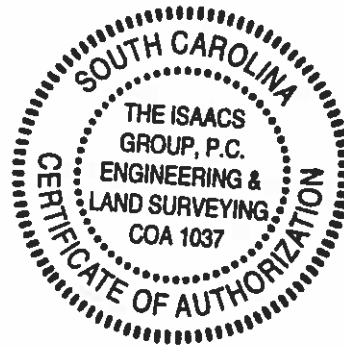


THE ISAACS GROUP

CIVIL ENGINEERING DESIGN & LAND SURVEYING
8720 RED OAK BOULEVARD, STE. 420
CHARLOTTE, N.C. 28217
PHONE (704) 527-3440 FAX (704) 527-8335

Project Gekko

Paragon Way
Rock Hill, South Carolina



Project Calculations

Project Gekko

**Paragon Way
Rock Hill, South Carolina**

Water Quality Calculations

WETPOND CALCULATIONS

Pond Drainage Information:

Pond No.: 1
 Total Drainage Area-DA (Ac.) = 43.24
 Impervious Area-IA (Ac.) = 28.28
 Percent Impervious Area = 65.40

See Plan for delineation of Basins
Total Proposed Impervious Area

Pond Stage-Storage Information:

Perm. Water surface elevation =

553

Elevation	Total Surface Area (s.f.)	Cummulative Det'n Volume (cu.ft.)	Cummulative Wet Volume (cu.ft.)	Forebay Surface Area (s.f.)	Forebay Cumulative Volume (cu. ft.)	Percentage of total Volume (20% desired)
549	45,443	0	0	9,158	0	
550	49,074	0	47,259	10,135	9,647	
551	52,932	0	98,262	11,117	20,273	
552	56,978	0	153,216	12,205	31,934	
553	61,313	0	212,360	13,387	44,730	
554	75,579	68,446	280,806	0	0	
555	80,879	148,675	359,035	0	0	
556	85,486	229,858	442,218	0	0	
557	89,709	317,455	529,815	0	0	
558	94,152	409,386	621,746	0	0	
559	98,559	505,741	718,101	0	0	
560	103,191	606,616	818,976	0	0	

21.06%

Permanent Pool Calculations:

Permanent Pool Elevation = 553
 FFV = 0.50
 Storage Required (ac.-ft.) = 1.18
 Storage Required (cu. ft.) = 51,328
 Storage Provided (cu. ft.) = 212,360

See Plan
First flush runoff depth (in.)
=(FFV*IA) /12
OK

Temporary Water Quality Volume Calculations:

FFV = 0.50
 Storage Required (ac.-ft.) = 1.80
 Storage Required (cu. ft.) = 78,481
 Temporary Water Quality Volume Provided @ elev.: 554.13

First flush runoff depth (in.)
=(FFV*DA) /12

WETPOND CALCULATIONS

Pond Drainage Information:

Pond No :	2	
Total Drainage Area-DA (Ac.) =	14.41	See Plan for delineation of Basins
Impervious Area-IA (Ac.) =	12.00	Total Proposed Impervious Area
Percent Impervious Area =	83.28	

Pond Stage-Storage Information:

Perm. Water surface elevation =

547.35

Elevation	Total Surface Area (s.f.)	Cummulative Def'n Volume (cu.ft.)	Cummulative Wet Volume (cu.ft.)	Forebay Surface Area (s.f.)	Forebay Cummulative Volume (cu. ft.)	Percentage of total Volume (20% desired)
543	4,341	0	0	780	0	
544	5,549	0	4,945	1,150	985	
545	6,576	0	11,008	1,576	2,326	
548	7,859	0	18,125	2,059	4,146	
547	8,790	0	26,350	2,598	6,474	
547.35	9,629	0	29,573	0	0	
548	13,082	7,381	36,954	0	0	
548	15,305	21,575	51,147	0	0	
550	16,811	37,633	67,205	0	0	
551	18,357	55,217	84,789	0	0	
552	19,985	74,388	103,980	0	0	
553	21,445	95,103	124,675	0	0	
554	23,445	117,548	147,120			
555	25,260	141,600	171,473			24.5%

3

Permanent Pool Calculations:

Permanent Pool Elevation =	547.35	See Plan
FFV =	0.50	First flush runoff depth (in.)
Storage Required (ac.-ft.) =	0.50	=(FFV*IA) /12
Storage Required (cu. ft.) =	21,780	OK
Storage Provided (cu. ft.) =	26,350	

Temporary Water Quality Volume Calculations:

FFV =	0.500	First flush runoff depth (in.)
Storage Required (ac.-ft.) =	0.60	=(FFV*DA) /12
Storage Required (cu. ft.) =	26,154	
Temporary Water Quality Volume Provided @ elev.:	549.29	

Project Gekko

**Paragon Way
Rock Hill, South Carolina**

Detention Calculations

MASTER DESIGN STORM SUMMARY

Default Network Design Storm File, ID STORMS.RNQ York Co SC 24 Hr

Return Event	Total Depth in	Rainfall Type	RNF File	RNF ID
2	3.6000	Synthetic Curve	DETENT	SCS Type II
10	5.3000	Synthetic Curve	DETENT	SCS Type II
25	6.3000	Synthetic Curve	DETENT	SCS Type II
50	7.1000	Synthetic Curve	DETENT	SCS Type II
100	7.9000	Synthetic Curve	DETENT	SCS Type II

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Storage Node ID	Return Type	Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-
*A-PRE-OUT	JCT	2	3.677		12.3000	27.34		
*A-PRE-OUT	JCT	10	8.830		12.2500	78.32		
*A-PRE-OUT	JCT	25	12.390		12.2500	113.72		
*A-PRE-OUT	JCT	50	15.437		12.2500	143.84		
*A-PRE-OUT	JCT	100	18.624		12.2500	175.16		
A-PREDEVELOPED	AREA	2	3.677		12.3000	27.34		
A-PREDEVELOPED	AREA	10	8.830		12.2500	78.32		
A-PREDEVELOPED	AREA	25	12.390		12.2500	113.72		
A-PREDEVELOPED	AREA	50	15.437		12.2500	143.84		
A-PREDEVELOPED	AREA	100	18.624		12.2500	175.16		
B-POSTDEVELOPED1	AREA	2	7.580		11.9000	132.95		
B-POSTDEVELOPED1	AREA	10	13.139		11.9000	228.97		
B-POSTDEVELOPED1	AREA	25	16.525		11.9000	285.96		
B-POSTDEVELOPED1	AREA	50	19.271		11.9000	331.51		
B-POSTDEVELOPED1	AREA	100	22.041		11.9000	376.96		
B-POSTDEVELOPED2	AREA	2	3.281		11.9000	56.36		
B-POSTDEVELOPED2	AREA	10	5.263		11.9000	88.37		
B-POSTDEVELOPED2	AREA	25	6.442		11.9000	107.01		
B-POSTDEVELOPED2	AREA	50	7.389		11.9000	121.84		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Storage Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-ft
B-POSTDEVELOPED2	AREA	100	8.339		11.9000	136.62		
BYPASS	AREA	2	.546		12.0000	8.48		
BYPASS	AREA	10	1.372		11.9500	23.14		
BYPASS	AREA	25	1.951		11.9500	33.69		
BYPASS	AREA	50	2.451		11.9500	42.67		
BYPASS	AREA	100	2.976		11.9500	52.01		
C-POND1	IN POND	2	7.580		11.9000	132.95		
C-POND1	IN POND	10	13.139		11.9000	228.97		
C-POND1	IN POND	25	16.525		11.9000	285.96		
C-POND1	IN POND	50	19.271		11.9000	331.51		
C-POND1	IN POND	100	22.041		11.9000	376.96		
4.005 C-POND1	OUT POND	2	7.578		12.6000	10.67	555.33	
7.342 C-POND1	OUT POND	10	13.137		12.7500	15.39	557.03	
9.413 C-POND1	OUT POND	25	16.523		12.8500	17.55	558.01	
10.417 C-POND1	OUT POND	50	19.269		12.4000	36.57	558.46	
11.352 C-POND1	OUT POND	100	22.038		12.2000	66.90	558.88	
C-POND2	IN POND	2	3.281		11.9000	56.36		
C-POND2	IN POND	10	5.263		11.9000	88.37		
C-POND2	IN POND	25	6.442		11.9000	107.01		
C-POND2	IN POND	50	7.389		11.9000	121.84		
C-POND2	IN POND	100	8.339		11.9000	136.62		
1.662 C-POND2	OUT POND	2	3.281		12.2500	8.30	551.90	
2.498 C-POND2	OUT POND	10	5.262		12.1000	24.00	553.61	
2.819 C-POND2	OUT POND	25	6.441		12.0500	53.63	554.22	
3.002 C-POND2	OUT POND	50	7.389		12.0500	77.42	554.54	

C-POND2	OUT POND	100	8.338	12.0000	103.98	554.74
3.114						
*E-POST-OUT	JCT	2	11.405	12.0500	22.94	
*E-POST-OUT	JCT	10	19.770	12.0000	55.08	
*E-POST-OUT	JCT	25	24.915	12.0500	92.57	

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Storage Node ID	Return Type	Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-
*E-POST-OUT	JCT	50	29.108		12.0000	127.21		
*E-POST-OUT	JCT	100	33.352		12.0500	179.59		

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.....
TIME OF CONCENTRATION CALCULATOR
.....

Segment #1: Tc: TR-55 Shallow

Hydraulic Length 1454.00 ft
Slope .050000 ft/ft
Unpaved

Avg.Velocity 3.61 ft/sec

Segment #1 Time: .1119 hrs

Segment #2: Tc: TR-55 Sheet

Mannings n .8000
Hydraulic Length 100.00 ft
2yr, 24hr P 3.6000 in
Slope .035000 ft/ft

Avg.Velocity .06 ft/sec

Segment #2 Time: .4697 hrs

=====
Total Tc: .5816 hrs
=====

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Tc Equations used...

==== SCS TR-55 Sheet Flow =====

$$Tc = (.007 * ((n * Lf)**0.8)) / ((P**.5) * (Sf**.4))$$

Where: Tc = Time of concentration, hrs
n = Mannings n
Lf = Flow length, ft
P = 2yr, 24hr Rain depth, inches
Sf = Slope, %

==== SCS TR-55 Shallow Concentrated Flow =====

Unpaved surface:
 $V = 16.1345 * (Sf**0.5)$

Paved surface:
 $V = 20.3282 * (Sf**0.5)$

$$Tc = (Lf / V) / (3600sec/hr)$$

Where: V = Velocity, ft/sec
Sf = Slope, ft/ft
Tc = Time of concentration, hrs
Lf = Flow length, ft

Type.... Runoff CN-Area
Name.... A-PREDEVELOPED

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

RUNOFF CURVE NUMBER DATA

.....

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C	%UC	Adjusted CN
WOODED - B SOIL	55	31.125			55.00
WOODED - C SOIL	70	31.125			70.00
COMPOSITE AREA & WEIGHTED CN --->		62.250			62.50 (63)

.....

Type.... Runoff CN-Area
Name.... B-POSTDEVELOPED

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

RUNOFF CURVE NUMBER DATA

.....

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
IMPERVIOUS	98	28.280			98.00
OPEN SPACE	61	14.960			61.00
COMPOSITE AREA & WEIGHTED CN --->		43.240			85.20 (85)

.....

Type.... Runoff CN-Area
Name.... B-POSTDEVELOPED2

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

RUNOFF CURVE NUMBER DATA

.....

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
IMPERVIOUS	98	12.000			98.00
OPEN SPACE	61	2.410			61.00
COMPOSITE AREA & WEIGHTED CN --->		14.410			91.81 (92)

.....

Type.... Runoff CN-Area
Name.... BYPASS

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

RUNOFF CURVE NUMBER DATA

.....

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
OPEN SPACE	61	10.600			61.00
COMPOSITE AREA & WEIGHTED CN --->		10.600			61.00 (61)

.....

Type.... Vol: Elev-Volume
Name.... C-POND

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

USER DEFINED VOLUME RATING TABLE

Elevation (ft)	Volume (ac-ft)
553.00	.000
554.00	1.571
555.00	3.367
556.00	5.277
557.00	7.288
558.00	9.398
559.00	11.610
560.05	13.926

Type.... Vol: Elev-Volume
Name.... C-POND2

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

USER DEFINED VOLUME RATING TABLE

Elevation (ft)	Volume (ac-ft)
547.35	.000
548.00	.170
549.00	.495
550.00	.864
551.00	1.268
552.00	1.708
553.00	2.183
554.00	2.699
555.00	3.258
555.47	3.552

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REQUESTED POND WS ELEVATIONS:

Min. Elev.= 553.00 ft
 Increment = .50 ft
 Max. Elev.= 560.05 ft

 OUTLET CONNECTIVITY

---> Forward Flow Only (UpStream to DnStream)
 <--- Reverse Flow Only (DnStream to UpStream)
 <---> Forward and Reverse Both Allowed

Structure	No.	Outfall	E1, ft	E2, ft
Inlet Box		---> CV	558.030	560.050
Weir-Rectangular		---> CV	559.430	560.050
Orifice-Circular		---> CV	553.000	560.050
Culvert-Circular	CV	---> TW	548.470	560.050
TW SETUP, DS Channel				

OUTLET STRUCTURE INPUT DATA

Structure ID =
Structure Type = Inlet Box

of Openings = 1
Invert Elev. = 558.03 ft
Orifice Area = 38.0160 sq.ft
Orifice Coeff. = .600
Weir Length = 19.80 ft
Weir Coeff. = 3.100
K, Submerged = .000
K, Reverse = 1.000
Kb,Barrel = .000000 (per ft of full flow)
Barrel Length = .00 ft
Mannings n = .0000

Structure ID =
Structure Type = Weir-Rectangular

of Openings = 1
Crest Elev. = 559.43 ft
Weir Length = 25.50 ft
Weir Coeff. = 3.100000

Weir TW effects (Use adjustment equation)

Structure ID =
Structure Type = Orifice-Circular

of Openings = 1
Invert Elev. = 553.00 ft
Diameter = 1.5000 ft
Orifice Coeff. = .600

OUTLET STRUCTURE INPUT DATA

Structure ID = CV
Structure Type = Culvert-Circular

No. Barrels = 1
Barrel Diameter = 3.0000 ft
Upstream Invert = 548.47 ft
Dnstream Invert = 548.05 ft
Horiz. Length = 83.00 ft
Barrel Length = 83.00 ft
Barrel Slope = .00506 ft/ft

OUTLET CONTROL DATA...

Mannings n = .0110
Ke = .1000 (forward entrance loss)
Kb = .005175 (per ft of full flow)
Kr = .1000 (reverse entrance loss)
HW Convergence = .001 +/- ft

INLET CONTROL DATA...

Equation form = 1
Inlet Control K = .0098
Inlet Control M = 2.0000
Inlet Control c = .03980
Inlet Control Y = .6700
T1 ratio (HW/D) = 1.158
T2 ratio (HW/D) = 1.304
Slope Factor = -.500

Use unsubmerged inlet control Form 1 equ. below T1 elev.
Use submerged inlet control Form 1 equ. above T2 elev.

In transition zone between unsubmerged and submerged inlet control,
interpolate between flows at T1 & T2...

At T1 Elev = 551.94 ft ---> Flow = 42.85 cfs
At T2 Elev = 552.38 ft ---> Flow = 48.97 cfs

Structure ID = TW
Structure Type = TW SETUP, DS Channel

FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...

Maximum Iterations= 30
Min. TW tolerance = .01 ft
Max. TW tolerance = .01 ft
Min. HW tolerance = .01 ft
Max. HW tolerance = .01 ft
Min. Q tolerance = .10 cfs

Max. Q tolerance = .10 cfs

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Inlet Box)

Upstream ID = (Pond Water Surface)

DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
553.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
553.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
554.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
554.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
555.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
555.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
556.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
556.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
557.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
557.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
558.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
558.03	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
558.50	19.78	558.50	Free	551.66	.000	.000	Free Outfall	
		Weir: H = .47						
559.00	58.64	559.00	Free	555.03	.000	.000	Free Outfall	
		Weir: H = .97						
559.43	106.05	559.43	559.43	559.43	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
559.50	106.45	559.50	559.50	559.50	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
560.00	109.36	560.00	560.00	560.00	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
560.05	109.65	560.05	560.05	560.05	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Weir-Rectangular)

Upstream ID = (Pond Water Surface)

DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
553.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
553.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
554.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
554.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
555.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
555.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
556.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
556.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
557.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
557.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
558.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
558.03	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
558.50	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
559.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
559.43	.00	.00	Centroid	559.43	.000	.000	Free Outfall	
		Full riser flow. Q=0 this opening.						
559.50	.00	559.50	559.50	559.50	.000	.000	Free Outfall	
		Full riser flow. Q=0 this opening.						
560.00	.00	560.00	560.00	560.00	.000	.000	Free Outfall	
		Full riser flow. Q=0 this opening.						
560.05	.00	560.05	560.05	560.05	.000	.000	Free Outfall	
		Full riser flow. Q=0 this opening.						

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Orifice-Circular)

Upstream ID = (Pond Water Surface)

DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
553.00	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
553.50	.98	553.50	Free	548.89	.000	.000	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .130ft	Dcr= .369ft	CRIT.DEPTH		
554.00	3.55	554.00	Free	549.28	.000	.000	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .279ft	Dcr= .720ft	CRIT.DEPTH		
554.50	7.37	554.50	Free	549.66	.000	.000	Free Outfall	
		H =.75						
555.00	9.51	555.00	Free	549.83	.000	.000	Free Outfall	
		H =1.25						
555.50	11.25	555.50	Free	549.96	.000	.000	Free Outfall	
		H =1.75						
556.00	12.76	556.00	Free	550.07	.000	.000	Free Outfall	
		H =2.25						
556.50	14.10	556.50	Free	550.16	.000	.000	Free Outfall	
		H =2.75						
557.00	15.33	557.00	Free	550.24	.000	.000	Free Outfall	
		H =3.25						
557.50	16.47	557.50	Free	550.31	.000	.000	Free Outfall	
		H =3.75						
558.00	17.53	558.00	Free	550.37	.000	.000	Free Outfall	
		H =4.25						
558.03	17.60	558.03	Free	550.38	.000	.000	Free Outfall	
		H =4.28						
558.50	18.54	558.50	Free	551.66	.000	.000	Free Outfall	
		H =4.75						
559.00	16.97	559.00	555.02	555.03	.007	.000	Free Outfall	
		H =3.98						
559.43	.00	559.43	559.43	559.43	.000	.000	Free Outfall	
		Full riser flow. Q=0 this opening.						
559.50	.00	559.50	559.50	559.50	.000	.000	Free Outfall	
		Full riser flow. Q=0 this opening.						
560.00	.00	560.00	560.00	560.00	.000	.000	Free Outfall	
		Full riser flow. Q=0 this opening.						
560.05	.00	560.05	560.05	560.05	.000	.000	Free Outfall	
		Full riser flow. Q=0 this opening.						

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = CV (Culvert-Circular)

Mannings open channel maximum capacity: 60.31 cfs

UPstream ID's= , ,

DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
553.00	.00	548.47	Free	Free	.000	.000	Free	Outfall
553.50	.98	548.89	Free	Free	.000	.000	Free	Outfall
554.00	3.55	549.28	Free	Free	.000	.000	Free	Outfall
554.50	7.37	549.66	Free	Free	.000	.000	Free	Outfall
555.00	9.51	549.83	Free	Free	.000	.000	Free	Outfall
555.50	11.25	549.96	Free	Free	.000	.000	Free	Outfall
556.00	12.76	550.07	Free	Free	.000	.000	Free	Outfall
556.50	14.10	550.16	Free	Free	.000	.000	Free	Outfall
557.00	15.33	550.24	Free	Free	.000	.000	Free	Outfall
557.50	16.47	550.31	Free	Free	.000	.000	Free	Outfall
558.00	17.53	550.37	Free	Free	.000	.000	Free	Outfall
558.03	17.60	550.38	Free	Free	.000	.000	Free	Outfall
558.50	38.31	551.66	Free	Free	.000	.000	Free	Outfall
559.00	75.61	555.03	Free	Free	.000	.000	Free	Outfall
559.43	106.05	559.43	Free	Free	.000	.000	Free	Outfall
559.50	106.45	559.50	Free	Free	.000	.000	Free	Outfall
560.00	109.36	560.00	Free	Free	.000	.000	Free	Outfall
560.05	109.65	560.05	Free	Free	.000	.000	Free	Outfall

***** COMPOSITE OUTFLOW SUMMARY *****

WS Elev, Total Q		Converge		Notes
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
553.00	.00	Free Outfall		(no Q: ,,CV)
553.50	.98	Free Outfall		,CV (no Q: ,)
554.00	3.55	Free Outfall		,CV (no Q: ,)
554.50	7.37	Free Outfall		,CV (no Q: ,)
555.00	9.51	Free Outfall		,CV (no Q: ,)
555.50	11.25	Free Outfall		,CV (no Q: ,)
556.00	12.76	Free Outfall		,CV (no Q: ,)
556.50	14.10	Free Outfall		,CV (no Q: ,)
557.00	15.33	Free Outfall		,CV (no Q: ,)
557.50	16.47	Free Outfall		,CV (no Q: ,)
558.00	17.53	Free Outfall		,CV (no Q: ,)
558.03	17.60	Free Outfall		,CV (no Q: ,)
558.50	38.31	Free Outfall		,,CV
559.00	75.61	Free Outfall		,,CV
559.43	106.05	Free Outfall		,CV (no Q: ,)
559.50	106.45	Free Outfall		,CV (no Q: ,)
560.00	109.36	Free Outfall		,CV (no Q: ,)
560.05	109.65	Free Outfall		,CV (no Q: ,)

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REQUESTED POND WS ELEVATIONS:

Min. Elev.= 547.35 ft
 Increment = .50 ft
 Max. Elev.= 555.47 ft

 OUTLET CONNECTIVITY

---> Forward Flow Only (UpStream to DnStream)
 <--- Reverse Flow Only (DnStream to UpStream)
 <---> Forward and Reverse Both Allowed

Structure	No.	Outfall	E1, ft	E2, ft
Orifice-Circular		---> CV	547.350	555.470
Inlet Box		---> CV	553.640	555.470
Orifice-Circular		---> CV	550.240	555.470
Culvert-Circular	CV	---> TW	542.730	555.470
Weir-Rectangular		---> TW	551.740	555.470
Weir-Rectangular		---> TW	554.530	555.470
TW SETUP, DS Channel				

OUTLET STRUCTURE INPUT DATA

Structure ID =
Structure Type = Orifice-Circular

of Openings = 1
Invert Elev. = 547.35 ft
Diameter = .5000 ft
Orifice Coeff. = .600

Structure ID =
Structure Type = Inlet Box

of Openings = 1
Invert Elev. = 553.64 ft
Orifice Area = 27.1250 sq.ft
Orifice Coeff. = .600
Weir Length = 15.50 ft
Weir Coeff. = 3.100
K, Submerged = .000
K, Reverse = 1.000
Kb,Barrel = .000000 (per ft of full flow)
Barrel Length = .00 ft
Mannings n = .0000

Structure ID =
Structure Type = Orifice-Circular

of Openings = 1
Invert Elev. = 550.24 ft
Diameter = 1.2500 ft
Orifice Coeff. = .600

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OUTLET STRUCTURE INPUT DATA

Structure ID = CV
Structure Type = Culvert-Circular

No. Barrels = 1
Barrel Diameter = 3.0000 ft
Upstream Invert = 542.73 ft
Dnstream Invert = 541.70 ft
Horiz. Length = 107.00 ft
Barrel Length = 107.01 ft
Barrel Slope = .00963 ft/ft

OUTLET CONTROL DATA...

Mannings n = .0110
Ke = .1000 (forward entrance loss)
Kb = .005175 (per ft of full flow)
Kr = .1000 (reverse entrance loss)
HW Convergence = .001 +/- ft

INLET CONTROL DATA...

Equation form = 1
Inlet Control K = .0098
Inlet Control M = 2.0000
Inlet Control c = .03980
Inlet Control Y = .6700
T1 ratio (HW/D) = 1.155
T2 ratio (HW/D) = 1.302
Slope Factor = -.500

Use unsubmerged inlet control Form 1 equ. below T1 elev.
Use submerged inlet control Form 1 equ. above T2 elev.

In transition zone between unsubmerged and submerged inlet control,
interpolate between flows at T1 & T2...

At T1 Elev = 546.20 ft ---> Flow = 42.85 cfs
At T2 Elev = 546.64 ft ---> Flow = 48.97 cfs

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OUTLET STRUCTURE INPUT DATA

Structure ID =
Structure Type = Weir-Rectangular

of Openings = 1
Crest Elev. = 551.74 ft
Weir Length = 1.50 ft
Weir Coeff. = 3.100000

Weir TW effects (Use adjustment equation)

Structure ID =
Structure Type = Weir-Rectangular

of Openings = 1
Crest Elev. = 554.53 ft
Weir Length = 26.00 ft
Weir Coeff. = 3.100000

Weir TW effects (Use adjustment equation)

Structure ID = TW
Structure Type = TW SETUP, DS Channel

FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...
Maximum Iterations= 30
Min. TW tolerance = .01 ft
Max. TW tolerance = .01 ft
Min. HW tolerance = .01 ft
Max. HW tolerance = .01 ft
Min. Q tolerance = .10 cfs
Max. Q tolerance = .10 cfs

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Orifice-Circular)

Upstream ID = (Pond Water Surface)

DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
547.35	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
547.85	.47	547.85	Free	543.02	.000	.000	Free Outfall	
		H =.25						
548.35	.82	548.35	Free	543.11	.000	.000	Free Outfall	
		H =.75						
548.85	1.06	548.85	Free	543.17	.000	.000	Free Outfall	
		H =1.25						
549.35	1.25	549.35	Free	543.21	.000	.000	Free Outfall	
		H =1.75						
549.85	1.42	549.85	Free	543.24	.000	.000	Free Outfall	
		H =2.25						
550.24	1.54	550.24	Free	543.26	.000	.000	Free Outfall	
		H =2.64						
550.35	1.57	550.35	Free	543.27	.000	.000	Free Outfall	
		H =2.75						
550.85	1.70	550.85	Free	543.47	.000	.000	Free Outfall	
		H =3.25						
551.35	1.83	551.35	Free	543.76	.000	.000	Free Outfall	
		H =3.75						
551.74	1.92	551.74	Free	543.93	.000	.000	Free Outfall	
		H =4.14						
551.85	1.95	551.85	Free	543.96	.000	.000	Free Outfall	
		H =4.25						
552.35	2.06	552.35	Free	544.07	.000	.000	Free Outfall	
		H =4.75						
552.85	2.17	552.85	Free	544.17	.000	.000	Free Outfall	
		H =5.25						
553.35	2.27	553.35	Free	544.25	.000	.000	Free Outfall	
		H =5.75						
553.64	2.32	553.64	Free	544.29	.000	.000	Free Outfall	
		H =6.04						
553.85	2.36	553.85	Free	544.61	.000	.000	Free Outfall	
		H =6.25						
554.35	2.46	554.35	Free	546.16	.000	.000	Free Outfall	
		H =6.75						

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Orifice-Circular)

Upstream ID = (Pond Water Surface)

DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
554.53	2.49	554.53	Free	547.06	.000	.000	Free Outfall	
		H =6.93						
554.85	2.17	554.85	549.56	549.56	.001	.000	Free Outfall	
		H =5.29						
555.35	.00	555.35	555.35	555.35	.000	.000	Free Outfall	
				Full riser flow. Q=0 this opening.				
555.47	.00	555.47	555.47	555.47	.000	.000	Free Outfall	
				Full riser flow. Q=0 this opening.				

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Inlet Box)

 Upstream ID = (Pond Water Surface)
 DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
547.35	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
547.85	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
548.35	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
548.85	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
549.35	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
549.85	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
550.24	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
550.35	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
550.85	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
551.35	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
551.74	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
551.85	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
552.35	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
552.85	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
553.35	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
553.64	.00	...	...	...	...	...	Free	Outfall
		WS below an invert; no flow.						
553.85	4.62	553.85	Free	544.61	.000	.000	Free	Outfall
		Weir: H =.21						
554.35	28.74	554.35	Free	546.16	.000	.000	Free	Outfall
		Weir: H =.71						

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Inlet Box)

 Upstream ID = (Pond Water Surface)
 DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
554.53	40.34	554.53	Free	547.06	.000	.000	Free Outfall	
		Weir: H =.89						
554.85	63.95	554.85	Free	549.56	.000	.000	Free Outfall	
		Weir: H =1.21						
555.35	115.49	555.35	555.35	555.35	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						
555.47	116.15	555.47	555.47	555.47	.000	.000	Free Outfall	
		DS HGL+Loss > crest: Flow set to Downstream outlet.						

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Orifice-Circular)

Upstream ID = (Pond Water Surface)

DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
547.35	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
547.85	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
548.35	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
548.85	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
549.35	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
549.85	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
550.24	.00	...	...	...	...	...	Free Outfall	
		WS below an invert; no flow.						
550.35	.05	550.35	Free	543.27	.000	.000	Free Outfall	
		CRIT.DEPTH CONTROL		Vh= .027ft	Dcr= .083ft	CRIT.DEPTH		
550.85	1.28	550.85	Free	543.47	.000	.000	Free Outfall	
		CRIT.DEPTH CONTROL		Vh= .164ft	Dcr= .447ft	CRIT.DEPTH		
551.35	3.71	551.35	Free	543.76	.000	.000	Free Outfall	
		CRIT.DEPTH CONTROL		Vh= .332ft	Dcr= .778ft	CRIT.DEPTH		
551.74	5.53	551.74	Free	543.93	.000	.000	Free Outfall	
		H =.88						
551.85	5.86	551.85	Free	543.96	.000	.000	Free Outfall	
		H =.98						
552.35	7.20	552.35	Free	544.07	.000	.000	Free Outfall	
		H =1.48						
552.85	8.32	552.85	Free	544.17	.000	.000	Free Outfall	
		H =1.98						
553.35	9.31	553.35	Free	544.25	.000	.000	Free Outfall	
		H =2.48						
553.64	9.84	553.64	Free	544.29	.000	.000	Free Outfall	
		H =2.78						
553.85	10.20	553.85	Free	544.61	.000	.000	Free Outfall	
		H =2.98						
554.35	11.03	554.35	Free	546.16	.000	.000	Free Outfall	
		H =3.48						

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Orifice-Circular)

Upstream ID = (Pond Water Surface)

DNstream ID = CV (Culvert-Circular)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
554.53	11.31	554.53	Free	547.06	.000	.000	Free Outfall	
		H =3.67						
554.85	11.79	554.85	Free	549.56	.000	.000	Free Outfall	
		H =3.98						
555.35	.00	555.35	555.35	555.35	.000	.000	Free Outfall	
				Full riser flow. Q=0 this opening.				
555.47	.00	555.47	555.47	555.47	.000	.000	Free Outfall	
				Full riser flow. Q=0 this opening.				

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = CV (Culvert-Circular)

Mannings open channel maximum capacity: 83.19 cfs

UPstream ID's= , ,

DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
547.35	.00	...	...	...	...	...	Free Outfall	
REMARKS: Upstream HW & DNstream TW < Inv.El								
547.85	.48	543.02	Free	Free	.000	.003	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .072ft	Dcr= .212ft		CRIT.DEPTH	
548.35	.82	543.11	Free	Free	.000	.002	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .095ft	Dcr= .280ft		CRIT.DEPTH	
548.85	1.05	543.17	Free	Free	.000	.005	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .108ft	Dcr= .317ft		CRIT.DEPTH	
549.35	1.25	543.21	Free	Free	.000	.003	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .118ft	Dcr= .346ft		CRIT.DEPTH	
549.85	1.41	543.24	Free	Free	.000	.004	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .126ft	Dcr= .368ft		CRIT.DEPTH	
550.24	1.53	543.26	Free	Free	.000	.001	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .132ft	Dcr= .384ft		CRIT.DEPTH	
550.35	1.61	543.27	Free	Free	.000	.001	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .135ft	Dcr= .394ft		CRIT.DEPTH	
550.85	2.98	543.47	Free	Free	.000	.002	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .187ft	Dcr= .537ft		CRIT.DEPTH	
551.35	5.54	543.76	Free	Free	.000	.001	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .261ft	Dcr= .738ft		CRIT.DEPTH	
551.74	7.46	543.93	Free	Free	.000	.009	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .308ft	Dcr= .860ft		CRIT.DEPTH	
551.85	7.81	543.96	Free	Free	.000	.002	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .317ft	Dcr= .880ft		CRIT.DEPTH	
552.35	9.26	544.07	Free	Free	.000	.007	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .349ft	Dcr= .962ft		CRIT.DEPTH	
552.85	10.49	544.17	Free	Free	.000	.004	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .375ft	Dcr= 1.026ft		CRIT.DEPTH	
553.35	11.57	544.25	Free	Free	.000	.006	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .397ft	Dcr= 1.079ft		CRIT.DEPTH	
553.64	12.15	544.29	Free	Free	.000	.012	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .409ft	Dcr= 1.107ft		CRIT.DEPTH	
553.85	17.19	544.61	Free	Free	.000	.001	Free Outfall	
		CRIT.DEPTH	CONTROL	Vh= .506ft	Dcr= 1.326ft		CRIT.DEPTH	
554.35	42.22	546.16	Free	Free	.000	.001	Free Outfall	
		INLET CONTROL...		Equ.1: HW =3.43	dc=2.117	Ac=5.3315		

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = CV (Culvert-Circular)

Mannings open channel maximum capacity: 83.19 cfs

UPstream ID's= , ,

DNstream ID = TW (Pond Outfall)

Pond WS. Elev. ft	Device Q cfs	(into) HW HGL ft	Converge DS HGL ft	Next DS HGL ft	DS HGL Error +/-ft	Q SUM Error +/-cfs	DS Chan. TW ft	TW Error +/-ft
554.53	54.14	547.06	Free	Free	.000	.005	Free	Outfall
		INLET CONTROL...		Submerged:	HW =4.33			
554.85	77.92	549.56	Free	Free	.000	.001	Free	Outfall
		INLET CONTROL...		Submerged:	HW =6.83			
555.35	115.49	555.35	Free	Free	.000	.000	Free	Outfall
		INLET CONTROL...		Submerged:	HW =12.62			
555.47	116.15	555.47	Free	Free	.000	.000	Free	Outfall
		INLET CONTROL...		Submerged:	HW =12.74			

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Weir-Rectangular)

Upstream ID = (Pond Water Surface)

DNstream ID = TW (Pond Outfall)

WS Elev, Device Q		Tail Water		Notes
WS Elev. ft	Q cfs	TW Elev ft	Converge +/-ft	Computation Messages
547.35	.00	Free	Outfall	WS below an invert; no flow.
547.85	.00	Free	Outfall	WS below an invert; no flow.
548.35	.00	Free	Outfall	WS below an invert; no flow.
548.85	.00	Free	Outfall	WS below an invert; no flow.
549.35	.00	Free	Outfall	WS below an invert; no flow.
549.85	.00	Free	Outfall	WS below an invert; no flow.
550.24	.00	Free	Outfall	WS below an invert; no flow.
550.35	.00	Free	Outfall	WS below an invert; no flow.
550.85	.00	Free	Outfall	WS below an invert; no flow.
551.35	.00	Free	Outfall	WS below an invert; no flow.
551.74	.00	Free	Outfall	WS below an invert; no flow.
551.85	.17	Free	Outfall	H=.11; Htw=.00; Qfree=.17;
552.35	2.22	Free	Outfall	H=.61; Htw=.00; Qfree=2.22;
552.85	5.44	Free	Outfall	H=1.11; Htw=.00; Qfree=5.44;
553.35	9.50	Free	Outfall	H=1.61; Htw=.00; Qfree=9.50;
553.64	12.18	Free	Outfall	H=1.90; Htw=.00; Qfree=12.18;
553.85	14.25	Free	Outfall	H=2.11; Htw=.00; Qfree=14.25;
554.35	19.61	Free	Outfall	H=2.61; Htw=.00; Qfree=19.61;
554.53	21.67	Free	Outfall	H=2.79; Htw=.00; Qfree=21.67;
554.85	25.50	Free	Outfall	H=3.11; Htw=.00; Qfree=25.50;
555.35	31.89	Free	Outfall	H=3.61; Htw=.00; Qfree=31.89;
555.47	33.50	Free	Outfall	H=3.73; Htw=.00; Qfree=33.50;

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RATING TABLE FOR ONE OUTLET TYPE

Structure ID = (Weir-Rectangular)

Upstream ID = (Pond Water Surface)

DNstream ID = TW (Pond Outfall)

WS Elev,Device Q		Tail Water		Notes
WS Elev. ft	Q cfs	TW Elev ft	Converge +/-ft	Computation Messages
547.35	.00	Free Outfall		WS below an invert; no flow.
547.85	.00	Free Outfall		WS below an invert; no flow.
548.35	.00	Free Outfall		WS below an invert; no flow.
548.85	.00	Free Outfall		WS below an invert; no flow.
549.35	.00	Free Outfall		WS below an invert; no flow.
549.85	.00	Free Outfall		WS below an invert; no flow.
550.24	.00	Free Outfall		WS below an invert; no flow.
550.35	.00	Free Outfall		WS below an invert; no flow.
550.85	.00	Free Outfall		WS below an invert; no flow.
551.35	.00	Free Outfall		WS below an invert; no flow.
551.74	.00	Free Outfall		WS below an invert; no flow.
551.85	.00	Free Outfall		WS below an invert; no flow.
552.35	.00	Free Outfall		WS below an invert; no flow.
552.85	.00	Free Outfall		WS below an invert; no flow.
553.35	.00	Free Outfall		WS below an invert; no flow.
553.64	.00	Free Outfall		WS below an invert; no flow.
553.85	.00	Free Outfall		WS below an invert; no flow.
554.35	.00	Free Outfall		WS below an invert; no flow.
554.53	.00	Free Outfall		WS below an invert; no flow.
554.85	14.59	Free Outfall		H=.32; Htw=.00; Qfree=14.59;
555.35	59.84	Free Outfall		H=.82; Htw=.00; Qfree=59.84;
555.47	73.45	Free Outfall		H=.94; Htw=.00; Qfree=73.45;

Type.... Composite Rating Curve
 Name.... PR 20

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

***** COMPOSITE OUTFLOW SUMMARY *****

WS Elev, Total Q		Converge		Notes
Elev. ft	Q cfs	TW Elev ft	Error +/-ft	Contributing Structures
547.35	.00	Free Outfall		(no Q: ,,CV,,)
547.85	.48	Free Outfall		,CV (no Q: ,,,)
548.35	.82	Free Outfall		,CV (no Q: ,,,)
548.85	1.05	Free Outfall		,CV (no Q: ,,,)
549.35	1.25	Free Outfall		,CV (no Q: ,,,)
549.85	1.41	Free Outfall		,CV (no Q: ,,,)
550.24	1.53	Free Outfall		,CV (no Q: ,,,)
550.35	1.61	Free Outfall		,,CV (no Q: ,,)
550.85	2.98	Free Outfall		,,CV (no Q: ,,)
551.35	5.54	Free Outfall		,,CV (no Q: ,,)
551.74	7.46	Free Outfall		,,CV (no Q: ,,)
551.85	7.98	Free Outfall		,,CV, (no Q: ,)
552.35	11.48	Free Outfall		,,CV, (no Q: ,)
552.85	15.93	Free Outfall		,,CV, (no Q: ,)
553.35	21.07	Free Outfall		,,CV, (no Q: ,)
553.64	24.33	Free Outfall		,,CV, (no Q: ,)
553.85	31.44	Free Outfall		,,,CV,
554.35	61.83	Free Outfall		,,,CV,
554.53	75.82	Free Outfall		,,,CV,
554.85	118.00	Free Outfall		,,,CV,,
555.35	207.23	Free Outfall		,CV,, (no Q: ,)
555.47	223.09	Free Outfall		,CV,, (no Q: ,)

LEVEL POOL ROUTING DATA

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
 Inflow HYG file = NONE STORED - C-POND1 IN 2
 Outflow HYG file = NONE STORED - C-POND1 OUT 2

Pond Node Data = C-POND1
 Pond Volume Data = C-POND
 Pond Outlet Data = PR 10

No Infiltration

INITIAL CONDITIONS

 Starting WS Elev = 553.00 ft
 Starting Volume = .000 ac-ft
 Starting Outflow = .00 cfs
 Starting Infiltr. = .00 cfs
 Starting Total Qout = .00 cfs
 Time Increment = .0500 hrs

Elevation ft	Outflow cfs	Storage ac-ft	Infiltr. cfs	Q Total cfs	2S/t + 0 cfs
553.00	.00	.000	.00	.00	.00
553.50	.98	.786	.00	.98	381.24
554.00	3.55	1.571	.00	3.55	764.06
554.50	7.37	2.469	.00	7.37	1202.48
555.00	9.51	3.367	.00	9.51	1639.23
555.50	11.25	4.322	.00	11.25	2103.10
556.00	12.76	5.277	.00	12.76	2566.73
556.50	14.10	6.282	.00	14.10	3054.73
557.00	15.33	7.288	.00	15.33	3542.61
557.50	16.47	8.343	.00	16.47	4054.48
558.00	17.53	9.398	.00	17.53	4566.27
558.03	17.60	9.465	.00	17.60	4598.48
558.50	38.31	10.504	.00	38.31	5122.35
559.00	75.61	11.610	.00	75.61	5694.95
559.43	106.05	12.559	.00	106.05	6184.40
559.50	106.45	12.713	.00	106.45	6259.54
560.00	109.36	13.816	.00	109.36	6796.18
560.05	109.65	13.926	.00	109.65	6849.82

Type.... Node: Pond Inflow Summary
 Name.... C-POND1 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 2

Page 6.02
 Event: 2 yr

SUMMARY FOR HYDROGRAPH ADDITION
 at Node: C-POND1 IN

HYG Directory: P:\PONDPACK\13020\3RD SUBMITTAL\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID        HYG tag
-----
A 30              B-POSTDEVELOPED1  B-POSTDEVELOPED12
=====

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INFLOWS TO:  C-POND1      IN
-----
HYG file      HYG ID          HYG tag        Volume      Peak Time     Peak Flow
              HYG ID          HYG tag        ac-ft       hrs           cfs
-----
              B-POSTDEVELOPED1  2              7.580      11.9000     132.95

```

```

TOTAL FLOW INTO:  C-POND1      IN
-----
HYG file      HYG ID          HYG tag        Volume      Peak Time     Peak Flow
              HYG ID          HYG tag        ac-ft       hrs           cfs
-----
              C-POND1      IN  2              7.580      11.9000     132.95

```

Type... Node: Pond Inflow Summary
 Name... C-POND1 IN
 File... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 2

TOTAL NODE INFLOW...

HYG file =
 HYG ID = C-POND1 IN
 HYG Tag = 2

 Peak Discharge = 132.95 cfs
 Time to Peak = 11.9000 hrs
 HYG Volume = 7.580 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs

Time on left represents time for first value in each row.

Time hrs	Time on left represents time for first value in each row.				
6.9500	.00	.00	.01	.02	.03
7.2000	.05	.06	.07	.09	.10
7.4500	.11	.13	.14	.15	.17
7.7000	.18	.20	.21	.23	.24
7.9500	.25	.27	.29	.30	.32
8.2000	.34	.37	.39	.42	.44
8.4500	.47	.49	.52	.55	.58
8.7000	.61	.65	.68	.71	.75
8.9500	.78	.82	.85	.88	.91
9.2000	.93	.96	.98	1.00	1.03
9.4500	1.05	1.07	1.11	1.14	1.19
9.7000	1.24	1.30	1.35	1.41	1.47
9.9500	1.53	1.59	1.67	1.74	1.82
10.2000	1.91	2.00	2.09	2.19	2.28
10.4500	2.39	2.49	2.62	2.74	2.90
10.7000	3.04	3.22	3.38	3.56	3.74
10.9500	3.93	4.11	4.38	4.65	5.03
11.2000	5.40	5.84	6.25	6.73	7.17
11.4500	7.68	8.16	11.99	16.26	25.62
11.7000	35.44	50.52	65.72	98.42	132.95
11.9500	131.30	119.98	82.18	43.25	29.16
12.2000	23.53	20.62	18.88	17.26	15.97
12.4500	14.47	13.16	12.06	11.19	10.66
12.7000	10.31	9.95	9.65	9.30	9.00
12.9500	8.66	8.35	8.06	7.82	7.61
13.2000	7.44	7.25	7.09	6.90	6.74
13.4500	6.55	6.39	6.22	6.07	5.93
13.7000	5.81	5.67	5.56	5.42	5.30
13.9500	5.16	5.05	4.94	4.86	4.80
14.2000	4.75	4.70	4.67	4.62	4.57
14.4500	4.53	4.49	4.44	4.40	4.35
14.7000	4.32	4.26	4.22	4.17	4.14
14.9500	4.09	4.04	4.00	3.96	3.91

Type... Node: Pond Inflow Summary
 Name... C-POND1 IN
 File... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 2

Page 6.04
 Event: 2 yr

HYDROGRAPH ORDINATES (cfs)
 Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
15.2000	3.86	3.82	3.78	3.73	3.68
15.4500	3.64	3.60	3.55	3.50	3.46
15.7000	3.42	3.37	3.32	3.27	3.24
15.9500	3.18	3.14	3.10	3.08	3.05
16.2000	3.03	3.02	3.00	2.99	2.97
16.4500	2.95	2.94	2.92	2.91	2.89
16.7000	2.88	2.86	2.84	2.83	2.81
16.9500	2.79	2.78	2.76	2.75	2.73
17.2000	2.71	2.70	2.69	2.67	2.65
17.4500	2.63	2.62	2.60	2.58	2.57
17.7000	2.56	2.54	2.52	2.50	2.49
17.9500	2.47	2.45	2.44	2.43	2.41
18.2000	2.39	2.37	2.36	2.34	2.32
18.4500	2.31	2.29	2.27	2.26	2.24
18.7000	2.23	2.21	2.19	2.17	2.16
18.9500	2.14	2.12	2.11	2.10	2.08
19.2000	2.06	2.04	2.03	2.01	1.99
19.4500	1.98	1.96	1.94	1.93	1.91
19.7000	1.90	1.88	1.86	1.84	1.83
19.9500	1.81	1.79	1.78	1.77	1.77
20.2000	1.76	1.76	1.76	1.75	1.75
20.4500	1.74	1.74	1.74	1.73	1.73
20.7000	1.73	1.73	1.72	1.72	1.72
20.9500	1.71	1.71	1.71	1.71	1.70
21.2000	1.70	1.69	1.69	1.69	1.68
21.4500	1.68	1.68	1.68	1.67	1.67
21.7000	1.67	1.66	1.66	1.66	1.66
21.9500	1.65	1.64	1.64	1.64	1.64
22.2000	1.63	1.63	1.63	1.62	1.62
22.4500	1.62	1.62	1.61	1.61	1.60
22.7000	1.60	1.60	1.59	1.59	1.59
22.9500	1.59	1.58	1.58	1.58	1.57
23.2000	1.57	1.57	1.57	1.56	1.55
23.4500	1.55	1.55	1.55	1.54	1.54
23.7000	1.54	1.53	1.53	1.53	1.53
23.9500	1.52	1.52	.94	.32	.11
24.2000	.03	.01	.00	.00	

Type.... Node: Pond Inflow Summary Page 6.05
 Name.... C-POND1 IN Event: 10 yr
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 10

SUMMARY FOR HYDROGRAPH ADDITION
 at Node: C-POND1 IN

HYG Directory: P:\PONDPACK\13020\3RD SUBMITTAL\

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=====
Upstream Link ID  Upstream Node ID  HYG file  HYG ID  HYG tag
-----
A 30              B-POSTDEVELOPED1  B-POSTDEVELOPED110
=====

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INFLOWS TO: C-POND1 IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
              ac-ft       hrs          cfs
-----
              B-POSTDEVELOPED1  10          13.139      11.9000      228.97

```

```

TOTAL FLOW INTO: C-POND1 IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
              ac-ft       hrs          cfs
-----
              C-POND1      IN  10          13.139      11.9000      228.97

```

Type.... Node: Pond Inflow Summary
 Name.... C-POND1 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 10

Page 6.06
 Event: 10 yr

TOTAL NODE INFLOW...

HYG file =
 HYG ID = C-POND1 IN
 HYG Tag = 10

 Peak Discharge = 228.97 cfs
 Time to Peak = 11.9000 hrs
 HYG Volume = 13.139 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
5.2000	.00	.00	.01	.02	.04
5.4500	.06	.08	.10	.12	.14
5.7000	.16	.18	.20	.22	.24
5.9500	.26	.28	.31	.33	.35
6.2000	.37	.39	.42	.44	.46
6.4500	.49	.51	.53	.55	.58
6.7000	.60	.63	.65	.67	.70
6.9500	.72	.75	.77	.80	.82
7.2000	.85	.87	.90	.92	.95
7.4500	.98	1.00	1.03	1.05	1.08
7.7000	1.09	1.13	1.17	1.20	1.22
7.9500	1.24	1.27	1.31	1.34	1.39
8.2000	1.44	1.50	1.56	1.62	1.67
8.4500	1.74	1.79	1.86	1.92	1.99
8.7000	2.06	2.13	2.19	2.27	2.34
8.9500	2.41	2.49	2.55	2.61	2.65
9.2000	2.69	2.73	2.76	2.80	2.83
9.4500	2.87	2.90	2.96	3.03	3.13
9.7000	3.23	3.35	3.46	3.58	3.69
9.9500	3.82	3.94	4.09	4.23	4.40
10.2000	4.57	4.76	4.93	5.13	5.31
10.4500	5.51	5.70	5.95	6.18	6.49
10.7000	6.78	7.11	7.42	7.77	8.09
10.9500	8.45	8.78	9.30	9.80	10.53
11.2000	11.22	12.05	12.81	13.68	14.48
11.4500	15.39	16.23	23.60	31.67	49.08
11.7000	66.82	93.20	118.84	173.29	228.97
11.9500	222.29	200.07	135.99	71.23	47.77
12.2000	38.40	33.55	30.67	27.99	25.88
12.4500	23.42	21.28	19.48	18.07	17.20
12.7000	16.62	16.02	15.53	14.97	14.48
12.9500	13.91	13.42	12.95	12.56	12.21
13.2000	11.94	11.63	11.36	11.06	10.79

HYDROGRAPH ORDINATES (cfs)
 Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
13.4500	10.49	10.22	9.95	9.71	9.48
13.7000	9.28	9.06	8.87	8.65	8.46
13.9500	8.24	8.05	7.88	7.75	7.65
14.2000	7.57	7.49	7.43	7.35	7.28
14.4500	7.21	7.15	7.07	6.99	6.92
14.7000	6.86	6.78	6.71	6.63	6.58
14.9500	6.49	6.42	6.35	6.29	6.20
15.2000	6.13	6.06	6.00	5.92	5.84
15.4500	5.77	5.71	5.63	5.55	5.48
15.7000	5.42	5.33	5.26	5.19	5.13
15.9500	5.04	4.97	4.91	4.87	4.83
16.2000	4.80	4.77	4.75	4.72	4.70
16.4500	4.67	4.65	4.62	4.59	4.57
16.7000	4.55	4.52	4.49	4.47	4.45
16.9500	4.41	4.39	4.36	4.34	4.31
17.2000	4.28	4.26	4.24	4.21	4.18
17.4500	4.15	4.13	4.10	4.08	4.05
17.7000	4.03	4.00	3.97	3.95	3.93
17.9500	3.90	3.87	3.84	3.82	3.79
18.2000	3.76	3.74	3.72	3.69	3.66
18.4500	3.63	3.61	3.58	3.55	3.53
18.7000	3.51	3.48	3.45	3.42	3.40
18.9500	3.37	3.34	3.32	3.30	3.27
19.2000	3.24	3.21	3.19	3.16	3.13
19.4500	3.11	3.09	3.06	3.03	3.00
19.7000	2.98	2.95	2.92	2.90	2.87
19.9500	2.84	2.82	2.80	2.79	2.77
20.2000	2.76	2.76	2.76	2.75	2.74
20.4500	2.74	2.74	2.73	2.72	2.72
20.7000	2.72	2.71	2.70	2.70	2.70
20.9500	2.69	2.68	2.68	2.68	2.67
21.2000	2.66	2.66	2.66	2.65	2.64
21.4500	2.64	2.64	2.63	2.62	2.62
21.7000	2.62	2.61	2.60	2.60	2.60
21.9500	2.59	2.58	2.58	2.57	2.57
22.2000	2.56	2.55	2.55	2.55	2.54
22.4500	2.53	2.53	2.52	2.52	2.51
22.7000	2.51	2.50	2.50	2.49	2.49
22.9500	2.48	2.47	2.47	2.47	2.46
23.2000	2.45	2.45	2.45	2.44	2.43
23.4500	2.43	2.43	2.42	2.41	2.41
23.7000	2.41	2.40	2.39	2.39	2.39
23.9500	2.38	2.37	1.47	.50	.17
24.2000	.05	.02	.00	.00	

Type.... Node: Pond Inflow Summary
 Name.... C-POND1 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 25

Page 6.08
 Event: 25 yr

SUMMARY FOR HYDROGRAPH ADDITION
 at Node: C-POND1 IN

HYG Directory: P:\PONDPACK\13020\3RD SUBMITTAL\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID        HYG tag
-----
A 30              B-POSTDEVELOPED1  B-POSTDEVELOPED125
=====

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INFLOWS TO:  C-POND1      IN
-----
HYG file      HYG ID        HYG tag      Volume      Peak Time    Peak Flow
              ac-ft         hrs          cfs
-----
              B-POSTDEVELOPED1  25          16.525      11.9000     285.96

```

```

TOTAL FLOW INTO:  C-POND1      IN
-----
HYG file      HYG ID        HYG tag      Volume      Peak Time    Peak Flow
              ac-ft         hrs          cfs
-----
              C-POND1      IN  25          16.525      11.9000     285.96

```

Type... Node: Pond Inflow Summary
 Name... C-POND1 IN
 File... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 25

Page 6.09
 Event: 25 yr

TOTAL NODE INFLOW...

HYG file =
 HYG ID = C-POND1 IN
 HYG Tag = 25

 Peak Discharge = 285.96 cfs
 Time to Peak = 11.9000 hrs
 HYG Volume = 16.525 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
4.5500	-.00	.00	.02	.04	.06
4.8000	.08	.10	.13	.15	.18
5.0500	.20	.23	.25	.28	.30
5.3000	.33	.35	.38	.40	.43
5.5500	.46	.48	.51	.54	.57
5.8000	.59	.62	.65	.68	.71
6.0500	.74	.77	.79	.82	.85
6.3000	.88	.91	.94	.97	1.00
6.5500	1.04	1.07	1.10	1.13	1.16
6.8000	1.19	1.22	1.25	1.29	1.32
7.0500	1.35	1.38	1.42	1.45	1.48
7.3000	1.51	1.55	1.58	1.61	1.65
7.5500	1.68	1.71	1.74	1.76	1.81
7.8000	1.87	1.90	1.92	1.96	1.99
8.0500	2.04	2.09	2.16	2.23	2.31
8.3000	2.38	2.47	2.54	2.63	2.71
8.5500	2.80	2.88	2.98	3.06	3.16
8.8000	3.25	3.35	3.44	3.54	3.64
9.0500	3.72	3.79	3.84	3.89	3.93
9.3000	3.97	4.01	4.05	4.09	4.13
9.5500	4.21	4.29	4.43	4.56	4.72
9.8000	4.86	5.02	5.17	5.34	5.50
10.0500	5.69	5.87	6.10	6.32	6.57
10.3000	6.79	7.05	7.28	7.55	7.79
10.5500	8.11	8.41	8.81	9.19	9.62
10.8000	10.01	10.46	10.87	11.33	11.75
11.0500	12.42	13.06	14.00	14.90	15.96
11.3000	16.92	18.04	19.05	20.20	21.26
11.5500	30.81	41.21	63.50	86.01	119.09
11.8000	150.85	218.03	285.96	276.03	247.19
12.0500	167.60	87.64	58.68	47.10	41.11
12.3000	37.56	34.27	31.66	28.65	26.02
12.5500	23.82	22.09	21.02	20.30	19.57

Type... Node: Pond Inflow Summary
 Name... C-POND1 IN
 File... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 25

Page 6.10
 Event: 25 yr

HYDROGRAPH ORDINATES (cfs)
 Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
12.8000	18.97	18.27	17.67	16.98	16.38
13.0500	15.80	15.32	14.90	14.56	14.18
13.3000	13.86	13.48	13.16	12.78	12.46
13.5500	12.12	11.84	11.55	11.31	11.04
13.8000	10.81	10.54	10.31	10.04	9.80
14.0500	9.60	9.44	9.31	9.21	9.12
14.3000	9.05	8.95	8.86	8.77	8.70
14.5500	8.60	8.51	8.42	8.35	8.25
14.8000	8.16	8.07	8.00	7.90	7.80
15.0500	7.72	7.64	7.54	7.45	7.36
15.3000	7.29	7.19	7.10	7.01	6.94
15.5500	6.84	6.74	6.66	6.58	6.48
15.8000	6.39	6.30	6.23	6.13	6.03
16.0500	5.96	5.91	5.87	5.83	5.80
16.3000	5.77	5.74	5.70	5.67	5.65
16.5500	5.61	5.58	5.55	5.52	5.48
16.8000	5.45	5.42	5.40	5.36	5.32
17.0500	5.29	5.27	5.23	5.20	5.17
17.3000	5.14	5.11	5.07	5.04	5.02
17.5500	4.98	4.95	4.91	4.89	4.85
17.8000	4.82	4.79	4.76	4.73	4.69
18.0500	4.66	4.64	4.60	4.56	4.53
18.3000	4.51	4.47	4.44	4.41	4.38
18.5500	4.34	4.31	4.28	4.25	4.22
18.8000	4.18	4.15	4.13	4.09	4.05
19.0500	4.02	4.00	3.96	3.92	3.89
19.3000	3.87	3.83	3.80	3.77	3.74
19.5500	3.70	3.67	3.64	3.61	3.57
19.8000	3.54	3.51	3.48	3.45	3.41
20.0500	3.39	3.38	3.36	3.35	3.35
20.3000	3.34	3.33	3.32	3.32	3.32
20.5500	3.31	3.30	3.29	3.29	3.28
20.8000	3.27	3.27	3.27	3.26	3.25
21.0500	3.24	3.24	3.23	3.22	3.22
21.3000	3.22	3.21	3.20	3.19	3.19
21.5500	3.18	3.17	3.17	3.17	3.16
21.8000	3.15	3.14	3.14	3.13	3.12
22.0500	3.12	3.12	3.11	3.10	3.09
22.3000	3.09	3.08	3.07	3.07	3.07
22.5500	3.06	3.05	3.04	3.04	3.03
22.8000	3.02	3.02	3.02	3.01	3.00
23.0500	2.99	2.99	2.98	2.97	2.97
23.3000	2.97	2.96	2.94	2.94	2.94
23.5500	2.93	2.92	2.92	2.91	2.90
23.8000	2.89	2.89	2.89	2.88	2.87
24.0500	1.78	.60	.20	.07	.02
24.3000	.00	.00			

Type.... Node: Pond Inflow Summary
 Name.... C-POND1 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 50

Page 6.11
 Event: 50 yr

SUMMARY FOR HYDROGRAPH ADDITION
 at Node: C-POND1 IN

HYG Directory: P:\PONDPACK\13020\3RD SUBMITTAL\

```

=====
Upstream Link ID  Upstream Node ID  HYG file  HYG ID  HYG tag
-----
A 30              B-POSTDEVELOPED1  B-POSTDEVELOPED150
=====

```

```

INFLOWS TO:  C-POND1      IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
              ac-ft       hrs          cfs
-----
              B-POSTDEVELOPED1  50          19.271      11.9000      331.51

```

```

TOTAL FLOW INTO:  C-POND1      IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
              ac-ft       hrs          cfs
-----
              C-POND1      IN  50          19.271      11.9000      331.51

```

Type.... Node: Pond Inflow Summary
 Name.... C-POND1 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 50

TOTAL NODE INFLOW...

HYG file =
 HYG ID = C-POND1 IN
 HYG Tag = 50

 Peak Discharge = 331.51 cfs
 Time to Peak = 11.9000 hrs
 HYG Volume = 19.271 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs

Time on left represents time for first value in each row.

Time hrs	Time on left represents time for first value in each row.				
4.1000	-.00	.00	.01	.03	.06
4.3500	.08	.11	.13	.16	.19
4.6000	.22	.24	.27	.30	.33
4.8500	.36	.39	.42	.45	.48
5.1000	.51	.54	.57	.60	.63
5.3500	.66	.69	.73	.76	.79
5.6000	.82	.86	.89	.92	.96
5.8500	.99	1.03	1.06	1.09	1.13
6.1000	1.16	1.20	1.24	1.27	1.31
6.3500	1.34	1.38	1.42	1.45	1.49
6.6000	1.52	1.56	1.60	1.64	1.67
6.8500	1.71	1.75	1.79	1.82	1.86
7.1000	1.90	1.94	1.98	2.02	2.06
7.3500	2.10	2.13	2.17	2.21	2.25
7.6000	2.29	2.32	2.34	2.41	2.47
7.8500	2.51	2.54	2.58	2.61	2.67
8.1000	2.73	2.82	2.91	3.00	3.10
8.3500	3.20	3.29	3.40	3.50	3.61
8.6000	3.71	3.82	3.92	4.04	4.15
8.8500	4.27	4.38	4.50	4.61	4.71
9.1000	4.80	4.86	4.91	4.95	5.00
9.3500	5.04	5.09	5.13	5.17	5.26
9.6000	5.36	5.52	5.68	5.87	6.04
9.8500	6.24	6.41	6.61	6.80	7.03
10.1000	7.25	7.52	7.78	8.08	8.34
10.3500	8.65	8.93	9.24	9.53	9.91
10.6000	10.26	10.74	11.18	11.69	12.15
10.8500	12.68	13.16	13.71	14.20	14.98
11.1000	15.74	16.85	17.91	19.16	20.29
11.3500	21.60	22.77	24.13	25.35	26.66
11.6000	48.95	75.17	101.52	139.95	176.59
11.8500	253.88	331.51	318.92	284.75	192.77
12.1000	100.71	67.36	54.02	47.14	43.05

Type... Node: Pond Inflow Summary
 Name... C-POND1 IN
 File... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 50

HYDROGRAPH ORDINATES (cfs)						
Time hrs	Output Time increment = .0500 hrs					
	Time on left represents time for first value in each row.					
12.3500	39.26	36.27	32.81	29.79	27.27	
12.6000	25.29	24.06	23.23	22.40	21.70	
12.8500	20.91	20.22	19.43	18.74	18.07	
13.1000	17.52	17.04	16.65	16.21	15.84	
13.3500	15.41	15.04	14.61	14.24	13.85	
13.6000	13.52	13.20	12.92	12.61	12.35	
13.8500	12.04	11.77	11.46	11.20	10.96	
14.1000	10.78	10.63	10.52	10.41	10.33	
14.3500	10.22	10.11	10.01	9.93	9.82	
14.6000	9.71	9.61	9.53	9.41	9.31	
14.8500	9.21	9.13	9.01	8.91	8.81	
15.1000	8.72	8.61	8.50	8.40	8.32	
15.3500	8.20	8.10	8.00	7.92	7.80	
15.6000	7.69	7.59	7.51	7.39	7.29	
15.8500	7.19	7.10	6.99	6.88	6.80	
16.1000	6.74	6.69	6.65	6.61	6.58	
16.3500	6.54	6.50	6.47	6.44	6.40	
16.6000	6.36	6.32	6.30	6.25	6.22	
16.8500	6.18	6.15	6.11	6.07	6.04	
17.1000	6.01	5.97	5.93	5.89	5.86	
17.3500	5.82	5.78	5.75	5.72	5.68	
17.6000	5.64	5.60	5.57	5.53	5.49	
17.8500	5.46	5.43	5.39	5.35	5.31	
18.1000	5.28	5.24	5.20	5.17	5.14	
18.3500	5.09	5.06	5.02	4.99	4.95	
18.6000	4.91	4.87	4.85	4.80	4.76	
18.8500	4.73	4.70	4.66	4.62	4.58	
19.1000	4.55	4.51	4.47	4.44	4.41	
19.3500	4.36	4.33	4.29	4.26	4.22	
19.6000	4.18	4.14	4.11	4.07	4.03	
19.8500	4.00	3.97	3.93	3.89	3.86	
20.1000	3.85	3.83	3.81	3.81	3.81	
20.3500	3.80	3.79	3.78	3.78	3.77	
20.6000	3.76	3.75	3.75	3.74	3.73	
20.8500	3.72	3.72	3.71	3.70	3.69	
21.1000	3.69	3.68	3.67	3.67	3.67	
21.3500	3.65	3.64	3.64	3.64	3.62	
21.6000	3.61	3.61	3.61	3.60	3.58	
21.8500	3.58	3.58	3.57	3.55	3.55	
22.1000	3.55	3.54	3.53	3.52	3.52	
22.3500	3.51	3.50	3.49	3.49	3.48	
22.6000	3.47	3.46	3.46	3.45	3.44	
22.8500	3.44	3.43	3.42	3.41	3.41	
23.1000	3.40	3.39	3.38	3.38	3.38	
23.3500	3.36	3.35	3.35	3.35	3.34	
23.6000	3.32	3.32	3.32	3.31	3.29	
23.8500	3.29	3.29	3.28	3.27	2.03	

Type.... Node: Pond Inflow Summary

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Name.... C-POND1 IN

Event: 50 yr

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

Storm... SCS Type II Tag: 50

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs

Time on left represents time for first value in each row.

Time hrs					
24.1000	.68	.23	.08	.02	.01
24.3500	.00				

Type.... Node: Pond Inflow Summary
 Name.... C-POND1 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 100

Page 6.15
 Event: 100 yr

SUMMARY FOR HYDROGRAPH ADDITION
 at Node: C-POND1 IN

HYG Directory: P:\PONDPACK\13020\3RD SUBMITTAL\

```

=====
Upstream Link ID  Upstream Node ID  HYG file  HYG ID  HYG tag
-----
A 30              B-POSTDEVELOPED1  B-POSTDEVELOPED1100
=====
  
```

```

INFLOWS TO: C-POND1 IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
              ac-ft       hrs          cfs
-----
              B-POSTDEVELOPED1  100          22.041      11.9000      376.96
  
```

```

TOTAL FLOW INTO: C-POND1 IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
              ac-ft       hrs          cfs
-----
              C-POND1      IN  100          22.041      11.9000      376.96
  
```


Type.... Node: Pond Inflow Summary
 Name.... C-POND1 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 100

Page 6.16
 Event: 100 yr

TOTAL NODE INFLOW...

HYG file =
 HYG ID = C-POND1 IN
 HYG Tag = 100

 Peak Discharge = 376.96 cfs
 Time to Peak = 11.9000 hrs
 HYG Volume = 22.041 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
3.7500	-.00	.00	.02	.04	.07
4.0000	.10	.13	.16	.19	.22
4.2500	.25	.28	.31	.34	.38
4.5000	.41	.44	.48	.51	.54
4.7500	.58	.61	.65	.68	.72
5.0000	.75	.79	.82	.86	.90
5.2500	.94	.97	1.01	1.05	1.09
5.5000	1.12	1.16	1.20	1.24	1.28
5.7500	1.32	1.36	1.40	1.44	1.48
6.0000	1.52	1.56	1.60	1.64	1.68
6.2500	1.73	1.77	1.81	1.85	1.89
6.5000	1.93	1.98	2.02	2.06	2.11
6.7500	2.15	2.19	2.24	2.28	2.32
7.0000	2.37	2.41	2.46	2.50	2.55
7.2500	2.59	2.63	2.68	2.72	2.77
7.5000	2.82	2.86	2.91	2.94	2.96
7.7500	3.04	3.11	3.16	3.19	3.23
8.0000	3.27	3.34	3.41	3.52	3.62
8.2500	3.74	3.85	3.97	4.08	4.21
8.5000	4.32	4.45	4.57	4.70	4.83
8.7500	4.96	5.09	5.23	5.36	5.50
9.0000	5.63	5.75	5.84	5.91	5.96
9.2500	6.01	6.06	6.11	6.16	6.20
9.5000	6.25	6.35	6.46	6.65	6.84
9.7500	7.06	7.26	7.49	7.69	7.92
10.0000	8.14	8.41	8.66	8.98	9.28
10.2500	9.62	9.93	10.29	10.61	10.97
10.5000	11.30	11.74	12.15	12.70	13.21
10.7500	13.80	14.33	14.94	15.49	16.12
11.0000	16.69	17.59	18.46	19.75	20.96
11.2500	22.40	23.70	25.20	26.54	28.09
11.5000	29.48	42.57	56.74	86.92	117.09
11.7500	160.87	202.34	289.69	376.96	361.68

Type... Node: Pond Inflow Summary
 Name... C-POND1 IN
 File... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 100

HYDROGRAPH ORDINATES (cfs)						
Time hrs	Output Time increment = .0500 hrs					
	Time on left represents time for first value in each row.					
12.0000	322.17	217.85	113.72	76.00	60.92	
12.2500	53.13	48.51	44.24	40.86	36.95	
12.5000	33.55	30.71	28.47	27.09	26.15	
12.7500	25.21	24.42	23.53	22.75	21.86	
13.0000	21.08	20.33	19.71	19.16	18.72	
13.2500	18.23	17.81	17.33	16.91	16.43	
13.5000	16.01	15.57	15.21	14.84	14.53	
13.7500	14.18	13.88	13.53	13.23	12.88	
14.0000	12.58	12.32	12.11	11.95	11.82	
14.2500	11.70	11.61	11.48	11.36	11.25	
14.5000	11.16	11.03	10.91	10.80	10.71	
14.7500	10.58	10.46	10.35	10.25	10.12	
15.0000	10.01	9.89	9.80	9.67	9.55	
15.2500	9.44	9.34	9.21	9.10	8.98	
15.5000	8.89	8.76	8.64	8.53	8.43	
15.7500	8.30	8.18	8.07	7.98	7.85	
16.0000	7.73	7.64	7.57	7.51	7.46	
16.2500	7.42	7.39	7.34	7.30	7.26	
16.5000	7.23	7.18	7.14	7.10	7.07	
16.7500	7.02	6.98	6.94	6.91	6.86	
17.0000	6.81	6.77	6.74	6.69	6.65	
17.2500	6.61	6.58	6.53	6.49	6.45	
17.5000	6.42	6.37	6.33	6.29	6.25	
17.7500	6.21	6.16	6.12	6.09	6.04	
18.0000	6.00	5.96	5.93	5.88	5.84	
18.2500	5.80	5.76	5.72	5.67	5.63	
18.5000	5.60	5.55	5.51	5.47	5.44	
18.7500	5.39	5.34	5.30	5.27	5.22	
19.0000	5.18	5.14	5.11	5.06	5.02	
19.2500	4.98	4.94	4.90	4.85	4.81	
19.5000	4.78	4.73	4.69	4.65	4.62	
19.7500	4.57	4.52	4.48	4.45	4.40	
20.0000	4.36	4.33	4.31	4.29	4.28	
20.2500	4.27	4.27	4.26	4.24	4.24	
20.5000	4.24	4.23	4.21	4.21	4.21	
20.7500	4.19	4.18	4.18	4.17	4.16	
21.0000	4.15	4.14	4.14	4.13	4.12	
21.2500	4.11	4.11	4.10	4.08	4.08	
21.5000	4.08	4.06	4.05	4.05	4.04	
21.7500	4.03	4.02	4.01	4.01	4.00	
22.0000	3.99	3.98	3.98	3.97	3.95	
22.2500	3.95	3.95	3.93	3.92	3.92	
22.5000	3.91	3.90	3.89	3.88	3.88	
22.7500	3.87	3.86	3.85	3.85	3.84	
23.0000	3.82	3.82	3.82	3.80	3.79	
23.2500	3.79	3.78	3.77	3.76	3.75	
23.5000	3.75	3.74	3.72	3.72	3.72	

Type.... Node: Pond Inflow Summary
Name.... C-POND1 IN
File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
Storm... SCS Type II Tag: 100

Page 6.18
Event: 100 yr

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
23.7500	3.71	3.69	3.69	3.69	3.67
24.0000	3.66	2.27	.76	.26	.08
24.2500	.03	.01	.00		

LEVEL POOL ROUTING SUMMARY

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
Inflow HYG file = NONE STORED - C-POND1 IN 2
Outflow HYG file = NONE STORED - C-POND1 OUT 2

Pond Node Data = C-POND1
Pond Volume Data = C-POND
Pond Outlet Data = PR 10

No Infiltration

INITIAL CONDITIONS

Starting WS Elev = 553.00 ft
Starting Volume = .000 ac-ft
Starting Outflow = .00 cfs
Starting Infiltr. = .00 cfs
Starting Total Qout= .00 cfs
Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
Peak Inflow = 132.95 cfs at 11.9000 hrs
Peak Outflow = 10.67 cfs at 12.6000 hrs

Peak Elevation = 555.33 ft
Peak Storage = 4.005 ac-ft
=====

MASS BALANCE (ac-ft)

+ Initial Vol = .000
+ HYG Vol IN = 7.580
- Infiltration = .000
- HYG Vol OUT = 7.578
- Retained Vol = .002

Unrouted Vol = .000 ac-ft (.000% of Inflow Volume)

Type.... Pond Routing Summary Page 6.20
 Name.... C-POND1 OUT Tag: 10 Event: 10 yr
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 10

LEVEL POOL ROUTING SUMMARY

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
 Inflow HYG file = NONE STORED - C-POND1 IN 10
 Outflow HYG file = NONE STORED - C-POND1 OUT 10

Pond Node Data = C-POND1
 Pond Volume Data = C-POND
 Pond Outlet Data = PR 10

No Infiltration

INITIAL CONDITIONS

 Starting WS Elev = 553.00 ft
 Starting Volume = .000 ac-ft
 Starting Outflow = .00 cfs
 Starting Infiltr. = .00 cfs
 Starting Total Qout= .00 cfs
 Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
 Peak Inflow = 228.97 cfs at 11.9000 hrs
 Peak Outflow = 15.39 cfs at 12.7500 hrs

 Peak Elevation = 557.03 ft
 Peak Storage = 7.342 ac-ft
 =====

MASS BALANCE (ac-ft)

 + Initial Vol = .000
 + HYG Vol IN = 13.139
 - Infiltration = .000
 - HYG Vol OUT = 13.137
 - Retained Vol = .002

 Unrouted Vol = .000 ac-ft (.000% of Inflow Volume)

Type... Pond Routing Summary Page 6.21
 Name... C-POND1 OUT Tag: 25 Event: 25 yr
 File... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 25

LEVEL POOL ROUTING SUMMARY

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
 Inflow HYG file = NONE STORED - C-POND1 IN 25
 Outflow HYG file = NONE STORED - C-POND1 OUT 25

Pond Node Data = C-POND1
 Pond Volume Data = C-POND
 Pond Outlet Data = PR 10

No Infiltration

INITIAL CONDITIONS

 Starting WS Elev = 553.00 ft
 Starting Volume = .000 ac-ft
 Starting Outflow = .00 cfs
 Starting Infiltr. = .00 cfs
 Starting Total Qout = .00 cfs
 Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
 Peak Inflow = 285.96 cfs at 11.9000 hrs
 Peak Outflow = 17.55 cfs at 12.8500 hrs

 Peak Elevation = 558.01 ft
 Peak Storage = 9.413 ac-ft
 =====

MASS BALANCE (ac-ft)

 + Initial Vol = .000
 + HYG Vol IN = 16.525
 - Infiltration = .000
 - HYG Vol OUT = 16.523
 - Retained Vol = .002

 Unrouted Vol = .000 ac-ft (.000% of Inflow Volume)

Type... Pond Routing Summary Page 6.22
 Name... C-POND1 OUT Tag: 50 Event: 50 yr
 File... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 50

LEVEL POOL ROUTING SUMMARY

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
 Inflow HYG file = NONE STORED - C-POND1 IN 50
 Outflow HYG file = NONE STORED - C-POND1 OUT 50

Pond Node Data = C-POND1
 Pond Volume Data = C-POND
 Pond Outlet Data = PR 10

No Infiltration

INITIAL CONDITIONS

```

-----
Starting WS Elev = 553.00 ft
Starting Volume = .000 ac-ft
Starting Outflow = .00 cfs
Starting Infiltr. = .00 cfs
Starting Total Qout = .00 cfs
Time Increment = .0500 hrs
  
```

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

```

=====
Peak Inflow = 331.51 cfs at 11.9000 hrs
Peak Outflow = 36.57 cfs at 12.4000 hrs
-----
Peak Elevation = 558.46 ft
Peak Storage = 10.417 ac-ft
=====
  
```

MASS BALANCE (ac-ft)

```

-----
+ Initial Vol = .000
+ HYG Vol IN = 19.271
- Infiltration = .000
- HYG Vol OUT = 19.269
- Retained Vol = .002
-----
Unrouted Vol = -.000 ac-ft (.000% of Inflow Volume)
  
```

LEVEL POOL ROUTING SUMMARY

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
 Inflow HYG file = NONE STORED - C-POND1 IN 100
 Outflow HYG file = NONE STORED - C-POND1 OUT 100

Pond Node Data = C-POND1
 Pond Volume Data = C-POND
 Pond Outlet Data = PR 10

No Infiltration

INITIAL CONDITIONS

 Starting WS Elev = 553.00 ft
 Starting Volume = .000 ac-ft
 Starting Outflow = .00 cfs
 Starting Infiltr. = .00 cfs
 Starting Total Qout = .00 cfs
 Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
 Peak Inflow = 376.96 cfs at 11.9000 hrs
 Peak Outflow = 66.90 cfs at 12.2000 hrs

 Peak Elevation = 558.88 ft
 Peak Storage = 11.352 ac-ft
 =====

MASS BALANCE (ac-ft)

 + Initial Vol = .000
 + HYG Vol IN = 22.041
 - Infiltration = .000
 - HYG Vol OUT = 22.038
 - Retained Vol = .002

 Unrouted Vol = -.000 ac-ft (.000% of Inflow Volume)

Name.... C-POND2

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

LEVEL POOL ROUTING DATA

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
 Inflow HYG file = NONE STORED - C-POND2 IN 2
 Outflow HYG file = NONE STORED - C-POND2 OUT 2

Pond Node Data = C-POND2
 Pond Volume Data = C-POND2
 Pond Outlet Data = PR 20

No Infiltration

INITIAL CONDITIONS

 Starting WS Elev = 547.35 ft
 Starting Volume = .000 ac-ft
 Starting Outflow = .00 cfs
 Starting Infiltr. = .00 cfs
 Starting Total Qout = .00 cfs
 Time Increment = .0500 hrs

Elevation ft	Outflow cfs	Storage ac-ft	Infiltr. cfs	Q Total cfs	2S/t + 0 cfs
547.35	.00	.000	.00	.00	.00
547.85	.48	.131	.00	.48	63.70
548.35	.82	.284	.00	.82	138.15
548.85	1.05	.446	.00	1.05	217.14
549.35	1.25	.624	.00	1.25	303.42
549.85	1.41	.809	.00	1.41	392.79
550.24	1.53	.961	.00	1.53	466.57
550.35	1.61	1.005	.00	1.61	488.13
550.85	2.98	1.207	.00	2.98	587.19
551.35	5.54	1.422	.00	5.54	693.61
551.74	7.46	1.593	.00	7.46	778.60
551.85	7.98	1.642	.00	7.98	802.55
552.35	11.48	1.874	.00	11.48	918.56
552.85	15.93	2.112	.00	15.93	1038.10
553.35	21.07	2.364	.00	21.07	1165.05
553.64	24.33	2.513	.00	24.33	1240.64
553.85	31.44	2.621	.00	31.44	1300.12
554.35	61.83	2.894	.00	61.83	1462.62
554.53	75.82	2.995	.00	75.82	1525.32
554.85	118.00	3.174	.00	118.00	1654.08
555.35	207.23	3.477	.00	207.23	1889.92
555.47	223.09	3.552	.00	223.09	1942.14

Type.... Node: Pond Inflow Summary
 Name.... C-POND2 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 2

Page 6.25
 Event: 2 yr

SUMMARY FOR HYDROGRAPH ADDITION
 at Node: C-POND2 IN

HYG Directory: P:\PONDPACK\13020\3RD SUBMITTAL\

```

=====
Upstream Link ID  Upstream Node ID  HYG file  HYG ID  HYG tag
-----
A 20              B-POSTDEVELOPED2  B-POSTDEVELOPED22
=====

```

```

INFLOWS TO:  C-POND2  IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
ac-ft         hrs         cfs
-----
              B-POSTDEVELOPED2  2            3.281       11.9000       56.36

```

```

TOTAL FLOW INTO:  C-POND2  IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
ac-ft         hrs         cfs
-----
              C-POND2      IN  2            3.281       11.9000       56.36

```

Type.... Node: Pond Inflow Summary
 Name.... C-POND2 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 2

Page 6.26
 Event: 2 yr

TOTAL NODE INFLOW...

HYG file =
 HYG ID = C-POND2 IN
 HYG Tag = 2

 Peak Discharge = 56.36 cfs
 Time to Peak = 11.9000 hrs
 HYG Volume = 3.281 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
4.0500	.00	.00	.01	.01	.01
4.3000	.02	.02	.03	.03	.04
4.5500	.04	.05	.05	.06	.06
4.8000	.07	.07	.08	.08	.09
5.0500	.09	.10	.10	.11	.11
5.3000	.12	.12	.13	.13	.14
5.5500	.15	.15	.16	.16	.17
5.8000	.17	.18	.19	.19	.20
6.0500	.20	.21	.22	.22	.23
6.3000	.23	.24	.25	.25	.26
6.5500	.26	.27	.28	.28	.29
6.8000	.30	.30	.31	.32	.32
7.0500	.33	.34	.34	.35	.36
7.3000	.36	.37	.37	.38	.39
7.5500	.40	.40	.41	.41	.42
7.8000	.43	.44	.44	.45	.46
8.0500	.47	.48	.49	.51	.52
8.3000	.54	.56	.57	.59	.61
8.5500	.63	.64	.66	.68	.70
8.8000	.72	.74	.76	.78	.80
9.0500	.82	.83	.84	.85	.86
9.3000	.87	.87	.88	.89	.89
9.5500	.91	.93	.95	.98	1.01
9.8000	1.04	1.08	1.11	1.14	1.17
10.0500	1.21	1.25	1.30	1.34	1.39
10.3000	1.44	1.49	1.54	1.59	1.64
10.5500	1.70	1.76	1.85	1.92	2.01
10.8000	2.09	2.18	2.26	2.35	2.44
11.0500	2.57	2.70	2.89	3.07	3.28
11.3000	3.48	3.70	3.90	4.13	4.34
11.5500	6.27	8.37	12.84	17.33	23.87
11.8000	30.09	43.20	56.36	54.18	48.34
12.0500	32.72	17.09	11.43	9.16	7.99

HYDROGRAPH ORDINATES (cfs)						
Time hrs	Output Time increment = .0500 hrs					
	Time on left represents time for first value in each row.					
12.3000	7.30	6.66	6.15	5.56	5.05	
12.5500	4.62	4.29	4.08	3.94	3.80	
12.8000	3.68	3.54	3.43	3.29	3.18	
13.0500	3.06	2.97	2.89	2.82	2.75	
13.3000	2.68	2.61	2.55	2.48	2.41	
13.5500	2.35	2.29	2.24	2.19	2.14	
13.8000	2.09	2.04	1.99	1.94	1.90	
14.0500	1.86	1.83	1.80	1.78	1.76	
14.3000	1.75	1.73	1.71	1.70	1.68	
14.5500	1.66	1.65	1.63	1.61	1.60	
14.8000	1.58	1.56	1.55	1.53	1.51	
15.0500	1.49	1.48	1.46	1.44	1.42	
15.3000	1.41	1.39	1.37	1.36	1.34	
15.5500	1.32	1.30	1.29	1.27	1.25	
15.8000	1.23	1.22	1.20	1.18	1.17	
16.0500	1.15	1.14	1.13	1.13	1.12	
16.3000	1.12	1.11	1.10	1.10	1.09	
16.5500	1.08	1.08	1.07	1.07	1.06	
16.8000	1.05	1.05	1.04	1.03	1.03	
17.0500	1.02	1.02	1.01	1.00	1.00	
17.3000	.99	.99	.98	.97	.97	
17.5500	.96	.95	.95	.94	.94	
17.8000	.93	.92	.92	.91	.91	
18.0500	.90	.89	.89	.88	.87	
18.3000	.87	.86	.86	.85	.85	
18.5500	.84	.83	.83	.82	.81	
18.8000	.81	.80	.80	.79	.78	
19.0500	.78	.77	.76	.76	.75	
19.3000	.75	.74	.73	.73	.72	
19.5500	.71	.71	.70	.70	.69	
19.8000	.68	.68	.67	.66	.66	
20.0500	.65	.65	.65	.65	.65	
20.3000	.65	.64	.64	.64	.64	
20.5500	.64	.64	.64	.64	.63	
20.8000	.63	.63	.63	.63	.63	
21.0500	.63	.63	.62	.62	.62	
21.3000	.62	.62	.62	.62	.62	
21.5500	.61	.61	.61	.61	.61	
21.8000	.61	.61	.61	.60	.60	
22.0500	.60	.60	.60	.60	.60	
22.3000	.60	.59	.59	.59	.59	
22.5500	.59	.59	.59	.59	.58	
22.8000	.58	.58	.58	.58	.58	
23.0500	.58	.58	.57	.57	.57	
23.3000	.57	.57	.57	.57	.57	
23.5500	.56	.56	.56	.56	.56	
23.8000	.56	.56	.56	.55	.55	

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.0500	|	.34	.12	.04	.01
24.3000	|	.00			

Type.... Node: Pond Inflow Summary Page 6.29
 Name.... C-POND2 IN Event: 10 yr
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 10

SUMMARY FOR HYDROGRAPH ADDITION
 at Node: C-POND2 IN

HYG Directory: P:\PONDPACK\13020\3RD SUBMITTAL\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID        HYG tag
-----
A 20              B-POSTDEVELOPED2      B-POSTDEVELOPED210
=====
  
```

```

INFLOWS TO:  C-POND2      IN
-----
HYG file      HYG ID        HYG tag      Volume      Peak Time      Peak Flow
              ac-ft         hrs          cfs
-----
              B-POSTDEVELOPED2  10          5.263      11.9000      88.37
  
```

```

TOTAL FLOW INTO:  C-POND2      IN
-----
HYG file      HYG ID        HYG tag      Volume      Peak Time      Peak Flow
              ac-ft         hrs          cfs
-----
              C-POND2      IN  10          5.263      11.9000      88.37
  
```

Type.... Node: Pond Inflow Summary
 Name.... C-POND2 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 10

Page 6.30
 Event: 10 yr

TOTAL NODE INFLOW...

HYG file =
 HYG ID = C-POND2 IN
 HYG Tag = 10

 Peak Discharge = 88.37 cfs
 Time to Peak = 11.9000 hrs
 HYG Volume = 5.263 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
2.9000	.00	.00	.01	.02	.02
3.1500	.03	.04	.05	.06	.06
3.4000	.07	.08	.09	.09	.10
3.6500	.11	.12	.13	.13	.14
3.9000	.15	.16	.16	.17	.18
4.1500	.19	.20	.21	.21	.22
4.4000	.23	.24	.25	.26	.27
4.6500	.28	.28	.29	.30	.31
4.9000	.32	.33	.34	.35	.36
5.1500	.37	.38	.39	.40	.41
5.4000	.42	.43	.44	.45	.46
5.6500	.47	.48	.49	.50	.51
5.9000	.52	.53	.54	.55	.56
6.1500	.57	.58	.59	.60	.61
6.4000	.62	.63	.64	.65	.66
6.6500	.67	.68	.69	.70	.71
6.9000	.72	.73	.74	.75	.76
7.1500	.77	.79	.80	.81	.82
7.4000	.83	.84	.85	.86	.87
7.6500	.88	.88	.90	.92	.93
7.9000	.94	.95	.96	.97	.99
8.1500	1.02	1.05	1.08	1.10	1.14
8.4000	1.17	1.20	1.23	1.26	1.29
8.6500	1.32	1.36	1.39	1.42	1.46
8.9000	1.49	1.52	1.56	1.58	1.61
9.1500	1.62	1.63	1.64	1.65	1.66
9.4000	1.67	1.68	1.69	1.71	1.74
9.6500	1.78	1.83	1.88	1.93	1.99
9.9000	2.04	2.10	2.15	2.22	2.28
10.1500	2.36	2.43	2.52	2.59	2.68
10.4000	2.76	2.84	2.92	3.03	3.13
10.6500	3.26	3.39	3.53	3.66	3.81
10.9000	3.94	4.09	4.22	4.44	4.65

HYDROGRAPH ORDINATES (cfs)
 Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
11.1500	4.96	5.26	5.60	5.91	6.27
11.4000	6.59	6.95	7.28	10.47	13.91
11.6500	21.18	28.37	38.66	48.28	68.45
11.9000	88.37	84.27	74.67	50.36	26.24
12.1500	17.51	14.01	12.21	11.14	10.16
12.4000	9.38	8.48	7.70	7.04	6.53
12.6500	6.21	5.99	5.78	5.59	5.39
12.9000	5.21	5.00	4.82	4.65	4.51
13.1500	4.38	4.28	4.17	4.07	3.96
13.4000	3.87	3.76	3.66	3.56	3.48
13.6500	3.39	3.32	3.24	3.17	3.09
13.9000	3.02	2.94	2.87	2.81	2.77
14.1500	2.73	2.70	2.67	2.65	2.62
14.4000	2.59	2.57	2.55	2.52	2.49
14.6500	2.46	2.44	2.41	2.39	2.36
14.9000	2.34	2.31	2.28	2.26	2.23
15.1500	2.20	2.18	2.15	2.13	2.10
15.4000	2.07	2.05	2.03	2.00	1.97
15.6500	1.94	1.92	1.89	1.87	1.84
15.9000	1.82	1.79	1.76	1.74	1.72
16.1500	1.71	1.70	1.69	1.68	1.67
16.4000	1.66	1.65	1.65	1.64	1.63
16.6500	1.62	1.61	1.60	1.59	1.58
16.9000	1.57	1.56	1.55	1.54	1.54
17.1500	1.52	1.51	1.51	1.50	1.49
17.4000	1.48	1.47	1.46	1.45	1.44
17.6500	1.43	1.42	1.41	1.40	1.39
17.9000	1.39	1.38	1.36	1.36	1.35
18.1500	1.34	1.33	1.32	1.31	1.30
18.4000	1.29	1.28	1.27	1.26	1.25
18.6500	1.24	1.24	1.23	1.22	1.21
18.9000	1.20	1.19	1.18	1.17	1.16
19.1500	1.15	1.14	1.13	1.12	1.11
19.4000	1.10	1.09	1.09	1.08	1.07
19.6500	1.06	1.05	1.04	1.03	1.02
19.9000	1.01	1.00	.99	.98	.98
20.1500	.98	.97	.97	.97	.97
20.4000	.96	.96	.96	.96	.96
20.6500	.96	.96	.95	.95	.95
20.9000	.95	.95	.94	.94	.94
21.1500	.94	.94	.93	.93	.93
21.4000	.93	.93	.93	.92	.92
21.6500	.92	.92	.92	.91	.91
21.9000	.91	.91	.91	.90	.90
22.1500	.90	.90	.90	.90	.89
22.4000	.89	.89	.89	.89	.88
22.6500	.88	.88	.88	.88	.87

Type.... Node: Pond Inflow Summary
Name.... C-POND2 IN
File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
Storm... SCS Type II Tag: 10

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Event: 10 yr

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
22.9000	.87	.87	.87	.87	.87
23.1500	.86	.86	.86	.86	.86
23.4000	.85	.85	.85	.85	.85
23.6500	.84	.84	.84	.84	.84
23.9000	.84	.83	.83	.52	.17
24.1500	.06	.02	.01	.00	.00

Type.... Node: Pond Inflow Summary
 Name.... C-POND2 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 25

Page 6.33
 Event: 25 yr

SUMMARY FOR HYDROGRAPH ADDITION
 at Node: C-POND2 IN

HYG Directory: P:\PONDPACK\13020\3RD SUBMITTAL\

```

=====
Upstream Link ID  Upstream Node ID  HYG file  HYG ID  HYG tag
-----
A 20              B-POSTDEVELOPED2  B-POSTDEVELOPED225
=====
  
```

```

INFLOWS TO:  C-POND2      IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
ac-ft         hrs         cfs
-----
              B-POSTDEVELOPED2  25           6.442       11.9000       107.01
  
```

```

TOTAL FLOW INTO:  C-POND2      IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
ac-ft         hrs         cfs
-----
              C-POND2      IN  25           6.442       11.9000       107.01
  
```

Type.... Node: Pond Inflow Summary
 Name.... C-POND2 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 25

Page 6.34
 Event: 25 yr

TOTAL NODE INFLOW...

HYG file =
 HYG ID = C-POND2 IN
 HYG Tag = 25

 Peak Discharge = 107.01 cfs
 Time to Peak = 11.9000 hrs
 HYG Volume = 6.442 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs						
2.4500	-.00	.00	.01	.02	.02	
2.7000	.04	.05	.06	.07	.08	
2.9500	.09	.10	.11	.12	.13	
3.2000	.14	.15	.16	.17	.18	
3.4500	.19	.20	.21	.22	.23	
3.7000	.24	.25	.26	.27	.28	
3.9500	.29	.29	.30	.31	.33	
4.2000	.34	.35	.36	.37	.38	
4.4500	.39	.40	.42	.43	.44	
4.7000	.45	.46	.47	.48	.50	
4.9500	.51	.52	.53	.54	.56	
5.2000	.57	.58	.59	.60	.62	
5.4500	.63	.64	.65	.66	.68	
5.7000	.69	.70	.71	.73	.74	
5.9500	.75	.76	.78	.79	.80	
6.2000	.81	.83	.84	.85	.86	
6.4500	.88	.89	.90	.92	.93	
6.7000	.94	.95	.97	.98	.99	
6.9500	1.00	1.02	1.03	1.04	1.06	
7.2000	1.07	1.08	1.09	1.11	1.12	
7.4500	1.13	1.14	1.16	1.17	1.18	
7.7000	1.18	1.21	1.23	1.24	1.25	
7.9500	1.26	1.27	1.30	1.32	1.35	
8.2000	1.39	1.42	1.46	1.50	1.54	
8.4500	1.58	1.61	1.66	1.69	1.74	
8.7000	1.77	1.82	1.86	1.90	1.94	
8.9500	1.98	2.02	2.06	2.08	2.10	
9.2000	2.11	2.12	2.13	2.14	2.15	
9.4500	2.16	2.17	2.20	2.23	2.29	
9.7000	2.35	2.41	2.48	2.55	2.61	
9.9500	2.68	2.74	2.82	2.90	3.00	
10.2000	3.09	3.19	3.29	3.39	3.49	
10.4500	3.60	3.69	3.82	3.95	4.11	

HYDROGRAPH ORDINATES (cfs)
 Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
10.7000	4.26	4.44	4.60	4.78	4.94
10.9500	5.12	5.28	5.55	5.81	6.19
11.2000	6.55	6.98	7.35	7.79	8.18
11.4500	8.62	9.02	12.95	17.17	26.07
11.7000	34.83	47.31	58.90	83.17	107.01
11.9500	101.79	90.00	60.63	31.58	21.05
12.2000	16.84	14.67	13.38	12.20	11.26
12.4500	10.18	9.24	8.45	7.83	7.45
12.7000	7.19	6.93	6.71	6.46	6.25
12.9500	6.00	5.79	5.58	5.41	5.26
13.2000	5.14	5.00	4.88	4.75	4.64
13.4500	4.50	4.39	4.27	4.17	4.06
13.7000	3.98	3.88	3.80	3.70	3.62
13.9500	3.53	3.44	3.37	3.31	3.27
14.2000	3.23	3.20	3.17	3.14	3.11
14.4500	3.08	3.05	3.01	2.98	2.95
14.7000	2.93	2.89	2.86	2.83	2.80
14.9500	2.77	2.73	2.70	2.68	2.64
15.2000	2.61	2.58	2.55	2.52	2.48
15.4500	2.45	2.43	2.39	2.36	2.33
15.7000	2.30	2.27	2.23	2.20	2.18
15.9500	2.14	2.11	2.08	2.06	2.05
16.2000	2.04	2.02	2.02	2.00	1.99
16.4500	1.98	1.97	1.96	1.95	1.93
16.7000	1.93	1.91	1.90	1.89	1.88
16.9500	1.87	1.86	1.85	1.84	1.82
17.2000	1.81	1.80	1.79	1.78	1.77
17.4500	1.76	1.75	1.73	1.72	1.71
17.7000	1.70	1.69	1.68	1.67	1.66
17.9500	1.65	1.63	1.62	1.61	1.60
18.2000	1.59	1.58	1.57	1.56	1.54
18.4500	1.53	1.52	1.51	1.50	1.49
18.7000	1.48	1.47	1.45	1.44	1.43
18.9500	1.42	1.41	1.40	1.39	1.38
19.2000	1.36	1.35	1.34	1.33	1.32
19.4500	1.31	1.30	1.29	1.27	1.26
19.7000	1.26	1.24	1.23	1.22	1.21
19.9500	1.20	1.19	1.18	1.17	1.17
20.2000	1.16	1.16	1.16	1.16	1.15
20.4500	1.15	1.15	1.15	1.15	1.14
20.7000	1.14	1.14	1.14	1.13	1.13
20.9500	1.13	1.13	1.13	1.13	1.12
21.2000	1.12	1.12	1.12	1.11	1.11
21.4500	1.11	1.11	1.10	1.10	1.10
21.7000	1.10	1.10	1.09	1.09	1.09
21.9500	1.09	1.08	1.08	1.08	1.08
22.2000	1.07	1.07	1.07	1.07	1.06

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
22.4500	1.06	1.06	1.06	1.06	1.05
22.7000	1.05	1.05	1.05	1.05	1.05
22.9500	1.04	1.04	1.04	1.04	1.03
23.2000	1.03	1.03	1.03	1.02	1.02
23.4500	1.02	1.02	1.01	1.01	1.01
23.7000	1.01	1.01	1.00	1.00	1.00
23.9500	1.00	.99	.62	.21	.07
24.2000	.02	.01	.00	.00	

Type.... Node: Pond Inflow Summary Page 6.37
 Name.... C-POND2 IN Event: 50 yr
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 50

SUMMARY FOR HYDROGRAPH ADDITION
 at Node: C-POND2 IN

HYG Directory: P:\PONDPACK\13020\3RD SUBMITTAL\

```

=====
Upstream Link ID  Upstream Node ID  HYG file  HYG ID  HYG tag
-----
A 20              B-POSTDEVELOPED2  B-POSTDEVELOPED250
=====
  
```

```

INFLOWS TO: C-POND2 IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
              ac-ft       hrs          cfs
-----
              B-POSTDEVELOPED2  50          7.389       11.9000       121.84
  
```

```

TOTAL FLOW INTO: C-POND2 IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
              ac-ft       hrs          cfs
-----
              C-POND2      IN  50          7.389       11.9000       121.84
  
```

Type.... Node: Pond Inflow Summary
 Name.... C-POND2 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 50

TOTAL NODE INFLOW...

HYG file =
 HYG ID = C-POND2 IN
 HYG Tag = 50

 Peak Discharge = 121.84 cfs
 Time to Peak = 11.9000 hrs
 HYG Volume = 7.389 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
2.2000	-.00	.00	.01	.02	.03
2.4500	.04	.06	.07	.08	.09
2.7000	.11	.12	.13	.14	.15
2.9500	.17	.18	.19	.20	.21
3.2000	.23	.24	.25	.26	.27
3.4500	.28	.30	.31	.32	.33
3.7000	.34	.35	.37	.38	.39
3.9500	.40	.41	.42	.44	.45
4.2000	.46	.47	.49	.50	.51
4.4500	.53	.54	.55	.57	.58
4.7000	.59	.61	.62	.63	.65
4.9500	.66	.68	.69	.70	.72
5.2000	.73	.75	.76	.77	.79
5.4500	.80	.81	.83	.84	.86
5.7000	.87	.89	.90	.91	.93
5.9500	.94	.96	.97	.99	1.00
6.2000	1.01	1.03	1.04	1.06	1.07
6.4500	1.09	1.10	1.12	1.13	1.14
6.7000	1.16	1.17	1.19	1.20	1.22
6.9500	1.23	1.24	1.26	1.27	1.29
7.2000	1.30	1.32	1.33	1.35	1.36
7.4500	1.37	1.39	1.40	1.42	1.42
7.7000	1.43	1.46	1.49	1.50	1.51
7.9500	1.52	1.53	1.56	1.58	1.62
8.2000	1.66	1.71	1.75	1.80	1.84
8.4500	1.89	1.93	1.98	2.02	2.07
8.7000	2.12	2.17	2.21	2.26	2.31
8.9500	2.36	2.40	2.44	2.47	2.49
9.2000	2.50	2.51	2.52	2.53	2.54
9.4500	2.55	2.56	2.59	2.63	2.70
9.7000	2.76	2.84	2.91	2.99	3.06
9.9500	3.15	3.22	3.31	3.40	3.51
10.2000	3.62	3.74	3.84	3.97	4.08

HYDROGRAPH ORDINATES (cfs)
 Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
10.4500	4.20	4.31	4.46	4.60	4.79
10.7000	4.96	5.17	5.35	5.55	5.74
10.9500	5.95	6.13	6.44	6.73	7.17
11.2000	7.58	8.07	8.50	9.00	9.44
11.4500	9.95	10.40	14.92	19.76	29.97
11.7000	39.98	54.20	67.34	94.88	121.84
11.9500	115.74	102.21	68.81	35.82	23.87
12.2000	19.09	16.63	15.16	13.82	12.76
12.4500	11.53	10.46	9.57	8.87	8.44
12.7000	8.14	7.85	7.60	7.32	7.08
12.9500	6.80	6.55	6.32	6.12	5.95
13.2000	5.81	5.66	5.53	5.38	5.25
13.4500	5.10	4.97	4.83	4.72	4.60
13.7000	4.50	4.40	4.30	4.19	4.10
13.9500	3.99	3.90	3.82	3.75	3.70
14.2000	3.66	3.62	3.59	3.55	3.52
14.4500	3.48	3.45	3.41	3.37	3.34
14.7000	3.31	3.27	3.23	3.20	3.17
14.9500	3.13	3.09	3.06	3.03	2.99
15.2000	2.95	2.92	2.89	2.85	2.81
15.4500	2.77	2.74	2.70	2.67	2.63
15.7000	2.60	2.56	2.53	2.49	2.46
15.9500	2.42	2.38	2.36	2.34	2.32
16.2000	2.30	2.29	2.28	2.27	2.25
16.4500	2.24	2.23	2.21	2.20	2.19
16.7000	2.18	2.16	2.15	2.14	2.13
16.9500	2.11	2.10	2.09	2.08	2.06
17.2000	2.05	2.04	2.03	2.01	2.00
17.4500	1.99	1.98	1.96	1.95	1.94
17.7000	1.93	1.91	1.90	1.89	1.88
17.9500	1.86	1.85	1.83	1.82	1.81
18.2000	1.80	1.78	1.77	1.76	1.75
18.4500	1.73	1.72	1.71	1.70	1.68
18.7000	1.67	1.66	1.64	1.63	1.62
18.9500	1.61	1.59	1.58	1.57	1.56
19.2000	1.54	1.53	1.52	1.51	1.49
19.4500	1.48	1.47	1.46	1.44	1.43
19.7000	1.42	1.40	1.39	1.38	1.37
19.9500	1.35	1.34	1.33	1.33	1.32
20.2000	1.32	1.31	1.31	1.31	1.30
20.4500	1.30	1.30	1.30	1.29	1.29
20.7000	1.29	1.29	1.28	1.28	1.28
20.9500	1.28	1.27	1.27	1.27	1.27
21.2000	1.26	1.26	1.26	1.26	1.25
21.4500	1.25	1.25	1.25	1.24	1.24
21.7000	1.24	1.24	1.23	1.23	1.23
21.9500	1.23	1.22	1.22	1.22	1.22

Type.... Node: Pond Inflow Summary
 Name.... C-POND2 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 50

Page 6.40
 Event: 50 yr

HYDROGRAPH ORDINATES (cfs)
 Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs						
22.2000	1.21	1.21	1.21	1.21	1.20	1.20
22.4500	1.20	1.20	1.20	1.19	1.19	1.19
22.7000	1.19	1.19	1.18	1.18	1.18	1.18
22.9500	1.18	1.17	1.17	1.17	1.17	1.17
23.2000	1.16	1.16	1.16	1.16	1.16	1.15
23.4500	1.15	1.15	1.15	1.14	1.14	1.14
23.7000	1.14	1.14	1.13	1.13	1.13	1.13
23.9500	1.13	1.12	.70	.23	.08	.08
24.2000	.03	.01	.00	.00		

Type.... Node: Pond Inflow Summary Page 6.41
 Name.... C-POND2 IN Event: 100 yr
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 100

SUMMARY FOR HYDROGRAPH ADDITION
 at Node: C-POND2 IN

HYG Directory: P:\PONDPACK\13020\3RD SUBMITTAL\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID      HYG tag
-----
A 20              B-POSTDEVELOPED2      B-POSTDEVELOPED2100
=====
  
```

```

INFLOWS TO:  C-POND2      IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
ac-ft        hrs          cfs
-----
              B-POSTDEVELOPED2  100          8.339       11.9000      136.62
  
```

```

TOTAL FLOW INTO:  C-POND2      IN
-----
HYG file      HYG ID      HYG tag      Volume      Peak Time      Peak Flow
ac-ft        hrs          cfs
-----
              C-POND2      IN  100          8.339       11.9000      136.62
  
```

Type.... Node: Pond Inflow Summary
 Name.... C-POND2 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 100

TOTAL NODE INFLOW...

HYG file =
 HYG ID = C-POND2 IN
 HYG Tag = 100

 Peak Discharge = 136.62 cfs
 Time to Peak = 11.9000 hrs
 HYG Volume = 8.339 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs

Time on left represents time for first value in each row.

Time hrs					
2.0000	-.00	.00	.01	.02	.04
2.2500	.05	.07	.08	.10	.11
2.5000	.13	.14	.15	.17	.18
2.7500	.20	.21	.23	.24	.25
3.0000	.27	.28	.30	.31	.32
3.2500	.34	.35	.37	.38	.39
3.5000	.41	.42	.43	.45	.46
3.7500	.47	.48	.50	.51	.52
4.0000	.54	.55	.56	.58	.59
4.2500	.61	.62	.64	.65	.67
4.5000	.68	.70	.71	.73	.75
4.7500	.76	.78	.79	.81	.82
5.0000	.84	.85	.87	.89	.90
5.2500	.92	.93	.95	.97	.98
5.5000	1.00	1.01	1.03	1.05	1.06
5.7500	1.08	1.09	1.11	1.12	1.14
6.0000	1.16	1.17	1.19	1.21	1.22
6.2500	1.24	1.25	1.27	1.29	1.30
6.5000	1.32	1.33	1.35	1.37	1.38
6.7500	1.40	1.41	1.43	1.45	1.46
7.0000	1.48	1.49	1.51	1.53	1.54
7.2500	1.56	1.57	1.59	1.61	1.62
7.5000	1.64	1.65	1.67	1.68	1.68
7.7500	1.71	1.75	1.76	1.77	1.78
8.0000	1.80	1.82	1.85	1.90	1.94
8.2500	2.00	2.04	2.10	2.15	2.20
8.5000	2.25	2.30	2.35	2.41	2.46
8.7500	2.52	2.57	2.63	2.68	2.73
9.0000	2.79	2.83	2.86	2.88	2.89
9.2500	2.91	2.92	2.93	2.94	2.94
9.5000	2.95	2.99	3.03	3.11	3.18
9.7500	3.27	3.35	3.44	3.52	3.61
10.0000	3.70	3.80	3.90	4.03	4.15

Type.... Node: Pond Inflow Summary
 Name.... C-POND2 IN
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 100

HYDROGRAPH ORDINATES (cfs)						
Time hrs	Output Time increment = .0500 hrs					
	Time on left represents time for first value in each row.					
10.2500	4.28	4.40	4.54	4.66	4.80	
10.5000	4.93	5.10	5.26	5.47	5.67	
10.7500	5.89	6.10	6.33	6.54	6.77	
11.0000	6.98	7.32	7.65	8.15	8.62	
11.2500	9.16	9.65	10.21	10.71	11.27	
11.5000	11.78	16.88	22.35	33.85	45.11	
11.7500	61.05	75.76	106.54	136.62	129.63	
12.0000	114.37	76.97	40.06	26.68	21.33	
12.2500	18.58	16.94	15.44	14.25	12.88	
12.5000	11.69	10.69	9.91	9.42	9.10	
12.7500	8.76	8.49	8.17	7.90	7.59	
13.0000	7.32	7.05	6.84	6.65	6.49	
13.2500	6.32	6.17	6.01	5.86	5.69	
13.5000	5.54	5.39	5.26	5.14	5.03	
13.7500	4.91	4.80	4.68	4.58	4.46	
14.0000	4.35	4.26	4.19	4.13	4.08	
14.2500	4.04	4.01	3.96	3.92	3.88	
14.5000	3.85	3.81	3.77	3.73	3.69	
14.7500	3.65	3.61	3.57	3.54	3.49	
15.0000	3.45	3.41	3.38	3.33	3.29	
15.2500	3.25	3.22	3.18	3.13	3.10	
15.5000	3.06	3.02	2.98	2.94	2.90	
15.7500	2.86	2.82	2.78	2.75	2.70	
16.0000	2.66	2.63	2.61	2.59	2.57	
16.2500	2.55	2.54	2.53	2.51	2.50	
16.5000	2.49	2.47	2.46	2.44	2.43	
16.7500	2.41	2.40	2.39	2.37	2.36	
17.0000	2.34	2.33	2.32	2.30	2.29	
17.2500	2.27	2.26	2.25	2.23	2.22	
17.5000	2.21	2.19	2.17	2.16	2.15	
17.7500	2.13	2.12	2.10	2.09	2.08	
18.0000	2.06	2.05	2.04	2.02	2.00	
18.2500	1.99	1.98	1.96	1.95	1.93	
18.5000	1.92	1.91	1.89	1.88	1.87	
18.7500	1.85	1.83	1.82	1.81	1.79	
19.0000	1.78	1.76	1.75	1.74	1.72	
19.2500	1.71	1.70	1.68	1.66	1.65	
19.5000	1.64	1.62	1.61	1.59	1.58	
19.7500	1.57	1.55	1.54	1.53	1.51	
20.0000	1.49	1.49	1.48	1.47	1.47	
20.2500	1.47	1.46	1.46	1.46	1.45	
20.5000	1.45	1.45	1.44	1.44	1.44	
20.7500	1.44	1.43	1.43	1.43	1.43	
21.0000	1.42	1.42	1.42	1.41	1.41	
21.2500	1.41	1.41	1.40	1.40	1.40	
21.5000	1.40	1.39	1.39	1.39	1.39	
21.7500	1.38	1.38	1.37	1.37	1.37	

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0500 hrs

Time on left represents time for first value in each row.

Time hrs	Time on left represents time for first value in each row.				
22.0000	1.37	1.36	1.36	1.36	1.35
22.2500	1.35	1.35	1.35	1.34	1.34
22.5000	1.34	1.34	1.33	1.33	1.33
22.7500	1.32	1.32	1.32	1.32	1.31
23.0000	1.31	1.31	1.31	1.30	1.30
23.2500	1.30	1.30	1.29	1.29	1.28
23.5000	1.28	1.28	1.27	1.27	1.27
23.7500	1.27	1.26	1.26	1.26	1.26
24.0000	1.25	.78	.26	.09	.03
24.2500	.01	.00	.00		

Type.... Pond Routing Summary Page 6.45
 Name.... C-POND2 OUT Tag: 2 Event: 2 yr
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 2

LEVEL POOL ROUTING SUMMARY

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
 Inflow HYG file = NONE STORED - C-POND2 IN 2
 Outflow HYG file = NONE STORED - C-POND2 OUT 2

Pond Node Data = C-POND2
 Pond Volume Data = C-POND2
 Pond Outlet Data = PR 20

No Infiltration

INITIAL CONDITIONS

 Starting WS Elev = 547.35 ft
 Starting Volume = .000 ac-ft
 Starting Outflow = .00 cfs
 Starting Infiltr. = .00 cfs
 Starting Total Qout= .00 cfs
 Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
 Peak Inflow = 56.36 cfs at 11.9000 hrs
 Peak Outflow = 8.30 cfs at 12.2500 hrs

 Peak Elevation = 551.90 ft
 Peak Storage = 1.662 ac-ft
 =====

MASS BALANCE (ac-ft)

 + Initial Vol = .000
 + HYG Vol IN = 3.281
 - Infiltration = .000
 - HYG Vol OUT = 3.281
 - Retained Vol = .001

 Unrouted Vol = -0.000 ac-ft (.000% of Inflow Volume)

Type.... Pond Routing Summary Page 6.46
 Name.... C-POND2 OUT Tag: 10 Event: 10 yr
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 10

LEVEL POOL ROUTING SUMMARY

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
 Inflow HYG file = NONE STORED - C-POND2 IN 10
 Outflow HYG file = NONE STORED - C-POND2 OUT 10

Pond Node Data = C-POND2
 Pond Volume Data = C-POND2
 Pond Outlet Data = PR 20

No Infiltration

INITIAL CONDITIONS

 Starting WS Elev = 547.35 ft
 Starting Volume = .000 ac-ft
 Starting Outflow = .00 cfs
 Starting Infiltr. = .00 cfs
 Starting Total Qout = .00 cfs
 Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
 Peak Inflow = 88.37 cfs at 11.9000 hrs
 Peak Outflow = 24.00 cfs at 12.1000 hrs

 Peak Elevation = 553.61 ft
 Peak Storage = 2.498 ac-ft
 =====

MASS BALANCE (ac-ft)

 + Initial Vol = .000
 + HYG Vol IN = 5.263
 - Infiltration = .000
 - HYG Vol OUT = 5.262
 - Retained Vol = .001

 Unrouted Vol = .000 ac-ft (.000% of Inflow Volume)

Type.... Pond Routing Summary Page 6.47
 Name.... C-POND2 OUT Tag: 25 Event: 25 yr
 File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW
 Storm... SCS Type II Tag: 25

LEVEL POOL ROUTING SUMMARY

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
 Inflow HYG file = NONE STORED - C-POND2 IN 25
 Outflow HYG file = NONE STORED - C-POND2 OUT 25

Pond Node Data = C-POND2
 Pond Volume Data = C-POND2
 Pond Outlet Data = PR 20

No Infiltration

INITIAL CONDITIONS

 Starting WS Elev = 547.35 ft
 Starting Volume = .000 ac-ft
 Starting Outflow = .00 cfs
 Starting Infiltr. = .00 cfs
 Starting Total Qout = .00 cfs
 Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
 Peak Inflow = 107.01 cfs at 11.9000 hrs
 Peak Outflow = 53.63 cfs at 12.0500 hrs

 Peak Elevation = 554.22 ft
 Peak Storage = 2.819 ac-ft
 =====

MASS BALANCE (ac-ft)

 + Initial Vol = .000
 + HYG Vol IN = 6.442
 - Infiltration = .000
 - HYG Vol OUT = 6.441
 - Retained Vol = .001

 Unrouted Vol = -.000 ac-ft (.000% of Inflow Volume)

Type.... Pond Routing Summary

Name.... C-POND2 OUT Tag: 50

File.... P:\PONDPACK\13020\3RD SUBMITTAL\13020-ASBUILT-REV.PPW

Storm... SCS Type II Tag: 50

LEVEL POOL ROUTING SUMMARY

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
Inflow HYG file = NONE STORED - C-POND2 IN 50
Outflow HYG file = NONE STORED - C-POND2 OUT 50

Pond Node Data = C-POND2
Pond Volume Data = C-POND2
Pond Outlet Data = PR 20

No Infiltration

INITIAL CONDITIONS

Starting WS Elev = 547.35 ft
Starting Volume = .000 ac-ft
Starting Outflow = .00 cfs
Starting Infiltr. = .00 cfs
Starting Total Qout= .00 cfs
Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
Peak Inflow = 121.84 cfs at 11.9000 hrs
Peak Outflow = 77.42 cfs at 12.0500 hrs

Peak Elevation = 554.54 ft
Peak Storage = 3.002 ac-ft
=====

MASS BALANCE (ac-ft)

+ Initial Vol = .000
+ HYG Vol IN = 7.389
- Infiltration = .000
- HYG Vol OUT = 7.389
- Retained Vol = .001

Unrouted Vol = .000 ac-ft (.000% of Inflow Volume)

LEVEL POOL ROUTING SUMMARY

HYG Dir = P:\PONDPACK\13020\3RD SUBMITTAL\
 Inflow HYG file = NONE STORED - C-POND2 IN 100
 Outflow HYG file = NONE STORED - C-POND2 OUT 100

Pond Node Data = C-POND2
 Pond Volume Data = C-POND2
 Pond Outlet Data = PR 20

No Infiltration

INITIAL CONDITIONS

 Starting WS Elev = 547.35 ft
 Starting Volume = .000 ac-ft
 Starting Outflow = .00 cfs
 Starting Infiltr. = .00 cfs
 Starting Total Qout = .00 cfs
 Time Increment = .0500 hrs

INFLOW/OUTFLOW HYDROGRAPH SUMMARY

=====
 Peak Inflow = 136.62 cfs at 11.9000 hrs
 Peak Outflow = 103.98 cfs at 12.0000 hrs

 Peak Elevation = 554.74 ft
 Peak Storage = 3.114 ac-ft
 =====

MASS BALANCE (ac-ft)

 + Initial Vol = .000
 + HYG Vol IN = 8.339
 - Infiltration = .000
 - HYG Vol OUT = 8.338
 - Retained Vol = .001

 Unrouted Vol = -.000 ac-ft (.000% of Inflow Volume)

UST-6C

Application to Install or Replace Underground Storage Tank Systems (SCHEDULE OF MATERIALS)



Facility ID No.	Facility Name Quality Oil - West Jefferson	Attachment to (check one): UST-6A <input checked="" type="checkbox"/> UST-6B <input type="checkbox"/>
UST System components installed (Check one): <input checked="" type="checkbox"/> Tanks and Piping <input type="checkbox"/> Tanks Only <input type="checkbox"/> Piping Only		If attached to UST-6B, have any modifications been made to approved design plan? YES <input type="checkbox"/> NO <input type="checkbox"/>

INSTRUCTIONS: List the manufacturer, model or part number and quantity for the following equipment installed at the facility: tanks; piping including flexible connectors; leak detection equipment including the monitoring console, interstitial monitoring sensors and automatic line leak detectors; spill and overfill prevention equipment; vapor recovery equipment; containment sumps and method of locating the piping once it is buried. Group like categories of equipment together in the list. The item number provided below must correspond to the location(s) of the equipment shown on the scale drawing. Attach additional pages as necessary.

ITEM NO.	ITEM/PART DESCRIPTION	MANUFACTURER	MODEL/PART NO.	QTY
A	TLS-450 Tank Monitor	Veeder Root	794382-303 86000	1 26090-100
B	10' Mag Probes	Veeder Root	846390-109	1
C	8' Mag Probes	Veeder Root	846390-107	X 4
D	Probe Installation Kit - Diesel	Veeder Root	846400-001	2
E	Probe Installation Kit - Gasoline	Veeder Root	846400-000	X 3
G	Sump Sensor X dispensers X tanks	Veeder Root	794380-208 *	X 10
H	PLLD	Veeder Root	848480-001	X 5
I	18" Flex Hose For Dispensers	Hose Master	FSMS 1.5	X 13
J	5 Gal. Spill Bucket	Emco Wheaton	A1004-210S-CM	X 5
K	2" Vent Valve	OPW	233-4420	X 5
L	Ball Float	OPW	53VML-0210	1
M	2 HP Submerged Pump	Veeder Root	Red Jacket P200U1-3RJ2	X 3
N	2" Vent Line	Ameron	3000/L	1
O	2" Product Pipe	Ameron	3000/LCX	1
P	25K Gal UST DW-FRP 10'Dia 47.8'L ⁴⁶	Xerxes	DW-Brine Interstitial	1
Q	8K Gal UST DW-FRP 8'Dia 26.5'L ^{26.25}	Xerxes	DW-Brine Interstitial	1
R	15K Gal UST DW-FRP 8'Dia 46.8'L ^{44.5} (Split 12K Diesel/3K Kerosene)	Xerxes	DW-Brine Interstitial	1
S	Detectable Tape	Empire Level 1	Magnatec 31-143	1
T	Dual Point Interstitial	Veeder Root	794382-303	3
U	Dispenser Sump	Petro Fiberglass	DPF-1EC	X 5
V	STP Sump	Petro Fiberglass	* DPF-48WT16	X 5
W	3/4 HP Submerged Pump	Veeder Root	Red Jacket P75U1-RJ2	X 2
X	Dispenser Sump	Petro Fiberglass	DPF-5BW	X 1
Y	3"X4" Vapor Recovery Adaptor	OPW	1611AV-1620	X 3
Z	3" Orange Vapor Recovery Cap	OPW	711T-7085EVR	X 3
AA	2" Flex Hose For Submerged Pumps	Hose Master	FSMS 2.0	X 5
BB	Ball Float	OPW	53VML-0160	X 4

Brian T. Upton

 Print Name of North Carolina Professional Engineer

The Isaacs Group

 Company Name

3/12/2013

 Date

2/29/14

Affix PE seal here:

UST-6C

Application to Install or Replace Underground Storage Tank Systems (SCHEDULE OF MATERIALS)



Facility ID No 0-039068	Facility Name Holt Oil	Attachment to (check one) UST-5A <input checked="" type="checkbox"/> UST-6B <input type="checkbox"/>
UST System components installed (Check one): <input checked="" type="checkbox"/> Tanks and Piping <input type="checkbox"/> Tanks Only <input type="checkbox"/> Piping Only		If attached to UST-6B, have any modifications been made to approved design plan? YES <input type="checkbox"/> NO <input type="checkbox"/>

INSTRUCTIONS: List the manufacturer, model or part number and quantity for the following equipment installed at the facility: tanks, piping including flexible connectors; leak detection equipment including the monitoring console, interstitial monitoring sensors and automatic line leak detectors; spill and overflow prevention equipment; vapor recovery equipment; containment sumps and method of locating the piping once it is buried. Group like categories of equipment together in the list. The item number provided below must correspond to the location(s) of the equipment shown on the scale drawing. Attach additional pages as necessary.

ITEM NO.	ITEM/PART DESCRIPTION	MANUFACTURER	MODEL/PART NO.	QTY
A	TLS-450 Tank Monitor	Veeder Root	860090-100	1
B	10.5' Mag Probes	Veeder Root	846390-110	1
C	8' Mag Probes	Veeder Root	846390-107	2
D	Probe Installation Kit – Gasoline	Veeder Root	886100-001	2
E	Probe Installation Kit – Diesel	Veeder Root	846400-001	1
F	Sump Sensor (6 dispensers/3 tanks)	Veeder Root	794380-208	9
G	Position Sensitive Sensor	Veeder Root	794380-323	2
H	PLLD	Veeder Root	859080-001	3
I	8 Input Interstitial/Liquid Sensor Mode	Veeder Root	332813-001	1
J	5 Gallon Spill Bucket	Emco Wheaton	A1004-211S-CM	3
K	2" Vent Valve	OPW	623V-2203	2
L	Overflow Prevention Valve	OPW	71SO-410C	1
M	Water Tight Tank Sump	OPW	TSM-4536	3
N	Plastic Dispenser Sump	OPW	DS-1836	6
Q	Double Wall Flex	OPW	C15-1000	
R	Premium Detectable Tape	Empire Level	Magnatec 31-143	
S	20K 10 5' Dia. Titan UST	Highland Tank	Titan	1
T	12K 8' Dia. Titan UST (6K/6K Split)	Highland Tank	Titan	1
U	4"X2" Tee Extractor Fitting	OPW	233-4420	1
W	3"X4" Vapor Recovery Adaptor	OPW	61VSA-1020-EVR	2
X	3" Orange Vapor Recovery Cap	OPW	1711T-7085EVR	2
Y	2" Vac. Vent	OPW	23-0033	1
AA	1.5" Flex Hose for Dispensers	Hose Master	FSMS-1 5	13
BB	2 HP Submerged Pump	Veeder Root	Red Jacket P200U1-RJ2	2
CC	75 HP Submerged Pump	Veeder Root	Red Jacket P75U1-RJ2	1
DD	4"X3" Adapter	Morrison	805L-0100AA	2

EE Overfill Prevention Valve

Benji Layman
Print Name of North Carolina Professional Engineer

The Isaacs Group
Company Name

12/24/13
Date

Affix Professional Seal Here
1150-480C

