 449.00 ft
Warning Stage: 470.00 ft

Comment:

Node: Trib2-04-04

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 450.00 ft
Warning Stage: 455.00 ft

Stage [ft]	Area [ac]	Area [ft2]
450.00	0.0000	0

Stage [ft]	Area [ac]	Area [ft2]
451.00	0.0089	388
452.00	0.0326	1420
453.00	0.0630	2744
454.00	0.1483	6460
455.00	0.2471	10764

Comment: Basin Off3 Storage

Node: Trib2-04-05

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 454.00 ft
Warning Stage: 470.00 ft

Comment:

Node: Trib2-04-06

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 455.00 ft
Warning Stage: 459.00 ft

Stage [ft]	Area [ac]	Area [ft2]
455.00	0.0022	96
456.00	0.0089	388
457.00	0.0311	1355
458.00	0.0966	4208
459.00	0.1633	7113
460.00	0.2589	11278

Comment: Basin Off4 Storage

Node: Trib2-04-07

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 447.60 ft
Warning Stage: 452.00 ft

Comment:

Node: Trib2-04-08

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 448.00 ft
Warning Stage: 453.00 ft

Stage [ft]	Area [ac]	Area [ft2]
448.00	0.0022	96
449.00	0.0264	1150
450.00	0.1628	7092
451.00	0.3219	14022
452.00	0.5097	22203
453.00	0.6938	30222

Comment: basin 20 storage

Node: Trib2-04-10

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 463.00 ft
Warning Stage: 483.00 ft

Comment:

Node: Trib2-04-11

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 514.00 ft
Warning Stage: 518.50 ft

Comment:

Node: Trib3-00-01

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 360.00 ft
Warning Stage: 370.00 ft

Comment:

Node: Trib3-00-02

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 372.50 ft
Warning Stage: 390.00 ft

Comment:

Node: Trib3-00-03

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 377.00 ft
Warning Stage: 390.00 ft

Comment:

Node: Trib3-00-04

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 386.00 ft
Warning Stage: 423.00 ft

Comment:

Node: Trib3-00-05

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 388.50 ft
Warning Stage: 423.00 ft

Comment:

Node: Trib3-00-06

Scenario: Proposed
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 390.40 ft
Warning Stage: 425.00 ft

Stage [ft]	Area [ac]	Area [ft2]
390.00	0.0000	0
391.00	0.0067	292
392.00	0.0252	1098
393.00	0.0504	2195
394.00	0.0934	4069
395.00	0.2128	9270
396.00	0.5073	22098
397.00	0.7757	33789
398.00	1.1844	51592
399.00	1.6299	70998
400.00	1.9931	86819
401.00	2.4446	106487
402.00	2.9522	128598
403.00	3.4704	151171
404.00	3.9545	172258
405.00	4.4373	193289
406.00	5.0239	218841
407.00	5.7580	250818
408.00	6.4756	282077
409.00	7.2609	316285
410.00	8.1789	356273
411.00	9.1910	400360
412.00	10.4389	454718
413.00	11.6838	508946
414.00	13.0604	568911
415.00	14.5129	632182
416.00	16.1240	702361
417.00	17.9051	779946
418.00	19.9314	868212

Comment: Basin Off6 storage

Node: Trib3-00-07

Scenario:	Proposed
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	429.75 ft
Warning Stage:	445.00 ft

Comment:

Channel Link: L-0310C		Upstream		Downstream	
Scenario:	Proposed	Invert:	437.00 ft	Invert:	422.00 ft
From Node:	Trib1-05-01b	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-05-01a	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0810C	Cross Section:	X-0810C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	780.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0320C		Upstream		Downstream	
Scenario:	Proposed	Invert:	434.00 ft	Invert:	427.00 ft
From Node:	Trib1-04-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-04-01	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0740C	Cross Section:	X-0740C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	300.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				

Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Drop Structure Link: L-0340DS		Upstream Pipe		Downstream Pipe	
Scenario:	Proposed	Invert:	450.50 ft	Invert:	444.31 ft
From Node:	Pond-02	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-04-03	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	82.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Circular	Op Table:	
Invert:	455.00 ft	Ref Node:	
Control Elevation:	455.00 ft	Discharge Coefficients	
Max Depth:	0.50 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	2	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular		

Invert:	457.50 ft
Control Elevation:	457.50 ft
Max Depth:	2.50 ft
Max Width:	1.00 ft
Fillet:	0.00 ft

Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	3
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	460.00 ft
Control Elevation:	460.00 ft
Max Depth:	2.00 ft
Max Width:	2.00 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	4
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	462.00 ft
Control Elevation:	462.00 ft
Max Depth:	4.00 ft
Max Width:	4.00 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	5
Weir Count:	1
Weir Flow Direction:	None
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Circular
Invert:	450.50 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	

Control Elevation:	450.50 ft
Max Depth:	1.00 ft

Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: **ORIFICE FOR EMPTYING POND; CLOSED DURING NORMAL POND OPPERATION

Drop Structure Comment:

Channel Link: L-0350C		Upstream		Downstream	
Scenario:	Proposed	Invert:	470.00 ft	Invert:	447.50 ft
From Node:	Trib1-05-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-05-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0820C	Cross Section:	X-0820C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1040.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0360C		Upstream		Downstream	
Scenario:	Proposed	Invert:	481.00 ft	Invert:	470.00 ft
From Node:	Trib1-05-05	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-05-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0800C	Cross Section:	X-0800C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	2640.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Drop Structure Link: L-0370DS		Upstream Pipe		Downstream Pipe	
Scenario:	Proposed	Invert:	482.73 ft	Invert:	481.00 ft
From Node:	Pond-05	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-05-05	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	303.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment: 7-5-23: lengthened pipe;

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Circular	Op Table:	
Invert:	483.00 ft	Ref Node:	
Control Elevation:	483.00 ft	Discharge Coefficients	
Max Depth:	0.50 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	2	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	484.00 ft	Ref Node:	
Control Elevation:	484.00 ft	Discharge Coefficients	
Max Depth:	4.00 ft	Weir Default:	3.200
Max Width:	1.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	3	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	**Top Clip**	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	488.00 ft	Ref Node:	
Control Elevation:	488.00 ft	**Discharge Coefficients**	
Max Depth:	4.00 ft	Weir Default:	3.200
Max Width:	4.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Channel Link: L-0390C		Upstream		Downstream	
Scenario:	Proposed	Invert:	514.00 ft	Invert:	463.00 ft
From Node:	Trib2-04-11	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-04-10	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0790C	Cross Section:	X-0780C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	4220.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.50				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0400C		Upstream		Downstream	
Scenario:	Proposed	Invert:	433.00 ft	Invert:	414.00 ft
From Node:	Trib2-03-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0750C	Cross Section:	X-0750C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	800.00 ft				
Contraction Coef:	0.00				

Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Drop Structure Link: L-0410DS		Upstream Pipe		Downstream Pipe	
Scenario:	Proposed	Invert:	438.20 ft	Invert:	438.04 ft
From Node:	Pond-01	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-03-01	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	67.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	442.20 ft	Ref Node:	
Control Elevation:	442.20 ft	Discharge Coefficients	
Max Depth:	1.00 ft	Weir Default:	3.200
Max Width:	1.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	2	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both		

Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	443.20 ft
Control Elevation:	443.20 ft
Max Depth:	1.00 ft
Max Width:	2.50 ft
Fillet:	0.00 ft

Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	3
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	444.20 ft
Control Elevation:	444.20 ft
Max Depth:	1.00 ft
Max Width:	3.50 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	4
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	445.20 ft
Control Elevation:	445.20 ft
Max Depth:	4.00 ft
Max Width:	4.00 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	5
Weir Count:	1
Weir Flow Direction:	None
Damping:	0.0000 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Weir Type:	Broad Crested Vertical
Geometry Type:	Circular
Invert:	438.20 ft
Control Elevation:	438.20 ft
Max Depth:	2.00 ft

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: **ORIFICE FOR EMPTYING POND; CLOSED DURING NORMAL POND OPPERATION

Drop Structure Comment:

Drop Structure Link: L-0420DS		Upstream Pipe		Downstream Pipe	
Scenario:	Proposed	Invert:	448.50 ft	Invert:	403.32 ft
From Node:	Pond-03	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-01-01	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	568.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component	
Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Circular
Invert:	453.50 ft
Control Elevation:	453.50 ft
Max Depth:	0.50 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: low flow

Weir Component		Bottom Clip	
Weir:	2	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	454.00 ft	Ref Node:	
Control Elevation:	454.00 ft	Discharge Coefficients	
Max Depth:	1.50 ft	Weir Default:	3.200
Max Width:	2.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment: middle weir

Weir Component		Bottom Clip	
Weir:	3	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	455.50 ft	Ref Node:	
Control Elevation:	455.50 ft	Discharge Coefficients	
Max Depth:	1.50 ft	Weir Default:	3.200
Max Width:	3.50 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment: top middle weir

Weir Component		Bottom Clip	
Weir:	4	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	457.00 ft	Ref Node:	
Control Elevation:	457.00 ft	Discharge Coefficients	
Max Depth:	5.00 ft	Weir Default:	3.200
Max Width:	5.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment: 5x5 per chandler

Weir Component		Bottom Clip	
Weir:	5	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	None	Ref Node:	
Damping:	0.0000 ft	**Top Clip**	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Circular	Op Table:	
Invert:	448.50 ft	Ref Node:	
Control Elevation:	448.50 ft	**Discharge Coefficients**	
Max Depth:	1.00 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment: **ORIFICE FOR EMPTYING POND; CLOSED DURING NORMAL POND OPPERATION

Drop Structure Comment:

Pipe Link: L-0430P		Upstream		Downstream	
Scenario:	Proposed	Invert:	392.70 ft	Invert:	367.12 ft
From Node:	Trib1-00-03a	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-00-02	Geometry: Circular		Geometry: Circular	
Link Count:	2	Max Depth:	5.00 ft	Max Depth:	5.00 ft
Flow Direction:	Both	**Bottom Clip**			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	1256.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	**Top Clip**			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: L-0440C		Upstream		Downstream	
Scenario:	Proposed	Invert:	399.00 ft	Invert:	392.70 ft
From Node:	Trib1-00-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-03b	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	X-0730C	Cross Section:	X-0730C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	630.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				

Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Pipe Link: L-0450P		Upstream		Downstream	
Scenario:	Proposed	Invert:	405.00 ft	Invert:	399.00 ft
From Node:	Trib1-00-05	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-00-04	Geometry: Circular		Geometry: Circular	
Link Count:	2	Max Depth:	5.00 ft	Max Depth:	5.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	1316.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Drop Structure Link: L-0460DS		Upstream Pipe		Downstream Pipe	
Scenario:	Proposed	Invert:	409.00 ft	Invert:	402.10 ft
From Node:	Pond-06	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-01-02	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	129.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		
Weir:	1	Bottom Clip

Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Circular
Invert:	419.00 ft
Control Elevation:	419.00 ft
Max Depth:	0.50 ft

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	2
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	423.00 ft
Control Elevation:	423.00 ft
Max Depth:	4.00 ft
Max Width:	1.00 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	3
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	427.00 ft
Control Elevation:	427.00 ft
Max Depth:	6.00 ft
Max Width:	2.00 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	4
Weir Count:	1

Bottom Clip

Default:	0.00 ft

Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	433.00 ft
Control Elevation:	433.00 ft
Max Depth:	4.00 ft
Max Width:	4.00 ft
Fillet:	0.00 ft

Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	5
Weir Count:	1
Weir Flow Direction:	None
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Circular
Invert:	409.00 ft
Control Elevation:	409.00 ft
Max Depth:	0.50 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: **ORIFICE FOR EMPTYING POND; CLOSED DURING NORMAL POND OPPERATION

Drop Structure Comment:

Channel Link: L-0470C

Scenario:	Proposed
From Node:	Trib2-04-10
To Node:	Pond-01
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Length:	475.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	1.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Upstream		Downstream	
Invert:	463.00 ft	Invert:	450.00 ft
Manning's N:	0.0000	Manning's N:	0.0000
Geometry:	Irregular	Geometry:	Irregular
Cross Section:	X-0770C	Cross Section:	X-0770C

Comment:

Drop Structure Link: L-0490DS		Upstream Pipe		Downstream Pipe	
Scenario:	Proposed	Invert:	453.80 ft	Invert:	410.66 ft
From Node:	Pond-04	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-01-01	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	415.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Circular	Op Table:	
Invert:	457.80 ft	Ref Node:	
Control Elevation:	457.80 ft	Discharge Coefficients	
Max Depth:	0.50 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	2	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	459.80 ft	Ref Node:	
Control Elevation:	459.80 ft	Discharge Coefficients	
Max Depth:	3.00 ft		

Max Width:	1.00 ft
Fillet:	0.00 ft

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	3
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	462.80 ft
Control Elevation:	462.80 ft
Max Depth:	4.00 ft
Max Width:	4.00 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	4
Weir Count:	1
Weir Flow Direction:	None
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Circular
Invert:	453.80 ft
Control Elevation:	453.80 ft
Max Depth:	1.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: **ORIFICE FOR EMPTYING POND; CLOSED DURING NORMAL POND OPPERATION

Drop Structure Comment:

Pipe Link: L-0500P

Scenario:	Proposed
From Node:	Trib1-04-01
To Node:	Trib1-00-06
Link Count:	1
Flow Direction:	Both

Upstream

Invert:	427.96 ft
Manning's N:	0.0130

Geometry: Circular

Max Depth:	2.00 ft

Bottom Clip

Downstream

Invert:	427.37 ft
Manning's N:	0.0130

Geometry: Circular

Max Depth:	2.00 ft

Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	195.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Weir Link: L-0510W

Scenario:	Proposed	Bottom Clip	
From Node:	Pond-02	Default:	0.00 ft
To Node:	Trib1-04-02	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	463.50 ft	Discharge Coefficients	
Control Elevation:	463.50 ft	Weir Default:	2.800
Max Depth:	2.50 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	400.00 ft	Orifice Table:	
Left Slope:	3.000 (h:v)		
Right Slope:	3.000 (h:v)		

Comment:

Weir Link: L-0520W

Scenario:	Proposed	Bottom Clip	
From Node:	Pond-01	Default:	0.00 ft
To Node:	Trib2-03-01	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	446.20 ft	Discharge Coefficients	
Control Elevation:	446.20 ft	Weir Default:	2.800
Max Depth:	2.50 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	300.00 ft	Orifice Table:	
Left Slope:	3.000 (h:v)		
Right Slope:	3.000 (h:v)		

Comment:

Weir Link: L-0550W			
Scenario:	Proposed	Bottom Clip	
From Node:	Trib1-04-01	Default:	0.00 ft
To Node:	Trib1-00-06	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Paved Road Vertical	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	440.00 ft	Discharge Coefficients	
Control Elevation:	440.00 ft	Weir Default:	2.800
Max Depth:	10.00 ft	Weir Table:	
Max Width:	150.00 ft	Orifice Default:	0.600
Fillet:	0.00 ft	Orifice Table:	

Comment:

Pipe Link: L-0580P		Upstream		Downstream	
Scenario:	Proposed	Invert:	489.54 ft	Invert:	488.49 ft
From Node:	Trib1-05-07	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-05-06	Geometry: Circular		Geometry: Circular	
Link Count:	2	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	151.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: L-0590C		Upstream		Downstream	
Scenario:	Proposed	Invert:	488.49 ft	Invert:	483.00 ft
From Node:	Trib1-05-06	Manning's N:	0.0350	Manning's N:	0.0350
To Node:	Pond-05	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	X-0840C	Cross Section:	X-0840C
Flow Direction:	Both				
Damping:	0.0000 ft				

Length:	1745.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Pipe Link: L-0600P		Upstream		Downstream	
Scenario:	Proposed	Invert:	430.07 ft	Invert:	405.85 ft
From Node:	Trib1-02-01	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-00-05	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	352.00 ft	Op Table:		Op Table:	
FHWA Code:	3	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: L-0610P		Upstream		Downstream	
Scenario:	Proposed	Invert:	425.88 ft	Invert:	420.36 ft
From Node:	Trib1-01-03	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Pond-06	Geometry: Circular		Geometry: Circular	
Link Count:	2	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	477.00 ft	Op Table:		Op Table:	
FHWA Code:	3	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: L-0620C		Upstream		Downstream	
Scenario:	Proposed	Invert:	445.50 ft	Invert:	437.00 ft
From Node:	Trib1-05-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-05-01b	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0830C	Cross Section:	X-0830C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	443.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment:					

Weir Link: L-0640W			
Scenario:	Proposed	Bottom Clip	
From Node:	Offsite02	Default:	0.00 ft
To Node:	Trib1-05-01b	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Paved Road Vertical	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	459.00 ft	Discharge Coefficients	
Control Elevation:	459.00 ft	Weir Default:	2.800
Max Depth:	10.00 ft	Weir Table:	
Max Width:	15.00 ft	Orifice Default:	0.600
Fillet:	0.00 ft	Orifice Table:	
Comment:			

Weir Link: L-0650W			
Scenario:	Proposed	Bottom Clip	
From Node:	Trib1-05-07	Default:	0.00 ft
To Node:	Trib1-05-06	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Paved Road Vertical	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	493.00 ft	Discharge Coefficients	
Control Elevation:	493.00 ft	Weir Default:	2.800
Max Depth:	10.00 ft	Weir Table:	

Max Width:	15.00 ft		
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Comment:

Channel Link: L-0660C		Upstream		Downstream	
Scenario:	Proposed	Invert:	360.00 ft	Invert:	347.00 ft
From Node:	Trib3-00-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-00	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-011	Cross Section:	X-001
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1078.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0670C		Upstream		Downstream	
Scenario:	Proposed	Invert:	372.50 ft	Invert:	360.00 ft
From Node:	Trib3-00-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib3-00-01	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-020	Cross Section:	X-011
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	945.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0680C		Upstream		Downstream	
Scenario:	Proposed	Invert:	377.00 ft	Invert:	372.50 ft
From Node:	Trib3-00-03	Manning's N:	0.0000	Manning's N:	0.0000

To Node:	Trib3-00-02	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:	X-030	Cross Section:	X-020
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	905.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Pipe Link: L-0690P		Upstream		Downstream	
Scenario:	Proposed	Invert:	436.31 ft	Invert:	434.00 ft
From Node:	Trib1-04-03	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-04-02	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	55.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: L-0700P		Upstream		Downstream	
Scenario:	Proposed	Invert:	399.04 ft	Invert:	395.45 ft
From Node:	Trib1-01-01	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-00-03b	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	72.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	

		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: L-0710P		Upstream		Downstream	
Scenario:	Proposed	Invert:	399.42 ft	Invert:	396.85 ft
From Node:	Trib1-01-02	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-00-03b	Geometry:	Circular	Geometry:	Circular
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	52.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment: 7-5-23 CHANGED PIPE LENGTH & U.S. INV

Channel Link: L-0720C		Upstream		Downstream	
Scenario:	Proposed	Invert:	429.75 ft	Invert:	386.50 ft
From Node:	Trib3-00-07	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib3-00-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0720C	Cross Section:	X-0720C
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	970.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Drop Structure Link: L-0730DS		Upstream Pipe		Downstream Pipe	
Scenario:	Proposed	Invert:	438.00 ft	Invert:	429.92 ft
From Node:	Pond-09	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib3-00-07	Geometry:	Circular	Geometry:	Circular
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft

Flow Direction:	Both
Solution:	Combine
Increments:	0
Pipe Count:	1
Damping:	0.0000 ft
Length:	79.00 ft
FHWA Code:	0
Entr Loss Coef:	0.50
Exit Loss Coef:	0.50
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Bottom Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000
Top Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000

Pipe Comment:

Weir Component

Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Circular
Invert:	439.00 ft
Control Elevation:	439.00 ft
Max Depth:	0.25 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	2
Weir Count:	1
Weir Flow Direction:	None
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	440.00 ft
Control Elevation:	440.00 ft
Max Depth:	3.00 ft
Max Width:	0.50 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	3
Weir Count:	1
Weir Flow Direction:	Both

Bottom Clip

Default:	0.00 ft
Op Table:	

Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	443.00 ft
Control Elevation:	443.00 ft
Max Depth:	4.00 ft
Max Width:	4.00 ft
Fillet:	0.00 ft

Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link: L-0740DS		Upstream Pipe		Downstream Pipe	
Scenario:	Proposed	Invert:	412.99 ft	Invert:	412.21 ft
From Node:	Pond-07	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-01-01	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	95.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment: 7-5-23 SHORTENED PIPE LENGTH; CHANGED INVERTS

Weir Component	
Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	Circular
Invert:	419.00 ft
Control Elevation:	419.00 ft
Max Depth:	0.50 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600

Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	2	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	421.00 ft	Ref Node:	
Control Elevation:	421.00 ft	Discharge Coefficients	
Max Depth:	4.00 ft	Weir Default:	3.200
Max Width:	1.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	3	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	425.00 ft	Ref Node:	
Control Elevation:	425.00 ft	Discharge Coefficients	
Max Depth:	4.00 ft	Weir Default:	3.200
Max Width:	4.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link: L-0750DS		Upstream Pipe		Downstream Pipe	
Scenario:	Proposed	Invert:	418.00 ft	Invert:	410.73 ft
From Node:	Pond-08	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-00-02b	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	

Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	83.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Circular	Op Table:	
Invert:	418.00 ft	Ref Node:	
Control Elevation:	418.00 ft	Discharge Coefficients	
Max Depth:	0.25 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	2	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	None	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	419.00 ft	Ref Node:	
Control Elevation:	419.00 ft	Discharge Coefficients	
Max Depth:	4.00 ft	Weir Default:	3.200
Max Width:	1.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	3	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	423.00 ft		

Control Elevation:	423.00 ft
Max Depth:	4.00 ft
Max Width:	4.00 ft
Fillet:	0.00 ft

Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Drop Structure Comment:

Channel Link: L-0760C		Upstream		Downstream	
Scenario:	Proposed	Invert:	410.73 ft	Invert:	367.12 ft
From Node:	Trib1-00-02b	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-2b_DA	Cross Section:	XS-2b_DA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	675.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: REVISE THIS XS!!!!

Weir Link: L-0800W			
Scenario:	Proposed	**Bottom Clip**	
From Node:	Trib1-00-03b	Default:	0.00 ft
To Node:	Trib1-00-03a	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	392.70 ft	**Discharge Coefficients**	
Control Elevation:	392.70 ft	Weir Default:	2.800
Max Depth:	5.00 ft	Weir Table:	
Max Width:	0.50 ft	Orifice Default:	0.600
Fillet:	0.00 ft	Orifice Table:	

Comment:

Weir Link: L-0820W			
Scenario:	Proposed	Bottom Clip	
From Node:	Trib1-00-03b	Default:	0.00 ft
To Node:	Trib1-00-03a	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Horizontal	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	408.70 ft	Discharge Coefficients	
Control Elevation:	408.70 ft	Weir Default:	2.800
Max Depth:	5.00 ft	Weir Table:	
Max Width:	15.00 ft	Orifice Default:	0.600
Fillet:	0.00 ft	Orifice Table:	
Comment:			

Weir Link: L-0860W			
Scenario:	Proposed	Bottom Clip	
From Node:	Pond-06	Default:	0.00 ft
To Node:	Trib1-00-03b	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	431.00 ft	Discharge Coefficients	
Control Elevation:	431.00 ft	Weir Default:	2.800
Max Depth:	4.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	60.00 ft	Orifice Table:	
Left Slope:	3.000 (h:v)		
Right Slope:	3.000 (h:v)		
Comment:			

Pipe Link: Link-01		Upstream		Downstream	
Scenario:	Proposed	Invert:	455.00 ft	Invert:	454.00 ft
From Node:	Trib2-04-06	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-04-05	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	70.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			

Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-02		Upstream		Downstream	
Scenario:	Proposed	Invert:	450.00 ft	Invert:	449.00 ft
From Node:	Trib2-04-04	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-04-03	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	70.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-03		Upstream		Downstream	
Scenario:	Proposed	Invert:	448.00 ft	Invert:	447.60 ft
From Node:	Trib2-04-08	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib2-04-07	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	110.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-04		Upstream		Downstream	
Scenario:	Proposed	Invert:	413.00 ft	Invert:	404.50 ft

From Node:	Trib2-02-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-205	Cross Section:	XS-205
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	420.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-05		Upstream		Downstream	
Scenario:	Proposed	Invert:	404.50 ft	Invert:	402.90 ft
From Node:	Trib2-00-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-204	Cross Section:	XS-204
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	310.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-06

Scenario:	Proposed	Bottom Clip	
From Node:	Trib2-00-02	Default:	0.00 ft
To Node:	Trib2-00-01	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	402.00 ft	Discharge Coefficients	
Control Elevation:	402.00 ft	Weir Default:	2.800
Cross Section:	XS-23	Weir Table:	
		Orifice Default:	0.600

Orifice Table:

Comment:

Channel Link: Link-08		Upstream		Downstream	
Scenario:	Proposed	Invert:	396.00 ft	Invert:	384.50 ft
From Node:	Trib2-01-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-01	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-202	Cross Section:	XS-202
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	445.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-09		Upstream		Downstream	
Scenario:	Proposed	Invert:	384.50 ft	Invert:	378.00 ft
From Node:	Trib2-00-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Outfall_B	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-201	Cross Section:	XS-201
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	720.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-10			
Scenario:	Proposed	Bottom Clip	
From Node:	Trib2-04-02	Default:	0.00 ft
To Node:	Trib2-04-01	Op Table:	

Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	442.30 ft
Control Elevation:	442.30 ft
Cross Section:	XS-021

Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Link: Link-11		Upstream		Downstream	
Scenario:	Proposed	Invert:	419.00 ft	Invert:	414.00 ft
From Node:	Trib2-04-01	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-04	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-207	Cross Section:	XS-207
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	340.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-14		Upstream		Downstream	
Scenario:	Proposed	Invert:	414.00 ft	Invert:	404.50 ft
From Node:	Trib2-00-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-206	Cross Section:	XS-206
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	925.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-18		Upstream		Downstream	
Scenario:	Proposed	Invert:	449.00 ft	Invert:	444.00 ft
From Node:	Trib2-04-03	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-04-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-208	Cross Section:	XS-208
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	105.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-19		Upstream		Downstream	
Scenario:	Proposed	Invert:	454.00 ft	Invert:	446.50 ft
From Node:	Trib2-04-05	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-04-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-209	Cross Section:	XS-209
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	200.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-20		Upstream		Downstream	
Scenario:	Proposed	Invert:	447.60 ft	Invert:	442.50 ft
From Node:	Trib2-04-07	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib2-04-02	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-210	Cross Section:	XS-210
Flow Direction:	Both				

Damping:	0.0000 ft
Length:	265.00 ft
Contraction Coef:	0.00
Expansion Coef:	0.00
Entr Loss Coef:	0.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Pipe Link: Link-39		Upstream		Downstream	
Scenario:	Proposed	Invert:	422.00 ft	Invert:	420.00 ft
From Node:	Trib1-05-01a	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-00-07	Geometry:	Rectangular	Geometry:	Rectangular
Link Count:	2	Max Depth:	6.00 ft	Max Depth:	6.00 ft
Flow Direction:	Both	Max Width:	6.00 ft	Max Width:	6.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	63.00 ft	Bottom Clip			
FHWA Code:	11	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec	Top Clip			
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-40		Upstream		Downstream	
Scenario:	Proposed	Invert:	419.50 ft	Invert:	417.50 ft
From Node:	Trib1-00-07	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-06	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-112	Cross Section:	XS-112
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	105.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Pipe Link: Link-42		Upstream		Downstream	
Scenario:	Proposed	Invert:	435.00 ft	Invert:	433.00 ft
From Node:	Offsite01	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib1-05-01a	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	4.00 ft	Max Depth:	4.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	224.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-43		Upstream		Downstream	
Scenario:	Proposed	Invert:	447.50 ft	Invert:	446.00 ft
From Node:	Trib1-05-03	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-05-02	Geometry: Rectangular		Geometry: Rectangular	
Link Count:	1	Max Depth:	6.00 ft	Max Depth:	6.00 ft
Flow Direction:	Both	Max Width:	6.00 ft	Max Width:	6.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	82.00 ft	Bottom Clip			
FHWA Code:	12	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec	Top Clip			
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-47		Upstream		Downstream	
Scenario:	Proposed	Invert:	417.50 ft	Invert:	406.00 ft
From Node:	Trib1-00-06	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib1-00-05	Geometry: Irregular		Geometry: Irregular	

Link Count:	1	Cross Section:	XS-111	Cross Section:	XS-111
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1120.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-62		Upstream		Downstream	
Scenario:	Proposed	Invert:	367.12 ft	Invert:	358.50 ft
From Node:	Trib1-00-02	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Outfall_C	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-Z	Cross Section:	X-Z
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1080.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-77			
Scenario:	Proposed	Bottom Clip	
From Node:	Offsite01	Default:	0.00 ft
To Node:	Trib1-05-01a	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	442.85 ft	Discharge Coefficients	
Control Elevation:	442.85 ft	Weir Default:	2.800
Cross Section:	XS-010	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Pipe Link: Link-78		Upstream		Downstream	
Scenario:	Proposed	Invert:	436.00 ft	Invert:	430.00 ft
From Node:	Offsite01	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib1-00-07	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	328.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000
Comment:					

Pipe Link: Link-79		Upstream		Downstream	
Scenario:	Proposed	Invert:	442.00 ft	Invert:	436.00 ft
From Node:	Offsite01	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib1-05-01a	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	232.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000
Comment:					

Pipe Link: Link-80		Upstream		Downstream	
Scenario:	Proposed	Invert:	443.00 ft	Invert:	438.00 ft
From Node:	Offsite02	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib1-05-01b	Geometry: Rectangular		Geometry: Rectangular	
Link Count:	1	Max Depth:	6.00 ft	Max Depth:	6.00 ft
Flow Direction:	Both	Max Width:	6.00 ft	Max Width:	6.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	266.00 ft	Bottom Clip			
FHWA Code:	12	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.50	Ref Node:		Ref Node:	

Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec	Top Clip			
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Weir Link: Link-87

Scenario:	Proposed	Bottom Clip	
From Node:	Trib1-05-01a	Default:	0.00 ft
To Node:	Trib1-00-07	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	430.90 ft	Discharge Coefficients	
Control Elevation:	430.90 ft	Weir Default:	2.800
Cross Section:	XS-015	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Channel Link: Link-90

Scenario:	Proposed	Upstream		Downstream	
From Node:	Outfall_C	Invert:	358.50 ft	Invert:	347.00 ft
To Node:	Trib1-00-00	Manning's N:	0.0000	Manning's N:	0.0000
Link Count:	1	Geometry:	Irregular	Geometry:	Irregular
Flow Direction:	Both	Cross Section:	XS-100	Cross Section:	XS-100
Damping:	0.0000 ft				
Length:	1025.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: Link-91 Upstream Downstream

Scenario:	Proposed	Invert:	347.00 ft	Invert:	346.00 ft
From Node:	Trib1-00-00	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Outfall_A	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-000	Cross Section:	XS-000
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	100.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Pipe Link: Link-92		Upstream		Downstream	
Scenario:	Proposed	Invert:	390.00 ft	Invert:	388.50 ft
From Node:	Trib3-00-06	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	Trib3-00-05	Geometry:	Rectangular	Geometry:	Rectangular
Link Count:	1	Max Depth:	10.00 ft	Max Depth:	10.00 ft
Flow Direction:	Both	Max Width:	10.00 ft	Max Width:	10.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	278.00 ft		Bottom Clip		
FHWA Code:	11	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec		Top Clip		
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: Link-93		Upstream		Downstream	
Scenario:	Proposed	Invert:	388.50 ft	Invert:	386.00 ft
From Node:	Trib3-00-05	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Trib3-00-04	Geometry:	Rectangular	Geometry:	Rectangular
Link Count:	1	Max Depth:	10.00 ft	Max Depth:	10.00 ft
Flow Direction:	Both	Max Width:	10.00 ft	Max Width:	10.00 ft
Damping:	0.0000 ft	Fillet:	0.00 ft	Fillet:	0.00 ft
Length:	30.00 ft		Bottom Clip		
FHWA Code:	11	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	

Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec	Top Clip			
Energy Switch:	Energy	Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Channel Link: Link-94		Upstream		Downstream	
Scenario:	Proposed	Invert:	386.00 ft	Invert:	377.00 ft
From Node:	Trib3-00-04	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Trib3-00-03	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-0890C	Cross Section:	X-030
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1164.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Weir Link: Link-95			
Scenario:	Proposed	Bottom Clip	
From Node:	Trib3-00-05	Default:	0.00 ft
To Node:	Trib3-00-04	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	404.20 ft	Discharge Coefficients	
Control Elevation:	404.20 ft	Weir Default:	2.800
Cross Section:	XS-014	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: Link-96

Scenario:	Proposed	**Bottom Clip**	
From Node:	Trib3-00-06	Default:	0.00 ft
To Node:	Trib3-00-05	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	422.00 ft	**Discharge Coefficients**	
Control Elevation:	422.00 ft	Weir Default:	2.800
Cross Section:	XS-011	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: Weir-01

Scenario:	Proposed	**Bottom Clip**	
From Node:	Trib2-04-06	Default:	0.00 ft
To Node:	Trib2-04-05	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	459.00 ft	**Discharge Coefficients**	
Control Elevation:	459.00 ft	Weir Default:	2.800
Max Depth:	99.00 ft	Weir Table:	
Max Width:	25.00 ft	Orifice Default:	0.600
Fillet:	0.00 ft	Orifice Table:	

Comment:

Weir Link: Weir-02

Scenario:	Proposed	**Bottom Clip**	
From Node:	Trib2-04-04	Default:	0.00 ft
To Node:	Trib2-04-03	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	454.50 ft	**Discharge Coefficients**	
Control Elevation:	454.50 ft	Weir Default:	2.800
Max Depth:	99.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600

Bottom Width:	60.00 ft
Left Slope:	0.014 (h:v)
Right Slope:	0.014 (h:v)
Orifice Table:	

Comment:

Weir Link: Weir-03

Scenario:	Proposed
From Node:	Trib2-04-08
To Node:	Trib2-04-07
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	V-Notch Up
Invert:	452.50 ft
Control Elevation:	452.50 ft
Max Depth:	3.00 ft
Max Width:	240.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: Weir-84

Scenario:	Proposed
From Node:	Trib1-05-03
To Node:	Trib1-05-02
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	460.00 ft
Control Elevation:	460.00 ft
Max Depth:	1.00 ft
Max Width:	150.00 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Channel Cross Section: X-001

Scenario:	Proposed
Lid:	No
Conveyance Method:	ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	378.47	0.0500
1	9.94	377.46	0.0500
2	19.88	376.02	0.0500
3	29.82	374.45	0.0500
4	39.76	372.81	0.0500
5	49.70	370.91	0.0500
6	59.63	368.85	0.0500
7	69.57	366.28	0.0500
8	79.51	363.88	0.0500
9	89.45	361.30	0.0500
10	99.39	358.83	0.0500
11	109.33	356.94	0.0500
12	119.27	355.10	0.0500
13	129.21	353.69	0.0500
14	139.15	352.63	0.0500
15	149.09	352.12	0.0500
16	159.03	350.56	0.0500
17	168.96	349.16	0.0500
18	178.90	350.71	0.0500
19	188.84	351.40	0.0500
20	198.78	351.17	0.0500
21	208.72	350.94	0.0500
22	218.66	351.12	0.0500
23	228.60	351.17	0.0500
24	238.54	351.04	0.0500
25	248.48	351.16	0.0500
26	258.42	351.57	0.0500
27	268.36	351.80	0.0500
28	278.30	351.90	0.0500
29	288.23	352.05	0.0500
30	298.17	352.18	0.0500
31	308.11	352.51	0.0500
32	317.93	352.98	0.0500
33	327.75	353.54	0.0500
34	337.57	354.01	0.0500
35	347.38	354.78	0.0500
36	357.20	355.76	0.0500
37	367.02	356.83	0.0500
38	376.84	357.33	0.0500
39	386.65	357.88	0.0500
40	396.47	358.06	0.0500
41	406.29	358.15	0.0500
42	416.11	358.30	0.0500
43	425.93	358.37	0.0500
44	435.74	358.40	0.0500
45	445.56	358.43	0.0500
46	455.38	358.63	0.0500
47	465.20	358.76	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
48	475.01	359.04	0.0500
49	484.83	359.16	0.0500
50	494.65	359.20	0.0500
51	504.47	359.32	0.0500
52	514.29	359.37	0.0500
53	524.10	359.50	0.0500
54	533.92	359.78	0.0500
55	543.74	359.86	0.0500
56	553.56	360.04	0.0500
57	563.37	360.23	0.0500
58	573.19	360.35	0.0500
59	583.01	360.64	0.0500
60	592.83	360.79	0.0500
61	602.65	360.91	0.0500
62	612.46	361.02	0.0500
63	622.28	361.26	0.0500
64	632.10	361.35	0.0500
65	641.92	361.51	0.0500
66	651.73	361.69	0.0500
67	661.55	361.96	0.0500
68	671.37	362.02	0.0500
69	681.19	362.32	0.0500
70	691.01	362.64	0.0500
71	700.82	362.88	0.0500
72	710.64	362.97	0.0500
73	720.46	363.18	0.0500
74	730.28	363.52	0.0500
75	740.09	363.74	0.0500
76	749.91	363.86	0.0500
77	759.73	364.00	0.0500
78	769.55	364.30	0.0500
79	779.37	364.58	0.0500
80	789.18	364.76	0.0500

Comment:

Channel Cross Section: X-011

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
16	0.00	371.61	0.0500
17	9.52	370.95	0.0500
18	19.05	370.22	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
19	28.57	369.44	0.0500
20	38.09	368.63	0.0500
21	47.62	367.86	0.0500
22	57.14	367.23	0.0500
23	66.66	366.71	0.0500
24	76.19	366.32	0.0500
25	85.71	365.72	0.0500
26	95.23	365.23	0.0500
27	104.76	364.93	0.0500
28	114.28	364.59	0.0500
29	123.80	363.99	0.0500
30	133.33	362.50	0.0500
31	142.85	361.45	0.0500
32	152.37	363.41	0.0500
33	162.23	362.78	0.0500
34	172.09	362.41	0.0500
35	181.95	362.52	0.0500
36	191.81	362.87	0.0500
37	201.67	363.24	0.0500
38	211.53	363.85	0.0500
39	221.38	363.89	0.0500
40	231.24	364.15	0.0500
41	241.10	364.46	0.0500
42	250.96	365.09	0.0500
43	260.82	365.89	0.0500
44	270.68	367.65	0.0500
45	280.53	369.36	0.0500
46	290.39	370.77	0.0500
47	300.25	371.70	0.0500
48	310.11	372.67	0.0500
49	319.97	373.78	0.0500
50	329.83	375.01	0.0500
51	339.69	376.05	0.0500

Comment:

Channel Cross Section: X-020

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	390.39	0.0500
1	9.83	390.68	0.0500
2	19.67	390.39	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
3	29.50	389.20	0.0500
4	39.33	387.43	0.0500
5	49.17	385.04	0.0500
6	59.00	382.01	0.0500
7	68.84	379.22	0.0500
8	78.67	377.35	0.0500
9	88.50	375.70	0.0500
10	98.34	374.45	0.0500
11	108.17	374.28	0.0500
12	118.00	374.40	0.0500
13	127.84	374.04	0.0500
14	137.67	373.63	0.0500
15	147.50	373.31	0.0500
16	157.34	373.26	0.0500
17	167.17	373.52	0.0500
18	177.00	373.86	0.0500
19	186.84	373.88	0.0500
20	196.67	373.77	0.0500
21	206.51	373.86	0.0500
22	216.34	374.09	0.0500
23	226.17	373.81	0.0500
24	236.01	372.93	0.0500
25	245.84	374.44	0.0500
26	255.67	375.45	0.0500
27	265.51	375.87	0.0500
28	275.34	376.45	0.0500
29	285.17	377.43	0.0500
30	295.01	378.32	0.0500
31	304.84	379.74	0.0500
32	314.68	381.09	0.0500
33	324.51	382.51	0.0500
34	334.34	383.36	0.0500
35	344.18	384.90	0.0500

Comment:

Channel Cross Section: X-030

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	397.02	0.0500
1	9.85	396.04	0.0500
2	19.71	394.87	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
3	29.56	393.00	0.0500
4	39.41	390.60	0.0500
5	49.26	388.04	0.0500
6	59.12	385.48	0.0500
7	68.97	382.92	0.0500
8	78.82	380.88	0.0500
9	88.67	380.34	0.0500
10	98.53	379.34	0.0500
11	108.38	377.63	0.0500
12	118.34	380.28	0.0500
13	128.30	380.81	0.0500
14	138.26	380.33	0.0500
15	148.22	380.14	0.0500
16	158.18	380.19	0.0500
17	168.14	380.49	0.0500
18	178.10	380.43	0.0500
19	188.06	380.34	0.0500
20	198.02	380.40	0.0500
21	207.98	380.75	0.0500
22	217.94	381.58	0.0500
23	227.90	382.59	0.0500
24	237.86	383.41	0.0500
25	247.82	383.95	0.0500
26	257.78	384.31	0.0500
27	267.74	384.59	0.0500
28	277.70	385.01	0.0500
29	287.66	385.44	0.0500
30	297.62	385.94	0.0500
31	307.58	386.72	0.0500
32	317.54	387.28	0.0500

Comment:

Channel Cross Section: X-0720C

Scenario: Proposed
Lid: No
Conveyance Method: Composite Mannings N

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	432.51	0.0360
1	5.98	431.78	0.0360
2	6.98	431.45	0.0360
3	13.96	431.54	0.0360
4	14.96	431.68	0.0360
5	15.95	431.79	0.0360

Order	Station [ft]	Elevation [ft]	Manning's N
6	16.95	431.14	0.0360
7	17.95	430.87	0.0360
8	27.92	430.19	0.0360
9	28.92	429.93	0.0360
10	37.89	429.93	0.0360
11	38.89	429.38	0.0360
12	39.88	429.19	0.0360
13	40.88	429.21	0.0360
14	49.86	428.46	0.0360
15	50.85	428.21	0.0360
16	60.82	427.13	0.0360
17	61.82	426.82	0.0360
18	62.82	426.79	0.0360
19	63.82	426.73	0.0360
20	64.81	426.67	0.0360
21	65.81	426.67	0.0360
22	71.79	425.90	0.0360
23	72.79	425.70	0.0360
24	82.76	424.40	0.0360
25	83.76	424.09	0.0360
26	87.75	424.06	0.0360
27	88.74	424.02	0.0360
28	89.74	424.00	0.0360
29	93.73	422.70	0.0360
30	94.73	422.43	0.0360
31	104.70	420.53	0.0360
32	105.69	420.17	0.0360
33	111.68	420.15	0.0360
34	112.67	419.99	0.0360
35	113.67	419.83	0.0360
36	114.67	419.78	0.0360
37	115.67	417.91	0.0360
38	116.66	417.60	0.0360
39	126.63	415.00	0.0360
40	127.63	414.64	0.0360
41	137.60	412.92	0.0360
42	138.60	413.10	0.0360
43	147.57	413.10	0.0360
44	148.57	411.75	0.0360
45	149.57	411.62	0.0360
46	158.54	411.63	0.0360
47	159.54	411.87	0.0360
48	160.54	411.88	0.0360
49	161.53	412.40	0.0360
50	162.53	412.97	0.0360
51	163.53	413.27	0.0360
52	169.51	413.40	0.0360
53	180.48	416.90	0.0360
54	181.48	419.42	0.0360

Order	Station [ft]	Elevation [ft]	Manning's N
55	182.47	419.52	0.0360
56	185.46	419.75	0.0360
57	186.46	420.49	0.0360
58	187.46	421.24	0.0360
59	188.46	421.36	0.0360
60	191.45	421.55	0.0360
61	202.42	424.29	0.0360
62	203.41	426.87	0.0360
63	204.41	426.87	0.0360
64	205.41	426.87	0.0360
65	210.39	427.28	0.0360
66	211.39	427.88	0.0360
67	212.39	428.35	0.0360
68	213.38	428.54	0.0360
69	214.38	430.16	0.0360
70	224.35	430.46	0.0360
71	234.32	432.66	0.0360
72	235.32	433.28	0.0360
73	236.32	435.48	0.0360
74	237.31	435.77	0.0360
75	246.29	435.97	0.0360
76	247.29	437.04	0.0360
77	257.26	437.27	0.0360
78	258.25	438.40	0.0360
79	259.25	438.61	0.0360
80	260.25	439.09	0.0360
81	261.25	439.57	0.0360
82	262.24	439.58	0.0360

Comment:

Channel Cross Section: X-0730C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.80	0.0350
1	0.99	434.11	0.0350
2	1.99	434.42	0.0350
3	2.98	434.73	0.0350
4	3.98	434.96	0.0350
5	4.97	435.00	0.0350
6	5.97	435.00	0.0350
7	6.96	435.00	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
8	7.95	435.00	0.0350
9	8.95	435.00	0.0350
10	9.94	435.00	0.0350
11	10.94	435.00	0.0350
12	11.93	435.00	0.0350
13	12.93	435.00	0.0350
14	13.92	434.94	0.0350
15	14.91	434.67	0.0350
16	15.91	434.35	0.0350
17	16.90	434.02	0.0350
18	17.90	433.69	0.0350
19	18.89	433.36	0.0350
20	19.89	433.03	0.0350
21	20.88	432.70	0.0350
22	21.87	432.37	0.0350
23	22.87	432.05	0.0350
24	23.86	431.72	0.0350
25	24.86	431.39	0.0350
26	25.85	431.06	0.0350
27	26.85	430.73	0.0350
28	27.84	430.40	0.0350
29	28.83	430.07	0.0350
30	29.83	429.74	0.0350
31	30.82	429.42	0.0350
32	31.82	429.09	0.0350
33	32.81	428.76	0.0350
34	33.81	428.43	0.0350
35	34.80	428.10	0.0350
36	35.79	427.77	0.0350
37	36.79	427.44	0.0350
38	37.78	427.11	0.0350
39	38.78	426.79	0.0350
40	39.77	426.46	0.0350
41	40.77	426.13	0.0350
42	41.76	425.80	0.0350
43	42.75	425.47	0.0350
44	43.75	425.14	0.0350
45	44.74	424.81	0.0350
46	45.74	424.48	0.0350
47	46.73	424.16	0.0350
48	47.73	423.83	0.0350
49	48.72	423.50	0.0350
50	49.71	423.17	0.0350
51	50.71	422.84	0.0350
52	51.70	422.51	0.0350
53	52.70	422.18	0.0350
54	53.69	421.85	0.0350
55	54.69	421.53	0.0350
56	55.68	421.20	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
57	56.67	420.87	0.0350
58	57.67	420.54	0.0350
59	58.66	420.21	0.0350
60	59.66	419.87	0.0350
61	60.65	419.52	0.0350
62	61.65	419.16	0.0350
63	62.64	418.81	0.0350
64	63.64	418.45	0.0350
65	64.63	418.09	0.0350
66	65.62	417.74	0.0350
67	66.62	417.38	0.0350
68	67.61	417.03	0.0350
69	68.61	416.67	0.0350
70	69.60	416.32	0.0350
71	70.60	415.96	0.0350
72	71.59	415.60	0.0350
73	72.58	415.25	0.0350
74	73.58	414.89	0.0350
75	74.57	414.54	0.0350
76	75.57	414.18	0.0350
77	76.56	413.83	0.0350
78	77.56	413.47	0.0350
79	78.55	413.11	0.0350
80	79.54	412.77	0.0350
81	80.54	412.45	0.0350
82	81.53	412.15	0.0350
83	82.53	411.87	0.0350
84	83.52	411.59	0.0350
85	84.52	411.32	0.0350
86	85.51	411.04	0.0350
87	86.50	410.76	0.0350
88	87.50	410.48	0.0350
89	88.49	410.20	0.0350
90	89.49	409.93	0.0350
91	90.48	409.65	0.0350
92	91.48	409.37	0.0350
93	92.47	409.09	0.0350
94	93.46	408.81	0.0350
95	94.46	408.54	0.0350
96	95.45	408.26	0.0350
97	96.45	407.98	0.0350
98	97.44	407.67	0.0350
99	98.44	407.36	0.0350
100	99.43	407.04	0.0350
101	100.42	406.73	0.0350
102	101.42	406.42	0.0350
103	102.41	406.10	0.0350
104	103.41	405.79	0.0350
105	104.40	405.47	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
106	105.40	405.16	0.0350
107	106.39	404.84	0.0350
108	107.38	404.53	0.0350
109	108.38	404.21	0.0350
110	109.37	403.90	0.0350
111	110.37	403.58	0.0350
112	111.36	403.27	0.0350
113	112.36	402.95	0.0350
114	113.35	402.64	0.0350
115	114.35	402.32	0.0350
116	115.35	402.00	0.0350
117	116.34	401.69	0.0350
118	117.34	401.37	0.0350
119	118.33	401.06	0.0350
120	119.33	400.74	0.0350
121	120.32	400.43	0.0350
122	121.32	400.11	0.0350
123	122.31	399.80	0.0350
124	123.31	399.48	0.0350
125	124.30	399.17	0.0350
126	125.30	398.85	0.0350
127	126.29	398.54	0.0350
128	127.29	398.22	0.0350
129	128.28	397.90	0.0350
130	129.28	397.59	0.0350
131	130.27	397.27	0.0350
132	131.27	396.96	0.0350
133	132.26	396.65	0.0350
134	133.26	396.53	0.0350
135	134.25	396.53	0.0350
136	135.25	396.53	0.0350
137	136.25	396.53	0.0350
138	137.24	396.53	0.0350
139	138.24	396.53	0.0350
140	139.23	396.53	0.0350
141	140.23	396.53	0.0350
142	141.22	396.53	0.0350
143	142.22	396.54	0.0350
144	143.21	396.72	0.0350
145	144.21	397.04	0.0350
146	145.20	397.35	0.0350
147	146.20	397.66	0.0350
148	147.19	397.97	0.0350
149	148.19	398.29	0.0350
150	149.18	398.60	0.0350
151	150.18	398.91	0.0350
152	151.17	399.23	0.0350
153	152.17	399.54	0.0350
154	153.16	399.85	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
155	154.16	400.17	0.0350
156	155.15	400.48	0.0350
157	156.15	400.79	0.0350
158	157.15	401.11	0.0350
159	158.14	401.42	0.0350
160	159.14	401.73	0.0350
161	160.13	402.05	0.0350
162	161.13	402.36	0.0350
163	162.12	402.67	0.0350
164	163.12	402.99	0.0350
165	164.11	403.30	0.0350
166	165.11	403.61	0.0350
167	166.10	403.93	0.0350
168	167.10	404.24	0.0350
169	168.09	404.55	0.0350
170	169.09	404.87	0.0350
171	170.08	405.18	0.0350
172	171.08	405.49	0.0350
173	172.07	405.81	0.0350
174	173.07	406.12	0.0350
175	174.06	406.43	0.0350
176	175.06	406.75	0.0350
177	176.05	407.06	0.0350
178	177.05	407.37	0.0350
179	178.05	407.69	0.0350
180	179.04	408.00	0.0350
181	180.04	408.31	0.0350
182	181.03	408.63	0.0350
183	182.03	408.94	0.0350
184	183.02	409.25	0.0350
185	184.02	409.57	0.0350
186	185.01	409.88	0.0350
187	186.01	410.19	0.0350
188	187.00	410.51	0.0350
189	188.00	410.82	0.0350
190	188.99	411.13	0.0350
191	189.99	411.45	0.0350
192	190.98	411.76	0.0350
193	191.98	412.07	0.0350
194	192.97	412.39	0.0350
195	193.97	412.70	0.0350
196	194.96	413.01	0.0350
197	195.96	413.33	0.0350
198	196.95	413.64	0.0350
199	197.95	413.95	0.0350
200	198.95	414.27	0.0350
201	199.94	414.58	0.0350
202	200.94	414.89	0.0350
203	201.93	415.21	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
204	202.93	415.52	0.0350
205	203.92	415.83	0.0350
206	204.92	416.15	0.0350
207	205.91	416.46	0.0350
208	206.91	416.77	0.0350
209	207.90	417.09	0.0350
210	208.90	417.40	0.0350
211	209.89	417.71	0.0350
212	210.89	418.03	0.0350
213	211.88	418.34	0.0350
214	212.88	418.65	0.0350
215	213.87	418.96	0.0350
216	214.87	419.28	0.0350
217	215.86	419.59	0.0350
218	216.86	419.90	0.0350
219	217.85	420.22	0.0350
220	218.85	420.53	0.0350
221	219.85	420.84	0.0350
222	220.84	421.16	0.0350
223	221.84	421.47	0.0350
224	222.83	421.78	0.0350
225	223.83	422.10	0.0350
226	224.82	422.41	0.0350
227	225.82	422.72	0.0350
228	226.81	423.04	0.0350
229	227.81	423.35	0.0350
230	228.80	423.66	0.0350
231	229.80	423.98	0.0350
232	230.79	424.29	0.0350
233	231.79	424.60	0.0350
234	232.78	424.92	0.0350
235	233.78	425.23	0.0350
236	234.77	425.54	0.0350
237	235.77	425.86	0.0350
238	236.76	426.17	0.0350
239	237.76	426.48	0.0350
240	238.75	426.80	0.0350
241	239.75	427.11	0.0350
242	240.75	427.42	0.0350
243	241.74	427.74	0.0350
244	242.74	428.05	0.0350
245	243.73	428.35	0.0350
246	244.73	428.64	0.0350
247	245.72	428.94	0.0350
248	246.72	429.24	0.0350
249	247.71	429.54	0.0350
250	248.71	429.84	0.0350
251	249.70	430.13	0.0350
252	250.70	430.43	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
253	251.69	430.73	0.0350
254	252.69	431.03	0.0350
255	253.68	431.33	0.0350
256	254.68	431.62	0.0350
257	255.67	431.92	0.0350
258	256.67	432.22	0.0350
259	257.66	432.52	0.0350
260	258.66	432.81	0.0350
261	259.65	433.11	0.0350
262	260.65	433.41	0.0350
263	261.65	433.71	0.0350
264	262.64	434.01	0.0350
265	263.64	434.30	0.0350
266	264.63	434.60	0.0350
267	265.63	434.90	0.0350
268	266.62	435.20	0.0350
269	267.62	435.49	0.0350
270	268.61	435.79	0.0350
271	269.61	436.09	0.0350
272	270.60	436.39	0.0350
273	271.60	436.69	0.0350
274	272.59	436.98	0.0350
275	273.59	437.28	0.0350
276	274.58	437.58	0.0350
277	275.58	437.88	0.0350
278	276.57	438.17	0.0350
279	277.57	438.47	0.0350
280	278.56	438.77	0.0350
281	279.56	439.07	0.0350
282	280.55	439.37	0.0350
283	281.55	439.66	0.0350
284	282.55	439.96	0.0350
285	283.54	440.26	0.0350
286	284.54	440.56	0.0350
287	285.53	440.86	0.0350

Comment:

Channel Cross Section: X-0740C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	434.35	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
1	1.00	434.35	0.0350
2	1.99	434.33	0.0350
3	2.99	434.20	0.0350
4	3.99	434.18	0.0350
5	4.99	434.41	0.0350
6	5.98	434.41	0.0350
7	6.98	434.41	0.0350
8	7.98	434.41	0.0350
9	8.98	434.41	0.0350
10	9.97	434.41	0.0350
11	10.97	434.41	0.0350
12	11.97	434.41	0.0350
13	12.97	434.41	0.0350
14	13.96	434.41	0.0350
15	14.96	434.38	0.0350
16	15.96	434.34	0.0350
17	16.96	434.34	0.0350
18	17.95	434.34	0.0350
19	18.95	434.34	0.0350
20	19.95	434.34	0.0350
21	20.95	434.34	0.0350
22	21.94	434.34	0.0350
23	22.94	434.34	0.0350
24	23.94	434.34	0.0350
25	24.93	434.34	0.0350
26	25.93	434.32	0.0350
27	26.93	434.25	0.0350
28	27.93	434.13	0.0350
29	28.92	434.02	0.0350
30	29.92	434.00	0.0350
31	30.92	434.00	0.0350
32	31.92	434.00	0.0350
33	32.91	434.00	0.0350
34	33.91	434.00	0.0350
35	34.91	434.00	0.0350
36	35.91	434.00	0.0350
37	36.90	433.96	0.0350
38	37.90	433.91	0.0350
39	38.90	433.91	0.0350
40	39.90	433.91	0.0350
41	40.89	433.91	0.0350
42	41.89	433.91	0.0350
43	42.89	433.91	0.0350
44	43.88	433.91	0.0350
45	44.88	433.91	0.0350
46	45.88	433.91	0.0350
47	46.88	433.91	0.0350
48	47.87	433.78	0.0350
49	48.87	433.63	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
50	49.87	433.63	0.0350
51	50.87	433.63	0.0350
52	51.86	433.59	0.0350
53	52.86	433.50	0.0350
54	53.86	433.41	0.0350
55	54.86	433.41	0.0350
56	55.85	433.41	0.0350
57	56.85	433.41	0.0350
58	57.85	433.41	0.0350
59	58.85	433.09	0.0350
60	59.84	432.77	0.0350
61	60.84	432.77	0.0350
62	61.84	432.77	0.0350
63	62.84	432.77	0.0350
64	63.83	432.77	0.0350
65	64.83	432.77	0.0350
66	65.83	432.77	0.0350
67	66.82	432.77	0.0350
68	67.82	432.77	0.0350
69	68.82	432.77	0.0350
70	69.82	432.41	0.0350
71	70.81	432.10	0.0350
72	71.81	432.10	0.0350
73	72.81	432.10	0.0350
74	73.81	432.10	0.0350
75	74.80	432.10	0.0350
76	75.80	432.10	0.0350
77	76.80	432.01	0.0350
78	77.80	431.86	0.0350
79	78.79	431.71	0.0350
80	79.79	431.71	0.0350
81	80.79	431.49	0.0350
82	81.79	431.34	0.0350
83	82.78	431.34	0.0350
84	83.78	431.34	0.0350
85	84.78	431.34	0.0350
86	85.78	431.34	0.0350
87	86.77	431.34	0.0350
88	87.77	431.34	0.0350
89	88.77	431.34	0.0350
90	89.76	431.34	0.0350
91	90.76	431.34	0.0350
92	91.76	430.88	0.0350
93	92.76	430.60	0.0350
94	93.75	430.60	0.0350
95	94.75	430.60	0.0350
96	95.75	430.60	0.0350
97	96.75	430.60	0.0350
98	97.74	430.60	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
99	98.74	430.60	0.0350
100	99.74	430.60	0.0350
101	100.74	430.60	0.0350
102	101.73	430.52	0.0350
103	102.73	430.40	0.0350
104	103.73	430.44	0.0350
105	104.73	430.44	0.0350
106	105.72	430.44	0.0350
107	106.72	430.44	0.0350
108	107.72	430.44	0.0350
109	108.71	430.44	0.0350
110	109.71	430.44	0.0350
111	110.71	430.44	0.0350
112	111.71	430.44	0.0350
113	112.70	430.44	0.0350
114	113.70	428.99	0.0350
115	114.70	428.40	0.0350
116	115.70	428.40	0.0350
117	116.69	428.40	0.0350
118	117.69	428.40	0.0350
119	118.69	428.40	0.0350
120	119.69	428.40	0.0350
121	120.68	428.40	0.0350
122	121.68	428.40	0.0350
123	122.68	428.40	0.0350
124	123.68	428.40	0.0350
125	124.67	430.64	0.0350
126	125.67	431.39	0.0350
127	126.67	431.62	0.0350
128	127.67	431.92	0.0350
129	128.66	432.13	0.0350
130	129.66	432.13	0.0350
131	130.66	432.13	0.0350
132	131.65	432.13	0.0350
133	132.65	432.13	0.0350
134	133.65	432.13	0.0350
135	134.65	432.13	0.0350
136	135.64	432.90	0.0350
137	136.64	433.10	0.0350
138	137.64	433.10	0.0350
139	138.64	433.10	0.0350
140	139.63	433.10	0.0350
141	140.63	433.10	0.0350
142	141.63	433.10	0.0350
143	142.63	433.10	0.0350
144	143.62	433.10	0.0350
145	144.62	433.10	0.0350
146	145.62	433.10	0.0350
147	146.62	433.85	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
148	147.61	434.00	0.0350
149	148.61	434.00	0.0350
150	149.61	434.00	0.0350
151	150.61	434.00	0.0350
152	151.60	433.94	0.0350
153	152.60	433.88	0.0350
154	153.60	433.84	0.0350
155	154.59	433.84	0.0350
156	155.59	433.84	0.0350
157	156.59	433.84	0.0350
158	157.59	434.21	0.0350
159	158.58	434.26	0.0350
160	159.58	434.26	0.0350
161	160.58	434.26	0.0350
162	161.58	434.26	0.0350
163	162.57	434.26	0.0350
164	163.57	434.26	0.0350
165	164.57	434.26	0.0350
166	165.57	434.26	0.0350
167	166.56	434.26	0.0350
168	167.56	434.27	0.0350
169	168.56	434.84	0.0350
170	169.56	434.90	0.0350
171	170.55	434.90	0.0350
172	171.55	434.90	0.0350
173	172.55	434.90	0.0350
174	173.54	434.90	0.0350
175	174.54	434.90	0.0350
176	175.54	434.90	0.0350
177	176.54	434.75	0.0350
178	177.53	434.61	0.0350
179	178.53	434.56	0.0350
180	179.53	434.94	0.0350
181	180.53	434.96	0.0350
182	181.52	434.96	0.0350
183	182.52	434.96	0.0350
184	183.52	434.96	0.0350
185	184.52	434.96	0.0350
186	185.51	434.96	0.0350
187	186.51	434.96	0.0350
188	187.51	434.96	0.0350
189	188.51	434.96	0.0350

Comment:

Channel Cross Section: X-0750C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	443.59	0.0350
5	5.00	442.31	0.0350
6	6.00	441.89	0.0350
10	10.00	441.71	0.0350
11	11.00	441.35	0.0350
12	12.00	441.25	0.0350
17	16.99	440.00	0.0350
18	17.99	439.63	0.0350
28	27.99	439.47	0.0350
29	28.99	437.51	0.0350
30	29.99	436.90	0.0350
41	40.98	435.48	0.0350
42	41.98	435.15	0.0350
46	45.98	435.07	0.0350
47	46.98	434.36	0.0350
48	47.98	433.86	0.0350
52	51.98	433.86	0.0350
53	52.98	432.79	0.0350
54	53.98	432.58	0.0350
64	63.98	432.54	0.0350
65	64.97	430.30	0.0350
66	65.97	429.08	0.0350
76	75.97	428.93	0.0350
77	76.97	426.00	0.0350
78	77.97	425.57	0.0350
83	82.97	425.19	0.0350
84	83.97	424.65	0.0350
85	84.97	424.60	0.0350
88	87.97	424.68	0.0350
89	88.97	425.72	0.0350
90	89.96	425.84	0.0350
100	99.96	425.81	0.0350
101	100.96	425.43	0.0350
102	101.96	425.39	0.0350
103	102.96	425.39	0.0350
112	111.96	425.36	0.0350
113	112.96	425.17	0.0350
114	113.96	425.16	0.0350
119	118.95	425.17	0.0350
120	119.95	425.18	0.0350
121	120.95	425.19	0.0350
124	123.95	425.21	0.0350
125	124.95	425.40	0.0350
126	125.95	425.41	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
136	135.95	425.36	0.0350
137	136.95	425.12	0.0350
138	137.95	425.02	0.0350
139	138.95	424.96	0.0350
148	147.94	424.95	0.0350
149	148.94	424.89	0.0350
156	155.94	425.18	0.0350
157	156.94	425.47	0.0350
161	160.93	425.39	0.0350
162	161.93	425.31	0.0350
170	169.91	425.19	0.0350
171	170.90	425.14	0.0350
176	175.89	425.20	0.0350
177	176.89	425.38	0.0350
178	177.88	425.42	0.0350
183	182.87	425.26	0.0350
184	183.87	425.12	0.0350
192	191.85	425.11	0.0350
193	192.84	425.10	0.0350
194	193.84	425.10	0.0350
195	194.84	425.10	0.0350
196	195.84	425.13	0.0350
197	196.83	425.19	0.0350
198	197.83	425.19	0.0350
199	198.83	425.19	0.0350
200	199.82	425.19	0.0350
201	200.82	425.19	0.0350
202	201.82	425.19	0.0350
203	202.82	425.19	0.0350
204	203.81	425.19	0.0350
205	204.81	425.19	0.0350
206	205.81	425.19	0.0350
207	206.81	425.26	0.0350
208	207.80	425.40	0.0350
209	208.80	425.51	0.0350
210	209.80	425.96	0.0350
211	210.80	426.00	0.0350
212	211.79	426.00	0.0350
213	212.79	426.00	0.0350
214	213.79	426.00	0.0350
215	214.78	426.00	0.0350
216	215.78	426.00	0.0350
217	216.78	426.00	0.0350
218	217.78	426.00	0.0350
219	218.77	426.00	0.0350
220	219.77	426.00	0.0350
221	220.77	426.00	0.0350
222	221.77	426.11	0.0350
223	222.76	427.37	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
224	223.76	427.72	0.0350
225	224.76	427.72	0.0350
226	225.75	427.72	0.0350
227	226.75	427.72	0.0350
228	227.75	427.72	0.0350
229	228.75	427.72	0.0350
230	229.74	427.72	0.0350
231	230.74	427.72	0.0350
232	231.74	427.72	0.0350
233	232.74	427.72	0.0350
234	233.73	427.72	0.0350
235	234.73	427.72	0.0350
236	235.73	428.16	0.0350
237	236.72	428.44	0.0350
238	237.72	429.14	0.0350
239	238.72	429.82	0.0350
240	239.72	429.82	0.0350
241	240.71	429.82	0.0350
242	241.71	429.82	0.0350
243	242.71	429.82	0.0350
244	243.71	429.82	0.0350
245	244.70	429.82	0.0350
246	245.70	429.82	0.0350
247	246.70	429.82	0.0350
248	247.69	429.82	0.0350
249	248.69	430.17	0.0350
250	249.69	430.60	0.0350
251	250.69	430.60	0.0350
252	251.68	430.60	0.0350
253	252.68	430.83	0.0350
254	253.68	431.43	0.0350
255	254.68	431.52	0.0350
256	255.67	431.52	0.0350
257	256.67	431.52	0.0350
258	257.67	431.52	0.0350
259	258.67	431.52	0.0350
260	259.66	431.52	0.0350
261	260.66	431.52	0.0350
262	261.66	431.71	0.0350
263	262.65	432.20	0.0350
264	263.65	432.20	0.0350
265	264.65	432.20	0.0350
266	265.65	432.20	0.0350
267	266.64	432.20	0.0350
268	267.64	432.21	0.0350
269	268.64	432.87	0.0350
270	269.64	433.23	0.0350
271	270.63	433.23	0.0350
272	271.63	433.23	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
273	272.63	433.23	0.0350
274	273.62	433.23	0.0350
275	274.62	433.33	0.0350
276	275.62	434.00	0.0350
277	276.62	434.11	0.0350
278	277.61	434.11	0.0350
279	278.61	434.11	0.0350
280	279.61	434.11	0.0350
281	280.61	434.11	0.0350
282	281.60	434.11	0.0350
283	282.60	434.11	0.0350
284	283.60	434.41	0.0350
285	284.59	434.86	0.0350
286	285.59	434.86	0.0350
287	286.59	434.86	0.0350
288	287.59	434.86	0.0350
289	288.58	435.50	0.0350
290	289.58	435.77	0.0350
291	290.58	435.77	0.0350
292	291.58	435.77	0.0350
293	292.57	435.77	0.0350
294	293.57	435.77	0.0350
295	294.57	435.77	0.0350
296	295.57	435.77	0.0350
297	296.56	435.77	0.0350
298	297.56	435.77	0.0350
299	298.56	435.81	0.0350
300	299.55	436.00	0.0350
301	300.55	436.06	0.0350
302	301.55	436.53	0.0350
303	302.55	436.94	0.0350
304	303.54	436.94	0.0350
305	304.54	436.94	0.0350
306	305.54	436.94	0.0350
307	306.54	436.94	0.0350
308	307.53	436.94	0.0350
309	308.53	436.94	0.0350
310	309.53	436.94	0.0350
311	310.52	436.94	0.0350
312	311.52	436.94	0.0350
313	312.52	436.94	0.0350
314	313.52	436.94	0.0350
315	314.51	437.44	0.0350
316	315.51	437.92	0.0350
317	316.51	437.92	0.0350
318	317.51	437.92	0.0350
319	318.50	437.92	0.0350
320	319.50	437.92	0.0350
321	320.50	437.92	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
322	321.49	437.92	0.0350
323	322.49	437.92	0.0350
324	323.49	437.92	0.0350
325	324.49	437.92	0.0350
326	325.48	437.92	0.0350
327	326.48	437.92	0.0350
328	327.48	438.06	0.0350
329	328.48	438.58	0.0350
330	329.47	438.76	0.0350
331	330.47	439.10	0.0350
332	331.47	439.13	0.0350
333	332.47	439.13	0.0350
334	333.46	439.13	0.0350
335	334.46	439.13	0.0350
336	335.46	439.13	0.0350
337	336.45	439.13	0.0350

Comment:

Channel Cross Section: X-0760C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	460.21	0.0350
1	1.00	460.12	0.0350
2	2.00	459.81	0.0350
3	3.00	459.73	0.0350
4	3.99	459.78	0.0350
5	4.99	459.79	0.0350
6	5.99	459.79	0.0350
7	6.99	459.79	0.0350
8	7.99	459.79	0.0350
9	8.99	459.79	0.0350
10	9.99	459.79	0.0350
11	10.98	459.79	0.0350
12	11.98	459.79	0.0350
13	12.98	459.79	0.0350
14	13.98	459.79	0.0350
15	14.98	459.79	0.0350
16	15.98	459.76	0.0350
17	16.97	459.61	0.0350
18	17.97	459.50	0.0350
19	18.97	459.48	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
20	19.97	459.48	0.0350
21	20.97	459.48	0.0350
22	21.97	459.48	0.0350
23	22.97	459.48	0.0350
24	23.96	459.48	0.0350
25	24.96	459.48	0.0350
26	25.96	459.48	0.0350
27	26.96	459.48	0.0350
28	27.96	459.48	0.0350
29	28.96	459.50	0.0350
30	29.96	459.54	0.0350
31	30.95	459.54	0.0350
32	31.95	459.54	0.0350
33	32.95	459.31	0.0350
34	33.95	458.91	0.0350
35	34.95	458.91	0.0350
36	35.95	458.91	0.0350
37	36.94	458.91	0.0350
38	37.94	458.91	0.0350
39	38.94	458.91	0.0350
40	39.94	458.91	0.0350
41	40.94	458.91	0.0350
42	41.94	458.85	0.0350
43	42.94	458.73	0.0350
44	43.93	458.73	0.0350
45	44.93	458.73	0.0350
46	45.93	458.73	0.0350
47	46.93	458.73	0.0350
48	47.93	458.73	0.0350
49	48.93	458.56	0.0350
50	49.93	458.36	0.0350
51	50.92	458.36	0.0350
52	51.92	458.36	0.0350
53	52.92	458.36	0.0350
54	53.92	458.36	0.0350
55	54.92	458.00	0.0350
56	55.92	457.52	0.0350
57	56.92	457.52	0.0350
58	57.91	457.52	0.0350
59	58.91	457.52	0.0350
60	59.91	457.52	0.0350
61	60.91	457.52	0.0350
62	61.91	457.52	0.0350
63	62.91	457.52	0.0350
64	63.90	457.52	0.0350
65	64.90	457.05	0.0350
66	65.90	456.66	0.0350
67	66.90	456.66	0.0350
68	67.90	456.30	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
69	68.90	455.92	0.0350
70	69.90	455.92	0.0350
71	70.89	455.92	0.0350
72	71.89	455.92	0.0350
73	72.89	455.92	0.0350
74	73.89	455.92	0.0350
75	74.89	455.92	0.0350
76	75.89	455.92	0.0350
77	76.89	455.92	0.0350
78	77.88	455.92	0.0350
79	78.88	455.92	0.0350
80	79.88	455.91	0.0350
81	80.88	454.53	0.0350
82	81.88	453.57	0.0350
83	82.88	453.57	0.0350
84	83.88	453.57	0.0350
85	84.87	453.57	0.0350
86	85.87	453.57	0.0350
87	86.87	453.57	0.0350
88	87.87	453.57	0.0350
89	88.87	453.57	0.0350
90	89.87	453.57	0.0350
91	90.86	453.57	0.0350
92	91.86	453.57	0.0350
93	92.86	453.57	0.0350
94	93.86	453.05	0.0350
95	94.86	452.73	0.0350
96	95.86	452.58	0.0350
97	96.86	451.65	0.0350
98	97.85	451.27	0.0350
99	98.85	451.27	0.0350
100	99.85	451.27	0.0350
101	100.85	451.27	0.0350
102	101.85	451.27	0.0350
103	102.85	451.27	0.0350
104	103.85	451.27	0.0350
105	104.84	451.27	0.0350
106	105.84	451.27	0.0350
107	106.84	450.60	0.0350
108	107.84	450.28	0.0350
109	108.84	450.28	0.0350
110	109.84	450.28	0.0350
111	110.83	450.28	0.0350
112	111.83	450.52	0.0350
113	112.83	451.31	0.0350
114	113.83	451.53	0.0350
115	114.83	451.53	0.0350
116	115.83	451.53	0.0350
117	116.83	451.53	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
118	117.82	451.53	0.0350
119	118.82	451.53	0.0350
120	119.82	452.20	0.0350
121	120.82	452.43	0.0350
122	121.82	452.43	0.0350
123	122.82	452.43	0.0350
124	123.82	452.43	0.0350
125	124.81	452.43	0.0350
126	125.81	452.43	0.0350
127	126.81	452.43	0.0350
128	127.81	452.50	0.0350
129	128.81	452.65	0.0350
130	129.81	452.67	0.0350
131	130.81	452.67	0.0350
132	131.80	452.67	0.0350
133	132.80	452.72	0.0350
134	133.80	452.73	0.0350
135	134.80	452.73	0.0350
136	135.80	452.73	0.0350
137	136.80	452.73	0.0350
138	137.79	452.73	0.0350
139	138.79	452.73	0.0350
140	139.79	452.73	0.0350
141	140.79	452.73	0.0350
142	141.79	452.73	0.0350
143	142.79	452.73	0.0350
144	143.79	452.72	0.0350
145	144.78	452.70	0.0350
146	145.78	452.73	0.0350
147	146.78	452.74	0.0350
148	147.78	452.74	0.0350
149	148.78	452.74	0.0350
150	149.78	452.74	0.0350
151	150.78	452.74	0.0350
152	151.77	452.74	0.0350
153	152.77	452.74	0.0350
154	153.77	452.74	0.0350
155	154.77	452.74	0.0350
156	155.77	452.74	0.0350
157	156.77	452.74	0.0350
158	157.77	452.91	0.0350
159	158.76	453.74	0.0350
160	159.76	454.18	0.0350
161	160.76	454.58	0.0350
162	161.76	454.58	0.0350
163	162.76	454.58	0.0350
164	163.76	454.58	0.0350
165	164.75	454.58	0.0350
166	165.75	454.58	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
167	166.75	454.58	0.0350
168	167.75	454.58	0.0350
169	168.75	454.58	0.0350
170	169.75	454.58	0.0350
171	170.75	455.09	0.0350
172	171.74	456.88	0.0350
173	172.74	456.89	0.0350
174	173.74	456.89	0.0350
175	174.74	456.89	0.0350
176	175.74	457.39	0.0350
177	176.74	457.77	0.0350
178	177.74	457.77	0.0350
179	178.73	457.77	0.0350
180	179.73	457.77	0.0350
181	180.73	457.77	0.0350
182	181.73	457.77	0.0350
183	182.73	457.77	0.0350
184	183.73	458.29	0.0350
185	184.72	459.60	0.0350
186	185.72	459.60	0.0350
187	186.72	459.60	0.0350
188	187.72	459.60	0.0350
189	188.72	459.60	0.0350
190	189.72	459.60	0.0350
191	190.72	459.61	0.0350
192	191.71	459.94	0.0350
193	192.71	460.11	0.0350
194	193.71	460.11	0.0350
195	194.71	460.11	0.0350
196	195.71	460.11	0.0350
197	196.71	460.62	0.0350
198	197.71	461.58	0.0350
199	198.70	461.58	0.0350
200	199.70	461.58	0.0350
201	200.70	461.58	0.0350
202	201.70	461.58	0.0350
203	202.70	461.58	0.0350
204	203.70	461.58	0.0350
205	204.70	461.58	0.0350
206	205.69	461.58	0.0350
207	206.69	461.61	0.0350
208	207.69	461.75	0.0350
209	208.69	461.80	0.0350
210	209.69	462.42	0.0350
211	210.69	463.32	0.0350
212	211.68	463.32	0.0350
213	212.68	463.32	0.0350
214	213.68	463.32	0.0350
215	214.68	463.32	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
216	215.68	463.32	0.0350
217	216.68	463.32	0.0350
218	217.68	463.32	0.0350

Comment:

Channel Cross Section: X-0770C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	483.20	0.0350
1	2.98	483.20	0.0350
2	5.97	483.20	0.0350
3	8.95	483.20	0.0350
4	11.93	483.20	0.0350
5	14.92	483.20	0.0350
6	17.90	483.18	0.0350
7	20.88	482.50	0.0350
8	23.87	481.57	0.0350
9	26.85	480.64	0.0350
10	29.83	479.71	0.0350
11	32.82	478.78	0.0350
12	35.80	477.85	0.0350
13	38.78	476.93	0.0350
14	41.77	476.00	0.0350
15	44.75	475.08	0.0350
16	47.73	474.15	0.0350
17	50.72	473.23	0.0350
18	53.70	472.31	0.0350
19	56.68	471.38	0.0350
20	59.67	470.46	0.0350
21	62.65	469.54	0.0350
22	65.63	468.61	0.0350
23	68.62	467.69	0.0350
24	71.60	466.76	0.0350
25	74.58	465.84	0.0350
26	77.57	464.92	0.0350
27	80.55	463.99	0.0350
28	83.53	463.07	0.0350
29	86.52	462.14	0.0350
30	89.50	461.22	0.0350
31	92.48	460.30	0.0350
32	95.47	459.37	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
33	98.45	458.45	0.0350
34	101.43	457.62	0.0350
35	104.42	457.40	0.0350
36	107.40	457.69	0.0350
37	110.38	458.57	0.0350
38	113.37	459.57	0.0350
39	116.35	460.57	0.0350
40	119.33	461.56	0.0350
41	122.32	462.56	0.0350
42	125.30	463.56	0.0350
43	128.28	464.55	0.0350
44	131.27	465.55	0.0350
45	134.25	466.55	0.0350
46	137.23	467.54	0.0350
47	140.22	468.54	0.0350
48	143.20	469.54	0.0350
49	146.18	470.53	0.0350
50	149.17	471.53	0.0350
51	152.15	472.52	0.0350
52	155.13	473.52	0.0350
53	158.12	474.52	0.0350
54	161.10	475.51	0.0350
55	164.08	476.51	0.0350
56	167.07	477.51	0.0350
57	170.05	478.50	0.0350
58	173.03	479.50	0.0350
59	176.02	480.50	0.0350
60	179.00	481.49	0.0350
61	181.98	482.49	0.0350
62	184.97	483.48	0.0350
63	187.95	484.48	0.0350
64	190.94	485.48	0.0350
65	193.92	486.47	0.0350
66	196.90	487.47	0.0350
67	199.89	488.47	0.0350
68	202.87	489.46	0.0350
69	205.85	490.46	0.0350
70	208.84	491.46	0.0350
71	211.82	492.45	0.0350
72	214.80	493.45	0.0350
73	217.79	494.44	0.0350
74	220.77	495.44	0.0350
75	223.75	496.44	0.0350
76	226.74	497.43	0.0350

Comment:

Channel Cross Section: X-0780C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	38.54	483.20	0.0350
1	41.50	483.20	0.0350
2	44.47	483.20	0.0350
3	47.43	483.20	0.0350
4	50.39	483.20	0.0350
5	53.36	483.20	0.0350
6	56.32	483.20	0.0350
7	59.29	483.20	0.0350
8	62.25	482.97	0.0350
9	65.22	482.28	0.0350
10	68.18	481.48	0.0350
11	71.15	480.67	0.0350
12	74.11	479.87	0.0350
13	77.07	479.07	0.0350
14	80.04	478.26	0.0350
15	83.00	477.44	0.0350
16	85.97	476.63	0.0350
17	88.93	475.95	0.0350
18	91.90	475.75	0.0350
19	94.86	476.11	0.0350
20	97.83	476.95	0.0350
21	100.79	477.94	0.0350
22	103.75	478.93	0.0350
23	106.72	479.92	0.0350
24	109.68	480.91	0.0350
25	112.65	481.90	0.0350
26	115.61	482.88	0.0350
27	118.58	483.87	0.0350
28	121.54	484.86	0.0350
29	124.51	485.85	0.0350
30	127.47	486.84	0.0350
31	130.43	487.83	0.0350

Comment:

Channel Cross Section: X-0790C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	510.39	0.0350
1	2.94	511.37	0.0350
2	5.87	512.35	0.0350
3	8.81	512.97	0.0350
4	11.75	513.01	0.0350
5	14.68	512.53	0.0350
6	17.62	511.55	0.0350
7	20.56	510.57	0.0350
8	23.49	509.59	0.0350
9	26.43	508.64	0.0350
10	29.37	508.11	0.0350
11	32.30	508.17	0.0350
12	35.24	508.79	0.0350
13	38.18	509.76	0.0350
14	41.11	510.74	0.0350
15	44.05	511.72	0.0350
16	46.99	512.69	0.0350
17	49.92	513.67	0.0350
18	52.86	514.65	0.0350
19	55.80	515.63	0.0350
20	58.73	516.60	0.0350
21	61.67	517.58	0.0350
22	64.60	518.56	0.0350

Comment:

Channel Cross Section: X-0800C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	483.20	0.0120
17	16.98	483.20	0.0120
18	17.98	483.12	0.0350
19	18.98	482.81	0.0350
20	19.98	482.48	0.0350
21	20.98	482.14	0.0350
22	21.98	481.81	0.0350
23	22.97	481.48	0.0350
24	23.97	481.15	0.0350
25	24.97	480.81	0.0350
26	25.97	480.48	0.0350
27	26.97	480.15	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
28	27.97	479.81	0.0350
29	28.97	479.48	0.0350
30	29.97	479.15	0.0350
31	30.97	478.82	0.0350
32	31.96	478.48	0.0350
33	32.96	478.15	0.0350
34	33.96	477.82	0.0350
35	34.96	477.48	0.0350
36	35.96	477.15	0.0350
37	36.96	476.82	0.0350
38	37.96	476.49	0.0350
39	38.96	476.17	0.0350
40	39.95	475.98	0.0350
41	40.95	475.98	0.0350
42	41.95	475.98	0.0350
43	42.95	475.98	0.0350
44	43.95	476.00	0.0350
45	44.95	476.14	0.0350
46	45.95	476.47	0.0350
47	46.95	476.81	0.0350
48	47.95	477.14	0.0350
49	48.94	477.47	0.0350
50	49.94	477.81	0.0350
51	50.94	478.14	0.0350
52	51.94	478.47	0.0350
53	52.94	478.80	0.0350
54	53.94	479.14	0.0350
55	54.94	479.47	0.0350
56	55.94	479.80	0.0350
57	56.94	480.14	0.0350
58	57.93	480.47	0.0350
59	58.93	480.80	0.0350
60	59.93	481.14	0.0350
61	60.93	481.47	0.0350
62	61.93	481.80	0.0350
63	62.93	482.13	0.0350
64	63.93	482.47	0.0350
65	64.93	482.80	0.0350
66	65.93	483.09	0.0350
67	66.92	483.20	0.0120
89	88.90	483.20	0.0120

Comment:

Channel Cross Section: X-0810C

Scenario: Proposed

Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	451.76	0.0350
1	1.00	451.76	0.0350
2	2.00	451.76	0.0350
3	2.99	451.76	0.0350
20	3.99	451.76	0.0350
29	4.99	451.76	0.0350
30	5.99	451.76	0.0350
36	6.98	451.76	0.0350
37	7.98	451.76	0.0350
38	8.98	450.98	0.0350
39	9.98	447.52	0.0350
40	10.97	447.52	0.0350
41	11.97	447.52	0.0350
42	12.97	447.52	0.0350
43	13.97	447.52	0.0350
44	14.97	447.52	0.0350
45	15.96	447.52	0.0350
46	16.96	447.52	0.0350
47	17.96	447.52	0.0350
48	18.96	446.73	0.0350
49	19.95	442.29	0.0350
50	20.95	442.29	0.0350
51	21.95	442.29	0.0350
52	22.95	442.29	0.0350
53	23.94	442.29	0.0350
54	24.94	442.29	0.0350
55	25.94	442.29	0.0350
56	26.94	442.29	0.0350
57	27.93	442.29	0.0350
58	28.93	441.73	0.0350
59	29.93	437.50	0.0350
60	30.93	437.50	0.0350
70	31.93	437.50	0.0350
71	32.92	437.50	0.0350
80	33.92	437.50	0.0350
81	34.92	437.50	0.0350
90	35.92	437.50	0.0350
91	36.91	437.49	0.0350
100	37.91	437.47	0.0350
101	38.91	437.36	0.0350
110	39.91	436.24	0.0350
111	40.90	436.20	0.0350
120	41.90	436.16	0.0350
121	42.90	436.12	0.0350
130	43.90	436.07	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
131	44.90	436.03	0.0350
132	45.89	435.99	0.0350
133	46.89	435.95	0.0350
134	47.89	435.91	0.0350
135	48.89	435.80	0.0350
136	49.88	434.41	0.0350
137	50.88	434.40	0.0350
138	51.88	434.38	0.0350
139	52.88	434.37	0.0350
140	53.87	434.36	0.0350
141	54.87	434.34	0.0350
142	55.87	434.33	0.0350
143	56.87	434.31	0.0350
144	57.86	434.30	0.0350
145	58.86	434.21	0.0350
146	59.86	429.23	0.0350
147	60.86	429.23	0.0350
148	61.86	429.23	0.0350
149	62.85	429.23	0.0350
150	63.85	429.23	0.0350
151	64.85	429.23	0.0350
152	65.85	429.23	0.0350
153	66.84	429.23	0.0350
154	67.84	429.23	0.0350
155	68.84	429.23	0.0350
156	69.84	430.39	0.0350
157	70.83	430.41	0.0350
158	71.83	430.41	0.0350
159	72.83	430.41	0.0350
160	73.83	430.41	0.0350
161	74.83	430.41	0.0350
162	75.82	430.41	0.0350
163	76.82	430.41	0.0350
164	77.82	430.41	0.0350
165	78.82	430.41	0.0350
166	79.81	434.72	0.0350
167	80.81	434.96	0.0350
168	81.81	434.96	0.0350
169	82.81	434.96	0.0350
170	83.80	434.96	0.0350
171	84.80	434.96	0.0350
172	85.80	434.96	0.0350
173	86.80	434.96	0.0350
174	87.80	434.96	0.0350
175	88.79	434.96	0.0350
176	89.79	435.57	0.0350
177	90.79	435.62	0.0350
178	91.79	435.62	0.0350
179	92.78	435.62	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
180	93.78	435.62	0.0350
181	94.78	435.62	0.0350
182	95.78	435.62	0.0350
183	96.77	435.62	0.0350
184	97.77	435.62	0.0350
185	98.77	435.62	0.0350
186	99.77	440.08	0.0350
187	100.76	440.68	0.0350
188	101.76	440.68	0.0350
189	102.76	440.68	0.0350
190	103.76	440.68	0.0350
191	104.76	440.68	0.0350
192	105.75	440.68	0.0350
193	106.75	440.68	0.0350
194	107.75	440.68	0.0350
195	108.75	440.68	0.0350
196	109.74	443.00	0.0350
197	110.74	443.42	0.0350
198	111.74	443.42	0.0350
199	112.74	443.42	0.0350
200	113.73	443.42	0.0350
201	114.73	443.42	0.0350
202	115.73	443.42	0.0350
203	116.73	443.42	0.0350
204	117.73	443.42	0.0350
205	118.72	443.42	0.0350
206	119.72	443.77	0.0350
207	120.72	443.85	0.0350
208	121.72	443.85	0.0350
209	122.71	443.85	0.0350
210	123.71	443.85	0.0350
211	124.71	443.85	0.0350
212	125.71	443.85	0.0350
213	126.70	443.85	0.0350
214	127.70	443.85	0.0350
215	128.70	443.85	0.0350
216	129.70	443.89	0.0350
217	130.70	443.90	0.0350
218	131.69	443.90	0.0350
219	132.69	443.90	0.0350
220	133.69	443.90	0.0350
221	134.69	443.90	0.0350

Comment:

Channel Cross Section: X-0820C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	474.39	0.0350
1	1.00	474.39	0.0350
2	2.00	474.39	0.0350
3	3.00	474.39	0.0350
4	3.99	474.39	0.0350
5	4.99	474.31	0.0350
6	5.99	473.69	0.0350
7	6.99	473.69	0.0350
8	7.99	473.69	0.0350
9	8.99	473.69	0.0350
10	9.99	473.69	0.0350
11	10.98	473.69	0.0350
12	11.98	473.69	0.0350
13	12.98	473.69	0.0350
14	13.98	473.69	0.0350
15	14.98	473.71	0.0350
16	15.98	473.16	0.0350
17	16.97	473.09	0.0350
18	17.97	473.16	0.0350
19	18.97	473.23	0.0350
20	19.97	473.23	0.0350
21	20.97	473.23	0.0350
22	21.97	473.23	0.0350
23	22.97	473.23	0.0350
24	23.96	473.23	0.0350
25	24.96	473.23	0.0350
26	25.96	472.85	0.0350
27	26.96	472.53	0.0350
28	27.96	472.53	0.0350
29	28.96	472.53	0.0350
30	29.96	472.53	0.0350
31	30.95	472.53	0.0350
32	31.95	472.53	0.0350
33	32.95	472.53	0.0350
34	33.95	472.53	0.0350
35	34.95	472.53	0.0350
36	35.95	472.24	0.0350
37	36.95	471.49	0.0350
38	37.94	471.49	0.0350
39	38.94	471.49	0.0350
40	39.94	471.49	0.0350
41	40.94	471.49	0.0350
42	41.94	471.49	0.0350
43	42.94	471.49	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
44	43.93	471.49	0.0350
45	44.93	471.49	0.0350
46	45.93	471.47	0.0350
47	46.93	470.09	0.0350
48	47.93	470.07	0.0350
49	48.93	470.07	0.0350
50	49.93	470.07	0.0350
51	50.92	470.07	0.0350
52	51.92	470.07	0.0350
53	52.92	470.07	0.0350
54	53.92	470.07	0.0350
55	54.92	470.07	0.0350
56	55.92	470.07	0.0350
57	56.92	469.69	0.0350
58	57.91	469.54	0.0350
59	58.91	469.54	0.0350
60	59.91	469.46	0.0350
61	60.91	469.37	0.0350
62	61.91	469.27	0.0350
63	62.91	469.18	0.0350
64	63.90	469.10	0.0350
65	64.90	469.10	0.0350
66	65.90	469.10	0.0350
67	66.90	468.64	0.0350
68	67.90	468.05	0.0350
69	68.90	468.05	0.0350
70	69.90	468.05	0.0350
71	70.89	468.05	0.0350
72	71.89	468.05	0.0350
73	72.89	468.05	0.0350
74	73.89	468.05	0.0350
75	74.89	468.05	0.0350
76	75.89	468.05	0.0350
77	76.89	467.88	0.0350
78	77.88	467.09	0.0350
79	78.88	467.09	0.0350
80	79.88	467.09	0.0350
81	80.88	467.09	0.0350
82	81.88	467.09	0.0350
83	82.88	467.09	0.0350
84	83.88	467.09	0.0350
85	84.87	467.09	0.0350
86	85.87	467.09	0.0350
87	86.87	467.09	0.0350
88	87.87	466.30	0.0350
89	88.87	466.19	0.0350
90	89.87	466.19	0.0350
91	90.86	466.19	0.0350
92	91.86	466.19	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
93	92.86	466.19	0.0350
94	93.86	466.19	0.0350
95	94.86	466.19	0.0350
96	95.86	466.19	0.0350
97	96.86	466.19	0.0350
98	97.85	466.07	0.0350
99	98.85	466.00	0.0350
100	99.85	466.00	0.0350
101	100.85	466.00	0.0350
102	101.85	466.00	0.0350
103	102.85	466.00	0.0350
104	103.85	466.00	0.0350
105	104.84	466.00	0.0350
106	105.84	466.01	0.0350
107	106.84	466.01	0.0350
108	107.84	465.48	0.0350
109	108.84	464.44	0.0350
110	109.84	464.44	0.0350
111	110.84	464.44	0.0350
112	111.83	464.44	0.0350
113	112.83	464.44	0.0350
114	113.83	464.44	0.0350
115	114.83	464.44	0.0350
116	115.83	464.44	0.0350
117	116.83	464.44	0.0350
118	117.82	464.33	0.0350
119	118.82	462.93	0.0350
120	119.82	462.93	0.0350
121	120.82	462.93	0.0350
122	121.82	462.93	0.0350
123	122.82	462.93	0.0350
124	123.82	462.93	0.0350
125	124.81	462.93	0.0350
126	125.81	462.93	0.0350
127	126.81	462.93	0.0350
128	127.81	462.93	0.0350
129	128.81	461.88	0.0350
130	129.81	461.58	0.0350
131	130.81	461.58	0.0350
132	131.80	461.58	0.0350
133	132.80	461.58	0.0350
134	133.80	461.58	0.0350
135	134.80	461.58	0.0350
136	135.80	461.58	0.0350
137	136.80	461.58	0.0350
138	137.80	461.58	0.0350
139	138.79	461.55	0.0350
140	139.79	461.52	0.0350
141	140.79	461.52	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
142	141.79	461.52	0.0350
143	142.79	461.52	0.0350
144	143.79	461.52	0.0350
145	144.78	461.52	0.0350
146	145.78	461.52	0.0350
147	146.78	461.52	0.0350
148	147.78	461.52	0.0350
149	148.78	461.36	0.0350
150	149.78	460.94	0.0350
151	150.78	460.90	0.0350
152	151.77	460.85	0.0350
153	152.77	460.81	0.0350
154	153.77	460.81	0.0350
155	154.77	460.81	0.0350
156	155.77	460.81	0.0350
157	156.77	460.81	0.0350
158	157.77	460.81	0.0350
159	158.76	460.81	0.0350
160	159.76	460.42	0.0350
161	160.76	460.39	0.0350
162	161.76	460.39	0.0350
163	162.76	460.39	0.0350
164	163.76	460.39	0.0350
165	164.76	460.39	0.0350
166	165.75	460.39	0.0350
167	166.75	460.39	0.0350
168	167.75	460.39	0.0350
169	168.75	460.39	0.0350
170	169.75	458.08	0.0350
171	170.75	456.95	0.0350
172	171.74	456.95	0.0350
173	172.74	456.95	0.0350
174	173.74	456.95	0.0350
175	174.74	456.95	0.0350
176	175.74	456.95	0.0350
177	176.74	456.95	0.0350
178	177.74	456.95	0.0350
179	178.73	456.95	0.0350
180	179.73	457.86	0.0350
181	180.73	459.20	0.0350
182	181.73	459.20	0.0350
183	182.73	459.21	0.0350
184	183.73	459.33	0.0350
185	184.73	459.65	0.0350
186	185.72	459.97	0.0350
187	186.72	460.30	0.0350
188	187.71	460.63	0.0350
189	188.71	460.96	0.0350
190	189.70	461.29	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
191	190.70	461.62	0.0350
192	191.69	461.95	0.0350
193	192.69	462.28	0.0350
194	193.68	462.61	0.0350
195	194.68	462.94	0.0350
196	195.67	463.27	0.0350
197	196.67	463.60	0.0350
198	197.66	463.93	0.0350
199	198.66	464.26	0.0350
200	199.65	464.59	0.0350
201	200.65	464.92	0.0350
202	201.64	465.25	0.0350
203	202.64	465.58	0.0350
204	203.63	465.91	0.0350
205	204.63	466.24	0.0350
206	205.62	466.57	0.0350
207	206.62	466.90	0.0350
208	207.61	467.23	0.0350
209	208.61	467.56	0.0350
210	209.61	467.89	0.0350
211	210.60	468.22	0.0350
212	211.60	468.55	0.0350
213	212.59	468.88	0.0350
214	213.59	469.21	0.0350
215	214.58	469.54	0.0350
216	215.58	469.87	0.0350
217	216.57	470.20	0.0350
218	217.57	470.53	0.0350
219	218.56	470.86	0.0350
220	219.56	471.19	0.0350
221	220.55	471.52	0.0350
222	221.55	471.85	0.0350
223	222.54	472.18	0.0350
224	223.54	472.51	0.0350
225	224.53	472.84	0.0350
226	225.53	473.17	0.0350
227	226.52	473.50	0.0350
228	227.52	473.83	0.0350
229	228.51	474.16	0.0350
230	229.51	474.49	0.0350
231	230.50	474.82	0.0350
232	231.50	475.15	0.0350
233	232.49	475.48	0.0350
234	233.49	475.81	0.0350
235	234.48	476.14	0.0350
236	235.48	476.47	0.0350

Comment:

Channel Cross Section: X-0830C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	461.05	0.0350
1	9.87	461.65	0.0350
2	19.73	462.37	0.0350
3	29.60	463.04	0.0350
4	39.46	463.69	0.0180
5	49.33	464.04	0.0180
6	59.19	464.37	0.0180
7	69.06	464.63	0.0180
8	78.92	463.57	0.0180
9	88.79	459.38	0.0180
10	98.65	454.25	0.0350
11	108.52	449.40	0.0350
12	118.38	445.88	0.0350
13	128.25	443.29	0.0350
14	138.12	441.10	0.0350
15	147.98	442.69	0.0350
16	157.85	446.93	0.0350
17	167.71	451.07	0.0350
18	177.58	455.18	0.0350
19	187.44	457.71	0.0350
20	197.31	458.47	0.0350
21	207.17	458.60	0.0350
22	217.04	458.13	0.0350

Comment:

Channel Cross Section: X-0840C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	493.10	0.0350
1	2.90	493.10	0.0350
2	5.79	493.10	0.0350
3	8.69	493.10	0.0350
4	11.59	493.10	0.0350
5	14.49	493.10	0.0350
6	17.38	492.93	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
7	20.28	492.28	0.0350
8	23.18	491.31	0.0350
9	26.07	490.35	0.0350
10	28.97	489.38	0.0350
11	31.87	488.41	0.0350
12	34.77	487.45	0.0350
13	37.66	486.48	0.0350
14	40.56	485.59	0.0350
15	43.46	485.21	0.0350
16	46.35	485.88	0.0350
17	49.25	486.86	0.0350
18	52.15	487.83	0.0350
19	55.05	488.80	0.0350
20	57.94	489.77	0.0350
21	60.84	490.74	0.0350
22	63.74	491.70	0.0350
23	66.63	492.67	0.0350
24	69.53	493.06	0.0350
25	72.43	492.86	0.0350
26	75.33	492.59	0.0350
27	78.22	492.31	0.0350

Comment:

Channel Cross Section: X-0890C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	403.73	0.0500
1	2.96	403.18	0.0500
2	5.93	403.06	0.0500
3	8.89	402.82	0.0500
4	11.85	402.02	0.0500
5	14.81	401.29	0.0500
6	17.78	401.29	0.0500
7	20.74	401.29	0.0500
8	23.70	401.29	0.0500
9	26.66	401.12	0.0500
10	29.63	400.78	0.0500
11	32.59	400.32	0.0500
12	35.55	399.96	0.0500
13	38.51	399.88	0.0500
14	41.48	399.88	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
15	44.44	399.78	0.0500
16	47.40	399.37	0.0500
17	50.36	399.37	0.0500
18	53.33	399.37	0.0500
19	56.29	399.13	0.0500
20	59.25	398.33	0.0500
21	62.21	397.82	0.0500
22	65.18	397.82	0.0500
23	68.14	397.60	0.0500
24	71.10	397.00	0.0500
25	74.06	397.00	0.0500
26	77.03	396.72	0.0500
27	79.99	395.68	0.0500
28	82.95	395.34	0.0500
29	85.91	395.34	0.0500
30	88.88	395.34	0.0500
31	91.84	395.00	0.0500
32	94.80	394.35	0.0500
33	97.76	393.98	0.0500
34	100.73	393.58	0.0500
35	103.69	392.15	0.0500
36	106.65	391.97	0.0500
37	109.61	391.97	0.0500
38	112.58	391.09	0.0500
39	115.54	390.31	0.0500
40	118.50	390.31	0.0500
41	121.46	390.31	0.0500
42	124.43	389.88	0.0500
43	127.39	388.00	0.0500
44	130.35	387.86	0.0500
45	133.31	387.86	0.0500
46	136.28	387.06	0.0500
47	139.24	386.53	0.0500
48	142.20	386.53	0.0500
49	145.16	386.34	0.0500
50	148.13	385.84	0.0500
51	151.09	385.80	0.0500
52	154.05	385.80	0.0500
53	157.01	385.80	0.0500
54	159.98	385.70	0.0500
55	162.94	385.61	0.0500
56	165.90	385.42	0.0500
57	168.86	385.20	0.0500
58	171.83	385.11	0.0500
59	174.79	385.11	0.0500
60	177.75	385.11	0.0500
61	180.71	385.11	0.0500
62	183.68	385.11	0.0500
63	186.64	385.11	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
64	189.60	385.12	0.0500
65	192.56	385.33	0.0500
66	195.53	385.47	0.0500
67	198.49	385.46	0.0500
68	201.45	385.45	0.0500
69	204.41	385.39	0.0500
70	207.38	385.39	0.0500
71	210.34	385.37	0.0500
72	213.30	385.34	0.0500
73	216.26	385.55	0.0500
74	219.23	385.55	0.0500
75	222.19	385.55	0.0500
76	225.15	385.55	0.0500
77	228.11	385.51	0.0500
78	231.08	385.50	0.0500
79	234.04	385.46	0.0500
80	237.00	385.39	0.0500
81	239.98	385.37	0.0500
82	242.96	385.37	0.0500
83	245.95	385.21	0.0500
84	248.93	384.88	0.0500
85	251.91	384.88	0.0500
86	254.89	384.88	0.0500
87	257.87	384.70	0.0500
88	260.86	384.14	0.0500
89	263.84	384.36	0.0500
90	266.82	384.36	0.0500
91	269.80	384.76	0.0500
92	272.78	385.37	0.0500
93	275.77	385.37	0.0500
94	278.75	385.30	0.0500
95	281.73	385.06	0.0500
96	284.71	385.02	0.0500
97	287.69	385.02	0.0500
98	290.68	385.02	0.0500
99	293.66	384.91	0.0500
100	296.64	384.87	0.0500
101	299.62	385.08	0.0500
102	302.60	385.35	0.0500
103	305.58	386.05	0.0500
104	308.57	386.05	0.0500
105	311.55	386.05	0.0500
106	314.53	386.60	0.0500
107	317.51	386.90	0.0500
108	320.49	386.90	0.0500
109	323.48	386.96	0.0500
110	326.46	387.17	0.0500
111	329.44	387.51	0.0500
112	332.42	387.51	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
113	335.40	387.51	0.0500
114	338.39	388.35	0.0500
115	341.37	388.68	0.0500
116	344.35	388.81	0.0500
117	347.33	389.15	0.0500
118	350.31	389.53	0.0500
119	353.30	389.53	0.0500
120	356.28	389.53	0.0500
121	359.26	389.53	0.0500
122	362.24	390.04	0.0500
123	365.22	390.25	0.0500
124	368.20	390.32	0.0500
125	371.19	390.67	0.0500
126	374.17	391.10	0.0500
127	377.15	391.10	0.0500
128	380.13	391.17	0.0500
129	383.11	391.90	0.0500
130	386.10	391.91	0.0500
131	389.08	391.87	0.0500
132	392.06	391.79	0.0500
133	395.04	392.24	0.0500
134	398.02	392.70	0.0500
135	401.01	392.70	0.0500
136	403.99	392.85	0.0500
137	406.97	393.59	0.0500
138	409.95	393.91	0.0500
139	412.93	394.22	0.0500
140	415.92	394.97	0.0500
141	418.90	395.27	0.0500
142	421.88	395.27	0.0500
143	424.86	395.27	0.0500
144	427.84	395.68	0.0500
145	430.82	396.83	0.0500
146	433.81	396.98	0.0500
147	436.79	396.98	0.0500
148	439.77	397.34	0.0500
149	442.75	397.45	0.0500
150	445.73	397.45	0.0500
151	448.72	398.04	0.0500
152	451.70	398.85	0.0500
153	454.68	399.11	0.0500
154	457.66	399.52	0.0500
155	460.64	399.77	0.0500
156	463.63	400.74	0.0500
157	466.61	400.93	0.0500
158	469.59	400.93	0.0500
159	472.57	401.53	0.0500
160	475.55	402.68	0.0500
161	478.54	403.22	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
162	481.52	403.50	0.0500
163	484.50	404.60	0.0500

Comment:

Channel Cross Section: X-0960C

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.04	0.0350
1	10.96	430.17	0.0350
2	20.92	427.56	0.0350
3	30.88	424.96	0.0350
4	40.84	422.35	0.0350
5	50.80	419.74	0.0350
6	60.76	417.14	0.0350
7	70.73	414.53	0.0350
8	80.69	411.92	0.0350
9	90.65	409.32	0.0350
10	100.61	406.71	0.0350
11	101.61	406.45	0.0350
12	110.57	404.10	0.0350
13	120.53	401.50	0.0350
14	130.50	398.89	0.0350
15	140.46	396.28	0.0350
16	141.45	396.02	0.0350
17	142.45	395.76	0.0350
18	143.45	395.50	0.0350
19	144.44	395.24	0.0350
20	145.44	394.98	0.0350
21	146.43	392.77	0.0350
22	147.43	391.56	0.0350
23	149.43	392.52	0.0350
24	154.42	392.52	0.0350
25	164.42	395.10	0.0350
26	175.41	397.39	0.0350
27	185.40	401.10	0.0350
28	196.39	402.96	0.0350
29	207.38	404.91	0.0350
30	217.37	406.76	0.0350
31	228.36	408.33	0.0350
32	239.35	410.07	0.0350
33	249.35	410.88	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
34	259.34	411.58	0.0350
35	270.33	412.26	0.0350
36	281.32	413.39	0.0350
37	291.31	413.74	0.0350
38	301.30	414.39	0.0350
39	302.30	414.59	0.0350
40	303.30	414.96	0.0350
41	304.30	414.96	0.0350
42	305.30	414.97	0.0350
43	306.30	415.01	0.0350

Comment:

Channel Cross Section: X-Z

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	378.34	0.0500
1	9.97	377.48	0.0500
2	19.95	376.41	0.0500
3	29.92	375.21	0.0500
4	39.89	374.02	0.0500
5	49.87	373.44	0.0500
6	59.84	372.15	0.0500
7	69.81	371.15	0.0500
8	79.79	370.86	0.0500
9	89.76	370.02	0.0500
10	99.74	369.01	0.0500
11	109.71	368.08	0.0500
12	119.68	367.24	0.0500
13	129.66	365.63	0.0500
14	139.63	364.59	0.0500
15	149.60	363.94	0.0500
16	159.58	363.05	0.0500
17	169.55	362.66	0.0500
18	179.52	362.84	0.0500
19	189.50	363.02	0.0500
20	199.47	362.84	0.0500
21	209.44	361.01	0.0500
22	219.42	362.63	0.0500
23	229.39	363.06	0.0500
24	239.37	363.07	0.0500
25	249.34	363.00	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
26	259.31	363.14	0.0500
27	269.29	363.24	0.0500
28	279.26	363.63	0.0500
29	289.23	363.75	0.0500
30	299.21	363.79	0.0500
31	309.18	364.45	0.0500
32	319.15	365.40	0.0500
33	329.13	366.78	0.0500
34	339.10	367.53	0.0500
35	349.07	369.21	0.0500
36	359.05	370.85	0.0500
37	369.02	372.12	0.0500
38	379.00	373.02	0.0500
39	388.97	373.45	0.0500
40	398.94	373.91	0.0500
41	408.92	374.37	0.0500
42	418.89	374.95	0.0500
43	428.86	375.95	0.0500
44	438.84	377.43	0.0500
45	448.81	378.62	0.0500
46	458.78	379.97	0.0500
47	468.76	381.62	0.0500

Comment:

Channel Cross Section: XS-000

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	375.90	0.0350
1	9.48	374.34	0.0350
2	18.96	372.79	0.0350
3	28.43	371.06	0.0350
4	37.91	369.23	0.0350
5	47.39	367.58	0.0350
6	56.87	365.46	0.0350
7	66.35	363.21	0.0350
8	75.83	360.81	0.0350
9	85.30	358.05	0.0350
10	94.78	354.83	0.0350
11	104.26	351.87	0.0350
12	113.74	350.32	0.0350
13	123.22	349.89	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
14	132.69	349.87	0.0350
15	142.17	348.05	0.0350
16	151.65	348.08	0.0350
17	161.13	349.22	0.0350
18	170.61	349.75	0.0350
19	180.57	349.65	0.0350
20	190.53	349.32	0.0350
21	200.50	349.34	0.0350
22	210.46	349.45	0.0350
23	220.43	349.81	0.0350
24	230.39	350.39	0.0350
25	240.35	350.81	0.0350
26	250.32	351.00	0.0350
27	260.28	351.53	0.0350
28	270.24	352.05	0.0350
29	280.21	352.36	0.0350
30	290.17	352.60	0.0350
31	300.13	353.11	0.0350
32	310.10	353.62	0.0350
33	320.06	353.87	0.0350
34	330.03	354.15	0.0350
35	339.99	354.13	0.0350
36	349.95	353.90	0.0350
37	359.92	354.76	0.0350
38	369.88	355.42	0.0350
39	379.84	356.40	0.0350
40	389.81	357.35	0.0350
41	399.77	358.16	0.0350
42	409.73	359.02	0.0350
43	419.70	359.54	0.0350
44	429.66	360.37	0.0350
45	439.22	361.00	0.0350
46	448.79	361.74	0.0350
47	458.35	363.00	0.0350
48	467.91	364.26	0.0350
49	477.47	365.51	0.0350
50	487.04	366.96	0.0350
51	496.60	368.34	0.0350
52	506.16	369.75	0.0350
53	515.72	371.13	0.0350
54	525.29	372.44	0.0350
55	534.85	373.65	0.0350
56	544.41	374.69	0.0350
57	553.97	375.49	0.0350
58	563.54	376.38	0.0350
59	573.10	377.36	0.0350

Comment:

Weir Cross Section: XS-002

Scenario: Proposed
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	512.91
1	9.39	512.04
2	18.79	512.02
3	28.18	512.02
4	37.58	511.93
5	46.97	511.92
6	56.37	512.00
7	65.76	511.91
8	75.16	511.80
9	84.55	511.84
10	93.94	511.94
11	103.34	512.16
12	112.73	512.07
13	122.13	512.08
14	131.52	511.97
15	140.92	511.82
16	150.31	512.13
17	159.97	512.26
18	169.62	512.23
19	179.28	512.20
20	188.93	512.28
21	198.58	512.21
22	208.24	512.14
23	217.89	512.56
24	227.55	513.03
25	237.20	512.77
26	246.86	512.25
27	256.51	511.98
28	266.17	511.82
29	275.82	511.68
30	285.47	511.53
31	295.13	511.13
32	304.78	511.11
33	314.44	511.18
34	324.09	511.36
35	333.75	511.58
36	343.40	511.23
37	353.06	510.98
38	362.71	510.46
39	372.37	510.38
40	382.02	510.32
41	391.67	510.27
42	401.33	510.23
43	410.98	509.94

Order	Station [ft]	Elevation [ft]
44	420.64	509.76
45	429.84	509.53
46	439.05	509.13
47	448.26	508.75
48	457.46	508.71
49	466.67	508.78
50	475.88	508.54
51	485.08	508.64
52	494.94	508.51
53	504.79	508.40
54	514.64	508.68
55	524.49	508.67
56	534.35	508.80
57	544.20	508.76
58	554.05	508.71
59	563.90	508.85
60	573.76	508.86
61	583.61	508.80
62	593.46	508.88
63	603.31	508.79
64	613.16	508.65
65	623.02	508.92
66	632.87	508.95
67	642.72	508.84
68	652.57	508.68
69	662.43	508.49
70	672.28	508.19
71	682.13	508.05
72	691.98	508.53
73	701.83	509.19
74	711.69	509.53
75	721.54	509.42
76	731.39	509.20
77	741.24	508.90
78	751.10	508.88
79	760.95	508.56
80	770.80	508.16
81	780.65	507.85
82	790.50	507.66
83	800.36	507.57
84	810.21	507.64
85	820.06	507.93
86	829.91	508.38
87	839.77	508.62
88	849.35	508.58
89	858.93	508.55
90	868.51	508.47
91	878.09	508.01
92	887.67	508.34

Order	Station [ft]	Elevation [ft]
93	897.25	508.63
94	906.83	509.20
95	916.41	509.78
96	925.84	509.89
97	935.27	509.84
98	944.69	510.01
99	954.12	510.46
100	963.55	510.42
101	972.98	510.81
102	982.41	511.00
103	991.83	510.84
104	1001.26	510.90
105	1010.69	511.23
106	1020.12	511.47
107	1029.55	511.21
108	1038.97	511.51
109	1048.40	511.69

Comment:

Weir Cross Section: XS-005

Scenario: Proposed

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	17.75	452.91
1	26.63	452.44
2	35.50	452.04
3	44.38	451.60
4	53.25	451.28
5	62.13	450.78
6	71.58	450.01
7	81.03	449.41
8	90.49	448.37
9	99.94	447.98
10	109.39	448.12
11	117.29	448.54
12	125.19	448.67
13	133.09	448.85
14	142.51	448.56
15	151.94	448.91
16	161.36	449.26
17	170.79	449.28
18	180.21	449.69
19	189.64	450.39

Order	Station [ft]	Elevation [ft]
20	199.06	449.96
21	208.49	449.85
22	217.91	450.49
23	226.54	450.45
24	235.18	450.10
25	243.81	450.20
26	252.45	450.43
27	261.08	450.82
28	269.48	450.48
29	277.88	450.43
30	286.27	450.29
31	294.67	450.19
32	303.07	450.20
33	311.47	450.52
34	320.39	450.60
35	329.31	450.22
36	338.24	449.88
37	347.16	449.71
38	353.42	449.85
39	359.68	450.17
40	369.03	450.18
41	378.39	449.97
42	387.75	449.79
43	397.11	449.52
44	406.46	449.46
45	415.82	449.67
46	425.18	449.53
47	434.54	449.63
48	443.89	449.49
49	452.94	449.31
50	461.98	448.75
51	471.03	448.45
52	480.97	448.60
53	490.91	448.60
54	500.85	448.81
55	510.80	448.95
56	520.74	449.11
57	530.68	449.69
58	540.62	450.22
59	550.56	450.85
60	560.50	451.37

Comment:

Weir Cross Section: XS-007

Scenario: Proposed

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	497.54
1	9.47	497.19
2	18.94	496.91
3	28.41	496.77
4	37.88	496.19
5	47.35	495.94
6	56.82	495.86
7	66.30	495.65
8	75.77	495.52
9	85.24	495.59
10	94.71	495.12
11	104.18	494.96
12	113.65	494.79
13	123.12	494.85
14	132.59	494.85
15	142.06	494.85
16	151.66	495.09
17	161.26	495.02
18	170.86	495.11
19	180.46	494.97
20	190.06	495.01
21	199.66	494.81
22	209.26	494.92
23	218.86	494.84
24	228.46	495.35
25	238.07	494.75
26	247.67	495.38
27	257.27	495.43
28	266.87	495.88
29	276.47	495.51
30	286.07	495.72
31	295.67	495.53
32	305.27	495.46
33	314.87	495.33
34	324.47	495.42
35	334.07	495.90
36	342.07	496.22
37	350.08	496.46
38	358.08	496.74
39	366.08	496.92
40	374.08	497.29

Comment:

Weir Cross Section: XS-009

Scenario: Proposed
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	452.45
1	9.18	451.47
2	18.36	450.81
3	27.54	449.74
4	36.72	448.56
5	45.90	447.44
6	55.09	446.23
7	64.27	444.97
8	73.33	444.30
9	82.39	443.89
10	91.45	443.65
11	100.52	444.01
12	109.58	444.42
13	118.64	444.91
14	127.70	445.03
15	136.77	444.76
16	145.83	444.59
17	155.15	445.36
18	164.47	445.92
19	173.79	446.12
20	183.12	445.86
21	192.62	445.36
22	202.12	445.87
23	211.62	445.89
24	221.13	445.65
25	230.63	445.75
26	240.13	445.47
27	249.63	445.54
28	259.14	445.50
29	268.64	445.24
30	278.14	445.48
31	287.64	445.52
32	297.15	445.43
33	306.65	445.66
34	315.18	445.81
35	323.72	446.12
36	332.26	446.53
37	341.59	447.13
38	350.92	447.96
39	360.26	449.65
40	369.59	451.43

Comment:

Weir Cross Section: XS-010

Scenario: Proposed
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	451.58
1	9.85	451.46
2	19.70	451.40
3	29.55	451.28
4	39.40	451.16
5	49.24	451.02
6	59.09	451.00
7	68.94	450.90
8	78.79	450.79
9	88.64	450.77
10	98.49	450.64
11	108.34	450.55
12	118.19	450.47
13	128.03	450.28
14	137.88	450.14
15	147.73	450.05
16	157.58	449.92
17	167.43	449.78
18	177.28	449.70
19	187.13	449.64
20	196.98	449.54
21	206.82	449.40
22	216.67	449.31
23	226.52	449.21
24	236.37	449.02
25	246.22	448.88
26	256.07	448.80
27	265.92	448.71
28	275.77	448.58
29	285.61	448.49
30	295.46	448.45
31	305.31	448.33
32	315.16	448.20
33	325.01	448.14
34	334.86	448.03
35	344.71	447.99
36	354.56	447.93
37	364.40	447.74
38	374.25	447.76
39	384.10	447.77
40	393.95	447.70
41	403.80	447.50
42	413.65	447.42
43	423.50	447.33

Order	Station [ft]	Elevation [ft]
44	433.35	447.22
45	443.19	447.16
46	453.04	447.11
47	462.89	447.08
48	472.74	447.01
49	482.59	446.95
50	492.44	446.89
51	502.29	446.77
52	512.14	446.70
53	521.98	446.64
54	531.83	446.59
55	541.68	446.53
56	551.53	446.48
57	561.38	446.51
58	571.23	446.42
59	581.08	446.32
60	590.93	446.13
61	600.77	446.08
62	610.62	446.02
63	620.47	445.98
64	630.32	445.90
65	640.08	445.79
66	649.84	445.68
67	659.60	445.56
68	669.36	445.45
69	679.12	445.38
70	688.88	445.34
71	698.63	445.30
72	708.39	445.21
73	718.15	445.06
74	727.91	444.89
75	737.67	444.85
76	747.43	444.82
77	757.19	444.69
78	766.95	444.58
79	776.71	444.51
80	786.47	444.44
81	796.23	444.37
82	805.98	444.29
83	815.74	444.20
84	825.50	444.11
85	835.26	444.03
86	845.02	443.89
87	854.78	443.89
88	864.54	443.84
89	874.30	443.75
90	884.06	443.69
91	893.82	443.62
92	903.58	443.56

Order	Station [ft]	Elevation [ft]
93	913.33	443.50
94	923.09	443.44
95	932.85	443.36
96	942.61	443.32
97	952.37	443.29
98	962.13	443.23
99	971.89	443.24
100	981.51	443.16
101	991.13	443.11
102	1000.75	443.08
103	1010.37	443.11
104	1019.99	443.04
105	1029.61	442.98
106	1039.23	442.98
107	1048.85	442.96
108	1058.47	442.92
109	1068.09	442.93
110	1077.71	442.95
111	1087.33	442.96
112	1096.95	442.94
113	1106.57	442.87
114	1116.19	442.86
115	1125.81	442.89
116	1135.43	442.89
117	1145.05	442.87
118	1154.67	442.88
119	1164.29	442.94
120	1173.91	442.99
121	1183.53	442.95
122	1193.15	443.00
123	1202.77	443.08
124	1212.39	443.06
125	1222.01	443.11
126	1232.00	443.14
127	1241.99	443.09
128	1251.98	443.13
129	1261.98	443.23
130	1271.97	443.34
131	1281.96	443.40
132	1291.95	443.37
133	1301.94	443.45
134	1311.93	443.56
135	1321.93	443.60
136	1331.92	443.61
137	1341.91	443.65
138	1351.90	443.67
139	1361.89	443.73
140	1371.88	443.85
141	1381.88	444.00

Order	Station [ft]	Elevation [ft]
142	1391.87	444.01
143	1401.86	444.12
144	1411.85	444.12
145	1421.84	444.19
146	1431.83	444.27
147	1441.83	444.36
148	1451.82	444.49
149	1461.81	444.62
150	1471.80	444.76
151	1481.79	444.87
152	1491.78	444.96
153	1501.78	445.11
154	1511.77	445.28
155	1521.76	445.39
156	1531.75	445.52
157	1541.74	445.65
158	1551.73	445.78
159	1561.72	445.92
160	1571.72	446.10
161	1581.71	446.23
162	1591.70	446.41
163	1601.57	446.59
164	1611.43	446.76
165	1621.30	446.87
166	1631.17	446.96
167	1641.03	447.15
168	1650.90	447.32
169	1660.77	447.47
170	1670.63	447.67
171	1680.50	447.87
172	1690.37	448.02
173	1700.23	448.20
174	1710.10	448.36
175	1719.97	448.54
176	1729.83	448.71
177	1739.70	448.82
178	1749.57	449.04
179	1759.44	449.26
180	1769.30	449.32
181	1779.17	449.51
182	1789.04	449.71
183	1798.90	449.94
184	1808.77	450.20
185	1818.64	450.44
186	1828.50	450.50
187	1838.37	450.76
188	1848.24	450.90
189	1858.10	451.01
190	1867.97	451.33

Order	Station [ft]	Elevation [ft]
191	1877.84	451.48
192	1887.70	451.66
193	1897.57	451.71

Comment:

Weir Cross Section: XS-011

Scenario: Proposed
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	426.28
1	10.00	426.27
2	19.99	426.24
3	29.99	426.05
4	39.99	425.80
5	49.99	425.73
6	59.98	425.66
7	69.98	425.58
8	79.98	425.51
9	89.98	425.42
10	99.97	425.34
11	109.97	425.20
12	119.97	425.10
13	129.97	425.11
14	139.96	424.91
15	149.96	424.98
16	159.96	424.95
17	169.96	424.69
18	179.95	424.58
19	189.95	424.39
20	199.95	424.39
21	209.95	424.33
22	219.94	424.33
23	229.94	424.17
24	239.94	424.00
25	249.94	423.91
26	259.93	423.73
27	269.93	423.70
28	279.93	423.69
29	289.92	423.57
30	299.92	423.46
31	309.92	423.32
32	319.92	423.19
33	329.91	423.12

Order	Station [ft]	Elevation [ft]
34	339.91	422.97
35	349.91	423.08
36	359.91	422.94
37	369.90	422.87
38	379.90	422.84
39	389.90	422.78
40	399.90	422.70
41	409.89	422.66
42	419.89	422.69
43	429.89	422.54
44	439.89	422.48
45	449.88	422.48
46	459.88	422.35
47	469.88	422.30
48	479.88	422.34
49	489.87	422.29
50	499.87	422.18
51	509.87	422.22
52	519.87	422.27
53	529.86	422.11
54	539.86	422.15
55	549.86	422.25
56	559.85	422.17
57	569.85	422.25
58	579.85	422.21
59	589.85	422.07
60	599.84	422.07
61	609.84	422.19
62	619.84	422.08
63	629.84	422.01
64	639.83	422.06
65	649.83	422.17
66	659.83	422.25
67	669.83	422.26
68	679.82	422.27
69	689.82	422.26
70	699.82	422.25
71	709.82	422.33
72	719.81	422.38
73	729.81	422.43
74	739.81	422.48
75	749.81	422.49
76	759.80	422.53
77	769.80	422.59
78	779.80	422.66
79	789.80	422.70
80	799.79	422.74
81	809.79	422.77
82	819.79	422.81

Order	Station [ft]	Elevation [ft]
83	829.78	422.81
84	839.78	422.93
85	849.78	422.94
86	859.78	423.08
87	869.77	423.16
88	879.77	423.28
89	889.77	423.35
90	899.77	423.40
91	909.76	423.48
92	919.76	423.56
93	929.76	423.71
94	939.76	423.84
95	949.75	423.96
96	959.75	424.11
97	969.75	424.21
98	979.75	424.30
99	989.74	424.44
100	999.74	424.49
101	1009.74	424.62
102	1019.74	424.89
103	1029.73	425.05
104	1039.73	425.22
105	1049.73	425.40
106	1059.73	425.53
107	1069.72	425.58
108	1079.72	425.75
109	1089.72	425.90
110	1099.72	426.01
111	1109.71	426.23
112	1119.71	426.43
113	1129.71	426.67
114	1139.70	426.78
115	1149.70	426.89
116	1159.70	427.12

Comment:

Weir Cross Section: XS-012

Scenario: Proposed

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	462.68
1	9.24	461.62
2	18.48	460.97

Order	Station [ft]	Elevation [ft]
3	27.71	460.24
4	36.95	459.41
5	46.19	457.49
6	55.43	454.98
7	64.66	454.92
8	73.90	454.87
9	83.14	454.96
10	92.43	455.90
11	101.73	456.79
12	111.02	457.16
13	120.78	456.97
14	130.54	456.79
15	140.30	456.56
16	150.06	456.48
17	159.82	456.41
18	169.58	456.05
19	179.34	456.03
20	189.10	456.29
21	198.86	456.59
22	208.62	456.05
23	218.38	455.87
24	228.14	456.04
25	237.89	456.70
26	247.65	456.59
27	257.41	456.40
28	267.17	456.64
29	276.29	456.66
30	285.42	456.61
31	294.54	456.84
32	303.66	457.26
33	312.78	457.93
34	321.90	459.07
35	330.28	460.61
36	338.67	461.90
37	347.05	463.15
38	355.43	464.37

Comment:

Weir Cross Section: XS-013

Scenario: Proposed

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	417.56

Order	Station [ft]	Elevation [ft]
1	8.48	417.04
2	16.96	416.31
3	25.45	415.58
4	33.93	414.79
5	42.41	413.87
6	50.87	412.56
7	59.32	411.48
8	67.78	410.94
9	76.24	410.93
10	84.69	411.24
11	93.15	411.58
12	103.00	412.17
13	112.85	412.77
14	122.70	412.79
15	132.54	412.94
16	142.39	413.01
17	152.24	413.20
18	162.09	413.39
19	171.94	413.21
20	181.66	413.30
21	191.37	413.41
22	201.09	413.45
23	210.81	413.37
24	220.53	413.07
25	230.24	412.99
26	239.96	413.21
27	249.68	412.92
28	259.40	412.99
29	269.11	413.58
30	278.83	413.30
31	288.55	413.20
32	297.81	413.51
33	307.07	413.29
34	316.33	413.31
35	325.59	413.53
36	334.85	413.68
37	344.11	414.72
38	353.37	416.01
39	359.92	417.19
40	366.47	418.39

Comment:

Weir Cross Section: XS-014

Scenario: Proposed

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	415.46
1	9.72	415.20
2	19.43	414.86
3	29.15	414.51
4	38.87	414.21
5	48.58	413.78
6	58.30	413.45
7	68.02	413.11
8	77.73	412.81
9	87.45	412.42
10	97.17	412.09
11	106.88	411.68
12	116.60	411.35
13	126.32	411.03
14	136.03	410.64
15	145.75	410.28
16	155.47	409.98
17	165.18	409.63
18	174.90	409.35
19	184.62	409.03
20	194.33	408.70
21	204.05	408.46
22	213.77	408.04
23	223.48	407.80
24	233.20	407.61
25	242.92	407.45
26	252.63	407.14
27	262.35	406.91
28	272.07	406.69
29	281.78	406.44
30	291.50	406.24
31	301.22	406.08
32	310.93	406.03
33	320.65	405.76
34	330.55	405.46
35	340.44	405.46
36	350.34	405.30
37	360.24	405.12
38	370.14	404.84
39	380.03	404.78
40	389.93	404.78
41	399.83	404.67
42	409.73	404.48
43	419.62	404.46
44	429.52	404.43
45	439.42	404.43
46	449.32	404.40

Order	Station [ft]	Elevation [ft]
47	459.21	404.30
48	469.11	404.40
49	479.01	404.28
50	488.91	404.38
51	498.80	404.42
52	508.70	404.53
53	518.60	404.58
54	528.50	404.66
55	538.39	404.75
56	548.29	404.83
57	558.19	405.09
58	568.09	405.40
59	577.98	405.52
60	587.88	405.66
61	597.78	405.84
62	607.68	406.05
63	617.57	406.33
64	627.47	406.44
65	637.37	406.70
66	647.27	406.90
67	657.16	407.17
68	667.06	407.24
69	676.96	407.58
70	686.66	407.86
71	696.36	408.15
72	706.06	408.28
73	715.76	408.49
74	725.46	408.88
75	735.16	409.22
76	744.86	409.46
77	754.57	409.74
78	764.27	410.18
79	773.97	410.45
80	783.67	410.64
81	793.37	410.91
82	803.07	411.41
83	812.77	411.67
84	822.47	411.97
85	832.17	412.25
86	841.87	412.53
87	851.57	412.76
88	861.27	413.02
89	870.98	413.36
90	880.68	413.71
91	890.38	414.08
92	900.08	414.27
93	909.78	414.49
94	919.48	414.81
95	929.18	415.16

Order	Station [ft]	Elevation [ft]
96	938.88	415.42
97	948.58	415.74
98	958.28	415.98
99	967.98	416.29

Comment:

Weir Cross Section: XS-015

Scenario: Proposed

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	449.32
1	9.93	449.21
2	19.86	448.80
3	29.79	448.47
4	39.72	448.27
5	49.65	448.14
6	59.59	447.96
7	69.52	447.56
8	79.45	447.18
9	89.38	446.92
10	99.31	446.44
11	109.24	446.32
12	119.17	446.22
13	129.10	445.85
14	139.03	445.48
15	148.96	445.22
16	158.89	445.08
17	168.83	444.91
18	178.76	444.56
19	188.69	444.27
20	198.62	443.90
21	208.55	443.78
22	218.48	443.38
23	228.41	443.04
24	238.34	442.80
25	248.27	442.52
26	258.20	442.19
27	268.13	441.79
28	278.06	441.46
29	288.00	441.20
30	297.93	440.89
31	307.86	440.54
32	317.79	440.26

Order	Station [ft]	Elevation [ft]
33	327.72	439.92
34	337.65	439.59
35	347.55	439.20
36	357.44	438.85
37	367.34	438.59
38	377.24	438.27
39	387.14	438.06
40	397.03	437.64
41	406.93	437.40
42	416.83	437.14
43	426.73	437.01
44	436.62	436.59
45	446.52	436.25
46	456.42	435.98
47	466.32	435.73
48	476.21	435.44
49	486.11	435.20
50	496.01	434.93
51	505.91	434.74
52	515.80	434.58
53	525.70	434.37
54	535.60	434.18
55	545.49	433.97
56	555.39	433.74
57	565.29	433.51
58	575.19	433.33
59	585.08	433.16
60	594.98	433.04
61	604.88	432.93
62	614.78	432.75
63	624.67	432.57
64	634.57	432.45
65	644.47	432.33
66	654.37	432.23
67	664.26	432.09
68	674.16	432.04
69	683.85	431.93
70	693.55	431.84
71	703.24	431.79
72	712.93	431.77
73	722.63	431.73
74	732.32	431.58
75	742.01	431.49
76	751.71	431.45
77	761.40	431.32
78	771.09	431.26
79	780.79	431.15
80	790.48	431.12
81	800.17	431.12

Order	Station [ft]	Elevation [ft]
82	809.87	431.11
83	819.56	431.03
84	829.26	431.00
85	838.95	431.04
86	848.64	431.10
87	858.34	431.15
88	868.03	431.16
89	877.72	431.19
90	887.42	431.24
91	897.11	431.32
92	906.80	431.38
93	916.50	431.46
94	926.19	431.56
95	936.18	431.73
96	946.17	431.83
97	956.16	431.98
98	966.15	432.13
99	976.14	432.27
100	986.13	432.41
101	996.12	432.51
102	1006.11	432.64
103	1016.10	432.80
104	1026.09	432.99
105	1036.08	433.17
106	1046.07	433.32
107	1056.06	433.47
108	1066.05	433.67
109	1076.04	433.88
110	1086.03	434.05
111	1096.02	434.29
112	1106.01	434.51
113	1115.97	434.74
114	1125.92	434.98
115	1135.88	435.19
116	1145.83	435.43
117	1155.79	435.72
118	1165.75	435.99
119	1175.70	436.24
120	1185.66	436.49
121	1195.62	436.74
122	1205.57	437.00
123	1215.53	437.35
124	1225.49	437.66
125	1235.44	437.85
126	1245.40	438.07
127	1255.36	438.34
128	1265.31	438.59
129	1275.27	438.91
130	1285.22	439.26

Order	Station [ft]	Elevation [ft]
131	1295.18	439.49
132	1305.14	439.80
133	1315.09	440.21
134	1325.05	440.50
135	1335.01	440.70
136	1344.96	440.95
137	1354.92	441.26
138	1364.88	441.57
139	1374.83	441.86
140	1384.79	442.15
141	1394.74	442.46
142	1404.70	442.71
143	1414.66	442.97
144	1424.61	443.28
145	1434.57	443.68
146	1444.53	443.95
147	1454.48	444.26

Comment:

Weir Cross Section: XS-017

Scenario: Proposed

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	496.72
1	9.78	495.04
2	19.57	493.89
3	29.35	493.42
4	39.13	493.03
5	48.92	492.78
6	58.70	492.71
7	68.48	492.84
8	76.46	492.29
9	84.45	491.82
10	92.43	491.54
11	101.82	490.56
12	111.21	489.90
13	120.60	489.65
14	130.00	489.83
15	139.39	489.75
16	148.78	489.83
17	158.17	489.44
18	167.56	489.65
19	176.95	489.83

Order	Station [ft]	Elevation [ft]
20	186.35	490.21
21	195.74	490.17
22	205.13	490.30
23	214.86	490.99
24	224.58	490.99
25	234.31	491.24
26	244.03	490.78
27	253.76	491.49
28	263.49	490.94
29	273.21	490.66
30	282.94	490.63
31	292.67	491.01
32	300.54	490.35
33	308.41	489.86
34	316.28	489.93
35	324.38	489.49
36	332.49	489.23
37	340.59	489.45
38	348.70	489.93
39	357.60	490.13
40	366.50	490.03
41	375.40	489.70
42	384.30	489.66
43	393.20	490.09
44	402.40	489.18
45	411.60	488.28
46	420.80	488.19
47	430.00	489.36
48	439.20	491.34

Comment:

Weir Cross Section: XS-018

Scenario: Proposed

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	514.58
1	9.44	514.30
2	18.87	514.16
3	28.31	514.76
4	37.75	514.63
5	47.18	514.73
6	56.62	514.33
7	66.06	514.01

Order	Station [ft]	Elevation [ft]
8	75.49	513.84
9	84.93	513.44
10	94.37	513.27
11	103.81	513.14
12	113.24	512.75
13	122.68	512.62
14	132.12	512.67
15	141.87	512.68
16	151.62	512.72
17	161.38	512.49
18	171.13	512.93
19	180.88	512.87
20	190.18	513.02
21	199.47	512.92
22	208.76	513.13
23	218.05	513.09
24	227.35	512.80
25	236.64	512.98
26	245.93	513.27
27	255.23	513.30
28	264.52	513.21
29	273.15	513.60
30	281.77	513.99
31	290.40	513.80
32	299.03	514.08
33	307.66	514.34
34	316.28	514.44
35	325.16	514.76
36	334.04	514.53
37	342.92	514.61
38	351.79	514.75
39	360.67	514.46
40	369.55	514.79
41	378.43	514.47
42	387.83	514.18
43	397.22	514.46
44	406.62	514.43
45	416.02	513.84
46	425.42	514.16
47	434.82	513.72
48	444.21	513.31
49	453.61	513.77
50	462.50	513.92
51	471.38	513.47
52	480.27	513.43
53	489.15	513.36
54	498.04	513.54
55	506.93	513.80
56	515.81	513.38

Order	Station [ft]	Elevation [ft]
57	524.70	513.11
58	533.74	513.05
59	542.78	513.06
60	551.81	513.02
61	560.85	513.15
62	569.89	513.41
63	578.93	513.35
64	587.97	513.46
65	596.86	513.72
66	605.76	513.94
67	614.66	514.10
68	623.55	514.48
69	632.45	514.67
70	641.35	514.79
71	650.24	514.98
72	659.14	514.91
73	668.04	515.31

Comment:

Weir Cross Section: XS-021

Scenario: Proposed

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	451.07
1	9.93	450.55
2	19.87	449.60
3	29.80	448.70
4	39.73	448.10
5	49.67	447.38
6	59.60	446.76
7	69.54	447.00
8	79.47	447.60
9	88.85	446.91
10	98.23	447.19
11	107.61	446.31
12	117.00	443.91
13	126.38	442.94
14	135.76	442.61
15	145.14	442.54
16	154.52	442.53
17	163.90	442.53
18	173.29	442.54
19	182.67	442.53

Order	Station [ft]	Elevation [ft]
20	192.05	442.53
21	201.43	442.55
22	210.81	442.42
23	220.19	442.34
24	229.71	442.98
25	239.22	442.98
26	248.74	442.53
27	258.25	442.98
28	267.77	443.84
29	277.28	444.92
30	286.80	445.81
31	296.31	447.03
32	305.83	448.05
33	315.62	448.45
34	325.41	448.72
35	335.20	448.66
36	345.00	448.60
37	354.79	448.73
38	364.58	448.65
39	374.07	448.67
40	383.56	448.82
41	393.05	448.40
42	402.54	446.97
43	412.03	446.73
44	421.52	445.76
45	431.01	446.32
46	440.50	444.98
47	449.54	445.13
48	458.57	445.96
49	467.60	444.74
50	476.63	444.57
51	485.66	445.17
52	494.69	446.59
53	503.72	446.65
54	512.76	445.68
55	521.79	446.14
56	530.82	445.28
57	540.47	446.07
58	550.12	445.73
59	559.77	445.56
60	569.42	446.07
61	579.07	445.69
62	588.72	446.70
63	598.38	446.88
64	608.03	446.70
65	617.68	446.95
66	627.33	446.72
67	636.98	447.49
68	646.64	447.86

Order	Station [ft]	Elevation [ft]
69	656.30	447.80
70	665.96	448.67
71	675.62	448.52
72	685.28	448.44
73	694.94	448.13
74	704.60	447.71
75	714.26	447.11
76	723.92	446.33
77	733.59	445.51
78	743.26	444.91
79	752.93	444.82
80	762.60	445.00
81	772.27	445.50
82	781.94	446.60
83	791.61	446.90
84	801.28	447.91
85	810.95	450.53
86	820.61	453.60

Comment:

Weir Cross Section: XS-024

Scenario: Proposed

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	478.26
1	9.69	477.75
2	19.39	477.06
3	29.08	476.14
4	38.77	475.61
5	48.47	474.92
6	58.16	474.18
7	67.85	473.38
8	77.54	472.46
9	87.24	471.46
10	96.93	470.61
11	106.62	469.69
12	116.32	468.32
13	126.01	467.40
14	135.70	466.98
15	145.40	465.72
16	154.96	464.65
17	164.52	463.47
18	174.08	462.25

Order	Station [ft]	Elevation [ft]
19	183.64	461.11
20	193.21	460.02
21	202.77	458.96
22	212.33	457.66
23	221.89	456.15
24	231.45	454.76
25	241.01	452.47
26	250.58	451.68
27	258.34	451.74
28	266.10	452.63
29	273.87	453.82
30	283.52	453.89
31	293.17	454.00
32	302.82	454.15
33	312.47	453.77
34	322.12	454.22
35	331.77	453.94
36	341.42	454.19
37	351.07	454.18
38	360.72	454.30
39	370.37	454.47
40	380.02	454.37
41	389.67	454.58
42	399.32	454.01
43	408.97	454.15
44	418.74	453.92
45	428.52	454.02
46	438.29	454.25
47	448.07	453.86
48	457.85	454.02
49	467.62	453.79
50	477.40	453.76
51	487.18	454.12
52	496.95	453.76
53	506.73	454.00
54	516.50	453.87
55	526.28	453.74
56	536.06	454.08
57	545.83	453.48
58	555.61	453.61
59	565.39	453.98
60	575.16	454.66
61	584.94	456.07
62	594.41	456.93
63	603.89	457.55
64	613.36	458.10
65	622.84	458.86
66	632.31	459.98
67	641.79	460.93

Order	Station [ft]	Elevation [ft]
68	651.26	461.61
69	660.74	462.73
70	670.21	463.49
71	679.69	464.32
72	689.16	465.28
73	698.64	466.39
74	708.21	467.23
75	717.79	467.87
76	727.37	468.86
77	736.94	469.79
78	746.52	470.26
79	756.09	470.97
80	765.67	471.79

Comment:

Weir Cross Section: XS-025

Scenario: Proposed
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	118.92	442.89
1	128.83	441.71
2	138.73	439.47
3	148.64	436.15
4	158.55	432.06
5	168.46	428.27
6	178.37	427.08
7	188.28	426.99
8	198.18	426.92
9	208.09	427.61
10	218.00	429.09
11	227.91	429.69
12	237.82	430.06
13	247.54	430.58
14	257.26	430.16
15	266.98	430.32
16	276.70	430.34
17	286.42	430.19
18	296.14	430.55
19	305.87	430.29
20	315.59	430.19
21	325.31	430.33
22	335.03	430.03
23	344.75	430.18

Order	Station [ft]	Elevation [ft]
24	354.47	430.04
25	364.19	429.86
26	373.91	429.98
27	383.64	429.77
28	393.36	429.73
29	403.08	429.76
30	412.80	429.77
31	422.52	429.96
32	432.24	429.83
33	441.96	429.89
34	451.69	430.09
35	461.41	430.03
36	471.13	430.13
37	480.85	429.99
38	490.57	430.07
39	500.32	430.10
40	510.08	430.01
41	519.83	429.99
42	529.58	429.87
43	539.33	429.92
44	549.09	429.68
45	558.84	429.82
46	568.59	429.88
47	578.35	430.31
48	588.10	430.98
49	597.85	431.82
50	607.60	432.62
51	617.36	433.41
52	626.71	434.31
53	636.07	435.06
54	645.42	435.60
55	654.78	436.18
56	664.14	437.01
57	673.49	437.04
58	682.85	437.31
59	692.20	437.99
60	701.56	438.82
61	710.92	439.60
62	720.27	440.48

Comment:

Channel Cross Section: XS-100

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	391.79	0.0350
1	9.83	391.34	0.0350
2	19.66	390.72	0.0350
3	29.49	390.05	0.0350
4	39.33	389.84	0.0350
5	49.16	389.44	0.0350
6	58.99	389.09	0.0350
7	68.82	388.84	0.0350
8	78.65	388.74	0.0350
9	88.48	388.49	0.0350
10	98.31	388.14	0.0350
11	108.15	387.52	0.0350
12	117.98	386.83	0.0350
13	127.81	386.37	0.0350
14	137.64	385.87	0.0350
15	147.47	385.44	0.0350
16	157.30	385.02	0.0350
17	167.13	384.27	0.0350
18	176.97	383.68	0.0350
19	186.80	383.02	0.0350
20	196.63	382.23	0.0350
21	206.46	381.35	0.0350
22	216.29	380.80	0.0350
23	226.12	379.71	0.0350
24	235.95	379.46	0.0350
25	245.79	378.94	0.0350
26	255.62	378.43	0.0350
27	265.45	377.62	0.0350
28	275.28	376.91	0.0350
29	285.11	376.34	0.0350
30	294.94	375.64	0.0350
31	304.77	374.93	0.0350
32	314.60	374.00	0.0350
33	324.44	373.01	0.0350
34	334.27	371.84	0.0350
35	344.10	370.91	0.0350
36	353.93	370.01	0.0350
37	363.76	369.11	0.0350
38	373.59	368.25	0.0350
39	383.42	367.53	0.0350
40	393.26	367.01	0.0350
41	403.09	366.43	0.0350
42	412.92	366.45	0.0350
43	422.75	366.23	0.0350
44	432.58	365.94	0.0350
45	442.19	365.53	0.0350
46	451.81	365.12	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
47	461.42	364.88	0.0350
48	471.03	364.47	0.0350
49	480.64	363.86	0.0350
50	490.26	363.11	0.0350
51	499.87	362.21	0.0350
52	509.48	361.36	0.0350
53	519.09	360.89	0.0350
54	528.71	360.46	0.0350
55	538.32	359.95	0.0350
56	547.93	359.52	0.0350
57	557.54	359.21	0.0350
58	567.16	359.00	0.0350
59	576.77	358.81	0.0350
60	586.38	358.56	0.0350
61	595.99	358.63	0.0350
62	605.61	358.03	0.0350
63	615.22	355.22	0.0350
64	624.83	355.31	0.0350
65	634.56	358.48	0.0350
66	644.28	358.94	0.0350
67	654.01	359.10	0.0350
68	663.74	359.01	0.0350
69	673.46	359.07	0.0350
70	683.19	359.06	0.0350
71	692.92	359.57	0.0350
72	702.64	361.05	0.0350
73	712.37	364.45	0.0350
74	722.09	368.32	0.0350
75	731.82	372.69	0.0350
76	741.55	376.97	0.0350
77	751.27	380.26	0.0350
78	761.00	382.95	0.0350
79	770.73	385.34	0.0350
80	780.45	387.35	0.0350
81	790.18	389.06	0.0350
82	799.90	390.42	0.0350
83	809.63	391.31	0.0350
84	819.36	392.01	0.0350
85	829.08	392.41	0.0350
86	838.81	392.72	0.0350
87	848.54	392.91	0.0350
88	858.26	393.16	0.0350
89	867.99	393.43	0.0350
90	877.71	393.51	0.0350
91	887.44	393.65	0.0350

Comment:

Channel Cross Section: XS-101

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	439.69	0.0350
1	9.98	439.01	0.0350
2	19.96	438.04	0.0350
3	29.94	437.06	0.0350
4	39.91	436.18	0.0350
5	49.89	435.24	0.0350
6	59.87	434.11	0.0350
7	69.85	432.97	0.0350
8	79.83	431.87	0.0350
9	89.81	430.79	0.0350
10	99.79	429.68	0.0350
11	109.76	428.56	0.0350
12	119.74	427.52	0.0350
13	129.72	426.37	0.0350
14	139.70	425.29	0.0350
15	149.68	424.33	0.0350
16	159.66	423.25	0.0350
17	169.64	422.13	0.0350
18	179.61	421.14	0.0350
19	189.59	420.04	0.0350
20	199.57	418.73	0.0350
21	209.55	417.81	0.0350
22	219.53	417.27	0.0350
23	229.51	416.79	0.0350
24	239.49	416.39	0.0350
25	249.46	416.09	0.0350
26	259.44	415.71	0.0350
27	269.42	415.31	0.0350
28	279.40	414.80	0.0350
29	289.38	414.34	0.0350
30	299.36	413.90	0.0350
31	309.33	413.20	0.0350
32	319.31	412.35	0.0350
33	329.29	411.55	0.0350
34	339.27	410.46	0.0350
35	349.25	409.22	0.0350
36	359.23	407.84	0.0350
37	369.21	406.64	0.0350
38	379.18	404.94	0.0350
39	389.16	403.00	0.0350
40	399.14	401.03	0.0350
41	409.12	399.36	0.0350
42	419.10	397.66	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
43	429.08	395.67	0.0350
44	439.06	393.98	0.0350
45	449.03	392.59	0.0350
46	459.01	391.37	0.0350
47	468.99	390.62	0.0350
48	478.97	389.63	0.0350
49	488.95	388.94	0.0350
50	498.93	388.28	0.0350
51	508.91	387.28	0.0350
52	518.88	385.80	0.0350
53	528.86	383.34	0.0350
54	538.84	380.34	0.0350
55	548.69	378.17	0.0350
56	558.54	375.27	0.0350
57	568.38	372.07	0.0350
58	578.23	369.41	0.0350
59	588.08	367.36	0.0350
60	597.92	365.95	0.0350
61	607.77	364.68	0.0350
62	617.62	363.93	0.0350
63	627.46	364.12	0.0350
64	637.31	364.04	0.0350
65	647.16	364.17	0.0350
66	657.01	364.35	0.0350
67	666.85	364.61	0.0350
68	676.70	364.61	0.0350
69	686.55	364.73	0.0350
70	696.39	364.87	0.0350
71	706.24	364.91	0.0350
72	716.09	364.98	0.0350
73	725.93	364.98	0.0350
74	735.78	365.21	0.0350
75	745.63	365.25	0.0350
76	755.48	365.53	0.0350
77	765.32	365.12	0.0350
78	775.17	363.82	0.0350
79	785.02	363.91	0.0350
80	794.86	364.80	0.0350
81	804.71	366.09	0.0350
82	814.56	368.23	0.0350
83	824.40	370.14	0.0350
84	834.25	371.35	0.0350
85	844.10	372.44	0.0350
86	853.95	372.86	0.0350
87	863.79	373.23	0.0350
88	873.64	373.91	0.0350
89	883.49	374.77	0.0350
90	893.33	373.91	0.0350
91	903.18	371.38	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
92	913.03	373.07	0.0350
93	922.87	375.67	0.0350
94	932.72	376.27	0.0350
95	942.57	376.76	0.0350
96	952.42	377.28	0.0350
97	962.26	377.75	0.0350
98	972.11	378.17	0.0350
99	982.00	378.52	0.0350
100	991.88	378.64	0.0350
101	1001.77	379.71	0.0350
102	1011.65	381.01	0.0350
103	1021.54	381.89	0.0350
104	1031.43	383.24	0.0350
105	1041.31	384.71	0.0350
106	1051.20	386.00	0.0350
107	1061.08	387.16	0.0350
108	1070.97	388.28	0.0350
109	1080.86	389.54	0.0350
110	1090.74	390.90	0.0350
111	1100.63	392.14	0.0350
112	1110.52	393.15	0.0350
113	1120.40	394.02	0.0350
114	1130.29	394.99	0.0350
115	1140.17	396.19	0.0350
116	1150.06	397.54	0.0350
117	1159.95	398.55	0.0350
118	1169.83	399.43	0.0350
119	1179.72	400.61	0.0350
120	1189.60	401.63	0.0350
121	1199.49	402.49	0.0350
122	1209.38	403.27	0.0350
123	1219.26	404.26	0.0350
124	1229.15	404.88	0.0350
125	1239.04	405.64	0.0350
126	1248.92	406.28	0.0350
127	1258.81	407.07	0.0350
128	1268.69	407.55	0.0350
129	1278.58	408.12	0.0350
130	1288.47	408.83	0.0350
131	1298.35	409.42	0.0350
132	1308.24	410.09	0.0350
133	1318.13	410.70	0.0350
134	1328.01	411.29	0.0350
135	1337.90	411.79	0.0350
136	1347.78	412.47	0.0350
137	1357.67	413.09	0.0350
138	1367.56	413.97	0.0350
139	1377.44	414.58	0.0350
140	1387.33	415.10	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
141	1397.21	415.71	0.0350
142	1407.10	416.36	0.0350
143	1416.99	416.83	0.0350
144	1426.87	417.17	0.0350
145	1436.76	417.62	0.0350
146	1446.65	418.41	0.0350
147	1456.53	418.87	0.0350
148	1466.42	419.38	0.0350
149	1476.30	420.14	0.0350
150	1486.19	420.87	0.0350
151	1496.08	421.68	0.0350
152	1505.96	422.26	0.0350
153	1515.85	422.92	0.0350
154	1525.73	423.76	0.0350
155	1535.62	424.29	0.0350
156	1545.51	424.73	0.0350
157	1555.39	425.09	0.0350
158	1565.28	425.58	0.0350
159	1575.17	426.21	0.0350
160	1585.05	426.77	0.0350
161	1594.94	427.14	0.0350
162	1604.82	427.64	0.0350
163	1614.71	428.10	0.0350
164	1624.60	428.42	0.0350
165	1634.48	428.97	0.0350
166	1644.37	429.20	0.0350
167	1654.26	429.49	0.0350
168	1664.14	429.73	0.0350
169	1674.03	429.74	0.0350

Comment:

Channel Cross Section: XS-102

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	398.32	0.0350
1	9.90	397.50	0.0350
2	19.79	396.32	0.0350
3	29.69	395.41	0.0350
4	39.59	394.29	0.0350
5	49.49	393.24	0.0350
6	59.38	391.89	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
7	69.28	390.80	0.0350
8	79.18	388.94	0.0350
9	89.08	387.52	0.0350
10	98.97	386.61	0.0350
11	108.87	386.07	0.0350
12	118.77	385.42	0.0350
13	127.87	386.36	0.0350
14	136.96	386.36	0.0350
15	146.06	386.42	0.0350
16	155.16	388.61	0.0350
17	164.26	391.56	0.0350
18	173.36	393.32	0.0350
19	182.45	395.47	0.0350
20	191.55	397.74	0.0350
21	200.65	399.45	0.0350
22	209.75	401.33	0.0350

Comment:

Channel Cross Section: XS-105

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	430.36	0.0350
1	9.52	429.96	0.0350
2	19.03	429.41	0.0350
3	28.55	429.03	0.0350
4	38.06	428.68	0.0350
5	47.58	428.00	0.0350
6	57.10	427.53	0.0350
7	66.61	427.21	0.0350
8	76.13	426.84	0.0350
9	85.64	426.29	0.0350
10	95.16	426.19	0.0350
11	104.68	425.82	0.0350
12	114.19	425.04	0.0350
13	123.71	424.78	0.0350
14	133.23	424.28	0.0350
15	142.74	423.51	0.0350
16	152.26	422.05	0.0350
17	161.77	420.64	0.0350
18	171.66	419.12	0.0350
19	181.55	417.14	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
20	191.44	415.18	0.0350
21	201.33	413.47	0.0350
22	211.21	411.77	0.0350
23	221.10	410.31	0.0350
24	230.99	410.18	0.0350
25	240.88	411.41	0.0350
26	250.76	413.30	0.0350
27	260.65	415.51	0.0350
28	270.54	417.42	0.0350
29	280.43	419.57	0.0350
30	290.32	421.67	0.0350
31	300.20	423.60	0.0350
32	309.18	425.48	0.0350
33	318.17	427.63	0.0350
34	327.15	429.59	0.0350
35	336.13	431.35	0.0350

Comment:

Channel Cross Section: XS-106

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	450.20	0.0350
1	9.94	449.51	0.0350
2	19.89	448.80	0.0350
3	29.83	448.07	0.0350
4	39.78	447.29	0.0350
5	49.72	446.28	0.0350
6	59.66	445.25	0.0350
7	69.61	444.50	0.0350
8	79.55	443.98	0.0350
9	89.49	443.10	0.0350
10	99.44	442.18	0.0350
11	109.38	441.45	0.0350
12	119.33	440.80	0.0350
13	129.27	439.98	0.0350
14	139.21	439.04	0.0350
15	149.16	438.51	0.0350
16	159.10	438.13	0.0350
17	169.05	437.43	0.0350
18	178.99	436.93	0.0350
19	188.93	436.45	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
20	198.88	435.96	0.0350
21	208.82	435.36	0.0350
22	218.77	434.77	0.0350
23	228.71	434.34	0.0350
24	238.65	433.73	0.0350
25	248.60	433.09	0.0350
26	258.54	432.45	0.0350
27	268.48	431.85	0.0350
28	278.43	431.40	0.0350
29	288.37	430.84	0.0350
30	298.32	430.23	0.0350
31	308.26	429.44	0.0350
32	318.20	428.73	0.0350
33	328.15	428.03	0.0350
34	338.09	427.10	0.0350
35	348.04	425.97	0.0350
36	357.98	424.82	0.0350
37	367.92	423.80	0.0350
38	377.87	422.66	0.0350
39	387.81	421.36	0.0350
40	397.76	420.11	0.0350
41	407.70	419.29	0.0350
42	417.64	418.20	0.0350
43	427.59	416.44	0.0350
44	437.53	415.04	0.0350
45	447.39	413.45	0.0350
46	457.24	412.08	0.0350
47	467.10	410.65	0.0350
48	476.95	409.13	0.0350
49	486.81	408.05	0.0350
50	496.66	407.02	0.0350
51	506.52	405.58	0.0350
52	516.37	403.59	0.0350
53	526.23	402.22	0.0350
54	536.08	401.29	0.0350
55	545.93	400.10	0.0350
56	555.79	398.84	0.0350
57	565.64	397.61	0.0350
58	575.50	396.43	0.0350
59	585.35	395.47	0.0350
60	595.21	394.91	0.0350
61	605.06	394.61	0.0350
62	614.92	394.38	0.0350
63	624.77	394.27	0.0350
64	634.63	393.91	0.0350
65	644.48	393.83	0.0350
66	654.34	393.84	0.0350
67	664.19	393.58	0.0350
68	674.05	393.71	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
69	683.90	394.50	0.0350
70	693.76	394.32	0.0350
71	703.61	393.92	0.0350
72	713.47	394.74	0.0350
73	723.32	395.69	0.0350
74	733.18	395.85	0.0350
75	743.03	396.22	0.0350
76	752.89	396.73	0.0350
77	762.74	397.36	0.0350
78	772.60	397.97	0.0350
79	782.45	398.71	0.0350
80	792.31	399.29	0.0350
81	802.16	400.17	0.0350
82	812.02	401.12	0.0350
83	821.87	401.96	0.0350
84	831.73	402.72	0.0350
85	841.58	403.91	0.0350
86	851.44	405.16	0.0350
87	861.29	406.23	0.0350
88	871.15	407.09	0.0350
89	881.11	408.08	0.0350
90	891.07	408.81	0.0350
91	901.03	409.49	0.0350
92	910.99	410.39	0.0350
93	920.95	411.07	0.0350
94	930.91	411.73	0.0350
95	940.87	412.45	0.0350
96	950.84	412.82	0.0350
97	960.80	413.35	0.0350
98	970.76	413.87	0.0350
99	980.72	414.41	0.0350
100	990.68	415.17	0.0350
101	1000.64	415.78	0.0350
102	1010.60	416.61	0.0350
103	1020.56	417.55	0.0350
104	1030.53	418.21	0.0350
105	1040.49	418.77	0.0350
106	1050.45	419.48	0.0350
107	1060.41	420.54	0.0350
108	1070.37	421.42	0.0350
109	1080.33	421.90	0.0350
110	1090.29	422.19	0.0350
111	1100.25	422.51	0.0350
112	1110.22	422.92	0.0350
113	1120.18	423.43	0.0350
114	1130.14	424.10	0.0350
115	1140.10	424.72	0.0350
116	1150.06	425.77	0.0350
117	1160.02	426.61	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
118	1169.98	427.59	0.0350
119	1179.94	428.84	0.0350
120	1189.90	429.67	0.0350
121	1199.87	430.39	0.0350
122	1209.83	431.10	0.0350
123	1219.79	431.65	0.0350
124	1229.75	432.40	0.0350
125	1239.71	433.24	0.0350
126	1249.67	433.80	0.0350
127	1259.63	434.40	0.0350
128	1269.59	435.16	0.0350
129	1279.56	435.91	0.0350
130	1289.52	436.91	0.0350
131	1299.48	437.61	0.0350
132	1309.44	438.36	0.0350
133	1319.40	439.28	0.0350
134	1329.36	440.41	0.0350
135	1339.32	441.44	0.0350
136	1349.28	442.31	0.0350
137	1359.25	443.21	0.0350
138	1369.21	443.80	0.0350
139	1379.17	445.03	0.0350
140	1389.13	445.43	0.0350
141	1399.09	446.65	0.0350
142	1409.05	447.86	0.0350
143	1419.01	449.26	0.0350

Comment:

Channel Cross Section: XS-111

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	87.74	436.23	0.0350
1	97.49	433.29	0.0350
2	107.23	428.40	0.0350
3	116.98	425.57	0.0350
4	126.73	424.68	0.0350
5	136.48	424.08	0.0350
6	146.23	423.41	0.0350
7	155.98	422.75	0.0350
8	165.73	421.91	0.0350
9	175.47	421.45	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
10	185.22	421.43	0.0350
11	194.97	420.67	0.0350
12	204.72	419.99	0.0350
13	214.47	419.45	0.0350
14	224.22	418.65	0.0350
15	233.96	417.96	0.0350
16	243.71	417.29	0.0350
17	253.46	416.55	0.0350
18	263.24	415.78	0.0350
19	273.02	415.29	0.0350
20	282.80	415.29	0.0350
21	292.57	414.77	0.0350
22	302.35	414.57	0.0350
23	312.13	414.42	0.0350
24	321.91	414.07	0.0350
25	331.68	413.53	0.0350
26	341.46	413.36	0.0350
27	351.24	413.03	0.0350
28	361.02	412.52	0.0350
29	370.80	412.24	0.0350
30	380.57	411.98	0.0350
31	390.35	411.48	0.0350
32	400.13	410.15	0.0350
33	409.91	409.70	0.0350
34	419.68	410.21	0.0350
35	429.46	411.64	0.0350
36	439.24	412.82	0.0350
37	449.02	414.39	0.0350
38	458.80	417.07	0.0350
39	468.57	420.28	0.0350
40	478.35	423.27	0.0350
41	488.13	425.68	0.0350
42	497.91	427.51	0.0350
43	507.69	428.79	0.0350
44	517.46	430.07	0.0350
45	527.24	431.48	0.0350
46	537.02	432.83	0.0350
47	546.80	434.09	0.0350
48	556.57	435.30	0.0350
49	566.35	436.47	0.0350
50	575.86	437.63	0.0350

Comment:

Channel Cross Section: XS-112

Scenario: Proposed

Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	442.97	0.0350
1	9.66	442.74	0.0350
2	19.32	442.10	0.0350
3	28.98	441.00	0.0350
4	38.64	439.69	0.0350
5	48.30	438.29	0.0350
6	57.96	436.89	0.0350
7	67.62	435.48	0.0350
8	77.28	434.07	0.0350
9	86.94	432.73	0.0350
10	96.60	431.66	0.0350
11	106.26	430.82	0.0350
12	115.91	430.92	0.0350
13	125.57	431.16	0.0350
14	135.23	431.40	0.0350
15	144.89	431.36	0.0350
16	154.55	428.19	0.0350
17	164.43	426.73	0.0350
18	174.31	426.15	0.0350
19	184.18	425.93	0.0350
20	194.06	425.57	0.0350
21	203.94	425.20	0.0350
22	213.81	424.85	0.0350
23	223.69	423.98	0.0350
24	233.57	423.02	0.0350
25	243.44	421.68	0.0350
26	253.32	419.84	0.0350
27	263.20	419.16	0.0350
28	273.07	418.62	0.0350
29	282.95	417.89	0.0350
30	292.83	418.52	0.0350
31	302.70	418.83	0.0350
32	312.58	419.07	0.0350
33	322.46	419.46	0.0350
34	332.33	419.44	0.0350
35	342.21	419.89	0.0350
36	352.09	420.25	0.0350
37	361.96	420.95	0.0350
38	371.84	422.22	0.0350
39	381.72	423.52	0.0350
40	391.59	424.82	0.0350
41	401.47	425.07	0.0350
42	411.21	425.76	0.0350
43	420.94	426.08	0.0350
44	430.68	426.62	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
45	440.42	427.44	0.0350
46	450.15	428.08	0.0350
47	459.89	428.62	0.0350
48	469.62	428.99	0.0350
49	479.36	429.29	0.0350
50	489.10	429.58	0.0350
51	498.83	429.83	0.0350
52	508.57	430.22	0.0350
53	518.30	430.67	0.0350
54	528.04	431.02	0.0350
55	537.78	431.36	0.0350
56	547.51	431.61	0.0350
57	557.25	432.04	0.0350
58	566.98	432.65	0.0350
59	576.72	433.14	0.0350
60	586.46	433.36	0.0350
61	596.19	433.61	0.0350
62	605.93	433.91	0.0350
63	615.67	434.65	0.0350
64	625.40	435.34	0.0350
65	635.14	435.78	0.0350
66	644.87	436.09	0.0350
67	654.61	436.24	0.0350
68	664.35	436.42	0.0350
69	674.08	436.56	0.0350
70	683.82	436.65	0.0350
71	693.77	436.89	0.0350
72	703.72	437.31	0.0350
73	713.66	437.81	0.0350
74	723.61	438.22	0.0350
75	733.56	438.58	0.0350
76	743.51	439.03	0.0350
77	753.46	439.57	0.0350
78	763.41	440.16	0.0350
79	773.36	440.55	0.0350
80	783.31	441.08	0.0350

Comment:

Channel Cross Section: XS-113

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	438.74	0.0350
1	9.54	438.30	0.0350
2	19.09	438.02	0.0350
3	28.63	437.87	0.0350
4	38.17	437.70	0.0350
5	47.72	437.48	0.0350
6	57.26	437.23	0.0350
7	66.80	437.12	0.0350
8	76.35	436.57	0.0350
9	85.89	435.71	0.0350
10	95.43	434.51	0.0350
11	104.97	433.52	0.0350
12	114.52	432.82	0.0350
13	124.06	432.35	0.0350
14	133.60	431.88	0.0350
15	143.15	431.32	0.0350
16	152.69	430.27	0.0350
17	162.23	428.99	0.0350
18	171.78	427.31	0.0350
19	181.32	425.05	0.0350
20	190.86	423.92	0.0350
21	200.41	425.62	0.0350
22	210.07	426.14	0.0350
23	219.73	426.41	0.0350
24	229.40	426.51	0.0350
25	239.06	427.10	0.0350
26	248.72	427.97	0.0350
27	258.39	429.00	0.0350
28	268.05	430.26	0.0350
29	277.72	431.75	0.0350
30	287.38	433.93	0.0350
31	297.04	436.16	0.0350
32	306.71	437.95	0.0350
33	316.37	439.57	0.0350
34	326.03	441.01	0.0350
35	335.70	442.52	0.0350
36	345.36	443.80	0.0350
37	355.02	444.60	0.0350
38	364.69	445.66	0.0350
39	374.35	446.87	0.0350
40	384.02	447.75	0.0350

Comment:

Channel Cross Section: XS-115

Scenario: Proposed

Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	475.82	0.0350
1	9.81	474.80	0.0350
2	19.63	473.66	0.0350
3	29.44	472.70	0.0350
4	39.26	471.72	0.0350
5	49.07	470.83	0.0350
6	58.89	470.08	0.0350
7	68.70	468.68	0.0350
8	78.51	467.43	0.0350
9	88.33	466.21	0.0350
10	98.14	465.02	0.0350
11	107.96	463.55	0.0350
12	117.77	462.23	0.0350
13	127.59	461.03	0.0350
14	137.40	459.75	0.0350
15	147.21	458.68	0.0350
16	157.03	457.48	0.0350
17	166.84	456.05	0.0350
18	176.66	454.04	0.0350
19	186.47	452.06	0.0350
20	196.29	450.92	0.0350
21	206.10	451.21	0.0350
22	215.91	450.93	0.0350
23	225.73	451.13	0.0350
24	235.54	451.19	0.0350
25	245.36	451.15	0.0350
26	255.17	451.37	0.0350
27	264.99	451.41	0.0350
28	274.80	452.03	0.0350
29	284.62	453.81	0.0350
30	294.43	455.23	0.0350
31	304.24	456.92	0.0350
32	314.06	458.64	0.0350
33	323.87	460.57	0.0350
34	333.69	462.22	0.0350
35	343.50	463.70	0.0350
36	353.32	464.93	0.0350
37	363.13	465.87	0.0350
38	372.94	467.07	0.0350
39	382.76	468.23	0.0350
40	392.57	469.59	0.0350
41	402.39	470.93	0.0350
42	412.20	471.91	0.0350

Comment:

Channel Cross Section: XS-116

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	490.43	0.0350
1	9.73	490.12	0.0350
2	19.46	489.72	0.0350
3	29.19	489.60	0.0350
4	38.92	489.11	0.0350
5	48.65	488.67	0.0350
6	58.38	488.32	0.0350
7	68.11	487.67	0.0350
8	77.85	487.31	0.0350
9	87.58	486.77	0.0350
10	97.31	486.26	0.0350
11	107.04	485.94	0.0350
12	116.77	485.25	0.0350
13	126.50	484.61	0.0350
14	136.23	483.99	0.0350
15	145.96	483.64	0.0350
16	155.69	482.89	0.0350
17	165.42	481.92	0.0350
18	175.15	481.20	0.0350
19	184.88	480.80	0.0350
20	194.61	480.18	0.0350
21	204.34	479.74	0.0350
22	214.07	479.02	0.0350
23	223.81	478.45	0.0350
24	233.54	477.97	0.0350
25	243.27	477.40	0.0350
26	253.00	476.89	0.0350
27	262.73	476.21	0.0350
28	272.46	475.84	0.0350
29	282.10	475.39	0.0350
30	291.74	474.84	0.0350
31	301.38	474.59	0.0350
32	311.02	474.42	0.0350
33	320.66	474.05	0.0350
34	330.30	473.86	0.0350
35	339.94	473.52	0.0350
36	349.59	473.41	0.0350
37	359.23	473.04	0.0350
38	368.87	472.87	0.0350
39	378.51	472.50	0.0350
40	388.15	472.65	0.0350
41	397.49	472.48	0.0350
42	406.82	472.27	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
43	416.16	471.60	0.0350
44	425.49	471.03	0.0350
45	434.83	471.29	0.0350
46	444.16	471.37	0.0350
47	453.50	471.32	0.0350
48	462.83	471.19	0.0350
49	472.17	470.89	0.0350
50	481.51	470.88	0.0350
51	490.84	471.06	0.0350
52	500.33	471.38	0.0350
53	509.81	471.79	0.0350
54	519.29	472.04	0.0350
55	528.78	472.27	0.0350
56	538.26	473.05	0.0350
57	547.74	473.22	0.0350
58	557.23	472.99	0.0350
59	566.71	473.76	0.0350
60	576.30	474.22	0.0350
61	585.89	473.87	0.0350
62	595.48	474.10	0.0350
63	605.07	473.98	0.0350
64	614.66	474.34	0.0350
65	624.25	474.49	0.0350
66	633.83	475.43	0.0350
67	643.42	476.11	0.0350
68	653.01	476.74	0.0350
69	662.60	477.27	0.0350
70	672.19	478.28	0.0350
71	681.78	478.25	0.0350
72	691.37	478.00	0.0350
73	700.96	478.75	0.0350
74	710.55	478.97	0.0350
75	720.14	480.29	0.0350
76	729.72	480.93	0.0350
77	739.31	481.71	0.0350
78	748.90	482.66	0.0350
79	758.73	483.00	0.0350
80	768.56	483.74	0.0350
81	778.39	483.65	0.0350
82	788.22	484.42	0.0350
83	798.05	484.43	0.0350
84	807.88	485.77	0.0350
85	817.71	485.83	0.0350
86	827.54	486.30	0.0350
87	837.37	487.04	0.0350
88	847.20	487.49	0.0350
89	857.03	487.52	0.0350
90	866.86	488.17	0.0350

Comment:

Channel Cross Section: XS-117

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	482.43	0.0350
1	9.42	481.55	0.0350
2	18.83	480.96	0.0350
3	28.25	480.33	0.0350
4	37.66	479.70	0.0350
5	47.08	478.84	0.0350
6	56.49	477.55	0.0350
7	65.91	476.14	0.0350
8	75.32	475.39	0.0350
9	84.74	474.46	0.0350
10	94.15	473.13	0.0350
11	103.57	471.99	0.0350
12	112.98	471.18	0.0350
13	122.40	470.80	0.0350
14	131.81	470.51	0.0350
15	141.23	470.43	0.0350
16	150.64	470.23	0.0350
17	160.54	470.35	0.0350
18	170.44	470.13	0.0350
19	180.34	470.07	0.0350
20	190.24	469.99	0.0350
21	200.14	469.67	0.0350
22	210.04	469.92	0.0350
23	219.94	470.41	0.0350
24	229.85	471.58	0.0350
25	239.75	473.05	0.0350
26	249.65	473.95	0.0350
27	259.55	474.80	0.0350
28	269.45	475.72	0.0350
29	279.35	476.59	0.0350
30	289.25	477.56	0.0350
31	299.15	478.54	0.0350
32	309.05	479.38	0.0350
33	318.95	480.30	0.0350
34	328.85	481.52	0.0350
35	338.75	482.26	0.0350
36	348.65	482.44	0.0350

Comment:

Channel Cross Section: XS-118

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	487.94	0.0350
1	9.39	487.37	0.0350
2	18.78	485.92	0.0350
3	28.18	484.34	0.0350
4	37.57	482.96	0.0350
5	46.96	481.56	0.0350
6	56.35	480.17	0.0350
7	65.74	479.21	0.0350
8	75.14	479.06	0.0350
9	84.53	478.55	0.0350
10	93.92	478.94	0.0350
11	103.31	480.22	0.0350
12	112.70	481.24	0.0350
13	121.86	482.20	0.0350
14	131.02	483.53	0.0350
15	140.18	485.00	0.0350
16	149.34	486.09	0.0350
17	158.50	486.96	0.0350
18	167.65	487.99	0.0350

Comment:

Channel Cross Section: XS-121

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	506.54	0.0350
1	9.73	506.42	0.0350
2	19.47	505.82	0.0350
3	29.20	505.20	0.0350
4	38.93	504.46	0.0350
5	48.67	503.21	0.0350
6	58.40	502.80	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
7	68.13	502.09	0.0350
8	77.87	502.65	0.0350
9	87.60	501.47	0.0350
10	97.33	499.53	0.0350
11	107.07	498.57	0.0350
12	116.80	497.72	0.0350
13	126.53	496.82	0.0350
14	136.27	497.11	0.0350
15	146.00	498.37	0.0350
16	155.21	499.18	0.0350
17	164.42	499.89	0.0350
18	173.63	500.91	0.0350
19	182.84	502.08	0.0350
20	192.05	503.92	0.0350
21	201.26	504.44	0.0350
22	210.47	504.39	0.0350
23	219.68	504.57	0.0350

Comment:

Channel Cross Section: XS-122

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	501.25	0.0350
1	9.30	500.59	0.0350
2	18.60	499.67	0.0350
3	27.90	498.59	0.0350
4	37.20	498.30	0.0350
5	46.50	497.17	0.0350
6	55.80	496.44	0.0350
7	65.11	495.42	0.0350
8	74.41	494.31	0.0350
9	83.71	493.54	0.0350
10	93.01	492.72	0.0350
11	102.31	492.11	0.0350
12	111.61	492.47	0.0350
13	120.91	493.44	0.0350
14	130.21	494.49	0.0350
15	139.49	495.91	0.0350
16	148.77	497.07	0.0350
17	158.05	497.56	0.0350
18	167.33	498.30	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
19	176.60	499.01	0.0350
20	185.88	499.71	0.0350
21	195.16	500.44	0.0350
22	204.44	501.04	0.0350
23	213.72	501.55	0.0350
24	223.00	502.20	0.0350

Comment:

Channel Cross Section: XS-123

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	432.24	0.0350
1	9.45	432.40	0.0350
2	18.90	432.15	0.0350
3	28.36	431.63	0.0350
4	37.81	430.83	0.0350
5	47.26	430.16	0.0350
6	56.71	428.94	0.0350
7	66.17	427.74	0.0350
8	75.62	426.45	0.0350
9	85.07	425.92	0.0350
10	94.52	425.79	0.0350
11	103.97	425.39	0.0350
12	113.43	424.81	0.0350
13	122.88	426.29	0.0350
14	132.33	428.37	0.0350
15	141.78	430.12	0.0350
16	151.23	431.07	0.0350
17	160.69	431.20	0.0350
18	170.14	430.82	0.0350

Comment:

Weir Cross Section: XS-124

Scenario: Proposed
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	444.58
1	9.46	444.36
2	18.91	443.90
3	28.37	443.51
4	37.83	442.92
5	47.28	442.35
6	56.74	441.84
7	66.20	441.35
8	75.65	440.72
9	85.11	440.18
10	94.57	439.79
11	104.02	439.42
12	113.48	439.21
13	123.42	439.06
14	133.37	439.07
15	143.31	439.03
16	153.26	438.98
17	163.20	439.06
18	173.14	439.01
19	183.09	439.01
20	193.03	439.05
21	202.98	439.05
22	212.92	439.20
23	222.69	439.28
24	232.46	439.19
25	242.23	439.42
26	252.00	439.24
27	261.77	439.39
28	271.53	439.49
29	280.82	439.56
30	290.10	439.63
31	299.39	439.71
32	308.67	439.87
33	317.96	440.10
34	327.24	440.34
35	336.53	440.48
36	345.81	440.61
37	355.10	440.72
38	364.38	440.81
39	373.16	440.94
40	381.94	441.09
41	390.72	441.25
42	399.50	441.36
43	408.28	441.58
44	417.06	441.84
45	425.84	442.07
46	434.83	442.79
47	443.82	443.35
48	452.80	443.94

Order	Station [ft]	Elevation [ft]
49	461.79	444.39
50	470.77	445.03

Comment:

Channel Cross Section: XS-125

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	478.38	0.0350
1	9.92	477.72	0.0350
2	19.85	476.95	0.0350
3	29.77	476.04	0.0350
4	39.69	475.09	0.0350
5	49.61	474.06	0.0350
6	59.54	472.66	0.0350
7	69.46	471.23	0.0350
8	79.38	469.76	0.0350
9	89.31	468.62	0.0350
10	99.23	467.98	0.0350
11	109.15	466.92	0.0350
12	119.07	466.22	0.0350
13	129.00	467.75	0.0350
14	138.92	468.45	0.0350
15	148.84	469.93	0.0350
16	158.76	471.19	0.0350
17	168.69	472.96	0.0350
18	178.61	474.71	0.0350
19	188.53	476.41	0.0350
20	198.46	478.20	0.0350
21	208.38	479.58	0.0350

Comment:

Channel Cross Section: XS-126

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	475.14	0.0350
1	9.85	474.66	0.0350
2	19.70	474.09	0.0350
3	29.54	473.43	0.0350
4	39.39	472.70	0.0350
5	49.24	471.70	0.0350
6	59.09	470.48	0.0350
7	68.94	469.58	0.0350
8	78.78	468.69	0.0350
9	88.63	467.69	0.0350
10	98.48	466.70	0.0350
11	108.33	466.17	0.0350
12	118.18	465.30	0.0350
13	128.02	463.85	0.0350
14	137.87	462.47	0.0350
15	147.72	461.59	0.0350
16	157.57	461.14	0.0350
17	167.42	460.72	0.0350
18	177.26	459.12	0.0350
19	187.11	457.97	0.0350
20	196.96	459.37	0.0350
21	206.81	459.81	0.0350
22	216.66	459.87	0.0350
23	226.50	460.90	0.0350
24	236.35	462.02	0.0350
25	246.20	463.37	0.0350
26	256.05	464.82	0.0350
27	265.90	466.16	0.0350
28	275.74	467.41	0.0350
29	285.59	468.79	0.0350
30	295.44	470.30	0.0350
31	305.29	472.04	0.0350
32	315.14	473.62	0.0350
33	324.98	475.16	0.0350
34	334.83	476.46	0.0350
35	344.68	477.65	0.0350
36	354.53	478.48	0.0350
37	364.38	479.20	0.0350
38	374.23	479.66	0.0350
39	384.07	479.89	0.0350

Comment:

Channel Cross Section: XS-1A

Scenario: Proposed

Lid: No

Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	501.93	0.0350
1	9.99	501.89	0.0350
2	19.98	501.86	0.0350
3	29.98	501.76	0.0350
4	39.97	501.64	0.0350
5	49.96	501.49	0.0350
6	59.95	501.33	0.0350
7	69.95	501.16	0.0350
8	79.94	500.97	0.0350
9	89.93	500.75	0.0350
10	99.92	500.50	0.0350
11	109.91	500.22	0.0350
12	119.91	499.93	0.0350
13	129.90	499.69	0.0350
14	139.89	499.49	0.0350
15	149.88	498.98	0.0350
16	159.88	498.31	0.0350
17	169.87	497.78	0.0350
18	179.86	497.15	0.0350
19	189.85	496.36	0.0350
20	199.85	495.54	0.0350
21	209.84	494.40	0.0350
22	219.83	492.86	0.0350
23	229.82	491.53	0.0350
24	239.81	490.32	0.0350
25	249.81	489.11	0.0350
26	259.80	488.03	0.0350
27	269.79	487.35	0.0350
28	279.78	486.46	0.0350
29	289.78	485.46	0.0350
30	299.77	484.66	0.0350
31	309.76	484.07	0.0350
32	319.75	483.57	0.0350
33	329.74	483.16	0.0350
34	339.74	482.56	0.0350
35	349.73	481.94	0.0350
36	359.72	481.29	0.0350
37	369.71	480.37	0.0350
38	379.71	479.21	0.0350
39	389.70	478.50	0.0350
40	399.69	479.78	0.0350
41	409.68	481.10	0.0350
42	419.67	481.97	0.0350
43	429.67	482.73	0.0350
44	439.66	483.74	0.0350
45	449.65	484.92	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
46	459.64	486.17	0.0350
47	469.64	487.42	0.0350
48	479.63	488.68	0.0350
49	489.62	489.91	0.0350
50	499.61	491.01	0.0350
51	509.61	491.99	0.0350
52	519.60	492.90	0.0350
53	529.59	493.94	0.0350
54	539.58	494.97	0.0350
55	549.57	495.13	0.0350
56	559.57	495.53	0.0350
57	569.56	495.99	0.0350
58	579.55	496.51	0.0350
59	589.54	496.91	0.0350
60	599.54	497.29	0.0350
61	609.53	497.67	0.0350
62	619.52	497.93	0.0350
63	629.51	498.18	0.0350
64	639.50	498.39	0.0350
65	649.50	498.58	0.0350
66	659.49	498.71	0.0350
67	669.48	498.87	0.0350
68	679.47	499.03	0.0350
69	689.47	499.18	0.0350

Comment:

Channel Cross Section: XS-1a_DA

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	409.51	0.0500
1	10.00	408.56	0.0500
2	20.00	407.66	0.0500
3	30.00	406.62	0.0500
4	40.00	405.70	0.0500
5	50.00	404.64	0.0500
6	60.00	403.47	0.0500
7	70.00	402.37	0.0500
8	80.00	401.10	0.0500
9	90.00	399.89	0.0500
10	100.00	398.55	0.0500
11	110.00	397.64	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
12	120.00	396.64	0.0500
13	130.00	395.58	0.0500
14	140.00	394.57	0.0500
15	150.00	393.40	0.0500
16	160.00	392.17	0.0500
17	170.00	390.86	0.0500
18	180.00	389.79	0.0500
19	190.00	388.95	0.0500
20	200.00	388.07	0.0500
21	210.00	387.09	0.0500
22	219.99	385.96	0.0500
23	229.99	385.20	0.0500
24	239.99	384.70	0.0500
25	249.99	383.78	0.0500
26	259.99	384.00	0.0500
27	269.99	383.51	0.0500
28	279.99	382.41	0.0500
29	289.91	381.68	0.0500
30	299.83	380.53	0.0500
31	309.74	379.35	0.0500
32	319.66	378.18	0.0500
33	329.58	377.24	0.0500
34	339.50	376.41	0.0500
35	349.41	375.03	0.0500
36	359.33	374.48	0.0500
37	369.25	374.55	0.0500
38	379.16	374.54	0.0500
39	389.08	374.32	0.0500
40	399.00	374.38	0.0500
41	408.92	374.61	0.0500
42	418.83	374.26	0.0500
43	428.75	374.24	0.0500
44	438.67	374.35	0.0500
45	448.59	374.50	0.0500
46	458.50	374.63	0.0500
47	468.42	374.79	0.0500
48	478.34	374.96	0.0500
49	488.25	372.91	0.0500
50	498.17	374.25	0.0500
51	508.09	375.91	0.0500
52	518.01	376.88	0.0500
53	527.92	377.77	0.0500
54	537.84	378.45	0.0500
55	547.76	379.10	0.0500
56	557.67	380.65	0.0500
57	567.59	382.50	0.0500
58	577.51	384.49	0.0500
59	587.43	387.19	0.0500
60	597.34	389.75	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
61	607.26	391.82	0.0500
62	617.18	395.15	0.0500
63	627.09	398.08	0.0500
64	637.01	400.96	0.0500
65	646.93	403.73	0.0500
66	656.85	406.53	0.0500
67	666.76	409.20	0.0500

Comment:

Channel Cross Section: XS-1b_DA

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	396.25	0.0500
1	1.00	396.25	0.0500
2	2.00	396.25	0.0500
3	3.00	396.25	0.0500
4	4.00	396.25	0.0500
5	5.00	396.25	0.0500
6	6.00	396.22	0.0500
7	7.00	396.15	0.0500
8	8.00	396.15	0.0500
9	9.00	396.15	0.0500
10	10.00	396.15	0.0500
11	11.00	396.18	0.0500
12	12.00	396.18	0.0500
13	13.00	396.18	0.0500
14	14.00	396.18	0.0500
15	15.00	396.18	0.0500
16	16.00	396.18	0.0500
17	17.00	396.18	0.0500
18	18.00	396.18	0.0500
19	19.00	396.18	0.0500
20	20.00	396.18	0.0500
21	21.00	396.18	0.0500
22	22.00	396.18	0.0500
23	23.00	396.18	0.0500
24	24.00	396.09	0.0500
25	24.99	395.84	0.0500
26	25.99	395.82	0.0500
27	26.99	395.82	0.0500
28	27.99	395.82	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
29	28.99	395.82	0.0500
30	29.99	395.82	0.0500
31	30.99	395.82	0.0500
32	31.99	395.82	0.0500
33	32.99	395.82	0.0500
34	33.99	395.82	0.0500
35	34.99	395.81	0.0500
36	35.99	395.80	0.0500
37	36.99	395.80	0.0500
38	37.99	395.71	0.0500
39	38.99	395.39	0.0500
40	39.99	395.36	0.0500
41	40.99	395.36	0.0500
42	41.99	395.36	0.0500
43	42.99	395.36	0.0500
44	43.99	395.36	0.0500
45	44.99	395.36	0.0500
46	45.99	395.36	0.0500
47	46.99	395.36	0.0500
48	47.99	395.36	0.0500
49	48.99	395.42	0.0500
50	49.99	395.49	0.0500
51	50.99	395.49	0.0500
52	51.99	395.36	0.0500
53	52.99	394.87	0.0500
54	53.99	394.79	0.0500
55	54.99	394.79	0.0500
56	55.99	394.79	0.0500
57	56.99	394.79	0.0500
58	57.99	394.79	0.0500
59	58.99	394.79	0.0500
60	59.99	394.79	0.0500
61	60.99	394.79	0.0500
62	61.99	394.79	0.0500
63	62.99	394.86	0.0500
64	63.99	395.01	0.0500
65	64.99	395.01	0.0500
66	65.99	394.94	0.0500
67	66.99	394.59	0.0500
68	67.99	394.51	0.0500
69	68.99	394.51	0.0500
70	69.99	394.51	0.0500
71	70.99	394.51	0.0500
72	71.99	394.51	0.0500
73	72.99	394.51	0.0500
74	73.99	394.51	0.0500
75	74.98	394.51	0.0500
76	75.98	394.51	0.0500
77	76.98	394.48	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
78	77.98	394.33	0.0500
79	78.98	394.30	0.0500
80	79.98	394.23	0.0500
81	80.98	393.75	0.0500
82	81.98	393.63	0.0500
83	82.98	393.63	0.0500
84	83.98	393.63	0.0500
85	84.98	393.63	0.0500
86	85.98	393.63	0.0500
87	86.98	393.63	0.0500
88	87.98	393.63	0.0500
89	88.98	393.63	0.0500
90	89.98	393.63	0.0500
91	90.98	393.63	0.0500
92	91.98	393.57	0.0500
93	92.98	393.55	0.0500
94	93.98	393.48	0.0500
95	94.98	392.84	0.0500
96	95.98	392.64	0.0500
97	96.98	392.64	0.0500
98	97.98	392.64	0.0500
99	98.98	392.64	0.0500
100	99.98	392.64	0.0500
101	100.98	392.64	0.0500
102	101.98	392.64	0.0500
103	102.98	392.64	0.0500
104	103.98	392.64	0.0500
105	104.98	392.64	0.0500
106	105.98	392.53	0.0500
107	106.98	392.43	0.0500
108	107.98	392.41	0.0500
109	108.98	391.98	0.0500
110	109.98	391.83	0.0500
111	110.98	391.83	0.0500
112	111.98	391.83	0.0500
113	112.98	391.83	0.0500
114	113.98	391.83	0.0500
115	114.98	391.83	0.0500
116	115.98	391.83	0.0500
117	116.98	391.83	0.0500
118	117.98	391.83	0.0500
119	118.98	391.83	0.0500
120	119.98	391.77	0.0500
121	120.98	391.63	0.0500
122	121.98	391.63	0.0500
123	122.98	391.22	0.0500
124	123.98	391.05	0.0500
125	124.97	391.05	0.0500
126	125.97	391.05	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
127	126.97	391.05	0.0500
128	127.97	391.05	0.0500
129	128.97	391.05	0.0500
130	129.97	391.05	0.0500
131	130.97	391.05	0.0500
132	131.97	391.05	0.0500
133	132.97	391.05	0.0500
134	133.97	390.95	0.0500
135	134.97	390.54	0.0500
136	135.97	390.46	0.0500
137	136.97	390.15	0.0500
138	137.97	390.00	0.0500
139	138.97	390.00	0.0500
140	139.97	390.00	0.0500
141	140.97	390.00	0.0500
142	141.97	390.00	0.0500
143	142.97	390.00	0.0500
144	143.97	390.00	0.0500
145	144.97	390.00	0.0500
146	145.97	390.00	0.0500
147	146.97	390.00	0.0500
148	147.97	390.00	0.0500
149	148.97	389.36	0.0500
150	149.97	389.10	0.0500
151	150.97	388.48	0.0500
152	151.97	388.14	0.0500
153	152.97	388.14	0.0500
154	153.97	388.14	0.0500
155	154.97	388.14	0.0500
156	155.97	388.14	0.0500
157	156.97	388.14	0.0500
158	157.97	388.14	0.0500
159	158.97	388.14	0.0500
160	159.97	388.14	0.0500
161	160.97	388.14	0.0500
162	161.97	388.14	0.0500
163	162.97	387.50	0.0500
164	163.97	386.95	0.0500
165	164.97	386.23	0.0500
166	165.97	385.76	0.0500
167	166.97	385.76	0.0500
168	167.97	385.76	0.0500
169	168.97	385.76	0.0500
170	169.97	385.76	0.0500
171	170.97	385.76	0.0500
172	171.97	385.76	0.0500
173	172.97	385.76	0.0500
174	173.97	385.76	0.0500
175	174.96	385.76	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
176	175.96	385.76	0.0500
177	176.96	385.19	0.0500
178	177.96	384.21	0.0500
179	178.96	383.18	0.0500
180	179.96	382.40	0.0500
181	180.96	382.40	0.0500
182	181.96	382.40	0.0500
183	182.96	382.40	0.0500
184	183.96	382.40	0.0500
185	184.96	382.40	0.0500
186	185.96	382.40	0.0500
187	186.96	382.40	0.0500
188	187.96	382.40	0.0500
189	188.96	382.40	0.0500
190	189.96	382.40	0.0500
191	190.96	382.15	0.0500
192	191.96	381.26	0.0500
193	192.96	380.27	0.0500
194	193.96	379.52	0.0500
195	194.96	379.52	0.0500
196	195.96	379.52	0.0500
197	196.96	379.52	0.0500
198	197.96	379.52	0.0500
199	198.96	379.52	0.0500
200	199.96	379.52	0.0500
201	200.96	379.52	0.0500
202	201.96	379.52	0.0500
203	202.96	379.52	0.0500
204	203.96	379.52	0.0500
205	204.96	379.49	0.0500
206	205.96	378.57	0.0500
207	206.96	377.38	0.0500
208	207.96	376.52	0.0500
209	208.96	376.52	0.0500
210	209.96	376.52	0.0500
211	210.96	376.52	0.0500
212	211.96	376.52	0.0500
213	212.96	376.52	0.0500
214	213.96	376.52	0.0500
215	214.96	376.52	0.0500
216	215.96	376.52	0.0500
217	216.96	376.52	0.0500
218	217.96	376.52	0.0500
219	218.96	376.52	0.0500
220	219.96	375.99	0.0500
221	220.96	374.97	0.0500
222	221.96	374.27	0.0500
223	222.96	374.27	0.0500
224	223.95	374.27	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
225	224.95	374.27	0.0500
226	225.95	374.27	0.0500
227	226.95	374.27	0.0500
228	227.95	374.27	0.0500
229	228.95	374.27	0.0500
230	229.95	374.27	0.0500
231	230.95	374.27	0.0500
232	231.95	374.27	0.0500
233	232.95	374.27	0.0500
234	233.95	373.97	0.0500
235	234.95	372.99	0.0500
236	235.95	372.30	0.0500
237	236.95	372.30	0.0500
238	237.95	372.30	0.0500
239	238.95	372.30	0.0500
240	239.95	372.30	0.0500
241	240.95	372.30	0.0500
242	241.95	372.30	0.0500
243	242.95	372.30	0.0500
244	243.95	372.30	0.0500
245	244.95	372.30	0.0500
246	245.95	372.30	0.0500
247	246.95	372.30	0.0500
248	247.95	372.21	0.0500
249	248.95	371.63	0.0500
250	249.95	371.14	0.0500
251	250.95	371.14	0.0500
252	251.95	371.14	0.0500
253	252.95	371.14	0.0500
254	253.95	371.14	0.0500
255	254.95	371.14	0.0500
256	255.95	371.14	0.0500
257	256.95	371.14	0.0500
258	257.95	371.14	0.0500
259	258.95	371.14	0.0500
260	259.95	371.14	0.0500
261	260.95	371.14	0.0500
262	261.95	371.13	0.0500
263	262.95	370.63	0.0500
264	263.95	369.87	0.0500
265	264.95	369.87	0.0500
266	265.95	369.87	0.0500
267	266.95	369.87	0.0500
268	267.95	369.87	0.0500
269	268.95	369.87	0.0500
270	269.95	369.87	0.0500
271	270.95	369.87	0.0500
272	271.95	369.87	0.0500
273	272.95	369.87	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
274	273.94	369.87	0.0500
275	274.94	369.87	0.0500
276	275.94	369.87	0.0500
277	276.94	369.43	0.0500
278	277.94	368.41	0.0500
279	278.94	368.41	0.0500
280	279.94	368.41	0.0500
281	280.94	368.41	0.0500
282	281.94	368.41	0.0500
283	282.94	368.41	0.0500
284	283.94	368.41	0.0500
285	284.94	368.41	0.0500
286	285.94	368.41	0.0500
287	286.94	368.41	0.0500
288	287.94	368.41	0.0500
289	288.94	368.41	0.0500
290	289.94	368.41	0.0500
291	290.94	367.80	0.0500
292	291.94	366.51	0.0500
293	292.94	366.50	0.0500
294	293.94	366.50	0.0500
295	294.94	366.50	0.0500
296	295.94	366.50	0.0500
297	296.94	366.50	0.0500
298	297.94	366.50	0.0500
299	298.94	366.50	0.0500
300	299.94	366.50	0.0500
301	300.94	366.50	0.0500
302	301.94	366.50	0.0500
303	302.94	366.50	0.0500
304	303.94	366.50	0.0500
305	304.94	366.29	0.0500
306	305.94	366.60	0.0500
307	306.94	366.68	0.0500
308	307.94	366.68	0.0500
309	308.94	366.68	0.0500
310	309.94	366.68	0.0500
311	310.94	366.68	0.0500
312	311.94	366.68	0.0500
313	312.94	366.68	0.0500
314	313.94	366.68	0.0500
315	314.94	366.68	0.0500
316	315.94	366.68	0.0500
317	316.94	366.68	0.0500
318	317.94	366.68	0.0500
319	318.94	366.76	0.0500
320	319.94	367.00	0.0500
321	320.94	367.02	0.0500
322	321.94	367.02	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
323	322.94	367.02	0.0500
324	323.93	367.02	0.0500
325	324.93	367.02	0.0500
326	325.93	367.02	0.0500
327	326.93	367.02	0.0500
328	327.93	367.02	0.0500
329	328.93	367.02	0.0500
330	329.93	367.02	0.0500
331	330.93	367.02	0.0500
332	331.93	367.02	0.0500
333	332.93	367.02	0.0500
334	333.93	367.08	0.0500
335	334.93	367.15	0.0500
336	335.93	367.15	0.0500
337	336.93	367.15	0.0500
338	337.93	367.15	0.0500
339	338.93	367.15	0.0500
340	339.93	367.15	0.0500
341	340.93	367.15	0.0500
342	341.93	367.15	0.0500
343	342.93	367.15	0.0500
344	343.93	367.15	0.0500
345	344.93	367.15	0.0500
346	345.93	367.15	0.0500
347	346.93	367.18	0.0500
348	347.93	366.91	0.0500
349	348.93	366.18	0.0500
350	349.93	366.18	0.0500
351	350.93	366.18	0.0500
352	351.93	366.18	0.0500
353	352.93	366.18	0.0500
354	353.93	366.18	0.0500
355	354.93	366.18	0.0500
356	355.93	366.18	0.0500
357	356.93	366.18	0.0500
358	357.93	366.18	0.0500
359	358.93	366.18	0.0500
360	359.93	366.18	0.0500
361	360.93	365.71	0.0500
362	361.92	362.53	0.0500
363	362.92	363.17	0.0500
364	363.92	363.51	0.0500
365	364.91	363.51	0.0500
366	365.91	363.51	0.0500
367	366.91	363.51	0.0500
368	367.90	363.51	0.0500
369	368.90	363.51	0.0500
370	369.89	363.51	0.0500
371	370.89	363.51	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
372	371.89	363.51	0.0500
373	372.88	363.51	0.0500
374	373.88	364.37	0.0500
375	374.88	366.90	0.0500
376	375.87	366.90	0.0500
377	376.87	366.90	0.0500
378	377.86	366.93	0.0500
379	378.86	367.16	0.0500
380	379.86	367.27	0.0500
381	380.85	367.27	0.0500
382	381.85	367.27	0.0500
383	382.85	367.27	0.0500
384	383.84	367.27	0.0500
385	384.84	367.27	0.0500
386	385.83	367.27	0.0500
387	386.83	367.29	0.0500
388	387.83	367.32	0.0500
389	388.82	367.32	0.0500
390	389.82	367.32	0.0500
391	390.82	367.32	0.0500
392	391.81	367.32	0.0500
393	392.81	367.32	0.0500
394	393.80	367.32	0.0500
395	394.80	367.19	0.0500
396	395.80	367.11	0.0500
397	396.79	367.11	0.0500
398	397.79	367.11	0.0500
399	398.79	367.11	0.0500
400	399.78	367.29	0.0500
401	400.78	367.44	0.0500
402	401.77	367.44	0.0500
403	402.77	367.44	0.0500
404	403.77	367.44	0.0500
405	404.76	367.44	0.0500
406	405.76	367.44	0.0500
407	406.76	367.44	0.0500
408	407.75	367.44	0.0500
409	408.75	367.44	0.0500
410	409.74	367.44	0.0500
411	410.74	367.67	0.0500
412	411.74	367.89	0.0500
413	412.73	367.79	0.0500
414	413.73	367.75	0.0500
415	414.73	367.75	0.0500
416	415.72	367.75	0.0500
417	416.72	367.75	0.0500
418	417.71	367.75	0.0500
419	418.71	367.75	0.0500
420	419.71	367.75	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
421	420.70	367.75	0.0500
422	421.70	367.75	0.0500
423	422.70	367.75	0.0500
424	423.69	367.75	0.0500
425	424.69	367.72	0.0500
426	425.69	367.43	0.0500
427	426.68	367.57	0.0500
428	427.68	367.86	0.0500
429	428.67	367.86	0.0500
430	429.67	367.86	0.0500
431	430.67	367.86	0.0500
432	431.66	367.86	0.0500
433	432.66	367.86	0.0500
434	433.66	367.86	0.0500
435	434.65	367.86	0.0500
436	435.65	367.86	0.0500
437	436.64	367.86	0.0500
438	437.64	367.84	0.0500
439	438.64	367.76	0.0500
440	439.63	367.76	0.0500
441	440.63	367.76	0.0500
442	441.63	367.76	0.0500
443	442.62	367.82	0.0500
444	443.62	367.93	0.0500
445	444.61	367.94	0.0500
446	445.61	367.94	0.0500
447	446.61	367.94	0.0500
448	447.60	367.94	0.0500
449	448.60	367.94	0.0500
450	449.60	367.94	0.0500
451	450.59	367.94	0.0500
452	451.59	367.94	0.0500
453	452.58	367.94	0.0500
454	453.58	367.94	0.0500
455	454.58	367.94	0.0500
456	455.57	367.94	0.0500
457	456.57	367.94	0.0500
458	457.57	367.94	0.0500
459	458.56	368.04	0.0500
460	459.56	368.31	0.0500
461	460.55	368.38	0.0500
462	461.55	368.38	0.0500
463	462.55	368.38	0.0500
464	463.54	368.76	0.0500
465	464.54	369.13	0.0500
466	465.54	369.13	0.0500
467	466.53	369.13	0.0500
468	467.53	369.13	0.0500
469	468.52	369.13	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
470	469.52	369.13	0.0500
471	470.52	369.13	0.0500
472	471.51	369.13	0.0500
473	472.51	369.13	0.0500
474	473.51	369.13	0.0500
475	474.50	369.26	0.0500
476	475.50	369.86	0.0500
477	476.50	370.52	0.0500
478	477.49	370.74	0.0500
479	478.49	370.74	0.0500
480	479.48	370.74	0.0500
481	480.48	370.74	0.0500
482	481.48	370.74	0.0500
483	482.47	370.74	0.0500
484	483.47	370.74	0.0500
485	484.47	370.74	0.0500
486	485.46	370.74	0.0500
487	486.46	370.74	0.0500
488	487.45	370.74	0.0500
489	488.45	370.75	0.0500
490	489.45	371.20	0.0500
491	490.44	371.35	0.0500
492	491.44	371.89	0.0500
493	492.44	372.19	0.0500
494	493.43	372.19	0.0500
495	494.43	372.19	0.0500
496	495.42	372.19	0.0500
497	496.42	372.19	0.0500
498	497.42	372.19	0.0500
499	498.41	372.19	0.0500
500	499.41	372.19	0.0500
501	500.41	372.19	0.0500
502	501.40	372.65	0.0500
503	502.40	374.77	0.0500
504	503.39	374.90	0.0500
505	504.39	374.90	0.0500
506	505.39	374.90	0.0500
507	506.38	374.90	0.0500
508	507.38	375.06	0.0500
509	508.38	375.18	0.0500
510	509.37	375.18	0.0500
511	510.37	375.18	0.0500
512	511.36	375.18	0.0500
513	512.36	375.18	0.0500
514	513.36	375.18	0.0500
515	514.35	375.33	0.0500
516	515.35	375.65	0.0500
517	516.35	375.65	0.0500
518	517.34	375.65	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
519	518.34	375.65	0.0500
520	519.33	375.65	0.0500
521	520.33	375.65	0.0500
522	521.33	375.65	0.0500
523	522.32	375.65	0.0500
524	523.32	375.73	0.0500
525	524.32	375.82	0.0500
526	525.31	375.82	0.0500
527	526.31	375.82	0.0500
528	527.30	376.04	0.0500
529	528.30	376.30	0.0500
530	529.30	376.30	0.0500
531	530.29	376.30	0.0500
532	531.29	376.30	0.0500
533	532.29	376.30	0.0500
534	533.28	376.30	0.0500
535	534.28	376.30	0.0500
536	535.28	376.30	0.0500
537	536.27	376.30	0.0500
538	537.27	376.30	0.0500
539	538.26	376.30	0.0500
540	539.26	376.54	0.0500
541	540.26	379.00	0.0500
542	541.25	380.32	0.0500
543	542.25	380.32	0.0500
544	543.25	380.32	0.0500
545	544.24	380.32	0.0500
546	545.24	380.32	0.0500
547	546.23	380.32	0.0500
548	547.23	380.32	0.0500
549	548.23	380.32	0.0500
550	549.22	380.32	0.0500
551	550.22	380.32	0.0500
552	551.22	380.32	0.0500
553	552.21	380.32	0.0500
554	553.21	383.70	0.0500
555	554.20	384.77	0.0500
556	555.20	385.16	0.0500
557	556.20	386.01	0.0500
558	557.19	386.15	0.0500
559	558.19	386.15	0.0500
560	559.19	386.15	0.0500
561	560.18	386.15	0.0500
562	561.18	386.15	0.0500
563	562.17	386.15	0.0500
564	563.17	386.15	0.0500
565	564.17	386.15	0.0500
566	565.16	386.49	0.0500
567	566.16	388.58	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
568	567.16	388.83	0.0500
569	568.15	388.83	0.0500
570	569.15	388.83	0.0500
571	570.14	388.83	0.0500
572	571.14	389.04	0.0500
573	572.14	389.77	0.0500
574	573.13	390.01	0.0500
575	574.13	390.01	0.0500
576	575.13	390.01	0.0500
577	576.12	390.01	0.0500
578	577.12	390.01	0.0500
579	578.11	391.01	0.0500
580	579.11	393.67	0.0500
581	580.11	393.67	0.0500
582	581.10	393.67	0.0500
583	582.10	393.67	0.0500
584	583.10	393.67	0.0500
585	584.09	393.67	0.0500
586	585.09	393.67	0.0500
587	586.08	393.67	0.0500
588	587.08	393.81	0.0500
589	588.08	394.79	0.0500
590	589.07	395.25	0.0500
591	590.07	395.25	0.0500
592	591.07	396.23	0.0500
593	592.06	397.58	0.0500
594	593.06	397.58	0.0500
595	594.06	397.58	0.0500
596	595.05	397.58	0.0500
597	596.05	397.58	0.0500
598	597.04	397.58	0.0500
599	598.04	397.58	0.0500
600	599.04	397.58	0.0500
601	600.03	397.58	0.0500
602	601.03	397.58	0.0500
603	602.03	397.58	0.0500
604	603.02	397.58	0.0500
605	604.02	399.29	0.0500
606	605.01	400.75	0.0500
607	606.01	400.75	0.0500
608	607.01	400.75	0.0500
609	608.00	400.75	0.0500
610	609.00	400.75	0.0500
611	610.00	400.75	0.0500
612	610.99	400.75	0.0500
613	611.99	400.75	0.0500
614	612.98	400.75	0.0500
615	613.98	400.75	0.0500
616	614.98	400.75	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
617	615.97	400.75	0.0500
618	616.97	402.84	0.0500
619	617.97	403.66	0.0500

Comment:

Channel Cross Section: XS-1c_DA

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	414.13	0.0500
1	1.00	414.13	0.0500
2	2.00	414.13	0.0500
3	3.00	413.87	0.0500
4	4.00	413.52	0.0500
5	5.00	413.32	0.0500
6	6.00	413.32	0.0500
7	6.99	413.32	0.0500
8	7.99	413.32	0.0500
9	8.99	413.32	0.0500
10	9.99	412.96	0.0500
11	10.99	412.92	0.0500
12	11.99	412.92	0.0500
13	12.99	412.92	0.0500
14	13.99	412.92	0.0500
15	14.99	412.92	0.0500
16	15.99	412.92	0.0500
17	16.99	412.92	0.0500
18	17.99	412.92	0.0500
19	18.99	412.92	0.0500
20	19.99	412.92	0.0500
21	20.98	412.30	0.0500
22	21.98	412.12	0.0500
23	22.98	412.12	0.0500
24	23.98	412.12	0.0500
25	24.98	412.12	0.0500
26	25.98	411.81	0.0500
27	26.98	411.45	0.0500
28	27.98	411.30	0.0500
29	28.98	411.30	0.0500
30	29.98	411.30	0.0500
31	30.98	411.30	0.0500
32	31.98	410.88	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
33	32.98	410.66	0.0500
34	33.97	410.66	0.0500
35	34.97	410.66	0.0500
36	35.97	410.66	0.0500
37	36.97	410.66	0.0500
38	37.97	410.66	0.0500
39	38.97	410.66	0.0500
40	39.97	410.66	0.0500
41	40.97	410.66	0.0500
42	41.97	410.66	0.0500
43	42.97	410.18	0.0500
44	43.97	409.76	0.0500
45	44.97	409.76	0.0500
46	45.97	409.76	0.0500
47	46.97	409.76	0.0500
48	47.96	409.75	0.0500
49	48.96	409.33	0.0500
50	49.96	408.92	0.0500
51	50.96	408.82	0.0500
52	51.96	408.82	0.0500
53	52.96	408.82	0.0500
54	53.96	408.24	0.0500
55	54.96	407.44	0.0500
56	55.96	407.44	0.0500
57	56.96	407.44	0.0500
58	57.96	407.44	0.0500
59	58.96	407.44	0.0500
60	59.96	407.44	0.0500
61	60.95	407.44	0.0500
62	61.95	407.44	0.0500
63	62.95	407.44	0.0500
64	63.95	407.44	0.0500
65	64.95	407.06	0.0500
66	65.95	406.15	0.0500
67	66.95	406.15	0.0500
68	67.95	406.15	0.0500
69	68.95	406.15	0.0500
70	69.95	406.15	0.0500
71	70.95	406.05	0.0500
72	71.95	405.53	0.0500
73	72.95	405.00	0.0500
74	73.95	404.95	0.0500
75	74.94	404.95	0.0500
76	75.94	404.63	0.0500
77	76.94	403.14	0.0500
78	77.94	403.14	0.0500
79	78.94	403.14	0.0500
80	79.94	403.14	0.0500
81	80.94	403.14	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
82	81.94	403.14	0.0500
83	82.94	403.14	0.0500
84	83.94	403.14	0.0500
85	84.94	403.14	0.0500
86	85.94	403.14	0.0500
87	86.94	403.03	0.0500
88	87.93	401.40	0.0500
89	88.93	401.32	0.0500
90	89.93	401.32	0.0500
91	90.93	401.32	0.0500
92	91.93	401.32	0.0500
93	92.93	401.32	0.0500
94	93.93	401.14	0.0500
95	94.93	400.60	0.0500
96	95.93	400.11	0.0500
97	96.93	400.11	0.0500
98	97.93	400.11	0.0500
99	98.93	398.50	0.0500
100	99.93	398.19	0.0500
101	100.93	398.19	0.0500
102	101.92	398.19	0.0500
103	102.92	398.19	0.0500
104	103.92	398.19	0.0500
105	104.92	398.19	0.0500
106	105.92	398.19	0.0500
107	106.92	398.19	0.0500
108	107.92	398.19	0.0500
109	108.92	398.19	0.0500
110	109.92	396.88	0.0500
111	110.92	396.37	0.0500
112	111.92	396.37	0.0500
113	112.92	396.37	0.0500
114	113.92	396.37	0.0500
115	114.91	396.37	0.0500
116	115.91	396.37	0.0500
117	116.91	395.97	0.0500
118	117.91	395.17	0.0500
119	118.91	394.56	0.0500
120	119.91	394.56	0.0500
121	120.91	393.36	0.0500
122	121.91	392.56	0.0500
123	122.91	392.56	0.0500
124	123.91	392.56	0.0500
125	124.91	392.56	0.0500
126	125.91	392.56	0.0500
127	126.91	392.56	0.0500
128	127.91	392.56	0.0500
129	128.90	392.56	0.0500
130	129.90	392.56	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
131	130.90	392.56	0.0500
132	131.90	391.54	0.0500
133	132.90	390.44	0.0500
134	133.90	390.44	0.0500
135	134.90	390.44	0.0500
136	135.90	390.44	0.0500
137	136.90	390.44	0.0500
138	137.90	390.44	0.0500
139	138.90	390.44	0.0500
140	139.90	389.91	0.0500
141	140.90	389.13	0.0500
142	141.89	388.65	0.0500
143	142.89	387.95	0.0500
144	143.89	386.72	0.0500
145	144.89	386.72	0.0500
146	145.89	386.72	0.0500
147	146.89	386.72	0.0500
148	147.89	386.72	0.0500
149	148.89	386.72	0.0500
150	149.89	386.72	0.0500
151	150.89	386.72	0.0500
152	151.89	386.72	0.0500
153	152.89	386.72	0.0500
154	153.89	386.26	0.0500
155	154.89	384.82	0.0500
156	155.88	384.82	0.0500
157	156.88	384.82	0.0500
158	157.88	384.82	0.0500
159	158.88	384.82	0.0500
160	159.88	384.82	0.0500
161	160.88	384.82	0.0500
162	161.88	384.82	0.0500
163	162.88	384.13	0.0500
164	163.88	383.30	0.0500
165	164.88	382.73	0.0500
166	165.88	381.46	0.0500
167	166.88	381.46	0.0500
168	167.88	381.46	0.0500
169	168.88	381.46	0.0500
170	169.87	381.46	0.0500
171	170.87	381.46	0.0500
172	171.87	381.46	0.0500
173	172.87	381.46	0.0500
174	173.87	381.46	0.0500
175	174.87	381.46	0.0500
176	175.87	381.45	0.0500
177	176.87	380.03	0.0500
178	177.87	379.88	0.0500
179	178.87	379.88	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
180	179.87	379.88	0.0500
181	180.87	379.88	0.0500
182	181.87	379.88	0.0500
183	182.86	379.88	0.0500
184	183.86	379.88	0.0500
185	184.86	379.88	0.0500
186	185.86	379.38	0.0500
187	186.86	378.86	0.0500
188	187.86	377.67	0.0500
189	188.86	377.39	0.0500
190	189.86	377.39	0.0500
191	190.86	377.39	0.0500
192	191.86	377.39	0.0500
193	192.86	377.39	0.0500
194	193.86	377.39	0.0500
195	194.86	377.39	0.0500
196	195.86	377.39	0.0500
197	196.85	377.39	0.0500
198	197.85	377.39	0.0500
199	198.85	376.83	0.0500
200	199.85	376.54	0.0500
201	200.85	376.54	0.0500
202	201.85	376.54	0.0500
203	202.85	376.54	0.0500
204	203.85	376.54	0.0500
205	204.85	376.54	0.0500
206	205.85	376.54	0.0500
207	206.85	376.54	0.0500
208	207.85	376.51	0.0500
209	208.85	376.25	0.0500
210	209.84	375.40	0.0500
211	210.84	374.83	0.0500
212	211.84	374.83	0.0500
213	212.84	374.83	0.0500
214	213.84	374.83	0.0500
215	214.84	374.83	0.0500
216	215.84	374.83	0.0500
217	216.84	374.83	0.0500
218	217.84	374.83	0.0500
219	218.84	374.83	0.0500
220	219.84	374.83	0.0500
221	220.84	374.66	0.0500
222	221.84	374.45	0.0500
223	222.84	374.45	0.0500
224	223.83	374.45	0.0500
225	224.83	374.45	0.0500
226	225.83	374.45	0.0500
227	226.83	374.45	0.0500
228	227.83	374.45	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
229	228.83	374.45	0.0500
230	229.83	374.45	0.0500
231	230.83	374.43	0.0500
232	231.83	374.34	0.0500
233	232.83	374.43	0.0500
234	233.83	374.43	0.0500
235	234.83	374.43	0.0500
236	235.83	374.43	0.0500
237	236.82	374.43	0.0500
238	237.82	374.43	0.0500
239	238.82	374.43	0.0500
240	239.82	374.43	0.0500
241	240.82	374.43	0.0500
242	241.82	374.43	0.0500
243	242.82	374.28	0.0500
244	243.82	373.61	0.0500
245	244.82	373.61	0.0500
246	245.82	373.61	0.0500
247	246.82	373.61	0.0500
248	247.82	373.61	0.0500
249	248.82	373.61	0.0500
250	249.82	373.61	0.0500
251	250.81	373.61	0.0500
252	251.81	373.61	0.0500
253	252.81	373.61	0.0500
254	253.81	373.75	0.0500
255	254.81	374.84	0.0500
256	255.81	375.76	0.0500
257	256.81	375.76	0.0500
258	257.81	375.76	0.0500
259	258.81	375.76	0.0500
260	259.81	375.76	0.0500
261	260.81	375.76	0.0500
262	261.81	375.76	0.0500
263	262.81	375.76	0.0500
264	263.80	375.76	0.0500
265	264.80	375.76	0.0500
266	265.80	373.96	0.0500
267	266.80	373.64	0.0500
268	267.80	373.64	0.0500
269	268.80	373.64	0.0500
270	269.80	373.64	0.0500
271	270.80	373.64	0.0500
272	271.80	373.64	0.0500
273	272.80	373.64	0.0500
274	273.80	373.64	0.0500
275	274.80	373.64	0.0500
276	275.80	373.64	0.0500
277	276.80	372.78	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
278	277.79	372.30	0.0500
279	278.79	372.21	0.0500
280	279.79	372.21	0.0500
281	280.79	372.21	0.0500
282	281.79	372.21	0.0500
283	282.79	372.21	0.0500
284	283.79	372.21	0.0500
285	284.79	372.21	0.0500
286	285.79	372.21	0.0500
287	286.79	372.21	0.0500
288	287.79	371.91	0.0500
289	288.79	371.71	0.0500
290	289.79	371.71	0.0500
291	290.78	371.71	0.0500
292	291.78	371.71	0.0500
293	292.78	371.71	0.0500
294	293.78	371.71	0.0500
295	294.78	371.71	0.0500
296	295.78	371.71	0.0500
297	296.78	371.71	0.0500
298	297.78	371.71	0.0500
299	298.78	371.28	0.0500
300	299.78	370.92	0.0500
301	300.78	371.02	0.0500
302	301.78	371.07	0.0500
303	302.78	371.07	0.0500
304	303.78	371.07	0.0500
305	304.77	371.07	0.0500
306	305.77	371.07	0.0500
307	306.77	371.07	0.0500
308	307.77	371.07	0.0500
309	308.77	371.07	0.0500
310	309.77	370.54	0.0500
311	310.77	369.65	0.0500
312	311.77	369.65	0.0500
313	312.77	369.65	0.0500
314	313.77	369.65	0.0500
315	314.77	369.65	0.0500
316	315.77	369.65	0.0500
317	316.77	369.65	0.0500
318	317.76	369.65	0.0500
319	318.76	369.65	0.0500
320	319.76	369.65	0.0500
321	320.76	369.41	0.0500
322	321.76	368.70	0.0500
323	322.76	368.47	0.0500
324	323.76	368.23	0.0500
325	324.76	368.14	0.0500
326	325.76	368.14	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
327	326.76	368.14	0.0500
328	327.76	368.14	0.0500
329	328.76	368.14	0.0500
330	329.76	368.14	0.0500
331	330.76	368.14	0.0500
332	331.75	368.07	0.0500
333	332.75	367.56	0.0500
334	333.75	367.56	0.0500
335	334.75	367.56	0.0500
336	335.75	367.56	0.0500
337	336.75	367.56	0.0500
338	337.75	367.56	0.0500
339	338.75	367.56	0.0500
340	339.75	367.56	0.0500
341	340.75	367.56	0.0500
342	341.75	367.56	0.0500
343	342.75	367.55	0.0500
344	343.75	367.06	0.0500
345	344.74	366.99	0.0500
346	345.74	366.78	0.0500
347	346.74	366.57	0.0500
348	347.74	366.53	0.0500
349	348.74	366.53	0.0500
350	349.74	366.53	0.0500
351	350.74	366.53	0.0500
352	351.74	366.53	0.0500
353	352.74	366.53	0.0500
354	353.74	366.53	0.0500
355	354.74	366.19	0.0500
356	355.74	366.10	0.0500
357	356.74	366.10	0.0500
358	357.74	366.10	0.0500
359	358.73	366.10	0.0500
360	359.73	366.10	0.0500
361	360.73	366.10	0.0500
362	361.73	366.10	0.0500
363	362.73	366.10	0.0500
364	363.73	366.10	0.0500
365	364.73	366.10	0.0500
366	365.73	365.92	0.0500
367	366.73	365.83	0.0500
368	367.73	365.77	0.0500
369	368.73	365.54	0.0500
370	369.73	365.30	0.0500
371	370.73	365.29	0.0500
372	371.72	365.29	0.0500
373	372.72	365.29	0.0500
374	373.72	365.29	0.0500
375	374.72	365.29	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
376	375.72	365.29	0.0500
377	376.72	365.07	0.0500
378	377.72	364.89	0.0500
379	378.72	364.89	0.0500
380	379.72	364.89	0.0500
381	380.72	364.89	0.0500
382	381.72	364.89	0.0500
383	382.72	364.89	0.0500
384	383.72	364.89	0.0500
385	384.72	364.89	0.0500
386	385.71	364.89	0.0500
387	386.71	364.89	0.0500
388	387.71	364.74	0.0500
389	388.71	364.56	0.0500
390	389.71	364.56	0.0500
391	390.71	364.49	0.0500
392	391.71	364.34	0.0500
393	392.71	364.20	0.0500
394	393.71	364.20	0.0500
395	394.71	364.20	0.0500
396	395.71	364.20	0.0500
397	396.71	364.20	0.0500
398	397.71	364.20	0.0500
399	398.70	364.11	0.0500
400	399.70	363.92	0.0500
401	400.70	363.92	0.0500
402	401.70	363.92	0.0500
403	402.70	363.92	0.0500
404	403.70	363.92	0.0500
405	404.70	363.92	0.0500
406	405.70	363.92	0.0500
407	406.70	363.92	0.0500
408	407.70	363.92	0.0500
409	408.70	363.92	0.0500
410	409.70	363.78	0.0500
411	410.70	363.22	0.0500
412	411.70	363.22	0.0500
413	412.69	363.22	0.0500
414	413.69	363.20	0.0500
415	414.69	363.16	0.0500
416	415.69	363.13	0.0500
417	416.69	363.13	0.0500
418	417.69	363.13	0.0500
419	418.69	363.13	0.0500
420	419.69	363.13	0.0500
421	420.69	363.09	0.0500
422	421.69	362.51	0.0500
423	422.69	362.49	0.0500
424	423.69	362.49	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
425	424.69	362.49	0.0500
426	425.68	362.49	0.0500
427	426.68	362.49	0.0500
428	427.68	362.49	0.0500
429	428.68	362.49	0.0500
430	429.68	362.49	0.0500
431	430.68	362.49	0.0500
432	431.68	362.49	0.0500
433	432.68	362.36	0.0500
434	433.68	362.33	0.0500
435	434.68	362.33	0.0500
436	435.68	362.33	0.0500
437	436.68	362.24	0.0500
438	437.68	362.11	0.0500
439	438.68	362.04	0.0500
440	439.67	362.04	0.0500
441	440.67	362.04	0.0500
442	441.67	362.04	0.0500
443	442.67	362.04	0.0500
444	443.67	361.81	0.0500
445	444.67	361.73	0.0500
446	445.67	361.73	0.0500
447	446.67	361.73	0.0500
448	447.67	361.73	0.0500
449	448.67	361.73	0.0500
450	449.67	361.73	0.0500
451	450.67	361.73	0.0500
452	451.67	361.73	0.0500
453	452.66	361.73	0.0500
454	453.66	361.73	0.0500
455	454.66	361.49	0.0500
456	455.66	361.35	0.0500
457	456.66	361.35	0.0500
458	457.66	361.35	0.0500
459	458.66	361.35	0.0500
460	459.66	361.33	0.0500
461	460.66	361.30	0.0500
462	461.66	361.30	0.0500
463	462.66	361.30	0.0500
464	463.65	361.30	0.0500
465	464.65	361.30	0.0500
466	465.65	361.30	0.0500
467	466.65	361.30	0.0500
468	467.65	361.30	0.0500
469	468.65	360.77	0.0500
470	469.65	359.99	0.0500
471	470.65	359.98	0.0500
472	471.64	359.76	0.0500
473	472.64	357.51	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
474	473.64	357.18	0.0500
475	474.64	357.18	0.0500
476	475.64	357.18	0.0500
477	476.64	357.18	0.0500
478	477.64	357.18	0.0500
479	478.63	357.18	0.0500
480	479.63	357.18	0.0500
481	480.63	357.18	0.0500
482	481.63	357.18	0.0500
483	482.63	357.18	0.0500
484	483.63	357.18	0.0500
485	484.63	357.65	0.0500
486	485.62	358.80	0.0500
487	486.62	360.02	0.0500
488	487.62	360.06	0.0500
489	488.62	360.06	0.0500
490	489.62	360.06	0.0500
491	490.62	360.06	0.0500
492	491.62	360.06	0.0500
493	492.62	360.06	0.0500
494	493.61	360.06	0.0500
495	494.61	360.06	0.0500
496	495.61	360.06	0.0500
497	496.61	360.35	0.0500
498	497.61	361.17	0.0500
499	498.61	361.17	0.0500
500	499.61	361.17	0.0500
501	500.60	361.17	0.0500
502	501.60	361.17	0.0500
503	502.60	360.86	0.0500
504	503.60	360.39	0.0500
505	504.60	360.37	0.0500
506	505.60	360.37	0.0500
507	506.60	360.37	0.0500
508	507.60	360.37	0.0500
509	508.59	360.37	0.0500
510	509.59	360.28	0.0500
511	510.59	360.25	0.0500
512	511.59	360.25	0.0500
513	512.59	360.25	0.0500
514	513.59	360.25	0.0500
515	514.59	360.25	0.0500
516	515.58	360.25	0.0500
517	516.58	360.25	0.0500
518	517.58	360.25	0.0500
519	518.58	360.25	0.0500
520	519.58	360.14	0.0500
521	520.58	359.96	0.0500
522	521.58	360.12	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
523	522.58	360.33	0.0500
524	523.57	360.33	0.0500
525	524.57	360.33	0.0500
526	525.57	360.33	0.0500
527	526.57	360.33	0.0500
528	527.57	360.33	0.0500
529	528.57	360.33	0.0500
530	529.57	360.33	0.0500
531	530.56	360.33	0.0500
532	531.56	360.33	0.0500
533	532.56	360.33	0.0500
534	533.56	360.36	0.0500
535	534.56	360.50	0.0500
536	535.56	360.51	0.0500
537	536.56	360.43	0.0500
538	537.56	360.31	0.0500
539	538.55	360.30	0.0500
540	539.55	360.30	0.0500
541	540.55	360.30	0.0500
542	541.55	360.30	0.0500
543	542.55	360.30	0.0500
544	543.55	360.30	0.0500
545	544.55	360.30	0.0500
546	545.54	360.30	0.0500
547	546.54	360.33	0.0500
548	547.54	360.34	0.0500
549	548.54	360.34	0.0500
550	549.54	360.34	0.0500
551	550.54	360.34	0.0500
552	551.54	360.34	0.0500
553	552.53	360.34	0.0500
554	553.53	360.39	0.0500
555	554.53	360.47	0.0500
556	555.53	360.47	0.0500
557	556.53	360.47	0.0500
558	557.53	360.47	0.0500
559	558.53	360.44	0.0500
560	559.53	360.37	0.0500
561	560.52	360.37	0.0500
562	561.52	360.37	0.0500
563	562.52	360.37	0.0500
564	563.52	360.37	0.0500
565	564.52	360.37	0.0500
566	565.52	360.37	0.0500
567	566.52	360.37	0.0500
568	567.51	360.37	0.0500
569	568.51	360.37	0.0500
570	569.51	360.37	0.0500
571	570.51	360.33	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
572	571.51	360.26	0.0500
573	572.51	360.26	0.0500
574	573.51	360.26	0.0500
575	574.51	360.26	0.0500
576	575.50	360.26	0.0500
577	576.50	360.26	0.0500
578	577.50	360.26	0.0500
579	578.50	360.26	0.0500
580	579.50	360.26	0.0500
581	580.50	360.26	0.0500
582	581.50	360.26	0.0500
583	582.49	360.26	0.0500
584	583.49	360.38	0.0500
585	584.49	360.50	0.0500
586	585.49	360.50	0.0500
587	586.49	360.50	0.0500
588	587.49	360.37	0.0500
589	588.49	360.17	0.0500
590	589.49	360.15	0.0500
591	590.48	360.15	0.0500
592	591.48	360.15	0.0500
593	592.48	360.15	0.0500
594	593.48	360.15	0.0500
595	594.48	360.15	0.0500
596	595.48	360.15	0.0500
597	596.48	360.14	0.0500
598	597.47	360.14	0.0500
599	598.47	360.14	0.0500
600	599.47	360.14	0.0500
601	600.47	360.14	0.0500
602	601.47	360.14	0.0500
603	602.47	360.14	0.0500
604	603.47	360.14	0.0500
605	604.47	360.06	0.0500
606	605.46	359.91	0.0500
607	606.46	359.89	0.0500
608	607.46	359.89	0.0500
609	608.46	359.71	0.0500
610	609.46	359.63	0.0500
611	610.46	359.63	0.0500
612	611.46	359.63	0.0500
613	612.45	359.63	0.0500
614	613.45	359.63	0.0500
615	614.45	359.63	0.0500
616	615.45	359.63	0.0500
617	616.45	359.63	0.0500
618	617.45	359.63	0.0500
619	618.45	359.63	0.0500
620	619.44	359.63	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
621	620.44	359.42	0.0500
622	621.44	359.15	0.0500
623	622.44	359.30	0.0500
624	623.44	359.32	0.0500
625	624.44	359.32	0.0500
626	625.44	359.32	0.0500
627	626.44	359.32	0.0500
628	627.43	359.32	0.0500
629	628.43	359.32	0.0500
630	629.43	359.32	0.0500
631	630.43	359.32	0.0500
632	631.43	359.32	0.0500
633	632.43	359.34	0.0500
634	633.43	359.62	0.0500
635	634.42	359.67	0.0500
636	635.42	359.67	0.0500
637	636.42	359.67	0.0500
638	637.42	359.67	0.0500
639	638.42	359.84	0.0500
640	639.42	360.15	0.0500
641	640.42	360.19	0.0500
642	641.42	360.19	0.0500
643	642.41	360.19	0.0500
644	643.41	360.19	0.0500
645	644.41	360.19	0.0500
646	645.41	360.19	0.0500
647	646.41	360.19	0.0500
648	647.41	360.19	0.0500
649	648.41	360.19	0.0500
650	649.40	360.19	0.0500
651	650.40	360.19	0.0500
652	651.40	360.19	0.0500
653	652.40	360.19	0.0500
654	653.40	360.19	0.0500
655	654.40	360.19	0.0500
656	655.40	360.32	0.0500
657	656.40	360.55	0.0500
658	657.39	360.85	0.0500
659	658.39	361.71	0.0500
660	659.39	361.71	0.0500
661	660.39	361.71	0.0500
662	661.39	361.71	0.0500
663	662.39	361.71	0.0500
664	663.39	361.71	0.0500
665	664.38	361.71	0.0500
666	665.38	361.71	0.0500
667	666.38	361.71	0.0500
668	667.38	361.71	0.0500
669	668.38	361.71	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
670	669.38	361.71	0.0500
671	670.38	362.11	0.0500
672	671.38	362.25	0.0500
673	672.37	362.47	0.0500
674	673.37	362.86	0.0500
675	674.37	362.92	0.0500
676	675.37	362.92	0.0500
677	676.37	362.92	0.0500
678	677.37	362.92	0.0500
679	678.37	362.92	0.0500
680	679.36	362.92	0.0500
681	680.36	362.92	0.0500
682	681.36	362.92	0.0500
683	682.36	363.15	0.0500
684	683.36	363.47	0.0500
685	684.36	363.47	0.0500
686	685.36	363.47	0.0500
687	686.36	363.47	0.0500
688	687.35	363.47	0.0500
689	688.35	363.47	0.0500
690	689.35	363.58	0.0500
691	690.35	363.78	0.0500
692	691.35	363.82	0.0500
693	692.35	363.82	0.0500
694	693.35	363.82	0.0500
695	694.34	363.82	0.0500
696	695.34	363.83	0.0500
697	696.34	363.83	0.0500
698	697.34	363.83	0.0500
699	698.34	363.83	0.0500
700	699.34	363.83	0.0500
701	700.34	363.83	0.0500
702	701.33	363.83	0.0500
703	702.33	363.83	0.0500
704	703.33	363.83	0.0500
705	704.33	363.83	0.0500
706	705.33	363.83	0.0500
707	706.33	363.99	0.0500
708	707.33	364.71	0.0500
709	708.33	365.03	0.0500
710	709.32	365.03	0.0500
711	710.32	365.03	0.0500
712	711.32	365.03	0.0500
713	712.32	365.03	0.0500
714	713.32	365.03	0.0500
715	714.32	365.03	0.0500
716	715.32	365.03	0.0500
717	716.31	365.03	0.0500
718	717.31	365.03	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
719	718.31	365.03	0.0500
720	719.31	365.21	0.0500
721	720.31	365.66	0.0500
722	721.31	365.66	0.0500
723	722.31	365.66	0.0500
724	723.31	365.79	0.0500
725	724.30	366.04	0.0500
726	725.30	366.09	0.0500
727	726.30	366.09	0.0500
728	727.30	366.09	0.0500
729	728.30	366.09	0.0500
730	729.30	366.09	0.0500
731	730.30	366.09	0.0500
732	731.29	366.09	0.0500
733	732.29	366.90	0.0500
734	733.29	367.12	0.0500
735	734.29	367.12	0.0500
736	735.29	367.12	0.0500
737	736.29	367.12	0.0500
738	737.29	367.12	0.0500
739	738.29	367.12	0.0500
740	739.28	367.12	0.0500
741	740.28	367.38	0.0500
742	741.28	367.90	0.0500
743	742.28	368.00	0.0500
744	743.28	368.00	0.0500
745	744.28	369.41	0.0500
746	745.28	370.96	0.0500
747	746.27	370.96	0.0500
748	747.27	370.96	0.0500
749	748.27	370.96	0.0500
750	749.27	370.96	0.0500
751	750.27	370.96	0.0500
752	751.27	370.96	0.0500
753	752.27	370.96	0.0500
754	753.27	370.96	0.0500
755	754.26	370.96	0.0500
756	755.26	370.96	0.0500
757	756.26	371.18	0.0500
758	757.26	372.29	0.0500
759	758.26	372.32	0.0500
760	759.26	372.32	0.0500
761	760.26	372.32	0.0500
762	761.25	372.32	0.0500
763	762.25	372.32	0.0500
764	763.25	372.32	0.0500
765	764.25	372.32	0.0500
766	765.25	372.32	0.0500
767	766.25	372.32	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
768	767.25	372.32	0.0500
769	768.24	372.32	0.0500
770	769.24	373.05	0.0500
771	770.24	373.43	0.0500
772	771.24	373.43	0.0500
773	772.24	373.43	0.0500
774	773.24	373.43	0.0500
775	774.24	373.87	0.0500
776	775.24	374.78	0.0500
777	776.23	374.99	0.0500
778	777.23	374.99	0.0500
779	778.23	374.99	0.0500
780	779.23	374.99	0.0500
781	780.23	374.99	0.0500
782	781.23	375.98	0.0500
783	782.23	377.87	0.0500
784	783.22	377.87	0.0500
785	784.22	377.87	0.0500
786	785.22	377.87	0.0500
787	786.22	377.87	0.0500
788	787.22	377.87	0.0500
789	788.22	377.87	0.0500
790	789.22	377.87	0.0500
791	790.22	377.87	0.0500
792	791.21	378.11	0.0500
793	792.21	378.62	0.0500
794	793.21	378.83	0.0500
795	794.21	380.97	0.0500
796	795.21	381.39	0.0500
797	796.21	381.39	0.0500
798	797.21	381.39	0.0500
799	798.20	381.39	0.0500
800	799.20	381.39	0.0500
801	800.20	381.39	0.0500
802	801.20	381.39	0.0500
803	802.20	381.39	0.0500
804	803.20	381.39	0.0500
805	804.20	381.39	0.0500
806	805.20	381.39	0.0500
807	806.19	383.05	0.0500
808	807.19	384.54	0.0500
809	808.19	384.66	0.0500
810	809.19	384.93	0.0500
811	810.19	384.99	0.0500
812	811.19	384.99	0.0500
813	812.19	384.99	0.0500
814	813.18	384.99	0.0500
815	814.18	384.99	0.0500
816	815.18	384.99	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
817	816.18	384.99	0.0500
818	817.18	384.99	0.0500
819	818.18	385.66	0.0500
820	819.18	388.08	0.0500
821	820.18	388.08	0.0500
822	821.17	388.08	0.0500
823	822.17	388.08	0.0500
824	823.17	388.08	0.0500
825	824.17	388.08	0.0500
826	825.17	388.30	0.0500
827	826.17	388.81	0.0500
828	827.17	388.94	0.0500
829	828.16	388.94	0.0500
830	829.16	388.94	0.0500
831	830.16	388.94	0.0500
832	831.16	391.15	0.0500
833	832.16	392.06	0.0500
834	833.16	392.06	0.0500
835	834.16	392.06	0.0500
836	835.16	392.06	0.0500
837	836.15	392.06	0.0500
838	837.15	392.06	0.0500
839	838.15	392.06	0.0500
840	839.15	392.06	0.0500
841	840.15	392.06	0.0500
842	841.15	392.06	0.0500
843	842.15	392.24	0.0500
844	843.14	393.90	0.0500
845	844.14	395.90	0.0500
846	845.14	395.90	0.0500
847	846.14	395.90	0.0500
848	847.14	395.90	0.0500
849	848.14	395.90	0.0500
850	849.14	395.90	0.0500
851	850.13	395.90	0.0500
852	851.13	395.90	0.0500
853	852.13	395.90	0.0500
854	853.13	395.90	0.0500
855	854.13	395.90	0.0500
856	855.13	396.20	0.0500
857	856.13	399.04	0.0500
858	857.13	399.41	0.0500
859	858.12	399.41	0.0500
860	859.12	399.52	0.0500
861	860.12	399.77	0.0500
862	861.12	399.84	0.0500
863	862.12	399.84	0.0500
864	863.12	399.84	0.0500
865	864.12	399.84	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
866	865.11	399.84	0.0500
867	866.11	399.84	0.0500
868	867.11	399.84	0.0500
869	868.11	401.70	0.0500
870	869.11	403.05	0.0500
871	870.11	403.05	0.0500
872	871.11	403.05	0.0500
873	872.11	403.05	0.0500
874	873.10	403.05	0.0500
875	874.10	403.05	0.0500
876	875.10	403.05	0.0500
877	876.10	403.28	0.0500
878	877.10	403.84	0.0500
879	878.10	404.00	0.0500
880	879.10	404.00	0.0500
881	880.09	404.81	0.0500
882	881.09	407.01	0.0500
883	882.09	407.01	0.0500
884	883.09	407.01	0.0500
885	884.09	407.01	0.0500
886	885.09	407.01	0.0500
887	886.09	407.01	0.0500
888	887.09	407.01	0.0500
889	888.08	407.01	0.0500
890	889.08	407.01	0.0500
891	890.08	407.01	0.0500
892	891.08	407.01	0.0500
893	892.08	407.01	0.0500
894	893.08	410.00	0.0500
895	894.08	411.18	0.0500
896	895.07	411.29	0.0500
897	896.07	411.29	0.0500
898	897.07	411.29	0.0500
899	898.07	411.29	0.0500
900	899.07	411.29	0.0500
901	900.07	411.29	0.0500
902	901.07	411.29	0.0500
903	902.07	411.29	0.0500

Comment:

Channel Cross Section: XS-1d_DA

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	360.03	0.0500
1	9.84	359.60	0.0500
2	19.68	359.28	0.0500
3	29.52	359.02	0.0500
4	39.35	358.67	0.0500
5	49.19	358.37	0.0500
6	59.03	358.11	0.0500
7	68.87	357.93	0.0500
8	78.71	357.70	0.0500
9	88.55	357.27	0.0500
10	98.38	357.06	0.0500
11	108.22	356.88	0.0500
12	118.06	356.43	0.0500
13	127.90	356.06	0.0500
14	137.74	355.92	0.0500
15	147.58	355.98	0.0500
16	157.41	355.98	0.0500
17	167.25	355.57	0.0500
18	177.09	354.98	0.0500
19	186.93	354.90	0.0500
20	196.77	354.56	0.0500
21	206.61	354.07	0.0500
22	216.45	353.94	0.0500
23	226.28	353.64	0.0500
24	236.12	353.37	0.0500
25	245.96	353.01	0.0500
26	255.80	352.69	0.0500
27	265.64	352.48	0.0500
28	275.53	352.21	0.0500
29	285.42	351.70	0.0500
30	295.31	351.18	0.0500
31	305.20	350.58	0.0500
32	315.09	350.20	0.0500
33	324.98	349.54	0.0500
34	334.88	349.31	0.0500
35	344.77	348.95	0.0500
36	354.66	348.62	0.0500
37	364.55	348.41	0.0500
38	374.44	348.13	0.0500
39	384.33	347.86	0.0500
40	394.22	347.80	0.0500
41	404.11	347.34	0.0500
42	414.01	347.46	0.0500
43	423.90	347.32	0.0500
44	433.79	347.04	0.0500
45	443.68	346.87	0.0500
46	453.57	346.67	0.0500
47	463.46	346.47	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
48	473.35	346.04	0.0500
49	483.24	345.86	0.0500
50	493.14	345.53	0.0500
51	503.03	345.20	0.0500
52	512.92	344.60	0.0500
53	522.81	344.04	0.0500
54	532.70	343.20	0.0500
55	542.59	342.70	0.0500
56	552.48	342.18	0.0500
57	562.37	341.86	0.0500
58	572.26	341.62	0.0500
59	582.16	341.29	0.0500
60	592.05	340.86	0.0500
61	601.94	341.02	0.0500
62	611.74	340.89	0.0500
63	621.54	340.77	0.0500
64	631.34	340.60	0.0500
65	641.14	340.83	0.0500
66	650.94	341.45	0.0500
67	660.73	341.51	0.0500
68	670.53	341.46	0.0500
69	680.33	341.79	0.0500
70	690.13	341.46	0.0500
71	699.93	341.41	0.0500
72	709.73	340.52	0.0500
73	719.53	338.77	0.0500
74	729.33	341.73	0.0500
75	739.13	345.51	0.0500
76	748.93	348.69	0.0500
77	758.73	351.72	0.0500
78	768.53	355.55	0.0500
79	778.33	358.59	0.0500
80	788.13	360.99	0.0500
81	797.93	362.94	0.0500
82	807.72	364.96	0.0500
83	817.52	366.99	0.0500
84	827.32	368.86	0.0500
85	837.12	370.33	0.0500
86	846.92	370.60	0.0500
87	856.72	371.05	0.0500

Comment:

Channel Cross Section: XS-201

Scenario: Proposed

Lid: No

Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	440.06	0.0350
1	9.87	439.11	0.0350
2	19.74	438.32	0.0350
3	29.60	437.34	0.0350
4	39.47	436.38	0.0350
5	49.34	435.22	0.0350
6	59.21	434.09	0.0350
7	69.08	433.06	0.0350
8	78.95	431.82	0.0350
9	88.81	430.71	0.0350
10	98.68	429.26	0.0350
11	108.55	428.39	0.0350
12	118.42	427.31	0.0350
13	128.29	426.41	0.0350
14	138.16	425.53	0.0350
15	148.02	424.17	0.0350
16	157.89	422.98	0.0350
17	167.76	421.91	0.0350
18	177.63	420.65	0.0350
19	187.50	419.61	0.0350
20	197.36	418.32	0.0350
21	207.23	416.74	0.0350
22	217.10	415.30	0.0350
23	226.97	413.28	0.0350
24	236.84	411.52	0.0350
25	246.71	410.77	0.0350
26	256.57	409.40	0.0350
27	266.44	407.95	0.0350
28	276.31	407.03	0.0350
29	286.18	405.61	0.0350
30	296.05	403.81	0.0350
31	305.92	402.71	0.0350
32	315.78	401.98	0.0350
33	325.65	401.39	0.0350
34	335.52	400.73	0.0350
35	345.39	400.19	0.0350
36	355.26	399.66	0.0350
37	365.13	399.04	0.0350
38	375.01	398.48	0.0350
39	384.88	398.84	0.0350
40	394.75	398.42	0.0350
41	404.63	398.43	0.0350
42	414.50	397.89	0.0350
43	424.38	397.52	0.0350
44	434.25	397.02	0.0350
45	444.13	396.44	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
46	454.00	395.70	0.0350
47	463.88	394.57	0.0350
48	473.75	394.01	0.0350
49	483.63	393.39	0.0350
50	493.50	392.45	0.0350
51	503.38	391.69	0.0350
52	513.25	391.06	0.0350
53	523.12	390.50	0.0350
54	533.00	390.37	0.0350
55	542.87	389.97	0.0350
56	552.75	389.57	0.0350
57	562.62	389.37	0.0350
58	572.50	388.94	0.0350
59	582.37	388.90	0.0350
60	592.25	388.77	0.0350
61	602.12	388.86	0.0350
62	612.00	388.43	0.0350
63	621.87	387.86	0.0350
64	631.74	387.09	0.0350
65	641.62	386.43	0.0350
66	651.49	386.37	0.0350
67	661.37	385.98	0.0350
68	671.24	385.36	0.0350
69	681.12	384.73	0.0350
70	690.99	384.44	0.0350
71	700.87	384.47	0.0350
72	710.74	384.56	0.0350
73	720.62	384.41	0.0350
74	730.49	384.15	0.0350
75	740.37	384.05	0.0350
76	750.24	383.92	0.0350
77	760.11	384.17	0.0350
78	769.99	383.78	0.0350
79	779.86	383.61	0.0350
80	789.69	383.44	0.0350
81	799.51	383.41	0.0350
82	809.33	383.63	0.0350
83	819.16	383.76	0.0350
84	828.98	383.71	0.0350
85	838.80	383.88	0.0350
86	848.62	384.06	0.0350
87	858.45	384.41	0.0350
88	868.27	384.19	0.0350
89	878.09	383.92	0.0350
90	887.92	383.81	0.0350
91	897.74	380.28	0.0350
92	907.56	383.54	0.0350
93	917.39	386.73	0.0350
94	927.21	389.88	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
95	937.03	393.70	0.0350
96	946.86	397.70	0.0350
97	956.68	401.27	0.0350
98	966.50	404.38	0.0350
99	976.32	407.44	0.0350
100	986.15	410.00	0.0350
101	995.97	412.22	0.0350
102	1005.79	414.38	0.0350
103	1015.62	416.23	0.0350
104	1025.44	417.86	0.0350
105	1035.26	419.46	0.0350
106	1045.09	420.92	0.0350
107	1054.91	422.36	0.0350
108	1064.73	423.71	0.0350
109	1074.55	424.97	0.0350
110	1084.38	426.06	0.0350
111	1094.20	426.93	0.0350
112	1104.02	427.83	0.0350
113	1113.85	428.56	0.0350
114	1123.44	429.42	0.0350
115	1133.02	430.42	0.0350
116	1142.61	431.45	0.0350
117	1152.20	432.47	0.0350
118	1161.79	433.09	0.0350
119	1171.38	433.95	0.0350
120	1180.96	434.91	0.0350
121	1190.55	435.72	0.0350
122	1200.14	436.84	0.0350

Comment:

Channel Cross Section: XS-202

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.29	0.0350
1	9.88	432.14	0.0350
2	19.77	430.88	0.0350
3	29.65	429.65	0.0350
4	39.53	428.73	0.0350
5	49.41	427.69	0.0350
6	59.30	426.53	0.0350
7	69.18	425.29	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
8	79.06	424.43	0.0350
9	88.94	423.04	0.0350
10	98.83	421.80	0.0350
11	108.71	420.78	0.0350
12	118.59	419.55	0.0350
13	128.47	417.92	0.0350
14	138.36	416.02	0.0350
15	148.24	414.24	0.0350
16	158.12	412.66	0.0350
17	168.00	410.89	0.0350
18	177.89	409.16	0.0350
19	187.66	407.74	0.0350
20	197.43	406.58	0.0350
21	207.20	405.65	0.0350
22	216.97	404.73	0.0350
23	226.74	404.11	0.0350
24	236.51	403.05	0.0350
25	246.28	402.18	0.0350
26	256.05	401.65	0.0350
27	265.83	400.56	0.0350
28	275.60	400.80	0.0350
29	285.37	401.28	0.0350
30	295.14	402.04	0.0350
31	304.91	402.52	0.0350
32	314.68	403.03	0.0350
33	324.45	403.70	0.0350
34	334.22	406.08	0.0350
35	343.99	408.76	0.0350
36	353.76	410.93	0.0350
37	363.54	413.01	0.0350
38	373.31	415.04	0.0350
39	383.08	416.88	0.0350
40	392.85	418.06	0.0350
41	402.62	419.21	0.0350
42	412.39	420.21	0.0350
43	421.60	421.16	0.0350
44	430.81	422.34	0.0350
45	440.02	423.08	0.0350
46	449.23	423.59	0.0350
47	458.44	424.20	0.0350
48	467.65	424.77	0.0350
49	476.86	425.25	0.0350
50	486.07	425.39	0.0350
51	495.28	425.89	0.0350

Comment:

Channel Cross Section: XS-203

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.29	0.0350
1	9.88	432.14	0.0350
2	19.77	430.88	0.0350
3	29.65	429.65	0.0350
4	39.53	428.73	0.0350
5	49.41	427.69	0.0350
6	59.30	426.53	0.0350
7	69.18	425.29	0.0350
8	79.06	424.43	0.0350
9	88.94	423.04	0.0350
10	98.83	421.80	0.0350
11	108.71	420.78	0.0350
12	118.59	419.55	0.0350
13	128.47	417.92	0.0350
14	138.36	416.02	0.0350
15	148.24	414.24	0.0350
16	158.12	412.66	0.0350
17	168.00	410.89	0.0350
18	177.89	409.16	0.0350
19	187.66	407.74	0.0350
20	197.43	406.58	0.0350
21	207.20	405.65	0.0350
22	216.97	404.73	0.0350
23	226.74	404.11	0.0350
24	236.51	403.05	0.0350
25	246.28	402.18	0.0350
26	256.05	401.65	0.0350
27	265.83	400.56	0.0350
28	275.60	400.80	0.0350
29	285.37	401.28	0.0350
30	295.14	402.04	0.0350
31	304.91	402.52	0.0350
32	314.68	403.03	0.0350
33	324.45	403.70	0.0350
34	334.22	406.08	0.0350
35	343.99	408.76	0.0350
36	353.76	410.93	0.0350
37	363.54	413.01	0.0350
38	373.31	415.04	0.0350
39	383.08	416.88	0.0350
40	392.85	418.06	0.0350
41	402.62	419.21	0.0350
42	412.39	420.21	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
43	421.60	421.16	0.0350
44	430.81	422.34	0.0350
45	440.02	423.08	0.0350
46	449.23	423.59	0.0350
47	458.44	424.20	0.0350
48	467.65	424.77	0.0350
49	476.86	425.25	0.0350
50	486.07	425.39	0.0350
51	495.28	425.89	0.0350

Comment:

Channel Cross Section: XS-204

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	447.26	0.0350
1	9.98	446.64	0.0350
2	19.95	446.04	0.0350
3	29.93	445.42	0.0350
4	39.90	444.81	0.0350
5	49.88	444.29	0.0350
6	59.86	443.94	0.0350
7	69.83	443.29	0.0350
8	79.81	442.75	0.0350
9	89.79	442.15	0.0350
10	99.76	441.32	0.0350
11	109.74	440.90	0.0350
12	119.71	440.66	0.0350
13	129.69	440.26	0.0350
14	139.67	439.97	0.0350
15	149.64	439.63	0.0350
16	159.62	439.36	0.0350
17	169.60	439.16	0.0350
18	179.57	439.12	0.0350
19	189.55	439.20	0.0350
20	199.52	439.24	0.0350
21	209.50	438.85	0.0350
22	219.48	438.39	0.0350
23	229.45	437.82	0.0350
24	239.43	436.92	0.0350
25	249.41	435.82	0.0350
26	259.38	435.26	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
27	269.36	434.84	0.0350
28	279.33	434.84	0.0350
29	289.31	434.74	0.0350
30	299.29	434.30	0.0350
31	309.26	433.80	0.0350
32	319.24	433.14	0.0350
33	329.22	432.83	0.0350
34	339.19	432.40	0.0350
35	349.17	431.68	0.0350
36	359.14	430.73	0.0350
37	369.12	430.56	0.0350
38	379.10	430.05	0.0350
39	389.07	429.72	0.0350
40	399.05	429.10	0.0350
41	409.03	428.93	0.0350
42	419.00	428.25	0.0350
43	428.98	427.72	0.0350
44	438.95	427.22	0.0350
45	448.93	426.73	0.0350
46	458.91	426.04	0.0350
47	468.88	425.37	0.0350
48	478.86	424.80	0.0350
49	488.84	423.87	0.0350
50	498.81	423.22	0.0350
51	508.79	422.69	0.0350
52	518.76	422.18	0.0350
53	528.74	421.78	0.0350
54	538.72	421.29	0.0350
55	548.69	420.56	0.0350
56	558.66	419.82	0.0350
57	568.63	419.28	0.0350
58	578.60	418.82	0.0350
59	588.57	418.37	0.0350
60	598.53	418.20	0.0350
61	608.50	417.71	0.0350
62	618.47	417.46	0.0350
63	628.44	417.60	0.0350
64	638.41	416.94	0.0350
65	648.38	416.01	0.0350
66	658.35	414.90	0.0350
67	668.32	412.58	0.0350
68	678.29	410.82	0.0350
69	688.26	409.63	0.0350
70	698.23	408.54	0.0350
71	708.20	408.00	0.0350
72	718.17	407.52	0.0350
73	728.14	406.79	0.0350
74	738.11	406.17	0.0350
75	748.08	405.52	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
76	758.05	405.32	0.0350
77	768.02	405.00	0.0350
78	777.99	404.55	0.0350
79	787.96	404.40	0.0350
80	797.93	404.35	0.0350
81	807.90	403.76	0.0350
82	817.87	403.49	0.0350
83	827.84	405.04	0.0350
84	837.81	405.63	0.0350
85	847.78	406.16	0.0350
86	857.75	407.54	0.0350
87	867.72	409.53	0.0350
88	877.69	412.33	0.0350
89	887.66	415.17	0.0350
90	897.63	418.94	0.0350
91	907.60	423.13	0.0350
92	917.57	426.75	0.0350
93	927.54	429.61	0.0350
94	937.51	432.10	0.0350
95	947.47	433.97	0.0350
96	957.44	434.99	0.0350
97	967.41	436.25	0.0350
98	977.38	436.90	0.0350
99	987.35	437.67	0.0350
100	997.32	437.75	0.0350
101	1007.18	437.99	0.0350
102	1017.03	438.19	0.0350
103	1026.89	438.43	0.0350
104	1036.74	438.99	0.0350
105	1046.60	439.94	0.0350
106	1056.45	440.60	0.0350
107	1066.30	441.44	0.0350
108	1076.16	442.03	0.0350
109	1086.01	442.57	0.0350
110	1095.87	443.34	0.0350
111	1105.72	444.20	0.0350
112	1115.58	445.02	0.0350
113	1125.43	445.77	0.0350

Comment:

Channel Cross Section: XS-205

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	444.07	0.0350
1	9.90	443.17	0.0350
2	19.81	442.40	0.0350
3	29.71	441.27	0.0350
4	39.61	440.07	0.0350
5	49.51	439.01	0.0350
6	59.42	438.00	0.0350
7	69.32	436.85	0.0350
8	79.22	435.43	0.0350
9	89.12	434.34	0.0350
10	99.03	433.44	0.0350
11	108.93	432.33	0.0350
12	118.83	431.05	0.0350
13	128.73	429.55	0.0350
14	138.64	428.28	0.0350
15	148.54	426.42	0.0350
16	158.44	424.49	0.0350
17	168.34	422.82	0.0350
18	178.25	421.34	0.0350
19	188.15	419.48	0.0350
20	197.78	417.73	0.0350
21	207.41	416.13	0.0350
22	217.03	414.52	0.0350
23	226.66	412.92	0.0350
24	236.29	411.59	0.0350
25	245.92	410.77	0.0350
26	255.55	410.26	0.0350
27	265.18	409.85	0.0350
28	274.80	409.74	0.0350
29	284.43	409.89	0.0350
30	294.06	408.31	0.0350
31	303.69	408.63	0.0350
32	313.32	411.26	0.0350
33	322.94	411.82	0.0350
34	332.57	413.03	0.0350
35	342.20	414.86	0.0350
36	351.83	417.46	0.0350
37	361.46	419.96	0.0350
38	371.09	422.16	0.0350
39	380.73	424.24	0.0350
40	390.36	425.47	0.0350
41	399.99	426.24	0.0350
42	409.63	427.37	0.0350
43	419.26	429.59	0.0350
44	428.90	430.27	0.0350
45	438.53	431.71	0.0350
46	448.16	432.53	0.0350
47	457.80	433.13	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
48	467.43	434.03	0.0350
49	477.07	434.90	0.0350
50	486.70	435.35	0.0350
51	496.33	436.01	0.0350
52	505.97	436.78	0.0350
53	515.60	437.41	0.0350
54	525.24	438.33	0.0350
55	534.87	439.06	0.0350
56	544.50	439.78	0.0350
57	554.14	440.44	0.0350
58	563.77	440.64	0.0350
59	573.41	440.81	0.0350
60	583.04	441.13	0.0350
61	592.80	441.47	0.0350
62	602.56	441.80	0.0350
63	612.32	442.10	0.0350
64	622.09	442.48	0.0350
65	631.85	442.65	0.0350
66	641.61	442.88	0.0350
67	651.37	443.10	0.0350
68	661.13	443.40	0.0350
69	670.89	444.24	0.0350
70	680.65	444.72	0.0350
71	690.41	445.07	0.0350

Comment:

Channel Cross Section: XS-206

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	447.02	0.0350
1	9.88	446.65	0.0350
2	19.77	446.19	0.0350
3	29.65	445.64	0.0350
4	39.53	445.28	0.0350
5	49.42	444.97	0.0350
6	59.30	444.63	0.0350
7	69.19	444.58	0.0350
8	79.07	444.10	0.0350
9	88.95	443.37	0.0350
10	98.84	442.86	0.0350
11	108.72	442.21	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
12	118.60	441.89	0.0350
13	128.49	441.74	0.0350
14	138.37	441.23	0.0350
15	148.26	441.42	0.0350
16	158.14	440.90	0.0350
17	168.02	440.50	0.0350
18	177.91	440.32	0.0350
19	187.79	439.62	0.0350
20	197.67	438.96	0.0350
21	207.56	438.40	0.0350
22	217.44	438.04	0.0350
23	227.33	437.23	0.0350
24	237.21	436.56	0.0350
25	247.09	435.91	0.0350
26	256.98	435.44	0.0350
27	266.86	434.80	0.0350
28	276.74	434.02	0.0350
29	286.63	432.96	0.0350
30	296.51	431.79	0.0350
31	306.40	430.99	0.0350
32	316.28	429.75	0.0350
33	326.16	428.48	0.0350
34	336.05	427.50	0.0350
35	345.93	426.68	0.0350
36	355.81	425.87	0.0350
37	365.70	425.15	0.0350
38	375.58	424.58	0.0350
39	385.46	423.88	0.0350
40	395.35	423.25	0.0350
41	405.23	422.37	0.0350
42	415.12	421.68	0.0350
43	425.00	420.97	0.0350
44	434.88	420.42	0.0350
45	444.77	420.02	0.0350
46	454.65	419.24	0.0350
47	464.54	418.61	0.0350
48	474.43	418.25	0.0350
49	484.31	418.01	0.0350
50	494.20	417.85	0.0350
51	504.09	416.66	0.0350
52	513.97	415.13	0.0350
53	523.86	413.87	0.0350
54	533.75	413.11	0.0350
55	543.63	412.25	0.0350
56	553.52	411.44	0.0350
57	563.41	410.87	0.0350
58	573.29	410.21	0.0350
59	583.18	409.90	0.0350
60	593.06	409.79	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
61	602.95	409.84	0.0350
62	612.84	409.68	0.0350
63	622.72	409.71	0.0350
64	632.61	409.94	0.0350
65	642.50	409.94	0.0350
66	652.38	410.05	0.0350
67	662.27	409.89	0.0350
68	672.16	408.62	0.0350
69	682.04	410.26	0.0350
70	691.93	412.07	0.0350
71	701.82	413.37	0.0350
72	711.70	415.19	0.0350
73	721.59	417.46	0.0350
74	731.48	419.98	0.0350
75	741.36	422.53	0.0350
76	751.25	425.06	0.0350
77	761.09	427.70	0.0350
78	770.94	430.26	0.0350
79	780.79	432.41	0.0350
80	790.63	434.56	0.0350
81	800.48	436.01	0.0350
82	810.32	437.84	0.0350
83	820.17	439.13	0.0350
84	830.01	439.99	0.0350
85	839.86	441.05	0.0350
86	849.70	442.24	0.0350
87	859.55	443.05	0.0350
88	869.40	443.84	0.0350
89	879.24	444.45	0.0350
90	889.09	444.64	0.0350
91	898.93	444.87	0.0350
92	908.78	445.18	0.0350
93	918.62	445.63	0.0350
94	928.47	446.21	0.0350
95	938.31	446.66	0.0350
96	948.16	446.95	0.0350
97	958.01	447.46	0.0350

Comment:

Channel Cross Section: XS-207

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	436.19	0.0350
1	9.72	435.96	0.0350
2	19.44	435.54	0.0350
3	29.16	434.85	0.0350
4	38.88	434.98	0.0350
5	48.60	434.73	0.0350
6	58.32	434.39	0.0350
7	68.04	434.11	0.0350
8	77.76	433.98	0.0350
9	87.48	433.93	0.0350
10	97.25	433.83	0.0350
11	107.01	433.77	0.0350
12	116.78	433.68	0.0350
13	126.55	433.51	0.0350
14	136.31	433.38	0.0350
15	146.08	433.27	0.0350
16	155.85	433.12	0.0350
17	165.61	432.97	0.0350
18	175.38	432.78	0.0350
19	185.15	432.46	0.0350
20	194.91	432.19	0.0350
21	204.68	432.23	0.0350
22	214.45	432.04	0.0350
23	224.21	432.02	0.0350
24	233.98	431.91	0.0350
25	243.75	431.83	0.0350
26	253.58	431.51	0.0350
27	263.42	431.15	0.0350
28	273.26	430.60	0.0350
29	283.09	429.92	0.0350
30	292.93	429.09	0.0350
31	302.77	428.40	0.0350
32	312.60	427.70	0.0350
33	322.44	426.96	0.0350
34	332.28	425.73	0.0350
35	342.11	424.25	0.0350
36	351.95	423.44	0.0350
37	361.79	422.79	0.0350
38	371.63	422.52	0.0350
39	381.46	422.16	0.0350
40	391.30	421.40	0.0350
41	401.14	420.61	0.0350
42	410.97	420.09	0.0350
43	420.81	419.80	0.0350
44	430.65	419.72	0.0350
45	440.48	419.62	0.0350
46	450.32	419.26	0.0350
47	460.15	418.87	0.0350
48	469.98	418.65	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
49	479.81	419.04	0.0350
50	489.64	418.02	0.0350
51	499.47	417.35	0.0350
52	509.31	418.85	0.0350
53	519.14	420.83	0.0350
54	528.97	423.84	0.0350
55	538.80	427.93	0.0350
56	548.63	432.22	0.0350
57	558.46	436.03	0.0350
58	568.29	438.85	0.0350
59	578.12	441.01	0.0350
60	587.95	442.82	0.0350
61	597.78	444.07	0.0350
62	607.61	445.02	0.0350
63	617.45	445.70	0.0350
64	627.28	445.71	0.0350
65	636.06	446.05	0.0350
66	644.85	446.24	0.0350
67	653.64	446.28	0.0350
68	662.43	446.53	0.0350
69	671.22	446.92	0.0350

Comment:

Channel Cross Section: XS-208

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	458.76	0.0350
1	9.38	458.51	0.0350
2	18.76	457.99	0.0350
3	28.14	456.57	0.0350
4	37.52	455.36	0.0350
5	46.90	453.69	0.0350
6	56.28	451.34	0.0350
7	65.66	449.70	0.0350
8	75.04	448.46	0.0350
9	84.42	447.12	0.0350
10	94.29	445.54	0.0350
11	104.17	446.05	0.0350
12	114.04	448.52	0.0350
13	123.92	450.27	0.0350
14	133.80	450.66	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
15	143.67	451.14	0.0350
16	153.55	451.45	0.0350
17	163.42	451.89	0.0350
18	173.30	452.48	0.0350
19	182.45	453.31	0.0350
20	191.60	454.51	0.0350
21	200.75	456.09	0.0350
22	209.90	457.36	0.0350
23	219.05	458.08	0.0350
24	228.20	459.03	0.0350
25	237.35	459.68	0.0350

Comment:

Channel Cross Section: XS-209

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	459.41	0.0350
1	8.89	458.11	0.0350
2	17.78	456.14	0.0350
3	26.68	454.06	0.0350
4	35.57	452.62	0.0350
5	44.46	451.82	0.0350
6	53.35	450.81	0.0350
7	62.25	450.59	0.0350
8	71.14	450.40	0.0350
9	80.03	450.31	0.0350
10	89.16	450.62	0.0350
11	98.29	451.13	0.0350
12	107.42	452.07	0.0350
13	116.55	453.63	0.0350
14	125.68	455.24	0.0350
15	134.81	456.64	0.0350
16	143.94	458.43	0.0350

Comment:

Channel Cross Section: XS-210

Scenario: Proposed
Lid: No

Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	454.13	0.0350
1	9.70	454.11	0.0350
2	19.39	454.37	0.0350
3	29.09	453.84	0.0350
4	38.78	449.63	0.0350
5	48.48	447.50	0.0350
6	58.18	446.84	0.0350
7	67.87	446.79	0.0350
8	77.57	446.43	0.0350
9	87.26	446.16	0.0350
10	96.96	446.46	0.0350
11	106.66	446.37	0.0350
12	116.22	446.32	0.0350
13	125.78	446.14	0.0350
14	135.35	446.23	0.0350
15	144.91	446.74	0.0350
16	154.47	447.78	0.0350
17	164.04	449.27	0.0350
18	173.60	451.47	0.0350
19	183.16	454.54	0.0350
20	192.73	458.03	0.0350
21	202.29	461.50	0.0350

Comment:

Channel Cross Section: XS-215

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	483.69	0.0350
1	9.44	482.74	0.0350
2	18.88	481.97	0.0350
3	28.33	481.24	0.0350
4	37.77	480.43	0.0350
5	47.21	479.17	0.0350
6	56.65	477.50	0.0350
7	66.09	476.10	0.0350
8	75.54	475.30	0.0350
9	84.98	474.42	0.0350
10	94.42	473.84	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
11	103.86	473.84	0.0350
12	113.30	473.39	0.0350
13	122.75	472.91	0.0350
14	132.19	472.26	0.0350
15	142.05	471.63	0.0350
16	151.92	472.09	0.0350
17	161.79	473.82	0.0350
18	171.66	475.59	0.0350
19	181.52	477.25	0.0350
20	191.39	478.55	0.0350
21	201.26	479.53	0.0350
22	211.13	481.03	0.0350
23	220.99	482.17	0.0350
24	230.86	482.94	0.0350
25	240.73	483.51	0.0350
26	250.60	484.27	0.0350
27	260.46	485.51	0.0350
28	270.33	486.57	0.0350

Comment:

Channel Cross Section: XS-216

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	491.29	0.0350
1	9.69	490.28	0.0350
2	19.38	489.13	0.0350
3	29.07	487.10	0.0350
4	38.76	485.56	0.0350
5	48.45	483.84	0.0350
6	58.14	482.36	0.0350
7	67.83	481.42	0.0350
8	77.52	480.39	0.0350
9	87.21	480.02	0.0350
10	96.90	480.99	0.0350
11	106.59	481.66	0.0350
12	116.28	482.01	0.0350
13	125.97	482.16	0.0350
14	135.79	482.72	0.0350
15	145.62	483.43	0.0350
16	155.44	484.50	0.0350
17	165.26	485.84	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
18	175.08	487.02	0.0350
19	184.90	488.24	0.0350
20	194.72	489.98	0.0350

Comment:

Weir Cross Section: XS-23

Scenario: Proposed
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	416.59
1	9.48	416.02
2	18.96	415.90
3	28.44	415.64
4	37.93	415.02
5	47.41	414.98
6	56.89	414.92
7	66.37	414.18
8	75.85	413.41
9	85.33	412.61
10	94.82	411.77
11	104.30	410.49
12	113.75	409.07
13	123.21	407.66
14	132.66	406.21
15	142.12	405.18
16	151.58	404.67
17	161.03	403.97
18	170.49	403.26
19	179.94	402.70
20	189.40	402.38
21	198.85	402.19
22	208.31	402.04
23	217.76	401.96
24	227.34	402.03
25	236.92	402.50
26	246.50	403.80
27	256.08	404.47
28	265.94	404.74
29	275.79	405.01
30	285.64	404.90
31	295.49	405.06
32	305.35	404.89
33	315.20	405.17

Order	Station [ft]	Elevation [ft]
34	325.05	404.90
35	334.90	405.20
36	344.76	404.81
37	354.61	404.99
38	364.46	404.87
39	374.31	404.95
40	384.17	404.62
41	394.02	404.86
42	403.87	404.76
43	413.72	404.84
44	423.58	404.64
45	433.43	404.55
46	443.28	404.74
47	453.13	404.71
48	462.99	404.69
49	472.31	404.33
50	481.62	404.41
51	490.94	404.10
52	500.26	404.38
53	509.58	404.23
54	518.90	404.97
55	528.22	407.74
56	537.54	410.67
57	546.86	412.50
58	555.81	413.44
59	564.77	414.46
60	573.73	415.12
61	582.68	415.43
62	591.64	415.85
63	600.60	416.31
64	609.55	416.79
65	618.51	417.14
66	627.18	417.55
67	635.84	418.18
68	644.51	418.68
69	653.18	419.41
70	661.85	420.08

Comment:

Channel Cross Section: XS-2a_DA

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	373.21	0.0500
1	9.92	371.31	0.0500
2	19.84	369.61	0.0500
3	29.76	367.72	0.0500
4	39.67	365.85	0.0500
5	49.59	363.76	0.0500
6	59.51	361.32	0.0500
7	69.43	358.74	0.0500
8	79.35	355.37	0.0500
9	89.27	352.18	0.0500
10	99.19	350.26	0.0500
11	109.10	349.79	0.0500
12	119.02	349.49	0.0500
13	125.00	346.98	0.0500
14	135.00	346.98	0.0500
15	138.86	348.94	0.0500
16	148.78	349.51	0.0500
17	158.70	349.43	0.0500
18	168.62	349.48	0.0500
19	178.53	349.24	0.0500
20	188.45	349.34	0.0500
21	198.37	349.74	0.0500
22	208.29	350.25	0.0500
23	218.21	350.69	0.0500
24	228.13	351.13	0.0500
25	238.05	351.45	0.0500
26	247.97	351.85	0.0500
27	257.88	352.09	0.0500
28	267.80	352.44	0.0500
29	277.72	352.72	0.0500
30	287.64	352.94	0.0500
31	297.59	353.26	0.0500
32	307.54	353.96	0.0500
33	317.48	354.20	0.0500
34	327.43	354.31	0.0500
35	337.38	354.87	0.0500
36	347.33	356.01	0.0500
37	357.27	356.38	0.0500
38	367.22	356.90	0.0500
39	377.17	357.64	0.0500
40	387.12	358.48	0.0500
41	397.07	359.26	0.0500
42	407.01	359.84	0.0500
43	416.96	360.57	0.0500
44	426.91	361.31	0.0500
45	436.86	362.18	0.0500
46	446.80	363.16	0.0500
47	456.75	364.48	0.0500
48	466.70	365.84	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
49	476.65	367.51	0.0500
50	486.60	369.00	0.0500
51	496.54	370.44	0.0500
52	506.49	371.87	0.0500
53	516.44	373.17	0.0500
54	526.39	374.47	0.0500

Comment:

Channel Cross Section: XS-2b_DA

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	361.29	0.0500
1	9.89	360.12	0.0500
2	19.78	359.02	0.0500
3	29.67	357.79	0.0500
4	39.56	356.45	0.0500
5	49.45	355.37	0.0500
6	59.34	354.30	0.0500
7	69.23	352.95	0.0500
8	79.12	351.93	0.0500
9	89.01	350.38	0.0500
10	98.90	349.21	0.0500
11	108.79	348.59	0.0500
12	118.69	348.06	0.0500
13	128.58	347.58	0.0500
14	138.47	346.88	0.0500
15	148.36	346.38	0.0500
16	158.25	345.85	0.0500
17	168.14	345.54	0.0500
18	178.03	345.10	0.0500
19	187.92	344.67	0.0500
20	197.81	344.32	0.0500
21	207.70	344.04	0.0500
22	217.59	343.70	0.0500
23	227.48	343.43	0.0500
24	237.37	343.15	0.0500
25	247.26	342.84	0.0500
26	257.15	343.05	0.0500
27	267.04	342.79	0.0500
28	276.93	342.65	0.0500
29	286.82	342.58	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
30	296.71	342.52	0.0500
31	306.60	342.33	0.0500
32	316.49	342.38	0.0500
33	326.38	342.05	0.0500
34	336.27	341.86	0.0500
35	346.16	341.21	0.0500
36	356.06	341.02	0.0500
37	365.95	340.88	0.0500
38	375.84	340.57	0.0500
39	385.73	340.70	0.0500
40	395.62	340.85	0.0500
41	405.51	340.67	0.0500
42	415.40	341.03	0.0500
43	425.29	340.41	0.0500
44	435.18	340.16	0.0500
45	445.07	340.26	0.0500
46	454.72	340.21	0.0500
47	464.37	340.37	0.0500
48	474.02	340.40	0.0500
49	483.67	340.37	0.0500
50	493.32	340.05	0.0500
51	498.00	336.81	0.0500
52	508.00	336.81	0.0500
53	512.63	338.40	0.0500
54	522.47	340.34	0.0500
55	532.31	340.20	0.0500
56	542.15	340.36	0.0500
57	551.99	340.54	0.0500
58	561.83	340.70	0.0500
59	571.67	340.67	0.0500
60	581.51	340.55	0.0500
61	591.36	340.90	0.0500
62	601.20	340.59	0.0500
63	611.04	340.53	0.0500
64	620.88	340.61	0.0500
65	630.72	340.68	0.0500
66	640.56	340.51	0.0500
67	650.40	340.55	0.0500
68	660.24	341.02	0.0500
69	670.08	342.64	0.0500
70	679.92	345.04	0.0500
71	689.77	347.26	0.0500
72	699.61	348.97	0.0500
73	709.45	350.26	0.0500
74	719.29	350.93	0.0500
75	729.13	351.32	0.0500
76	738.97	351.69	0.0500
77	748.81	351.96	0.0500
78	758.65	351.99	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
79	768.49	352.22	0.0500
80	778.34	352.35	0.0500
81	788.18	352.45	0.0500
82	798.02	352.52	0.0500
83	807.86	352.78	0.0500
84	817.69	353.10	0.0500
85	827.53	353.45	0.0500
86	837.37	353.71	0.0500
87	847.21	354.01	0.0500
88	857.05	354.22	0.0500
89	866.88	354.82	0.0500
90	876.72	354.95	0.0500
91	886.56	355.18	0.0500
92	896.40	355.98	0.0500
93	906.24	356.11	0.0500
94	916.07	355.96	0.0500
95	925.91	355.93	0.0500
96	935.75	356.21	0.0500
97	945.59	356.68	0.0500
98	955.43	357.07	0.0500
99	965.26	357.07	0.0500
100	975.10	357.50	0.0500
101	984.94	357.92	0.0500
102	994.78	357.94	0.0500
103	1004.61	358.29	0.0500
104	1014.45	358.46	0.0500
105	1024.29	358.90	0.0500
106	1034.13	359.15	0.0500
107	1043.97	359.42	0.0500
108	1053.80	359.81	0.0500
109	1063.64	360.28	0.0500

Comment:

Channel Cross Section: XS-301

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	411.79	0.0350
1	9.86	410.81	0.0350
2	19.71	410.29	0.0350
3	29.57	409.34	0.0350
4	39.42	408.38	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
5	49.28	407.75	0.0350
6	59.13	407.15	0.0350
7	68.99	406.55	0.0350
8	78.84	405.70	0.0350
9	88.70	404.63	0.0350
10	98.55	403.67	0.0350
11	108.41	402.99	0.0350
12	118.26	402.30	0.0350
13	128.12	401.56	0.0350
14	137.97	400.89	0.0350
15	147.83	399.92	0.0350
16	157.68	399.14	0.0350
17	167.54	398.53	0.0350
18	177.40	397.55	0.0350
19	187.25	396.86	0.0350
20	197.11	396.16	0.0350
21	206.96	395.22	0.0350
22	216.82	394.71	0.0350
23	226.67	393.93	0.0350
24	236.53	392.97	0.0350
25	246.38	391.92	0.0350
26	256.24	390.93	0.0350
27	266.09	390.17	0.0350
28	275.95	389.42	0.0350
29	285.80	388.76	0.0350
30	295.66	387.84	0.0350
31	305.51	386.68	0.0350
32	315.37	385.21	0.0350
33	325.22	384.55	0.0350
34	335.08	383.71	0.0350
35	344.94	382.70	0.0350
36	354.79	381.38	0.0350
37	364.65	380.52	0.0350
38	374.50	379.37	0.0350
39	384.41	378.32	0.0350
40	394.32	377.57	0.0350
41	404.24	376.56	0.0350
42	414.15	375.85	0.0350
43	424.06	375.45	0.0350
44	433.97	375.18	0.0350
45	443.88	375.09	0.0350
46	453.80	374.92	0.0350
47	463.71	374.61	0.0350
48	473.62	374.62	0.0350
49	483.53	375.11	0.0350
50	493.44	375.29	0.0350
51	503.35	375.24	0.0350
52	513.27	374.38	0.0350
53	523.18	374.13	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
54	533.09	376.11	0.0350
55	543.00	376.98	0.0350
56	552.91	377.52	0.0350
57	562.82	378.10	0.0350
58	572.74	378.59	0.0350
59	582.65	379.29	0.0350
60	592.56	380.21	0.0350
61	602.47	381.50	0.0350
62	612.38	382.79	0.0350
63	622.29	383.92	0.0350
64	632.21	385.35	0.0350
65	642.12	386.70	0.0350
66	652.03	388.07	0.0350
67	661.94	389.32	0.0350
68	671.85	389.96	0.0350
69	681.77	391.43	0.0350
70	691.68	392.52	0.0350
71	701.59	393.47	0.0350
72	711.50	393.95	0.0350
73	721.41	395.49	0.0350
74	731.32	397.41	0.0350
75	741.24	398.93	0.0350
76	751.15	400.69	0.0350
77	761.06	402.45	0.0350
78	770.97	404.26	0.0350
79	780.88	406.69	0.0350
80	790.79	408.54	0.0350
81	800.71	410.36	0.0350
82	810.62	412.07	0.0350
83	820.53	413.65	0.0350

Comment:

Channel Cross Section: XS-3A

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	488.19	0.0350
1	9.92	488.56	0.0350
2	19.85	487.80	0.0350
3	29.77	487.08	0.0350
4	39.69	486.23	0.0350
5	49.61	485.29	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
6	59.54	484.32	0.0350
7	69.46	484.33	0.0350
8	79.38	482.82	0.0350
9	89.31	481.87	0.0350
10	99.23	481.26	0.0350
11	109.15	480.49	0.0350
12	119.07	479.15	0.0350
13	129.00	478.14	0.0350
14	138.92	476.81	0.0350
15	148.84	475.66	0.0350
16	158.76	474.56	0.0350
17	168.69	473.49	0.0350
18	178.61	472.21	0.0350
19	188.53	471.03	0.0350
20	198.46	469.70	0.0350
21	208.38	468.45	0.0350
22	218.30	467.12	0.0350
23	228.22	465.79	0.0350
24	238.15	464.76	0.0350
25	248.07	463.55	0.0350
26	257.99	462.47	0.0350
27	267.92	461.07	0.0350
28	277.84	459.17	0.0350
29	287.76	457.35	0.0350
30	297.68	455.35	0.0350
31	307.61	452.17	0.0350
32	317.53	447.95	0.0350
33	327.45	442.87	0.0350
34	337.37	437.76	0.0350
35	347.30	434.03	0.0350
36	357.22	436.40	0.0350
37	367.14	436.37	0.0350
38	377.07	435.96	0.0350
39	386.99	436.27	0.0350
40	396.91	436.69	0.0350
41	406.83	436.68	0.0350
42	416.76	437.12	0.0350
43	426.68	437.09	0.0350
44	436.60	437.27	0.0350
45	446.53	437.86	0.0350
46	456.45	438.21	0.0350
47	466.37	438.73	0.0350
48	476.29	438.75	0.0350
49	486.22	439.51	0.0350
50	496.14	439.91	0.0350
51	506.06	440.21	0.0350
52	515.98	440.08	0.0350
53	525.91	441.00	0.0350
54	535.83	441.90	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
55	545.75	442.58	0.0350
56	555.68	443.54	0.0350
57	565.60	444.63	0.0350
58	575.52	445.62	0.0350
59	585.44	446.67	0.0350
60	595.37	447.44	0.0350
61	605.29	448.35	0.0350
62	615.21	449.49	0.0350
63	625.14	450.64	0.0350
64	635.06	451.50	0.0350
65	644.98	452.52	0.0350
66	654.90	453.34	0.0350
67	664.83	454.08	0.0350
68	674.75	454.47	0.0350
69	684.67	455.08	0.0350
70	694.59	455.86	0.0350
71	704.52	456.74	0.0350
72	714.44	457.29	0.0350
73	724.36	457.73	0.0350
74	734.29	458.15	0.0350
75	744.21	458.66	0.0350
76	754.13	459.13	0.0350
77	764.05	459.80	0.0350
78	773.98	460.81	0.0350
79	783.90	461.79	0.0350
80	793.43	462.65	0.0350
81	802.96	463.77	0.0350
82	812.49	465.18	0.0350
83	822.02	466.16	0.0350

Comment:

Channel Cross Section: XS-5A

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	433.16	0.0350
1	9.92	433.51	0.0350
2	19.83	433.89	0.0350
3	29.75	434.28	0.0350
4	39.67	434.55	0.0350
5	49.58	434.74	0.0350
6	59.50	434.59	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
7	69.42	434.48	0.0350
8	79.33	434.25	0.0350
9	89.25	433.99	0.0350
10	99.17	433.64	0.0350
11	109.08	433.26	0.0350
12	119.00	432.70	0.0350
13	128.92	432.02	0.0350
14	138.83	431.30	0.0350
15	148.75	430.37	0.0350
16	158.67	429.49	0.0350
17	168.58	428.51	0.0350
18	178.50	427.55	0.0350
19	188.42	426.71	0.0350
20	198.33	425.75	0.0350
21	208.25	425.00	0.0350
22	218.17	423.91	0.0350
23	228.08	422.05	0.0350
24	238.00	420.33	0.0350
25	247.92	418.28	0.0350
26	257.83	416.02	0.0350
27	267.75	413.45	0.0350
28	277.67	410.93	0.0350
29	287.58	408.64	0.0350
30	297.50	406.73	0.0350
31	307.42	405.26	0.0350
32	317.33	404.33	0.0350
33	327.25	403.86	0.0350
34	337.17	403.58	0.0350
35	347.08	403.26	0.0350
36	357.00	402.35	0.0350
37	366.92	401.86	0.0350
38	376.83	401.98	0.0350
39	386.75	402.06	0.0350
40	396.67	402.19	0.0350
41	406.58	402.13	0.0350
42	416.50	402.19	0.0350
43	426.42	402.21	0.0350
44	436.33	401.59	0.0350
45	446.25	400.96	0.0350
46	456.17	401.19	0.0350
47	466.08	402.57	0.0350
48	476.00	404.39	0.0350
49	485.92	406.78	0.0350
50	495.83	409.69	0.0350
51	505.75	412.62	0.0350
52	515.67	415.14	0.0350
53	525.58	417.33	0.0350
54	535.50	419.05	0.0350
55	545.42	420.23	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
56	555.33	421.31	0.0350
57	565.25	422.48	0.0350
58	575.17	423.12	0.0350
59	585.08	423.55	0.0350
60	595.00	423.98	0.0350
61	604.92	424.13	0.0350
62	614.83	424.43	0.0350
63	624.75	424.80	0.0350
64	634.67	424.96	0.0350
65	644.58	425.09	0.0350
66	654.50	425.46	0.0350
67	664.42	425.97	0.0350
68	674.33	427.83	0.0350
69	684.25	429.30	0.0350
70	694.17	431.14	0.0350
71	704.08	432.41	0.0350
72	714.00	433.74	0.0350
73	723.92	434.73	0.0350
74	733.83	435.91	0.0350
75	743.75	437.55	0.0350
76	753.67	438.56	0.0350
77	763.58	439.05	0.0350
78	773.50	439.57	0.0350
79	783.42	440.45	0.0350
80	793.33	441.34	0.0350
81	803.25	442.14	0.0350
82	813.17	442.66	0.0350
83	823.08	443.04	0.0350
84	833.00	443.37	0.0350
85	842.92	443.54	0.0350
86	852.83	444.02	0.0350
87	862.75	444.19	0.0350

Comment:

Channel Cross Section: XS-6A

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	425.56	0.0350
1	9.98	424.67	0.0350
2	19.96	423.98	0.0350
3	29.93	423.37	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
4	39.91	422.65	0.0350
5	49.89	421.43	0.0350
6	59.87	420.41	0.0350
7	69.84	419.58	0.0350
8	79.82	418.56	0.0350
9	89.80	417.63	0.0350
10	99.78	416.46	0.0350
11	109.75	415.08	0.0350
12	119.73	414.43	0.0350
13	129.71	413.58	0.0350
14	139.69	412.70	0.0350
15	149.66	411.89	0.0350
16	159.64	410.74	0.0350
17	169.62	409.86	0.0350
18	179.60	409.31	0.0350
19	189.57	408.12	0.0350
20	199.55	407.25	0.0350
21	209.53	406.42	0.0350
22	219.51	405.72	0.0350
23	229.48	404.78	0.0350
24	239.46	403.38	0.0350
25	249.44	401.99	0.0350
26	259.42	400.71	0.0350
27	269.40	399.60	0.0350
28	279.37	398.10	0.0350
29	289.35	396.76	0.0350
30	299.33	395.10	0.0350
31	309.31	393.71	0.0350
32	319.28	392.28	0.0350
33	329.26	390.86	0.0350
34	339.24	389.35	0.0350
35	349.22	387.88	0.0350
36	359.19	386.55	0.0350
37	369.17	385.26	0.0350
38	379.15	384.07	0.0350
39	389.13	382.86	0.0350
40	399.10	381.94	0.0350
41	409.08	380.98	0.0350
42	419.06	380.42	0.0350
43	429.04	380.10	0.0350
44	439.01	379.87	0.0350
45	448.99	379.64	0.0350
46	458.97	379.29	0.0350
47	468.95	378.37	0.0350
48	478.92	377.74	0.0350
49	488.90	378.67	0.0350
50	498.88	379.50	0.0350
51	508.86	379.28	0.0350
52	518.84	378.58	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
53	528.81	378.71	0.0350
54	538.79	378.52	0.0350
55	548.77	378.54	0.0350
56	558.75	378.83	0.0350
57	568.72	379.56	0.0350
58	578.70	380.37	0.0350
59	588.68	381.30	0.0350
60	598.66	382.70	0.0350
61	608.63	384.09	0.0350
62	618.61	384.99	0.0350
63	628.59	386.08	0.0350
64	638.57	386.15	0.0350
65	648.54	386.60	0.0350
66	658.52	387.72	0.0350
67	668.50	388.73	0.0350
68	678.48	389.64	0.0350
69	688.45	390.71	0.0350
70	698.43	391.99	0.0350
71	708.41	393.06	0.0350
72	718.39	393.67	0.0350
73	728.36	395.04	0.0350
74	738.34	396.34	0.0350
75	748.32	397.43	0.0350
76	758.30	398.12	0.0350
77	768.28	398.74	0.0350
78	778.25	399.65	0.0350
79	788.23	400.31	0.0350
80	798.21	400.91	0.0350
81	808.19	401.27	0.0350
82	818.16	401.54	0.0350
83	828.14	401.39	0.0350
84	838.12	402.55	0.0350
85	848.10	403.28	0.0350
86	858.07	403.99	0.0350
87	868.05	404.80	0.0350
88	878.03	405.61	0.0350
89	888.01	406.63	0.0350
90	897.98	407.98	0.0350
91	907.96	409.24	0.0350
92	917.94	410.19	0.0350
93	927.92	411.23	0.0350
94	937.89	412.11	0.0350
95	947.87	413.20	0.0350
96	957.85	413.61	0.0350
97	967.83	414.69	0.0350
98	977.80	415.25	0.0350
99	987.78	415.84	0.0350
100	997.76	416.31	0.0350
101	1007.74	416.50	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
102	1017.71	416.94	0.0350
103	1027.69	417.22	0.0350
104	1037.67	417.39	0.0350
105	1047.65	417.86	0.0350
106	1057.63	418.33	0.0350
107	1067.60	419.01	0.0350
108	1077.58	419.14	0.0350
109	1087.56	419.72	0.0350
110	1097.54	420.40	0.0350
111	1107.51	421.18	0.0350
112	1117.49	422.01	0.0350

Comment:

Channel Cross Section: XS-7A

Scenario: Proposed
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	465.21	0.0350
1	9.77	464.74	0.0350
2	19.55	464.42	0.0350
3	29.32	463.91	0.0350
4	39.10	463.32	0.0350
5	48.87	462.91	0.0350
6	58.65	462.46	0.0350
7	68.42	461.43	0.0350
8	78.19	460.24	0.0350
9	87.97	458.85	0.0350
10	97.74	457.48	0.0350
11	107.52	456.07	0.0350
12	117.29	454.49	0.0350
13	127.07	452.73	0.0350
14	136.84	451.15	0.0350
15	146.61	450.44	0.0350
16	156.39	449.89	0.0350
17	166.16	448.32	0.0350
18	175.94	448.47	0.0350
19	185.71	449.33	0.0350
20	195.49	449.89	0.0350
21	205.26	450.48	0.0350
22	215.03	451.44	0.0350
23	224.81	453.87	0.0350
24	234.58	456.61	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
25	244.36	459.25	0.0350
26	254.13	461.50	0.0350
27	263.90	463.24	0.0350
28	273.68	464.56	0.0350
29	283.45	465.82	0.0350
30	293.23	466.74	0.0350
31	303.00	467.62	0.0350
32	312.78	468.18	0.0350
33	322.55	468.69	0.0350
34	332.32	469.19	0.0350

Comment:

Node Max Conditions [Proposed]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Offsite01	002yr	470.00	436.41	-0.0017	13.59	13.51	1165
Offsite02	002yr	459.00	443.65	-0.0010	8.61	8.61	1597
Outfall_A	002yr	400.00	346.00	0.0000	208.02	0.00	0
Outfall_B	002yr	412.00	378.00	0.0000	30.02	0.00	0
Outfall_C	002yr	390.00	359.57	0.0002	67.88	67.53	17232
Pond-01	002yr	448.70	443.82	0.0003	747.59	8.95	1893943
Pond-02	002yr	466.00	457.86	0.0005	453.92	2.20	765737
Pond-03	002yr	458.50	455.32	0.0004	350.11	10.84	756425
Pond-04	002yr	464.80	460.32	0.0004	206.96	2.63	444282
Pond-05	002yr	493.00	483.44	0.0002	1.69	0.37	85470
Pond-06	002yr	435.00	421.54	0.0004	103.36	1.43	143634
Pond-07	002yr	427.00	420.87	-0.0004	80.27	1.20	97465
Pond-08	002yr	425.00	418.71	-0.0003	6.62	0.17	15275
Pond-09	002yr	445.00	439.63	-0.0003	6.06	0.17	15099
Trib1-00-00	002yr	389.10	348.94	-0.0010	209.06	208.02	60890
Trib1-00-02	002yr	415.00	369.15	0.0006	36.98	36.89	38241
Trib1-00-02b	002yr	425.00	410.76	0.0000	0.17	0.17	4140
Trib1-00-03a	002yr	435.00	394.30	0.0008	36.83	36.83	5949
Trib1-00-03b	002yr	435.00	404.57	0.0010	93.55	36.83	23720
Trib1-00-04	002yr	435.00	404.58	-0.0010	94.53	69.38	20507
Trib1-00-05	002yr	431.00	407.69	0.0008	120.58	94.53	25896
Trib1-00-06	002yr	440.00	418.57	0.0009	65.32	70.45	23350
Trib1-00-07	002yr	433.00	420.58	0.0010	62.99	62.22	2658
Trib1-01-01	002yr	416.63	404.58	0.0010	2.63	2.63	100
Trib1-01-02	002yr	413.39	404.58	-0.0010	1.43	1.70	100
Trib1-01-03	002yr	473.50	427.08	0.0003	21.43	11.92	11865
Trib1-02-01	002yr	455.00	431.81	-0.0010	13.28	11.32	3027
Trib1-04-01	002yr	435.00	429.08	0.0005	6.75	5.13	2883
Trib1-04-02	002yr	445.00	434.13	0.0005	2.21	2.21	1528
Trib1-04-03	002yr	448.84	436.92	-0.0007	2.20	2.21	100
Trib1-05-01a	002yr	431.00	423.58	0.0010	64.97	62.99	8237
Trib1-05-01b	002yr	460.00	437.97	0.0004	49.66	49.30	9600
Trib1-05-02	002yr	458.00	446.82	0.0009	41.28	41.26	3376
Trib1-05-03	002yr	458.00	449.34	0.0006	41.86	41.28	5726
Trib1-05-04	002yr	480.00	470.36	0.0001	10.48	9.62	16113
Trib1-05-05	002yr	483.20	481.91	-0.0002	12.75	10.48	12911
Trib1-05-06	002yr	493.10	489.04	-0.0004	2.08	1.38	4892
Trib1-05-07	002yr	494.75	490.01	-0.0010	2.09	2.08	254
Trib2-00-01	002yr	450.00	386.33	0.0003	29.18	29.17	17239
Trib2-00-02	002yr	430.00	402.40	0.0003	69.65	17.17	279050
Trib2-00-03	002yr	435.00	405.71	-0.0002	47.39	46.75	32379
Trib2-00-04	002yr	450.00	414.87	0.0001	13.60	13.32	45874
Trib2-01-01	002yr	405.00	396.44	0.0001	12.03	12.03	5868
Trib2-02-01	002yr	425.00	413.76	-0.0003	31.47	31.44	4469
Trib2-03-01	002yr	448.70	433.47	0.0002	8.95	8.95	19041
Trib2-04-01	002yr	450.00	419.67	0.0002	11.15	11.47	2379

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib2-04-02	002yr	464.00	442.59	-0.0001	71.12	11.15	275351
Trib2-04-03	002yr	470.00	449.21	-0.0004	1.02	1.02	324
Trib2-04-04	002yr	455.00	450.35	-0.0007	1.02	1.02	187
Trib2-04-05	002yr	470.00	454.17	-0.0003	2.81	2.78	2485
Trib2-04-06	002yr	459.00	455.58	-0.0010	2.84	2.81	329
Trib2-04-07	002yr	452.00	447.69	-0.0002	0.55	0.55	3598
Trib2-04-08	002yr	453.00	448.27	-0.0006	0.55	0.55	465
Trib2-04-10	002yr	483.00	464.05	-0.0003	45.28	35.92	30094
Trib2-04-11	002yr	518.50	515.40	-0.0005	56.84	45.28	28460
Trib3-00-01	002yr	370.00	362.01	-0.0010	135.93	124.61	84966
Trib3-00-02	002yr	390.00	373.77	-0.0010	126.86	135.93	100859
Trib3-00-03	002yr	390.00	380.11	0.0010	135.23	126.86	112761
Trib3-00-04	002yr	423.00	387.65	0.0010	127.81	135.23	77998
Trib3-00-05	002yr	423.00	391.34	-0.0009	127.67	127.66	1540
Trib3-00-06	002yr	425.00	392.77	0.0010	120.69	120.65	3338
Trib3-00-07	002yr	445.00	429.77	0.0000	0.17	0.17	7159
Offsite01	010yr	470.00	437.63	-0.0017	52.15	51.40	3477
Offsite02	010yr	459.00	444.75	-0.0009	38.11	38.09	1597
Outfall_A	010yr	400.00	346.00	0.0000	703.19	0.00	0
Outfall_B	010yr	412.00	378.00	0.0000	140.70	0.00	0
Outfall_C	010yr	390.00	360.19	0.0004	157.43	153.64	68717
Pond-01	010yr	448.70	444.79	-0.0003	1310.53	24.54	1911654
Pond-02	010yr	466.00	459.33	0.0004	730.93	9.84	782145
Pond-03	010yr	458.50	456.25	-0.0004	556.58	26.50	766039
Pond-04	010yr	464.80	461.50	0.0004	338.08	8.83	454588
Pond-05	010yr	493.00	484.51	-0.0003	19.59	2.20	94162
Pond-06	010yr	435.00	423.63	-0.0004	202.91	3.56	152330
Pond-07	010yr	427.00	421.95	-0.0004	145.43	4.51	103123
Pond-08	010yr	425.00	419.76	-0.0004	17.00	0.29	19859
Pond-09	010yr	445.00	440.40	-0.0004	13.48	0.27	19104
Trib1-00-00	010yr	389.10	349.70	-0.0010	703.92	703.19	92234
Trib1-00-02	010yr	415.00	369.64	0.0007	140.48	138.73	76630
Trib1-00-02b	010yr	425.00	410.76	0.0000	0.29	0.29	4328
Trib1-00-03a	010yr	435.00	396.09	0.0010	140.43	140.23	6243
Trib1-00-03b	010yr	435.00	409.60	0.0010	281.51	140.43	34136
Trib1-00-04	010yr	435.00	409.61	-0.0010	200.68	271.37	27731
Trib1-00-05	010yr	431.00	410.64	0.0009	250.31	200.68	60209
Trib1-00-06	010yr	440.00	419.04	0.0008	185.09	183.95	34750
Trib1-00-07	010yr	433.00	420.97	0.0010	179.87	179.86	3907
Trib1-01-01	010yr	416.63	409.65	0.0017	8.83	8.86	100
Trib1-01-02	010yr	413.39	409.61	0.0010	3.56	3.62	100
Trib1-01-03	010yr	473.50	428.23	0.0003	52.46	34.34	14980
Trib1-02-01	010yr	455.00	433.54	-0.0007	35.36	25.91	6998
Trib1-04-01	010yr	435.00	430.11	0.0009	17.93	14.06	4453
Trib1-04-02	010yr	445.00	434.33	0.0005	9.84	9.84	1623
Trib1-04-03	010yr	448.84	437.67	0.0010	9.84	9.84	100
Trib1-05-01a	010yr	431.00	425.20	0.0010	178.11	177.56	8554

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib1-05-01b	010yr	460.00	438.85	-0.0010	152.49	152.19	12731
Trib1-05-02	010yr	458.00	447.44	0.0009	114.57	114.53	4542
Trib1-05-03	010yr	458.00	451.14	-0.0010	116.79	114.57	10530
Trib1-05-04	010yr	480.00	470.59	-0.0002	22.59	21.08	18984
Trib1-05-05	010yr	483.20	482.33	-0.0003	25.80	22.59	15956
Trib1-05-06	010yr	493.10	489.95	0.0003	19.97	15.35	9553
Trib1-05-07	010yr	494.75	491.23	-0.0009	19.97	19.97	301
Trib2-00-01	010yr	450.00	388.13	-0.0010	136.83	135.28	48662
Trib2-00-02	010yr	430.00	403.00	0.0004	215.78	110.46	308186
Trib2-00-03	010yr	435.00	406.42	-0.0010	178.34	172.43	83241
Trib2-00-04	010yr	450.00	415.37	-0.0009	64.54	58.72	101078
Trib2-01-01	010yr	405.00	396.66	-0.0001	31.01	31.00	10077
Trib2-02-01	010yr	425.00	414.39	-0.0003	107.61	107.45	8718
Trib2-03-01	010yr	448.70	433.64	-0.0008	24.54	24.55	37879
Trib2-04-01	010yr	450.00	420.31	0.0003	61.33	62.51	4095
Trib2-04-02	010yr	464.00	442.84	0.0001	170.62	61.33	380219
Trib2-04-03	010yr	470.00	449.64	-0.0002	17.71	17.71	815
Trib2-04-04	010yr	455.00	451.52	-0.0005	17.75	17.71	984
Trib2-04-05	010yr	470.00	454.37	0.0002	17.33	17.25	3185
Trib2-04-06	010yr	459.00	456.50	-0.0005	17.45	17.33	936
Trib2-04-07	010yr	452.00	447.85	-0.0001	11.29	11.26	7191
Trib2-04-08	010yr	453.00	449.13	-0.0004	11.42	11.29	2035
Trib2-04-10	010yr	483.00	464.70	-0.0003	111.69	96.17	39894
Trib2-04-11	010yr	518.50	516.10	-0.0003	128.46	111.69	37321
Trib3-00-01	010yr	370.00	362.92	0.0007	454.85	450.47	123720
Trib3-00-02	010yr	390.00	374.29	0.0006	454.52	454.85	129403
Trib3-00-03	010yr	390.00	380.90	0.0010	463.81	454.52	147990
Trib3-00-04	010yr	423.00	388.21	0.0010	458.67	463.81	104489
Trib3-00-05	010yr	423.00	395.31	-0.0010	458.45	458.43	1540
Trib3-00-06	010yr	425.00	396.73	-0.0010	454.44	446.86	31996
Trib3-00-07	010yr	445.00	429.78	0.0000	0.27	0.27	7158
Offsite01	025yr	470.00	438.36	-0.0017	83.78	80.94	7149
Offsite02	025yr	459.00	445.48	-0.0009	64.44	64.39	1597
Outfall_A	025yr	400.00	346.00	0.0000	1128.11	0.00	0
Outfall_B	025yr	412.00	378.00	0.0000	284.48	0.00	0
Outfall_C	025yr	390.00	360.73	-0.0004	261.13	257.75	77101
Pond-01	025yr	448.70	445.38	-0.0003	1680.39	40.94	1922385
Pond-02	025yr	466.00	460.17	0.0004	909.10	16.34	791508
Pond-03	025yr	458.50	456.86	-0.0003	689.14	40.28	772225
Pond-04	025yr	464.80	462.24	0.0005	422.78	14.12	461080
Pond-05	025yr	493.00	485.16	0.0003	41.32	5.12	99063
Pond-06	025yr	435.00	424.44	0.0004	266.87	7.67	156011
Pond-07	025yr	427.00	422.62	-0.0004	188.71	8.32	106623
Pond-08	025yr	425.00	420.48	-0.0004	24.65	0.35	23004
Pond-09	025yr	445.00	440.93	-0.0004	18.77	0.32	21791
Trib1-00-00	025yr	389.10	350.15	-0.0010	1129.17	1128.11	111450
Trib1-00-02	025yr	415.00	369.95	0.0007	232.64	231.88	86716

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib1-00-02b	025yr	425.00	410.77	0.0000	0.35	0.35	4445
Trib1-00-03a	025yr	435.00	397.42	0.0010	232.47	232.33	6240
Trib1-00-03b	025yr	435.00	410.12	0.0010	405.19	232.47	35172
Trib1-00-04	025yr	435.00	410.12	-0.0010	263.51	388.46	28797
Trib1-00-05	025yr	431.00	412.89	0.0010	347.93	263.51	92029
Trib1-00-06	025yr	440.00	419.48	0.0010	280.62	275.83	50769
Trib1-00-07	025yr	433.00	421.21	0.0010	272.13	272.12	5075
Trib1-01-01	025yr	416.63	410.31	0.0018	14.12	14.13	100
Trib1-01-02	025yr	413.39	410.15	0.0010	7.67	7.70	100
Trib1-01-03	025yr	473.50	428.98	0.0004	75.09	46.48	18341
Trib1-02-01	025yr	455.00	434.60	-0.0010	51.78	31.66	11113
Trib1-04-01	025yr	435.00	430.85	0.0010	26.19	18.75	5785
Trib1-04-02	025yr	445.00	434.47	0.0005	16.34	16.34	1687
Trib1-04-03	025yr	448.84	438.10	-0.0010	16.34	16.34	100
Trib1-05-01a	025yr	431.00	426.21	0.0010	267.01	266.44	8718
Trib1-05-01b	025yr	460.00	439.25	-0.0010	232.23	231.95	13316
Trib1-05-02	025yr	458.00	447.77	0.0009	167.87	167.84	5027
Trib1-05-03	025yr	458.00	452.20	-0.0010	174.34	167.87	20230
Trib1-05-04	025yr	480.00	470.73	-0.0001	31.20	29.15	21444
Trib1-05-05	025yr	483.20	482.56	-0.0002	34.97	31.20	17603
Trib1-05-06	025yr	493.10	490.45	0.0003	37.60	31.36	11697
Trib1-05-07	025yr	494.75	492.30	0.0005	37.62	37.60	302
Trib2-00-01	025yr	450.00	388.51	-0.0010	275.03	273.33	128934
Trib2-00-02	025yr	430.00	403.47	0.0004	358.56	235.87	321576
Trib2-00-03	025yr	435.00	406.81	-0.0010	302.02	296.73	93861
Trib2-00-04	025yr	450.00	415.50	-0.0009	111.90	109.46	111381
Trib2-01-01	025yr	405.00	396.80	-0.0001	48.46	48.46	11319
Trib2-02-01	025yr	425.00	414.78	-0.0009	169.96	169.81	13115
Trib2-03-01	025yr	448.70	433.71	-0.0008	40.93	40.93	39917
Trib2-04-01	025yr	450.00	420.71	-0.0003	109.31	109.28	8930
Trib2-04-02	025yr	464.00	443.00	0.0001	254.47	109.31	442799
Trib2-04-03	025yr	470.00	449.84	-0.0006	33.04	33.04	878
Trib2-04-04	025yr	455.00	453.69	-0.0010	39.92	33.04	5300
Trib2-04-05	025yr	470.00	454.47	-0.0002	30.07	29.98	3720
Trib2-04-06	025yr	459.00	456.86	0.0005	30.18	30.07	1258
Trib2-04-07	025yr	452.00	447.93	0.0001	24.48	24.46	8752
Trib2-04-08	025yr	453.00	450.00	-0.0008	27.20	24.48	7232
Trib2-04-10	025yr	483.00	465.04	-0.0003	158.47	140.48	44970
Trib2-04-11	025yr	518.50	516.48	-0.0004	179.96	158.47	42624
Trib3-00-01	025yr	370.00	363.29	0.0006	717.53	709.87	141004
Trib3-00-02	025yr	390.00	374.59	0.0006	714.36	717.53	141242
Trib3-00-03	025yr	390.00	381.31	-0.0010	720.89	714.36	160469
Trib3-00-04	025yr	423.00	388.54	0.0010	717.88	720.89	112688
Trib3-00-05	025yr	423.00	397.73	-0.0010	717.61	717.59	1690
Trib3-00-06	025yr	425.00	399.15	-0.0010	741.62	703.77	74749
Trib3-00-07	025yr	445.00	429.79	0.0000	0.32	0.32	7159
Offsite01	050yr	470.00	438.95	-0.0017	112.00	105.27	10728

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Offsite02	050yr	459.00	446.07	-0.0010	88.71	88.66	1774
Outfall_A	050yr	400.00	346.00	0.0000	1417.27	0.00	0
Outfall_B	050yr	412.00	378.00	0.0000	425.73	0.00	0
Outfall_C	050yr	390.00	361.11	-0.0004	336.75	334.67	87496
Pond-01	050yr	448.70	445.78	-0.0003	1985.29	64.40	1929606
Pond-02	050yr	466.00	460.79	0.0004	1054.12	23.94	798400
Pond-03	050yr	458.50	457.30	-0.0003	797.00	61.36	776806
Pond-04	050yr	464.80	462.84	0.0004	491.82	19.41	466360
Pond-05	050yr	493.00	485.77	0.0003	63.53	8.75	103696
Pond-06	050yr	435.00	425.13	0.0005	317.59	12.25	159178
Pond-07	050yr	427.00	423.17	-0.0003	224.53	12.07	109494
Pond-08	050yr	425.00	421.07	-0.0004	31.25	0.40	25572
Pond-09	050yr	445.00	441.34	-0.0004	23.31	0.35	23939
Trib1-00-00	050yr	389.10	350.39	-0.0010	1418.37	1417.27	123608
Trib1-00-02	050yr	415.00	370.04	0.0007	300.05	301.15	92524
Trib1-00-02b	050yr	425.00	410.77	0.0000	0.40	0.40	4484
Trib1-00-03a	050yr	435.00	398.38	0.0010	299.83	299.70	6241
Trib1-00-03b	050yr	435.00	410.44	0.0010	479.31	299.83	35822
Trib1-00-04	050yr	435.00	410.45	-0.0010	275.81	452.32	29471
Trib1-00-05	050yr	431.00	414.87	-0.0010	459.20	275.81	112989
Trib1-00-06	050yr	440.00	419.84	0.0008	366.70	424.20	65634
Trib1-00-07	050yr	433.00	421.36	0.0010	353.14	353.13	5469
Trib1-01-01	050yr	416.63	410.96	0.0017	19.41	19.41	100
Trib1-01-02	050yr	413.39	410.63	0.0010	12.25	12.27	100
Trib1-01-03	050yr	473.50	429.63	-0.0006	94.57	54.45	20763
Trib1-02-01	050yr	455.00	435.43	-0.0010	66.01	35.50	14076
Trib1-04-01	050yr	435.00	431.91	0.0010	33.33	24.45	9160
Trib1-04-02	050yr	445.00	434.60	0.0005	23.94	23.94	3358
Trib1-04-03	050yr	448.84	439.82	0.0010	23.94	23.94	100
Trib1-05-01a	050yr	431.00	427.01	0.0010	344.75	344.11	8876
Trib1-05-01b	050yr	460.00	439.57	-0.0010	302.35	301.99	13795
Trib1-05-02	050yr	458.00	448.01	0.0010	213.86	213.82	5380
Trib1-05-03	050yr	458.00	453.03	-0.0008	224.99	213.86	21646
Trib1-05-04	050yr	480.00	470.83	0.0001	38.60	36.10	22880
Trib1-05-05	050yr	483.20	482.72	-0.0002	42.76	38.60	18808
Trib1-05-06	050yr	493.10	490.81	0.0003	54.06	47.04	13377
Trib1-05-07	050yr	494.75	493.28	-0.0010	54.09	54.06	302
Trib2-00-01	050yr	450.00	388.73	0.0010	413.25	409.37	154935
Trib2-00-02	050yr	430.00	403.84	0.0004	501.35	362.57	332566
Trib2-00-03	050yr	435.00	407.08	0.0010	413.89	409.61	98562
Trib2-00-04	050yr	450.00	415.60	-0.0008	159.68	158.17	115013
Trib2-01-01	050yr	405.00	396.96	0.0001	73.25	73.24	12165
Trib2-02-01	050yr	425.00	414.95	-0.0009	225.64	225.55	14288
Trib2-03-01	050yr	448.70	433.80	-0.0008	64.39	64.41	45178
Trib2-04-01	050yr	450.00	420.86	0.0003	152.13	152.10	9926
Trib2-04-02	050yr	464.00	443.11	0.0001	326.87	152.13	447498
Trib2-04-03	050yr	470.00	450.13	0.0017	64.41	63.73	998

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib2-04-04	050yr	455.00	454.67	-0.0010	62.66	64.41	9334
Trib2-04-05	050yr	470.00	454.48	-0.0003	31.22	31.22	3772
Trib2-04-06	050yr	459.00	458.17	-0.0013	41.79	31.22	4742
Trib2-04-07	050yr	452.00	447.98	0.0001	35.93	35.91	9116
Trib2-04-08	050yr	453.00	450.75	-0.0006	43.72	35.93	12267
Trib2-04-10	050yr	483.00	465.28	-0.0003	199.91	178.07	49244
Trib2-04-11	050yr	518.50	516.75	-0.0004	223.77	199.91	47334
Trib3-00-01	050yr	370.00	363.53	0.0007	915.62	903.83	151326
Trib3-00-02	050yr	390.00	374.81	0.0006	906.77	915.62	146131
Trib3-00-03	050yr	390.00	381.56	0.0010	916.21	906.77	164367
Trib3-00-04	050yr	423.00	388.78	0.0010	912.99	916.21	116241
Trib3-00-05	050yr	423.00	399.81	-0.1270	912.68	912.67	1690
Trib3-00-06	050yr	425.00	401.58	-0.0010	1003.23	897.70	119380
Trib3-00-07	050yr	445.00	429.79	0.0000	0.35	0.35	5768
Offsite01	100yr	470.00	439.57	-0.0017	145.28	130.59	18627
Offsite02	100yr	459.00	446.71	0.0007	117.81	117.71	2050
Outfall_A	100yr	400.00	356.00	0.0000	2059.73	12428.14	0
Outfall_B	100yr	412.00	383.00	0.0000	616.54	0.00	0
Outfall_C	100yr	390.00	361.33	-0.0002	405.72	402.24	136770
Pond-01	100yr	448.70	446.26	0.0003	2324.45	94.92	1938407
Pond-02	100yr	466.00	461.48	0.0004	1214.52	33.53	806024
Pond-03	100yr	458.50	457.76	0.0003	916.38	87.72	781512
Pond-04	100yr	464.80	463.30	0.0004	568.22	39.55	470400
Pond-05	100yr	493.00	486.53	0.0004	91.89	14.23	109441
Pond-06	100yr	435.00	425.98	0.0006	362.84	18.93	163068
Pond-07	100yr	427.00	423.78	0.0004	264.45	16.81	112694
Pond-08	100yr	425.00	421.71	-0.0004	38.89	0.44	28332
Pond-09	100yr	445.00	441.79	-0.0003	28.46	0.39	26240
Trib1-00-00	100yr	389.10	356.00	0.0422	12428.14	2059.73	283441
Trib1-00-02	100yr	415.00	370.12	0.0007	365.33	365.04	94635
Trib1-00-02b	100yr	425.00	410.77	0.0000	0.44	0.44	4516
Trib1-00-03a	100yr	435.00	399.44	0.0010	365.11	364.94	6240
Trib1-00-03b	100yr	435.00	410.73	-0.0010	544.69	365.11	36400
Trib1-00-04	100yr	435.00	410.74	-0.0010	325.90	503.61	30083
Trib1-00-05	100yr	431.00	416.95	-0.0010	597.91	325.90	132493
Trib1-00-06	100yr	440.00	420.11	0.0008	472.83	533.22	75311
Trib1-00-07	100yr	433.00	421.52	0.0010	451.31	451.27	5838
Trib1-01-01	100yr	416.63	414.81	0.0016	39.55	39.56	100
Trib1-01-02	100yr	413.39	411.46	0.0010	18.93	18.95	100
Trib1-01-03	100yr	473.50	430.46	-0.0007	117.09	60.12	23907
Trib1-02-01	100yr	455.00	436.30	-0.0010	82.55	39.13	17354
Trib1-04-01	100yr	435.00	434.31	0.0010	44.41	33.91	19089
Trib1-04-02	100yr	445.00	435.08	-0.0010	33.53	43.39	5763
Trib1-04-03	100yr	448.84	442.23	0.0010	33.53	33.53	100
Trib1-05-01a	100yr	431.00	427.88	0.0010	436.87	435.68	12562
Trib1-05-01b	100yr	460.00	439.91	-0.0010	384.67	384.21	14307
Trib1-05-02	100yr	458.00	448.26	-0.0010	267.41	267.35	5750

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib1-05-03	100yr	458.00	453.95	-0.0009	283.52	267.41	27699
Trib1-05-04	100yr	480.00	470.94	0.0001	46.86	43.87	26757
Trib1-05-05	100yr	483.20	482.89	0.0002	51.54	46.86	20021
Trib1-05-06	100yr	493.10	491.15	-0.0003	74.22	66.13	15039
Trib1-05-07	100yr	494.75	493.72	0.0010	74.25	74.22	302
Trib2-00-01	100yr	450.00	388.66	-0.0008	597.01	593.50	182754
Trib2-00-02	100yr	430.00	404.23	0.0005	682.50	526.74	343832
Trib2-00-03	100yr	435.00	407.35	-0.0010	554.58	551.15	102655
Trib2-00-04	100yr	450.00	415.70	-0.0008	226.39	225.23	117511
Trib2-01-01	100yr	405.00	397.13	0.0001	104.26	104.25	12817
Trib2-02-01	100yr	425.00	415.12	-0.0009	291.38	291.20	15449
Trib2-03-01	100yr	448.70	433.87	-0.0006	94.92	94.94	47669
Trib2-04-01	100yr	450.00	421.03	0.0004	211.90	211.87	10816
Trib2-04-02	100yr	464.00	443.25	0.0001	397.36	211.90	451262
Trib2-04-03	100yr	470.00	450.34	0.0018	91.00	91.00	1101
Trib2-04-04	100yr	455.00	454.86	-0.0010	91.52	91.00	10176
Trib2-04-05	100yr	470.00	454.55	-0.0003	42.84	42.71	4018
Trib2-04-06	100yr	459.00	459.21	-0.0015	55.62	42.84	7988
Trib2-04-07	100yr	452.00	448.03	0.0001	49.33	49.32	9500
Trib2-04-08	100yr	453.00	451.50	-0.0006	64.91	49.33	18150
Trib2-04-10	100yr	483.00	465.53	-0.0003	246.72	221.82	53456
Trib2-04-11	100yr	518.50	517.01	-0.0004	273.62	246.72	51917
Trib3-00-01	100yr	370.00	363.56	0.0004	1146.32	1143.51	173009
Trib3-00-02	100yr	390.00	375.16	0.0006	1144.98	1146.32	152748
Trib3-00-03	100yr	390.00	381.79	-0.0010	1148.33	1144.98	169000
Trib3-00-04	100yr	423.00	389.04	0.0010	1147.43	1148.33	120377
Trib3-00-05	100yr	423.00	401.85	-0.1272	1147.08	1147.08	1690
Trib3-00-06	100yr	425.00	403.58	0.0010	1314.75	1130.45	163401
Trib3-00-07	100yr	445.00	429.79	0.0000	0.39	0.39	5854
Offsite01	500yr	470.00	441.04	-0.0017	242.69	177.62	51968
Offsite02	500yr	459.00	448.35	0.0009	204.00	203.64	4003
Outfall_A	500yr	400.00	346.00	0.0000	2549.64	0.00	0
Outfall_B	500yr	412.00	378.00	0.0000	1319.59	0.00	0
Outfall_C	500yr	390.00	362.71	-0.0008	686.48	617.20	165221
Pond-01	500yr	448.70	446.94	0.0003	3239.53	624.13	1951503
Pond-02	500yr	466.00	463.49	-0.0004	1644.51	53.38	828435
Pond-03	500yr	458.50	459.25	0.0003	1236.73	103.02	832596
Pond-04	500yr	464.80	465.16	0.0003	773.00	49.38	487460
Pond-05	500yr	493.00	488.48	0.0004	183.40	46.44	124448
Pond-06	500yr	435.00	428.16	0.0007	492.84	44.02	173009
Pond-07	500yr	427.00	425.44	0.0006	371.95	29.00	121412
Pond-08	500yr	425.00	423.05	-0.0005	60.48	1.09	34193
Pond-09	500yr	445.00	442.93	-0.0004	42.71	0.46	32117
Trib1-00-00	500yr	389.10	351.15	-0.0010	2550.90	2549.64	185002
Trib1-00-02	500yr	415.00	370.11	0.0006	515.92	515.88	97087
Trib1-00-02b	500yr	425.00	410.81	0.0000	1.09	1.09	4517
Trib1-00-03a	500yr	435.00	402.86	0.0010	515.52	515.44	6240

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib1-00-03b	500yr	435.00	411.34	0.0010	722.20	515.52	37617
Trib1-00-04	500yr	435.00	411.34	-0.0010	416.66	622.52	31374
Trib1-00-05	500yr	431.00	421.51	-0.0010	813.12	416.66	173604
Trib1-00-06	500yr	440.00	421.79	-0.0010	785.01	722.84	112192
Trib1-00-07	500yr	433.00	421.93	-0.0012	754.57	754.55	6569
Trib1-01-01	500yr	416.63	418.44	0.0014	49.38	49.39	100
Trib1-01-02	500yr	413.39	416.28	0.0010	44.02	44.02	100
Trib1-01-03	500yr	473.50	432.79	0.0009	180.03	54.19	34703
Trib1-02-01	500yr	455.00	438.42	-0.0010	129.30	46.80	25101
Trib1-04-01	500yr	435.00	440.05	0.0010	110.49	54.51	28284
Trib1-04-02	500yr	445.00	440.05	-0.0010	69.70	109.56	26730
Trib1-04-03	500yr	448.84	448.96	-0.0181	53.38	69.70	100
Trib1-05-01a	500yr	431.00	430.93	0.0010	720.43	709.58	21929
Trib1-05-01b	500yr	460.00	440.73	-0.0010	608.01	607.34	19322
Trib1-05-02	500yr	458.00	448.81	0.0009	406.96	406.94	6349
Trib1-05-03	500yr	458.00	456.19	-0.0010	451.44	406.96	41096
Trib1-05-04	500yr	480.00	471.24	0.0001	72.89	67.78	38328
Trib1-05-05	500yr	483.20	483.32	0.0002	77.98	72.89	23163
Trib1-05-06	500yr	493.10	491.92	0.0004	134.77	124.70	18780
Trib1-05-07	500yr	494.75	494.60	-0.0010	134.79	134.77	302
Trib2-00-01	500yr	450.00	389.43	-0.0010	1292.31	1290.25	193622
Trib2-00-02	500yr	430.00	405.09	0.0005	1223.37	1163.00	367587
Trib2-00-03	500yr	435.00	408.15	0.0010	1123.98	1121.13	103418
Trib2-00-04	500yr	450.00	416.38	-0.0009	828.43	826.38	132009
Trib2-01-01	500yr	405.00	397.26	0.0001	131.56	131.56	14624
Trib2-02-01	500yr	425.00	415.52	-0.0006	482.03	481.77	17940
Trib2-03-01	500yr	448.70	434.56	-0.0008	624.13	623.96	58046
Trib2-04-01	500yr	450.00	421.50	0.0004	400.50	400.44	15483
Trib2-04-02	500yr	464.00	443.60	0.0001	669.33	400.50	459854
Trib2-04-03	500yr	470.00	450.87	0.0020	188.60	185.45	1380
Trib2-04-04	500yr	455.00	455.35	0.0010	182.36	188.60	10765
Trib2-04-05	500yr	470.00	454.78	-0.0003	92.94	92.83	4597
Trib2-04-06	500yr	459.00	459.84	-0.0014	96.42	92.94	10595
Trib2-04-07	500yr	452.00	448.21	-0.0001	105.78	105.63	11078
Trib2-04-08	500yr	453.00	453.18	0.0006	132.17	105.78	30225
Trib2-04-10	500yr	483.00	466.12	0.0003	378.14	345.39	63038
Trib2-04-11	500yr	518.50	517.59	-0.0004	411.52	378.14	62250
Trib3-00-01	500yr	370.00	364.13	0.0006	1634.18	1619.02	173453
Trib3-00-02	500yr	390.00	375.53	0.0006	1624.62	1634.18	162572
Trib3-00-03	500yr	390.00	382.33	-0.0010	1631.31	1624.62	176724
Trib3-00-04	500yr	423.00	389.49	0.0010	1628.42	1631.31	129013
Trib3-00-05	500yr	423.00	404.97	-0.0636	1628.00	1628.00	1690
Trib3-00-06	500yr	425.00	409.12	0.0010	2229.80	1608.79	321160
Trib3-00-07	500yr	445.00	429.80	0.0000	0.46	0.46	8796

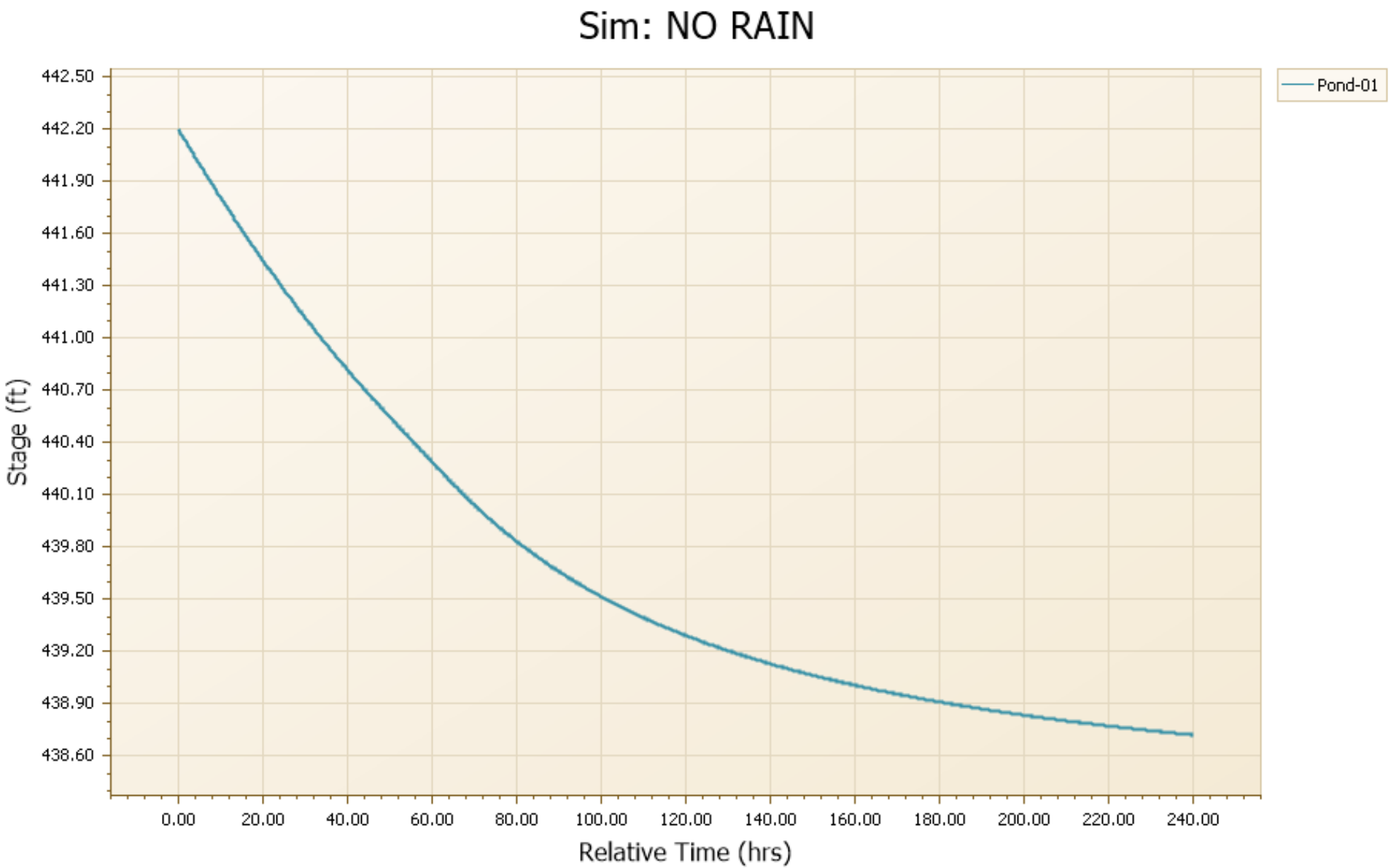
Node Max Conditions [Dam Analysis]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Pond-01	0.5 PMF	448.70	445.77	0.0003	2015.99	63.93	1927733
Pond-02	0.5 PMF	466.00	463.40	0.0008	1701.33	53.18	827441
Pond-03	0.5 PMF	483.20	459.50	0.0008	1370.40	104.44	835370
Pond-04	0.5 PMF	483.20	463.93	0.0009	622.06	46.30	475932
Pond-06	0.5 PMF	435.00	429.05	0.0010	650.84	74.58	177121
Pond-01	PMF	448.70	447.50	0.0002	3999.92	1351.25	1958431
Pond-02	PMF	466.00	465.17	0.0006	3499.96	2495.66	847063
Pond-03	PMF	483.20	466.14	0.0006	2799.97	137.30	910146
Pond-04	PMF	483.20	475.34	0.0009	1899.99	69.95	600030
Pond-06	PMF	435.00	434.22	0.0010	1299.99	1181.73	200750

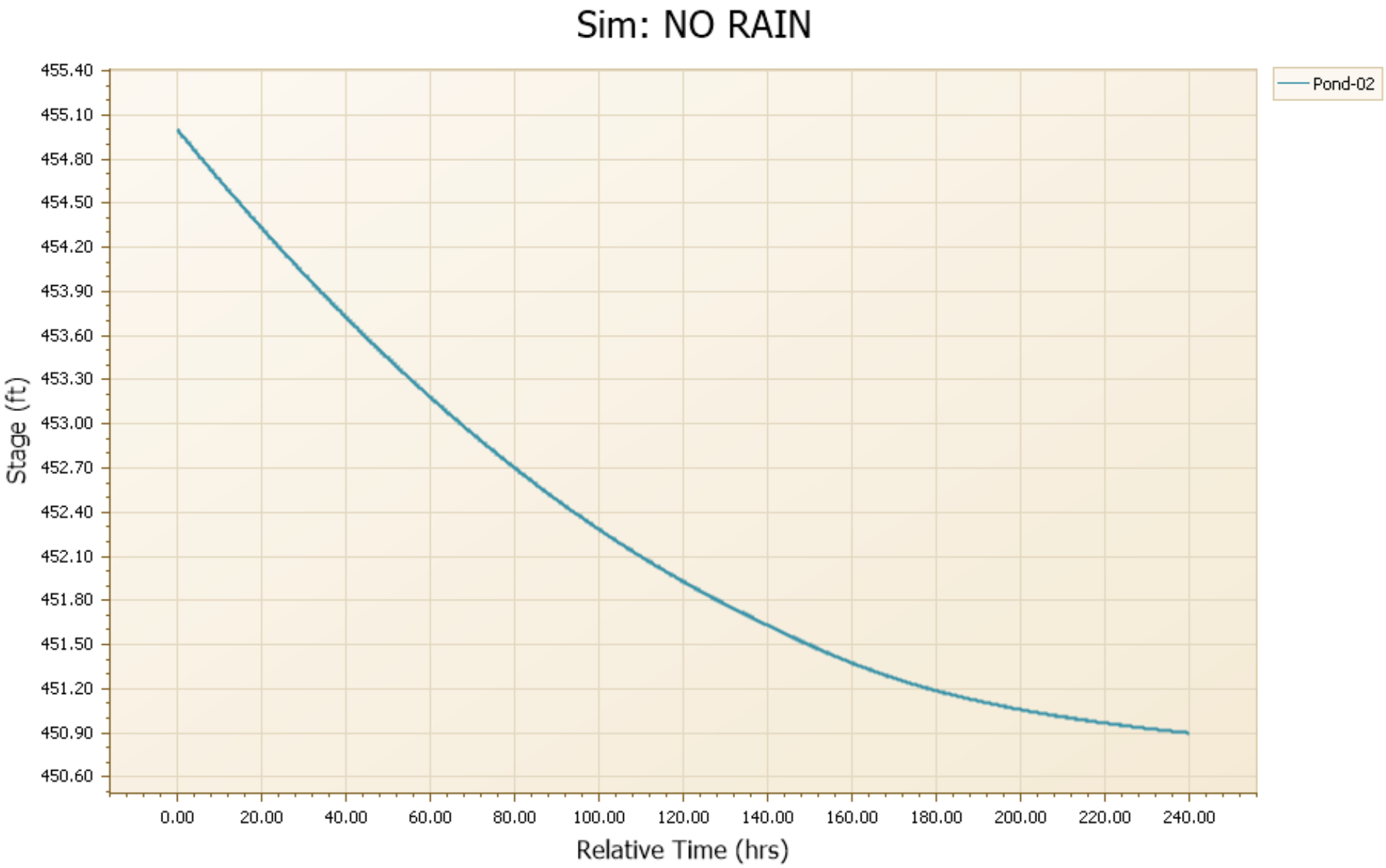
Node Max Conditions [Dam Analysis 2 (Structure)]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Trib1-00-03b	0.5 PMF	483.20	392.73	0.0003	0.05	0.01	2911
Trib1-00-03b	PMF	483.20	456.67	0.0050	10399.99	9501.25	89945

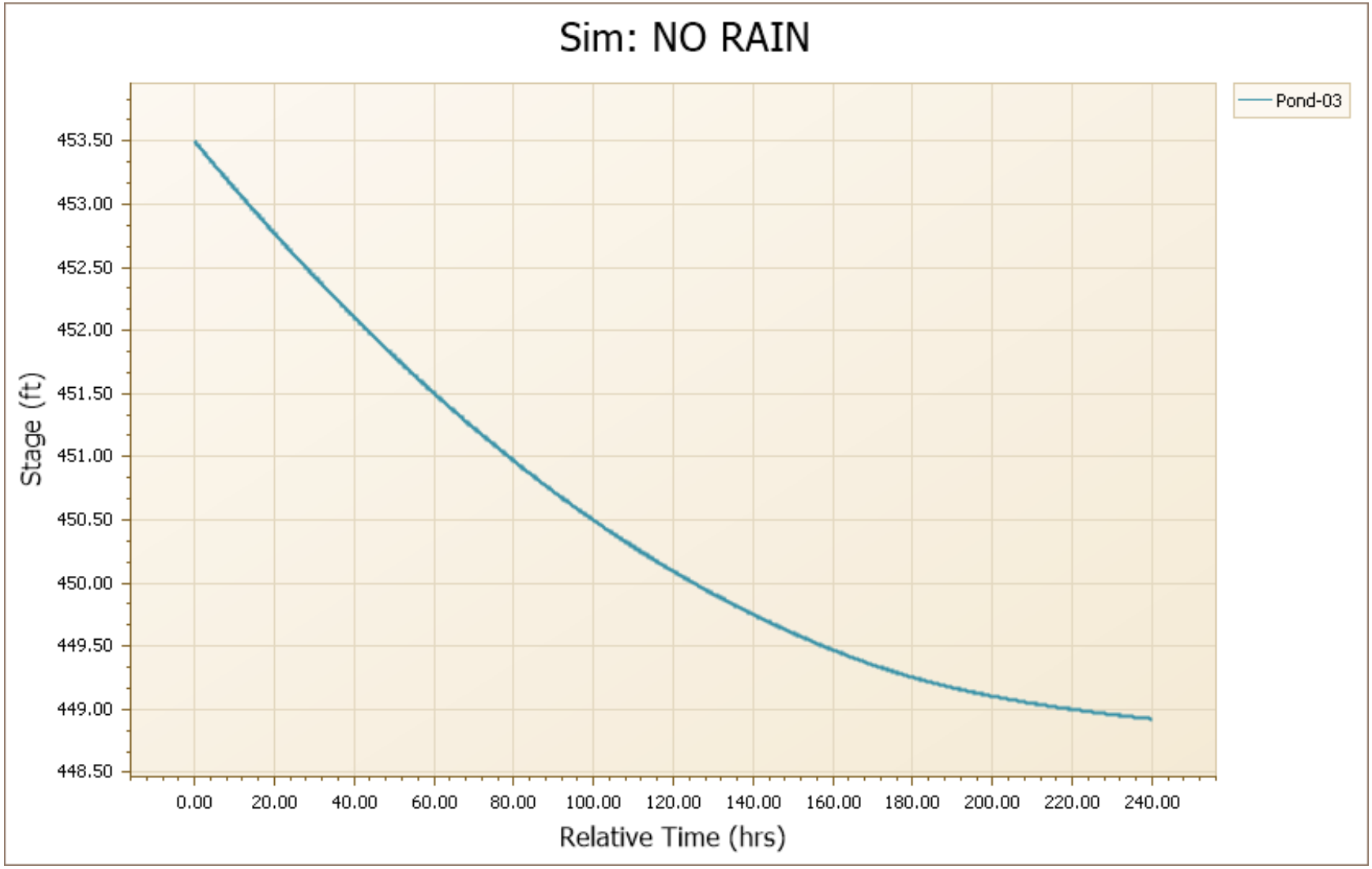
Harvester Dam Permanent Pool Drawdown



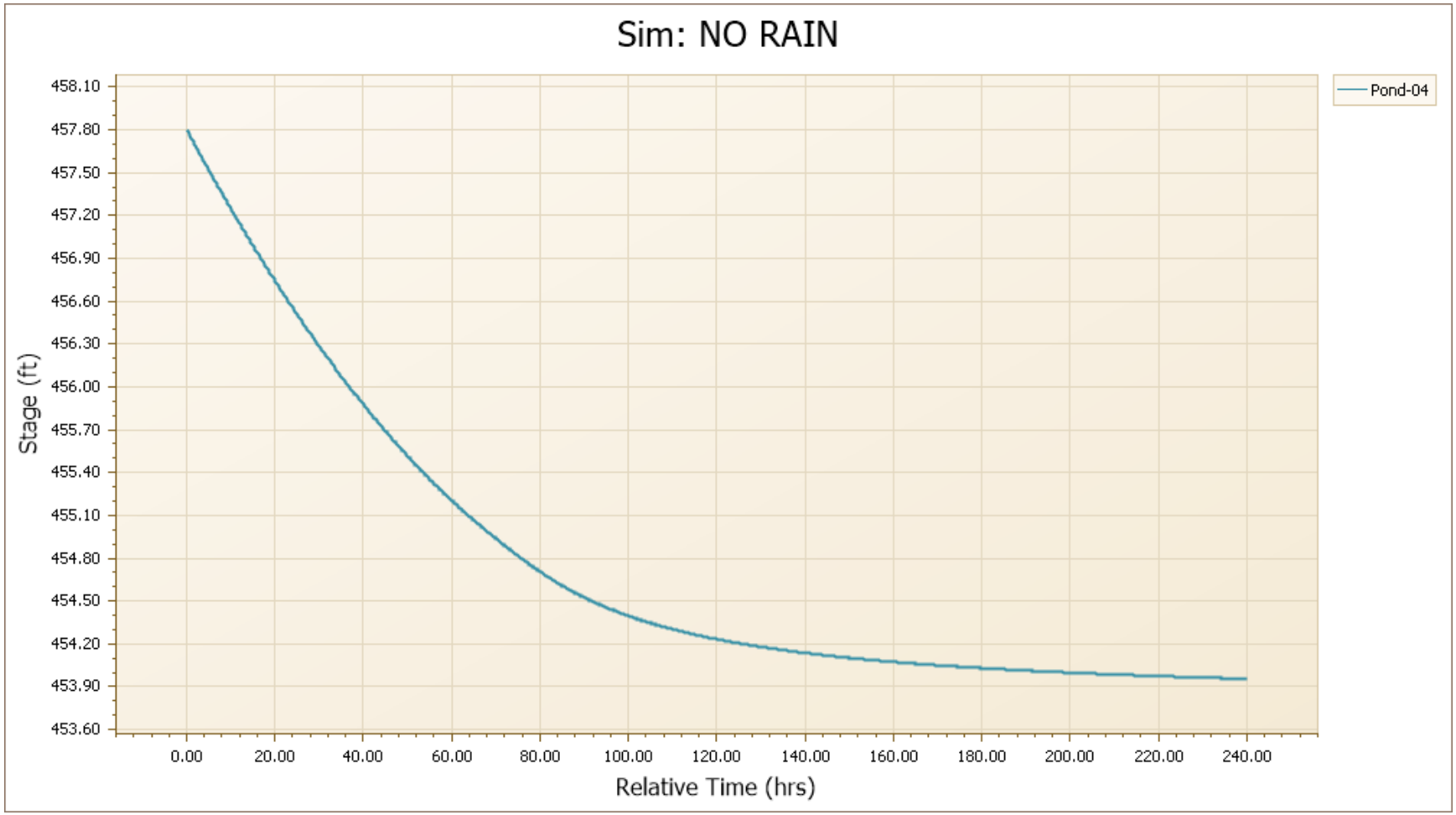
Terra Dam Permanent Pool Drawdown



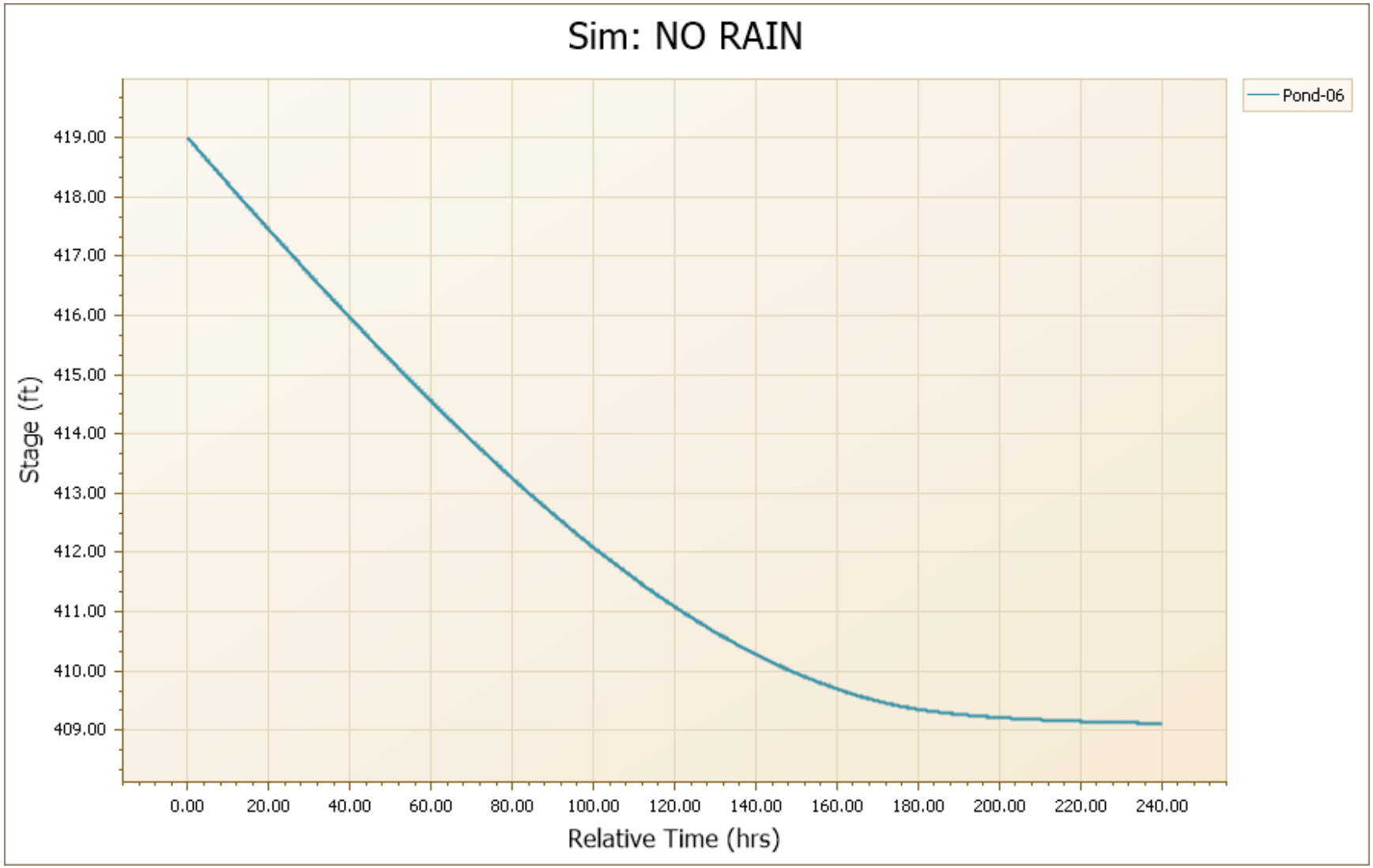
Traveler Dam Permanent Pool Drawdown



Spirit Dam Permanent Pool Drawdown



Patriot Dam Permanent Pool Drawdown



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STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX E

WATER QUALITY ANALYSIS

J – 27015.0007

December 2023

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STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX

EXISTING CONDITIONS IDEAL MODEL REPORTS

J – 27015.0007

December 2023

IDEAL Report

(IDEAL RICHLAND 4.0.0.0)

Name	
Description	
Analyst Name	schiazza.a
Date	5/4/2023, 5:06 PM
Comments	Richland County (SCS), SC IDEAL RICHLAND 4.0.0.0

Storm		
Priming Storm Inputs		
Parameter	**Value**	**Units**
Storm Type	III	-
Precipitation	10	in.
Duration	24	hrs
Season	Growing	-
Antecedent Moisture Condition	Average	-

Basin_24

Name	Basin_24
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	45.34	acres
Curve Number	55	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	1.27	hrs

Sediment Inputs

Parameter	Value	Units
Length	1618	ft
Slope	0.024	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	4.317	ac-ft
Total Sediment Yield	233.1	lbs
Total Sediment Yield (Clay)	2.424	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	179.8	lbs
Total Sediment Yield (Small Agg.)	3.263	lbs
Total Sediment Yield (Large Agg.)	47.61	lbs
Sediment Concentration	0.6061	mg/l
Peak Sediment Concentration	1.115	mg/l
Total Nitrogen Yield	11.39	lbs
Total Nitrogen Yield (Particulate)	4.896	lbs
Total Nitrogen Yield (Sorbed)	0.0007462	lbs
Total Nitrogen Yield (Dissolved)	6.49	lbs
Nitrogen Concentration	0.04605	mg/l
Peak Nitrogen Concentration	0.07896	mg/l
Total Phosphorus Yield	2.348	lbs
Total Phosphorus Yield (Particulate)	1.01	lbs
Total Phosphorus Yield (Sorbed)	3.115E-07	lbs
Total Phosphorus Yield (Dissolved)	1.338	lbs
Phosphorus Concentration	0.009494	mg/l
Peak Phosphorus Concentration	0.01628	mg/l
Total Bacteria Yield	5.322E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	5.322E+10	cfu
Bacteria Concentration	47.45	cfu/100 ml
Peak Bacteria Concentration	81.37	cfu/100 ml

Non-Routed Connector 21

Name	Non-Routed Connector 21
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	4.317	ac-ft
Total Sediment Discharged	233.1	lbs
Total Sediment Discharged (Clay)	2.424	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	179.8	lbs
Total Sediment Discharged (Small Agg.)	3.263	lbs
Total Sediment Discharged (Large Agg.)	47.61	lbs
Sediment Concentration	0.6061	mg/l
Peak Sediment Concentration	1.115	mg/l
Total Nitrogen Discharged	11.39	lbs
Total Nitrogen Discharged (Particulate)	4.896	lbs
Total Nitrogen Discharged (Sorbed)	0.0007462	lbs
Total Nitrogen Discharged (Dissolved)	6.49	lbs
Nitrogen Concentration	0.04605	mg/l
Peak Nitrogen Concentration	0.07896	mg/l
Total Phosphorus Discharged	2.348	lbs
Total Phosphorus Discharged (Particulate)	1.01	lbs
Total Phosphorus Discharged (Sorbed)	3.115E-07	lbs
Total Phosphorus Discharged (Dissolved)	1.338	lbs
Phosphorus Concentration	0.009494	mg/l
Peak Phosphorus Concentration	0.01628	mg/l
Total Bacteria Discharged	5.322E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	5.322E+10	cfu
Bacteria Concentration	47.45	cfu/100 ml
Peak Bacteria Concentration	81.37	cfu/100 ml

Trib2-01-04

Name	Trib2-01-04
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	12	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	4	ft
EMS Width	50	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	4	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	2.82	ac

Peak Stage	10	ft
Total Inflow Volume	4.317	ac-ft
Total Rainfall On BMP	14.19	ac-ft
Total Outflow Volume	80.02	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	79.81	ac-ft
Infiltration Volume	0.2026	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	233.1	lbs
Total Inflow Sediment Mass (Clay)	2.424	lbs
Total Inflow Sediment Mass (Silt)	0	lbs
Total Inflow Sediment Mass (Sand)	179.8	lbs
Total Inflow Sediment Mass (Small Agg.)	3.263	lbs
Total Inflow Sediment Mass (Large Agg.)	47.61	lbs
Priming Storm Sediment Mass In Permanent Pool	248.8	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	248.8	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	9.12	lbs
Total Sediment Mass Discharged (Clay)	9.107	lbs
Total Sediment Mass Discharged (Silt)	0	lbs
Total Sediment Mass Discharged (Sand)	0.001126	lbs
Total Sediment Mass Discharged (Small Agg.)	0.01223	lbs
Total Sediment Mass Discharged (Large Agg.)	0.0002618	lbs
Total Sediment Mass Trapped	472.7	lbs
Total Sediment Mass Trapped (Clay)	242.1	lbs
Total Sediment Mass Trapped (Silt)	0	lbs
Total Sediment Mass Trapped (Sand)	179.8	lbs
Total Sediment Mass Trapped (Small Agg.)	3.251	lbs

Total Sediment Mass Trapped (Large Agg.)	47.61	lbs
Sediment Trapping Efficiency	98.11	%
Sediment Trapping Efficiency (Clay)	96.37	%
Sediment Trapping Efficiency (Silt)	0	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	99.63	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	9.12	lbs
EMS Sediment Mass Discharged (Clay)	9.107	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0.001126	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.01223	lbs
EMS Sediment Mass Discharged (Large Agg.)	0.0002618	lbs
Sediment Concentration	0.001979	mg/l
Peak Sediment Concentration	0.002309	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	11.39	lbs
Total Nitrogen Mass Inflow (Particulate)	4.896	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.0007462	lbs
Total Nitrogen Mass Inflow (Dissolved)	6.49	lbs
Priming Storm Nitrogen Mass In Permanent Pool	1870	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	88.52	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.01729	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1782	lbs
Total Nitrogen Mass Discharged	67.79	lbs
Total Nitrogen Mass Discharged (Particulate)	3.49	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.0006931	lbs

Total Nitrogen Mass Discharged (Dissolved)	64.3	lbs
Total Nitrogen Mass Trapped	1814	lbs
Total Nitrogen Mass Trapped (Particulate)	89.92	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.01735	lbs
Total Nitrogen Mass Trapped (Dissolved)	1724	lbs
Nitrogen Trapping Efficiency	96.4	%
Nitrogen Trapping Efficiency (Particulate)	96.26	%
Nitrogen Trapping Efficiency (Sorbed)	96.16	%
Nitrogen Trapping Efficiency (Dissolved)	96.4	%
Outlet Pipe Nitrogen Mass Discharged	3.141E-17	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	3.141E-17	lbs
EMS Nitrogen Mass Discharged	67.79	lbs
EMS Nitrogen Mass Discharged (Particulate)	3.49	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.0006931	lbs
EMS Nitrogen Mass Discharged (Dissolved)	64.3	lbs
Nitrogen Concentration	0.01478	mg/l
Peak Nitrogen Concentration	0.01648	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	2.348	lbs
Total Phosphorus Mass Inflow (Particulate)	1.01	lbs
Total Phosphorus Mass Inflow (Sorbed)	3.115E-07	lbs
Total Phosphorus Mass Inflow (Dissolved)	1.338	lbs
Priming Storm Phosphorus Mass In Permanent Pool	385.7	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	18.25	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	7.22E-06	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	367.4	lbs
Total Phosphorus Mass Discharged	13.98	lbs
Total Phosphorus Mass Discharged (Particulate)	0.7195	lbs
Total Phosphorus Mass Discharged (Sorbed)	2.894E-07	lbs
Total Phosphorus Mass Discharged (Dissolved)	13.26	lbs
Total Phosphorus Mass Trapped	374.1	lbs

Total Phosphorus Mass Trapped (Particulate)	18.54	lbs
Total Phosphorus Mass Trapped (Sorbed)	7.242E-06	lbs
Total Phosphorus Mass Trapped (Dissolved)	355.5	lbs
Phosphorus Trapping Efficiency	96.4	%
Phosphorus Trapping Efficiency (Particulate)	96.26	%
Phosphorus Trapping Efficiency (Sorbed)	96.16	%
Phosphorus Trapping Efficiency (Dissolved)	96.4	%
Outlet Pipe Phosphorus Mass Discharged	-1.198E-17	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	-1.198E-17	lbs
EMS Phosphorus Mass Discharged	13.98	lbs
EMS Phosphorus Mass Discharged (Particulate)	0.7195	lbs
EMS Phosphorus Mass Discharged (Sorbed)	2.894E-07	lbs
EMS Phosphorus Mass Discharged (Dissolved)	13.26	lbs
Phosphorus Concentration	0.003048	mg/l
Peak Phosphorus Concentration	0.003397	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	5.322E+10	cfu
Total Bacteria Loading (Sorbed To Clay)	5.587E+06	cfu
Total Bacteria Loading (Sorbed To Silt)	0	cfu
Total Bacteria Loading (Planktonic)	5.322E+10	cfu
Priming Storm Bacteria In Permanent Pool	1.491E+08	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	1.491E+08	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	3.448E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.847E+06	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	3.442E+09	cfu
Total Bacteria Trapped	4.993E+10	cfu

Total Bacteria Trapped (Sorbed To Clay)	1.488E+08	cfu
Total Bacteria Trapped (Sorbed To Silt)	0	cfu
Total Bacteria Trapped (Planktonic)	4.978E+10	cfu
Bacteria Trapping Efficiency	93.54	%
Bacteria Trapping Efficiency (Sorbed To Clay)	96.22	%
Bacteria Trapping Efficiency (Sorbed To Silt)	0	%
Bacteria Trapping Efficiency (Planktonic)	93.53	%
Outlet Pipe Bacteria Discharged	4.474E-09	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	4.474E-09	cfu
EMS Bacteria Discharged	3.448E+09	cfu
EMS Bacteria Discharged (Sorbed To Clay)	5.847E+06	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	3.442E+09	cfu
Bacteria Concentration	0.09989	cfu/100 ml
Peak Bacteria Concentration	0.7977	cfu/100 ml

Non-Routed Connector 47

Name	Non-Routed Connector 47
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	79.81	ac-ft
Total Sediment Discharged	9.12	lbs
Total Sediment Discharged (Clay)	9.107	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	0.001126	lbs
Total Sediment Discharged (Small Agg.)	0.01223	lbs
Total Sediment Discharged (Large Agg.)	0.0002618	lbs
Sediment Concentration	0.001979	mg/l
Peak Sediment Concentration	0.002309	mg/l
Total Nitrogen Discharged	67.79	lbs
Total Nitrogen Discharged (Particulate)	3.49	lbs
Total Nitrogen Discharged (Sorbed)	0.0006931	lbs
Total Nitrogen Discharged (Dissolved)	64.3	lbs
Nitrogen Concentration	0.01478	mg/l
Peak Nitrogen Concentration	0.01648	mg/l
Total Phosphorus Discharged	13.98	lbs
Total Phosphorus Discharged (Particulate)	0.7195	lbs
Total Phosphorus Discharged (Sorbed)	2.894E-07	lbs
Total Phosphorus Discharged (Dissolved)	13.26	lbs
Phosphorus Concentration	0.003048	mg/l
Peak Phosphorus Concentration	0.003397	mg/l
Total Bacteria Discharged	3.448E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.847E+06	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	3.442E+09	cfu
Bacteria Concentration	0.09989	cfu/100 ml
Peak Bacteria Concentration	0.7977	cfu/100 ml

Basin_25

Name	Basin_25
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	52.69	acres
Curve Number	69	-
Soil Series	Pelion	-
Depth Range	0-13	in
Peak Rate Factor	484	-
Time of Concentration	0.267	hrs

Sediment Inputs

Parameter	Value	Units
Length	1630	ft
Slope	0.04	ft/ft
Soil Erodibility	0.2	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	6	%
Silt Percent	16.3	%
Sand Percent	77.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	221.2	micro g/g/mg/l
Isotherm Max - Nitrogen	3708.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	13.62	ac-ft
Total Sediment Yield	2.503E+04	lbs
Total Sediment Yield (Clay)	390.4	lbs
Total Sediment Yield (Silt)	1377	lbs
Total Sediment Yield (Sand)	1.427E+04	lbs
Total Sediment Yield (Small Agg.)	2703	lbs
Total Sediment Yield (Large Agg.)	6286	lbs
Sediment Concentration	51.31	mg/l
Peak Sediment Concentration	134	mg/l
Total Nitrogen Yield	35.91	lbs
Total Nitrogen Yield (Particulate)	15.44	lbs
Total Nitrogen Yield (Sorbed)	0.0904	lbs
Total Nitrogen Yield (Dissolved)	20.38	lbs
Nitrogen Concentration	0.1294	mg/l
Peak Nitrogen Concentration	0.3045	mg/l
Total Phosphorus Yield	7.405	lbs
Total Phosphorus Yield (Particulate)	3.184	lbs
Total Phosphorus Yield (Sorbed)	6.552E-05	lbs
Total Phosphorus Yield (Dissolved)	4.221	lbs
Phosphorus Concentration	0.02667	mg/l
Peak Phosphorus Concentration	0.06279	mg/l
Total Bacteria Yield	1.679E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	1.679E+11	cfu
Bacteria Concentration	133.3	cfu/100 ml
Peak Bacteria Concentration	313.8	cfu/100 ml

Non-Routed Connector 22

Name	Non-Routed Connector 22
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	13.62	ac-ft
Total Sediment Discharged	2.503E+04	lbs
Total Sediment Discharged (Clay)	390.4	lbs
Total Sediment Discharged (Silt)	1377	lbs
Total Sediment Discharged (Sand)	1.427E+04	lbs
Total Sediment Discharged (Small Agg.)	2703	lbs
Total Sediment Discharged (Large Agg.)	6286	lbs
Sediment Concentration	51.31	mg/l
Peak Sediment Concentration	134	mg/l
Total Nitrogen Discharged	35.91	lbs
Total Nitrogen Discharged (Particulate)	15.44	lbs
Total Nitrogen Discharged (Sorbed)	0.0904	lbs
Total Nitrogen Discharged (Dissolved)	20.38	lbs
Nitrogen Concentration	0.1294	mg/l
Peak Nitrogen Concentration	0.3045	mg/l
Total Phosphorus Discharged	7.405	lbs
Total Phosphorus Discharged (Particulate)	3.184	lbs
Total Phosphorus Discharged (Sorbed)	6.552E-05	lbs
Total Phosphorus Discharged (Dissolved)	4.221	lbs
Phosphorus Concentration	0.02667	mg/l
Peak Phosphorus Concentration	0.06279	mg/l
Total Bacteria Discharged	1.679E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.679E+11	cfu
Bacteria Concentration	133.3	cfu/100 ml
Peak Bacteria Concentration	313.8	cfu/100 ml

Trib2-01-02

Name	Trib2-01-02
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	15	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	4	ft
EMS Width	50	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	4	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	5.78	ac

Peak Stage	13	ft
Total Inflow Volume	93.43	ac-ft
Total Rainfall On BMP	29.09	ac-ft
Total Outflow Volume	727.1	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	726	ac-ft
Infiltration Volume	1.087	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	2.504E+04	lbs
Total Inflow Sediment Mass (Clay)	399.6	lbs
Total Inflow Sediment Mass (Silt)	1377	lbs
Total Inflow Sediment Mass (Sand)	1.427E+04	lbs
Total Inflow Sediment Mass (Small Agg.)	2703	lbs
Total Inflow Sediment Mass (Large Agg.)	6286	lbs
Priming Storm Sediment Mass In Permanent Pool	1.114E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	1.114E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	1579	lbs
Total Sediment Mass Discharged (Clay)	1399	lbs
Total Sediment Mass Discharged (Silt)	129.4	lbs
Total Sediment Mass Discharged (Sand)	0.4546	lbs
Total Sediment Mass Discharged (Small Agg.)	49.54	lbs
Total Sediment Mass Discharged (Large Agg.)	0.1759	lbs
Total Sediment Mass Trapped	3.46E+04	lbs
Total Sediment Mass Trapped (Clay)	1.014E+04	lbs
Total Sediment Mass Trapped (Silt)	1247	lbs
Total Sediment Mass Trapped (Sand)	1.427E+04	lbs
Total Sediment Mass Trapped (Small Agg.)	2654	lbs

Total Sediment Mass Trapped (Large Agg.)	6286	lbs
Sediment Trapping Efficiency	95.64	%
Sediment Trapping Efficiency (Clay)	87.87	%
Sediment Trapping Efficiency (Silt)	90.6	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	98.17	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	1579	lbs
EMS Sediment Mass Discharged (Clay)	1399	lbs
EMS Sediment Mass Discharged (Silt)	129.4	lbs
EMS Sediment Mass Discharged (Sand)	0.4546	lbs
EMS Sediment Mass Discharged (Small Agg.)	49.54	lbs
EMS Sediment Mass Discharged (Large Agg.)	0.1759	lbs
Sediment Concentration	0.1008	mg/l
Peak Sediment Concentration	0.2387	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	103.7	lbs
Total Nitrogen Mass Inflow (Particulate)	18.93	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.09109	lbs
Total Nitrogen Mass Inflow (Dissolved)	84.68	lbs
Priming Storm Nitrogen Mass In Permanent Pool	5466	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	241.4	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.5782	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	5224	lbs
Total Nitrogen Mass Discharged	660.9	lbs
Total Nitrogen Mass Discharged (Particulate)	33.65	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.1019	lbs

Total Nitrogen Mass Discharged (Dissolved)	627.1	lbs
Total Nitrogen Mass Trapped	4909	lbs
Total Nitrogen Mass Trapped (Particulate)	226.7	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.5674	lbs
Total Nitrogen Mass Trapped (Dissolved)	4681	lbs
Nitrogen Trapping Efficiency	88.13	%
Nitrogen Trapping Efficiency (Particulate)	87.08	%
Nitrogen Trapping Efficiency (Sorbed)	84.77	%
Nitrogen Trapping Efficiency (Dissolved)	88.19	%
Outlet Pipe Nitrogen Mass Discharged	4.362E-15	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	4.362E-15	lbs
EMS Nitrogen Mass Discharged	660.9	lbs
EMS Nitrogen Mass Discharged (Particulate)	33.65	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.1019	lbs
EMS Nitrogen Mass Discharged (Dissolved)	627.1	lbs
Nitrogen Concentration	0.04452	mg/l
Peak Nitrogen Concentration	0.04908	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	21.38	lbs
Total Phosphorus Mass Inflow (Particulate)	3.904	lbs
Total Phosphorus Mass Inflow (Sorbed)	6.581E-05	lbs
Total Phosphorus Mass Inflow (Dissolved)	17.48	lbs
Priming Storm Phosphorus Mass In Permanent Pool	1129	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	49.78	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.0004102	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	1079	lbs
Total Phosphorus Mass Discharged	136.5	lbs
Total Phosphorus Mass Discharged (Particulate)	6.938	lbs
Total Phosphorus Mass Discharged (Sorbed)	7.284E-05	lbs
Total Phosphorus Mass Discharged (Dissolved)	129.5	lbs
Total Phosphorus Mass Trapped	1014	lbs

Total Phosphorus Mass Trapped (Particulate)	46.75	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.0004031	lbs
Total Phosphorus Mass Trapped (Dissolved)	966.9	lbs
Phosphorus Trapping Efficiency	88.14	%
Phosphorus Trapping Efficiency (Particulate)	87.08	%
Phosphorus Trapping Efficiency (Sorbed)	84.7	%
Phosphorus Trapping Efficiency (Dissolved)	88.19	%
Outlet Pipe Phosphorus Mass Discharged	1.359E-16	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	1.359E-16	lbs
EMS Phosphorus Mass Discharged	136.5	lbs
EMS Phosphorus Mass Discharged (Particulate)	6.938	lbs
EMS Phosphorus Mass Discharged (Sorbed)	7.284E-05	lbs
EMS Phosphorus Mass Discharged (Dissolved)	129.5	lbs
Phosphorus Concentration	0.009194	mg/l
Peak Phosphorus Concentration	0.01013	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	1.713E+11	cfu
Total Bacteria Loading (Sorbed To Clay)	2.253E+08	cfu
Total Bacteria Loading (Sorbed To Silt)	2.059E+08	cfu
Total Bacteria Loading (Planktonic)	1.709E+11	cfu
Priming Storm Bacteria In Permanent Pool	9.524E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	9.524E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	5.432E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.181E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.036E+07	cfu
Total Bacteria Discharged (Planktonic)	5.306E+10	cfu
Total Bacteria Trapped	1.265E+11	cfu

Total Bacteria Trapped (Sorbed To Clay)	8.568E+09	cfu
Total Bacteria Trapped (Sorbed To Silt)	1.255E+08	cfu
Total Bacteria Trapped (Planktonic)	1.178E+11	cfu
Bacteria Trapping Efficiency	69.97	%
Bacteria Trapping Efficiency (Sorbed To Clay)	87.88	%
Bacteria Trapping Efficiency (Sorbed To Silt)	60.97	%
Bacteria Trapping Efficiency (Planktonic)	68.95	%
Outlet Pipe Bacteria Discharged	-4.488E-08	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	-4.488E-08	cfu
EMS Bacteria Discharged	5.432E+10	cfu
EMS Bacteria Discharged (Sorbed To Clay)	1.181E+09	cfu
EMS Bacteria Discharged (Sorbed To Silt)	8.036E+07	cfu
EMS Bacteria Discharged (Planktonic)	5.306E+10	cfu
Bacteria Concentration	0.5872	cfu/100 ml
Peak Bacteria Concentration	6.648	cfu/100 ml

Non-Routed Connector 56		
Name	Non-Routed Connector 56	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	726	ac-ft
Total Sediment Discharged	1579	lbs
Total Sediment Discharged (Clay)	1399	lbs
Total Sediment Discharged (Silt)	129.4	lbs
Total Sediment Discharged (Sand)	0.4546	lbs
Total Sediment Discharged (Small Agg.)	49.54	lbs
Total Sediment Discharged (Large Agg.)	0.1759	lbs
Sediment Concentration	0.1008	mg/l
Peak Sediment Concentration	0.2387	mg/l
Total Nitrogen Discharged	660.9	lbs
Total Nitrogen Discharged (Particulate)	33.65	lbs
Total Nitrogen Discharged (Sorbed)	0.1019	lbs
Total Nitrogen Discharged (Dissolved)	627.1	lbs
Nitrogen Concentration	0.04452	mg/l
Peak Nitrogen Concentration	0.04908	mg/l
Total Phosphorus Discharged	136.5	lbs
Total Phosphorus Discharged (Particulate)	6.938	lbs
Total Phosphorus Discharged (Sorbed)	7.284E-05	lbs
Total Phosphorus Discharged (Dissolved)	129.5	lbs
Phosphorus Concentration	0.009194	mg/l
Peak Phosphorus Concentration	0.01013	mg/l
Total Bacteria Discharged	5.432E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.181E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.036E+07	cfu
Total Bacteria Discharged (Planktonic)	5.305E+10	cfu
Bacteria Concentration	0.5872	cfu/100 ml
Peak Bacteria Concentration	6.648	cfu/100 ml

Basin_17		
Name	Basin_17	
Description		
Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	88.32	acres
Curve Number	54	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.5	hrs
Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	2311	ft
Slope	0.033	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%
Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	0.42	acres
Curve Number	54	-
Peak Rate Factor	484	-
Time of Concentration	0.5	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	7.823	ac-ft
Total Sediment Yield	1057	lbs
Total Sediment Yield (Clay)	12.58	lbs
Total Sediment Yield (Silt)	3.51	lbs

Total Sediment Yield (Sand)	811.3	lbs
Total Sediment Yield (Small Agg.)	14.7	lbs
Total Sediment Yield (Large Agg.)	214.5	lbs
Sediment Concentration	4.57	mg/l
Peak Sediment Concentration	8.108	mg/l
Total Nitrogen Yield	20.69	lbs
Total Nitrogen Yield (Particulate)	8.897	lbs
Total Nitrogen Yield (Sorbed)	0.005025	lbs
Total Nitrogen Yield (Dissolved)	11.79	lbs
Nitrogen Concentration	0.1015	mg/l
Peak Nitrogen Concentration	0.1766	mg/l
Total Phosphorus Yield	4.257	lbs
Total Phosphorus Yield (Particulate)	1.83	lbs
Total Phosphorus Yield (Sorbed)	1.919E-06	lbs
Total Phosphorus Yield (Dissolved)	2.426	lbs
Phosphorus Concentration	0.01609	mg/l
Peak Phosphorus Concentration	0.02874	mg/l
Total Bacteria Yield	1.029E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	3.63E+07	cfu
Total Bacteria Yield (Sorbed To Silt)	2.159E+07	cfu
Total Bacteria Yield (Planktonic)	1.029E+11	cfu
Bacteria Concentration	795.2	cfu/100 ml
Peak Bacteria Concentration	1279	cfu/100 ml

Non-Routed Connector 26		
Name	Non-Routed Connector 26	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	7.823	ac-ft
Total Sediment Discharged	1057	lbs
Total Sediment Discharged (Clay)	12.58	lbs
Total Sediment Discharged (Silt)	3.51	lbs
Total Sediment Discharged (Sand)	811.3	lbs
Total Sediment Discharged (Small Agg.)	14.7	lbs
Total Sediment Discharged (Large Agg.)	214.5	lbs
Sediment Concentration	4.57	mg/l
Peak Sediment Concentration	8.108	mg/l
Total Nitrogen Discharged	20.69	lbs
Total Nitrogen Discharged (Particulate)	8.897	lbs
Total Nitrogen Discharged (Sorbed)	0.005025	lbs
Total Nitrogen Discharged (Dissolved)	11.79	lbs
Nitrogen Concentration	0.1015	mg/l
Peak Nitrogen Concentration	0.1766	mg/l
Total Phosphorus Discharged	4.257	lbs
Total Phosphorus Discharged (Particulate)	1.83	lbs
Total Phosphorus Discharged (Sorbed)	1.919E-06	lbs
Total Phosphorus Discharged (Dissolved)	2.426	lbs
Phosphorus Concentration	0.01609	mg/l
Peak Phosphorus Concentration	0.02874	mg/l
Total Bacteria Discharged	1.029E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.63E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.159E+07	cfu
Total Bacteria Discharged (Planktonic)	1.029E+11	cfu
Bacteria Concentration	795.2	cfu/100 ml
Peak Bacteria Concentration	1279	cfu/100 ml

Trib2-03-05

Name	Trib2-03-05
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	12	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	4	ft
EMS Width	50	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	4	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	5.78	ac

Peak Stage	10	ft
Total Inflow Volume	7.823	ac-ft
Total Rainfall On BMP	29.09	ac-ft
Total Outflow Volume	248	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	247.4	ac-ft
Infiltration Volume	0.5965	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	1057	lbs
Total Inflow Sediment Mass (Clay)	12.58	lbs
Total Inflow Sediment Mass (Silt)	3.51	lbs
Total Inflow Sediment Mass (Sand)	811.3	lbs
Total Inflow Sediment Mass (Small Agg.)	14.7	lbs
Total Inflow Sediment Mass (Large Agg.)	214.5	lbs
Priming Storm Sediment Mass In Permanent Pool	1458	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	1458	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	83.08	lbs
Total Sediment Mass Discharged (Clay)	82.97	lbs
Total Sediment Mass Discharged (Silt)	0.04444	lbs
Total Sediment Mass Discharged (Sand)	0.006496	lbs
Total Sediment Mass Discharged (Small Agg.)	0.05875	lbs
Total Sediment Mass Discharged (Large Agg.)	0.001511	lbs
Total Sediment Mass Trapped	2432	lbs
Total Sediment Mass Trapped (Clay)	1388	lbs
Total Sediment Mass Trapped (Silt)	3.465	lbs
Total Sediment Mass Trapped (Sand)	811.3	lbs
Total Sediment Mass Trapped (Small Agg.)	14.65	lbs

Total Sediment Mass Trapped (Large Agg.)	214.5	lbs
Sediment Trapping Efficiency	96.7	%
Sediment Trapping Efficiency (Clay)	94.36	%
Sediment Trapping Efficiency (Silt)	98.73	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	99.6	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	83.08	lbs
EMS Sediment Mass Discharged (Clay)	82.97	lbs
EMS Sediment Mass Discharged (Silt)	0.04444	lbs
EMS Sediment Mass Discharged (Sand)	0.006496	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.05875	lbs
EMS Sediment Mass Discharged (Large Agg.)	0.001511	lbs
Sediment Concentration	0.009206	mg/l
Peak Sediment Concentration	0.01005	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	20.69	lbs
Total Nitrogen Mass Inflow (Particulate)	8.897	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.005025	lbs
Total Nitrogen Mass Inflow (Dissolved)	11.79	lbs
Priming Storm Nitrogen Mass In Permanent Pool	3540	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	198	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.1632	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	3342	lbs
Total Nitrogen Mass Discharged	200.5	lbs
Total Nitrogen Mass Discharged (Particulate)	11.73	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.009647	lbs

Total Nitrogen Mass Discharged (Dissolved)	188.7	lbs
Total Nitrogen Mass Trapped	3361	lbs
Total Nitrogen Mass Trapped (Particulate)	195.2	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.1586	lbs
Total Nitrogen Mass Trapped (Dissolved)	3165	lbs
Nitrogen Trapping Efficiency	94.37	%
Nitrogen Trapping Efficiency (Particulate)	94.33	%
Nitrogen Trapping Efficiency (Sorbed)	94.27	%
Nitrogen Trapping Efficiency (Dissolved)	94.37	%
Outlet Pipe Nitrogen Mass Discharged	-1.802E-15	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	-1.802E-15	lbs
EMS Nitrogen Mass Discharged	200.5	lbs
EMS Nitrogen Mass Discharged (Particulate)	11.73	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.009647	lbs
EMS Nitrogen Mass Discharged (Dissolved)	188.7	lbs
Nitrogen Concentration	0.02227	mg/l
Peak Nitrogen Concentration	0.02363	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	4.257	lbs
Total Phosphorus Mass Inflow (Particulate)	1.83	lbs
Total Phosphorus Mass Inflow (Sorbed)	1.919E-06	lbs
Total Phosphorus Mass Inflow (Dissolved)	2.426	lbs
Priming Storm Phosphorus Mass In Permanent Pool	727.4	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	40.66	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	6.06E-05	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	686.7	lbs
Total Phosphorus Mass Discharged	41.19	lbs
Total Phosphorus Mass Discharged (Particulate)	2.408	lbs
Total Phosphorus Mass Discharged (Sorbed)	3.592E-06	lbs
Total Phosphorus Mass Discharged (Dissolved)	38.78	lbs
Total Phosphorus Mass Trapped	690.5	lbs

Total Phosphorus Mass Trapped (Particulate)	40.08	lbs
Total Phosphorus Mass Trapped (Sorbed)	5.892E-05	lbs
Total Phosphorus Mass Trapped (Dissolved)	650.4	lbs
Phosphorus Trapping Efficiency	94.37	%
Phosphorus Trapping Efficiency (Particulate)	94.33	%
Phosphorus Trapping Efficiency (Sorbed)	94.25	%
Phosphorus Trapping Efficiency (Dissolved)	94.37	%
Outlet Pipe Phosphorus Mass Discharged	3.741E-16	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	3.741E-16	lbs
EMS Phosphorus Mass Discharged	41.19	lbs
EMS Phosphorus Mass Discharged (Particulate)	2.408	lbs
EMS Phosphorus Mass Discharged (Sorbed)	3.592E-06	lbs
EMS Phosphorus Mass Discharged (Dissolved)	38.78	lbs
Phosphorus Concentration	0.004575	mg/l
Peak Phosphorus Concentration	0.004856	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	1.029E+11	cfu
Total Bacteria Loading (Sorbed To Clay)	3.63E+07	cfu
Total Bacteria Loading (Sorbed To Silt)	2.159E+07	cfu
Total Bacteria Loading (Planktonic)	1.029E+11	cfu
Priming Storm Bacteria In Permanent Pool	9.811E+08	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	9.811E+08	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	6.818E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.772E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.214E+05	cfu
Total Bacteria Discharged (Planktonic)	6.76E+09	cfu
Total Bacteria Trapped	9.71E+10	cfu

Total Bacteria Trapped (Sorbed To Clay)	9.597E+08	cfu
Total Bacteria Trapped (Sorbed To Silt)	2.147E+07	cfu
Total Bacteria Trapped (Planktonic)	9.612E+10	cfu
Bacteria Trapping Efficiency	93.44	%
Bacteria Trapping Efficiency (Sorbed To Clay)	94.33	%
Bacteria Trapping Efficiency (Sorbed To Silt)	99.44	%
Bacteria Trapping Efficiency (Planktonic)	93.43	%
Outlet Pipe Bacteria Discharged	-8.34E-09	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	-8.34E-09	cfu
EMS Bacteria Discharged	6.818E+09	cfu
EMS Bacteria Discharged (Sorbed To Clay)	5.772E+07	cfu
EMS Bacteria Discharged (Sorbed To Silt)	1.214E+05	cfu
EMS Bacteria Discharged (Planktonic)	6.76E+09	cfu
Bacteria Concentration	0.1007	cfu/100 ml
Peak Bacteria Concentration	0.8461	cfu/100 ml

RICHLAND COUNTY
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Non-Routed Connector 43		
Name	Non-Routed Connector 43	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	247.4	ac-ft
Total Sediment Discharged	83.08	lbs
Total Sediment Discharged (Clay)	82.97	lbs
Total Sediment Discharged (Silt)	0.04444	lbs
Total Sediment Discharged (Sand)	0.006496	lbs
Total Sediment Discharged (Small Agg.)	0.05875	lbs
Total Sediment Discharged (Large Agg.)	0.001511	lbs
Sediment Concentration	0.009206	mg/l
Peak Sediment Concentration	0.01005	mg/l
Total Nitrogen Discharged	200.5	lbs
Total Nitrogen Discharged (Particulate)	11.73	lbs
Total Nitrogen Discharged (Sorbed)	0.009647	lbs
Total Nitrogen Discharged (Dissolved)	188.7	lbs
Nitrogen Concentration	0.02227	mg/l
Peak Nitrogen Concentration	0.02363	mg/l
Total Phosphorus Discharged	41.19	lbs
Total Phosphorus Discharged (Particulate)	2.408	lbs
Total Phosphorus Discharged (Sorbed)	3.592E-06	lbs
Total Phosphorus Discharged (Dissolved)	38.78	lbs
Phosphorus Concentration	0.004575	mg/l
Peak Phosphorus Concentration	0.004856	mg/l
Total Bacteria Discharged	6.818E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.772E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.214E+05	cfu
Total Bacteria Discharged (Planktonic)	6.76E+09	cfu
Bacteria Concentration	0.1007	cfu/100 ml
Peak Bacteria Concentration	0.8461	cfu/100 ml

Basin_18

Name	Basin_18
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	6.43	acres
Curve Number	67	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.317	hrs

Sediment Inputs

Parameter	Value	Units
Length	280	ft
Slope	0.05	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	5000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.448	ac-ft
Total Sediment Yield	136.3	lbs
Total Sediment Yield (Clay)	1.417	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	105.1	lbs
Total Sediment Yield (Small Agg.)	1.908	lbs
Total Sediment Yield (Large Agg.)	27.84	lbs
Sediment Concentration	2.274	mg/l
Peak Sediment Concentration	5.418	mg/l
Total Nitrogen Yield	3.82	lbs
Total Nitrogen Yield (Particulate)	1.643	lbs
Total Nitrogen Yield (Sorbed)	0.0005585	lbs
Total Nitrogen Yield (Dissolved)	2.177	lbs
Nitrogen Concentration	0.1211	mg/l
Peak Nitrogen Concentration	0.2448	mg/l
Total Phosphorus Yield	0.7877	lbs
Total Phosphorus Yield (Particulate)	0.3387	lbs
Total Phosphorus Yield (Sorbed)	2.333E-07	lbs
Total Phosphorus Yield (Dissolved)	0.449	lbs
Phosphorus Concentration	0.02496	mg/l
Peak Phosphorus Concentration	0.05047	mg/l
Total Bacteria Yield	8.929E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	8.929E+10	cfu
Bacteria Concentration	623.8	cfu/100 ml
Peak Bacteria Concentration	1261	cfu/100 ml

Non-Routed Connector 16

Name	Non-Routed Connector 16
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1.448	ac-ft
Total Sediment Discharged	136.3	lbs
Total Sediment Discharged (Clay)	1.417	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	105.1	lbs
Total Sediment Discharged (Small Agg.)	1.908	lbs
Total Sediment Discharged (Large Agg.)	27.84	lbs
Sediment Concentration	2.274	mg/l
Peak Sediment Concentration	5.418	mg/l
Total Nitrogen Discharged	3.82	lbs
Total Nitrogen Discharged (Particulate)	1.643	lbs
Total Nitrogen Discharged (Sorbed)	0.0005585	lbs
Total Nitrogen Discharged (Dissolved)	2.177	lbs
Nitrogen Concentration	0.1211	mg/l
Peak Nitrogen Concentration	0.2448	mg/l
Total Phosphorus Discharged	0.7877	lbs
Total Phosphorus Discharged (Particulate)	0.3387	lbs
Total Phosphorus Discharged (Sorbed)	2.333E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.449	lbs
Phosphorus Concentration	0.02496	mg/l
Peak Phosphorus Concentration	0.05047	mg/l
Total Bacteria Discharged	8.929E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	8.929E+10	cfu
Bacteria Concentration	623.8	cfu/100 ml
Peak Bacteria Concentration	1261	cfu/100 ml

Trib2-03-07

Name	Trib2-03-07
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	12	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	4	ft
EMS Width	80	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	4	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	5.17	ac

Peak Stage	10	ft
Total Inflow Volume	1.448	ac-ft
Total Rainfall On BMP	26.02	ac-ft
Total Outflow Volume	368.6	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	367.7	ac-ft
Infiltration Volume	0.9237	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	136.3	lbs
Total Inflow Sediment Mass (Clay)	1.417	lbs
Total Inflow Sediment Mass (Silt)	0	lbs
Total Inflow Sediment Mass (Sand)	105.1	lbs
Total Inflow Sediment Mass (Small Agg.)	1.908	lbs
Total Inflow Sediment Mass (Large Agg.)	27.84	lbs
Priming Storm Sediment Mass In Permanent Pool	458.5	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	458.5	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	41.15	lbs
Total Sediment Mass Discharged (Clay)	41.15	lbs
Total Sediment Mass Discharged (Silt)	0	lbs
Total Sediment Mass Discharged (Sand)	0	lbs
Total Sediment Mass Discharged (Small Agg.)	0	lbs
Total Sediment Mass Discharged (Large Agg.)	0	lbs
Total Sediment Mass Trapped	553.6	lbs
Total Sediment Mass Trapped (Clay)	418.8	lbs
Total Sediment Mass Trapped (Silt)	0	lbs
Total Sediment Mass Trapped (Sand)	105.1	lbs
Total Sediment Mass Trapped (Small Agg.)	1.908	lbs

Total Sediment Mass Trapped (Large Agg.)	27.84	lbs
Sediment Trapping Efficiency	93.08	%
Sediment Trapping Efficiency (Clay)	91.05	%
Sediment Trapping Efficiency (Silt)	0	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	100	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	41.15	lbs
EMS Sediment Mass Discharged (Clay)	41.15	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0	lbs
EMS Sediment Mass Discharged (Small Agg.)	0	lbs
EMS Sediment Mass Discharged (Large Agg.)	0	lbs
Sediment Concentration	0.005137	mg/l
Peak Sediment Concentration	0.005501	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	3.82	lbs
Total Nitrogen Mass Inflow (Particulate)	1.643	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.0005585	lbs
Total Nitrogen Mass Inflow (Dissolved)	2.177	lbs
Priming Storm Nitrogen Mass In Permanent Pool	1925	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	92.92	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.04865	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1832	lbs
Total Nitrogen Mass Discharged	172.7	lbs
Total Nitrogen Mass Discharged (Particulate)	8.339	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.004366	lbs

Total Nitrogen Mass Discharged (Dissolved)	164.4	lbs
Total Nitrogen Mass Trapped	1756	lbs
Total Nitrogen Mass Trapped (Particulate)	86.22	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.04484	lbs
Total Nitrogen Mass Trapped (Dissolved)	1670	lbs
Nitrogen Trapping Efficiency	91.04	%
Nitrogen Trapping Efficiency (Particulate)	91.18	%
Nitrogen Trapping Efficiency (Sorbed)	91.13	%
Nitrogen Trapping Efficiency (Dissolved)	91.04	%
Outlet Pipe Nitrogen Mass Discharged	-1.622E-15	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	-1.622E-15	lbs
EMS Nitrogen Mass Discharged	172.7	lbs
EMS Nitrogen Mass Discharged (Particulate)	8.339	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.004366	lbs
EMS Nitrogen Mass Discharged (Dissolved)	164.4	lbs
Nitrogen Concentration	0.02157	mg/l
Peak Nitrogen Concentration	0.0231	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	0.7877	lbs
Total Phosphorus Mass Inflow (Particulate)	0.3387	lbs
Total Phosphorus Mass Inflow (Sorbed)	2.333E-07	lbs
Total Phosphorus Mass Inflow (Dissolved)	0.449	lbs
Priming Storm Phosphorus Mass In Permanent Pool	397	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	19.16	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	2.033E-05	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	377.8	lbs
Total Phosphorus Mass Discharged	35.63	lbs
Total Phosphorus Mass Discharged (Particulate)	1.719	lbs
Total Phosphorus Mass Discharged (Sorbed)	1.825E-06	lbs
Total Phosphorus Mass Discharged (Dissolved)	33.91	lbs
Total Phosphorus Mass Trapped	362.2	lbs

Total Phosphorus Mass Trapped (Particulate)	17.78	lbs
Total Phosphorus Mass Trapped (Sorbed)	1.874E-05	lbs
Total Phosphorus Mass Trapped (Dissolved)	344.4	lbs
Phosphorus Trapping Efficiency	91.04	%
Phosphorus Trapping Efficiency (Particulate)	91.18	%
Phosphorus Trapping Efficiency (Sorbed)	91.13	%
Phosphorus Trapping Efficiency (Dissolved)	91.04	%
Outlet Pipe Phosphorus Mass Discharged	-8.279E-17	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	-8.279E-17	lbs
EMS Phosphorus Mass Discharged	35.63	lbs
EMS Phosphorus Mass Discharged (Particulate)	1.719	lbs
EMS Phosphorus Mass Discharged (Sorbed)	1.825E-06	lbs
EMS Phosphorus Mass Discharged (Dissolved)	33.91	lbs
Phosphorus Concentration	0.004448	mg/l
Peak Phosphorus Concentration	0.004764	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	8.929E+10	cfu
Total Bacteria Loading (Sorbed To Clay)	1.633E+07	cfu
Total Bacteria Loading (Sorbed To Silt)	0	cfu
Total Bacteria Loading (Planktonic)	8.927E+10	cfu
Priming Storm Bacteria In Permanent Pool	1.373E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	1.373E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	1.233E+08	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.233E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	0	cfu
Total Bacteria Trapped	9.054E+10	cfu

Total Bacteria Trapped (Sorbed To Clay)	1.267E+09	cfu
Total Bacteria Trapped (Sorbed To Silt)	0	cfu
Total Bacteria Trapped (Planktonic)	8.927E+10	cfu
Bacteria Trapping Efficiency	99.86	%
Bacteria Trapping Efficiency (Sorbed To Clay)	91.13	%
Bacteria Trapping Efficiency (Sorbed To Silt)	0	%
Bacteria Trapping Efficiency (Planktonic)	100	%
Outlet Pipe Bacteria Discharged	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	0	cfu
EMS Bacteria Discharged	1.233E+08	cfu
EMS Bacteria Discharged (Sorbed To Clay)	1.233E+08	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	0.003392	cfu/100 ml
Peak Bacteria Concentration	0.003633	cfu/100 ml

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SOUTH CAROLINA

Non-Routed Connector 42		
Name	Non-Routed Connector 42	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	367.7	ac-ft
Total Sediment Discharged	41.15	lbs
Total Sediment Discharged (Clay)	41.15	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	0	lbs
Total Sediment Discharged (Small Agg.)	0	lbs
Total Sediment Discharged (Large Agg.)	0	lbs
Sediment Concentration	0.005137	mg/l
Peak Sediment Concentration	0.005501	mg/l
Total Nitrogen Discharged	172.7	lbs
Total Nitrogen Discharged (Particulate)	8.339	lbs
Total Nitrogen Discharged (Sorbed)	0.004366	lbs
Total Nitrogen Discharged (Dissolved)	164.4	lbs
Nitrogen Concentration	0.02157	mg/l
Peak Nitrogen Concentration	0.0231	mg/l
Total Phosphorus Discharged	35.63	lbs
Total Phosphorus Discharged (Particulate)	1.719	lbs
Total Phosphorus Discharged (Sorbed)	1.825E-06	lbs
Total Phosphorus Discharged (Dissolved)	33.91	lbs
Phosphorus Concentration	0.004448	mg/l
Peak Phosphorus Concentration	0.004764	mg/l
Total Bacteria Discharged	1.233E+08	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.233E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	0.003392	cfu/100 ml
Peak Bacteria Concentration	0.003633	cfu/100 ml

Trib2-03-03

Name	Trib2-03-03
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	615.1	ac-ft
Total Sediment Discharged	124.2	lbs
Total Sediment Discharged (Clay)	124.1	lbs
Total Sediment Discharged (Silt)	0.04444	lbs
Total Sediment Discharged (Sand)	0.006496	lbs
Total Sediment Discharged (Small Agg.)	0.05875	lbs
Total Sediment Discharged (Large Agg.)	0.001511	lbs
Sediment Concentration	0.01001	mg/l
Peak Sediment Concentration	0.01286	mg/l
Total Nitrogen Discharged	373.2	lbs
Total Nitrogen Discharged (Particulate)	20.07	lbs
Total Nitrogen Discharged (Sorbed)	0.01401	lbs
Total Nitrogen Discharged (Dissolved)	353.1	lbs
Nitrogen Concentration	0.03127	mg/l
Peak Nitrogen Concentration	0.03606	mg/l
Total Phosphorus Discharged	76.82	lbs
Total Phosphorus Discharged (Particulate)	4.128	lbs
Total Phosphorus Discharged (Sorbed)	5.416E-06	lbs
Total Phosphorus Discharged (Dissolved)	72.69	lbs
Phosphorus Concentration	0.006438	mg/l
Peak Phosphorus Concentration	0.007419	mg/l
Total Bacteria Discharged	6.939E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.609E+05	cfu
Total Bacteria Discharged (Sorbed To Silt)	5083	cfu
Total Bacteria Discharged (Planktonic)	6.939E+09	cfu
Bacteria Concentration	0.06523	cfu/100 ml
Peak Bacteria Concentration	0.7589	cfu/100 ml

Non-Routed Connector 44

Name	Non-Routed Connector 44
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	615.1	ac-ft
Total Sediment Discharged	124.2	lbs
Total Sediment Discharged (Clay)	124.1	lbs
Total Sediment Discharged (Silt)	0.04444	lbs
Total Sediment Discharged (Sand)	0.006496	lbs
Total Sediment Discharged (Small Agg.)	0.05875	lbs
Total Sediment Discharged (Large Agg.)	0.001511	lbs
Sediment Concentration	0.01001	mg/l
Peak Sediment Concentration	0.01286	mg/l
Total Nitrogen Discharged	373.2	lbs
Total Nitrogen Discharged (Particulate)	20.07	lbs
Total Nitrogen Discharged (Sorbed)	0.01401	lbs
Total Nitrogen Discharged (Dissolved)	353.1	lbs
Nitrogen Concentration	0.03127	mg/l
Peak Nitrogen Concentration	0.03606	mg/l
Total Phosphorus Discharged	76.82	lbs
Total Phosphorus Discharged (Particulate)	4.128	lbs
Total Phosphorus Discharged (Sorbed)	5.416E-06	lbs
Total Phosphorus Discharged (Dissolved)	72.69	lbs
Phosphorus Concentration	0.006438	mg/l
Peak Phosphorus Concentration	0.007419	mg/l
Total Bacteria Discharged	6.939E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.609E+05	cfu
Total Bacteria Discharged (Sorbed To Silt)	5083	cfu
Total Bacteria Discharged (Planktonic)	6.939E+09	cfu
Bacteria Concentration	0.06523	cfu/100 ml
Peak Bacteria Concentration	0.7589	cfu/100 ml

Basin_19

Name	Basin_19
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	109.35	acres
Curve Number	62	-
Soil Series	Pelion	-
Depth Range	0-13	in
Peak Rate Factor	484	-
Time of Concentration	0.733	hrs

Sediment Inputs

Parameter	Value	Units
Length	2656	ft
Slope	0.023	ft/ft
Soil Erodibility	0.2	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	6	%
Silt Percent	16.3	%
Sand Percent	77.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	221.2	micro g/g/mg/l
Isotherm Max - Nitrogen	3708.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	5000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	17.34	ac-ft
Total Sediment Yield	1.381E+04	lbs
Total Sediment Yield (Clay)	215.4	lbs
Total Sediment Yield (Silt)	759.6	lbs
Total Sediment Yield (Sand)	7875	lbs
Total Sediment Yield (Small Agg.)	1492	lbs
Total Sediment Yield (Large Agg.)	3469	lbs
Sediment Concentration	15.89	mg/l
Peak Sediment Concentration	31.85	mg/l
Total Nitrogen Yield	45.73	lbs
Total Nitrogen Yield (Particulate)	19.66	lbs
Total Nitrogen Yield (Sorbed)	0.04358	lbs
Total Nitrogen Yield (Dissolved)	26.02	lbs
Nitrogen Concentration	0.1042	mg/l
Peak Nitrogen Concentration	0.178	mg/l
Total Phosphorus Yield	9.428	lbs
Total Phosphorus Yield (Particulate)	4.054	lbs
Total Phosphorus Yield (Sorbed)	3.114E-05	lbs
Total Phosphorus Yield (Dissolved)	5.374	lbs
Phosphorus Concentration	0.02148	mg/l
Peak Phosphorus Concentration	0.0367	mg/l
Total Bacteria Yield	1.069E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	1.069E+12	cfu
Bacteria Concentration	536.7	cfu/100 ml
Peak Bacteria Concentration	917.2	cfu/100 ml

Non-Routed Connector 17		
Name	Non-Routed Connector 17	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	17.34	ac-ft
Total Sediment Discharged	1.381E+04	lbs
Total Sediment Discharged (Clay)	215.4	lbs
Total Sediment Discharged (Silt)	759.6	lbs
Total Sediment Discharged (Sand)	7875	lbs
Total Sediment Discharged (Small Agg.)	1492	lbs
Total Sediment Discharged (Large Agg.)	3469	lbs
Sediment Concentration	15.89	mg/l
Peak Sediment Concentration	31.85	mg/l
Total Nitrogen Discharged	45.73	lbs
Total Nitrogen Discharged (Particulate)	19.66	lbs
Total Nitrogen Discharged (Sorbed)	0.04358	lbs
Total Nitrogen Discharged (Dissolved)	26.02	lbs
Nitrogen Concentration	0.1042	mg/l
Peak Nitrogen Concentration	0.178	mg/l
Total Phosphorus Discharged	9.428	lbs
Total Phosphorus Discharged (Particulate)	4.054	lbs
Total Phosphorus Discharged (Sorbed)	3.114E-05	lbs
Total Phosphorus Discharged (Dissolved)	5.374	lbs
Phosphorus Concentration	0.02148	mg/l
Peak Phosphorus Concentration	0.0367	mg/l
Total Bacteria Discharged	1.069E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.069E+12	cfu
Bacteria Concentration	536.7	cfu/100 ml
Peak Bacteria Concentration	917.2	cfu/100 ml

Trib2-03-02

Name	Trib2-03-02
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	632.5	ac-ft
Total Sediment Discharged	1.393E+04	lbs
Total Sediment Discharged (Clay)	339.6	lbs
Total Sediment Discharged (Silt)	759.6	lbs
Total Sediment Discharged (Sand)	7875	lbs
Total Sediment Discharged (Small Agg.)	1492	lbs
Total Sediment Discharged (Large Agg.)	3469	lbs
Sediment Concentration	0.6739	mg/l
Peak Sediment Concentration	18.49	mg/l
Total Nitrogen Discharged	418.9	lbs
Total Nitrogen Discharged (Particulate)	39.73	lbs
Total Nitrogen Discharged (Sorbed)	0.0576	lbs
Total Nitrogen Discharged (Dissolved)	379.2	lbs
Nitrogen Concentration	0.03305	mg/l
Peak Nitrogen Concentration	0.1167	mg/l
Total Phosphorus Discharged	86.24	lbs
Total Phosphorus Discharged (Particulate)	8.182	lbs
Total Phosphorus Discharged (Sorbed)	3.655E-05	lbs
Total Phosphorus Discharged (Dissolved)	78.06	lbs
Phosphorus Concentration	0.006804	mg/l
Peak Phosphorus Concentration	0.02405	mg/l
Total Bacteria Discharged	1.076E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.127E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.762E+08	cfu
Total Bacteria Discharged (Planktonic)	1.075E+12	cfu
Bacteria Concentration	12.18	cfu/100 ml
Peak Bacteria Concentration	507.5	cfu/100 ml

Non-Routed Connector 65

Name	Non-Routed Connector 65
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	632.5	ac-ft
Total Sediment Discharged	1.393E+04	lbs
Total Sediment Discharged (Clay)	339.6	lbs
Total Sediment Discharged (Silt)	759.6	lbs
Total Sediment Discharged (Sand)	7875	lbs
Total Sediment Discharged (Small Agg.)	1492	lbs
Total Sediment Discharged (Large Agg.)	3469	lbs
Sediment Concentration	0.6739	mg/l
Peak Sediment Concentration	18.49	mg/l
Total Nitrogen Discharged	418.9	lbs
Total Nitrogen Discharged (Particulate)	39.73	lbs
Total Nitrogen Discharged (Sorbed)	0.0576	lbs
Total Nitrogen Discharged (Dissolved)	379.2	lbs
Nitrogen Concentration	0.03305	mg/l
Peak Nitrogen Concentration	0.1167	mg/l
Total Phosphorus Discharged	86.24	lbs
Total Phosphorus Discharged (Particulate)	8.182	lbs
Total Phosphorus Discharged (Sorbed)	3.655E-05	lbs
Total Phosphorus Discharged (Dissolved)	78.06	lbs
Phosphorus Concentration	0.006804	mg/l
Peak Phosphorus Concentration	0.02405	mg/l
Total Bacteria Discharged	1.076E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.127E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.762E+08	cfu
Total Bacteria Discharged (Planktonic)	1.075E+12	cfu
Bacteria Concentration	12.18	cfu/100 ml
Peak Bacteria Concentration	507.5	cfu/100 ml

Basin_20		
Name	Basin_20	
Description		
Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	84.82	acres
Curve Number	45	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.617	hrs
Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	3789	ft
Slope	0.03	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%
Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	0.42	acres
Curve Number	45	-
Peak Rate Factor	484	-
Time of Concentration	0.617	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	117	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	3.511	ac-ft
Total Sediment Yield	419	lbs
Total Sediment Yield (Clay)	4.836	lbs
Total Sediment Yield (Silt)	1.054	lbs

Total Sediment Yield (Sand)	322.1	lbs
Total Sediment Yield (Small Agg.)	5.839	lbs
Total Sediment Yield (Large Agg.)	85.19	lbs
Sediment Concentration	1.829	mg/l
Peak Sediment Concentration	2.999	mg/l
Total Nitrogen Yield	9.278	lbs
Total Nitrogen Yield (Particulate)	3.99	lbs
Total Nitrogen Yield (Sorbed)	0.001765	lbs
Total Nitrogen Yield (Dissolved)	5.287	lbs
Nitrogen Concentration	0.05356	mg/l
Peak Nitrogen Concentration	0.0851	mg/l
Total Phosphorus Yield	1.91	lbs
Total Phosphorus Yield (Particulate)	0.8214	lbs
Total Phosphorus Yield (Sorbed)	6.887E-07	lbs
Total Phosphorus Yield (Dissolved)	1.089	lbs
Phosphorus Concentration	0.009654	mg/l
Peak Phosphorus Concentration	0.01553	mg/l
Total Bacteria Yield	4.522E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	1.438E+07	cfu
Total Bacteria Yield (Sorbed To Silt)	8.811E+06	cfu
Total Bacteria Yield (Planktonic)	4.52E+10	cfu
Bacteria Concentration	253.7	cfu/100 ml
Peak Bacteria Concentration	375.6	cfu/100 ml

Non-Routed Connector 27		
Name	Non-Routed Connector 27	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	3.511	ac-ft
Total Sediment Discharged	419	lbs
Total Sediment Discharged (Clay)	4.836	lbs
Total Sediment Discharged (Silt)	1.054	lbs
Total Sediment Discharged (Sand)	322.1	lbs
Total Sediment Discharged (Small Agg.)	5.839	lbs
Total Sediment Discharged (Large Agg.)	85.19	lbs
Sediment Concentration	1.829	mg/l
Peak Sediment Concentration	2.999	mg/l
Total Nitrogen Discharged	9.278	lbs
Total Nitrogen Discharged (Particulate)	3.99	lbs
Total Nitrogen Discharged (Sorbed)	0.001765	lbs
Total Nitrogen Discharged (Dissolved)	5.287	lbs
Nitrogen Concentration	0.05356	mg/l
Peak Nitrogen Concentration	0.0851	mg/l
Total Phosphorus Discharged	1.91	lbs
Total Phosphorus Discharged (Particulate)	0.8214	lbs
Total Phosphorus Discharged (Sorbed)	6.887E-07	lbs
Total Phosphorus Discharged (Dissolved)	1.089	lbs
Phosphorus Concentration	0.009654	mg/l
Peak Phosphorus Concentration	0.01553	mg/l
Total Bacteria Discharged	4.522E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.438E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.811E+06	cfu
Total Bacteria Discharged (Planktonic)	4.52E+10	cfu
Bacteria Concentration	253.7	cfu/100 ml
Peak Bacteria Concentration	375.6	cfu/100 ml

Trib2-04-08

Name	Trib2-04-08
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	3.511	ac-ft
Total Sediment Discharged	419	lbs
Total Sediment Discharged (Clay)	4.836	lbs
Total Sediment Discharged (Silt)	1.054	lbs
Total Sediment Discharged (Sand)	322.1	lbs
Total Sediment Discharged (Small Agg.)	5.839	lbs
Total Sediment Discharged (Large Agg.)	85.19	lbs
Sediment Concentration	1.829	mg/l
Peak Sediment Concentration	2.999	mg/l
Total Nitrogen Discharged	9.278	lbs
Total Nitrogen Discharged (Particulate)	3.99	lbs
Total Nitrogen Discharged (Sorbed)	0.001765	lbs
Total Nitrogen Discharged (Dissolved)	5.287	lbs
Nitrogen Concentration	0.05356	mg/l
Peak Nitrogen Concentration	0.0851	mg/l
Total Phosphorus Discharged	1.91	lbs
Total Phosphorus Discharged (Particulate)	0.8214	lbs
Total Phosphorus Discharged (Sorbed)	6.887E-07	lbs
Total Phosphorus Discharged (Dissolved)	1.089	lbs
Phosphorus Concentration	0.009654	mg/l
Peak Phosphorus Concentration	0.01553	mg/l
Total Bacteria Discharged	4.522E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.438E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.811E+06	cfu
Total Bacteria Discharged (Planktonic)	4.52E+10	cfu
Bacteria Concentration	253.7	cfu/100 ml
Peak Bacteria Concentration	375.6	cfu/100 ml

Circular Conduit 4

Name	Circular Conduit 4
Description	

Inputs

Parameter	Value	Units
Conduit Option	Simple Translation	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	3.511	ac-ft
Total Sediment Discharged	419	lbs
Total Sediment Discharged (Clay)	4.836	lbs
Total Sediment Discharged (Silt)	1.054	lbs
Total Sediment Discharged (Sand)	322.1	lbs
Total Sediment Discharged (Small Agg.)	5.839	lbs
Total Sediment Discharged (Large Agg.)	85.19	lbs
Sediment Concentration	1.829	mg/l
Peak Sediment Concentration	2.999	mg/l
Total Nitrogen Discharged	9.278	lbs
Total Nitrogen Discharged (Particulate)	3.99	lbs
Total Nitrogen Discharged (Sorbed)	0.001765	lbs
Total Nitrogen Discharged (Dissolved)	5.287	lbs
Nitrogen Concentration	0.05356	mg/l
Peak Nitrogen Concentration	0.0851	mg/l
Total Phosphorus Discharged	1.91	lbs
Total Phosphorus Discharged (Particulate)	0.8214	lbs
Total Phosphorus Discharged (Sorbed)	6.887E-07	lbs
Total Phosphorus Discharged (Dissolved)	1.089	lbs
Phosphorus Concentration	0.009654	mg/l
Peak Phosphorus Concentration	0.01553	mg/l
Total Bacteria Discharged	4.522E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.438E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.811E+06	cfu
Total Bacteria Discharged (Planktonic)	4.52E+10	cfu
Bacteria Concentration	253.7	cfu/100 ml
Peak Bacteria Concentration	375.6	cfu/100 ml

Trib2-04-07	
Name	Trib2-04-07
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	3.511	ac-ft
Total Sediment Discharged	419	lbs
Total Sediment Discharged (Clay)	4.836	lbs
Total Sediment Discharged (Silt)	1.054	lbs
Total Sediment Discharged (Sand)	322.1	lbs
Total Sediment Discharged (Small Agg.)	5.839	lbs
Total Sediment Discharged (Large Agg.)	85.19	lbs
Sediment Concentration	1.829	mg/l
Peak Sediment Concentration	2.999	mg/l
Total Nitrogen Discharged	9.278	lbs
Total Nitrogen Discharged (Particulate)	3.99	lbs
Total Nitrogen Discharged (Sorbed)	0.001765	lbs
Total Nitrogen Discharged (Dissolved)	5.287	lbs
Nitrogen Concentration	0.05356	mg/l
Peak Nitrogen Concentration	0.0851	mg/l
Total Phosphorus Discharged	1.91	lbs
Total Phosphorus Discharged (Particulate)	0.8214	lbs
Total Phosphorus Discharged (Sorbed)	6.887E-07	lbs
Total Phosphorus Discharged (Dissolved)	1.089	lbs
Phosphorus Concentration	0.009654	mg/l
Peak Phosphorus Concentration	0.01553	mg/l
Total Bacteria Discharged	4.522E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.438E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.811E+06	cfu
Total Bacteria Discharged (Planktonic)	4.52E+10	cfu
Bacteria Concentration	253.7	cfu/100 ml
Peak Bacteria Concentration	375.6	cfu/100 ml

Non-Routed Connector 64		
Name	Non-Routed Connector 64	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	3.511	ac-ft
Total Sediment Discharged	419	lbs
Total Sediment Discharged (Clay)	4.836	lbs
Total Sediment Discharged (Silt)	1.054	lbs
Total Sediment Discharged (Sand)	322.1	lbs
Total Sediment Discharged (Small Agg.)	5.839	lbs
Total Sediment Discharged (Large Agg.)	85.19	lbs
Sediment Concentration	1.829	mg/l
Peak Sediment Concentration	2.999	mg/l
Total Nitrogen Discharged	9.278	lbs
Total Nitrogen Discharged (Particulate)	3.99	lbs
Total Nitrogen Discharged (Sorbed)	0.001765	lbs
Total Nitrogen Discharged (Dissolved)	5.287	lbs
Nitrogen Concentration	0.05356	mg/l
Peak Nitrogen Concentration	0.0851	mg/l
Total Phosphorus Discharged	1.91	lbs
Total Phosphorus Discharged (Particulate)	0.8214	lbs
Total Phosphorus Discharged (Sorbed)	6.887E-07	lbs
Total Phosphorus Discharged (Dissolved)	1.089	lbs
Phosphorus Concentration	0.009654	mg/l
Peak Phosphorus Concentration	0.01553	mg/l
Total Bacteria Discharged	4.522E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.438E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.811E+06	cfu
Total Bacteria Discharged (Planktonic)	4.52E+10	cfu
Bacteria Concentration	253.7	cfu/100 ml
Peak Bacteria Concentration	375.6	cfu/100 ml

Basin_Off4		
Name	Basin_Off4	
Description		
Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	15.67	acres
Curve Number	52	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs
Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	1603	ft
Slope	0.044	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%
Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.06	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.28	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	20000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	0.12	acres
Curve Number	52	-
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	117	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.19	ac-ft
Total Sediment Yield	209.5	lbs
Total Sediment Yield (Clay)	2.538	lbs
Total Sediment Yield (Silt)	0.7926	lbs

Total Sediment Yield (Sand)	160.8	lbs
Total Sediment Yield (Small Agg.)	2.913	lbs
Total Sediment Yield (Large Agg.)	42.5	lbs
Sediment Concentration	3.347	mg/l
Peak Sediment Concentration	6.996	mg/l
Total Nitrogen Yield	6.667	lbs
Total Nitrogen Yield (Particulate)	2.867	lbs
Total Nitrogen Yield (Sorbed)	0.002123	lbs
Total Nitrogen Yield (Dissolved)	3.798	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Yield	0.9058	lbs
Total Phosphorus Yield (Particulate)	0.3895	lbs
Total Phosphorus Yield (Sorbed)	5.782E-07	lbs
Total Phosphorus Yield (Dissolved)	0.5163	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Yield	2.939E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	1.049E+08	cfu
Total Bacteria Yield (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Yield (Planktonic)	2.938E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Non-Routed Connector 29

Name	Non-Routed Connector 29
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1.19	ac-ft
Total Sediment Discharged	209.5	lbs
Total Sediment Discharged (Clay)	2.538	lbs
Total Sediment Discharged (Silt)	0.7926	lbs
Total Sediment Discharged (Sand)	160.8	lbs
Total Sediment Discharged (Small Agg.)	2.913	lbs
Total Sediment Discharged (Large Agg.)	42.5	lbs
Sediment Concentration	3.347	mg/l
Peak Sediment Concentration	6.996	mg/l
Total Nitrogen Discharged	6.667	lbs
Total Nitrogen Discharged (Particulate)	2.867	lbs
Total Nitrogen Discharged (Sorbed)	0.002123	lbs
Total Nitrogen Discharged (Dissolved)	3.798	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Discharged	0.9058	lbs
Total Phosphorus Discharged (Particulate)	0.3895	lbs
Total Phosphorus Discharged (Sorbed)	5.782E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.5163	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Discharged	2.939E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.049E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Discharged (Planktonic)	2.938E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Trib2-04-06

Name	Trib2-04-06
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1.19	ac-ft
Total Sediment Discharged	209.5	lbs
Total Sediment Discharged (Clay)	2.538	lbs
Total Sediment Discharged (Silt)	0.7926	lbs
Total Sediment Discharged (Sand)	160.8	lbs
Total Sediment Discharged (Small Agg.)	2.913	lbs
Total Sediment Discharged (Large Agg.)	42.5	lbs
Sediment Concentration	3.347	mg/l
Peak Sediment Concentration	6.996	mg/l
Total Nitrogen Discharged	6.667	lbs
Total Nitrogen Discharged (Particulate)	2.867	lbs
Total Nitrogen Discharged (Sorbed)	0.002123	lbs
Total Nitrogen Discharged (Dissolved)	3.798	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Discharged	0.9058	lbs
Total Phosphorus Discharged (Particulate)	0.3895	lbs
Total Phosphorus Discharged (Sorbed)	5.782E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.5163	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Discharged	2.939E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.049E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Discharged (Planktonic)	2.938E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Circular Conduit 5

Name	Circular Conduit 5
Description	

Inputs

Parameter	Value	Units
Conduit Option	Muskingum-Kunge method	-
Conduit Diameter	24	in.
Conduit Length	70	ft
Conduit Slope	0.014	ft/ft
Manning's Roughness	0.013	-

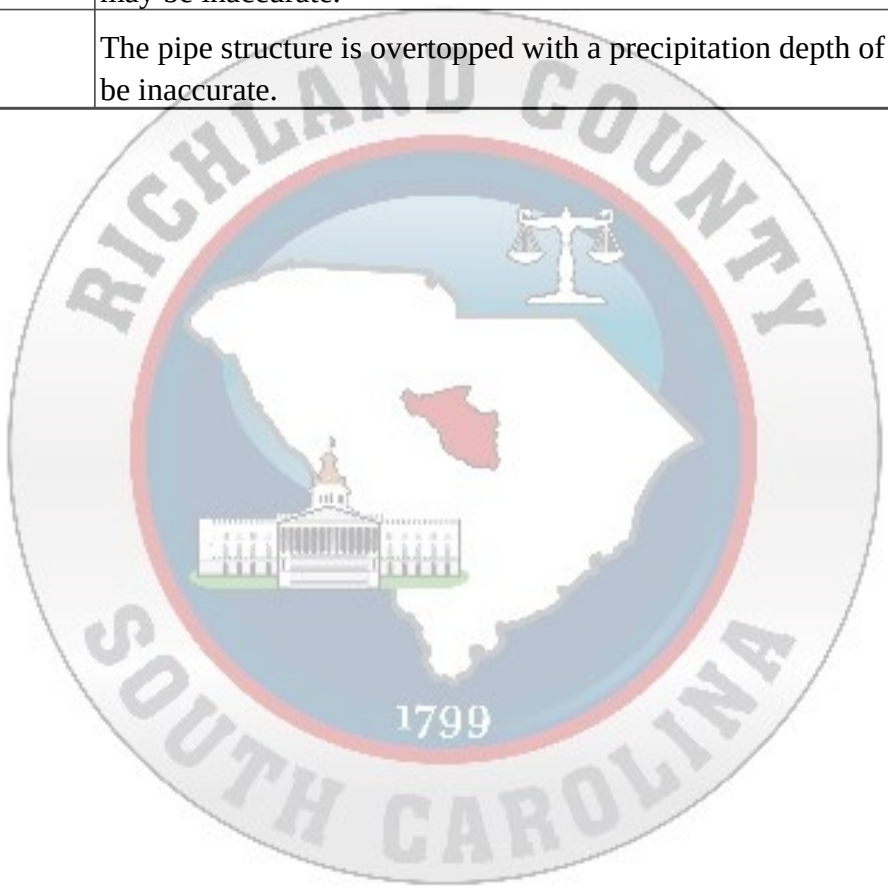
Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1.19	ac-ft
Total Sediment Discharged	209.5	lbs
Total Sediment Discharged (Clay)	2.538	lbs
Total Sediment Discharged (Silt)	0.7926	lbs
Total Sediment Discharged (Sand)	160.8	lbs
Total Sediment Discharged (Small Agg.)	2.913	lbs
Total Sediment Discharged (Large Agg.)	42.5	lbs
Sediment Concentration	3.347	mg/l
Peak Sediment Concentration	6.996	mg/l
Total Nitrogen Discharged	6.667	lbs
Total Nitrogen Discharged (Particulate)	2.867	lbs
Total Nitrogen Discharged (Sorbed)	0.002123	lbs
Total Nitrogen Discharged (Dissolved)	3.798	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Discharged	0.9058	lbs
Total Phosphorus Discharged (Particulate)	0.3895	lbs
Total Phosphorus Discharged (Sorbed)	5.782E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.5163	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Discharged	2.939E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.049E+08	cfu

Total Bacteria Discharged (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Discharged (Planktonic)	2.938E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Messages

Type	Description
Warning	Convergence criteria is not met. Flow is routed as simple translation.
Warning	The pipe structure is overtopped with a precipitation depth of 4.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 5.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 7 in. Results may be inaccurate.



Trib2-04-05

Name	Trib2-04-05
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1.19	ac-ft
Total Sediment Discharged	209.5	lbs
Total Sediment Discharged (Clay)	2.538	lbs
Total Sediment Discharged (Silt)	0.7926	lbs
Total Sediment Discharged (Sand)	160.8	lbs
Total Sediment Discharged (Small Agg.)	2.913	lbs
Total Sediment Discharged (Large Agg.)	42.5	lbs
Sediment Concentration	3.347	mg/l
Peak Sediment Concentration	6.996	mg/l
Total Nitrogen Discharged	6.667	lbs
Total Nitrogen Discharged (Particulate)	2.867	lbs
Total Nitrogen Discharged (Sorbed)	0.002123	lbs
Total Nitrogen Discharged (Dissolved)	3.798	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Discharged	0.9058	lbs
Total Phosphorus Discharged (Particulate)	0.3895	lbs
Total Phosphorus Discharged (Sorbed)	5.782E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.5163	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Discharged	2.939E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.049E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Discharged (Planktonic)	2.938E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Non-Routed Connector 63

Name	Non-Routed Connector 63
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1.19	ac-ft
Total Sediment Discharged	209.5	lbs
Total Sediment Discharged (Clay)	2.538	lbs
Total Sediment Discharged (Silt)	0.7926	lbs
Total Sediment Discharged (Sand)	160.8	lbs
Total Sediment Discharged (Small Agg.)	2.913	lbs
Total Sediment Discharged (Large Agg.)	42.5	lbs
Sediment Concentration	3.347	mg/l
Peak Sediment Concentration	6.996	mg/l
Total Nitrogen Discharged	6.667	lbs
Total Nitrogen Discharged (Particulate)	2.867	lbs
Total Nitrogen Discharged (Sorbed)	0.002123	lbs
Total Nitrogen Discharged (Dissolved)	3.798	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Discharged	0.9058	lbs
Total Phosphorus Discharged (Particulate)	0.3895	lbs
Total Phosphorus Discharged (Sorbed)	5.782E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.5163	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Discharged	2.939E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.049E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Discharged (Planktonic)	2.938E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Basin_Off3		
Name	Basin_Off3	
Description		
Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	56.61	acres
Curve Number	46	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.45	hrs
Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	2659	ft
Slope	0.029	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%
Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	1.45	acres
Curve Number	46	-
Peak Rate Factor	484	-
Time of Concentration	0.45	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	117	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.589	ac-ft
Total Sediment Yield	276.3	lbs
Total Sediment Yield (Clay)	4.792	lbs
Total Sediment Yield (Silt)	4.229	lbs

Total Sediment Yield (Sand)	208.6	lbs
Total Sediment Yield (Small Agg.)	3.76	lbs
Total Sediment Yield (Large Agg.)	54.86	lbs
Sediment Concentration	1.674	mg/l
Peak Sediment Concentration	2.841	mg/l
Total Nitrogen Yield	6.898	lbs
Total Nitrogen Yield (Particulate)	2.966	lbs
Total Nitrogen Yield (Sorbed)	0.002202	lbs
Total Nitrogen Yield (Dissolved)	3.929	lbs
Nitrogen Concentration	0.05365	mg/l
Peak Nitrogen Concentration	0.0872	mg/l
Total Phosphorus Yield	1.411	lbs
Total Phosphorus Yield (Particulate)	0.6066	lbs
Total Phosphorus Yield (Sorbed)	7.153E-07	lbs
Total Phosphorus Yield (Dissolved)	0.8041	lbs
Phosphorus Concentration	0.009657	mg/l
Peak Phosphorus Concentration	0.01592	mg/l
Total Bacteria Yield	8.619E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	2.059E+08	cfu
Total Bacteria Yield (Sorbed To Silt)	6.797E+07	cfu
Total Bacteria Yield (Planktonic)	8.616E+11	cfu
Bacteria Concentration	1260	cfu/100 ml
Peak Bacteria Concentration	2084	cfu/100 ml

Non-Routed Connector 28		
Name	Non-Routed Connector 28	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.589	ac-ft
Total Sediment Discharged	276.3	lbs
Total Sediment Discharged (Clay)	4.792	lbs
Total Sediment Discharged (Silt)	4.229	lbs
Total Sediment Discharged (Sand)	208.6	lbs
Total Sediment Discharged (Small Agg.)	3.76	lbs
Total Sediment Discharged (Large Agg.)	54.86	lbs
Sediment Concentration	1.674	mg/l
Peak Sediment Concentration	2.841	mg/l
Total Nitrogen Discharged	6.898	lbs
Total Nitrogen Discharged (Particulate)	2.966	lbs
Total Nitrogen Discharged (Sorbed)	0.002202	lbs
Total Nitrogen Discharged (Dissolved)	3.929	lbs
Nitrogen Concentration	0.05365	mg/l
Peak Nitrogen Concentration	0.0872	mg/l
Total Phosphorus Discharged	1.411	lbs
Total Phosphorus Discharged (Particulate)	0.6066	lbs
Total Phosphorus Discharged (Sorbed)	7.153E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.8041	lbs
Phosphorus Concentration	0.009657	mg/l
Peak Phosphorus Concentration	0.01592	mg/l
Total Bacteria Discharged	8.619E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.059E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.797E+07	cfu
Total Bacteria Discharged (Planktonic)	8.616E+11	cfu
Bacteria Concentration	1260	cfu/100 ml
Peak Bacteria Concentration	2084	cfu/100 ml

Trib2-04-04

Name	Trib2-04-04
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	12	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	0.014	ft/ft
Barrel Length	70	ft
Barrel Diameter	24	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	5	ft
EMS Width	50	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	0.2471	ac

Peak Stage	10	ft
Total Inflow Volume	2.589	ac-ft
Total Rainfall On BMP	1.244	ac-ft
Total Outflow Volume	8.406	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	8.406	ac-ft
Infiltration Volume	1.928E-05	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	276.3	lbs
Total Inflow Sediment Mass (Clay)	4.792	lbs
Total Inflow Sediment Mass (Silt)	4.229	lbs
Total Inflow Sediment Mass (Sand)	208.6	lbs
Total Inflow Sediment Mass (Small Agg.)	3.76	lbs
Total Inflow Sediment Mass (Large Agg.)	54.86	lbs
Priming Storm Sediment Mass In Permanent Pool	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	37.22	lbs
Total Sediment Mass Discharged (Clay)	0.7401	lbs
Total Sediment Mass Discharged (Silt)	0.4196	lbs
Total Sediment Mass Discharged (Sand)	28.06	lbs
Total Sediment Mass Discharged (Small Agg.)	0.7197	lbs
Total Sediment Mass Discharged (Large Agg.)	7.279	lbs
Total Sediment Mass Trapped	239	lbs
Total Sediment Mass Trapped (Clay)	4.052	lbs
Total Sediment Mass Trapped (Silt)	3.809	lbs
Total Sediment Mass Trapped (Sand)	180.6	lbs
Total Sediment Mass Trapped (Small Agg.)	3.04	lbs

Total Sediment Mass Trapped (Large Agg.)	47.58	lbs
Sediment Trapping Efficiency	86.53	%
Sediment Trapping Efficiency (Clay)	84.56	%
Sediment Trapping Efficiency (Silt)	90.08	%
Sediment Trapping Efficiency (Sand)	86.55	%
Sediment Trapping Efficiency (Small Agg.)	80.86	%
Sediment Trapping Efficiency (Large Agg.)	86.73	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	37.22	lbs
EMS Sediment Mass Discharged (Clay)	0.7401	lbs
EMS Sediment Mass Discharged (Silt)	0.4196	lbs
EMS Sediment Mass Discharged (Sand)	28.06	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.7197	lbs
EMS Sediment Mass Discharged (Large Agg.)	7.279	lbs
Sediment Concentration	0.02163	mg/l
Peak Sediment Concentration	0.02418	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	6.898	lbs
Total Nitrogen Mass Inflow (Particulate)	2.966	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.002202	lbs
Total Nitrogen Mass Inflow (Dissolved)	3.929	lbs
Priming Storm Nitrogen Mass In Permanent Pool	0	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	0	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	0	lbs
Total Nitrogen Mass Discharged	0.976	lbs
Total Nitrogen Mass Discharged (Particulate)	0.3895	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.0002776	lbs

Total Nitrogen Mass Discharged (Dissolved)	0.5862	lbs
Total Nitrogen Mass Trapped	5.922	lbs
Total Nitrogen Mass Trapped (Particulate)	2.576	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.001925	lbs
Total Nitrogen Mass Trapped (Dissolved)	3.343	lbs
Nitrogen Trapping Efficiency	85.85	%
Nitrogen Trapping Efficiency (Particulate)	86.87	%
Nitrogen Trapping Efficiency (Sorbed)	87.4	%
Nitrogen Trapping Efficiency (Dissolved)	85.08	%
Outlet Pipe Nitrogen Mass Discharged	1.966E-18	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	1.966E-18	lbs
EMS Nitrogen Mass Discharged	0.976	lbs
EMS Nitrogen Mass Discharged (Particulate)	0.3895	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.0002776	lbs
EMS Nitrogen Mass Discharged (Dissolved)	0.5862	lbs
Nitrogen Concentration	0.0006089	mg/l
Peak Nitrogen Concentration	0.0008952	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	1.411	lbs
Total Phosphorus Mass Inflow (Particulate)	0.6066	lbs
Total Phosphorus Mass Inflow (Sorbed)	7.153E-07	lbs
Total Phosphorus Mass Inflow (Dissolved)	0.8041	lbs
Priming Storm Phosphorus Mass In Permanent Pool	0	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	0	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	0	lbs
Total Phosphorus Mass Discharged	0.2002	lbs
Total Phosphorus Mass Discharged (Particulate)	0.07992	lbs
Total Phosphorus Mass Discharged (Sorbed)	9.868E-08	lbs
Total Phosphorus Mass Discharged (Dissolved)	0.1203	lbs
Total Phosphorus Mass Trapped	1.21	lbs

Total Phosphorus Mass Trapped (Particulate)	0.5267	lbs
Total Phosphorus Mass Trapped (Sorbed)	6.166E-07	lbs
Total Phosphorus Mass Trapped (Dissolved)	0.6838	lbs
Phosphorus Trapping Efficiency	85.81	%
Phosphorus Trapping Efficiency (Particulate)	86.83	%
Phosphorus Trapping Efficiency (Sorbed)	86.2	%
Phosphorus Trapping Efficiency (Dissolved)	85.04	%
Outlet Pipe Phosphorus Mass Discharged	3.69E-18	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	3.69E-18	lbs
EMS Phosphorus Mass Discharged	0.2002	lbs
EMS Phosphorus Mass Discharged (Particulate)	0.07992	lbs
EMS Phosphorus Mass Discharged (Sorbed)	9.868E-08	lbs
EMS Phosphorus Mass Discharged (Dissolved)	0.1203	lbs
Phosphorus Concentration	0.000125	mg/l
Peak Phosphorus Concentration	0.0001842	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	8.619E+11	cfu
Total Bacteria Loading (Sorbed To Clay)	2.059E+08	cfu
Total Bacteria Loading (Sorbed To Silt)	6.797E+07	cfu
Total Bacteria Loading (Planktonic)	8.616E+11	cfu
Priming Storm Bacteria In Permanent Pool	0	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	0	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	1.291E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.254E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.796E+06	cfu
Total Bacteria Discharged (Planktonic)	1.29E+11	cfu
Total Bacteria Trapped	7.328E+11	cfu

Total Bacteria Trapped (Sorbed To Clay)	1.734E+08	cfu
Total Bacteria Trapped (Sorbed To Silt)	6.118E+07	cfu
Total Bacteria Trapped (Planktonic)	7.326E+11	cfu
Bacteria Trapping Efficiency	85.03	%
Bacteria Trapping Efficiency (Sorbed To Clay)	84.2	%
Bacteria Trapping Efficiency (Sorbed To Silt)	90	%
Bacteria Trapping Efficiency (Planktonic)	85.02	%
Outlet Pipe Bacteria Discharged	2.681E-06	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	2.681E-06	cfu
EMS Bacteria Discharged	1.291E+11	cfu
EMS Bacteria Discharged (Sorbed To Clay)	3.254E+07	cfu
EMS Bacteria Discharged (Sorbed To Silt)	6.796E+06	cfu
EMS Bacteria Discharged (Planktonic)	1.29E+11	cfu
Bacteria Concentration	17.79	cfu/100 ml
Peak Bacteria Concentration	27.18	cfu/100 ml

Non-Routed Connector 62

Name	Non-Routed Connector 62
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	8.406	ac-ft
Total Sediment Discharged	37.22	lbs
Total Sediment Discharged (Clay)	0.7401	lbs
Total Sediment Discharged (Silt)	0.4196	lbs
Total Sediment Discharged (Sand)	28.06	lbs
Total Sediment Discharged (Small Agg.)	0.7197	lbs
Total Sediment Discharged (Large Agg.)	7.279	lbs
Sediment Concentration	0.02163	mg/l
Peak Sediment Concentration	0.02418	mg/l
Total Nitrogen Discharged	0.976	lbs
Total Nitrogen Discharged (Particulate)	0.3895	lbs
Total Nitrogen Discharged (Sorbed)	0.0002776	lbs
Total Nitrogen Discharged (Dissolved)	0.5862	lbs
Nitrogen Concentration	0.0006089	mg/l
Peak Nitrogen Concentration	0.0008952	mg/l
Total Phosphorus Discharged	0.2002	lbs
Total Phosphorus Discharged (Particulate)	0.07992	lbs
Total Phosphorus Discharged (Sorbed)	9.868E-08	lbs
Total Phosphorus Discharged (Dissolved)	0.1203	lbs
Phosphorus Concentration	0.000125	mg/l
Peak Phosphorus Concentration	0.0001842	mg/l
Total Bacteria Discharged	1.291E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.254E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.796E+06	cfu
Total Bacteria Discharged (Planktonic)	1.29E+11	cfu
Bacteria Concentration	17.79	cfu/100 ml
Peak Bacteria Concentration	27.18	cfu/100 ml

Trib2-04-03

Name	Trib2-04-03
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	8.406	ac-ft
Total Sediment Discharged	37.22	lbs
Total Sediment Discharged (Clay)	0.7401	lbs
Total Sediment Discharged (Silt)	0.4196	lbs
Total Sediment Discharged (Sand)	28.06	lbs
Total Sediment Discharged (Small Agg.)	0.7197	lbs
Total Sediment Discharged (Large Agg.)	7.279	lbs
Sediment Concentration	0.02163	mg/l
Peak Sediment Concentration	0.02418	mg/l
Total Nitrogen Discharged	0.976	lbs
Total Nitrogen Discharged (Particulate)	0.3895	lbs
Total Nitrogen Discharged (Sorbed)	0.0002776	lbs
Total Nitrogen Discharged (Dissolved)	0.5862	lbs
Nitrogen Concentration	0.0006089	mg/l
Peak Nitrogen Concentration	0.0008952	mg/l
Total Phosphorus Discharged	0.2002	lbs
Total Phosphorus Discharged (Particulate)	0.07992	lbs
Total Phosphorus Discharged (Sorbed)	9.868E-08	lbs
Total Phosphorus Discharged (Dissolved)	0.1203	lbs
Phosphorus Concentration	0.000125	mg/l
Peak Phosphorus Concentration	0.0001842	mg/l
Total Bacteria Discharged	1.291E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.254E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.796E+06	cfu
Total Bacteria Discharged (Planktonic)	1.29E+11	cfu
Bacteria Concentration	17.79	cfu/100 ml
Peak Bacteria Concentration	27.18	cfu/100 ml

Non-Routed Connector 61

Name	Non-Routed Connector 61
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	8.406	ac-ft
Total Sediment Discharged	37.22	lbs
Total Sediment Discharged (Clay)	0.7401	lbs
Total Sediment Discharged (Silt)	0.4196	lbs
Total Sediment Discharged (Sand)	28.06	lbs
Total Sediment Discharged (Small Agg.)	0.7197	lbs
Total Sediment Discharged (Large Agg.)	7.279	lbs
Sediment Concentration	0.02163	mg/l
Peak Sediment Concentration	0.02418	mg/l
Total Nitrogen Discharged	0.976	lbs
Total Nitrogen Discharged (Particulate)	0.3895	lbs
Total Nitrogen Discharged (Sorbed)	0.0002776	lbs
Total Nitrogen Discharged (Dissolved)	0.5862	lbs
Nitrogen Concentration	0.0006089	mg/l
Peak Nitrogen Concentration	0.0008952	mg/l
Total Phosphorus Discharged	0.2002	lbs
Total Phosphorus Discharged (Particulate)	0.07992	lbs
Total Phosphorus Discharged (Sorbed)	9.868E-08	lbs
Total Phosphorus Discharged (Dissolved)	0.1203	lbs
Phosphorus Concentration	0.000125	mg/l
Peak Phosphorus Concentration	0.0001842	mg/l
Total Bacteria Discharged	1.291E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.254E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.796E+06	cfu
Total Bacteria Discharged (Planktonic)	1.29E+11	cfu
Bacteria Concentration	17.79	cfu/100 ml
Peak Bacteria Concentration	27.18	cfu/100 ml

Basin_21

Name	Basin_21
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	66.36	acres
Curve Number	63	-
Soil Series	Georgeville	-
Depth Range	0-15	in
Peak Rate Factor	484	-
Time of Concentration	0.55	hrs

Sediment Inputs

Parameter	Value	Units
Length	1919	ft
Slope	0.04	ft/ft
Soil Erodibility	0.49	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	11.3	ac-ft
Total Sediment Yield	4.663E+04	lbs
Total Sediment Yield (Clay)	1940	lbs
Total Sediment Yield (Silt)	1.189E+04	lbs
Total Sediment Yield (Sand)	5791	lbs
Total Sediment Yield (Small Agg.)	1.343E+04	lbs
Total Sediment Yield (Large Agg.)	1.358E+04	lbs
Sediment Concentration	83.33	mg/l
Peak Sediment Concentration	180.4	mg/l
Total Nitrogen Yield	29.81	lbs
Total Nitrogen Yield (Particulate)	12.82	lbs
Total Nitrogen Yield (Sorbed)	0.08188	lbs
Total Nitrogen Yield (Dissolved)	16.91	lbs
Nitrogen Concentration	0.1042	mg/l
Peak Nitrogen Concentration	0.1911	mg/l
Total Phosphorus Yield	6.146	lbs
Total Phosphorus Yield (Particulate)	2.643	lbs
Total Phosphorus Yield (Sorbed)	0.0002946	lbs
Total Phosphorus Yield (Dissolved)	3.503	lbs
Phosphorus Concentration	0.02148	mg/l
Peak Phosphorus Concentration	0.0394	mg/l
Total Bacteria Yield	3.762E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	3.762E+12	cfu
Bacteria Concentration	2898	cfu/100 ml
Peak Bacteria Concentration	5317	cfu/100 ml

Non-Routed Connector 18

Name	Non-Routed Connector 18
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	11.3	ac-ft
Total Sediment Discharged	4.663E+04	lbs
Total Sediment Discharged (Clay)	1940	lbs
Total Sediment Discharged (Silt)	1.189E+04	lbs
Total Sediment Discharged (Sand)	5791	lbs
Total Sediment Discharged (Small Agg.)	1.343E+04	lbs
Total Sediment Discharged (Large Agg.)	1.358E+04	lbs
Sediment Concentration	83.33	mg/l
Peak Sediment Concentration	180.4	mg/l
Total Nitrogen Discharged	29.81	lbs
Total Nitrogen Discharged (Particulate)	12.82	lbs
Total Nitrogen Discharged (Sorbed)	0.08188	lbs
Total Nitrogen Discharged (Dissolved)	16.91	lbs
Nitrogen Concentration	0.1042	mg/l
Peak Nitrogen Concentration	0.1911	mg/l
Total Phosphorus Discharged	6.146	lbs
Total Phosphorus Discharged (Particulate)	2.643	lbs
Total Phosphorus Discharged (Sorbed)	0.0002946	lbs
Total Phosphorus Discharged (Dissolved)	3.503	lbs
Phosphorus Concentration	0.02148	mg/l
Peak Phosphorus Concentration	0.0394	mg/l
Total Bacteria Discharged	3.762E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	3.762E+12	cfu
Bacteria Concentration	2898	cfu/100 ml
Peak Bacteria Concentration	5317	cfu/100 ml

Trib2-04-02

Name	Trib2-04-02
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	19	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	12	ft
EMS Width	80	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	12.41	ac

Peak Stage	17	ft
Total Inflow Volume	24.41	ac-ft
Total Rainfall On BMP	62.46	ac-ft
Total Outflow Volume	798.1	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	795.4	ac-ft
Infiltration Volume	2.715	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	4.729E+04	lbs
Total Inflow Sediment Mass (Clay)	1948	lbs
Total Inflow Sediment Mass (Silt)	1.189E+04	lbs
Total Inflow Sediment Mass (Sand)	6302	lbs
Total Inflow Sediment Mass (Small Agg.)	1.344E+04	lbs
Total Inflow Sediment Mass (Large Agg.)	1.371E+04	lbs
Priming Storm Sediment Mass In Permanent Pool	1.095E+06	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	1.095E+06	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	5.168E+04	lbs
Total Sediment Mass Discharged (Clay)	5.168E+04	lbs
Total Sediment Mass Discharged (Silt)	0	lbs
Total Sediment Mass Discharged (Sand)	0	lbs
Total Sediment Mass Discharged (Small Agg.)	0	lbs
Total Sediment Mass Discharged (Large Agg.)	0	lbs
Total Sediment Mass Trapped	1.09E+06	lbs
Total Sediment Mass Trapped (Clay)	1.045E+06	lbs
Total Sediment Mass Trapped (Silt)	1.189E+04	lbs
Total Sediment Mass Trapped (Sand)	6302	lbs
Total Sediment Mass Trapped (Small Agg.)	1.344E+04	lbs

Total Sediment Mass Trapped (Large Agg.)	1.371E+04	lbs
Sediment Trapping Efficiency	95.47	%
Sediment Trapping Efficiency (Clay)	95.29	%
Sediment Trapping Efficiency (Silt)	100	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	100	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	5.168E+04	lbs
EMS Sediment Mass Discharged (Clay)	5.168E+04	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0	lbs
EMS Sediment Mass Discharged (Small Agg.)	0	lbs
EMS Sediment Mass Discharged (Large Agg.)	0	lbs
Sediment Concentration	2.866	mg/l
Peak Sediment Concentration	2.941	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	46.73	lbs
Total Nitrogen Mass Inflow (Particulate)	20.06	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.08605	lbs
Total Nitrogen Mass Inflow (Dissolved)	26.58	lbs
Priming Storm Nitrogen Mass In Permanent Pool	2.138E+04	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	2854	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	14.11	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1.851E+04	lbs
Total Nitrogen Mass Discharged	1009	lbs
Total Nitrogen Mass Discharged (Particulate)	134.8	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.6663	lbs

Total Nitrogen Mass Discharged (Dissolved)	873.8	lbs
Total Nitrogen Mass Trapped	2.041E+04	lbs
Total Nitrogen Mass Trapped (Particulate)	2739	lbs
Total Nitrogen Mass Trapped (Sorbed)	13.53	lbs
Total Nitrogen Mass Trapped (Dissolved)	1.766E+04	lbs
Nitrogen Trapping Efficiency	95.29	%
Nitrogen Trapping Efficiency (Particulate)	95.31	%
Nitrogen Trapping Efficiency (Sorbed)	95.31	%
Nitrogen Trapping Efficiency (Dissolved)	95.29	%
Outlet Pipe Nitrogen Mass Discharged	-5.266E-16	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	-5.266E-16	lbs
EMS Nitrogen Mass Discharged	1009	lbs
EMS Nitrogen Mass Discharged (Particulate)	134.8	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.6663	lbs
EMS Nitrogen Mass Discharged (Dissolved)	873.8	lbs
Nitrogen Concentration	0.05598	mg/l
Peak Nitrogen Concentration	0.05743	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	9.162	lbs
Total Phosphorus Mass Inflow (Particulate)	3.933	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.000296	lbs
Total Phosphorus Mass Inflow (Dissolved)	5.228	lbs
Priming Storm Phosphorus Mass In Permanent Pool	4163	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	554.2	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.04517	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	3608	lbs
Total Phosphorus Mass Discharged	196.5	lbs
Total Phosphorus Mass Discharged (Particulate)	26.17	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.002133	lbs
Total Phosphorus Mass Discharged (Dissolved)	170.4	lbs
Total Phosphorus Mass Trapped	3975	lbs

Total Phosphorus Mass Trapped (Particulate)	532	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.04334	lbs
Total Phosphorus Mass Trapped (Dissolved)	3443	lbs
Phosphorus Trapping Efficiency	95.29	%
Phosphorus Trapping Efficiency (Particulate)	95.31	%
Phosphorus Trapping Efficiency (Sorbed)	95.31	%
Phosphorus Trapping Efficiency (Dissolved)	95.29	%
Outlet Pipe Phosphorus Mass Discharged	2.133E-15	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	2.133E-15	lbs
EMS Phosphorus Mass Discharged	196.5	lbs
EMS Phosphorus Mass Discharged (Particulate)	26.17	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0.002133	lbs
EMS Phosphorus Mass Discharged (Dissolved)	170.4	lbs
Phosphorus Concentration	0.0109	mg/l
Peak Phosphorus Concentration	0.01118	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	4.23E+12	cfu
Total Bacteria Loading (Sorbed To Clay)	6.544E+10	cfu
Total Bacteria Loading (Sorbed To Silt)	1.039E+11	cfu
Total Bacteria Loading (Planktonic)	4.061E+12	cfu
Priming Storm Bacteria In Permanent Pool	9.501E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	9.501E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	4.486E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.486E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	0	cfu
Total Bacteria Trapped	1.328E+13	cfu

Total Bacteria Trapped (Sorbed To Clay)	9.118E+12	cfu
Total Bacteria Trapped (Sorbed To Silt)	1.039E+11	cfu
Total Bacteria Trapped (Planktonic)	4.061E+12	cfu
Bacteria Trapping Efficiency	96.73	%
Bacteria Trapping Efficiency (Sorbed To Clay)	95.31	%
Bacteria Trapping Efficiency (Sorbed To Silt)	100	%
Bacteria Trapping Efficiency (Planktonic)	100	%
Outlet Pipe Bacteria Discharged	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	0	cfu
EMS Bacteria Discharged	4.486E+11	cfu
EMS Bacteria Discharged (Sorbed To Clay)	4.486E+11	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	5.485	cfu/100 ml
Peak Bacteria Concentration	5.627	cfu/100 ml

Non-Routed Connector 60

Name	Non-Routed Connector 60
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	795.4	ac-ft
Total Sediment Discharged	5.168E+04	lbs
Total Sediment Discharged (Clay)	5.168E+04	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	0	lbs
Total Sediment Discharged (Small Agg.)	0	lbs
Total Sediment Discharged (Large Agg.)	0	lbs
Sediment Concentration	2.866	mg/l
Peak Sediment Concentration	2.941	mg/l
Total Nitrogen Discharged	1009	lbs
Total Nitrogen Discharged (Particulate)	134.7	lbs
Total Nitrogen Discharged (Sorbed)	0.6663	lbs
Total Nitrogen Discharged (Dissolved)	873.8	lbs
Nitrogen Concentration	0.05598	mg/l
Peak Nitrogen Concentration	0.05743	mg/l
Total Phosphorus Discharged	196.5	lbs
Total Phosphorus Discharged (Particulate)	26.17	lbs
Total Phosphorus Discharged (Sorbed)	0.002133	lbs
Total Phosphorus Discharged (Dissolved)	170.4	lbs
Phosphorus Concentration	0.0109	mg/l
Peak Phosphorus Concentration	0.01118	mg/l
Total Bacteria Discharged	4.486E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.486E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	5.485	cfu/100 ml
Peak Bacteria Concentration	5.627	cfu/100 ml

Trib2-00-04

Name	Trib2-00-04
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1428	ac-ft
Total Sediment Discharged	6.561E+04	lbs
Total Sediment Discharged (Clay)	5.202E+04	lbs
Total Sediment Discharged (Silt)	759.6	lbs
Total Sediment Discharged (Sand)	7876	lbs
Total Sediment Discharged (Small Agg.)	1492	lbs
Total Sediment Discharged (Large Agg.)	3469	lbs
Sediment Concentration	2.068	mg/l
Peak Sediment Concentration	13.52	mg/l
Total Nitrogen Discharged	1428	lbs
Total Nitrogen Discharged (Particulate)	174.5	lbs
Total Nitrogen Discharged (Sorbed)	0.7239	lbs
Total Nitrogen Discharged (Dissolved)	1253	lbs
Nitrogen Concentration	0.05094	mg/l
Peak Nitrogen Concentration	0.09753	mg/l
Total Phosphorus Discharged	282.8	lbs
Total Phosphorus Discharged (Particulate)	34.35	lbs
Total Phosphorus Discharged (Sorbed)	0.002169	lbs
Total Phosphorus Discharged (Dissolved)	248.4	lbs
Phosphorus Concentration	0.01011	mg/l
Peak Phosphorus Concentration	0.01977	mg/l
Total Bacteria Discharged	1.524E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.746E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.488E+08	cfu
Total Bacteria Discharged (Planktonic)	1.521E+12	cfu
Bacteria Concentration	9.194	cfu/100 ml
Peak Bacteria Concentration	299.1	cfu/100 ml

Non-Routed Connector 59

Name	Non-Routed Connector 59
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1428	ac-ft
Total Sediment Discharged	6.561E+04	lbs
Total Sediment Discharged (Clay)	5.202E+04	lbs
Total Sediment Discharged (Silt)	759.6	lbs
Total Sediment Discharged (Sand)	7876	lbs
Total Sediment Discharged (Small Agg.)	1492	lbs
Total Sediment Discharged (Large Agg.)	3469	lbs
Sediment Concentration	2.068	mg/l
Peak Sediment Concentration	13.52	mg/l
Total Nitrogen Discharged	1428	lbs
Total Nitrogen Discharged (Particulate)	174.5	lbs
Total Nitrogen Discharged (Sorbed)	0.7239	lbs
Total Nitrogen Discharged (Dissolved)	1253	lbs
Nitrogen Concentration	0.05094	mg/l
Peak Nitrogen Concentration	0.09753	mg/l
Total Phosphorus Discharged	282.8	lbs
Total Phosphorus Discharged (Particulate)	34.35	lbs
Total Phosphorus Discharged (Sorbed)	0.002169	lbs
Total Phosphorus Discharged (Dissolved)	248.4	lbs
Phosphorus Concentration	0.01011	mg/l
Peak Phosphorus Concentration	0.01977	mg/l
Total Bacteria Discharged	1.524E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.746E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.488E+08	cfu
Total Bacteria Discharged (Planktonic)	1.521E+12	cfu
Bacteria Concentration	9.194	cfu/100 ml
Peak Bacteria Concentration	299.1	cfu/100 ml

Basin_Off5		
Name	Basin_Off5	
Description		
Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	133.13	acres
Curve Number	59	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.75	hrs
Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	4003	ft
Slope	0.033	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%
Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.25	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	20000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	0.92	acres
Curve Number	59	-
Peak Rate Factor	484	-
Time of Concentration	0.75	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	117	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	223.45	micro g/g/mg/l
Isotherm Max - Nitrogen	3734.3	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	17.05	ac-ft
Total Sediment Yield	2711	lbs
Total Sediment Yield (Clay)	34.41	lbs
Total Sediment Yield (Silt)	13.69	lbs

Total Sediment Yield (Sand)	2077	lbs
Total Sediment Yield (Small Agg.)	37.6	lbs
Total Sediment Yield (Large Agg.)	548.6	lbs
Sediment Concentration	8.214	mg/l
Peak Sediment Concentration	13.93	mg/l
Total Nitrogen Yield	92.73	lbs
Total Nitrogen Yield (Particulate)	39.87	lbs
Total Nitrogen Yield (Sorbed)	0.02215	lbs
Total Nitrogen Yield (Dissolved)	52.83	lbs
Nitrogen Concentration	0.302	mg/l
Peak Nitrogen Concentration	0.4786	mg/l
Total Phosphorus Yield	11.59	lbs
Total Phosphorus Yield (Particulate)	4.983	lbs
Total Phosphorus Yield (Sorbed)	5.995E-06	lbs
Total Phosphorus Yield (Dissolved)	6.605	lbs
Phosphorus Concentration	0.03724	mg/l
Peak Phosphorus Concentration	0.05902	mg/l
Total Bacteria Yield	4.211E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	1.375E+09	cfu
Total Bacteria Yield (Sorbed To Silt)	1.823E+08	cfu
Total Bacteria Yield (Planktonic)	4.21E+12	cfu
Bacteria Concentration	3331	cfu/100 ml
Peak Bacteria Concentration	5283	cfu/100 ml

Non-Routed Connector 30		
Name	Non-Routed Connector 30	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	17.05	ac-ft
Total Sediment Discharged	2711	lbs
Total Sediment Discharged (Clay)	34.41	lbs
Total Sediment Discharged (Silt)	13.69	lbs
Total Sediment Discharged (Sand)	2077	lbs
Total Sediment Discharged (Small Agg.)	37.6	lbs
Total Sediment Discharged (Large Agg.)	548.6	lbs
Sediment Concentration	8.214	mg/l
Peak Sediment Concentration	13.93	mg/l
Total Nitrogen Discharged	92.73	lbs
Total Nitrogen Discharged (Particulate)	39.87	lbs
Total Nitrogen Discharged (Sorbed)	0.02215	lbs
Total Nitrogen Discharged (Dissolved)	52.83	lbs
Nitrogen Concentration	0.302	mg/l
Peak Nitrogen Concentration	0.4786	mg/l
Total Phosphorus Discharged	11.59	lbs
Total Phosphorus Discharged (Particulate)	4.983	lbs
Total Phosphorus Discharged (Sorbed)	5.995E-06	lbs
Total Phosphorus Discharged (Dissolved)	6.605	lbs
Phosphorus Concentration	0.03724	mg/l
Peak Phosphorus Concentration	0.05902	mg/l
Total Bacteria Discharged	4.211E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.375E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.823E+08	cfu
Total Bacteria Discharged (Planktonic)	4.21E+12	cfu
Bacteria Concentration	3331	cfu/100 ml
Peak Bacteria Concentration	5283	cfu/100 ml

Trib2-02-01

Name	Trib2-02-01
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	17.05	ac-ft
Total Sediment Discharged	2711	lbs
Total Sediment Discharged (Clay)	34.41	lbs
Total Sediment Discharged (Silt)	13.69	lbs
Total Sediment Discharged (Sand)	2077	lbs
Total Sediment Discharged (Small Agg.)	37.6	lbs
Total Sediment Discharged (Large Agg.)	548.6	lbs
Sediment Concentration	8.214	mg/l
Peak Sediment Concentration	13.93	mg/l
Total Nitrogen Discharged	92.73	lbs
Total Nitrogen Discharged (Particulate)	39.87	lbs
Total Nitrogen Discharged (Sorbed)	0.02215	lbs
Total Nitrogen Discharged (Dissolved)	52.83	lbs
Nitrogen Concentration	0.302	mg/l
Peak Nitrogen Concentration	0.4786	mg/l
Total Phosphorus Discharged	11.59	lbs
Total Phosphorus Discharged (Particulate)	4.983	lbs
Total Phosphorus Discharged (Sorbed)	5.995E-06	lbs
Total Phosphorus Discharged (Dissolved)	6.605	lbs
Phosphorus Concentration	0.03724	mg/l
Peak Phosphorus Concentration	0.05902	mg/l
Total Bacteria Discharged	4.211E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.375E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.823E+08	cfu
Total Bacteria Discharged (Planktonic)	4.21E+12	cfu
Bacteria Concentration	3331	cfu/100 ml
Peak Bacteria Concentration	5283	cfu/100 ml

Non-Routed Connector 58		
Name	Non-Routed Connector 58	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	17.05	ac-ft
Total Sediment Discharged	2711	lbs
Total Sediment Discharged (Clay)	34.41	lbs
Total Sediment Discharged (Silt)	13.69	lbs
Total Sediment Discharged (Sand)	2077	lbs
Total Sediment Discharged (Small Agg.)	37.6	lbs
Total Sediment Discharged (Large Agg.)	548.6	lbs
Sediment Concentration	8.214	mg/l
Peak Sediment Concentration	13.93	mg/l
Total Nitrogen Discharged	92.73	lbs
Total Nitrogen Discharged (Particulate)	39.87	lbs
Total Nitrogen Discharged (Sorbed)	0.02215	lbs
Total Nitrogen Discharged (Dissolved)	52.83	lbs
Nitrogen Concentration	0.302	mg/l
Peak Nitrogen Concentration	0.4786	mg/l
Total Phosphorus Discharged	11.59	lbs
Total Phosphorus Discharged (Particulate)	4.983	lbs
Total Phosphorus Discharged (Sorbed)	5.995E-06	lbs
Total Phosphorus Discharged (Dissolved)	6.605	lbs
Phosphorus Concentration	0.03724	mg/l
Peak Phosphorus Concentration	0.05902	mg/l
Total Bacteria Discharged	4.211E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.375E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.823E+08	cfu
Total Bacteria Discharged (Planktonic)	4.21E+12	cfu
Bacteria Concentration	3331	cfu/100 ml
Peak Bacteria Concentration	5283	cfu/100 ml

Basin_22

Name	Basin_22
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	86.19	acres
Curve Number	56	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.65	hrs

Sediment Inputs

Parameter	Value	Units
Length	3344	ft
Slope	0.03	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	8.83	ac-ft
Total Sediment Yield	1096	lbs
Total Sediment Yield (Clay)	11.4	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	845.2	lbs
Total Sediment Yield (Small Agg.)	15.34	lbs
Total Sediment Yield (Large Agg.)	223.8	lbs
Sediment Concentration	2.435	mg/l
Peak Sediment Concentration	4.516	mg/l
Total Nitrogen Yield	23.29	lbs
Total Nitrogen Yield (Particulate)	10.02	lbs
Total Nitrogen Yield (Sorbed)	0.003984	lbs
Total Nitrogen Yield (Dissolved)	13.27	lbs
Nitrogen Concentration	0.09495	mg/l
Peak Nitrogen Concentration	0.1609	mg/l
Total Phosphorus Yield	4.802	lbs
Total Phosphorus Yield (Particulate)	2.065	lbs
Total Phosphorus Yield (Sorbed)	1.665E-06	lbs
Total Phosphorus Yield (Dissolved)	2.737	lbs
Phosphorus Concentration	0.01958	mg/l
Peak Phosphorus Concentration	0.03318	mg/l
Total Bacteria Yield	1.089E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	1.089E+11	cfu
Bacteria Concentration	97.85	cfu/100 ml
Peak Bacteria Concentration	165.9	cfu/100 ml

Non-Routed Connector 19		
Name	Non-Routed Connector 19	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	8.83	ac-ft
Total Sediment Discharged	1096	lbs
Total Sediment Discharged (Clay)	11.4	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	845.2	lbs
Total Sediment Discharged (Small Agg.)	15.34	lbs
Total Sediment Discharged (Large Agg.)	223.8	lbs
Sediment Concentration	2.435	mg/l
Peak Sediment Concentration	4.516	mg/l
Total Nitrogen Discharged	23.29	lbs
Total Nitrogen Discharged (Particulate)	10.02	lbs
Total Nitrogen Discharged (Sorbed)	0.003984	lbs
Total Nitrogen Discharged (Dissolved)	13.27	lbs
Nitrogen Concentration	0.09495	mg/l
Peak Nitrogen Concentration	0.1609	mg/l
Total Phosphorus Discharged	4.802	lbs
Total Phosphorus Discharged (Particulate)	2.065	lbs
Total Phosphorus Discharged (Sorbed)	1.665E-06	lbs
Total Phosphorus Discharged (Dissolved)	2.737	lbs
Phosphorus Concentration	0.01958	mg/l
Peak Phosphorus Concentration	0.03318	mg/l
Total Bacteria Discharged	1.089E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.089E+11	cfu
Bacteria Concentration	97.85	cfu/100 ml
Peak Bacteria Concentration	165.9	cfu/100 ml

Trib2-00-03	
Name	Trib2-00-03
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1454	ac-ft
Total Sediment Discharged	6.942E+04	lbs
Total Sediment Discharged (Clay)	5.206E+04	lbs
Total Sediment Discharged (Silt)	773.3	lbs
Total Sediment Discharged (Sand)	1.08E+04	lbs
Total Sediment Discharged (Small Agg.)	1545	lbs
Total Sediment Discharged (Large Agg.)	4241	lbs
Sediment Concentration	4.287	mg/l
Peak Sediment Concentration	14.04	mg/l
Total Nitrogen Discharged	1544	lbs
Total Nitrogen Discharged (Particulate)	224.4	lbs
Total Nitrogen Discharged (Sorbed)	0.75	lbs
Total Nitrogen Discharged (Dissolved)	1319	lbs
Nitrogen Concentration	0.09042	mg/l
Peak Nitrogen Concentration	0.1988	mg/l
Total Phosphorus Discharged	299.2	lbs
Total Phosphorus Discharged (Particulate)	41.4	lbs
Total Phosphorus Discharged (Sorbed)	0.002177	lbs
Total Phosphorus Discharged (Dissolved)	257.8	lbs
Phosphorus Concentration	0.01483	mg/l
Peak Phosphorus Concentration	0.03104	mg/l
Total Bacteria Discharged	5.844E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	9.654E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.638E+08	cfu
Total Bacteria Discharged (Planktonic)	5.834E+12	cfu
Bacteria Concentration	533.8	cfu/100 ml
Peak Bacteria Concentration	1588	cfu/100 ml

Non-Routed Connector 57		
Name	Non-Routed Connector 57	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1454	ac-ft
Total Sediment Discharged	6.942E+04	lbs
Total Sediment Discharged (Clay)	5.206E+04	lbs
Total Sediment Discharged (Silt)	773.3	lbs
Total Sediment Discharged (Sand)	1.08E+04	lbs
Total Sediment Discharged (Small Agg.)	1545	lbs
Total Sediment Discharged (Large Agg.)	4241	lbs
Sediment Concentration	4.287	mg/l
Peak Sediment Concentration	14.04	mg/l
Total Nitrogen Discharged	1544	lbs
Total Nitrogen Discharged (Particulate)	224.4	lbs
Total Nitrogen Discharged (Sorbed)	0.75	lbs
Total Nitrogen Discharged (Dissolved)	1319	lbs
Nitrogen Concentration	0.09042	mg/l
Peak Nitrogen Concentration	0.1988	mg/l
Total Phosphorus Discharged	299.2	lbs
Total Phosphorus Discharged (Particulate)	41.4	lbs
Total Phosphorus Discharged (Sorbed)	0.002177	lbs
Total Phosphorus Discharged (Dissolved)	257.8	lbs
Phosphorus Concentration	0.01483	mg/l
Peak Phosphorus Concentration	0.03104	mg/l
Total Bacteria Discharged	5.844E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	9.654E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.638E+08	cfu
Total Bacteria Discharged (Planktonic)	5.834E+12	cfu
Bacteria Concentration	533.8	cfu/100 ml
Peak Bacteria Concentration	1588	cfu/100 ml

Basin_23

Name	Basin_23
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	56.16	acres
Curve Number	67	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.35	hrs

Sediment Inputs

Parameter	Value	Units
Length	1081	ft
Slope	0.045	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	12.65	ac-ft
Total Sediment Yield	2240	lbs
Total Sediment Yield (Clay)	23.29	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	1728	lbs
Total Sediment Yield (Small Agg.)	31.36	lbs
Total Sediment Yield (Large Agg.)	457.5	lbs
Sediment Concentration	4.297	mg/l
Peak Sediment Concentration	10.06	mg/l
Total Nitrogen Yield	33.37	lbs
Total Nitrogen Yield (Particulate)	14.35	lbs
Total Nitrogen Yield (Sorbed)	0.00906	lbs
Total Nitrogen Yield (Dissolved)	19.01	lbs
Nitrogen Concentration	0.1211	mg/l
Peak Nitrogen Concentration	0.241	mg/l
Total Phosphorus Yield	6.881	lbs
Total Phosphorus Yield (Particulate)	2.959	lbs
Total Phosphorus Yield (Sorbed)	3.789E-06	lbs
Total Phosphorus Yield (Dissolved)	3.922	lbs
Phosphorus Concentration	0.02496	mg/l
Peak Phosphorus Concentration	0.04969	mg/l
Total Bacteria Yield	1.56E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	1.56E+11	cfu
Bacteria Concentration	124.8	cfu/100 ml
Peak Bacteria Concentration	248.4	cfu/100 ml

Non-Routed Connector 20

Name	Non-Routed Connector 20
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	12.65	ac-ft
Total Sediment Discharged	2240	lbs
Total Sediment Discharged (Clay)	23.29	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	1728	lbs
Total Sediment Discharged (Small Agg.)	31.36	lbs
Total Sediment Discharged (Large Agg.)	457.5	lbs
Sediment Concentration	4.297	mg/l
Peak Sediment Concentration	10.06	mg/l
Total Nitrogen Discharged	33.37	lbs
Total Nitrogen Discharged (Particulate)	14.35	lbs
Total Nitrogen Discharged (Sorbed)	0.00906	lbs
Total Nitrogen Discharged (Dissolved)	19.01	lbs
Nitrogen Concentration	0.1211	mg/l
Peak Nitrogen Concentration	0.241	mg/l
Total Phosphorus Discharged	6.881	lbs
Total Phosphorus Discharged (Particulate)	2.959	lbs
Total Phosphorus Discharged (Sorbed)	3.789E-06	lbs
Total Phosphorus Discharged (Dissolved)	3.922	lbs
Phosphorus Concentration	0.02496	mg/l
Peak Phosphorus Concentration	0.04969	mg/l
Total Bacteria Discharged	1.56E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.56E+11	cfu
Bacteria Concentration	124.8	cfu/100 ml
Peak Bacteria Concentration	248.4	cfu/100 ml

Trib2-00-02

Name	Trib2-00-02
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	15	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	8	ft
EMS Width	80	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	7.97	ac

Peak Stage	13	ft
Total Inflow Volume	1466	ac-ft
Total Rainfall On BMP	40.11	ac-ft
Total Outflow Volume	2098	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	2096	ac-ft
Infiltration Volume	1.881	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	7.166E+04	lbs
Total Inflow Sediment Mass (Clay)	5.209E+04	lbs
Total Inflow Sediment Mass (Silt)	773.3	lbs
Total Inflow Sediment Mass (Sand)	1.252E+04	lbs
Total Inflow Sediment Mass (Small Agg.)	1576	lbs
Total Inflow Sediment Mass (Large Agg.)	4699	lbs
Priming Storm Sediment Mass In Permanent Pool	2.991E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	2.991E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	4.069E+04	lbs
Total Sediment Mass Discharged (Clay)	3.98E+04	lbs
Total Sediment Mass Discharged (Silt)	392	lbs
Total Sediment Mass Discharged (Sand)	55.67	lbs
Total Sediment Mass Discharged (Small Agg.)	420	lbs
Total Sediment Mass Discharged (Large Agg.)	18.65	lbs
Total Sediment Mass Trapped	6.094E+04	lbs
Total Sediment Mass Trapped (Clay)	4.225E+04	lbs
Total Sediment Mass Trapped (Silt)	381.3	lbs
Total Sediment Mass Trapped (Sand)	1.247E+04	lbs
Total Sediment Mass Trapped (Small Agg.)	1156	lbs

Total Sediment Mass Trapped (Large Agg.)	4680	lbs
Sediment Trapping Efficiency	59.96	%
Sediment Trapping Efficiency (Clay)	51.49	%
Sediment Trapping Efficiency (Silt)	49.31	%
Sediment Trapping Efficiency (Sand)	99.56	%
Sediment Trapping Efficiency (Small Agg.)	73.35	%
Sediment Trapping Efficiency (Large Agg.)	99.6	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	4.069E+04	lbs
EMS Sediment Mass Discharged (Clay)	3.98E+04	lbs
EMS Sediment Mass Discharged (Silt)	392	lbs
EMS Sediment Mass Discharged (Sand)	55.67	lbs
EMS Sediment Mass Discharged (Small Agg.)	420	lbs
EMS Sediment Mass Discharged (Large Agg.)	18.65	lbs
Sediment Concentration	1.026	mg/l
Peak Sediment Concentration	2.252	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	1578	lbs
Total Nitrogen Mass Inflow (Particulate)	238.7	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.7591	lbs
Total Nitrogen Mass Inflow (Dissolved)	1338	lbs
Priming Storm Nitrogen Mass In Permanent Pool	5142	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	913	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	1.54	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	4228	lbs
Total Nitrogen Mass Discharged	1976	lbs
Total Nitrogen Mass Discharged (Particulate)	311	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.8131	lbs

Total Nitrogen Mass Discharged (Dissolved)	1664	lbs
Total Nitrogen Mass Trapped	4753	lbs
Total Nitrogen Mass Trapped (Particulate)	842.4	lbs
Total Nitrogen Mass Trapped (Sorbed)	1.489	lbs
Total Nitrogen Mass Trapped (Dissolved)	3909	lbs
Nitrogen Trapping Efficiency	70.64	%
Nitrogen Trapping Efficiency (Particulate)	73.04	%
Nitrogen Trapping Efficiency (Sorbed)	64.68	%
Nitrogen Trapping Efficiency (Dissolved)	70.14	%
Outlet Pipe Nitrogen Mass Discharged	6.818E-15	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	6.818E-15	lbs
EMS Nitrogen Mass Discharged	1976	lbs
EMS Nitrogen Mass Discharged (Particulate)	311	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.8131	lbs
EMS Nitrogen Mass Discharged (Dissolved)	1664	lbs
Nitrogen Concentration	0.05479	mg/l
Peak Nitrogen Concentration	0.07227	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	306	lbs
Total Phosphorus Mass Inflow (Particulate)	44.35	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.002181	lbs
Total Phosphorus Mass Inflow (Dissolved)	261.7	lbs
Priming Storm Phosphorus Mass In Permanent Pool	977.9	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	170.5	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.003735	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	807.4	lbs
Total Phosphorus Mass Discharged	381	lbs
Total Phosphorus Mass Discharged (Particulate)	58.14	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.002238	lbs
Total Phosphorus Mass Discharged (Dissolved)	322.9	lbs
Total Phosphorus Mass Trapped	904.7	lbs

Total Phosphorus Mass Trapped (Particulate)	157	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.003684	lbs
Total Phosphorus Mass Trapped (Dissolved)	747.7	lbs
Phosphorus Trapping Efficiency	70.37	%
Phosphorus Trapping Efficiency (Particulate)	72.98	%
Phosphorus Trapping Efficiency (Sorbed)	62.2	%
Phosphorus Trapping Efficiency (Dissolved)	69.84	%
Outlet Pipe Phosphorus Mass Discharged	2.874E-15	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	2.874E-15	lbs
EMS Phosphorus Mass Discharged	381	lbs
EMS Phosphorus Mass Discharged (Particulate)	58.14	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0.002238	lbs
EMS Phosphorus Mass Discharged (Dissolved)	322.9	lbs
Phosphorus Concentration	0.01056	mg/l
Peak Phosphorus Concentration	0.01374	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	6E+12	cfu
Total Bacteria Loading (Sorbed To Clay)	9.714E+09	cfu
Total Bacteria Loading (Sorbed To Silt)	6.512E+08	cfu
Total Bacteria Loading (Planktonic)	5.99E+12	cfu
Priming Storm Bacteria In Permanent Pool	5.014E+10	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	5.014E+10	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	3.628E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.379E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	5.126E+08	cfu
Total Bacteria Discharged (Planktonic)	3.613E+12	cfu
Total Bacteria Trapped	2.423E+12	cfu

Total Bacteria Trapped (Sorbed To Clay)	4.616E+10	cfu
Total Bacteria Trapped (Sorbed To Silt)	1.386E+08	cfu
Total Bacteria Trapped (Planktonic)	2.377E+12	cfu
Bacteria Trapping Efficiency	40.04	%
Bacteria Trapping Efficiency (Sorbed To Clay)	77	%
Bacteria Trapping Efficiency (Sorbed To Silt)	21.28	%
Bacteria Trapping Efficiency (Planktonic)	39.68	%
Outlet Pipe Bacteria Discharged	-4.562E-06	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	-4.562E-06	cfu
EMS Bacteria Discharged	3.628E+12	cfu
EMS Bacteria Discharged (Sorbed To Clay)	1.379E+10	cfu
EMS Bacteria Discharged (Sorbed To Silt)	5.126E+08	cfu
EMS Bacteria Discharged (Planktonic)	3.613E+12	cfu
Bacteria Concentration	13.54	cfu/100 ml
Peak Bacteria Concentration	100.7	cfu/100 ml

RICHLAND COUNTY
SOUTH CAROLINA
1799

Non-Routed Connector 45		
Name	Non-Routed Connector 45	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2096	ac-ft
Total Sediment Discharged	4.069E+04	lbs
Total Sediment Discharged (Clay)	3.98E+04	lbs
Total Sediment Discharged (Silt)	392	lbs
Total Sediment Discharged (Sand)	55.67	lbs
Total Sediment Discharged (Small Agg.)	420	lbs
Total Sediment Discharged (Large Agg.)	18.65	lbs
Sediment Concentration	1.026	mg/l
Peak Sediment Concentration	2.252	mg/l
Total Nitrogen Discharged	1976	lbs
Total Nitrogen Discharged (Particulate)	311	lbs
Total Nitrogen Discharged (Sorbed)	0.8131	lbs
Total Nitrogen Discharged (Dissolved)	1664	lbs
Nitrogen Concentration	0.05479	mg/l
Peak Nitrogen Concentration	0.07227	mg/l
Total Phosphorus Discharged	381	lbs
Total Phosphorus Discharged (Particulate)	58.14	lbs
Total Phosphorus Discharged (Sorbed)	0.002238	lbs
Total Phosphorus Discharged (Dissolved)	322.9	lbs
Phosphorus Concentration	0.01056	mg/l
Peak Phosphorus Concentration	0.01374	mg/l
Total Bacteria Discharged	3.627E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.379E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	5.126E+08	cfu
Total Bacteria Discharged (Planktonic)	3.613E+12	cfu
Bacteria Concentration	13.54	cfu/100 ml
Peak Bacteria Concentration	100.7	cfu/100 ml

Trib2-00-01	
Name	Trib2-00-01
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2822	ac-ft
Total Sediment Discharged	4.227E+04	lbs
Total Sediment Discharged (Clay)	4.12E+04	lbs
Total Sediment Discharged (Silt)	521.4	lbs
Total Sediment Discharged (Sand)	56.12	lbs
Total Sediment Discharged (Small Agg.)	469.6	lbs
Total Sediment Discharged (Large Agg.)	18.82	lbs
Sediment Concentration	0.7933	mg/l
Peak Sediment Concentration	2.01	mg/l
Total Nitrogen Discharged	2637	lbs
Total Nitrogen Discharged (Particulate)	344.6	lbs
Total Nitrogen Discharged (Sorbed)	0.9151	lbs
Total Nitrogen Discharged (Dissolved)	2291	lbs
Nitrogen Concentration	0.0546	mg/l
Peak Nitrogen Concentration	0.07073	mg/l
Total Phosphorus Discharged	517.5	lbs
Total Phosphorus Discharged (Particulate)	65.08	lbs
Total Phosphorus Discharged (Sorbed)	0.002311	lbs
Total Phosphorus Discharged (Dissolved)	452.4	lbs
Phosphorus Concentration	0.01069	mg/l
Peak Phosphorus Concentration	0.01358	mg/l
Total Bacteria Discharged	3.682E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.952E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.121E+08	cfu
Total Bacteria Discharged (Planktonic)	3.679E+12	cfu
Bacteria Concentration	10.27	cfu/100 ml
Peak Bacteria Concentration	87.29	cfu/100 ml

Non-Routed Connector 46		
Name	Non-Routed Connector 46	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2822	ac-ft
Total Sediment Discharged	4.227E+04	lbs
Total Sediment Discharged (Clay)	4.12E+04	lbs
Total Sediment Discharged (Silt)	521.4	lbs
Total Sediment Discharged (Sand)	56.12	lbs
Total Sediment Discharged (Small Agg.)	469.6	lbs
Total Sediment Discharged (Large Agg.)	18.82	lbs
Sediment Concentration	0.7933	mg/l
Peak Sediment Concentration	2.01	mg/l
Total Nitrogen Discharged	2637	lbs
Total Nitrogen Discharged (Particulate)	344.6	lbs
Total Nitrogen Discharged (Sorbed)	0.9151	lbs
Total Nitrogen Discharged (Dissolved)	2291	lbs
Nitrogen Concentration	0.0546	mg/l
Peak Nitrogen Concentration	0.07073	mg/l
Total Phosphorus Discharged	517.5	lbs
Total Phosphorus Discharged (Particulate)	65.08	lbs
Total Phosphorus Discharged (Sorbed)	0.002311	lbs
Total Phosphorus Discharged (Dissolved)	452.4	lbs
Phosphorus Concentration	0.01069	mg/l
Peak Phosphorus Concentration	0.01358	mg/l
Total Bacteria Discharged	3.682E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.952E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.121E+08	cfu
Total Bacteria Discharged (Planktonic)	3.679E+12	cfu
Bacteria Concentration	10.27	cfu/100 ml
Peak Bacteria Concentration	87.29	cfu/100 ml

Basin_26

Name	Basin_26
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	41.96	acres
Curve Number	61	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.333	hrs

Sediment Inputs

Parameter	Value	Units
Length	1922	ft
Slope	0.056	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	6.189	ac-ft
Total Sediment Yield	1824	lbs
Total Sediment Yield (Clay)	18.97	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	1407	lbs
Total Sediment Yield (Small Agg.)	25.54	lbs
Total Sediment Yield (Large Agg.)	372.7	lbs
Sediment Concentration	5.31	mg/l
Peak Sediment Concentration	12.17	mg/l
Total Nitrogen Yield	16.32	lbs
Total Nitrogen Yield (Particulate)	7.019	lbs
Total Nitrogen Yield (Sorbed)	0.007358	lbs
Total Nitrogen Yield (Dissolved)	9.297	lbs
Nitrogen Concentration	0.1042	mg/l
Peak Nitrogen Concentration	0.1882	mg/l
Total Phosphorus Yield	3.366	lbs
Total Phosphorus Yield (Particulate)	1.447	lbs
Total Phosphorus Yield (Sorbed)	3.082E-06	lbs
Total Phosphorus Yield (Dissolved)	1.919	lbs
Phosphorus Concentration	0.02148	mg/l
Peak Phosphorus Concentration	0.03881	mg/l
Total Bacteria Yield	7.631E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	7.631E+10	cfu
Bacteria Concentration	107.3	cfu/100 ml
Peak Bacteria Concentration	194	cfu/100 ml

Non-Routed Connector 23

Name	Non-Routed Connector 23
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	6.189	ac-ft
Total Sediment Discharged	1824	lbs
Total Sediment Discharged (Clay)	18.97	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	1407	lbs
Total Sediment Discharged (Small Agg.)	25.54	lbs
Total Sediment Discharged (Large Agg.)	372.7	lbs
Sediment Concentration	5.31	mg/l
Peak Sediment Concentration	12.17	mg/l
Total Nitrogen Discharged	16.32	lbs
Total Nitrogen Discharged (Particulate)	7.019	lbs
Total Nitrogen Discharged (Sorbed)	0.007358	lbs
Total Nitrogen Discharged (Dissolved)	9.297	lbs
Nitrogen Concentration	0.1042	mg/l
Peak Nitrogen Concentration	0.1882	mg/l
Total Phosphorus Discharged	3.366	lbs
Total Phosphorus Discharged (Particulate)	1.447	lbs
Total Phosphorus Discharged (Sorbed)	3.082E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.919	lbs
Phosphorus Concentration	0.02148	mg/l
Peak Phosphorus Concentration	0.03881	mg/l
Total Bacteria Discharged	7.631E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	7.631E+10	cfu
Bacteria Concentration	107.3	cfu/100 ml
Peak Bacteria Concentration	194	cfu/100 ml

Outfall_B

Name	Outfall_B
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	2,827.96	ac-ft
Total Drainage Area	846.36	ac
Total BMP Surface Area	40.18	ac
Total Modeled Area	886.54	ac
Total Sediment Discharged	44,093.95	lbs
Total Sediment Trapped	1,189,384.14	lbs
Sediment Trapping Efficiency	96.43%	%
Total Sediment Discharged (Clay)	41,222.57	lbs
Total Sediment Discharged (Silt)	521.41	lbs
Total Sediment Discharged (Sand)	1,463.39	lbs
Total Sediment Discharged (Small Agg.)	495.09	lbs
Total Sediment Discharged (Large Agg.)	391.48	lbs
Total Sediment Yield Per Acre	52.10	lbs
Sediment Concentration	0.81	mg/l
Peak Sediment Concentration	2.97	mg/l
Total Nitrogen Discharged	2,653.04	lbs
Total Nitrogen Trapped	37,002.54	lbs
Nitrogen Trapping Efficiency	93.31%	%
Total Nitrogen Discharged (Particulate)	351.63	lbs
Total Nitrogen Discharged (Sorbed)	0.92	lbs
Total Nitrogen Discharged (Dissolved)	2,300.49	lbs
Total Nitrogen Yield Per Acre	3.13	lbs
Nitrogen Concentration	0.05	mg/l
Peak Nitrogen Concentration	0.08	mg/l
Total Phosphorus Discharged	520.82	lbs
Total Phosphorus Trapped	7,319.61	lbs
Phosphorus Trapping Efficiency	93.36%	%
Total Phosphorus Discharged (Particulate)	66.52	lbs
Total Phosphorus Discharged (Sorbed)	0.00	lbs
Total Phosphorus Discharged (Dissolved)	454.29	lbs
Total Phosphorus Yield Per Acre	0.62	lbs

Phosphorus Concentration	0.01	mg/l
Peak Phosphorus Concentration	0.01	mg/l
Total Bacteria Discharged	3.758E+12	cfu
Total Bacteria Trapped	1.68E+13	cfu
Bacteria Trapping Efficiency	81.72%	%
Total Bacteria Discharged (Sorbed To Clay)	3.002E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.102E+08	cfu
Total Bacteria Discharged (Planktonic)	3.754E+12	cfu
Bacteria Concentration	10.38	cfu/100 ml
Peak Bacteria Concentration	86.71	cfu/100 ml
Clay Trapped	1,140,472.26	lbs
Clay Trapping Efficiency	96.39%	%
Silt Trapped	14,049.32	lbs
Silt Trapping Efficiency	96.29%	%
Sand Trapped	35,783.80	lbs
Sand Trapping Efficiency	95.91%	%
Large Aggregates Trapped	17,765.45	lbs
Large Aggregates Trapping Efficiency	98.46%	%
Small Aggregates Trapped	25,407.26	lbs
Small Aggregates Trapping Efficiency	97.21%	%
Particulate Nitrogen Trapped	39,655.58	lbs
Particulate Nitrogen Trapping Efficiency	100.00%	%
Sorbed Nitrogen Trapped	16.73	lbs
Sorbed Nitrogen Trapping Efficiency	100.00%	%
Dissolved Nitrogen Trapped	35,106.44	lbs
Dissolved Nitrogen Trapping Efficiency	100.00%	%
Particulate Phosphorus Trapped	878.89	lbs
Particulate Phosphorus Trapping Efficiency	100.00%	%
Sorbed Phosphorus Trapped	0.05	lbs
Sorbed Phosphorus Trapping Efficiency	100.00%	%
Dissolved Phosphorus Trapped	6,961.49	lbs
Dissolved Phosphorus Trapping Efficiency	100.00%	%
Bacteria Sorbed to Clay Trapped	9.565E+12	cfu
Bacteria Sorbed to Clay Trapping Efficiency	100.00%	%
Bacteria Sorbed to Silt Trapped	2.915E+08	cfu
Bacteria Sorbed to Silt Trapping Efficiency	100.00%	%

Bacteria not Sorbed (Planktonic) Trapped	1.1E+13	cfu
Bacteria not Sorbed (Planktonic) Trapping Efficiency	100.00%	%

Basin_07

Name	Basin_07
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	36.56	acres
Curve Number	45	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.583	hrs

Sediment Inputs

Parameter	Value	Units
Length	1435	ft
Slope	0.023	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	5000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.511	ac-ft
Total Sediment Yield	83.88	lbs
Total Sediment Yield (Clay)	0.8723	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	64.7	lbs
Total Sediment Yield (Small Agg.)	1.174	lbs
Total Sediment Yield (Large Agg.)	17.13	lbs
Sediment Concentration	0.416	mg/l
Peak Sediment Concentration	0.7714	mg/l
Total Nitrogen Yield	3.985	lbs
Total Nitrogen Yield (Particulate)	1.714	lbs
Total Nitrogen Yield (Sorbed)	0.0003008	lbs
Total Nitrogen Yield (Dissolved)	2.271	lbs
Nitrogen Concentration	0.03757	mg/l
Peak Nitrogen Concentration	0.06229	mg/l
Total Phosphorus Yield	0.8216	lbs
Total Phosphorus Yield (Particulate)	0.3533	lbs
Total Phosphorus Yield (Sorbed)	1.256E-07	lbs
Total Phosphorus Yield (Dissolved)	0.4683	lbs
Phosphorus Concentration	0.007746	mg/l
Peak Phosphorus Concentration	0.01284	mg/l
Total Bacteria Yield	9.314E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	9.314E+10	cfu
Bacteria Concentration	193.6	cfu/100 ml
Peak Bacteria Concentration	321	cfu/100 ml

Non-Routed Connector 14		
Name	Non-Routed Connector 14	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.511	ac-ft
Total Sediment Discharged	83.88	lbs
Total Sediment Discharged (Clay)	0.8723	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	64.7	lbs
Total Sediment Discharged (Small Agg.)	1.174	lbs
Total Sediment Discharged (Large Agg.)	17.13	lbs
Sediment Concentration	0.416	mg/l
Peak Sediment Concentration	0.7714	mg/l
Total Nitrogen Discharged	3.985	lbs
Total Nitrogen Discharged (Particulate)	1.714	lbs
Total Nitrogen Discharged (Sorbed)	0.0003008	lbs
Total Nitrogen Discharged (Dissolved)	2.271	lbs
Nitrogen Concentration	0.03757	mg/l
Peak Nitrogen Concentration	0.06229	mg/l
Total Phosphorus Discharged	0.8216	lbs
Total Phosphorus Discharged (Particulate)	0.3533	lbs
Total Phosphorus Discharged (Sorbed)	1.256E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.4683	lbs
Phosphorus Concentration	0.007746	mg/l
Peak Phosphorus Concentration	0.01284	mg/l
Total Bacteria Discharged	9.314E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	9.314E+10	cfu
Bacteria Concentration	193.6	cfu/100 ml
Peak Bacteria Concentration	321	cfu/100 ml

Trib1-03-07

Name	Trib1-03-07
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	15	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	4	ft
EMS Width	80	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	4	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	4.85	ac

Peak Stage	13	ft
Total Inflow Volume	1.511	ac-ft
Total Rainfall On BMP	24.41	ac-ft
Total Outflow Volume	143.7	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	143.5	ac-ft
Infiltration Volume	0.2174	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	83.88	lbs
Total Inflow Sediment Mass (Clay)	0.8723	lbs
Total Inflow Sediment Mass (Silt)	0	lbs
Total Inflow Sediment Mass (Sand)	64.7	lbs
Total Inflow Sediment Mass (Small Agg.)	1.174	lbs
Total Inflow Sediment Mass (Large Agg.)	17.13	lbs
Priming Storm Sediment Mass In Permanent Pool	618.2	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	618.2	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	19.6	lbs
Total Sediment Mass Discharged (Clay)	19.6	lbs
Total Sediment Mass Discharged (Silt)	0	lbs
Total Sediment Mass Discharged (Sand)	5.683E-06	lbs
Total Sediment Mass Discharged (Small Agg.)	0.0001361	lbs
Total Sediment Mass Discharged (Large Agg.)	1.319E-06	lbs
Total Sediment Mass Trapped	682.5	lbs
Total Sediment Mass Trapped (Clay)	599.5	lbs
Total Sediment Mass Trapped (Silt)	0	lbs
Total Sediment Mass Trapped (Sand)	64.7	lbs
Total Sediment Mass Trapped (Small Agg.)	1.174	lbs

Total Sediment Mass Trapped (Large Agg.)	17.13	lbs
Sediment Trapping Efficiency	97.21	%
Sediment Trapping Efficiency (Clay)	96.83	%
Sediment Trapping Efficiency (Silt)	0	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	99.99	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	19.6	lbs
EMS Sediment Mass Discharged (Clay)	19.6	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	5.683E-06	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.0001361	lbs
EMS Sediment Mass Discharged (Large Agg.)	1.319E-06	lbs
Sediment Concentration	0.001946	mg/l
Peak Sediment Concentration	0.002166	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	3.985	lbs
Total Nitrogen Mass Inflow (Particulate)	1.714	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.0003008	lbs
Total Nitrogen Mass Inflow (Dissolved)	2.271	lbs
Priming Storm Nitrogen Mass In Permanent Pool	4466	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	211.3	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.05821	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	4255	lbs
Total Nitrogen Mass Discharged	141.6	lbs
Total Nitrogen Mass Discharged (Particulate)	6.717	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.001851	lbs

Total Nitrogen Mass Discharged (Dissolved)	134.9	lbs
Total Nitrogen Mass Trapped	4329	lbs
Total Nitrogen Mass Trapped (Particulate)	206.3	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.05666	lbs
Total Nitrogen Mass Trapped (Dissolved)	4122	lbs
Nitrogen Trapping Efficiency	96.83	%
Nitrogen Trapping Efficiency (Particulate)	96.85	%
Nitrogen Trapping Efficiency (Sorbed)	96.84	%
Nitrogen Trapping Efficiency (Dissolved)	96.83	%
Outlet Pipe Nitrogen Mass Discharged	-1.051E-15	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	-1.051E-15	lbs
EMS Nitrogen Mass Discharged	141.6	lbs
EMS Nitrogen Mass Discharged (Particulate)	6.717	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.001851	lbs
EMS Nitrogen Mass Discharged (Dissolved)	134.9	lbs
Nitrogen Concentration	0.01406	mg/l
Peak Nitrogen Concentration	0.01556	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	0.8216	lbs
Total Phosphorus Mass Inflow (Particulate)	0.3533	lbs
Total Phosphorus Mass Inflow (Sorbed)	1.256E-07	lbs
Total Phosphorus Mass Inflow (Dissolved)	0.4683	lbs
Priming Storm Phosphorus Mass In Permanent Pool	921.1	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	43.56	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	2.431E-05	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	877.5	lbs
Total Phosphorus Mass Discharged	29.2	lbs
Total Phosphorus Mass Discharged (Particulate)	1.385	lbs
Total Phosphorus Mass Discharged (Sorbed)	7.729E-07	lbs
Total Phosphorus Mass Discharged (Dissolved)	27.81	lbs
Total Phosphorus Mass Trapped	892.7	lbs

Total Phosphorus Mass Trapped (Particulate)	42.53	lbs
Total Phosphorus Mass Trapped (Sorbed)	2.366E-05	lbs
Total Phosphorus Mass Trapped (Dissolved)	850.2	lbs
Phosphorus Trapping Efficiency	96.83	%
Phosphorus Trapping Efficiency (Particulate)	96.85	%
Phosphorus Trapping Efficiency (Sorbed)	96.84	%
Phosphorus Trapping Efficiency (Dissolved)	96.83	%
Outlet Pipe Phosphorus Mass Discharged	6.045E-17	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	6.045E-17	lbs
EMS Phosphorus Mass Discharged	29.2	lbs
EMS Phosphorus Mass Discharged (Particulate)	1.385	lbs
EMS Phosphorus Mass Discharged (Sorbed)	7.729E-07	lbs
EMS Phosphorus Mass Discharged (Dissolved)	27.81	lbs
Phosphorus Concentration	0.002898	mg/l
Peak Phosphorus Concentration	0.00321	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	9.314E+10	cfu
Total Bacteria Loading (Sorbed To Clay)	1.005E+07	cfu
Total Bacteria Loading (Sorbed To Silt)	0	cfu
Total Bacteria Loading (Planktonic)	9.313E+10	cfu
Priming Storm Bacteria In Permanent Pool	1.852E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	1.852E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	1.206E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.888E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.147E+09	cfu
Total Bacteria Trapped	9.378E+10	cfu

Total Bacteria Trapped (Sorbed To Clay)	1.803E+09	cfu
Total Bacteria Trapped (Sorbed To Silt)	0	cfu
Total Bacteria Trapped (Planktonic)	9.198E+10	cfu
Bacteria Trapping Efficiency	98.73	%
Bacteria Trapping Efficiency (Sorbed To Clay)	96.84	%
Bacteria Trapping Efficiency (Sorbed To Silt)	0	%
Bacteria Trapping Efficiency (Planktonic)	98.77	%
Outlet Pipe Bacteria Discharged	-6.663E-10	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	-6.663E-10	cfu
EMS Bacteria Discharged	1.206E+09	cfu
EMS Bacteria Discharged (Sorbed To Clay)	5.888E+07	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	1.147E+09	cfu
Bacteria Concentration	0.02024	cfu/100 ml
Peak Bacteria Concentration	0.7737	cfu/100 ml

RICHLAND COUNTY
1799
SOUTH CAROLINA

Non-Routed Connector 59

Name	Non-Routed Connector 59
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	143.5	ac-ft
Total Sediment Discharged	19.6	lbs
Total Sediment Discharged (Clay)	19.6	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	5.683E-06	lbs
Total Sediment Discharged (Small Agg.)	0.0001361	lbs
Total Sediment Discharged (Large Agg.)	1.319E-06	lbs
Sediment Concentration	0.001946	mg/l
Peak Sediment Concentration	0.002166	mg/l
Total Nitrogen Discharged	141.6	lbs
Total Nitrogen Discharged (Particulate)	6.717	lbs
Total Nitrogen Discharged (Sorbed)	0.001851	lbs
Total Nitrogen Discharged (Dissolved)	134.9	lbs
Nitrogen Concentration	0.01406	mg/l
Peak Nitrogen Concentration	0.01556	mg/l
Total Phosphorus Discharged	29.2	lbs
Total Phosphorus Discharged (Particulate)	1.385	lbs
Total Phosphorus Discharged (Sorbed)	7.729E-07	lbs
Total Phosphorus Discharged (Dissolved)	27.81	lbs
Phosphorus Concentration	0.002898	mg/l
Peak Phosphorus Concentration	0.00321	mg/l
Total Bacteria Discharged	1.206E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.888E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.147E+09	cfu
Bacteria Concentration	0.02024	cfu/100 ml
Peak Bacteria Concentration	0.7737	cfu/100 ml

Basin_06

Name	Basin_06
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	31.59	acres
Curve Number	78	-
Soil Series	Troup	-
Depth Range	0-18	in
Peak Rate Factor	484	-
Time of Concentration	0.3	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	1483	ft
Slope	0.023	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	5	%
Silt Percent	1.4	%
Sand Percent	93.6	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	282.42	micro g/g/mg/l
Isotherm Max - Nitrogen	4418.6	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1.135E+05	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	19.56	acres
Curve Number	78	-
Peak Rate Factor	484	-
Time of Concentration	0.3	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	329.99	micro g/g/mg/l
Isotherm Max - Nitrogen	4964.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	13600	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	24.89	ac-ft
Total Sediment Yield	4288	lbs
Total Sediment Yield (Clay)	826.7	lbs
Total Sediment Yield (Silt)	1717	lbs

Total Sediment Yield (Sand)	1438	lbs
Total Sediment Yield (Small Agg.)	16.34	lbs
Total Sediment Yield (Large Agg.)	290.3	lbs
Sediment Concentration	29.56	mg/l
Peak Sediment Concentration	57.36	mg/l
Total Nitrogen Yield	93.65	lbs
Total Nitrogen Yield (Particulate)	40.27	lbs
Total Nitrogen Yield (Sorbed)	0.5675	lbs
Total Nitrogen Yield (Dissolved)	52.81	lbs
Nitrogen Concentration	0.5937	mg/l
Peak Nitrogen Concentration	1.183	mg/l
Total Phosphorus Yield	14.62	lbs
Total Phosphorus Yield (Particulate)	6.285	lbs
Total Phosphorus Yield (Sorbed)	0.0001609	lbs
Total Phosphorus Yield (Dissolved)	8.331	lbs
Phosphorus Concentration	0.08185	mg/l
Peak Phosphorus Concentration	0.1686	mg/l
Total Bacteria Yield	2.265E+13	cfu
Total Bacteria Yield (Sorbed To Clay)	2.993E+10	cfu
Total Bacteria Yield (Sorbed To Silt)	5.693E+10	cfu
Total Bacteria Yield (Planktonic)	2.256E+13	cfu
Bacteria Concentration	1.793E+04	cfu/100 ml
Peak Bacteria Concentration	4.308E+04	cfu/100 ml

Non-Routed Connector 25

Name	Non-Routed Connector 25
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	24.89	ac-ft
Total Sediment Discharged	4288	lbs
Total Sediment Discharged (Clay)	826.7	lbs
Total Sediment Discharged (Silt)	1717	lbs
Total Sediment Discharged (Sand)	1438	lbs
Total Sediment Discharged (Small Agg.)	16.34	lbs
Total Sediment Discharged (Large Agg.)	290.3	lbs
Sediment Concentration	29.56	mg/l
Peak Sediment Concentration	57.36	mg/l
Total Nitrogen Discharged	93.65	lbs
Total Nitrogen Discharged (Particulate)	40.27	lbs
Total Nitrogen Discharged (Sorbed)	0.5675	lbs
Total Nitrogen Discharged (Dissolved)	52.81	lbs
Nitrogen Concentration	0.5937	mg/l
Peak Nitrogen Concentration	1.183	mg/l
Total Phosphorus Discharged	14.62	lbs
Total Phosphorus Discharged (Particulate)	6.285	lbs
Total Phosphorus Discharged (Sorbed)	0.0001609	lbs
Total Phosphorus Discharged (Dissolved)	8.331	lbs
Phosphorus Concentration	0.08185	mg/l
Peak Phosphorus Concentration	0.1686	mg/l
Total Bacteria Discharged	2.265E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.993E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	5.693E+10	cfu
Total Bacteria Discharged (Planktonic)	2.256E+13	cfu
Bacteria Concentration	1.793E+04	cfu/100 ml
Peak Bacteria Concentration	4.308E+04	cfu/100 ml

Trib1-03-12

Name	Trib1-03-12
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	19	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	5	ft
EMS Width	150	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	4	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	14.21	ac

Peak Stage	17	ft
Total Inflow Volume	24.89	ac-ft
Total Rainfall On BMP	71.52	ac-ft
Total Outflow Volume	4232	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	4229	ac-ft
Infiltration Volume	3.554	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	4288	lbs
Total Inflow Sediment Mass (Clay)	826.7	lbs
Total Inflow Sediment Mass (Silt)	1717	lbs
Total Inflow Sediment Mass (Sand)	1438	lbs
Total Inflow Sediment Mass (Small Agg.)	16.34	lbs
Total Inflow Sediment Mass (Large Agg.)	290.3	lbs
Priming Storm Sediment Mass In Permanent Pool	9.532E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	9.532E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	7.346E-13	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	3.026E+04	lbs
Total Sediment Mass Discharged (Clay)	3.025E+04	lbs
Total Sediment Mass Discharged (Silt)	2.256	lbs
Total Sediment Mass Discharged (Sand)	0.0005095	lbs
Total Sediment Mass Discharged (Small Agg.)	0.004835	lbs
Total Sediment Mass Discharged (Large Agg.)	0.0001099	lbs
Total Sediment Mass Trapped	6.935E+04	lbs
Total Sediment Mass Trapped (Clay)	6.59E+04	lbs
Total Sediment Mass Trapped (Silt)	1714	lbs
Total Sediment Mass Trapped (Sand)	1438	lbs
Total Sediment Mass Trapped (Small Agg.)	16.33	lbs

Total Sediment Mass Trapped (Large Agg.)	290.3	lbs
Sediment Trapping Efficiency	69.63	%
Sediment Trapping Efficiency (Clay)	68.53	%
Sediment Trapping Efficiency (Silt)	99.87	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	99.97	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	3.026E+04	lbs
EMS Sediment Mass Discharged (Clay)	3.025E+04	lbs
EMS Sediment Mass Discharged (Silt)	2.256	lbs
EMS Sediment Mass Discharged (Sand)	0.0005095	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.004835	lbs
EMS Sediment Mass Discharged (Large Agg.)	0.0001099	lbs
Sediment Concentration	0.9544	mg/l
Peak Sediment Concentration	1.049	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	93.65	lbs
Total Nitrogen Mass Inflow (Particulate)	40.27	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.5675	lbs
Total Nitrogen Mass Inflow (Dissolved)	52.81	lbs
Priming Storm Nitrogen Mass In Permanent Pool	1.844E+04	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	4383	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	58.84	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1.4E+04	lbs
Total Nitrogen Mass Discharged	5852	lbs
Total Nitrogen Mass Discharged (Particulate)	1391	lbs
Total Nitrogen Mass Discharged (Sorbed)	18.68	lbs

Total Nitrogen Mass Discharged (Dissolved)	4442	lbs
Total Nitrogen Mass Trapped	1.268E+04	lbs
Total Nitrogen Mass Trapped (Particulate)	3032	lbs
Total Nitrogen Mass Trapped (Sorbed)	40.73	lbs
Total Nitrogen Mass Trapped (Dissolved)	9608	lbs
Nitrogen Trapping Efficiency	68.42	%
Nitrogen Trapping Efficiency (Particulate)	68.55	%
Nitrogen Trapping Efficiency (Sorbed)	68.56	%
Nitrogen Trapping Efficiency (Dissolved)	68.38	%
Outlet Pipe Nitrogen Mass Discharged	-1.356E-14	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	-1.356E-14	lbs
EMS Nitrogen Mass Discharged	5852	lbs
EMS Nitrogen Mass Discharged (Particulate)	1391	lbs
EMS Nitrogen Mass Discharged (Sorbed)	18.68	lbs
EMS Nitrogen Mass Discharged (Dissolved)	4442	lbs
Nitrogen Concentration	0.1846	mg/l
Peak Nitrogen Concentration	0.2022	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	14.62	lbs
Total Phosphorus Mass Inflow (Particulate)	6.285	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.0001609	lbs
Total Phosphorus Mass Inflow (Dissolved)	8.331	lbs
Priming Storm Phosphorus Mass In Permanent Pool	2916	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	690	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.01674	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	2226	lbs
Total Phosphorus Mass Discharged	925.4	lbs
Total Phosphorus Mass Discharged (Particulate)	219	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.005315	lbs
Total Phosphorus Mass Discharged (Dissolved)	706.4	lbs
Total Phosphorus Mass Trapped	2005	lbs

Total Phosphorus Mass Trapped (Particulate)	477.3	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.01159	lbs
Total Phosphorus Mass Trapped (Dissolved)	1528	lbs
Phosphorus Trapping Efficiency	68.42	%
Phosphorus Trapping Efficiency (Particulate)	68.54	%
Phosphorus Trapping Efficiency (Sorbed)	68.56	%
Phosphorus Trapping Efficiency (Dissolved)	68.38	%
Outlet Pipe Phosphorus Mass Discharged	-5.718E-15	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	-5.718E-15	lbs
EMS Phosphorus Mass Discharged	925.4	lbs
EMS Phosphorus Mass Discharged (Particulate)	219	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0.005315	lbs
EMS Phosphorus Mass Discharged (Dissolved)	706.4	lbs
Phosphorus Concentration	0.02919	mg/l
Peak Phosphorus Concentration	0.03197	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	2.265E+13	cfu
Total Bacteria Loading (Sorbed To Clay)	2.993E+10	cfu
Total Bacteria Loading (Sorbed To Silt)	5.693E+10	cfu
Total Bacteria Loading (Planktonic)	2.256E+13	cfu
Priming Storm Bacteria In Permanent Pool	4.28E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	4.28E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	1.656E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.359E+12	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.715E+08	cfu
Total Bacteria Discharged (Planktonic)	2.961E+11	cfu
Total Bacteria Trapped	2.527E+13	cfu

Total Bacteria Trapped (Sorbed To Clay)	2.952E+12	cfu
Total Bacteria Trapped (Sorbed To Silt)	5.606E+10	cfu
Total Bacteria Trapped (Planktonic)	2.227E+13	cfu
Bacteria Trapping Efficiency	93.85	%
Bacteria Trapping Efficiency (Sorbed To Clay)	68.48	%
Bacteria Trapping Efficiency (Sorbed To Silt)	98.47	%
Bacteria Trapping Efficiency (Planktonic)	98.69	%
Outlet Pipe Bacteria Discharged	4.158E-07	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	4.158E-07	cfu
EMS Bacteria Discharged	1.656E+12	cfu
EMS Bacteria Discharged (Sorbed To Clay)	1.359E+12	cfu
EMS Bacteria Discharged (Sorbed To Silt)	8.715E+08	cfu
EMS Bacteria Discharged (Planktonic)	2.961E+11	cfu
Bacteria Concentration	11.15	cfu/100 ml
Peak Bacteria Concentration	61.91	cfu/100 ml

Non-Routed Connector 58		
Name	Non-Routed Connector 58	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	4229	ac-ft
Total Sediment Discharged	3.026E+04	lbs
Total Sediment Discharged (Clay)	3.025E+04	lbs
Total Sediment Discharged (Silt)	2.256	lbs
Total Sediment Discharged (Sand)	0.0005095	lbs
Total Sediment Discharged (Small Agg.)	0.004835	lbs
Total Sediment Discharged (Large Agg.)	0.0001099	lbs
Sediment Concentration	0.9544	mg/l
Peak Sediment Concentration	1.049	mg/l
Total Nitrogen Discharged	5852	lbs
Total Nitrogen Discharged (Particulate)	1391	lbs
Total Nitrogen Discharged (Sorbed)	18.68	lbs
Total Nitrogen Discharged (Dissolved)	4442	lbs
Nitrogen Concentration	0.1846	mg/l
Peak Nitrogen Concentration	0.2022	mg/l
Total Phosphorus Discharged	925.4	lbs
Total Phosphorus Discharged (Particulate)	219	lbs
Total Phosphorus Discharged (Sorbed)	0.005315	lbs
Total Phosphorus Discharged (Dissolved)	706.4	lbs
Phosphorus Concentration	0.02919	mg/l
Peak Phosphorus Concentration	0.03197	mg/l
Total Bacteria Discharged	1.656E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.359E+12	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.714E+08	cfu
Total Bacteria Discharged (Planktonic)	2.961E+11	cfu
Bacteria Concentration	11.15	cfu/100 ml
Peak Bacteria Concentration	61.91	cfu/100 ml

Basin_02

Name	Basin_02
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	71.06	acres
Curve Number	43	-
Soil Series	Troup	-
Depth Range	0-18	in
Peak Rate Factor	484	-
Time of Concentration	0.533	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	2245	ft
Slope	0.02	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	5	%
Silt Percent	1.4	%
Sand Percent	93.6	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	282.42	micro g/g/mg/l
Isotherm Max - Nitrogen	4418.6	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	1.02	acres
Curve Number	43	-
Peak Rate Factor	484	-
Time of Concentration	0.533	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	117	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	277.42	micro g/g/mg/l
Isotherm Max - Nitrogen	4360.9	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1.135E+05	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.44	ac-ft
Total Sediment Yield	137.5	lbs
Total Sediment Yield (Clay)	2.622	lbs
Total Sediment Yield (Silt)	1.857	lbs

Total Sediment Yield (Sand)	97.79	lbs
Total Sediment Yield (Small Agg.)	1.878	lbs
Total Sediment Yield (Large Agg.)	33.36	lbs
Sediment Concentration	1.195	mg/l
Peak Sediment Concentration	1.897	mg/l
Total Nitrogen Yield	6.465	lbs
Total Nitrogen Yield (Particulate)	2.78	lbs
Total Nitrogen Yield (Sorbed)	0.0008222	lbs
Total Nitrogen Yield (Dissolved)	3.684	lbs
Nitrogen Concentration	0.03848	mg/l
Peak Nitrogen Concentration	0.06186	mg/l
Total Phosphorus Yield	1.328	lbs
Total Phosphorus Yield (Particulate)	0.571	lbs
Total Phosphorus Yield (Sorbed)	3.745E-07	lbs
Total Phosphorus Yield (Dissolved)	0.757	lbs
Phosphorus Concentration	0.006535	mg/l
Peak Phosphorus Concentration	0.01069	mg/l
Total Bacteria Yield	4.48E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	3.626E+07	cfu
Total Bacteria Yield (Sorbed To Silt)	6.615E+07	cfu
Total Bacteria Yield (Planktonic)	4.47E+10	cfu
Bacteria Concentration	933.6	cfu/100 ml
Peak Bacteria Concentration	1384	cfu/100 ml

Non-Routed Connector 24		
Name	Non-Routed Connector 24	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.44	ac-ft
Total Sediment Discharged	137.5	lbs
Total Sediment Discharged (Clay)	2.622	lbs
Total Sediment Discharged (Silt)	1.857	lbs
Total Sediment Discharged (Sand)	97.79	lbs
Total Sediment Discharged (Small Agg.)	1.878	lbs
Total Sediment Discharged (Large Agg.)	33.36	lbs
Sediment Concentration	1.195	mg/l
Peak Sediment Concentration	1.897	mg/l
Total Nitrogen Discharged	6.465	lbs
Total Nitrogen Discharged (Particulate)	2.78	lbs
Total Nitrogen Discharged (Sorbed)	0.0008222	lbs
Total Nitrogen Discharged (Dissolved)	3.684	lbs
Nitrogen Concentration	0.03848	mg/l
Peak Nitrogen Concentration	0.06186	mg/l
Total Phosphorus Discharged	1.328	lbs
Total Phosphorus Discharged (Particulate)	0.571	lbs
Total Phosphorus Discharged (Sorbed)	3.745E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.757	lbs
Phosphorus Concentration	0.006535	mg/l
Peak Phosphorus Concentration	0.01069	mg/l
Total Bacteria Discharged	4.48E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.626E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.615E+07	cfu
Total Bacteria Discharged (Planktonic)	4.47E+10	cfu
Bacteria Concentration	933.6	cfu/100 ml
Peak Bacteria Concentration	1384	cfu/100 ml

Trib1-03-10		
Name	Trib1-03-10	
Description		
General Input		
Parameter	**Value**	**Units**
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-
Riser Input		
Parameter	**Value**	**Units**
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	19	ft
Riser Length	4	ft
Riser Width	4	ft
Barrel/Outlet Pipe Input		
Parameter	**Value**	**Units**
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-
EMS Input		
Parameter	**Value**	**Units**
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	6	ft
EMS Width	100	ft
Bacteria Input		
Parameter	**Value**	**Units**
Direct Bacteria Loading	4	animal units/acre/day
Annual Loading Results - Hydrology		
Parameter	**Value**	**Units**
Surface Area	13.41	ac

Peak Stage	17	ft
Total Inflow Volume	2.44	ac-ft
Total Rainfall On BMP	67.49	ac-ft
Total Outflow Volume	241.5	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	241.4	ac-ft
Infiltration Volume	0.1179	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	137.5	lbs
Total Inflow Sediment Mass (Clay)	2.622	lbs
Total Inflow Sediment Mass (Silt)	1.857	lbs
Total Inflow Sediment Mass (Sand)	97.79	lbs
Total Inflow Sediment Mass (Small Agg.)	1.878	lbs
Total Inflow Sediment Mass (Large Agg.)	33.36	lbs
Priming Storm Sediment Mass In Permanent Pool	3199	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	3199	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	6.64E-13	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	97.15	lbs
Total Sediment Mass Discharged (Clay)	96.92	lbs
Total Sediment Mass Discharged (Silt)	0.1513	lbs
Total Sediment Mass Discharged (Sand)	0.01085	lbs
Total Sediment Mass Discharged (Small Agg.)	0.06657	lbs
Total Sediment Mass Discharged (Large Agg.)	0.003266	lbs
Total Sediment Mass Trapped	3239	lbs
Total Sediment Mass Trapped (Clay)	3105	lbs
Total Sediment Mass Trapped (Silt)	1.706	lbs
Total Sediment Mass Trapped (Sand)	97.78	lbs
Total Sediment Mass Trapped (Small Agg.)	1.811	lbs

Total Sediment Mass Trapped (Large Agg.)	33.36	lbs
Sediment Trapping Efficiency	97.09	%
Sediment Trapping Efficiency (Clay)	96.97	%
Sediment Trapping Efficiency (Silt)	91.85	%
Sediment Trapping Efficiency (Sand)	99.99	%
Sediment Trapping Efficiency (Small Agg.)	96.45	%
Sediment Trapping Efficiency (Large Agg.)	99.99	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	97.15	lbs
EMS Sediment Mass Discharged (Clay)	96.92	lbs
EMS Sediment Mass Discharged (Silt)	0.1513	lbs
EMS Sediment Mass Discharged (Sand)	0.01085	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.06657	lbs
EMS Sediment Mass Discharged (Large Agg.)	0.003266	lbs
Sediment Concentration	0.004594	mg/l
Peak Sediment Concentration	0.005521	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	6.465	lbs
Total Nitrogen Mass Inflow (Particulate)	2.78	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.0008222	lbs
Total Nitrogen Mass Inflow (Dissolved)	3.684	lbs
Priming Storm Nitrogen Mass In Permanent Pool	4170	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	702.7	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.3765	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	3467	lbs
Total Nitrogen Mass Discharged	127.1	lbs
Total Nitrogen Mass Discharged (Particulate)	21.87	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.0116	lbs

Total Nitrogen Mass Discharged (Dissolved)	105.2	lbs
Total Nitrogen Mass Trapped	4049	lbs
Total Nitrogen Mass Trapped (Particulate)	683.6	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.3657	lbs
Total Nitrogen Mass Trapped (Dissolved)	3365	lbs
Nitrogen Trapping Efficiency	96.96	%
Nitrogen Trapping Efficiency (Particulate)	96.9	%
Nitrogen Trapping Efficiency (Sorbed)	96.92	%
Nitrogen Trapping Efficiency (Dissolved)	96.97	%
Outlet Pipe Nitrogen Mass Discharged	-2.028E-16	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	-2.028E-16	lbs
EMS Nitrogen Mass Discharged	127.1	lbs
EMS Nitrogen Mass Discharged (Particulate)	21.87	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.0116	lbs
EMS Nitrogen Mass Discharged (Dissolved)	105.2	lbs
Nitrogen Concentration	0.006008	mg/l
Peak Nitrogen Concentration	0.007568	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	1.328	lbs
Total Phosphorus Mass Inflow (Particulate)	0.571	lbs
Total Phosphorus Mass Inflow (Sorbed)	3.745E-07	lbs
Total Phosphorus Mass Inflow (Dissolved)	0.757	lbs
Priming Storm Phosphorus Mass In Permanent Pool	849.5	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	143.1	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.0001512	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	706.3	lbs
Total Phosphorus Mass Discharged	25.89	lbs
Total Phosphorus Mass Discharged (Particulate)	4.457	lbs
Total Phosphorus Mass Discharged (Sorbed)	4.683E-06	lbs
Total Phosphorus Mass Discharged (Dissolved)	21.43	lbs
Total Phosphorus Mass Trapped	824.9	lbs

Total Phosphorus Mass Trapped (Particulate)	139.2	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.0001469	lbs
Total Phosphorus Mass Trapped (Dissolved)	685.7	lbs
Phosphorus Trapping Efficiency	96.96	%
Phosphorus Trapping Efficiency (Particulate)	96.9	%
Phosphorus Trapping Efficiency (Sorbed)	96.91	%
Phosphorus Trapping Efficiency (Dissolved)	96.97	%
Outlet Pipe Phosphorus Mass Discharged	-3.732E-16	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	-3.732E-16	lbs
EMS Phosphorus Mass Discharged	25.89	lbs
EMS Phosphorus Mass Discharged (Particulate)	4.457	lbs
EMS Phosphorus Mass Discharged (Sorbed)	4.683E-06	lbs
EMS Phosphorus Mass Discharged (Dissolved)	21.43	lbs
Phosphorus Concentration	0.001224	mg/l
Peak Phosphorus Concentration	0.001545	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	4.48E+10	cfu
Total Bacteria Loading (Sorbed To Clay)	3.626E+07	cfu
Total Bacteria Loading (Sorbed To Silt)	6.615E+07	cfu
Total Bacteria Loading (Planktonic)	4.47E+10	cfu
Priming Storm Bacteria In Permanent Pool	4.967E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	4.967E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	1.392E-06	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	1.17E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.535E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	4.931E+06	cfu
Total Bacteria Discharged (Planktonic)	1.154E+10	cfu
Total Bacteria Trapped	3.807E+10	cfu

Total Bacteria Trapped (Sorbed To Clay)	4.849E+09	cfu
Total Bacteria Trapped (Sorbed To Silt)	6.122E+07	cfu
Total Bacteria Trapped (Planktonic)	3.316E+10	cfu
Bacteria Trapping Efficiency	76.49	%
Bacteria Trapping Efficiency (Sorbed To Clay)	96.93	%
Bacteria Trapping Efficiency (Sorbed To Silt)	92.55	%
Bacteria Trapping Efficiency (Planktonic)	74.18	%
Outlet Pipe Bacteria Discharged	-6.891E-09	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	-6.891E-09	cfu
EMS Bacteria Discharged	1.17E+10	cfu
EMS Bacteria Discharged (Sorbed To Clay)	1.535E+08	cfu
EMS Bacteria Discharged (Sorbed To Silt)	4.931E+06	cfu
EMS Bacteria Discharged (Planktonic)	1.154E+10	cfu
Bacteria Concentration	0.1071	cfu/100 ml
Peak Bacteria Concentration	2.089	cfu/100 ml

Non-Routed Connector 57		
Name	Non-Routed Connector 57	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	241.4	ac-ft
Total Sediment Discharged	97.15	lbs
Total Sediment Discharged (Clay)	96.92	lbs
Total Sediment Discharged (Silt)	0.1513	lbs
Total Sediment Discharged (Sand)	0.01085	lbs
Total Sediment Discharged (Small Agg.)	0.06657	lbs
Total Sediment Discharged (Large Agg.)	0.003266	lbs
Sediment Concentration	0.004594	mg/l
Peak Sediment Concentration	0.005521	mg/l
Total Nitrogen Discharged	127.1	lbs
Total Nitrogen Discharged (Particulate)	21.87	lbs
Total Nitrogen Discharged (Sorbed)	0.0116	lbs
Total Nitrogen Discharged (Dissolved)	105.2	lbs
Nitrogen Concentration	0.006008	mg/l
Peak Nitrogen Concentration	0.007568	mg/l
Total Phosphorus Discharged	25.89	lbs
Total Phosphorus Discharged (Particulate)	4.457	lbs
Total Phosphorus Discharged (Sorbed)	4.683E-06	lbs
Total Phosphorus Discharged (Dissolved)	21.43	lbs
Phosphorus Concentration	0.001224	mg/l
Peak Phosphorus Concentration	0.001545	mg/l
Total Bacteria Discharged	1.17E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.535E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	4.931E+06	cfu
Total Bacteria Discharged (Planktonic)	1.154E+10	cfu
Bacteria Concentration	0.1071	cfu/100 ml
Peak Bacteria Concentration	2.089	cfu/100 ml

Trib1-03-08	
Name	Trib1-03-08
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	4470	ac-ft
Total Sediment Discharged	3.035E+04	lbs
Total Sediment Discharged (Clay)	3.035E+04	lbs
Total Sediment Discharged (Silt)	2.408	lbs
Total Sediment Discharged (Sand)	0.01136	lbs
Total Sediment Discharged (Small Agg.)	0.07141	lbs
Total Sediment Discharged (Large Agg.)	0.003376	lbs
Sediment Concentration	0.9244	mg/l
Peak Sediment Concentration	1.029	mg/l
Total Nitrogen Discharged	5979	lbs
Total Nitrogen Discharged (Particulate)	1413	lbs
Total Nitrogen Discharged (Sorbed)	18.69	lbs
Total Nitrogen Discharged (Dissolved)	4547	lbs
Nitrogen Concentration	0.1808	mg/l
Peak Nitrogen Concentration	0.1996	mg/l
Total Phosphorus Discharged	951.3	lbs
Total Phosphorus Discharged (Particulate)	223.5	lbs
Total Phosphorus Discharged (Sorbed)	0.005319	lbs
Total Phosphorus Discharged (Dissolved)	727.8	lbs
Phosphorus Concentration	0.0287	mg/l
Peak Phosphorus Concentration	0.03163	mg/l
Total Bacteria Discharged	1.667E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.311E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	4.646E+06	cfu
Total Bacteria Discharged (Planktonic)	1.667E+12	cfu
Bacteria Concentration	10.21	cfu/100 ml
Peak Bacteria Concentration	40.87	cfu/100 ml

Non-Routed Connector 59

Name	Non-Routed Connector 59
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	4470	ac-ft
Total Sediment Discharged	3.035E+04	lbs
Total Sediment Discharged (Clay)	3.035E+04	lbs
Total Sediment Discharged (Silt)	2.408	lbs
Total Sediment Discharged (Sand)	0.01136	lbs
Total Sediment Discharged (Small Agg.)	0.07141	lbs
Total Sediment Discharged (Large Agg.)	0.003376	lbs
Sediment Concentration	0.9244	mg/l
Peak Sediment Concentration	1.029	mg/l
Total Nitrogen Discharged	5979	lbs
Total Nitrogen Discharged (Particulate)	1413	lbs
Total Nitrogen Discharged (Sorbed)	18.69	lbs
Total Nitrogen Discharged (Dissolved)	4547	lbs
Nitrogen Concentration	0.1808	mg/l
Peak Nitrogen Concentration	0.1996	mg/l
Total Phosphorus Discharged	951.3	lbs
Total Phosphorus Discharged (Particulate)	223.5	lbs
Total Phosphorus Discharged (Sorbed)	0.005319	lbs
Total Phosphorus Discharged (Dissolved)	727.8	lbs
Phosphorus Concentration	0.0287	mg/l
Peak Phosphorus Concentration	0.03163	mg/l
Total Bacteria Discharged	1.667E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.311E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	4.646E+06	cfu
Total Bacteria Discharged (Planktonic)	1.667E+12	cfu
Bacteria Concentration	10.21	cfu/100 ml
Peak Bacteria Concentration	40.87	cfu/100 ml

Trib1-03-05

Name	Trib1-03-05
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	4613	ac-ft
Total Sediment Discharged	3.037E+04	lbs
Total Sediment Discharged (Clay)	3.037E+04	lbs
Total Sediment Discharged (Silt)	2.408	lbs
Total Sediment Discharged (Sand)	0.01136	lbs
Total Sediment Discharged (Small Agg.)	0.07155	lbs
Total Sediment Discharged (Large Agg.)	0.003377	lbs
Sediment Concentration	0.9089	mg/l
Peak Sediment Concentration	1.014	mg/l
Total Nitrogen Discharged	6121	lbs
Total Nitrogen Discharged (Particulate)	1420	lbs
Total Nitrogen Discharged (Sorbed)	18.69	lbs
Total Nitrogen Discharged (Dissolved)	4682	lbs
Nitrogen Concentration	0.1802	mg/l
Peak Nitrogen Concentration	0.1984	mg/l
Total Phosphorus Discharged	980.5	lbs
Total Phosphorus Discharged (Particulate)	224.9	lbs
Total Phosphorus Discharged (Sorbed)	0.00532	lbs
Total Phosphorus Discharged (Dissolved)	755.7	lbs
Phosphorus Concentration	0.02871	mg/l
Peak Phosphorus Concentration	0.03159	mg/l
Total Bacteria Discharged	1.669E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.12E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.935E+06	cfu
Total Bacteria Discharged (Planktonic)	1.668E+12	cfu
Bacteria Concentration	9.888	cfu/100 ml
Peak Bacteria Concentration	34.99	cfu/100 ml

Non-Routed Connector 61

Name	Non-Routed Connector 61
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	4613	ac-ft
Total Sediment Discharged	3.037E+04	lbs
Total Sediment Discharged (Clay)	3.037E+04	lbs
Total Sediment Discharged (Silt)	2.408	lbs
Total Sediment Discharged (Sand)	0.01136	lbs
Total Sediment Discharged (Small Agg.)	0.07155	lbs
Total Sediment Discharged (Large Agg.)	0.003377	lbs
Sediment Concentration	0.9089	mg/l
Peak Sediment Concentration	1.014	mg/l
Total Nitrogen Discharged	6121	lbs
Total Nitrogen Discharged (Particulate)	1420	lbs
Total Nitrogen Discharged (Sorbed)	18.69	lbs
Total Nitrogen Discharged (Dissolved)	4682	lbs
Nitrogen Concentration	0.1802	mg/l
Peak Nitrogen Concentration	0.1984	mg/l
Total Phosphorus Discharged	980.5	lbs
Total Phosphorus Discharged (Particulate)	224.9	lbs
Total Phosphorus Discharged (Sorbed)	0.00532	lbs
Total Phosphorus Discharged (Dissolved)	755.7	lbs
Phosphorus Concentration	0.02871	mg/l
Peak Phosphorus Concentration	0.03159	mg/l
Total Bacteria Discharged	1.669E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.12E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.935E+06	cfu
Total Bacteria Discharged (Planktonic)	1.668E+12	cfu
Bacteria Concentration	9.888	cfu/100 ml
Peak Bacteria Concentration	34.99	cfu/100 ml

Basin_08

Name	Basin_08
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	71.44	acres
Curve Number	50	-
Soil Series	Pelion	-
Depth Range	0-13	in
Peak Rate Factor	484	-
Time of Concentration	0.6	hrs

Sediment Inputs

Parameter	Value	Units
Length	2558	ft
Slope	0.017	ft/ft
Soil Erodibility	0.2	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	6	%
Silt Percent	16.3	%
Sand Percent	77.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	221.2	micro g/g/mg/l
Isotherm Max - Nitrogen	3708.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	5000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	4.593	ac-ft
Total Sediment Yield	2171	lbs
Total Sediment Yield (Clay)	33.86	lbs
Total Sediment Yield (Silt)	119.4	lbs
Total Sediment Yield (Sand)	1238	lbs
Total Sediment Yield (Small Agg.)	234.4	lbs
Total Sediment Yield (Large Agg.)	545.2	lbs
Sediment Concentration	3.901	mg/l
Peak Sediment Concentration	7.903	mg/l
Total Nitrogen Yield	12.12	lbs
Total Nitrogen Yield (Particulate)	5.21	lbs
Total Nitrogen Yield (Sorbed)	0.00693	lbs
Total Nitrogen Yield (Dissolved)	6.899	lbs
Nitrogen Concentration	0.04095	mg/l
Peak Nitrogen Concentration	0.07084	mg/l
Total Phosphorus Yield	2.498	lbs
Total Phosphorus Yield (Particulate)	1.074	lbs
Total Phosphorus Yield (Sorbed)	4.935E-06	lbs
Total Phosphorus Yield (Dissolved)	1.424	lbs
Phosphorus Concentration	0.008444	mg/l
Peak Phosphorus Concentration	0.01461	mg/l
Total Bacteria Yield	2.832E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	2.832E+11	cfu
Bacteria Concentration	211	cfu/100 ml
Peak Bacteria Concentration	365	cfu/100 ml

Non-Routed Connector 60

Name	Non-Routed Connector 60
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	4.593	ac-ft
Total Sediment Discharged	2171	lbs
Total Sediment Discharged (Clay)	33.86	lbs
Total Sediment Discharged (Silt)	119.4	lbs
Total Sediment Discharged (Sand)	1238	lbs
Total Sediment Discharged (Small Agg.)	234.4	lbs
Total Sediment Discharged (Large Agg.)	545.2	lbs
Sediment Concentration	3.901	mg/l
Peak Sediment Concentration	7.903	mg/l
Total Nitrogen Discharged	12.12	lbs
Total Nitrogen Discharged (Particulate)	5.21	lbs
Total Nitrogen Discharged (Sorbed)	0.00693	lbs
Total Nitrogen Discharged (Dissolved)	6.899	lbs
Nitrogen Concentration	0.04095	mg/l
Peak Nitrogen Concentration	0.07084	mg/l
Total Phosphorus Discharged	2.498	lbs
Total Phosphorus Discharged (Particulate)	1.074	lbs
Total Phosphorus Discharged (Sorbed)	4.935E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.424	lbs
Phosphorus Concentration	0.008444	mg/l
Peak Phosphorus Concentration	0.01461	mg/l
Total Bacteria Discharged	2.832E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	2.832E+11	cfu
Bacteria Concentration	211	cfu/100 ml
Peak Bacteria Concentration	365	cfu/100 ml

Trib1-03-04

Name	Trib1-03-04
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	4618	ac-ft
Total Sediment Discharged	3.254E+04	lbs
Total Sediment Discharged (Clay)	3.04E+04	lbs
Total Sediment Discharged (Silt)	121.8	lbs
Total Sediment Discharged (Sand)	1238	lbs
Total Sediment Discharged (Small Agg.)	234.5	lbs
Total Sediment Discharged (Large Agg.)	545.2	lbs
Sediment Concentration	0.94	mg/l
Peak Sediment Concentration	2.31	mg/l
Total Nitrogen Discharged	6133	lbs
Total Nitrogen Discharged (Particulate)	1425	lbs
Total Nitrogen Discharged (Sorbed)	18.7	lbs
Total Nitrogen Discharged (Dissolved)	4689	lbs
Nitrogen Concentration	0.1803	mg/l
Peak Nitrogen Concentration	0.2042	mg/l
Total Phosphorus Discharged	983	lbs
Total Phosphorus Discharged (Particulate)	225.9	lbs
Total Phosphorus Discharged (Sorbed)	0.005325	lbs
Total Phosphorus Discharged (Dissolved)	757.1	lbs
Phosphorus Concentration	0.02874	mg/l
Peak Phosphorus Concentration	0.03285	mg/l
Total Bacteria Discharged	1.952E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.997E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.862E+07	cfu
Total Bacteria Discharged (Planktonic)	1.951E+12	cfu
Bacteria Concentration	10.78	cfu/100 ml
Peak Bacteria Concentration	80.51	cfu/100 ml

Non-Routed Connector 62		
Name	Non-Routed Connector 62	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	4618	ac-ft
Total Sediment Discharged	3.254E+04	lbs
Total Sediment Discharged (Clay)	3.04E+04	lbs
Total Sediment Discharged (Silt)	121.8	lbs
Total Sediment Discharged (Sand)	1238	lbs
Total Sediment Discharged (Small Agg.)	234.5	lbs
Total Sediment Discharged (Large Agg.)	545.2	lbs
Sediment Concentration	0.94	mg/l
Peak Sediment Concentration	2.31	mg/l
Total Nitrogen Discharged	6133	lbs
Total Nitrogen Discharged (Particulate)	1425	lbs
Total Nitrogen Discharged (Sorbed)	18.7	lbs
Total Nitrogen Discharged (Dissolved)	4689	lbs
Nitrogen Concentration	0.1803	mg/l
Peak Nitrogen Concentration	0.2042	mg/l
Total Phosphorus Discharged	983	lbs
Total Phosphorus Discharged (Particulate)	225.9	lbs
Total Phosphorus Discharged (Sorbed)	0.005325	lbs
Total Phosphorus Discharged (Dissolved)	757.1	lbs
Phosphorus Concentration	0.02874	mg/l
Peak Phosphorus Concentration	0.03285	mg/l
Total Bacteria Discharged	1.952E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.997E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.862E+07	cfu
Total Bacteria Discharged (Planktonic)	1.951E+12	cfu
Bacteria Concentration	10.78	cfu/100 ml
Peak Bacteria Concentration	80.51	cfu/100 ml

Trib1-03-03

Name	Trib1-03-03
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	4618	ac-ft
Total Sediment Discharged	3.254E+04	lbs
Total Sediment Discharged (Clay)	3.04E+04	lbs
Total Sediment Discharged (Silt)	121.8	lbs
Total Sediment Discharged (Sand)	1238	lbs
Total Sediment Discharged (Small Agg.)	234.5	lbs
Total Sediment Discharged (Large Agg.)	545.2	lbs
Sediment Concentration	0.94	mg/l
Peak Sediment Concentration	2.31	mg/l
Total Nitrogen Discharged	6133	lbs
Total Nitrogen Discharged (Particulate)	1425	lbs
Total Nitrogen Discharged (Sorbed)	18.7	lbs
Total Nitrogen Discharged (Dissolved)	4689	lbs
Nitrogen Concentration	0.1803	mg/l
Peak Nitrogen Concentration	0.2042	mg/l
Total Phosphorus Discharged	983	lbs
Total Phosphorus Discharged (Particulate)	225.9	lbs
Total Phosphorus Discharged (Sorbed)	0.005325	lbs
Total Phosphorus Discharged (Dissolved)	757.1	lbs
Phosphorus Concentration	0.02874	mg/l
Peak Phosphorus Concentration	0.03285	mg/l
Total Bacteria Discharged	1.952E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.997E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.862E+07	cfu
Total Bacteria Discharged (Planktonic)	1.951E+12	cfu
Bacteria Concentration	10.78	cfu/100 ml
Peak Bacteria Concentration	80.51	cfu/100 ml

Non-Routed Connector 63		
Name	Non-Routed Connector 63	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	4618	ac-ft
Total Sediment Discharged	3.254E+04	lbs
Total Sediment Discharged (Clay)	3.04E+04	lbs
Total Sediment Discharged (Silt)	121.8	lbs
Total Sediment Discharged (Sand)	1238	lbs
Total Sediment Discharged (Small Agg.)	234.5	lbs
Total Sediment Discharged (Large Agg.)	545.2	lbs
Sediment Concentration	0.94	mg/l
Peak Sediment Concentration	2.31	mg/l
Total Nitrogen Discharged	6133	lbs
Total Nitrogen Discharged (Particulate)	1425	lbs
Total Nitrogen Discharged (Sorbed)	18.7	lbs
Total Nitrogen Discharged (Dissolved)	4689	lbs
Nitrogen Concentration	0.1803	mg/l
Peak Nitrogen Concentration	0.2042	mg/l
Total Phosphorus Discharged	983	lbs
Total Phosphorus Discharged (Particulate)	225.9	lbs
Total Phosphorus Discharged (Sorbed)	0.005325	lbs
Total Phosphorus Discharged (Dissolved)	757.1	lbs
Phosphorus Concentration	0.02874	mg/l
Peak Phosphorus Concentration	0.03285	mg/l
Total Bacteria Discharged	1.952E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.997E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.862E+07	cfu
Total Bacteria Discharged (Planktonic)	1.951E+12	cfu
Bacteria Concentration	10.78	cfu/100 ml
Peak Bacteria Concentration	80.51	cfu/100 ml

Basin_09

Name	Basin_09
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	88.16	acres
Curve Number	55	-
Soil Series	Pelion	-
Depth Range	0-13	in
Peak Rate Factor	484	-
Time of Concentration	0.733	hrs

Sediment Inputs

Parameter	Value	Units
Length	2797	ft
Slope	0.021	ft/ft
Soil Erodibility	0.2	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	6	%
Silt Percent	16.3	%
Sand Percent	77.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	221.2	micro g/g/mg/l
Isotherm Max - Nitrogen	3708.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	5000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	8.394	ac-ft
Total Sediment Yield	5549	lbs
Total Sediment Yield (Clay)	86.56	lbs
Total Sediment Yield (Silt)	305.2	lbs
Total Sediment Yield (Sand)	3164	lbs
Total Sediment Yield (Small Agg.)	599.3	lbs
Total Sediment Yield (Large Agg.)	1394	lbs
Sediment Concentration	7.021	mg/l
Peak Sediment Concentration	14.68	mg/l
Total Nitrogen Yield	22.14	lbs
Total Nitrogen Yield (Particulate)	9.521	lbs
Total Nitrogen Yield (Sorbed)	0.01731	lbs
Total Nitrogen Yield (Dissolved)	12.6	lbs
Nitrogen Concentration	0.04605	mg/l
Peak Nitrogen Concentration	0.08624	mg/l
Total Phosphorus Yield	4.565	lbs
Total Phosphorus Yield (Particulate)	1.963	lbs
Total Phosphorus Yield (Sorbed)	1.235E-05	lbs
Total Phosphorus Yield (Dissolved)	2.602	lbs
Phosphorus Concentration	0.009494	mg/l
Peak Phosphorus Concentration	0.01778	mg/l
Total Bacteria Yield	5.175E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	5.175E+11	cfu
Bacteria Concentration	237.3	cfu/100 ml
Peak Bacteria Concentration	444.4	cfu/100 ml

Non-Routed Connector 6

Name	Non-Routed Connector 6
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	8.394	ac-ft
Total Sediment Discharged	5549	lbs
Total Sediment Discharged (Clay)	86.56	lbs
Total Sediment Discharged (Silt)	305.2	lbs
Total Sediment Discharged (Sand)	3164	lbs
Total Sediment Discharged (Small Agg.)	599.3	lbs
Total Sediment Discharged (Large Agg.)	1394	lbs
Sediment Concentration	7.021	mg/l
Peak Sediment Concentration	14.68	mg/l
Total Nitrogen Discharged	22.14	lbs
Total Nitrogen Discharged (Particulate)	9.521	lbs
Total Nitrogen Discharged (Sorbed)	0.01731	lbs
Total Nitrogen Discharged (Dissolved)	12.6	lbs
Nitrogen Concentration	0.04605	mg/l
Peak Nitrogen Concentration	0.08624	mg/l
Total Phosphorus Discharged	4.565	lbs
Total Phosphorus Discharged (Particulate)	1.963	lbs
Total Phosphorus Discharged (Sorbed)	1.235E-05	lbs
Total Phosphorus Discharged (Dissolved)	2.602	lbs
Phosphorus Concentration	0.009494	mg/l
Peak Phosphorus Concentration	0.01778	mg/l
Total Bacteria Discharged	5.175E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	5.175E+11	cfu
Bacteria Concentration	237.3	cfu/100 ml
Peak Bacteria Concentration	444.4	cfu/100 ml

Trib1-03-02

Name	Trib1-03-02
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	12	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	4	ft
EMS Width	80	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	4	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	5.43	ac

Peak Stage	13	ft
Total Inflow Volume	4626	ac-ft
Total Rainfall On BMP	27.33	ac-ft
Total Outflow Volume	5399	ac-ft
Outlet Pipe Flow Volume	1.417	ac-ft
EMS Outflow Volume	5395	ac-ft
Infiltration Volume	1.852	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	3.809E+04	lbs
Total Inflow Sediment Mass (Clay)	3.049E+04	lbs
Total Inflow Sediment Mass (Silt)	427	lbs
Total Inflow Sediment Mass (Sand)	4402	lbs
Total Inflow Sediment Mass (Small Agg.)	833.8	lbs
Total Inflow Sediment Mass (Large Agg.)	1939	lbs
Priming Storm Sediment Mass In Permanent Pool	1494	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	1494	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	2.909E+04	lbs
Total Sediment Mass Discharged (Clay)	2.819E+04	lbs
Total Sediment Mass Discharged (Silt)	251.7	lbs
Total Sediment Mass Discharged (Sand)	252.8	lbs
Total Sediment Mass Discharged (Small Agg.)	291.4	lbs
Total Sediment Mass Discharged (Large Agg.)	105.9	lbs
Total Sediment Mass Trapped	1.052E+04	lbs
Total Sediment Mass Trapped (Clay)	3825	lbs
Total Sediment Mass Trapped (Silt)	175.3	lbs
Total Sediment Mass Trapped (Sand)	4149	lbs
Total Sediment Mass Trapped (Small Agg.)	542.4	lbs

Total Sediment Mass Trapped (Large Agg.)	1833	lbs
Sediment Trapping Efficiency	26.56	%
Sediment Trapping Efficiency (Clay)	11.95	%
Sediment Trapping Efficiency (Silt)	41.05	%
Sediment Trapping Efficiency (Sand)	94.26	%
Sediment Trapping Efficiency (Small Agg.)	65.06	%
Sediment Trapping Efficiency (Large Agg.)	94.54	%
Outlet Pipe Sediment Mass Discharged	7.176	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	7.051	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0.01613	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0.05559	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0.03057	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0.02324	lbs
EMS Sediment Mass Discharged	2.909E+04	lbs
EMS Sediment Mass Discharged (Clay)	2.819E+04	lbs
EMS Sediment Mass Discharged (Silt)	251.7	lbs
EMS Sediment Mass Discharged (Sand)	252.8	lbs
EMS Sediment Mass Discharged (Small Agg.)	291.3	lbs
EMS Sediment Mass Discharged (Large Agg.)	105.9	lbs
Sediment Concentration	0.7322	mg/l
Peak Sediment Concentration	1.329	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	6155	lbs
Total Nitrogen Mass Inflow (Particulate)	1435	lbs
Total Nitrogen Mass Inflow (Sorbed)	18.71	lbs
Total Nitrogen Mass Inflow (Dissolved)	4702	lbs
Priming Storm Nitrogen Mass In Permanent Pool	1749	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	170.9	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	1.159	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1577	lbs
Total Nitrogen Mass Discharged	6436	lbs
Total Nitrogen Mass Discharged (Particulate)	1406	lbs
Total Nitrogen Mass Discharged (Sorbed)	17.96	lbs

Total Nitrogen Mass Discharged (Dissolved)	5012	lbs
Total Nitrogen Mass Trapped	1506	lbs
Total Nitrogen Mass Trapped (Particulate)	203.4	lbs
Total Nitrogen Mass Trapped (Sorbed)	1.942	lbs
Total Nitrogen Mass Trapped (Dissolved)	1301	lbs
Nitrogen Trapping Efficiency	18.97	%
Nitrogen Trapping Efficiency (Particulate)	12.64	%
Nitrogen Trapping Efficiency (Sorbed)	9.759	%
Nitrogen Trapping Efficiency (Dissolved)	20.61	%
Outlet Pipe Nitrogen Mass Discharged	1.64	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0.3541	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0.004546	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	1.282	lbs
EMS Nitrogen Mass Discharged	6434	lbs
EMS Nitrogen Mass Discharged (Particulate)	1406	lbs
EMS Nitrogen Mass Discharged (Sorbed)	17.95	lbs
EMS Nitrogen Mass Discharged (Dissolved)	5011	lbs
Nitrogen Concentration	0.1605	mg/l
Peak Nitrogen Concentration	0.2032	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	987.6	lbs
Total Phosphorus Mass Inflow (Particulate)	227.9	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.005337	lbs
Total Phosphorus Mass Inflow (Dissolved)	759.7	lbs
Priming Storm Phosphorus Mass In Permanent Pool	319.6	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	31.1	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.000335	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	288.5	lbs
Total Phosphorus Mass Discharged	1048	lbs
Total Phosphorus Mass Discharged (Particulate)	224.7	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.005122	lbs
Total Phosphorus Mass Discharged (Dissolved)	822.9	lbs
Total Phosphorus Mass Trapped	266.4	lbs

Total Phosphorus Mass Trapped (Particulate)	34.94	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.0005576	lbs
Total Phosphorus Mass Trapped (Dissolved)	231.5	lbs
Phosphorus Trapping Efficiency	20.27	%
Phosphorus Trapping Efficiency (Particulate)	13.46	%
Phosphorus Trapping Efficiency (Sorbed)	9.818	%
Phosphorus Trapping Efficiency (Dissolved)	21.95	%
Outlet Pipe Phosphorus Mass Discharged	0.267	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0.05651	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	1.295E-06	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	0.2105	lbs
EMS Phosphorus Mass Discharged	1047	lbs
EMS Phosphorus Mass Discharged (Particulate)	224.7	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0.005121	lbs
EMS Phosphorus Mass Discharged (Dissolved)	822.7	lbs
Phosphorus Concentration	0.026	mg/l
Peak Phosphorus Concentration	0.03261	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	3.202E+12	cfu
Total Bacteria Loading (Sorbed To Clay)	1.048E+09	cfu
Total Bacteria Loading (Sorbed To Silt)	1.439E+08	cfu
Total Bacteria Loading (Planktonic)	3.201E+12	cfu
Priming Storm Bacteria In Permanent Pool	3.433E+10	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	3.433E+10	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	2.763E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.411E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.205E+08	cfu
Total Bacteria Discharged (Planktonic)	2.748E+12	cfu
Total Bacteria Trapped	4.748E+11	cfu

Total Bacteria Trapped (Sorbed To Clay)	2.201E+10	cfu
Total Bacteria Trapped (Sorbed To Silt)	2.338E+07	cfu
Total Bacteria Trapped (Planktonic)	4.527E+11	cfu
Bacteria Trapping Efficiency	14.67	%
Bacteria Trapping Efficiency (Sorbed To Clay)	60.94	%
Bacteria Trapping Efficiency (Sorbed To Silt)	16.25	%
Bacteria Trapping Efficiency (Planktonic)	14.14	%
Outlet Pipe Bacteria Discharged	5.019E+08	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	4.098E+06	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	927.8	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	4.978E+08	cfu
EMS Bacteria Discharged	2.762E+12	cfu
EMS Bacteria Discharged (Sorbed To Clay)	1.411E+10	cfu
EMS Bacteria Discharged (Sorbed To Silt)	1.205E+08	cfu
EMS Bacteria Discharged (Planktonic)	2.748E+12	cfu
Bacteria Concentration	13.23	cfu/100 ml
Peak Bacteria Concentration	58.45	cfu/100 ml

Non-Routed Connector 64		
Name	Non-Routed Connector 64	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5397	ac-ft
Total Sediment Discharged	2.909E+04	lbs
Total Sediment Discharged (Clay)	2.819E+04	lbs
Total Sediment Discharged (Silt)	251.7	lbs
Total Sediment Discharged (Sand)	252.8	lbs
Total Sediment Discharged (Small Agg.)	291.4	lbs
Total Sediment Discharged (Large Agg.)	105.9	lbs
Sediment Concentration	0.7322	mg/l
Peak Sediment Concentration	1.329	mg/l
Total Nitrogen Discharged	6436	lbs
Total Nitrogen Discharged (Particulate)	1406	lbs
Total Nitrogen Discharged (Sorbed)	17.96	lbs
Total Nitrogen Discharged (Dissolved)	5012	lbs
Nitrogen Concentration	0.1605	mg/l
Peak Nitrogen Concentration	0.2032	mg/l
Total Phosphorus Discharged	1048	lbs
Total Phosphorus Discharged (Particulate)	224.7	lbs
Total Phosphorus Discharged (Sorbed)	0.005122	lbs
Total Phosphorus Discharged (Dissolved)	822.9	lbs
Phosphorus Concentration	0.026	mg/l
Peak Phosphorus Concentration	0.03261	mg/l
Total Bacteria Discharged	2.763E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.411E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.205E+08	cfu
Total Bacteria Discharged (Planktonic)	2.748E+12	cfu
Bacteria Concentration	13.23	cfu/100 ml
Peak Bacteria Concentration	58.45	cfu/100 ml

Basin_05

Name	Basin_05
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	66.14	acres
Curve Number	45	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.883	hrs

Sediment Inputs

Parameter	Value	Units
Length	3565	ft
Slope	0.018	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.733	ac-ft
Total Sediment Yield	128.9	lbs
Total Sediment Yield (Clay)	1.34	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	99.4	lbs
Total Sediment Yield (Small Agg.)	1.804	lbs
Total Sediment Yield (Large Agg.)	26.32	lbs
Sediment Concentration	0.3738	mg/l
Peak Sediment Concentration	0.6466	mg/l
Total Nitrogen Yield	7.209	lbs
Total Nitrogen Yield (Particulate)	3.1	lbs
Total Nitrogen Yield (Sorbed)	0.0004293	lbs
Total Nitrogen Yield (Dissolved)	4.109	lbs
Nitrogen Concentration	0.03757	mg/l
Peak Nitrogen Concentration	0.05996	mg/l
Total Phosphorus Yield	1.486	lbs
Total Phosphorus Yield (Particulate)	0.6392	lbs
Total Phosphorus Yield (Sorbed)	1.792E-07	lbs
Total Phosphorus Yield (Dissolved)	0.8473	lbs
Phosphorus Concentration	0.007746	mg/l
Peak Phosphorus Concentration	0.01236	mg/l
Total Bacteria Yield	3.37E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	3.37E+10	cfu
Bacteria Concentration	38.72	cfu/100 ml
Peak Bacteria Concentration	61.79	cfu/100 ml

Non-Routed Connector 5

Name	Non-Routed Connector 5
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	2.733	ac-ft
Total Sediment Discharged	128.9	lbs
Total Sediment Discharged (Clay)	1.34	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	99.4	lbs
Total Sediment Discharged (Small Agg.)	1.804	lbs
Total Sediment Discharged (Large Agg.)	26.32	lbs
Sediment Concentration	0.3738	mg/l
Peak Sediment Concentration	0.6466	mg/l
Total Nitrogen Discharged	7.209	lbs
Total Nitrogen Discharged (Particulate)	3.1	lbs
Total Nitrogen Discharged (Sorbed)	0.0004293	lbs
Total Nitrogen Discharged (Dissolved)	4.109	lbs
Nitrogen Concentration	0.03757	mg/l
Peak Nitrogen Concentration	0.05996	mg/l
Total Phosphorus Discharged	1.486	lbs
Total Phosphorus Discharged (Particulate)	0.6392	lbs
Total Phosphorus Discharged (Sorbed)	1.792E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.8473	lbs
Phosphorus Concentration	0.007746	mg/l
Peak Phosphorus Concentration	0.01236	mg/l
Total Bacteria Discharged	3.37E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	3.37E+10	cfu
Bacteria Concentration	38.72	cfu/100 ml
Peak Bacteria Concentration	61.79	cfu/100 ml

Trib1-04-03

Name	Trib1-04-03
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	12	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	4	ft
EMS Width	80	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	4	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	3.52	ac

Peak Stage	10	ft
Total Inflow Volume	2.733	ac-ft
Total Rainfall On BMP	17.72	ac-ft
Total Outflow Volume	68.33	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	68.19	ac-ft
Infiltration Volume	0.1376	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	128.9	lbs
Total Inflow Sediment Mass (Clay)	1.34	lbs
Total Inflow Sediment Mass (Silt)	0	lbs
Total Inflow Sediment Mass (Sand)	99.4	lbs
Total Inflow Sediment Mass (Small Agg.)	1.804	lbs
Total Inflow Sediment Mass (Large Agg.)	26.32	lbs
Priming Storm Sediment Mass In Permanent Pool	162	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	162	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	5.493	lbs
Total Sediment Mass Discharged (Clay)	5.451	lbs
Total Sediment Mass Discharged (Silt)	0	lbs
Total Sediment Mass Discharged (Sand)	0.005048	lbs
Total Sediment Mass Discharged (Small Agg.)	0.0361	lbs
Total Sediment Mass Discharged (Large Agg.)	0.001176	lbs
Total Sediment Mass Trapped	285.4	lbs
Total Sediment Mass Trapped (Clay)	157.9	lbs
Total Sediment Mass Trapped (Silt)	0	lbs
Total Sediment Mass Trapped (Sand)	99.4	lbs
Total Sediment Mass Trapped (Small Agg.)	1.768	lbs

Total Sediment Mass Trapped (Large Agg.)	26.32	lbs
Sediment Trapping Efficiency	98.11	%
Sediment Trapping Efficiency (Clay)	96.66	%
Sediment Trapping Efficiency (Silt)	0	%
Sediment Trapping Efficiency (Sand)	99.99	%
Sediment Trapping Efficiency (Small Agg.)	98	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	5.493	lbs
EMS Sediment Mass Discharged (Clay)	5.451	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0.005048	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.0361	lbs
EMS Sediment Mass Discharged (Large Agg.)	0.001176	lbs
Sediment Concentration	0.001121	mg/l
Peak Sediment Concentration	0.001591	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	7.209	lbs
Total Nitrogen Mass Inflow (Particulate)	3.1	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.0004293	lbs
Total Nitrogen Mass Inflow (Dissolved)	4.109	lbs
Priming Storm Nitrogen Mass In Permanent Pool	1254	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	65.7	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.009438	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1189	lbs
Total Nitrogen Mass Discharged	41.17	lbs
Total Nitrogen Mass Discharged (Particulate)	2.692	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.0004274	lbs

Total Nitrogen Mass Discharged (Dissolved)	38.48	lbs
Total Nitrogen Mass Trapped	1220	lbs
Total Nitrogen Mass Trapped (Particulate)	66.11	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.00944	lbs
Total Nitrogen Mass Trapped (Dissolved)	1154	lbs
Nitrogen Trapping Efficiency	96.74	%
Nitrogen Trapping Efficiency (Particulate)	96.09	%
Nitrogen Trapping Efficiency (Sorbed)	95.67	%
Nitrogen Trapping Efficiency (Dissolved)	96.77	%
Outlet Pipe Nitrogen Mass Discharged	2.822E-16	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	2.822E-16	lbs
EMS Nitrogen Mass Discharged	41.17	lbs
EMS Nitrogen Mass Discharged (Particulate)	2.692	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.0004274	lbs
EMS Nitrogen Mass Discharged (Dissolved)	38.48	lbs
Nitrogen Concentration	0.008516	mg/l
Peak Nitrogen Concentration	0.01085	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	1.486	lbs
Total Phosphorus Mass Inflow (Particulate)	0.6392	lbs
Total Phosphorus Mass Inflow (Sorbed)	1.792E-07	lbs
Total Phosphorus Mass Inflow (Dissolved)	0.8473	lbs
Priming Storm Phosphorus Mass In Permanent Pool	258.7	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	13.55	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	3.94E-06	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	245.1	lbs
Total Phosphorus Mass Discharged	8.489	lbs
Total Phosphorus Mass Discharged (Particulate)	0.555	lbs
Total Phosphorus Mass Discharged (Sorbed)	1.784E-07	lbs
Total Phosphorus Mass Discharged (Dissolved)	7.934	lbs
Total Phosphorus Mass Trapped	251.7	lbs

Total Phosphorus Mass Trapped (Particulate)	13.63	lbs
Total Phosphorus Mass Trapped (Sorbed)	3.941E-06	lbs
Total Phosphorus Mass Trapped (Dissolved)	238	lbs
Phosphorus Trapping Efficiency	96.74	%
Phosphorus Trapping Efficiency (Particulate)	96.09	%
Phosphorus Trapping Efficiency (Sorbed)	95.67	%
Phosphorus Trapping Efficiency (Dissolved)	96.77	%
Outlet Pipe Phosphorus Mass Discharged	-1.519E-16	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	-1.519E-16	lbs
EMS Phosphorus Mass Discharged	8.489	lbs
EMS Phosphorus Mass Discharged (Particulate)	0.555	lbs
EMS Phosphorus Mass Discharged (Sorbed)	1.784E-07	lbs
EMS Phosphorus Mass Discharged (Dissolved)	7.934	lbs
Phosphorus Concentration	0.001756	mg/l
Peak Phosphorus Concentration	0.002238	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	3.37E+10	cfu
Total Bacteria Loading (Sorbed To Clay)	3.089E+06	cfu
Total Bacteria Loading (Sorbed To Silt)	0	cfu
Total Bacteria Loading (Planktonic)	3.37E+10	cfu
Priming Storm Bacteria In Permanent Pool	9.709E+07	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	9.709E+07	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	6.644E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.91E+06	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	6.64E+09	cfu
Total Bacteria Trapped	2.715E+10	cfu

Total Bacteria Trapped (Sorbed To Clay)	9.627E+07	cfu
Total Bacteria Trapped (Sorbed To Silt)	0	cfu
Total Bacteria Trapped (Planktonic)	2.706E+10	cfu
Bacteria Trapping Efficiency	80.34	%
Bacteria Trapping Efficiency (Sorbed To Clay)	96.1	%
Bacteria Trapping Efficiency (Sorbed To Silt)	0	%
Bacteria Trapping Efficiency (Planktonic)	80.29	%
Outlet Pipe Bacteria Discharged	7.969E-09	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	7.969E-09	cfu
EMS Bacteria Discharged	6.644E+09	cfu
EMS Bacteria Discharged (Sorbed To Clay)	3.91E+06	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	6.64E+09	cfu
Bacteria Concentration	0.1949	cfu/100 ml
Peak Bacteria Concentration	1.958	cfu/100 ml

Non-Routed Connector 34

Name	Non-Routed Connector 34
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	68.19	ac-ft
Total Sediment Discharged	5.493	lbs
Total Sediment Discharged (Clay)	5.451	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	0.005048	lbs
Total Sediment Discharged (Small Agg.)	0.0361	lbs
Total Sediment Discharged (Large Agg.)	0.001176	lbs
Sediment Concentration	0.001121	mg/l
Peak Sediment Concentration	0.001591	mg/l
Total Nitrogen Discharged	41.17	lbs
Total Nitrogen Discharged (Particulate)	2.692	lbs
Total Nitrogen Discharged (Sorbed)	0.0004274	lbs
Total Nitrogen Discharged (Dissolved)	38.48	lbs
Nitrogen Concentration	0.008516	mg/l
Peak Nitrogen Concentration	0.01085	mg/l
Total Phosphorus Discharged	8.489	lbs
Total Phosphorus Discharged (Particulate)	0.5549	lbs
Total Phosphorus Discharged (Sorbed)	1.784E-07	lbs
Total Phosphorus Discharged (Dissolved)	7.934	lbs
Phosphorus Concentration	0.001756	mg/l
Peak Phosphorus Concentration	0.002238	mg/l
Total Bacteria Discharged	6.644E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.91E+06	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	6.64E+09	cfu
Bacteria Concentration	0.1949	cfu/100 ml
Peak Bacteria Concentration	1.958	cfu/100 ml

Trib1-04-02

Name	Trib1-04-02
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	68.19	ac-ft
Total Sediment Discharged	5.493	lbs
Total Sediment Discharged (Clay)	5.451	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	0.005048	lbs
Total Sediment Discharged (Small Agg.)	0.0361	lbs
Total Sediment Discharged (Large Agg.)	0.001176	lbs
Sediment Concentration	0.001121	mg/l
Peak Sediment Concentration	0.001591	mg/l
Total Nitrogen Discharged	41.17	lbs
Total Nitrogen Discharged (Particulate)	2.692	lbs
Total Nitrogen Discharged (Sorbed)	0.0004274	lbs
Total Nitrogen Discharged (Dissolved)	38.48	lbs
Nitrogen Concentration	0.008516	mg/l
Peak Nitrogen Concentration	0.01085	mg/l
Total Phosphorus Discharged	8.489	lbs
Total Phosphorus Discharged (Particulate)	0.5549	lbs
Total Phosphorus Discharged (Sorbed)	1.784E-07	lbs
Total Phosphorus Discharged (Dissolved)	7.934	lbs
Phosphorus Concentration	0.001756	mg/l
Peak Phosphorus Concentration	0.002238	mg/l
Total Bacteria Discharged	6.644E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.91E+06	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	6.64E+09	cfu
Bacteria Concentration	0.1949	cfu/100 ml
Peak Bacteria Concentration	1.958	cfu/100 ml

Circular Conduit 1

Name	Circular Conduit 1
Description	

Inputs

Parameter	Value	Units
Conduit Option	Muskingum-Kunge method	-
Conduit Diameter	48	in.
Conduit Length	66	ft
Conduit Slope	0.015	ft/ft
Manning's Roughness	0.013	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	68.19	ac-ft
Total Sediment Discharged	5.493	lbs
Total Sediment Discharged (Clay)	5.451	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	0.005048	lbs
Total Sediment Discharged (Small Agg.)	0.0361	lbs
Total Sediment Discharged (Large Agg.)	0.001176	lbs
Sediment Concentration	0.001121	mg/l
Peak Sediment Concentration	0.001591	mg/l
Total Nitrogen Discharged	41.17	lbs
Total Nitrogen Discharged (Particulate)	2.692	lbs
Total Nitrogen Discharged (Sorbed)	0.0004274	lbs
Total Nitrogen Discharged (Dissolved)	38.48	lbs
Nitrogen Concentration	0.008516	mg/l
Peak Nitrogen Concentration	0.01085	mg/l
Total Phosphorus Discharged	8.489	lbs
Total Phosphorus Discharged (Particulate)	0.5549	lbs
Total Phosphorus Discharged (Sorbed)	1.784E-07	lbs
Total Phosphorus Discharged (Dissolved)	7.934	lbs
Phosphorus Concentration	0.001756	mg/l
Peak Phosphorus Concentration	0.002238	mg/l
Total Bacteria Discharged	6.644E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.91E+06	cfu

Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	6.64E+09	cfu
Bacteria Concentration	0.1949	cfu/100 ml
Peak Bacteria Concentration	1.958	cfu/100 ml

Messages

Type	Description
Warning	Convergence criteria is not met. Flow is routed as simple translation.
Warning	The pipe structure is overtopped with a precipitation depth of 1.1 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 1.45 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 1.8 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 2.25 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 2.75 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 3.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 4.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 5.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 7 in. Results may be inaccurate.

Trib1-04-01

Name	Trib1-04-01
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	68.19	ac-ft
Total Sediment Discharged	5.493	lbs
Total Sediment Discharged (Clay)	5.451	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	0.005048	lbs
Total Sediment Discharged (Small Agg.)	0.0361	lbs
Total Sediment Discharged (Large Agg.)	0.001176	lbs
Sediment Concentration	0.001121	mg/l
Peak Sediment Concentration	0.001591	mg/l
Total Nitrogen Discharged	41.17	lbs
Total Nitrogen Discharged (Particulate)	2.692	lbs
Total Nitrogen Discharged (Sorbed)	0.0004274	lbs
Total Nitrogen Discharged (Dissolved)	38.48	lbs
Nitrogen Concentration	0.008516	mg/l
Peak Nitrogen Concentration	0.01085	mg/l
Total Phosphorus Discharged	8.489	lbs
Total Phosphorus Discharged (Particulate)	0.5549	lbs
Total Phosphorus Discharged (Sorbed)	1.784E-07	lbs
Total Phosphorus Discharged (Dissolved)	7.934	lbs
Phosphorus Concentration	0.001756	mg/l
Peak Phosphorus Concentration	0.002238	mg/l
Total Bacteria Discharged	6.644E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.91E+06	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	6.64E+09	cfu
Bacteria Concentration	0.1949	cfu/100 ml
Peak Bacteria Concentration	1.958	cfu/100 ml

Non-Routed Connector 65

Name	Non-Routed Connector 65
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	68.19	ac-ft
Total Sediment Discharged	5.493	lbs
Total Sediment Discharged (Clay)	5.451	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	0.005048	lbs
Total Sediment Discharged (Small Agg.)	0.0361	lbs
Total Sediment Discharged (Large Agg.)	0.001176	lbs
Sediment Concentration	0.001121	mg/l
Peak Sediment Concentration	0.001591	mg/l
Total Nitrogen Discharged	41.17	lbs
Total Nitrogen Discharged (Particulate)	2.692	lbs
Total Nitrogen Discharged (Sorbed)	0.0004274	lbs
Total Nitrogen Discharged (Dissolved)	38.48	lbs
Nitrogen Concentration	0.008516	mg/l
Peak Nitrogen Concentration	0.01085	mg/l
Total Phosphorus Discharged	8.489	lbs
Total Phosphorus Discharged (Particulate)	0.5549	lbs
Total Phosphorus Discharged (Sorbed)	1.784E-07	lbs
Total Phosphorus Discharged (Dissolved)	7.934	lbs
Phosphorus Concentration	0.001756	mg/l
Peak Phosphorus Concentration	0.002238	mg/l
Total Bacteria Discharged	6.644E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.91E+06	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	6.64E+09	cfu
Bacteria Concentration	0.1949	cfu/100 ml
Peak Bacteria Concentration	1.958	cfu/100 ml

Basin_Off1b

Name	Basin_Off1b
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	43.86	acres
Curve Number	55	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.8	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	5250	ft
Slope	0.016	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	23.06	acres
Curve Number	55	-
Peak Rate Factor	484	-
Time of Concentration	0.8	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	290.63	micro g/g/mg/l
Isotherm Max - Nitrogen	4513.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5.428	ac-ft
Total Sediment Yield	587.1	lbs
Total Sediment Yield (Clay)	104.7	lbs
Total Sediment Yield (Silt)	217.3	lbs

Total Sediment Yield (Sand)	223.2	lbs
Total Sediment Yield (Small Agg.)	2.689	lbs
Total Sediment Yield (Large Agg.)	39.23	lbs
Sediment Concentration	4.248	mg/l
Peak Sediment Concentration	6.582	mg/l
Total Nitrogen Yield	17.86	lbs
Total Nitrogen Yield (Particulate)	7.68	lbs
Total Nitrogen Yield (Sorbed)	0.04883	lbs
Total Nitrogen Yield (Dissolved)	10.13	lbs
Nitrogen Concentration	0.1067	mg/l
Peak Nitrogen Concentration	0.1755	mg/l
Total Phosphorus Yield	3.088	lbs
Total Phosphorus Yield (Particulate)	1.328	lbs
Total Phosphorus Yield (Sorbed)	1.554E-05	lbs
Total Phosphorus Yield (Dissolved)	1.76	lbs
Phosphorus Concentration	0.01629	mg/l
Peak Phosphorus Concentration	0.02771	mg/l
Total Bacteria Yield	4.684E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	1.084E+09	cfu
Total Bacteria Yield (Sorbed To Silt)	2.254E+09	cfu
Total Bacteria Yield (Planktonic)	4.65E+11	cfu
Bacteria Concentration	926.9	cfu/100 ml
Peak Bacteria Concentration	1400	cfu/100 ml

Non-Routed Connector 68

Name	Non-Routed Connector 68
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	5.428	ac-ft
Total Sediment Discharged	587.1	lbs
Total Sediment Discharged (Clay)	104.7	lbs
Total Sediment Discharged (Silt)	217.3	lbs
Total Sediment Discharged (Sand)	223.2	lbs
Total Sediment Discharged (Small Agg.)	2.689	lbs
Total Sediment Discharged (Large Agg.)	39.23	lbs
Sediment Concentration	4.248	mg/l
Peak Sediment Concentration	6.582	mg/l
Total Nitrogen Discharged	17.86	lbs
Total Nitrogen Discharged (Particulate)	7.68	lbs
Total Nitrogen Discharged (Sorbed)	0.04883	lbs
Total Nitrogen Discharged (Dissolved)	10.13	lbs
Nitrogen Concentration	0.1067	mg/l
Peak Nitrogen Concentration	0.1755	mg/l
Total Phosphorus Discharged	3.088	lbs
Total Phosphorus Discharged (Particulate)	1.328	lbs
Total Phosphorus Discharged (Sorbed)	1.554E-05	lbs
Total Phosphorus Discharged (Dissolved)	1.76	lbs
Phosphorus Concentration	0.01629	mg/l
Peak Phosphorus Concentration	0.02771	mg/l
Total Bacteria Discharged	4.684E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.084E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.254E+09	cfu
Total Bacteria Discharged (Planktonic)	4.65E+11	cfu
Bacteria Concentration	926.9	cfu/100 ml
Peak Bacteria Concentration	1400	cfu/100 ml

Basin_Off1a		
Name	Basin_Off1a	
Description		
Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	39.59	acres
Curve Number	57	-
Soil Series	Lakeland	-
Depth Range	0-74	in
Peak Rate Factor	484	-
Time of Concentration	0.333	hrs
Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	1650	ft
Slope	0.032	ft/ft
Soil Erodibility	0.05	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	5	%
Silt Percent	1.4	%
Sand Percent	93.6	%
Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	282.42	micro g/g/mg/l
Isotherm Max - Nitrogen	4418.6	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	20000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	3.82	acres
Curve Number	57	-
Peak Rate Factor	484	-
Time of Concentration	0.333	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	58.58	micro g/g/mg/l
Isotherm Max - Nitrogen	1690	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	4.624	ac-ft
Total Sediment Yield	1355	lbs
Total Sediment Yield (Clay)	37.97	lbs
Total Sediment Yield (Silt)	45.33	lbs

Total Sediment Yield (Sand)	937.3	lbs
Total Sediment Yield (Small Agg.)	17.82	lbs
Total Sediment Yield (Large Agg.)	316.5	lbs
Sediment Concentration	8.093	mg/l
Peak Sediment Concentration	15.63	mg/l
Total Nitrogen Yield	12.94	lbs
Total Nitrogen Yield (Particulate)	5.562	lbs
Total Nitrogen Yield (Sorbed)	0.007124	lbs
Total Nitrogen Yield (Dissolved)	7.366	lbs
Nitrogen Concentration	0.1519	mg/l
Peak Nitrogen Concentration	0.2631	mg/l
Total Phosphorus Yield	2.543	lbs
Total Phosphorus Yield (Particulate)	1.094	lbs
Total Phosphorus Yield (Sorbed)	6.291E-06	lbs
Total Phosphorus Yield (Dissolved)	1.45	lbs
Phosphorus Concentration	0.02623	mg/l
Peak Phosphorus Concentration	0.04576	mg/l
Total Bacteria Yield	1.163E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	1.068E+09	cfu
Total Bacteria Yield (Sorbed To Silt)	6.317E+08	cfu
Total Bacteria Yield (Planktonic)	1.161E+12	cfu
Bacteria Concentration	2710	cfu/100 ml
Peak Bacteria Concentration	4720	cfu/100 ml

Non-Routed Connector 4

Name	Non-Routed Connector 4
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	4.624	ac-ft
Total Sediment Discharged	1355	lbs
Total Sediment Discharged (Clay)	37.97	lbs
Total Sediment Discharged (Silt)	45.33	lbs
Total Sediment Discharged (Sand)	937.3	lbs
Total Sediment Discharged (Small Agg.)	17.82	lbs
Total Sediment Discharged (Large Agg.)	316.5	lbs
Sediment Concentration	8.093	mg/l
Peak Sediment Concentration	15.63	mg/l
Total Nitrogen Discharged	12.94	lbs
Total Nitrogen Discharged (Particulate)	5.562	lbs
Total Nitrogen Discharged (Sorbed)	0.007124	lbs
Total Nitrogen Discharged (Dissolved)	7.366	lbs
Nitrogen Concentration	0.1519	mg/l
Peak Nitrogen Concentration	0.2631	mg/l
Total Phosphorus Discharged	2.543	lbs
Total Phosphorus Discharged (Particulate)	1.094	lbs
Total Phosphorus Discharged (Sorbed)	6.291E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.45	lbs
Phosphorus Concentration	0.02623	mg/l
Peak Phosphorus Concentration	0.04576	mg/l
Total Bacteria Discharged	1.163E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.068E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.317E+08	cfu
Total Bacteria Discharged (Planktonic)	1.161E+12	cfu
Bacteria Concentration	2710	cfu/100 ml
Peak Bacteria Concentration	4720	cfu/100 ml

Offsite-01	
Name	Offsite-01
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	4.624	ac-ft
Total Sediment Discharged	1355	lbs
Total Sediment Discharged (Clay)	37.97	lbs
Total Sediment Discharged (Silt)	45.33	lbs
Total Sediment Discharged (Sand)	937.3	lbs
Total Sediment Discharged (Small Agg.)	17.82	lbs
Total Sediment Discharged (Large Agg.)	316.5	lbs
Sediment Concentration	8.093	mg/l
Peak Sediment Concentration	15.63	mg/l
Total Nitrogen Discharged	12.94	lbs
Total Nitrogen Discharged (Particulate)	5.562	lbs
Total Nitrogen Discharged (Sorbed)	0.007124	lbs
Total Nitrogen Discharged (Dissolved)	7.366	lbs
Nitrogen Concentration	0.1519	mg/l
Peak Nitrogen Concentration	0.2631	mg/l
Total Phosphorus Discharged	2.543	lbs
Total Phosphorus Discharged (Particulate)	1.094	lbs
Total Phosphorus Discharged (Sorbed)	6.291E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.45	lbs
Phosphorus Concentration	0.02623	mg/l
Peak Phosphorus Concentration	0.04576	mg/l
Total Bacteria Discharged	1.163E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.068E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.317E+08	cfu
Total Bacteria Discharged (Planktonic)	1.161E+12	cfu
Bacteria Concentration	2710	cfu/100 ml
Peak Bacteria Concentration	4720	cfu/100 ml

Non-Routed Connector 70

Name	Non-Routed Connector 70
Description	

Inputs

Parameter	Value	Units
Flow Type	Concentrated	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	4.624	ac-ft
Total Sediment Discharged	1355	lbs
Total Sediment Discharged (Clay)	37.97	lbs
Total Sediment Discharged (Silt)	45.33	lbs
Total Sediment Discharged (Sand)	937.3	lbs
Total Sediment Discharged (Small Agg.)	17.82	lbs
Total Sediment Discharged (Large Agg.)	316.5	lbs
Sediment Concentration	8.093	mg/l
Peak Sediment Concentration	15.63	mg/l
Total Nitrogen Discharged	12.94	lbs
Total Nitrogen Discharged (Particulate)	5.562	lbs
Total Nitrogen Discharged (Sorbed)	0.007124	lbs
Total Nitrogen Discharged (Dissolved)	7.366	lbs
Nitrogen Concentration	0.1519	mg/l
Peak Nitrogen Concentration	0.2631	mg/l
Total Phosphorus Discharged	2.543	lbs
Total Phosphorus Discharged (Particulate)	1.094	lbs
Total Phosphorus Discharged (Sorbed)	6.291E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.45	lbs
Phosphorus Concentration	0.02623	mg/l
Peak Phosphorus Concentration	0.04576	mg/l
Total Bacteria Discharged	1.163E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.068E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.317E+08	cfu
Total Bacteria Discharged (Planktonic)	1.161E+12	cfu
Bacteria Concentration	2710	cfu/100 ml
Peak Bacteria Concentration	4720	cfu/100 ml

Basin_Off2

Name	Basin_Off2
Description	

Hydrology Inputs

Parameter	Value	Units
Area	14.8	acres
Curve Number	89	-
Peak Rate Factor	484	-
Time of Concentration	0.1	hrs

Sediment Inputs

Parameter	Value	Units
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	70.3	micro g/g/mg/l
Isotherm Max - Nitrogen	1851.8	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	19.8	ac-ft
Total Sediment Yield	6245	lbs
Total Sediment Yield (Clay)	1624	lbs
Total Sediment Yield (Silt)	3435	lbs

Total Sediment Yield (Sand)	1186	lbs
Total Sediment Yield (Small Agg.)	0	lbs
Total Sediment Yield (Large Agg.)	0	lbs
Sediment Concentration	42.08	mg/l
Peak Sediment Concentration	145.2	mg/l
Total Nitrogen Yield	108.2	lbs
Total Nitrogen Yield (Particulate)	46.53	lbs
Total Nitrogen Yield (Sorbed)	0.2787	lbs
Total Nitrogen Yield (Dissolved)	61.4	lbs
Nitrogen Concentration	0.7291	mg/l
Peak Nitrogen Concentration	2.515	mg/l
Total Phosphorus Yield	12.92	lbs
Total Phosphorus Yield (Particulate)	5.556	lbs
Total Phosphorus Yield (Sorbed)	0.0003617	lbs
Total Phosphorus Yield (Dissolved)	7.364	lbs
Phosphorus Concentration	0.08706	mg/l
Peak Phosphorus Concentration	0.3003	mg/l
Total Bacteria Yield	6.59E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	6.59E+12	cfu
Bacteria Concentration	9790	cfu/100 ml
Peak Bacteria Concentration	3.377E+04	cfu/100 ml

Non-Routed Connector 68

Name	Non-Routed Connector 68
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	19.8	ac-ft
Total Sediment Discharged	6245	lbs
Total Sediment Discharged (Clay)	1624	lbs
Total Sediment Discharged (Silt)	3435	lbs
Total Sediment Discharged (Sand)	1186	lbs
Total Sediment Discharged (Small Agg.)	0	lbs
Total Sediment Discharged (Large Agg.)	0	lbs
Sediment Concentration	42.08	mg/l
Peak Sediment Concentration	145.2	mg/l
Total Nitrogen Discharged	108.2	lbs
Total Nitrogen Discharged (Particulate)	46.53	lbs
Total Nitrogen Discharged (Sorbed)	0.2787	lbs
Total Nitrogen Discharged (Dissolved)	61.4	lbs
Nitrogen Concentration	0.7291	mg/l
Peak Nitrogen Concentration	2.515	mg/l
Total Phosphorus Discharged	12.92	lbs
Total Phosphorus Discharged (Particulate)	5.556	lbs
Total Phosphorus Discharged (Sorbed)	0.0003617	lbs
Total Phosphorus Discharged (Dissolved)	7.364	lbs
Phosphorus Concentration	0.08706	mg/l
Peak Phosphorus Concentration	0.3003	mg/l
Total Bacteria Discharged	6.59E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	6.59E+12	cfu
Bacteria Concentration	9790	cfu/100 ml
Peak Bacteria Concentration	3.377E+04	cfu/100 ml

Basin_01

Name	Basin_01
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	173.52	acres
Curve Number	47	-
Soil Series	Troup	-
Depth Range	0-18	in
Peak Rate Factor	484	-
Time of Concentration	1.7	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	6184	ft
Slope	0.012	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	5	%
Silt Percent	1.4	%
Sand Percent	93.6	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	282.42	micro g/g/mg/l
Isotherm Max - Nitrogen	4418.6	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	25.77	acres
Curve Number	47	-
Peak Rate Factor	484	-
Time of Concentration	1.7	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	304.27	micro g/g/mg/l
Isotherm Max - Nitrogen	4669.9	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1.135E+05	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	9.099	ac-ft
Total Sediment Yield	392.6	lbs
Total Sediment Yield (Clay)	43.7	lbs
Total Sediment Yield (Silt)	85.94	lbs

Total Sediment Yield (Sand)	200.9	lbs
Total Sediment Yield (Small Agg.)	3.309	lbs
Total Sediment Yield (Large Agg.)	58.8	lbs
Sediment Concentration	1.205	mg/l
Peak Sediment Concentration	1.686	mg/l
Total Nitrogen Yield	24.44	lbs
Total Nitrogen Yield (Particulate)	10.51	lbs
Total Nitrogen Yield (Sorbed)	0.01183	lbs
Total Nitrogen Yield (Dissolved)	13.92	lbs
Nitrogen Concentration	0.04806	mg/l
Peak Nitrogen Concentration	0.0696	mg/l
Total Phosphorus Yield	4.8	lbs
Total Phosphorus Yield (Particulate)	2.064	lbs
Total Phosphorus Yield (Sorbed)	2.323E-06	lbs
Total Phosphorus Yield (Dissolved)	2.736	lbs
Phosphorus Concentration	0.008408	mg/l
Peak Phosphorus Concentration	0.01231	mg/l
Total Bacteria Yield	7.993E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	1.612E+09	cfu
Total Bacteria Yield (Sorbed To Silt)	3.351E+09	cfu
Total Bacteria Yield (Planktonic)	7.944E+11	cfu
Bacteria Concentration	994.5	cfu/100 ml
Peak Bacteria Concentration	1361	cfu/100 ml

Non-Routed Connector 1		
Name	Non-Routed Connector 1	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	9.099	ac-ft
Total Sediment Discharged	392.6	lbs
Total Sediment Discharged (Clay)	43.7	lbs
Total Sediment Discharged (Silt)	85.94	lbs
Total Sediment Discharged (Sand)	200.9	lbs
Total Sediment Discharged (Small Agg.)	3.309	lbs
Total Sediment Discharged (Large Agg.)	58.8	lbs
Sediment Concentration	1.205	mg/l
Peak Sediment Concentration	1.686	mg/l
Total Nitrogen Discharged	24.44	lbs
Total Nitrogen Discharged (Particulate)	10.51	lbs
Total Nitrogen Discharged (Sorbed)	0.01183	lbs
Total Nitrogen Discharged (Dissolved)	13.92	lbs
Nitrogen Concentration	0.04806	mg/l
Peak Nitrogen Concentration	0.0696	mg/l
Total Phosphorus Discharged	4.8	lbs
Total Phosphorus Discharged (Particulate)	2.064	lbs
Total Phosphorus Discharged (Sorbed)	2.323E-06	lbs
Total Phosphorus Discharged (Dissolved)	2.736	lbs
Phosphorus Concentration	0.008408	mg/l
Peak Phosphorus Concentration	0.01231	mg/l
Total Bacteria Discharged	7.993E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.612E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.351E+09	cfu
Total Bacteria Discharged (Planktonic)	7.944E+11	cfu
Bacteria Concentration	994.5	cfu/100 ml
Peak Bacteria Concentration	1361	cfu/100 ml

Trib1-05-03

Name	Trib1-05-03
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	9.099	ac-ft
Total Sediment Discharged	392.6	lbs
Total Sediment Discharged (Clay)	43.7	lbs
Total Sediment Discharged (Silt)	85.94	lbs
Total Sediment Discharged (Sand)	200.9	lbs
Total Sediment Discharged (Small Agg.)	3.309	lbs
Total Sediment Discharged (Large Agg.)	58.8	lbs
Sediment Concentration	1.205	mg/l
Peak Sediment Concentration	1.686	mg/l
Total Nitrogen Discharged	24.44	lbs
Total Nitrogen Discharged (Particulate)	10.51	lbs
Total Nitrogen Discharged (Sorbed)	0.01183	lbs
Total Nitrogen Discharged (Dissolved)	13.92	lbs
Nitrogen Concentration	0.04806	mg/l
Peak Nitrogen Concentration	0.0696	mg/l
Total Phosphorus Discharged	4.8	lbs
Total Phosphorus Discharged (Particulate)	2.064	lbs
Total Phosphorus Discharged (Sorbed)	2.323E-06	lbs
Total Phosphorus Discharged (Dissolved)	2.736	lbs
Phosphorus Concentration	0.008408	mg/l
Peak Phosphorus Concentration	0.01231	mg/l
Total Bacteria Discharged	7.993E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.612E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.351E+09	cfu
Total Bacteria Discharged (Planktonic)	7.944E+11	cfu
Bacteria Concentration	994.5	cfu/100 ml
Peak Bacteria Concentration	1361	cfu/100 ml

Non-Routed Connector 66		
Name	Non-Routed Connector 66	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	9.099	ac-ft
Total Sediment Discharged	392.6	lbs
Total Sediment Discharged (Clay)	43.7	lbs
Total Sediment Discharged (Silt)	85.94	lbs
Total Sediment Discharged (Sand)	200.9	lbs
Total Sediment Discharged (Small Agg.)	3.309	lbs
Total Sediment Discharged (Large Agg.)	58.8	lbs
Sediment Concentration	1.205	mg/l
Peak Sediment Concentration	1.686	mg/l
Total Nitrogen Discharged	24.44	lbs
Total Nitrogen Discharged (Particulate)	10.51	lbs
Total Nitrogen Discharged (Sorbed)	0.01183	lbs
Total Nitrogen Discharged (Dissolved)	13.92	lbs
Nitrogen Concentration	0.04806	mg/l
Peak Nitrogen Concentration	0.0696	mg/l
Total Phosphorus Discharged	4.8	lbs
Total Phosphorus Discharged (Particulate)	2.064	lbs
Total Phosphorus Discharged (Sorbed)	2.323E-06	lbs
Total Phosphorus Discharged (Dissolved)	2.736	lbs
Phosphorus Concentration	0.008408	mg/l
Peak Phosphorus Concentration	0.01231	mg/l
Total Bacteria Discharged	7.993E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.612E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.351E+09	cfu
Total Bacteria Discharged (Planktonic)	7.944E+11	cfu
Bacteria Concentration	994.5	cfu/100 ml
Peak Bacteria Concentration	1361	cfu/100 ml

Trib1-05-01a	
Name	Trib1-05-01a
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	38.95	ac-ft
Total Sediment Discharged	8579	lbs
Total Sediment Discharged (Clay)	1810	lbs
Total Sediment Discharged (Silt)	3783	lbs
Total Sediment Discharged (Sand)	2548	lbs
Total Sediment Discharged (Small Agg.)	23.81	lbs
Total Sediment Discharged (Large Agg.)	414.6	lbs
Sediment Concentration	39.96	mg/l
Peak Sediment Concentration	144.2	mg/l
Total Nitrogen Discharged	163.4	lbs
Total Nitrogen Discharged (Particulate)	70.28	lbs
Total Nitrogen Discharged (Sorbed)	0.3465	lbs
Total Nitrogen Discharged (Dissolved)	92.82	lbs
Nitrogen Concentration	0.7029	mg/l
Peak Nitrogen Concentration	2.495	mg/l
Total Phosphorus Discharged	23.35	lbs
Total Phosphorus Discharged (Particulate)	10.04	lbs
Total Phosphorus Discharged (Sorbed)	0.0003859	lbs
Total Phosphorus Discharged (Dissolved)	13.31	lbs
Phosphorus Concentration	0.08599	mg/l
Peak Phosphorus Concentration	0.2982	mg/l
Total Bacteria Discharged	9.02E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.65E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	5.487E+10	cfu
Total Bacteria Discharged (Planktonic)	8.939E+12	cfu
Bacteria Concentration	9360	cfu/100 ml
Peak Bacteria Concentration	3.352E+04	cfu/100 ml

Circular Conduit 2

Name	Circular Conduit 2
Description	

Inputs

Parameter	Value	Units
Conduit Option	Muskingum-Kunge method	-
Conduit Diameter	72	in.
Conduit Length	63	ft
Conduit Slope	0.032	ft/ft
Manning's Roughness	0.013	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	38.95	ac-ft
Total Sediment Discharged	8579	lbs
Total Sediment Discharged (Clay)	1810	lbs
Total Sediment Discharged (Silt)	3783	lbs
Total Sediment Discharged (Sand)	2548	lbs
Total Sediment Discharged (Small Agg.)	23.81	lbs
Total Sediment Discharged (Large Agg.)	414.6	lbs
Sediment Concentration	39.96	mg/l
Peak Sediment Concentration	144.2	mg/l
Total Nitrogen Discharged	163.4	lbs
Total Nitrogen Discharged (Particulate)	70.28	lbs
Total Nitrogen Discharged (Sorbed)	0.3465	lbs
Total Nitrogen Discharged (Dissolved)	92.82	lbs
Nitrogen Concentration	0.7029	mg/l
Peak Nitrogen Concentration	2.495	mg/l
Total Phosphorus Discharged	23.35	lbs
Total Phosphorus Discharged (Particulate)	10.04	lbs
Total Phosphorus Discharged (Sorbed)	0.0003859	lbs
Total Phosphorus Discharged (Dissolved)	13.31	lbs
Phosphorus Concentration	0.08599	mg/l
Peak Phosphorus Concentration	0.2982	mg/l
Total Bacteria Discharged	9.02E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.65E+10	cfu

Total Bacteria Discharged (Sorbed To Silt)	5.487E+10	cfu
Total Bacteria Discharged (Planktonic)	8.939E+12	cfu
Bacteria Concentration	9360	cfu/100 ml
Peak Bacteria Concentration	3.352E+04	cfu/100 ml

Messages

Type	Description
Warning	Convergence criteria is not met. Flow is routed as simple translation.

Trib1-00-07

Name	Trib1-00-07
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	107.1	ac-ft
Total Sediment Discharged	8585	lbs
Total Sediment Discharged (Clay)	1815	lbs
Total Sediment Discharged (Silt)	3783	lbs
Total Sediment Discharged (Sand)	2548	lbs
Total Sediment Discharged (Small Agg.)	23.85	lbs
Total Sediment Discharged (Large Agg.)	414.6	lbs
Sediment Concentration	37.89	mg/l
Peak Sediment Concentration	141.1	mg/l
Total Nitrogen Discharged	204.6	lbs
Total Nitrogen Discharged (Particulate)	72.97	lbs
Total Nitrogen Discharged (Sorbed)	0.3469	lbs
Total Nitrogen Discharged (Dissolved)	131.3	lbs
Nitrogen Concentration	0.6657	mg/l
Peak Nitrogen Concentration	2.442	mg/l
Total Phosphorus Discharged	31.84	lbs
Total Phosphorus Discharged (Particulate)	10.6	lbs
Total Phosphorus Discharged (Sorbed)	0.0003861	lbs
Total Phosphorus Discharged (Dissolved)	21.24	lbs
Phosphorus Concentration	0.08058	mg/l
Peak Phosphorus Concentration	0.2921	mg/l
Total Bacteria Discharged	9.027E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.344E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	4.904E+10	cfu
Total Bacteria Discharged (Planktonic)	8.955E+12	cfu
Bacteria Concentration	8858	cfu/100 ml
Peak Bacteria Concentration	3.279E+04	cfu/100 ml

Non-Routed Connector 56

Name	Non-Routed Connector 56
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	107.1	ac-ft
Total Sediment Discharged	8585	lbs
Total Sediment Discharged (Clay)	1815	lbs
Total Sediment Discharged (Silt)	3783	lbs
Total Sediment Discharged (Sand)	2548	lbs
Total Sediment Discharged (Small Agg.)	23.85	lbs
Total Sediment Discharged (Large Agg.)	414.6	lbs
Sediment Concentration	37.89	mg/l
Peak Sediment Concentration	141.1	mg/l
Total Nitrogen Discharged	204.6	lbs
Total Nitrogen Discharged (Particulate)	72.97	lbs
Total Nitrogen Discharged (Sorbed)	0.3469	lbs
Total Nitrogen Discharged (Dissolved)	131.3	lbs
Nitrogen Concentration	0.6657	mg/l
Peak Nitrogen Concentration	2.442	mg/l
Total Phosphorus Discharged	31.84	lbs
Total Phosphorus Discharged (Particulate)	10.6	lbs
Total Phosphorus Discharged (Sorbed)	0.0003861	lbs
Total Phosphorus Discharged (Dissolved)	21.24	lbs
Phosphorus Concentration	0.08058	mg/l
Peak Phosphorus Concentration	0.2921	mg/l
Total Bacteria Discharged	9.027E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.344E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	4.904E+10	cfu
Total Bacteria Discharged (Planktonic)	8.955E+12	cfu
Bacteria Concentration	8858	cfu/100 ml
Peak Bacteria Concentration	3.279E+04	cfu/100 ml

Trib1-00-06	
Name	Trib1-00-06
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5504	ac-ft
Total Sediment Discharged	3.768E+04	lbs
Total Sediment Discharged (Clay)	3.001E+04	lbs
Total Sediment Discharged (Silt)	4035	lbs
Total Sediment Discharged (Sand)	2801	lbs
Total Sediment Discharged (Small Agg.)	315.2	lbs
Total Sediment Discharged (Large Agg.)	520.5	lbs
Sediment Concentration	0.8897	mg/l
Peak Sediment Concentration	45.15	mg/l
Total Nitrogen Discharged	6641	lbs
Total Nitrogen Discharged (Particulate)	1479	lbs
Total Nitrogen Discharged (Sorbed)	18.3	lbs
Total Nitrogen Discharged (Dissolved)	5143	lbs
Nitrogen Concentration	0.1622	mg/l
Peak Nitrogen Concentration	0.8938	mg/l
Total Phosphorus Discharged	1080	lbs
Total Phosphorus Discharged (Particulate)	235.3	lbs
Total Phosphorus Discharged (Sorbed)	0.005508	lbs
Total Phosphorus Discharged (Dissolved)	844.2	lbs
Phosphorus Concentration	0.0262	mg/l
Peak Phosphorus Concentration	0.1118	mg/l
Total Bacteria Discharged	1.179E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.121E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.226E+09	cfu
Total Bacteria Discharged (Planktonic)	1.179E+13	cfu
Bacteria Concentration	51.59	cfu/100 ml
Peak Bacteria Concentration	1.049E+04	cfu/100 ml

Non-Routed Connector 55

Name	Non-Routed Connector 55
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	5504	ac-ft
Total Sediment Discharged	3.768E+04	lbs
Total Sediment Discharged (Clay)	3.001E+04	lbs
Total Sediment Discharged (Silt)	4035	lbs
Total Sediment Discharged (Sand)	2801	lbs
Total Sediment Discharged (Small Agg.)	315.2	lbs
Total Sediment Discharged (Large Agg.)	520.5	lbs
Sediment Concentration	0.8897	mg/l
Peak Sediment Concentration	45.15	mg/l
Total Nitrogen Discharged	6641	lbs
Total Nitrogen Discharged (Particulate)	1479	lbs
Total Nitrogen Discharged (Sorbed)	18.3	lbs
Total Nitrogen Discharged (Dissolved)	5143	lbs
Nitrogen Concentration	0.1622	mg/l
Peak Nitrogen Concentration	0.8938	mg/l
Total Phosphorus Discharged	1080	lbs
Total Phosphorus Discharged (Particulate)	235.3	lbs
Total Phosphorus Discharged (Sorbed)	0.005508	lbs
Total Phosphorus Discharged (Dissolved)	844.2	lbs
Phosphorus Concentration	0.0262	mg/l
Peak Phosphorus Concentration	0.1118	mg/l
Total Bacteria Discharged	1.179E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.121E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.226E+09	cfu
Total Bacteria Discharged (Planktonic)	1.179E+13	cfu
Bacteria Concentration	51.59	cfu/100 ml
Peak Bacteria Concentration	1.049E+04	cfu/100 ml

Basin_10		
Name	Basin_10	
Description		
Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	31.68	acres
Curve Number	69	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.783	hrs
Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	1738	ft
Slope	0.044	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%
Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	3.02	acres
Curve Number	69	-
Peak Rate Factor	484	-
Time of Concentration	0.783	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	74.43	micro g/g/mg/l
Isotherm Max - Nitrogen	1907.5	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	8.879	ac-ft
Total Sediment Yield	1524	lbs
Total Sediment Yield (Clay)	70.41	lbs
Total Sediment Yield (Silt)	120.2	lbs

Total Sediment Yield (Sand)	1048	lbs
Total Sediment Yield (Small Agg.)	18.27	lbs
Total Sediment Yield (Large Agg.)	266.6	lbs
Sediment Concentration	13.86	mg/l
Peak Sediment Concentration	25.26	mg/l
Total Nitrogen Yield	25.38	lbs
Total Nitrogen Yield (Particulate)	10.91	lbs
Total Nitrogen Yield (Sorbed)	0.0122	lbs
Total Nitrogen Yield (Dissolved)	14.45	lbs
Nitrogen Concentration	0.2809	mg/l
Peak Nitrogen Concentration	0.5035	mg/l
Total Phosphorus Yield	4.904	lbs
Total Phosphorus Yield (Particulate)	2.109	lbs
Total Phosphorus Yield (Sorbed)	1.117E-05	lbs
Total Phosphorus Yield (Dissolved)	2.795	lbs
Phosphorus Concentration	0.04349	mg/l
Peak Phosphorus Concentration	0.07938	mg/l
Total Bacteria Yield	3.316E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	4.514E+08	cfu
Total Bacteria Yield (Sorbed To Silt)	8.078E+08	cfu
Total Bacteria Yield (Planktonic)	3.304E+11	cfu
Bacteria Concentration	2352	cfu/100 ml
Peak Bacteria Concentration	4015	cfu/100 ml

Non-Routed Connector 7

Name	Non-Routed Connector 7
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	8.879	ac-ft
Total Sediment Discharged	1524	lbs
Total Sediment Discharged (Clay)	70.41	lbs
Total Sediment Discharged (Silt)	120.2	lbs
Total Sediment Discharged (Sand)	1048	lbs
Total Sediment Discharged (Small Agg.)	18.27	lbs
Total Sediment Discharged (Large Agg.)	266.6	lbs
Sediment Concentration	13.86	mg/l
Peak Sediment Concentration	25.26	mg/l
Total Nitrogen Discharged	25.38	lbs
Total Nitrogen Discharged (Particulate)	10.91	lbs
Total Nitrogen Discharged (Sorbed)	0.0122	lbs
Total Nitrogen Discharged (Dissolved)	14.45	lbs
Nitrogen Concentration	0.2809	mg/l
Peak Nitrogen Concentration	0.5035	mg/l
Total Phosphorus Discharged	4.904	lbs
Total Phosphorus Discharged (Particulate)	2.109	lbs
Total Phosphorus Discharged (Sorbed)	1.117E-05	lbs
Total Phosphorus Discharged (Dissolved)	2.795	lbs
Phosphorus Concentration	0.04349	mg/l
Peak Phosphorus Concentration	0.07938	mg/l
Total Bacteria Discharged	3.316E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.514E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.078E+08	cfu
Total Bacteria Discharged (Planktonic)	3.304E+11	cfu
Bacteria Concentration	2352	cfu/100 ml
Peak Bacteria Concentration	4015	cfu/100 ml

Trib1-00-04

Name	Trib1-00-04
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	5513	ac-ft
Total Sediment Discharged	3.92E+04	lbs
Total Sediment Discharged (Clay)	3.008E+04	lbs
Total Sediment Discharged (Silt)	4155	lbs
Total Sediment Discharged (Sand)	3849	lbs
Total Sediment Discharged (Small Agg.)	333.5	lbs
Total Sediment Discharged (Large Agg.)	787.1	lbs
Sediment Concentration	0.9103	mg/l
Peak Sediment Concentration	45.08	mg/l
Total Nitrogen Discharged	6666	lbs
Total Nitrogen Discharged (Particulate)	1490	lbs
Total Nitrogen Discharged (Sorbed)	18.32	lbs
Total Nitrogen Discharged (Dissolved)	5158	lbs
Nitrogen Concentration	0.1624	mg/l
Peak Nitrogen Concentration	0.8925	mg/l
Total Phosphorus Discharged	1084	lbs
Total Phosphorus Discharged (Particulate)	237.4	lbs
Total Phosphorus Discharged (Sorbed)	0.005519	lbs
Total Phosphorus Discharged (Dissolved)	847	lbs
Phosphorus Concentration	0.02625	mg/l
Peak Phosphorus Concentration	0.1116	mg/l
Total Bacteria Discharged	1.212E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.233E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.308E+09	cfu
Total Bacteria Discharged (Planktonic)	1.212E+13	cfu
Bacteria Concentration	52.65	cfu/100 ml
Peak Bacteria Concentration	1.045E+04	cfu/100 ml

Non-Routed Connector 48

Name	Non-Routed Connector 48
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	5513	ac-ft
Total Sediment Discharged	3.92E+04	lbs
Total Sediment Discharged (Clay)	3.008E+04	lbs
Total Sediment Discharged (Silt)	4155	lbs
Total Sediment Discharged (Sand)	3849	lbs
Total Sediment Discharged (Small Agg.)	333.5	lbs
Total Sediment Discharged (Large Agg.)	787.1	lbs
Sediment Concentration	0.9103	mg/l
Peak Sediment Concentration	45.08	mg/l
Total Nitrogen Discharged	6666	lbs
Total Nitrogen Discharged (Particulate)	1490	lbs
Total Nitrogen Discharged (Sorbed)	18.32	lbs
Total Nitrogen Discharged (Dissolved)	5158	lbs
Nitrogen Concentration	0.1624	mg/l
Peak Nitrogen Concentration	0.8925	mg/l
Total Phosphorus Discharged	1084	lbs
Total Phosphorus Discharged (Particulate)	237.4	lbs
Total Phosphorus Discharged (Sorbed)	0.005519	lbs
Total Phosphorus Discharged (Dissolved)	847	lbs
Phosphorus Concentration	0.02625	mg/l
Peak Phosphorus Concentration	0.1116	mg/l
Total Bacteria Discharged	1.212E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.233E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.308E+09	cfu
Total Bacteria Discharged (Planktonic)	1.212E+13	cfu
Bacteria Concentration	52.65	cfu/100 ml
Peak Bacteria Concentration	1.045E+04	cfu/100 ml

Basin_12

Name	Basin_12
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	22.15	acres
Curve Number	57	-
Soil Series	Pelion	-
Depth Range	0-13	in
Peak Rate Factor	484	-
Time of Concentration	0.833	hrs

Sediment Inputs

Parameter	Value	Units
Length	1197	ft
Slope	0.03	ft/ft
Soil Erodibility	0.2	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	6	%
Silt Percent	16.3	%
Sand Percent	77.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	221.2	micro g/g/mg/l
Isotherm Max - Nitrogen	3708.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	500	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.441	ac-ft
Total Sediment Yield	1758	lbs
Total Sediment Yield (Clay)	27.42	lbs
Total Sediment Yield (Silt)	96.67	lbs
Total Sediment Yield (Sand)	1002	lbs
Total Sediment Yield (Small Agg.)	189.8	lbs
Total Sediment Yield (Large Agg.)	441.4	lbs
Sediment Concentration	13.02	mg/l
Peak Sediment Concentration	23.61	mg/l
Total Nitrogen Yield	6.438	lbs
Total Nitrogen Yield (Particulate)	2.768	lbs
Total Nitrogen Yield (Sorbed)	0.005378	lbs
Total Nitrogen Yield (Dissolved)	3.664	lbs
Nitrogen Concentration	0.09495	mg/l
Peak Nitrogen Concentration	0.1537	mg/l
Total Phosphorus Yield	1.327	lbs
Total Phosphorus Yield (Particulate)	0.5708	lbs
Total Phosphorus Yield (Sorbed)	3.838E-06	lbs
Total Phosphorus Yield (Dissolved)	0.7566	lbs
Phosphorus Concentration	0.01958	mg/l
Peak Phosphorus Concentration	0.0317	mg/l
Total Bacteria Yield	1.505E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	1.505E+10	cfu
Bacteria Concentration	48.92	cfu/100 ml
Peak Bacteria Concentration	79.22	cfu/100 ml

Non-Routed Connector 12

Name	Non-Routed Connector 12
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	2.441	ac-ft
Total Sediment Discharged	1758	lbs
Total Sediment Discharged (Clay)	27.42	lbs
Total Sediment Discharged (Silt)	96.67	lbs
Total Sediment Discharged (Sand)	1002	lbs
Total Sediment Discharged (Small Agg.)	189.8	lbs
Total Sediment Discharged (Large Agg.)	441.4	lbs
Sediment Concentration	13.02	mg/l
Peak Sediment Concentration	23.61	mg/l
Total Nitrogen Discharged	6.438	lbs
Total Nitrogen Discharged (Particulate)	2.768	lbs
Total Nitrogen Discharged (Sorbed)	0.005378	lbs
Total Nitrogen Discharged (Dissolved)	3.664	lbs
Nitrogen Concentration	0.09495	mg/l
Peak Nitrogen Concentration	0.1537	mg/l
Total Phosphorus Discharged	1.327	lbs
Total Phosphorus Discharged (Particulate)	0.5708	lbs
Total Phosphorus Discharged (Sorbed)	3.838E-06	lbs
Total Phosphorus Discharged (Dissolved)	0.7566	lbs
Phosphorus Concentration	0.01958	mg/l
Peak Phosphorus Concentration	0.0317	mg/l
Total Bacteria Discharged	1.505E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.505E+10	cfu
Bacteria Concentration	48.92	cfu/100 ml
Peak Bacteria Concentration	79.22	cfu/100 ml

Trib1-02-02

Name	Trib1-02-02
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	12	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	4	ft
EMS Width	80	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	4	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	2.16	ac

Peak Stage	10	ft
Total Inflow Volume	2.441	ac-ft
Total Rainfall On BMP	10.87	ac-ft
Total Outflow Volume	118.9	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	118.6	ac-ft
Infiltration Volume	0.2942	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	1758	lbs
Total Inflow Sediment Mass (Clay)	27.42	lbs
Total Inflow Sediment Mass (Silt)	96.67	lbs
Total Inflow Sediment Mass (Sand)	1002	lbs
Total Inflow Sediment Mass (Small Agg.)	189.8	lbs
Total Inflow Sediment Mass (Large Agg.)	441.4	lbs
Priming Storm Sediment Mass In Permanent Pool	4171	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	4171	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	299.8	lbs
Total Sediment Mass Discharged (Clay)	299	lbs
Total Sediment Mass Discharged (Silt)	0.5752	lbs
Total Sediment Mass Discharged (Sand)	0.001255	lbs
Total Sediment Mass Discharged (Small Agg.)	0.1677	lbs
Total Sediment Mass Discharged (Large Agg.)	0.0004853	lbs
Total Sediment Mass Trapped	5629	lbs
Total Sediment Mass Trapped (Clay)	3899	lbs
Total Sediment Mass Trapped (Silt)	96.09	lbs
Total Sediment Mass Trapped (Sand)	1002	lbs
Total Sediment Mass Trapped (Small Agg.)	189.7	lbs

Total Sediment Mass Trapped (Large Agg.)	441.4	lbs
Sediment Trapping Efficiency	94.94	%
Sediment Trapping Efficiency (Clay)	92.88	%
Sediment Trapping Efficiency (Silt)	99.4	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	99.91	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	299.8	lbs
EMS Sediment Mass Discharged (Clay)	299	lbs
EMS Sediment Mass Discharged (Silt)	0.5752	lbs
EMS Sediment Mass Discharged (Sand)	0.001255	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.1677	lbs
EMS Sediment Mass Discharged (Large Agg.)	0.0004853	lbs
Sediment Concentration	0.09084	mg/l
Peak Sediment Concentration	0.1121	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	6.438	lbs
Total Nitrogen Mass Inflow (Particulate)	2.768	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.005378	lbs
Total Nitrogen Mass Inflow (Dissolved)	3.664	lbs
Priming Storm Nitrogen Mass In Permanent Pool	1558	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	74.02	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.2019	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1484	lbs
Total Nitrogen Mass Discharged	111.6	lbs
Total Nitrogen Mass Discharged (Particulate)	5.373	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.01468	lbs

Total Nitrogen Mass Discharged (Dissolved)	106.2	lbs
Total Nitrogen Mass Trapped	1453	lbs
Total Nitrogen Mass Trapped (Particulate)	71.41	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.1926	lbs
Total Nitrogen Mass Trapped (Dissolved)	1381	lbs
Nitrogen Trapping Efficiency	92.87	%
Nitrogen Trapping Efficiency (Particulate)	93	%
Nitrogen Trapping Efficiency (Sorbed)	92.92	%
Nitrogen Trapping Efficiency (Dissolved)	92.86	%
Outlet Pipe Nitrogen Mass Discharged	-1.353E-15	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	-1.353E-15	lbs
EMS Nitrogen Mass Discharged	111.6	lbs
EMS Nitrogen Mass Discharged (Particulate)	5.373	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.01468	lbs
EMS Nitrogen Mass Discharged (Dissolved)	106.2	lbs
Nitrogen Concentration	0.03386	mg/l
Peak Nitrogen Concentration	0.04067	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	1.327	lbs
Total Phosphorus Mass Inflow (Particulate)	0.5708	lbs
Total Phosphorus Mass Inflow (Sorbed)	3.838E-06	lbs
Total Phosphorus Mass Inflow (Dissolved)	0.7566	lbs
Priming Storm Phosphorus Mass In Permanent Pool	321.8	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	15.26	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.0001445	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	306.6	lbs
Total Phosphorus Mass Discharged	23.05	lbs
Total Phosphorus Mass Discharged (Particulate)	1.108	lbs
Total Phosphorus Mass Discharged (Sorbed)	1.05E-05	lbs
Total Phosphorus Mass Discharged (Dissolved)	21.94	lbs
Total Phosphorus Mass Trapped	300.1	lbs

Total Phosphorus Mass Trapped (Particulate)	14.72	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.0001378	lbs
Total Phosphorus Mass Trapped (Dissolved)	285.4	lbs
Phosphorus Trapping Efficiency	92.87	%
Phosphorus Trapping Efficiency (Particulate)	93	%
Phosphorus Trapping Efficiency (Sorbed)	92.92	%
Phosphorus Trapping Efficiency (Dissolved)	92.86	%
Outlet Pipe Phosphorus Mass Discharged	-8.901E-16	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	-8.901E-16	lbs
EMS Phosphorus Mass Discharged	23.05	lbs
EMS Phosphorus Mass Discharged (Particulate)	1.108	lbs
EMS Phosphorus Mass Discharged (Sorbed)	1.05E-05	lbs
EMS Phosphorus Mass Discharged (Dissolved)	21.94	lbs
Phosphorus Concentration	0.006994	mg/l
Peak Phosphorus Concentration	0.0084	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	1.505E+10	cfu
Total Bacteria Loading (Sorbed To Clay)	3.146E+07	cfu
Total Bacteria Loading (Sorbed To Silt)	2.884E+07	cfu
Total Bacteria Loading (Planktonic)	1.499E+10	cfu
Priming Storm Bacteria In Permanent Pool	1.242E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	1.242E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	5.374E+08	cfu
Total Bacteria Discharged (Sorbed To Clay)	9.012E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.211E+06	cfu
Total Bacteria Discharged (Planktonic)	4.461E+08	cfu
Total Bacteria Trapped	1.575E+10	cfu

Total Bacteria Trapped (Sorbed To Clay)	1.184E+09	cfu
Total Bacteria Trapped (Sorbed To Silt)	2.763E+07	cfu
Total Bacteria Trapped (Planktonic)	1.454E+10	cfu
Bacteria Trapping Efficiency	96.7	%
Bacteria Trapping Efficiency (Sorbed To Clay)	92.92	%
Bacteria Trapping Efficiency (Sorbed To Silt)	95.8	%
Bacteria Trapping Efficiency (Planktonic)	97.02	%
Outlet Pipe Bacteria Discharged	-4.628E-10	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	-4.628E-10	cfu
EMS Bacteria Discharged	5.374E+08	cfu
EMS Bacteria Discharged (Sorbed To Clay)	9.012E+07	cfu
EMS Bacteria Discharged (Sorbed To Silt)	1.211E+06	cfu
EMS Bacteria Discharged (Planktonic)	4.461E+08	cfu
Bacteria Concentration	0.02491	cfu/100 ml
Peak Bacteria Concentration	0.2882	cfu/100 ml

Non-Routed Connector 32		
Name	Non-Routed Connector 32	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	118.6	ac-ft
Total Sediment Discharged	299.8	lbs
Total Sediment Discharged (Clay)	299	lbs
Total Sediment Discharged (Silt)	0.5752	lbs
Total Sediment Discharged (Sand)	0.001255	lbs
Total Sediment Discharged (Small Agg.)	0.1677	lbs
Total Sediment Discharged (Large Agg.)	0.0004853	lbs
Sediment Concentration	0.09084	mg/l
Peak Sediment Concentration	0.1121	mg/l
Total Nitrogen Discharged	111.6	lbs
Total Nitrogen Discharged (Particulate)	5.373	lbs
Total Nitrogen Discharged (Sorbed)	0.01468	lbs
Total Nitrogen Discharged (Dissolved)	106.2	lbs
Nitrogen Concentration	0.03386	mg/l
Peak Nitrogen Concentration	0.04067	mg/l
Total Phosphorus Discharged	23.05	lbs
Total Phosphorus Discharged (Particulate)	1.108	lbs
Total Phosphorus Discharged (Sorbed)	1.05E-05	lbs
Total Phosphorus Discharged (Dissolved)	21.94	lbs
Phosphorus Concentration	0.006994	mg/l
Peak Phosphorus Concentration	0.0084	mg/l
Total Bacteria Discharged	5.374E+08	cfu
Total Bacteria Discharged (Sorbed To Clay)	9.012E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.211E+06	cfu
Total Bacteria Discharged (Planktonic)	4.461E+08	cfu
Bacteria Concentration	0.02491	cfu/100 ml
Peak Bacteria Concentration	0.2882	cfu/100 ml

Basin_11

Name	Basin_11
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	192.11	acres
Curve Number	63	-
Soil Series	Pelion	-
Depth Range	0-13	in
Peak Rate Factor	484	-
Time of Concentration	1.42	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	5082	ft
Slope	0.023	ft/ft
Soil Erodibility	0.2	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	6	%
Silt Percent	16.3	%
Sand Percent	77.7	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	221.2	micro g/g/mg/l
Isotherm Max - Nitrogen	3708.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	6.3	acres
Curve Number	63	-
Peak Rate Factor	484	-
Time of Concentration	1.42	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	258.42	micro g/g/mg/l
Isotherm Max - Nitrogen	4141.3	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	33.53	ac-ft
Total Sediment Yield	2.717E+04	lbs
Total Sediment Yield (Clay)	486.5	lbs
Total Sediment Yield (Silt)	1621	lbs

Total Sediment Yield (Sand)	1.539E+04	lbs
Total Sediment Yield (Small Agg.)	2906	lbs
Total Sediment Yield (Large Agg.)	6759	lbs
Sediment Concentration	23.35	mg/l
Peak Sediment Concentration	39.7	mg/l
Total Nitrogen Yield	90.74	lbs
Total Nitrogen Yield (Particulate)	39.02	lbs
Total Nitrogen Yield (Sorbed)	0.1018	lbs
Total Nitrogen Yield (Dissolved)	51.62	lbs
Nitrogen Concentration	0.1934	mg/l
Peak Nitrogen Concentration	0.3045	mg/l
Total Phosphorus Yield	18.32	lbs
Total Phosphorus Yield (Particulate)	7.879	lbs
Total Phosphorus Yield (Sorbed)	6.308E-05	lbs
Total Phosphorus Yield (Dissolved)	10.44	lbs
Phosphorus Concentration	0.03197	mg/l
Peak Phosphorus Concentration	0.05042	mg/l
Total Bacteria Yield	6.742E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	1.733E+09	cfu
Total Bacteria Yield (Sorbed To Silt)	2.085E+09	cfu
Total Bacteria Yield (Planktonic)	6.704E+11	cfu
Bacteria Concentration	1328	cfu/100 ml
Peak Bacteria Concentration	2081	cfu/100 ml

Non-Routed Connector 8

Name	Non-Routed Connector 8
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	33.53	ac-ft
Total Sediment Discharged	2.717E+04	lbs
Total Sediment Discharged (Clay)	486.5	lbs
Total Sediment Discharged (Silt)	1621	lbs
Total Sediment Discharged (Sand)	1.539E+04	lbs
Total Sediment Discharged (Small Agg.)	2906	lbs
Total Sediment Discharged (Large Agg.)	6759	lbs
Sediment Concentration	23.35	mg/l
Peak Sediment Concentration	39.7	mg/l
Total Nitrogen Discharged	90.74	lbs
Total Nitrogen Discharged (Particulate)	39.02	lbs
Total Nitrogen Discharged (Sorbed)	0.1018	lbs
Total Nitrogen Discharged (Dissolved)	51.62	lbs
Nitrogen Concentration	0.1934	mg/l
Peak Nitrogen Concentration	0.3045	mg/l
Total Phosphorus Discharged	18.32	lbs
Total Phosphorus Discharged (Particulate)	7.879	lbs
Total Phosphorus Discharged (Sorbed)	6.308E-05	lbs
Total Phosphorus Discharged (Dissolved)	10.44	lbs
Phosphorus Concentration	0.03197	mg/l
Peak Phosphorus Concentration	0.05042	mg/l
Total Bacteria Discharged	6.742E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.733E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.085E+09	cfu
Total Bacteria Discharged (Planktonic)	6.704E+11	cfu
Bacteria Concentration	1328	cfu/100 ml
Peak Bacteria Concentration	2081	cfu/100 ml

Trib1-00-03

Name	Trib1-00-03
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	5665	ac-ft
Total Sediment Discharged	6.667E+04	lbs
Total Sediment Discharged (Clay)	3.086E+04	lbs
Total Sediment Discharged (Silt)	5777	lbs
Total Sediment Discharged (Sand)	1.924E+04	lbs
Total Sediment Discharged (Small Agg.)	3240	lbs
Total Sediment Discharged (Large Agg.)	7546	lbs
Sediment Concentration	1.211	mg/l
Peak Sediment Concentration	48.54	mg/l
Total Nitrogen Discharged	6868	lbs
Total Nitrogen Discharged (Particulate)	1534	lbs
Total Nitrogen Discharged (Sorbed)	18.43	lbs
Total Nitrogen Discharged (Dissolved)	5316	lbs
Nitrogen Concentration	0.1625	mg/l
Peak Nitrogen Concentration	0.8765	mg/l
Total Phosphorus Discharged	1126	lbs
Total Phosphorus Discharged (Particulate)	246.4	lbs
Total Phosphorus Discharged (Sorbed)	0.005593	lbs
Total Phosphorus Discharged (Dissolved)	879.4	lbs
Phosphorus Concentration	0.02639	mg/l
Peak Phosphorus Concentration	0.1103	mg/l
Total Bacteria Discharged	1.28E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.095E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.089E+09	cfu
Total Bacteria Discharged (Planktonic)	1.279E+13	cfu
Bacteria Concentration	52.98	cfu/100 ml
Peak Bacteria Concentration	1.015E+04	cfu/100 ml

Non-Routed Connector 55

Name	Non-Routed Connector 55
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	5665	ac-ft
Total Sediment Discharged	6.667E+04	lbs
Total Sediment Discharged (Clay)	3.086E+04	lbs
Total Sediment Discharged (Silt)	5777	lbs
Total Sediment Discharged (Sand)	1.924E+04	lbs
Total Sediment Discharged (Small Agg.)	3240	lbs
Total Sediment Discharged (Large Agg.)	7546	lbs
Sediment Concentration	1.211	mg/l
Peak Sediment Concentration	48.54	mg/l
Total Nitrogen Discharged	6868	lbs
Total Nitrogen Discharged (Particulate)	1534	lbs
Total Nitrogen Discharged (Sorbed)	18.43	lbs
Total Nitrogen Discharged (Dissolved)	5316	lbs
Nitrogen Concentration	0.1625	mg/l
Peak Nitrogen Concentration	0.8765	mg/l
Total Phosphorus Discharged	1126	lbs
Total Phosphorus Discharged (Particulate)	246.4	lbs
Total Phosphorus Discharged (Sorbed)	0.005593	lbs
Total Phosphorus Discharged (Dissolved)	879.4	lbs
Phosphorus Concentration	0.02639	mg/l
Peak Phosphorus Concentration	0.1103	mg/l
Total Bacteria Discharged	1.28E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.095E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.089E+09	cfu
Total Bacteria Discharged (Planktonic)	1.279E+13	cfu
Bacteria Concentration	52.98	cfu/100 ml
Peak Bacteria Concentration	1.015E+04	cfu/100 ml

Basin_13

Name	Basin_13
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	33.84	acres
Curve Number	51	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.467	hrs

Sediment Inputs

Parameter	Value	Units
Length	1190	ft
Slope	0.063	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	5000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.363	ac-ft
Total Sediment Yield	570.6	lbs
Total Sediment Yield (Clay)	5.934	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	440.1	lbs
Total Sediment Yield (Small Agg.)	7.988	lbs
Total Sediment Yield (Large Agg.)	116.5	lbs
Sediment Concentration	2.042	mg/l
Peak Sediment Concentration	4.492	mg/l
Total Nitrogen Yield	6.233	lbs
Total Nitrogen Yield (Particulate)	2.68	lbs
Total Nitrogen Yield (Sorbed)	0.002155	lbs
Total Nitrogen Yield (Dissolved)	3.551	lbs
Nitrogen Concentration	0.04095	mg/l
Peak Nitrogen Concentration	0.07743	mg/l
Total Phosphorus Yield	1.285	lbs
Total Phosphorus Yield (Particulate)	0.5526	lbs
Total Phosphorus Yield (Sorbed)	9.02E-07	lbs
Total Phosphorus Yield (Dissolved)	0.7325	lbs
Phosphorus Concentration	0.008444	mg/l
Peak Phosphorus Concentration	0.01596	mg/l
Total Bacteria Yield	1.457E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	1.457E+11	cfu
Bacteria Concentration	211	cfu/100 ml
Peak Bacteria Concentration	398.9	cfu/100 ml

Non-Routed Connector 13

Name	Non-Routed Connector 13
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	2.363	ac-ft
Total Sediment Discharged	570.6	lbs
Total Sediment Discharged (Clay)	5.934	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	440.1	lbs
Total Sediment Discharged (Small Agg.)	7.988	lbs
Total Sediment Discharged (Large Agg.)	116.5	lbs
Sediment Concentration	2.042	mg/l
Peak Sediment Concentration	4.492	mg/l
Total Nitrogen Discharged	6.233	lbs
Total Nitrogen Discharged (Particulate)	2.68	lbs
Total Nitrogen Discharged (Sorbed)	0.002155	lbs
Total Nitrogen Discharged (Dissolved)	3.551	lbs
Nitrogen Concentration	0.04095	mg/l
Peak Nitrogen Concentration	0.07743	mg/l
Total Phosphorus Discharged	1.285	lbs
Total Phosphorus Discharged (Particulate)	0.5526	lbs
Total Phosphorus Discharged (Sorbed)	9.02E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7325	lbs
Phosphorus Concentration	0.008444	mg/l
Peak Phosphorus Concentration	0.01596	mg/l
Total Bacteria Discharged	1.457E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.457E+11	cfu
Bacteria Concentration	211	cfu/100 ml
Peak Bacteria Concentration	398.9	cfu/100 ml

Trib1-01-02

Name	Trib1-01-02
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	12	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	4	ft
EMS Width	80	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	4	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	2.33	ac

Peak Stage	10	ft
Total Inflow Volume	2.363	ac-ft
Total Rainfall On BMP	11.73	ac-ft
Total Outflow Volume	61.25	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	61.09	ac-ft
Infiltration Volume	0.1574	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	570.6	lbs
Total Inflow Sediment Mass (Clay)	5.934	lbs
Total Inflow Sediment Mass (Silt)	0	lbs
Total Inflow Sediment Mass (Sand)	440.1	lbs
Total Inflow Sediment Mass (Small Agg.)	7.988	lbs
Total Inflow Sediment Mass (Large Agg.)	116.5	lbs
Priming Storm Sediment Mass In Permanent Pool	1145	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	1145	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	35.49	lbs
Total Sediment Mass Discharged (Clay)	35.48	lbs
Total Sediment Mass Discharged (Silt)	0	lbs
Total Sediment Mass Discharged (Sand)	0.0009102	lbs
Total Sediment Mass Discharged (Small Agg.)	0.0107	lbs
Total Sediment Mass Discharged (Large Agg.)	0.0002117	lbs
Total Sediment Mass Trapped	1680	lbs
Total Sediment Mass Trapped (Clay)	1115	lbs
Total Sediment Mass Trapped (Silt)	0	lbs
Total Sediment Mass Trapped (Sand)	440.1	lbs
Total Sediment Mass Trapped (Small Agg.)	7.978	lbs

Total Sediment Mass Trapped (Large Agg.)	116.5	lbs
Sediment Trapping Efficiency	97.93	%
Sediment Trapping Efficiency (Clay)	96.92	%
Sediment Trapping Efficiency (Silt)	0	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	99.87	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	35.49	lbs
EMS Sediment Mass Discharged (Clay)	35.48	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0.0009102	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.0107	lbs
EMS Sediment Mass Discharged (Large Agg.)	0.0002117	lbs
Sediment Concentration	0.008997	mg/l
Peak Sediment Concentration	0.01093	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	6.233	lbs
Total Nitrogen Mass Inflow (Particulate)	2.68	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.002155	lbs
Total Nitrogen Mass Inflow (Dissolved)	3.551	lbs
Priming Storm Nitrogen Mass In Permanent Pool	1911	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	89.49	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.1052	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1822	lbs
Total Nitrogen Mass Discharged	59.04	lbs
Total Nitrogen Mass Discharged (Particulate)	2.852	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.003362	lbs

Total Nitrogen Mass Discharged (Dissolved)	56.18	lbs
Total Nitrogen Mass Trapped	1859	lbs
Total Nitrogen Mass Trapped (Particulate)	89.32	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.104	lbs
Total Nitrogen Mass Trapped (Dissolved)	1769	lbs
Nitrogen Trapping Efficiency	96.92	%
Nitrogen Trapping Efficiency (Particulate)	96.91	%
Nitrogen Trapping Efficiency (Sorbed)	96.87	%
Nitrogen Trapping Efficiency (Dissolved)	96.92	%
Outlet Pipe Nitrogen Mass Discharged	-3.693E-16	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	-3.693E-16	lbs
EMS Nitrogen Mass Discharged	59.04	lbs
EMS Nitrogen Mass Discharged (Particulate)	2.852	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.003362	lbs
EMS Nitrogen Mass Discharged (Dissolved)	56.18	lbs
Nitrogen Concentration	0.01499	mg/l
Peak Nitrogen Concentration	0.01781	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	1.285	lbs
Total Phosphorus Mass Inflow (Particulate)	0.5526	lbs
Total Phosphorus Mass Inflow (Sorbed)	9.02E-07	lbs
Total Phosphorus Mass Inflow (Dissolved)	0.7325	lbs
Priming Storm Phosphorus Mass In Permanent Pool	394.4	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	18.45	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	4.409E-05	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	375.9	lbs
Total Phosphorus Mass Discharged	12.18	lbs
Total Phosphorus Mass Discharged (Particulate)	0.5879	lbs
Total Phosphorus Mass Discharged (Sorbed)	1.408E-06	lbs
Total Phosphorus Mass Discharged (Dissolved)	11.59	lbs
Total Phosphorus Mass Trapped	383.5	lbs

Total Phosphorus Mass Trapped (Particulate)	18.42	lbs
Total Phosphorus Mass Trapped (Sorbed)	4.358E-05	lbs
Total Phosphorus Mass Trapped (Dissolved)	365.1	lbs
Phosphorus Trapping Efficiency	96.92	%
Phosphorus Trapping Efficiency (Particulate)	96.91	%
Phosphorus Trapping Efficiency (Sorbed)	96.87	%
Phosphorus Trapping Efficiency (Dissolved)	96.92	%
Outlet Pipe Phosphorus Mass Discharged	1.766E-16	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	1.766E-16	lbs
EMS Phosphorus Mass Discharged	12.18	lbs
EMS Phosphorus Mass Discharged (Particulate)	0.5879	lbs
EMS Phosphorus Mass Discharged (Sorbed)	1.408E-06	lbs
EMS Phosphorus Mass Discharged (Dissolved)	11.59	lbs
Phosphorus Concentration	0.003093	mg/l
Peak Phosphorus Concentration	0.003676	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	1.457E+11	cfu
Total Bacteria Loading (Sorbed To Clay)	6.835E+07	cfu
Total Bacteria Loading (Sorbed To Silt)	0	cfu
Total Bacteria Loading (Planktonic)	1.456E+11	cfu
Priming Storm Bacteria In Permanent Pool	3.427E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	3.427E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	5.439E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.091E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	5.33E+09	cfu
Total Bacteria Trapped	1.437E+11	cfu

Total Bacteria Trapped (Sorbed To Clay)	3.387E+09	cfu
Total Bacteria Trapped (Sorbed To Silt)	0	cfu
Total Bacteria Trapped (Planktonic)	1.403E+11	cfu
Bacteria Trapping Efficiency	96.35	%
Bacteria Trapping Efficiency (Sorbed To Clay)	96.88	%
Bacteria Trapping Efficiency (Sorbed To Silt)	0	%
Bacteria Trapping Efficiency (Planktonic)	96.34	%
Outlet Pipe Bacteria Discharged	1.106E-08	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	1.106E-08	cfu
EMS Bacteria Discharged	5.439E+09	cfu
EMS Bacteria Discharged (Sorbed To Clay)	1.091E+08	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	5.33E+09	cfu
Bacteria Concentration	0.1901	cfu/100 ml
Peak Bacteria Concentration	2.86	cfu/100 ml

Non-Routed Connector 31

Name	Non-Routed Connector 31
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	61.09	ac-ft
Total Sediment Discharged	35.49	lbs
Total Sediment Discharged (Clay)	35.48	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	0.0009102	lbs
Total Sediment Discharged (Small Agg.)	0.0107	lbs
Total Sediment Discharged (Large Agg.)	0.0002117	lbs
Sediment Concentration	0.008997	mg/l
Peak Sediment Concentration	0.01093	mg/l
Total Nitrogen Discharged	59.04	lbs
Total Nitrogen Discharged (Particulate)	2.852	lbs
Total Nitrogen Discharged (Sorbed)	0.003362	lbs
Total Nitrogen Discharged (Dissolved)	56.18	lbs
Nitrogen Concentration	0.01499	mg/l
Peak Nitrogen Concentration	0.01781	mg/l
Total Phosphorus Discharged	12.18	lbs
Total Phosphorus Discharged (Particulate)	0.5879	lbs
Total Phosphorus Discharged (Sorbed)	1.408E-06	lbs
Total Phosphorus Discharged (Dissolved)	11.59	lbs
Phosphorus Concentration	0.003093	mg/l
Peak Phosphorus Concentration	0.003676	mg/l
Total Bacteria Discharged	5.439E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.091E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	5.33E+09	cfu
Bacteria Concentration	0.1901	cfu/100 ml
Peak Bacteria Concentration	2.86	cfu/100 ml

Trib1-00-02	
Name	Trib1-00-02
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5726	ac-ft
Total Sediment Discharged	6.671E+04	lbs
Total Sediment Discharged (Clay)	3.09E+04	lbs
Total Sediment Discharged (Silt)	5777	lbs
Total Sediment Discharged (Sand)	1.924E+04	lbs
Total Sediment Discharged (Small Agg.)	3240	lbs
Total Sediment Discharged (Large Agg.)	7546	lbs
Sediment Concentration	1.191	mg/l
Peak Sediment Concentration	48.34	mg/l
Total Nitrogen Discharged	6927	lbs
Total Nitrogen Discharged (Particulate)	1537	lbs
Total Nitrogen Discharged (Sorbed)	18.44	lbs
Total Nitrogen Discharged (Dissolved)	5372	lbs
Nitrogen Concentration	0.1623	mg/l
Peak Nitrogen Concentration	0.8732	mg/l
Total Phosphorus Discharged	1138	lbs
Total Phosphorus Discharged (Particulate)	247	lbs
Total Phosphorus Discharged (Sorbed)	0.005594	lbs
Total Phosphorus Discharged (Dissolved)	890.9	lbs
Phosphorus Concentration	0.02638	mg/l
Peak Phosphorus Concentration	0.11	mg/l
Total Bacteria Discharged	1.28E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.016E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.025E+09	cfu
Total Bacteria Discharged (Planktonic)	1.28E+13	cfu
Bacteria Concentration	52.27	cfu/100 ml
Peak Bacteria Concentration	1.01E+04	cfu/100 ml

Non-Routed Connector 52

Name	Non-Routed Connector 52
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	5726	ac-ft
Total Sediment Discharged	6.671E+04	lbs
Total Sediment Discharged (Clay)	3.09E+04	lbs
Total Sediment Discharged (Silt)	5777	lbs
Total Sediment Discharged (Sand)	1.924E+04	lbs
Total Sediment Discharged (Small Agg.)	3240	lbs
Total Sediment Discharged (Large Agg.)	7546	lbs
Sediment Concentration	1.191	mg/l
Peak Sediment Concentration	48.34	mg/l
Total Nitrogen Discharged	6927	lbs
Total Nitrogen Discharged (Particulate)	1537	lbs
Total Nitrogen Discharged (Sorbed)	18.44	lbs
Total Nitrogen Discharged (Dissolved)	5372	lbs
Nitrogen Concentration	0.1623	mg/l
Peak Nitrogen Concentration	0.8732	mg/l
Total Phosphorus Discharged	1138	lbs
Total Phosphorus Discharged (Particulate)	247	lbs
Total Phosphorus Discharged (Sorbed)	0.005594	lbs
Total Phosphorus Discharged (Dissolved)	890.9	lbs
Phosphorus Concentration	0.02638	mg/l
Peak Phosphorus Concentration	0.11	mg/l
Total Bacteria Discharged	1.28E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.016E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.025E+09	cfu
Total Bacteria Discharged (Planktonic)	1.28E+13	cfu
Bacteria Concentration	52.27	cfu/100 ml
Peak Bacteria Concentration	1.01E+04	cfu/100 ml

Basin_14

Name	Basin_14
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	136.96	acres
Curve Number	62	-
Soil Series	Herndon	-
Depth Range	0-4	in
Peak Rate Factor	484	-
Time of Concentration	1.52	hrs

Sediment Inputs

Parameter	Value	Units
Length	3847	ft
Slope	0.026	ft/ft
Soil Erodibility	0.49	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	5000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	21.71	ac-ft
Total Sediment Yield	4.592E+04	lbs
Total Sediment Yield (Clay)	1910	lbs
Total Sediment Yield (Silt)	1.171E+04	lbs
Total Sediment Yield (Sand)	5704	lbs
Total Sediment Yield (Small Agg.)	1.323E+04	lbs
Total Sediment Yield (Large Agg.)	1.337E+04	lbs
Sediment Concentration	46.02	mg/l
Peak Sediment Concentration	77.68	mg/l
Total Nitrogen Yield	57.27	lbs
Total Nitrogen Yield (Particulate)	24.63	lbs
Total Nitrogen Yield (Sorbed)	0.06777	lbs
Total Nitrogen Yield (Dissolved)	32.58	lbs
Nitrogen Concentration	0.1042	mg/l
Peak Nitrogen Concentration	0.1595	mg/l
Total Phosphorus Yield	11.81	lbs
Total Phosphorus Yield (Particulate)	5.078	lbs
Total Phosphorus Yield (Sorbed)	0.0002404	lbs
Total Phosphorus Yield (Dissolved)	6.731	lbs
Phosphorus Concentration	0.02148	mg/l
Peak Phosphorus Concentration	0.03289	mg/l
Total Bacteria Yield	1.339E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	1.339E+12	cfu
Bacteria Concentration	536.7	cfu/100 ml
Peak Bacteria Concentration	822	cfu/100 ml

Non-Routed Connector 11

Name	Non-Routed Connector 11
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	21.71	ac-ft
Total Sediment Discharged	4.592E+04	lbs
Total Sediment Discharged (Clay)	1910	lbs
Total Sediment Discharged (Silt)	1.171E+04	lbs
Total Sediment Discharged (Sand)	5704	lbs
Total Sediment Discharged (Small Agg.)	1.323E+04	lbs
Total Sediment Discharged (Large Agg.)	1.337E+04	lbs
Sediment Concentration	46.02	mg/l
Peak Sediment Concentration	77.68	mg/l
Total Nitrogen Discharged	57.27	lbs
Total Nitrogen Discharged (Particulate)	24.63	lbs
Total Nitrogen Discharged (Sorbed)	0.06777	lbs
Total Nitrogen Discharged (Dissolved)	32.58	lbs
Nitrogen Concentration	0.1042	mg/l
Peak Nitrogen Concentration	0.1595	mg/l
Total Phosphorus Discharged	11.81	lbs
Total Phosphorus Discharged (Particulate)	5.078	lbs
Total Phosphorus Discharged (Sorbed)	0.0002404	lbs
Total Phosphorus Discharged (Dissolved)	6.731	lbs
Phosphorus Concentration	0.02148	mg/l
Peak Phosphorus Concentration	0.03289	mg/l
Total Bacteria Discharged	1.339E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.339E+12	cfu
Bacteria Concentration	536.7	cfu/100 ml
Peak Bacteria Concentration	822	cfu/100 ml

Trib1-00-01	
Name	Trib1-00-01
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5748	ac-ft
Total Sediment Discharged	1.126E+05	lbs
Total Sediment Discharged (Clay)	3.281E+04	lbs
Total Sediment Discharged (Silt)	1.749E+04	lbs
Total Sediment Discharged (Sand)	2.495E+04	lbs
Total Sediment Discharged (Small Agg.)	1.647E+04	lbs
Total Sediment Discharged (Large Agg.)	2.092E+04	lbs
Sediment Concentration	1.668	mg/l
Peak Sediment Concentration	57.49	mg/l
Total Nitrogen Discharged	6985	lbs
Total Nitrogen Discharged (Particulate)	1562	lbs
Total Nitrogen Discharged (Sorbed)	18.5	lbs
Total Nitrogen Discharged (Dissolved)	5404	lbs
Nitrogen Concentration	0.1626	mg/l
Peak Nitrogen Concentration	0.873	mg/l
Total Phosphorus Discharged	1150	lbs
Total Phosphorus Discharged (Particulate)	252.1	lbs
Total Phosphorus Discharged (Sorbed)	0.005835	lbs
Total Phosphorus Discharged (Dissolved)	897.7	lbs
Phosphorus Concentration	0.02647	mg/l
Peak Phosphorus Concentration	0.1107	mg/l
Total Bacteria Discharged	1.414E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	8.343E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.623E+09	cfu
Total Bacteria Discharged (Planktonic)	1.412E+13	cfu
Bacteria Concentration	55.32	cfu/100 ml
Peak Bacteria Concentration	1.01E+04	cfu/100 ml

Non-Routed Connector 53

Name	Non-Routed Connector 53
Description	

Inputs

Parameter	Value	Units
Flow Type	Overland	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	5748	ac-ft
Total Sediment Discharged	1.126E+05	lbs
Total Sediment Discharged (Clay)	3.281E+04	lbs
Total Sediment Discharged (Silt)	1.749E+04	lbs
Total Sediment Discharged (Sand)	2.495E+04	lbs
Total Sediment Discharged (Small Agg.)	1.647E+04	lbs
Total Sediment Discharged (Large Agg.)	2.092E+04	lbs
Sediment Concentration	1.668	mg/l
Peak Sediment Concentration	57.49	mg/l
Total Nitrogen Discharged	6985	lbs
Total Nitrogen Discharged (Particulate)	1562	lbs
Total Nitrogen Discharged (Sorbed)	18.5	lbs
Total Nitrogen Discharged (Dissolved)	5404	lbs
Nitrogen Concentration	0.1626	mg/l
Peak Nitrogen Concentration	0.873	mg/l
Total Phosphorus Discharged	1150	lbs
Total Phosphorus Discharged (Particulate)	252.1	lbs
Total Phosphorus Discharged (Sorbed)	0.005835	lbs
Total Phosphorus Discharged (Dissolved)	897.7	lbs
Phosphorus Concentration	0.02647	mg/l
Peak Phosphorus Concentration	0.1107	mg/l
Total Bacteria Discharged	1.414E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	8.343E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.623E+09	cfu
Total Bacteria Discharged (Planktonic)	1.412E+13	cfu
Bacteria Concentration	55.32	cfu/100 ml
Peak Bacteria Concentration	1.01E+04	cfu/100 ml

Outfall_A

Name	Outfall_A
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	5,747.74	ac-ft
Total Drainage Area	1,136.01	ac
Total BMP Surface Area	45.91	ac
Total Modeled Area	1,181.92	ac
Total Sediment Discharged	112,630.38	lbs
Total Sediment Trapped	91,362.78	lbs
Sediment Trapping Efficiency	44.79%	%
Total Sediment Discharged (Clay)	32,809.83	lbs
Total Sediment Discharged (Silt)	17,487.68	lbs
Total Sediment Discharged (Sand)	24,947.73	lbs
Total Sediment Discharged (Small Agg.)	16,466.35	lbs
Total Sediment Discharged (Large Agg.)	20,918.78	lbs
Total Sediment Yield Per Acre	99.15	lbs
Sediment Concentration	1.67	mg/l
Peak Sediment Concentration	57.49	mg/l
Total Nitrogen Discharged	6,984.58	lbs
Total Nitrogen Trapped	27,059.43	lbs
Nitrogen Trapping Efficiency	79.48%	%
Total Nitrogen Discharged (Particulate)	1,561.66	lbs
Total Nitrogen Discharged (Sorbed)	18.50	lbs
Total Nitrogen Discharged (Dissolved)	5,404.42	lbs
Total Nitrogen Yield Per Acre	6.15	lbs
Nitrogen Concentration	0.16	mg/l
Peak Nitrogen Concentration	0.87	mg/l
Total Phosphorus Discharged	1,149.77	lbs
Total Phosphorus Trapped	4,917.53	lbs
Phosphorus Trapping Efficiency	81.05%	%
Total Phosphorus Discharged (Particulate)	252.09	lbs
Total Phosphorus Discharged (Sorbed)	0.01	lbs
Total Phosphorus Discharged (Dissolved)	897.68	lbs
Total Phosphorus Yield Per Acre	1.01	lbs

Phosphorus Concentration	0.03	mg/l
Peak Phosphorus Concentration	0.11	mg/l
Total Bacteria Discharged	1.414E+13	cfu
Total Bacteria Trapped	2.533E+13	cfu
Bacteria Trapping Efficiency	64.18%	%
Total Bacteria Discharged (Sorbed To Clay)	8.343E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.623E+09	cfu
Total Bacteria Discharged (Planktonic)	1.412E+13	cfu
Bacteria Concentration	55.32	cfu/100 ml
Peak Bacteria Concentration	1.01E+04	cfu/100 ml
Clay Trapped	111,374.22	lbs
Clay Trapping Efficiency	70.54%	%
Silt Trapped	19,475.18	lbs
Silt Trapping Efficiency	10.21%	%
Sand Trapped	32,239.47	lbs
Sand Trapping Efficiency	22.62%	%
Large Aggregates Trapped	17,227.51	lbs
Large Aggregates Trapping Efficiency	11.65%	%
Small Aggregates Trapped	23,676.77	lbs
Small Aggregates Trapping Efficiency	4.42%	%
Particulate Nitrogen Trapped	34,044.01	lbs
Particulate Nitrogen Trapping Efficiency	100.00%	%
Sorbed Nitrogen Trapped	61.88	lbs
Sorbed Nitrogen Trapping Efficiency	100.00%	%
Dissolved Nitrogen Trapped	28,071.80	lbs
Dissolved Nitrogen Trapping Efficiency	100.00%	%
Particulate Phosphorus Trapped	992.17	lbs
Particulate Phosphorus Trapping Efficiency	100.00%	%
Sorbed Phosphorus Trapped	0.02	lbs
Sorbed Phosphorus Trapping Efficiency	100.00%	%
Dissolved Phosphorus Trapped	5,075.12	lbs
Dissolved Phosphorus Trapping Efficiency	100.00%	%
Bacteria Sorbed to Clay Trapped	4.362E+12	cfu
Bacteria Sorbed to Clay Trapping Efficiency	100.00%	%
Bacteria Sorbed to Silt Trapped	6.613E+10	cfu
Bacteria Sorbed to Silt Trapping Efficiency	100.00%	%

Bacteria not Sorbed (Planktonic) Trapped	3.505E+13	cfu
Bacteria not Sorbed (Planktonic) Trapping Efficiency	100.00%	%

Watershed Results

Treatment Train 1

Parameter	Value	Units
Objects in Tree	Outfall_B, Basin_26, Trib2-00-02, Basin_23, Basin_22, Basin_Off5, Trib2-04-02, Basin_21, Trib2-04-04, Basin_Off3, Basin_Off4, Basin_20, Basin_19, Trib2-03-07, Basin_18, Trib2-03-05, Basin_17, Trib2-01-02, Basin_25, Trib2-01-04, Basin_24	-
Overall Trapping Efficiency of Sediment	96.43	%

Treatment Train 2

Parameter	Value	Units
Objects in Tree	Outfall_A, Basin_14, Trib1-01-02, Basin_13, Basin_11, Trib1-02-02, Basin_12, Basin_10, Basin_01, Basin_Off2, Basin_Off1a, Basin_Off1b, Trib1-04-03, Basin_05, Trib1-03-02, Basin_09, Basin_08, Trib1-03-10, Basin_02, Trib1-03-12, Basin_06, Trib1-03-07, Basin_07	-
Overall Trapping Efficiency of Sediment	44.79	%

Messages

Type	Description
Treatment Train 2 - Warning	

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX

PROPOSED CONDITIONS IDEAL MODEL REPORTS

J – 27015.0007

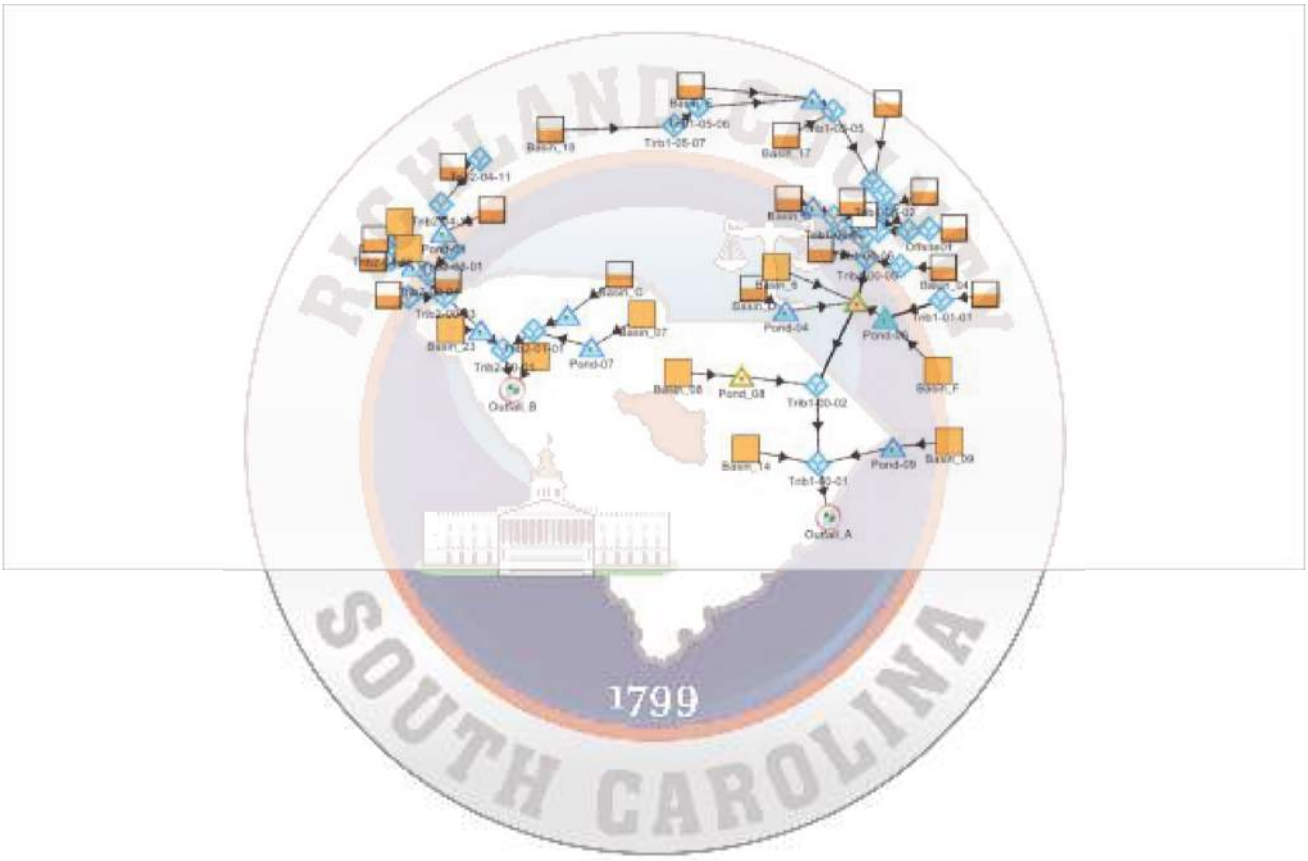
December 2023

thomasandhutton.com

IDEAL Report

(IDEAL RICHLAND 4.0.0.0)

Name	
Description	
Analyst Name	Brandon f.
Date	11/9/2023, 7:47 AM
Comments	Richland County (SCS), SC IDEAL RICHLAND 4.0.0.0



Storm		
Priming Storm Inputs		
Parameter	**Value**	**Units**
Storm Type	III	-
Precipitation	10	in.
Duration	24	hrs
Season	Growing	-
Antecedent Moisture Condition	Average	-

Basin_07

Name	Basin_07
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	41.63	acres
Curve Number	83	-
Soil Series	Herndon	-
Depth Range	0-4	in
Peak Rate Factor	484	-
Time of Concentration	0.2	hrs

Sediment Inputs

Parameter	Value	Units
Length	1571.4	ft
Slope	0.005	ft/ft
Soil Erodibility	0.49	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	28.21	ac-ft
Total Sediment Yield	1.067E+04	lbs
Total Sediment Yield (Clay)	443.7	lbs
Total Sediment Yield (Silt)	2720	lbs
Total Sediment Yield (Sand)	1325	lbs
Total Sediment Yield (Small Agg.)	3072	lbs
Total Sediment Yield (Large Agg.)	3106	lbs
Sediment Concentration	25.15	mg/l
Peak Sediment Concentration	65.99	mg/l
Total Nitrogen Yield	99.72	lbs
Total Nitrogen Yield (Particulate)	42.88	lbs
Total Nitrogen Yield (Sorbed)	0.02979	lbs
Total Nitrogen Yield (Dissolved)	56.81	lbs
Nitrogen Concentration	0.5141	mg/l
Peak Nitrogen Concentration	1.031	mg/l
Total Phosphorus Yield	6.904	lbs
Total Phosphorus Yield (Particulate)	2.969	lbs
Total Phosphorus Yield (Sorbed)	3.521E-05	lbs
Total Phosphorus Yield (Dissolved)	3.935	lbs
Phosphorus Concentration	0.03559	mg/l
Peak Phosphorus Concentration	0.07139	mg/l
Total Bacteria Yield	2.574E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	2.574E+12	cfu
Bacteria Concentration	2925	cfu/100 ml
Peak Bacteria Concentration	5867	cfu/100 ml

Non-Routed Connector 65	
Name	Non-Routed Connector 65
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Concentrated	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	28.21	ac-ft
Total Sediment Discharged	1.067E+04	lbs
Total Sediment Discharged (Clay)	443.7	lbs
Total Sediment Discharged (Silt)	2720	lbs
Total Sediment Discharged (Sand)	1325	lbs
Total Sediment Discharged (Small Agg.)	3072	lbs
Total Sediment Discharged (Large Agg.)	3106	lbs
Sediment Concentration	25.15	mg/l
Peak Sediment Concentration	65.99	mg/l
Total Nitrogen Discharged	99.72	lbs
Total Nitrogen Discharged (Particulate)	42.88	lbs
Total Nitrogen Discharged (Sorbed)	0.02979	lbs
Total Nitrogen Discharged (Dissolved)	56.81	lbs
Nitrogen Concentration	0.5141	mg/l
Peak Nitrogen Concentration	1.031	mg/l
Total Phosphorus Discharged	6.904	lbs
Total Phosphorus Discharged (Particulate)	2.969	lbs
Total Phosphorus Discharged (Sorbed)	3.521E-05	lbs
Total Phosphorus Discharged (Dissolved)	3.935	lbs
Phosphorus Concentration	0.03559	mg/l
Peak Phosphorus Concentration	0.07139	mg/l
Total Bacteria Discharged	2.574E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	2.574E+12	cfu
Bacteria Concentration	2925	cfu/100 ml
Peak Bacteria Concentration	5867	cfu/100 ml

Pond-07

Name	Pond-07
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	12.1	ft
Riser Length	5	ft
Riser Width	5	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	4	ft
Barrel Slope	0.012	ft/ft
Barrel Length	111	ft
Barrel Diameter	18	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	13	ft
EMS Width	50	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	2.975	ac

Peak Stage	11.86	ft
Total Inflow Volume	28.21	ac-ft
Total Rainfall On BMP	14.97	ac-ft
Total Outflow Volume	34.12	ac-ft
Outlet Pipe Flow Volume	28.6	ac-ft
EMS Outflow Volume	0	ac-ft
Infiltration Volume	5.52	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	1.067E+04	lbs
Total Inflow Sediment Mass (Clay)	443.7	lbs
Total Inflow Sediment Mass (Silt)	2720	lbs
Total Inflow Sediment Mass (Sand)	1325	lbs
Total Inflow Sediment Mass (Small Agg.)	3072	lbs
Total Inflow Sediment Mass (Large Agg.)	3106	lbs
Priming Storm Sediment Mass In Permanent Pool	5.032E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	1.893E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	3.139E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	1393	lbs
Total Sediment Mass Discharged (Clay)	526.7	lbs
Total Sediment Mass Discharged (Silt)	866.4	lbs
Total Sediment Mass Discharged (Sand)	5.684E-05	lbs
Total Sediment Mass Discharged (Small Agg.)	0.1647	lbs
Total Sediment Mass Discharged (Large Agg.)	9.835E-05	lbs
Total Sediment Mass Trapped	5.959E+04	lbs
Total Sediment Mass Trapped (Clay)	1.885E+04	lbs
Total Sediment Mass Trapped (Silt)	3.324E+04	lbs
Total Sediment Mass Trapped (Sand)	1325	lbs
Total Sediment Mass Trapped (Small Agg.)	3072	lbs

Total Sediment Mass Trapped (Large Agg.)	3106	lbs
Sediment Trapping Efficiency	97.72	%
Sediment Trapping Efficiency (Clay)	97.28	%
Sediment Trapping Efficiency (Silt)	97.46	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	99.99	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	1393	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	526.7	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	866.4	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	5.684E-05	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0.1647	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	9.835E-05	lbs
EMS Sediment Mass Discharged	0	lbs
EMS Sediment Mass Discharged (Clay)	0	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0	lbs
EMS Sediment Mass Discharged (Small Agg.)	0	lbs
EMS Sediment Mass Discharged (Large Agg.)	0	lbs
Sediment Concentration	7.205	mg/l
Peak Sediment Concentration	7.214	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	99.72	lbs
Total Nitrogen Mass Inflow (Particulate)	42.88	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.02979	lbs
Total Nitrogen Mass Inflow (Dissolved)	56.81	lbs
Priming Storm Nitrogen Mass In Permanent Pool	2129	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	342.8	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.3437	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1786	lbs
Total Nitrogen Mass Discharged	60.74	lbs
Total Nitrogen Mass Discharged (Particulate)	10.34	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.0103	lbs

Total Nitrogen Mass Discharged (Dissolved)	50.39	lbs
Total Nitrogen Mass Trapped	2168	lbs
Total Nitrogen Mass Trapped (Particulate)	375.3	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.3632	lbs
Total Nitrogen Mass Trapped (Dissolved)	1793	lbs
Nitrogen Trapping Efficiency	97.27	%
Nitrogen Trapping Efficiency (Particulate)	97.32	%
Nitrogen Trapping Efficiency (Sorbed)	97.24	%
Nitrogen Trapping Efficiency (Dissolved)	97.27	%
Outlet Pipe Nitrogen Mass Discharged	60.74	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	10.34	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0.0103	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	50.39	lbs
EMS Nitrogen Mass Discharged	0	lbs
EMS Nitrogen Mass Discharged (Particulate)	0	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0	lbs
EMS Nitrogen Mass Discharged (Dissolved)	0	lbs
Nitrogen Concentration	0.3053	mg/l
Peak Nitrogen Concentration	0.3062	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	6.904	lbs
Total Phosphorus Mass Inflow (Particulate)	2.969	lbs
Total Phosphorus Mass Inflow (Sorbed)	3.521E-05	lbs
Total Phosphorus Mass Inflow (Dissolved)	3.935	lbs
Priming Storm Phosphorus Mass In Permanent Pool	147.5	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	23.73	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.0004066	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	123.7	lbs
Total Phosphorus Mass Discharged	4.207	lbs
Total Phosphorus Mass Discharged (Particulate)	0.7161	lbs
Total Phosphorus Mass Discharged (Sorbed)	1.218E-05	lbs
Total Phosphorus Mass Discharged (Dissolved)	3.491	lbs
Total Phosphorus Mass Trapped	150.2	lbs

Total Phosphorus Mass Trapped (Particulate)	25.98	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.0004297	lbs
Total Phosphorus Mass Trapped (Dissolved)	124.2	lbs
Phosphorus Trapping Efficiency	97.27	%
Phosphorus Trapping Efficiency (Particulate)	97.32	%
Phosphorus Trapping Efficiency (Sorbed)	97.24	%
Phosphorus Trapping Efficiency (Dissolved)	97.27	%
Outlet Pipe Phosphorus Mass Discharged	4.207	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0.7161	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	1.218E-05	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	3.491	lbs
EMS Phosphorus Mass Discharged	0	lbs
EMS Phosphorus Mass Discharged (Particulate)	0	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0	lbs
EMS Phosphorus Mass Discharged (Dissolved)	0	lbs
Phosphorus Concentration	0.02115	mg/l
Peak Phosphorus Concentration	0.02121	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	2.574E+12	cfu
Total Bacteria Loading (Sorbed To Clay)	7.508E+09	cfu
Total Bacteria Loading (Sorbed To Silt)	1.197E+10	cfu
Total Bacteria Loading (Planktonic)	2.554E+12	cfu
Priming Storm Bacteria In Permanent Pool	2.208E+11	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	8.308E+10	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	1.377E+11	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	6.038E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.489E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	4.114E+09	cfu
Total Bacteria Discharged (Planktonic)	5.378E+10	cfu
Total Bacteria Trapped	2.734E+12	cfu

Total Bacteria Trapped (Sorbed To Clay)	8.81E+10	cfu
Total Bacteria Trapped (Sorbed To Silt)	1.456E+11	cfu
Total Bacteria Trapped (Planktonic)	2.501E+12	cfu
Bacteria Trapping Efficiency	97.84	%
Bacteria Trapping Efficiency (Sorbed To Clay)	97.25	%
Bacteria Trapping Efficiency (Sorbed To Silt)	97.25	%
Bacteria Trapping Efficiency (Planktonic)	97.89	%
Outlet Pipe Bacteria Discharged	6.038E+10	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	2.489E+09	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	4.114E+09	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	5.378E+10	cfu
EMS Bacteria Discharged	0	cfu
EMS Bacteria Discharged (Sorbed To Clay)	0	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	9.836	cfu/100 ml
Peak Bacteria Concentration	22.08	cfu/100 ml

RICHLAND COUNTY
1799
SOUTH CAROLINA

Non-Routed Connector 66	
Name	Non-Routed Connector 66
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Concentrated	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	28.6	ac-ft
Total Sediment Discharged	1393	lbs
Total Sediment Discharged (Clay)	526.7	lbs
Total Sediment Discharged (Silt)	866.4	lbs
Total Sediment Discharged (Sand)	5.684E-05	lbs
Total Sediment Discharged (Small Agg.)	0.1647	lbs
Total Sediment Discharged (Large Agg.)	9.835E-05	lbs
Sediment Concentration	7.205	mg/l
Peak Sediment Concentration	7.214	mg/l
Total Nitrogen Discharged	60.74	lbs
Total Nitrogen Discharged (Particulate)	10.34	lbs
Total Nitrogen Discharged (Sorbed)	0.0103	lbs
Total Nitrogen Discharged (Dissolved)	50.39	lbs
Nitrogen Concentration	0.3053	mg/l
Peak Nitrogen Concentration	0.3062	mg/l
Total Phosphorus Discharged	4.207	lbs
Total Phosphorus Discharged (Particulate)	0.7161	lbs
Total Phosphorus Discharged (Sorbed)	1.218E-05	lbs
Total Phosphorus Discharged (Dissolved)	3.491	lbs
Phosphorus Concentration	0.02115	mg/l
Peak Phosphorus Concentration	0.02121	mg/l
Total Bacteria Discharged	6.038E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.489E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	4.114E+09	cfu
Total Bacteria Discharged (Planktonic)	5.378E+10	cfu
Bacteria Concentration	9.836	cfu/100 ml
Peak Bacteria Concentration	22.08	cfu/100 ml

Basin_C

Name	Basin_C
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	263.72	acres
Curve Number	90	-
Soil Series	Pelion	-
Depth Range	0-13	in
Peak Rate Factor	484	-
Time of Concentration	0.617	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	4450	ft
Slope	0.005	ft/ft
Soil Erodibility	0.2	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	6	%
Silt Percent	16.3	%
Sand Percent	77.7	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	221.2	micro g/g/mg/l
Isotherm Max - Nitrogen	3708.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	136.56	acres
Curve Number	90	-
Peak Rate Factor	484	-
Time of Concentration	0.6	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	131.26	micro g/g/mg/l
Isotherm Max - Nitrogen	2632.8	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	515.8	ac-ft
Total Sediment Yield	1.169E+05	lbs
Total Sediment Yield (Clay)	1.72E+04	lbs
Total Sediment Yield (Silt)	3.757E+04	lbs

Total Sediment Yield (Sand)	4.273E+04	lbs
Total Sediment Yield (Small Agg.)	5829	lbs
Total Sediment Yield (Large Agg.)	1.356E+04	lbs
Sediment Concentration	36.19	mg/l
Peak Sediment Concentration	96.42	mg/l
Total Nitrogen Yield	1824	lbs
Total Nitrogen Yield (Particulate)	784.1	lbs
Total Nitrogen Yield (Sorbed)	3.079	lbs
Total Nitrogen Yield (Dissolved)	1036	lbs
Nitrogen Concentration	0.6683	mg/l
Peak Nitrogen Concentration	1.68	mg/l
Total Phosphorus Yield	126.2	lbs
Total Phosphorus Yield (Particulate)	54.29	lbs
Total Phosphorus Yield (Sorbed)	0.001203	lbs
Total Phosphorus Yield (Dissolved)	71.96	lbs
Phosphorus Concentration	0.04627	mg/l
Peak Phosphorus Concentration	0.1163	mg/l
Total Bacteria Yield	4.707E+13	cfu
Total Bacteria Yield (Sorbed To Clay)	8.637E+10	cfu
Total Bacteria Yield (Sorbed To Silt)	1.656E+11	cfu
Total Bacteria Yield (Planktonic)	4.681E+13	cfu
Bacteria Concentration	3803	cfu/100 ml
Peak Bacteria Concentration	9557	cfu/100 ml

Non-Routed Connector 17	
Name	Non-Routed Connector 17
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	515.8	ac-ft
Total Sediment Discharged	1.169E+05	lbs
Total Sediment Discharged (Clay)	1.72E+04	lbs
Total Sediment Discharged (Silt)	3.757E+04	lbs
Total Sediment Discharged (Sand)	4.273E+04	lbs
Total Sediment Discharged (Small Agg.)	5829	lbs
Total Sediment Discharged (Large Agg.)	1.356E+04	lbs
Sediment Concentration	36.19	mg/l
Peak Sediment Concentration	96.42	mg/l
Total Nitrogen Discharged	1824	lbs
Total Nitrogen Discharged (Particulate)	784.1	lbs
Total Nitrogen Discharged (Sorbed)	3.079	lbs
Total Nitrogen Discharged (Dissolved)	1036	lbs
Nitrogen Concentration	0.6683	mg/l
Peak Nitrogen Concentration	1.68	mg/l
Total Phosphorus Discharged	126.2	lbs
Total Phosphorus Discharged (Particulate)	54.29	lbs
Total Phosphorus Discharged (Sorbed)	0.001203	lbs
Total Phosphorus Discharged (Dissolved)	71.96	lbs
Phosphorus Concentration	0.04627	mg/l
Peak Phosphorus Concentration	0.1163	mg/l
Total Bacteria Discharged	4.707E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	8.637E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.656E+11	cfu
Total Bacteria Discharged (Planktonic)	4.681E+13	cfu
Bacteria Concentration	3803	cfu/100 ml
Peak Bacteria Concentration	9557	cfu/100 ml

Pond-03

Name	Pond-03
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Orifice Top Riser	-
Riser Shape	Rectangular	-
Riser Height	8.6	ft
Riser Length	5	ft
Riser Width	5	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	0.03	ft/ft
Barrel Length	582	ft
Barrel Diameter	36	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	9	ft
EMS Width	50	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	17.72	ac

Peak Stage	9.1	ft
Total Inflow Volume	515.8	ac-ft
Total Rainfall On BMP	89.18	ac-ft
Total Outflow Volume	355.2	ac-ft
Outlet Pipe Flow Volume	279.8	ac-ft
EMS Outflow Volume	4.857	ac-ft
Infiltration Volume	70.57	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	1.169E+05	lbs
Total Inflow Sediment Mass (Clay)	1.72E+04	lbs
Total Inflow Sediment Mass (Silt)	3.757E+04	lbs
Total Inflow Sediment Mass (Sand)	4.273E+04	lbs
Total Inflow Sediment Mass (Small Agg.)	5829	lbs
Total Inflow Sediment Mass (Large Agg.)	1.356E+04	lbs
Priming Storm Sediment Mass In Permanent Pool	2.948E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	2.214E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	7.338E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	8536	lbs
Total Sediment Mass Discharged (Clay)	6426	lbs
Total Sediment Mass Discharged (Silt)	2110	lbs
Total Sediment Mass Discharged (Sand)	0.001594	lbs
Total Sediment Mass Discharged (Small Agg.)	0.2874	lbs
Total Sediment Mass Discharged (Large Agg.)	0.0004967	lbs
Total Sediment Mass Trapped	4.032E+05	lbs
Total Sediment Mass Trapped (Clay)	2.322E+05	lbs
Total Sediment Mass Trapped (Silt)	1.088E+05	lbs
Total Sediment Mass Trapped (Sand)	4.273E+04	lbs
Total Sediment Mass Trapped (Small Agg.)	5829	lbs

Total Sediment Mass Trapped (Large Agg.)	1.356E+04	lbs
Sediment Trapping Efficiency	97.93	%
Sediment Trapping Efficiency (Clay)	97.31	%
Sediment Trapping Efficiency (Silt)	98.1	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	100	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	8385	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	6314	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	2071	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0.0009854	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0.1947	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0.0003054	lbs
EMS Sediment Mass Discharged	150.4	lbs
EMS Sediment Mass Discharged (Clay)	111.6	lbs
EMS Sediment Mass Discharged (Silt)	38.66	lbs
EMS Sediment Mass Discharged (Sand)	0.0006085	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.09271	lbs
EMS Sediment Mass Discharged (Large Agg.)	0.0001912	lbs
Sediment Concentration	5.726	mg/l
Peak Sediment Concentration	5.732	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	1824	lbs
Total Nitrogen Mass Inflow (Particulate)	784.1	lbs
Total Nitrogen Mass Inflow (Sorbed)	3.079	lbs
Total Nitrogen Mass Inflow (Dissolved)	1036	lbs
Priming Storm Nitrogen Mass In Permanent Pool	2.429E+04	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	9082	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	33.33	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1.518E+04	lbs
Total Nitrogen Mass Discharged	716.9	lbs
Total Nitrogen Mass Discharged (Particulate)	269.4	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.9901	lbs

Total Nitrogen Mass Discharged (Dissolved)	446.6	lbs
Total Nitrogen Mass Trapped	2.54E+04	lbs
Total Nitrogen Mass Trapped (Particulate)	9597	lbs
Total Nitrogen Mass Trapped (Sorbed)	35.42	lbs
Total Nitrogen Mass Trapped (Dissolved)	1.577E+04	lbs
Nitrogen Trapping Efficiency	97.25	%
Nitrogen Trapping Efficiency (Particulate)	97.27	%
Nitrogen Trapping Efficiency (Sorbed)	97.28	%
Nitrogen Trapping Efficiency (Dissolved)	97.25	%
Outlet Pipe Nitrogen Mass Discharged	704.6	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	264.7	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0.9731	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	438.9	lbs
EMS Nitrogen Mass Discharged	12.32	lbs
EMS Nitrogen Mass Discharged (Particulate)	4.632	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.01702	lbs
EMS Nitrogen Mass Discharged (Dissolved)	7.668	lbs
Nitrogen Concentration	0.4722	mg/l
Peak Nitrogen Concentration	0.473	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	126.2	lbs
Total Phosphorus Mass Inflow (Particulate)	54.29	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.001203	lbs
Total Phosphorus Mass Inflow (Dissolved)	71.96	lbs
Priming Storm Phosphorus Mass In Permanent Pool	1682	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	628.7	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.01278	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	1054	lbs
Total Phosphorus Mass Discharged	49.65	lbs
Total Phosphorus Mass Discharged (Particulate)	18.65	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.0003798	lbs
Total Phosphorus Mass Discharged (Dissolved)	31	lbs
Total Phosphorus Mass Trapped	1759	lbs

Total Phosphorus Mass Trapped (Particulate)	664.4	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.01361	lbs
Total Phosphorus Mass Trapped (Dissolved)	1095	lbs
Phosphorus Trapping Efficiency	97.25	%
Phosphorus Trapping Efficiency (Particulate)	97.27	%
Phosphorus Trapping Efficiency (Sorbed)	97.28	%
Phosphorus Trapping Efficiency (Dissolved)	97.25	%
Outlet Pipe Phosphorus Mass Discharged	48.8	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	18.33	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0.0003733	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	30.47	lbs
EMS Phosphorus Mass Discharged	0.853	lbs
EMS Phosphorus Mass Discharged (Particulate)	0.3207	lbs
EMS Phosphorus Mass Discharged (Sorbed)	6.528E-06	lbs
EMS Phosphorus Mass Discharged (Dissolved)	0.5323	lbs
Phosphorus Concentration	0.0327	mg/l
Peak Phosphorus Concentration	0.03276	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	4.707E+13	cfu
Total Bacteria Loading (Sorbed To Clay)	8.637E+10	cfu
Total Bacteria Loading (Sorbed To Silt)	1.656E+11	cfu
Total Bacteria Loading (Planktonic)	4.681E+13	cfu
Priming Storm Bacteria In Permanent Pool	1.301E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	9.773E+11	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	3.239E+11	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	6.559E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.898E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.126E+10	cfu
Total Bacteria Discharged (Planktonic)	6.157E+11	cfu
Total Bacteria Trapped	4.771E+13	cfu

Total Bacteria Trapped (Sorbed To Clay)	1.035E+12	cfu
Total Bacteria Trapped (Sorbed To Silt)	4.782E+11	cfu
Total Bacteria Trapped (Planktonic)	4.62E+13	cfu
Bacteria Trapping Efficiency	98.64	%
Bacteria Trapping Efficiency (Sorbed To Clay)	97.28	%
Bacteria Trapping Efficiency (Sorbed To Silt)	97.7	%
Bacteria Trapping Efficiency (Planktonic)	98.68	%
Outlet Pipe Bacteria Discharged	6.428E+11	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	2.848E+10	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	1.107E+10	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	6.033E+11	cfu
EMS Bacteria Discharged	1.311E+10	cfu
EMS Bacteria Discharged (Sorbed To Clay)	4.976E+08	cfu
EMS Bacteria Discharged (Sorbed To Silt)	1.969E+08	cfu
EMS Bacteria Discharged (Planktonic)	1.241E+10	cfu
Bacteria Concentration	8.853	cfu/100 ml
Peak Bacteria Concentration	24.1	cfu/100 ml

RICHLAND COUNTY
1799
SOUTH CAROLINA

Non-Routed Connector 60	
Name	Non-Routed Connector 60
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	284.6	ac-ft
Total Sediment Discharged	8536	lbs
Total Sediment Discharged (Clay)	6426	lbs
Total Sediment Discharged (Silt)	2110	lbs
Total Sediment Discharged (Sand)	0.001594	lbs
Total Sediment Discharged (Small Agg.)	0.2874	lbs
Total Sediment Discharged (Large Agg.)	0.0004967	lbs
Sediment Concentration	5.726	mg/l
Peak Sediment Concentration	5.732	mg/l
Total Nitrogen Discharged	716.9	lbs
Total Nitrogen Discharged (Particulate)	269.4	lbs
Total Nitrogen Discharged (Sorbed)	0.9901	lbs
Total Nitrogen Discharged (Dissolved)	446.5	lbs
Nitrogen Concentration	0.4722	mg/l
Peak Nitrogen Concentration	0.473	mg/l
Total Phosphorus Discharged	49.65	lbs
Total Phosphorus Discharged (Particulate)	18.65	lbs
Total Phosphorus Discharged (Sorbed)	0.0003798	lbs
Total Phosphorus Discharged (Dissolved)	31	lbs
Phosphorus Concentration	0.0327	mg/l
Peak Phosphorus Concentration	0.03276	mg/l
Total Bacteria Discharged	6.559E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.898E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.126E+10	cfu
Total Bacteria Discharged (Planktonic)	6.157E+11	cfu
Bacteria Concentration	8.853	cfu/100 ml
Peak Bacteria Concentration	24.1	cfu/100 ml

Trib2-01-01	
Name	Trib2-01-01
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	313.2	ac-ft
Total Sediment Discharged	9929	lbs
Total Sediment Discharged (Clay)	6952	lbs
Total Sediment Discharged (Silt)	2976	lbs
Total Sediment Discharged (Sand)	0.001651	lbs
Total Sediment Discharged (Small Agg.)	0.4521	lbs
Total Sediment Discharged (Large Agg.)	0.000595	lbs
Sediment Concentration	6.313	mg/l
Peak Sediment Concentration	9.016	mg/l
Total Nitrogen Discharged	777.7	lbs
Total Nitrogen Discharged (Particulate)	279.7	lbs
Total Nitrogen Discharged (Sorbed)	1	lbs
Total Nitrogen Discharged (Dissolved)	496.9	lbs
Nitrogen Concentration	0.46	mg/l
Peak Nitrogen Concentration	0.5584	mg/l
Total Phosphorus Discharged	53.86	lbs
Total Phosphorus Discharged (Particulate)	19.37	lbs
Total Phosphorus Discharged (Sorbed)	0.000392	lbs
Total Phosphorus Discharged (Dissolved)	34.49	lbs
Phosphorus Concentration	0.03186	mg/l
Peak Phosphorus Concentration	0.03867	mg/l
Total Bacteria Discharged	7.163E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	7.055E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.619E+08	cfu
Total Bacteria Discharged (Planktonic)	7.153E+11	cfu
Bacteria Concentration	9.402	cfu/100 ml
Peak Bacteria Concentration	27.09	cfu/100 ml

Non-Routed Connector 60	
Name	Non-Routed Connector 60
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	313.2	ac-ft
Total Sediment Discharged	9929	lbs
Total Sediment Discharged (Clay)	6952	lbs
Total Sediment Discharged (Silt)	2976	lbs
Total Sediment Discharged (Sand)	0.001651	lbs
Total Sediment Discharged (Small Agg.)	0.4521	lbs
Total Sediment Discharged (Large Agg.)	0.000595	lbs
Sediment Concentration	6.313	mg/l
Peak Sediment Concentration	9.016	mg/l
Total Nitrogen Discharged	777.7	lbs
Total Nitrogen Discharged (Particulate)	279.7	lbs
Total Nitrogen Discharged (Sorbed)	1	lbs
Total Nitrogen Discharged (Dissolved)	496.9	lbs
Nitrogen Concentration	0.46	mg/l
Peak Nitrogen Concentration	0.5584	mg/l
Total Phosphorus Discharged	53.86	lbs
Total Phosphorus Discharged (Particulate)	19.37	lbs
Total Phosphorus Discharged (Sorbed)	0.000392	lbs
Total Phosphorus Discharged (Dissolved)	34.49	lbs
Phosphorus Concentration	0.03186	mg/l
Peak Phosphorus Concentration	0.03867	mg/l
Total Bacteria Discharged	7.163E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	7.055E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.619E+08	cfu
Total Bacteria Discharged (Planktonic)	7.153E+11	cfu
Bacteria Concentration	9.402	cfu/100 ml
Peak Bacteria Concentration	27.09	cfu/100 ml

Basin_Off5

Name	Basin_Off5
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	134.05	acres
Curve Number	59	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.75	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	4003	ft
Slope	0.033	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	2	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.25	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	20000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	0.92	acres
Curve Number	59	-
Peak Rate Factor	484	-
Time of Concentration	0.75	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	117	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	223.45	micro g/g/mg/l
Isotherm Max - Nitrogen	3734.3	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	17.17	ac-ft
Total Sediment Yield	2732	lbs
Total Sediment Yield (Clay)	34.62	lbs
Total Sediment Yield (Silt)	13.69	lbs

Total Sediment Yield (Sand)	2093	lbs
Total Sediment Yield (Small Agg.)	37.89	lbs
Total Sediment Yield (Large Agg.)	552.9	lbs
Sediment Concentration	8.216	mg/l
Peak Sediment Concentration	13.93	mg/l
Total Nitrogen Yield	93.37	lbs
Total Nitrogen Yield (Particulate)	40.15	lbs
Total Nitrogen Yield (Sorbed)	0.02231	lbs
Total Nitrogen Yield (Dissolved)	53.2	lbs
Nitrogen Concentration	0.302	mg/l
Peak Nitrogen Concentration	0.4786	mg/l
Total Phosphorus Yield	11.67	lbs
Total Phosphorus Yield (Particulate)	5.017	lbs
Total Phosphorus Yield (Sorbed)	6.034E-06	lbs
Total Phosphorus Yield (Dissolved)	6.651	lbs
Phosphorus Concentration	0.03724	mg/l
Peak Phosphorus Concentration	0.05902	mg/l
Total Bacteria Yield	4.24E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	1.385E+09	cfu
Total Bacteria Yield (Sorbed To Silt)	1.823E+08	cfu
Total Bacteria Yield (Planktonic)	4.238E+12	cfu
Bacteria Concentration	3331	cfu/100 ml
Peak Bacteria Concentration	5283	cfu/100 ml

RICHLAND COUNTY 1799 SOUTH CAROLINA

Non-Routed Connector 19	
Name	Non-Routed Connector 19
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	17.17	ac-ft
Total Sediment Discharged	2732	lbs
Total Sediment Discharged (Clay)	34.62	lbs
Total Sediment Discharged (Silt)	13.69	lbs
Total Sediment Discharged (Sand)	2093	lbs
Total Sediment Discharged (Small Agg.)	37.89	lbs
Total Sediment Discharged (Large Agg.)	552.9	lbs
Sediment Concentration	8.216	mg/l
Peak Sediment Concentration	13.93	mg/l
Total Nitrogen Discharged	93.37	lbs
Total Nitrogen Discharged (Particulate)	40.15	lbs
Total Nitrogen Discharged (Sorbed)	0.02231	lbs
Total Nitrogen Discharged (Dissolved)	53.2	lbs
Nitrogen Concentration	0.302	mg/l
Peak Nitrogen Concentration	0.4786	mg/l
Total Phosphorus Discharged	11.67	lbs
Total Phosphorus Discharged (Particulate)	5.017	lbs
Total Phosphorus Discharged (Sorbed)	6.034E-06	lbs
Total Phosphorus Discharged (Dissolved)	6.651	lbs
Phosphorus Concentration	0.03724	mg/l
Peak Phosphorus Concentration	0.05902	mg/l
Total Bacteria Discharged	4.24E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.385E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.823E+08	cfu
Total Bacteria Discharged (Planktonic)	4.238E+12	cfu
Bacteria Concentration	3331	cfu/100 ml
Peak Bacteria Concentration	5283	cfu/100 ml

Trib2-02-01	
Name	Trib2-02-01
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	17.17	ac-ft
Total Sediment Discharged	2732	lbs
Total Sediment Discharged (Clay)	34.62	lbs
Total Sediment Discharged (Silt)	13.69	lbs
Total Sediment Discharged (Sand)	2093	lbs
Total Sediment Discharged (Small Agg.)	37.89	lbs
Total Sediment Discharged (Large Agg.)	552.9	lbs
Sediment Concentration	8.216	mg/l
Peak Sediment Concentration	13.93	mg/l
Total Nitrogen Discharged	93.37	lbs
Total Nitrogen Discharged (Particulate)	40.15	lbs
Total Nitrogen Discharged (Sorbed)	0.02231	lbs
Total Nitrogen Discharged (Dissolved)	53.2	lbs
Nitrogen Concentration	0.302	mg/l
Peak Nitrogen Concentration	0.4786	mg/l
Total Phosphorus Discharged	11.67	lbs
Total Phosphorus Discharged (Particulate)	5.017	lbs
Total Phosphorus Discharged (Sorbed)	6.034E-06	lbs
Total Phosphorus Discharged (Dissolved)	6.651	lbs
Phosphorus Concentration	0.03724	mg/l
Peak Phosphorus Concentration	0.05902	mg/l
Total Bacteria Discharged	4.24E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.385E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.823E+08	cfu
Total Bacteria Discharged (Planktonic)	4.238E+12	cfu
Bacteria Concentration	3331	cfu/100 ml
Peak Bacteria Concentration	5283	cfu/100 ml

Non-Routed Connector 56	
Name	Non-Routed Connector 56
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	17.17	ac-ft
Total Sediment Discharged	2732	lbs
Total Sediment Discharged (Clay)	34.62	lbs
Total Sediment Discharged (Silt)	13.69	lbs
Total Sediment Discharged (Sand)	2093	lbs
Total Sediment Discharged (Small Agg.)	37.89	lbs
Total Sediment Discharged (Large Agg.)	552.9	lbs
Sediment Concentration	8.216	mg/l
Peak Sediment Concentration	13.93	mg/l
Total Nitrogen Discharged	93.37	lbs
Total Nitrogen Discharged (Particulate)	40.15	lbs
Total Nitrogen Discharged (Sorbed)	0.02231	lbs
Total Nitrogen Discharged (Dissolved)	53.2	lbs
Nitrogen Concentration	0.302	mg/l
Peak Nitrogen Concentration	0.4786	mg/l
Total Phosphorus Discharged	11.67	lbs
Total Phosphorus Discharged (Particulate)	5.017	lbs
Total Phosphorus Discharged (Sorbed)	6.034E-06	lbs
Total Phosphorus Discharged (Dissolved)	6.651	lbs
Phosphorus Concentration	0.03724	mg/l
Peak Phosphorus Concentration	0.05902	mg/l
Total Bacteria Discharged	4.24E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.385E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.823E+08	cfu
Total Bacteria Discharged (Planktonic)	4.238E+12	cfu
Bacteria Concentration	3331	cfu/100 ml
Peak Bacteria Concentration	5283	cfu/100 ml

Basin_20

Name	Basin_20
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	42.11	acres
Curve Number	45	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.417	hrs

Sediment Inputs

Parameter	Value	Units
Length	3410	ft
Slope	0.031	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	2.06	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.28	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	15000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.74	ac-ft
Total Sediment Yield	211.8	lbs
Total Sediment Yield (Clay)	2.202	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	163.3	lbs
Total Sediment Yield (Small Agg.)	2.965	lbs
Total Sediment Yield (Large Agg.)	43.25	lbs
Sediment Concentration	0.8789	mg/l
Peak Sediment Concentration	1.715	mg/l
Total Nitrogen Yield	9.748	lbs
Total Nitrogen Yield (Particulate)	4.192	lbs
Total Nitrogen Yield (Sorbed)	0.001696	lbs
Total Nitrogen Yield (Dissolved)	5.555	lbs
Nitrogen Concentration	0.07979	mg/l
Peak Nitrogen Concentration	0.1362	mg/l
Total Phosphorus Yield	1.325	lbs
Total Phosphorus Yield (Particulate)	0.5697	lbs
Total Phosphorus Yield (Sorbed)	4.672E-07	lbs
Total Phosphorus Yield (Dissolved)	0.7552	lbs
Phosphorus Concentration	0.01084	mg/l
Peak Phosphorus Concentration	0.01851	mg/l
Total Bacteria Yield	3.218E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	3.218E+11	cfu
Bacteria Concentration	580.8	cfu/100 ml
Peak Bacteria Concentration	991.2	cfu/100 ml

Non-Routed Connector 24	
Name	Non-Routed Connector 24
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.74	ac-ft
Total Sediment Discharged	211.8	lbs
Total Sediment Discharged (Clay)	2.202	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	163.3	lbs
Total Sediment Discharged (Small Agg.)	2.965	lbs
Total Sediment Discharged (Large Agg.)	43.25	lbs
Sediment Concentration	0.8789	mg/l
Peak Sediment Concentration	1.715	mg/l
Total Nitrogen Discharged	9.748	lbs
Total Nitrogen Discharged (Particulate)	4.192	lbs
Total Nitrogen Discharged (Sorbed)	0.001696	lbs
Total Nitrogen Discharged (Dissolved)	5.555	lbs
Nitrogen Concentration	0.07979	mg/l
Peak Nitrogen Concentration	0.1362	mg/l
Total Phosphorus Discharged	1.325	lbs
Total Phosphorus Discharged (Particulate)	0.5697	lbs
Total Phosphorus Discharged (Sorbed)	4.672E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7552	lbs
Phosphorus Concentration	0.01084	mg/l
Peak Phosphorus Concentration	0.01851	mg/l
Total Bacteria Discharged	3.218E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	3.218E+11	cfu
Bacteria Concentration	580.8	cfu/100 ml
Peak Bacteria Concentration	991.2	cfu/100 ml

Trib2-04-08	
Name	Trib2-04-08
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.74	ac-ft
Total Sediment Discharged	211.8	lbs
Total Sediment Discharged (Clay)	2.202	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	163.3	lbs
Total Sediment Discharged (Small Agg.)	2.965	lbs
Total Sediment Discharged (Large Agg.)	43.25	lbs
Sediment Concentration	0.8789	mg/l
Peak Sediment Concentration	1.715	mg/l
Total Nitrogen Discharged	9.748	lbs
Total Nitrogen Discharged (Particulate)	4.192	lbs
Total Nitrogen Discharged (Sorbed)	0.001696	lbs
Total Nitrogen Discharged (Dissolved)	5.555	lbs
Nitrogen Concentration	0.07979	mg/l
Peak Nitrogen Concentration	0.1362	mg/l
Total Phosphorus Discharged	1.325	lbs
Total Phosphorus Discharged (Particulate)	0.5697	lbs
Total Phosphorus Discharged (Sorbed)	4.672E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7552	lbs
Phosphorus Concentration	0.01084	mg/l
Peak Phosphorus Concentration	0.01851	mg/l
Total Bacteria Discharged	3.218E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	3.218E+11	cfu
Bacteria Concentration	580.8	cfu/100 ml
Peak Bacteria Concentration	991.2	cfu/100 ml

Non-Routed Connector 67	
Name	Non-Routed Connector 67
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.74	ac-ft
Total Sediment Discharged	211.8	lbs
Total Sediment Discharged (Clay)	2.202	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	163.3	lbs
Total Sediment Discharged (Small Agg.)	2.965	lbs
Total Sediment Discharged (Large Agg.)	43.25	lbs
Sediment Concentration	0.8789	mg/l
Peak Sediment Concentration	1.715	mg/l
Total Nitrogen Discharged	9.748	lbs
Total Nitrogen Discharged (Particulate)	4.192	lbs
Total Nitrogen Discharged (Sorbed)	0.001696	lbs
Total Nitrogen Discharged (Dissolved)	5.555	lbs
Nitrogen Concentration	0.07979	mg/l
Peak Nitrogen Concentration	0.1362	mg/l
Total Phosphorus Discharged	1.325	lbs
Total Phosphorus Discharged (Particulate)	0.5697	lbs
Total Phosphorus Discharged (Sorbed)	4.672E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7552	lbs
Phosphorus Concentration	0.01084	mg/l
Peak Phosphorus Concentration	0.01851	mg/l
Total Bacteria Discharged	3.218E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	3.218E+11	cfu
Bacteria Concentration	580.8	cfu/100 ml
Peak Bacteria Concentration	991.2	cfu/100 ml

Trib2-04-07	
Name	Trib2-04-07
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.74	ac-ft
Total Sediment Discharged	211.8	lbs
Total Sediment Discharged (Clay)	2.202	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	163.3	lbs
Total Sediment Discharged (Small Agg.)	2.965	lbs
Total Sediment Discharged (Large Agg.)	43.25	lbs
Sediment Concentration	0.8789	mg/l
Peak Sediment Concentration	1.715	mg/l
Total Nitrogen Discharged	9.748	lbs
Total Nitrogen Discharged (Particulate)	4.192	lbs
Total Nitrogen Discharged (Sorbed)	0.001696	lbs
Total Nitrogen Discharged (Dissolved)	5.555	lbs
Nitrogen Concentration	0.07979	mg/l
Peak Nitrogen Concentration	0.1362	mg/l
Total Phosphorus Discharged	1.325	lbs
Total Phosphorus Discharged (Particulate)	0.5697	lbs
Total Phosphorus Discharged (Sorbed)	4.672E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7552	lbs
Phosphorus Concentration	0.01084	mg/l
Peak Phosphorus Concentration	0.01851	mg/l
Total Bacteria Discharged	3.218E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	3.218E+11	cfu
Bacteria Concentration	580.8	cfu/100 ml
Peak Bacteria Concentration	991.2	cfu/100 ml

Non-Routed Connector 66	
Name	Non-Routed Connector 66
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.74	ac-ft
Total Sediment Discharged	211.8	lbs
Total Sediment Discharged (Clay)	2.202	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	163.3	lbs
Total Sediment Discharged (Small Agg.)	2.965	lbs
Total Sediment Discharged (Large Agg.)	43.25	lbs
Sediment Concentration	0.8789	mg/l
Peak Sediment Concentration	1.715	mg/l
Total Nitrogen Discharged	9.748	lbs
Total Nitrogen Discharged (Particulate)	4.192	lbs
Total Nitrogen Discharged (Sorbed)	0.001696	lbs
Total Nitrogen Discharged (Dissolved)	5.555	lbs
Nitrogen Concentration	0.07979	mg/l
Peak Nitrogen Concentration	0.1362	mg/l
Total Phosphorus Discharged	1.325	lbs
Total Phosphorus Discharged (Particulate)	0.5697	lbs
Total Phosphorus Discharged (Sorbed)	4.672E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7552	lbs
Phosphorus Concentration	0.01084	mg/l
Peak Phosphorus Concentration	0.01851	mg/l
Total Bacteria Discharged	3.218E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	3.218E+11	cfu
Bacteria Concentration	580.8	cfu/100 ml
Peak Bacteria Concentration	991.2	cfu/100 ml

Basin_Off4

Name	Basin_Off4
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	15.79	acres
Curve Number	52	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	1603	ft
Slope	0.044	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	2.06	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.28	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	20000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	0.12	acres
Curve Number	52	-
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	117	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.199	ac-ft
Total Sediment Yield	211.3	lbs
Total Sediment Yield (Clay)	2.557	lbs
Total Sediment Yield (Silt)	0.7926	lbs

Total Sediment Yield (Sand)	162.1	lbs
Total Sediment Yield (Small Agg.)	2.938	lbs
Total Sediment Yield (Large Agg.)	42.86	lbs
Sediment Concentration	3.348	mg/l
Peak Sediment Concentration	7	mg/l
Total Nitrogen Yield	6.718	lbs
Total Nitrogen Yield (Particulate)	2.889	lbs
Total Nitrogen Yield (Sorbed)	0.002139	lbs
Total Nitrogen Yield (Dissolved)	3.827	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Yield	0.9127	lbs
Total Phosphorus Yield (Particulate)	0.3925	lbs
Total Phosphorus Yield (Sorbed)	5.826E-07	lbs
Total Phosphorus Yield (Dissolved)	0.5202	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Yield	2.961E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	1.058E+08	cfu
Total Bacteria Yield (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Yield (Planktonic)	2.96E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Non-Routed Connector 23	
Name	Non-Routed Connector 23
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.199	ac-ft
Total Sediment Discharged	211.3	lbs
Total Sediment Discharged (Clay)	2.557	lbs
Total Sediment Discharged (Silt)	0.7926	lbs
Total Sediment Discharged (Sand)	162.1	lbs
Total Sediment Discharged (Small Agg.)	2.938	lbs
Total Sediment Discharged (Large Agg.)	42.86	lbs
Sediment Concentration	3.348	mg/l
Peak Sediment Concentration	7	mg/l
Total Nitrogen Discharged	6.718	lbs
Total Nitrogen Discharged (Particulate)	2.889	lbs
Total Nitrogen Discharged (Sorbed)	0.002139	lbs
Total Nitrogen Discharged (Dissolved)	3.827	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Discharged	0.9127	lbs
Total Phosphorus Discharged (Particulate)	0.3925	lbs
Total Phosphorus Discharged (Sorbed)	5.826E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.5202	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Discharged	2.961E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.058E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Discharged (Planktonic)	2.96E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Trib2-04-06	
Name	Trib2-04-06
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.199	ac-ft
Total Sediment Discharged	211.3	lbs
Total Sediment Discharged (Clay)	2.557	lbs
Total Sediment Discharged (Silt)	0.7926	lbs
Total Sediment Discharged (Sand)	162.1	lbs
Total Sediment Discharged (Small Agg.)	2.938	lbs
Total Sediment Discharged (Large Agg.)	42.86	lbs
Sediment Concentration	3.348	mg/l
Peak Sediment Concentration	7	mg/l
Total Nitrogen Discharged	6.718	lbs
Total Nitrogen Discharged (Particulate)	2.889	lbs
Total Nitrogen Discharged (Sorbed)	0.002139	lbs
Total Nitrogen Discharged (Dissolved)	3.827	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Discharged	0.9127	lbs
Total Phosphorus Discharged (Particulate)	0.3925	lbs
Total Phosphorus Discharged (Sorbed)	5.826E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.5202	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Discharged	2.961E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.058E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Discharged (Planktonic)	2.96E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Non-Routed Connector 65	
Name	Non-Routed Connector 65
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.199	ac-ft
Total Sediment Discharged	211.3	lbs
Total Sediment Discharged (Clay)	2.557	lbs
Total Sediment Discharged (Silt)	0.7926	lbs
Total Sediment Discharged (Sand)	162.1	lbs
Total Sediment Discharged (Small Agg.)	2.938	lbs
Total Sediment Discharged (Large Agg.)	42.86	lbs
Sediment Concentration	3.348	mg/l
Peak Sediment Concentration	7	mg/l
Total Nitrogen Discharged	6.718	lbs
Total Nitrogen Discharged (Particulate)	2.889	lbs
Total Nitrogen Discharged (Sorbed)	0.002139	lbs
Total Nitrogen Discharged (Dissolved)	3.827	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Discharged	0.9127	lbs
Total Phosphorus Discharged (Particulate)	0.3925	lbs
Total Phosphorus Discharged (Sorbed)	5.826E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.5202	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Discharged	2.961E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.058E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Discharged (Planktonic)	2.96E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Trib2-04-05	
Name	Trib2-04-05
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.199	ac-ft
Total Sediment Discharged	211.3	lbs
Total Sediment Discharged (Clay)	2.557	lbs
Total Sediment Discharged (Silt)	0.7926	lbs
Total Sediment Discharged (Sand)	162.1	lbs
Total Sediment Discharged (Small Agg.)	2.938	lbs
Total Sediment Discharged (Large Agg.)	42.86	lbs
Sediment Concentration	3.348	mg/l
Peak Sediment Concentration	7	mg/l
Total Nitrogen Discharged	6.718	lbs
Total Nitrogen Discharged (Particulate)	2.889	lbs
Total Nitrogen Discharged (Sorbed)	0.002139	lbs
Total Nitrogen Discharged (Dissolved)	3.827	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Discharged	0.9127	lbs
Total Phosphorus Discharged (Particulate)	0.3925	lbs
Total Phosphorus Discharged (Sorbed)	5.826E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.5202	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Discharged	2.961E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.058E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Discharged (Planktonic)	2.96E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Non-Routed Connector 64	
Name	Non-Routed Connector 64
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.199	ac-ft
Total Sediment Discharged	211.3	lbs
Total Sediment Discharged (Clay)	2.557	lbs
Total Sediment Discharged (Silt)	0.7926	lbs
Total Sediment Discharged (Sand)	162.1	lbs
Total Sediment Discharged (Small Agg.)	2.938	lbs
Total Sediment Discharged (Large Agg.)	42.86	lbs
Sediment Concentration	3.348	mg/l
Peak Sediment Concentration	7	mg/l
Total Nitrogen Discharged	6.718	lbs
Total Nitrogen Discharged (Particulate)	2.889	lbs
Total Nitrogen Discharged (Sorbed)	0.002139	lbs
Total Nitrogen Discharged (Dissolved)	3.827	lbs
Nitrogen Concentration	0.1194	mg/l
Peak Nitrogen Concentration	0.2431	mg/l
Total Phosphorus Discharged	0.9127	lbs
Total Phosphorus Discharged (Particulate)	0.3925	lbs
Total Phosphorus Discharged (Sorbed)	5.826E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.5202	lbs
Phosphorus Concentration	0.01569	mg/l
Peak Phosphorus Concentration	0.03214	mg/l
Total Bacteria Discharged	2.961E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.058E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.085E+07	cfu
Total Bacteria Discharged (Planktonic)	2.96E+11	cfu
Bacteria Concentration	1279	cfu/100 ml
Peak Bacteria Concentration	2563	cfu/100 ml

Basin_Off3

Name	Basin_Off3
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	58.06	acres
Curve Number	46	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.45	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	2659	ft
Slope	0.029	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	20000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	1.45	acres
Curve Number	46	-
Peak Rate Factor	484	-
Time of Concentration	0.45	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	117	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.655	ac-ft
Total Sediment Yield	284	lbs
Total Sediment Yield (Clay)	4.873	lbs
Total Sediment Yield (Silt)	4.229	lbs

Total Sediment Yield (Sand)	214.6	lbs
Total Sediment Yield (Small Agg.)	3.868	lbs
Total Sediment Yield (Large Agg.)	56.43	lbs
Sediment Concentration	1.676	mg/l
Peak Sediment Concentration	2.845	mg/l
Total Nitrogen Yield	7.071	lbs
Total Nitrogen Yield (Particulate)	3.041	lbs
Total Nitrogen Yield (Sorbed)	0.002231	lbs
Total Nitrogen Yield (Dissolved)	4.028	lbs
Nitrogen Concentration	0.05364	mg/l
Peak Nitrogen Concentration	0.08719	mg/l
Total Phosphorus Yield	1.446	lbs
Total Phosphorus Yield (Particulate)	0.622	lbs
Total Phosphorus Yield (Sorbed)	7.273E-07	lbs
Total Phosphorus Yield (Dissolved)	0.8245	lbs
Phosphorus Concentration	0.009657	mg/l
Peak Phosphorus Concentration	0.01592	mg/l
Total Bacteria Yield	6.567E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	1.608E+08	cfu
Total Bacteria Yield (Sorbed To Silt)	5.958E+07	cfu
Total Bacteria Yield (Planktonic)	6.565E+11	cfu
Bacteria Concentration	989.5	cfu/100 ml
Peak Bacteria Concentration	1627	cfu/100 ml

Non-Routed Connector 21	
Name	Non-Routed Connector 21
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.655	ac-ft
Total Sediment Discharged	284	lbs
Total Sediment Discharged (Clay)	4.873	lbs
Total Sediment Discharged (Silt)	4.229	lbs
Total Sediment Discharged (Sand)	214.6	lbs
Total Sediment Discharged (Small Agg.)	3.868	lbs
Total Sediment Discharged (Large Agg.)	56.43	lbs
Sediment Concentration	1.676	mg/l
Peak Sediment Concentration	2.845	mg/l
Total Nitrogen Discharged	7.071	lbs
Total Nitrogen Discharged (Particulate)	3.041	lbs
Total Nitrogen Discharged (Sorbed)	0.002231	lbs
Total Nitrogen Discharged (Dissolved)	4.028	lbs
Nitrogen Concentration	0.05364	mg/l
Peak Nitrogen Concentration	0.08719	mg/l
Total Phosphorus Discharged	1.446	lbs
Total Phosphorus Discharged (Particulate)	0.622	lbs
Total Phosphorus Discharged (Sorbed)	7.273E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.8245	lbs
Phosphorus Concentration	0.009657	mg/l
Peak Phosphorus Concentration	0.01592	mg/l
Total Bacteria Discharged	6.567E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.608E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	5.958E+07	cfu
Total Bacteria Discharged (Planktonic)	6.565E+11	cfu
Bacteria Concentration	989.5	cfu/100 ml
Peak Bacteria Concentration	1627	cfu/100 ml

Trib2-04-04	
Name	Trib2-04-04
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	2.655	ac-ft
Total Sediment Discharged	284	lbs
Total Sediment Discharged (Clay)	4.873	lbs
Total Sediment Discharged (Silt)	4.229	lbs
Total Sediment Discharged (Sand)	214.6	lbs
Total Sediment Discharged (Small Agg.)	3.868	lbs
Total Sediment Discharged (Large Agg.)	56.43	lbs
Sediment Concentration	1.676	mg/l
Peak Sediment Concentration	2.845	mg/l
Total Nitrogen Discharged	7.071	lbs
Total Nitrogen Discharged (Particulate)	3.041	lbs
Total Nitrogen Discharged (Sorbed)	0.002231	lbs
Total Nitrogen Discharged (Dissolved)	4.028	lbs
Nitrogen Concentration	0.05364	mg/l
Peak Nitrogen Concentration	0.08719	mg/l
Total Phosphorus Discharged	1.446	lbs
Total Phosphorus Discharged (Particulate)	0.622	lbs
Total Phosphorus Discharged (Sorbed)	7.273E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.8245	lbs
Phosphorus Concentration	0.009657	mg/l
Peak Phosphorus Concentration	0.01592	mg/l
Total Bacteria Discharged	6.567E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.608E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	5.958E+07	cfu
Total Bacteria Discharged (Planktonic)	6.565E+11	cfu
Bacteria Concentration	989.5	cfu/100 ml
Peak Bacteria Concentration	1627	cfu/100 ml

Link-02	
Name	Link-02
Description	

Inputs		
Parameter	**Value**	**Units**
Conduit Option	Simple Translation	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.655	ac-ft
Total Sediment Discharged	284	lbs
Total Sediment Discharged (Clay)	4.873	lbs
Total Sediment Discharged (Silt)	4.229	lbs
Total Sediment Discharged (Sand)	214.6	lbs
Total Sediment Discharged (Small Agg.)	3.868	lbs
Total Sediment Discharged (Large Agg.)	56.43	lbs
Sediment Concentration	1.676	mg/l
Peak Sediment Concentration	2.845	mg/l
Total Nitrogen Discharged	7.071	lbs
Total Nitrogen Discharged (Particulate)	3.041	lbs
Total Nitrogen Discharged (Sorbed)	0.002231	lbs
Total Nitrogen Discharged (Dissolved)	4.028	lbs
Nitrogen Concentration	0.05364	mg/l
Peak Nitrogen Concentration	0.08719	mg/l
Total Phosphorus Discharged	1.446	lbs
Total Phosphorus Discharged (Particulate)	0.622	lbs
Total Phosphorus Discharged (Sorbed)	7.273E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.8245	lbs
Phosphorus Concentration	0.009657	mg/l
Peak Phosphorus Concentration	0.01592	mg/l
Total Bacteria Discharged	6.567E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.608E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	5.958E+07	cfu
Total Bacteria Discharged (Planktonic)	6.565E+11	cfu
Bacteria Concentration	989.5	cfu/100 ml
Peak Bacteria Concentration	1627	cfu/100 ml

Trib2-04-03	
Name	Trib2-04-03
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.655	ac-ft
Total Sediment Discharged	284	lbs
Total Sediment Discharged (Clay)	4.873	lbs
Total Sediment Discharged (Silt)	4.229	lbs
Total Sediment Discharged (Sand)	214.6	lbs
Total Sediment Discharged (Small Agg.)	3.868	lbs
Total Sediment Discharged (Large Agg.)	56.43	lbs
Sediment Concentration	1.676	mg/l
Peak Sediment Concentration	2.845	mg/l
Total Nitrogen Discharged	7.071	lbs
Total Nitrogen Discharged (Particulate)	3.041	lbs
Total Nitrogen Discharged (Sorbed)	0.002231	lbs
Total Nitrogen Discharged (Dissolved)	4.028	lbs
Nitrogen Concentration	0.05364	mg/l
Peak Nitrogen Concentration	0.08719	mg/l
Total Phosphorus Discharged	1.446	lbs
Total Phosphorus Discharged (Particulate)	0.622	lbs
Total Phosphorus Discharged (Sorbed)	7.273E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.8245	lbs
Phosphorus Concentration	0.009657	mg/l
Peak Phosphorus Concentration	0.01592	mg/l
Total Bacteria Discharged	6.567E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.608E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	5.958E+07	cfu
Total Bacteria Discharged (Planktonic)	6.565E+11	cfu
Bacteria Concentration	989.5	cfu/100 ml
Peak Bacteria Concentration	1627	cfu/100 ml

Non-Routed Connector 63	
Name	Non-Routed Connector 63
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.655	ac-ft
Total Sediment Discharged	284	lbs
Total Sediment Discharged (Clay)	4.873	lbs
Total Sediment Discharged (Silt)	4.229	lbs
Total Sediment Discharged (Sand)	214.6	lbs
Total Sediment Discharged (Small Agg.)	3.868	lbs
Total Sediment Discharged (Large Agg.)	56.43	lbs
Sediment Concentration	1.676	mg/l
Peak Sediment Concentration	2.845	mg/l
Total Nitrogen Discharged	7.071	lbs
Total Nitrogen Discharged (Particulate)	3.041	lbs
Total Nitrogen Discharged (Sorbed)	0.002231	lbs
Total Nitrogen Discharged (Dissolved)	4.028	lbs
Nitrogen Concentration	0.05364	mg/l
Peak Nitrogen Concentration	0.08719	mg/l
Total Phosphorus Discharged	1.446	lbs
Total Phosphorus Discharged (Particulate)	0.622	lbs
Total Phosphorus Discharged (Sorbed)	7.273E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.8245	lbs
Phosphorus Concentration	0.009657	mg/l
Peak Phosphorus Concentration	0.01592	mg/l
Total Bacteria Discharged	6.567E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.608E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	5.958E+07	cfu
Total Bacteria Discharged (Planktonic)	6.565E+11	cfu
Bacteria Concentration	989.5	cfu/100 ml
Peak Bacteria Concentration	1627	cfu/100 ml

Basin_21

Name	Basin_21
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	48.11	acres
Curve Number	68	-
Soil Series	Georgeville	-
Depth Range	0-15	in
Peak Rate Factor	484	-
Time of Concentration	0.083	hrs

Sediment Inputs

Parameter	Value	Units
Length	920	ft
Slope	0.095	ft/ft
Soil Erodibility	0.49	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	20000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	11.61	ac-ft
Total Sediment Yield	1.639E+05	lbs
Total Sediment Yield (Clay)	6818	lbs
Total Sediment Yield (Silt)	4.179E+04	lbs
Total Sediment Yield (Sand)	2.036E+04	lbs
Total Sediment Yield (Small Agg.)	4.72E+04	lbs
Total Sediment Yield (Large Agg.)	4.772E+04	lbs
Sediment Concentration	377.9	mg/l
Peak Sediment Concentration	1092	mg/l
Total Nitrogen Yield	30.62	lbs
Total Nitrogen Yield (Particulate)	13.17	lbs
Total Nitrogen Yield (Sorbed)	0.3197	lbs
Total Nitrogen Yield (Dissolved)	17.14	lbs
Nitrogen Concentration	0.1294	mg/l
Peak Nitrogen Concentration	0.3227	mg/l
Total Phosphorus Yield	6.314	lbs
Total Phosphorus Yield (Particulate)	2.715	lbs
Total Phosphorus Yield (Sorbed)	0.00124	lbs
Total Phosphorus Yield (Dissolved)	3.598	lbs
Phosphorus Concentration	0.02667	mg/l
Peak Phosphorus Concentration	0.06653	mg/l
Total Bacteria Yield	2.863E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	2.863E+12	cfu
Bacteria Concentration	2666	cfu/100 ml
Peak Bacteria Concentration	6651	cfu/100 ml

Non-Routed Connector 22	
Name	Non-Routed Connector 22
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	11.61	ac-ft
Total Sediment Discharged	1.639E+05	lbs
Total Sediment Discharged (Clay)	6818	lbs
Total Sediment Discharged (Silt)	4.179E+04	lbs
Total Sediment Discharged (Sand)	2.036E+04	lbs
Total Sediment Discharged (Small Agg.)	4.72E+04	lbs
Total Sediment Discharged (Large Agg.)	4.772E+04	lbs
Sediment Concentration	377.9	mg/l
Peak Sediment Concentration	1092	mg/l
Total Nitrogen Discharged	30.62	lbs
Total Nitrogen Discharged (Particulate)	13.17	lbs
Total Nitrogen Discharged (Sorbed)	0.3197	lbs
Total Nitrogen Discharged (Dissolved)	17.14	lbs
Nitrogen Concentration	0.1294	mg/l
Peak Nitrogen Concentration	0.3227	mg/l
Total Phosphorus Discharged	6.314	lbs
Total Phosphorus Discharged (Particulate)	2.715	lbs
Total Phosphorus Discharged (Sorbed)	0.00124	lbs
Total Phosphorus Discharged (Dissolved)	3.598	lbs
Phosphorus Concentration	0.02667	mg/l
Peak Phosphorus Concentration	0.06653	mg/l
Total Bacteria Discharged	2.863E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	2.863E+12	cfu
Bacteria Concentration	2666	cfu/100 ml
Peak Bacteria Concentration	6651	cfu/100 ml

Trib2-04-02

Name	Trib2-04-02
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	19	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	12	ft
EMS Width	80	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	12.47	ac

Peak Stage	17	ft
Total Inflow Volume	17.2	ac-ft
Total Rainfall On BMP	62.76	ac-ft
Total Outflow Volume	877.2	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	874.2	ac-ft
Infiltration Volume	2.987	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	1.646E+05	lbs
Total Inflow Sediment Mass (Clay)	6828	lbs
Total Inflow Sediment Mass (Silt)	4.18E+04	lbs
Total Inflow Sediment Mass (Sand)	2.09E+04	lbs
Total Inflow Sediment Mass (Small Agg.)	4.721E+04	lbs
Total Inflow Sediment Mass (Large Agg.)	4.787E+04	lbs
Priming Storm Sediment Mass In Permanent Pool	3.005E+06	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	3.005E+06	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	1.559E+05	lbs
Total Sediment Mass Discharged (Clay)	1.559E+05	lbs
Total Sediment Mass Discharged (Silt)	0	lbs
Total Sediment Mass Discharged (Sand)	0	lbs
Total Sediment Mass Discharged (Small Agg.)	0	lbs
Total Sediment Mass Discharged (Large Agg.)	0	lbs
Total Sediment Mass Trapped	3.013E+06	lbs
Total Sediment Mass Trapped (Clay)	2.856E+06	lbs
Total Sediment Mass Trapped (Silt)	4.18E+04	lbs
Total Sediment Mass Trapped (Sand)	2.09E+04	lbs
Total Sediment Mass Trapped (Small Agg.)	4.721E+04	lbs

Total Sediment Mass Trapped (Large Agg.)	4.787E+04	lbs
Sediment Trapping Efficiency	95.08	%
Sediment Trapping Efficiency (Clay)	94.82	%
Sediment Trapping Efficiency (Silt)	100	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	100	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	1.559E+05	lbs
EMS Sediment Mass Discharged (Clay)	1.559E+05	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0	lbs
EMS Sediment Mass Discharged (Small Agg.)	0	lbs
EMS Sediment Mass Discharged (Large Agg.)	0	lbs
Sediment Concentration	8.745	mg/l
Peak Sediment Concentration	8.97	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	54.16	lbs
Total Nitrogen Mass Inflow (Particulate)	23.29	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.3258	lbs
Total Nitrogen Mass Inflow (Dissolved)	30.55	lbs
Priming Storm Nitrogen Mass In Permanent Pool	2.283E+04	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	3078	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	39.02	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1.972E+04	lbs
Total Nitrogen Mass Discharged	1185	lbs
Total Nitrogen Mass Discharged (Particulate)	159.7	lbs
Total Nitrogen Mass Discharged (Sorbed)	2.024	lbs

Total Nitrogen Mass Discharged (Dissolved)	1023	lbs
Total Nitrogen Mass Trapped	2.17E+04	lbs
Total Nitrogen Mass Trapped (Particulate)	2941	lbs
Total Nitrogen Mass Trapped (Sorbed)	37.32	lbs
Total Nitrogen Mass Trapped (Dissolved)	1.873E+04	lbs
Nitrogen Trapping Efficiency	94.82	%
Nitrogen Trapping Efficiency (Particulate)	94.85	%
Nitrogen Trapping Efficiency (Sorbed)	94.86	%
Nitrogen Trapping Efficiency (Dissolved)	94.82	%
Outlet Pipe Nitrogen Mass Discharged	5.457E-15	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	5.457E-15	lbs
EMS Nitrogen Mass Discharged	1185	lbs
EMS Nitrogen Mass Discharged (Particulate)	159.7	lbs
EMS Nitrogen Mass Discharged (Sorbed)	2.024	lbs
EMS Nitrogen Mass Discharged (Dissolved)	1023	lbs
Nitrogen Concentration	0.06646	mg/l
Peak Nitrogen Concentration	0.06817	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	9.998	lbs
Total Phosphorus Mass Inflow (Particulate)	4.299	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.001242	lbs
Total Phosphorus Mass Inflow (Dissolved)	5.698	lbs
Priming Storm Phosphorus Mass In Permanent Pool	3989	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	534.2	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.1471	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	3454	lbs
Total Phosphorus Mass Discharged	206.9	lbs
Total Phosphorus Mass Discharged (Particulate)	27.71	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.007632	lbs
Total Phosphorus Mass Discharged (Dissolved)	179.2	lbs
Total Phosphorus Mass Trapped	3792	lbs

Total Phosphorus Mass Trapped (Particulate)	510.7	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.1407	lbs
Total Phosphorus Mass Trapped (Dissolved)	3281	lbs
Phosphorus Trapping Efficiency	94.83	%
Phosphorus Trapping Efficiency (Particulate)	94.85	%
Phosphorus Trapping Efficiency (Sorbed)	94.86	%
Phosphorus Trapping Efficiency (Dissolved)	94.82	%
Outlet Pipe Phosphorus Mass Discharged	3.567E-17	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	3.567E-17	lbs
EMS Phosphorus Mass Discharged	206.9	lbs
EMS Phosphorus Mass Discharged (Particulate)	27.71	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0.007632	lbs
EMS Phosphorus Mass Discharged (Dissolved)	179.2	lbs
Phosphorus Concentration	0.01161	mg/l
Peak Phosphorus Concentration	0.01191	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	4.138E+12	cfu
Total Bacteria Loading (Sorbed To Clay)	2.561E+11	cfu
Total Bacteria Loading (Sorbed To Silt)	4.078E+11	cfu
Total Bacteria Loading (Planktonic)	3.474E+12	cfu
Priming Storm Bacteria In Permanent Pool	2.906E+13	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	2.906E+13	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	1.508E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.508E+12	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	0	cfu
Total Bacteria Trapped	3.169E+13	cfu

Total Bacteria Trapped (Sorbed To Clay)	2.781E+13	cfu
Total Bacteria Trapped (Sorbed To Silt)	4.078E+11	cfu
Total Bacteria Trapped (Planktonic)	3.474E+12	cfu
Bacteria Trapping Efficiency	95.46	%
Bacteria Trapping Efficiency (Sorbed To Clay)	94.86	%
Bacteria Trapping Efficiency (Sorbed To Silt)	100	%
Bacteria Trapping Efficiency (Planktonic)	100	%
Outlet Pipe Bacteria Discharged	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	0	cfu
EMS Bacteria Discharged	1.508E+12	cfu
EMS Bacteria Discharged (Sorbed To Clay)	1.508E+12	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	18.65	cfu/100 ml
Peak Bacteria Concentration	19.13	cfu/100 ml

RICHLAND COUNTY
1799
SOUTH CAROLINA

Non-Routed Connector 62	
Name	Non-Routed Connector 62
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	874.2	ac-ft
Total Sediment Discharged	1.559E+05	lbs
Total Sediment Discharged (Clay)	1.559E+05	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	0	lbs
Total Sediment Discharged (Small Agg.)	0	lbs
Total Sediment Discharged (Large Agg.)	0	lbs
Sediment Concentration	8.745	mg/l
Peak Sediment Concentration	8.97	mg/l
Total Nitrogen Discharged	1185	lbs
Total Nitrogen Discharged (Particulate)	159.7	lbs
Total Nitrogen Discharged (Sorbed)	2.024	lbs
Total Nitrogen Discharged (Dissolved)	1023	lbs
Nitrogen Concentration	0.06646	mg/l
Peak Nitrogen Concentration	0.06817	mg/l
Total Phosphorus Discharged	206.9	lbs
Total Phosphorus Discharged (Particulate)	27.71	lbs
Total Phosphorus Discharged (Sorbed)	0.007632	lbs
Total Phosphorus Discharged (Dissolved)	179.2	lbs
Phosphorus Concentration	0.01161	mg/l
Peak Phosphorus Concentration	0.01191	mg/l
Total Bacteria Discharged	1.508E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.508E+12	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	18.65	cfu/100 ml
Peak Bacteria Concentration	19.13	cfu/100 ml

Basin_19	
Name	Basin_19
Description	

Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	27.99	acres
Curve Number	71	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.3	hrs

Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	1550	ft
Slope	0.02	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	26.52	acres
Curve Number	70	-
Peak Rate Factor	484	-
Time of Concentration	0.3	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	334.02	micro g/g/mg/l
Isotherm Max - Nitrogen	5010.5	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	13600	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	14.96	ac-ft
Total Sediment Yield	2616	lbs
Total Sediment Yield (Clay)	552.8	lbs
Total Sediment Yield (Silt)	1158	lbs

Total Sediment Yield (Sand)	793.9	lbs
Total Sediment Yield (Small Agg.)	7.147	lbs
Total Sediment Yield (Large Agg.)	104.3	lbs
Sediment Concentration	13.18	mg/l
Peak Sediment Concentration	27.62	mg/l
Total Nitrogen Yield	58.35	lbs
Total Nitrogen Yield (Particulate)	25.09	lbs
Total Nitrogen Yield (Sorbed)	0.3705	lbs
Total Nitrogen Yield (Dissolved)	32.89	lbs
Nitrogen Concentration	0.2997	mg/l
Peak Nitrogen Concentration	0.6701	mg/l
Total Phosphorus Yield	8.864	lbs
Total Phosphorus Yield (Particulate)	3.811	lbs
Total Phosphorus Yield (Sorbed)	0.0001032	lbs
Total Phosphorus Yield (Dissolved)	5.052	lbs
Phosphorus Concentration	0.04421	mg/l
Peak Phosphorus Concentration	0.1032	mg/l
Total Bacteria Yield	1.222E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	3.073E+09	cfu
Total Bacteria Yield (Sorbed To Silt)	6.384E+09	cfu
Total Bacteria Yield (Planktonic)	1.212E+12	cfu
Bacteria Concentration	1470	cfu/100 ml
Peak Bacteria Concentration	3028	cfu/100 ml

Non-Routed Connector 50	
Name	Non-Routed Connector 50
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	14.96	ac-ft
Total Sediment Discharged	2616	lbs
Total Sediment Discharged (Clay)	552.8	lbs
Total Sediment Discharged (Silt)	1158	lbs
Total Sediment Discharged (Sand)	793.9	lbs
Total Sediment Discharged (Small Agg.)	7.147	lbs
Total Sediment Discharged (Large Agg.)	104.3	lbs
Sediment Concentration	13.18	mg/l
Peak Sediment Concentration	27.62	mg/l
Total Nitrogen Discharged	58.35	lbs
Total Nitrogen Discharged (Particulate)	25.09	lbs
Total Nitrogen Discharged (Sorbed)	0.3705	lbs
Total Nitrogen Discharged (Dissolved)	32.89	lbs
Nitrogen Concentration	0.2997	mg/l
Peak Nitrogen Concentration	0.6701	mg/l
Total Phosphorus Discharged	8.864	lbs
Total Phosphorus Discharged (Particulate)	3.811	lbs
Total Phosphorus Discharged (Sorbed)	0.0001032	lbs
Total Phosphorus Discharged (Dissolved)	5.052	lbs
Phosphorus Concentration	0.04421	mg/l
Peak Phosphorus Concentration	0.1032	mg/l
Total Bacteria Discharged	1.222E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.073E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.384E+09	cfu
Total Bacteria Discharged (Planktonic)	1.212E+12	cfu
Bacteria Concentration	1470	cfu/100 ml
Peak Bacteria Concentration	3028	cfu/100 ml

Trib2-04-11	
Name	Trib2-04-11
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	14.96	ac-ft
Total Sediment Discharged	2616	lbs
Total Sediment Discharged (Clay)	552.8	lbs
Total Sediment Discharged (Silt)	1158	lbs
Total Sediment Discharged (Sand)	793.9	lbs
Total Sediment Discharged (Small Agg.)	7.147	lbs
Total Sediment Discharged (Large Agg.)	104.3	lbs
Sediment Concentration	13.18	mg/l
Peak Sediment Concentration	27.62	mg/l
Total Nitrogen Discharged	58.35	lbs
Total Nitrogen Discharged (Particulate)	25.09	lbs
Total Nitrogen Discharged (Sorbed)	0.3705	lbs
Total Nitrogen Discharged (Dissolved)	32.89	lbs
Nitrogen Concentration	0.2997	mg/l
Peak Nitrogen Concentration	0.6701	mg/l
Total Phosphorus Discharged	8.864	lbs
Total Phosphorus Discharged (Particulate)	3.811	lbs
Total Phosphorus Discharged (Sorbed)	0.0001032	lbs
Total Phosphorus Discharged (Dissolved)	5.052	lbs
Phosphorus Concentration	0.04421	mg/l
Peak Phosphorus Concentration	0.1032	mg/l
Total Bacteria Discharged	1.222E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.073E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.384E+09	cfu
Total Bacteria Discharged (Planktonic)	1.212E+12	cfu
Bacteria Concentration	1470	cfu/100 ml
Peak Bacteria Concentration	3028	cfu/100 ml

Non-Routed Connector 51	
Name	Non-Routed Connector 51
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	14.96	ac-ft
Total Sediment Discharged	2616	lbs
Total Sediment Discharged (Clay)	552.8	lbs
Total Sediment Discharged (Silt)	1158	lbs
Total Sediment Discharged (Sand)	793.9	lbs
Total Sediment Discharged (Small Agg.)	7.147	lbs
Total Sediment Discharged (Large Agg.)	104.3	lbs
Sediment Concentration	13.18	mg/l
Peak Sediment Concentration	27.62	mg/l
Total Nitrogen Discharged	58.35	lbs
Total Nitrogen Discharged (Particulate)	25.09	lbs
Total Nitrogen Discharged (Sorbed)	0.3705	lbs
Total Nitrogen Discharged (Dissolved)	32.89	lbs
Nitrogen Concentration	0.2997	mg/l
Peak Nitrogen Concentration	0.6701	mg/l
Total Phosphorus Discharged	8.864	lbs
Total Phosphorus Discharged (Particulate)	3.811	lbs
Total Phosphorus Discharged (Sorbed)	0.0001032	lbs
Total Phosphorus Discharged (Dissolved)	5.052	lbs
Phosphorus Concentration	0.04421	mg/l
Peak Phosphorus Concentration	0.1032	mg/l
Total Bacteria Discharged	1.222E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.073E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.384E+09	cfu
Total Bacteria Discharged (Planktonic)	1.212E+12	cfu
Bacteria Concentration	1470	cfu/100 ml
Peak Bacteria Concentration	3028	cfu/100 ml

Trib2-04-10	
Name	Trib2-04-10
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	14.96	ac-ft
Total Sediment Discharged	2616	lbs
Total Sediment Discharged (Clay)	552.8	lbs
Total Sediment Discharged (Silt)	1158	lbs
Total Sediment Discharged (Sand)	793.9	lbs
Total Sediment Discharged (Small Agg.)	7.147	lbs
Total Sediment Discharged (Large Agg.)	104.3	lbs
Sediment Concentration	13.18	mg/l
Peak Sediment Concentration	27.62	mg/l
Total Nitrogen Discharged	58.35	lbs
Total Nitrogen Discharged (Particulate)	25.09	lbs
Total Nitrogen Discharged (Sorbed)	0.3705	lbs
Total Nitrogen Discharged (Dissolved)	32.89	lbs
Nitrogen Concentration	0.2997	mg/l
Peak Nitrogen Concentration	0.6701	mg/l
Total Phosphorus Discharged	8.864	lbs
Total Phosphorus Discharged (Particulate)	3.811	lbs
Total Phosphorus Discharged (Sorbed)	0.0001032	lbs
Total Phosphorus Discharged (Dissolved)	5.052	lbs
Phosphorus Concentration	0.04421	mg/l
Peak Phosphorus Concentration	0.1032	mg/l
Total Bacteria Discharged	1.222E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.073E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.384E+09	cfu
Total Bacteria Discharged (Planktonic)	1.212E+12	cfu
Bacteria Concentration	1470	cfu/100 ml
Peak Bacteria Concentration	3028	cfu/100 ml

Non-Routed Connector 52		
Name	Non-Routed Connector 52	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	14.96	ac-ft
Total Sediment Discharged	2616	lbs
Total Sediment Discharged (Clay)	552.8	lbs
Total Sediment Discharged (Silt)	1158	lbs
Total Sediment Discharged (Sand)	793.9	lbs
Total Sediment Discharged (Small Agg.)	7.147	lbs
Total Sediment Discharged (Large Agg.)	104.3	lbs
Sediment Concentration	13.18	mg/l
Peak Sediment Concentration	27.62	mg/l
Total Nitrogen Discharged	58.35	lbs
Total Nitrogen Discharged (Particulate)	25.09	lbs
Total Nitrogen Discharged (Sorbed)	0.3705	lbs
Total Nitrogen Discharged (Dissolved)	32.89	lbs
Nitrogen Concentration	0.2997	mg/l
Peak Nitrogen Concentration	0.6701	mg/l
Total Phosphorus Discharged	8.864	lbs
Total Phosphorus Discharged (Particulate)	3.811	lbs
Total Phosphorus Discharged (Sorbed)	0.0001032	lbs
Total Phosphorus Discharged (Dissolved)	5.052	lbs
Phosphorus Concentration	0.04421	mg/l
Peak Phosphorus Concentration	0.1032	mg/l
Total Bacteria Discharged	1.222E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.073E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.384E+09	cfu
Total Bacteria Discharged (Planktonic)	1.212E+12	cfu
Bacteria Concentration	1470	cfu/100 ml
Peak Bacteria Concentration	3028	cfu/100 ml

Basin_A

Name	Basin_A
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	386.5	acres
Curve Number	88	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.517	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	7485	ft
Slope	0.0062	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	329.95	acres
Curve Number	88	-
Peak Rate Factor	484	-
Time of Concentration	0.517	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	221.2	micro g/g/mg/l
Isotherm Max - Nitrogen	3708.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	792.9	ac-ft
Total Sediment Yield	1.369E+05	lbs
Total Sediment Yield (Clay)	3.326E+04	lbs
Total Sediment Yield (Silt)	7.015E+04	lbs

Total Sediment Yield (Sand)	3.148E+04	lbs
Total Sediment Yield (Small Agg.)	131.6	lbs
Total Sediment Yield (Large Agg.)	1920	lbs
Sediment Concentration	29.06	mg/l
Peak Sediment Concentration	78.95	mg/l
Total Nitrogen Yield	2803	lbs
Total Nitrogen Yield (Particulate)	1205	lbs
Total Nitrogen Yield (Sorbed)	9.795	lbs
Total Nitrogen Yield (Dissolved)	1588	lbs
Nitrogen Concentration	0.6683	mg/l
Peak Nitrogen Concentration	1.598	mg/l
Total Phosphorus Yield	194.1	lbs
Total Phosphorus Yield (Particulate)	83.45	lbs
Total Phosphorus Yield (Sorbed)	0.002358	lbs
Total Phosphorus Yield (Dissolved)	110.6	lbs
Phosphorus Concentration	0.04627	mg/l
Peak Phosphorus Concentration	0.1107	mg/l
Total Bacteria Yield	7.235E+13	cfu
Total Bacteria Yield (Sorbed To Clay)	1.476E+11	cfu
Total Bacteria Yield (Sorbed To Silt)	3.088E+11	cfu
Total Bacteria Yield (Planktonic)	7.189E+13	cfu
Bacteria Concentration	3803	cfu/100 ml
Peak Bacteria Concentration	9095	cfu/100 ml

Non-Routed Connector 25	
Name	Non-Routed Connector 25
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	792.9	ac-ft
Total Sediment Discharged	1.369E+05	lbs
Total Sediment Discharged (Clay)	3.326E+04	lbs
Total Sediment Discharged (Silt)	7.015E+04	lbs
Total Sediment Discharged (Sand)	3.148E+04	lbs
Total Sediment Discharged (Small Agg.)	131.6	lbs
Total Sediment Discharged (Large Agg.)	1920	lbs
Sediment Concentration	29.06	mg/l
Peak Sediment Concentration	78.95	mg/l
Total Nitrogen Discharged	2803	lbs
Total Nitrogen Discharged (Particulate)	1205	lbs
Total Nitrogen Discharged (Sorbed)	9.795	lbs
Total Nitrogen Discharged (Dissolved)	1588	lbs
Nitrogen Concentration	0.6683	mg/l
Peak Nitrogen Concentration	1.598	mg/l
Total Phosphorus Discharged	194.1	lbs
Total Phosphorus Discharged (Particulate)	83.45	lbs
Total Phosphorus Discharged (Sorbed)	0.002358	lbs
Total Phosphorus Discharged (Dissolved)	110.6	lbs
Phosphorus Concentration	0.04627	mg/l
Peak Phosphorus Concentration	0.1107	mg/l
Total Bacteria Discharged	7.235E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.476E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.088E+11	cfu
Total Bacteria Discharged (Planktonic)	7.189E+13	cfu
Bacteria Concentration	3803	cfu/100 ml
Peak Bacteria Concentration	9095	cfu/100 ml

Pond-01

Name	Pond-01
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Orifice Top Riser	-
Riser Shape	Rectangular	-
Riser Height	8	ft
Riser Length	5	ft
Riser Width	5	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	0.043	ft/ft
Barrel Length	61	ft
Barrel Diameter	36	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	8	ft
EMS Width	300	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	45.5	ac

Peak Stage	9.161	ft
Total Inflow Volume	807.9	ac-ft
Total Rainfall On BMP	229	ac-ft
Total Outflow Volume	489.2	ac-ft
Outlet Pipe Flow Volume	318.2	ac-ft
EMS Outflow Volume	6.47	ac-ft
Infiltration Volume	164.5	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	1.396E+05	lbs
Total Inflow Sediment Mass (Clay)	3.381E+04	lbs
Total Inflow Sediment Mass (Silt)	7.13E+04	lbs
Total Inflow Sediment Mass (Sand)	3.228E+04	lbs
Total Inflow Sediment Mass (Small Agg.)	138.8	lbs
Total Inflow Sediment Mass (Large Agg.)	2024	lbs
Priming Storm Sediment Mass In Permanent Pool	7.434E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	5.872E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	1.562E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	9.126E-12	lbs
Total Sediment Mass Discharged	1.258E+04	lbs
Total Sediment Mass Discharged (Clay)	9942	lbs
Total Sediment Mass Discharged (Silt)	2634	lbs
Total Sediment Mass Discharged (Sand)	5.556E-05	lbs
Total Sediment Mass Discharged (Small Agg.)	0.0005259	lbs
Total Sediment Mass Discharged (Large Agg.)	4.624E-06	lbs
Total Sediment Mass Trapped	8.704E+05	lbs
Total Sediment Mass Trapped (Clay)	6.111E+05	lbs
Total Sediment Mass Trapped (Silt)	2.249E+05	lbs
Total Sediment Mass Trapped (Sand)	3.228E+04	lbs
Total Sediment Mass Trapped (Small Agg.)	138.8	lbs

Total Sediment Mass Trapped (Large Agg.)	2024	lbs
Sediment Trapping Efficiency	98.58	%
Sediment Trapping Efficiency (Clay)	98.4	%
Sediment Trapping Efficiency (Silt)	98.84	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	100	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	1.232E+04	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	9743	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	2581	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	2.941E-05	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0.0002812	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	2.394E-06	lbs
EMS Sediment Mass Discharged	251.8	lbs
EMS Sediment Mass Discharged (Clay)	199.1	lbs
EMS Sediment Mass Discharged (Silt)	52.68	lbs
EMS Sediment Mass Discharged (Sand)	2.615E-05	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.0002446	lbs
EMS Sediment Mass Discharged (Large Agg.)	2.23E-06	lbs
Sediment Concentration	7.376	mg/l
Peak Sediment Concentration	7.379	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	2862	lbs
Total Nitrogen Mass Inflow (Particulate)	1230	lbs
Total Nitrogen Mass Inflow (Sorbed)	10.17	lbs
Total Nitrogen Mass Inflow (Dissolved)	1621	lbs
Priming Storm Nitrogen Mass In Permanent Pool	5.566E+04	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	2.327E+04	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	192.7	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	3.22E+04	lbs
Total Nitrogen Mass Discharged	950.2	lbs
Total Nitrogen Mass Discharged (Particulate)	397.3	lbs
Total Nitrogen Mass Discharged (Sorbed)	3.289	lbs

Total Nitrogen Mass Discharged (Dissolved)	549.6	lbs
Total Nitrogen Mass Trapped	5.757E+04	lbs
Total Nitrogen Mass Trapped (Particulate)	2.41E+04	lbs
Total Nitrogen Mass Trapped (Sorbed)	199.6	lbs
Total Nitrogen Mass Trapped (Dissolved)	3.328E+04	lbs
Nitrogen Trapping Efficiency	98.38	%
Nitrogen Trapping Efficiency (Particulate)	98.38	%
Nitrogen Trapping Efficiency (Sorbed)	98.38	%
Nitrogen Trapping Efficiency (Dissolved)	98.38	%
Outlet Pipe Nitrogen Mass Discharged	931.2	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	389.3	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	3.224	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	538.6	lbs
EMS Nitrogen Mass Discharged	19.02	lbs
EMS Nitrogen Mass Discharged (Particulate)	7.957	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.06578	lbs
EMS Nitrogen Mass Discharged (Dissolved)	11	lbs
Nitrogen Concentration	0.5524	mg/l
Peak Nitrogen Concentration	0.5526	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	202.9	lbs
Total Phosphorus Mass Inflow (Particulate)	87.26	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.002461	lbs
Total Phosphorus Mass Inflow (Dissolved)	115.7	lbs
Priming Storm Phosphorus Mass In Permanent Pool	4120	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	1722	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.04726	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	2398	lbs
Total Phosphorus Mass Discharged	70.32	lbs
Total Phosphorus Mass Discharged (Particulate)	29.4	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.0008068	lbs
Total Phosphorus Mass Discharged (Dissolved)	40.92	lbs
Total Phosphorus Mass Trapped	4253	lbs

Total Phosphorus Mass Trapped (Particulate)	1780	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.04892	lbs
Total Phosphorus Mass Trapped (Dissolved)	2473	lbs
Phosphorus Trapping Efficiency	98.37	%
Phosphorus Trapping Efficiency (Particulate)	98.37	%
Phosphorus Trapping Efficiency (Sorbed)	98.38	%
Phosphorus Trapping Efficiency (Dissolved)	98.37	%
Outlet Pipe Phosphorus Mass Discharged	68.91	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	28.81	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0.0007907	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	40.1	lbs
EMS Phosphorus Mass Discharged	1.408	lbs
EMS Phosphorus Mass Discharged (Particulate)	0.5888	lbs
EMS Phosphorus Mass Discharged (Sorbed)	1.613E-05	lbs
EMS Phosphorus Mass Discharged (Dissolved)	0.8188	lbs
Phosphorus Concentration	0.04089	mg/l
Peak Phosphorus Concentration	0.0409	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	7.357E+13	cfu
Total Bacteria Loading (Sorbed To Clay)	1.502E+11	cfu
Total Bacteria Loading (Sorbed To Silt)	3.142E+11	cfu
Total Bacteria Loading (Planktonic)	7.311E+13	cfu
Priming Storm Bacteria In Permanent Pool	3.27E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	2.583E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	6.87E+11	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	3.797E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.41E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.281E+10	cfu
Total Bacteria Discharged (Planktonic)	3.228E+11	cfu
Total Bacteria Trapped	7.646E+13	cfu

Total Bacteria Trapped (Sorbed To Clay)	2.689E+12	cfu
Total Bacteria Trapped (Sorbed To Silt)	9.884E+11	cfu
Total Bacteria Trapped (Planktonic)	7.278E+13	cfu
Bacteria Trapping Efficiency	99.51	%
Bacteria Trapping Efficiency (Sorbed To Clay)	98.39	%
Bacteria Trapping Efficiency (Sorbed To Silt)	98.72	%
Bacteria Trapping Efficiency (Planktonic)	99.56	%
Outlet Pipe Bacteria Discharged	3.622E+11	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	4.322E+10	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	1.253E+10	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	3.064E+11	cfu
EMS Bacteria Discharged	1.755E+10	cfu
EMS Bacteria Discharged (Sorbed To Clay)	8.817E+08	cfu
EMS Bacteria Discharged (Sorbed To Silt)	2.872E+08	cfu
EMS Bacteria Discharged (Planktonic)	1.638E+10	cfu
Bacteria Concentration	8.08	cfu/100 ml
Peak Bacteria Concentration	12.51	cfu/100 ml

RICHLAND COUNTY
1799
SOUTH CAROLINA

Non-Routed Connector 53	
Name	Non-Routed Connector 53
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	324.7	ac-ft
Total Sediment Discharged	1.258E+04	lbs
Total Sediment Discharged (Clay)	9942	lbs
Total Sediment Discharged (Silt)	2634	lbs
Total Sediment Discharged (Sand)	5.556E-05	lbs
Total Sediment Discharged (Small Agg.)	0.0005259	lbs
Total Sediment Discharged (Large Agg.)	4.624E-06	lbs
Sediment Concentration	7.376	mg/l
Peak Sediment Concentration	7.379	mg/l
Total Nitrogen Discharged	950.1	lbs
Total Nitrogen Discharged (Particulate)	397.3	lbs
Total Nitrogen Discharged (Sorbed)	3.289	lbs
Total Nitrogen Discharged (Dissolved)	549.6	lbs
Nitrogen Concentration	0.5524	mg/l
Peak Nitrogen Concentration	0.5526	mg/l
Total Phosphorus Discharged	70.32	lbs
Total Phosphorus Discharged (Particulate)	29.4	lbs
Total Phosphorus Discharged (Sorbed)	0.0008068	lbs
Total Phosphorus Discharged (Dissolved)	40.92	lbs
Phosphorus Concentration	0.04089	mg/l
Peak Phosphorus Concentration	0.0409	mg/l
Total Bacteria Discharged	3.797E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.41E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.281E+10	cfu
Total Bacteria Discharged (Planktonic)	3.228E+11	cfu
Bacteria Concentration	8.08	cfu/100 ml
Peak Bacteria Concentration	12.51	cfu/100 ml

Trib2-03-01	
Name	Trib2-03-01
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	324.7	ac-ft
Total Sediment Discharged	1.258E+04	lbs
Total Sediment Discharged (Clay)	9942	lbs
Total Sediment Discharged (Silt)	2634	lbs
Total Sediment Discharged (Sand)	5.556E-05	lbs
Total Sediment Discharged (Small Agg.)	0.0005259	lbs
Total Sediment Discharged (Large Agg.)	4.624E-06	lbs
Sediment Concentration	7.376	mg/l
Peak Sediment Concentration	7.379	mg/l
Total Nitrogen Discharged	950.1	lbs
Total Nitrogen Discharged (Particulate)	397.3	lbs
Total Nitrogen Discharged (Sorbed)	3.289	lbs
Total Nitrogen Discharged (Dissolved)	549.6	lbs
Nitrogen Concentration	0.5524	mg/l
Peak Nitrogen Concentration	0.5526	mg/l
Total Phosphorus Discharged	70.32	lbs
Total Phosphorus Discharged (Particulate)	29.4	lbs
Total Phosphorus Discharged (Sorbed)	0.0008068	lbs
Total Phosphorus Discharged (Dissolved)	40.92	lbs
Phosphorus Concentration	0.04089	mg/l
Peak Phosphorus Concentration	0.0409	mg/l
Total Bacteria Discharged	3.797E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.41E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.281E+10	cfu
Total Bacteria Discharged (Planktonic)	3.228E+11	cfu
Bacteria Concentration	8.08	cfu/100 ml
Peak Bacteria Concentration	12.51	cfu/100 ml

Non-Routed Connector 54	
Name	Non-Routed Connector 54
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	324.7	ac-ft
Total Sediment Discharged	1.258E+04	lbs
Total Sediment Discharged (Clay)	9942	lbs
Total Sediment Discharged (Silt)	2634	lbs
Total Sediment Discharged (Sand)	5.556E-05	lbs
Total Sediment Discharged (Small Agg.)	0.0005259	lbs
Total Sediment Discharged (Large Agg.)	4.624E-06	lbs
Sediment Concentration	7.376	mg/l
Peak Sediment Concentration	7.379	mg/l
Total Nitrogen Discharged	950.1	lbs
Total Nitrogen Discharged (Particulate)	397.3	lbs
Total Nitrogen Discharged (Sorbed)	3.289	lbs
Total Nitrogen Discharged (Dissolved)	549.6	lbs
Nitrogen Concentration	0.5524	mg/l
Peak Nitrogen Concentration	0.5526	mg/l
Total Phosphorus Discharged	70.32	lbs
Total Phosphorus Discharged (Particulate)	29.4	lbs
Total Phosphorus Discharged (Sorbed)	0.0008068	lbs
Total Phosphorus Discharged (Dissolved)	40.92	lbs
Phosphorus Concentration	0.04089	mg/l
Peak Phosphorus Concentration	0.0409	mg/l
Total Bacteria Discharged	3.797E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.41E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.281E+10	cfu
Total Bacteria Discharged (Planktonic)	3.228E+11	cfu
Bacteria Concentration	8.08	cfu/100 ml
Peak Bacteria Concentration	12.51	cfu/100 ml

Trib2-00-04	
Name	Trib2-00-04
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1199	ac-ft
Total Sediment Discharged	1.685E+05	lbs
Total Sediment Discharged (Clay)	1.658E+05	lbs
Total Sediment Discharged (Silt)	2634	lbs
Total Sediment Discharged (Sand)	5.556E-05	lbs
Total Sediment Discharged (Small Agg.)	0.0005259	lbs
Total Sediment Discharged (Large Agg.)	4.624E-06	lbs
Sediment Concentration	12.97	mg/l
Peak Sediment Concentration	14.43	mg/l
Total Nitrogen Discharged	2135	lbs
Total Nitrogen Discharged (Particulate)	557	lbs
Total Nitrogen Discharged (Sorbed)	5.314	lbs
Total Nitrogen Discharged (Dissolved)	1572	lbs
Nitrogen Concentration	0.4895	mg/l
Peak Nitrogen Concentration	0.5526	mg/l
Total Phosphorus Discharged	277.2	lbs
Total Phosphorus Discharged (Particulate)	57.11	lbs
Total Phosphorus Discharged (Sorbed)	0.008439	lbs
Total Phosphorus Discharged (Dissolved)	220.1	lbs
Phosphorus Concentration	0.04171	mg/l
Peak Phosphorus Concentration	0.04219	mg/l
Total Bacteria Discharged	1.887E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.225E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.903E+08	cfu
Total Bacteria Discharged (Planktonic)	1.875E+12	cfu
Bacteria Concentration	21.58	cfu/100 ml
Peak Bacteria Concentration	29.63	cfu/100 ml

Non-Routed Connector 55	
Name	Non-Routed Connector 55
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1199	ac-ft
Total Sediment Discharged	1.685E+05	lbs
Total Sediment Discharged (Clay)	1.658E+05	lbs
Total Sediment Discharged (Silt)	2634	lbs
Total Sediment Discharged (Sand)	5.556E-05	lbs
Total Sediment Discharged (Small Agg.)	0.0005259	lbs
Total Sediment Discharged (Large Agg.)	4.624E-06	lbs
Sediment Concentration	12.97	mg/l
Peak Sediment Concentration	14.43	mg/l
Total Nitrogen Discharged	2135	lbs
Total Nitrogen Discharged (Particulate)	557	lbs
Total Nitrogen Discharged (Sorbed)	5.314	lbs
Total Nitrogen Discharged (Dissolved)	1572	lbs
Nitrogen Concentration	0.4895	mg/l
Peak Nitrogen Concentration	0.5526	mg/l
Total Phosphorus Discharged	277.2	lbs
Total Phosphorus Discharged (Particulate)	57.11	lbs
Total Phosphorus Discharged (Sorbed)	0.008439	lbs
Total Phosphorus Discharged (Dissolved)	220.1	lbs
Phosphorus Concentration	0.04171	mg/l
Peak Phosphorus Concentration	0.04219	mg/l
Total Bacteria Discharged	1.887E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.225E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.903E+08	cfu
Total Bacteria Discharged (Planktonic)	1.875E+12	cfu
Bacteria Concentration	21.58	cfu/100 ml
Peak Bacteria Concentration	29.63	cfu/100 ml

Basin_22

Name	Basin_22
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	41.46	acres
Curve Number	60	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.217	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	1825	ft
Slope	0.035	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	0.66	acres
Curve Number	60	-
Peak Rate Factor	484	-
Time of Concentration	0.217	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5.748	ac-ft
Total Sediment Yield	887	lbs
Total Sediment Yield (Clay)	14.15	lbs
Total Sediment Yield (Silt)	10.84	lbs

Total Sediment Yield (Sand)	672.7	lbs
Total Sediment Yield (Small Agg.)	12.14	lbs
Total Sediment Yield (Large Agg.)	177.2	lbs
Sediment Concentration	7.82	mg/l
Peak Sediment Concentration	15.82	mg/l
Total Nitrogen Yield	15.22	lbs
Total Nitrogen Yield (Particulate)	6.544	lbs
Total Nitrogen Yield (Sorbed)	0.006069	lbs
Total Nitrogen Yield (Dissolved)	8.669	lbs
Nitrogen Concentration	0.1612	mg/l
Peak Nitrogen Concentration	0.2945	mg/l
Total Phosphorus Yield	3.108	lbs
Total Phosphorus Yield (Particulate)	1.336	lbs
Total Phosphorus Yield (Sorbed)	1.878E-06	lbs
Total Phosphorus Yield (Dissolved)	1.771	lbs
Phosphorus Concentration	0.02516	mg/l
Peak Phosphorus Concentration	0.04595	mg/l
Total Bacteria Yield	7.581E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	3.142E+07	cfu
Total Bacteria Yield (Sorbed To Silt)	2.081E+07	cfu
Total Bacteria Yield (Planktonic)	7.576E+10	cfu
Bacteria Concentration	440.9	cfu/100 ml
Peak Bacteria Concentration	809.2	cfu/100 ml

Non-Routed Connector 20		
Name	Non-Routed Connector 20	
Description		
Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5.748	ac-ft
Total Sediment Discharged	887	lbs
Total Sediment Discharged (Clay)	14.15	lbs
Total Sediment Discharged (Silt)	10.84	lbs
Total Sediment Discharged (Sand)	672.7	lbs
Total Sediment Discharged (Small Agg.)	12.14	lbs
Total Sediment Discharged (Large Agg.)	177.2	lbs
Sediment Concentration	7.82	mg/l
Peak Sediment Concentration	15.82	mg/l
Total Nitrogen Discharged	15.22	lbs
Total Nitrogen Discharged (Particulate)	6.544	lbs
Total Nitrogen Discharged (Sorbed)	0.006069	lbs
Total Nitrogen Discharged (Dissolved)	8.669	lbs
Nitrogen Concentration	0.1612	mg/l
Peak Nitrogen Concentration	0.2945	mg/l
Total Phosphorus Discharged	3.108	lbs
Total Phosphorus Discharged (Particulate)	1.336	lbs
Total Phosphorus Discharged (Sorbed)	1.878E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.771	lbs
Phosphorus Concentration	0.02516	mg/l
Peak Phosphorus Concentration	0.04595	mg/l
Total Bacteria Discharged	7.581E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.142E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.081E+07	cfu
Total Bacteria Discharged (Planktonic)	7.576E+10	cfu
Bacteria Concentration	440.9	cfu/100 ml
Peak Bacteria Concentration	809.2	cfu/100 ml

Trib2-00-03	
Name	Trib2-00-03
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1222	ac-ft
Total Sediment Discharged	1.721E+05	lbs
Total Sediment Discharged (Clay)	1.659E+05	lbs
Total Sediment Discharged (Silt)	2658	lbs
Total Sediment Discharged (Sand)	2765	lbs
Total Sediment Discharged (Small Agg.)	50.04	lbs
Total Sediment Discharged (Large Agg.)	730	lbs
Sediment Concentration	12.98	mg/l
Peak Sediment Concentration	15.13	mg/l
Total Nitrogen Discharged	2243	lbs
Total Nitrogen Discharged (Particulate)	603.6	lbs
Total Nitrogen Discharged (Sorbed)	5.342	lbs
Total Nitrogen Discharged (Dissolved)	1634	lbs
Nitrogen Concentration	0.4912	mg/l
Peak Nitrogen Concentration	0.6036	mg/l
Total Phosphorus Discharged	292	lbs
Total Phosphorus Discharged (Particulate)	63.46	lbs
Total Phosphorus Discharged (Sorbed)	0.008447	lbs
Total Phosphorus Discharged (Dissolved)	228.5	lbs
Phosphorus Concentration	0.04196	mg/l
Peak Phosphorus Concentration	0.05112	mg/l
Total Bacteria Discharged	6.203E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.398E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.81E+08	cfu
Total Bacteria Discharged (Planktonic)	6.168E+12	cfu
Bacteria Concentration	46.63	cfu/100 ml
Peak Bacteria Concentration	873.5	cfu/100 ml

Non-Routed Connector 57	
Name	Non-Routed Connector 57
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1222	ac-ft
Total Sediment Discharged	1.721E+05	lbs
Total Sediment Discharged (Clay)	1.659E+05	lbs
Total Sediment Discharged (Silt)	2658	lbs
Total Sediment Discharged (Sand)	2765	lbs
Total Sediment Discharged (Small Agg.)	50.04	lbs
Total Sediment Discharged (Large Agg.)	730	lbs
Sediment Concentration	12.98	mg/l
Peak Sediment Concentration	15.13	mg/l
Total Nitrogen Discharged	2243	lbs
Total Nitrogen Discharged (Particulate)	603.6	lbs
Total Nitrogen Discharged (Sorbed)	5.342	lbs
Total Nitrogen Discharged (Dissolved)	1634	lbs
Nitrogen Concentration	0.4912	mg/l
Peak Nitrogen Concentration	0.6036	mg/l
Total Phosphorus Discharged	292	lbs
Total Phosphorus Discharged (Particulate)	63.46	lbs
Total Phosphorus Discharged (Sorbed)	0.008447	lbs
Total Phosphorus Discharged (Dissolved)	228.5	lbs
Phosphorus Concentration	0.04196	mg/l
Peak Phosphorus Concentration	0.05112	mg/l
Total Bacteria Discharged	6.203E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.398E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.81E+08	cfu
Total Bacteria Discharged (Planktonic)	6.168E+12	cfu
Bacteria Concentration	46.63	cfu/100 ml
Peak Bacteria Concentration	873.5	cfu/100 ml

Basin_23

Name	Basin_23
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	49.94	acres
Curve Number	67	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.35	hrs

Sediment Inputs

Parameter	Value	Units
Length	1081	ft
Slope	0.045	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	11.25	ac-ft
Total Sediment Yield	1964	lbs
Total Sediment Yield (Clay)	20.42	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	1515	lbs
Total Sediment Yield (Small Agg.)	27.49	lbs
Total Sediment Yield (Large Agg.)	401.1	lbs
Sediment Concentration	4.237	mg/l
Peak Sediment Concentration	9.919	mg/l
Total Nitrogen Yield	29.67	lbs
Total Nitrogen Yield (Particulate)	12.76	lbs
Total Nitrogen Yield (Sorbed)	0.007944	lbs
Total Nitrogen Yield (Dissolved)	16.91	lbs
Nitrogen Concentration	0.1211	mg/l
Peak Nitrogen Concentration	0.241	mg/l
Total Phosphorus Yield	6.118	lbs
Total Phosphorus Yield (Particulate)	2.631	lbs
Total Phosphorus Yield (Sorbed)	3.322E-06	lbs
Total Phosphorus Yield (Dissolved)	3.488	lbs
Phosphorus Concentration	0.02496	mg/l
Peak Phosphorus Concentration	0.04969	mg/l
Total Bacteria Yield	1.387E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	1.387E+11	cfu
Bacteria Concentration	124.8	cfu/100 ml
Peak Bacteria Concentration	248.4	cfu/100 ml

Non-Routed Connector 18	
Name	Non-Routed Connector 18
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	11.25	ac-ft
Total Sediment Discharged	1964	lbs
Total Sediment Discharged (Clay)	20.42	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	1515	lbs
Total Sediment Discharged (Small Agg.)	27.49	lbs
Total Sediment Discharged (Large Agg.)	401.1	lbs
Sediment Concentration	4.237	mg/l
Peak Sediment Concentration	9.919	mg/l
Total Nitrogen Discharged	29.67	lbs
Total Nitrogen Discharged (Particulate)	12.76	lbs
Total Nitrogen Discharged (Sorbed)	0.007944	lbs
Total Nitrogen Discharged (Dissolved)	16.91	lbs
Nitrogen Concentration	0.1211	mg/l
Peak Nitrogen Concentration	0.241	mg/l
Total Phosphorus Discharged	6.118	lbs
Total Phosphorus Discharged (Particulate)	2.631	lbs
Total Phosphorus Discharged (Sorbed)	3.322E-06	lbs
Total Phosphorus Discharged (Dissolved)	3.488	lbs
Phosphorus Concentration	0.02496	mg/l
Peak Phosphorus Concentration	0.04969	mg/l
Total Bacteria Discharged	1.387E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.387E+11	cfu
Bacteria Concentration	124.8	cfu/100 ml
Peak Bacteria Concentration	248.4	cfu/100 ml

Trib2-00-02

Name	Trib2-00-02
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	15	ft
Riser Length	4	ft
Riser Width	4	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	1	ft/ft
Barrel Length	100	ft
Barrel Diameter	6	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	8	ft
EMS Width	80	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	7.97	ac

Peak Stage	13	ft
Total Inflow Volume	1233	ac-ft
Total Rainfall On BMP	40.11	ac-ft
Total Outflow Volume	3187	ac-ft
Outlet Pipe Flow Volume	0	ac-ft
EMS Outflow Volume	3170	ac-ft
Infiltration Volume	16.58	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	1.74E+05	lbs
Total Inflow Sediment Mass (Clay)	1.659E+05	lbs
Total Inflow Sediment Mass (Silt)	2658	lbs
Total Inflow Sediment Mass (Sand)	4280	lbs
Total Inflow Sediment Mass (Small Agg.)	77.53	lbs
Total Inflow Sediment Mass (Large Agg.)	1131	lbs
Priming Storm Sediment Mass In Permanent Pool	2.593E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	2.593E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	1.167E+05	lbs
Total Sediment Mass Discharged (Clay)	1.158E+05	lbs
Total Sediment Mass Discharged (Silt)	917.6	lbs
Total Sediment Mass Discharged (Sand)	5.737	lbs
Total Sediment Mass Discharged (Small Agg.)	15.04	lbs
Total Sediment Mass Discharged (Large Agg.)	1.341	lbs
Total Sediment Mass Trapped	8.331E+04	lbs
Total Sediment Mass Trapped (Clay)	7.611E+04	lbs
Total Sediment Mass Trapped (Silt)	1741	lbs
Total Sediment Mass Trapped (Sand)	4274	lbs
Total Sediment Mass Trapped (Small Agg.)	62.49	lbs

Total Sediment Mass Trapped (Large Agg.)	1130	lbs
Sediment Trapping Efficiency	41.66	%
Sediment Trapping Efficiency (Clay)	39.67	%
Sediment Trapping Efficiency (Silt)	65.48	%
Sediment Trapping Efficiency (Sand)	99.87	%
Sediment Trapping Efficiency (Small Agg.)	80.6	%
Sediment Trapping Efficiency (Large Agg.)	99.88	%
Outlet Pipe Sediment Mass Discharged	0	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	0	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	0	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0	lbs
EMS Sediment Mass Discharged	1.167E+05	lbs
EMS Sediment Mass Discharged (Clay)	1.158E+05	lbs
EMS Sediment Mass Discharged (Silt)	917.6	lbs
EMS Sediment Mass Discharged (Sand)	5.737	lbs
EMS Sediment Mass Discharged (Small Agg.)	15.04	lbs
EMS Sediment Mass Discharged (Large Agg.)	1.341	lbs
Sediment Concentration	3.778	mg/l
Peak Sediment Concentration	9.402	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	2273	lbs
Total Nitrogen Mass Inflow (Particulate)	616.4	lbs
Total Nitrogen Mass Inflow (Sorbed)	5.35	lbs
Total Nitrogen Mass Inflow (Dissolved)	1651	lbs
Priming Storm Nitrogen Mass In Permanent Pool	1.668E+04	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	5918	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	49.01	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1.071E+04	lbs
Total Nitrogen Mass Discharged	7571	lbs
Total Nitrogen Mass Discharged (Particulate)	2524	lbs
Total Nitrogen Mass Discharged (Sorbed)	21.06	lbs

Total Nitrogen Mass Discharged (Dissolved)	5026	lbs
Total Nitrogen Mass Trapped	1.14E+04	lbs
Total Nitrogen Mass Trapped (Particulate)	4019	lbs
Total Nitrogen Mass Trapped (Sorbed)	33.38	lbs
Total Nitrogen Mass Trapped (Dissolved)	7349	lbs
Nitrogen Trapping Efficiency	60.1	%
Nitrogen Trapping Efficiency (Particulate)	61.42	%
Nitrogen Trapping Efficiency (Sorbed)	61.32	%
Nitrogen Trapping Efficiency (Dissolved)	59.39	%
Outlet Pipe Nitrogen Mass Discharged	7.21E-14	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	7.21E-14	lbs
EMS Nitrogen Mass Discharged	7571	lbs
EMS Nitrogen Mass Discharged (Particulate)	2524	lbs
EMS Nitrogen Mass Discharged (Sorbed)	21.06	lbs
EMS Nitrogen Mass Discharged (Dissolved)	5026	lbs
Nitrogen Concentration	0.4739	mg/l
Peak Nitrogen Concentration	0.5158	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	298.1	lbs
Total Phosphorus Mass Inflow (Particulate)	66.09	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.00845	lbs
Total Phosphorus Mass Inflow (Dissolved)	232	lbs
Priming Storm Phosphorus Mass In Permanent Pool	1237	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	438.2	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.01209	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	799.2	lbs
Total Phosphorus Mass Discharged	660.9	lbs
Total Phosphorus Mass Discharged (Particulate)	202.7	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.01061	lbs
Total Phosphorus Mass Discharged (Dissolved)	458.1	lbs
Total Phosphorus Mass Trapped	876.4	lbs

Total Phosphorus Mass Trapped (Particulate)	302.2	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.00995	lbs
Total Phosphorus Mass Trapped (Dissolved)	574.2	lbs
Phosphorus Trapping Efficiency	57.01	%
Phosphorus Trapping Efficiency (Particulate)	59.85	%
Phosphorus Trapping Efficiency (Sorbed)	48.39	%
Phosphorus Trapping Efficiency (Dissolved)	55.62	%
Outlet Pipe Phosphorus Mass Discharged	-1.946E-15	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	-1.946E-15	lbs
EMS Phosphorus Mass Discharged	660.9	lbs
EMS Phosphorus Mass Discharged (Particulate)	202.7	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0.01061	lbs
EMS Phosphorus Mass Discharged (Dissolved)	458.1	lbs
Phosphorus Concentration	0.03798	mg/l
Peak Phosphorus Concentration	0.04144	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	6.342E+12	cfu
Total Bacteria Loading (Sorbed To Clay)	3.416E+10	cfu
Total Bacteria Loading (Sorbed To Silt)	8.777E+08	cfu
Total Bacteria Loading (Planktonic)	6.307E+12	cfu
Priming Storm Bacteria In Permanent Pool	1.026E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	1.026E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	0	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	5.561E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.041E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	7.762E+08	cfu
Total Bacteria Discharged (Planktonic)	5.156E+12	cfu
Total Bacteria Trapped	1.808E+12	cfu

Total Bacteria Trapped (Sorbed To Clay)	6.577E+11	cfu
Total Bacteria Trapped (Sorbed To Silt)	1.016E+08	cfu
Total Bacteria Trapped (Planktonic)	1.15E+12	cfu
Bacteria Trapping Efficiency	24.53	%
Bacteria Trapping Efficiency (Sorbed To Clay)	61.94	%
Bacteria Trapping Efficiency (Sorbed To Silt)	11.57	%
Bacteria Trapping Efficiency (Planktonic)	18.24	%
Outlet Pipe Bacteria Discharged	5.844E-06	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	0	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	0	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	5.844E-06	cfu
EMS Bacteria Discharged	5.561E+12	cfu
EMS Bacteria Discharged (Sorbed To Clay)	4.041E+11	cfu
EMS Bacteria Discharged (Sorbed To Silt)	7.762E+08	cfu
EMS Bacteria Discharged (Planktonic)	5.156E+12	cfu
Bacteria Concentration	29.16	cfu/100 ml
Peak Bacteria Concentration	107.6	cfu/100 ml

RICHLAND COUNTY
SOUTH CAROLINA
1799

Non-Routed Connector 58	
Name	Non-Routed Connector 58
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	3170	ac-ft
Total Sediment Discharged	1.167E+05	lbs
Total Sediment Discharged (Clay)	1.158E+05	lbs
Total Sediment Discharged (Silt)	917.6	lbs
Total Sediment Discharged (Sand)	5.737	lbs
Total Sediment Discharged (Small Agg.)	15.04	lbs
Total Sediment Discharged (Large Agg.)	1.341	lbs
Sediment Concentration	3.778	mg/l
Peak Sediment Concentration	9.402	mg/l
Total Nitrogen Discharged	7571	lbs
Total Nitrogen Discharged (Particulate)	2524	lbs
Total Nitrogen Discharged (Sorbed)	21.06	lbs
Total Nitrogen Discharged (Dissolved)	5026	lbs
Nitrogen Concentration	0.4739	mg/l
Peak Nitrogen Concentration	0.5158	mg/l
Total Phosphorus Discharged	660.9	lbs
Total Phosphorus Discharged (Particulate)	202.7	lbs
Total Phosphorus Discharged (Sorbed)	0.01061	lbs
Total Phosphorus Discharged (Dissolved)	458.1	lbs
Phosphorus Concentration	0.03798	mg/l
Peak Phosphorus Concentration	0.04144	mg/l
Total Bacteria Discharged	5.561E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.041E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	7.762E+08	cfu
Total Bacteria Discharged (Planktonic)	5.156E+12	cfu
Bacteria Concentration	29.16	cfu/100 ml
Peak Bacteria Concentration	107.6	cfu/100 ml

Trib2-00-01	
Name	Trib2-00-01
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	3483	ac-ft
Total Sediment Discharged	1.266E+05	lbs
Total Sediment Discharged (Clay)	1.227E+05	lbs
Total Sediment Discharged (Silt)	3894	lbs
Total Sediment Discharged (Sand)	5.739	lbs
Total Sediment Discharged (Small Agg.)	15.49	lbs
Total Sediment Discharged (Large Agg.)	1.342	lbs
Sediment Concentration	3.687	mg/l
Peak Sediment Concentration	13.01	mg/l
Total Nitrogen Discharged	8349	lbs
Total Nitrogen Discharged (Particulate)	2804	lbs
Total Nitrogen Discharged (Sorbed)	22.06	lbs
Total Nitrogen Discharged (Dissolved)	5523	lbs
Nitrogen Concentration	0.4748	mg/l
Peak Nitrogen Concentration	0.5369	mg/l
Total Phosphorus Discharged	714.8	lbs
Total Phosphorus Discharged (Particulate)	222.1	lbs
Total Phosphorus Discharged (Sorbed)	0.011	lbs
Total Phosphorus Discharged (Dissolved)	492.6	lbs
Phosphorus Concentration	0.03763	mg/l
Peak Phosphorus Concentration	0.04217	mg/l
Total Bacteria Discharged	6.278E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.575E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.75E+08	cfu
Total Bacteria Discharged (Planktonic)	6.261E+12	cfu
Bacteria Concentration	25.85	cfu/100 ml
Peak Bacteria Concentration	87.22	cfu/100 ml

Non-Routed Connector 59	
Name	Non-Routed Connector 59
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	3483	ac-ft
Total Sediment Discharged	1.266E+05	lbs
Total Sediment Discharged (Clay)	1.227E+05	lbs
Total Sediment Discharged (Silt)	3894	lbs
Total Sediment Discharged (Sand)	5.739	lbs
Total Sediment Discharged (Small Agg.)	15.49	lbs
Total Sediment Discharged (Large Agg.)	1.342	lbs
Sediment Concentration	3.687	mg/l
Peak Sediment Concentration	13.01	mg/l
Total Nitrogen Discharged	8349	lbs
Total Nitrogen Discharged (Particulate)	2804	lbs
Total Nitrogen Discharged (Sorbed)	22.06	lbs
Total Nitrogen Discharged (Dissolved)	5523	lbs
Nitrogen Concentration	0.4748	mg/l
Peak Nitrogen Concentration	0.5369	mg/l
Total Phosphorus Discharged	714.8	lbs
Total Phosphorus Discharged (Particulate)	222.1	lbs
Total Phosphorus Discharged (Sorbed)	0.011	lbs
Total Phosphorus Discharged (Dissolved)	492.6	lbs
Phosphorus Concentration	0.03763	mg/l
Peak Phosphorus Concentration	0.04217	mg/l
Total Bacteria Discharged	6.278E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.575E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.75E+08	cfu
Total Bacteria Discharged (Planktonic)	6.261E+12	cfu
Bacteria Concentration	25.85	cfu/100 ml
Peak Bacteria Concentration	87.22	cfu/100 ml

Basin_26

Name	Basin_26
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	29.94	acres
Curve Number	63	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.417	hrs

Sediment Inputs

Parameter	Value	Units
Length	1922	ft
Slope	0.056	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5.098	ac-ft
Total Sediment Yield	1387	lbs
Total Sediment Yield (Clay)	14.43	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	1070	lbs
Total Sediment Yield (Small Agg.)	19.42	lbs
Total Sediment Yield (Large Agg.)	283.3	lbs
Sediment Concentration	5.378	mg/l
Peak Sediment Concentration	12.22	mg/l
Total Nitrogen Yield	13.45	lbs
Total Nitrogen Yield (Particulate)	5.782	lbs
Total Nitrogen Yield (Sorbed)	0.005454	lbs
Total Nitrogen Yield (Dissolved)	7.66	lbs
Nitrogen Concentration	0.1042	mg/l
Peak Nitrogen Concentration	0.1968	mg/l
Total Phosphorus Yield	2.773	lbs
Total Phosphorus Yield (Particulate)	1.192	lbs
Total Phosphorus Yield (Sorbed)	2.284E-06	lbs
Total Phosphorus Yield (Dissolved)	1.58	lbs
Phosphorus Concentration	0.02148	mg/l
Peak Phosphorus Concentration	0.04058	mg/l
Total Bacteria Yield	6.286E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	6.286E+10	cfu
Bacteria Concentration	107.3	cfu/100 ml
Peak Bacteria Concentration	202.8	cfu/100 ml

Non-Routed Connector 16	
Name	Non-Routed Connector 16
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5.098	ac-ft
Total Sediment Discharged	1387	lbs
Total Sediment Discharged (Clay)	14.43	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	1070	lbs
Total Sediment Discharged (Small Agg.)	19.42	lbs
Total Sediment Discharged (Large Agg.)	283.3	lbs
Sediment Concentration	5.378	mg/l
Peak Sediment Concentration	12.22	mg/l
Total Nitrogen Discharged	13.45	lbs
Total Nitrogen Discharged (Particulate)	5.782	lbs
Total Nitrogen Discharged (Sorbed)	0.005454	lbs
Total Nitrogen Discharged (Dissolved)	7.66	lbs
Nitrogen Concentration	0.1042	mg/l
Peak Nitrogen Concentration	0.1968	mg/l
Total Phosphorus Discharged	2.773	lbs
Total Phosphorus Discharged (Particulate)	1.192	lbs
Total Phosphorus Discharged (Sorbed)	2.284E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.58	lbs
Phosphorus Concentration	0.02148	mg/l
Peak Phosphorus Concentration	0.04058	mg/l
Total Bacteria Discharged	6.286E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	6.286E+10	cfu
Bacteria Concentration	107.3	cfu/100 ml
Peak Bacteria Concentration	202.8	cfu/100 ml

Outfall_B

Name	Outfall_B
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	3,488.37	ac-ft
Total Drainage Area	1,635.48	ac
Total BMP Surface Area	86.64	ac
Total Modeled Area	1,722.12	ac
Total Sediment Discharged	128,007.10	lbs
Total Sediment Trapped	4,429,853.60	lbs
Sediment Trapping Efficiency	97.19%	%
Total Sediment Discharged (Clay)	122,718.29	lbs
Total Sediment Discharged (Silt)	3,893.55	lbs
Total Sediment Discharged (Sand)	1,075.68	lbs
Total Sediment Discharged (Small Agg.)	34.91	lbs
Total Sediment Discharged (Large Agg.)	284.67	lbs
Total Sediment Yield Per Acre	78.27	lbs
Sediment Concentration	3.70	mg/l
Peak Sediment Concentration	13.72	mg/l
Total Nitrogen Discharged	8,362.08	lbs
Total Nitrogen Trapped	118,221.35	lbs
Nitrogen Trapping Efficiency	93.39%	%
Total Nitrogen Discharged (Particulate)	2,809.55	lbs
Total Nitrogen Discharged (Sorbed)	22.06	lbs
Total Nitrogen Discharged (Dissolved)	5,530.47	lbs
Total Nitrogen Yield Per Acre	5.11	lbs
Nitrogen Concentration	0.47	mg/l
Peak Nitrogen Concentration	0.54	mg/l
Total Phosphorus Discharged	717.52	lbs
Total Phosphorus Trapped	10,827.95	lbs
Phosphorus Trapping Efficiency	93.79%	%
Total Phosphorus Discharged (Particulate)	223.30	lbs
Total Phosphorus Discharged (Sorbed)	0.01	lbs
Total Phosphorus Discharged (Dissolved)	494.22	lbs
Total Phosphorus Yield Per Acre	0.44	lbs

Phosphorus Concentration	0.04	mg/l
Peak Phosphorus Concentration	0.04	mg/l
Total Bacteria Discharged	6.34E+12	cfu
Total Bacteria Trapped	1.604E+14	cfu
Bacteria Trapping Efficiency	96.20%	%
Total Bacteria Discharged (Sorbed To Clay)	1.583E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.761E+08	cfu
Total Bacteria Discharged (Planktonic)	6.323E+12	cfu
Bacteria Concentration	25.97	cfu/100 ml
Peak Bacteria Concentration	87	cfu/100 ml
Clay Trapped	3,916,580.57	lbs
Clay Trapping Efficiency	96.87%	%
Silt Trapped	414,385.63	lbs
Silt Trapping Efficiency	99.06%	%
Sand Trapped	102,579.04	lbs
Sand Trapping Efficiency	98.95%	%
Large Aggregates Trapped	56,348.04	lbs
Large Aggregates Trapping Efficiency	99.58%	%
Small Aggregates Trapped	67,967.41	lbs
Small Aggregates Trapping Efficiency	99.94%	%
Particulate Nitrogen Trapped	126,583.43	lbs
Particulate Nitrogen Trapping Efficiency	100.00%	%
Sorbed Nitrogen Trapped	328.04	lbs
Sorbed Nitrogen Trapping Efficiency	100.00%	%
Dissolved Nitrogen Trapped	82,424.18	lbs
Dissolved Nitrogen Trapping Efficiency	100.00%	%
Particulate Phosphorus Trapped	3,505.48	lbs
Particulate Phosphorus Trapping Efficiency	100.00%	%
Sorbed Phosphorus Trapped	0.22	lbs
Sorbed Phosphorus Trapping Efficiency	100.00%	%
Dissolved Phosphorus Trapped	8,039.77	lbs
Dissolved Phosphorus Trapping Efficiency	100.00%	%
Bacteria Sorbed to Clay Trapped	3.397E+13	cfu
Bacteria Sorbed to Clay Trapping Efficiency	100.00%	%
Bacteria Sorbed to Silt Trapped	1.63E+12	cfu
Bacteria Sorbed to Silt Trapping Efficiency	100.00%	%

Bacteria not Sorbed (Planktonic) Trapped	1.311E+14	cfu
Bacteria not Sorbed (Planktonic) Trapping Efficiency	100.00%	%

Basin_09

Name	Basin_09
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	4.42	acres
Curve Number	63	-
Soil Series	Georgeville	-
Depth Range	0-15	in
Peak Rate Factor	484	-
Time of Concentration	0.083	hrs

Sediment Inputs

Parameter	Value	Units
Length	1100	ft
Slope	0.002	ft/ft
Soil Erodibility	0.49	-
Cover & Practice Factor	0.04	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	6000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	0.7526	ac-ft
Total Sediment Yield	500.5	lbs
Total Sediment Yield (Clay)	20.82	lbs
Total Sediment Yield (Silt)	127.6	lbs
Total Sediment Yield (Sand)	62.17	lbs
Total Sediment Yield (Small Agg.)	144.1	lbs
Total Sediment Yield (Large Agg.)	145.7	lbs
Sediment Concentration	12.29	mg/l
Peak Sediment Concentration	34.82	mg/l
Total Nitrogen Yield	2.661	lbs
Total Nitrogen Yield (Particulate)	1.144	lbs
Total Nitrogen Yield (Sorbed)	0.001436	lbs
Total Nitrogen Yield (Dissolved)	1.515	lbs
Nitrogen Concentration	0.1396	mg/l
Peak Nitrogen Concentration	0.3029	mg/l
Total Phosphorus Yield	0.1842	lbs
Total Phosphorus Yield (Particulate)	0.07921	lbs
Total Phosphorus Yield (Sorbed)	1.702E-06	lbs
Total Phosphorus Yield (Dissolved)	0.105	lbs
Phosphorus Concentration	0.009665	mg/l
Peak Phosphorus Concentration	0.02097	mg/l
Total Bacteria Yield	5.568E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	5.568E+10	cfu
Bacteria Concentration	644.1	cfu/100 ml
Peak Bacteria Concentration	1398	cfu/100 ml

Non-Routed Connector 63	
Name	Non-Routed Connector 63
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Concentrated	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	0.7526	ac-ft
Total Sediment Discharged	500.5	lbs
Total Sediment Discharged (Clay)	20.82	lbs
Total Sediment Discharged (Silt)	127.6	lbs
Total Sediment Discharged (Sand)	62.17	lbs
Total Sediment Discharged (Small Agg.)	144.1	lbs
Total Sediment Discharged (Large Agg.)	145.7	lbs
Sediment Concentration	12.29	mg/l
Peak Sediment Concentration	34.82	mg/l
Total Nitrogen Discharged	2.661	lbs
Total Nitrogen Discharged (Particulate)	1.144	lbs
Total Nitrogen Discharged (Sorbed)	0.001436	lbs
Total Nitrogen Discharged (Dissolved)	1.515	lbs
Nitrogen Concentration	0.1396	mg/l
Peak Nitrogen Concentration	0.3029	mg/l
Total Phosphorus Discharged	0.1842	lbs
Total Phosphorus Discharged (Particulate)	0.07921	lbs
Total Phosphorus Discharged (Sorbed)	1.702E-06	lbs
Total Phosphorus Discharged (Dissolved)	0.105	lbs
Phosphorus Concentration	0.009665	mg/l
Peak Phosphorus Concentration	0.02097	mg/l
Total Bacteria Discharged	5.568E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	5.568E+10	cfu
Bacteria Concentration	644.1	cfu/100 ml
Peak Bacteria Concentration	1398	cfu/100 ml

Pond-09

Name	Pond-09
Description	

General Input

Parameter	Value	Units
Infiltration Method	GreenAndAmpts	-
Soil_Texture	Sandy Loam	-
Degree Of Saturation	0.9	-
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	11	ft
Riser Length	6	ft
Riser Width	6	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	4	ft
Barrel Slope	0.01	ft/ft
Barrel Length	80	ft
Barrel Diameter	18	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	9	ft
EMS Width	50	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units

Surface Area	0.983	ac
Peak Stage	5.842	ft
Total Inflow Volume	0.7526	ac-ft
Total Rainfall On BMP	4.947	ac-ft
Total Outflow Volume	2.121	ac-ft
Outlet Pipe Flow Volume	0.7508	ac-ft
EMS Outflow Volume	0	ac-ft
Infiltration Volume	1.37	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	500.5	lbs
Total Inflow Sediment Mass (Clay)	20.82	lbs
Total Inflow Sediment Mass (Silt)	127.6	lbs
Total Inflow Sediment Mass (Sand)	62.17	lbs
Total Inflow Sediment Mass (Small Agg.)	144.1	lbs
Total Inflow Sediment Mass (Large Agg.)	145.7	lbs
Priming Storm Sediment Mass In Permanent Pool	438.9	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	438.9	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	8.314E-13	lbs
Total Sediment Mass Discharged	8.477	lbs
Total Sediment Mass Discharged (Clay)	6	lbs
Total Sediment Mass Discharged (Silt)	2.179	lbs
Total Sediment Mass Discharged (Sand)	0.0001362	lbs
Total Sediment Mass Discharged (Small Agg.)	0.2973	lbs
Total Sediment Mass Discharged (Large Agg.)	0.0002359	lbs
Total Sediment Mass Trapped	930.9	lbs
Total Sediment Mass Trapped (Clay)	453.7	lbs
Total Sediment Mass Trapped (Silt)	125.4	lbs
Total Sediment Mass Trapped (Sand)	62.17	lbs

Total Sediment Mass Trapped (Small Agg.)	143.8	lbs
Total Sediment Mass Trapped (Large Agg.)	145.7	lbs
Sediment Trapping Efficiency	99.1	%
Sediment Trapping Efficiency (Clay)	98.69	%
Sediment Trapping Efficiency (Silt)	98.29	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	99.79	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	8.477	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	6	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	2.179	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0.0001362	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0.2973	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0.0002359	lbs
EMS Sediment Mass Discharged	0	lbs
EMS Sediment Mass Discharged (Clay)	0	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0	lbs
EMS Sediment Mass Discharged (Small Agg.)	0	lbs
EMS Sediment Mass Discharged (Large Agg.)	0	lbs
Sediment Concentration	0.2588	mg/l
Peak Sediment Concentration	0.3006	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	2.661	lbs
Total Nitrogen Mass Inflow (Particulate)	1.144	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.001436	lbs
Total Nitrogen Mass Inflow (Dissolved)	1.515	lbs
Priming Storm Nitrogen Mass In Permanent Pool	56.06	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	4.258	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	0.00713	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	51.79	lbs
Total Nitrogen Mass Discharged	0.748	lbs
Total Nitrogen Mass Discharged (Particulate)	0.1303	lbs

Total Nitrogen Mass Discharged (Sorbed)	0.0002244	lbs
Total Nitrogen Mass Discharged (Dissolved)	0.6174	lbs
Total Nitrogen Mass Trapped	57.97	lbs
Total Nitrogen Mass Trapped (Particulate)	5.272	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.008341	lbs
Total Nitrogen Mass Trapped (Dissolved)	52.69	lbs
Nitrogen Trapping Efficiency	98.73	%
Nitrogen Trapping Efficiency (Particulate)	97.59	%
Nitrogen Trapping Efficiency (Sorbed)	97.38	%
Nitrogen Trapping Efficiency (Dissolved)	98.84	%
Outlet Pipe Nitrogen Mass Discharged	0.748	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0.1303	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0.0002244	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	0.6174	lbs
EMS Nitrogen Mass Discharged	0	lbs
EMS Nitrogen Mass Discharged (Particulate)	0	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0	lbs
EMS Nitrogen Mass Discharged (Dissolved)	0	lbs
Nitrogen Concentration	0.03215	mg/l
Peak Nitrogen Concentration	0.03431	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	0.1842	lbs
Total Phosphorus Mass Inflow (Particulate)	0.07921	lbs
Total Phosphorus Mass Inflow (Sorbed)	1.702E-06	lbs
Total Phosphorus Mass Inflow (Dissolved)	0.105	lbs
Priming Storm Phosphorus Mass In Permanent Pool	3.885	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	0.2948	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	8.462E-06	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	3.59	lbs
Total Phosphorus Mass Discharged	0.05182	lbs
Total Phosphorus Mass Discharged (Particulate)	0.009023	lbs
Total Phosphorus Mass Discharged (Sorbed)	2.662E-07	lbs
Total Phosphorus Mass Discharged (Dissolved)	0.0428	lbs

Total Phosphorus Mass Trapped	4.017	lbs
Total Phosphorus Mass Trapped (Particulate)	0.365	lbs
Total Phosphorus Mass Trapped (Sorbed)	9.898E-06	lbs
Total Phosphorus Mass Trapped (Dissolved)	3.652	lbs
Phosphorus Trapping Efficiency	98.73	%
Phosphorus Trapping Efficiency (Particulate)	97.59	%
Phosphorus Trapping Efficiency (Sorbed)	97.38	%
Phosphorus Trapping Efficiency (Dissolved)	98.84	%
Outlet Pipe Phosphorus Mass Discharged	0.05182	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0.009023	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	2.662E-07	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	0.0428	lbs
EMS Phosphorus Mass Discharged	0	lbs
EMS Phosphorus Mass Discharged (Particulate)	0	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0	lbs
EMS Phosphorus Mass Discharged (Dissolved)	0	lbs
Phosphorus Concentration	0.002228	mg/l
Peak Phosphorus Concentration	0.002377	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	5.568E+10	cfu
Total Bacteria Loading (Sorbed To Clay)	2.838E+08	cfu
Total Bacteria Loading (Sorbed To Silt)	4.523E+08	cfu
Total Bacteria Loading (Planktonic)	5.494E+10	cfu
Priming Storm Bacteria In Permanent Pool	1.548E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	1.548E+09	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	3.487E-06	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	4.366E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.421E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	4.67E+07	cfu
Total Bacteria Discharged (Planktonic)	4.275E+09	cfu

Total Bacteria Trapped	5.286E+10	cfu
Total Bacteria Trapped (Sorbed To Clay)	1.787E+09	cfu
Total Bacteria Trapped (Sorbed To Silt)	4.056E+08	cfu
Total Bacteria Trapped (Planktonic)	5.067E+10	cfu
Bacteria Trapping Efficiency	92.37	%
Bacteria Trapping Efficiency (Sorbed To Clay)	97.59	%
Bacteria Trapping Efficiency (Sorbed To Silt)	89.68	%
Bacteria Trapping Efficiency (Planktonic)	92.22	%
Outlet Pipe Bacteria Discharged	4.366E+09	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	4.421E+07	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	4.67E+07	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	4.275E+09	cfu
EMS Bacteria Discharged	0	cfu
EMS Bacteria Discharged (Sorbed To Clay)	0	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	3.834	cfu/100 ml
Peak Bacteria Concentration	18.48	cfu/100 ml

RICHLAND COUNTY
1799
SOUTH CAROLINA

Non-Routed Connector 63	
Name	Non-Routed Connector 63
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Concentrated	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	0.7508	ac-ft
Total Sediment Discharged	8.476	lbs
Total Sediment Discharged (Clay)	6	lbs
Total Sediment Discharged (Silt)	2.179	lbs
Total Sediment Discharged (Sand)	0.0001362	lbs
Total Sediment Discharged (Small Agg.)	0.2973	lbs
Total Sediment Discharged (Large Agg.)	0.0002359	lbs
Sediment Concentration	0.2588	mg/l
Peak Sediment Concentration	0.3006	mg/l
Total Nitrogen Discharged	0.748	lbs
Total Nitrogen Discharged (Particulate)	0.1303	lbs
Total Nitrogen Discharged (Sorbed)	0.0002244	lbs
Total Nitrogen Discharged (Dissolved)	0.6174	lbs
Nitrogen Concentration	0.03215	mg/l
Peak Nitrogen Concentration	0.03431	mg/l
Total Phosphorus Discharged	0.05182	lbs
Total Phosphorus Discharged (Particulate)	0.009022	lbs
Total Phosphorus Discharged (Sorbed)	2.662E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.0428	lbs
Phosphorus Concentration	0.002228	mg/l
Peak Phosphorus Concentration	0.002377	mg/l
Total Bacteria Discharged	4.366E+09	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.42E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	4.67E+07	cfu
Total Bacteria Discharged (Planktonic)	4.275E+09	cfu
Bacteria Concentration	3.834	cfu/100 ml
Peak Bacteria Concentration	18.48	cfu/100 ml

Basin_08	
Name	Basin_08
Description	Name

Hydrology Inputs		
Parameter	**Value**	**Units**
Area	6.82	acres
Curve Number	61	-
Soil Series	Georgeville	-
Depth Range	0-15	in
Peak Rate Factor	484	-
Time of Concentration	0.083	hrs

Sediment Inputs		
Parameter	**Value**	**Units**
Length	1248.3	ft
Slope	0.002	ft/ft
Soil Erodibility	0.49	-
Cover & Practice Factor	0.08	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.006	ac-ft
Total Sediment Yield	1406	lbs
Total Sediment Yield (Clay)	58.5	lbs
Total Sediment Yield (Silt)	358.6	lbs
Total Sediment Yield (Sand)	174.7	lbs
Total Sediment Yield (Small Agg.)	405	lbs
Total Sediment Yield (Large Agg.)	409.5	lbs
Sediment Concentration	23.68	mg/l
Peak Sediment Concentration	64.54	mg/l
Total Nitrogen Yield	3.556	lbs
Total Nitrogen Yield (Particulate)	1.529	lbs
Total Nitrogen Yield (Sorbed)	0.003999	lbs
Total Nitrogen Yield (Dissolved)	2.023	lbs
Nitrogen Concentration	0.1396	mg/l
Peak Nitrogen Concentration	0.279	mg/l
Total Phosphorus Yield	0.2462	lbs
Total Phosphorus Yield (Particulate)	0.1059	lbs
Total Phosphorus Yield (Sorbed)	4.766E-06	lbs
Total Phosphorus Yield (Dissolved)	0.1403	lbs
Phosphorus Concentration	0.009665	mg/l
Peak Phosphorus Concentration	0.01931	mg/l
Total Bacteria Yield	9.178E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	9.178E+10	cfu
Bacteria Concentration	794.3	cfu/100 ml
Peak Bacteria Concentration	1587	cfu/100 ml

Non-Routed Connector 61	
Name	Non-Routed Connector 61
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Concentrated	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.006	ac-ft
Total Sediment Discharged	1406	lbs
Total Sediment Discharged (Clay)	58.5	lbs
Total Sediment Discharged (Silt)	358.6	lbs
Total Sediment Discharged (Sand)	174.7	lbs
Total Sediment Discharged (Small Agg.)	405	lbs
Total Sediment Discharged (Large Agg.)	409.5	lbs
Sediment Concentration	23.68	mg/l
Peak Sediment Concentration	64.54	mg/l
Total Nitrogen Discharged	3.556	lbs
Total Nitrogen Discharged (Particulate)	1.529	lbs
Total Nitrogen Discharged (Sorbed)	0.003999	lbs
Total Nitrogen Discharged (Dissolved)	2.023	lbs
Nitrogen Concentration	0.1396	mg/l
Peak Nitrogen Concentration	0.279	mg/l
Total Phosphorus Discharged	0.2462	lbs
Total Phosphorus Discharged (Particulate)	0.1059	lbs
Total Phosphorus Discharged (Sorbed)	4.766E-06	lbs
Total Phosphorus Discharged (Dissolved)	0.1403	lbs
Phosphorus Concentration	0.009665	mg/l
Peak Phosphorus Concentration	0.01931	mg/l
Total Bacteria Discharged	9.178E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	9.178E+10	cfu
Bacteria Concentration	794.3	cfu/100 ml
Peak Bacteria Concentration	1587	cfu/100 ml

Pond_08

Name	Pond_08
Description	

General Input

Parameter	Value	Units
Infiltration Method	GreenAndAmpts	-
Soil Texture	Sandy Loam	-
Degree Of Saturation	0.9	-
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	11	ft
Riser Length	6	ft
Riser Width	6	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	0	ft
Barrel Slope	0.01	ft/ft
Barrel Length	80	ft
Barrel Diameter	18	in
Entrance Loss Coefficient	0.5	-
Manning's Roughness Coefficient	0.013	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	6	ft
EMS Width	50	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units

Surface Area	0.983	ac
Total Inflow Volume	1.006	ac-ft
Total Rainfall On BMP	4.947	ac-ft
Total Outflow Volume	2.373	ac-ft
Outlet Pipe Flow Volume	0.5266	ac-ft
EMS Outflow Volume	0	ac-ft
Infiltration Volume	1.847	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	1406	lbs
Total Inflow Sediment Mass (Clay)	58.5	lbs
Total Inflow Sediment Mass (Silt)	358.6	lbs
Total Inflow Sediment Mass (Sand)	174.7	lbs
Total Inflow Sediment Mass (Small Agg.)	405	lbs
Total Inflow Sediment Mass (Large Agg.)	409.5	lbs
Total Sediment Mass Discharged	109.2	lbs
Total Sediment Mass Discharged (Clay)	25.87	lbs
Total Sediment Mass Discharged (Silt)	67.64	lbs
Total Sediment Mass Discharged (Sand)	0.01036	lbs
Total Sediment Mass Discharged (Small Agg.)	15.67	lbs
Total Sediment Mass Discharged (Large Agg.)	0.01799	lbs
Total Sediment Mass Trapped	1297	lbs
Total Sediment Mass Trapped (Clay)	32.63	lbs
Total Sediment Mass Trapped (Silt)	291	lbs
Total Sediment Mass Trapped (Sand)	174.7	lbs
Total Sediment Mass Trapped (Small Agg.)	389.3	lbs
Total Sediment Mass Trapped (Large Agg.)	409.5	lbs
Sediment Trapping Efficiency	92.23	%
Sediment Trapping Efficiency (Clay)	55.78	%
Sediment Trapping Efficiency (Silt)	81.14	%
Sediment Trapping Efficiency (Sand)	99.99	%
Sediment Trapping Efficiency (Small Agg.)	96.13	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	109.2	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	25.87	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	67.64	lbs

Outlet Pipe Sediment Mass Discharged (Sand)	0.01036	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	15.67	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	0.01799	lbs
EMS Sediment Mass Discharged	0	lbs
EMS Sediment Mass Discharged (Clay)	0	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0	lbs
EMS Sediment Mass Discharged (Small Agg.)	0	lbs
EMS Sediment Mass Discharged (Large Agg.)	0	lbs
Sediment Concentration	1.152	mg/l
Peak Sediment Concentration	2.175	mg/l

Annual Loading Results - Nitrogen

Parameter	Value	Units
Total Nitrogen Mass Inflow	3.556	lbs
Total Nitrogen Mass Inflow (Particulate)	1.529	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.003999	lbs
Total Nitrogen Mass Inflow (Dissolved)	2.023	lbs
Total Nitrogen Mass Discharged	1.435	lbs
Total Nitrogen Mass Discharged (Particulate)	0.615	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.00197	lbs
Total Nitrogen Mass Discharged (Dissolved)	0.8182	lbs
Total Nitrogen Mass Trapped	2.121	lbs
Total Nitrogen Mass Trapped (Particulate)	0.9141	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.002029	lbs
Total Nitrogen Mass Trapped (Dissolved)	1.205	lbs
Nitrogen Trapping Efficiency	59.64	%
Nitrogen Trapping Efficiency (Particulate)	59.78	%
Nitrogen Trapping Efficiency (Sorbed)	50.74	%
Nitrogen Trapping Efficiency (Dissolved)	59.55	%
Outlet Pipe Nitrogen Mass Discharged	1.435	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	0.615	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0.00197	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	0.8182	lbs
EMS Nitrogen Mass Discharged	0	lbs
EMS Nitrogen Mass Discharged (Particulate)	0	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0	lbs

EMS Nitrogen Mass Discharged (Dissolved)	0	lbs
Nitrogen Concentration	0.03925	mg/l
Peak Nitrogen Concentration	0.07955	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	0.2462	lbs
Total Phosphorus Mass Inflow (Particulate)	0.1059	lbs
Total Phosphorus Mass Inflow (Sorbed)	4.766E-06	lbs
Total Phosphorus Mass Inflow (Dissolved)	0.1403	lbs
Total Phosphorus Mass Discharged	0.09936	lbs
Total Phosphorus Mass Discharged (Particulate)	0.04258	lbs
Total Phosphorus Mass Discharged (Sorbed)	2.35E-06	lbs
Total Phosphorus Mass Discharged (Dissolved)	0.05678	lbs
Total Phosphorus Mass Trapped	0.1468	lbs
Total Phosphorus Mass Trapped (Particulate)	0.06328	lbs
Total Phosphorus Mass Trapped (Sorbed)	2.416E-06	lbs
Total Phosphorus Mass Trapped (Dissolved)	0.08354	lbs
Phosphorus Trapping Efficiency	59.64	%
Phosphorus Trapping Efficiency (Particulate)	59.78	%
Phosphorus Trapping Efficiency (Sorbed)	50.7	%
Phosphorus Trapping Efficiency (Dissolved)	59.54	%
Outlet Pipe Phosphorus Mass Discharged	0.09936	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	0.04258	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	2.35E-06	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	0.05678	lbs
EMS Phosphorus Mass Discharged	0	lbs
EMS Phosphorus Mass Discharged (Particulate)	0	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0	lbs
EMS Phosphorus Mass Discharged (Dissolved)	0	lbs
Phosphorus Concentration	0.002717	mg/l
Peak Phosphorus Concentration	0.005508	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	9.178E+10	cfu
Total Bacteria Loading (Sorbed To Clay)	9.681E+08	cfu

Total Bacteria Loading (Sorbed To Silt)	1.543E+09	cfu
Total Bacteria Loading (Planktonic)	8.927E+10	cfu
Total Bacteria Discharged	3.713E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.51E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	7.197E+08	cfu
Total Bacteria Discharged (Planktonic)	3.596E+10	cfu
Total Bacteria Trapped	5.465E+10	cfu
Total Bacteria Trapped (Sorbed To Clay)	5.172E+08	cfu
Total Bacteria Trapped (Sorbed To Silt)	8.233E+08	cfu
Total Bacteria Trapped (Planktonic)	5.331E+10	cfu
Bacteria Trapping Efficiency	59.54	%
Bacteria Trapping Efficiency (Sorbed To Clay)	53.42	%
Bacteria Trapping Efficiency (Sorbed To Silt)	53.36	%
Bacteria Trapping Efficiency (Planktonic)	59.72	%
Outlet Pipe Bacteria Discharged	3.713E+10	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	4.51E+08	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	7.197E+08	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	3.596E+10	cfu
EMS Bacteria Discharged	0	cfu
EMS Bacteria Discharged (Sorbed To Clay)	0	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	223.8	cfu/100 ml
Peak Bacteria Concentration	503.8	cfu/100 ml

Non-Routed Connector 61	
Name	Non-Routed Connector 61
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Concentrated	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	0.5266	ac-ft
Total Sediment Discharged	109.2	lbs
Total Sediment Discharged (Clay)	25.87	lbs
Total Sediment Discharged (Silt)	67.64	lbs
Total Sediment Discharged (Sand)	0.01036	lbs
Total Sediment Discharged (Small Agg.)	15.67	lbs
Total Sediment Discharged (Large Agg.)	0.01799	lbs
Sediment Concentration	1.152	mg/l
Peak Sediment Concentration	2.175	mg/l
Total Nitrogen Discharged	1.435	lbs
Total Nitrogen Discharged (Particulate)	0.615	lbs
Total Nitrogen Discharged (Sorbed)	0.00197	lbs
Total Nitrogen Discharged (Dissolved)	0.8182	lbs
Nitrogen Concentration	0.03925	mg/l
Peak Nitrogen Concentration	0.07955	mg/l
Total Phosphorus Discharged	0.09936	lbs
Total Phosphorus Discharged (Particulate)	0.04258	lbs
Total Phosphorus Discharged (Sorbed)	2.35E-06	lbs
Total Phosphorus Discharged (Dissolved)	0.05678	lbs
Phosphorus Concentration	0.002717	mg/l
Peak Phosphorus Concentration	0.005508	mg/l
Total Bacteria Discharged	3.713E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.51E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	7.197E+08	cfu
Total Bacteria Discharged (Planktonic)	3.596E+10	cfu
Bacteria Concentration	223.8	cfu/100 ml
Peak Bacteria Concentration	503.8	cfu/100 ml

Basin_D

Name	Basin_D
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	115.98	acres
Curve Number	91	-
Soil Series	Pelion	-
Depth Range	0-13	in
Peak Rate Factor	484	-
Time of Concentration	0.767	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	3120	ft
Slope	0.007	ft/ft
Soil Erodibility	0.2	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	6	%
Silt Percent	16.3	%
Sand Percent	77.7	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	221.2	micro g/g/mg/l
Isotherm Max - Nitrogen	3708.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	75.18	acres
Curve Number	91	-
Peak Rate Factor	484	-
Time of Concentration	0.767	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	221.2	micro g/g/mg/l
Isotherm Max - Nitrogen	3708.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	272.8	ac-ft
Total Sediment Yield	6.806E+04	lbs
Total Sediment Yield (Clay)	1.031E+04	lbs
Total Sediment Yield (Silt)	2.247E+04	lbs

Total Sediment Yield (Sand)	2.443E+04	lbs
Total Sediment Yield (Small Agg.)	3265	lbs
Total Sediment Yield (Large Agg.)	7593	lbs
Sediment Concentration	88.67	mg/l
Peak Sediment Concentration	171.9	mg/l
Total Nitrogen Yield	964.4	lbs
Total Nitrogen Yield (Particulate)	414.7	lbs
Total Nitrogen Yield (Sorbed)	2.885	lbs
Total Nitrogen Yield (Dissolved)	546.8	lbs
Nitrogen Concentration	1.3	mg/l
Peak Nitrogen Concentration	2.54	mg/l
Total Phosphorus Yield	66.77	lbs
Total Phosphorus Yield (Particulate)	28.71	lbs
Total Phosphorus Yield (Sorbed)	0.0006949	lbs
Total Phosphorus Yield (Dissolved)	38.06	lbs
Phosphorus Concentration	0.09	mg/l
Peak Phosphorus Concentration	0.1758	mg/l
Total Bacteria Yield	2.489E+13	cfu
Total Bacteria Yield (Sorbed To Clay)	5.132E+10	cfu
Total Bacteria Yield (Sorbed To Silt)	9.897E+10	cfu
Total Bacteria Yield (Planktonic)	2.474E+13	cfu
Bacteria Concentration	7397	cfu/100 ml
Peak Bacteria Concentration	1.445E+04	cfu/100 ml

Non-Routed Connector 5	
Name	Non-Routed Connector 5
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	272.8	ac-ft
Total Sediment Discharged	6.806E+04	lbs
Total Sediment Discharged (Clay)	1.031E+04	lbs
Total Sediment Discharged (Silt)	2.247E+04	lbs
Total Sediment Discharged (Sand)	2.443E+04	lbs
Total Sediment Discharged (Small Agg.)	3265	lbs
Total Sediment Discharged (Large Agg.)	7593	lbs
Sediment Concentration	88.67	mg/l
Peak Sediment Concentration	171.9	mg/l
Total Nitrogen Discharged	964.4	lbs
Total Nitrogen Discharged (Particulate)	414.7	lbs
Total Nitrogen Discharged (Sorbed)	2.885	lbs
Total Nitrogen Discharged (Dissolved)	546.8	lbs
Nitrogen Concentration	1.3	mg/l
Peak Nitrogen Concentration	2.54	mg/l
Total Phosphorus Discharged	66.77	lbs
Total Phosphorus Discharged (Particulate)	28.71	lbs
Total Phosphorus Discharged (Sorbed)	0.0006949	lbs
Total Phosphorus Discharged (Dissolved)	38.06	lbs
Phosphorus Concentration	0.09	mg/l
Peak Phosphorus Concentration	0.1758	mg/l
Total Bacteria Discharged	2.489E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.132E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	9.897E+10	cfu
Total Bacteria Discharged (Planktonic)	2.474E+13	cfu
Bacteria Concentration	7397	cfu/100 ml
Peak Bacteria Concentration	1.445E+04	cfu/100 ml

Pond-04

Name	Pond-04
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Orifice Top Riser	-
Riser Shape	Rectangular	-
Riser Height	9.1	ft
Riser Length	5	ft
Riser Width	5	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	4	ft
Barrel Slope	0.039	ft/ft
Barrel Length	447	ft
Barrel Diameter	24	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	10.9	ft
EMS Width	1	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	11.88	ac

Peak Stage	11	ft
Total Inflow Volume	272.8	ac-ft
Total Rainfall On BMP	59.79	ac-ft
Total Outflow Volume	187.1	ac-ft
Outlet Pipe Flow Volume	137.9	ac-ft
EMS Outflow Volume	0.04226	ac-ft
Infiltration Volume	49.1	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	6.806E+04	lbs
Total Inflow Sediment Mass (Clay)	1.031E+04	lbs
Total Inflow Sediment Mass (Silt)	2.247E+04	lbs
Total Inflow Sediment Mass (Sand)	2.443E+04	lbs
Total Inflow Sediment Mass (Small Agg.)	3265	lbs
Total Inflow Sediment Mass (Large Agg.)	7593	lbs
Priming Storm Sediment Mass In Permanent Pool	1.621E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	1.172E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	4.491E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	5554	lbs
Total Sediment Mass Discharged (Clay)	4025	lbs
Total Sediment Mass Discharged (Silt)	1529	lbs
Total Sediment Mass Discharged (Sand)	0.0002195	lbs
Total Sediment Mass Discharged (Small Agg.)	0.0483	lbs
Total Sediment Mass Discharged (Large Agg.)	6.653E-05	lbs
Total Sediment Mass Trapped	2.246E+05	lbs
Total Sediment Mass Trapped (Clay)	1.234E+05	lbs
Total Sediment Mass Trapped (Silt)	6.585E+04	lbs
Total Sediment Mass Trapped (Sand)	2.443E+04	lbs
Total Sediment Mass Trapped (Small Agg.)	3265	lbs

Total Sediment Mass Trapped (Large Agg.)	7593	lbs
Sediment Trapping Efficiency	97.59	%
Sediment Trapping Efficiency (Clay)	96.84	%
Sediment Trapping Efficiency (Silt)	97.73	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	100	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	5552	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	4024	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	1528	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0.0002195	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0.0483	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	6.653E-05	lbs
EMS Sediment Mass Discharged	1.725	lbs
EMS Sediment Mass Discharged (Clay)	1.247	lbs
EMS Sediment Mass Discharged (Silt)	0.478	lbs
EMS Sediment Mass Discharged (Sand)	0	lbs
EMS Sediment Mass Discharged (Small Agg.)	0	lbs
EMS Sediment Mass Discharged (Large Agg.)	0	lbs
Sediment Concentration	15	mg/l
Peak Sediment Concentration	15.01	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	964.4	lbs
Total Nitrogen Mass Inflow (Particulate)	414.7	lbs
Total Nitrogen Mass Inflow (Sorbed)	2.885	lbs
Total Nitrogen Mass Inflow (Dissolved)	546.8	lbs
Priming Storm Nitrogen Mass In Permanent Pool	1.126E+04	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	4248	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	28.71	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	6981	lbs
Total Nitrogen Mass Discharged	392.5	lbs
Total Nitrogen Mass Discharged (Particulate)	148.7	lbs
Total Nitrogen Mass Discharged (Sorbed)	1.005	lbs

Total Nitrogen Mass Discharged (Dissolved)	242.9	lbs
Total Nitrogen Mass Trapped	1.183E+04	lbs
Total Nitrogen Mass Trapped (Particulate)	4514	lbs
Total Nitrogen Mass Trapped (Sorbed)	30.59	lbs
Total Nitrogen Mass Trapped (Dissolved)	7285	lbs
Nitrogen Trapping Efficiency	96.79	%
Nitrogen Trapping Efficiency (Particulate)	96.81	%
Nitrogen Trapping Efficiency (Sorbed)	96.82	%
Nitrogen Trapping Efficiency (Dissolved)	96.77	%
Outlet Pipe Nitrogen Mass Discharged	392.4	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	148.6	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	1.005	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	242.8	lbs
EMS Nitrogen Mass Discharged	0.1198	lbs
EMS Nitrogen Mass Discharged (Particulate)	0.0452	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.0003056	lbs
EMS Nitrogen Mass Discharged (Dissolved)	0.07429	lbs
Nitrogen Concentration	1.042	mg/l
Peak Nitrogen Concentration	1.043	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	66.77	lbs
Total Phosphorus Mass Inflow (Particulate)	28.71	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.0006949	lbs
Total Phosphorus Mass Inflow (Dissolved)	38.06	lbs
Priming Storm Phosphorus Mass In Permanent Pool	779.8	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	294.1	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.006921	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	485.7	lbs
Total Phosphorus Mass Discharged	27.19	lbs
Total Phosphorus Mass Discharged (Particulate)	10.29	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.0002422	lbs
Total Phosphorus Mass Discharged (Dissolved)	16.9	lbs
Total Phosphorus Mass Trapped	819.4	lbs

Total Phosphorus Mass Trapped (Particulate)	312.5	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.007374	lbs
Total Phosphorus Mass Trapped (Dissolved)	506.9	lbs
Phosphorus Trapping Efficiency	96.79	%
Phosphorus Trapping Efficiency (Particulate)	96.81	%
Phosphorus Trapping Efficiency (Sorbed)	96.82	%
Phosphorus Trapping Efficiency (Dissolved)	96.77	%
Outlet Pipe Phosphorus Mass Discharged	27.18	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	10.29	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0.0002422	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	16.89	lbs
EMS Phosphorus Mass Discharged	0.008299	lbs
EMS Phosphorus Mass Discharged (Particulate)	0.00313	lbs
EMS Phosphorus Mass Discharged (Sorbed)	7.365E-08	lbs
EMS Phosphorus Mass Discharged (Dissolved)	0.005169	lbs
Phosphorus Concentration	0.07221	mg/l
Peak Phosphorus Concentration	0.07224	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	2.489E+13	cfu
Total Bacteria Loading (Sorbed To Clay)	5.132E+10	cfu
Total Bacteria Loading (Sorbed To Silt)	9.897E+10	cfu
Total Bacteria Loading (Planktonic)	2.474E+13	cfu
Priming Storm Bacteria In Permanent Pool	7.146E+11	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	5.166E+11	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	1.98E+11	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	2.962E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.808E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	7.741E+09	cfu
Total Bacteria Discharged (Planktonic)	2.704E+11	cfu
Total Bacteria Trapped	2.531E+13	cfu

Total Bacteria Trapped (Sorbed To Clay)	5.498E+11	cfu
Total Bacteria Trapped (Sorbed To Silt)	2.893E+11	cfu
Total Bacteria Trapped (Planktonic)	2.447E+13	cfu
Bacteria Trapping Efficiency	98.84	%
Bacteria Trapping Efficiency (Sorbed To Clay)	96.82	%
Bacteria Trapping Efficiency (Sorbed To Silt)	97.39	%
Bacteria Trapping Efficiency (Planktonic)	98.91	%
Outlet Pipe Bacteria Discharged	2.962E+11	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	1.807E+10	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	7.739E+09	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	2.704E+11	cfu
EMS Bacteria Discharged	7.605E+06	cfu
EMS Bacteria Discharged (Sorbed To Clay)	5.498E+06	cfu
EMS Bacteria Discharged (Sorbed To Silt)	2.107E+06	cfu
EMS Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	17.99	cfu/100 ml
Peak Bacteria Concentration	30.12	cfu/100 ml

RICHLAND COUNTY
1799
SOUTH CAROLINA

Non-Routed Connector 49	
Name	Non-Routed Connector 49
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	138	ac-ft
Total Sediment Discharged	5553	lbs
Total Sediment Discharged (Clay)	4025	lbs
Total Sediment Discharged (Silt)	1529	lbs
Total Sediment Discharged (Sand)	0.0002195	lbs
Total Sediment Discharged (Small Agg.)	0.0483	lbs
Total Sediment Discharged (Large Agg.)	6.653E-05	lbs
Sediment Concentration	15	mg/l
Peak Sediment Concentration	15.01	mg/l
Total Nitrogen Discharged	392.5	lbs
Total Nitrogen Discharged (Particulate)	148.7	lbs
Total Nitrogen Discharged (Sorbed)	1.005	lbs
Total Nitrogen Discharged (Dissolved)	242.8	lbs
Nitrogen Concentration	1.042	mg/l
Peak Nitrogen Concentration	1.043	mg/l
Total Phosphorus Discharged	27.19	lbs
Total Phosphorus Discharged (Particulate)	10.29	lbs
Total Phosphorus Discharged (Sorbed)	0.0002422	lbs
Total Phosphorus Discharged (Dissolved)	16.9	lbs
Phosphorus Concentration	0.07221	mg/l
Peak Phosphorus Concentration	0.07224	mg/l
Total Bacteria Discharged	2.962E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.808E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	7.74E+09	cfu
Total Bacteria Discharged (Planktonic)	2.704E+11	cfu
Bacteria Concentration	17.99	cfu/100 ml
Peak Bacteria Concentration	30.12	cfu/100 ml

Basin_05	
Name	Basin_05
Description	

Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	17.71	acres
Curve Number	64	-
Soil Series	Herndon	-
Depth Range	0-4	in
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs

Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	1195	ft
Slope	0.036	ft/ft
Soil Erodibility	0.49	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	4.06	acres
Curve Number	64	-
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	265.22	micro g/g/mg/l
Isotherm Max - Nitrogen	4220.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	3.815	ac-ft
Total Sediment Yield	1.042E+04	lbs
Total Sediment Yield (Clay)	473.3	lbs
Total Sediment Yield (Silt)	2710	lbs

Total Sediment Yield (Sand)	1306	lbs
Total Sediment Yield (Small Agg.)	2948	lbs
Total Sediment Yield (Large Agg.)	2980	lbs
Sediment Concentration	63.58	mg/l
Peak Sediment Concentration	164.3	mg/l
Total Nitrogen Yield	11.7	lbs
Total Nitrogen Yield (Particulate)	5.031	lbs
Total Nitrogen Yield (Sorbed)	0.04617	lbs
Total Nitrogen Yield (Dissolved)	6.623	lbs
Nitrogen Concentration	0.1984	mg/l
Peak Nitrogen Concentration	0.4111	mg/l
Total Phosphorus Yield	2.138	lbs
Total Phosphorus Yield (Particulate)	0.9193	lbs
Total Phosphorus Yield (Sorbed)	8.284E-05	lbs
Total Phosphorus Yield (Dissolved)	1.219	lbs
Phosphorus Concentration	0.03216	mg/l
Peak Phosphorus Concentration	0.06682	mg/l
Total Bacteria Yield	3.481E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	7.025E+09	cfu
Total Bacteria Yield (Sorbed To Silt)	1.13E+10	cfu
Total Bacteria Yield (Planktonic)	3.298E+11	cfu
Bacteria Concentration	1115	cfu/100 ml
Peak Bacteria Concentration	2319	cfu/100 ml

Non-Routed Connector 7	
Name	Non-Routed Connector 7
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	3.815	ac-ft
Total Sediment Discharged	1.042E+04	lbs
Total Sediment Discharged (Clay)	473.3	lbs
Total Sediment Discharged (Silt)	2710	lbs
Total Sediment Discharged (Sand)	1306	lbs
Total Sediment Discharged (Small Agg.)	2948	lbs
Total Sediment Discharged (Large Agg.)	2980	lbs
Sediment Concentration	63.58	mg/l
Peak Sediment Concentration	164.3	mg/l
Total Nitrogen Discharged	11.7	lbs
Total Nitrogen Discharged (Particulate)	5.031	lbs
Total Nitrogen Discharged (Sorbed)	0.04617	lbs
Total Nitrogen Discharged (Dissolved)	6.623	lbs
Nitrogen Concentration	0.1984	mg/l
Peak Nitrogen Concentration	0.4111	mg/l
Total Phosphorus Discharged	2.138	lbs
Total Phosphorus Discharged (Particulate)	0.9193	lbs
Total Phosphorus Discharged (Sorbed)	8.284E-05	lbs
Total Phosphorus Discharged (Dissolved)	1.219	lbs
Phosphorus Concentration	0.03216	mg/l
Peak Phosphorus Concentration	0.06682	mg/l
Total Bacteria Discharged	3.481E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	7.025E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.13E+10	cfu
Total Bacteria Discharged (Planktonic)	3.298E+11	cfu
Bacteria Concentration	1115	cfu/100 ml
Peak Bacteria Concentration	2319	cfu/100 ml

Trib1-01-01	
Name	Trib1-01-01
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	3.815	ac-ft
Total Sediment Discharged	1.042E+04	lbs
Total Sediment Discharged (Clay)	473.3	lbs
Total Sediment Discharged (Silt)	2710	lbs
Total Sediment Discharged (Sand)	1306	lbs
Total Sediment Discharged (Small Agg.)	2948	lbs
Total Sediment Discharged (Large Agg.)	2980	lbs
Sediment Concentration	63.58	mg/l
Peak Sediment Concentration	164.3	mg/l
Total Nitrogen Discharged	11.7	lbs
Total Nitrogen Discharged (Particulate)	5.031	lbs
Total Nitrogen Discharged (Sorbed)	0.04617	lbs
Total Nitrogen Discharged (Dissolved)	6.623	lbs
Nitrogen Concentration	0.1984	mg/l
Peak Nitrogen Concentration	0.4111	mg/l
Total Phosphorus Discharged	2.138	lbs
Total Phosphorus Discharged (Particulate)	0.9193	lbs
Total Phosphorus Discharged (Sorbed)	8.284E-05	lbs
Total Phosphorus Discharged (Dissolved)	1.219	lbs
Phosphorus Concentration	0.03216	mg/l
Peak Phosphorus Concentration	0.06682	mg/l
Total Bacteria Discharged	3.481E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	7.025E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.13E+10	cfu
Total Bacteria Discharged (Planktonic)	3.298E+11	cfu
Bacteria Concentration	1115	cfu/100 ml
Peak Bacteria Concentration	2319	cfu/100 ml

L-0610P

Name	L-0610P
Description	

Inputs

Parameter	Value	Units
Conduit Option	Muskingum-Kunge method	-
Conduit Diameter	24	in.
Conduit Length	462.5	ft
Conduit Slope	0.003	ft/ft
Manning's Roughness	0.013	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	3.815	ac-ft
Total Sediment Discharged	1.042E+04	lbs
Total Sediment Discharged (Clay)	473.3	lbs
Total Sediment Discharged (Silt)	2710	lbs
Total Sediment Discharged (Sand)	1306	lbs
Total Sediment Discharged (Small Agg.)	2948	lbs
Total Sediment Discharged (Large Agg.)	2980	lbs
Sediment Concentration	63.58	mg/l
Peak Sediment Concentration	164.3	mg/l
Total Nitrogen Discharged	11.7	lbs
Total Nitrogen Discharged (Particulate)	5.031	lbs
Total Nitrogen Discharged (Sorbed)	0.04617	lbs
Total Nitrogen Discharged (Dissolved)	6.623	lbs
Nitrogen Concentration	0.1984	mg/l
Peak Nitrogen Concentration	0.4111	mg/l
Total Phosphorus Discharged	2.138	lbs
Total Phosphorus Discharged (Particulate)	0.9193	lbs
Total Phosphorus Discharged (Sorbed)	8.284E-05	lbs
Total Phosphorus Discharged (Dissolved)	1.219	lbs
Phosphorus Concentration	0.03216	mg/l
Peak Phosphorus Concentration	0.06682	mg/l
Total Bacteria Discharged	3.481E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	7.025E+09	cfu

Total Bacteria Discharged (Sorbed To Silt)	1.13E+10	cfu
Total Bacteria Discharged (Planktonic)	3.298E+11	cfu
Bacteria Concentration	1115	cfu/100 ml
Peak Bacteria Concentration	2319	cfu/100 ml

Messages

Type	Description
Warning	Convergence criteria is not met. Flow is routed as simple translation.
Warning	The pipe structure is overtopped with a precipitation depth of 2.25 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 2.75 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 3.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 4.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 5.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 7 in. Results may be inaccurate.

RICHLAND COUNTY 1799 SOUTH CAROLINA

Basin_F

Name	Basin_F
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	56.51	acres
Curve Number	81	-
Soil Series	Fuquay	-
Depth Range	0-20	in
Peak Rate Factor	484	-
Time of Concentration	0.4	hrs

Sediment Inputs

Parameter	Value	Units
Length	4950	ft
Slope	0.002	ft/ft
Soil Erodibility	0.02	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	33.11	ac-ft
Total Sediment Yield	255.7	lbs
Total Sediment Yield (Clay)	2.659	lbs
Total Sediment Yield (Silt)	0	lbs
Total Sediment Yield (Sand)	197.2	lbs
Total Sediment Yield (Small Agg.)	3.579	lbs
Total Sediment Yield (Large Agg.)	52.22	lbs
Sediment Concentration	0.3909	mg/l
Peak Sediment Concentration	0.9901	mg/l
Total Nitrogen Yield	117.1	lbs
Total Nitrogen Yield (Particulate)	50.34	lbs
Total Nitrogen Yield (Sorbed)	0.001394	lbs
Total Nitrogen Yield (Dissolved)	66.72	lbs
Nitrogen Concentration	0.2696	mg/l
Peak Nitrogen Concentration	0.609	mg/l
Total Phosphorus Yield	8.104	lbs
Total Phosphorus Yield (Particulate)	3.485	lbs
Total Phosphorus Yield (Sorbed)	1.953E-07	lbs
Total Phosphorus Yield (Dissolved)	4.619	lbs
Phosphorus Concentration	0.01867	mg/l
Peak Phosphorus Concentration	0.04216	mg/l
Total Bacteria Yield	3.021E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	3.021E+12	cfu
Bacteria Concentration	1534	cfu/100 ml
Peak Bacteria Concentration	3465	cfu/100 ml

Non-Routed Connector 4	
Name	Non-Routed Connector 4
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	33.11	ac-ft
Total Sediment Discharged	255.7	lbs
Total Sediment Discharged (Clay)	2.659	lbs
Total Sediment Discharged (Silt)	0	lbs
Total Sediment Discharged (Sand)	197.2	lbs
Total Sediment Discharged (Small Agg.)	3.579	lbs
Total Sediment Discharged (Large Agg.)	52.22	lbs
Sediment Concentration	0.3909	mg/l
Peak Sediment Concentration	0.9901	mg/l
Total Nitrogen Discharged	117.1	lbs
Total Nitrogen Discharged (Particulate)	50.34	lbs
Total Nitrogen Discharged (Sorbed)	0.001394	lbs
Total Nitrogen Discharged (Dissolved)	66.72	lbs
Nitrogen Concentration	0.2696	mg/l
Peak Nitrogen Concentration	0.609	mg/l
Total Phosphorus Discharged	8.104	lbs
Total Phosphorus Discharged (Particulate)	3.485	lbs
Total Phosphorus Discharged (Sorbed)	1.953E-07	lbs
Total Phosphorus Discharged (Dissolved)	4.619	lbs
Phosphorus Concentration	0.01867	mg/l
Peak Phosphorus Concentration	0.04216	mg/l
Total Bacteria Discharged	3.021E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	3.021E+12	cfu
Bacteria Concentration	1534	cfu/100 ml
Peak Bacteria Concentration	3465	cfu/100 ml

Pond-06

Name	Pond-06
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	23	ft
Riser Length	5	ft
Riser Width	5	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	10	ft
Barrel Slope	0.031	ft/ft
Barrel Length	138	ft
Barrel Diameter	24	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	25	ft
EMS Width	50	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	4.69	ac

Peak Stage	17.15	ft
Total Inflow Volume	36.93	ac-ft
Total Rainfall On BMP	23.6	ac-ft
Total Outflow Volume	39.56	ac-ft
Outlet Pipe Flow Volume	33.62	ac-ft
EMS Outflow Volume	0	ac-ft
Infiltration Volume	5.942	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	1.067E+04	lbs
Total Inflow Sediment Mass (Clay)	475.9	lbs
Total Inflow Sediment Mass (Silt)	2710	lbs
Total Inflow Sediment Mass (Sand)	1503	lbs
Total Inflow Sediment Mass (Small Agg.)	2951	lbs
Total Inflow Sediment Mass (Large Agg.)	3033	lbs
Priming Storm Sediment Mass In Permanent Pool	4.635E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	9.907E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	3.645E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	8.696E-11	lbs
Total Sediment Mass Discharged	5354	lbs
Total Sediment Mass Discharged (Clay)	1145	lbs
Total Sediment Mass Discharged (Silt)	4209	lbs
Total Sediment Mass Discharged (Sand)	4.302E-07	lbs
Total Sediment Mass Discharged (Small Agg.)	0.0015	lbs
Total Sediment Mass Discharged (Large Agg.)	6.99E-07	lbs
Total Sediment Mass Trapped	4.689E+05	lbs
Total Sediment Mass Trapped (Clay)	9.84E+04	lbs
Total Sediment Mass Trapped (Silt)	3.63E+05	lbs
Total Sediment Mass Trapped (Sand)	1503	lbs
Total Sediment Mass Trapped (Small Agg.)	2951	lbs

Total Sediment Mass Trapped (Large Agg.)	3033	lbs
Sediment Trapping Efficiency	98.87	%
Sediment Trapping Efficiency (Clay)	98.85	%
Sediment Trapping Efficiency (Silt)	98.85	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	100	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	5354	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	1145	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	4209	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	4.302E-07	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0.0015	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	6.99E-07	lbs
EMS Sediment Mass Discharged	0	lbs
EMS Sediment Mass Discharged (Clay)	0	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0	lbs
EMS Sediment Mass Discharged (Small Agg.)	0	lbs
EMS Sediment Mass Discharged (Large Agg.)	0	lbs
Sediment Concentration	12.16	mg/l
Peak Sediment Concentration	12.16	mg/l

Annual Loading Results - Nitrogen

Parameter	Value	Units
Total Nitrogen Mass Inflow	128.8	lbs
Total Nitrogen Mass Inflow (Particulate)	55.37	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.04757	lbs
Total Nitrogen Mass Inflow (Dissolved)	73.35	lbs
Priming Storm Nitrogen Mass In Permanent Pool	6335	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	1087	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	2.762	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	5245	lbs
Total Nitrogen Mass Discharged	73.27	lbs
Total Nitrogen Mass Discharged (Particulate)	12.6	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.032	lbs

Total Nitrogen Mass Discharged (Dissolved)	60.63	lbs
Total Nitrogen Mass Trapped	6391	lbs
Total Nitrogen Mass Trapped (Particulate)	1130	lbs
Total Nitrogen Mass Trapped (Sorbed)	2.777	lbs
Total Nitrogen Mass Trapped (Dissolved)	5258	lbs
Nitrogen Trapping Efficiency	98.87	%
Nitrogen Trapping Efficiency (Particulate)	98.9	%
Nitrogen Trapping Efficiency (Sorbed)	98.86	%
Nitrogen Trapping Efficiency (Dissolved)	98.86	%
Outlet Pipe Nitrogen Mass Discharged	73.27	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	12.6	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0.032	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	60.63	lbs
EMS Nitrogen Mass Discharged	0	lbs
EMS Nitrogen Mass Discharged (Particulate)	0	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0	lbs
EMS Nitrogen Mass Discharged (Dissolved)	0	lbs
Nitrogen Concentration	0.1662	mg/l
Peak Nitrogen Concentration	0.1662	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	10.24	lbs
Total Phosphorus Mass Inflow (Particulate)	4.404	lbs
Total Phosphorus Mass Inflow (Sorbed)	8.303E-05	lbs
Total Phosphorus Mass Inflow (Dissolved)	5.838	lbs
Priming Storm Phosphorus Mass In Permanent Pool	575.1	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	98.61	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.005018	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	476.5	lbs
Total Phosphorus Mass Discharged	6.651	lbs
Total Phosphorus Mass Discharged (Particulate)	1.143	lbs
Total Phosphorus Mass Discharged (Sorbed)	5.817E-05	lbs
Total Phosphorus Mass Discharged (Dissolved)	5.508	lbs
Total Phosphorus Mass Trapped	578.7	lbs

Total Phosphorus Mass Trapped (Particulate)	101.9	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.005043	lbs
Total Phosphorus Mass Trapped (Dissolved)	476.8	lbs
Phosphorus Trapping Efficiency	98.86	%
Phosphorus Trapping Efficiency (Particulate)	98.89	%
Phosphorus Trapping Efficiency (Sorbed)	98.86	%
Phosphorus Trapping Efficiency (Dissolved)	98.86	%
Outlet Pipe Phosphorus Mass Discharged	6.651	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	1.143	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	5.817E-05	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	5.508	lbs
EMS Phosphorus Mass Discharged	0	lbs
EMS Phosphorus Mass Discharged (Particulate)	0	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0	lbs
EMS Phosphorus Mass Discharged (Dissolved)	0	lbs
Phosphorus Concentration	0.01508	mg/l
Peak Phosphorus Concentration	0.01509	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	3.369E+12	cfu
Total Bacteria Loading (Sorbed To Clay)	7.444E+09	cfu
Total Bacteria Loading (Sorbed To Silt)	1.19E+10	cfu
Total Bacteria Loading (Planktonic)	3.35E+12	cfu
Priming Storm Bacteria In Permanent Pool	2.021E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	4.319E+11	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	1.589E+12	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	2.605E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.007E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.838E+10	cfu
Total Bacteria Discharged (Planktonic)	2.666E+09	cfu
Total Bacteria Trapped	5.364E+12	cfu

Total Bacteria Trapped (Sorbed To Clay)	4.344E+11	cfu
Total Bacteria Trapped (Sorbed To Silt)	1.583E+12	cfu
Total Bacteria Trapped (Planktonic)	3.347E+12	cfu
Bacteria Trapping Efficiency	99.52	%
Bacteria Trapping Efficiency (Sorbed To Clay)	98.86	%
Bacteria Trapping Efficiency (Sorbed To Silt)	98.85	%
Bacteria Trapping Efficiency (Planktonic)	99.92	%
Outlet Pipe Bacteria Discharged	2.605E+10	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	5.007E+09	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	1.838E+10	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	2.666E+09	cfu
EMS Bacteria Discharged	0	cfu
EMS Bacteria Discharged (Sorbed To Clay)	0	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	11.74	cfu/100 ml
Peak Bacteria Concentration	12.09	cfu/100 ml

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Non-Routed Connector 42	
Name	Non-Routed Connector 42
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	33.62	ac-ft
Total Sediment Discharged	5354	lbs
Total Sediment Discharged (Clay)	1145	lbs
Total Sediment Discharged (Silt)	4209	lbs
Total Sediment Discharged (Sand)	4.302E-07	lbs
Total Sediment Discharged (Small Agg.)	0.0015	lbs
Total Sediment Discharged (Large Agg.)	6.99E-07	lbs
Sediment Concentration	12.16	mg/l
Peak Sediment Concentration	12.16	mg/l
Total Nitrogen Discharged	73.26	lbs
Total Nitrogen Discharged (Particulate)	12.6	lbs
Total Nitrogen Discharged (Sorbed)	0.03199	lbs
Total Nitrogen Discharged (Dissolved)	60.63	lbs
Nitrogen Concentration	0.1662	mg/l
Peak Nitrogen Concentration	0.1662	mg/l
Total Phosphorus Discharged	6.651	lbs
Total Phosphorus Discharged (Particulate)	1.143	lbs
Total Phosphorus Discharged (Sorbed)	5.816E-05	lbs
Total Phosphorus Discharged (Dissolved)	5.508	lbs
Phosphorus Concentration	0.01508	mg/l
Peak Phosphorus Concentration	0.01509	mg/l
Total Bacteria Discharged	2.605E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.007E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.838E+10	cfu
Total Bacteria Discharged (Planktonic)	2.665E+09	cfu
Bacteria Concentration	11.74	cfu/100 ml
Peak Bacteria Concentration	12.09	cfu/100 ml

Basin_Off1a	
Name	Basin_Off1a
Description	

Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	43.41	acres
Curve Number	57	-
Soil Series	Lakeland	-
Depth Range	0-74	in
Peak Rate Factor	484	-
Time of Concentration	0.333	hrs

Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	1650	ft
Slope	0.032	ft/ft
Soil Erodibility	0.05	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	5	%
Silt Percent	1.4	%
Sand Percent	93.6	%

Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	282.42	micro g/g/mg/l
Isotherm Max - Nitrogen	4418.6	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	3.82	acres
Curve Number	57	-
Peak Rate Factor	484	-
Time of Concentration	0.333	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.06	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.28	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	58.58	micro g/g/mg/l
Isotherm Max - Nitrogen	1690	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	15000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5.045	ac-ft
Total Sediment Yield	1493	lbs
Total Sediment Yield (Clay)	39.77	lbs
Total Sediment Yield (Silt)	45.33	lbs

Total Sediment Yield (Sand)	1037	lbs
Total Sediment Yield (Small Agg.)	19.75	lbs
Total Sediment Yield (Large Agg.)	350.9	lbs
Sediment Concentration	8.137	mg/l
Peak Sediment Concentration	15.73	mg/l
Total Nitrogen Yield	14.08	lbs
Total Nitrogen Yield (Particulate)	6.055	lbs
Total Nitrogen Yield (Sorbed)	0.007703	lbs
Total Nitrogen Yield (Dissolved)	8.018	lbs
Nitrogen Concentration	0.1533	mg/l
Peak Nitrogen Concentration	0.2654	mg/l
Total Phosphorus Yield	2.8	lbs
Total Phosphorus Yield (Particulate)	1.204	lbs
Total Phosphorus Yield (Sorbed)	7.185E-06	lbs
Total Phosphorus Yield (Dissolved)	1.596	lbs
Phosphorus Concentration	0.02739	mg/l
Peak Phosphorus Concentration	0.04769	mg/l
Total Bacteria Yield	1.073E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	1.564E+08	cfu
Total Bacteria Yield (Sorbed To Silt)	2.085E+08	cfu
Total Bacteria Yield (Planktonic)	1.069E+11	cfu
Bacteria Concentration	532.5	cfu/100 ml
Peak Bacteria Concentration	897.7	cfu/100 ml

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Non-Routed Connector 13	
Name	Non-Routed Connector 13
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5.045	ac-ft
Total Sediment Discharged	1493	lbs
Total Sediment Discharged (Clay)	39.77	lbs
Total Sediment Discharged (Silt)	45.33	lbs
Total Sediment Discharged (Sand)	1037	lbs
Total Sediment Discharged (Small Agg.)	19.75	lbs
Total Sediment Discharged (Large Agg.)	350.9	lbs
Sediment Concentration	8.137	mg/l
Peak Sediment Concentration	15.73	mg/l
Total Nitrogen Discharged	14.08	lbs
Total Nitrogen Discharged (Particulate)	6.055	lbs
Total Nitrogen Discharged (Sorbed)	0.007703	lbs
Total Nitrogen Discharged (Dissolved)	8.018	lbs
Nitrogen Concentration	0.1533	mg/l
Peak Nitrogen Concentration	0.2654	mg/l
Total Phosphorus Discharged	2.8	lbs
Total Phosphorus Discharged (Particulate)	1.204	lbs
Total Phosphorus Discharged (Sorbed)	7.185E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.596	lbs
Phosphorus Concentration	0.02739	mg/l
Peak Phosphorus Concentration	0.04769	mg/l
Total Bacteria Discharged	1.073E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.564E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.085E+08	cfu
Total Bacteria Discharged (Planktonic)	1.069E+11	cfu
Bacteria Concentration	532.5	cfu/100 ml
Peak Bacteria Concentration	897.7	cfu/100 ml

Offsite01	
Name	Offsite01
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5.045	ac-ft
Total Sediment Discharged	1493	lbs
Total Sediment Discharged (Clay)	39.77	lbs
Total Sediment Discharged (Silt)	45.33	lbs
Total Sediment Discharged (Sand)	1037	lbs
Total Sediment Discharged (Small Agg.)	19.75	lbs
Total Sediment Discharged (Large Agg.)	350.9	lbs
Sediment Concentration	8.137	mg/l
Peak Sediment Concentration	15.73	mg/l
Total Nitrogen Discharged	14.08	lbs
Total Nitrogen Discharged (Particulate)	6.055	lbs
Total Nitrogen Discharged (Sorbed)	0.007703	lbs
Total Nitrogen Discharged (Dissolved)	8.018	lbs
Nitrogen Concentration	0.1533	mg/l
Peak Nitrogen Concentration	0.2654	mg/l
Total Phosphorus Discharged	2.8	lbs
Total Phosphorus Discharged (Particulate)	1.204	lbs
Total Phosphorus Discharged (Sorbed)	7.185E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.596	lbs
Phosphorus Concentration	0.02739	mg/l
Peak Phosphorus Concentration	0.04769	mg/l
Total Bacteria Discharged	1.073E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.564E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.085E+08	cfu
Total Bacteria Discharged (Planktonic)	1.069E+11	cfu
Bacteria Concentration	532.5	cfu/100 ml
Peak Bacteria Concentration	897.7	cfu/100 ml

Non-Routed Connector 36	
Name	Non-Routed Connector 36
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Concentrated	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	5.045	ac-ft
Total Sediment Discharged	1493	lbs
Total Sediment Discharged (Clay)	39.77	lbs
Total Sediment Discharged (Silt)	45.33	lbs
Total Sediment Discharged (Sand)	1037	lbs
Total Sediment Discharged (Small Agg.)	19.75	lbs
Total Sediment Discharged (Large Agg.)	350.9	lbs
Sediment Concentration	8.137	mg/l
Peak Sediment Concentration	15.73	mg/l
Total Nitrogen Discharged	14.08	lbs
Total Nitrogen Discharged (Particulate)	6.055	lbs
Total Nitrogen Discharged (Sorbed)	0.007703	lbs
Total Nitrogen Discharged (Dissolved)	8.018	lbs
Nitrogen Concentration	0.1533	mg/l
Peak Nitrogen Concentration	0.2654	mg/l
Total Phosphorus Discharged	2.8	lbs
Total Phosphorus Discharged (Particulate)	1.204	lbs
Total Phosphorus Discharged (Sorbed)	7.185E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.596	lbs
Phosphorus Concentration	0.02739	mg/l
Peak Phosphorus Concentration	0.04769	mg/l
Total Bacteria Discharged	1.073E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.564E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.085E+08	cfu
Total Bacteria Discharged (Planktonic)	1.069E+11	cfu
Bacteria Concentration	532.5	cfu/100 ml
Peak Bacteria Concentration	897.7	cfu/100 ml

Basin_17	
Name	Basin_17
Description	

Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	11.84	acres
Curve Number	76	-
Soil Series	Herndon	-
Depth Range	0-4	in
Peak Rate Factor	484	-
Time of Concentration	0.53	hrs

Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	947.26	ft
Slope	0.018	ft/ft
Soil Erodibility	0.49	-
Curve and Practice Factor	0.1	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	0.17	acres
Curve Number	76	-
Peak Rate Factor	484	-
Time of Concentration	0.53	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	291.99	micro g/g/mg/l
Isotherm Max - Nitrogen	4528.8	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	4.975	ac-ft
Total Sediment Yield	5.235E+04	lbs
Total Sediment Yield (Clay)	2183	lbs
Total Sediment Yield (Silt)	1.336E+04	lbs

Total Sediment Yield (Sand)	6504	lbs
Total Sediment Yield (Small Agg.)	1.507E+04	lbs
Total Sediment Yield (Large Agg.)	1.524E+04	lbs
Sediment Concentration	466.3	mg/l
Peak Sediment Concentration	1103	mg/l
Total Nitrogen Yield	13.19	lbs
Total Nitrogen Yield (Particulate)	5.671	lbs
Total Nitrogen Yield (Sorbed)	0.09289	lbs
Total Nitrogen Yield (Dissolved)	7.424	lbs
Nitrogen Concentration	0.4113	mg/l
Peak Nitrogen Concentration	0.7832	mg/l
Total Phosphorus Yield	2.684	lbs
Total Phosphorus Yield (Particulate)	1.154	lbs
Total Phosphorus Yield (Sorbed)	0.0003387	lbs
Total Phosphorus Yield (Dissolved)	1.53	lbs
Phosphorus Concentration	0.05275	mg/l
Peak Phosphorus Concentration	0.1035	mg/l
Total Bacteria Yield	8.444E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	5.22E+09	cfu
Total Bacteria Yield (Sorbed To Silt)	8.329E+09	cfu
Total Bacteria Yield (Planktonic)	7.089E+10	cfu
Bacteria Concentration	5041	cfu/100 ml
Peak Bacteria Concentration	9460	cfu/100 ml

Non-Routed Connector 66	
Name	Non-Routed Connector 66
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Concentrated	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	4.975	ac-ft
Total Sediment Discharged	5.235E+04	lbs
Total Sediment Discharged (Clay)	2183	lbs
Total Sediment Discharged (Silt)	1.336E+04	lbs
Total Sediment Discharged (Sand)	6504	lbs
Total Sediment Discharged (Small Agg.)	1.507E+04	lbs
Total Sediment Discharged (Large Agg.)	1.524E+04	lbs
Sediment Concentration	466.3	mg/l
Peak Sediment Concentration	1103	mg/l
Total Nitrogen Discharged	13.19	lbs
Total Nitrogen Discharged (Particulate)	5.671	lbs
Total Nitrogen Discharged (Sorbed)	0.09289	lbs
Total Nitrogen Discharged (Dissolved)	7.424	lbs
Nitrogen Concentration	0.4113	mg/l
Peak Nitrogen Concentration	0.7832	mg/l
Total Phosphorus Discharged	2.684	lbs
Total Phosphorus Discharged (Particulate)	1.154	lbs
Total Phosphorus Discharged (Sorbed)	0.0003387	lbs
Total Phosphorus Discharged (Dissolved)	1.53	lbs
Phosphorus Concentration	0.05275	mg/l
Peak Phosphorus Concentration	0.1035	mg/l
Total Bacteria Discharged	8.444E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.22E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.329E+09	cfu
Total Bacteria Discharged (Planktonic)	7.089E+10	cfu
Bacteria Concentration	5041	cfu/100 ml
Peak Bacteria Concentration	9460	cfu/100 ml

Basin_18	
Name	Basin_18
Description	

Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	27.99	acres
Curve Number	50	-
Soil Series	Troup	-
Depth Range	0-18	in
Peak Rate Factor	484	-
Time of Concentration	0.283	hrs

Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	1900	ft
Slope	0.015	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	5	%
Silt Percent	1.4	%
Sand Percent	93.6	%

Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.06	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.28	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	282.42	micro g/g/mg/l
Isotherm Max - Nitrogen	4418.6	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1.135E+05	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	1.19	acres
Curve Number	49	-
Peak Rate Factor	484	-
Time of Concentration	0.283	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	117	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.06	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.28	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	268.1	micro g/g/mg/l
Isotherm Max - Nitrogen	4253.3	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.83	ac-ft
Total Sediment Yield	80.17	lbs
Total Sediment Yield (Clay)	3.417	lbs
Total Sediment Yield (Silt)	5.288	lbs

Total Sediment Yield (Sand)	52.93	lbs
Total Sediment Yield (Small Agg.)	0.9878	lbs
Total Sediment Yield (Large Agg.)	17.55	lbs
Sediment Concentration	2.24	mg/l
Peak Sediment Concentration	3.717	mg/l
Total Nitrogen Yield	10.25	lbs
Total Nitrogen Yield (Particulate)	4.408	lbs
Total Nitrogen Yield (Sorbed)	0.001753	lbs
Total Nitrogen Yield (Dissolved)	5.841	lbs
Nitrogen Concentration	0.1202	mg/l
Peak Nitrogen Concentration	0.2175	mg/l
Total Phosphorus Yield	1.393	lbs
Total Phosphorus Yield (Particulate)	0.5991	lbs
Total Phosphorus Yield (Sorbed)	6.718E-07	lbs
Total Phosphorus Yield (Dissolved)	0.7942	lbs
Phosphorus Concentration	0.01633	mg/l
Peak Phosphorus Concentration	0.02956	mg/l
Total Bacteria Yield	2.529E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	3.448E+08	cfu
Total Bacteria Yield (Sorbed To Silt)	2.251E+08	cfu
Total Bacteria Yield (Planktonic)	2.528E+12	cfu
Bacteria Concentration	5188	cfu/100 ml
Peak Bacteria Concentration	9766	cfu/100 ml

RICHLAND COUNTY SOUTH CAROLINA 1799

Non-Routed Connector 27	
Name	Non-Routed Connector 27
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.83	ac-ft
Total Sediment Discharged	80.17	lbs
Total Sediment Discharged (Clay)	3.417	lbs
Total Sediment Discharged (Silt)	5.288	lbs
Total Sediment Discharged (Sand)	52.93	lbs
Total Sediment Discharged (Small Agg.)	0.9878	lbs
Total Sediment Discharged (Large Agg.)	17.55	lbs
Sediment Concentration	2.24	mg/l
Peak Sediment Concentration	3.717	mg/l
Total Nitrogen Discharged	10.25	lbs
Total Nitrogen Discharged (Particulate)	4.408	lbs
Total Nitrogen Discharged (Sorbed)	0.001753	lbs
Total Nitrogen Discharged (Dissolved)	5.841	lbs
Nitrogen Concentration	0.1202	mg/l
Peak Nitrogen Concentration	0.2175	mg/l
Total Phosphorus Discharged	1.393	lbs
Total Phosphorus Discharged (Particulate)	0.5991	lbs
Total Phosphorus Discharged (Sorbed)	6.718E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7942	lbs
Phosphorus Concentration	0.01633	mg/l
Peak Phosphorus Concentration	0.02956	mg/l
Total Bacteria Discharged	2.529E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.448E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.251E+08	cfu
Total Bacteria Discharged (Planktonic)	2.528E+12	cfu
Bacteria Concentration	5188	cfu/100 ml
Peak Bacteria Concentration	9766	cfu/100 ml

Tirb1-05-07	
Name	Tirb1-05-07
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	1.83	ac-ft
Total Sediment Discharged	80.17	lbs
Total Sediment Discharged (Clay)	3.417	lbs
Total Sediment Discharged (Silt)	5.288	lbs
Total Sediment Discharged (Sand)	52.93	lbs
Total Sediment Discharged (Small Agg.)	0.9878	lbs
Total Sediment Discharged (Large Agg.)	17.55	lbs
Sediment Concentration	2.24	mg/l
Peak Sediment Concentration	3.717	mg/l
Total Nitrogen Discharged	10.25	lbs
Total Nitrogen Discharged (Particulate)	4.408	lbs
Total Nitrogen Discharged (Sorbed)	0.001753	lbs
Total Nitrogen Discharged (Dissolved)	5.841	lbs
Nitrogen Concentration	0.1202	mg/l
Peak Nitrogen Concentration	0.2175	mg/l
Total Phosphorus Discharged	1.393	lbs
Total Phosphorus Discharged (Particulate)	0.5991	lbs
Total Phosphorus Discharged (Sorbed)	6.718E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7942	lbs
Phosphorus Concentration	0.01633	mg/l
Peak Phosphorus Concentration	0.02956	mg/l
Total Bacteria Discharged	2.529E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.448E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.251E+08	cfu
Total Bacteria Discharged (Planktonic)	2.528E+12	cfu
Bacteria Concentration	5188	cfu/100 ml
Peak Bacteria Concentration	9766	cfu/100 ml

L-0580P	
Name	L-0580P
Description	

Inputs		
Parameter	**Value**	**Units**
Conduit Option	Muskingum-Kunge method	-
Conduit Diameter	48	in.
Conduit Length	151	ft
Conduit Slope	0.008	ft/ft
Manning's Roughness	0.013	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.83	ac-ft
Total Sediment Discharged	80.17	lbs
Total Sediment Discharged (Clay)	3.417	lbs
Total Sediment Discharged (Silt)	5.288	lbs
Total Sediment Discharged (Sand)	52.93	lbs
Total Sediment Discharged (Small Agg.)	0.9878	lbs
Total Sediment Discharged (Large Agg.)	17.55	lbs
Sediment Concentration	2.24	mg/l
Peak Sediment Concentration	3.717	mg/l
Total Nitrogen Discharged	10.25	lbs
Total Nitrogen Discharged (Particulate)	4.408	lbs
Total Nitrogen Discharged (Sorbed)	0.001753	lbs
Total Nitrogen Discharged (Dissolved)	5.841	lbs
Nitrogen Concentration	0.1202	mg/l
Peak Nitrogen Concentration	0.2175	mg/l
Total Phosphorus Discharged	1.393	lbs
Total Phosphorus Discharged (Particulate)	0.5991	lbs
Total Phosphorus Discharged (Sorbed)	6.718E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7942	lbs
Phosphorus Concentration	0.01633	mg/l
Peak Phosphorus Concentration	0.02956	mg/l
Total Bacteria Discharged	2.529E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.448E+08	cfu

Total Bacteria Discharged (Sorbed To Silt)	2.251E+08	cfu
Total Bacteria Discharged (Planktonic)	2.528E+12	cfu
Bacteria Concentration	5188	cfu/100 ml
Peak Bacteria Concentration	9766	cfu/100 ml

Messages	
Type	**Description**
Warning	Convergence criteria is not met. Flow is routed as simple translation.

Trib1-05-06	
Name	Trib1-05-06
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.83	ac-ft
Total Sediment Discharged	80.17	lbs
Total Sediment Discharged (Clay)	3.417	lbs
Total Sediment Discharged (Silt)	5.288	lbs
Total Sediment Discharged (Sand)	52.93	lbs
Total Sediment Discharged (Small Agg.)	0.9878	lbs
Total Sediment Discharged (Large Agg.)	17.55	lbs
Sediment Concentration	2.24	mg/l
Peak Sediment Concentration	3.717	mg/l
Total Nitrogen Discharged	10.25	lbs
Total Nitrogen Discharged (Particulate)	4.408	lbs
Total Nitrogen Discharged (Sorbed)	0.001753	lbs
Total Nitrogen Discharged (Dissolved)	5.841	lbs
Nitrogen Concentration	0.1202	mg/l
Peak Nitrogen Concentration	0.2175	mg/l
Total Phosphorus Discharged	1.393	lbs
Total Phosphorus Discharged (Particulate)	0.5991	lbs
Total Phosphorus Discharged (Sorbed)	6.718E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7942	lbs
Phosphorus Concentration	0.01633	mg/l
Peak Phosphorus Concentration	0.02956	mg/l
Total Bacteria Discharged	2.529E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.448E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.251E+08	cfu
Total Bacteria Discharged (Planktonic)	2.528E+12	cfu
Bacteria Concentration	5188	cfu/100 ml
Peak Bacteria Concentration	9766	cfu/100 ml

Non-Routed Connector 50	
Name	Non-Routed Connector 50
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.83	ac-ft
Total Sediment Discharged	80.17	lbs
Total Sediment Discharged (Clay)	3.417	lbs
Total Sediment Discharged (Silt)	5.288	lbs
Total Sediment Discharged (Sand)	52.93	lbs
Total Sediment Discharged (Small Agg.)	0.9878	lbs
Total Sediment Discharged (Large Agg.)	17.55	lbs
Sediment Concentration	2.24	mg/l
Peak Sediment Concentration	3.717	mg/l
Total Nitrogen Discharged	10.25	lbs
Total Nitrogen Discharged (Particulate)	4.408	lbs
Total Nitrogen Discharged (Sorbed)	0.001753	lbs
Total Nitrogen Discharged (Dissolved)	5.841	lbs
Nitrogen Concentration	0.1202	mg/l
Peak Nitrogen Concentration	0.2175	mg/l
Total Phosphorus Discharged	1.393	lbs
Total Phosphorus Discharged (Particulate)	0.5991	lbs
Total Phosphorus Discharged (Sorbed)	6.718E-07	lbs
Total Phosphorus Discharged (Dissolved)	0.7942	lbs
Phosphorus Concentration	0.01633	mg/l
Peak Phosphorus Concentration	0.02956	mg/l
Total Bacteria Discharged	2.529E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.448E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.251E+08	cfu
Total Bacteria Discharged (Planktonic)	2.528E+12	cfu
Bacteria Concentration	5188	cfu/100 ml
Peak Bacteria Concentration	9766	cfu/100 ml

Basin_E	
Name	Basin_E
Description	

Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	63.66	acres
Curve Number	44	-
Soil Series	Troup	-
Depth Range	0-18	in
Peak Rate Factor	484	-
Time of Concentration	0.917	hrs

Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	2770	ft
Slope	0.002	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	5	%
Silt Percent	1.4	%
Sand Percent	93.6	%

Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	282.42	micro g/g/mg/l
Isotherm Max - Nitrogen	4418.6	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	11.04	acres
Curve Number	44	-
Peak Rate Factor	484	-
Time of Concentration	0.917	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	117	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	285.05	micro g/g/mg/l
Isotherm Max - Nitrogen	4448.9	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.531	ac-ft
Total Sediment Yield	54.94	lbs
Total Sediment Yield (Clay)	11.34	lbs
Total Sediment Yield (Silt)	23.67	lbs

Total Sediment Yield (Sand)	16.8	lbs
Total Sediment Yield (Small Agg.)	0.1667	lbs
Total Sediment Yield (Large Agg.)	2.962	lbs
Sediment Concentration	1.017	mg/l
Peak Sediment Concentration	1.453	mg/l
Total Nitrogen Yield	7.059	lbs
Total Nitrogen Yield (Particulate)	3.035	lbs
Total Nitrogen Yield (Sorbed)	0.004654	lbs
Total Nitrogen Yield (Dissolved)	4.019	lbs
Nitrogen Concentration	0.03896	mg/l
Peak Nitrogen Concentration	0.06068	mg/l
Total Phosphorus Yield	1.391	lbs
Total Phosphorus Yield (Particulate)	0.5982	lbs
Total Phosphorus Yield (Sorbed)	1.509E-06	lbs
Total Phosphorus Yield (Dissolved)	0.793	lbs
Phosphorus Concentration	0.006553	mg/l
Peak Phosphorus Concentration	0.01041	mg/l
Total Bacteria Yield	4.188E+10	cfu
Total Bacteria Yield (Sorbed To Clay)	3.205E+07	cfu
Total Bacteria Yield (Sorbed To Silt)	6.693E+07	cfu
Total Bacteria Yield (Planktonic)	4.178E+10	cfu
Bacteria Concentration	85.33	cfu/100 ml
Peak Bacteria Concentration	126.6	cfu/100 ml

Non-Routed Connector 28	
Name	Non-Routed Connector 28
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	2.531	ac-ft
Total Sediment Discharged	54.94	lbs
Total Sediment Discharged (Clay)	11.34	lbs
Total Sediment Discharged (Silt)	23.67	lbs
Total Sediment Discharged (Sand)	16.8	lbs
Total Sediment Discharged (Small Agg.)	0.1667	lbs
Total Sediment Discharged (Large Agg.)	2.962	lbs
Sediment Concentration	1.017	mg/l
Peak Sediment Concentration	1.453	mg/l
Total Nitrogen Discharged	7.059	lbs
Total Nitrogen Discharged (Particulate)	3.035	lbs
Total Nitrogen Discharged (Sorbed)	0.004654	lbs
Total Nitrogen Discharged (Dissolved)	4.019	lbs
Nitrogen Concentration	0.03896	mg/l
Peak Nitrogen Concentration	0.06068	mg/l
Total Phosphorus Discharged	1.391	lbs
Total Phosphorus Discharged (Particulate)	0.5982	lbs
Total Phosphorus Discharged (Sorbed)	1.509E-06	lbs
Total Phosphorus Discharged (Dissolved)	0.793	lbs
Phosphorus Concentration	0.006553	mg/l
Peak Phosphorus Concentration	0.01041	mg/l
Total Bacteria Discharged	4.188E+10	cfu
Total Bacteria Discharged (Sorbed To Clay)	3.205E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.693E+07	cfu
Total Bacteria Discharged (Planktonic)	4.178E+10	cfu
Bacteria Concentration	85.33	cfu/100 ml
Peak Bacteria Concentration	126.6	cfu/100 ml

Pond-05

Name	Pond-05
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	18	ft
Riser Length	4	ft
Riser Width	5	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	4	ft
Barrel Slope	0.007	ft/ft
Barrel Length	267	ft
Barrel Diameter	36	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	21	ft
EMS Width	50	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	2.51	ac

Peak Stage	14.47	ft
Total Inflow Volume	4.361	ac-ft
Total Rainfall On BMP	12.63	ac-ft
Total Outflow Volume	6.868	ac-ft
Outlet Pipe Flow Volume	6.049	ac-ft
EMS Outflow Volume	0	ac-ft
Infiltration Volume	0.8196	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	135.1	lbs
Total Inflow Sediment Mass (Clay)	14.76	lbs
Total Inflow Sediment Mass (Silt)	28.96	lbs
Total Inflow Sediment Mass (Sand)	69.73	lbs
Total Inflow Sediment Mass (Small Agg.)	1.154	lbs
Total Inflow Sediment Mass (Large Agg.)	20.51	lbs
Priming Storm Sediment Mass In Permanent Pool	1.532E+04	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	8026	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	7292	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	80.89	lbs
Total Sediment Mass Discharged (Clay)	42.54	lbs
Total Sediment Mass Discharged (Silt)	38.34	lbs
Total Sediment Mass Discharged (Sand)	0.0001821	lbs
Total Sediment Mass Discharged (Small Agg.)	0.002623	lbs
Total Sediment Mass Discharged (Large Agg.)	4.766E-05	lbs
Total Sediment Mass Trapped	1.537E+04	lbs
Total Sediment Mass Trapped (Clay)	7998	lbs
Total Sediment Mass Trapped (Silt)	7282	lbs
Total Sediment Mass Trapped (Sand)	69.73	lbs
Total Sediment Mass Trapped (Small Agg.)	1.152	lbs

Total Sediment Mass Trapped (Large Agg.)	20.51	lbs
Sediment Trapping Efficiency	99.48	%
Sediment Trapping Efficiency (Clay)	99.47	%
Sediment Trapping Efficiency (Silt)	99.48	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	99.77	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	80.89	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	42.54	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	38.34	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0.0001821	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0.002623	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	4.766E-05	lbs
EMS Sediment Mass Discharged	0	lbs
EMS Sediment Mass Discharged (Clay)	0	lbs
EMS Sediment Mass Discharged (Silt)	0	lbs
EMS Sediment Mass Discharged (Sand)	0	lbs
EMS Sediment Mass Discharged (Small Agg.)	0	lbs
EMS Sediment Mass Discharged (Large Agg.)	0	lbs
Sediment Concentration	0.2976	mg/l
Peak Sediment Concentration	0.2985	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	17.31	lbs
Total Nitrogen Mass Inflow (Particulate)	7.443	lbs
Total Nitrogen Mass Inflow (Sorbed)	0.006407	lbs
Total Nitrogen Mass Inflow (Dissolved)	9.86	lbs
Priming Storm Nitrogen Mass In Permanent Pool	3206	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	1296	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	3.852	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1906	lbs
Total Nitrogen Mass Discharged	17.84	lbs
Total Nitrogen Mass Discharged (Particulate)	7.242	lbs
Total Nitrogen Mass Discharged (Sorbed)	0.02056	lbs

Total Nitrogen Mass Discharged (Dissolved)	10.58	lbs
Total Nitrogen Mass Trapped	3206	lbs
Total Nitrogen Mass Trapped (Particulate)	1297	lbs
Total Nitrogen Mass Trapped (Sorbed)	3.838	lbs
Total Nitrogen Mass Trapped (Dissolved)	1905	lbs
Nitrogen Trapping Efficiency	99.45	%
Nitrogen Trapping Efficiency (Particulate)	99.44	%
Nitrogen Trapping Efficiency (Sorbed)	99.47	%
Nitrogen Trapping Efficiency (Dissolved)	99.45	%
Outlet Pipe Nitrogen Mass Discharged	17.84	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	7.242	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	0.02056	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	10.58	lbs
EMS Nitrogen Mass Discharged	0	lbs
EMS Nitrogen Mass Discharged (Particulate)	0	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0	lbs
EMS Nitrogen Mass Discharged (Dissolved)	0	lbs
Nitrogen Concentration	0.06248	mg/l
Peak Nitrogen Concentration	0.06265	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	2.785	lbs
Total Phosphorus Mass Inflow (Particulate)	1.197	lbs
Total Phosphorus Mass Inflow (Sorbed)	2.181E-06	lbs
Total Phosphorus Mass Inflow (Dissolved)	1.587	lbs
Priming Storm Phosphorus Mass In Permanent Pool	515.5	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	208.4	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.001288	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	307.1	lbs
Total Phosphorus Mass Discharged	2.874	lbs
Total Phosphorus Mass Discharged (Particulate)	1.167	lbs
Total Phosphorus Mass Discharged (Sorbed)	6.881E-06	lbs
Total Phosphorus Mass Discharged (Dissolved)	1.707	lbs
Total Phosphorus Mass Trapped	515.4	lbs

Total Phosphorus Mass Trapped (Particulate)	208.4	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.001284	lbs
Total Phosphorus Mass Trapped (Dissolved)	307	lbs
Phosphorus Trapping Efficiency	99.45	%
Phosphorus Trapping Efficiency (Particulate)	99.44	%
Phosphorus Trapping Efficiency (Sorbed)	99.47	%
Phosphorus Trapping Efficiency (Dissolved)	99.45	%
Outlet Pipe Phosphorus Mass Discharged	2.874	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	1.167	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	6.881E-06	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	1.707	lbs
EMS Phosphorus Mass Discharged	0	lbs
EMS Phosphorus Mass Discharged (Particulate)	0	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0	lbs
EMS Phosphorus Mass Discharged (Dissolved)	0	lbs
Phosphorus Concentration	0.01005	mg/l
Peak Phosphorus Concentration	0.01008	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	2.57E+12	cfu
Total Bacteria Loading (Sorbed To Clay)	3.534E+08	cfu
Total Bacteria Loading (Sorbed To Silt)	5.04E+08	cfu
Total Bacteria Loading (Planktonic)	2.57E+12	cfu
Priming Storm Bacteria In Permanent Pool	3.459E+11	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	1.812E+11	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	1.647E+11	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	1.515E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	9.746E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	9.049E+08	cfu
Total Bacteria Discharged (Planktonic)	1.496E+11	cfu
Total Bacteria Trapped	2.765E+12	cfu

Total Bacteria Trapped (Sorbed To Clay)	1.806E+11	cfu
Total Bacteria Trapped (Sorbed To Silt)	1.643E+11	cfu
Total Bacteria Trapped (Planktonic)	2.42E+12	cfu
Bacteria Trapping Efficiency	94.81	%
Bacteria Trapping Efficiency (Sorbed To Clay)	99.46	%
Bacteria Trapping Efficiency (Sorbed To Silt)	99.45	%
Bacteria Trapping Efficiency (Planktonic)	94.18	%
Outlet Pipe Bacteria Discharged	1.515E+11	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	9.746E+08	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	9.049E+08	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	1.496E+11	cfu
EMS Bacteria Discharged	0	cfu
EMS Bacteria Discharged (Sorbed To Clay)	0	cfu
EMS Bacteria Discharged (Sorbed To Silt)	0	cfu
EMS Bacteria Discharged (Planktonic)	0	cfu
Bacteria Concentration	7.921	cfu/100 ml
Peak Bacteria Concentration	24.44	cfu/100 ml

RICHLAND COUNTY
1799
SOUTH CAROLINA

Non-Routed Connector 29	
Name	Non-Routed Connector 29
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	6.049	ac-ft
Total Sediment Discharged	80.89	lbs
Total Sediment Discharged (Clay)	42.54	lbs
Total Sediment Discharged (Silt)	38.34	lbs
Total Sediment Discharged (Sand)	0.0001821	lbs
Total Sediment Discharged (Small Agg.)	0.002623	lbs
Total Sediment Discharged (Large Agg.)	4.766E-05	lbs
Sediment Concentration	0.2976	mg/l
Peak Sediment Concentration	0.2985	mg/l
Total Nitrogen Discharged	17.84	lbs
Total Nitrogen Discharged (Particulate)	7.242	lbs
Total Nitrogen Discharged (Sorbed)	0.02056	lbs
Total Nitrogen Discharged (Dissolved)	10.58	lbs
Nitrogen Concentration	0.06248	mg/l
Peak Nitrogen Concentration	0.06265	mg/l
Total Phosphorus Discharged	2.874	lbs
Total Phosphorus Discharged (Particulate)	1.167	lbs
Total Phosphorus Discharged (Sorbed)	6.881E-06	lbs
Total Phosphorus Discharged (Dissolved)	1.707	lbs
Phosphorus Concentration	0.01005	mg/l
Peak Phosphorus Concentration	0.01008	mg/l
Total Bacteria Discharged	1.515E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	9.746E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	9.049E+08	cfu
Total Bacteria Discharged (Planktonic)	1.496E+11	cfu
Bacteria Concentration	7.921	cfu/100 ml
Peak Bacteria Concentration	24.44	cfu/100 ml

Trib1-05-05	
Name	Trib1-05-05
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	11.02	ac-ft
Total Sediment Discharged	5.243E+04	lbs
Total Sediment Discharged (Clay)	2225	lbs
Total Sediment Discharged (Silt)	1.34E+04	lbs
Total Sediment Discharged (Sand)	6504	lbs
Total Sediment Discharged (Small Agg.)	1.507E+04	lbs
Total Sediment Discharged (Large Agg.)	1.524E+04	lbs
Sediment Concentration	371.6	mg/l
Peak Sediment Concentration	1082	mg/l
Total Nitrogen Discharged	31.03	lbs
Total Nitrogen Discharged (Particulate)	12.91	lbs
Total Nitrogen Discharged (Sorbed)	0.1135	lbs
Total Nitrogen Discharged (Dissolved)	18	lbs
Nitrogen Concentration	0.4139	mg/l
Peak Nitrogen Concentration	0.7684	mg/l
Total Phosphorus Discharged	5.558	lbs
Total Phosphorus Discharged (Particulate)	2.321	lbs
Total Phosphorus Discharged (Sorbed)	0.0003456	lbs
Total Phosphorus Discharged (Dissolved)	3.237	lbs
Phosphorus Concentration	0.05205	mg/l
Peak Phosphorus Concentration	0.1026	mg/l
Total Bacteria Discharged	2.358E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.062E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	9.639E+09	cfu
Total Bacteria Discharged (Planktonic)	2.201E+11	cfu
Bacteria Concentration	4989	cfu/100 ml
Peak Bacteria Concentration	8993	cfu/100 ml

Non-Routed Connector 30	
Name	Non-Routed Connector 30
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	11.02	ac-ft
Total Sediment Discharged	5.243E+04	lbs
Total Sediment Discharged (Clay)	2225	lbs
Total Sediment Discharged (Silt)	1.34E+04	lbs
Total Sediment Discharged (Sand)	6504	lbs
Total Sediment Discharged (Small Agg.)	1.507E+04	lbs
Total Sediment Discharged (Large Agg.)	1.524E+04	lbs
Sediment Concentration	371.6	mg/l
Peak Sediment Concentration	1082	mg/l
Total Nitrogen Discharged	31.03	lbs
Total Nitrogen Discharged (Particulate)	12.91	lbs
Total Nitrogen Discharged (Sorbed)	0.1135	lbs
Total Nitrogen Discharged (Dissolved)	18	lbs
Nitrogen Concentration	0.4139	mg/l
Peak Nitrogen Concentration	0.7684	mg/l
Total Phosphorus Discharged	5.558	lbs
Total Phosphorus Discharged (Particulate)	2.321	lbs
Total Phosphorus Discharged (Sorbed)	0.0003456	lbs
Total Phosphorus Discharged (Dissolved)	3.237	lbs
Phosphorus Concentration	0.05205	mg/l
Peak Phosphorus Concentration	0.1026	mg/l
Total Bacteria Discharged	2.358E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.062E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	9.639E+09	cfu
Total Bacteria Discharged (Planktonic)	2.201E+11	cfu
Bacteria Concentration	4989	cfu/100 ml
Peak Bacteria Concentration	8993	cfu/100 ml

Basin_01	
Name	Basin_01
Description	

Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	83.95	acres
Curve Number	63	-
Soil Series	Herndon	-
Depth Range	0-4	in
Peak Rate Factor	484	-
Time of Concentration	0.7	hrs

Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	4820	ft
Slope	0.018	ft/ft
Soil Erodibility	0.49	-
Curve and Practice Factor	0.1	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	27.24	acres
Curve Number	61	-
Peak Rate Factor	484	-
Time of Concentration	0.7	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	291.99	micro g/g/mg/l
Isotherm Max - Nitrogen	4528.8	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	17.16	ac-ft
Total Sediment Yield	2.462E+05	lbs
Total Sediment Yield (Clay)	1.044E+04	lbs
Total Sediment Yield (Silt)	6.306E+04	lbs

Total Sediment Yield (Sand)	3.064E+04	lbs
Total Sediment Yield (Small Agg.)	7.065E+04	lbs
Total Sediment Yield (Large Agg.)	7.144E+04	lbs
Sediment Concentration	337.6	mg/l
Peak Sediment Concentration	706.6	mg/l
Total Nitrogen Yield	47.85	lbs
Total Nitrogen Yield (Particulate)	20.57	lbs
Total Nitrogen Yield (Sorbed)	0.4621	lbs
Total Nitrogen Yield (Dissolved)	26.81	lbs
Nitrogen Concentration	0.1627	mg/l
Peak Nitrogen Concentration	0.2784	mg/l
Total Phosphorus Yield	8.477	lbs
Total Phosphorus Yield (Particulate)	3.645	lbs
Total Phosphorus Yield (Sorbed)	0.001501	lbs
Total Phosphorus Yield (Dissolved)	4.83	lbs
Phosphorus Concentration	0.02466	mg/l
Peak Phosphorus Concentration	0.04335	mg/l
Total Bacteria Yield	1.131E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	6.239E+10	cfu
Total Bacteria Yield (Sorbed To Silt)	1.005E+11	cfu
Total Bacteria Yield (Planktonic)	9.682E+11	cfu
Bacteria Concentration	1448	cfu/100 ml
Peak Bacteria Concentration	2350	cfu/100 ml

Non-Routed Connector 15	
Name	Non-Routed Connector 15
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	17.16	ac-ft
Total Sediment Discharged	2.462E+05	lbs
Total Sediment Discharged (Clay)	1.044E+04	lbs
Total Sediment Discharged (Silt)	6.306E+04	lbs
Total Sediment Discharged (Sand)	3.064E+04	lbs
Total Sediment Discharged (Small Agg.)	7.065E+04	lbs
Total Sediment Discharged (Large Agg.)	7.144E+04	lbs
Sediment Concentration	337.6	mg/l
Peak Sediment Concentration	706.6	mg/l
Total Nitrogen Discharged	47.85	lbs
Total Nitrogen Discharged (Particulate)	20.57	lbs
Total Nitrogen Discharged (Sorbed)	0.4621	lbs
Total Nitrogen Discharged (Dissolved)	26.81	lbs
Nitrogen Concentration	0.1627	mg/l
Peak Nitrogen Concentration	0.2784	mg/l
Total Phosphorus Discharged	8.477	lbs
Total Phosphorus Discharged (Particulate)	3.645	lbs
Total Phosphorus Discharged (Sorbed)	0.001501	lbs
Total Phosphorus Discharged (Dissolved)	4.83	lbs
Phosphorus Concentration	0.02466	mg/l
Peak Phosphorus Concentration	0.04335	mg/l
Total Bacteria Discharged	1.131E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.239E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.005E+11	cfu
Total Bacteria Discharged (Planktonic)	9.682E+11	cfu
Bacteria Concentration	1448	cfu/100 ml
Peak Bacteria Concentration	2350	cfu/100 ml

Trib1-05-03	
Name	Trib1-05-03
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	28.19	ac-ft
Total Sediment Discharged	2.987E+05	lbs
Total Sediment Discharged (Clay)	1.267E+04	lbs
Total Sediment Discharged (Silt)	7.645E+04	lbs
Total Sediment Discharged (Sand)	3.715E+04	lbs
Total Sediment Discharged (Small Agg.)	8.572E+04	lbs
Total Sediment Discharged (Large Agg.)	8.667E+04	lbs
Sediment Concentration	411.1	mg/l
Peak Sediment Concentration	1098	mg/l
Total Nitrogen Discharged	78.87	lbs
Total Nitrogen Discharged (Particulate)	33.49	lbs
Total Nitrogen Discharged (Sorbed)	0.5755	lbs
Total Nitrogen Discharged (Dissolved)	44.81	lbs
Nitrogen Concentration	0.4177	mg/l
Peak Nitrogen Concentration	0.7685	mg/l
Total Phosphorus Discharged	14.03	lbs
Total Phosphorus Discharged (Particulate)	5.966	lbs
Total Phosphorus Discharged (Sorbed)	0.001846	lbs
Total Phosphorus Discharged (Dissolved)	8.067	lbs
Phosphorus Concentration	0.05068	mg/l
Peak Phosphorus Concentration	0.09909	mg/l
Total Bacteria Discharged	1.367E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.899E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.106E+11	cfu
Total Bacteria Discharged (Planktonic)	1.187E+12	cfu
Bacteria Concentration	5438	cfu/100 ml
Peak Bacteria Concentration	9383	cfu/100 ml

Non-Routed Connector 31	
Name	Non-Routed Connector 31
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Concentrated	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	28.19	ac-ft
Total Sediment Discharged	2.987E+05	lbs
Total Sediment Discharged (Clay)	1.267E+04	lbs
Total Sediment Discharged (Silt)	7.645E+04	lbs
Total Sediment Discharged (Sand)	3.715E+04	lbs
Total Sediment Discharged (Small Agg.)	8.572E+04	lbs
Total Sediment Discharged (Large Agg.)	8.667E+04	lbs
Sediment Concentration	411.1	mg/l
Peak Sediment Concentration	1098	mg/l
Total Nitrogen Discharged	78.87	lbs
Total Nitrogen Discharged (Particulate)	33.49	lbs
Total Nitrogen Discharged (Sorbed)	0.5755	lbs
Total Nitrogen Discharged (Dissolved)	44.81	lbs
Nitrogen Concentration	0.4177	mg/l
Peak Nitrogen Concentration	0.7685	mg/l
Total Phosphorus Discharged	14.03	lbs
Total Phosphorus Discharged (Particulate)	5.966	lbs
Total Phosphorus Discharged (Sorbed)	0.001846	lbs
Total Phosphorus Discharged (Dissolved)	8.067	lbs
Phosphorus Concentration	0.05068	mg/l
Peak Phosphorus Concentration	0.09909	mg/l
Total Bacteria Discharged	1.367E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.899E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.106E+11	cfu
Total Bacteria Discharged (Planktonic)	1.187E+12	cfu
Bacteria Concentration	5438	cfu/100 ml
Peak Bacteria Concentration	9383	cfu/100 ml

Trib1-05-02	
Name	Trib1-05-02
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	28.19	ac-ft
Total Sediment Discharged	2.987E+05	lbs
Total Sediment Discharged (Clay)	1.267E+04	lbs
Total Sediment Discharged (Silt)	7.645E+04	lbs
Total Sediment Discharged (Sand)	3.715E+04	lbs
Total Sediment Discharged (Small Agg.)	8.572E+04	lbs
Total Sediment Discharged (Large Agg.)	8.667E+04	lbs
Sediment Concentration	411.1	mg/l
Peak Sediment Concentration	1098	mg/l
Total Nitrogen Discharged	78.87	lbs
Total Nitrogen Discharged (Particulate)	33.49	lbs
Total Nitrogen Discharged (Sorbed)	0.5755	lbs
Total Nitrogen Discharged (Dissolved)	44.81	lbs
Nitrogen Concentration	0.4177	mg/l
Peak Nitrogen Concentration	0.7685	mg/l
Total Phosphorus Discharged	14.03	lbs
Total Phosphorus Discharged (Particulate)	5.966	lbs
Total Phosphorus Discharged (Sorbed)	0.001846	lbs
Total Phosphorus Discharged (Dissolved)	8.067	lbs
Phosphorus Concentration	0.05068	mg/l
Peak Phosphorus Concentration	0.09909	mg/l
Total Bacteria Discharged	1.367E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.899E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.106E+11	cfu
Total Bacteria Discharged (Planktonic)	1.187E+12	cfu
Bacteria Concentration	5438	cfu/100 ml
Peak Bacteria Concentration	9383	cfu/100 ml

Non-Routed Connector 32	
Name	Non-Routed Connector 32
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	28.19	ac-ft
Total Sediment Discharged	2.987E+05	lbs
Total Sediment Discharged (Clay)	1.267E+04	lbs
Total Sediment Discharged (Silt)	7.645E+04	lbs
Total Sediment Discharged (Sand)	3.715E+04	lbs
Total Sediment Discharged (Small Agg.)	8.572E+04	lbs
Total Sediment Discharged (Large Agg.)	8.667E+04	lbs
Sediment Concentration	411.1	mg/l
Peak Sediment Concentration	1098	mg/l
Total Nitrogen Discharged	78.87	lbs
Total Nitrogen Discharged (Particulate)	33.49	lbs
Total Nitrogen Discharged (Sorbed)	0.5755	lbs
Total Nitrogen Discharged (Dissolved)	44.81	lbs
Nitrogen Concentration	0.4177	mg/l
Peak Nitrogen Concentration	0.7685	mg/l
Total Phosphorus Discharged	14.03	lbs
Total Phosphorus Discharged (Particulate)	5.966	lbs
Total Phosphorus Discharged (Sorbed)	0.001846	lbs
Total Phosphorus Discharged (Dissolved)	8.067	lbs
Phosphorus Concentration	0.05068	mg/l
Peak Phosphorus Concentration	0.09909	mg/l
Total Bacteria Discharged	1.367E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.899E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.106E+11	cfu
Total Bacteria Discharged (Planktonic)	1.187E+12	cfu
Bacteria Concentration	5438	cfu/100 ml
Peak Bacteria Concentration	9383	cfu/100 ml

Basin_Off1b	
Name	Basin_Off1b
Description	

Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	66.92	acres
Curve Number	55	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.8	hrs

Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	5250	ft
Slope	0.016	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	23.06	acres
Curve Number	55	-
Peak Rate Factor	484	-
Time of Concentration	0.8	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.06	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.28	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	290.63	micro g/g/mg/l
Isotherm Max - Nitrogen	4513.1	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	15000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	7.624	ac-ft
Total Sediment Yield	703.3	lbs
Total Sediment Yield (Clay)	105.9	lbs
Total Sediment Yield (Silt)	217.3	lbs

Total Sediment Yield (Sand)	312.8	lbs
Total Sediment Yield (Small Agg.)	4.316	lbs
Total Sediment Yield (Large Agg.)	62.97	lbs
Sediment Concentration	4.148	mg/l
Peak Sediment Concentration	6.47	mg/l
Total Nitrogen Yield	23.82	lbs
Total Nitrogen Yield (Particulate)	10.24	lbs
Total Nitrogen Yield (Sorbed)	0.05043	lbs
Total Nitrogen Yield (Dissolved)	13.53	lbs
Nitrogen Concentration	0.1071	mg/l
Peak Nitrogen Concentration	0.1763	mg/l
Total Phosphorus Yield	4.419	lbs
Total Phosphorus Yield (Particulate)	1.9	lbs
Total Phosphorus Yield (Sorbed)	1.826E-05	lbs
Total Phosphorus Yield (Dissolved)	2.519	lbs
Phosphorus Concentration	0.01751	mg/l
Peak Phosphorus Concentration	0.02954	mg/l
Total Bacteria Yield	3.102E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	5.853E+08	cfu
Total Bacteria Yield (Sorbed To Silt)	1.205E+09	cfu
Total Bacteria Yield (Planktonic)	3.084E+11	cfu
Bacteria Concentration	517.4	cfu/100 ml
Peak Bacteria Concentration	788.4	cfu/100 ml

Non-Routed Connector 14	
Name	Non-Routed Connector 14
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	7.624	ac-ft
Total Sediment Discharged	703.3	lbs
Total Sediment Discharged (Clay)	105.9	lbs
Total Sediment Discharged (Silt)	217.3	lbs
Total Sediment Discharged (Sand)	312.8	lbs
Total Sediment Discharged (Small Agg.)	4.316	lbs
Total Sediment Discharged (Large Agg.)	62.97	lbs
Sediment Concentration	4.148	mg/l
Peak Sediment Concentration	6.47	mg/l
Total Nitrogen Discharged	23.82	lbs
Total Nitrogen Discharged (Particulate)	10.24	lbs
Total Nitrogen Discharged (Sorbed)	0.05043	lbs
Total Nitrogen Discharged (Dissolved)	13.53	lbs
Nitrogen Concentration	0.1071	mg/l
Peak Nitrogen Concentration	0.1763	mg/l
Total Phosphorus Discharged	4.419	lbs
Total Phosphorus Discharged (Particulate)	1.9	lbs
Total Phosphorus Discharged (Sorbed)	1.826E-05	lbs
Total Phosphorus Discharged (Dissolved)	2.519	lbs
Phosphorus Concentration	0.01751	mg/l
Peak Phosphorus Concentration	0.02954	mg/l
Total Bacteria Discharged	3.102E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.853E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.205E+09	cfu
Total Bacteria Discharged (Planktonic)	3.084E+11	cfu
Bacteria Concentration	517.4	cfu/100 ml
Peak Bacteria Concentration	788.4	cfu/100 ml

Trib1-05-01b	
Name	Trib1-05-01b
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	35.81	ac-ft
Total Sediment Discharged	2.994E+05	lbs
Total Sediment Discharged (Clay)	1.277E+04	lbs
Total Sediment Discharged (Silt)	7.667E+04	lbs
Total Sediment Discharged (Sand)	3.746E+04	lbs
Total Sediment Discharged (Small Agg.)	8.573E+04	lbs
Total Sediment Discharged (Large Agg.)	8.674E+04	lbs
Sediment Concentration	376.4	mg/l
Peak Sediment Concentration	1036	mg/l
Total Nitrogen Discharged	102.7	lbs
Total Nitrogen Discharged (Particulate)	43.73	lbs
Total Nitrogen Discharged (Sorbed)	0.626	lbs
Total Nitrogen Discharged (Dissolved)	58.34	lbs
Nitrogen Concentration	0.4206	mg/l
Peak Nitrogen Concentration	0.7681	mg/l
Total Phosphorus Discharged	18.45	lbs
Total Phosphorus Discharged (Particulate)	7.866	lbs
Total Phosphorus Discharged (Sorbed)	0.001865	lbs
Total Phosphorus Discharged (Dissolved)	10.59	lbs
Phosphorus Concentration	0.05125	mg/l
Peak Phosphorus Concentration	0.09916	mg/l
Total Bacteria Discharged	1.677E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.893E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.107E+11	cfu
Total Bacteria Discharged (Planktonic)	1.497E+12	cfu
Bacteria Concentration	5435	cfu/100 ml
Peak Bacteria Concentration	9349	cfu/100 ml

Non-Routed Connector 34	
Name	Non-Routed Connector 34
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Concentrated	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	35.81	ac-ft
Total Sediment Discharged	2.994E+05	lbs
Total Sediment Discharged (Clay)	1.277E+04	lbs
Total Sediment Discharged (Silt)	7.667E+04	lbs
Total Sediment Discharged (Sand)	3.746E+04	lbs
Total Sediment Discharged (Small Agg.)	8.573E+04	lbs
Total Sediment Discharged (Large Agg.)	8.674E+04	lbs
Sediment Concentration	376.4	mg/l
Peak Sediment Concentration	1036	mg/l
Total Nitrogen Discharged	102.7	lbs
Total Nitrogen Discharged (Particulate)	43.73	lbs
Total Nitrogen Discharged (Sorbed)	0.626	lbs
Total Nitrogen Discharged (Dissolved)	58.34	lbs
Nitrogen Concentration	0.4206	mg/l
Peak Nitrogen Concentration	0.7681	mg/l
Total Phosphorus Discharged	18.45	lbs
Total Phosphorus Discharged (Particulate)	7.866	lbs
Total Phosphorus Discharged (Sorbed)	0.001865	lbs
Total Phosphorus Discharged (Dissolved)	10.59	lbs
Phosphorus Concentration	0.05125	mg/l
Peak Phosphorus Concentration	0.09916	mg/l
Total Bacteria Discharged	1.677E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.893E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.107E+11	cfu
Total Bacteria Discharged (Planktonic)	1.497E+12	cfu
Bacteria Concentration	5435	cfu/100 ml
Peak Bacteria Concentration	9349	cfu/100 ml

Basin_Off2

Name	Basin_Off2
Description	

Hydrology Inputs

Parameter	Value	Units
Area	17.39	acres
Curve Number	89	-
Peak Rate Factor	484	-
Time of Concentration	0.1	hrs

Sediment Inputs

Parameter	Value	Units
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	76.34	micro g/g/mg/l
Isotherm Max - Nitrogen	1933	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	27000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	23.26	ac-ft
Total Sediment Yield	7337	lbs
Total Sediment Yield (Clay)	1908	lbs
Total Sediment Yield (Silt)	4036	lbs

Total Sediment Yield (Sand)	1394	lbs
Total Sediment Yield (Small Agg.)	0	lbs
Total Sediment Yield (Large Agg.)	0	lbs
Sediment Concentration	42.08	mg/l
Peak Sediment Concentration	145.2	mg/l
Total Nitrogen Yield	127.1	lbs
Total Nitrogen Yield (Particulate)	54.67	lbs
Total Nitrogen Yield (Sorbed)	0.3554	lbs
Total Nitrogen Yield (Dissolved)	72.11	lbs
Nitrogen Concentration	0.7291	mg/l
Peak Nitrogen Concentration	2.515	mg/l
Total Phosphorus Yield	15.18	lbs
Total Phosphorus Yield (Particulate)	6.528	lbs
Total Phosphorus Yield (Sorbed)	0.000425	lbs
Total Phosphorus Yield (Dissolved)	8.653	lbs
Phosphorus Concentration	0.08706	mg/l
Peak Phosphorus Concentration	0.3003	mg/l
Total Bacteria Yield	7.744E+12	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	7.744E+12	cfu
Bacteria Concentration	9790	cfu/100 ml
Peak Bacteria Concentration	3.377E+04	cfu/100 ml

Non-Routed Connector 12	
Name	Non-Routed Connector 12
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	23.26	ac-ft
Total Sediment Discharged	7337	lbs
Total Sediment Discharged (Clay)	1908	lbs
Total Sediment Discharged (Silt)	4036	lbs
Total Sediment Discharged (Sand)	1394	lbs
Total Sediment Discharged (Small Agg.)	0	lbs
Total Sediment Discharged (Large Agg.)	0	lbs
Sediment Concentration	42.08	mg/l
Peak Sediment Concentration	145.2	mg/l
Total Nitrogen Discharged	127.1	lbs
Total Nitrogen Discharged (Particulate)	54.67	lbs
Total Nitrogen Discharged (Sorbed)	0.3554	lbs
Total Nitrogen Discharged (Dissolved)	72.11	lbs
Nitrogen Concentration	0.7291	mg/l
Peak Nitrogen Concentration	2.515	mg/l
Total Phosphorus Discharged	15.18	lbs
Total Phosphorus Discharged (Particulate)	6.528	lbs
Total Phosphorus Discharged (Sorbed)	0.000425	lbs
Total Phosphorus Discharged (Dissolved)	8.653	lbs
Phosphorus Concentration	0.08706	mg/l
Peak Phosphorus Concentration	0.3003	mg/l
Total Bacteria Discharged	7.744E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	7.744E+12	cfu
Bacteria Concentration	9790	cfu/100 ml
Peak Bacteria Concentration	3.377E+04	cfu/100 ml

Trib1-05-01a	
Name	Trib1-05-01a
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	64.12	ac-ft
Total Sediment Discharged	3.082E+05	lbs
Total Sediment Discharged (Clay)	1.472E+04	lbs
Total Sediment Discharged (Silt)	8.075E+04	lbs
Total Sediment Discharged (Sand)	3.989E+04	lbs
Total Sediment Discharged (Small Agg.)	8.575E+04	lbs
Total Sediment Discharged (Large Agg.)	8.709E+04	lbs
Sediment Concentration	203.9	mg/l
Peak Sediment Concentration	693.2	mg/l
Total Nitrogen Discharged	243.9	lbs
Total Nitrogen Discharged (Particulate)	104.5	lbs
Total Nitrogen Discharged (Sorbed)	0.9891	lbs
Total Nitrogen Discharged (Dissolved)	138.5	lbs
Nitrogen Concentration	0.6581	mg/l
Peak Nitrogen Concentration	2.445	mg/l
Total Phosphorus Discharged	36.44	lbs
Total Phosphorus Discharged (Particulate)	15.6	lbs
Total Phosphorus Discharged (Sorbed)	0.002297	lbs
Total Phosphorus Discharged (Dissolved)	20.83	lbs
Phosphorus Concentration	0.08366	mg/l
Peak Phosphorus Concentration	0.2927	mg/l
Total Bacteria Discharged	9.528E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.925E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.191E+11	cfu
Total Bacteria Discharged (Planktonic)	9.016E+12	cfu
Bacteria Concentration	8059	cfu/100 ml
Peak Bacteria Concentration	3.273E+04	cfu/100 ml

Non-Routed Connector 35	
Name	Non-Routed Connector 35
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	64.12	ac-ft
Total Sediment Discharged	3.082E+05	lbs
Total Sediment Discharged (Clay)	1.472E+04	lbs
Total Sediment Discharged (Silt)	8.075E+04	lbs
Total Sediment Discharged (Sand)	3.989E+04	lbs
Total Sediment Discharged (Small Agg.)	8.575E+04	lbs
Total Sediment Discharged (Large Agg.)	8.709E+04	lbs
Sediment Concentration	203.9	mg/l
Peak Sediment Concentration	693.2	mg/l
Total Nitrogen Discharged	243.9	lbs
Total Nitrogen Discharged (Particulate)	104.5	lbs
Total Nitrogen Discharged (Sorbed)	0.9891	lbs
Total Nitrogen Discharged (Dissolved)	138.5	lbs
Nitrogen Concentration	0.6581	mg/l
Peak Nitrogen Concentration	2.445	mg/l
Total Phosphorus Discharged	36.44	lbs
Total Phosphorus Discharged (Particulate)	15.6	lbs
Total Phosphorus Discharged (Sorbed)	0.002297	lbs
Total Phosphorus Discharged (Dissolved)	20.83	lbs
Phosphorus Concentration	0.08366	mg/l
Peak Phosphorus Concentration	0.2927	mg/l
Total Bacteria Discharged	9.528E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.925E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.191E+11	cfu
Total Bacteria Discharged (Planktonic)	9.016E+12	cfu
Bacteria Concentration	8059	cfu/100 ml
Peak Bacteria Concentration	3.273E+04	cfu/100 ml

Trib1-00-07	
Name	Trib1-00-07
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	64.12	ac-ft
Total Sediment Discharged	3.082E+05	lbs
Total Sediment Discharged (Clay)	1.472E+04	lbs
Total Sediment Discharged (Silt)	8.075E+04	lbs
Total Sediment Discharged (Sand)	3.989E+04	lbs
Total Sediment Discharged (Small Agg.)	8.575E+04	lbs
Total Sediment Discharged (Large Agg.)	8.709E+04	lbs
Sediment Concentration	203.9	mg/l
Peak Sediment Concentration	693.2	mg/l
Total Nitrogen Discharged	243.9	lbs
Total Nitrogen Discharged (Particulate)	104.5	lbs
Total Nitrogen Discharged (Sorbed)	0.9891	lbs
Total Nitrogen Discharged (Dissolved)	138.5	lbs
Nitrogen Concentration	0.6581	mg/l
Peak Nitrogen Concentration	2.445	mg/l
Total Phosphorus Discharged	36.44	lbs
Total Phosphorus Discharged (Particulate)	15.6	lbs
Total Phosphorus Discharged (Sorbed)	0.002297	lbs
Total Phosphorus Discharged (Dissolved)	20.83	lbs
Phosphorus Concentration	0.08366	mg/l
Peak Phosphorus Concentration	0.2927	mg/l
Total Bacteria Discharged	9.528E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.925E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.191E+11	cfu
Total Bacteria Discharged (Planktonic)	9.016E+12	cfu
Bacteria Concentration	8059	cfu/100 ml
Peak Bacteria Concentration	3.273E+04	cfu/100 ml

Non-Routed Connector 37	
Name	Non-Routed Connector 37
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	64.12	ac-ft
Total Sediment Discharged	3.082E+05	lbs
Total Sediment Discharged (Clay)	1.472E+04	lbs
Total Sediment Discharged (Silt)	8.075E+04	lbs
Total Sediment Discharged (Sand)	3.989E+04	lbs
Total Sediment Discharged (Small Agg.)	8.575E+04	lbs
Total Sediment Discharged (Large Agg.)	8.709E+04	lbs
Sediment Concentration	203.9	mg/l
Peak Sediment Concentration	693.2	mg/l
Total Nitrogen Discharged	243.9	lbs
Total Nitrogen Discharged (Particulate)	104.5	lbs
Total Nitrogen Discharged (Sorbed)	0.9891	lbs
Total Nitrogen Discharged (Dissolved)	138.5	lbs
Nitrogen Concentration	0.6581	mg/l
Peak Nitrogen Concentration	2.445	mg/l
Total Phosphorus Discharged	36.44	lbs
Total Phosphorus Discharged (Particulate)	15.6	lbs
Total Phosphorus Discharged (Sorbed)	0.002297	lbs
Total Phosphorus Discharged (Dissolved)	20.83	lbs
Phosphorus Concentration	0.08366	mg/l
Peak Phosphorus Concentration	0.2927	mg/l
Total Bacteria Discharged	9.528E+12	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.925E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	3.191E+11	cfu
Total Bacteria Discharged (Planktonic)	9.016E+12	cfu
Bacteria Concentration	8059	cfu/100 ml
Peak Bacteria Concentration	3.273E+04	cfu/100 ml

Basin_B

Name	Basin_B
Description	

Pervious: Hydrology Inputs

Parameter	Value	Units
Area	260.6	acres
Curve Number	85	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.6	hrs

Pervious: Sediment Inputs

Parameter	Value	Units
Length	4320	ft
Slope	0.015	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Pervious: Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	260.27	acres
Curve Number	87	-
Peak Rate Factor	484	-
Time of Concentration	0.6	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	245.59	micro g/g/mg/l
Isotherm Max - Nitrogen	3992.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	497.9	ac-ft
Total Sediment Yield	1.049E+05	lbs
Total Sediment Yield (Clay)	2.41E+04	lbs
Total Sediment Yield (Silt)	5.069E+04	lbs

Total Sediment Yield (Sand)	2.734E+04	lbs
Total Sediment Yield (Small Agg.)	178.3	lbs
Total Sediment Yield (Large Agg.)	2601	lbs
Sediment Concentration	32.99	mg/l
Peak Sediment Concentration	85.52	mg/l
Total Nitrogen Yield	1760	lbs
Total Nitrogen Yield (Particulate)	756.9	lbs
Total Nitrogen Yield (Sorbed)	7.645	lbs
Total Nitrogen Yield (Dissolved)	995.7	lbs
Nitrogen Concentration	0.6683	mg/l
Peak Nitrogen Concentration	1.452	mg/l
Total Phosphorus Yield	121.9	lbs
Total Phosphorus Yield (Particulate)	52.4	lbs
Total Phosphorus Yield (Sorbed)	0.001658	lbs
Total Phosphorus Yield (Dissolved)	69.46	lbs
Phosphorus Concentration	0.04627	mg/l
Peak Phosphorus Concentration	0.1005	mg/l
Total Bacteria Yield	4.543E+13	cfu
Total Bacteria Yield (Sorbed To Clay)	1.076E+11	cfu
Total Bacteria Yield (Sorbed To Silt)	2.23E+11	cfu
Total Bacteria Yield (Planktonic)	4.51E+13	cfu
Bacteria Concentration	3803	cfu/100 ml
Peak Bacteria Concentration	8260	cfu/100 ml

Non-Routed Connector 10	
Name	Non-Routed Connector 10
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	497.9	ac-ft
Total Sediment Discharged	1.049E+05	lbs
Total Sediment Discharged (Clay)	2.41E+04	lbs
Total Sediment Discharged (Silt)	5.069E+04	lbs
Total Sediment Discharged (Sand)	2.734E+04	lbs
Total Sediment Discharged (Small Agg.)	178.3	lbs
Total Sediment Discharged (Large Agg.)	2601	lbs
Sediment Concentration	32.99	mg/l
Peak Sediment Concentration	85.52	mg/l
Total Nitrogen Discharged	1760	lbs
Total Nitrogen Discharged (Particulate)	756.9	lbs
Total Nitrogen Discharged (Sorbed)	7.645	lbs
Total Nitrogen Discharged (Dissolved)	995.7	lbs
Nitrogen Concentration	0.6683	mg/l
Peak Nitrogen Concentration	1.452	mg/l
Total Phosphorus Discharged	121.9	lbs
Total Phosphorus Discharged (Particulate)	52.4	lbs
Total Phosphorus Discharged (Sorbed)	0.001658	lbs
Total Phosphorus Discharged (Dissolved)	69.46	lbs
Phosphorus Concentration	0.04627	mg/l
Peak Phosphorus Concentration	0.1005	mg/l
Total Bacteria Discharged	4.543E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.076E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.23E+11	cfu
Total Bacteria Discharged (Planktonic)	4.51E+13	cfu
Bacteria Concentration	3803	cfu/100 ml
Peak Bacteria Concentration	8260	cfu/100 ml

Pond-02

Name	Pond-02
Description	

General Input

Parameter	Value	Units
Infiltration Method	Simple	-
Infiltration Rate	0.01	in/hr
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input

Parameter	Value	Units
Riser Type	Orifice Top Riser	-
Riser Shape	Rectangular	-
Riser Height	11.51	ft
Riser Length	5	ft
Riser Width	5	ft

Barrel/Outlet Pipe Input

Parameter	Value	Units
Barrel Invert Height	4.5	ft
Barrel Slope	0.082	ft/ft
Barrel Length	72	ft
Barrel Diameter	24	in
Manning's Roughness Coefficient	0.013	-
Entrance Loss Coefficient	0.5	-

EMS Input

Parameter	Value	Units
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	13	ft
EMS Width	400	ft

Bacteria Input

Parameter	Value	Units
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology

Parameter	Value	Units
Surface Area	19.7	ac

Peak Stage	13.56	ft
Total Inflow Volume	497.9	ac-ft
Total Rainfall On BMP	99.15	ac-ft
Total Outflow Volume	226.9	ac-ft
Outlet Pipe Flow Volume	161.2	ac-ft
EMS Outflow Volume	0.7033	ac-ft
Infiltration Volume	64.96	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	1.049E+05	lbs
Total Inflow Sediment Mass (Clay)	2.41E+04	lbs
Total Inflow Sediment Mass (Silt)	5.069E+04	lbs
Total Inflow Sediment Mass (Sand)	2.734E+04	lbs
Total Inflow Sediment Mass (Small Agg.)	178.3	lbs
Total Inflow Sediment Mass (Large Agg.)	2601	lbs
Priming Storm Sediment Mass In Permanent Pool	5.019E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Clay)	2.838E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Silt)	2.181E+05	lbs
Priming Storm Sediment Mass In Permanent Pool (Sand)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Small Agg.)	0	lbs
Priming Storm Sediment Mass In Permanent Pool (Large Agg.)	0	lbs
Total Sediment Mass Discharged	9682	lbs
Total Sediment Mass Discharged (Clay)	5534	lbs
Total Sediment Mass Discharged (Silt)	4148	lbs
Total Sediment Mass Discharged (Sand)	0.0002992	lbs
Total Sediment Mass Discharged (Small Agg.)	0.004014	lbs
Total Sediment Mass Discharged (Large Agg.)	3.52E-05	lbs
Total Sediment Mass Trapped	5.971E+05	lbs
Total Sediment Mass Trapped (Clay)	3.023E+05	lbs
Total Sediment Mass Trapped (Silt)	2.646E+05	lbs
Total Sediment Mass Trapped (Sand)	2.734E+04	lbs
Total Sediment Mass Trapped (Small Agg.)	178.3	lbs

Total Sediment Mass Trapped (Large Agg.)	2601	lbs
Sediment Trapping Efficiency	98.4	%
Sediment Trapping Efficiency (Clay)	98.2	%
Sediment Trapping Efficiency (Silt)	98.46	%
Sediment Trapping Efficiency (Sand)	100	%
Sediment Trapping Efficiency (Small Agg.)	100	%
Sediment Trapping Efficiency (Large Agg.)	100	%
Outlet Pipe Sediment Mass Discharged	9640	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	5510	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	4130	lbs
Outlet Pipe Sediment Mass Discharged (Sand)	0.0002613	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	0.00354	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	3.046E-05	lbs
EMS Sediment Mass Discharged	42.64	lbs
EMS Sediment Mass Discharged (Clay)	24.57	lbs
EMS Sediment Mass Discharged (Silt)	18.08	lbs
EMS Sediment Mass Discharged (Sand)	3.797E-05	lbs
EMS Sediment Mass Discharged (Small Agg.)	0.0004736	lbs
EMS Sediment Mass Discharged (Large Agg.)	4.746E-06	lbs
Sediment Concentration	11.62	mg/l
Peak Sediment Concentration	11.63	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	1760	lbs
Total Nitrogen Mass Inflow (Particulate)	756.9	lbs
Total Nitrogen Mass Inflow (Sorbed)	7.645	lbs
Total Nitrogen Mass Inflow (Dissolved)	995.7	lbs
Priming Storm Nitrogen Mass In Permanent Pool	2.391E+04	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Particulate)	9967	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Sorbed)	92.08	lbs
Priming Storm Nitrogen Mass In Permanent Pool (Dissolved)	1.385E+04	lbs
Total Nitrogen Mass Discharged	477.3	lbs
Total Nitrogen Mass Discharged (Particulate)	199.3	lbs
Total Nitrogen Mass Discharged (Sorbed)	1.843	lbs

Total Nitrogen Mass Discharged (Dissolved)	276.2	lbs
Total Nitrogen Mass Trapped	2.519E+04	lbs
Total Nitrogen Mass Trapped (Particulate)	1.052E+04	lbs
Total Nitrogen Mass Trapped (Sorbed)	97.88	lbs
Total Nitrogen Mass Trapped (Dissolved)	1.457E+04	lbs
Nitrogen Trapping Efficiency	98.14	%
Nitrogen Trapping Efficiency (Particulate)	98.14	%
Nitrogen Trapping Efficiency (Sorbed)	98.15	%
Nitrogen Trapping Efficiency (Dissolved)	98.14	%
Outlet Pipe Nitrogen Mass Discharged	475.2	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	198.4	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	1.835	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	275	lbs
EMS Nitrogen Mass Discharged	2.105	lbs
EMS Nitrogen Mass Discharged (Particulate)	0.8805	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.008094	lbs
EMS Nitrogen Mass Discharged (Dissolved)	1.217	lbs
Nitrogen Concentration	0.5539	mg/l
Peak Nitrogen Concentration	0.5541	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	121.9	lbs
Total Phosphorus Mass Inflow (Particulate)	52.4	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.001658	lbs
Total Phosphorus Mass Inflow (Dissolved)	69.46	lbs
Priming Storm Phosphorus Mass In Permanent Pool	1656	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Particulate)	690	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Sorbed)	0.01993	lbs
Priming Storm Phosphorus Mass In Permanent Pool (Dissolved)	965.6	lbs
Total Phosphorus Mass Discharged	33.05	lbs
Total Phosphorus Mass Discharged (Particulate)	13.8	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.0003989	lbs
Total Phosphorus Mass Discharged (Dissolved)	19.25	lbs
Total Phosphorus Mass Trapped	1744	lbs

Total Phosphorus Mass Trapped (Particulate)	728.6	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.02119	lbs
Total Phosphorus Mass Trapped (Dissolved)	1016	lbs
Phosphorus Trapping Efficiency	98.14	%
Phosphorus Trapping Efficiency (Particulate)	98.14	%
Phosphorus Trapping Efficiency (Sorbed)	98.15	%
Phosphorus Trapping Efficiency (Dissolved)	98.14	%
Outlet Pipe Phosphorus Mass Discharged	32.91	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	13.74	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0.0003971	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	19.17	lbs
EMS Phosphorus Mass Discharged	0.1458	lbs
EMS Phosphorus Mass Discharged (Particulate)	0.06096	lbs
EMS Phosphorus Mass Discharged (Sorbed)	1.752E-06	lbs
EMS Phosphorus Mass Discharged (Dissolved)	0.08483	lbs
Phosphorus Concentration	0.03835	mg/l
Peak Phosphorus Concentration	0.03837	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	4.543E+13	cfu
Total Bacteria Loading (Sorbed To Clay)	1.076E+11	cfu
Total Bacteria Loading (Sorbed To Silt)	2.23E+11	cfu
Total Bacteria Loading (Planktonic)	4.51E+13	cfu
Priming Storm Bacteria In Permanent Pool	2.212E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Clay)	1.251E+12	cfu
Priming Storm Bacteria In Permanent Pool (Sorbed To Silt)	9.612E+11	cfu
Priming Storm Bacteria In Permanent Pool (Planktonic)	0	cfu
Total Bacteria Discharged	6.615E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.503E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.091E+10	cfu
Total Bacteria Discharged (Planktonic)	6.155E+11	cfu
Total Bacteria Trapped	4.698E+13	cfu

Total Bacteria Trapped (Sorbed To Clay)	1.333E+12	cfu
Total Bacteria Trapped (Sorbed To Silt)	1.163E+12	cfu
Total Bacteria Trapped (Planktonic)	4.449E+13	cfu
Bacteria Trapping Efficiency	98.61	%
Bacteria Trapping Efficiency (Sorbed To Clay)	98.16	%
Bacteria Trapping Efficiency (Sorbed To Silt)	98.23	%
Bacteria Trapping Efficiency (Planktonic)	98.64	%
Outlet Pipe Bacteria Discharged	6.557E+11	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	2.492E+10	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	2.081E+10	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	6.1E+11	cfu
EMS Bacteria Discharged	5.729E+09	cfu
EMS Bacteria Discharged (Sorbed To Clay)	1.098E+08	cfu
EMS Bacteria Discharged (Sorbed To Silt)	9.817E+07	cfu
EMS Bacteria Discharged (Planktonic)	5.521E+09	cfu
Bacteria Concentration	14.84	cfu/100 ml
Peak Bacteria Concentration	21.53	cfu/100 ml

RICHLAND COUNTY
1799
SOUTH CAROLINA

Non-Routed Connector 38	
Name	Non-Routed Connector 38
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	161.9	ac-ft
Total Sediment Discharged	9682	lbs
Total Sediment Discharged (Clay)	5534	lbs
Total Sediment Discharged (Silt)	4148	lbs
Total Sediment Discharged (Sand)	0.0002992	lbs
Total Sediment Discharged (Small Agg.)	0.004014	lbs
Total Sediment Discharged (Large Agg.)	3.52E-05	lbs
Sediment Concentration	11.62	mg/l
Peak Sediment Concentration	11.63	mg/l
Total Nitrogen Discharged	477.3	lbs
Total Nitrogen Discharged (Particulate)	199.3	lbs
Total Nitrogen Discharged (Sorbed)	1.843	lbs
Total Nitrogen Discharged (Dissolved)	276.2	lbs
Nitrogen Concentration	0.5539	mg/l
Peak Nitrogen Concentration	0.5541	mg/l
Total Phosphorus Discharged	33.05	lbs
Total Phosphorus Discharged (Particulate)	13.8	lbs
Total Phosphorus Discharged (Sorbed)	0.0003988	lbs
Total Phosphorus Discharged (Dissolved)	19.25	lbs
Phosphorus Concentration	0.03835	mg/l
Peak Phosphorus Concentration	0.03837	mg/l
Total Bacteria Discharged	6.614E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.503E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.091E+10	cfu
Total Bacteria Discharged (Planktonic)	6.155E+11	cfu
Bacteria Concentration	14.84	cfu/100 ml
Peak Bacteria Concentration	21.53	cfu/100 ml

Trib1-04-02	
Name	Trib1-04-02
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	161.9	ac-ft
Total Sediment Discharged	9682	lbs
Total Sediment Discharged (Clay)	5534	lbs
Total Sediment Discharged (Silt)	4148	lbs
Total Sediment Discharged (Sand)	0.0002992	lbs
Total Sediment Discharged (Small Agg.)	0.004014	lbs
Total Sediment Discharged (Large Agg.)	3.52E-05	lbs
Sediment Concentration	11.62	mg/l
Peak Sediment Concentration	11.63	mg/l
Total Nitrogen Discharged	477.3	lbs
Total Nitrogen Discharged (Particulate)	199.3	lbs
Total Nitrogen Discharged (Sorbed)	1.843	lbs
Total Nitrogen Discharged (Dissolved)	276.2	lbs
Nitrogen Concentration	0.5539	mg/l
Peak Nitrogen Concentration	0.5541	mg/l
Total Phosphorus Discharged	33.05	lbs
Total Phosphorus Discharged (Particulate)	13.8	lbs
Total Phosphorus Discharged (Sorbed)	0.0003988	lbs
Total Phosphorus Discharged (Dissolved)	19.25	lbs
Phosphorus Concentration	0.03835	mg/l
Peak Phosphorus Concentration	0.03837	mg/l
Total Bacteria Discharged	6.614E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.503E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.091E+10	cfu
Total Bacteria Discharged (Planktonic)	6.155E+11	cfu
Bacteria Concentration	14.84	cfu/100 ml
Peak Bacteria Concentration	21.53	cfu/100 ml

Non-Routed Connector 39	
Name	Non-Routed Connector 39
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	161.9	ac-ft
Total Sediment Discharged	9682	lbs
Total Sediment Discharged (Clay)	5534	lbs
Total Sediment Discharged (Silt)	4148	lbs
Total Sediment Discharged (Sand)	0.0002992	lbs
Total Sediment Discharged (Small Agg.)	0.004014	lbs
Total Sediment Discharged (Large Agg.)	3.52E-05	lbs
Sediment Concentration	11.62	mg/l
Peak Sediment Concentration	11.63	mg/l
Total Nitrogen Discharged	477.3	lbs
Total Nitrogen Discharged (Particulate)	199.3	lbs
Total Nitrogen Discharged (Sorbed)	1.843	lbs
Total Nitrogen Discharged (Dissolved)	276.2	lbs
Nitrogen Concentration	0.5539	mg/l
Peak Nitrogen Concentration	0.5541	mg/l
Total Phosphorus Discharged	33.05	lbs
Total Phosphorus Discharged (Particulate)	13.8	lbs
Total Phosphorus Discharged (Sorbed)	0.0003988	lbs
Total Phosphorus Discharged (Dissolved)	19.25	lbs
Phosphorus Concentration	0.03835	mg/l
Peak Phosphorus Concentration	0.03837	mg/l
Total Bacteria Discharged	6.614E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	2.503E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	2.091E+10	cfu
Total Bacteria Discharged (Planktonic)	6.155E+11	cfu
Bacteria Concentration	14.84	cfu/100 ml
Peak Bacteria Concentration	21.53	cfu/100 ml

Basin_02	
Name	Basin_02
Description	

Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	8.63	acres
Curve Number	62	-
Soil Series	Blanton	-
Depth Range	0-23	in
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs

Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	1025	ft
Slope	0.031	ft/ft
Soil Erodibility	0.02	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	4	%
Silt Percent	1.4	%
Sand Percent	94.6	%

Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	375.61	micro g/g/mg/l
Isotherm Max - Nitrogen	5484.4	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	0.79	acres
Curve Number	61	-
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	2.01	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.24	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	55.45	micro g/g/mg/l
Isotherm Max - Nitrogen	1645.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.451	ac-ft
Total Sediment Yield	150.4	lbs
Total Sediment Yield (Clay)	8.113	lbs
Total Sediment Yield (Silt)	14.43	lbs

Total Sediment Yield (Sand)	100.8	lbs
Total Sediment Yield (Small Agg.)	1.739	lbs
Total Sediment Yield (Large Agg.)	25.36	lbs
Sediment Concentration	7.046	mg/l
Peak Sediment Concentration	14.28	mg/l
Total Nitrogen Yield	4.063	lbs
Total Nitrogen Yield (Particulate)	1.747	lbs
Total Nitrogen Yield (Sorbed)	0.001297	lbs
Total Nitrogen Yield (Dissolved)	2.315	lbs
Nitrogen Concentration	0.1952	mg/l
Peak Nitrogen Concentration	0.3754	mg/l
Total Phosphorus Yield	0.7984	lbs
Total Phosphorus Yield (Particulate)	0.3433	lbs
Total Phosphorus Yield (Sorbed)	1.475E-06	lbs
Total Phosphorus Yield (Dissolved)	0.4551	lbs
Phosphorus Concentration	0.03204	mg/l
Peak Phosphorus Concentration	0.06204	mg/l
Total Bacteria Yield	1.324E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	5.21E+07	cfu
Total Bacteria Yield (Sorbed To Silt)	6.364E+07	cfu
Total Bacteria Yield (Planktonic)	1.323E+11	cfu
Bacteria Concentration	1115	cfu/100 ml
Peak Bacteria Concentration	2164	cfu/100 ml

Non-Routed Connector 11	
Name	Non-Routed Connector 11
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	1.451	ac-ft
Total Sediment Discharged	150.4	lbs
Total Sediment Discharged (Clay)	8.113	lbs
Total Sediment Discharged (Silt)	14.43	lbs
Total Sediment Discharged (Sand)	100.8	lbs
Total Sediment Discharged (Small Agg.)	1.739	lbs
Total Sediment Discharged (Large Agg.)	25.36	lbs
Sediment Concentration	7.046	mg/l
Peak Sediment Concentration	14.28	mg/l
Total Nitrogen Discharged	4.063	lbs
Total Nitrogen Discharged (Particulate)	1.747	lbs
Total Nitrogen Discharged (Sorbed)	0.001297	lbs
Total Nitrogen Discharged (Dissolved)	2.315	lbs
Nitrogen Concentration	0.1952	mg/l
Peak Nitrogen Concentration	0.3754	mg/l
Total Phosphorus Discharged	0.7984	lbs
Total Phosphorus Discharged (Particulate)	0.3433	lbs
Total Phosphorus Discharged (Sorbed)	1.475E-06	lbs
Total Phosphorus Discharged (Dissolved)	0.4551	lbs
Phosphorus Concentration	0.03204	mg/l
Peak Phosphorus Concentration	0.06204	mg/l
Total Bacteria Discharged	1.324E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.21E+07	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.364E+07	cfu
Total Bacteria Discharged (Planktonic)	1.323E+11	cfu
Bacteria Concentration	1115	cfu/100 ml
Peak Bacteria Concentration	2164	cfu/100 ml

Trib1-04-01	
Name	Trib1-04-01
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	163.3	ac-ft
Total Sediment Discharged	9832	lbs
Total Sediment Discharged (Clay)	5542	lbs
Total Sediment Discharged (Silt)	4162	lbs
Total Sediment Discharged (Sand)	100.8	lbs
Total Sediment Discharged (Small Agg.)	1.743	lbs
Total Sediment Discharged (Large Agg.)	25.36	lbs
Sediment Concentration	11.62	mg/l
Peak Sediment Concentration	14.72	mg/l
Total Nitrogen Discharged	481.4	lbs
Total Nitrogen Discharged (Particulate)	201	lbs
Total Nitrogen Discharged (Sorbed)	1.844	lbs
Total Nitrogen Discharged (Dissolved)	278.5	lbs
Nitrogen Concentration	0.5538	mg/l
Peak Nitrogen Concentration	0.632	mg/l
Total Phosphorus Discharged	33.85	lbs
Total Phosphorus Discharged (Particulate)	14.14	lbs
Total Phosphorus Discharged (Sorbed)	0.0004003	lbs
Total Phosphorus Discharged (Dissolved)	19.71	lbs
Phosphorus Concentration	0.03848	mg/l
Peak Phosphorus Concentration	0.05877	mg/l
Total Bacteria Discharged	7.938E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.171E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	6.994E+08	cfu
Total Bacteria Discharged (Planktonic)	7.92E+11	cfu
Bacteria Concentration	22.29	cfu/100 ml
Peak Bacteria Concentration	861.9	cfu/100 ml

L-0500P

Name	L-0500P
Description	

Inputs

Parameter	Value	Units
Conduit Option	Muskingum-Kunge method	-
Conduit Diameter	36	in.
Conduit Length	150	ft
Conduit Slope	0.033	ft/ft
Manning's Roughness	0.013	-

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	163.3	ac-ft
Total Sediment Discharged	9832	lbs
Total Sediment Discharged (Clay)	5542	lbs
Total Sediment Discharged (Silt)	4162	lbs
Total Sediment Discharged (Sand)	100.8	lbs
Total Sediment Discharged (Small Agg.)	1.743	lbs
Total Sediment Discharged (Large Agg.)	25.36	lbs
Sediment Concentration	11.62	mg/l
Peak Sediment Concentration	14.72	mg/l
Total Nitrogen Discharged	481.4	lbs
Total Nitrogen Discharged (Particulate)	201	lbs
Total Nitrogen Discharged (Sorbed)	1.844	lbs
Total Nitrogen Discharged (Dissolved)	278.5	lbs
Nitrogen Concentration	0.5538	mg/l
Peak Nitrogen Concentration	0.632	mg/l
Total Phosphorus Discharged	33.85	lbs
Total Phosphorus Discharged (Particulate)	14.14	lbs
Total Phosphorus Discharged (Sorbed)	0.0004003	lbs
Total Phosphorus Discharged (Dissolved)	19.71	lbs
Phosphorus Concentration	0.03848	mg/l
Peak Phosphorus Concentration	0.05877	mg/l
Total Bacteria Discharged	7.938E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.171E+09	cfu

Total Bacteria Discharged (Sorbed To Silt)	6.994E+08	cfu
Total Bacteria Discharged (Planktonic)	7.92E+11	cfu
Bacteria Concentration	22.29	cfu/100 ml
Peak Bacteria Concentration	861.9	cfu/100 ml

Messages	
Type	**Description**
Warning	Convergence criteria is not met. Flow is routed as simple translation.
Warning	The pipe structure is overtopped with a precipitation depth of 7 in. Results may be inaccurate.

Trib1-00-06	
Name	Trib1-00-06
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	227.5	ac-ft
Total Sediment Discharged	3.18E+05	lbs
Total Sediment Discharged (Clay)	2.026E+04	lbs
Total Sediment Discharged (Silt)	8.491E+04	lbs
Total Sediment Discharged (Sand)	3.999E+04	lbs
Total Sediment Discharged (Small Agg.)	8.575E+04	lbs
Total Sediment Discharged (Large Agg.)	8.711E+04	lbs
Sediment Concentration	66.23	mg/l
Peak Sediment Concentration	630.8	mg/l
Total Nitrogen Discharged	725.3	lbs
Total Nitrogen Discharged (Particulate)	305.5	lbs
Total Nitrogen Discharged (Sorbed)	2.833	lbs
Total Nitrogen Discharged (Dissolved)	417	lbs
Nitrogen Concentration	0.6328	mg/l
Peak Nitrogen Concentration	2.597	mg/l
Total Phosphorus Discharged	70.29	lbs
Total Phosphorus Discharged (Particulate)	29.74	lbs
Total Phosphorus Discharged (Sorbed)	0.002697	lbs
Total Phosphorus Discharged (Dissolved)	40.54	lbs
Phosphorus Concentration	0.05484	mg/l
Peak Phosphorus Concentration	0.3029	mg/l
Total Bacteria Discharged	1.032E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	9.026E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.366E+11	cfu
Total Bacteria Discharged (Planktonic)	1.009E+13	cfu
Bacteria Concentration	2384	cfu/100 ml
Peak Bacteria Concentration	3.255E+04	cfu/100 ml

Non-Routed Connector 40	
Name	Non-Routed Connector 40
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	227.5	ac-ft
Total Sediment Discharged	3.18E+05	lbs
Total Sediment Discharged (Clay)	2.026E+04	lbs
Total Sediment Discharged (Silt)	8.491E+04	lbs
Total Sediment Discharged (Sand)	3.999E+04	lbs
Total Sediment Discharged (Small Agg.)	8.575E+04	lbs
Total Sediment Discharged (Large Agg.)	8.711E+04	lbs
Sediment Concentration	66.23	mg/l
Peak Sediment Concentration	630.8	mg/l
Total Nitrogen Discharged	725.3	lbs
Total Nitrogen Discharged (Particulate)	305.5	lbs
Total Nitrogen Discharged (Sorbed)	2.833	lbs
Total Nitrogen Discharged (Dissolved)	417	lbs
Nitrogen Concentration	0.6328	mg/l
Peak Nitrogen Concentration	2.597	mg/l
Total Phosphorus Discharged	70.29	lbs
Total Phosphorus Discharged (Particulate)	29.74	lbs
Total Phosphorus Discharged (Sorbed)	0.002697	lbs
Total Phosphorus Discharged (Dissolved)	40.54	lbs
Phosphorus Concentration	0.05484	mg/l
Peak Phosphorus Concentration	0.3029	mg/l
Total Bacteria Discharged	1.032E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	9.026E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.366E+11	cfu
Total Bacteria Discharged (Planktonic)	1.009E+13	cfu
Bacteria Concentration	2384	cfu/100 ml
Peak Bacteria Concentration	3.255E+04	cfu/100 ml

Basin_04		
Name	Basin_04	
Description		
Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	16.65	acres
Curve Number	63	-
Soil Series	Herndon	-
Depth Range	0-4	in
Peak Rate Factor	484	-
Time of Concentration	0.217	hrs
Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	725	ft
Slope	0.004	ft/ft
Soil Erodibility	0.49	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%
Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	0.97	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.2	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	1.9	acres
Curve Number	62	-
Peak Rate Factor	484	-
Time of Concentration	0.217	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	234.29	micro g/g/mg/l
Isotherm Max - Nitrogen	3861	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	3.057	ac-ft
Total Sediment Yield	749.9	lbs
Total Sediment Yield (Clay)	46.48	lbs
Total Sediment Yield (Silt)	211.9	lbs

Total Sediment Yield (Sand)	97.75	lbs
Total Sediment Yield (Small Agg.)	195.8	lbs
Total Sediment Yield (Large Agg.)	198	lbs
Sediment Concentration	9.879	mg/l
Peak Sediment Concentration	21.25	mg/l
Total Nitrogen Yield	8.263	lbs
Total Nitrogen Yield (Particulate)	3.553	lbs
Total Nitrogen Yield (Sorbed)	0.006835	lbs
Total Nitrogen Yield (Dissolved)	4.703	lbs
Nitrogen Concentration	0.1619	mg/l
Peak Nitrogen Concentration	0.3149	mg/l
Total Phosphorus Yield	1.596	lbs
Total Phosphorus Yield (Particulate)	0.6864	lbs
Total Phosphorus Yield (Sorbed)	6.077E-06	lbs
Total Phosphorus Yield (Dissolved)	0.9099	lbs
Phosphorus Concentration	0.02494	mg/l
Peak Phosphorus Concentration	0.04932	mg/l
Total Bacteria Yield	2.789E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	5.598E+08	cfu
Total Bacteria Yield (Sorbed To Silt)	9.339E+08	cfu
Total Bacteria Yield (Planktonic)	2.774E+11	cfu
Bacteria Concentration	1115	cfu/100 ml
Peak Bacteria Concentration	2180	cfu/100 ml

Non-Routed Connector 8	
Name	Non-Routed Connector 8
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	3.057	ac-ft
Total Sediment Discharged	749.9	lbs
Total Sediment Discharged (Clay)	46.48	lbs
Total Sediment Discharged (Silt)	211.9	lbs
Total Sediment Discharged (Sand)	97.75	lbs
Total Sediment Discharged (Small Agg.)	195.8	lbs
Total Sediment Discharged (Large Agg.)	198	lbs
Sediment Concentration	9.879	mg/l
Peak Sediment Concentration	21.25	mg/l
Total Nitrogen Discharged	8.263	lbs
Total Nitrogen Discharged (Particulate)	3.553	lbs
Total Nitrogen Discharged (Sorbed)	0.006835	lbs
Total Nitrogen Discharged (Dissolved)	4.703	lbs
Nitrogen Concentration	0.1619	mg/l
Peak Nitrogen Concentration	0.3149	mg/l
Total Phosphorus Discharged	1.596	lbs
Total Phosphorus Discharged (Particulate)	0.6864	lbs
Total Phosphorus Discharged (Sorbed)	6.077E-06	lbs
Total Phosphorus Discharged (Dissolved)	0.9099	lbs
Phosphorus Concentration	0.02494	mg/l
Peak Phosphorus Concentration	0.04932	mg/l
Total Bacteria Discharged	2.789E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.598E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	9.339E+08	cfu
Total Bacteria Discharged (Planktonic)	2.774E+11	cfu
Bacteria Concentration	1115	cfu/100 ml
Peak Bacteria Concentration	2180	cfu/100 ml

Trib1-02-01	
Name	Trib1-02-01
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	3.057	ac-ft
Total Sediment Discharged	749.9	lbs
Total Sediment Discharged (Clay)	46.48	lbs
Total Sediment Discharged (Silt)	211.9	lbs
Total Sediment Discharged (Sand)	97.75	lbs
Total Sediment Discharged (Small Agg.)	195.8	lbs
Total Sediment Discharged (Large Agg.)	198	lbs
Sediment Concentration	9.879	mg/l
Peak Sediment Concentration	21.25	mg/l
Total Nitrogen Discharged	8.263	lbs
Total Nitrogen Discharged (Particulate)	3.553	lbs
Total Nitrogen Discharged (Sorbed)	0.006835	lbs
Total Nitrogen Discharged (Dissolved)	4.703	lbs
Nitrogen Concentration	0.1619	mg/l
Peak Nitrogen Concentration	0.3149	mg/l
Total Phosphorus Discharged	1.596	lbs
Total Phosphorus Discharged (Particulate)	0.6864	lbs
Total Phosphorus Discharged (Sorbed)	6.077E-06	lbs
Total Phosphorus Discharged (Dissolved)	0.9099	lbs
Phosphorus Concentration	0.02494	mg/l
Peak Phosphorus Concentration	0.04932	mg/l
Total Bacteria Discharged	2.789E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.598E+08	cfu
Total Bacteria Discharged (Sorbed To Silt)	9.339E+08	cfu
Total Bacteria Discharged (Planktonic)	2.774E+11	cfu
Bacteria Concentration	1115	cfu/100 ml
Peak Bacteria Concentration	2180	cfu/100 ml

L-0600P

Name	L-0600P
Description	

Inputs

Parameter	Value	Units
Conduit Option	Muskingum-Kunge method	-
Conduit Diameter	24	in.
Conduit Length	285	ft
Conduit Slope	0.018	ft/ft
Manning's Roughness	0.013	-

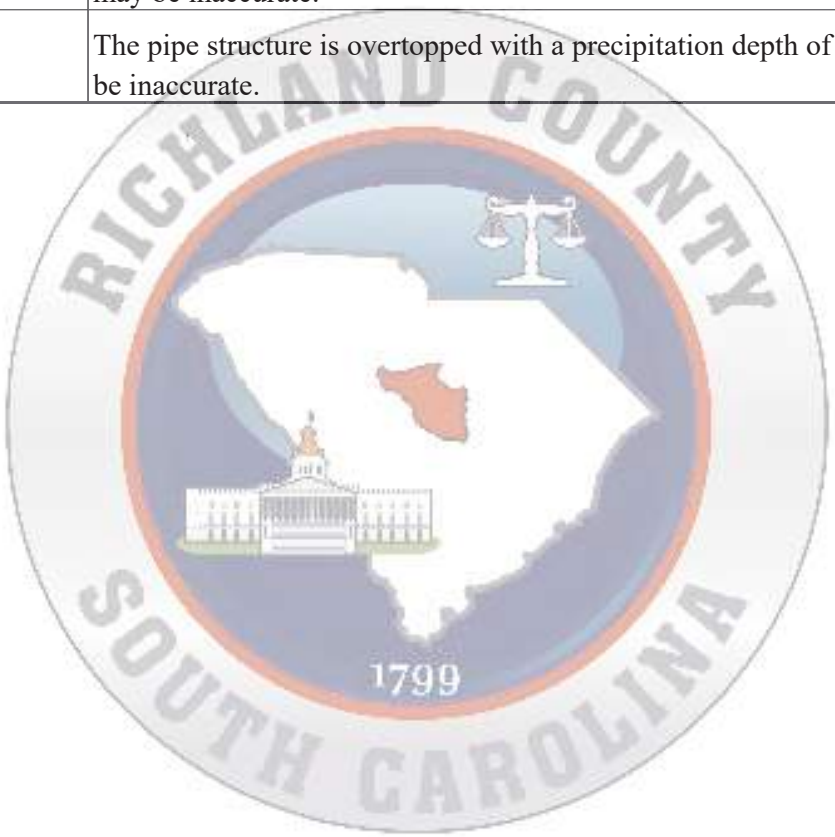
Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	3.057	ac-ft
Total Sediment Discharged	749.9	lbs
Total Sediment Discharged (Clay)	46.48	lbs
Total Sediment Discharged (Silt)	211.9	lbs
Total Sediment Discharged (Sand)	97.75	lbs
Total Sediment Discharged (Small Agg.)	195.8	lbs
Total Sediment Discharged (Large Agg.)	198	lbs
Sediment Concentration	9.879	mg/l
Peak Sediment Concentration	21.25	mg/l
Total Nitrogen Discharged	8.263	lbs
Total Nitrogen Discharged (Particulate)	3.553	lbs
Total Nitrogen Discharged (Sorbed)	0.006835	lbs
Total Nitrogen Discharged (Dissolved)	4.703	lbs
Nitrogen Concentration	0.1619	mg/l
Peak Nitrogen Concentration	0.3149	mg/l
Total Phosphorus Discharged	1.596	lbs
Total Phosphorus Discharged (Particulate)	0.6864	lbs
Total Phosphorus Discharged (Sorbed)	6.077E-06	lbs
Total Phosphorus Discharged (Dissolved)	0.9099	lbs
Phosphorus Concentration	0.02494	mg/l
Peak Phosphorus Concentration	0.04932	mg/l
Total Bacteria Discharged	2.789E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	5.598E+08	cfu

Total Bacteria Discharged (Sorbed To Silt)	9.339E+08	cfu
Total Bacteria Discharged (Planktonic)	2.774E+11	cfu
Bacteria Concentration	1115	cfu/100 ml
Peak Bacteria Concentration	2180	cfu/100 ml

Messages

Type	Description
Warning	Convergence criteria is not met. Flow is routed as simple translation.
Warning	The pipe structure is overtopped with a precipitation depth of 4.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 5.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 7 in. Results may be inaccurate.



Basin_03	
Name	Basin_03
Description	

Pervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	21.54	acres
Curve Number	76	-
Soil Series	Herndon	-
Depth Range	0-4	in
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs

Pervious: Sediment Inputs		
Parameter	**Value**	**Units**
Length	1320	ft
Slope	0.015	ft/ft
Soil Erodibility	0.49	-
Curve and Practice Factor	0.009	-
Tendency to Rill	1	-
Power function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Pervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Pervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Impervious: Hydrology Inputs		
Parameter	**Value**	**Units**
Area	1.2	acres
Curve Number	75	-
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs
Impervious: Sediment Inputs		
Parameter	**Value**	**Units**
Event Mean Concentration	116	mg/L
Power function Coefficient	1	-
Impervious: Nutrient Inputs		
Parameter	**Value**	**Units**
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	52.84	micro g/g/mg/l
Isotherm Max - Nitrogen	1608.3	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g
Impervious: Bacteria Inputs		
Parameter	**Value**	**Units**
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-
Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	9.388	ac-ft
Total Sediment Yield	9812	lbs
Total Sediment Yield (Clay)	440.4	lbs
Total Sediment Yield (Silt)	2546	lbs

Total Sediment Yield (Sand)	1228	lbs
Total Sediment Yield (Small Agg.)	2784	lbs
Total Sediment Yield (Large Agg.)	2814	lbs
Sediment Concentration	64.37	mg/l
Peak Sediment Concentration	165.5	mg/l
Total Nitrogen Yield	33.19	lbs
Total Nitrogen Yield (Particulate)	14.27	lbs
Total Nitrogen Yield (Sorbed)	0.02973	lbs
Total Nitrogen Yield (Dissolved)	18.89	lbs
Nitrogen Concentration	0.4716	mg/l
Peak Nitrogen Concentration	1.036	mg/l
Total Phosphorus Yield	2.298	lbs
Total Phosphorus Yield (Particulate)	0.988	lbs
Total Phosphorus Yield (Sorbed)	3.478E-05	lbs
Total Phosphorus Yield (Dissolved)	1.31	lbs
Phosphorus Concentration	0.03265	mg/l
Peak Phosphorus Concentration	0.07172	mg/l
Total Bacteria Yield	8.566E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	6.872E+09	cfu
Total Bacteria Yield (Sorbed To Silt)	1.104E+10	cfu
Total Bacteria Yield (Planktonic)	8.387E+11	cfu
Bacteria Concentration	2683	cfu/100 ml
Peak Bacteria Concentration	5895	cfu/100 ml

Non-Routed Connector 9	
Name	Non-Routed Connector 9
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	9.388	ac-ft
Total Sediment Discharged	9812	lbs
Total Sediment Discharged (Clay)	440.4	lbs
Total Sediment Discharged (Silt)	2546	lbs
Total Sediment Discharged (Sand)	1228	lbs
Total Sediment Discharged (Small Agg.)	2784	lbs
Total Sediment Discharged (Large Agg.)	2814	lbs
Sediment Concentration	64.37	mg/l
Peak Sediment Concentration	165.5	mg/l
Total Nitrogen Discharged	33.19	lbs
Total Nitrogen Discharged (Particulate)	14.27	lbs
Total Nitrogen Discharged (Sorbed)	0.02973	lbs
Total Nitrogen Discharged (Dissolved)	18.89	lbs
Nitrogen Concentration	0.4716	mg/l
Peak Nitrogen Concentration	1.036	mg/l
Total Phosphorus Discharged	2.298	lbs
Total Phosphorus Discharged (Particulate)	0.988	lbs
Total Phosphorus Discharged (Sorbed)	3.478E-05	lbs
Total Phosphorus Discharged (Dissolved)	1.31	lbs
Phosphorus Concentration	0.03265	mg/l
Peak Phosphorus Concentration	0.07172	mg/l
Total Bacteria Discharged	8.566E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.872E+09	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.104E+10	cfu
Total Bacteria Discharged (Planktonic)	8.387E+11	cfu
Bacteria Concentration	2683	cfu/100 ml
Peak Bacteria Concentration	5895	cfu/100 ml

Trib1-00-05	
Name	Trib1-00-05
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	239.9	ac-ft
Total Sediment Discharged	3.286E+05	lbs
Total Sediment Discharged (Clay)	2.075E+04	lbs
Total Sediment Discharged (Silt)	8.767E+04	lbs
Total Sediment Discharged (Sand)	4.132E+04	lbs
Total Sediment Discharged (Small Agg.)	8.873E+04	lbs
Total Sediment Discharged (Large Agg.)	9.013E+04	lbs
Sediment Concentration	64.53	mg/l
Peak Sediment Concentration	512.6	mg/l
Total Nitrogen Discharged	766.8	lbs
Total Nitrogen Discharged (Particulate)	323.3	lbs
Total Nitrogen Discharged (Sorbed)	2.87	lbs
Total Nitrogen Discharged (Dissolved)	440.6	lbs
Nitrogen Concentration	0.6338	mg/l
Peak Nitrogen Concentration	2.491	mg/l
Total Phosphorus Discharged	74.18	lbs
Total Phosphorus Discharged (Particulate)	31.41	lbs
Total Phosphorus Discharged (Sorbed)	0.002738	lbs
Total Phosphorus Discharged (Dissolved)	42.76	lbs
Phosphorus Concentration	0.05481	mg/l
Peak Phosphorus Concentration	0.2843	mg/l
Total Bacteria Discharged	1.146E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.044E+11	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.587E+11	cfu
Total Bacteria Discharged (Planktonic)	1.119E+13	cfu
Bacteria Concentration	2428	cfu/100 ml
Peak Bacteria Concentration	3.024E+04	cfu/100 ml

L-0450P

Name	L-0450P
Description	

Inputs

Parameter	Value	Units
Conduit Option	Muskingum-Kunge method	-
Conduit Diameter	72	in.
Conduit Length	1300	ft
Conduit Slope	0.005	ft/ft
Manning's Roughness	0.013	-

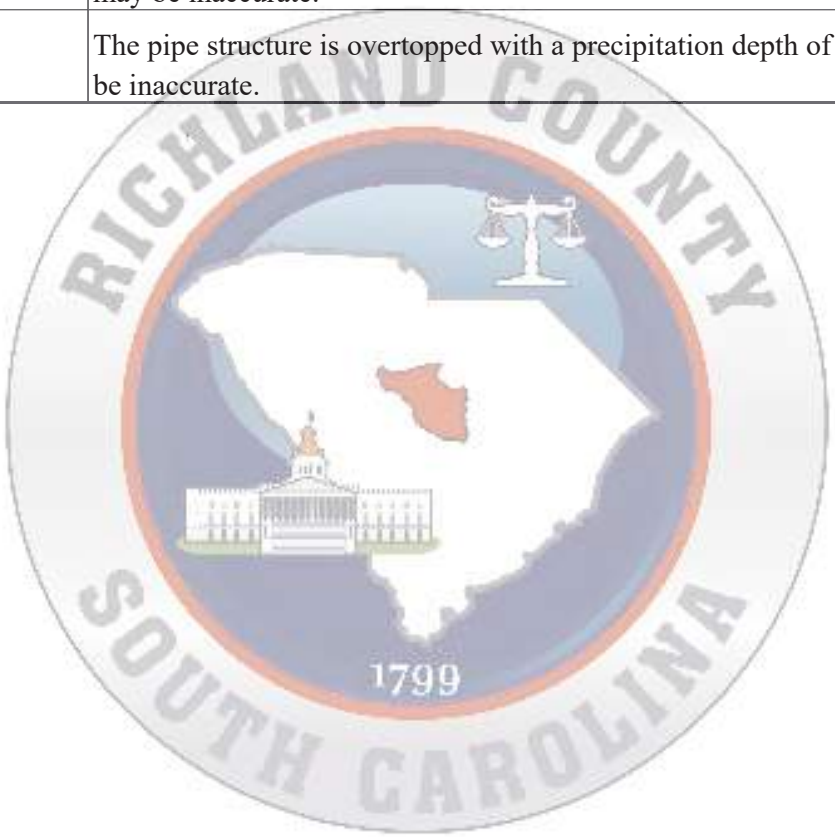
Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	239.9	ac-ft
Total Sediment Discharged	3.286E+05	lbs
Total Sediment Discharged (Clay)	2.075E+04	lbs
Total Sediment Discharged (Silt)	8.767E+04	lbs
Total Sediment Discharged (Sand)	4.132E+04	lbs
Total Sediment Discharged (Small Agg.)	8.873E+04	lbs
Total Sediment Discharged (Large Agg.)	9.013E+04	lbs
Sediment Concentration	64.53	mg/l
Peak Sediment Concentration	512.6	mg/l
Total Nitrogen Discharged	766.8	lbs
Total Nitrogen Discharged (Particulate)	323.3	lbs
Total Nitrogen Discharged (Sorbed)	2.87	lbs
Total Nitrogen Discharged (Dissolved)	440.6	lbs
Nitrogen Concentration	0.6338	mg/l
Peak Nitrogen Concentration	2.491	mg/l
Total Phosphorus Discharged	74.18	lbs
Total Phosphorus Discharged (Particulate)	31.41	lbs
Total Phosphorus Discharged (Sorbed)	0.002738	lbs
Total Phosphorus Discharged (Dissolved)	42.76	lbs
Phosphorus Concentration	0.05481	mg/l
Peak Phosphorus Concentration	0.2843	mg/l
Total Bacteria Discharged	1.146E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	1.044E+11	cfu

Total Bacteria Discharged (Sorbed To Silt)	1.587E+11	cfu
Total Bacteria Discharged (Planktonic)	1.119E+13	cfu
Bacteria Concentration	2428	cfu/100 ml
Peak Bacteria Concentration	3.024E+04	cfu/100 ml

Messages

Type	Description
Warning	Convergence criteria is not met. Flow is routed as simple translation.
Warning	The pipe structure is overtopped with a precipitation depth of 4.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 5.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 7 in. Results may be inaccurate.



Basin_6

Name	Basin_6
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	18.69	acres
Curve Number	76	-
Soil Series	Chewacla	-
Depth Range	0-18	in
Peak Rate Factor	484	-
Time of Concentration	0.183	hrs

Sediment Inputs

Parameter	Value	Units
Length	855	ft
Slope	0.018	ft/ft
Soil Erodibility	0.28	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	18.5	%
Silt Percent	38.5	%
Sand Percent	43	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	1.3	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.09	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	33.05	micro g/g/mg/l
Isotherm Max - Nitrogen	1307.6	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	7400	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	7.741	ac-ft
Total Sediment Yield	5387	lbs
Total Sediment Yield (Clay)	259.1	lbs
Total Sediment Yield (Silt)	250.5	lbs
Total Sediment Yield (Sand)	832.9	lbs
Total Sediment Yield (Small Agg.)	1824	lbs
Total Sediment Yield (Large Agg.)	2221	lbs
Sediment Concentration	28.58	mg/l
Peak Sediment Concentration	82.27	mg/l
Total Nitrogen Yield	27.36	lbs
Total Nitrogen Yield (Particulate)	11.77	lbs
Total Nitrogen Yield (Sorbed)	0.01285	lbs
Total Nitrogen Yield (Dissolved)	15.58	lbs
Nitrogen Concentration	0.2454	mg/l
Peak Nitrogen Concentration	0.6027	mg/l
Total Phosphorus Yield	1.894	lbs
Total Phosphorus Yield (Particulate)	0.8146	lbs
Total Phosphorus Yield (Sorbed)	2.054E-05	lbs
Total Phosphorus Yield (Dissolved)	1.08	lbs
Phosphorus Concentration	0.01699	mg/l
Peak Phosphorus Concentration	0.04173	mg/l
Total Bacteria Yield	7.063E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	7.063E+11	cfu
Bacteria Concentration	1396	cfu/100 ml
Peak Bacteria Concentration	3430	cfu/100 ml

Non-Routed Connector 6	
Name	Non-Routed Connector 6
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	7.741	ac-ft
Total Sediment Discharged	5387	lbs
Total Sediment Discharged (Clay)	259.1	lbs
Total Sediment Discharged (Silt)	250.5	lbs
Total Sediment Discharged (Sand)	832.9	lbs
Total Sediment Discharged (Small Agg.)	1824	lbs
Total Sediment Discharged (Large Agg.)	2221	lbs
Sediment Concentration	28.58	mg/l
Peak Sediment Concentration	82.27	mg/l
Total Nitrogen Discharged	27.36	lbs
Total Nitrogen Discharged (Particulate)	11.77	lbs
Total Nitrogen Discharged (Sorbed)	0.01285	lbs
Total Nitrogen Discharged (Dissolved)	15.58	lbs
Nitrogen Concentration	0.2454	mg/l
Peak Nitrogen Concentration	0.6027	mg/l
Total Phosphorus Discharged	1.894	lbs
Total Phosphorus Discharged (Particulate)	0.8146	lbs
Total Phosphorus Discharged (Sorbed)	2.054E-05	lbs
Total Phosphorus Discharged (Dissolved)	1.08	lbs
Phosphorus Concentration	0.01699	mg/l
Peak Phosphorus Concentration	0.04173	mg/l
Total Bacteria Discharged	7.063E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	7.063E+11	cfu
Bacteria Concentration	1396	cfu/100 ml
Peak Bacteria Concentration	3430	cfu/100 ml

Trib1-00-03	
Name	Trib1-00-03
Description	

General Input		
Parameter	**Value**	**Units**
Infiltration Method	GreenAndAmpts	-
Soil Texture	Sandy Loam	-
Degree Of Saturation	0.9	-
TE Calculation Method	EPAMethod	-
Pond Efficiency Parameter	2	-

Riser Input		
Parameter	**Value**	**Units**
Riser Type	Drop Inlet	-
Riser Shape	Rectangular	-
Riser Height	25	ft
Riser Length	8	ft
Riser Width	16	ft

Barrel/Outlet Pipe Input		
Parameter	**Value**	**Units**
Barrel Invert Height	0	ft
Barrel Slope	0.0203	ft/ft
Barrel Length	1255	ft
Barrel Diameter	60	in
Entrance Loss Coefficient	0.5	-
Manning's Roughness Coefficient	0.013	-

EMS Input		
Parameter	**Value**	**Units**
EMS Type	Broad Crested	-
EMS Cross-Section	Rectangular	-
EMS Crest Height	15	ft
EMS Width	50	ft

Bacteria Input		
Parameter	**Value**	**Units**
Direct Bacteria Loading	0	animal units/acre/day

Annual Loading Results - Hydrology		
Parameter	**Value**	**Units**

Surface Area	0.98	ac
Total Inflow Volume	419.2	ac-ft
Total Rainfall On BMP	4.932	ac-ft
Total Outflow Volume	424.2	ac-ft
Outlet Pipe Flow Volume	365.5	ac-ft
EMS Outflow Volume	12.57	ac-ft
Infiltration Volume	46.08	ac-ft
Annual Loading Results - Sediment		
Parameter	**Value**	**Units**
Total Inflow Sediment Mass	3.449E+05	lbs
Total Inflow Sediment Mass (Clay)	2.618E+04	lbs
Total Inflow Sediment Mass (Silt)	9.366E+04	lbs
Total Inflow Sediment Mass (Sand)	4.215E+04	lbs
Total Inflow Sediment Mass (Small Agg.)	9.055E+04	lbs
Total Inflow Sediment Mass (Large Agg.)	9.235E+04	lbs
Total Sediment Mass Discharged	1.223E+05	lbs
Total Sediment Mass Discharged (Clay)	2.249E+04	lbs
Total Sediment Mass Discharged (Silt)	6.419E+04	lbs
Total Sediment Mass Discharged (Sand)	302.3	lbs
Total Sediment Mass Discharged (Small Agg.)	3.48E+04	lbs
Total Sediment Mass Discharged (Large Agg.)	525.6	lbs
Total Sediment Mass Trapped	2.226E+05	lbs
Total Sediment Mass Trapped (Clay)	3692	lbs
Total Sediment Mass Trapped (Silt)	2.947E+04	lbs
Total Sediment Mass Trapped (Sand)	4.185E+04	lbs
Total Sediment Mass Trapped (Small Agg.)	5.575E+04	lbs
Total Sediment Mass Trapped (Large Agg.)	9.182E+04	lbs
Sediment Trapping Efficiency	64.54	%
Sediment Trapping Efficiency (Clay)	14.1	%
Sediment Trapping Efficiency (Silt)	31.46	%
Sediment Trapping Efficiency (Sand)	99.28	%
Sediment Trapping Efficiency (Small Agg.)	61.57	%
Sediment Trapping Efficiency (Large Agg.)	99.43	%
Outlet Pipe Sediment Mass Discharged	9.462E+04	lbs
Outlet Pipe Sediment Mass Discharged (Clay)	1.953E+04	lbs
Outlet Pipe Sediment Mass Discharged (Silt)	5.112E+04	lbs

Outlet Pipe Sediment Mass Discharged (Sand)	75.86	lbs
Outlet Pipe Sediment Mass Discharged (Small Agg.)	2.377E+04	lbs
Outlet Pipe Sediment Mass Discharged (Large Agg.)	128.2	lbs
EMS Sediment Mass Discharged	2.768E+04	lbs
EMS Sediment Mass Discharged (Clay)	2958	lbs
EMS Sediment Mass Discharged (Silt)	1.308E+04	lbs
EMS Sediment Mass Discharged (Sand)	226.4	lbs
EMS Sediment Mass Discharged (Small Agg.)	1.103E+04	lbs
EMS Sediment Mass Discharged (Large Agg.)	397.4	lbs
Sediment Concentration	13.22	mg/l
Peak Sediment Concentration	117.3	mg/l
Annual Loading Results - Nitrogen		
Parameter	**Value**	**Units**
Total Nitrogen Mass Inflow	1260	lbs
Total Nitrogen Mass Inflow (Particulate)	496.4	lbs
Total Nitrogen Mass Inflow (Sorbed)	3.919	lbs
Total Nitrogen Mass Inflow (Dissolved)	759.6	lbs
Total Nitrogen Mass Discharged	1119	lbs
Total Nitrogen Mass Discharged (Particulate)	437.9	lbs
Total Nitrogen Mass Discharged (Sorbed)	3.467	lbs
Total Nitrogen Mass Discharged (Dissolved)	677.1	lbs
Total Nitrogen Mass Trapped	141.4	lbs
Total Nitrogen Mass Trapped (Particulate)	58.42	lbs
Total Nitrogen Mass Trapped (Sorbed)	0.4521	lbs
Total Nitrogen Mass Trapped (Dissolved)	82.51	lbs
Nitrogen Trapping Efficiency	11.22	%
Nitrogen Trapping Efficiency (Particulate)	11.77	%
Nitrogen Trapping Efficiency (Sorbed)	11.53	%
Nitrogen Trapping Efficiency (Dissolved)	10.86	%
Outlet Pipe Nitrogen Mass Discharged	1076	lbs
Outlet Pipe Nitrogen Mass Discharged (Particulate)	420.3	lbs
Outlet Pipe Nitrogen Mass Discharged (Sorbed)	3.288	lbs
Outlet Pipe Nitrogen Mass Discharged (Dissolved)	652.1	lbs
EMS Nitrogen Mass Discharged	42.87	lbs
EMS Nitrogen Mass Discharged (Particulate)	17.65	lbs
EMS Nitrogen Mass Discharged (Sorbed)	0.1793	lbs

EMS Nitrogen Mass Discharged (Dissolved)	25.04	lbs
Nitrogen Concentration	0.426	mg/l
Peak Nitrogen Concentration	1.713	mg/l
Annual Loading Results - Phosphorus		
Parameter	**Value**	**Units**
Total Phosphorus Mass Inflow	109.9	lbs
Total Phosphorus Mass Inflow (Particulate)	43.66	lbs
Total Phosphorus Mass Inflow (Sorbed)	0.003059	lbs
Total Phosphorus Mass Inflow (Dissolved)	66.25	lbs
Total Phosphorus Mass Discharged	97.26	lbs
Total Phosphorus Mass Discharged (Particulate)	38.39	lbs
Total Phosphorus Mass Discharged (Sorbed)	0.002672	lbs
Total Phosphorus Mass Discharged (Dissolved)	58.87	lbs
Total Phosphorus Mass Trapped	12.66	lbs
Total Phosphorus Mass Trapped (Particulate)	5.277	lbs
Total Phosphorus Mass Trapped (Sorbed)	0.0003874	lbs
Total Phosphorus Mass Trapped (Dissolved)	7.382	lbs
Phosphorus Trapping Efficiency	11.52	%
Phosphorus Trapping Efficiency (Particulate)	12.09	%
Phosphorus Trapping Efficiency (Sorbed)	12.66	%
Phosphorus Trapping Efficiency (Dissolved)	11.14	%
Outlet Pipe Phosphorus Mass Discharged	91.98	lbs
Outlet Pipe Phosphorus Mass Discharged (Particulate)	36.18	lbs
Outlet Pipe Phosphorus Mass Discharged (Sorbed)	0.002295	lbs
Outlet Pipe Phosphorus Mass Discharged (Dissolved)	55.79	lbs
EMS Phosphorus Mass Discharged	5.28	lbs
EMS Phosphorus Mass Discharged (Particulate)	2.202	lbs
EMS Phosphorus Mass Discharged (Sorbed)	0.0003762	lbs
EMS Phosphorus Mass Discharged (Dissolved)	3.078	lbs
Phosphorus Concentration	0.03512	mg/l
Peak Phosphorus Concentration	0.1838	mg/l
Annual Loading Results - Bacteria		
Parameter	**Value**	**Units**
Total Bacteria Loading	1.249E+13	cfu
Total Bacteria Loading (Sorbed To Clay)	8.305E+10	cfu

Total Bacteria Loading (Sorbed To Silt)	1.216E+11	cfu
Total Bacteria Loading (Planktonic)	1.228E+13	cfu
Total Bacteria Discharged	1.074E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	7.281E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.072E+11	cfu
Total Bacteria Discharged (Planktonic)	1.056E+13	cfu
Total Bacteria Trapped	1.745E+12	cfu
Total Bacteria Trapped (Sorbed To Clay)	1.024E+10	cfu
Total Bacteria Trapped (Sorbed To Silt)	1.442E+10	cfu
Total Bacteria Trapped (Planktonic)	1.721E+12	cfu
Bacteria Trapping Efficiency	13.98	%
Bacteria Trapping Efficiency (Sorbed To Clay)	12.33	%
Bacteria Trapping Efficiency (Sorbed To Silt)	11.86	%
Bacteria Trapping Efficiency (Planktonic)	14.01	%
Outlet Pipe Bacteria Discharged	1.003E+13	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Clay)	6.333E+10	cfu
Outlet Pipe Bacteria Discharged (Sorbed To Silt)	9.264E+10	cfu
Outlet Pipe Bacteria Discharged (Planktonic)	9.871E+12	cfu
EMS Bacteria Discharged	7.129E+11	cfu
EMS Bacteria Discharged (Sorbed To Clay)	9.481E+09	cfu
EMS Bacteria Discharged (Sorbed To Silt)	1.457E+10	cfu
EMS Bacteria Discharged (Planktonic)	6.889E+11	cfu
Bacteria Concentration	1203	cfu/100 ml
Peak Bacteria Concentration	1.796E+04	cfu/100 ml

RICHLAND COUNTY 1799 SOUTH CAROLINA

L-0430P

Name	L-0430P
Description	

Inputs

Parameter	Value	Units
Conduit Option	Muskingum-Kunge method	-
Conduit Diameter	72	in.
Conduit Length	1200	ft
Conduit Slope	0.006	ft/ft
Manning's Roughness	0.013	-

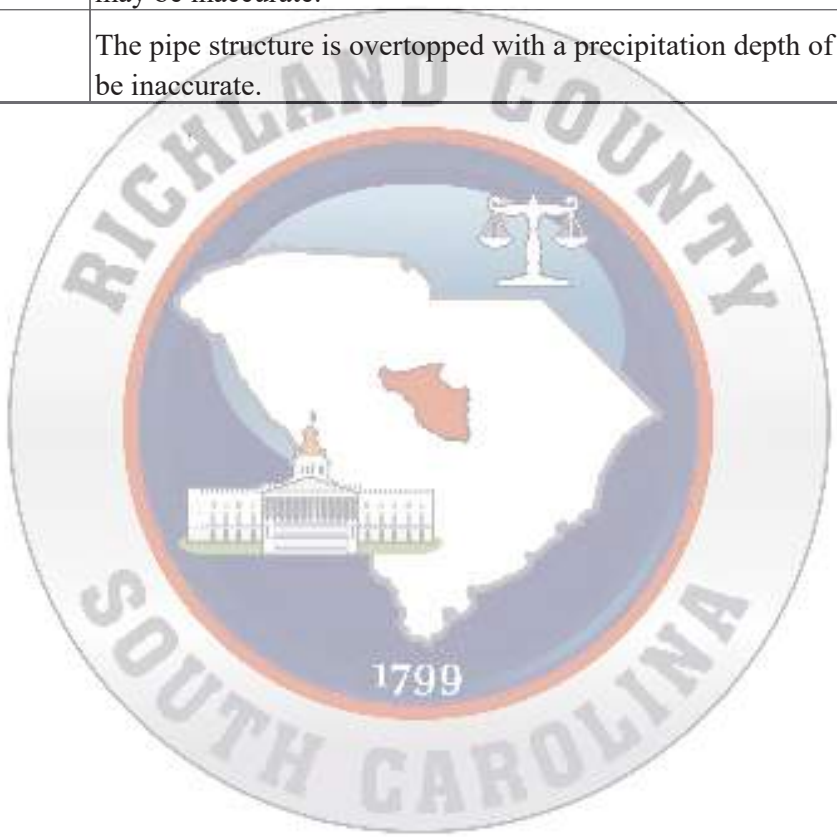
Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	378.1	ac-ft
Total Sediment Discharged	1.223E+05	lbs
Total Sediment Discharged (Clay)	2.249E+04	lbs
Total Sediment Discharged (Silt)	6.419E+04	lbs
Total Sediment Discharged (Sand)	302.3	lbs
Total Sediment Discharged (Small Agg.)	3.48E+04	lbs
Total Sediment Discharged (Large Agg.)	525.6	lbs
Sediment Concentration	13.22	mg/l
Peak Sediment Concentration	117.3	mg/l
Total Nitrogen Discharged	1119	lbs
Total Nitrogen Discharged (Particulate)	437.9	lbs
Total Nitrogen Discharged (Sorbed)	3.467	lbs
Total Nitrogen Discharged (Dissolved)	677.1	lbs
Nitrogen Concentration	0.426	mg/l
Peak Nitrogen Concentration	1.713	mg/l
Total Phosphorus Discharged	97.26	lbs
Total Phosphorus Discharged (Particulate)	38.39	lbs
Total Phosphorus Discharged (Sorbed)	0.002672	lbs
Total Phosphorus Discharged (Dissolved)	58.87	lbs
Phosphorus Concentration	0.03512	mg/l
Peak Phosphorus Concentration	0.1838	mg/l
Total Bacteria Discharged	1.074E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	7.281E+10	cfu

Total Bacteria Discharged (Sorbed To Silt)	1.072E+11	cfu
Total Bacteria Discharged (Planktonic)	1.056E+13	cfu
Bacteria Concentration	1203	cfu/100 ml
Peak Bacteria Concentration	1.796E+04	cfu/100 ml

Messages

Type	Description
Warning	Convergence criteria is not met. Flow is routed as simple translation.
Warning	The pipe structure is overtopped with a precipitation depth of 4.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 5.5 in. Results may be inaccurate.
Warning	The pipe structure is overtopped with a precipitation depth of 7 in. Results may be inaccurate.



Trib1-00-02	
Name	Trib1-00-02
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	378.6	ac-ft
Total Sediment Discharged	1.224E+05	lbs
Total Sediment Discharged (Clay)	2.251E+04	lbs
Total Sediment Discharged (Silt)	6.426E+04	lbs
Total Sediment Discharged (Sand)	302.3	lbs
Total Sediment Discharged (Small Agg.)	3.482E+04	lbs
Total Sediment Discharged (Large Agg.)	525.6	lbs
Sediment Concentration	13.21	mg/l
Peak Sediment Concentration	118.7	mg/l
Total Nitrogen Discharged	1120	lbs
Total Nitrogen Discharged (Particulate)	438.6	lbs
Total Nitrogen Discharged (Sorbed)	3.469	lbs
Total Nitrogen Discharged (Dissolved)	677.9	lbs
Nitrogen Concentration	0.426	mg/l
Peak Nitrogen Concentration	2.113	mg/l
Total Phosphorus Discharged	97.36	lbs
Total Phosphorus Discharged (Particulate)	38.43	lbs
Total Phosphorus Discharged (Sorbed)	0.002674	lbs
Total Phosphorus Discharged (Dissolved)	58.93	lbs
Phosphorus Concentration	0.03512	mg/l
Peak Phosphorus Concentration	0.2228	mg/l
Total Bacteria Discharged	1.078E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.141E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.367E+10	cfu
Total Bacteria Discharged (Planktonic)	1.065E+13	cfu
Bacteria Concentration	1204	cfu/100 ml
Peak Bacteria Concentration	1.795E+04	cfu/100 ml

Non-Routed Connector 43	
Name	Non-Routed Connector 43
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	378.6	ac-ft
Total Sediment Discharged	1.224E+05	lbs
Total Sediment Discharged (Clay)	2.251E+04	lbs
Total Sediment Discharged (Silt)	6.426E+04	lbs
Total Sediment Discharged (Sand)	302.3	lbs
Total Sediment Discharged (Small Agg.)	3.482E+04	lbs
Total Sediment Discharged (Large Agg.)	525.6	lbs
Sediment Concentration	13.21	mg/l
Peak Sediment Concentration	118.7	mg/l
Total Nitrogen Discharged	1120	lbs
Total Nitrogen Discharged (Particulate)	438.6	lbs
Total Nitrogen Discharged (Sorbed)	3.469	lbs
Total Nitrogen Discharged (Dissolved)	677.9	lbs
Nitrogen Concentration	0.426	mg/l
Peak Nitrogen Concentration	2.113	mg/l
Total Phosphorus Discharged	97.36	lbs
Total Phosphorus Discharged (Particulate)	38.43	lbs
Total Phosphorus Discharged (Sorbed)	0.002674	lbs
Total Phosphorus Discharged (Dissolved)	58.93	lbs
Phosphorus Concentration	0.03512	mg/l
Peak Phosphorus Concentration	0.2228	mg/l
Total Bacteria Discharged	1.078E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	4.141E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	8.367E+10	cfu
Total Bacteria Discharged (Planktonic)	1.065E+13	cfu
Bacteria Concentration	1204	cfu/100 ml
Peak Bacteria Concentration	1.795E+04	cfu/100 ml

Basin_14

Name	Basin_14
Description	Name

Hydrology Inputs

Parameter	Value	Units
Area	55.6	acres
Curve Number	70	-
Soil Series	Georgeville	-
Depth Range	0-15	in
Peak Rate Factor	484	-
Time of Concentration	0.267	hrs

Sediment Inputs

Parameter	Value	Units
Length	2230	ft
Slope	0.049	ft/ft
Soil Erodibility	0.49	-
Cover & Practice Factor	0.009	-
Tendency to Rill	1	-
Power Function Coefficient	1	-
Clay Percent	16	%
Silt Percent	54.3	%
Sand Percent	29.7	%

Nutrient Inputs

Parameter	Value	Units
EMC Nitrogen	2.06	mg/l
EMC Nitrogen Particulate fraction	0.43	-
EMC Phosphorous	0.28	mg/l
EMC Phosphorous Particulate fraction	0.43	-
Isotherm Rate - Nitrogen	44.62	micro g/g/mg/l
Isotherm Max - Nitrogen	1487.7	micro g/g
Isotherm Rate - Phosphorous	0.76	micro g/g/mg/l
Isotherm Max - Phosphorous	817	micro g/g

Bacteria Inputs

Parameter	Value	Units
EMC Bacteria	1000	cfu/100 ml
Decay Coefficient - Bacteria	0.8	-

Growth Coefficient - Bacteria	0.4	-
Isotherm Rate - Bacteria	0	cfu/g/mg/l
Isotherm Max - Bacteria	0	cfu/g
Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	15.38	ac-ft
Total Sediment Yield	1.075E+05	lbs
Total Sediment Yield (Clay)	4472	lbs
Total Sediment Yield (Silt)	2.741E+04	lbs
Total Sediment Yield (Sand)	1.335E+04	lbs
Total Sediment Yield (Small Agg.)	3.096E+04	lbs
Total Sediment Yield (Large Agg.)	3.13E+04	lbs
Sediment Concentration	204.1	mg/l
Peak Sediment Concentration	550.8	mg/l
Total Nitrogen Yield	86.17	lbs
Total Nitrogen Yield (Particulate)	37.05	lbs
Total Nitrogen Yield (Sorbed)	0.4337	lbs
Total Nitrogen Yield (Dissolved)	48.68	lbs
Nitrogen Concentration	0.2747	mg/l
Peak Nitrogen Concentration	0.6803	mg/l
Total Phosphorus Yield	11.71	lbs
Total Phosphorus Yield (Particulate)	5.036	lbs
Total Phosphorus Yield (Sorbed)	0.00105	lbs
Total Phosphorus Yield (Dissolved)	6.675	lbs
Phosphorus Concentration	0.03734	mg/l
Peak Phosphorus Concentration	0.09247	mg/l
Total Bacteria Yield	1.897E+11	cfu
Total Bacteria Yield (Sorbed To Clay)	0	cfu
Total Bacteria Yield (Sorbed To Silt)	0	cfu
Total Bacteria Yield (Planktonic)	1.897E+11	cfu
Bacteria Concentration	133.3	cfu/100 ml
Peak Bacteria Concentration	330.1	cfu/100 ml

Non-Routed Connector 3	
Name	Non-Routed Connector 3
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	15.38	ac-ft
Total Sediment Discharged	1.075E+05	lbs
Total Sediment Discharged (Clay)	4472	lbs
Total Sediment Discharged (Silt)	2.741E+04	lbs
Total Sediment Discharged (Sand)	1.335E+04	lbs
Total Sediment Discharged (Small Agg.)	3.096E+04	lbs
Total Sediment Discharged (Large Agg.)	3.13E+04	lbs
Sediment Concentration	204.1	mg/l
Peak Sediment Concentration	550.8	mg/l
Total Nitrogen Discharged	86.17	lbs
Total Nitrogen Discharged (Particulate)	37.05	lbs
Total Nitrogen Discharged (Sorbed)	0.4337	lbs
Total Nitrogen Discharged (Dissolved)	48.68	lbs
Nitrogen Concentration	0.2747	mg/l
Peak Nitrogen Concentration	0.6803	mg/l
Total Phosphorus Discharged	11.71	lbs
Total Phosphorus Discharged (Particulate)	5.036	lbs
Total Phosphorus Discharged (Sorbed)	0.00105	lbs
Total Phosphorus Discharged (Dissolved)	6.675	lbs
Phosphorus Concentration	0.03734	mg/l
Peak Phosphorus Concentration	0.09247	mg/l
Total Bacteria Discharged	1.897E+11	cfu
Total Bacteria Discharged (Sorbed To Clay)	0	cfu
Total Bacteria Discharged (Sorbed To Silt)	0	cfu
Total Bacteria Discharged (Planktonic)	1.897E+11	cfu
Bacteria Concentration	133.3	cfu/100 ml
Peak Bacteria Concentration	330.1	cfu/100 ml

Trib1-00-01	
Name	Trib1-00-01
Description	

Annual Loading Results

Parameter	Value	Units
Total Runoff Volume	394.7	ac-ft
Total Sediment Discharged	2.299E+05	lbs
Total Sediment Discharged (Clay)	2.699E+04	lbs
Total Sediment Discharged (Silt)	9.167E+04	lbs
Total Sediment Discharged (Sand)	1.366E+04	lbs
Total Sediment Discharged (Small Agg.)	6.578E+04	lbs
Total Sediment Discharged (Large Agg.)	3.183E+04	lbs
Sediment Concentration	23.29	mg/l
Peak Sediment Concentration	285.2	mg/l
Total Nitrogen Discharged	1207	lbs
Total Nitrogen Discharged (Particulate)	475.7	lbs
Total Nitrogen Discharged (Sorbed)	3.903	lbs
Total Nitrogen Discharged (Dissolved)	727.2	lbs
Nitrogen Concentration	0.4316	mg/l
Peak Nitrogen Concentration	2.19	mg/l
Total Phosphorus Discharged	109.1	lbs
Total Phosphorus Discharged (Particulate)	43.47	lbs
Total Phosphorus Discharged (Sorbed)	0.003725	lbs
Total Phosphorus Discharged (Dissolved)	65.64	lbs
Phosphorus Concentration	0.03619	mg/l
Peak Phosphorus Concentration	0.2378	mg/l
Total Bacteria Discharged	1.097E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.007E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.123E+11	cfu
Total Bacteria Discharged (Planktonic)	1.08E+13	cfu
Bacteria Concentration	1200	cfu/100 ml
Peak Bacteria Concentration	1.707E+04	cfu/100 ml

Non-Routed Connector 44	
Name	Non-Routed Connector 44
Description	

Inputs		
Parameter	**Value**	**Units**
Flow Type	Overland	-

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	394.7	ac-ft
Total Sediment Discharged	2.299E+05	lbs
Total Sediment Discharged (Clay)	2.699E+04	lbs
Total Sediment Discharged (Silt)	9.167E+04	lbs
Total Sediment Discharged (Sand)	1.366E+04	lbs
Total Sediment Discharged (Small Agg.)	6.578E+04	lbs
Total Sediment Discharged (Large Agg.)	3.183E+04	lbs
Sediment Concentration	23.29	mg/l
Peak Sediment Concentration	285.2	mg/l
Total Nitrogen Discharged	1207	lbs
Total Nitrogen Discharged (Particulate)	475.7	lbs
Total Nitrogen Discharged (Sorbed)	3.903	lbs
Total Nitrogen Discharged (Dissolved)	727.2	lbs
Nitrogen Concentration	0.4316	mg/l
Peak Nitrogen Concentration	2.19	mg/l
Total Phosphorus Discharged	109.1	lbs
Total Phosphorus Discharged (Particulate)	43.47	lbs
Total Phosphorus Discharged (Sorbed)	0.003725	lbs
Total Phosphorus Discharged (Dissolved)	65.64	lbs
Phosphorus Concentration	0.03619	mg/l
Peak Phosphorus Concentration	0.2378	mg/l
Total Bacteria Discharged	1.097E+13	cfu
Total Bacteria Discharged (Sorbed To Clay)	6.007E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.123E+11	cfu
Total Bacteria Discharged (Planktonic)	1.08E+13	cfu
Bacteria Concentration	1200	cfu/100 ml
Peak Bacteria Concentration	1.707E+04	cfu/100 ml

Outfall_A	
Name	Outfall_A
Description	

Annual Loading Results		
Parameter	**Value**	**Units**
Total Runoff Volume	394.75	ac-ft
Total Drainage Area	1,308.23	ac
Total BMP Surface Area	41.73	ac
Total Modeled Area	1,349.96	ac
Total Sediment Discharged	229,925.32	lbs
Total Sediment Trapped	1,530,733.99	lbs
Sediment Trapping Efficiency	86.94%	%
Total Sediment Discharged (Clay)	26,989.32	lbs
Total Sediment Discharged (Silt)	91,673.98	lbs
Total Sediment Discharged (Sand)	13,655.27	lbs
Total Sediment Discharged (Small Agg.)	65,776.95	lbs
Total Sediment Discharged (Large Agg.)	31,829.80	lbs
Total Sediment Yield Per Acre	175.75	lbs
Sediment Concentration	23.29	mg/l
Peak Sediment Concentration	285.24	mg/l
Total Nitrogen Discharged	1,206.89	lbs
Total Nitrogen Trapped	46,818.78	lbs
Nitrogen Trapping Efficiency	97.49%	%
Total Nitrogen Discharged (Particulate)	475.74	lbs
Total Nitrogen Discharged (Sorbed)	3.90	lbs
Total Nitrogen Discharged (Dissolved)	727.24	lbs
Total Nitrogen Yield Per Acre	0.92	lbs
Nitrogen Concentration	0.43	mg/l
Peak Nitrogen Concentration	2.19	mg/l
Total Phosphorus Discharged	109.12	lbs
Total Phosphorus Trapped	3,674.77	lbs
Phosphorus Trapping Efficiency	97.12%	%
Total Phosphorus Discharged (Particulate)	43.47	lbs
Total Phosphorus Discharged (Sorbed)	0.00	lbs
Total Phosphorus Discharged (Dissolved)	65.64	lbs
Total Phosphorus Yield Per Acre	0.08	lbs

Phosphorus Concentration	0.04	mg/l
Peak Phosphorus Concentration	0.24	mg/l
Total Bacteria Discharged	1.097E+13	cfu
Total Bacteria Trapped	8.228E+13	cfu
Bacteria Trapping Efficiency	88.24%	%
Total Bacteria Discharged (Sorbed To Clay)	6.007E+10	cfu
Total Bacteria Discharged (Sorbed To Silt)	1.123E+11	cfu
Total Bacteria Discharged (Planktonic)	1.08E+13	cfu
Bacteria Concentration	1200	cfu/100 ml
Peak Bacteria Concentration	1.707E+04	cfu/100 ml
Clay Trapped	563,364.41	lbs
Clay Trapping Efficiency	95.21%	%
Silt Trapped	822,305.95	lbs
Silt Trapping Efficiency	88.85%	%
Sand Trapped	109,076.26	lbs
Sand Trapping Efficiency	87.48%	%
Large Aggregates Trapped	128,459.14	lbs
Large Aggregates Trapping Efficiency	76.84%	%
Small Aggregates Trapped	137,453.55	lbs
Small Aggregates Trapping Efficiency	48.80%	%
Particulate Nitrogen Trapped	48,025.67	lbs
Particulate Nitrogen Trapping Efficiency	100.00%	%
Sorbed Nitrogen Trapped	139.45	lbs
Sorbed Nitrogen Trapping Efficiency	100.00%	%
Dissolved Nitrogen Trapped	29,880.86	lbs
Dissolved Nitrogen Trapping Efficiency	100.00%	%
Particulate Phosphorus Trapped	1,400.60	lbs
Particulate Phosphorus Trapping Efficiency	100.00%	%
Sorbed Phosphorus Trapped	0.04	lbs
Sorbed Phosphorus Trapping Efficiency	100.00%	%
Dissolved Phosphorus Trapped	2,383.25	lbs
Dissolved Phosphorus Trapping Efficiency	100.00%	%
Bacteria Sorbed to Clay Trapped	2.624E+12	cfu
Bacteria Sorbed to Clay Trapping Efficiency	100.00%	%
Bacteria Sorbed to Silt Trapped	3.369E+12	cfu
Bacteria Sorbed to Silt Trapping Efficiency	100.00%	%

Bacteria not Sorbed (Planktonic) Trapped	8.725E+13	cfu
Bacteria not Sorbed (Planktonic) Trapping Efficiency	100.00%	%

Watershed Results		
Treatment Train 1		
Parameter	**Value**	**Units**
Objects in Tree	Outfall_B, Basin_26, Trib2-00-02, Basin_23, Basin_22, Pond-01, Basin_A, Basin_19, Trib2-04-02, Basin_21, Basin_Off3, Basin_Off4, Basin_20, Basin_Off5, Pond-03, Basin_C, Pond-07, Basin_07	-
Overall Trapping Efficiency of Sediment	97.19	%
Treatment Train 2		
Parameter	**Value**	**Units**
Objects in Tree	Outfall_A, Basin_14, Trib1-00-03, Basin_6, Basin_03, Basin_04, Basin_02, Pond-02, Basin_B, Basin_Off2, Basin_Off1b, Basin_01, Pond-05, Basin_E, Basin_18, Basin_17, Basin_Off1a, Pond-06, Basin_F, Basin_05, Pond-04, Basin_D, Pond_08, Basin_08, Pond-09, Basin_09	-
Overall Trapping Efficiency of Sediment	86.94	%

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX

HYDROLOGIC CALCULATIONS

J – 27015.0007

November 2023

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Water Quality Design Considerations

POND 1

DETERMINE STORAGE VOLUME REQUIRED

First half-inch of runoff from the entire site

398.33 ac = Drainage Basin Area
0.5 in = Volume of runoff over site to place in water quality pond
16.60 ac-ft = Volume of runoff to place in water quality pond

First one inch of runoff from the built-upon portion of the property

398.33 ac = Drainage Basin Area
100.0 % = percent impervious (future)
398.33 ac = Built upon portion
1 in = Volume of runoff over site to place in water quality pond
33.19 ac-ft = Volume of runoff to place in water quality pond

DETERMINE INITIAL STAGE OF WATER QUALITY POND

If the volume of water calculated above is placed in the water quality pond, the initial stage of the pond can be calculated as follows:

Given the following stage-area-storage relationship for Pond 1:

Elev. (ft)	Surface Area (ac)	Total Storage (ac-ft)	
438.2	40.41	0.00	<- pond bottom
442.2	42.80	0.00	<- nwl
448.7	45.45	286.81	

Interpolation yields an initial stage of:

Elevation (ft)	Pond Depth (ft)	Total Storage (ac-ft)
442.2	4.0001	0.00
443.0	4.8	**33.19**
448.7	10.5	286.81

Water Quality Design Considerations

POND 2

DETERMINE STORAGE VOLUME REQUIRED

First half-inch of runoff from the entire site

239.86 ac = Drainage Basin Area
0.5 in = Volume of runoff over site to place in water quality pond
9.99 ac-ft = Volume of runoff to place in water quality pond

First one inch of runoff from the built-upon portion of the property

239.86 ac = Drainage Basin Area
100.0 % = percent impervious (future)
239.86 ac = Built upon portion
1 in = Volume of runoff over site to place in water quality pond
19.99 ac-ft = Volume of runoff to place in water quality pond

DETERMINE INITIAL STAGE OF WATER QUALITY POND

If the volume of water calculated above is placed in the water quality pond, the initial stage of the pond can be calculated as follows:

Given the following stage-area-storage relationship for Pond 2:

Elev. (ft)	Surface Area (ac)	Total Storage (ac-ft)	
450.5	14.95	0.00	<- pond bottom
455	16.85	0.00	<- nwl
466	19.66	200.78	

Interpolation yields an initial stage of:

Elevation (ft)	Pond Depth (ft)	Total Storage (ac-ft)
455	4.5	0.00
456.1	5.6	**19.99**
466	15.5	200.78

Water Quality Design Considerations

POND 3

DETERMINE STORAGE VOLUME REQUIRED

First half-inch of runoff from the entire site

182.31 ac = Drainage Basin Area
0.5 in = Volume of runoff over site to place in water quality pond
7.60 ac-ft = Volume of runoff to place in water quality pond

First one inch of runoff from the built-upon portion of the property

182.31 ac = Drainage Basin Area
100.0 % = percent impervious (future)
182.31 ac = Built upon portion
1 in = Volume of runoff over site to place in water quality pond
15.19 ac-ft = Volume of runoff to place in water quality pond

DETERMINE INITIAL STAGE OF WATER QUALITY POND

If the volume of water calculated above is placed in the water quality pond, the initial stage of the pond can be calculated as follows:

Given the following stage-area-storage relationship for Pond 3:

Elev. (ft)	Surface Area (ac)	Total Storage (ac-ft)	
448.5	15.05	0.00	<- pond bottom
453.50001	16.94	0.00	<- nwl
458.5	18.12	87.63	

Interpolation yields an initial stage of:

Elevation (ft)	Pond Depth (ft)	Total Storage (ac-ft)
453.50001	5	0.00
454.4	5.9	**15.19**
458.5	10	87.63

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-03	0.0000	454.40	0.00	0.00
Proposed WQ	NO RAIN	Pond-03	0.2503	454.40	0.00	2.36
Proposed WQ	NO RAIN	Pond-03	0.5000	454.39	0.00	2.34
Proposed WQ	NO RAIN	Pond-03	0.7501	454.39	0.00	2.32
Proposed WQ	NO RAIN	Pond-03	1.0001	454.39	0.00	2.31
Proposed WQ	NO RAIN	Pond-03	1.2503	454.39	0.00	2.29
Proposed WQ	NO RAIN	Pond-03	1.5007	454.38	0.00	2.27
Proposed WQ	NO RAIN	Pond-03	1.7511	454.38	0.00	2.25
Proposed WQ	NO RAIN	Pond-03	2.0006	454.38	0.00	2.23
Proposed WQ	NO RAIN	Pond-03	2.2506	454.38	0.00	2.22
Proposed WQ	NO RAIN	Pond-03	2.5008	454.37	0.00	2.20
Proposed WQ	NO RAIN	Pond-03	2.7552	454.37	0.00	2.18
Proposed WQ	NO RAIN	Pond-03	3.0015	454.37	0.00	2.17
Proposed WQ	NO RAIN	Pond-03	3.2515	454.36	0.00	2.15
Proposed WQ	NO RAIN	Pond-03	3.5015	454.36	0.00	2.13
Proposed WQ	NO RAIN	Pond-03	3.7515	454.36	0.00	2.12
Proposed WQ	NO RAIN	Pond-03	4.0015	454.36	0.00	2.10
Proposed WQ	NO RAIN	Pond-03	4.2515	454.35	0.00	2.08
Proposed WQ	NO RAIN	Pond-03	4.5015	454.35	0.00	2.07
Proposed WQ	NO RAIN	Pond-03	4.7512	454.35	0.00	2.05
Proposed WQ	NO RAIN	Pond-03	5.0056	454.35	0.00	2.04
Proposed WQ	NO RAIN	Pond-03	5.2506	454.34	0.00	2.02
Proposed WQ	NO RAIN	Pond-03	5.5002	454.34	0.00	2.01
Proposed WQ	NO RAIN	Pond-03	5.7547	454.34	0.00	1.99
Proposed WQ	NO RAIN	Pond-03	6.0047	454.34	0.00	1.98
Proposed WQ	NO RAIN	Pond-03	6.2547	454.33	0.00	1.96
Proposed WQ	NO RAIN	Pond-03	6.5047	454.33	0.00	1.95
Proposed WQ	NO RAIN	Pond-03	6.7547	454.33	0.00	1.93
Proposed WQ	NO RAIN	Pond-03	7.0047	454.33	0.00	1.92
Proposed WQ	NO RAIN	Pond-03	7.2547	454.33	0.00	1.91
Proposed WQ	NO RAIN	Pond-03	7.5047	454.32	0.00	1.89
Proposed WQ	NO RAIN	Pond-03	7.7547	454.32	0.00	1.88
Proposed WQ	NO RAIN	Pond-03	8.0047	454.32	0.00	1.86
Proposed WQ	NO RAIN	Pond-03	8.2547	454.32	0.00	1.85
Proposed WQ	NO RAIN	Pond-03	8.5047	454.31	0.00	1.84
Proposed WQ	NO RAIN	Pond-03	8.7514	454.31	0.00	1.82
Proposed WQ	NO RAIN	Pond-03	9.0064	454.31	0.00	1.81
Proposed WQ	NO RAIN	Pond-03	9.2522	454.31	0.00	1.80
Proposed WQ	NO RAIN	Pond-03	9.5064	454.31	0.00	1.78
Proposed WQ	NO RAIN	Pond-03	9.7564	454.30	0.00	1.77
Proposed WQ	NO RAIN	Pond-03	10.0056	454.30	0.00	1.76
Proposed WQ	NO RAIN	Pond-03	10.2514	454.30	0.00	1.75

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-03	10.5047	454.30	0.00	1.73
Proposed WQ	NO RAIN	Pond-03	10.7530	454.29	0.00	1.72
Proposed WQ	NO RAIN	Pond-03	11.0019	454.29	0.00	1.71
Proposed WQ	NO RAIN	Pond-03	11.2503	454.29	0.00	1.70
Proposed WQ	NO RAIN	Pond-03	11.5018	454.29	0.00	1.69
Proposed WQ	NO RAIN	Pond-03	11.7530	454.29	0.00	1.67
Proposed WQ	NO RAIN	Pond-03	12.0023	454.28	0.00	1.66
Proposed WQ	NO RAIN	Pond-03	12.2554	454.28	0.00	1.65
Proposed WQ	NO RAIN	Pond-03	12.5037	454.28	0.00	1.64
Proposed WQ	NO RAIN	Pond-03	12.7530	454.28	0.00	1.63
Proposed WQ	NO RAIN	Pond-03	13.0038	454.28	0.00	1.62
Proposed WQ	NO RAIN	Pond-03	13.2500	454.27	0.00	1.61
Proposed WQ	NO RAIN	Pond-03	13.5013	454.27	0.00	1.60
Proposed WQ	NO RAIN	Pond-03	13.7503	454.27	0.00	1.58
Proposed WQ	NO RAIN	Pond-03	14.0034	454.27	0.00	1.57
Proposed WQ	NO RAIN	Pond-03	14.2513	454.27	0.00	1.56
Proposed WQ	NO RAIN	Pond-03	14.5031	454.27	0.00	1.55
Proposed WQ	NO RAIN	Pond-03	14.7511	454.26	0.00	1.54
Proposed WQ	NO RAIN	Pond-03	15.0046	454.26	0.00	1.53
Proposed WQ	NO RAIN	Pond-03	15.2567	454.26	0.00	1.52
Proposed WQ	NO RAIN	Pond-03	15.5053	454.26	0.00	1.51
Proposed WQ	NO RAIN	Pond-03	15.7553	454.26	0.00	1.50
Proposed WQ	NO RAIN	Pond-03	16.0053	454.25	0.00	1.49
Proposed WQ	NO RAIN	Pond-03	16.2553	454.25	0.00	1.48
Proposed WQ	NO RAIN	Pond-03	16.5053	454.25	0.00	1.47
Proposed WQ	NO RAIN	Pond-03	16.7553	454.25	0.00	1.46
Proposed WQ	NO RAIN	Pond-03	17.0053	454.25	0.00	1.45
Proposed WQ	NO RAIN	Pond-03	17.2553	454.25	0.00	1.44
Proposed WQ	NO RAIN	Pond-03	17.5053	454.24	0.00	1.43
Proposed WQ	NO RAIN	Pond-03	17.7553	454.24	0.00	1.42
Proposed WQ	NO RAIN	Pond-03	18.0022	454.24	0.00	1.42
Proposed WQ	NO RAIN	Pond-03	18.2538	454.24	0.00	1.41
Proposed WQ	NO RAIN	Pond-03	18.5060	454.24	0.00	1.40
Proposed WQ	NO RAIN	Pond-03	18.7560	454.24	0.00	1.39
Proposed WQ	NO RAIN	Pond-03	19.0060	454.23	0.00	1.38
Proposed WQ	NO RAIN	Pond-03	19.2560	454.23	0.00	1.37
Proposed WQ	NO RAIN	Pond-03	19.5060	454.23	0.00	1.36
Proposed WQ	NO RAIN	Pond-03	19.7560	454.23	0.00	1.35
Proposed WQ	NO RAIN	Pond-03	20.0060	454.23	0.00	1.34
Proposed WQ	NO RAIN	Pond-03	20.2560	454.23	0.00	1.34
Proposed WQ	NO RAIN	Pond-03	20.5060	454.22	0.00	1.33
Proposed WQ	NO RAIN	Pond-03	20.7560	454.22	0.00	1.32

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-03	21.0060	454.22	0.00	1.31
Proposed WQ	NO RAIN	Pond-03	21.2560	454.22	0.00	1.30
Proposed WQ	NO RAIN	Pond-03	21.5060	454.22	0.00	1.29
Proposed WQ	NO RAIN	Pond-03	21.7560	454.22	0.00	1.29
Proposed WQ	NO RAIN	Pond-03	22.0060	454.21	0.00	1.28
Proposed WQ	NO RAIN	Pond-03	22.2560	454.21	0.00	1.27
Proposed WQ	NO RAIN	Pond-03	22.5060	454.21	0.00	1.26
Proposed WQ	NO RAIN	Pond-03	22.7560	454.21	0.00	1.25
Proposed WQ	NO RAIN	Pond-03	23.0060	454.21	0.00	1.25
Proposed WQ	NO RAIN	Pond-03	23.2560	454.21	0.00	1.24
Proposed WQ	NO RAIN	Pond-03	23.5060	454.21	0.00	1.23
Proposed WQ	NO RAIN	Pond-03	23.7560	454.20	0.00	1.22
Proposed WQ	NO RAIN	Pond-03	24.0060	454.20	0.00	1.22
Proposed WQ	NO RAIN	Pond-03	24.2560	454.20	0.00	1.21
Proposed WQ	NO RAIN	Pond-03	24.5060	454.20	0.00	1.20
Proposed WQ	NO RAIN	Pond-03	24.7560	454.20	0.00	1.20
Proposed WQ	NO RAIN	Pond-03	25.0060	454.20	0.00	1.19
Proposed WQ	NO RAIN	Pond-03	25.2560	454.19	0.00	1.18
Proposed WQ	NO RAIN	Pond-03	25.5060	454.19	0.00	1.17
Proposed WQ	NO RAIN	Pond-03	25.7560	454.19	0.00	1.17
Proposed WQ	NO RAIN	Pond-03	26.0060	454.19	0.00	1.16
Proposed WQ	NO RAIN	Pond-03	26.2560	454.19	0.00	1.15
Proposed WQ	NO RAIN	Pond-03	26.5060	454.19	0.00	1.15
Proposed WQ	NO RAIN	Pond-03	26.7560	454.19	0.00	1.14
Proposed WQ	NO RAIN	Pond-03	27.0060	454.19	0.00	1.13
Proposed WQ	NO RAIN	Pond-03	27.2560	454.18	0.00	1.13
Proposed WQ	NO RAIN	Pond-03	27.5060	454.18	0.00	1.12
Proposed WQ	NO RAIN	Pond-03	27.7560	454.18	0.00	1.11
Proposed WQ	NO RAIN	Pond-03	28.0060	454.18	0.00	1.11
Proposed WQ	NO RAIN	Pond-03	28.2560	454.18	0.00	1.10
Proposed WQ	NO RAIN	Pond-03	28.5060	454.18	0.00	1.09
Proposed WQ	NO RAIN	Pond-03	28.7560	454.18	0.00	1.09
Proposed WQ	NO RAIN	Pond-03	29.0060	454.17	0.00	1.08
Proposed WQ	NO RAIN	Pond-03	29.2560	454.17	0.00	1.08
Proposed WQ	NO RAIN	Pond-03	29.5060	454.17	0.00	1.07
Proposed WQ	NO RAIN	Pond-03	29.7560	454.17	0.00	1.06

Water Quality Design Considerations

POND 4

DETERMINE STORAGE VOLUME REQUIRED

First half-inch of runoff from the entire site

132.60 ac = Drainage Basin Area
0.5 in = Volume of runoff over site to place in water quality pond
5.53 ac-ft = Volume of runoff to place in water quality pond

First one inch of runoff from the built-upon portion of the property

132.60 ac = Drainage Basin Area
100.0 % = percent impervious (future)
132.60 ac = Built upon portion
1 in = Volume of runoff over site to place in water quality pond
11.05 ac-ft = Volume of runoff to place in water quality pond

DETERMINE INITIAL STAGE OF WATER QUALITY POND

If the volume of water calculated above is placed in the water quality pond, the initial stage of the pond can be calculated as follows:

Given the following stage-area-storage relationship for Pond 4:

Elev. (ft)	Surface Area (ac)	Total Storage (ac-ft)	
453.8	8.31	0.00	<- pond bottom
457.8	9.69	0.00	<- nwl
464.8	11.10	72.77	

Interpolation yields an initial stage of:

Elevation (ft)	Pond Depth (ft)	Total Storage (ac-ft)
457.8	4.0	0.00
458.9	5.1	**11.05**
464.8	11.0	72.77

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-04	0.0000	458.90	0.00	0.00
Proposed WQ	NO RAIN	Pond-04	0.2503	458.90	0.00	0.87
Proposed WQ	NO RAIN	Pond-04	0.5000	458.90	0.00	0.87
Proposed WQ	NO RAIN	Pond-04	0.7501	458.89	0.00	0.87
Proposed WQ	NO RAIN	Pond-04	1.0001	458.89	0.00	0.87
Proposed WQ	NO RAIN	Pond-04	1.2503	458.89	0.00	0.87
Proposed WQ	NO RAIN	Pond-04	1.5007	458.89	0.00	0.87
Proposed WQ	NO RAIN	Pond-04	1.7511	458.89	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	2.0006	458.89	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	2.2506	458.88	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	2.5008	458.88	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	2.7552	458.88	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	3.0015	458.88	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	3.2515	458.88	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	3.5015	458.87	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	3.7515	458.87	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	4.0015	458.87	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	4.2515	458.87	0.00	0.86
Proposed WQ	NO RAIN	Pond-04	4.5015	458.87	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	4.7512	458.87	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	5.0056	458.86	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	5.2506	458.86	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	5.5002	458.86	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	5.7547	458.86	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	6.0047	458.86	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	6.2547	458.86	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	6.5047	458.85	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	6.7547	458.85	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	7.0047	458.85	0.00	0.85
Proposed WQ	NO RAIN	Pond-04	7.2547	458.85	0.00	0.84
Proposed WQ	NO RAIN	Pond-04	7.5047	458.85	0.00	0.84
Proposed WQ	NO RAIN	Pond-04	7.7547	458.84	0.00	0.84
Proposed WQ	NO RAIN	Pond-04	8.0047	458.84	0.00	0.84
Proposed WQ	NO RAIN	Pond-04	8.2547	458.84	0.00	0.84
Proposed WQ	NO RAIN	Pond-04	8.5047	458.84	0.00	0.84
Proposed WQ	NO RAIN	Pond-04	8.7514	458.84	0.00	0.84
Proposed WQ	NO RAIN	Pond-04	9.0064	458.84	0.00	0.84
Proposed WQ	NO RAIN	Pond-04	9.2522	458.83	0.00	0.84
Proposed WQ	NO RAIN	Pond-04	9.5064	458.83	0.00	0.84
Proposed WQ	NO RAIN	Pond-04	9.7564	458.83	0.00	0.83
Proposed WQ	NO RAIN	Pond-04	10.0056	458.83	0.00	0.83
Proposed WQ	NO RAIN	Pond-04	10.2514	458.83	0.00	0.83

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-04	10.5047	458.83	0.00	0.83
Proposed WQ	NO RAIN	Pond-04	10.7530	458.82	0.00	0.83
Proposed WQ	NO RAIN	Pond-04	11.0019	458.82	0.00	0.83
Proposed WQ	NO RAIN	Pond-04	11.2503	458.82	0.00	0.83
Proposed WQ	NO RAIN	Pond-04	11.5018	458.82	0.00	0.83
Proposed WQ	NO RAIN	Pond-04	11.7530	458.82	0.00	0.83
Proposed WQ	NO RAIN	Pond-04	12.0023	458.82	0.00	0.83
Proposed WQ	NO RAIN	Pond-04	12.2554	458.81	0.00	0.83
Proposed WQ	NO RAIN	Pond-04	12.5037	458.81	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	12.7530	458.81	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	13.0038	458.81	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	13.2500	458.81	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	13.5013	458.80	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	13.7503	458.80	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	14.0034	458.80	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	14.2513	458.80	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	14.5031	458.80	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	14.7511	458.80	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	15.0046	458.79	0.00	0.82
Proposed WQ	NO RAIN	Pond-04	15.2567	458.79	0.00	0.81
Proposed WQ	NO RAIN	Pond-04	15.5053	458.79	0.00	0.81
Proposed WQ	NO RAIN	Pond-04	15.7553	458.79	0.00	0.81
Proposed WQ	NO RAIN	Pond-04	16.0053	458.79	0.00	0.81
Proposed WQ	NO RAIN	Pond-04	16.2553	458.79	0.00	0.81
Proposed WQ	NO RAIN	Pond-04	16.5053	458.78	0.00	0.81
Proposed WQ	NO RAIN	Pond-04	16.7553	458.78	0.00	0.81
Proposed WQ	NO RAIN	Pond-04	17.0053	458.78	0.00	0.81
Proposed WQ	NO RAIN	Pond-04	17.2553	458.78	0.00	0.81
Proposed WQ	NO RAIN	Pond-04	17.5053	458.78	0.00	0.81
Proposed WQ	NO RAIN	Pond-04	17.7553	458.78	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	18.0022	458.77	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	18.2538	458.77	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	18.5060	458.77	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	18.7560	458.77	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	19.0060	458.77	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	19.2560	458.77	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	19.5060	458.76	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	19.7560	458.76	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	20.0060	458.76	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	20.2560	458.76	0.00	0.80
Proposed WQ	NO RAIN	Pond-04	20.5060	458.76	0.00	0.79
Proposed WQ	NO RAIN	Pond-04	20.7560	458.76	0.00	0.79

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-04	21.0060	458.75	0.00	0.79
Proposed WQ	NO RAIN	Pond-04	21.2560	458.75	0.00	0.79
Proposed WQ	NO RAIN	Pond-04	21.5060	458.75	0.00	0.79
Proposed WQ	NO RAIN	Pond-04	21.7560	458.75	0.00	0.79
Proposed WQ	NO RAIN	Pond-04	22.0060	458.75	0.00	0.79
Proposed WQ	NO RAIN	Pond-04	22.2560	458.75	0.00	0.79
Proposed WQ	NO RAIN	Pond-04	22.5060	458.74	0.00	0.79
Proposed WQ	NO RAIN	Pond-04	22.7560	458.74	0.00	0.79
Proposed WQ	NO RAIN	Pond-04	23.0060	458.74	0.00	0.79
Proposed WQ	NO RAIN	Pond-04	23.2560	458.74	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	23.5060	458.74	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	23.7560	458.74	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	24.0060	458.73	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	24.2560	458.73	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	24.5060	458.73	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	24.7560	458.73	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	25.0060	458.73	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	25.2560	458.73	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	25.5060	458.72	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	25.7560	458.72	0.00	0.78
Proposed WQ	NO RAIN	Pond-04	26.0060	458.72	0.00	0.77
Proposed WQ	NO RAIN	Pond-04	26.2560	458.72	0.00	0.77
Proposed WQ	NO RAIN	Pond-04	26.5060	458.72	0.00	0.77
Proposed WQ	NO RAIN	Pond-04	26.7560	458.72	0.00	0.77
Proposed WQ	NO RAIN	Pond-04	27.0060	458.71	0.00	0.77
Proposed WQ	NO RAIN	Pond-04	27.2560	458.71	0.00	0.77
Proposed WQ	NO RAIN	Pond-04	27.5060	458.71	0.00	0.77
Proposed WQ	NO RAIN	Pond-04	27.7560	458.71	0.00	0.77
Proposed WQ	NO RAIN	Pond-04	28.0060	458.71	0.00	0.77
Proposed WQ	NO RAIN	Pond-04	28.2560	458.71	0.00	0.77
Proposed WQ	NO RAIN	Pond-04	28.5060	458.71	0.00	0.76
Proposed WQ	NO RAIN	Pond-04	28.7560	458.70	0.00	0.76
Proposed WQ	NO RAIN	Pond-04	29.0060	458.70	0.00	0.76
Proposed WQ	NO RAIN	Pond-04	29.2560	458.70	0.00	0.76
Proposed WQ	NO RAIN	Pond-04	29.5060	458.70	0.00	0.76
Proposed WQ	NO RAIN	Pond-04	29.7560	458.70	0.00	0.76

Water Quality Design Considerations

POND 5

DETERMINE STORAGE VOLUME REQUIRED

First half-inch of runoff from the entire site

64.94 ac = Drainage Basin Area
0.5 in = Volume of runoff over site to place in water quality pond
2.71 ac-ft = Volume of runoff to place in water quality pond

First one inch of runoff from the built-upon portion of the property

64.94 ac = Drainage Basin Area
13.9 % = percent impervious (future)
9.00 ac = Built upon portion
1 in = Volume of runoff over site to place in water quality pond
0.75 ac-ft = Volume of runoff to place in water quality pond

DETERMINE INITIAL STAGE OF WATER QUALITY POND

If the volume of water calculated above is placed in the water quality pond, the initial stage of the pond can be calculated as follows:

Given the following stage-area-storage relationship for Pond 5:

Elev. (ft)	Surface Area (ac)	Total Storage (ac-ft)	
475.0	1.22	0.00	<- pond bottom
483.0	1.84	0.00	<- nwl
493.0	2.62	22.31	

Interpolation yields an initial stage of:

Elevation (ft)	Pond Depth (ft)	Total Storage (ac-ft)
483.0	8.0	0.00
484.2	9.2	**2.71**
493.0	18.0	22.31

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-05	0.0000	484.20	0.00	0.00
Proposed WQ	NO RAIN	Pond-05	0.2503	484.19	0.00	1.17
Proposed WQ	NO RAIN	Pond-05	0.5000	484.18	0.00	1.14
Proposed WQ	NO RAIN	Pond-05	0.7501	484.16	0.00	1.11
Proposed WQ	NO RAIN	Pond-05	1.0001	484.15	0.00	1.09
Proposed WQ	NO RAIN	Pond-05	1.2503	484.14	0.00	1.06
Proposed WQ	NO RAIN	Pond-05	1.5007	484.13	0.00	1.04
Proposed WQ	NO RAIN	Pond-05	1.7511	484.12	0.00	1.01
Proposed WQ	NO RAIN	Pond-05	2.0006	484.11	0.00	0.99
Proposed WQ	NO RAIN	Pond-05	2.2506	484.10	0.00	0.97
Proposed WQ	NO RAIN	Pond-05	2.5008	484.09	0.00	0.95
Proposed WQ	NO RAIN	Pond-05	2.7552	484.08	0.00	0.93
Proposed WQ	NO RAIN	Pond-05	3.0015	484.07	0.00	0.91
Proposed WQ	NO RAIN	Pond-05	3.2515	484.06	0.00	0.90
Proposed WQ	NO RAIN	Pond-05	3.5015	484.05	0.00	0.88
Proposed WQ	NO RAIN	Pond-05	3.7515	484.04	0.00	0.87
Proposed WQ	NO RAIN	Pond-05	4.0015	484.03	0.00	0.85
Proposed WQ	NO RAIN	Pond-05	4.2515	484.02	0.00	0.84
Proposed WQ	NO RAIN	Pond-05	4.5015	484.01	0.00	0.83
Proposed WQ	NO RAIN	Pond-05	4.7512	484.00	0.00	0.82
Proposed WQ	NO RAIN	Pond-05	5.0056	484.00	0.00	0.82
Proposed WQ	NO RAIN	Pond-05	5.2506	483.99	0.00	0.81
Proposed WQ	NO RAIN	Pond-05	5.5002	483.98	0.00	0.81
Proposed WQ	NO RAIN	Pond-05	5.7547	483.97	0.00	0.80
Proposed WQ	NO RAIN	Pond-05	6.0047	483.96	0.00	0.80
Proposed WQ	NO RAIN	Pond-05	6.2547	483.95	0.00	0.79
Proposed WQ	NO RAIN	Pond-05	6.5047	483.94	0.00	0.79
Proposed WQ	NO RAIN	Pond-05	6.7547	483.94	0.00	0.78
Proposed WQ	NO RAIN	Pond-05	7.0047	483.93	0.00	0.78
Proposed WQ	NO RAIN	Pond-05	7.2547	483.92	0.00	0.77
Proposed WQ	NO RAIN	Pond-05	7.5047	483.91	0.00	0.77
Proposed WQ	NO RAIN	Pond-05	7.7547	483.90	0.00	0.76
Proposed WQ	NO RAIN	Pond-05	8.0047	483.90	0.00	0.76
Proposed WQ	NO RAIN	Pond-05	8.2547	483.89	0.00	0.75
Proposed WQ	NO RAIN	Pond-05	8.5047	483.88	0.00	0.75
Proposed WQ	NO RAIN	Pond-05	8.7514	483.87	0.00	0.74
Proposed WQ	NO RAIN	Pond-05	9.0064	483.86	0.00	0.74
Proposed WQ	NO RAIN	Pond-05	9.2522	483.86	0.00	0.74
Proposed WQ	NO RAIN	Pond-05	9.5064	483.85	0.00	0.73
Proposed WQ	NO RAIN	Pond-05	9.7564	483.84	0.00	0.73
Proposed WQ	NO RAIN	Pond-05	10.0056	483.83	0.00	0.72
Proposed WQ	NO RAIN	Pond-05	10.2514	483.82	0.00	0.72

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-05	10.5047	483.82	0.00	0.71
Proposed WQ	NO RAIN	Pond-05	10.7530	483.81	0.00	0.71
Proposed WQ	NO RAIN	Pond-05	11.0019	483.80	0.00	0.70
Proposed WQ	NO RAIN	Pond-05	11.2503	483.79	0.00	0.70
Proposed WQ	NO RAIN	Pond-05	11.5018	483.79	0.00	0.69
Proposed WQ	NO RAIN	Pond-05	11.7530	483.78	0.00	0.69
Proposed WQ	NO RAIN	Pond-05	12.0023	483.77	0.00	0.68
Proposed WQ	NO RAIN	Pond-05	12.2554	483.76	0.00	0.68
Proposed WQ	NO RAIN	Pond-05	12.5037	483.76	0.00	0.67
Proposed WQ	NO RAIN	Pond-05	12.7530	483.75	0.00	0.67
Proposed WQ	NO RAIN	Pond-05	13.0038	483.74	0.00	0.66
Proposed WQ	NO RAIN	Pond-05	13.2500	483.74	0.00	0.66
Proposed WQ	NO RAIN	Pond-05	13.5013	483.73	0.00	0.65
Proposed WQ	NO RAIN	Pond-05	13.7503	483.72	0.00	0.65
Proposed WQ	NO RAIN	Pond-05	14.0034	483.71	0.00	0.64
Proposed WQ	NO RAIN	Pond-05	14.2513	483.71	0.00	0.64
Proposed WQ	NO RAIN	Pond-05	14.5031	483.70	0.00	0.63
Proposed WQ	NO RAIN	Pond-05	14.7511	483.69	0.00	0.63
Proposed WQ	NO RAIN	Pond-05	15.0046	483.69	0.00	0.62
Proposed WQ	NO RAIN	Pond-05	15.2567	483.68	0.00	0.62
Proposed WQ	NO RAIN	Pond-05	15.5053	483.67	0.00	0.62
Proposed WQ	NO RAIN	Pond-05	15.7553	483.67	0.00	0.61
Proposed WQ	NO RAIN	Pond-05	16.0053	483.66	0.00	0.61
Proposed WQ	NO RAIN	Pond-05	16.2553	483.65	0.00	0.60
Proposed WQ	NO RAIN	Pond-05	16.5053	483.65	0.00	0.60
Proposed WQ	NO RAIN	Pond-05	16.7553	483.64	0.00	0.59
Proposed WQ	NO RAIN	Pond-05	17.0053	483.64	0.00	0.59
Proposed WQ	NO RAIN	Pond-05	17.2553	483.63	0.00	0.58
Proposed WQ	NO RAIN	Pond-05	17.5053	483.62	0.00	0.58
Proposed WQ	NO RAIN	Pond-05	17.7553	483.62	0.00	0.57
Proposed WQ	NO RAIN	Pond-05	18.0022	483.61	0.00	0.57
Proposed WQ	NO RAIN	Pond-05	18.2538	483.60	0.00	0.56
Proposed WQ	NO RAIN	Pond-05	18.5060	483.60	0.00	0.56
Proposed WQ	NO RAIN	Pond-05	18.7560	483.59	0.00	0.55
Proposed WQ	NO RAIN	Pond-05	19.0060	483.59	0.00	0.54
Proposed WQ	NO RAIN	Pond-05	19.2560	483.58	0.00	0.53
Proposed WQ	NO RAIN	Pond-05	19.5060	483.57	0.00	0.52
Proposed WQ	NO RAIN	Pond-05	19.7560	483.57	0.00	0.52
Proposed WQ	NO RAIN	Pond-05	20.0060	483.56	0.00	0.51
Proposed WQ	NO RAIN	Pond-05	20.2560	483.56	0.00	0.50
Proposed WQ	NO RAIN	Pond-05	20.5060	483.55	0.00	0.49
Proposed WQ	NO RAIN	Pond-05	20.7560	483.55	0.00	0.49

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-05	21.0060	483.54	0.00	0.48
Proposed WQ	NO RAIN	Pond-05	21.2560	483.54	0.00	0.47
Proposed WQ	NO RAIN	Pond-05	21.5060	483.53	0.00	0.47
Proposed WQ	NO RAIN	Pond-05	21.7560	483.53	0.00	0.46
Proposed WQ	NO RAIN	Pond-05	22.0060	483.52	0.00	0.45
Proposed WQ	NO RAIN	Pond-05	22.2560	483.52	0.00	0.45
Proposed WQ	NO RAIN	Pond-05	22.5060	483.51	0.00	0.44
Proposed WQ	NO RAIN	Pond-05	22.7560	483.51	0.00	0.43
Proposed WQ	NO RAIN	Pond-05	23.0060	483.50	0.00	0.43
Proposed WQ	NO RAIN	Pond-05	23.2560	483.50	0.00	0.42
Proposed WQ	NO RAIN	Pond-05	23.5060	483.49	0.00	0.42
Proposed WQ	NO RAIN	Pond-05	23.7560	483.49	0.00	0.42
Proposed WQ	NO RAIN	Pond-05	24.0060	483.48	0.00	0.41
Proposed WQ	NO RAIN	Pond-05	24.2560	483.48	0.00	0.41
Proposed WQ	NO RAIN	Pond-05	24.5060	483.47	0.00	0.40
Proposed WQ	NO RAIN	Pond-05	24.7560	483.47	0.00	0.40
Proposed WQ	NO RAIN	Pond-05	25.0060	483.47	0.00	0.40
Proposed WQ	NO RAIN	Pond-05	25.2560	483.46	0.00	0.39
Proposed WQ	NO RAIN	Pond-05	25.5060	483.46	0.00	0.39
Proposed WQ	NO RAIN	Pond-05	25.7560	483.45	0.00	0.38
Proposed WQ	NO RAIN	Pond-05	26.0060	483.45	0.00	0.38
Proposed WQ	NO RAIN	Pond-05	26.2560	483.44	0.00	0.37
Proposed WQ	NO RAIN	Pond-05	26.5060	483.44	0.00	0.37
Proposed WQ	NO RAIN	Pond-05	26.7560	483.44	0.00	0.36
Proposed WQ	NO RAIN	Pond-05	27.0060	483.43	0.00	0.36
Proposed WQ	NO RAIN	Pond-05	27.2560	483.43	0.00	0.36
Proposed WQ	NO RAIN	Pond-05	27.5060	483.42	0.00	0.35
Proposed WQ	NO RAIN	Pond-05	27.7560	483.42	0.00	0.35
Proposed WQ	NO RAIN	Pond-05	28.0060	483.42	0.00	0.34
Proposed WQ	NO RAIN	Pond-05	28.2560	483.41	0.00	0.34
Proposed WQ	NO RAIN	Pond-05	28.5060	483.41	0.00	0.33
Proposed WQ	NO RAIN	Pond-05	28.7560	483.41	0.00	0.33
Proposed WQ	NO RAIN	Pond-05	29.0060	483.40	0.00	0.32
Proposed WQ	NO RAIN	Pond-05	29.2560	483.40	0.00	0.32
Proposed WQ	NO RAIN	Pond-05	29.5060	483.40	0.00	0.32
Proposed WQ	NO RAIN	Pond-05	29.7560	483.39	0.00	0.31

Water Quality Design Considerations

POND 6

DETERMINE STORAGE VOLUME REQUIRED

First half-inch of runoff from the entire site

55.66 ac = Drainage Basin Area
0.5 in = Volume of runoff over site to place in water quality pond
2.32 ac-ft = Volume of runoff to place in water quality pond

First one inch of runoff from the built-upon portion of the property

55.66 ac = Drainage Basin Area
62.6 % = percent impervious (future)
34.83 ac = Built upon portion
1 in = Volume of runoff over site to place in water quality pond
2.90 ac-ft = Volume of runoff to place in water quality pond

DETERMINE INITIAL STAGE OF WATER QUALITY POND

If the volume of water calculated above is placed in the water quality pond, the initial stage of the pond can be calculated as follows:

Given the following stage-area-storage relationship for Pond 6:

Elev. (ft)	Surface Area (ac)	Total Storage (ac-ft)	
409.0	1.96	0.00	<- pond bottom
419.0	3.01	0.00	<- nwl
435.0	4.69	61.60	

Interpolation yields an initial stage of:

Elevation (ft)	Pond Depth (ft)	Total Storage (ac-ft)
419	10.0	0.00
419.8	10.8	**2.90**
435.0	26.0	61.60

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-06	0.0000	419.80	0.00	0.00
Proposed WQ	NO RAIN	Pond-06	0.2503	419.80	0.00	0.70
Proposed WQ	NO RAIN	Pond-06	0.5000	419.79	0.00	0.69
Proposed WQ	NO RAIN	Pond-06	0.7501	419.79	0.00	0.69
Proposed WQ	NO RAIN	Pond-06	1.0001	419.78	0.00	0.69
Proposed WQ	NO RAIN	Pond-06	1.2503	419.78	0.00	0.69
Proposed WQ	NO RAIN	Pond-06	1.5007	419.77	0.00	0.68
Proposed WQ	NO RAIN	Pond-06	1.7511	419.77	0.00	0.68
Proposed WQ	NO RAIN	Pond-06	2.0006	419.76	0.00	0.68
Proposed WQ	NO RAIN	Pond-06	2.2506	419.76	0.00	0.67
Proposed WQ	NO RAIN	Pond-06	2.5008	419.75	0.00	0.67
Proposed WQ	NO RAIN	Pond-06	2.7552	419.75	0.00	0.67
Proposed WQ	NO RAIN	Pond-06	3.0015	419.75	0.00	0.66
Proposed WQ	NO RAIN	Pond-06	3.2515	419.74	0.00	0.66
Proposed WQ	NO RAIN	Pond-06	3.5015	419.74	0.00	0.66
Proposed WQ	NO RAIN	Pond-06	3.7515	419.73	0.00	0.66
Proposed WQ	NO RAIN	Pond-06	4.0015	419.73	0.00	0.65
Proposed WQ	NO RAIN	Pond-06	4.2515	419.72	0.00	0.65
Proposed WQ	NO RAIN	Pond-06	4.5015	419.72	0.00	0.65
Proposed WQ	NO RAIN	Pond-06	4.7512	419.71	0.00	0.64
Proposed WQ	NO RAIN	Pond-06	5.0056	419.71	0.00	0.64
Proposed WQ	NO RAIN	Pond-06	5.2506	419.71	0.00	0.64
Proposed WQ	NO RAIN	Pond-06	5.5002	419.70	0.00	0.64
Proposed WQ	NO RAIN	Pond-06	5.7547	419.70	0.00	0.63
Proposed WQ	NO RAIN	Pond-06	6.0047	419.69	0.00	0.63
Proposed WQ	NO RAIN	Pond-06	6.2547	419.69	0.00	0.63
Proposed WQ	NO RAIN	Pond-06	6.5047	419.68	0.00	0.62
Proposed WQ	NO RAIN	Pond-06	6.7547	419.68	0.00	0.62
Proposed WQ	NO RAIN	Pond-06	7.0047	419.68	0.00	0.62
Proposed WQ	NO RAIN	Pond-06	7.2547	419.67	0.00	0.61
Proposed WQ	NO RAIN	Pond-06	7.5047	419.67	0.00	0.61
Proposed WQ	NO RAIN	Pond-06	7.7547	419.66	0.00	0.61
Proposed WQ	NO RAIN	Pond-06	8.0047	419.66	0.00	0.61
Proposed WQ	NO RAIN	Pond-06	8.2547	419.66	0.00	0.60
Proposed WQ	NO RAIN	Pond-06	8.5047	419.65	0.00	0.60
Proposed WQ	NO RAIN	Pond-06	8.7514	419.65	0.00	0.60
Proposed WQ	NO RAIN	Pond-06	9.0064	419.64	0.00	0.59
Proposed WQ	NO RAIN	Pond-06	9.2522	419.64	0.00	0.59
Proposed WQ	NO RAIN	Pond-06	9.5064	419.64	0.00	0.59
Proposed WQ	NO RAIN	Pond-06	9.7564	419.63	0.00	0.58
Proposed WQ	NO RAIN	Pond-06	10.0056	419.63	0.00	0.58
Proposed WQ	NO RAIN	Pond-06	10.2514	419.62	0.00	0.58

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-06	10.5047	419.62	0.00	0.58
Proposed WQ	NO RAIN	Pond-06	10.7530	419.62	0.00	0.57
Proposed WQ	NO RAIN	Pond-06	11.0019	419.61	0.00	0.57
Proposed WQ	NO RAIN	Pond-06	11.2503	419.61	0.00	0.57
Proposed WQ	NO RAIN	Pond-06	11.5018	419.61	0.00	0.56
Proposed WQ	NO RAIN	Pond-06	11.7530	419.60	0.00	0.56
Proposed WQ	NO RAIN	Pond-06	12.0023	419.60	0.00	0.56
Proposed WQ	NO RAIN	Pond-06	12.2554	419.59	0.00	0.55
Proposed WQ	NO RAIN	Pond-06	12.5037	419.59	0.00	0.55
Proposed WQ	NO RAIN	Pond-06	12.7530	419.59	0.00	0.54
Proposed WQ	NO RAIN	Pond-06	13.0038	419.58	0.00	0.54
Proposed WQ	NO RAIN	Pond-06	13.2500	419.58	0.00	0.53
Proposed WQ	NO RAIN	Pond-06	13.5013	419.58	0.00	0.53
Proposed WQ	NO RAIN	Pond-06	13.7503	419.57	0.00	0.52
Proposed WQ	NO RAIN	Pond-06	14.0034	419.57	0.00	0.52
Proposed WQ	NO RAIN	Pond-06	14.2513	419.57	0.00	0.51
Proposed WQ	NO RAIN	Pond-06	14.5031	419.56	0.00	0.51
Proposed WQ	NO RAIN	Pond-06	14.7511	419.56	0.00	0.50
Proposed WQ	NO RAIN	Pond-06	15.0046	419.56	0.00	0.50
Proposed WQ	NO RAIN	Pond-06	15.2567	419.55	0.00	0.49
Proposed WQ	NO RAIN	Pond-06	15.5053	419.55	0.00	0.49
Proposed WQ	NO RAIN	Pond-06	15.7553	419.55	0.00	0.49
Proposed WQ	NO RAIN	Pond-06	16.0053	419.54	0.00	0.48
Proposed WQ	NO RAIN	Pond-06	16.2553	419.54	0.00	0.48
Proposed WQ	NO RAIN	Pond-06	16.5053	419.54	0.00	0.47
Proposed WQ	NO RAIN	Pond-06	16.7553	419.53	0.00	0.47
Proposed WQ	NO RAIN	Pond-06	17.0053	419.53	0.00	0.46
Proposed WQ	NO RAIN	Pond-06	17.2553	419.53	0.00	0.46
Proposed WQ	NO RAIN	Pond-06	17.5053	419.52	0.00	0.46
Proposed WQ	NO RAIN	Pond-06	17.7553	419.52	0.00	0.45
Proposed WQ	NO RAIN	Pond-06	18.0022	419.52	0.00	0.45
Proposed WQ	NO RAIN	Pond-06	18.2538	419.51	0.00	0.44
Proposed WQ	NO RAIN	Pond-06	18.5060	419.51	0.00	0.44
Proposed WQ	NO RAIN	Pond-06	18.7560	419.51	0.00	0.44
Proposed WQ	NO RAIN	Pond-06	19.0060	419.51	0.00	0.43
Proposed WQ	NO RAIN	Pond-06	19.2560	419.50	0.00	0.43
Proposed WQ	NO RAIN	Pond-06	19.5060	419.50	0.00	0.42
Proposed WQ	NO RAIN	Pond-06	19.7560	419.50	0.00	0.42
Proposed WQ	NO RAIN	Pond-06	20.0060	419.49	0.00	0.42
Proposed WQ	NO RAIN	Pond-06	20.2560	419.49	0.00	0.42
Proposed WQ	NO RAIN	Pond-06	20.5060	419.49	0.00	0.42
Proposed WQ	NO RAIN	Pond-06	20.7560	419.49	0.00	0.41

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-06	21.0060	419.48	0.00	0.41
Proposed WQ	NO RAIN	Pond-06	21.2560	419.48	0.00	0.41
Proposed WQ	NO RAIN	Pond-06	21.5060	419.48	0.00	0.41
Proposed WQ	NO RAIN	Pond-06	21.7560	419.47	0.00	0.40
Proposed WQ	NO RAIN	Pond-06	22.0060	419.47	0.00	0.40
Proposed WQ	NO RAIN	Pond-06	22.2560	419.47	0.00	0.40
Proposed WQ	NO RAIN	Pond-06	22.5060	419.47	0.00	0.40
Proposed WQ	NO RAIN	Pond-06	22.7560	419.46	0.00	0.39
Proposed WQ	NO RAIN	Pond-06	23.0060	419.46	0.00	0.39
Proposed WQ	NO RAIN	Pond-06	23.2560	419.46	0.00	0.39
Proposed WQ	NO RAIN	Pond-06	23.5060	419.46	0.00	0.39
Proposed WQ	NO RAIN	Pond-06	23.7560	419.45	0.00	0.38
Proposed WQ	NO RAIN	Pond-06	24.0060	419.45	0.00	0.38
Proposed WQ	NO RAIN	Pond-06	24.2560	419.45	0.00	0.38
Proposed WQ	NO RAIN	Pond-06	24.5060	419.45	0.00	0.37
Proposed WQ	NO RAIN	Pond-06	24.7560	419.44	0.00	0.37
Proposed WQ	NO RAIN	Pond-06	25.0060	419.44	0.00	0.37
Proposed WQ	NO RAIN	Pond-06	25.2560	419.44	0.00	0.37
Proposed WQ	NO RAIN	Pond-06	25.5060	419.44	0.00	0.36
Proposed WQ	NO RAIN	Pond-06	25.7560	419.43	0.00	0.36
Proposed WQ	NO RAIN	Pond-06	26.0060	419.43	0.00	0.36
Proposed WQ	NO RAIN	Pond-06	26.2560	419.43	0.00	0.35
Proposed WQ	NO RAIN	Pond-06	26.5060	419.43	0.00	0.35
Proposed WQ	NO RAIN	Pond-06	26.7560	419.42	0.00	0.35
Proposed WQ	NO RAIN	Pond-06	27.0060	419.42	0.00	0.35
Proposed WQ	NO RAIN	Pond-06	27.2560	419.42	0.00	0.34
Proposed WQ	NO RAIN	Pond-06	27.5060	419.42	0.00	0.34
Proposed WQ	NO RAIN	Pond-06	27.7560	419.41	0.00	0.34
Proposed WQ	NO RAIN	Pond-06	28.0060	419.41	0.00	0.34
Proposed WQ	NO RAIN	Pond-06	28.2560	419.41	0.00	0.33
Proposed WQ	NO RAIN	Pond-06	28.5060	419.41	0.00	0.33
Proposed WQ	NO RAIN	Pond-06	28.7560	419.40	0.00	0.33
Proposed WQ	NO RAIN	Pond-06	29.0060	419.40	0.00	0.32
Proposed WQ	NO RAIN	Pond-06	29.2560	419.40	0.00	0.32
Proposed WQ	NO RAIN	Pond-06	29.5060	419.40	0.00	0.32
Proposed WQ	NO RAIN	Pond-06	29.7560	419.40	0.00	0.32

Water Quality Design Considerations

POND 7

DETERMINE STORAGE VOLUME REQUIRED

First half-inch of runoff from the entire site

35.86 ac = Drainage Basin Area
0.5 in = Volume of runoff over site to place in water quality pond
1.49 ac-ft = Volume of runoff to place in water quality pond

First one inch of runoff from the built-upon portion of the property

35.86 ac = Drainage Basin Area
100.0 % = percent impervious (future)
35.86 ac = Built upon portion
1 in = Volume of runoff over site to place in water quality pond
2.99 ac-ft = Volume of runoff to place in water quality pond

DETERMINE INITIAL STAGE OF WATER QUALITY POND

If the volume of water calculated above is placed in the water quality pond, the initial stage of the pond can be calculated as follows:

Given the following stage-area-storage relationship for Pond 7:

Elev. (ft)	Surface Area (ac)	Total Storage (ac-ft)	
415.0	1.01	0.00	<- pond bottom
419.0	1.79	0.00	<- nwl
427.0	2.98	19.04	

Interpolation yields an initial stage of:

Elevation (ft)	Pond Depth (ft)	Total Storage (ac-ft)
419	4.0	0.00
420.3	5.3	**2.99**
427.0	12.0	19.04

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-07	0.0000	420.30	0.00	0.00
Proposed WQ	NO RAIN	Pond-07	0.2503	420.29	0.00	0.96
Proposed WQ	NO RAIN	Pond-07	0.5000	420.28	0.00	0.96
Proposed WQ	NO RAIN	Pond-07	0.7501	420.27	0.00	0.95
Proposed WQ	NO RAIN	Pond-07	1.0001	420.26	0.00	0.95
Proposed WQ	NO RAIN	Pond-07	1.2503	420.25	0.00	0.94
Proposed WQ	NO RAIN	Pond-07	1.5007	420.24	0.00	0.94
Proposed WQ	NO RAIN	Pond-07	1.7511	420.23	0.00	0.94
Proposed WQ	NO RAIN	Pond-07	2.0006	420.22	0.00	0.93
Proposed WQ	NO RAIN	Pond-07	2.2506	420.21	0.00	0.93
Proposed WQ	NO RAIN	Pond-07	2.5008	420.20	0.00	0.92
Proposed WQ	NO RAIN	Pond-07	2.7552	420.19	0.00	0.92
Proposed WQ	NO RAIN	Pond-07	3.0015	420.18	0.00	0.91
Proposed WQ	NO RAIN	Pond-07	3.2515	420.17	0.00	0.91
Proposed WQ	NO RAIN	Pond-07	3.5015	420.16	0.00	0.90
Proposed WQ	NO RAIN	Pond-07	3.7515	420.15	0.00	0.90
Proposed WQ	NO RAIN	Pond-07	4.0015	420.14	0.00	0.89
Proposed WQ	NO RAIN	Pond-07	4.2515	420.13	0.00	0.89
Proposed WQ	NO RAIN	Pond-07	4.5015	420.12	0.00	0.88
Proposed WQ	NO RAIN	Pond-07	4.7512	420.12	0.00	0.88
Proposed WQ	NO RAIN	Pond-07	5.0056	420.11	0.00	0.87
Proposed WQ	NO RAIN	Pond-07	5.2506	420.10	0.00	0.87
Proposed WQ	NO RAIN	Pond-07	5.5002	420.09	0.00	0.86
Proposed WQ	NO RAIN	Pond-07	5.7547	420.08	0.00	0.86
Proposed WQ	NO RAIN	Pond-07	6.0047	420.07	0.00	0.86
Proposed WQ	NO RAIN	Pond-07	6.2547	420.06	0.00	0.85
Proposed WQ	NO RAIN	Pond-07	6.5047	420.05	0.00	0.85
Proposed WQ	NO RAIN	Pond-07	6.7547	420.04	0.00	0.84
Proposed WQ	NO RAIN	Pond-07	7.0047	420.03	0.00	0.84
Proposed WQ	NO RAIN	Pond-07	7.2547	420.02	0.00	0.83
Proposed WQ	NO RAIN	Pond-07	7.5047	420.02	0.00	0.83
Proposed WQ	NO RAIN	Pond-07	7.7547	420.01	0.00	0.82
Proposed WQ	NO RAIN	Pond-07	8.0047	420.00	0.00	0.82
Proposed WQ	NO RAIN	Pond-07	8.2547	419.99	0.00	0.81
Proposed WQ	NO RAIN	Pond-07	8.5047	419.98	0.00	0.81
Proposed WQ	NO RAIN	Pond-07	8.7514	419.97	0.00	0.80
Proposed WQ	NO RAIN	Pond-07	9.0064	419.96	0.00	0.80
Proposed WQ	NO RAIN	Pond-07	9.2522	419.95	0.00	0.79
Proposed WQ	NO RAIN	Pond-07	9.5064	419.95	0.00	0.79
Proposed WQ	NO RAIN	Pond-07	9.7564	419.94	0.00	0.78
Proposed WQ	NO RAIN	Pond-07	10.0056	419.93	0.00	0.78
Proposed WQ	NO RAIN	Pond-07	10.2514	419.92	0.00	0.77

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-07	10.5047	419.91	0.00	0.77
Proposed WQ	NO RAIN	Pond-07	10.7530	419.90	0.00	0.76
Proposed WQ	NO RAIN	Pond-07	11.0019	419.90	0.00	0.76
Proposed WQ	NO RAIN	Pond-07	11.2503	419.89	0.00	0.75
Proposed WQ	NO RAIN	Pond-07	11.5018	419.88	0.00	0.75
Proposed WQ	NO RAIN	Pond-07	11.7530	419.87	0.00	0.75
Proposed WQ	NO RAIN	Pond-07	12.0023	419.86	0.00	0.74
Proposed WQ	NO RAIN	Pond-07	12.2554	419.86	0.00	0.74
Proposed WQ	NO RAIN	Pond-07	12.5037	419.85	0.00	0.73
Proposed WQ	NO RAIN	Pond-07	12.7530	419.84	0.00	0.73
Proposed WQ	NO RAIN	Pond-07	13.0038	419.83	0.00	0.72
Proposed WQ	NO RAIN	Pond-07	13.2500	419.82	0.00	0.72
Proposed WQ	NO RAIN	Pond-07	13.5013	419.82	0.00	0.71
Proposed WQ	NO RAIN	Pond-07	13.7503	419.81	0.00	0.71
Proposed WQ	NO RAIN	Pond-07	14.0034	419.80	0.00	0.70
Proposed WQ	NO RAIN	Pond-07	14.2513	419.79	0.00	0.70
Proposed WQ	NO RAIN	Pond-07	14.5031	419.79	0.00	0.69
Proposed WQ	NO RAIN	Pond-07	14.7511	419.78	0.00	0.69
Proposed WQ	NO RAIN	Pond-07	15.0046	419.77	0.00	0.68
Proposed WQ	NO RAIN	Pond-07	15.2567	419.76	0.00	0.68
Proposed WQ	NO RAIN	Pond-07	15.5053	419.76	0.00	0.67
Proposed WQ	NO RAIN	Pond-07	15.7553	419.75	0.00	0.67
Proposed WQ	NO RAIN	Pond-07	16.0053	419.74	0.00	0.66
Proposed WQ	NO RAIN	Pond-07	16.2553	419.74	0.00	0.66
Proposed WQ	NO RAIN	Pond-07	16.5053	419.73	0.00	0.65
Proposed WQ	NO RAIN	Pond-07	16.7553	419.72	0.00	0.65
Proposed WQ	NO RAIN	Pond-07	17.0053	419.71	0.00	0.64
Proposed WQ	NO RAIN	Pond-07	17.2553	419.71	0.00	0.64
Proposed WQ	NO RAIN	Pond-07	17.5053	419.70	0.00	0.63
Proposed WQ	NO RAIN	Pond-07	17.7553	419.69	0.00	0.63
Proposed WQ	NO RAIN	Pond-07	18.0022	419.69	0.00	0.62
Proposed WQ	NO RAIN	Pond-07	18.2538	419.68	0.00	0.62
Proposed WQ	NO RAIN	Pond-07	18.5060	419.67	0.00	0.61
Proposed WQ	NO RAIN	Pond-07	18.7560	419.67	0.00	0.61
Proposed WQ	NO RAIN	Pond-07	19.0060	419.66	0.00	0.60
Proposed WQ	NO RAIN	Pond-07	19.2560	419.65	0.00	0.60
Proposed WQ	NO RAIN	Pond-07	19.5060	419.65	0.00	0.59
Proposed WQ	NO RAIN	Pond-07	19.7560	419.64	0.00	0.59
Proposed WQ	NO RAIN	Pond-07	20.0060	419.63	0.00	0.58
Proposed WQ	NO RAIN	Pond-07	20.2560	419.63	0.00	0.58
Proposed WQ	NO RAIN	Pond-07	20.5060	419.62	0.00	0.57
Proposed WQ	NO RAIN	Pond-07	20.7560	419.61	0.00	0.57

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-07	21.0060	419.61	0.00	0.57
Proposed WQ	NO RAIN	Pond-07	21.2560	419.60	0.00	0.56
Proposed WQ	NO RAIN	Pond-07	21.5060	419.60	0.00	0.55
Proposed WQ	NO RAIN	Pond-07	21.7560	419.59	0.00	0.54
Proposed WQ	NO RAIN	Pond-07	22.0060	419.58	0.00	0.54
Proposed WQ	NO RAIN	Pond-07	22.2560	419.58	0.00	0.53
Proposed WQ	NO RAIN	Pond-07	22.5060	419.57	0.00	0.52
Proposed WQ	NO RAIN	Pond-07	22.7560	419.57	0.00	0.51
Proposed WQ	NO RAIN	Pond-07	23.0060	419.56	0.00	0.51
Proposed WQ	NO RAIN	Pond-07	23.2560	419.55	0.00	0.50
Proposed WQ	NO RAIN	Pond-07	23.5060	419.55	0.00	0.49
Proposed WQ	NO RAIN	Pond-07	23.7560	419.54	0.00	0.48
Proposed WQ	NO RAIN	Pond-07	24.0060	419.54	0.00	0.48
Proposed WQ	NO RAIN	Pond-07	24.2560	419.53	0.00	0.47
Proposed WQ	NO RAIN	Pond-07	24.5060	419.53	0.00	0.46
Proposed WQ	NO RAIN	Pond-07	24.7560	419.52	0.00	0.46
Proposed WQ	NO RAIN	Pond-07	25.0060	419.52	0.00	0.45
Proposed WQ	NO RAIN	Pond-07	25.2560	419.51	0.00	0.44
Proposed WQ	NO RAIN	Pond-07	25.5060	419.51	0.00	0.44
Proposed WQ	NO RAIN	Pond-07	25.7560	419.50	0.00	0.43
Proposed WQ	NO RAIN	Pond-07	26.0060	419.50	0.00	0.42
Proposed WQ	NO RAIN	Pond-07	26.2560	419.49	0.00	0.42
Proposed WQ	NO RAIN	Pond-07	26.5060	419.49	0.00	0.42
Proposed WQ	NO RAIN	Pond-07	26.7560	419.48	0.00	0.41
Proposed WQ	NO RAIN	Pond-07	27.0060	419.48	0.00	0.41
Proposed WQ	NO RAIN	Pond-07	27.2560	419.48	0.00	0.41
Proposed WQ	NO RAIN	Pond-07	27.5060	419.47	0.00	0.40
Proposed WQ	NO RAIN	Pond-07	27.7560	419.47	0.00	0.40
Proposed WQ	NO RAIN	Pond-07	28.0060	419.46	0.00	0.39
Proposed WQ	NO RAIN	Pond-07	28.2560	419.46	0.00	0.39
Proposed WQ	NO RAIN	Pond-07	28.5060	419.45	0.00	0.38
Proposed WQ	NO RAIN	Pond-07	28.7560	419.45	0.00	0.38
Proposed WQ	NO RAIN	Pond-07	29.0060	419.45	0.00	0.37
Proposed WQ	NO RAIN	Pond-07	29.2560	419.44	0.00	0.37
Proposed WQ	NO RAIN	Pond-07	29.5060	419.44	0.00	0.36
Proposed WQ	NO RAIN	Pond-07	29.7560	419.43	0.00	0.36

Water Quality Design Considerations

POND 8

DETERMINE STORAGE VOLUME REQUIRED

First half-inch of runoff from the entire site

6.82 ac = Drainage Basin Area
0.5 in = Volume of runoff over site to place in water quality pond
0.28 ac-ft = Volume of runoff to place in water quality pond

First one inch of runoff from the built-upon portion of the property

6.82 ac = Drainage Basin Area
0.0 % = percent impervious (future)
0.00 ac = Built upon portion
1 in = Volume of runoff over site to place in water quality pond
0.00 ac-ft = Volume of runoff to place in water quality pond

DETERMINE INITIAL STAGE OF WATER QUALITY POND

If the volume of water calculated above is placed in the water quality pond, the initial stage of the pond can be calculated as follows:

Given the following stage-area-storage relationship for Pond 8:

Elev. (ft)	Surface Area (ac)	Total Storage (ac-ft)	
418.0	0.00	0.00	<- pond bottom
421.4	0.28	0.47	
425.0	0.98	2.75	

Interpolation yields an initial stage of:

Elevation (ft)	Pond Depth (ft)	Total Storage (ac-ft)
418.0	0.0	0.00
420.0	2.0	**0.28**
421.4	3.4	0.47

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-08	0.0000	420.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	0.2503	419.98	0.00	0.31
Proposed WQ	NO RAIN	Pond-08	0.5000	419.95	0.00	0.31
Proposed WQ	NO RAIN	Pond-08	0.7501	419.93	0.00	0.31
Proposed WQ	NO RAIN	Pond-08	1.0001	419.91	0.00	0.31
Proposed WQ	NO RAIN	Pond-08	1.2503	419.88	0.00	0.30
Proposed WQ	NO RAIN	Pond-08	1.5007	419.86	0.00	0.30
Proposed WQ	NO RAIN	Pond-08	1.7511	419.83	0.00	0.30
Proposed WQ	NO RAIN	Pond-08	2.0006	419.81	0.00	0.30
Proposed WQ	NO RAIN	Pond-08	2.2506	419.79	0.00	0.29
Proposed WQ	NO RAIN	Pond-08	2.5008	419.76	0.00	0.29
Proposed WQ	NO RAIN	Pond-08	2.7552	419.74	0.00	0.29
Proposed WQ	NO RAIN	Pond-08	3.0015	419.71	0.00	0.29
Proposed WQ	NO RAIN	Pond-08	3.2515	419.69	0.00	0.29
Proposed WQ	NO RAIN	Pond-08	3.5015	419.66	0.00	0.28
Proposed WQ	NO RAIN	Pond-08	3.7515	419.64	0.00	0.28
Proposed WQ	NO RAIN	Pond-08	4.0015	419.61	0.00	0.28
Proposed WQ	NO RAIN	Pond-08	4.2515	419.59	0.00	0.28
Proposed WQ	NO RAIN	Pond-08	4.5015	419.56	0.00	0.27
Proposed WQ	NO RAIN	Pond-08	4.7512	419.53	0.00	0.27
Proposed WQ	NO RAIN	Pond-08	5.0056	419.51	0.00	0.27
Proposed WQ	NO RAIN	Pond-08	5.2506	419.48	0.00	0.27
Proposed WQ	NO RAIN	Pond-08	5.5002	419.46	0.00	0.26
Proposed WQ	NO RAIN	Pond-08	5.7547	419.43	0.00	0.26
Proposed WQ	NO RAIN	Pond-08	6.0047	419.40	0.00	0.26
Proposed WQ	NO RAIN	Pond-08	6.2547	419.37	0.00	0.25
Proposed WQ	NO RAIN	Pond-08	6.5047	419.35	0.00	0.25
Proposed WQ	NO RAIN	Pond-08	6.7547	419.32	0.00	0.25
Proposed WQ	NO RAIN	Pond-08	7.0047	419.29	0.00	0.25
Proposed WQ	NO RAIN	Pond-08	7.2547	419.26	0.00	0.24
Proposed WQ	NO RAIN	Pond-08	7.5047	419.23	0.00	0.24
Proposed WQ	NO RAIN	Pond-08	7.7547	419.21	0.00	0.24
Proposed WQ	NO RAIN	Pond-08	8.0047	419.18	0.00	0.23
Proposed WQ	NO RAIN	Pond-08	8.2547	419.15	0.00	0.23
Proposed WQ	NO RAIN	Pond-08	8.5047	419.12	0.00	0.23
Proposed WQ	NO RAIN	Pond-08	8.7514	419.09	0.00	0.22
Proposed WQ	NO RAIN	Pond-08	9.0064	419.06	0.00	0.22
Proposed WQ	NO RAIN	Pond-08	9.2522	419.03	0.00	0.22
Proposed WQ	NO RAIN	Pond-08	9.5064	418.99	0.00	0.21
Proposed WQ	NO RAIN	Pond-08	9.7564	418.96	0.00	0.21
Proposed WQ	NO RAIN	Pond-08	10.0056	418.93	0.00	0.20
Proposed WQ	NO RAIN	Pond-08	10.2514	418.90	0.00	0.20

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-08	10.5047	418.87	0.00	0.19
Proposed WQ	NO RAIN	Pond-08	10.7530	418.83	0.00	0.19
Proposed WQ	NO RAIN	Pond-08	11.0019	418.80	0.00	0.19
Proposed WQ	NO RAIN	Pond-08	11.2503	418.76	0.00	0.18
Proposed WQ	NO RAIN	Pond-08	11.5018	418.73	0.00	0.18
Proposed WQ	NO RAIN	Pond-08	11.7530	418.69	0.00	0.17
Proposed WQ	NO RAIN	Pond-08	12.0023	418.66	0.00	0.16
Proposed WQ	NO RAIN	Pond-08	12.2554	418.62	0.00	0.16
Proposed WQ	NO RAIN	Pond-08	12.5037	418.58	0.00	0.15
Proposed WQ	NO RAIN	Pond-08	12.7530	418.54	0.00	0.15
Proposed WQ	NO RAIN	Pond-08	13.0038	418.50	0.00	0.14
Proposed WQ	NO RAIN	Pond-08	13.2500	418.46	0.00	0.13
Proposed WQ	NO RAIN	Pond-08	13.5013	418.42	0.00	0.12
Proposed WQ	NO RAIN	Pond-08	13.7503	418.37	0.00	0.11
Proposed WQ	NO RAIN	Pond-08	14.0034	418.33	0.00	0.10
Proposed WQ	NO RAIN	Pond-08	14.2513	418.28	0.00	0.09
Proposed WQ	NO RAIN	Pond-08	14.5031	418.23	0.00	0.07
Proposed WQ	NO RAIN	Pond-08	14.7511	418.19	0.00	0.05
Proposed WQ	NO RAIN	Pond-08	15.0046	418.15	0.00	0.04
Proposed WQ	NO RAIN	Pond-08	15.2567	418.12	0.00	0.02
Proposed WQ	NO RAIN	Pond-08	15.5053	418.09	0.00	0.02
Proposed WQ	NO RAIN	Pond-08	15.7553	418.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-08	16.0053	418.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-08	16.2553	418.04	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	16.5053	418.03	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	16.7553	418.03	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	17.0053	418.02	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	17.2553	418.02	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	17.5053	418.01	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	17.7553	418.01	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	18.0022	418.01	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	18.2538	418.01	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	18.5060	418.01	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	18.7560	418.01	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	19.0060	418.01	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	19.2560	418.01	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	19.5060	418.01	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	19.7560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	20.0060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	20.2560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	20.5060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	20.7560	418.00	0.00	0.00

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-08	21.0060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	21.2560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	21.5060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	21.7560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	22.0060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	22.2560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	22.5060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	22.7560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	23.0060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	23.2560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	23.5060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	23.7560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	24.0060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	24.2560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	24.5060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	24.7560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	25.0060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	25.2560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	25.5060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	25.7560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	26.0060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	26.2560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	26.5060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	26.7560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	27.0060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	27.2560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	27.5060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	27.7560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	28.0060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	28.2560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	28.5060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	28.7560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	29.0060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	29.2560	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	29.5060	418.00	0.00	0.00
Proposed WQ	NO RAIN	Pond-08	29.7560	418.00	0.00	0.00

Water Quality Design Considerations

POND 9

DETERMINE STORAGE VOLUME REQUIRED

First half-inch of runoff from the entire site

4.39 ac = Drainage Basin Area
0.5 in = Volume of runoff over site to place in water quality pond
0.18 ac-ft = Volume of runoff to place in water quality pond

First one inch of runoff from the built-upon portion of the property

4.39 ac = Drainage Basin Area
0.0 % = percent impervious (future)
0.00 ac = Built upon portion
1 in = Volume of runoff over site to place in water quality pond
0.00 ac-ft = Volume of runoff to place in water quality pond

DETERMINE INITIAL STAGE OF WATER QUALITY POND

If the volume of water calculated above is placed in the water quality pond, the initial stage of the pond can be calculated as follows:

Given the following stage-area-storage relationship for Pond 9:

Elev. (ft)	Surface Area (ac)	Total Storage (ac-ft)	
435.0	0.03	0.00	<- pond bottom
439.0	0.27	0.00	<- nwl
445.0	0.98	3.77	

Interpolation yields an initial stage of:

Elevation (ft)	Pond Depth (ft)	Total Storage (ac-ft)
439.0	4.0	0.00
439.3	4.3	**0.18**
445.0	10.0	3.77

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-09	0.0000	439.30	0.00	0.00
Proposed WQ	NO RAIN	Pond-09	0.2503	439.29	0.00	0.10
Proposed WQ	NO RAIN	Pond-09	0.5000	439.29	0.00	0.09
Proposed WQ	NO RAIN	Pond-09	0.7501	439.28	0.00	0.09
Proposed WQ	NO RAIN	Pond-09	1.0001	439.28	0.00	0.09
Proposed WQ	NO RAIN	Pond-09	1.2503	439.27	0.00	0.08
Proposed WQ	NO RAIN	Pond-09	1.5007	439.26	0.00	0.08
Proposed WQ	NO RAIN	Pond-09	1.7511	439.26	0.00	0.08
Proposed WQ	NO RAIN	Pond-09	2.0006	439.25	0.00	0.08
Proposed WQ	NO RAIN	Pond-09	2.2506	439.25	0.00	0.07
Proposed WQ	NO RAIN	Pond-09	2.5008	439.24	0.00	0.07
Proposed WQ	NO RAIN	Pond-09	2.7552	439.24	0.00	0.07
Proposed WQ	NO RAIN	Pond-09	3.0015	439.23	0.00	0.07
Proposed WQ	NO RAIN	Pond-09	3.2515	439.23	0.00	0.07
Proposed WQ	NO RAIN	Pond-09	3.5015	439.22	0.00	0.07
Proposed WQ	NO RAIN	Pond-09	3.7515	439.22	0.00	0.06
Proposed WQ	NO RAIN	Pond-09	4.0015	439.21	0.00	0.06
Proposed WQ	NO RAIN	Pond-09	4.2515	439.21	0.00	0.06
Proposed WQ	NO RAIN	Pond-09	4.5015	439.21	0.00	0.06
Proposed WQ	NO RAIN	Pond-09	4.7512	439.20	0.00	0.06
Proposed WQ	NO RAIN	Pond-09	5.0056	439.20	0.00	0.06
Proposed WQ	NO RAIN	Pond-09	5.2506	439.19	0.00	0.05
Proposed WQ	NO RAIN	Pond-09	5.5002	439.19	0.00	0.05
Proposed WQ	NO RAIN	Pond-09	5.7547	439.19	0.00	0.05
Proposed WQ	NO RAIN	Pond-09	6.0047	439.18	0.00	0.05
Proposed WQ	NO RAIN	Pond-09	6.2547	439.18	0.00	0.05
Proposed WQ	NO RAIN	Pond-09	6.5047	439.18	0.00	0.05
Proposed WQ	NO RAIN	Pond-09	6.7547	439.17	0.00	0.04
Proposed WQ	NO RAIN	Pond-09	7.0047	439.17	0.00	0.04
Proposed WQ	NO RAIN	Pond-09	7.2547	439.17	0.00	0.04
Proposed WQ	NO RAIN	Pond-09	7.5047	439.16	0.00	0.04
Proposed WQ	NO RAIN	Pond-09	7.7547	439.16	0.00	0.04
Proposed WQ	NO RAIN	Pond-09	8.0047	439.16	0.00	0.04
Proposed WQ	NO RAIN	Pond-09	8.2547	439.16	0.00	0.04
Proposed WQ	NO RAIN	Pond-09	8.5047	439.15	0.00	0.04
Proposed WQ	NO RAIN	Pond-09	8.7514	439.15	0.00	0.04
Proposed WQ	NO RAIN	Pond-09	9.0064	439.15	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	9.2522	439.15	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	9.5064	439.14	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	9.7564	439.14	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	10.0056	439.14	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	10.2514	439.14	0.00	0.03

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-09	10.5047	439.13	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	10.7530	439.13	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	11.0019	439.13	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	11.2503	439.13	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	11.5018	439.13	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	11.7530	439.12	0.00	0.03
Proposed WQ	NO RAIN	Pond-09	12.0023	439.12	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	12.2554	439.12	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	12.5037	439.12	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	12.7530	439.12	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	13.0038	439.12	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	13.2500	439.11	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	13.5013	439.11	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	13.7503	439.11	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	14.0034	439.11	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	14.2513	439.11	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	14.5031	439.11	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	14.7511	439.11	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	15.0046	439.10	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	15.2567	439.10	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	15.5053	439.10	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	15.7553	439.10	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	16.0053	439.10	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	16.2553	439.10	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	16.5053	439.10	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	16.7553	439.10	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	17.0053	439.10	0.00	0.02
Proposed WQ	NO RAIN	Pond-09	17.2553	439.09	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	17.5053	439.09	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	17.7553	439.09	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	18.0022	439.09	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	18.2538	439.09	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	18.5060	439.09	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	18.7560	439.09	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	19.0060	439.09	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	19.2560	439.09	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	19.5060	439.09	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	19.7560	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	20.0060	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	20.2560	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	20.5060	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	20.7560	439.08	0.00	0.01

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Rate [cfs]	Total Outflow Rate [cfs]
Proposed WQ	NO RAIN	Pond-09	21.0060	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	21.2560	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	21.5060	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	21.7560	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	22.0060	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	22.2560	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	22.5060	439.08	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	22.7560	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	23.0060	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	23.2560	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	23.5060	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	23.7560	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	24.0060	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	24.2560	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	24.5060	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	24.7560	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	25.0060	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	25.2560	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	25.5060	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	25.7560	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	26.0060	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	26.2560	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	26.5060	439.07	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	26.7560	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	27.0060	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	27.2560	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	27.5060	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	27.7560	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	28.0060	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	28.2560	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	28.5060	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	28.7560	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	29.0060	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	29.2560	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	29.5060	439.06	0.00	0.01
Proposed WQ	NO RAIN	Pond-09	29.7560	439.06	0.00	0.01

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX F

SEDIMENTOLOGY ANALYSIS

J – 27015.0007

December 2023

thomasandhutton.com

Project Connect Mass Grading Phase 2
Erosion Control Phase 1
Sedimentology Calculations

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 1

(with (1) 8" Marlee Float Skimmer)

Kayla Kernich, PE

General Information

Storm Information:

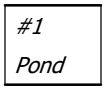
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 1



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	62.340	62.340	148.72	14.82	588.0	52,606	38.59	21.06
	Out			1.83	6.14	5.1	5,921	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	100.000%	100.000%
0.0630	71.861%	100.000%
0.0440	13.941%	100.000%
0.0380	13.941%	100.000%
0.0040	2.947%	100.000%
0.0030	2.040%	100.000%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 1

Pond Inputs:

Initial Pool Elev:	448.01 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
456.00	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	455.98 ft
H'graph Detention Time:	15.70 hrs
Pond Model:	CSTRS
Dewater Time:	3.60 days
Trap Efficiency:	99.12 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
448.00	0.000	0.000	0.000		Top of Sed. Storage
448.01	0.000	0.000	0.000		
448.50	0.024	0.004	1.309	0.04*	
449.00	0.083	0.030	1.465	0.21*	
449.50	0.178	0.094	1.564	0.49*	
450.00	0.308	0.214	1.638	0.89*	
450.50	0.476	0.408	1.699	1.39*	
451.00	0.680	0.695	1.749	1.99*	
451.50	0.920	1.094	1.794	2.69*	
452.00	1.195	1.621	1.833	3.48*	
452.50	1.506	2.295	1.833	4.45*	
453.00	1.855	3.133	1.833	5.54*	

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
453.50	2.239	4.155	1.833	6.75*	
454.00	2.660	5.379	1.833	8.08*	
454.50	3.115	6.821	1.833	9.52*	
455.00	3.608	8.500	1.833	11.09*	
455.50	4.138	10.435	1.833	12.77*	
455.98	4.678	12.543	1.833	0.00	Peak Stage
456.00	4.703	12.644	1.833		Spillway #2
456.50	5.304	15.144	12.094		
457.00	5.940	17.953	133.838		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
448.00	0.000	0.000	0.000
448.01	0.000	0.000	0.000
448.50	1.309	0.000	1.309
449.00	1.465	0.000	1.465
449.50	1.564	0.000	1.564
450.00	1.638	0.000	1.638
450.50	1.699	0.000	1.699
451.00	1.749	0.000	1.749
451.50	1.794	0.000	1.794
452.00	1.833	0.000	1.833
452.50	1.833	0.000	1.833
453.00	1.833	0.000	1.833
453.50	1.833	0.000	1.833
454.00	1.833	0.000	1.833
454.50	1.833	0.000	1.833
455.00	1.833	0.000	1.833
455.50	1.833	0.000	1.833
456.00	1.833	0.000	1.833
456.50	1.833	10.261	12.094
457.00	1.833	132.005	133.838

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	62.340	0.417	0.000	0.000	77.000	TR55	148.72	14.825
	Σ	**62.340**						**148.72**	**14.825**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	1,625.00	1.90	1.0000	1.0000	1	588.0	52,606	38.59	21.06
	Σ							**588.0**	**52,606**	**38.59**	**21.06**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 2 (with (1) 8" Marlee Float Skimmer)

Kayla Kernich, PE

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General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

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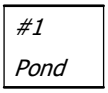
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 2



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	337.350	337.350	527.54	80.22	3,129.5	46,884	33.60	21.01
	Out			481.39	69.90	316.0	6,043	1.83	1.04

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	100.000%	100.000%
0.0630	91.037%	100.000%
0.0440	17.662%	100.000%
0.0380	17.662%	100.000%
0.0040	3.733%	36.976%
0.0030	2.585%	25.599%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 2

Pond Inputs:

Initial Pool Elev:	443.71 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
451.00	10.00	3.00:1	3.00:1	200.00

Pond Results:

Peak Elevation:	451.96 ft
H'graph Detention Time:	1.90 hrs
Pond Model:	CSTRS
Dewater Time:	3.96 days
Trap Efficiency:	89.90 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
443.70	0.000	0.000	0.000		Top of Sed. Storage
443.71	0.001	0.000	0.000		
444.20	0.035	0.006	1.309	0.06*	
444.70	0.122	0.043	1.465	0.31*	
445.20	0.261	0.137	1.564	0.72*	
445.70	0.453	0.313	1.638	1.30*	
446.20	0.697	0.599	1.699	2.03*	
446.70	0.993	1.019	1.749	2.91*	
447.20	1.341	1.600	1.794	3.92*	
447.70	1.742	2.368	1.832	5.07*	

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Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
448.20	2.194	3.350	1.832	6.48*	
448.70	2.700	4.572	1.832	8.07*	
449.20	3.259	6.059	1.832	9.82*	
449.70	3.873	7.840	1.832	11.76*	
450.20	4.539	9.941	1.832	13.87*	
450.70	5.257	12.387	1.832	16.16*	
451.00	5.708	14.032	1.832	10.86*	Spillway #2
451.20	6.023	15.205	82.297	0.17*	
451.70	6.849	18.421	283.448	1.00	
451.96	7.294	20.233	481.395	0.50	Peak Stage
452.00	7.370	20.553	516.297		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
443.70	0.000	0.000	0.000
443.71	0.000	0.000	0.000
444.20	1.309	0.000	1.309
444.70	1.465	0.000	1.465
445.20	1.564	0.000	1.564
445.70	1.638	0.000	1.638
446.20	1.699	0.000	1.699
446.70	1.749	0.000	1.749
447.20	1.794	0.000	1.794
447.70	1.832	0.000	1.832
448.20	1.832	0.000	1.832
448.70	1.832	0.000	1.832
449.20	1.832	0.000	1.832
449.70	1.832	0.000	1.832
450.20	1.832	0.000	1.832
450.70	1.832	0.000	1.832
451.00	1.832	0.000	1.832
451.20	1.832	80.465	82.297
451.70	1.832	281.615	283.448
452.00	1.832	514.465	516.297

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	337.350	0.950	0.000	0.000	77.000	TR55	527.54	80.220
	Σ	**337.350**						**527.54**	**80.220**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	3,395.00	1.50	1.0000	1.0000	1	3,129.5	46,884	33.60	20.26
	Σ							**3,129.5**	**46,884**	**33.60**	**21.01**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for EC01 Area 3

(with (1) 8" Marlee Float Skimmer connected to a 6" pipe & (3) 8" Skimmers)

Kayla Kernich, PE

General Information

Storm Information:

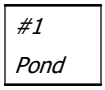
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Temp Sed Basin 3



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	111.090	111.090	356.81	34.55	1,976.3	76,432	56.38	30.32
	Out			5.10	15.60	0.7	76	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	94.406%	100.000%
0.0630	67.327%	100.000%
0.0440	13.062%	100.000%
0.0380	13.062%	100.000%
0.0040	2.761%	100.000%
0.0030	1.911%	100.000%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Temp Sed Basin 3

Pond Inputs:

Initial Pool Elev:	443.71 ft
Initial Pool:	165.62 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
447.70	10.00	3.00:1	3.00:1	50.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
447.70	10.00	3.00:1	3.00:1	50.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
447.70	10.00	3.00:1	3.00:1	50.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
447.70	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	444.39 ft
H'graph Detention Time:	17.05 hrs
Pond Model:	CSTRS
Dewater Time:	3.02 days
Trap Efficiency:	99.96 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
439.70	40.770	0.000	0.000		Top of Sed. Storage
439.71	40.773	0.408	0.000		
440.20	40.902	20.418	0.000		
440.70	41.034	40.902	0.000		
441.20	41.166	61.452	0.000		
441.70	41.298	82.068	0.000		
442.20	41.431	102.750	0.000		
442.70	41.564	123.499	0.000		
443.20	41.697	144.314	0.000		
443.70	41.830	165.195	0.000		
443.71	43.158	165.620	0.000		
444.20	43.357	186.817	4.866	52.71*	
444.39	43.433	194.898	5.102	19.75	Peak Stage
444.70	43.561	208.546	5.500		
445.20	43.766	230.378	5.910		
445.70	43.971	252.312	6.219		
446.20	44.176	274.349	6.470		
446.70	44.382	296.488	6.684		
447.20	44.588	318.731	6.869		
447.70	44.795	341.077	7.035		Spillway #2
448.20	45.002	363.526	17.297		
448.70	45.210	386.079	139.040		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
439.70	0.000	0.000	0.000	0.000	0.000	0.000
439.71	0.000	0.000	0.000	0.000	0.000	0.000
440.20	0.000	0.000	0.000	0.000	0.000	0.000
440.70	0.000	0.000	0.000	0.000	0.000	0.000
441.20	0.000	0.000	0.000	0.000	0.000	0.000
441.70	0.000	0.000	0.000	0.000	0.000	0.000
442.20	0.000	0.000	0.000	0.000	0.000	0.000
442.70	0.000	0.000	0.000	0.000	0.000	0.000
443.20	0.000	0.000	0.000	0.000	0.000	0.000
443.70	0.000	0.000	0.000	0.000	0.000	0.000
443.71	0.000	0.000	0.000	0.000	0.000	0.000
444.20	0.938	0.000	1.309	1.309	1.309	4.866

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
444.70	1.106	0.000	1.465	1.465	1.465	5.500
445.20	1.217	0.000	1.564	1.564	1.564	5.910
445.70	1.304	0.000	1.638	1.638	1.638	6.219
446.20	1.375	0.000	1.699	1.699	1.699	6.470
446.70	1.435	0.000	1.749	1.749	1.749	6.684
447.20	1.488	0.000	1.794	1.794	1.794	6.869
447.70	1.537	0.000	1.833	1.833	1.833	7.035
448.20	1.537	10.261	1.833	1.833	1.833	17.297
448.70	1.537	132.005	1.833	1.833	1.833	139.040

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	111.090	0.367	0.000	0.000	86.000	TR55	356.81	34.547
	Σ	**111.090**						**356.81**	**34.547**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	1,660.00	2.50	1.0000	1.0000	1	1,976.3	76,432	56.38	30.32
	Σ							**1,976.3**	**76,432**	**56.38**	**30.32**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 4

(with (3) 8" Marlee Float Skimmers connected to 6" pipe)

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

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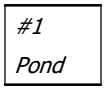
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Temp Sed Basin 4



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	205.710	205.710	658.70	72.92	4,467.7	80,810	57.14	31.08
	Out			91.34	41.21	186.2	10,800	0.81	0.29

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	98.128%	100.000%
0.0630	69.364%	100.000%
0.0440	20.798%	100.000%
0.0380	20.798%	100.000%
0.0040	3.429%	82.296%
0.0030	2.102%	50.440%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Temp Sed Basin 4

Pond Inputs:

Initial Pool Elev:	442.01 ft
Initial Pool:	0.01 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
454.00	10.00	3.00:1	3.00:1	50.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
454.00	10.00	3.00:1	3.00:1	50.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
454.00	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	454.81 ft
H'graph Detention Time:	7.96 hrs
Pond Model:	CSTRS
Dewater Time:	4.86 days
Trap Efficiency:	95.83 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
442.00	0.751	0.000	0.000		Top of Sed. Storage
442.01	0.753	0.008	0.000		
442.50	0.883	0.408	2.813	1.72*	

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
443.00	1.027	0.885	3.317	1.74*	
443.50	1.181	1.437	3.652	1.83*	
444.00	1.345	2.068	3.911	1.95*	
444.50	1.521	2.784	4.123	2.10*	
445.00	1.707	3.590	4.306	2.27*	
445.50	1.904	4.493	4.466	2.44*	
446.00	2.112	5.496	4.611	2.63*	
446.50	2.330	6.606	4.611	2.91*	
447.00	2.559	7.828	4.611	3.21*	
447.50	2.800	9.167	4.611	3.51*	
448.00	3.050	10.629	4.611	3.84*	
448.50	3.311	12.219	4.611	4.17*	
449.00	3.584	13.942	4.611	4.52*	
449.50	3.867	15.804	4.611	4.89*	
450.00	4.161	17.811	4.611	5.27*	
450.50	4.465	19.967	4.611	5.66*	
451.00	4.780	22.278	4.611	6.06*	
451.50	5.107	24.749	4.611	6.49*	
452.00	5.443	27.386	4.611	6.92*	
452.50	5.790	30.194	4.611	7.37*	
453.00	6.149	33.178	4.611	7.83*	
453.50	6.518	36.344	4.611	8.31*	
454.00	6.898	39.698	4.611	8.80*	Spillway #2
454.50	7.288	43.244	14.872	2.89*	
454.81	7.542	45.596	91.344	7.25	Peak Stage
455.00	7.689	46.988	136.616		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
442.00	0.000	0.000	0.000	0.000	0.000
442.01	0.000	0.000	0.000	0.000	0.000
442.50	0.938	0.000	0.938	0.938	2.813
443.00	1.106	0.000	1.106	1.106	3.317
443.50	1.217	0.000	1.217	1.217	3.652
444.00	1.304	0.000	1.304	1.304	3.911
444.50	1.375	0.000	1.375	1.375	4.123
445.00	1.435	0.000	1.435	1.435	4.306

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
445.50	1.489	0.000	1.489	1.489	4.466
446.00	1.537	0.000	1.537	1.537	4.611
446.50	1.537	0.000	1.537	1.537	4.611
447.00	1.537	0.000	1.537	1.537	4.611
447.50	1.537	0.000	1.537	1.537	4.611
448.00	1.537	0.000	1.537	1.537	4.611
448.50	1.537	0.000	1.537	1.537	4.611
449.00	1.537	0.000	1.537	1.537	4.611
449.50	1.537	0.000	1.537	1.537	4.611
450.00	1.537	0.000	1.537	1.537	4.611
450.50	1.537	0.000	1.537	1.537	4.611
451.00	1.537	0.000	1.537	1.537	4.611
451.50	1.537	0.000	1.537	1.537	4.611
452.00	1.537	0.000	1.537	1.537	4.611
452.50	1.537	0.000	1.537	1.537	4.611
453.00	1.537	0.000	1.537	1.537	4.611
453.50	1.537	0.000	1.537	1.537	4.611
454.00	1.537	0.000	1.537	1.537	4.611
454.50	1.537	10.261	1.537	1.537	14.872
455.00	1.537	132.005	1.537	1.537	136.616

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	205.710	0.500	0.000	0.000	91.000	TR55	658.70	72.916
	Σ	**205.710**						**658.70**	**72.916**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.170	2,200.00	2.10	1.0000	1.0000	4	4,467.7	80,810	57.14	31.08
	Σ							**4,467.7**	**80,810**	**57.14**	**31.08**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 5

(with (2) 8" Marlee Float Skimmers w/ 7" Orifices connected to 6" pipes)

Kayla Kernich, PE

General Information

Storm Information:

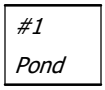
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Temp Sed Basin 5



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	110.580	110.580	400.92	38.87	3,149.2	108,192	77.13	41.09
	Out			205.44	28.83	154.6	8,471	1.35	0.73

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	91.533%	100.000%
0.0630	64.703%	100.000%
0.0440	19.400%	100.000%
0.0380	19.400%	100.000%
0.0040	3.199%	65.168%
0.0030	1.961%	39.942%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Temp Sed Basin 5

Pond Inputs:

Initial Pool Elev:	417.61 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
424.00	10.00	3.00:1	3.00:1	150.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
424.00	10.00	3.00:1	3.00:1	150.00

Pond Results:

Peak Elevation:	424.68 ft
H'graph Detention Time:	6.21 hrs
Pond Model:	CSTRS
Dewater Time:	3.31 days
Trap Efficiency:	95.09 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
417.60	0.000	0.000	0.000		Top of Sed. Storage
417.61	0.001	0.000	0.000		
418.10	0.065	0.012	1.506	0.10*	
418.60	0.213	0.078	1.833	0.44*	
419.10	0.463	0.243	2.056	0.97*	
419.60	0.801	0.556	2.231	1.69*	
420.10	1.236	1.061	2.377	2.57*	

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
420.60	1.762	1.807	2.503	3.61*	
421.10	2.383	2.839	2.615	4.78*	
421.60	3.098	4.206	2.716	6.09*	
422.10	3.904	5.952	2.716	7.78*	
422.60	4.808	8.126	2.716	9.69*	
422.80	5.190	9.126	2.716	4.45*	
423.10	5.273	10.695	2.716	6.99*	
423.60	5.413	13.367	2.716	11.90*	
424.00	5.527	15.555	2.716	9.75*	Spillway #2
424.10	5.555	16.109	8.847	0.76*	
424.50	5.670	18.354	33.367	6.90	
424.60	5.699	18.922	162.675	0.95	
424.68	5.721	19.356	205.437	0.10	Peak Stage
425.00	5.815	21.225	389.690		
425.10	5.844	21.808	460.908		
425.60	5.992	24.767	870.969		
426.00	6.111	27.187	1,247.003		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
417.60	0.000	0.000	0.000	0.000
417.61	0.000	0.000	0.000	0.000
418.10	0.753	0.000	0.753	1.506
418.60	0.916	0.000	0.916	1.833
419.10	1.028	0.000	1.028	2.056
419.60	1.116	0.000	1.116	2.231
420.10	1.188	0.000	1.188	2.377
420.60	1.252	0.000	1.252	2.503
421.10	1.307	0.000	1.307	2.615
421.60	1.358	0.000	1.358	2.716
422.10	1.358	0.000	1.358	2.716
422.60	1.358	0.000	1.358	2.716
422.80	1.358	0.000	1.358	2.716
423.10	1.358	0.000	1.358	2.716
423.60	1.358	0.000	1.358	2.716
424.00	1.358	0.000	1.358	2.716
424.10	1.358	6.131	1.358	8.847

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
424.50	1.358	30.651	1.358	33.367
424.60	1.358	159.959	1.358	162.675
425.00	1.358	386.974	1.358	389.690
425.10	1.358	458.192	1.358	460.908
425.60	1.358	868.253	1.358	870.969
426.00	1.358	1,244.287	1.358	1,247.003

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	110.580	0.317	0.000	0.000	91.000	TR55	400.92	38.867
	Σ	**110.580**						**400.92**	**38.867**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.170	1,550.00	3.20	1.0000	1.0000	4	3,149.2	108,192	77.13	41.09
	Σ							**3,149.2**	**108,192**	**77.13**	**41.09**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 6

(with 8" Marlee Float Skimmer connected to a 6" pipe)

Kayla Kernich, PE

General Information

Storm Information:

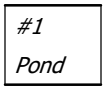
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Temp Sed Basin 6



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	34.760	34.760	131.29	12.42	818.5	87,748	62.72	33.70
	Out			5.25	7.50	18.7	9,848	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	89.459%	100.000%
0.0630	63.236%	100.000%
0.0440	18.961%	100.000%
0.0380	18.961%	100.000%
0.0040	3.127%	100.000%
0.0030	1.916%	83.943%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Temp Sed Basin 6

Pond Inputs:

Initial Pool Elev:	408.01 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
415.00	10.00	3.00:1	3.00:1	25.00

Pond Results:

Peak Elevation:	415.36 ft
H'graph Detention Time:	12.30 hrs
Pond Model:	CSTRS
Dewater Time:	4.26 days
Trap Efficiency:	97.72 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
408.00	0.000	0.000	0.000		Top of Sed. Storage
408.01	0.002	0.000	0.000		
408.50	0.115	0.022	0.938	0.28*	
409.00	0.406	0.144	1.106	1.34*	
409.50	0.876	0.457	1.217	3.11*	
409.74	1.165	0.701	1.304	2.27*	
410.00	1.187	1.007	1.375	2.69*	
410.50	1.231	1.612	1.435	5.10*	
411.00	1.275	2.238	1.489	5.09*	
411.50	1.320	2.887	1.537	5.11*	
412.00	1.366	3.558	1.537	5.29*	
412.50	1.412	4.253	1.537	5.47*	

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
413.00	1.460	4.971	1.537	5.65*	
413.50	1.508	5.712	1.537	5.84*	
414.00	1.557	6.479	1.537	6.03*	
414.50	1.606	7.269	1.537	6.23*	
415.00	1.657	8.085	1.537	6.42*	Spillway #2
415.36	1.694	8.690	5.253	34.70	Peak Stage
415.50	1.708	8.926	6.701		
416.00	1.760	9.793	69.819		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
408.00	0.000	0.000	0.000
408.01	0.000	0.000	0.000
408.50	0.938	0.000	0.938
409.00	1.106	0.000	1.106
409.50	1.217	0.000	1.217
409.74	1.304	0.000	1.304
410.00	1.375	0.000	1.375
410.50	1.435	0.000	1.435
411.00	1.489	0.000	1.489
411.50	1.537	0.000	1.537
412.00	1.537	0.000	1.537
412.50	1.537	0.000	1.537
413.00	1.537	0.000	1.537
413.50	1.537	0.000	1.537
414.00	1.537	0.000	1.537
414.50	1.537	0.000	1.537
415.00	1.537	0.000	1.537
415.50	1.537	5.164	6.701
416.00	1.537	68.282	69.819

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	34.760	0.200	0.000	0.000	91.000	TR55	131.29	12.418
	Σ	**34.760**						**131.29**	**12.418**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	1,080.00	3.80	1.0000	1.0000	4	818.5	87,748	62.72	33.70
	Σ							**818.5**	**87,748**	**62.72**	**33.70**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 7

(with 8" Marlee Float Skimmer w/ 7" orifice connected to a 6" pipe)

Kayla Kernich, PE

General Information

Storm Information:

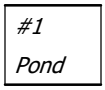
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Temp Sed Basin 7



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	28.260	28.260	108.38	10.06	455.8	58,759	33.92	18.87
	Out			1.30	4.49	11.5	12,974	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	88.100%	100.000%
0.0630	60.700%	100.000%
0.0440	54.800%	100.000%
0.0380	54.000%	100.000%
0.0040	9.300%	100.000%
0.0030	6.000%	100.000%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Temp Sed Basin 7

Pond Inputs:

Initial Pool Elev:	429.01 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
434.00	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	432.47 ft
H'graph Detention Time:	15.47 hrs
Pond Model:	CSTRS
Dewater Time:	3.55 days
Trap Efficiency:	97.48 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
429.00	0.000	0.000	0.000		Top of Sed. Storage
429.01	0.004	0.000	0.000		
429.50	0.258	0.048	0.753	0.78*	
430.00	0.898	0.321	0.916	3.60*	
430.50	1.924	1.010	1.028	8.11*	
431.00	3.336	2.309	1.116	14.09*	
431.20	4.000	3.042	1.145	7.74*	
431.50	4.053	4.250	1.188	12.30*	
432.00	4.141	6.298	1.252	19.80*	
432.47	4.225	8.279	1.304	18.75	Peak Stage
432.50	4.230	8.391	1.307		
433.00	4.320	10.528	1.358		

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
433.50	4.411	12.711	1.358		
434.00	4.503	14.939	1.358		Spillway #2
434.50	4.596	17.214	11.619		
435.00	4.690	19.536	133.363		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
429.00	0.000	0.000	0.000
429.01	0.000	0.000	0.000
429.50	0.753	0.000	0.753
430.00	0.916	0.000	0.916
430.50	1.028	0.000	1.028
431.00	1.116	0.000	1.116
431.20	1.145	0.000	1.145
431.50	1.188	0.000	1.188
432.00	1.252	0.000	1.252
432.50	1.307	0.000	1.307
433.00	1.358	0.000	1.358
433.50	1.358	0.000	1.358
434.00	1.358	0.000	1.358
434.50	1.358	10.261	11.619
435.00	1.358	132.005	133.363

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	28.260	0.117	0.000	0.000	91.000	TR55	108.38	10.057
	Σ	**28.260**						**108.38**	**10.057**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	500.00	3.30	1.0000	1.0000	2	455.8	58,759	33.92	18.87
	Σ							**455.8**	**58,759**	**33.92**	**18.87**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 8

(with (2) 8" Marlee Float Skimmers connected to 6" pipes)

Kayla Kernich, PE

General Information

Storm Information:

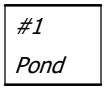
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Temp Sed Basin 8



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	114.240	114.240	407.58	40.51	2,551.3	84,944	48.32	25.68
	Out			124.93	26.87	483.9	24,204	5.59	3.61

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	91.737%	100.000%
0.0630	63.206%	100.000%
0.0440	57.062%	100.000%
0.0380	56.229%	100.000%
0.0040	9.684%	51.060%
0.0030	6.248%	32.942%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Temp Sed Basin 8

Pond Inputs:

Initial Pool Elev:	410.01 ft
Initial Pool:	0.01 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
421.00	10.00	3.00:1	3.00:1	50.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
421.00	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	421.96 ft
H'graph Detention Time:	7.49 hrs
Pond Model:	CSTRS
Dewater Time:	3.63 days
Trap Efficiency:	81.03 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
410.00	0.910	0.000	0.000		Top of Sed. Storage
410.01	0.911	0.009	0.000		
410.50	0.981	0.473	1.876	2.99*	
411.00	1.055	0.982	2.212	2.78*	
411.50	1.131	1.528	2.435	2.72*	
412.00	1.210	2.113	2.607	2.72*	
412.50	1.292	2.738	2.749	2.75*	

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
413.00	1.376	3.405	2.871	2.81*	
413.50	1.463	4.115	2.978	2.88*	
414.00	1.553	4.869	3.074	2.97*	
414.50	1.645	5.668	3.074	3.15*	
415.00	1.740	6.514	3.074	3.33*	
415.50	1.814	7.403	3.074	3.50*	
416.00	1.889	8.328	3.074	3.64*	
416.50	1.965	9.292	3.074	3.79*	
417.00	2.043	10.294	3.074	3.94*	
417.50	2.123	11.335	3.074	4.10*	
418.00	2.204	12.417	3.074	4.26*	
418.50	2.286	13.539	3.074	4.42*	
419.00	2.370	14.703	3.074	4.58*	
419.50	2.456	15.910	3.074	4.75*	
420.00	2.543	17.159	3.074	4.92*	
420.50	2.632	18.453	3.074	5.09*	
421.00	2.722	19.792	3.074	5.27*	Spillway #2
421.50	2.814	21.176	13.335	1.26*	
421.96	2.899	22.487	124.932	4.50	Peak Stage
422.00	2.907	22.606	135.079		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
410.00	0.000	0.000	0.000	0.000
410.01	0.000	0.000	0.000	0.000
410.50	0.938	0.000	0.938	1.876
411.00	1.106	0.000	1.106	2.212
411.50	1.217	0.000	1.217	2.435
412.00	1.304	0.000	1.304	2.607
412.50	1.375	0.000	1.375	2.749
413.00	1.435	0.000	1.435	2.871
413.50	1.489	0.000	1.489	2.978
414.00	1.537	0.000	1.537	3.074
414.50	1.537	0.000	1.537	3.074
415.00	1.537	0.000	1.537	3.074
415.50	1.537	0.000	1.537	3.074
416.00	1.537	0.000	1.537	3.074

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
416.50	1.537	0.000	1.537	3.074
417.00	1.537	0.000	1.537	3.074
417.50	1.537	0.000	1.537	3.074
418.00	1.537	0.000	1.537	3.074
418.50	1.537	0.000	1.537	3.074
419.00	1.537	0.000	1.537	3.074
419.50	1.537	0.000	1.537	3.074
420.00	1.537	0.000	1.537	3.074
420.50	1.537	0.000	1.537	3.074
421.00	1.537	0.000	1.537	3.074
421.50	1.537	10.261	1.537	13.335
422.00	1.537	132.005	1.537	135.079

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	114.240	0.367	0.000	0.000	91.000	TR55	407.58	40.511
	Σ	**114.240**						**407.58**	**40.511**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	1,600.00	2.80	1.0000	1.0000	2	2,551.3	84,944	48.32	25.68
	Σ							**2,551.3**	**84,944**	**48.32**	**25.68**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 9

(with 6" Marlee Float Skimmer)

Kayla Kernich, PE

General Information

Storm Information:

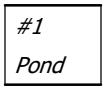
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Temp Sed Basin 9



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	17.250	17.250	60.50	5.47	160.4	39,388	22.65	12.25
	Out			2.07	3.09	10.5	10,937	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	89.060%	100.000%
0.0630	61.362%	100.000%
0.0440	55.397%	100.000%
0.0380	54.589%	100.000%
0.0040	9.401%	100.000%
0.0030	6.065%	92.245%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Temp Sed Basin 9

Pond Inputs:

Initial Pool Elev:	438.01 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
444.00	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	444.06 ft
H'graph Detention Time:	14.52 hrs
Pond Model:	CSTRS
Dewater Time:	3.10 days
Trap Efficiency:	93.42 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
438.00	0.462	0.000	0.000		Top of Sed. Storage
438.01	0.463	0.005	0.000		
438.50	0.493	0.239	0.570	4.97*	
439.00	0.526	0.494	0.632	4.87*	
439.50	0.559	0.765	0.672	4.89*	
440.00	0.594	1.053	0.701	4.97*	
440.50	0.629	1.358	0.725	5.10*	
441.00	0.665	1.682	0.745	5.25*	
441.50	0.703	2.024	0.763	5.43*	
442.00	0.741	2.385	0.778	5.61*	
442.50	0.781	2.766	0.778		
443.00	0.822	3.166	0.778		

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
443.50	0.863	3.587	0.778		
444.00	0.906	4.029	0.778		Spillway #2
444.06	0.912	4.088	2.068	33.30	Peak Stage
444.50	0.949	4.493	11.039		
445.00	0.994	4.979	132.783		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
438.00	0.000	0.000	0.000
438.01	0.000	0.000	0.000
438.50	0.570	0.000	0.570
439.00	0.632	0.000	0.632
439.50	0.672	0.000	0.672
440.00	0.701	0.000	0.701
440.50	0.725	0.000	0.725
441.00	0.745	0.000	0.745
441.50	0.763	0.000	0.763
442.00	0.778	0.000	0.778
442.50	0.778	0.000	0.778
443.00	0.778	0.000	0.778
443.50	0.778	0.000	0.778
444.00	0.778	0.000	0.778
444.50	0.778	10.261	11.039
445.00	0.778	132.005	132.783

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	17.250	0.150	0.000	0.000	86.000	TR55	60.50	5.471
	Σ	**17.250**						**60.50**	**5.471**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	500.00	2.20	1.0000	1.0000	2	160.4	39,388	22.65	12.25
	Σ							**160.4**	**39,388**	**22.65**	**12.25**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 10

(with 8" Marlee Float Skimmer connected to 6" pipe

AND a 6" Marlee Float Skimmer)

Kayla Kernich, PE

General Information

Storm Information:

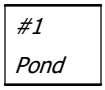
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Temp Sed Basin 10



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	65.100	65.100	245.70	23.22	529.7	30,978	17.83	9.56
	Out			94.29	18.72	75.4	6,892	1.07	0.56

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	88.893%	100.000%
0.0630	61.246%	100.000%
0.0440	55.293%	100.000%
0.0380	54.486%	100.000%
0.0040	9.384%	65.937%
0.0030	6.054%	42.540%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Temp Sed Basin 10

Pond Inputs:

Initial Pool Elev:	386.01 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
389.00	10.00	3.00:1	3.00:1	50.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
389.00	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	389.84 ft
H'graph Detention Time:	7.25 hrs
Pond Model:	CSTRS
Dewater Time:	2.80 days
Trap Efficiency:	85.77 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
386.00	0.000	0.000	0.000		Top of Sed. Storage
386.01	0.022	0.000	0.000		
386.50	1.230	0.232	1.508	1.86*	
386.85	3.195	0.979	1.669	5.42*	
387.00	3.245	1.462	1.738	3.36*	
387.50	3.412	3.126	1.889	10.66*	
388.00	3.584	4.875	2.005	10.55*	

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
388.50	3.759	6.711	2.100	10.80	
389.00	3.940	8.635	2.181	10.90	Spillway #2
389.50	4.124	10.651	12.513	11.35	
389.84	4.251	12.067	94.286	2.30	Peak Stage
390.00	4.312	12.760	134.320		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
386.00	0.000	0.000	0.000	0.000
386.01	0.000	0.000	0.000	0.000
386.50	0.938	0.000	0.570	1.508
386.85	1.055	0.000	0.614	1.669
387.00	1.106	0.000	0.632	1.738
387.50	1.217	0.000	0.672	1.889
388.00	1.304	0.000	0.701	2.005
388.50	1.375	0.000	0.725	2.100
389.00	1.435	0.000	0.745	2.181
389.50	1.489	10.261	0.763	12.513
390.00	1.537	132.005	0.778	134.320

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	65.100	0.183	0.000	0.000	91.000	TR55	245.70	23.215
	Σ	**65.100**						**245.70**	**23.215**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	1,180.00	1.00	1.0000	1.0000	2	529.7	30,978	17.83	9.56
	Σ							**529.7**	**30,978**	**17.83**	**9.56**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 11

(with 8" Marlee Float Skimmer)

Kayla Kernich, PE

General Information

Storm Information:

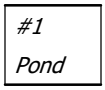
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Temp Sed Basin 11



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	52.360	52.360	200.47	18.94	6,257.6	383,660	220.41	122.79
	Out			1.83	6.29	268.1	116,871	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	88.481%	100.000%
0.0630	62.057%	100.000%
0.0440	55.851%	100.000%
0.0380	54.950%	100.000%
0.0040	9.309%	100.000%
0.0030	6.005%	100.000%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Temp Sed Basin 11

Pond Inputs:

Initial Pool Elev:	384.51 ft
Initial Pool:	0.02 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
393.50	10.00	3.00:1	3.00:1	50.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
393.50	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	393.16 ft
H'graph Detention Time:	16.05 hrs
Pond Model:	CSTRS
Dewater Time:	5.05 days
Trap Efficiency:	95.72 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
384.50	1.555	0.000	0.000		Top of Sed. Storage
384.51	1.556	0.016	0.000		
385.00	1.594	0.787	1.309	7.13*	
385.50	1.633	1.594	1.465	6.66*	
386.00	1.672	2.420	1.564	6.39*	
386.50	1.712	3.266	1.638	6.25*	
387.00	1.753	4.132	1.699	6.17*	
387.50	1.793	5.018	1.749	6.13*	
388.00	1.835	5.926	1.794	6.12*	

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
388.50	1.877	6.853	1.833	6.13*	
389.00	1.919	7.802	1.833	6.26*	
389.50	1.962	8.773	1.833	6.41*	
390.00	2.005	9.764	1.833	6.55*	
390.50	2.049	10.778	1.833	6.69*	
391.00	2.093	11.813	1.833	6.84*	
391.50	2.138	12.871	1.833	6.98*	
392.00	2.183	13.951	1.833	7.13*	
392.50	2.229	15.054	1.833	7.28*	
393.00	2.275	16.180	1.833	7.43*	
393.16	2.290	16.554	1.833	0.00	Peak Stage
393.50	2.321	17.329	1.833		Spillway #1
394.00	2.368	18.502	12.094		
394.50	2.416	19.698	133.838		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	Emergency Spillway (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
384.50	0.000	0.000	0.000
384.51	0.000	0.000	0.000
385.00	0.000	1.309	1.309
385.50	0.000	1.465	1.465
386.00	0.000	1.564	1.564
386.50	0.000	1.638	1.638
387.00	0.000	1.699	1.699
387.50	0.000	1.749	1.749
388.00	0.000	1.794	1.794
388.50	0.000	1.833	1.833
389.00	0.000	1.833	1.833
389.50	0.000	1.833	1.833
390.00	0.000	1.833	1.833
390.50	0.000	1.833	1.833
391.00	0.000	1.833	1.833
391.50	0.000	1.833	1.833
392.00	0.000	1.833	1.833
392.50	0.000	1.833	1.833
393.00	0.000	1.833	1.833
393.50	0.000	1.833	1.833

Elevation (ft)	Emergency Spillway (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
394.00	10.261	1.833	12.094
394.50	132.005	1.833	133.838

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	52.360	0.150	0.000	0.000	91.000	TR55	200.47	18.938
	Σ	**52.360**						**200.47**	**18.938**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.370	860.00	4.90	1.0000	1.0000	5	6,257.6	383,660	220.41	122.79
	Σ							**6,257.6**	**383,660**	**220.41**	**122.79**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Sediment Basin 12

(6" Marlee Float Skimmer w/ 5" Orifice)

Kayla Kernich, PE

General Information

Storm Information:

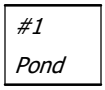
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Temp Sed Basin 12



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	16.790	16.790	60.04	5.24	1,418.5	315,351	181.23	102.80
	Out			4.22	3.09	132.5	99,238	0.20	0.08

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	88.400%	100.000%
0.0630	62.000%	100.000%
0.0440	55.800%	100.000%
0.0380	54.900%	100.000%
0.0040	9.300%	99.584%
0.0030	6.000%	64.248%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Temp Sed Basin 12

Pond Inputs:

Initial Pool Elev:	418.01 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
424.00	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	424.18 ft
H'graph Detention Time:	10.55 hrs
Pond Model:	CSTRS
Dewater Time:	4.80 days
Trap Efficiency:	90.66 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
418.00	0.280	0.000	0.000		Top of Sed. Storage
418.01	0.281	0.003	0.000		
418.50	0.316	0.149	0.423	4.18*	
419.00	0.355	0.317	0.454	4.47*	
419.50	0.396	0.504	0.473	4.80*	
420.00	0.438	0.713	0.487	5.18*	
420.50	0.483	0.943	0.498	5.60*	
421.00	0.531	1.196	0.507	6.04*	
421.50	0.580	1.474	0.516	6.51*	
422.00	0.632	1.777	0.523	7.01*	
422.50	0.686	2.106	0.523	7.62*	
423.00	0.742	2.463	0.523	8.26*	

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
423.50	0.800	2.848	0.523	8.92*	
424.00	0.861	3.263	0.523	9.61*	Spillway #2
424.18	0.884	3.424	4.219	36.45	Peak Stage
424.50	0.923	3.709	10.784		
425.00	0.988	4.187	132.528		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
418.00	0.000	0.000	0.000
418.01	0.000	0.000	0.000
418.50	0.423	0.000	0.423
419.00	0.454	0.000	0.454
419.50	0.473	0.000	0.473
420.00	0.487	0.000	0.487
420.50	0.498	0.000	0.498
421.00	0.507	0.000	0.507
421.50	0.516	0.000	0.516
422.00	0.523	0.000	0.523
422.50	0.523	0.000	0.523
423.00	0.523	0.000	0.523
423.50	0.523	0.000	0.523
424.00	0.523	0.000	0.523
424.50	0.523	10.261	10.784
425.00	0.523	132.005	132.528

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	16.790	0.100	0.000	0.000	86.000	TR55	60.04	5.240
	Σ	**16.790**						**60.04**	**5.240**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.370	530.00	5.70	1.0000	1.0000	5	1,418.5	315,351	181.23	102.80
	Σ							**1,418.5**	**315,351**	**181.23**	**102.80**

Project Connect Mass Grading Phase 2
Erosion Control Phase 2
Sedimentology Calculations

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Proposed Pond 1

(with (6) 8" Marlee Float Skimmers)

Kayla Kernich, PE

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General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

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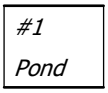
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 1



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	457.620	457.620	925.54	109.04	8,309.2	95,251	69.28	39.58
	Out			14.58	38.39	14.3	751	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	100.000%	100.000%
0.0630	78.824%	100.000%
0.0440	15.292%	100.000%
0.0380	15.292%	100.000%
0.0040	3.233%	100.000%
0.0030	2.238%	100.000%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 1

Pond Inputs:

Initial Pool Elev:	443.70 ft
Initial Pool:	166.15 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Drop Inlet

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
48.00	8.00	36.00	70.00	0.94	0.0130	447.20

Broad-crested Weir

Weir Width (ft)	Spillway Elev (ft)
3.50	446.20

Broad-crested Weir

Weir Width (ft)	Spillway Elev (ft)
2.50	445.20

Weir Width (ft)	Spillway Elev (ft)
2.50	445.20

Weir Width (ft)	Spillway Elev (ft)
2.50	445.20

Weir Width (ft)	Spillway Elev (ft)
2.50	445.20

Weir Width (ft)	Spillway Elev (ft)
2.50	445.20

Weir Width (ft)	Spillway Elev (ft)
2.50	445.20

Weir Width (ft)	Spillway Elev (ft)
2.50	445.20

Pond Results:

Peak Elevation:	445.89 ft
H'graph Detention Time:	16.24 hrs
Pond Model:	CSTRS
Dewater Time:	5.01 days
Trap Efficiency:	99.83 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
439.70	41.006	0.000	0.000		Top of Sed. Storage
439.71	41.009	0.409	0.000		
440.20	41.138	20.536	0.000		
440.70	41.270	41.138	0.000		
441.20	41.403	61.806	0.000		
441.70	41.535	82.541	0.000		
442.20	41.668	103.342	0.000		
442.70	41.801	124.209	0.000		
443.20	41.934	145.143	0.000		
443.70	42.068	166.143	0.000		
443.70	42.068	166.147	0.000		
444.20	43.610	187.562	7.856	32.98*	
444.70	43.813	209.418	8.788	30.09*	
445.20	44.015	231.375	9.385	28.31*	Spillway #3
445.70	44.218	253.433	12.560	21.25*	
445.89	44.296	261.822	14.585	7.65	Peak Stage
446.20	44.422	275.593	17.909		Spillway #2

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
446.70	44.626	297.855	28.494		
447.20	44.830	320.219	43.396		Spillway #1
447.70	45.035	342.686	75.125		
448.00	45.159	356.214	101.121		
448.20	45.241	365.255	120.614		
448.70	45.447	387.926	175.805		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	Drop Inlet (cfs)	Broad-crested Weir (cfs)	Broad-crested Weir (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	User-input discha (cfs)
439.70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
439.71	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
440.20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
440.70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
441.20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
441.70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
442.20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
442.70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
443.20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
443.70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
443.70	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
444.20	0.000	0.000	0.000	1.309	1.309	1.309	1.309	1
444.70	0.000	0.000	0.000	1.465	1.465	1.465	1.465	1
445.20	0.000	0.000	0.000	1.564	1.564	1.564	1.564	1
445.70	0.000	0.000	2.729	1.638	1.638	1.638	1.638	1
446.20	0.000	0.000	7.718	1.699	1.699	1.699	1.699	1
446.70	0.000	3.820	14.178	1.749	1.749	1.749	1.749	1
447.20	0.000	10.804	21.828	1.794	1.794	1.794	1.794	1
447.70	13.773	19.849	30.506	1.833	1.833	1.833	1.833	1
448.00	27.874	26.092	36.159	1.833	1.833	1.833	1.833	1
448.20	38.956	30.560	40.101	1.833	1.833	1.833	1.833	1
448.70	71.566	42.709	50.533	1.833	1.833	1.833	1.833	1

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	457.620	0.600	0.000	0.000	77.000	TR55	925.54	109.041
	Σ	**457.620**						**925.54**	**109.041**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.370	2,600.00	1.00	1.0000	1.0000	1	8,309.2	95,251	69.28	39.58
	Σ							**8,309.2**	**95,251**	**69.28**	**39.58**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Proposed Pond 2

(with (1) 6" Marlee Float Skimmer

And (3) 8" Marlee Float Skimmers)

Kayla Kernich, PE

General Information

Storm Information:

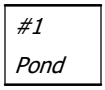
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 2



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	224.260	224.260	453.57	53.44	3,506.0	82,448	59.96	34.21
	Out			5.99	18.54	16.6	5,495	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	100.000%	100.000%
0.0630	78.824%	100.000%
0.0440	15.292%	100.000%
0.0380	15.292%	100.000%
0.0040	3.233%	100.000%
0.0030	2.238%	100.000%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 2

Pond Inputs:

Initial Pool Elev:	452.51 ft
Initial Pool:	0.15 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Drop Inlet

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
48.00	11.50	24.00	98.00	8.35	0.0130	464.00

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
464.00	10.00	3.00:1	3.00:1	350.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
464.00	10.00	3.00:1	3.00:1	350.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
464.00	10.00	3.00:1	3.00:1	350.00

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
464.00	10.00	3.00:1	3.00:1	350.00

Pond Results:

Peak Elevation:	455.49 ft
H'graph Detention Time:	16.65 hrs
Pond Model:	CSTRS
Dewater Time:	4.46 days
Trap Efficiency:	99.53 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
452.50	15.424	0.000	0.000		Top of Sed. Storage
452.51	15.427	0.154	0.000		
453.00	15.544	7.742	4.498	20.41*	
453.50	15.665	15.544	5.024	18.79*	
454.00	15.786	23.407	5.364	17.74*	
454.50	15.907	31.330	5.617	17.07*	
455.00	16.029	39.314	5.821	16.60*	
455.49	16.150	47.273	5.992	16.45	Peak Stage
455.50	16.151	47.359	5.994		
456.00	16.274	55.466	6.144		
456.50	16.397	63.633	6.276		
457.00	16.521	71.863	6.276		
457.00	17.350	71.880	6.276		
457.50	17.475	80.569	6.276		
458.00	17.600	89.337	6.276		
458.50	17.725	98.168	6.276		
459.00	17.851	107.062	6.276		
459.50	17.977	116.019	6.276		
460.00	18.103	125.039	6.276		
460.50	18.231	134.123	6.276		
461.00	18.358	143.270	6.276		
461.50	18.486	152.481	6.276		
462.00	18.615	161.756	6.276		
462.50	18.743	171.095	6.276		
463.00	18.873	180.500	6.276		
463.50	19.003	189.968	6.276		
464.00	19.133	199.502	6.276		Spillway #2 Spillway #3
464.50	19.263	209.101	91.478		
465.00	19.395	218.766	942.172		
465.50	19.526	228.496	1,871.621		
466.00	19.658	238.292	2,929.283		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Drop Inlet (cfs)	Emergency Spillway (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
452.50	0.000	0.000	0.000	0.000	0.000	0.000	0.000
452.51	0.000	0.000	0.000	0.000	0.000	0.000	0.000
453.00	0.570	0.000	0.000	1.309	1.309	1.309	4.498
453.50	0.630	0.000	0.000	1.465	1.465	1.465	5.024
454.00	0.672	0.000	0.000	1.564	1.564	1.564	5.364
454.50	0.701	0.000	0.000	1.638	1.638	1.638	5.617
455.00	0.725	0.000	0.000	1.699	1.699	1.699	5.821
455.50	0.745	0.000	0.000	1.749	1.749	1.749	5.994
456.00	0.763	0.000	0.000	1.794	1.794	1.794	6.144
456.50	0.778	0.000	0.000	1.832	1.833	1.833	6.276
457.00	0.778	0.000	0.000	1.832	1.833	1.833	6.276
457.00	0.778	0.000	0.000	1.832	1.833	1.833	6.276
457.50	0.778	0.000	0.000	1.832	1.833	1.833	6.276
458.00	0.778	0.000	0.000	1.832	1.833	1.833	6.276
458.50	0.778	0.000	0.000	1.832	1.833	1.833	6.276
459.00	0.778	0.000	0.000	1.832	1.833	1.833	6.276
459.50	0.778	0.000	0.000	1.832	1.833	1.833	6.276
460.00	0.778	0.000	0.000	1.832	1.833	1.833	6.276
460.50	0.778	0.000	0.000	1.832	1.833	1.833	6.276
461.00	0.778	0.000	0.000	1.832	1.833	1.833	6.276
461.50	0.778	0.000	0.000	1.832	1.833	1.833	6.276
462.00	0.778	0.000	0.000	1.832	1.833	1.833	6.276
462.50	0.778	0.000	0.000	1.832	1.833	1.833	6.276
463.00	0.778	0.000	0.000	1.832	1.833	1.833	6.276
463.50	0.778	0.000	0.000	1.832	1.833	1.833	6.276
464.00	0.778	0.000	0.000	1.832	1.833	1.833	6.276
464.50	0.778	13.773	71.429	1.832	1.833	1.833	91.478
465.00	0.778	38.956	896.940	1.832	1.833	1.833	942.172
465.50	0.778	60.183	1,805.163	1.832	1.833	1.833	1,871.621
466.00	0.778	60.889	2,862.118	1.832	1.833	1.833	2,929.283

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	224.260	0.600	0.000	0.000	77.000	TR55	453.57	53.436
	Σ	**224.260**						**453.57**	**53.436**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.370	2,100.00	1.00	1.0000	1.0000	1	3,506.0	82,448	59.96	34.21
	Σ							**3,506.0**	**82,448**	**59.96**	**34.21**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Proposed Pond 3

(with (1) 6" Marlee Float Skimmer

And (4) 8" Marlee Float Skimmers)

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

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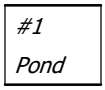
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 3



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	219.760	219.760	645.86	77.82	5,366.8	88,780	48.33	26.86
	Out			8.11	26.67	178.0	21,769	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	100.000%	100.000%
0.0630	70.455%	100.000%
0.0440	63.607%	100.000%
0.0380	62.678%	100.000%
0.0040	10.795%	100.000%
0.0030	6.964%	100.000%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 3

Pond Inputs:

Initial Pool Elev:	448.51 ft
Initial Pool:	0.15 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Drop Inlet

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
60.00	8.50	36.00	582.00	7.72	0.0130	457.00

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
60.00	8.50	36.00	582.00	7.72	0.0130	457.00

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
60.00	8.50	36.00	582.00	7.72	0.0130	457.00

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
60.00	8.50	36.00	582.00	7.72	0.0130	457.00

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
60.00	8.50	36.00	582.00	7.72	0.0130	457.00

Pond Results:

Peak Elevation:	452.89 ft
H'graph Detention Time:	16.48 hrs
Pond Model:	CSTRS
Dewater Time:	4.35 days

Trap Efficiency:	96.68 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
448.50	15.047	0.000	0.000		Top of Sed. Storage
448.51	15.050	0.151	0.000		
449.00	15.158	7.551	5.807	15.42*	
449.50	15.269	15.158	6.491	14.18*	
450.00	15.380	22.820	6.928	13.38*	
450.50	15.492	30.538	7.255	12.87*	
451.00	15.604	38.312	7.520	12.51*	
451.50	15.716	46.142	7.743	12.24*	
452.00	15.829	54.029	8.016	11.90*	
452.50	15.943	61.972	8.109		
452.89	16.030	68.145	8.109	11.95	Peak Stage
453.00	16.056	69.971	8.109		
453.50	16.170	78.028	8.109		
453.50	16.938	78.045	8.109		
454.00	17.053	86.525	8.109		
454.50	17.170	95.081	8.109		
455.00	17.287	103.695	8.109		
455.50	17.404	112.368	8.109		
456.00	17.521	121.099	8.109		
456.50	17.639	129.889	8.109		
457.00	17.758	138.738	8.109		Spillway #2
457.50	17.876	147.647	25.325		
458.00	17.996	156.615	56.804		
458.50	18.115	165.643	97.567		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Drop Inlet (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
448.50	0.000	0.000	0.000	0.000	0.000	0.000	0.000
448.51	0.000	0.000	0.000	0.000	0.000	0.000	0.000
449.00	0.570	0.000	1.309	1.309	1.309	1.309	5.807
449.50	0.632	0.000	1.465	1.465	1.465	1.465	6.491
450.00	0.672	0.000	1.564	1.564	1.564	1.564	6.928

Elevation (ft)	User-input discharge (cfs)	Drop Inlet (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
450.50	0.701	0.000	1.638	1.638	1.638	1.638	7.255
451.00	0.725	0.000	1.699	1.699	1.699	1.699	7.520
451.50	0.745	0.000	1.749	1.749	1.749	1.749	7.743
452.00	0.763	0.000	1.833	1.833	1.794	1.794	8.016
452.50	0.778	0.000	1.833	1.833	1.833	1.833	8.109
453.00	0.778	0.000	1.833	1.833	1.833	1.833	8.109
453.50	0.778	0.000	1.833	1.833	1.833	1.833	8.109
453.50	0.778	0.000	1.833	1.833	1.833	1.833	8.109
454.00	0.778	0.000	1.833	1.833	1.833	1.833	8.109
454.50	0.778	0.000	1.833	1.833	1.833	1.833	8.109
455.00	0.778	0.000	1.833	1.833	1.833	1.833	8.109
455.50	0.778	0.000	1.833	1.833	1.833	1.833	8.109
456.00	0.778	0.000	1.833	1.833	1.833	1.833	8.109
456.50	0.778	0.000	1.833	1.833	1.833	1.833	8.109
457.00	0.778	0.000	1.833	1.833	1.833	1.833	8.109
457.50	0.778	17.216	1.833	1.833	1.833	1.833	25.325
458.00	0.778	48.695	1.833	1.833	1.833	1.833	56.804
458.50	0.778	89.458	1.833	1.833	1.833	1.833	97.567

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	219.760	0.600	0.000	0.000	91.000	TR55	645.86	77.816
	Σ	**219.760**						**645.86**	**77.816**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.370	2,225.00	1.00	1.0000	1.0000	2	5,366.8	88,780	48.33	26.86
	Σ							**5,366.8**	**88,780**	**48.33**	**26.86**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Proposed Pond 4

(with (3) 8" Marlee Float Skimmers)

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%

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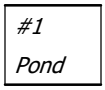
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 4



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	123.470	123.470	284.67	38.30	2,027.4	65,667	45.56	26.46
	Out			5.43	17.10	20.9	5,344	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	100.000%	100.000%
0.0630	80.166%	100.000%
0.0440	24.037%	100.000%
0.0380	24.037%	100.000%
0.0040	3.964%	100.000%
0.0030	2.429%	100.000%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 4

Pond Inputs:

Initial Pool Elev:	453.81 ft
Initial Pool:	0.08 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Drop Inlet

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
48.00	9.00	24.00	447.00	10.06	0.0130	462.80

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
48.00	9.00	24.00	447.00	10.06	0.0130	462.80

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
48.00	9.00	24.00	447.00	10.06	0.0130	462.80

Pond Results:

Peak Elevation:	457.53 ft
H'graph Detention Time:	16.47 hrs
Pond Model:	CSTRS
Dewater Time:	3.40 days
Trap Efficiency:	98.97 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
453.80	8.309	0.000	0.000		Top of Sed. Storage
453.81	8.311	0.083	0.000		
454.30	8.400	4.177	3.928	12.61*	
454.80	8.492	8.400	4.394	11.63*	
455.30	8.585	12.670	4.692	11.01*	
455.80	8.678	16.985	4.915	10.62*	
456.30	8.771	21.348	5.096	10.36*	
456.80	8.865	25.757	5.248	10.30	
457.30	8.960	30.213	5.381	10.15	
457.53	9.003	32.270	5.435	4.85	Peak Stage
457.80	9.055	34.716	5.498		
457.80	9.692	34.717	5.498		
458.30	9.789	39.587	5.498		
458.80	9.887	44.506	5.498		
459.30	9.986	49.474	5.498		
459.80	10.085	54.491	5.498		
460.30	10.184	59.559	5.498		
460.80	10.284	64.676	5.498		
461.30	10.384	69.843	5.498		
461.80	10.485	75.060	5.498		
462.30	10.586	80.328	5.498		
462.80	10.688	85.646	5.498		Spillway #2
463.30	10.791	91.016	19.271		
463.80	10.893	96.437	44.454		
464.30	10.997	101.910	71.657		
464.80	11.100	107.434	71.954		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Drop Inlet (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
453.80	0.000	0.000	0.000	0.000	0.000
453.81	0.000	0.000	0.000	0.000	0.000
454.30	1.309	0.000	1.309	1.309	3.928
454.80	1.465	0.000	1.465	1.465	4.394
455.30	1.564	0.000	1.564	1.564	4.692
455.80	1.638	0.000	1.638	1.638	4.915
456.30	1.699	0.000	1.699	1.699	5.096
456.80	1.749	0.000	1.749	1.749	5.248

Elevation (ft)	User-input discharge (cfs)	Drop Inlet (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
457.30	1.794	0.000	1.794	1.794	5.381
457.80	1.833	0.000	1.833	1.833	5.498
457.80	1.833	0.000	1.833	1.833	5.498
458.30	1.833	0.000	1.833	1.833	5.498
458.80	1.833	0.000	1.833	1.833	5.498
459.30	1.833	0.000	1.833	1.833	5.498
459.80	1.833	0.000	1.833	1.833	5.498
460.30	1.833	0.000	1.833	1.833	5.498
460.80	1.833	0.000	1.833	1.833	5.498
461.30	1.833	0.000	1.833	1.833	5.498
461.80	1.833	0.000	1.833	1.833	5.498
462.30	1.833	0.000	1.833	1.833	5.498
462.80	1.833	0.000	1.833	1.833	5.498
463.30	1.833	13.773	1.833	1.833	19.271
463.80	1.833	38.956	1.833	1.833	44.454
464.30	1.833	66.158	1.833	1.833	71.657
464.80	1.833	66.456	1.833	1.833	71.954

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	123.470	0.767	0.000	0.000	86.000	TR55	284.67	38.305
	Σ	**123.470**						**284.67**	**38.305**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.370	1,500.00	1.00	1.0000	1.0000	4	2,027.4	65,667	45.56	26.46
	Σ							**2,027.4**	**65,667**	**45.56**	**26.46**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Proposed Pond 5

(with (1) 8" Marlee Float Skimmer connected to a 6" PVC pipe

And (2) 8" Marlee Float Skimmers)

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Troup
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	91.600%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	72.400%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	18.200%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	17.700%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	2.200%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.400%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

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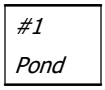
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 5



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	92.940	92.940	150.10	22.11	1,018.3	55,556	38.61	23.14
	Out			12.43	16.64	30.2	3,632	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	100.000%	100.000%
0.0630	100.000%	100.000%
0.0440	25.666%	100.000%
0.0380	24.960%	100.000%
0.0040	3.102%	100.000%
0.0030	1.974%	66.498%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 5

Pond Inputs:

Initial Pool Elev:	483.00 ft
Initial Pool:	11.81 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Drop Inlet

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
48.00	9.00	36.00	267.00	0.65	0.0130	490.00

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
48.00	9.00	36.00	267.00	0.65	0.0130	490.00

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
48.00	9.00	36.00	267.00	0.65	0.0130	490.00

Pond Results:

Peak Elevation:	490.26 ft
H'graph Detention Time:	12.93 hrs
Pond Model:	CSTRS
Dewater Time:	3.71 days
Trap Efficiency:	97.03 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
475.00	1.218	0.000	0.000		Top of Sed. Storage
475.01	1.219	0.012	0.000		
475.50	1.248	0.617	0.000		
476.00	1.279	1.248	0.000		
476.50	1.310	1.896	0.000		
477.00	1.342	2.559	0.000		
477.50	1.374	3.238	0.000		
478.00	1.406	3.933	0.000		
478.50	1.439	4.644	0.000		
479.00	1.472	5.372	0.000		
479.50	1.505	6.116	0.000		
480.00	1.539	6.877	0.000		
480.50	1.573	7.656	0.000		
481.00	1.608	8.451	0.000		
481.50	1.643	9.264	0.000		
482.00	1.678	10.094	0.000		
482.50	1.714	10.942	0.000		
483.00	1.750	11.808	0.000		
483.50	1.789	12.693	0.938	11.42*	
484.00	1.829	13.597	1.106	9.90*	
484.50	1.869	14.522	1.217	9.19*	
485.00	1.910	15.467	1.304	8.77*	
485.50	1.951	16.432	1.375	8.50*	
486.00	1.993	17.418	1.435	8.31*	
486.50	2.035	18.425	4.108	4.75	
487.00	2.077	19.453	4.466	2.95	
487.50	2.120	20.502	4.665	2.75	
488.00	2.163	21.573	4.814	2.75	
488.50	2.207	22.665	4.934	2.70	
489.00	2.251	23.780	5.036	2.70	
489.50	2.296	24.916	5.124	2.70	
490.00	2.341	26.075	5.202	4.70	Spillway #2
490.26	2.365	26.695	12.428	7.05	Peak Stage
490.50	2.386	27.257	18.975		
491.00	2.432	28.461	44.158		
491.50	2.478	29.689	76.769		
492.00	2.525	30.940	90.772		
492.50	2.572	32.214	100.872		
493.00	2.620	33.512	105.070		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Drop Inlet (cfs)	User-input discharge (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
475.00	0.000	0.000	0.000	0.000	0.000
475.01	0.000	0.000	0.000	0.000	0.000
475.50	0.000	0.000	0.000	0.000	0.000
476.00	0.000	0.000	0.000	0.000	0.000
476.50	0.000	0.000	0.000	0.000	0.000
477.00	0.000	0.000	0.000	0.000	0.000
477.50	0.000	0.000	0.000	0.000	0.000
478.00	0.000	0.000	0.000	0.000	0.000
478.50	0.000	0.000	0.000	0.000	0.000
479.00	0.000	0.000	0.000	0.000	0.000
479.50	0.000	0.000	0.000	0.000	0.000
480.00	0.000	0.000	0.000	0.000	0.000
480.50	0.000	0.000	0.000	0.000	0.000
481.00	0.000	0.000	0.000	0.000	0.000
481.50	0.000	0.000	0.000	0.000	0.000
482.00	0.000	0.000	0.000	0.000	0.000
482.50	0.000	0.000	0.000	0.000	0.000
483.00	0.000	0.000	0.000	0.000	0.000
483.50	0.938	0.000	0.000	0.000	0.938
484.00	1.106	0.000	0.000	0.000	1.106
484.50	1.217	0.000	0.000	0.000	1.217
485.00	1.304	0.000	0.000	0.000	1.304
485.50	1.375	0.000	0.000	0.000	1.375
486.00	1.435	0.000	0.000	0.000	1.435
486.50	1.489	0.000	1.309	1.309	4.108
487.00	1.537	0.000	1.465	1.465	4.466
487.50	1.537	0.000	1.564	1.564	4.665
488.00	1.537	0.000	1.638	1.638	4.814
488.50	1.537	0.000	1.699	1.699	4.934
489.00	1.537	0.000	1.749	1.749	5.036
489.50	1.537	0.000	1.794	1.794	5.124
490.00	1.537	0.000	1.833	1.833	5.202
490.50	1.537	13.773	1.833	1.833	18.975
491.00	1.537	38.956	1.833	1.833	44.158
491.50	1.537	71.566	1.833	1.833	76.769
492.00	1.537	85.570	1.833	1.833	90.772
492.50	1.537	95.670	1.833	1.833	100.872
493.00	1.537	99.867	1.833	1.833	105.070

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	92.940	0.900	0.000	0.000	77.000	TR55	150.10	22.106
	Σ	**92.940**						**150.10**	**22.106**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.370	1,390.00	1.00	1.0000	1.0000	6	1,018.3	55,556	38.61	23.14
	Σ							**1,018.3**	**55,556**	**38.61**	**23.14**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Proposed Pond 6

(with (1) 6" Marlee Float Skimmer

And (1) 8" Marlee Float Skimmer)

Kayla Kernich, PE

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General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Troup
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	91.600%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	72.400%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	18.200%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	17.700%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	2.200%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.400%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

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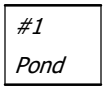
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 6



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	42.740	42.740	100.51	15.11	604.2	49,635	25.44	14.84
	Out			2.53	7.75	16.3	2,226	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	100.000%	100.000%
0.0630	79.822%	100.000%
0.0440	72.063%	100.000%
0.0380	71.011%	100.000%
0.0040	12.230%	100.000%
0.0030	7.890%	100.000%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 6

Pond Inputs:

Initial Pool Elev:	419.00 ft
Initial Pool:	24.01 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Drop Inlet

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
48.00	14.00	24.00	138.00	5.00	0.0130	433.00

Riser Diameter (in)	Riser Height (ft)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Slope (%)	Manning's n	Spillway Elev (ft)
48.00	14.00	24.00	138.00	5.00	0.0130	433.00

Pond Results:

Peak Elevation:	423.02 ft
H'graph Detention Time:	16.83 hrs
Pond Model:	CSTRS
Dewater Time:	4.57 days
Trap Efficiency:	97.31 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
409.00	1.960	0.000	0.000		Top of Sed. Storage
409.01	1.961	0.020	0.000		
409.50	2.001	0.990	0.000		
410.00	2.043	2.002	0.000		
410.50	2.086	3.034	0.000		
411.00	2.128	4.087	0.000		

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
411.50	2.172	5.162	0.000		
412.00	2.215	6.259	0.000		
412.50	2.259	7.378	0.000		
413.00	2.304	8.518	0.000		
413.50	2.349	9.681	0.000		
414.00	2.394	10.867	0.000		
414.50	2.440	12.075	0.000		
415.00	2.486	13.307	0.000		
415.50	2.533	14.561	0.000		
416.00	2.580	15.839	0.000		
416.50	2.627	17.141	0.000		
417.00	2.675	18.467	0.000		
417.50	2.724	19.816	0.000		
418.00	2.772	21.190	0.000		
418.50	2.822	22.589	0.000		
419.00	2.871	24.012	0.000		
419.50	2.921	25.460	0.570	30.75*	
420.00	2.972	26.933	0.632	28.19*	
420.50	3.023	28.432	1.981	9.15*	
421.00	3.074	29.956	2.166	8.51*	
421.50	3.126	31.507	2.289	8.19*	
422.00	3.178	33.083	2.384	8.15	
422.50	3.231	34.685	2.461	8.00	
423.00	3.284	36.314	2.527	7.95	
423.02	3.287	36.390	2.529	0.80	Peak Stage
423.50	3.338	37.970	2.572		
424.00	3.392	39.652	2.611		
424.50	3.446	41.362	2.611		
425.00	3.501	43.098	2.611		
425.50	3.557	44.863	2.611		
426.00	3.612	46.655	2.611		
426.50	3.669	48.475	2.611		
427.00	3.725	50.324	2.611		
427.50	3.782	52.201	2.611		
428.00	3.840	54.106	2.611		
428.50	3.898	56.040	2.611		
429.00	3.956	58.004	2.611		
429.50	4.015	59.996	2.611		
430.00	4.074	62.019	2.611		
430.50	4.134	64.070	2.611		
431.00	4.194	66.152	2.611		
431.50	4.254	68.264	2.611		
432.00	4.315	70.407	2.611		

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
432.50	4.377	72.579	2.611		
433.00	4.438	74.783	2.611		Spillway #2
433.50	4.501	77.018	16.384		
434.00	4.563	79.284	41.567		
434.50	4.626	81.581	60.736		
435.00	4.690	83.910	61.381		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Drop Inlet (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
409.00	0.000	0.000	0.000	0.000
409.01	0.000	0.000	0.000	0.000
409.50	0.000	0.000	0.000	0.000
410.00	0.000	0.000	0.000	0.000
410.50	0.000	0.000	0.000	0.000
411.00	0.000	0.000	0.000	0.000
411.50	0.000	0.000	0.000	0.000
412.00	0.000	0.000	0.000	0.000
412.50	0.000	0.000	0.000	0.000
413.00	0.000	0.000	0.000	0.000
413.50	0.000	0.000	0.000	0.000
414.00	0.000	0.000	0.000	0.000
414.50	0.000	0.000	0.000	0.000
415.00	0.000	0.000	0.000	0.000
415.50	0.000	0.000	0.000	0.000
416.00	0.000	0.000	0.000	0.000
416.50	0.000	0.000	0.000	0.000
417.00	0.000	0.000	0.000	0.000
417.50	0.000	0.000	0.000	0.000
418.00	0.000	0.000	0.000	0.000
418.50	0.000	0.000	0.000	0.000
419.00	0.000	0.000	0.000	0.000
419.50	0.570	0.000	0.000	0.570
420.00	0.632	0.000	0.000	0.632
420.50	0.672	0.000	1.309	1.981
421.00	0.701	0.000	1.465	2.166
421.50	0.725	0.000	1.564	2.289
422.00	0.745	0.000	1.638	2.384

Elevation (ft)	User-input discharge (cfs)	Drop Inlet (cfs)	User-input discharge (cfs)	Combined Total Discharge (cfs)
422.50	0.763	0.000	1.699	2.461
423.00	0.778	0.000	1.749	2.527
423.50	0.778	0.000	1.794	2.572
424.00	0.778	0.000	1.833	2.611
424.50	0.778	0.000	1.833	2.611
425.00	0.778	0.000	1.833	2.611
425.50	0.778	0.000	1.833	2.611
426.00	0.778	0.000	1.833	2.611
426.50	0.778	0.000	1.833	2.611
427.00	0.778	0.000	1.833	2.611
427.50	0.778	0.000	1.833	2.611
428.00	0.778	0.000	1.833	2.611
428.50	0.778	0.000	1.833	2.611
429.00	0.778	0.000	1.833	2.611
429.50	0.778	0.000	1.833	2.611
430.00	0.778	0.000	1.833	2.611
430.50	0.778	0.000	1.833	2.611
431.00	0.778	0.000	1.833	2.611
431.50	0.778	0.000	1.833	2.611
432.00	0.778	0.000	1.833	2.611
432.50	0.778	0.000	1.833	2.611
433.00	0.778	0.000	1.833	2.611
433.50	0.778	13.773	1.833	16.384
434.00	0.778	38.956	1.833	41.567
434.50	0.778	58.125	1.833	60.736
435.00	0.778	58.770	1.833	61.381

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	42.740	0.900	0.000	0.000	91.000	TR55	100.51	15.107
	Σ	**42.740**						**100.51**	**15.107**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.370	1,050.00	1.00	1.0000	1.0000	2	604.2	49,635	25.44	14.84
	Σ							**604.2**	**49,635**	**25.44**	**14.84**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Proposed Pond 7

(with 6" Marlee Float Skimmer)

Kayla Kernich, PE

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General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

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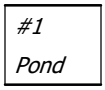
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 7



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	15.920	15.920	62.55	6.13	95.6	21,535	15.40	8.15
	Out			0.77	2.56	0.7	1,323	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	88.997%	100.000%
0.0630	62.910%	100.000%
0.0440	18.863%	100.000%
0.0380	18.863%	100.000%
0.0040	3.110%	100.000%
0.0030	1.906%	100.000%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 7

Pond Inputs:

Initial Pool Elev:	415.01 ft
Initial Pool:	0.01 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
426.00	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	418.70 ft
H'graph Detention Time:	16.41 hrs
Pond Model:	CSTRS
Dewater Time:	3.78 days
Trap Efficiency:	99.26 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
415.00	1.206	0.000	0.000		Top of Sed. Storage
415.01	1.207	0.012	0.000		
415.50	1.256	0.615	0.570	12.81*	
416.00	1.307	1.256	0.632	12.26*	
416.50	1.359	1.923	0.672	12.01*	
417.00	1.412	2.616	0.701	11.95*	
417.50	1.466	3.335	0.725	12.01*	
418.00	1.521	4.082	0.745	12.13*	
418.50	1.578	4.857	0.763	12.45	
418.70	1.601	5.179	0.769	5.15	Peak Stage
419.00	1.635	5.660	0.778		
419.00	2.013	5.662	0.778		

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
419.50	2.067	6.679	0.778		
420.00	2.123	7.727	0.778		
420.50	2.179	8.802	0.778		
421.00	2.236	9.906	0.778		
421.50	2.293	11.038	0.778		
422.00	2.351	12.199	0.778		
422.50	2.411	13.389	0.778		
423.00	2.470	14.610	0.778		
423.50	2.531	15.860	0.778		
424.00	2.592	17.140	0.778		
424.50	2.654	18.452	0.778		
425.00	2.717	19.795	0.778		
425.50	2.780	21.169	0.778		
426.00	2.844	22.575	0.778		Spillway #2
426.50	2.909	24.013	11.039		
427.00	2.975	25.485	132.783		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
415.00	0.000	0.000	0.000
415.01	0.000	0.000	0.000
415.50	0.570	0.000	0.570
416.00	0.632	0.000	0.632
416.50	0.672	0.000	0.672
417.00	0.701	0.000	0.701
417.50	0.725	0.000	0.725
418.00	0.745	0.000	0.745
418.50	0.763	0.000	0.763
419.00	0.778	0.000	0.778
419.00	0.778	0.000	0.778
419.50	0.778	0.000	0.778
420.00	0.778	0.000	0.778
420.50	0.778	0.000	0.778
421.00	0.778	0.000	0.778
421.50	0.778	0.000	0.778
422.00	0.778	0.000	0.778
422.50	0.778	0.000	0.778

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
423.00	0.778	0.000	0.778
423.50	0.778	0.000	0.778
424.00	0.778	0.000	0.778
424.50	0.778	0.000	0.778
425.00	0.778	0.000	0.778
425.50	0.778	0.000	0.778
426.00	0.778	0.000	0.778
426.50	0.778	10.261	11.039
427.00	0.778	132.005	132.783

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	15.920	0.200	0.000	0.000	94.000	TR55	62.55	6.127
	Σ	**15.920**						**62.55**	**6.127**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.170	400.00	1.00	1.0000	1.0000	4	95.6	21,535	15.40	8.15
	Σ							**95.6**	**21,535**	**15.40**	**8.15**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Proposed Pond 8

(with 8" Marlee Float Skimmer w/ 6.5" Orifice connected to a 6" PVC pipe)

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

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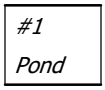
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 8



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	26.330	26.330	84.57	8.19	161.4	26,873	15.10	8.08
	Out			28.91	6.79	31.3	7,606	1.76	0.97

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	93.875%	100.000%
0.0630	65.840%	100.000%
0.0440	59.256%	100.000%
0.0380	58.300%	100.000%
0.0040	9.876%	50.984%
0.0030	6.372%	32.893%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 8

Pond Inputs:

Initial Pool Elev:	418.01 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
424.00	10.00	3.00:1	3.00:1	10.00

Pond Results:

Peak Elevation:	424.96 ft
H'graph Detention Time:	8.27 hrs
Pond Model:	CSTRS
Dewater Time:	2.43 days
Trap Efficiency:	80.63 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
418.00	0.280	0.000	0.000		Top of Sed. Storage
418.01	0.280	0.003	0.000		
418.50	0.316	0.149	0.641	2.76*	
419.00	0.354	0.316	0.726	2.79*	
419.50	0.394	0.503	0.782	2.90*	
420.00	0.437	0.711	0.823	3.05*	
420.50	0.482	0.941	0.858	3.24*	
421.00	0.529	1.193	0.886	3.45*	
421.50	0.578	1.470	0.911	3.67*	
422.00	0.629	1.771	0.934	4.00	
422.50	0.683	2.099	0.934		
423.00	0.738	2.455	0.934		

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
423.50	0.796	2.838	0.934		
424.00	0.856	3.251	0.934		Spillway #2
424.25	0.887	3.469	1.987	23.10	
424.40	0.906	3.604	2.618	2.70	
424.50	0.918	3.695	3.040	2.35	
424.96	0.977	4.134	28.911	4.40	Peak Stage
425.00	0.982	4.170	31.027		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
418.00	0.000	0.000	0.000
418.01	0.000	0.000	0.000
418.50	0.641	0.000	0.641
419.00	0.726	0.000	0.726
419.50	0.782	0.000	0.782
420.00	0.823	0.000	0.823
420.50	0.858	0.000	0.858
421.00	0.886	0.000	0.886
421.50	0.911	0.000	0.911
422.00	0.934	0.000	0.934
422.50	0.934	0.000	0.934
423.00	0.934	0.000	0.934
423.50	0.934	0.000	0.934
424.00	0.934	0.000	0.934
424.25	0.934	1.053	1.987
424.40	0.934	1.685	2.618
424.50	0.934	2.106	3.040
425.00	0.934	30.093	31.027

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	26.330	0.367	0.000	0.000	86.000	TR55	84.57	8.188
	Σ	**26.330**						**84.57**	**8.188**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.170	750.00	1.00	1.0000	1.0000	5	161.4	26,873	15.10	8.08
	Σ							**161.4**	**26,873**	**15.10**	**8.08**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Proposed Pond 9
(with 6" Marlee Float Skimmer w/ 5" Orifice)

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

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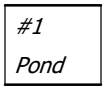
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	Sed Basin 9



Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	13.190	13.190	46.26	4.18	78.2	25,249	18.58	10.03
	Out			3.12	2.64	1.1	1,651	0.00	0.00

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	93.306%	100.000%
0.0630	75.413%	100.000%
0.0440	14.759%	100.000%
0.0380	14.456%	100.000%
0.0040	1.921%	100.000%
0.0030	1.213%	87.973%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Sed Basin 9

Pond Inputs:

Initial Pool Elev:	439.00 ft
Initial Pool:	1.07 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
444.00	10.00	3.00:1	3.00:1	50.00

Pond Results:

Peak Elevation:	444.13 ft
H'graph Detention Time:	11.73 hrs
Pond Model:	CSTRS
Dewater Time:	3.11 days
Trap Efficiency:	98.62 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
435.00	0.265	0.000	0.000		Top of Sed. Storage
435.01	0.265	0.003	0.000		
435.50	0.266	0.133	0.000		
436.00	0.267	0.266	0.000		
436.50	0.268	0.400	0.000		
437.00	0.269	0.534	0.000		
437.50	0.269	0.668	0.000		
438.00	0.270	0.803	0.000		
438.50	0.271	0.938	0.000		
439.00	0.272	1.074	0.000		
439.50	0.315	1.221	0.423	4.19*	
440.00	0.361	1.390	0.454	4.50*	

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
440.50	0.409	1.582	0.473	4.92*	
441.00	0.461	1.800	0.487	5.40*	
441.50	0.516	2.044	0.498	5.93*	
442.00	0.574	2.316	0.507	6.50*	
442.50	0.635	2.619	0.516	7.09*	
443.00	0.700	2.952	0.523	7.72*	
443.50	0.767	3.319	0.523		
444.00	0.837	3.719	0.523		Spillway #2
444.13	0.857	3.830	3.118	28.45	Peak Stage
444.50	0.911	4.156	10.784		
445.00	0.987	4.631	132.528		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
435.00	0.000	0.000	0.000
435.01	0.000	0.000	0.000
435.50	0.000	0.000	0.000
436.00	0.000	0.000	0.000
436.50	0.000	0.000	0.000
437.00	0.000	0.000	0.000
437.50	0.000	0.000	0.000
438.00	0.000	0.000	0.000
438.50	0.000	0.000	0.000
439.00	0.000	0.000	0.000
439.50	0.423	0.000	0.423
440.00	0.454	0.000	0.454
440.50	0.473	0.000	0.473
441.00	0.487	0.000	0.487
441.50	0.498	0.000	0.498
442.00	0.507	0.000	0.507
442.50	0.516	0.000	0.516
443.00	0.523	0.000	0.523
443.50	0.523	0.000	0.523
444.00	0.523	0.000	0.523
444.50	0.523	10.261	10.784
445.00	0.523	132.005	132.528

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	13.190	0.150	0.000	0.000	86.000	TR55	46.26	4.184
	Σ	**13.190**						**46.26**	**4.184**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.170	750.00	1.00	1.0000	1.0000	6	78.2	25,249	18.58	10.03
	Σ							**78.2**	**25,249**	**18.58**	**10.03**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Seidment Basin 13 (6" Marlee Float Skimmer)

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay	Chewacla
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%	91.100%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%	70.700%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%	59.700%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%	58.800%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%	7.200%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%	4.400%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

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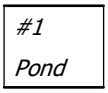
Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	32.430	32.430	71.73	7.74	975.9	157,106	114.80	64.60
	Out			34.92	5.98	52.8	25,235	5.09	1.50

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Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	100.000%	100.000%
0.0630	74.972%	100.000%
0.0440	14.545%	100.000%
0.0380	14.545%	100.000%
0.0040	3.075%	56.811%
0.0030	2.129%	39.331%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Pond Inputs:

Initial Pool Elev:	459.51 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
468.50	5.00	3.00:1	3.00:1	60.00

Pond Results:

Peak Elevation:	468.98 ft
H'graph Detention Time:	6.84 hrs
Pond Model:	CSTRS
Dewater Time:	3.88 days
Trap Efficiency:	94.59 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
459.50	0.210	0.000	0.000		Top of Sed. Storage
459.51	0.210	0.002	0.000		
460.00	0.224	0.108	0.698	1.84*	
460.50	0.238	0.224	0.698	2.00*	
461.00	0.253	0.346	0.698	2.13*	
461.50	0.268	0.476	0.698	2.26*	
462.00	0.284	0.614	0.698	2.39*	
462.50	0.300	0.760	0.698	2.53*	
463.00	0.317	0.914	0.698	2.67*	
463.50	0.334	1.077	0.698	2.82*	
464.00	0.351	1.248	0.698	2.97*	
464.50	0.369	1.428	0.698	3.12*	

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Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
465.00	0.388	1.617	0.698	3.28*	
465.50	0.406	1.816	0.698	3.44*	
466.00	0.426	2.024	0.698	3.60*	
466.50	0.445	2.241	0.698	3.77*	
467.00	0.466	2.469	0.698	3.95*	
467.50	0.486	2.707	0.698	4.12*	
468.00	0.507	2.956	0.698	4.30*	
468.50	0.529	3.215	0.698	4.49*	Spillway #2
468.98	0.550	3.473	34.924	37.40	Peak Stage
469.00	0.551	3.485	36.490		
469.50	0.573	3.766	174.918		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
459.50	0.000	0.000	0.000
459.51	0.000	0.000	0.000
460.00	0.698	0.000	0.698
460.50	0.698	0.000	0.698
461.00	0.698	0.000	0.698
461.50	0.698	0.000	0.698
462.00	0.698	0.000	0.698
462.50	0.698	0.000	0.698
463.00	0.698	0.000	0.698
463.50	0.698	0.000	0.698
464.00	0.698	0.000	0.698
464.50	0.698	0.000	0.698
465.00	0.698	0.000	0.698
465.50	0.698	0.000	0.698
466.00	0.698	0.000	0.698
466.50	0.698	0.000	0.698
467.00	0.698	0.000	0.698
467.50	0.698	0.000	0.698
468.00	0.698	0.000	0.698
468.50	0.698	0.000	0.698
469.00	0.698	35.791	36.490
469.50	0.698	174.220	174.918

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	32.430	0.500	0.000	0.000	77.000	TR55	71.73	7.735
	Σ	**32.430**						**71.73**	**7.735**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	1,500.00	4.10	1.0000	1.0000	1	975.9	157,106	114.80	64.60
	Σ							**975.9**	**157,106**	**114.80**	**64.60**

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Project Connect at Blythewood Industrial Park

Sediment Basin Design for Temporary Seidment Basin 14

(3" Marlee Float Skimmer w/ 2.5" Orifice)

Kayla Kernich, PE

General Information

Storm Information:

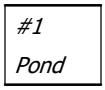
Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay	Chewacla
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%	91.100%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%	70.700%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%	59.700%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%	58.800%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%	7.200%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%	4.400%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Pond	#1	==>	End	0.000	0.000	



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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	2.240	2.240	8.85	0.86	127.8	183,923	131.59	73.60
	Out			4.29	0.71	5.4	14,526	1.76	0.92

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	88.700%	100.000%
0.0630	62.700%	100.000%
0.0440	18.800%	100.000%
0.0380	18.800%	100.000%
0.0040	3.100%	72.737%
0.0030	1.900%	44.581%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Pond)

Pond Inputs:

Initial Pool Elev:	430.01 ft
Initial Pool:	0.00 ac-ft
*Sediment Storage:	0.00 ac-ft
Dead Space:	20.00 %

**No sediment capacity defined*

Emergency Spillway

Spillway Elev	Crest Length (ft)	Left Sideslope	Right Sideslope	Bottom Width (ft)
434.00	5.00	3.00:1	3.00:1	10.00

Pond Results:

Peak Elevation:	434.33 ft
H'graph Detention Time:	9.14 hrs
Pond Model:	CSTRS
Dewater Time:	3.36 days
Trap Efficiency:	95.74 %

Dewatering time is calculated from peak stage to lowest spillway

Elevation-Capacity-Discharge Table

Elevation	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
430.00	0.045	0.000	0.000		Top of Sed. Storage
430.01	0.045	0.000	0.000		
430.50	0.056	0.025	0.111	2.70*	
431.00	0.067	0.056	0.111	3.37*	
431.50	0.080	0.093	0.111	4.04*	
432.00	0.094	0.137	0.111	4.78*	
432.50	0.110	0.187	0.111	5.58*	
433.00	0.126	0.246	0.111	6.44*	
433.50	0.143	0.314	0.111	7.37*	
434.00	0.162	0.390	0.111	8.36*	Spillway #2
434.33	0.175	0.447	4.294	37.90	Peak Stage
434.50	0.182	0.476	6.406		
435.00	0.203	0.572	33.685		

**Designates time(s) to dewater have been extrapolated beyond the 50 hour hydrograph limit.*

Detailed Discharge Table

Elevation (ft)	User-input discharge (cfs)	Emergency Spillway (cfs)	Combined Total Discharge (cfs)
430.00	0.000	0.000	0.000
430.01	0.000	0.000	0.000
430.50	0.111	0.000	0.111
431.00	0.111	0.000	0.111
431.50	0.111	0.000	0.111
432.00	0.111	0.000	0.111
432.50	0.111	0.000	0.111
433.00	0.111	0.000	0.111
433.50	0.111	0.000	0.111
434.00	0.111	0.000	0.111
434.50	0.111	6.295	6.406
435.00	0.111	33.575	33.685

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	2.240	0.100	0.000	0.000	94.000	TR55	8.85	0.859
	Σ	**2.240**						**8.85**	**0.859**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	75.00	20.00	1.0000	1.0000	4	127.8	183,923	131.59	73.60
	Σ							**127.8**	**183,923**	**131.59**	**73.60**

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Project Connect at Blythewood Industrial Park

Silt Fence Calculations

Area A

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay	Chewacla
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%	91.100%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%	70.700%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%	59.700%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%	58.800%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%	7.200%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%	4.400%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Silt Fence	#1	==>	End	0.000	0.000	Silt Fence Area

Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	3.360	3.360	12.01	1.05	345.5	373,605	214.43	122.34
	Out			11.79	1.05	69.0	100,483	30.84	2.26

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	91.100%	100.000%
0.0630	70.700%	100.000%
0.0440	59.700%	100.000%
0.0380	58.800%	100.000%
0.0040	7.200%	36.033%
0.0030	4.400%	22.020%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Silt Fence)

Silt Fence Area A

Silt Fence Inputs:

Fence Flow Rate (gpm/sq ft)	Width along contour (ft)	Height (ft)	Land Slope (%)	Tie-back distance (ft)
10.0	280.0	2.0	33.00	10.0

**Sediment Storage: 0.00 ac-ft*

**No sediment capacity defined*

Silt Fence Results:

Peak Fence Stage:	1.85 ft
Peak Water Stage:	1.85 ft
Dewater Time:	0.50 days
Trap Efficiency:	80.02 %

Dewatering time is calculated from peak stage to lowest spillway

Stage-Capacity-Discharge Table

Fence Stage (ft)	Water Stage (ft)	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
0.00	0.00	0.000	0.000	0.000		Top of Sediment
0.10	0.10	0.002	0.000	0.625	10.00	
0.20	0.20	0.004	0.000	1.250	1.35	
0.30	0.30	0.006	0.001	1.878	0.15	
0.40	0.40	0.008	0.002	2.506	0.40	
0.50	0.50	0.010	0.002	3.136		
0.60	0.60	0.012	0.003	3.768	0.05	
0.70	0.70	0.014	0.005	4.400		
0.80	0.80	0.016	0.006	5.034		
0.90	0.90	0.018	0.008	5.670		
1.00	1.00	0.019	0.010	6.306		
1.10	1.10	0.021	0.012	6.944		
1.20	1.20	0.023	0.014	7.584		
1.30	1.30	0.025	0.016	8.225		
1.40	1.40	0.027	0.019	8.867		
1.50	1.50	0.029	0.022	9.510		
1.60	1.60	0.031	0.025	10.155		
1.70	1.70	0.033	0.028	10.801		
1.80	1.80	0.035	0.032	11.449		

Fence Stage (ft)	Water Stage (ft)	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
1.85	1.85	0.036	0.033	11.789	0.00	Peak Stage
1.90	1.90	0.037	0.035	12.098		
2.00	2.00	0.039	0.039	12.748		

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	3.360	0.100	0.000	0.000	86.000	TR55	12.01	1.048
	Σ	**3.360**						**12.01**	**1.048**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	100.00	33.00	1.0000	1.0000	7	345.5	373,605	214.43	122.34
	Σ							**345.5**	**373,605**	**214.43**	**122.34**

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Project Connect at Blythewood Industrial Park

Silt Fence Calculations

Area C1

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay	Chewacla
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%	91.100%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%	70.700%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%	59.700%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%	58.800%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%	7.200%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%	4.400%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

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Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Silt Fence	#1	==>	End	0.000	0.000	Silt Fence Area C

Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	0.750	0.750	2.68	0.23	39.9	208,359	120.29	67.70
	Out			2.68	0.23	5.1	51,603	6.31	0.51

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	88.100%	100.000%
0.0630	60.700%	100.000%
0.0440	54.800%	100.000%
0.0380	54.000%	100.000%
0.0040	9.300%	72.568%
0.0030	6.000%	46.818%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Silt Fence)

Silt Fence Area C

Silt Fence Inputs:

Fence Flow Rate (gpm/sq ft)	Width along contour (ft)	Height (ft)	Land Slope (%)	Tie-back distance (ft)
10.0	330.0	2.0	60.00	3.3

**Sediment Storage: 0.00 ac-ft*

**No sediment capacity defined*

Silt Fence Results:

Peak Fence Stage:	0.36 ft
Peak Water Stage:	0.36 ft
Dewater Time:	0.50 days
Trap Efficiency:	87.18 %

Dewatering time is calculated from peak stage to lowest spillway

Stage-Capacity-Discharge Table

Fence Stage (ft)	Water Stage (ft)	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
0.00	0.00	0.000	0.000	0.000		Top of Sediment
0.10	0.10	0.001	0.000	0.736	11.60	
0.20	0.20	0.003	0.000	1.472		
0.30	0.30	0.004	0.001	2.209		
0.36	0.36	0.005	0.001	2.677	0.00	Peak Stage
0.40	0.40	0.005	0.001	2.947		
0.50	0.50	0.006	0.002	3.686		
0.60	0.60	0.008	0.002	4.425		
0.70	0.70	0.009	0.003	5.165		
0.80	0.80	0.010	0.004	5.906		
0.90	0.90	0.011	0.005	6.648		
1.00	1.00	0.013	0.006	7.390		
1.10	1.10	0.014	0.008	8.133		
1.20	1.20	0.015	0.009	8.877		
1.30	1.30	0.016	0.011	9.622		
1.40	1.40	0.018	0.012	10.367		
1.50	1.50	0.019	0.014	11.113		
1.60	1.60	0.020	0.016	11.860		
1.70	1.70	0.021	0.018	12.607		

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Fence Stage (ft)	Water Stage (ft)	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)
1.80	1.80	0.023	0.020	13.356	
1.90	1.90	0.024	0.023	14.105	
2.00	2.00	0.025	0.025	14.854	

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	0.750	0.100	0.000	0.000	86.000	TR55	2.68	0.233
	Σ	**0.750**						**2.68**	**0.233**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	45.00	33.00	1.0000	1.0000	2	39.9	208,359	120.29	67.70
	Σ							**39.9**	**208,359**	**120.29**	**67.70**

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Project Connect at Blythewood Industrial Park

Silt Fence Calculations

Area C2

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay	Chewacla
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%	91.100%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%	70.700%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%	59.700%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%	58.800%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%	7.200%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%	4.400%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

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Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Silt Fence	#1	==>	End	0.000	0.000	Silt Fence Area C

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Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	2.250	2.250	8.05	0.70	207.0	339,595	196.06	111.50
	Out			8.03	0.70	25.7	85,535	9.42	0.44

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	88.100%	100.000%
0.0630	60.700%	100.000%
0.0440	54.800%	100.000%
0.0380	54.000%	100.000%
0.0040	9.300%	75.035%
0.0030	6.000%	48.410%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Silt Fence)

Silt Fence Area C

Silt Fence Inputs:

Fence Flow Rate (gpm/sq ft)	Width along contour (ft)	Height (ft)	Land Slope (%)	Tie-back distance (ft)
10.0	1,000.0	2.0	60.00	3.3

**Sediment Storage: 0.00 ac-ft*

**No sediment capacity defined*

Silt Fence Results:

Peak Fence Stage:	0.36 ft
Peak Water Stage:	0.36 ft
Dewater Time:	0.50 days
Trap Efficiency:	87.61 %

Dewatering time is calculated from peak stage to lowest spillway

Stage-Capacity-Discharge Table

Fence Stage (ft)	Water Stage (ft)	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
0.00	0.00	0.000	0.000	0.000		Top of Sediment
0.10	0.10	0.004	0.000	2.229	11.60	
0.20	0.20	0.008	0.001	4.458		
0.30	0.30	0.011	0.002	6.688		
0.36	0.36	0.014	0.002	8.032	0.00	Peak Stage
0.40	0.40	0.015	0.003	8.919		
0.50	0.50	0.019	0.005	11.150		
0.60	0.60	0.023	0.007	13.382		
0.70	0.70	0.027	0.009	15.615		
0.80	0.80	0.031	0.012	17.849		
0.90	0.90	0.034	0.015	20.084		
1.00	1.00	0.038	0.019	22.319		
1.10	1.10	0.042	0.023	24.555		
1.20	1.20	0.046	0.027	26.791		
1.30	1.30	0.050	0.032	29.029		
1.40	1.40	0.054	0.037	31.267		
1.50	1.50	0.057	0.043	33.506		
1.60	1.60	0.061	0.049	35.746		
1.70	1.70	0.065	0.055	37.986		

Fence Stage (ft)	Water Stage (ft)	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)
1.80	1.80	0.069	0.062	40.227	
1.90	1.90	0.073	0.069	42.469	
2.00	2.00	0.077	0.076	44.712	

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	2.250	0.100	0.000	0.000	86.000	TR55	8.05	0.702
	Σ	**2.250**						**8.05**	**0.702**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	90.00	33.00	1.0000	1.0000	2	207.0	339,595	196.06	111.50
	Σ							**207.0**	**339,595**	**196.06**	**111.50**

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Project Connect at Blythewood Industrial Park

Silt Fence Calculations

Area C3

Kayla Kernich, PE

General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	10 yr - 24 hr
Rainfall Depth:	5.300 inches

Particle Size Distribution:

Size (mm)	Blanton	Herndon	Lakeland	Pelion	Georgeville	Fuquay	Chewacla
1.4000	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%
1.0000	88.900%	88.100%	92.700%	88.700%	88.400%	92.300%	91.100%
0.0630	63.400%	60.700%	75.900%	62.700%	62.000%	74.600%	70.700%
0.0440	12.300%	54.800%	4.800%	18.800%	55.800%	14.600%	59.700%
0.0380	12.300%	54.000%	4.800%	18.800%	54.900%	14.300%	58.800%
0.0040	2.600%	9.300%	1.400%	3.100%	9.300%	1.900%	7.200%
0.0030	1.800%	6.000%	1.000%	1.900%	6.000%	1.200%	4.400%
0.0010	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

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Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Silt Fence	#1	==>	End	0.000	0.000	Silt Fence Area C

Structure Summary:

		Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#1	In	1.280	1.280	4.58	0.40	77.3	233,973	135.08	76.09
	Out			4.57	0.40	9.5	56,417	5.96	0.37

Particle Size Distribution(s) at Each Structure

Structure #1:

Size (mm)	In	Out
1.4000	100.000%	100.000%
1.0000	88.100%	100.000%
0.0630	60.700%	100.000%
0.0440	54.800%	100.000%
0.0380	54.000%	100.000%
0.0040	9.300%	75.939%
0.0030	6.000%	48.993%
0.0010	0.000%	0.000%

Structure Detail:

Structure #1 (Silt Fence)

Silt Fence Area C

Silt Fence Inputs:

Fence Flow Rate (gpm/sq ft)	Width along contour (ft)	Height (ft)	Land Slope (%)	Tie-back distance (ft)
10.0	590.0	2.0	60.00	3.3

**Sediment Storage: 0.00 ac-ft*

**No sediment capacity defined*

Silt Fence Results:

Peak Fence Stage:	0.35 ft
Peak Water Stage:	0.35 ft
Dewater Time:	0.50 days
Trap Efficiency:	87.75 %

Dewatering time is calculated from peak stage to lowest spillway

Stage-Capacity-Discharge Table

Fence Stage (ft)	Water Stage (ft)	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)	
0.00	0.00	0.000	0.000	0.000		Top of Sediment
0.10	0.10	0.002	0.000	1.315	11.70	
0.20	0.20	0.005	0.000	2.631		
0.30	0.30	0.007	0.001	3.947		
0.35	0.35	0.008	0.001	4.570	0.00	Peak Stage
0.40	0.40	0.009	0.002	5.264		
0.50	0.50	0.011	0.003	6.582		
0.60	0.60	0.014	0.004	7.901		
0.70	0.70	0.016	0.005	9.221		
0.80	0.80	0.018	0.007	10.541		
0.90	0.90	0.020	0.009	11.862		
1.00	1.00	0.023	0.011	13.183		
1.10	1.10	0.025	0.014	14.506		
1.20	1.20	0.027	0.016	15.829		
1.30	1.30	0.029	0.019	17.153		
1.40	1.40	0.032	0.022	18.477		
1.50	1.50	0.034	0.025	19.803		
1.60	1.60	0.036	0.029	21.129		
1.70	1.70	0.038	0.033	22.456		

Fence Stage (ft)	Water Stage (ft)	Area (ac)	Capacity (ac-ft)	Discharge (cfs)	Dewater Time (hrs)
1.80	1.80	0.041	0.037	23.783	
1.90	1.90	0.043	0.041	25.112	
2.00	2.00	0.045	0.045	26.441	

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	1.280	0.100	0.000	0.000	86.000	TR55	4.58	0.399
	Σ	**1.280**						**4.58**	**0.399**

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc (ml/l)	24VW (ml/l)
#1	1	0.150	50.00	33.00	1.0000	1.0000	2	77.3	233,973	135.08	76.09
	Σ							**77.3**	**233,973**	**135.08**	**76.09**

THOMAS & HUTTON

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STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX G

DOWNSTREAM ANALYSIS MODEL REPORTS

J – 27015.0007

December 2023

Simulation: 010yr

Scenario: Proposed 10% DSA
Run Date/Time: 12/14/2023 11:03:42 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	5.30 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 100yr

Scenario:	Proposed 10% DSA
Run Date/Time:	12/14/2023 11:06:07 AM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: Flood
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic
Dflt Damping (2D): 0.0050 ft
Min Node Srf Area (2D): 100 ft2
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False
Smp/Man Basin Rain Opt: Global
OF Region Rain Opt: Global
Rainfall Name: ~SCSII-24
Rainfall Amount: 8.30 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simple Basin: Basin01_DA

Scenario:	Proposed 10% DSA
Node:	Analysis Pt. 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	37.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	254.0000 ac
Curve Number:	73.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin02_DA

Scenario:	Proposed 10% DSA
Node:	Analysis Pt. 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	23.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	100.8700 ac
Curve Number:	79.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin03_DA

Scenario:	Proposed 10% DSA
Node:	Analysis Pt. 2
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	117.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	1303.2500 ac
Curve Number:	82.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin04_DA

Scenario:	Proposed 10% DSA
Node:	Analysis Pt. 3
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	31.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	468.8300 ac
Curve Number:	73.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin05_DA

Scenario:	Proposed 10% DSA
Node:	Analysis Pt. 4
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	139.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	1253.0800 ac
Curve Number:	69.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin06_DA

Scenario:	Proposed 10% DSA
Node:	Analysis Pt. 5
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	158.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	4036.3700 ac
Curve Number:	62.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin07_DA

Scenario:	Proposed 10% DSA
Node:	Analysis Pt. 6
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	204.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	2615.2800 ac
Curve Number:	69.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Basin08_DA

Scenario:	Proposed 10% DSA
Node:	Analysis Pt. 7
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	725.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	16101.5500 ac
Curve Number:	77.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Analysis Pt. 1

Scenario:	Proposed 10% DSA
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	332.00 ft
Warning Stage:	340.00 ft

Comment:

Node: Analysis Pt. 2

Scenario:	Proposed 10% DSA
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	315.80 ft
Warning Stage:	345.50 ft

Comment:

Node: Analysis Pt. 3

Scenario:	Proposed 10% DSA
Type:	Stage/Area

Base Flow: 0.00 cfs
Initial Stage: 294.50 ft
Warning Stage: 310.50 ft

Comment:

Node: Analysis Pt. 4

Scenario: Proposed 10% DSA
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 270.20 ft
Warning Stage: 279.20 ft

Comment:

Node: Analysis Pt. 5

Scenario: Proposed 10% DSA
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 258.70 ft
Warning Stage: 271.20 ft

Comment:

Node: Analysis Pt. 6

Scenario: Proposed 10% DSA
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 228.90 ft
Warning Stage: 243.80 ft

Comment:

Node: Analysis Pt. 7

Scenario: Proposed 10% DSA
Type: Time/Stage

Base Flow:	0.00 cfs
Initial Stage:	206.70 ft
Warning Stage:	298.10 ft
Boundary Stage:	

Comment:

Channel Link: L-0860C		Upstream		Downstream	
Scenario:	Proposed 10% DSA	Invert:	378.00 ft	Invert:	332.00 ft
From Node:	Outfall_B	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Analysis Pt. 1	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-1a_DA	Cross Section:	XS-1b_DA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	4247.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0870C		Upstream		Downstream	
Scenario:	Proposed 10% DSA	Invert:	347.00 ft	Invert:	332.00 ft
From Node:	Trib1-00-00	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Analysis Pt. 1	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-2a_DA	Cross Section:	XS-2b_DA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	1580.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0880C		Upstream		Downstream	
Scenario:	Proposed 10% DSA	Invert:	332.00 ft	Invert:	315.80 ft
From Node:	Analysis Pt. 1	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Analysis Pt. 2	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-3_DA	Cross Section:	XS-4_DA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	2847.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment:					

Channel Link: L-0890C		Upstream		Downstream	
Scenario:	Proposed 10% DSA	Invert:	315.80 ft	Invert:	294.50 ft
From Node:	Analysis Pt. 2	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Analysis Pt. 3	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-5_DA	Cross Section:	XS-6_DA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	3815.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment:					

Channel Link: L-0900C		Upstream		Downstream	
Scenario:	Proposed 10% DSA	Invert:	294.50 ft	Invert:	270.20 ft
From Node:	Analysis Pt. 3	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Analysis Pt. 4	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-7_DA	Cross Section:	XS-8_DA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	5633.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				

Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Channel Link: L-0910C		Upstream		Downstream	
Scenario:	Proposed 10% DSA	Invert:	270.20 ft	Invert:	258.70 ft
From Node:	Analysis Pt. 4	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Analysis Pt. 5	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-9_DA	Cross Section:	XS-9_DA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	2771.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0920C		Upstream		Downstream	
Scenario:	Proposed 10% DSA	Invert:	258.70 ft	Invert:	228.90 ft
From Node:	Analysis Pt. 5	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Analysis Pt. 6	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-10a_DA	Cross Section:	XS-10b_DA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	9216.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Link: L-0930C		Upstream		Downstream	
Scenario:	Proposed 10% DSA	Invert:	228.90 ft	Invert:	206.70 ft

From Node:	Analysis Pt. 6	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	Analysis Pt. 7	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	XS-11_DA	Cross Section:	XS-11_DA
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	9875.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

Channel Cross Section: XS-10a_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	285.87	0.0500
1	9.98	284.76	0.0500
2	19.96	283.42	0.0500
3	29.94	282.26	0.0500
4	39.92	281.00	0.0500
5	49.89	279.42	0.0500
6	59.87	277.86	0.0500
7	69.85	276.10	0.0500
8	79.83	274.32	0.0500
9	89.81	272.45	0.0500
10	99.79	270.62	0.0500
11	109.77	269.08	0.0500
12	119.75	267.68	0.0500
13	129.72	266.48	0.0500
14	139.70	265.21	0.0500
15	149.68	263.59	0.0500
16	159.66	261.34	0.0500
17	169.64	259.41	0.0500
18	179.62	258.83	0.0500
19	189.60	258.49	0.0500
20	199.58	258.24	0.0500
21	209.56	258.13	0.0500
22	219.53	258.52	0.0500
23	229.51	258.93	0.0500
24	239.49	258.84	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
25	249.47	258.94	0.0500
26	259.45	259.32	0.0500
27	269.43	256.56	0.0500
28	279.41	254.27	0.0500
29	289.39	255.40	0.0500
30	299.36	257.53	0.0500
31	309.34	259.10	0.0500
32	319.32	259.10	0.0500
33	329.30	258.98	0.0500
34	339.28	258.72	0.0500
35	349.26	258.65	0.0500
36	359.24	258.39	0.0500
37	369.22	258.33	0.0500
38	379.19	258.60	0.0500
39	389.17	258.53	0.0500
40	399.15	258.64	0.0500
41	409.13	258.38	0.0500
42	419.11	258.09	0.0500
43	429.09	258.40	0.0500
44	439.07	258.68	0.0500
45	449.05	258.49	0.0500
46	459.03	258.19	0.0500
47	469.00	258.08	0.0500
48	478.98	258.34	0.0500
49	488.96	258.47	0.0500
50	498.94	258.72	0.0500
51	508.92	258.70	0.0500
52	518.90	258.44	0.0500
53	528.88	258.41	0.0500
54	538.86	258.55	0.0500
55	548.83	258.74	0.0500
56	558.81	258.64	0.0500
57	568.79	258.42	0.0500
58	578.77	258.20	0.0500
59	588.75	258.10	0.0500
60	598.73	258.20	0.0500
61	608.71	258.30	0.0500
62	618.62	258.27	0.0500
63	628.53	258.44	0.0500
64	638.44	258.23	0.0500
65	648.35	258.42	0.0500
66	658.27	258.51	0.0500
67	668.18	258.21	0.0500
68	678.09	258.22	0.0500
69	688.00	258.18	0.0500
70	697.91	258.27	0.0500
71	707.83	258.09	0.0500
72	717.74	258.21	0.0500
73	727.65	258.13	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
74	737.56	258.29	0.0500
75	747.47	258.31	0.0500
76	757.38	258.20	0.0500
77	767.30	258.17	0.0500
78	777.21	258.11	0.0500
79	787.12	258.07	0.0500
80	797.03	258.04	0.0500
81	806.94	258.01	0.0500
82	816.85	258.19	0.0500
83	826.77	258.36	0.0500
84	836.68	258.34	0.0500
85	846.59	258.34	0.0500
86	856.50	258.39	0.0500
87	866.41	258.18	0.0500
88	876.33	258.35	0.0500
89	886.24	258.72	0.0500
90	896.15	258.74	0.0500
91	906.06	258.92	0.0500
92	915.97	259.59	0.0500
93	925.88	260.17	0.0500
94	935.80	260.43	0.0500
95	945.71	260.93	0.0500
96	955.62	261.63	0.0500
97	965.53	262.50	0.0500
98	975.44	263.47	0.0500
99	985.35	264.25	0.0500
100	995.27	265.10	0.0500
101	1005.18	265.68	0.0500
102	1015.09	266.29	0.0500
103	1025.00	266.76	0.0500
104	1034.91	266.93	0.0500
105	1044.82	267.98	0.0500
106	1054.74	268.66	0.0500
107	1064.65	269.41	0.0500
108	1074.56	270.30	0.0500
109	1084.47	270.65	0.0500
110	1094.38	271.10	0.0500
111	1104.30	271.74	0.0500
112	1114.21	272.24	0.0500
113	1124.12	272.95	0.0500
114	1134.03	273.55	0.0500
115	1143.94	274.12	0.0500
116	1153.85	274.45	0.0500
117	1163.77	274.75	0.0500
118	1173.68	275.40	0.0500
119	1183.59	276.23	0.0500
120	1193.50	276.97	0.0500
121	1203.41	277.68	0.0500
122	1213.32	277.79	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
123	1223.24	278.06	0.0500
124	1233.15	278.70	0.0500
125	1243.06	279.18	0.0500
126	1252.97	279.50	0.0500
127	1262.88	280.05	0.0500
128	1272.80	280.21	0.0500
129	1282.71	280.30	0.0500
130	1292.62	280.99	0.0500
131	1302.53	281.22	0.0500
132	1312.44	281.81	0.0500
133	1322.35	282.68	0.0500
134	1332.27	283.15	0.0500
135	1342.18	283.57	0.0500
136	1352.09	284.10	0.0500
137	1362.00	284.67	0.0500
138	1371.91	283.70	0.0500
139	1381.82	283.58	0.0500
140	1391.74	284.75	0.0500
141	1401.65	285.59	0.0500
142	1411.56	285.92	0.0500
143	1421.47	286.37	0.0500
144	1431.38	286.85	0.0500
145	1441.30	287.25	0.0500
146	1451.21	287.59	0.0500
147	1461.12	288.25	0.0500
148	1471.03	289.06	0.0500
149	1480.94	289.69	0.0500
150	1490.85	290.58	0.0500
151	1500.77	292.07	0.0500
152	1510.68	294.07	0.0500
153	1520.59	295.70	0.0500

Comment:

Channel Cross Section: XS-10b_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	270.70	0.0500
1	9.88	270.01	0.0500
2	19.77	269.38	0.0500
3	29.65	269.11	0.0500
4	39.53	268.54	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
5	49.41	268.08	0.0500
6	59.30	267.61	0.0500
7	69.18	267.02	0.0500
8	79.06	266.52	0.0500
9	88.95	265.96	0.0500
10	98.83	265.51	0.0500
11	108.71	264.95	0.0500
12	118.59	264.21	0.0500
13	128.48	263.35	0.0500
14	138.36	262.43	0.0500
15	148.24	261.65	0.0500
16	158.13	260.80	0.0500
17	168.01	260.04	0.0500
18	177.89	259.30	0.0500
19	187.77	258.34	0.0500
20	197.66	257.53	0.0500
21	207.54	256.98	0.0500
22	217.42	256.82	0.0500
23	227.31	255.52	0.0500
24	237.19	254.60	0.0500
25	247.07	254.11	0.0500
26	256.95	253.41	0.0500
27	266.84	252.72	0.0500
28	276.72	252.26	0.0500
29	286.60	251.57	0.0500
30	296.49	250.89	0.0500
31	306.37	250.46	0.0500
32	316.25	250.27	0.0500
33	326.13	250.09	0.0500
34	336.02	249.92	0.0500
35	345.90	249.97	0.0500
36	355.78	249.90	0.0500
37	365.67	249.84	0.0500
38	375.55	250.05	0.0500
39	385.43	249.86	0.0500
40	395.31	249.60	0.0500
41	405.20	249.49	0.0500
42	415.08	249.20	0.0500
43	424.96	248.60	0.0500
44	434.85	247.81	0.0500
45	444.73	246.95	0.0500
46	454.61	245.87	0.0500
47	464.49	245.18	0.0500
48	474.38	244.22	0.0500
49	484.26	242.96	0.0500
50	494.14	241.66	0.0500
51	504.03	240.38	0.0500
52	513.91	238.94	0.0500
53	523.79	238.57	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
54	533.67	238.66	0.0500
55	543.56	238.42	0.0500
56	553.44	238.59	0.0500
57	563.32	238.58	0.0500
58	573.21	238.26	0.0500
59	583.09	238.34	0.0500
60	592.97	238.55	0.0500
61	602.85	238.63	0.0500
62	612.74	238.80	0.0500
63	622.62	238.75	0.0500
64	632.50	238.37	0.0500
65	642.39	238.31	0.0500
66	652.27	238.73	0.0500
67	662.15	238.69	0.0500
68	672.03	238.56	0.0500
69	681.92	238.51	0.0500
70	691.80	238.40	0.0500
71	701.68	238.88	0.0500
72	711.57	238.66	0.0500
73	721.45	238.68	0.0500
74	731.33	238.73	0.0500
75	741.21	239.25	0.0500
76	751.10	239.66	0.0500
77	760.98	239.38	0.0500
78	770.86	239.26	0.0500
79	780.75	236.50	0.0500
80	790.63	234.33	0.0500
81	800.51	237.17	0.0500
82	810.39	238.38	0.0500
83	820.28	238.30	0.0500
84	830.16	238.54	0.0500
85	840.04	238.61	0.0500
86	849.98	238.58	0.0500
87	859.92	238.46	0.0500
88	869.86	238.33	0.0500
89	879.79	238.48	0.0500
90	889.73	238.81	0.0500
91	899.67	238.66	0.0500
92	909.61	238.54	0.0500
93	919.55	238.22	0.0500
94	929.48	238.29	0.0500
95	939.42	238.14	0.0500
96	949.36	238.27	0.0500
97	959.30	238.32	0.0500
98	969.24	238.44	0.0500
99	979.17	238.59	0.0500
100	989.11	238.20	0.0500
101	999.05	238.83	0.0500
102	1008.99	238.65	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
103	1018.93	238.58	0.0500
104	1028.86	237.97	0.0500
105	1038.80	238.30	0.0500
106	1048.74	238.66	0.0500
107	1058.68	238.41	0.0500
108	1068.62	238.24	0.0500
109	1078.55	238.61	0.0500
110	1088.49	238.32	0.0500
111	1098.43	238.13	0.0500
112	1108.37	238.10	0.0500
113	1118.31	238.24	0.0500
114	1128.24	238.10	0.0500
115	1138.18	238.00	0.0500
116	1148.12	238.20	0.0500
117	1158.06	238.36	0.0500
118	1168.00	238.44	0.0500
119	1177.93	238.79	0.0500
120	1187.87	238.49	0.0500
121	1197.81	238.64	0.0500
122	1207.75	238.00	0.0500
123	1217.68	238.62	0.0500
124	1227.62	238.95	0.0500
125	1237.56	239.08	0.0500
126	1247.50	239.58	0.0500
127	1257.44	239.96	0.0500
128	1267.37	239.79	0.0500
129	1277.31	239.80	0.0500
130	1287.25	239.96	0.0500
131	1297.19	239.44	0.0500
132	1307.13	239.75	0.0500
133	1317.06	239.98	0.0500
134	1327.00	239.73	0.0500
135	1336.94	239.32	0.0500
136	1346.88	239.59	0.0500
137	1356.82	240.08	0.0500
138	1366.75	240.03	0.0500
139	1376.69	240.12	0.0500
140	1386.63	240.08	0.0500
141	1396.57	240.11	0.0500
142	1406.51	239.61	0.0500
143	1416.44	238.97	0.0500
144	1426.38	239.04	0.0500
145	1436.32	239.64	0.0500
146	1446.26	239.69	0.0500
147	1456.20	239.69	0.0500
148	1466.13	239.88	0.0500
149	1476.07	239.73	0.0500
150	1486.01	240.06	0.0500
151	1495.95	239.95	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
152	1505.89	239.20	0.0500
153	1515.82	238.85	0.0500
154	1525.76	239.45	0.0500
155	1535.70	240.01	0.0500
156	1545.64	239.93	0.0500
157	1555.58	240.10	0.0500
158	1565.51	240.25	0.0500
159	1575.45	240.43	0.0500
160	1585.39	241.00	0.0500
161	1595.33	240.86	0.0500
162	1605.26	240.92	0.0500
163	1615.20	241.26	0.0500
164	1625.14	241.57	0.0500
165	1635.08	241.68	0.0500
166	1645.02	241.71	0.0500
167	1654.95	241.78	0.0500
168	1664.89	242.00	0.0500
169	1674.83	242.47	0.0500
170	1684.77	242.63	0.0500
171	1694.71	242.86	0.0500
172	1704.64	243.33	0.0500
173	1714.58	243.68	0.0500
174	1724.52	244.31	0.0500
175	1734.46	244.91	0.0500
176	1744.40	245.40	0.0500
177	1754.33	245.87	0.0500
178	1764.27	247.69	0.0500
179	1774.21	249.63	0.0500
180	1784.15	251.68	0.0500
181	1794.09	253.79	0.0500
182	1804.02	256.01	0.0500
183	1813.96	258.19	0.0500
184	1823.90	260.26	0.0500
185	1833.84	261.96	0.0500
186	1843.78	263.75	0.0500
187	1853.71	265.37	0.0500
188	1863.65	267.10	0.0500
189	1873.59	268.62	0.0500
190	1883.53	270.02	0.0500
191	1893.47	271.24	0.0500
192	1903.40	272.46	0.0500
193	1913.34	273.75	0.0500
194	1923.28	274.88	0.0500

Comment:

Channel Cross Section: XS-11_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	287.22	0.0500
1	9.98	286.32	0.0500
2	19.97	285.53	0.0500
3	29.95	284.59	0.0500
4	39.93	283.67	0.0500
5	49.91	282.94	0.0500
6	59.90	282.14	0.0500
7	69.88	280.98	0.0500
8	79.86	280.07	0.0500
9	89.84	279.27	0.0500
10	99.83	278.49	0.0500
11	109.81	277.44	0.0500
12	119.79	276.22	0.0500
13	129.77	274.84	0.0500
14	139.76	273.44	0.0500
15	149.74	272.09	0.0500
16	159.72	270.33	0.0500
17	169.70	268.78	0.0500
18	179.69	267.64	0.0500
19	189.67	266.56	0.0500
20	199.65	265.19	0.0500
21	209.63	263.87	0.0500
22	219.62	262.77	0.0500
23	229.60	261.88	0.0500
24	239.58	260.59	0.0500
25	249.56	259.58	0.0500
26	259.55	258.52	0.0500
27	269.53	257.46	0.0500
28	279.51	257.19	0.0500
29	289.49	256.63	0.0500
30	299.48	255.88	0.0500
31	309.46	254.33	0.0500
32	319.44	253.50	0.0500
33	329.42	252.88	0.0500
34	339.41	252.12	0.0500
35	349.39	251.52	0.0500
36	359.37	250.85	0.0500
37	369.35	249.62	0.0500
38	379.34	248.69	0.0500
39	389.32	247.33	0.0500
40	399.30	246.27	0.0500
41	409.28	245.16	0.0500
42	419.27	243.72	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
43	429.25	242.19	0.0500
44	439.23	240.64	0.0500
45	449.21	239.35	0.0500
46	459.20	237.89	0.0500
47	469.18	236.27	0.0500
48	479.16	234.84	0.0500
49	489.14	234.01	0.0500
50	499.13	233.39	0.0500
51	509.11	233.19	0.0500
52	519.09	232.51	0.0500
53	529.07	232.61	0.0500
54	539.06	233.36	0.0500
55	549.04	233.41	0.0500
56	559.02	233.34	0.0500
57	569.00	232.90	0.0500
58	578.99	232.63	0.0500
59	588.97	232.80	0.0500
60	598.95	232.22	0.0500
61	608.94	232.51	0.0500
62	618.92	232.45	0.0500
63	628.90	232.41	0.0500
64	638.88	232.38	0.0500
65	648.87	232.64	0.0500
66	658.85	232.69	0.0500
67	668.83	232.61	0.0500
68	678.81	232.33	0.0500
69	688.80	232.27	0.0500
70	698.78	232.31	0.0500
71	708.76	232.86	0.0500
72	718.74	232.68	0.0500
73	728.73	232.99	0.0500
74	738.71	232.91	0.0500
75	748.69	232.77	0.0500
76	758.67	232.34	0.0500
77	768.66	232.18	0.0500
78	778.64	231.30	0.0500
79	788.62	230.98	0.0500
80	798.60	231.01	0.0500
81	808.59	231.62	0.0500
82	818.57	232.23	0.0500
83	828.55	232.15	0.0500
84	838.53	232.02	0.0500
85	848.52	232.39	0.0500
86	858.50	232.69	0.0500
87	868.48	233.11	0.0500
88	878.46	233.15	0.0500
89	888.45	233.20	0.0500
90	898.43	233.18	0.0500
91	908.41	232.79	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
92	918.39	230.45	0.0500
93	928.38	229.08	0.0500
94	938.36	229.97	0.0500
95	948.34	231.74	0.0500
96	958.32	233.01	0.0500
97	968.31	233.43	0.0500
98	978.29	233.41	0.0500
99	988.27	233.40	0.0500
100	998.25	233.39	0.0500
101	1008.24	233.16	0.0500
102	1018.22	233.11	0.0500
103	1028.20	233.29	0.0500
104	1038.18	233.41	0.0500
105	1048.10	233.23	0.0500
106	1058.01	233.09	0.0500
107	1067.93	233.08	0.0500
108	1077.84	233.02	0.0500
109	1087.76	232.94	0.0500
110	1097.67	232.73	0.0500
111	1107.59	232.48	0.0500
112	1117.50	232.22	0.0500
113	1127.41	232.37	0.0500
114	1137.33	232.81	0.0500
115	1147.24	233.05	0.0500
116	1157.16	233.36	0.0500
117	1167.07	233.33	0.0500
118	1176.99	233.35	0.0500
119	1186.90	233.34	0.0500
120	1196.82	233.31	0.0500
121	1206.73	233.33	0.0500
122	1216.64	233.24	0.0500
123	1226.56	233.35	0.0500
124	1236.47	233.19	0.0500
125	1246.39	232.86	0.0500
126	1256.30	232.72	0.0500
127	1266.22	232.40	0.0500
128	1276.13	233.65	0.0500
129	1286.05	233.88	0.0500
130	1295.96	233.99	0.0500
131	1305.87	234.02	0.0500
132	1315.79	234.07	0.0500
133	1325.70	234.20	0.0500
134	1335.62	234.22	0.0500
135	1345.53	234.23	0.0500
136	1355.45	234.09	0.0500
137	1365.36	234.15	0.0500
138	1375.28	234.67	0.0500
139	1385.19	234.92	0.0500
140	1395.10	234.75	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
141	1405.02	234.75	0.0500
142	1414.93	234.80	0.0500
143	1424.85	234.68	0.0500
144	1434.76	234.10	0.0500
145	1444.68	234.43	0.0500
146	1454.59	234.52	0.0500
147	1464.51	234.59	0.0500
148	1474.42	234.57	0.0500
149	1484.33	234.70	0.0500
150	1494.25	234.88	0.0500
151	1504.16	234.76	0.0500
152	1514.08	234.61	0.0500
153	1523.99	234.47	0.0500
154	1533.91	234.45	0.0500
155	1543.82	234.28	0.0500
156	1553.74	234.17	0.0500
157	1563.65	233.13	0.0500
158	1573.56	233.19	0.0500
159	1583.48	233.43	0.0500
160	1593.39	232.54	0.0500
161	1603.31	232.22	0.0500
162	1613.22	233.07	0.0500
163	1623.14	231.41	0.0500
164	1633.05	227.87	0.0500
165	1642.97	227.98	0.0500
166	1652.88	231.65	0.0500
167	1662.79	234.16	0.0500
168	1672.71	234.76	0.0500
169	1682.62	234.89	0.0500
170	1692.54	235.20	0.0500
171	1702.45	236.02	0.0500
172	1712.37	237.62	0.0500
173	1722.28	239.06	0.0500
174	1732.20	240.17	0.0500
175	1742.11	241.11	0.0500
176	1752.02	242.02	0.0500
177	1761.94	243.15	0.0500
178	1771.85	244.25	0.0500
179	1781.77	245.30	0.0500
180	1791.68	246.08	0.0500
181	1801.60	246.70	0.0500
182	1811.51	247.51	0.0500
183	1821.43	248.35	0.0500
184	1831.34	248.92	0.0500
185	1841.25	249.47	0.0500
186	1851.17	250.15	0.0500
187	1861.08	250.70	0.0500
188	1871.00	251.23	0.0500
189	1880.91	252.03	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
190	1890.83	252.84	0.0500
191	1900.74	253.54	0.0500
192	1910.66	254.28	0.0500
193	1920.57	254.88	0.0500
194	1930.48	255.45	0.0500
195	1940.40	256.04	0.0500
196	1950.31	256.66	0.0500
197	1960.23	257.05	0.0500
198	1970.14	257.30	0.0500
199	1980.06	257.45	0.0500
200	1989.97	259.08	0.0500
201	1999.89	260.14	0.0500
202	2009.80	261.24	0.0500
203	2019.46	262.10	0.0500
204	2029.13	263.21	0.0500
205	2038.79	264.32	0.0500
206	2048.46	265.54	0.0500
207	2058.12	266.57	0.0500
208	2067.79	267.71	0.0500
209	2077.45	268.71	0.0500
210	2087.12	269.59	0.0500
211	2096.78	270.50	0.0500
212	2106.45	271.51	0.0500
213	2116.11	272.52	0.0500
214	2125.77	273.47	0.0500
215	2135.44	274.43	0.0500
216	2145.10	275.42	0.0500
217	2154.77	276.17	0.0500
218	2164.43	276.82	0.0500
219	2174.10	277.61	0.0500
220	2183.76	278.49	0.0500
221	2193.43	279.30	0.0500
222	2203.09	280.14	0.0500
223	2212.75	281.00	0.0500
224	2222.42	281.87	0.0500
225	2232.08	282.50	0.0500
226	2241.75	283.49	0.0500
227	2251.41	284.13	0.0500

Comment:

Channel Cross Section: XS-1a_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	417.90	0.0350
1	9.98	417.41	0.0350
2	19.95	416.77	0.0350
3	29.93	415.96	0.0350
4	39.91	415.47	0.0350
5	49.88	414.71	0.0350
6	59.86	413.95	0.0350
7	69.84	413.25	0.0350
8	79.81	412.70	0.0350
9	89.79	411.55	0.0350
10	99.77	410.83	0.0350
11	109.74	409.83	0.0350
12	119.72	408.85	0.0350
13	129.70	407.91	0.0350
14	139.67	406.77	0.0350
15	149.65	405.52	0.0350
16	159.63	404.11	0.0350
17	169.61	402.22	0.0350
18	179.58	400.33	0.0350
19	189.56	398.52	0.0350
20	199.54	396.90	0.0350
21	209.51	394.91	0.0350
22	219.49	392.79	0.0350
23	229.47	391.12	0.0350
24	239.44	389.27	0.0350
25	249.42	387.23	0.0350
26	259.40	385.63	0.0350
27	269.37	384.13	0.0350
28	279.35	382.02	0.0350
29	289.33	380.52	0.0350
30	299.30	379.35	0.0350
31	309.28	378.31	0.0350
32	319.26	377.44	0.0350
33	329.23	377.06	0.0350
34	339.21	376.73	0.0350
35	349.19	376.58	0.0350
36	359.16	376.18	0.0350
37	369.14	375.41	0.0350
38	379.12	374.83	0.0350
39	389.09	374.37	0.0350
40	399.07	374.15	0.0350
41	409.05	373.54	0.0350
42	419.02	372.75	0.0350
43	429.00	371.81	0.0350
44	438.98	370.92	0.0350
45	448.96	369.87	0.0350
46	458.93	368.83	0.0350
47	468.91	368.29	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
48	478.89	367.34	0.0350
49	488.86	366.06	0.0350
50	498.84	364.68	0.0350
51	508.82	364.41	0.0350
52	518.79	364.25	0.0350
53	528.77	364.29	0.0350
54	538.75	364.17	0.0350
55	548.72	363.89	0.0350
56	558.70	362.14	0.0350
57	568.68	359.15	0.0350
58	578.65	362.47	0.0350
59	588.63	363.60	0.0350
60	598.61	363.43	0.0350
61	608.58	363.31	0.0350
62	618.56	363.34	0.0350
63	628.54	363.46	0.0350
64	638.51	363.85	0.0350
65	648.49	364.11	0.0350
66	658.47	364.09	0.0350
67	668.44	364.36	0.0350
68	678.42	364.81	0.0350
69	688.40	365.21	0.0350
70	698.37	365.80	0.0350
71	708.35	366.42	0.0350
72	718.33	366.99	0.0350
73	728.31	367.61	0.0350
74	738.28	368.22	0.0350
75	748.26	368.99	0.0350
76	758.24	370.70	0.0350
77	768.21	373.62	0.0350
78	778.19	374.44	0.0350
79	788.17	375.72	0.0350
80	798.14	379.78	0.0350
81	808.12	384.77	0.0350
82	818.10	389.11	0.0350
83	828.07	393.16	0.0350
84	838.05	396.78	0.0350
85	848.03	400.85	0.0350
86	858.00	404.02	0.0350
87	867.98	407.43	0.0350
88	877.96	410.85	0.0350
89	887.93	413.91	0.0350
90	897.91	416.52	0.0350
91	907.89	418.81	0.0350
92	917.86	421.26	0.0350
93	927.84	423.52	0.0350
94	937.82	425.72	0.0350
95	947.79	427.83	0.0350
96	957.77	429.47	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
97	967.75	431.29	0.0350
98	977.72	432.74	0.0350
99	987.70	434.59	0.0350
100	997.68	436.40	0.0350
101	1007.66	438.37	0.0350
102	1017.63	440.85	0.0350
103	1027.61	442.06	0.0350
104	1037.59	442.68	0.0350
105	1047.56	443.41	0.0350
106	1057.54	444.08	0.0350
107	1067.52	444.24	0.0350
108	1077.49	444.62	0.0350
109	1087.47	445.47	0.0350
110	1097.45	446.20	0.0350
111	1107.42	446.89	0.0350
112	1117.40	448.21	0.0350
113	1127.38	449.91	0.0350
114	1137.35	451.26	0.0350
115	1147.33	451.89	0.0350
116	1157.31	452.68	0.0350
117	1167.28	453.45	0.0350
118	1177.26	453.91	0.0350
119	1187.24	454.53	0.0350
120	1197.21	455.27	0.0350
121	1207.19	455.91	0.0350
122	1217.17	456.29	0.0350
123	1227.14	456.18	0.0350

Comment:

Channel Cross Section: XS-1b_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	389.96	0.0350
1	9.92	390.01	0.0350
2	19.85	390.16	0.0350
3	29.77	390.21	0.0350
4	39.69	390.27	0.0350
5	49.61	390.37	0.0350
6	59.54	390.59	0.0350
7	69.46	388.84	0.0350
8	79.38	387.60	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
9	89.30	387.56	0.0350
10	99.23	387.55	0.0350
11	109.15	387.45	0.0350
12	119.07	386.49	0.0350
13	128.99	385.39	0.0350
14	138.92	384.66	0.0350
15	148.84	384.38	0.0350
16	158.76	384.19	0.0350
17	168.69	383.64	0.0350
18	178.61	382.88	0.0350
19	188.53	381.78	0.0350
20	198.45	379.88	0.0350
21	208.38	377.68	0.0350
22	218.30	373.30	0.0350
23	228.22	368.82	0.0350
24	238.14	366.74	0.0350
25	248.07	365.30	0.0350
26	257.99	362.88	0.0350
27	267.91	357.65	0.0350
28	277.84	352.65	0.0350
29	287.76	351.68	0.0350
30	297.68	351.62	0.0350
31	307.60	351.81	0.0350
32	317.53	351.49	0.0350
33	327.45	351.32	0.0350
34	337.37	351.73	0.0350
35	347.29	351.45	0.0350
36	357.22	351.29	0.0350
37	367.14	351.48	0.0350
38	377.06	351.56	0.0350
39	386.98	351.69	0.0350
40	396.91	351.45	0.0350
41	406.83	351.50	0.0350
42	416.75	351.56	0.0350
43	426.68	351.39	0.0350
44	436.60	351.76	0.0350
45	446.52	352.20	0.0350
46	456.44	352.15	0.0350
47	466.37	352.25	0.0350
48	476.29	351.62	0.0350
49	486.21	350.54	0.0350
50	496.13	352.98	0.0350
51	506.06	353.91	0.0350
52	515.98	354.45	0.0350
53	525.90	354.94	0.0350
54	535.83	355.59	0.0350
55	545.75	356.12	0.0350
56	555.67	356.77	0.0350
57	565.59	357.08	0.0350

Order	Station [ft]	Elevation [ft]	Manning's N
58	575.52	357.57	0.0350
59	585.44	357.79	0.0350
60	595.36	357.92	0.0350
61	605.28	358.26	0.0350
62	615.21	358.57	0.0350
63	625.13	358.74	0.0350
64	635.05	359.20	0.0350
65	644.97	359.42	0.0350
66	654.90	359.98	0.0350
67	664.82	360.69	0.0350
68	674.74	361.18	0.0350
69	684.67	361.38	0.0350
70	694.59	361.34	0.0350
71	704.51	361.57	0.0350
72	714.43	361.76	0.0350
73	724.36	361.98	0.0350
74	734.28	362.34	0.0350
75	744.20	362.72	0.0350
76	754.12	363.24	0.0350
77	764.05	363.91	0.0350
78	773.97	364.79	0.0350
79	783.89	365.73	0.0350
80	793.82	366.38	0.0350
81	803.74	367.61	0.0350
82	813.66	368.77	0.0350
83	823.58	370.00	0.0350
84	833.51	371.94	0.0350
85	843.43	372.91	0.0350
86	853.35	374.85	0.0350
87	863.27	377.30	0.0350
88	873.20	379.89	0.0350
89	883.12	381.67	0.0350
90	893.04	383.54	0.0350
91	902.96	385.12	0.0350
92	912.89	387.14	0.0350
93	922.81	388.29	0.0350
94	932.73	389.35	0.0350
95	942.66	390.50	0.0350
96	952.58	391.66	0.0350
97	962.50	392.65	0.0350

Comment:

Channel Cross Section: XS-1c_DA

Scenario: Proposed 10% DSA

Lid: No

Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	414.13	0.0500
1	1.00	414.13	0.0500
2	2.00	414.13	0.0500
3	3.00	413.87	0.0500
4	4.00	413.52	0.0500
5	5.00	413.32	0.0500
6	6.00	413.32	0.0500
7	6.99	413.32	0.0500
8	7.99	413.32	0.0500
9	8.99	413.32	0.0500
10	9.99	412.96	0.0500
11	10.99	412.92	0.0500
12	11.99	412.92	0.0500
13	12.99	412.92	0.0500
14	13.99	412.92	0.0500
15	14.99	412.92	0.0500
16	15.99	412.92	0.0500
17	16.99	412.92	0.0500
18	17.99	412.92	0.0500
19	18.99	412.92	0.0500
20	19.99	412.92	0.0500
21	20.98	412.30	0.0500
22	21.98	412.12	0.0500
23	22.98	412.12	0.0500
24	23.98	412.12	0.0500
25	24.98	412.12	0.0500
26	25.98	411.81	0.0500
27	26.98	411.45	0.0500
28	27.98	411.30	0.0500
29	28.98	411.30	0.0500
30	29.98	411.30	0.0500
31	30.98	411.30	0.0500
32	31.98	410.88	0.0500
33	32.98	410.66	0.0500
34	33.97	410.66	0.0500
35	34.97	410.66	0.0500
36	35.97	410.66	0.0500
37	36.97	410.66	0.0500
38	37.97	410.66	0.0500
39	38.97	410.66	0.0500
40	39.97	410.66	0.0500
41	40.97	410.66	0.0500
42	41.97	410.66	0.0500
43	42.97	410.18	0.0500
44	43.97	409.76	0.0500
45	44.97	409.76	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
46	45.97	409.76	0.0500
47	46.97	409.76	0.0500
48	47.96	409.75	0.0500
49	48.96	409.33	0.0500
50	49.96	408.92	0.0500
51	50.96	408.82	0.0500
52	51.96	408.82	0.0500
53	52.96	408.82	0.0500
54	53.96	408.24	0.0500
55	54.96	407.44	0.0500
56	55.96	407.44	0.0500
57	56.96	407.44	0.0500
58	57.96	407.44	0.0500
59	58.96	407.44	0.0500
60	59.96	407.44	0.0500
61	60.95	407.44	0.0500
62	61.95	407.44	0.0500
63	62.95	407.44	0.0500
64	63.95	407.44	0.0500
65	64.95	407.06	0.0500
66	65.95	406.15	0.0500
67	66.95	406.15	0.0500
68	67.95	406.15	0.0500
69	68.95	406.15	0.0500
70	69.95	406.15	0.0500
71	70.95	406.05	0.0500
72	71.95	405.53	0.0500
73	72.95	405.00	0.0500
74	73.95	404.95	0.0500
75	74.94	404.95	0.0500
76	75.94	404.63	0.0500
77	76.94	403.14	0.0500
78	77.94	403.14	0.0500
79	78.94	403.14	0.0500
80	79.94	403.14	0.0500
81	80.94	403.14	0.0500
82	81.94	403.14	0.0500
83	82.94	403.14	0.0500
84	83.94	403.14	0.0500
85	84.94	403.14	0.0500
86	85.94	403.14	0.0500
87	86.94	403.03	0.0500
88	87.93	401.40	0.0500
89	88.93	401.32	0.0500
90	89.93	401.32	0.0500
91	90.93	401.32	0.0500
92	91.93	401.32	0.0500
93	92.93	401.32	0.0500
94	93.93	401.14	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
95	94.93	400.60	0.0500
96	95.93	400.11	0.0500
97	96.93	400.11	0.0500
98	97.93	400.11	0.0500
99	98.93	398.50	0.0500
100	99.93	398.19	0.0500
101	100.93	398.19	0.0500
102	101.92	398.19	0.0500
103	102.92	398.19	0.0500
104	103.92	398.19	0.0500
105	104.92	398.19	0.0500
106	105.92	398.19	0.0500
107	106.92	398.19	0.0500
108	107.92	398.19	0.0500
109	108.92	398.19	0.0500
110	109.92	396.88	0.0500
111	110.92	396.37	0.0500
112	111.92	396.37	0.0500
113	112.92	396.37	0.0500
114	113.92	396.37	0.0500
115	114.91	396.37	0.0500
116	115.91	396.37	0.0500
117	116.91	395.97	0.0500
118	117.91	395.17	0.0500
119	118.91	394.56	0.0500
120	119.91	394.56	0.0500
121	120.91	393.36	0.0500
122	121.91	392.56	0.0500
123	122.91	392.56	0.0500
124	123.91	392.56	0.0500
125	124.91	392.56	0.0500
126	125.91	392.56	0.0500
127	126.91	392.56	0.0500
128	127.91	392.56	0.0500
129	128.90	392.56	0.0500
130	129.90	392.56	0.0500
131	130.90	392.56	0.0500
132	131.90	391.54	0.0500
133	132.90	390.44	0.0500
134	133.90	390.44	0.0500
135	134.90	390.44	0.0500
136	135.90	390.44	0.0500
137	136.90	390.44	0.0500
138	137.90	390.44	0.0500
139	138.90	390.44	0.0500
140	139.90	389.91	0.0500
141	140.90	389.13	0.0500
142	141.89	388.65	0.0500
143	142.89	387.95	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
144	143.89	386.72	0.0500
145	144.89	386.72	0.0500
146	145.89	386.72	0.0500
147	146.89	386.72	0.0500
148	147.89	386.72	0.0500
149	148.89	386.72	0.0500
150	149.89	386.72	0.0500
151	150.89	386.72	0.0500
152	151.89	386.72	0.0500
153	152.89	386.72	0.0500
154	153.89	386.26	0.0500
155	154.89	384.82	0.0500
156	155.88	384.82	0.0500
157	156.88	384.82	0.0500
158	157.88	384.82	0.0500
159	158.88	384.82	0.0500
160	159.88	384.82	0.0500
161	160.88	384.82	0.0500
162	161.88	384.82	0.0500
163	162.88	384.13	0.0500
164	163.88	383.30	0.0500
165	164.88	382.73	0.0500
166	165.88	381.46	0.0500
167	166.88	381.46	0.0500
168	167.88	381.46	0.0500
169	168.88	381.46	0.0500
170	169.87	381.46	0.0500
171	170.87	381.46	0.0500
172	171.87	381.46	0.0500
173	172.87	381.46	0.0500
174	173.87	381.46	0.0500
175	174.87	381.46	0.0500
176	175.87	381.45	0.0500
177	176.87	380.03	0.0500
178	177.87	379.88	0.0500
179	178.87	379.88	0.0500
180	179.87	379.88	0.0500
181	180.87	379.88	0.0500
182	181.87	379.88	0.0500
183	182.86	379.88	0.0500
184	183.86	379.88	0.0500
185	184.86	379.88	0.0500
186	185.86	379.38	0.0500
187	186.86	378.86	0.0500
188	187.86	377.67	0.0500
189	188.86	377.39	0.0500
190	189.86	377.39	0.0500
191	190.86	377.39	0.0500
192	191.86	377.39	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
193	192.86	377.39	0.0500
194	193.86	377.39	0.0500
195	194.86	377.39	0.0500
196	195.86	377.39	0.0500
197	196.85	377.39	0.0500
198	197.85	377.39	0.0500
199	198.85	376.83	0.0500
200	199.85	376.54	0.0500
201	200.85	376.54	0.0500
202	201.85	376.54	0.0500
203	202.85	376.54	0.0500
204	203.85	376.54	0.0500
205	204.85	376.54	0.0500
206	205.85	376.54	0.0500
207	206.85	376.54	0.0500
208	207.85	376.51	0.0500
209	208.85	376.25	0.0500
210	209.84	375.40	0.0500
211	210.84	374.83	0.0500
212	211.84	374.83	0.0500
213	212.84	374.83	0.0500
214	213.84	374.83	0.0500
215	214.84	374.83	0.0500
216	215.84	374.83	0.0500
217	216.84	374.83	0.0500
218	217.84	374.83	0.0500
219	218.84	374.83	0.0500
220	219.84	374.83	0.0500
221	220.84	374.66	0.0500
222	221.84	374.45	0.0500
223	222.84	374.45	0.0500
224	223.83	374.45	0.0500
225	224.83	374.45	0.0500
226	225.83	374.45	0.0500
227	226.83	374.45	0.0500
228	227.83	374.45	0.0500
229	228.83	374.45	0.0500
230	229.83	374.45	0.0500
231	230.83	374.43	0.0500
232	231.83	374.34	0.0500
233	232.83	374.43	0.0500
234	233.83	374.43	0.0500
235	234.83	374.43	0.0500
236	235.83	374.43	0.0500
237	236.82	374.43	0.0500
238	237.82	374.43	0.0500
239	238.82	374.43	0.0500
240	239.82	374.43	0.0500
241	240.82	374.43	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
242	241.82	374.43	0.0500
243	242.82	374.28	0.0500
244	243.82	373.61	0.0500
245	244.82	373.61	0.0500
246	245.82	373.61	0.0500
247	246.82	373.61	0.0500
248	247.82	373.61	0.0500
249	248.82	373.61	0.0500
250	249.82	373.61	0.0500
251	250.81	373.61	0.0500
252	251.81	373.61	0.0500
253	252.81	373.61	0.0500
254	253.81	373.75	0.0500
255	254.81	374.84	0.0500
256	255.81	375.76	0.0500
257	256.81	375.76	0.0500
258	257.81	375.76	0.0500
259	258.81	375.76	0.0500
260	259.81	375.76	0.0500
261	260.81	375.76	0.0500
262	261.81	375.76	0.0500
263	262.81	375.76	0.0500
264	263.80	375.76	0.0500
265	264.80	375.76	0.0500
266	265.80	373.96	0.0500
267	266.80	373.64	0.0500
268	267.80	373.64	0.0500
269	268.80	373.64	0.0500
270	269.80	373.64	0.0500
271	270.80	373.64	0.0500
272	271.80	373.64	0.0500
273	272.80	373.64	0.0500
274	273.80	373.64	0.0500
275	274.80	373.64	0.0500
276	275.80	373.64	0.0500
277	276.80	372.78	0.0500
278	277.79	372.30	0.0500
279	278.79	372.21	0.0500
280	279.79	372.21	0.0500
281	280.79	372.21	0.0500
282	281.79	372.21	0.0500
283	282.79	372.21	0.0500
284	283.79	372.21	0.0500
285	284.79	372.21	0.0500
286	285.79	372.21	0.0500
287	286.79	372.21	0.0500
288	287.79	371.91	0.0500
289	288.79	371.71	0.0500
290	289.79	371.71	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
291	290.78	371.71	0.0500
292	291.78	371.71	0.0500
293	292.78	371.71	0.0500
294	293.78	371.71	0.0500
295	294.78	371.71	0.0500
296	295.78	371.71	0.0500
297	296.78	371.71	0.0500
298	297.78	371.71	0.0500
299	298.78	371.28	0.0500
300	299.78	370.92	0.0500
301	300.78	371.02	0.0500
302	301.78	371.07	0.0500
303	302.78	371.07	0.0500
304	303.78	371.07	0.0500
305	304.77	371.07	0.0500
306	305.77	371.07	0.0500
307	306.77	371.07	0.0500
308	307.77	371.07	0.0500
309	308.77	371.07	0.0500
310	309.77	370.54	0.0500
311	310.77	369.65	0.0500
312	311.77	369.65	0.0500
313	312.77	369.65	0.0500
314	313.77	369.65	0.0500
315	314.77	369.65	0.0500
316	315.77	369.65	0.0500
317	316.77	369.65	0.0500
318	317.76	369.65	0.0500
319	318.76	369.65	0.0500
320	319.76	369.65	0.0500
321	320.76	369.41	0.0500
322	321.76	368.70	0.0500
323	322.76	368.47	0.0500
324	323.76	368.23	0.0500
325	324.76	368.14	0.0500
326	325.76	368.14	0.0500
327	326.76	368.14	0.0500
328	327.76	368.14	0.0500
329	328.76	368.14	0.0500
330	329.76	368.14	0.0500
331	330.76	368.14	0.0500
332	331.75	368.07	0.0500
333	332.75	367.56	0.0500
334	333.75	367.56	0.0500
335	334.75	367.56	0.0500
336	335.75	367.56	0.0500
337	336.75	367.56	0.0500
338	337.75	367.56	0.0500
339	338.75	367.56	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
340	339.75	367.56	0.0500
341	340.75	367.56	0.0500
342	341.75	367.56	0.0500
343	342.75	367.55	0.0500
344	343.75	367.06	0.0500
345	344.74	366.99	0.0500
346	345.74	366.78	0.0500
347	346.74	366.57	0.0500
348	347.74	366.53	0.0500
349	348.74	366.53	0.0500
350	349.74	366.53	0.0500
351	350.74	366.53	0.0500
352	351.74	366.53	0.0500
353	352.74	366.53	0.0500
354	353.74	366.53	0.0500
355	354.74	366.19	0.0500
356	355.74	366.10	0.0500
357	356.74	366.10	0.0500
358	357.74	366.10	0.0500
359	358.73	366.10	0.0500
360	359.73	366.10	0.0500
361	360.73	366.10	0.0500
362	361.73	366.10	0.0500
363	362.73	366.10	0.0500
364	363.73	366.10	0.0500
365	364.73	366.10	0.0500
366	365.73	365.92	0.0500
367	366.73	365.83	0.0500
368	367.73	365.77	0.0500
369	368.73	365.54	0.0500
370	369.73	365.30	0.0500
371	370.73	365.29	0.0500
372	371.72	365.29	0.0500
373	372.72	365.29	0.0500
374	373.72	365.29	0.0500
375	374.72	365.29	0.0500
376	375.72	365.29	0.0500
377	376.72	365.07	0.0500
378	377.72	364.89	0.0500
379	378.72	364.89	0.0500
380	379.72	364.89	0.0500
381	380.72	364.89	0.0500
382	381.72	364.89	0.0500
383	382.72	364.89	0.0500
384	383.72	364.89	0.0500
385	384.72	364.89	0.0500
386	385.71	364.89	0.0500
387	386.71	364.89	0.0500
388	387.71	364.74	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
389	388.71	364.56	0.0500
390	389.71	364.56	0.0500
391	390.71	364.49	0.0500
392	391.71	364.34	0.0500
393	392.71	364.20	0.0500
394	393.71	364.20	0.0500
395	394.71	364.20	0.0500
396	395.71	364.20	0.0500
397	396.71	364.20	0.0500
398	397.71	364.20	0.0500
399	398.70	364.11	0.0500
400	399.70	363.92	0.0500
401	400.70	363.92	0.0500
402	401.70	363.92	0.0500
403	402.70	363.92	0.0500
404	403.70	363.92	0.0500
405	404.70	363.92	0.0500
406	405.70	363.92	0.0500
407	406.70	363.92	0.0500
408	407.70	363.92	0.0500
409	408.70	363.92	0.0500
410	409.70	363.78	0.0500
411	410.70	363.22	0.0500
412	411.70	363.22	0.0500
413	412.69	363.22	0.0500
414	413.69	363.20	0.0500
415	414.69	363.16	0.0500
416	415.69	363.13	0.0500
417	416.69	363.13	0.0500
418	417.69	363.13	0.0500
419	418.69	363.13	0.0500
420	419.69	363.13	0.0500
421	420.69	363.09	0.0500
422	421.69	362.51	0.0500
423	422.69	362.49	0.0500
424	423.69	362.49	0.0500
425	424.69	362.49	0.0500
426	425.68	362.49	0.0500
427	426.68	362.49	0.0500
428	427.68	362.49	0.0500
429	428.68	362.49	0.0500
430	429.68	362.49	0.0500
431	430.68	362.49	0.0500
432	431.68	362.49	0.0500
433	432.68	362.36	0.0500
434	433.68	362.33	0.0500
435	434.68	362.33	0.0500
436	435.68	362.33	0.0500
437	436.68	362.24	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
438	437.68	362.11	0.0500
439	438.68	362.04	0.0500
440	439.67	362.04	0.0500
441	440.67	362.04	0.0500
442	441.67	362.04	0.0500
443	442.67	362.04	0.0500
444	443.67	361.81	0.0500
445	444.67	361.73	0.0500
446	445.67	361.73	0.0500
447	446.67	361.73	0.0500
448	447.67	361.73	0.0500
449	448.67	361.73	0.0500
450	449.67	361.73	0.0500
451	450.67	361.73	0.0500
452	451.67	361.73	0.0500
453	452.66	361.73	0.0500
454	453.66	361.73	0.0500
455	454.66	361.49	0.0500
456	455.66	361.35	0.0500
457	456.66	361.35	0.0500
458	457.66	361.35	0.0500
459	458.66	361.35	0.0500
460	459.66	361.33	0.0500
461	460.66	361.30	0.0500
462	461.66	361.30	0.0500
463	462.66	361.30	0.0500
464	463.65	361.30	0.0500
465	464.65	361.30	0.0500
466	465.65	361.30	0.0500
467	466.65	361.30	0.0500
468	467.65	361.30	0.0500
469	468.65	360.77	0.0500
470	469.65	359.99	0.0500
471	470.65	359.98	0.0500
472	471.64	359.76	0.0500
473	472.64	357.51	0.0500
474	473.64	357.18	0.0500
475	474.64	357.18	0.0500
476	475.64	357.18	0.0500
477	476.64	357.18	0.0500
478	477.64	357.18	0.0500
479	478.63	357.18	0.0500
480	479.63	357.18	0.0500
481	480.63	357.18	0.0500
482	481.63	357.18	0.0500
483	482.63	357.18	0.0500
484	483.63	357.18	0.0500
485	484.63	357.65	0.0500
486	485.62	358.80	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
487	486.62	360.02	0.0500
488	487.62	360.06	0.0500
489	488.62	360.06	0.0500
490	489.62	360.06	0.0500
491	490.62	360.06	0.0500
492	491.62	360.06	0.0500
493	492.62	360.06	0.0500
494	493.61	360.06	0.0500
495	494.61	360.06	0.0500
496	495.61	360.06	0.0500
497	496.61	360.35	0.0500
498	497.61	361.17	0.0500
499	498.61	361.17	0.0500
500	499.61	361.17	0.0500
501	500.60	361.17	0.0500
502	501.60	361.17	0.0500
503	502.60	360.86	0.0500
504	503.60	360.39	0.0500
505	504.60	360.37	0.0500
506	505.60	360.37	0.0500
507	506.60	360.37	0.0500
508	507.60	360.37	0.0500
509	508.59	360.37	0.0500
510	509.59	360.28	0.0500
511	510.59	360.25	0.0500
512	511.59	360.25	0.0500
513	512.59	360.25	0.0500
514	513.59	360.25	0.0500
515	514.59	360.25	0.0500
516	515.58	360.25	0.0500
517	516.58	360.25	0.0500
518	517.58	360.25	0.0500
519	518.58	360.25	0.0500
520	519.58	360.14	0.0500
521	520.58	359.96	0.0500
522	521.58	360.12	0.0500
523	522.58	360.33	0.0500
524	523.57	360.33	0.0500
525	524.57	360.33	0.0500
526	525.57	360.33	0.0500
527	526.57	360.33	0.0500
528	527.57	360.33	0.0500
529	528.57	360.33	0.0500
530	529.57	360.33	0.0500
531	530.56	360.33	0.0500
532	531.56	360.33	0.0500
533	532.56	360.33	0.0500
534	533.56	360.36	0.0500
535	534.56	360.50	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
536	535.56	360.51	0.0500
537	536.56	360.43	0.0500
538	537.56	360.31	0.0500
539	538.55	360.30	0.0500
540	539.55	360.30	0.0500
541	540.55	360.30	0.0500
542	541.55	360.30	0.0500
543	542.55	360.30	0.0500
544	543.55	360.30	0.0500
545	544.55	360.30	0.0500
546	545.54	360.30	0.0500
547	546.54	360.33	0.0500
548	547.54	360.34	0.0500
549	548.54	360.34	0.0500
550	549.54	360.34	0.0500
551	550.54	360.34	0.0500
552	551.54	360.34	0.0500
553	552.53	360.34	0.0500
554	553.53	360.39	0.0500
555	554.53	360.47	0.0500
556	555.53	360.47	0.0500
557	556.53	360.47	0.0500
558	557.53	360.47	0.0500
559	558.53	360.44	0.0500
560	559.53	360.37	0.0500
561	560.52	360.37	0.0500
562	561.52	360.37	0.0500
563	562.52	360.37	0.0500
564	563.52	360.37	0.0500
565	564.52	360.37	0.0500
566	565.52	360.37	0.0500
567	566.52	360.37	0.0500
568	567.51	360.37	0.0500
569	568.51	360.37	0.0500
570	569.51	360.37	0.0500
571	570.51	360.33	0.0500
572	571.51	360.26	0.0500
573	572.51	360.26	0.0500
574	573.51	360.26	0.0500
575	574.51	360.26	0.0500
576	575.50	360.26	0.0500
577	576.50	360.26	0.0500
578	577.50	360.26	0.0500
579	578.50	360.26	0.0500
580	579.50	360.26	0.0500
581	580.50	360.26	0.0500
582	581.50	360.26	0.0500
583	582.49	360.26	0.0500
584	583.49	360.38	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
585	584.49	360.50	0.0500
586	585.49	360.50	0.0500
587	586.49	360.50	0.0500
588	587.49	360.37	0.0500
589	588.49	360.17	0.0500
590	589.49	360.15	0.0500
591	590.48	360.15	0.0500
592	591.48	360.15	0.0500
593	592.48	360.15	0.0500
594	593.48	360.15	0.0500
595	594.48	360.15	0.0500
596	595.48	360.15	0.0500
597	596.48	360.14	0.0500
598	597.47	360.14	0.0500
599	598.47	360.14	0.0500
600	599.47	360.14	0.0500
601	600.47	360.14	0.0500
602	601.47	360.14	0.0500
603	602.47	360.14	0.0500
604	603.47	360.14	0.0500
605	604.47	360.06	0.0500
606	605.46	359.91	0.0500
607	606.46	359.89	0.0500
608	607.46	359.89	0.0500
609	608.46	359.71	0.0500
610	609.46	359.63	0.0500
611	610.46	359.63	0.0500
612	611.46	359.63	0.0500
613	612.45	359.63	0.0500
614	613.45	359.63	0.0500
615	614.45	359.63	0.0500
616	615.45	359.63	0.0500
617	616.45	359.63	0.0500
618	617.45	359.63	0.0500
619	618.45	359.63	0.0500
620	619.44	359.63	0.0500
621	620.44	359.42	0.0500
622	621.44	359.15	0.0500
623	622.44	359.30	0.0500
624	623.44	359.32	0.0500
625	624.44	359.32	0.0500
626	625.44	359.32	0.0500
627	626.44	359.32	0.0500
628	627.43	359.32	0.0500
629	628.43	359.32	0.0500
630	629.43	359.32	0.0500
631	630.43	359.32	0.0500
632	631.43	359.32	0.0500
633	632.43	359.34	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
634	633.43	359.62	0.0500
635	634.42	359.67	0.0500
636	635.42	359.67	0.0500
637	636.42	359.67	0.0500
638	637.42	359.67	0.0500
639	638.42	359.84	0.0500
640	639.42	360.15	0.0500
641	640.42	360.19	0.0500
642	641.42	360.19	0.0500
643	642.41	360.19	0.0500
644	643.41	360.19	0.0500
645	644.41	360.19	0.0500
646	645.41	360.19	0.0500
647	646.41	360.19	0.0500
648	647.41	360.19	0.0500
649	648.41	360.19	0.0500
650	649.40	360.19	0.0500
651	650.40	360.19	0.0500
652	651.40	360.19	0.0500
653	652.40	360.19	0.0500
654	653.40	360.19	0.0500
655	654.40	360.19	0.0500
656	655.40	360.32	0.0500
657	656.40	360.55	0.0500
658	657.39	360.85	0.0500
659	658.39	361.71	0.0500
660	659.39	361.71	0.0500
661	660.39	361.71	0.0500
662	661.39	361.71	0.0500
663	662.39	361.71	0.0500
664	663.39	361.71	0.0500
665	664.38	361.71	0.0500
666	665.38	361.71	0.0500
667	666.38	361.71	0.0500
668	667.38	361.71	0.0500
669	668.38	361.71	0.0500
670	669.38	361.71	0.0500
671	670.38	362.11	0.0500
672	671.38	362.25	0.0500
673	672.37	362.47	0.0500
674	673.37	362.86	0.0500
675	674.37	362.92	0.0500
676	675.37	362.92	0.0500
677	676.37	362.92	0.0500
678	677.37	362.92	0.0500
679	678.37	362.92	0.0500
680	679.36	362.92	0.0500
681	680.36	362.92	0.0500
682	681.36	362.92	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
683	682.36	363.15	0.0500
684	683.36	363.47	0.0500
685	684.36	363.47	0.0500
686	685.36	363.47	0.0500
687	686.36	363.47	0.0500
688	687.35	363.47	0.0500
689	688.35	363.47	0.0500
690	689.35	363.58	0.0500
691	690.35	363.78	0.0500
692	691.35	363.82	0.0500
693	692.35	363.82	0.0500
694	693.35	363.82	0.0500
695	694.34	363.82	0.0500
696	695.34	363.83	0.0500
697	696.34	363.83	0.0500
698	697.34	363.83	0.0500
699	698.34	363.83	0.0500
700	699.34	363.83	0.0500
701	700.34	363.83	0.0500
702	701.33	363.83	0.0500
703	702.33	363.83	0.0500
704	703.33	363.83	0.0500
705	704.33	363.83	0.0500
706	705.33	363.83	0.0500
707	706.33	363.99	0.0500
708	707.33	364.71	0.0500
709	708.33	365.03	0.0500
710	709.32	365.03	0.0500
711	710.32	365.03	0.0500
712	711.32	365.03	0.0500
713	712.32	365.03	0.0500
714	713.32	365.03	0.0500
715	714.32	365.03	0.0500
716	715.32	365.03	0.0500
717	716.31	365.03	0.0500
718	717.31	365.03	0.0500
719	718.31	365.03	0.0500
720	719.31	365.21	0.0500
721	720.31	365.66	0.0500
722	721.31	365.66	0.0500
723	722.31	365.66	0.0500
724	723.31	365.79	0.0500
725	724.30	366.04	0.0500
726	725.30	366.09	0.0500
727	726.30	366.09	0.0500
728	727.30	366.09	0.0500
729	728.30	366.09	0.0500
730	729.30	366.09	0.0500
731	730.30	366.09	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
732	731.29	366.09	0.0500
733	732.29	366.90	0.0500
734	733.29	367.12	0.0500
735	734.29	367.12	0.0500
736	735.29	367.12	0.0500
737	736.29	367.12	0.0500
738	737.29	367.12	0.0500
739	738.29	367.12	0.0500
740	739.28	367.12	0.0500
741	740.28	367.38	0.0500
742	741.28	367.90	0.0500
743	742.28	368.00	0.0500
744	743.28	368.00	0.0500
745	744.28	369.41	0.0500
746	745.28	370.96	0.0500
747	746.27	370.96	0.0500
748	747.27	370.96	0.0500
749	748.27	370.96	0.0500
750	749.27	370.96	0.0500
751	750.27	370.96	0.0500
752	751.27	370.96	0.0500
753	752.27	370.96	0.0500
754	753.27	370.96	0.0500
755	754.26	370.96	0.0500
756	755.26	370.96	0.0500
757	756.26	371.18	0.0500
758	757.26	372.29	0.0500
759	758.26	372.32	0.0500
760	759.26	372.32	0.0500
761	760.26	372.32	0.0500
762	761.25	372.32	0.0500
763	762.25	372.32	0.0500
764	763.25	372.32	0.0500
765	764.25	372.32	0.0500
766	765.25	372.32	0.0500
767	766.25	372.32	0.0500
768	767.25	372.32	0.0500
769	768.24	372.32	0.0500
770	769.24	373.05	0.0500
771	770.24	373.43	0.0500
772	771.24	373.43	0.0500
773	772.24	373.43	0.0500
774	773.24	373.43	0.0500
775	774.24	373.87	0.0500
776	775.24	374.78	0.0500
777	776.23	374.99	0.0500
778	777.23	374.99	0.0500
779	778.23	374.99	0.0500
780	779.23	374.99	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
781	780.23	374.99	0.0500
782	781.23	375.98	0.0500
783	782.23	377.87	0.0500
784	783.22	377.87	0.0500
785	784.22	377.87	0.0500
786	785.22	377.87	0.0500
787	786.22	377.87	0.0500
788	787.22	377.87	0.0500
789	788.22	377.87	0.0500
790	789.22	377.87	0.0500
791	790.22	377.87	0.0500
792	791.21	378.11	0.0500
793	792.21	378.62	0.0500
794	793.21	378.83	0.0500
795	794.21	380.97	0.0500
796	795.21	381.39	0.0500
797	796.21	381.39	0.0500
798	797.21	381.39	0.0500
799	798.20	381.39	0.0500
800	799.20	381.39	0.0500
801	800.20	381.39	0.0500
802	801.20	381.39	0.0500
803	802.20	381.39	0.0500
804	803.20	381.39	0.0500
805	804.20	381.39	0.0500
806	805.20	381.39	0.0500
807	806.19	383.05	0.0500
808	807.19	384.54	0.0500
809	808.19	384.66	0.0500
810	809.19	384.93	0.0500
811	810.19	384.99	0.0500
812	811.19	384.99	0.0500
813	812.19	384.99	0.0500
814	813.18	384.99	0.0500
815	814.18	384.99	0.0500
816	815.18	384.99	0.0500
817	816.18	384.99	0.0500
818	817.18	384.99	0.0500
819	818.18	385.66	0.0500
820	819.18	388.08	0.0500
821	820.18	388.08	0.0500
822	821.17	388.08	0.0500
823	822.17	388.08	0.0500
824	823.17	388.08	0.0500
825	824.17	388.08	0.0500
826	825.17	388.30	0.0500
827	826.17	388.81	0.0500
828	827.17	388.94	0.0500
829	828.16	388.94	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
830	829.16	388.94	0.0500
831	830.16	388.94	0.0500
832	831.16	391.15	0.0500
833	832.16	392.06	0.0500
834	833.16	392.06	0.0500
835	834.16	392.06	0.0500
836	835.16	392.06	0.0500
837	836.15	392.06	0.0500
838	837.15	392.06	0.0500
839	838.15	392.06	0.0500
840	839.15	392.06	0.0500
841	840.15	392.06	0.0500
842	841.15	392.06	0.0500
843	842.15	392.24	0.0500
844	843.14	393.90	0.0500
845	844.14	395.90	0.0500
846	845.14	395.90	0.0500
847	846.14	395.90	0.0500
848	847.14	395.90	0.0500
849	848.14	395.90	0.0500
850	849.14	395.90	0.0500
851	850.13	395.90	0.0500
852	851.13	395.90	0.0500
853	852.13	395.90	0.0500
854	853.13	395.90	0.0500
855	854.13	395.90	0.0500
856	855.13	396.20	0.0500
857	856.13	399.04	0.0500
858	857.13	399.41	0.0500
859	858.12	399.41	0.0500
860	859.12	399.52	0.0500
861	860.12	399.77	0.0500
862	861.12	399.84	0.0500
863	862.12	399.84	0.0500
864	863.12	399.84	0.0500
865	864.12	399.84	0.0500
866	865.11	399.84	0.0500
867	866.11	399.84	0.0500
868	867.11	399.84	0.0500
869	868.11	401.70	0.0500
870	869.11	403.05	0.0500
871	870.11	403.05	0.0500
872	871.11	403.05	0.0500
873	872.11	403.05	0.0500
874	873.10	403.05	0.0500
875	874.10	403.05	0.0500
876	875.10	403.05	0.0500
877	876.10	403.28	0.0500
878	877.10	403.84	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
879	878.10	404.00	0.0500
880	879.10	404.00	0.0500
881	880.09	404.81	0.0500
882	881.09	407.01	0.0500
883	882.09	407.01	0.0500
884	883.09	407.01	0.0500
885	884.09	407.01	0.0500
886	885.09	407.01	0.0500
887	886.09	407.01	0.0500
888	887.09	407.01	0.0500
889	888.08	407.01	0.0500
890	889.08	407.01	0.0500
891	890.08	407.01	0.0500
892	891.08	407.01	0.0500
893	892.08	407.01	0.0500
894	893.08	410.00	0.0500
895	894.08	411.18	0.0500
896	895.07	411.29	0.0500
897	896.07	411.29	0.0500
898	897.07	411.29	0.0500
899	898.07	411.29	0.0500
900	899.07	411.29	0.0500
901	900.07	411.29	0.0500
902	901.07	411.29	0.0500
903	902.07	411.29	0.0500

Comment:

Channel Cross Section: XS-1d_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	360.03	0.0500
1	9.84	359.60	0.0500
2	19.68	359.28	0.0500
3	29.52	359.02	0.0500
4	39.35	358.67	0.0500
5	49.19	358.37	0.0500
6	59.03	358.11	0.0500
7	68.87	357.93	0.0500
8	78.71	357.70	0.0500
9	88.55	357.27	0.0500
10	98.38	357.06	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
11	108.22	356.88	0.0500
12	118.06	356.43	0.0500
13	127.90	356.06	0.0500
14	137.74	355.92	0.0500
15	147.58	355.98	0.0500
16	157.41	355.98	0.0500
17	167.25	355.57	0.0500
18	177.09	354.98	0.0500
19	186.93	354.90	0.0500
20	196.77	354.56	0.0500
21	206.61	354.07	0.0500
22	216.45	353.94	0.0500
23	226.28	353.64	0.0500
24	236.12	353.37	0.0500
25	245.96	353.01	0.0500
26	255.80	352.69	0.0500
27	265.64	352.48	0.0500
28	275.53	352.21	0.0500
29	285.42	351.70	0.0500
30	295.31	351.18	0.0500
31	305.20	350.58	0.0500
32	315.09	350.20	0.0500
33	324.98	349.54	0.0500
34	334.88	349.31	0.0500
35	344.77	348.95	0.0500
36	354.66	348.62	0.0500
37	364.55	348.41	0.0500
38	374.44	348.13	0.0500
39	384.33	347.86	0.0500
40	394.22	347.80	0.0500
41	404.11	347.34	0.0500
42	414.01	347.46	0.0500
43	423.90	347.32	0.0500
44	433.79	347.04	0.0500
45	443.68	346.87	0.0500
46	453.57	346.67	0.0500
47	463.46	346.47	0.0500
48	473.35	346.04	0.0500
49	483.24	345.86	0.0500
50	493.14	345.53	0.0500
51	503.03	345.20	0.0500
52	512.92	344.60	0.0500
53	522.81	344.04	0.0500
54	532.70	343.20	0.0500
55	542.59	342.70	0.0500
56	552.48	342.18	0.0500
57	562.37	341.86	0.0500
58	572.26	341.62	0.0500
59	582.16	341.29	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
60	592.05	340.86	0.0500
61	601.94	341.02	0.0500
62	611.74	340.89	0.0500
63	621.54	340.77	0.0500
64	631.34	340.60	0.0500
65	641.14	340.83	0.0500
66	650.94	341.45	0.0500
67	660.73	341.51	0.0500
68	670.53	341.46	0.0500
69	680.33	341.79	0.0500
70	690.13	341.46	0.0500
71	699.93	341.41	0.0500
72	709.73	340.52	0.0500
73	719.53	338.77	0.0500
74	729.33	341.73	0.0500
75	739.13	345.51	0.0500
76	748.93	348.69	0.0500
77	758.73	351.72	0.0500
78	768.53	355.55	0.0500
79	778.33	358.59	0.0500
80	788.13	360.99	0.0500
81	797.93	362.94	0.0500
82	807.72	364.96	0.0500
83	817.52	366.99	0.0500
84	827.32	368.86	0.0500
85	837.12	370.33	0.0500
86	846.92	370.60	0.0500
87	856.72	371.05	0.0500

Comment:

Channel Cross Section: XS-2a_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	373.21	0.0500
1	9.92	371.31	0.0500
2	19.84	369.61	0.0500
3	29.76	367.72	0.0500
4	39.67	365.85	0.0500
5	49.59	363.76	0.0500
6	59.51	361.32	0.0500
7	69.43	358.74	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
8	79.35	355.37	0.0500
9	89.27	352.18	0.0500
10	99.19	350.26	0.0500
11	109.10	349.79	0.0500
12	119.02	349.49	0.0500
13	125.00	346.98	0.0500
14	135.00	346.98	0.0500
15	138.86	348.94	0.0500
16	148.78	349.51	0.0500
17	158.70	349.43	0.0500
18	168.62	349.48	0.0500
19	178.53	349.24	0.0500
20	188.45	349.34	0.0500
21	198.37	349.74	0.0500
22	208.29	350.25	0.0500
23	218.21	350.69	0.0500
24	228.13	351.13	0.0500
25	238.05	351.45	0.0500
26	247.97	351.85	0.0500
27	257.88	352.09	0.0500
28	267.80	352.44	0.0500
29	277.72	352.72	0.0500
30	287.64	352.94	0.0500
31	297.59	353.26	0.0500
32	307.54	353.96	0.0500
33	317.48	354.20	0.0500
34	327.43	354.31	0.0500
35	337.38	354.87	0.0500
36	347.33	356.01	0.0500
37	357.27	356.38	0.0500
38	367.22	356.90	0.0500
39	377.17	357.64	0.0500
40	387.12	358.48	0.0500
41	397.07	359.26	0.0500
42	407.01	359.84	0.0500
43	416.96	360.57	0.0500
44	426.91	361.31	0.0500
45	436.86	362.18	0.0500
46	446.80	363.16	0.0500
47	456.75	364.48	0.0500
48	466.70	365.84	0.0500
49	476.65	367.51	0.0500
50	486.60	369.00	0.0500
51	496.54	370.44	0.0500
52	506.49	371.87	0.0500
53	516.44	373.17	0.0500
54	526.39	374.47	0.0500

Comment:

Channel Cross Section: XS-2b_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	361.29	0.0500
1	9.89	360.12	0.0500
2	19.78	359.02	0.0500
3	29.67	357.79	0.0500
4	39.56	356.45	0.0500
5	49.45	355.37	0.0500
6	59.34	354.30	0.0500
7	69.23	352.95	0.0500
8	79.12	351.93	0.0500
9	89.01	350.38	0.0500
10	98.90	349.21	0.0500
11	108.79	348.59	0.0500
12	118.69	348.06	0.0500
13	128.58	347.58	0.0500
14	138.47	346.88	0.0500
15	148.36	346.38	0.0500
16	158.25	345.85	0.0500
17	168.14	345.54	0.0500
18	178.03	345.10	0.0500
19	187.92	344.67	0.0500
20	197.81	344.32	0.0500
21	207.70	344.04	0.0500
22	217.59	343.70	0.0500
23	227.48	343.43	0.0500
24	237.37	343.15	0.0500
25	247.26	342.84	0.0500
26	257.15	343.05	0.0500
27	267.04	342.79	0.0500
28	276.93	342.65	0.0500
29	286.82	342.58	0.0500
30	296.71	342.52	0.0500
31	306.60	342.33	0.0500
32	316.49	342.38	0.0500
33	326.38	342.05	0.0500
34	336.27	341.86	0.0500
35	346.16	341.21	0.0500
36	356.06	341.02	0.0500
37	365.95	340.88	0.0500
38	375.84	340.57	0.0500
39	385.73	340.70	0.0500
40	395.62	340.85	0.0500
41	405.51	340.67	0.0500
42	415.40	341.03	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
43	425.29	340.41	0.0500
44	435.18	340.16	0.0500
45	445.07	340.26	0.0500
46	454.72	340.21	0.0500
47	464.37	340.37	0.0500
48	474.02	340.40	0.0500
49	483.67	340.37	0.0500
50	493.32	340.05	0.0500
51	498.00	336.81	0.0500
52	508.00	336.81	0.0500
53	512.63	338.40	0.0500
54	522.47	340.34	0.0500
55	532.31	340.20	0.0500
56	542.15	340.36	0.0500
57	551.99	340.54	0.0500
58	561.83	340.70	0.0500
59	571.67	340.67	0.0500
60	581.51	340.55	0.0500
61	591.36	340.90	0.0500
62	601.20	340.59	0.0500
63	611.04	340.53	0.0500
64	620.88	340.61	0.0500
65	630.72	340.68	0.0500
66	640.56	340.51	0.0500
67	650.40	340.55	0.0500
68	660.24	341.02	0.0500
69	670.08	342.64	0.0500
70	679.92	345.04	0.0500
71	689.77	347.26	0.0500
72	699.61	348.97	0.0500
73	709.45	350.26	0.0500
74	719.29	350.93	0.0500
75	729.13	351.32	0.0500
76	738.97	351.69	0.0500
77	748.81	351.96	0.0500
78	758.65	351.99	0.0500
79	768.49	352.22	0.0500
80	778.34	352.35	0.0500
81	788.18	352.45	0.0500
82	798.02	352.52	0.0500
83	807.86	352.78	0.0500
84	817.69	353.10	0.0500
85	827.53	353.45	0.0500
86	837.37	353.71	0.0500
87	847.21	354.01	0.0500
88	857.05	354.22	0.0500
89	866.88	354.82	0.0500
90	876.72	354.95	0.0500
91	886.56	355.18	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
92	896.40	355.98	0.0500
93	906.24	356.11	0.0500
94	916.07	355.96	0.0500
95	925.91	355.93	0.0500
96	935.75	356.21	0.0500
97	945.59	356.68	0.0500
98	955.43	357.07	0.0500
99	965.26	357.07	0.0500
100	975.10	357.50	0.0500
101	984.94	357.92	0.0500
102	994.78	357.94	0.0500
103	1004.61	358.29	0.0500
104	1014.45	358.46	0.0500
105	1024.29	358.90	0.0500
106	1034.13	359.15	0.0500
107	1043.97	359.42	0.0500
108	1053.80	359.81	0.0500
109	1063.64	360.28	0.0500

Comment:

Channel Cross Section: XS-3_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	367.71	0.0500
1	9.87	366.77	0.0500
2	19.74	365.66	0.0500
3	29.61	364.47	0.0500
4	39.48	363.30	0.0500
5	49.34	361.88	0.0500
6	59.21	360.70	0.0500
7	69.08	359.42	0.0500
8	78.95	358.44	0.0500
9	88.82	357.19	0.0500
10	98.69	356.01	0.0500
11	108.56	354.79	0.0500
12	118.43	353.88	0.0500
13	128.29	352.97	0.0500
14	138.16	352.19	0.0500
15	148.03	351.65	0.0500
16	157.90	351.48	0.0500
17	167.77	350.83	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
18	177.64	350.14	0.0500
19	187.51	349.25	0.0500
20	197.38	348.19	0.0500
21	207.25	347.26	0.0500
22	217.11	346.54	0.0500
23	226.98	345.75	0.0500
24	236.85	344.96	0.0500
25	246.72	344.49	0.0500
26	256.59	343.74	0.0500
27	266.46	342.20	0.0500
28	276.33	341.54	0.0500
29	286.20	340.86	0.0500
30	296.07	340.73	0.0500
31	305.93	340.26	0.0500
32	315.80	339.84	0.0500
33	325.67	339.32	0.0500
34	335.54	338.99	0.0500
35	345.41	338.79	0.0500
36	355.28	338.23	0.0500
37	365.15	337.35	0.0500
38	375.02	336.98	0.0500
39	385.00	336.73	0.0500
40	394.98	336.31	0.0500
41	404.97	336.32	0.0500
42	414.95	336.05	0.0500
43	424.93	336.05	0.0500
44	434.92	336.25	0.0500
45	444.90	336.21	0.0500
46	454.88	336.05	0.0500
47	464.87	336.25	0.0500
48	474.85	336.27	0.0500
49	484.84	336.11	0.0500
50	494.82	336.03	0.0500
51	504.80	336.05	0.0500
52	514.79	336.01	0.0500
53	524.77	336.12	0.0500
54	534.75	334.79	0.0500
55	540.00	332.29	0.0500
56	550.00	332.29	0.0500
57	554.72	333.89	0.0500
58	564.70	336.14	0.0500
59	574.69	335.88	0.0500
60	584.67	335.57	0.0500
61	594.65	336.21	0.0500
62	604.64	336.87	0.0500
63	614.62	336.96	0.0500
64	624.61	336.99	0.0500
65	634.59	336.86	0.0500
66	644.57	336.85	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
67	654.56	337.12	0.0500
68	664.54	337.14	0.0500
69	674.52	337.08	0.0500
70	684.51	337.16	0.0500
71	694.49	337.12	0.0500
72	704.47	337.12	0.0500
73	714.46	337.09	0.0500
74	724.44	337.03	0.0500
75	734.42	337.00	0.0500
76	744.41	336.95	0.0500
77	754.39	337.02	0.0500
78	764.38	337.20	0.0500
79	774.36	337.48	0.0500
80	784.34	337.96	0.0500
81	794.33	338.69	0.0500
82	804.31	339.58	0.0500
83	814.29	340.50	0.0500
84	824.28	341.91	0.0500
85	833.66	343.87	0.0500
86	843.04	345.85	0.0500
87	852.42	347.90	0.0500
88	861.80	349.93	0.0500
89	871.18	352.22	0.0500
90	880.57	354.39	0.0500
91	889.95	356.86	0.0500
92	899.33	359.25	0.0500
93	908.71	361.86	0.0500
94	918.09	364.47	0.0500

Comment:

Channel Cross Section: XS-4_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	365.57	0.0500
1	9.89	364.73	0.0500
2	19.78	364.00	0.0500
3	29.67	363.38	0.0500
4	39.56	362.68	0.0500
5	49.45	361.91	0.0500
6	59.34	361.49	0.0500
7	69.24	361.05	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
8	79.13	360.33	0.0500
9	89.02	359.70	0.0500
10	98.91	358.95	0.0500
11	108.80	358.12	0.0500
12	118.69	357.36	0.0500
13	128.58	356.54	0.0500
14	138.47	355.76	0.0500
15	148.36	354.83	0.0500
16	158.25	353.76	0.0500
17	168.14	352.38	0.0500
18	178.03	351.08	0.0500
19	187.93	349.66	0.0500
20	197.82	348.63	0.0500
21	207.71	347.74	0.0500
22	217.60	346.82	0.0500
23	227.49	345.48	0.0500
24	237.38	343.63	0.0500
25	247.27	341.61	0.0500
26	257.16	340.03	0.0500
27	267.05	338.87	0.0500
28	276.94	337.69	0.0500
29	286.83	336.25	0.0500
30	296.72	334.84	0.0500
31	306.62	333.22	0.0500
32	316.51	331.47	0.0500
33	326.40	329.98	0.0500
34	336.29	327.93	0.0500
35	346.18	325.99	0.0500
36	356.07	324.61	0.0500
37	365.96	323.88	0.0500
38	375.85	323.45	0.0500
39	385.74	323.38	0.0500
40	395.63	323.18	0.0500
41	405.52	322.94	0.0500
42	415.41	322.67	0.0500
43	425.31	322.40	0.0500
44	435.20	322.14	0.0500
45	445.09	322.30	0.0500
46	454.98	320.57	0.0500
47	464.87	319.79	0.0500
48	474.76	319.25	0.0500
49	484.65	319.02	0.0500
50	494.54	320.24	0.0500
51	504.43	321.49	0.0500
52	514.32	321.07	0.0500
53	524.21	320.26	0.0500
54	534.10	319.52	0.0500
55	543.99	319.44	0.0500
56	553.89	321.27	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
57	563.78	322.02	0.0500
58	573.67	321.72	0.0500
59	583.56	320.77	0.0500
60	593.45	319.06	0.0500
61	597.00	317.86	0.0500
62	607.00	317.86	0.0500
63	613.23	320.87	0.0500
64	623.12	322.85	0.0500
65	633.01	322.67	0.0500
66	642.90	322.36	0.0500
67	652.79	322.15	0.0500
68	662.68	322.11	0.0500
69	672.58	321.69	0.0500
70	682.47	321.36	0.0500
71	692.36	321.31	0.0500
72	702.25	321.51	0.0500
73	712.15	321.86	0.0500
74	722.05	322.00	0.0500
75	731.95	321.92	0.0500
76	741.86	322.13	0.0500
77	751.76	322.57	0.0500
78	761.66	322.98	0.0500
79	771.56	323.58	0.0500
80	781.46	324.15	0.0500
81	791.37	324.79	0.0500
82	801.27	325.45	0.0500
83	811.17	326.18	0.0500
84	821.07	326.89	0.0500
85	830.97	327.25	0.0500
86	840.88	327.99	0.0500
87	850.78	328.81	0.0500
88	860.68	329.77	0.0500
89	870.58	330.66	0.0500
90	880.48	331.42	0.0500
91	890.39	332.13	0.0500
92	900.29	333.59	0.0500
93	910.19	335.20	0.0500
94	920.09	336.42	0.0500
95	929.99	336.93	0.0500
96	939.89	337.28	0.0500
97	949.80	338.39	0.0500
98	959.70	339.94	0.0500
99	969.60	341.94	0.0500
100	979.50	343.45	0.0500
101	989.40	345.27	0.0500
102	999.31	347.01	0.0500
103	1009.21	348.41	0.0500
104	1019.11	349.93	0.0500
105	1029.01	351.42	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
106	1038.91	352.51	0.0500
107	1048.82	353.12	0.0500
108	1058.72	353.72	0.0500
109	1068.62	354.11	0.0500
110	1078.52	354.45	0.0500
111	1088.42	355.09	0.0500
112	1098.33	356.51	0.0500
113	1108.23	357.74	0.0500
114	1118.13	358.71	0.0500
115	1128.03	359.78	0.0500
116	1137.93	360.69	0.0500
117	1147.84	361.48	0.0500
118	1157.74	362.23	0.0500
119	1167.64	362.76	0.0500
120	1177.54	363.34	0.0500
121	1187.44	364.18	0.0500
122	1197.35	365.07	0.0500
123	1207.25	365.83	0.0500
124	1217.15	366.50	0.0500
125	1227.05	367.15	0.0500
126	1236.95	367.86	0.0500
127	1246.86	368.58	0.0500

Comment:

Channel Cross Section: XS-5_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	363.54	0.0500
1	9.82	362.22	0.0500
2	19.63	360.97	0.0500
3	29.45	359.78	0.0500
4	39.27	358.50	0.0500
5	49.09	357.02	0.0500
6	58.90	355.49	0.0500
7	68.72	353.79	0.0500
8	78.54	351.77	0.0500
9	88.35	349.61	0.0500
10	98.17	347.57	0.0500
11	107.99	345.61	0.0500
12	117.81	344.07	0.0500
13	127.62	343.21	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
14	137.44	343.23	0.0500
15	147.26	343.17	0.0500
16	157.07	343.75	0.0500
17	166.89	343.65	0.0500
18	176.71	342.96	0.0500
19	186.53	342.19	0.0500
20	196.34	341.38	0.0500
21	206.16	340.49	0.0500
22	215.98	339.62	0.0500
23	225.79	338.82	0.0500
24	235.61	338.12	0.0500
25	245.43	337.45	0.0500
26	255.25	336.33	0.0500
27	265.06	335.14	0.0500
28	274.88	334.38	0.0500
29	284.70	333.15	0.0500
30	294.51	332.39	0.0500
31	304.33	331.59	0.0500
32	314.15	330.61	0.0500
33	323.97	329.27	0.0500
34	333.95	328.17	0.0500
35	343.93	326.97	0.0500
36	353.91	325.73	0.0500
37	363.89	324.50	0.0500
38	373.87	323.49	0.0500
39	383.85	322.45	0.0500
40	393.83	321.45	0.0500
41	403.81	320.88	0.0500
42	413.79	320.36	0.0500
43	423.77	319.77	0.0500
44	433.75	319.11	0.0500
45	443.73	319.04	0.0500
46	453.71	318.68	0.0500
47	463.69	318.60	0.0500
48	473.67	318.22	0.0500
49	483.65	317.67	0.0500
50	493.63	317.10	0.0500
51	503.61	316.92	0.0500
52	513.59	316.72	0.0500
53	523.57	316.57	0.0500
54	533.55	316.36	0.0500
55	543.53	315.83	0.0500
56	553.51	315.71	0.0500
57	563.49	315.79	0.0500
58	573.47	315.53	0.0500
59	583.45	315.37	0.0500
60	593.43	315.40	0.0500
61	603.41	315.24	0.0500
62	613.39	315.20	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
63	623.37	315.48	0.0500
64	633.35	315.71	0.0500
65	643.34	315.65	0.0500
66	653.32	315.31	0.0500
67	663.30	315.26	0.0500
68	673.28	315.72	0.0500
69	683.26	316.19	0.0500
70	693.24	316.07	0.0500
71	703.22	316.11	0.0500
72	713.20	316.28	0.0500
73	723.18	316.06	0.0500
74	733.16	313.51	0.0500
75	738.00	310.66	0.0500
76	749.00	310.66	0.0500
77	753.12	312.84	0.0500
78	763.10	315.62	0.0500
79	773.08	315.75	0.0500
80	783.06	315.41	0.0500
81	793.04	315.56	0.0500
82	803.02	315.64	0.0500
83	813.00	315.48	0.0500
84	822.98	315.39	0.0500
85	832.96	315.67	0.0500
86	842.94	316.06	0.0500
87	852.92	316.26	0.0500
88	862.90	316.66	0.0500
89	872.88	317.65	0.0500
90	882.86	318.77	0.0500
91	892.84	319.73	0.0500
92	902.79	320.73	0.0500
93	912.73	322.44	0.0500
94	922.67	324.99	0.0500
95	932.62	327.66	0.0500
96	942.56	330.17	0.0500
97	952.51	332.17	0.0500
98	962.45	333.55	0.0500
99	972.39	335.16	0.0500
100	982.34	336.91	0.0500
101	992.28	338.47	0.0500
102	1002.22	339.75	0.0500
103	1012.17	340.94	0.0500
104	1022.11	342.12	0.0500
105	1032.05	343.21	0.0500
106	1042.00	343.87	0.0500
107	1051.94	344.88	0.0500
108	1061.89	346.20	0.0500
109	1071.83	347.49	0.0500
110	1081.77	348.57	0.0500
111	1091.72	349.63	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
112	1101.66	350.68	0.0500
113	1111.60	351.62	0.0500
114	1121.55	352.95	0.0500
115	1131.49	353.86	0.0500
116	1141.44	354.91	0.0500
117	1151.38	355.97	0.0500
118	1161.32	357.12	0.0500
119	1171.27	358.03	0.0500
120	1181.21	358.85	0.0500
121	1191.15	360.24	0.0500
122	1201.10	361.00	0.0500
123	1211.04	362.02	0.0500

Comment:

Channel Cross Section: XS-6_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	337.85	0.0500
1	9.89	337.59	0.0500
2	19.77	336.78	0.0500
3	29.66	335.69	0.0500
4	39.54	334.81	0.0500
5	49.43	333.89	0.0500
6	59.31	333.35	0.0500
7	69.20	332.92	0.0500
8	79.08	332.14	0.0500
9	88.97	331.41	0.0500
10	98.85	330.76	0.0500
11	108.74	330.00	0.0500
12	118.62	329.30	0.0500
13	128.51	328.82	0.0500
14	138.39	328.20	0.0500
15	148.28	327.35	0.0500
16	158.16	326.57	0.0500
17	168.05	325.77	0.0500
18	177.94	325.16	0.0500
19	187.82	324.55	0.0500
20	197.71	323.62	0.0500
21	207.59	322.73	0.0500
22	217.48	322.02	0.0500
23	227.36	321.40	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
24	237.25	320.74	0.0500
25	247.13	320.11	0.0500
26	257.02	319.54	0.0500
27	266.90	319.05	0.0500
28	276.79	318.35	0.0500
29	286.67	317.73	0.0500
30	296.56	317.23	0.0500
31	306.44	316.74	0.0500
32	316.33	316.20	0.0500
33	326.21	315.49	0.0500
34	336.10	314.71	0.0500
35	345.99	314.44	0.0500
36	355.87	313.64	0.0500
37	365.76	313.05	0.0500
38	375.64	313.34	0.0500
39	385.53	313.33	0.0500
40	395.41	311.45	0.0500
41	405.30	308.29	0.0500
42	415.18	305.93	0.0500
43	425.07	305.10	0.0500
44	434.95	304.64	0.0500
45	444.84	304.26	0.0500
46	454.72	304.12	0.0500
47	464.61	303.74	0.0500
48	474.49	304.02	0.0500
49	484.38	303.77	0.0500
50	494.26	303.60	0.0500
51	504.15	303.72	0.0500
52	514.04	303.60	0.0500
53	523.92	303.60	0.0500
54	533.81	303.66	0.0500
55	543.69	303.84	0.0500
56	553.50	303.48	0.0500
57	563.31	303.23	0.0500
58	573.13	302.49	0.0500
59	582.94	301.62	0.0500
60	592.75	298.76	0.0500
61	596.00	297.10	0.0500
62	606.00	297.10	0.0500
63	612.37	299.47	0.0500
64	622.18	301.43	0.0500
65	632.00	301.44	0.0500
66	641.81	301.49	0.0500
67	651.62	301.88	0.0500
68	661.43	302.21	0.0500
69	671.24	302.52	0.0500
70	681.06	303.25	0.0500
71	690.87	304.32	0.0500
72	700.68	305.44	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
73	710.49	307.58	0.0500
74	720.30	310.17	0.0500
75	730.11	313.43	0.0500
76	739.93	316.63	0.0500
77	749.74	319.49	0.0500
78	759.55	322.25	0.0500
79	769.36	324.23	0.0500
80	779.17	327.10	0.0500
81	788.98	331.33	0.0500
82	798.80	335.35	0.0500
83	808.61	338.13	0.0500
84	818.42	340.61	0.0500
85	828.23	343.75	0.0500
86	838.04	346.71	0.0500

Comment:

Channel Cross Section: XS-7_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	346.33	0.0500
1	9.87	344.55	0.0500
2	19.73	342.87	0.0500
3	29.60	340.70	0.0500
4	39.46	339.21	0.0500
5	49.33	338.90	0.0500
6	59.20	339.04	0.0500
7	69.06	339.17	0.0500
8	78.93	339.25	0.0500
9	88.79	339.27	0.0500
10	98.66	339.30	0.0500
11	108.53	339.10	0.0500
12	118.39	337.98	0.0500
13	128.26	336.40	0.0500
14	138.13	333.08	0.0500
15	147.99	328.54	0.0500
16	157.86	325.02	0.0500
17	167.72	322.24	0.0500
18	177.59	319.36	0.0500
19	187.46	316.22	0.0500
20	197.32	313.06	0.0500
21	207.19	309.46	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
22	217.05	305.51	0.0500
23	226.92	302.48	0.0500
24	236.79	300.77	0.0500
25	246.65	299.90	0.0500
26	256.52	299.31	0.0500
27	266.38	298.73	0.0500
28	276.25	296.91	0.0500
29	286.12	295.38	0.0500
30	295.98	295.27	0.0500
31	305.85	295.14	0.0500
32	315.72	295.24	0.0500
33	325.58	295.40	0.0500
34	335.45	295.31	0.0500
35	345.31	295.44	0.0500
36	355.18	295.30	0.0500
37	365.05	295.08	0.0500
38	374.91	295.45	0.0500
39	384.78	295.48	0.0500
40	394.64	295.18	0.0500
41	404.51	295.16	0.0500
42	414.51	294.91	0.0500
43	424.50	295.05	0.0500
44	434.50	295.38	0.0500
45	444.50	295.48	0.0500
46	454.50	295.43	0.0500
47	464.49	295.43	0.0500
48	474.49	295.43	0.0500
49	484.49	295.36	0.0500
50	494.49	295.24	0.0500
51	504.48	295.19	0.0500
52	514.48	295.23	0.0500
53	524.48	295.16	0.0500
54	534.48	295.09	0.0500
55	544.47	294.80	0.0500
56	554.47	294.75	0.0500
57	564.47	294.75	0.0500
58	574.47	294.59	0.0500
59	584.46	294.48	0.0500
60	594.46	294.48	0.0500
61	604.46	294.67	0.0500
62	614.45	294.85	0.0500
63	624.45	294.93	0.0500
64	634.45	294.75	0.0500
65	644.45	294.62	0.0500
66	654.44	294.64	0.0500
67	664.44	294.75	0.0500
68	674.44	295.07	0.0500
69	684.44	295.26	0.0500
70	694.43	294.72	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
71	704.43	291.89	0.0500
72	706.00	291.44	0.0500
73	716.00	291.44	0.0500
74	724.43	294.02	0.0500
75	734.42	296.08	0.0500
76	744.42	297.15	0.0500
77	754.42	297.45	0.0500
78	764.42	297.83	0.0500
79	774.41	298.24	0.0500
80	784.41	298.43	0.0500
81	794.41	298.63	0.0500
82	804.40	298.88	0.0500
83	814.40	299.27	0.0500
84	824.40	299.66	0.0500
85	834.40	299.98	0.0500
86	844.39	300.32	0.0500
87	854.39	300.58	0.0500
88	864.39	300.80	0.0500
89	874.39	301.07	0.0500
90	884.38	301.37	0.0500
91	894.38	301.69	0.0500
92	904.38	302.01	0.0500
93	914.38	302.27	0.0500
94	924.37	302.41	0.0500
95	934.37	302.64	0.0500
96	944.37	303.09	0.0500
97	954.37	303.56	0.0500
98	964.36	303.94	0.0500
99	974.36	304.17	0.0500
100	984.36	304.19	0.0500
101	994.36	304.15	0.0500
102	1004.35	304.39	0.0500
103	1014.35	304.75	0.0500
104	1024.35	304.85	0.0500
105	1034.34	304.99	0.0500
106	1044.34	305.31	0.0500
107	1054.30	306.06	0.0500
108	1064.25	306.47	0.0500
109	1074.20	306.71	0.0500
110	1084.16	307.07	0.0500
111	1094.11	307.15	0.0500
112	1104.07	307.43	0.0500
113	1114.02	307.75	0.0500
114	1123.97	308.33	0.0500
115	1133.93	309.08	0.0500
116	1143.88	309.60	0.0500
117	1153.84	309.74	0.0500
118	1163.79	310.19	0.0500
119	1173.74	311.14	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
120	1183.70	312.49	0.0500
121	1193.65	313.45	0.0500
122	1203.61	314.55	0.0500
123	1213.56	315.80	0.0500
124	1223.51	317.25	0.0500
125	1233.47	318.84	0.0500
126	1243.42	320.72	0.0500
127	1253.38	322.24	0.0500
128	1263.33	323.75	0.0500
129	1273.28	325.19	0.0500
130	1283.24	326.80	0.0500
131	1293.19	328.24	0.0500
132	1303.15	329.77	0.0500
133	1313.10	330.97	0.0500
134	1323.05	332.34	0.0500
135	1333.01	333.86	0.0500
136	1342.96	335.31	0.0500
137	1352.92	336.90	0.0500
138	1362.87	338.42	0.0500
139	1372.82	340.03	0.0500
140	1382.78	341.32	0.0500
141	1392.73	342.77	0.0500
142	1402.69	343.89	0.0500
143	1412.64	344.90	0.0500
144	1422.59	346.07	0.0500
145	1432.55	346.88	0.0500

Comment:

Channel Cross Section: XS-8_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	341.80	0.0500
1	9.91	341.76	0.0500
2	19.81	341.56	0.0500
3	29.72	341.37	0.0500
4	39.63	341.27	0.0500
5	49.53	340.75	0.0500
6	59.44	340.61	0.0500
7	69.35	340.42	0.0500
8	79.25	339.86	0.0500
9	89.16	339.09	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
10	99.07	338.22	0.0500
11	108.97	337.02	0.0500
12	118.88	336.27	0.0500
13	128.79	335.18	0.0500
14	138.69	333.71	0.0500
15	148.60	332.23	0.0500
16	158.50	330.68	0.0500
17	168.41	328.88	0.0500
18	178.32	327.23	0.0500
19	188.22	325.63	0.0500
20	198.13	323.88	0.0500
21	208.04	322.40	0.0500
22	217.94	321.31	0.0500
23	227.85	319.77	0.0500
24	237.76	317.87	0.0500
25	247.66	315.94	0.0500
26	257.57	313.84	0.0500
27	267.48	311.33	0.0500
28	277.38	308.42	0.0500
29	287.29	305.48	0.0500
30	297.20	302.70	0.0500
31	307.10	299.88	0.0500
32	317.01	296.84	0.0500
33	326.92	294.15	0.0500
34	336.82	291.80	0.0500
35	346.73	289.49	0.0500
36	356.64	287.30	0.0500
37	366.54	285.43	0.0500
38	376.45	284.16	0.0500
39	386.36	283.23	0.0500
40	396.26	282.17	0.0500
41	406.17	279.89	0.0500
42	410.00	275.90	0.0500
43	420.00	275.59	0.0500
44	430.00	275.90	0.0500
45	435.89	279.66	0.0500
46	445.79	280.96	0.0500
47	455.70	280.87	0.0500
48	465.61	280.56	0.0500
49	475.51	279.52	0.0500
50	485.42	278.95	0.0500
51	495.33	280.29	0.0500
52	505.23	280.59	0.0500
53	515.14	280.14	0.0500
54	525.05	280.29	0.0500
55	534.95	280.81	0.0500
56	544.86	281.36	0.0500
57	554.77	281.69	0.0500
58	564.67	281.78	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
59	574.58	281.77	0.0500
60	584.49	281.83	0.0500
61	594.39	281.84	0.0500
62	604.30	281.84	0.0500
63	614.21	282.00	0.0500
64	624.11	282.04	0.0500
65	634.05	282.10	0.0500
66	643.99	282.27	0.0500
67	653.94	282.31	0.0500
68	663.88	282.21	0.0500
69	673.82	282.05	0.0500
70	683.76	282.11	0.0500
71	693.70	282.24	0.0500
72	703.64	282.25	0.0500
73	713.58	282.48	0.0500
74	723.53	282.43	0.0500
75	733.47	282.40	0.0500
76	743.41	282.21	0.0500
77	753.35	282.18	0.0500
78	763.29	282.05	0.0500
79	773.23	281.86	0.0500
80	783.17	281.72	0.0500
81	793.11	281.51	0.0500
82	803.06	281.45	0.0500
83	813.00	281.41	0.0500
84	822.94	281.49	0.0500
85	832.88	281.55	0.0500
86	842.82	281.76	0.0500
87	852.76	281.43	0.0500
88	862.70	281.33	0.0500
89	872.65	281.59	0.0500
90	882.59	281.67	0.0500
91	892.53	281.99	0.0500
92	902.47	282.23	0.0500
93	912.41	281.96	0.0500
94	922.35	281.97	0.0500
95	932.29	282.05	0.0500
96	942.24	282.22	0.0500
97	952.18	282.24	0.0500
98	962.12	282.24	0.0500
99	972.06	282.36	0.0500
100	982.00	282.18	0.0500
101	991.94	282.46	0.0500
102	1001.88	282.77	0.0500
103	1011.82	282.82	0.0500
104	1021.77	283.07	0.0500
105	1031.71	283.36	0.0500
106	1041.65	283.06	0.0500
107	1051.59	283.32	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
108	1061.53	283.44	0.0500
109	1071.47	283.53	0.0500
110	1081.41	283.56	0.0500
111	1091.36	283.63	0.0500
112	1101.30	283.72	0.0500
113	1111.24	283.62	0.0500
114	1121.18	283.86	0.0500
115	1131.12	283.90	0.0500
116	1141.06	283.96	0.0500
117	1151.00	283.86	0.0500
118	1160.94	284.06	0.0500
119	1170.89	284.03	0.0500
120	1180.83	284.21	0.0500
121	1190.77	284.45	0.0500
122	1200.71	284.52	0.0500
123	1210.65	284.24	0.0500
124	1220.59	284.13	0.0500
125	1230.53	284.22	0.0500
126	1240.48	284.75	0.0500
127	1250.42	284.83	0.0500
128	1260.36	284.91	0.0500
129	1270.30	285.15	0.0500
130	1280.24	285.44	0.0500
131	1290.18	285.60	0.0500
132	1300.12	286.05	0.0500
133	1310.06	286.58	0.0500
134	1320.01	287.31	0.0500
135	1329.95	287.71	0.0500
136	1339.89	288.28	0.0500
137	1349.83	288.65	0.0500
138	1359.77	288.72	0.0500
139	1369.71	289.13	0.0500
140	1379.65	289.24	0.0500
141	1389.60	289.43	0.0500
142	1399.54	289.72	0.0500
143	1409.48	289.84	0.0500
144	1419.42	289.80	0.0500
145	1429.36	289.86	0.0500
146	1439.30	290.14	0.0500
147	1449.24	290.26	0.0500
148	1459.19	290.41	0.0500
149	1469.13	290.71	0.0500
150	1479.07	291.11	0.0500
151	1489.01	290.99	0.0500
152	1498.95	291.46	0.0500
153	1508.89	291.97	0.0500
154	1518.83	292.28	0.0500
155	1528.77	292.50	0.0500
156	1538.72	292.78	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
157	1548.66	293.37	0.0500
158	1558.60	293.88	0.0500
159	1568.54	294.30	0.0500
160	1578.48	294.62	0.0500
161	1588.42	295.12	0.0500
162	1598.36	295.47	0.0500
163	1608.31	296.08	0.0500
164	1618.25	296.60	0.0500
165	1628.19	297.36	0.0500
166	1638.13	297.91	0.0500
167	1648.07	298.44	0.0500
168	1658.01	299.17	0.0500
169	1667.95	299.88	0.0500
170	1677.89	300.46	0.0500
171	1687.84	301.07	0.0500
172	1697.78	301.66	0.0500
173	1707.72	302.17	0.0500
174	1717.66	302.66	0.0500
175	1727.60	302.89	0.0500
176	1737.52	303.35	0.0500
177	1747.43	303.82	0.0500
178	1757.35	304.21	0.0500
179	1767.26	305.21	0.0500
180	1777.18	305.84	0.0500
181	1787.10	306.12	0.0500
182	1797.01	306.28	0.0500
183	1806.93	307.98	0.0500
184	1816.84	309.13	0.0500
185	1826.76	310.01	0.0500
186	1836.68	310.43	0.0500
187	1846.59	310.89	0.0500
188	1856.51	311.30	0.0500
189	1866.42	312.23	0.0500
190	1876.34	313.11	0.0500
191	1886.25	313.91	0.0500
192	1896.17	314.45	0.0500
193	1906.09	314.85	0.0500
194	1916.00	315.21	0.0500
195	1925.92	315.57	0.0500
196	1935.83	315.89	0.0500
197	1945.75	316.35	0.0500
198	1955.67	316.69	0.0500
199	1965.58	316.90	0.0500
200	1975.50	317.14	0.0500
201	1985.41	317.56	0.0500
202	1995.33	318.04	0.0500
203	2005.24	318.19	0.0500
204	2015.16	318.61	0.0500
205	2025.08	319.18	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
206	2034.99	319.42	0.0500
207	2044.91	319.74	0.0500
208	2054.82	320.01	0.0500
209	2064.74	320.37	0.0500
210	2074.65	320.62	0.0500
211	2084.57	320.94	0.0500
212	2094.49	321.30	0.0500
213	2104.40	321.51	0.0500
214	2114.32	321.75	0.0500
215	2124.23	322.02	0.0500
216	2134.15	322.43	0.0500
217	2144.07	322.71	0.0500
218	2153.98	323.08	0.0500
219	2163.90	323.20	0.0500
220	2173.81	323.57	0.0500
221	2183.73	324.00	0.0500
222	2193.64	324.32	0.0500
223	2203.56	324.74	0.0500
224	2213.48	324.91	0.0500
225	2223.39	325.21	0.0500
226	2233.31	325.66	0.0500
227	2243.22	326.28	0.0500

Comment:

Channel Cross Section: XS-9_DA

Scenario: Proposed 10% DSA
Lid: No
Conveyance Method: ICPRv3

Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	325.00	0.0500
1	9.97	323.98	0.0500
2	19.94	322.90	0.0500
3	29.91	321.88	0.0500
4	39.88	320.85	0.0500
5	49.85	319.85	0.0500
6	59.82	318.90	0.0500
7	69.79	317.95	0.0500
8	79.76	317.12	0.0500
9	89.73	315.64	0.0500
10	99.70	314.68	0.0500
11	109.67	313.66	0.0500
12	119.64	312.53	0.0500
13	129.60	311.60	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
14	139.57	310.38	0.0500
15	149.54	309.41	0.0500
16	159.51	308.67	0.0500
17	169.48	307.92	0.0500
18	179.45	306.76	0.0500
19	189.42	305.47	0.0500
20	199.39	304.32	0.0500
21	209.36	303.56	0.0500
22	219.33	302.44	0.0500
23	229.30	301.21	0.0500
24	239.27	300.34	0.0500
25	249.24	299.05	0.0500
26	259.21	297.81	0.0500
27	269.18	296.36	0.0500
28	279.15	294.76	0.0500
29	289.12	293.83	0.0500
30	299.09	292.98	0.0500
31	309.06	292.26	0.0500
32	319.03	291.42	0.0500
33	329.00	289.96	0.0500
34	338.97	289.27	0.0500
35	348.94	288.49	0.0500
36	358.91	287.72	0.0500
37	368.88	287.16	0.0500
38	378.85	286.57	0.0500
39	388.81	286.24	0.0500
40	398.78	285.74	0.0500
41	408.75	285.08	0.0500
42	418.72	284.43	0.0500
43	428.69	284.21	0.0500
44	438.66	283.73	0.0500
45	448.63	283.22	0.0500
46	458.60	282.68	0.0500
47	468.57	282.32	0.0500
48	478.54	281.96	0.0500
49	488.51	281.41	0.0500
50	498.48	281.32	0.0500
51	508.45	281.01	0.0500
52	518.42	280.49	0.0500
53	528.39	280.15	0.0500
54	538.36	279.87	0.0500
55	548.33	279.59	0.0500
56	558.30	279.35	0.0500
57	568.27	279.07	0.0500
58	578.24	278.74	0.0500
59	588.21	278.49	0.0500
60	598.18	278.17	0.0500
61	608.15	278.07	0.0500
62	618.12	277.68	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
63	628.09	277.37	0.0500
64	638.06	277.09	0.0500
65	648.02	276.66	0.0500
66	657.99	276.39	0.0500
67	667.96	275.91	0.0500
68	677.93	275.36	0.0500
69	687.90	275.07	0.0500
70	697.79	274.91	0.0500
71	707.68	274.63	0.0500
72	717.57	274.53	0.0500
73	727.46	274.48	0.0500
74	737.35	274.00	0.0500
75	747.24	273.57	0.0500
76	757.13	273.21	0.0500
77	767.02	272.81	0.0500
78	776.92	272.37	0.0500
79	786.81	272.00	0.0500
80	796.70	271.71	0.0500
81	806.59	271.40	0.0500
82	816.48	271.27	0.0500
83	826.37	271.19	0.0500
84	836.26	271.13	0.0500
85	846.15	271.08	0.0500
86	856.04	271.35	0.0500
87	865.93	271.23	0.0500
88	875.82	269.55	0.0500
89	885.71	267.44	0.0500
90	895.60	269.59	0.0500
91	905.49	270.87	0.0500
92	915.38	271.08	0.0500
93	925.27	270.74	0.0500
94	935.16	270.79	0.0500
95	945.05	271.09	0.0500
96	954.94	271.17	0.0500
97	964.83	271.40	0.0500
98	974.72	271.08	0.0500
99	984.61	270.66	0.0500
100	994.50	270.71	0.0500
101	1004.39	270.85	0.0500
102	1014.28	270.76	0.0500
103	1024.17	270.68	0.0500
104	1034.06	270.61	0.0500
105	1043.95	270.18	0.0500
106	1053.84	270.22	0.0500
107	1063.73	269.76	0.0500
108	1073.62	269.56	0.0500
109	1083.51	269.75	0.0500
110	1093.40	269.98	0.0500
111	1103.29	270.05	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
112	1113.18	270.14	0.0500
113	1123.07	270.45	0.0500
114	1132.96	270.34	0.0500
115	1142.85	270.23	0.0500
116	1152.74	270.25	0.0500
117	1162.63	270.40	0.0500
118	1172.52	270.63	0.0500
119	1182.41	270.77	0.0500
120	1192.30	271.15	0.0500
121	1202.19	271.18	0.0500
122	1212.08	270.97	0.0500
123	1221.97	271.07	0.0500
124	1231.86	271.20	0.0500
125	1241.75	271.10	0.0500
126	1251.65	271.39	0.0500
127	1261.54	271.26	0.0500
128	1271.43	271.64	0.0500
129	1281.32	271.84	0.0500
130	1291.21	271.88	0.0500
131	1301.10	272.01	0.0500
132	1310.99	272.26	0.0500
133	1320.78	272.51	0.0500
134	1330.58	272.60	0.0500
135	1340.37	272.66	0.0500
136	1350.17	273.01	0.0500
137	1359.96	273.51	0.0500
138	1369.76	274.21	0.0500
139	1379.56	275.07	0.0500
140	1389.35	276.11	0.0500
141	1399.15	277.42	0.0500
142	1408.94	279.75	0.0500
143	1418.74	282.48	0.0500
144	1428.53	285.65	0.0500
145	1438.33	288.13	0.0500
146	1448.13	290.38	0.0500
147	1457.92	292.19	0.0500
148	1467.72	293.76	0.0500
149	1477.51	294.93	0.0500
150	1487.31	296.17	0.0500
151	1497.10	297.17	0.0500
152	1506.90	297.79	0.0500
153	1516.70	298.61	0.0500
154	1526.49	299.36	0.0500
155	1536.29	300.06	0.0500
156	1546.08	300.58	0.0500
157	1555.88	301.48	0.0500
158	1565.67	302.21	0.0500
159	1575.47	302.80	0.0500
160	1585.27	303.22	0.0500

Order	Station [ft]	Elevation [ft]	Manning's N
161	1595.06	303.45	0.0500
162	1604.86	303.83	0.0500
163	1614.65	304.38	0.0500
164	1624.45	304.90	0.0500
165	1634.24	305.65	0.0500
166	1644.04	305.87	0.0500
167	1653.84	306.14	0.0500
168	1663.63	306.62	0.0500
169	1673.43	307.18	0.0500
170	1683.22	307.61	0.0500
171	1693.02	307.94	0.0500
172	1702.81	308.43	0.0500
173	1712.61	308.89	0.0500
174	1722.40	309.27	0.0500
175	1732.20	309.44	0.0500
176	1742.00	309.68	0.0500
177	1751.79	309.77	0.0500
178	1761.59	310.13	0.0500
179	1771.38	310.73	0.0500

Comment:

Scenario	Sim	Node Name	Warning Stage [ft]	Maximum Stage [ft]	Maximum Total Inflow Rate [cfs]
Existing2	010yr	Analysis_Point_1	340.00	336.98	1168.13
Existing2	010yr	Analysis_Point_2	345.50	322.91	2421.90
Existing2	010yr	Analysis_Point_3	310.50	300.18	2425.67
Existing2	010yr	Analysis_Point_4	279.20	275.25	3039.28
Existing2	010yr	Analysis_Point_5	271.20	265.11	4549.36
Existing2	010yr	Analysis_Point_6	243.80	235.78	5832.47
Existing2	010yr	Analysis_Point_7	298.10	206.70	5242.04
Existing2	100yr	Analysis_Point_1	340.00	338.07	3809.43
Existing2	100yr	Analysis_Point_2	345.50	324.70	6251.62
Existing2	100yr	Analysis_Point_3	310.50	301.87	6317.19
Existing2	100yr	Analysis_Point_4	279.20	276.57	7622.42
Existing2	100yr	Analysis_Point_5	271.20	266.74	11346.34
Existing2	100yr	Analysis_Point_6	243.80	237.43	14649.88
Existing2	100yr	Analysis_Point_7	298.10	206.70	11895.13

Node Max Conditions [Proposed 10% DSA]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Analysis Pt. 1	010yr	340.00	336.73	0.0004	949.48	801.20	1133610
Analysis Pt. 2	010yr	345.50	322.79	0.0010	2212.12	2114.75	1236607
Analysis Pt. 3	010yr	310.50	300.07	-0.0010	2232.12	2133.64	1452637
Analysis Pt. 4	010yr	279.20	275.18	0.0010	2863.85	2840.82	1408755
Analysis Pt. 5	010yr	271.20	265.05	-0.0010	4378.80	4607.65	4751313
Analysis Pt. 6	010yr	243.80	235.80	-0.0010	5751.62	3188.11	13669228
Analysis Pt. 7	010yr	298.10	206.70	0.0000	5178.81	0.00	0
Analysis Pt. 1	100yr	340.00	337.67	0.0004	2594.45	2535.73	1386284
Analysis Pt. 2	100yr	345.50	324.29	0.0010	5121.41	4981.77	1429600
Analysis Pt. 3	100yr	310.50	301.51	0.0010	5239.76	5048.92	2105110
Analysis Pt. 4	100yr	279.20	276.34	0.0010	6685.44	6588.72	2508248
Analysis Pt. 5	100yr	271.20	266.49	0.0010	10443.72	11322.09	5048592
Analysis Pt. 6	100yr	243.80	237.40	0.0010	13852.42	9307.43	16414735
Analysis Pt. 7	100yr	298.10	206.70	0.0000	11583.36	0.00	0

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX H

HYDRAULIC CALCULATIONS

J – 27015.0007

December 2023

thomasandhutton.com

Z:\27015\27015.0007\ENGINEERING\CALCULATIONS AND REPORTS\STORM WATER\EXPRESS\27015.0007 - CONNECT - DITCH BASINS.DWG - Nov 9, 2023 - 2:47 PM

DITCH 5A
17.8 AC.

DITCH 5B
15.7 AC.

POND 5

DITCH 2A
97.2 AC.

DITCH 2B
26.3 AC.

DITCH 1A
143.9 AC.

POND 1

POND 2

DITCH 1B
157.2 AC.

DITCH 2C
15.9 AC.

DITCH 2D
14.7 AC.

DITCH 3A
107.0 AC.

DITCH 4B
61.9 AC.

DITCH 4A
86.1 AC.

POND 3

POND 4

POND 6

POND 7

POND 8

POND 9

N
W E
S

DRAINAGE DITCH BASINS

PROJECT CONNECT

BLYTHEWOOD, SC

PREPARED FOR:

RICHLAND COUNTY

PREPARED BY:

THOMAS & HUTTON

1501 Main Street • Suite 400
Columbia, SC 29201 • 803.451.6789

www.thomasandhutton.com

JOB NO:	J-27015.0007
DRAWN:	JRD
REVIEWED:	CGW

DATE:	06/15/2023
SCALE:	1" = 400'
SHEET:	1 OF 1

Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 1A - 100-YR

Trapezoidal

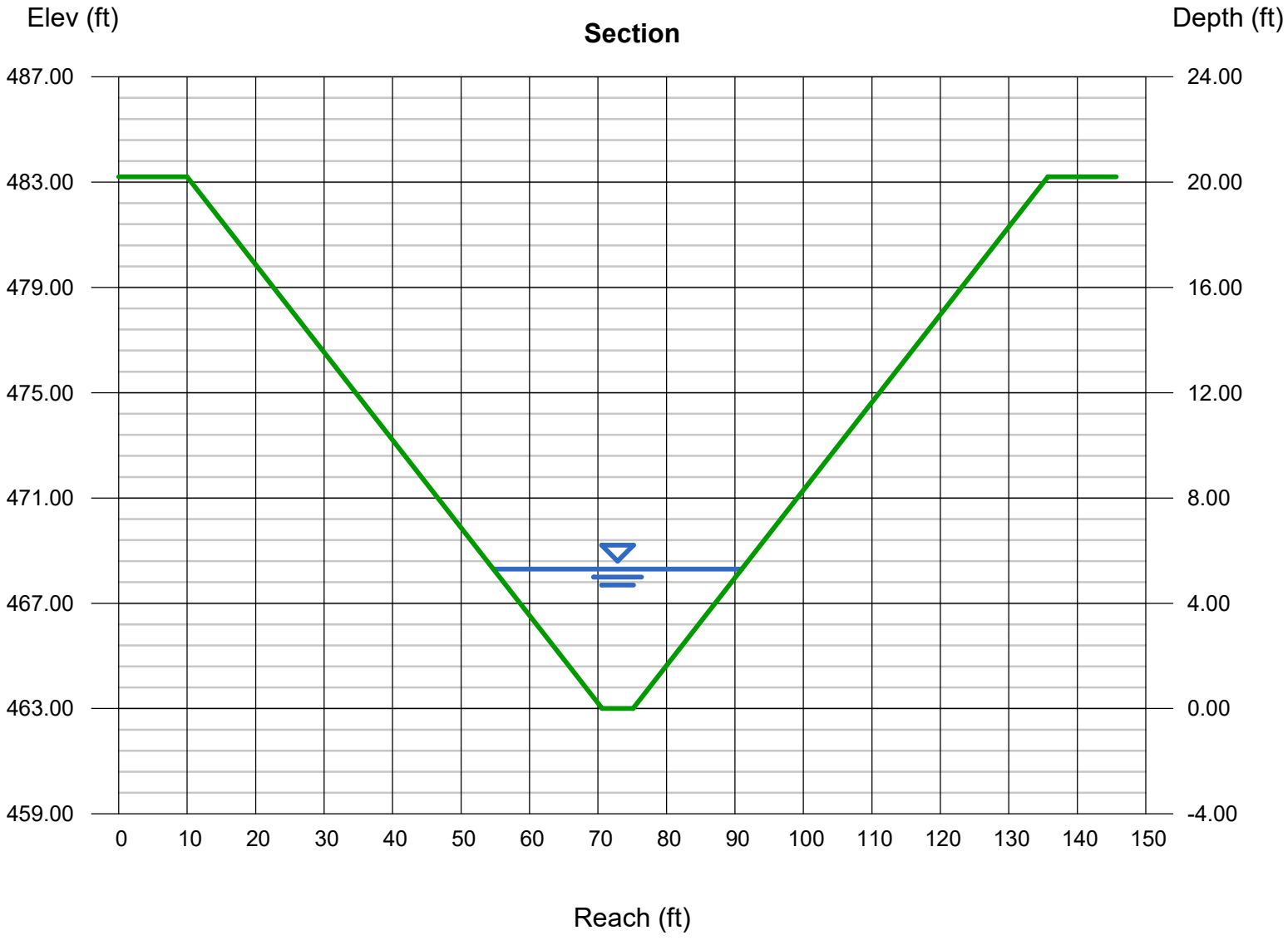
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 20.20
Invert Elev (ft)	= 463.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 1033.30

Highlighted

Depth (ft)	= 5.30
Q (cfs)	= 1,033
Area (sqft)	= 108.12
Velocity (ft/s)	= 9.56
Wetted Perim (ft)	= 38.02
Crit Depth, Yc (ft)	= 5.25
Top Width (ft)	= 36.30
EGL (ft)	= 6.72



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 1B - 100-YR

Trapezoidal

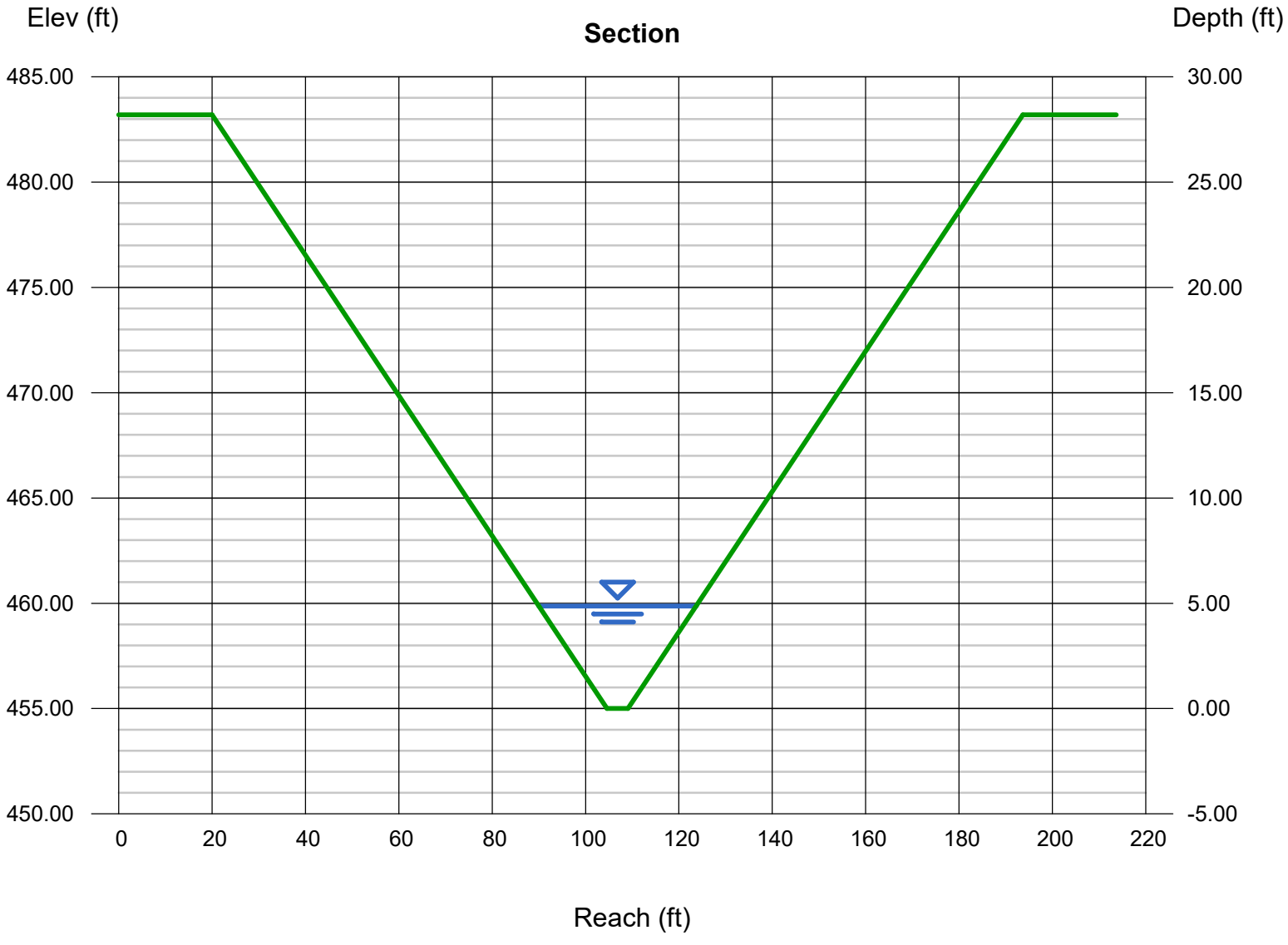
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 28.20
Invert Elev (ft)	= 455.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 845.06

Highlighted

Depth (ft)	= 4.87
Q (cfs)	= 845.06
Area (sqft)	= 93.07
Velocity (ft/s)	= 9.08
Wetted Perim (ft)	= 35.30
Crit Depth, Yc (ft)	= 4.79
Top Width (ft)	= 33.72
EGL (ft)	= 6.15



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 2A - 100-YR

Trapezoidal

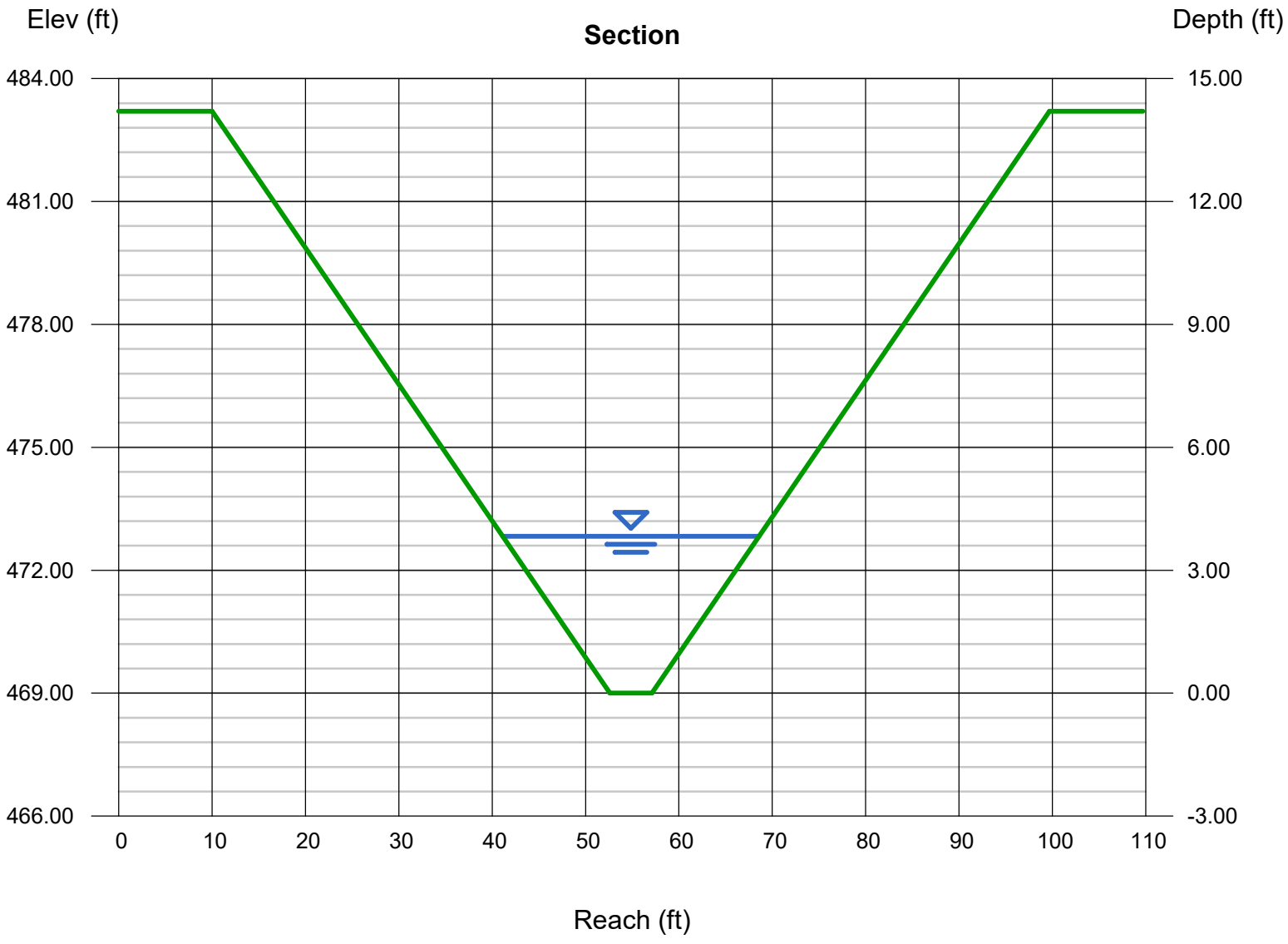
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 14.20
Invert Elev (ft)	= 469.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 484.06

Highlighted

Depth (ft)	= 3.83
Q (cfs)	= 484.06
Area (sqft)	= 61.24
Velocity (ft/s)	= 7.90
Wetted Perim (ft)	= 28.72
Crit Depth, Yc (ft)	= 3.71
Top Width (ft)	= 27.48
EGL (ft)	= 4.80



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 2B - 100-YR

Trapezoidal

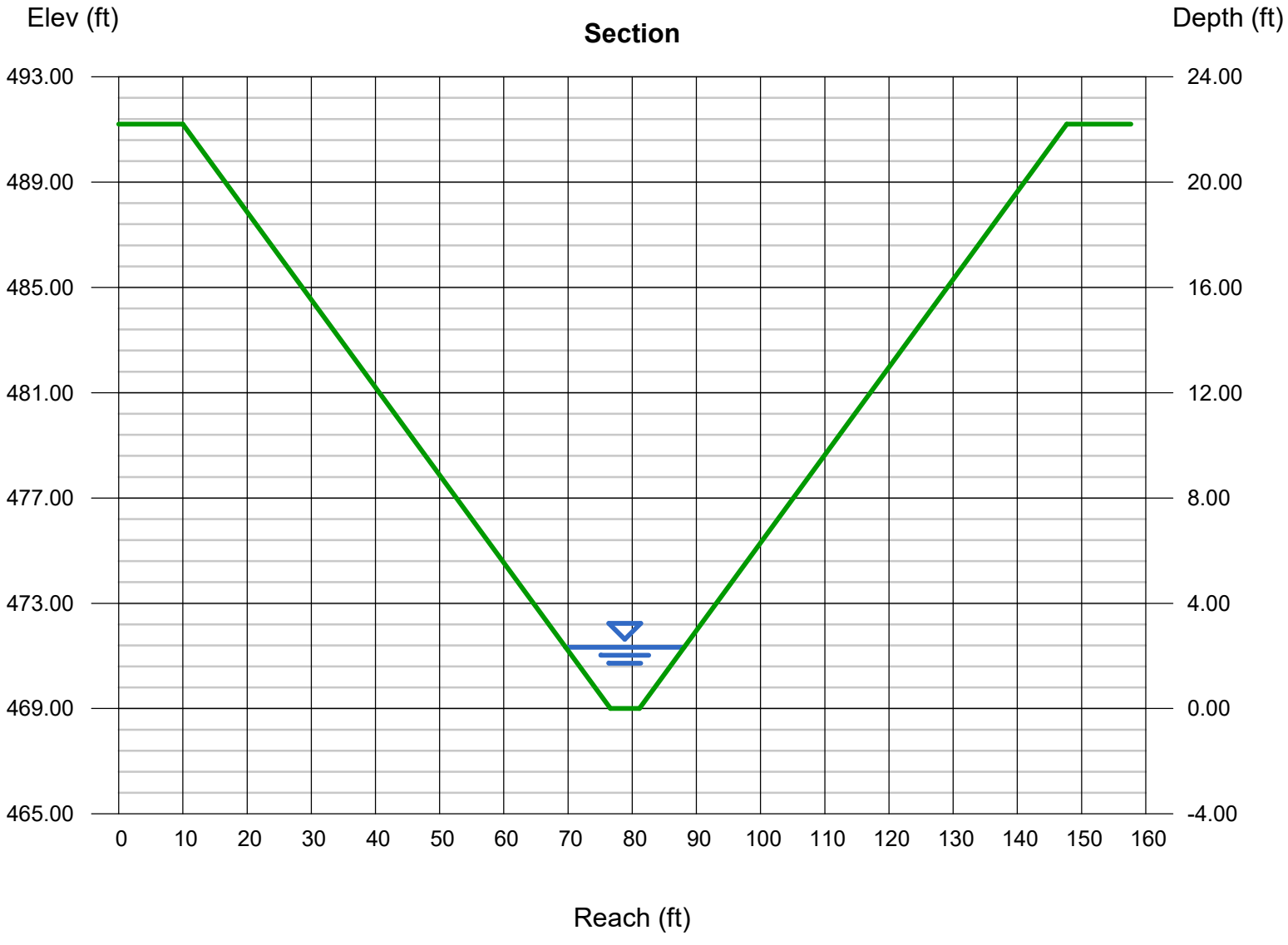
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 22.20
Invert Elev (ft)	= 469.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 158.79

Highlighted

Depth (ft)	= 2.33
Q (cfs)	= 158.79
Area (sqft)	= 26.77
Velocity (ft/s)	= 5.93
Wetted Perim (ft)	= 19.24
Crit Depth, Yc (ft)	= 2.18
Top Width (ft)	= 18.48
EGL (ft)	= 2.88



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 2C - 100-YR

Trapezoidal

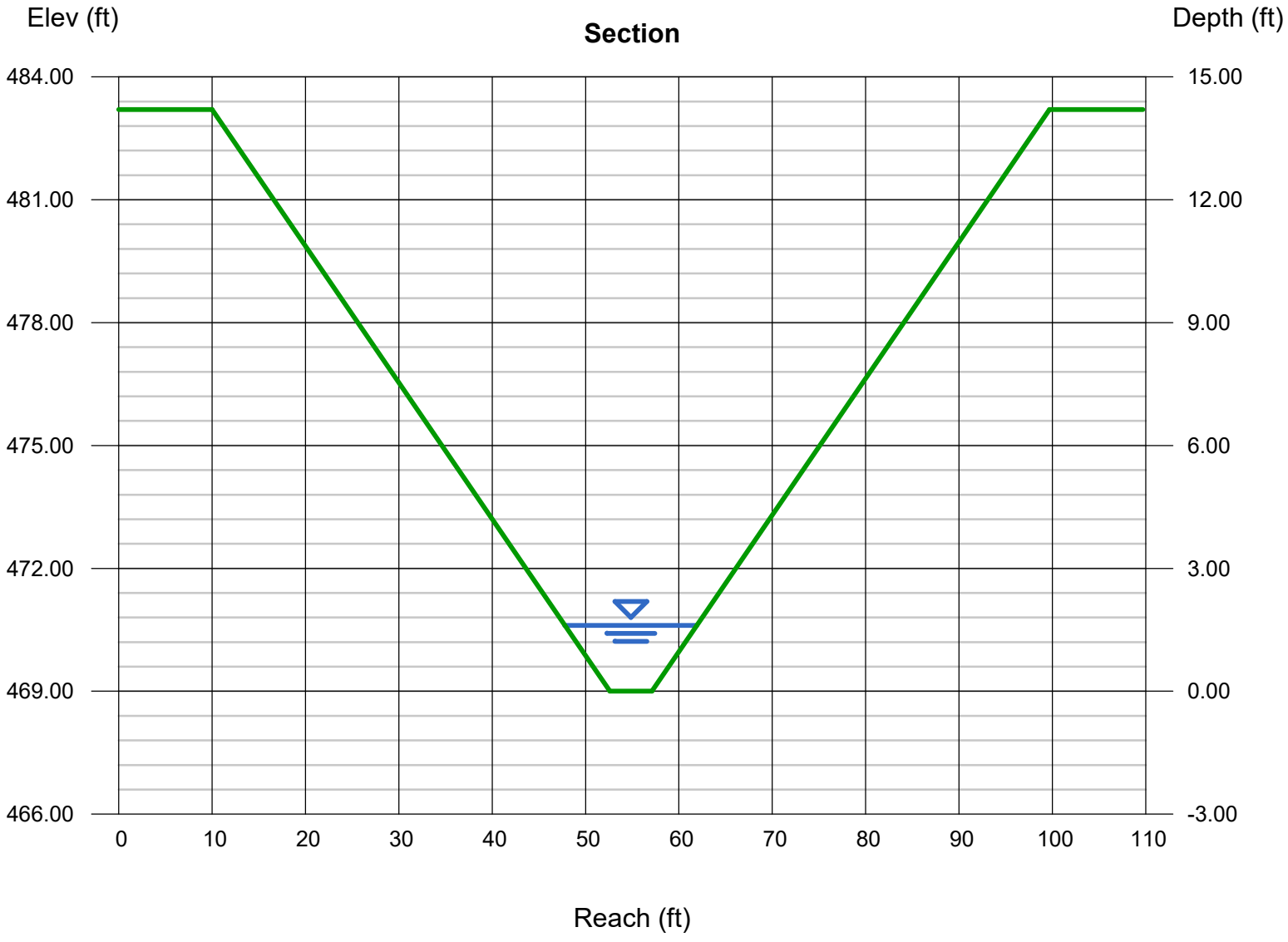
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 14.20
Invert Elev (ft)	= 469.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 71.92

Highlighted

Depth (ft)	= 1.61
Q (cfs)	= 71.92
Area (sqft)	= 15.02
Velocity (ft/s)	= 4.79
Wetted Perim (ft)	= 14.68
Crit Depth, Yc (ft)	= 1.46
Top Width (ft)	= 14.16
EGL (ft)	= 1.97



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 2D - 100-YR

Trapezoidal

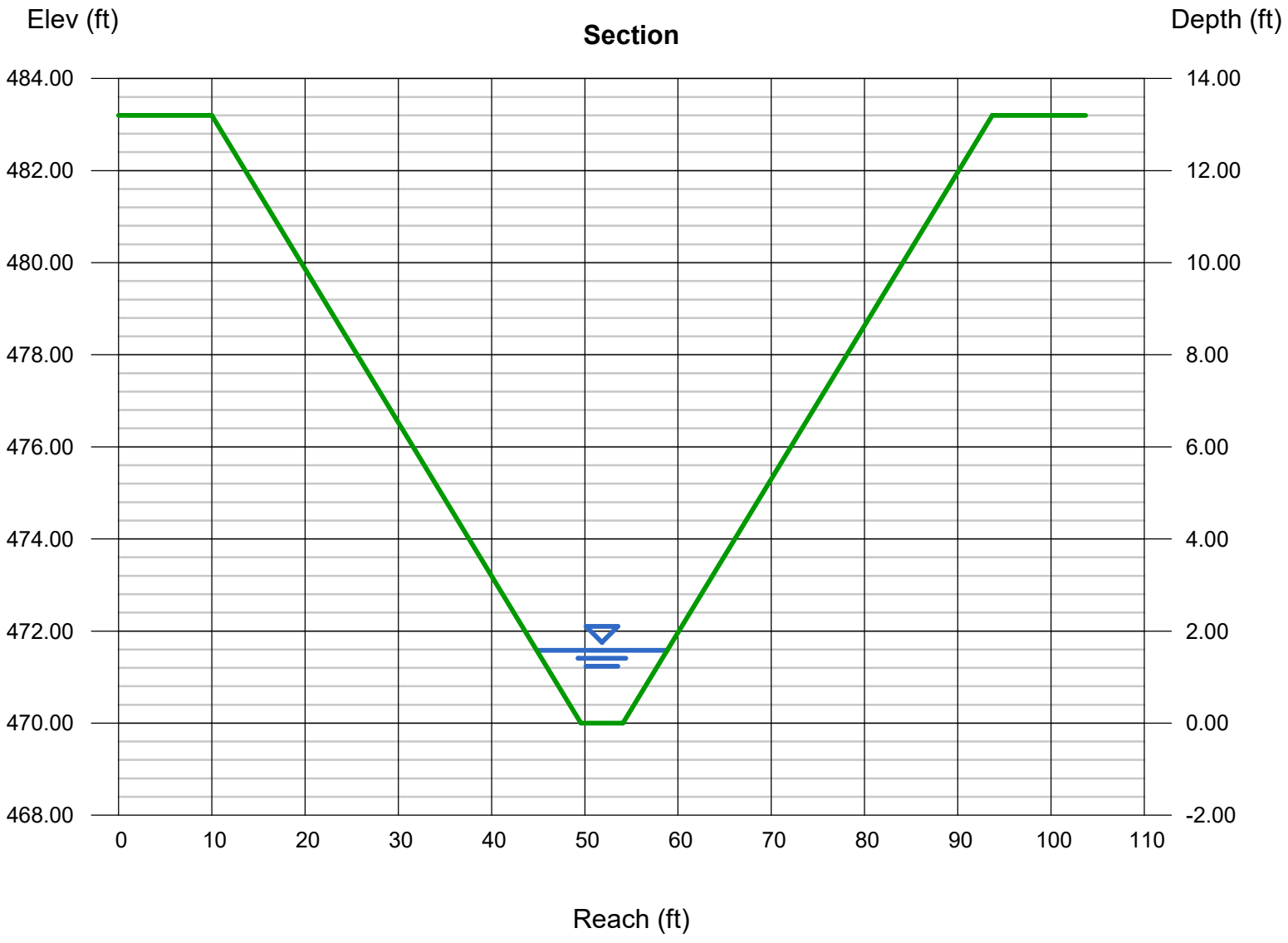
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 13.20
Invert Elev (ft)	= 470.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 69.50

Highlighted

Depth (ft)	= 1.58
Q (cfs)	= 69.50
Area (sqft)	= 14.60
Velocity (ft/s)	= 4.76
Wetted Perim (ft)	= 14.49
Crit Depth, Yc (ft)	= 1.43
Top Width (ft)	= 13.98
EGL (ft)	= 1.93



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 3A - 100-YR

Trapezoidal

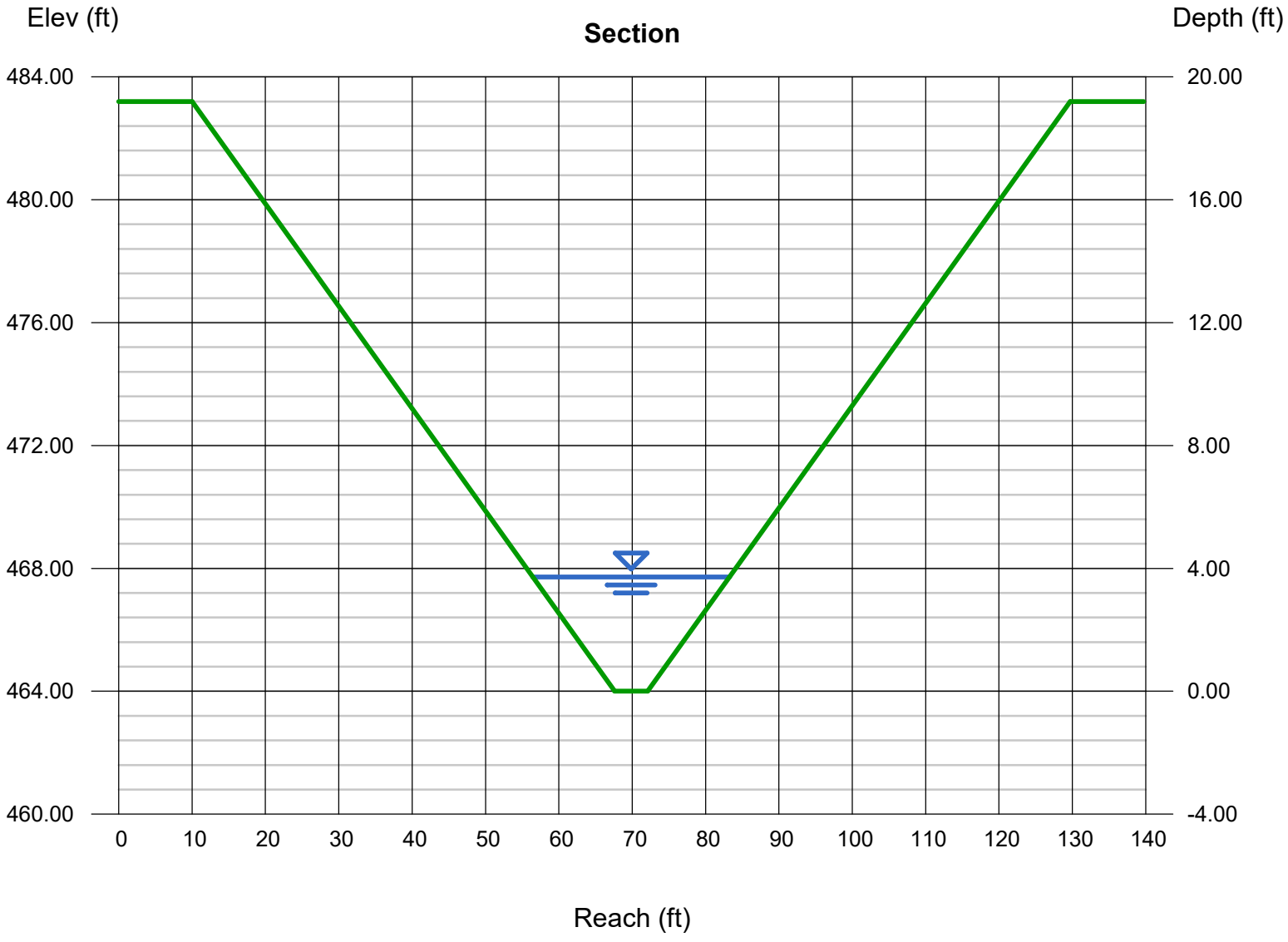
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 19.20
Invert Elev (ft)	= 464.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 450.84

Highlighted

Depth (ft)	= 3.72
Q (cfs)	= 450.84
Area (sqft)	= 58.26
Velocity (ft/s)	= 7.74
Wetted Perim (ft)	= 28.03
Crit Depth, Yc (ft)	= 3.59
Top Width (ft)	= 26.82
EGL (ft)	= 4.65



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 4A - 100-YR

Trapezoidal

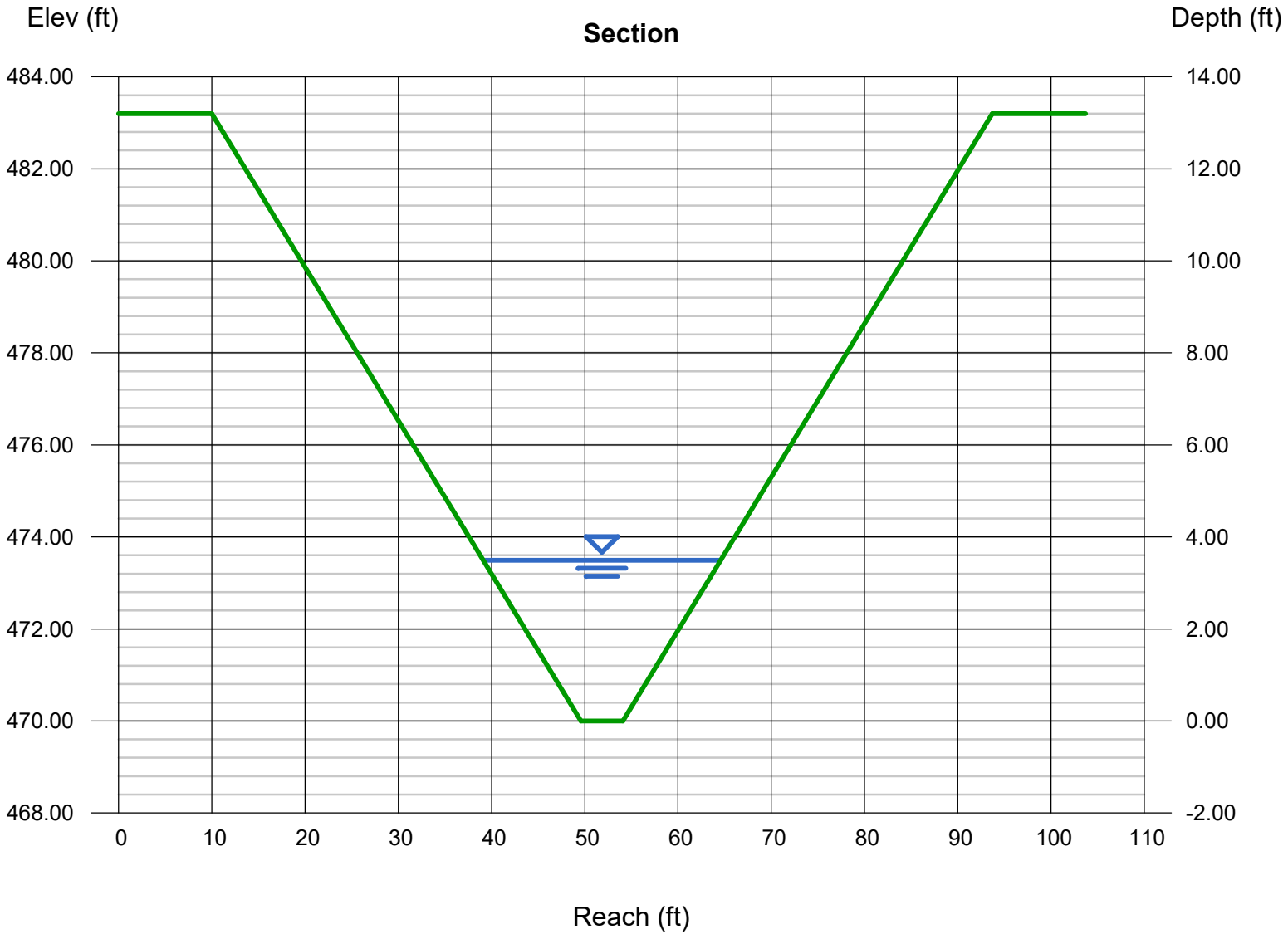
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 13.20
Invert Elev (ft)	= 470.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 390.06

Highlighted

Depth (ft)	= 3.49
Q (cfs)	= 390.06
Area (sqft)	= 52.25
Velocity (ft/s)	= 7.47
Wetted Perim (ft)	= 26.57
Crit Depth, Yc (ft)	= 3.36
Top Width (ft)	= 25.44
EGL (ft)	= 4.36



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 4B - 100-YR

Trapezoidal

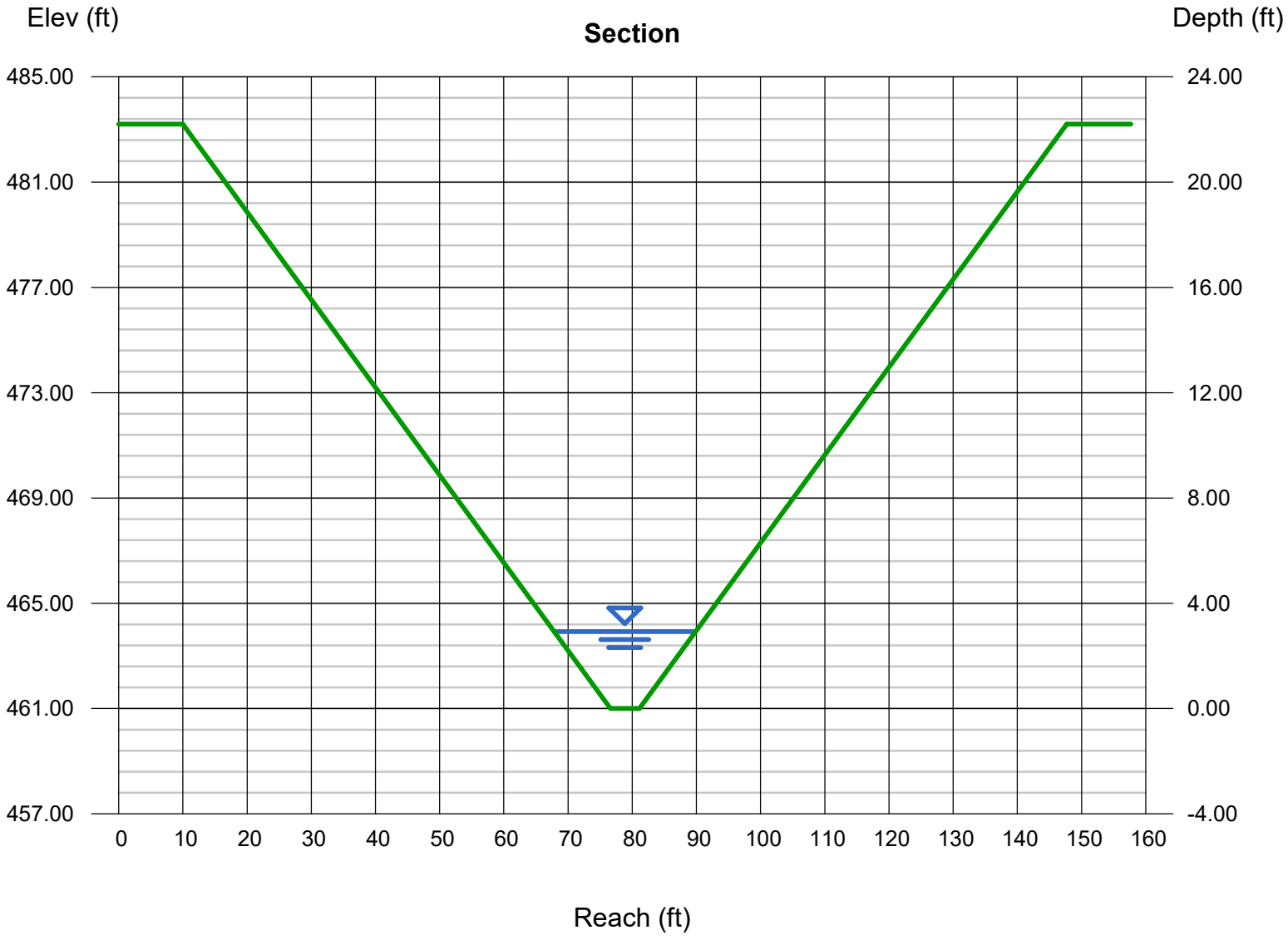
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 22.20
Invert Elev (ft)	= 461.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 260.53

Highlighted

Depth (ft)	= 2.92
Q (cfs)	= 260.53
Area (sqft)	= 38.72
Velocity (ft/s)	= 6.73
Wetted Perim (ft)	= 22.97
Crit Depth, Yc (ft)	= 2.77
Top Width (ft)	= 22.02
EGL (ft)	= 3.62



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 5A - 100-YR

Trapezoidal

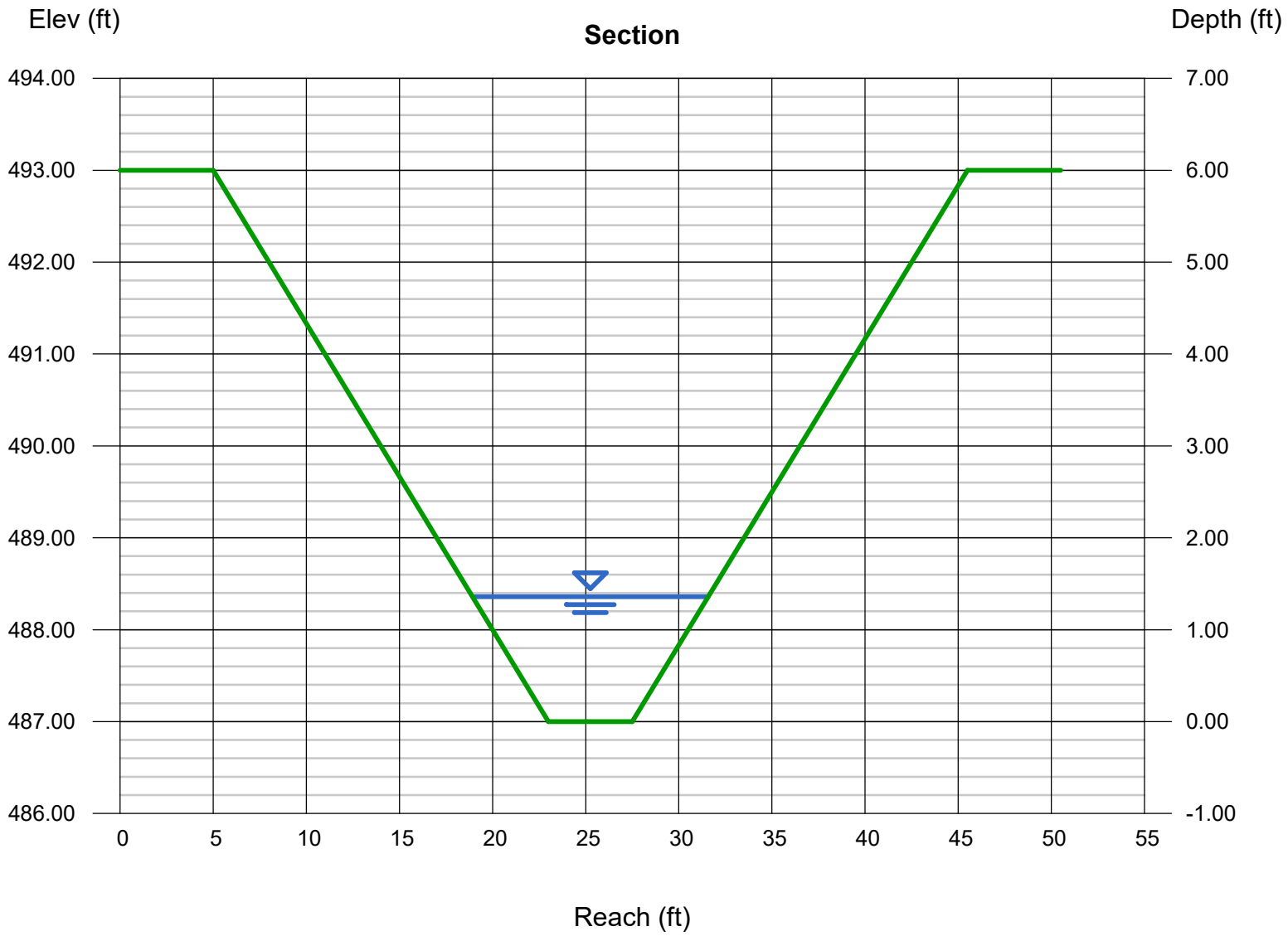
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 6.00
Invert Elev (ft)	= 487.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 51.17

Highlighted

Depth (ft)	= 1.36
Q (cfs)	= 51.17
Area (sqft)	= 11.67
Velocity (ft/s)	= 4.39
Wetted Perim (ft)	= 13.10
Crit Depth, Yc (ft)	= 1.22
Top Width (ft)	= 12.66
EGL (ft)	= 1.66



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Nov 9 2023

Ditch 5B - 100-YR

Trapezoidal

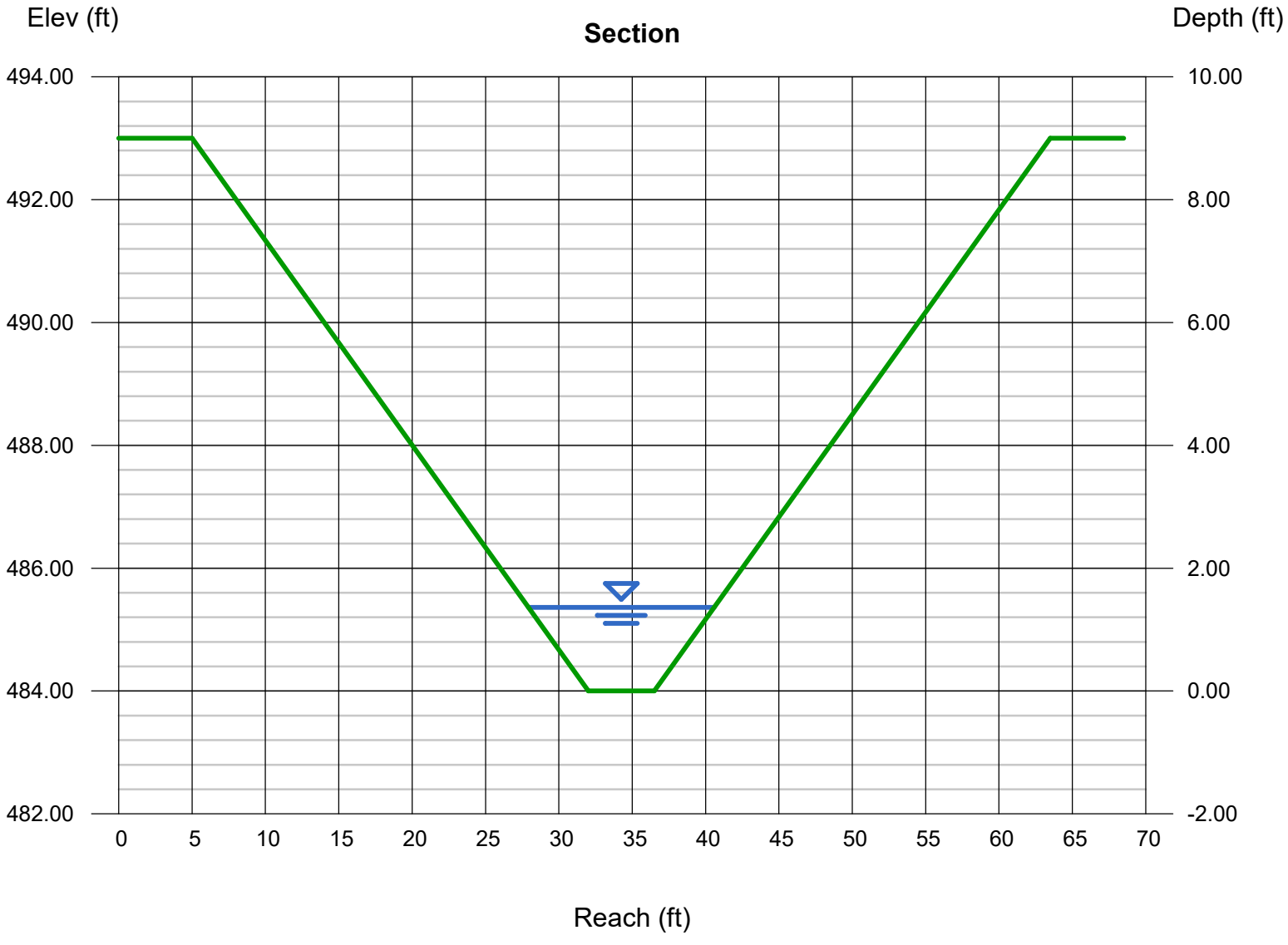
Bottom Width (ft)	= 4.50
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 9.00
Invert Elev (ft)	= 484.00
Slope (%)	= 0.50
N-Value	= 0.022

Calculations

Compute by:	Known Q
Known Q (cfs)	= 51.17

Highlighted

Depth (ft)	= 1.36
Q (cfs)	= 51.17
Area (sqft)	= 11.67
Velocity (ft/s)	= 4.39
Wetted Perim (ft)	= 13.10
Crit Depth, Yc (ft)	= 1.22
Top Width (ft)	= 12.66
EGL (ft)	= 1.66



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STORMWATER MANAGEMENT REPORT

Phase 2 Grading for Project Connect

APPENDIX I

Wave Height Calculation/ Freeboard Analysis

J – 27015.0007

December 2023

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Wave Height Calculation and Freeboard Analysis

for Project Connect Dams

The proposed Project Connect site includes the design and construction of six regulated dams. The SCDHEC Dams and Reservoirs Safety Act Regulations require new dam construction applications to include an analysis to verify that each dam is safe against overtopping and wave action. To accomplish this, the methodology found in the NRCS Guide for Design and Layout of Vegetated Wave Protection for Earthen Embankments and Shorelines, Technical Release 56 was used in the following analysis of ponds for the Project Connect site.

Wind-Generated waves create complex and erosive forces on earthen embankments. The NRCS guide serves to simplify the assessment of a wave attack using the following assumptions:

- The Height of the wave is a measure of the energy contained in each wave and of the energy that must be dissipated by the vegetation from each successive wave.
- Wave height is a function of wind direction, wind speed, and fetch length.
- There are no bathymetric limitations on ultimate wave height. This is referred to as the "deep water wave assumption".

These assumptions work with the nature of the site to reduce the complexity of calculations of wave height and velocity from wind generated waves. The steps to determine the wave height are divided into four steps:

1. Determine the effective fetch (F_e)
2. Determine the overland wind velocity (V_L)
3. Determine the overwater wind velocity (V_W)
4. Determine the significant wave height (H_s)

Determine the effective fetch (F_e)

The fetch is defined as the distance across open water that the wind blows to generate waves. In enclosed bodies of water such as those located on site, the fetch is limited by the sides of the impoundment. Effective fetch (F_e) is used to account for the effects of the reservoir shape. Effective fetch is calculated by using a plan view of the subject pond to calculate various radial lengths from the point of greatest vulnerability on the dam.

The point of greatest vulnerability was determined using historical wind direction data for the project site and then drawing a line perpendicular to the wind direction along the dam at the Spillway Design Flood (SDF) water level for each pond. 14 radial lines (seven along each side of the central 0° line) were spaced 6° apart and were extended from the point of greatest vulnerability to an intersection with the reservoir contour that represents the water surface of the fetch being calculated. The sum of the distance

multiplied by the cosine of each angle was divided by the sum of the cosines to calculate the effective fetch for the pond.

Determine the overland wind velocity (V_L)

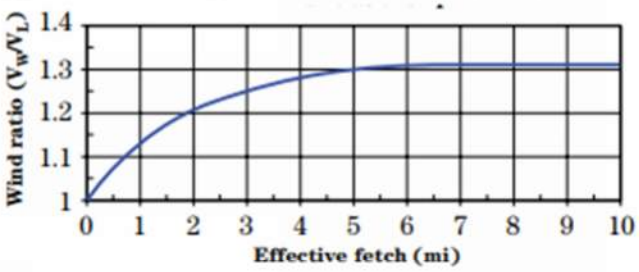
Wave height is determined by using overwater and overland wind velocities and the previously calculated effective fetch lengths. Consistent with the Engineer Guidelines for the Georgia Department of Natural Resources Environmental Protection Division Watershed Protection Branch Safe Dams Program, an assumed overland wind velocity of 50 mph was used. This value represents the minimum wind velocity recommended for freeboard calculations.

Determine the overwater wind velocity (V_W)

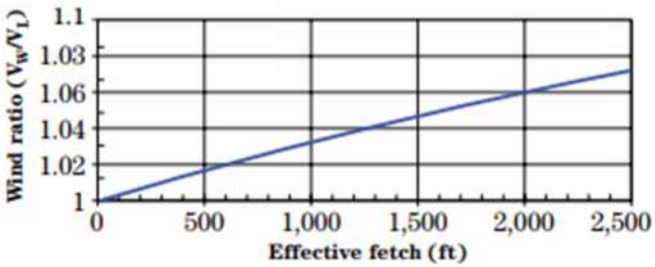
A conversion to overwater wind velocity was calculated using the charts from Figure 5 located in the NRCS guide. The wind ratio conversion accounts for the decrease in resistance that occurs when wind travels overwater. An image of Figure 5 can be found below.

Figure 5 Wind ratio

(a) Wind relationship overwater to overland (miles)



(b) Wind relationship overwater to overland (feet)



Determine the significant wave height (H_s)

Calculation of the significant wave height is a function of effective fetch and overwater wind velocity. It can be calculated by using the equation $H_s = 0.0232 * V_w^{1.06} * F_e^{0.47}$. This equation gives an average value for the highest one-third of the waves and is appropriate for the majority of NRCS applications. A table of effective fetch lengths, significant wave height, and available freeboard for each proposed dam can be found

below. Images showing how fetch length is calculated can be found below. Freeboard values marked with an asterisk signify insufficient freeboard available, and will be updated following design changes.

Dam	Pond #	Effective Fetch Length (ft)	Calculated Wave Height (ft)	Freeboard for PMF (ft)
Harvester Dam	Pond 1	1343.5	0.80	1.20
Terra Dam	Pond 2	1033.3	0.71	0.83
Traveler Dam	Pond 3	1063.1	0.72	17.06
Spirit Dam	Pond 4	633.8	0.55	7.85
Patriot Dam	Pond 6	381.1	0.43	0.78
Comanche Dam		579.2	0.62	26.53

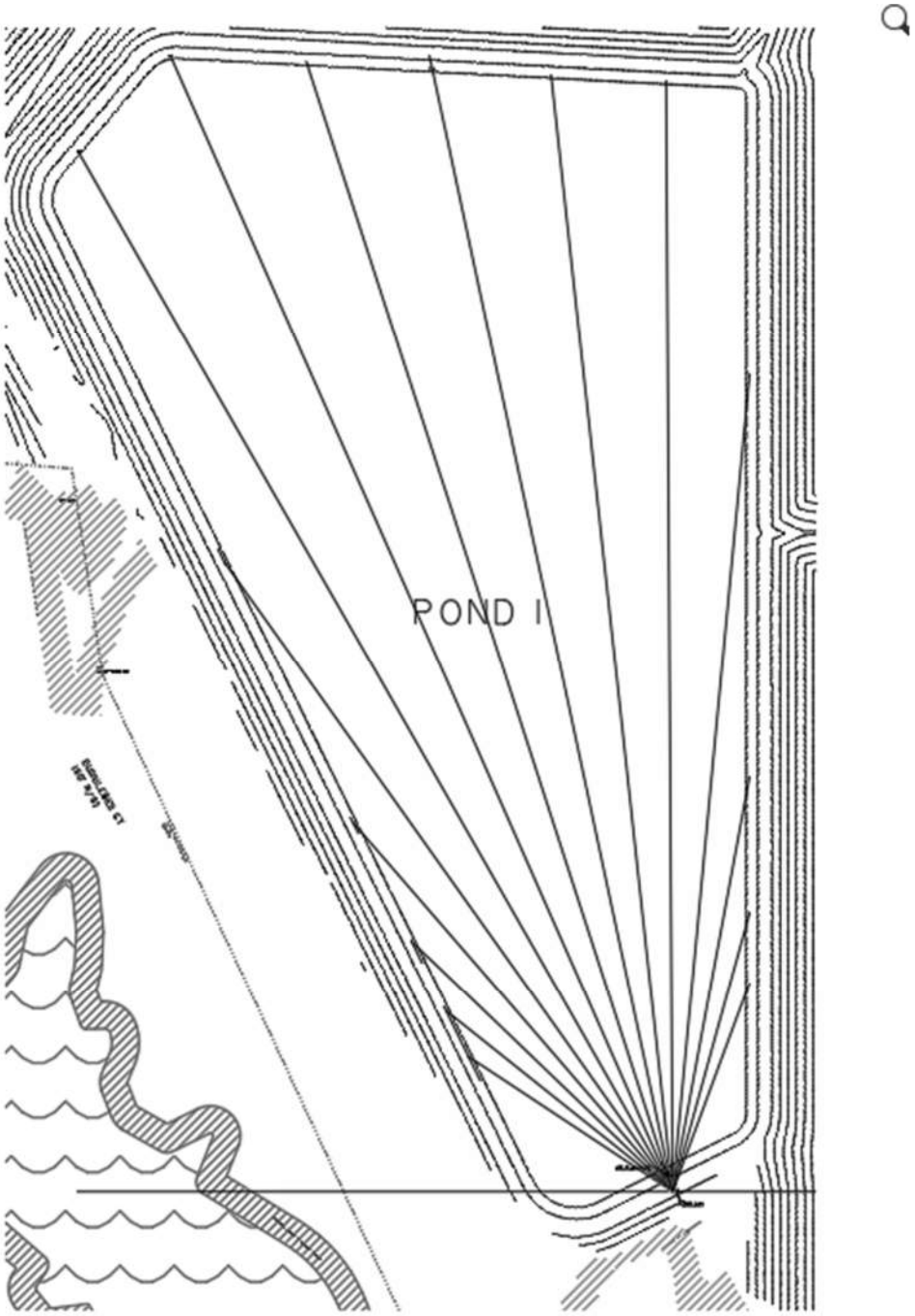


Figure 1: Harvester Dam Effective fetch calculation

Dam	Pond #	Effective Fetch Length (ft)	Calculated Wave Height (ft)	Freeboard for PMF (ft)
Harvester Dam	Pond 1	1343.5	0.80	1.20

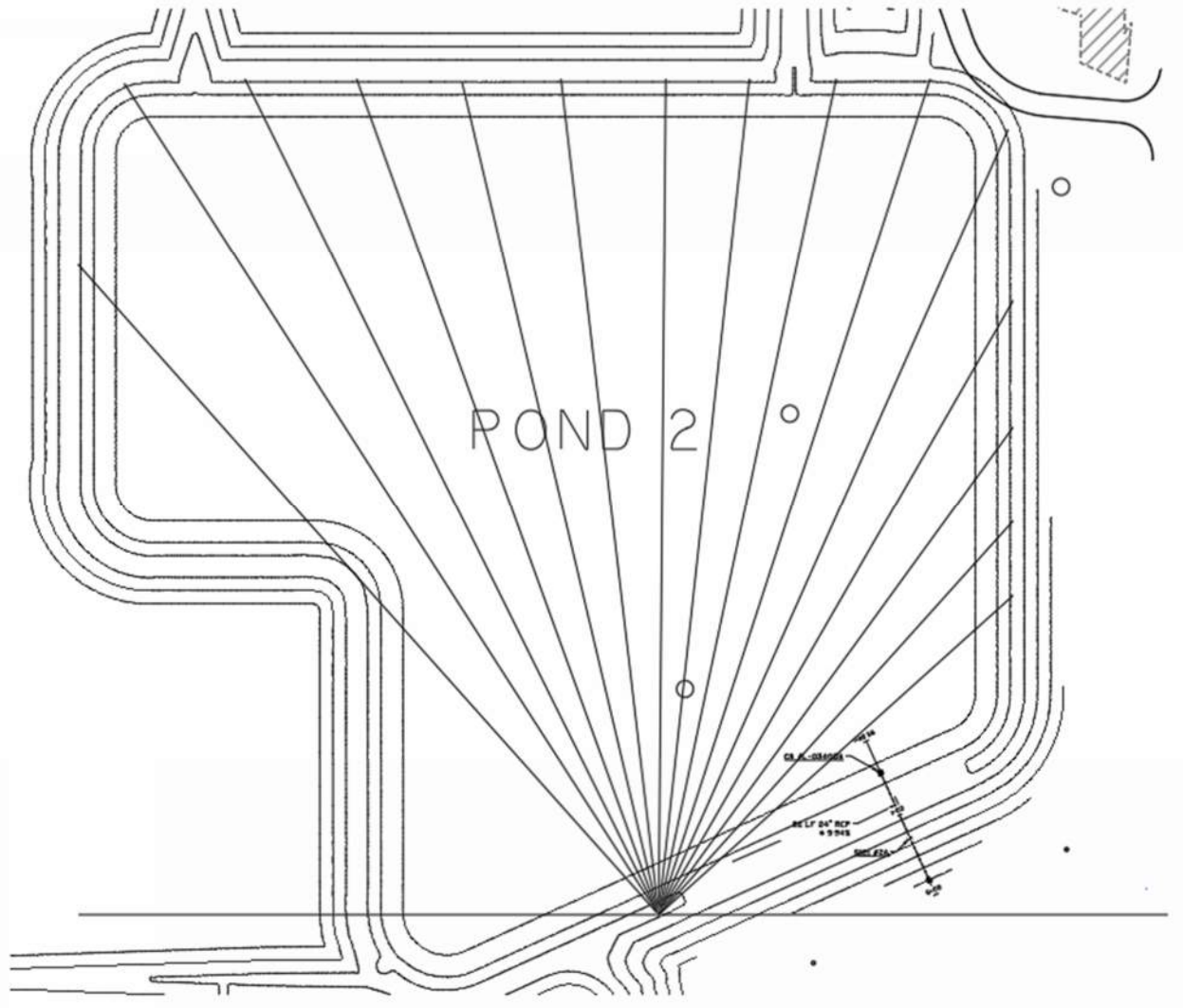


Figure 2: Terra Dam Effective Fetch Calculation

Dam	Pond #	Effective Fetch Length (ft)	Calculated Wave Height (ft)	Freeboard for PMF (ft)
Terra Dam	Pond 2	1033.3	0.71	0.83

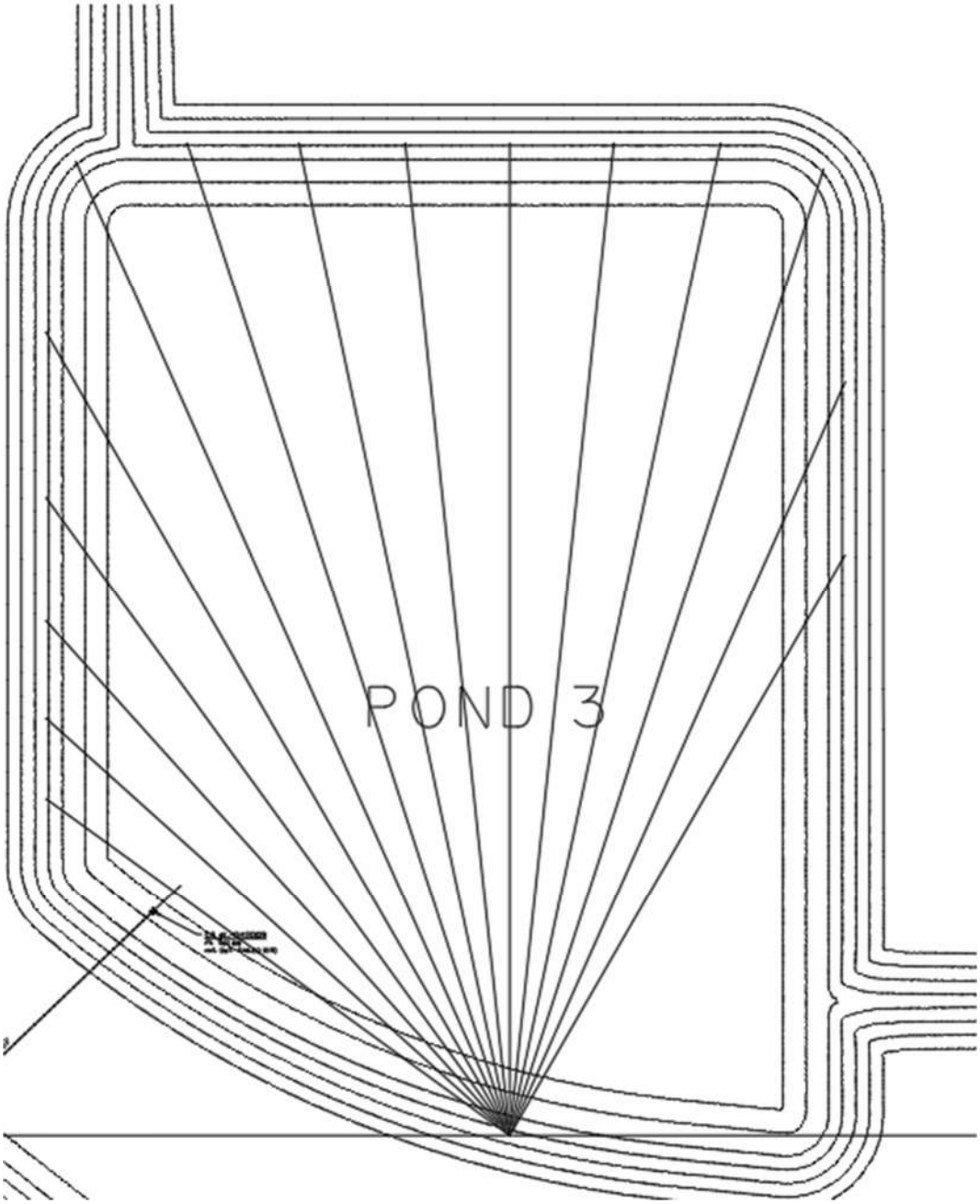


Figure 3: Traveler Dam Effective Fetch Calculation

Dam	Pond #	Effective Fetch Length (ft)	Calculated Wave Height (ft)	Freeboard for PMF (ft)
Traveler Dam	Pond 3	1063.1	0.72	17.06

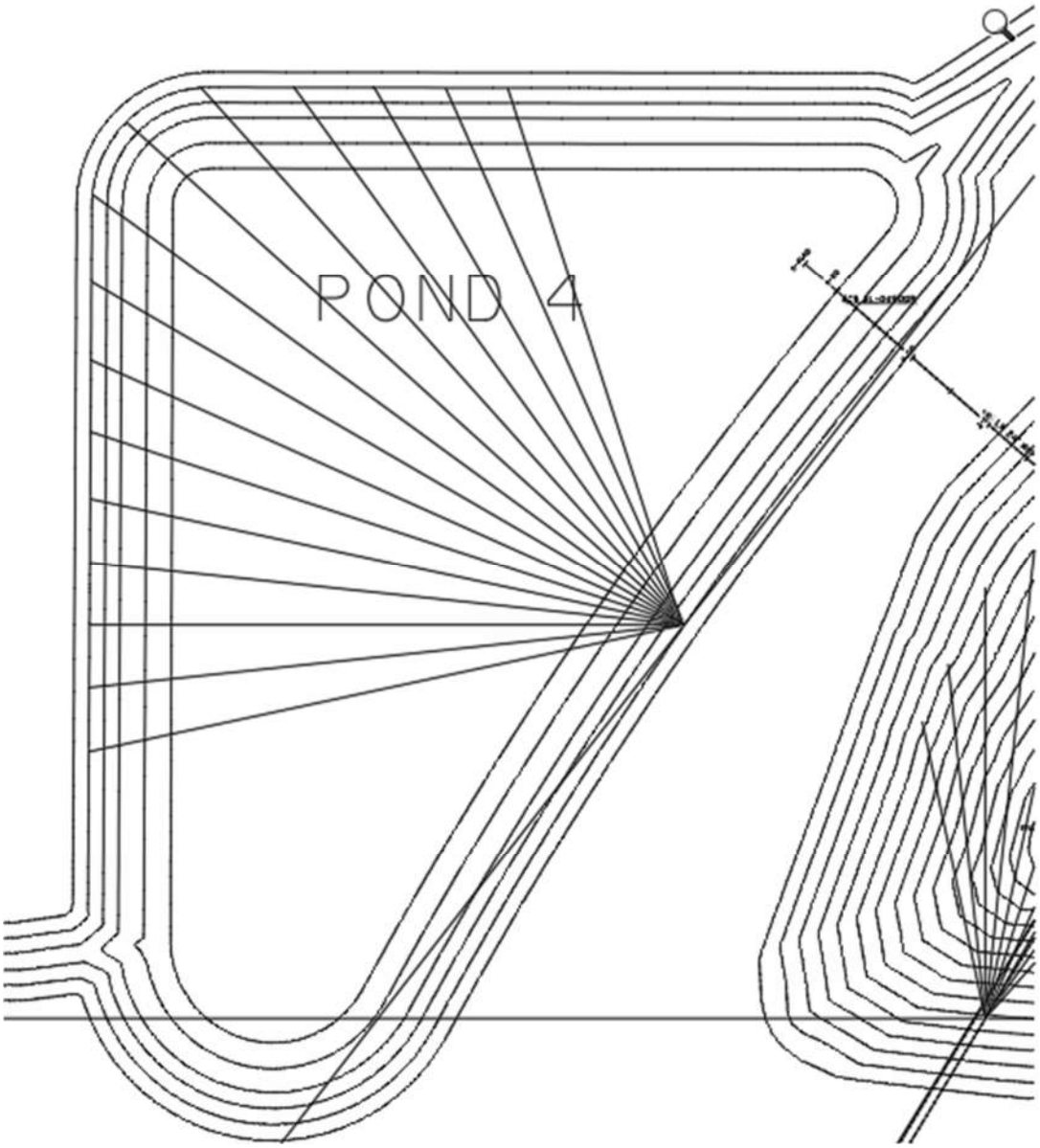


Figure 4: Spirit Dam Effective Fetch Calculation

Dam	Pond #	Effective Fetch Length (ft)	Calculated Wave Height (ft)	Freeboard for PMF (ft)
Spirit Dam	Pond 4	633.8	0.55	7.85

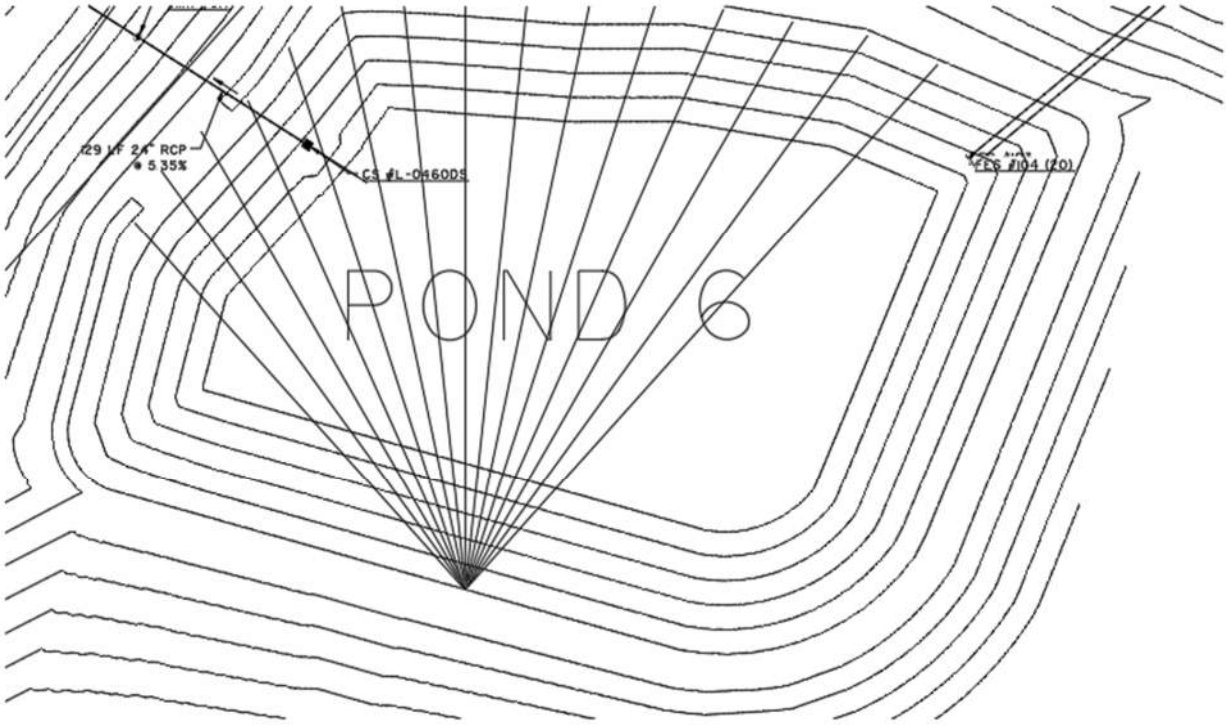


Figure 5: Patriot Dam Effective Fetch Calculation

Dam	Pond #	Effective Fetch Length (ft)	Calculated Wave Height (ft)	Freeboard for PMF (ft)
Patriot Dam	Pond 6	381.1	0.43	0.78

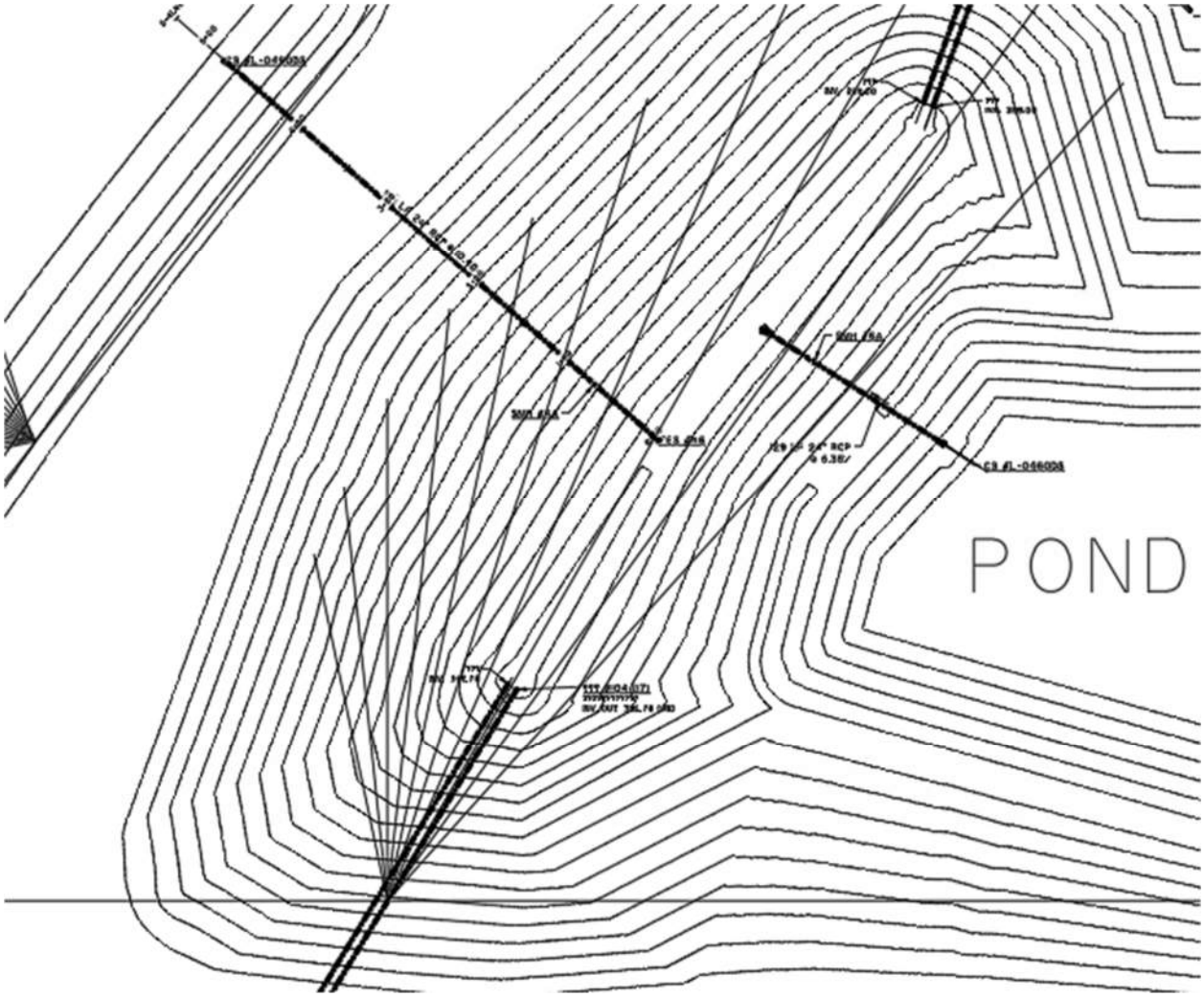


Figure 6: Comanche Dam Effective Fetch Calculation

Dam	Pond #	Effective Fetch Length (ft)	Calculated Wave Height (ft)	Freeboard for PMF (ft)
Comanche Dam	N/A	579.2	0.62	26.53

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Phase 2 Grading for Project Connect

EXHIBITS

J – 27015.0007

December 2023

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Pre-Development Drainage Exhibit

Phase 2 Grading for Project Connect : Pre

Existing Nodes

Existing Links

Channel

Pipe

Weir

Existing TC Paths

Water Lines (FEMA)

Existing Basins

Site Boundary

Parcels

Richland County 1 ft Contours

Richland County DEM (2010)

Value

High : 573.634

Low : 332.358

0 225 450 900 1,350 1,800 2,250 Feet

1 inch = 450 feet

Job Number: 27013.0007	Produced: 3-9-2023	Produced By: ACS	Modified: 6-13-2023	Modified By: ACS
File: Z:\27015\27015.0007\GIS\Mxd\Exhibits\Phase 2\PreDevelopmentExhibit_Phase2.mxd				Vertical Datum: NAVD88

Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Existing Nodes/Existing Links/Existing Basins	Thomas & Hutton	2023
Site Boundary	Thomas & Hutton	2023
Parcels/DEM	Richland County	2010
Water Lines	FEMA	2017

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Phase 2 Grading for Project Connect

Richland County, SC

Pre-Development Drainage Exhibit

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COLUMBIA, SC 29201 • 803.451.6789
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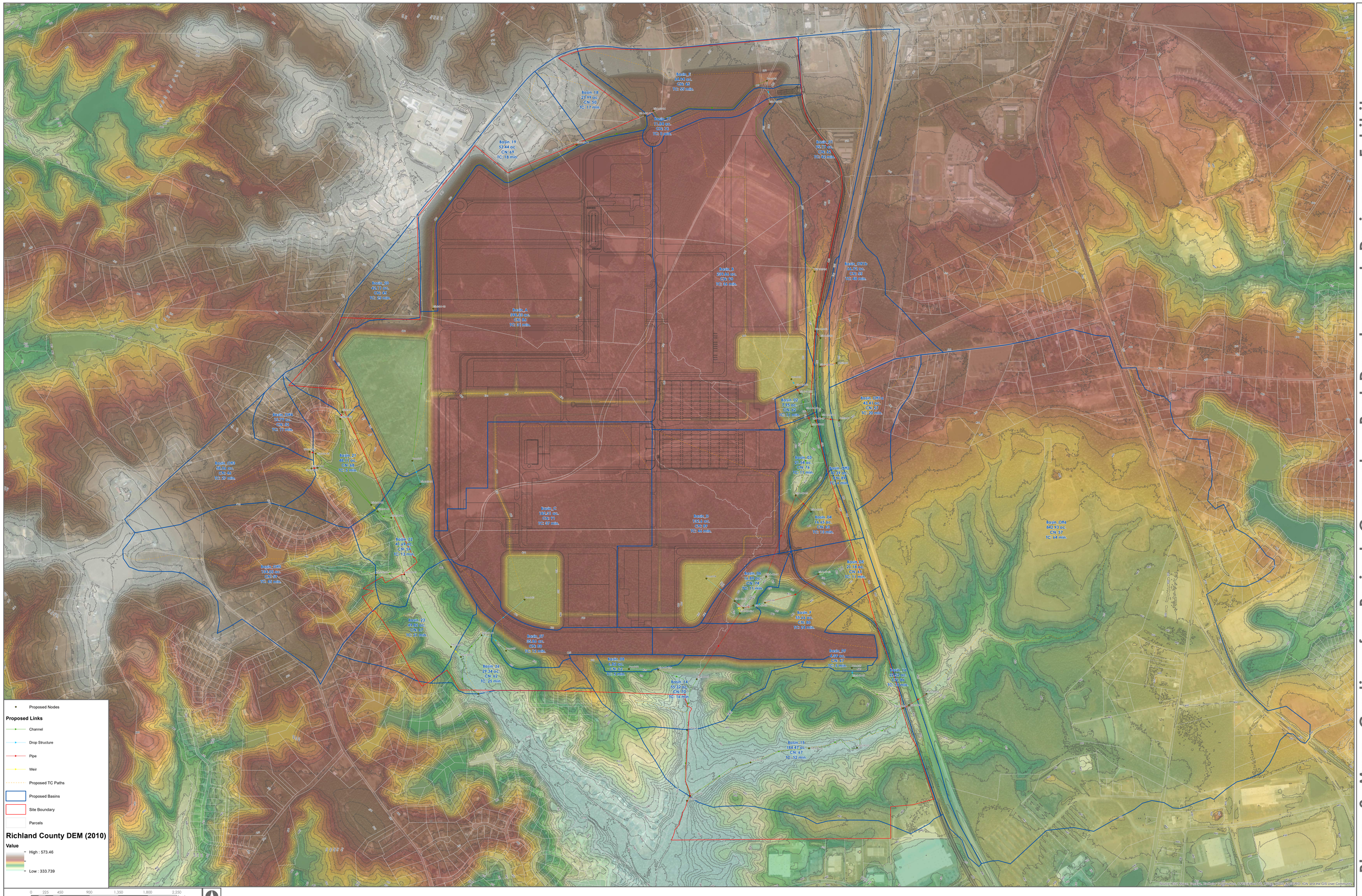
Exhibit 1



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Site Boundary	Thomas & Hutton	2023
Parcels/DEM	Richland County	2010
Water Lines	FEMA	2017

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Phase 2 Mass Grading for Project Connect

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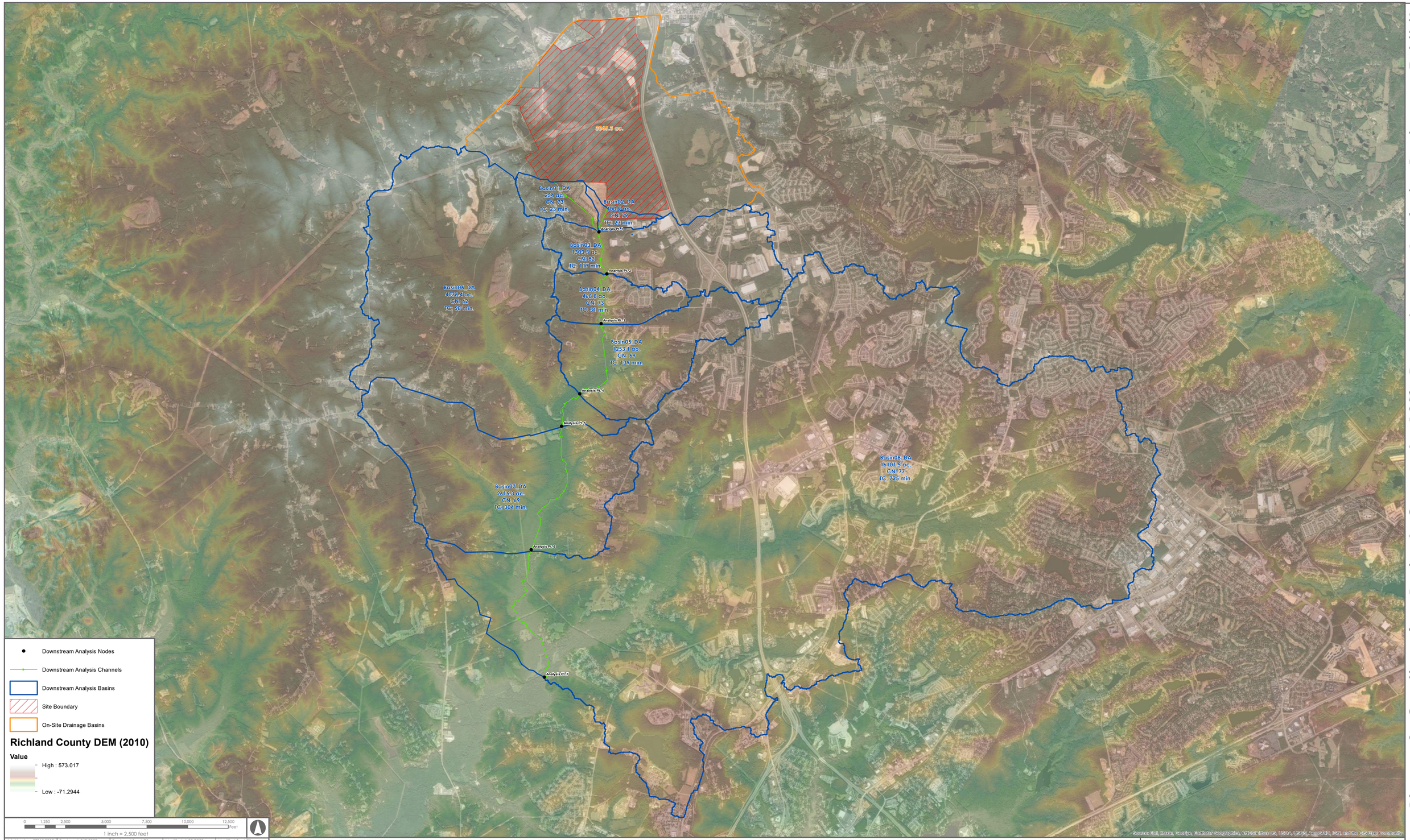
Phase 2 Mass Grading for Project Connect : Post-Development Drainage Exhibit

Exhibit 2



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Site Boundary	Thomas & Hutton	2023
Parcels/ DEM	Richland County	2010
Water Lines	FEMA	2017

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10% Downstream Analysis Drainage Exhibit

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Phase 2 Grading for Project Connect: 10% Downstream Analysis Drainage Exhibit

Exhibit 3

Appendix E

Inspection Log and Reports

To Be Included in OS-SWPPP

Appendix F

Rainfall Records

To Be Included in OS-SWPPP

Appendix G

Additional Site Logs and Records

To Be Included in OS-SWPPP

Appendix H

Construction General Permit SCR100000

A copy of the NPDES General Permit for Stormwater Discharges from Construction Activities (SCR100000) can be found at the following address:

http://www.scdhec.gov/environment/water/swater/docs/CGP-permit.pdf