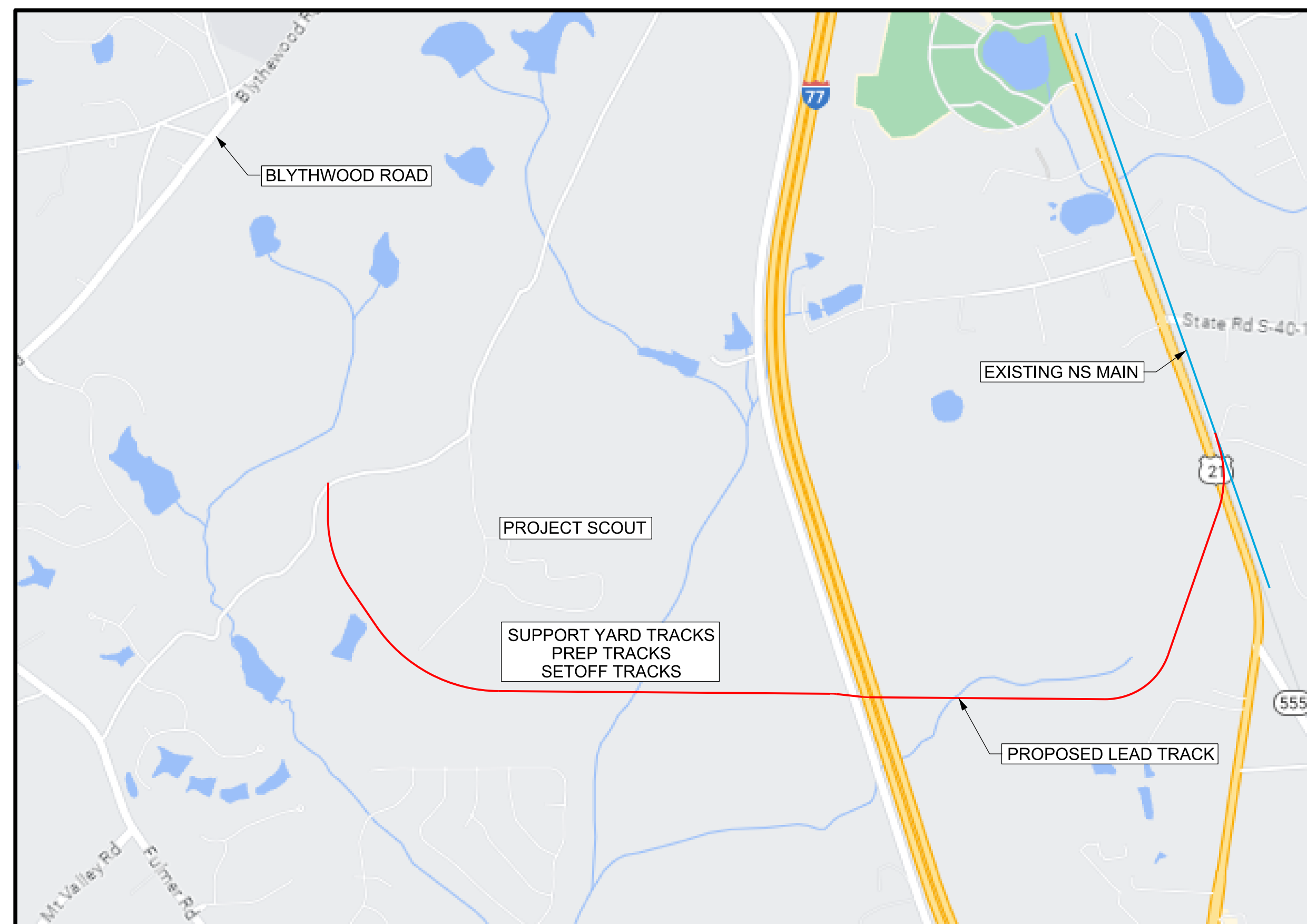




BLYTHEWOOD, SOUTH CAROLINA PROPOSED TRACKS TO SERVE PROJECT SCOUT – MP R91.4

CONSTRUCTION SITE LOCATION MAP



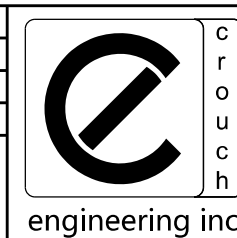
NOTES:

- THE WORK FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE NORFOLK SOUTHERN STANDARD SPECIFICATIONS FOR MATERIALS AND CONSTRUCTION DATED JANUARY 2019 AND ANY SPECIAL PROVISIONS PROVIDED HEREIN.
- NS WILL FURNISH A FLAGMAN AT NO COST TO THE CONTRACTOR. THE CONTRACTOR WILL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE NS FLAGMAN.
- THE CONTRACTOR SHALL SUBMIT TO NS A PROPOSED CONSTRUCTION SCHEDULE PRIOR TO BEGINNING WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT NS DOES NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS. THE CONTRACTOR SHOULD VERIFY LOCATIONS WITH THE UTILITY COMPANIES NOT LESS THAN 48 HOURS BEFORE STARTING EXCAVATION ACTIVITIES.
- ALL CONSTRUCTION WORK WILL BE PERFORMED IN SUCH A MANNER AS TO CONTROL EROSION AND PREVENT SEDIMENTATION FROM LEAVING THE SITE. EROSION CONTROL MEASURES AND PRACTICES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.
- RAILROAD RIGHT OF WAY LINES, IF SHOWN, WERE OBTAINED FROM VALUATION MAPS. ALL RIGHT OF WAY AND PROPERTY LINES ARE SHOWN FOR INFORMATION PURPOSES ONLY AS THEY HAVE NOT BEEN VERIFIED IN THE FIELD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY LOCAL CONSTRUCTION PERMITS THAT MAY BE REQUIRED FOR CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD LAYOUT AND CONSTRUCTION STAKING.
- THE CONTRACTOR SHALL OBTAIN ANY TEMPORARY CONSTRUCTION ENTRANCE AND/OR DRIVEWAY PERMITS FROM THE APPROPRIATE GOVERNING AGENCY.
- ON SITE AND GENERATED CONSTRUCTION DEBRIS IS TO BE DISPOSED OF AS NON-REGULATED SOLID WASTE IN COMPLIANCE WITHIN LOCAL REGULATIONS. IF SUSPECTED ENVIRONMENTAL PROBLEMS ARE ENCOUNTERED, CONTACT THE NS ENVIRONMENTAL PROTECTION DEPARTMENT TO ASSIST IN THEIR PROPER HANDLING AND REMOVAL.
- THE CONTRACTOR'S BID PRICE FOR CROSS TIE REMOVAL, IF REQUIRED, SHALL INCLUDE TRANSPORTATION AND LEGAL DISPOSAL.

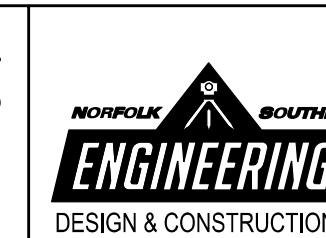
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PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



| | | | |
|---|--------------|---------------|--|
| REV | BY | DATE | DESCRIPTION |
| R1 | EVU/DA/03/24 | | ADDED HEADWALLS AND CASING DETAIL, UPDATED TABLE OF CONTENTS |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT COVER SHEET | | | |
| DWN | EVU | PTD NO: D3327 | VRN |
| FILE NO: | TRK1115024 | 04825 | MILE POST: R91.4 |
| CHK | DATE | MARCH 5, 2024 | DRAWING NUMBER: TD-2023-105-R1 |

LEGEND:

- C/L EXISTING TRACK
- C/L PROPOSED TRACK
- C/L FUTURE TRACK
- C/L EXISTING TRACK TO BE LINED
- C/L EXISTING TRACK TO BE REMOVED
- EXISTING NS RIGHT OF WAY
- | W |——— EXISTING WATER LINE
- | W+ |——— PROPOSED WATER LINE
- | FOC |——— EXISTING FIBER OPTIC CABLE
- | FOC+ |——— PROPOSED FIBER OPTIC CABLE
- | G |——— EXISTING GAS LINE
- | G+ |——— PROPOSED GAS LINE
- | A |——— EXISTING AIR LINE
- | A+ |——— PROPOSED AIR LINE
- | P |——— EXISTING POWER LINE
- | P+ |——— PROPOSED POWER LINE
- | P |——— EXISTING UNDERGROUND POWER LINE
- | P+ |——— PROPOSED UNDERGROUND POWER LINE
- | P&T |——— EXISTING POWER & TELEPHONE LINE
- | P&T+ |——— PROPOSED POWER & TELEPHONE LINE
- | X |——— EXISTING FENCE LINE
- | X+ |——— PROPOSED FENCE LINE
- | SSI |——— EXISTING STORM SEWER LINE
- | SSI+ |——— PROPOSED STORM SEWER LINE
- | SSI |——— EXISTING SANITARY SEWER LINE
- | SSI+ |——— PROPOSED SANITARY SEWER LINE
- | T |——— EXISTING TELEPHONE LINE
- | T+ |——— PROPOSED TELEPHONE LINE
- | G |——— EXISTING GUARDRAIL
- | G+ |——— PROPOSED GUARDRAIL
- | O |——— EXISTING OIL LINE
- | O+ |——— PROPOSED OIL LINE
- | SF |——— SILT FENCE
- | LD |——— LIMIT OF DISTURBANCE

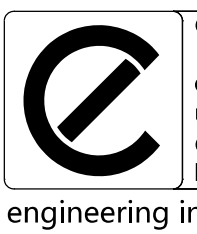
- ⊕ AEI SCANNER
- BOLLARD POST
- ⊗ BUMPING POST
- ⊗ CANTILEVER SIGNAL WITH FLASHERS
- ⊗ CANTILEVER SIGNAL
- ⊗ CATCH BASIN
- ⊗ CURB INLET
- ⊗ SEWER CLEAN OUT
- ⊗ CONTROL POINT
- ⊗ CROSSING ACTIVATOR
- ⊗ C & S PEDESTAL
- ⊗ C & S POLE
- ⊗ DROP INLET
- ⊗ DRAGGING EQUIPMENT DETECTOR
- ⊗ DWARF SIGNAL
- ⊗ EARTHMOUND
- ⊗ FIRE HYDRANT
- ⊗ RR FLASHERS
- ⊗ GAS VENT
- ⊗ RR FLASHERS WITH GATE
- ⊗ GATE
- ⊗ GUARD POST
- ⊗ GUY POST
- ⊗ DERAIL
- ⊗ GUY WIRE
- ⊗ HI CAR DETECTOR
- ⊗ HOT BOX DETECTOR
- ⊗ ELECTRIC JUNCTION BOX
- ⊗ LIGHT POLE
- ⊗ LIGHT TOWER
- ⊗ RAIL LUBRICATOR
- ⊗ ELECTRIC METER
- ⊗ GAS METER

- ⊗ WATER METER
- ⊗ DRAINAGE MANHOLE
- ⊗ UTILITY MANHOLE
- ⊗ MONITORING WELL
- ⊗ MILEPOST
- ⊗ METER POLE
- ⊗ PROPANE TANK
- ⊗ EXISTING POINT OF SWITCH
- ⊗ EXISTING ELECTRIC LOCK POINT OF SWITCH
- ⊗ EXISTING POWER POINT OF SWITCH
- ⊗ PROPOSED POWER POINT OF SWITCH
- ⊗ PROPOSED POINT OF SWITCH
- ⊗ PROPOSED ELECTRIC LOCK POINT OF SWITCH
- ⊗ RR SIGNAL
- ⊗ SIGN
- ⊗ TELEPHONE PEDESTAL
- ⊗ TREE
- ⊗ UTILITY POLE
- ⊗ AIR VALVE
- ⊗ FUEL VALVE
- ⊗ GAS VALVE
- ⊗ WATER VALVE
- ⊗ WHISTLE BOARD
- ⊗ WHEEL DETECTOR
- ⊗ WHEEL STOP
- ⊗ CROSS BUCKS
- ⊗ ROCK CHECK DAM
- ⊗ CONSTRUCTION ENTRANCE
- ⊗ SEDIMENT TRAP
- ⊗ SCOUR POOL
- ⊗ INLET SEDIMENT TRAP

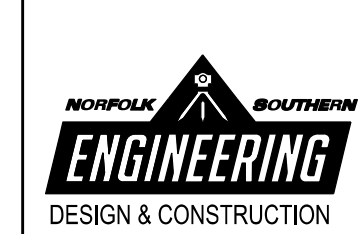
**BLYTHEWOOD, SC - PROPOSED TRACKS TO SERVE PROJECT SCOUT
SURVEY CONTROL POINTS**

| POINT # | NORTHING | EASTING | ELEVATION | DESC. |
|---------|-------------|--------------|-----------|-----------------|
| 1 | 860087.6906 | 2009169.3123 | 470.42 | CPIPSCAP |
| 2 | 859618.3903 | 2009337.4285 | 467.98 | CPIPSCAP |
| 3 | 859146.9929 | 2009502.0938 | 464.99 | CPIPSCAP |
| 4 | 858710.4180 | 2009656.0263 | 462.54 | CPIPSCAP |
| 5 | 858219.1780 | 2009830.2926 | 459.35 | CPIPSCAP |
| 6 | 857744.4841 | 2009996.1315 | 457.80 | CPIPSCAP |
| 1005 | 860153.7588 | 2003208.5875 | 463.27 | CP/SCPSA RW MON |
| 1006 | 860565.8702 | 2004048.8505 | 443.84 | CP/PKS |
| 100001 | 858418.6180 | 2008043.0955 | 452.83 | CPIPSCAP |

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



| | | |
|---|---------------------|-----------------------------|
| REV. BY: | DATE: | DESCRIPTION: |
| | | BLYTHEWOOD, SC |
| LOCATION | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT LEGEND AND PROJECT CONTROL | | |
| DWN: EVU | PTD NO: D3327 | VRN: 04825 |
| DWN: EVU | FILE NO: TRK1115024 | FILE POST: R91.4 |
| CHK: | DATE: MARCH 5, 2024 | DRAWING NUMBER: TD-2023-105 |

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MODEL NAME: #MODELNAME#
DATE PRINTED: #DATE#

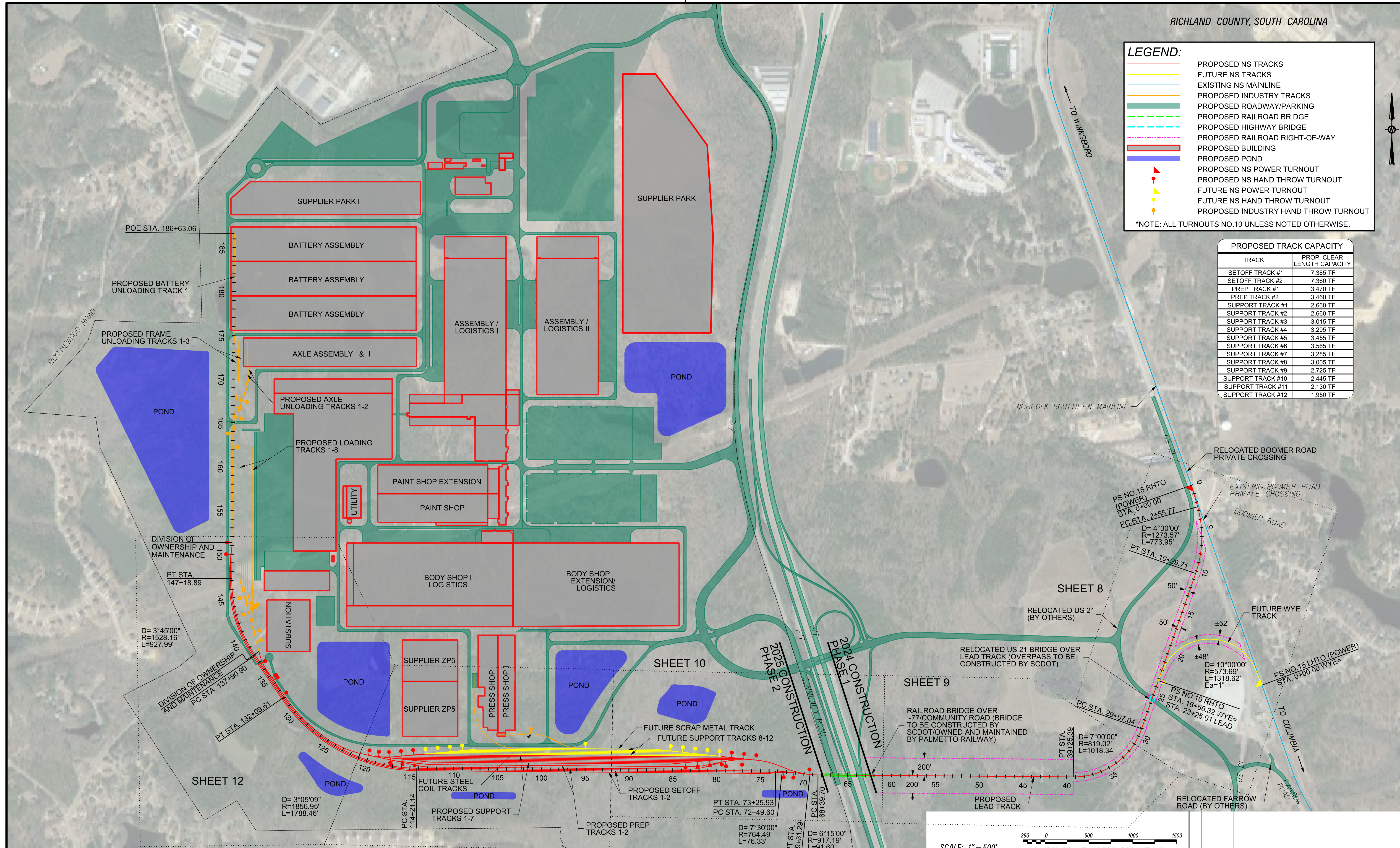
OPERATING DIVISION: DESIGN AND CONSTRUCTION - ATLANTA, GA.
CADD FILE: #FILEL#
LAST SAVED: #LASTSAVEDDATE#

LEGEND:

- PROPOSED NS TRACKS
- FUTURE NS TRACKS
- EXISTING NS MAINLINE
- PROPOSED INDUSTRY TRACKS
- PROPOSED ROADWAY/PARKING
- - - PROPOSED RAILROAD BRIDGE
- - - PROPOSED HIGHWAY BRIDGE
- - - PROPOSED RAILROAD RIGHT-OF-WAY
- PROPOSED BUILDING
- PROPOSED POND
- ▲ PROPOSED NS POWER TURNOUT
- ▲ PROPOSED NS HAND THROW TURNOUT
- ▲ FUTURE NS POWER TURNOUT
- ▲ FUTURE NS HAND THROW TURNOUT
- ▲ PROPOSED INDUSTRY HAND THROW TURNOUT

*NOTE: ALL TURNOUTS NO.10 UNLESS NOTED OTHERWISE.

| PROPOSED TRACK CAPACITY | |
|-------------------------|-----------------------------|
| TRACK | PROP. CLEAR LENGTH CAPACITY |
| SETOFF TRACK #1 | 7,385 TF |
| SETOFF TRACK #2 | 7,360 TF |
| PREP TRACK #1 | 3,470 TF |
| PREP TRACK #2 | 3,460 TF |
| SUPPORT TRACK #1 | 2,660 TF |
| SUPPORT TRACK #2 | 2,660 TF |
| SUPPORT TRACK #3 | 3,015 TF |
| SUPPORT TRACK #4 | 3,295 TF |
| SUPPORT TRACK #5 | 3,455 TF |
| SUPPORT TRACK #6 | 3,565 TF |
| SUPPORT TRACK #7 | 3,285 TF |
| SUPPORT TRACK #8 | 3,005 TF |
| SUPPORT TRACK #9 | 2,725 TF |
| SUPPORT TRACK #10 | 2,445 TF |
| SUPPORT TRACK #11 | 2,130 TF |
| SUPPORT TRACK #12 | 1,950 TF |



DIVISION OF OWNERSHIP AND MAINTENANCE
 PT STA. 147+18.89
 D= 3°45'00"
 R=1528.16'
 L=927.99'
 DIVISION OF OWNERSHIP AND MAINTENANCE
 PC STA. 137+80.90

D= 3°05'09"
 R=1856.95'
 L=1788.46'

PT STA. 132+09.61
 PC STA. 114+21.14

PT STA. 73+25.93
 PC STA. 72+49.60

PT STA. 69+31.29
 PC STA. 68+39.70

D= 7°30'00"
 R=917.19'
 L=76.33'

D= 6°15'00"
 R=917.19'
 L=91.60'

PT STA. 39+29.39
 PC STA. 29+07.04

D= 7°00'00"
 R=819.02'
 L=1018.34'

PT STA. 10+29.71
 PC STA. 2+55.77

D= 4°30'00"
 R=1273.57'
 L=773.95'

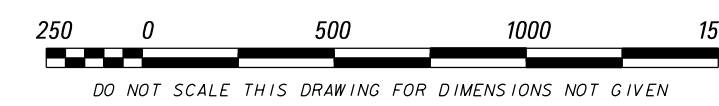
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 PC STA. 0+00.00

D= 10°00'00"
 R=573.69'
 L=1318.62'
 Ea=1°

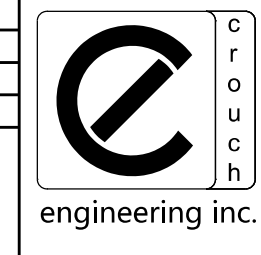
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 PC STA. 23+25.01

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 Ea=1°

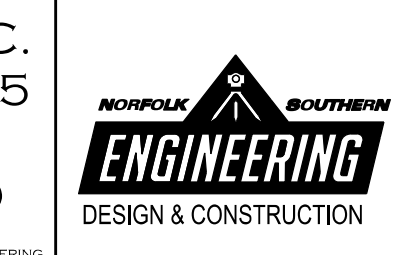
SCALE: 1" = 500'



| | |
|-------------|-------|
| PROJECT NO: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |



CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



NORFOLK SOUTHERN RAILWAY COMPANY
 OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | |
|---------------|-----------------|---|
| REV. BY: | DATE: | DESCRIPTION: |
| EVU | 03/27/24 | BLT HEW WOOD, SC |
| EVU | | PROPOSED TRACKS TO SERVE PROJECT SCOUT PROJECT OVERVIEW |
| CHK: | DATE: | |
| EVU | MARCH 5, 2024 | |
| FILE NO.: | TRK115024 | DRAWING NUMBER |
| PROJECT NO.: | D3327 | 04825 |
| SCALE: | AS SHOWN | R91.4 |
| CADD FILE: | #FILEL# | |
| DATE PRINTED: | #DATE# | |
| LAST SAVED: | #LASTSAVEDDATE# | |

GENERAL NOTES

- IN PERFORMING THE WORK, UNDER THIS CONTRACT, THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STATUTES, ORDINANCES AND DIRECTIVES WITH RESPECT TO THE ELIMINATION OF EXCESSIVE NOISE AND POLLUTION OF AIR AND WATER DUE TO HIS CONSTRUCTION EQUIPMENT AND OTHER OPERATIONS. ATTENTION SHALL BE GIVEN TO REDUCE THE NOISE OF HEAVY CONSTRUCTION EQUIPMENT AND TO THE CONTROL OF DUST, SMOKE AND FUMES FROM CONSTRUCTION EQUIPMENT AND OTHER OPERATIONS ON THE WORK SITE, AND THE DIRT AND NOISE CREATED BY HEAVY TRUCK OPERATION AREAS AND ADJACENT EXISTING PAVED AREAS. THESE AREAS SHALL BE KEPT FREE FROM DEBRIS AT ALL TIMES. THE DISCHARGE OF OILY, GREASY OR CHEMICAL WASTES INTO WATERWAYS AND PUBLIC SEWERS WILL NOT BE PERMITTED.
- NORFOLK SOUTHERN REQUIRES THAT ALL CONTRACTORS BE QUALIFIED FOR THE WORK THEY ARE PERFORMING. IT IS PRESUMED THAT CONTRACTORS PERFORMING WORK ARE EXPERIENCED AND KNOWLEDGEABLE ABOUT THE WORK (INCLUDING GOVERNMENTAL REGULATIONS), THAT QUALITY PRODUCTS, APPROPRIATE FOR THE APPLICATION, WILL BE USED AND THAT ALL WORK WILL BE INSTALLED IN A PROFESSIONAL WORKMANLIKE MANNER. THE PLANS SHOW LOCATIONS, RELATIONSHIPS, MAGNITUDE AND GENERAL SPECIFICATIONS OF THE WORK REQUIRED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT ALL COMPONENTS INSTALLED FUNCTION PROPERLY AND THAT ALL HARDWARE, FITTINGS, CABLING, CONNECTIONS, SUPPLY LINES, ETC. ARE SUPPLIED AND PROPERLY FITTED, WHETHER DETAILED ON THE PLANS OR NOT. THE CONTRACTOR SHALL ASSURE THAT ALL COMPONENTS AND WORK ARE INSTALLED COMPLETE IN PLACE AND OPERATIONAL TO THE SATISFACTION OF THE NORFOLK SOUTHERN RAILWAY.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- NORFOLK SOUTHERN RAILWAY WILL PROVIDE CONSTRUCTION LAYOUT (STAKING) - ONE TIME ONLY - AND GENERAL CONSTRUCTION OVERSIGHT. ANY RE-STAKING WILL BE AT THE COST OF THE CONTRACTOR.
- THE CONTRACTOR SHALL SUBMIT TO NSR A PROPOSED CONSTRUCTION SCHEDULE PRIOR TO BEGINNING WORK.
- IF QUESTIONABLE MATERIAL (BY ODOR OR VISUAL APPEARANCE) IS ENCOUNTERED DURING EXCAVATION OR TRENCHING, CONSTRUCTION SHALL CEASE AND THE NSR CONSTRUCTION MANAGER SHALL BE CONTACTED FOR FURTHER DIRECTION ON HOW TO PROCEED.
- THE CONTRACTOR SHALL FURNISH AND MAINTAIN SANITARY CONVENIENCE FACILITIES FOR THE WORKERS AND INSPECTORS FOR THE DURATION OF THE WORK. THE COST TO PROVIDE SANITARY FACILITIES FOR HIS WORKERS SHALL BE CONSIDERED INCIDENTAL TO THIS CONTRACT.
- THE CONTRACTOR SHALL PROVIDE WHATEVER MEANS NECESSARY TO ALLEVIATE OR PREVENT DUST NUISANCE AT ALL TIMES. THE COST OF THIS ITEM IS INCIDENTAL TO THE PROJECT.
- THE CONTRACTOR SHALL INSPECT THE SITE OF THE PROJECT AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS, TRAFFIC AND OTHER ITEMS, THAT AFFECT THE CONTRACT AND THE DETAILED REQUIREMENTS OF CONSTRUCTION.
- LOCATION OF A CONSTRUCTION STAGING AREA IS TO BE COORDINATED WITH THE NSR CONSTRUCTION MANAGER PRIOR TO BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT WORK AREAS FROM LOCATIONS DESIGNATED BY THE NSR CONSTRUCTION MANAGER.
- APPROXIMATE RAILROAD RIGHT OF WAY LINES AS SHOWN WERE OBTAINED FROM VALUATION MAPS. ALL RIGHT OF WAY AND PROPERTY LINES ARE SHOWN FOR INFORMATION PURPOSES ONLY AS THEY HAVE NOT BEEN VERIFIED IN THE FIELD.
- ALL WORK ON THIS PROJECT TO CONFORM WITH NORFOLK SOUTHERN STANDARD SPECIFICATIONS FOR MATERIALS AND CONSTRUCTION, LATEST EDITION, AND ANY SPECIAL PROVISIONS PROVIDED HEREIN.
- HORIZONTAL AND VERTICAL DATUM IS BASED ON SC83-IF - NAD83 SOUTH CAROLINA STATE PLANES, INTERNATIONAL FOOT. HOWEVER, IT IS RECOMMENDED THAT THE SURVEYOR / CONTRACTOR LOCALIZE TO THE CONTROL POINTS SHOWN ON THE PLANS.

- EXISTING CONDITIONS WERE TAKEN FROM SURVEY DATA AND AVAILABLE RECORD DRAWING INFORMATION. INFORMATION SHOWN CONCERNING FEATURES AND UTILITIES IS NOT GUARANTEED, ALL INCLUSIVE OR CORRECT. THE CONTRACTOR SHALL VERIFY THE FEATURES PRIOR TO CONSTRUCTION. ALL STRUCTURES ABOVE OR BELOW GROUND THAT ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE PROPERLY SUPPORTED AND MAINTAINED. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS WITH THE NSR CONSTRUCTION MANAGER FOR THE PROTECTION, RELOCATION, RECONSTRUCTION OR ADJUSTMENT OF SUCH STRUCTURES AS REQUIRED IN FIELD. IF DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL MAKE REPAIRS OR PAY FOR REPAIRS TO THE STRUCTURE TO THE SATISFACTION OF THE NSR CONSTRUCTION MANAGER.
- THE CONTRACTOR SHALL NOT START ANY WORK WHICH MAY AFFECT EXISTING UTILITIES UNTIL THE NSR CONSTRUCTION MANAGER HAS REVIEWED AND APPROVED THE PROCEDURES FOR PROTECTION OF THE UTILITY.
- INCIDENTAL REMOVAL OF ABANDONED UTILITIES & DRAINAGE LINES FOR CONSTRUCTION WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND SHALL BE INCLUDED WITH THE COST OF THE ASSOCIATED SITE WORK. THE CONTRACTOR SHALL NOTIFY THE NSR CONSTRUCTION MANAGER PRIOR TO REMOVAL OR MODIFICATION OF ANY DRAINAGE LINES NOT IDENTIFIED ON THE PLANS, FOR FURTHER DISCUSSION WITH THE COUNTY ENGINEER AS APPROPRIATE.
- WHEREVER ANY ABANDONED CONDUITS OR PIPES ARE CUT OR BROKEN BY CONSTRUCTION, SUITABLE BULKHEADS, AS DETERMINED BY THE NSR CONSTRUCTION MANAGER, SHALL BE INSTALLED SO THAT NO LOSS OF BACKFILL MATERIAL SHALL OCCUR. ALL COSTS TO PERFORM SUCH WORK SHALL BE INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE NSR CONSTRUCTION MANAGER PRIOR TO REMOVAL OR MODIFICATION OF ANY DRAINAGE LINES NOT IDENTIFIED ON THE PLANS, FOR FURTHER DISCUSSION WITH THE COUNTY ENGINEER AS APPROPRIATE.
- IN THE EVENT OF THE CONTRACTOR ENCOUNTERING EXISTING SUBSURFACE DRAINAGE SYSTEMS THAT WERE NOT SHOWN ON PLANS, THE CONTRACTOR SHALL MAINTAIN AND PRESERVE THE SUBSURFACE DRAINAGE SYSTEMS OR CONNECT THE SYSTEMS TO THE NEAREST DRAINAGE SYSTEMS AS DIRECTED BY THE NSR CONSTRUCTION MANAGER. THE CONTRACTOR SHALL NOTIFY THE NSR CONSTRUCTION MANAGER PRIOR TO REMOVAL OR MODIFICATION OF ANY DRAINAGE LINES NOT IDENTIFIED ON THE PLANS, FOR FURTHER DISCUSSION WITH THE COUNTY ENGINEER AS APPROPRIATE.
- DURING CONSTRUCTION OPERATIONS, IF ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES OR DITCHES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DUST AND DEBRIS. THE COST OF THE WORK SPECIFIED ABOVE IS INCIDENTAL TO THE PROJECT.

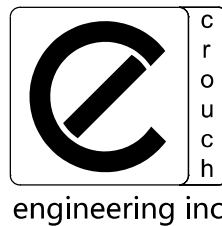
RAILROAD OPERATIONS NOTES

- THE CONTRACTOR SHALL NOT PERFORM ANY WORK ON ACTIVE NORFOLK SOUTHERN TRACKS, UTILITIES OR FACILITIES, UNLESS DIRECTED BY THE NSR CONSTRUCTION MANAGER.
- THE CONTRACTOR'S WORK SHALL NOT INTERRUPT THE OPERATIONS OF THE RAILROAD WITHOUT PRIOR APPROVAL OF THE NSR CONSTRUCTION MANAGER.
- NORFOLK SOUTHERN WILL PROVIDE A FLAGMAN AT NO COST TO THE CONTRACTOR FOR THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE NSR CONSTRUCTION MANAGER AND NSR FLAGMAN WITH A SUFFICIENT WORK SCHEDULE FOR PROTECTION TO BE PLANNED ACCORDINGLY.
- THE CONTRACTOR SHALL NOT FOUL LIVE TRACKS WITHOUT PERMISSION AND AN APPOINTED FLAGMAN ON DUTY.
- DESIGN SPEED FOR PROPOSED LEAD TRACK IS 20 MPH.

UTILITY & DRAINAGE NOTES

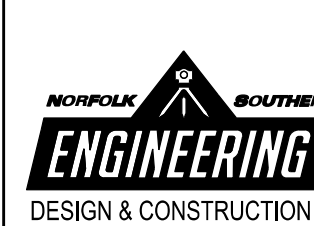
- THE CONTRACTOR SHALL CONTACT SOUTH CAROLINA 811 PRIOR TO ANY EXCAVATION WORK. THE CONTRACTOR IS RESPONSIBLE TO VERIFY THE SIZE, TYPE, LOCATION, CLASS, AND DEPTH OF ALL NEARBY UTILITIES PRIOR TO ANY EXCAVATION WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH ALL UTILITY AGENCIES.
- THESE NOTES INCLUDE GENERAL REQUIREMENTS. THESE NOTES ARE NOT ALL-INCLUSIVE AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AN INSTALLATION IN ACCORDANCE WITH LOCAL REGULATIONS AND NORFOLK SOUTHERN SPECIFICATIONS.
- ALL EXISTING UTILITIES SHALL REMAIN IN CONTINUOUS OPERATION DURING THE PROSECUTION OF THE WORK UNLESS INDICATED OTHERWISE. THE CONTRACTOR SHALL CONTACT THE OWNERS OF ALL UTILITIES PRIOR TO THE START OF THE WORK SO THAT THE OWNERS MAY LOCATE AND STAKE THEIR UTILITIES. THE CONTRACTOR SHALL NOTIFY THE NSR CONSTRUCTION MANAGER, IN WRITING, 48 HOURS PRIOR TO THE UTILITY OWNER LOCATING THE UTILITY.
- IN LOCATIONS WHERE EXISTING DRAINAGE FACILITIES ARE TO REMAIN AND ARE DISTURBED OR DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO RESTORE AND REPLACE THE DAMAGED FACILITIES AT HIS EXPENSE TO THE SATISFACTION OF THE NSR CONSTRUCTION MANAGER. THE SEWER FLOW MUST BE MAINTAINED AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN MINIMUM COVER OVER ALL PROPOSED AND EXISTING SEWER PIPES FOR SITE CONSTRUCTION TRAFFIC DURING CONSTRUCTION.
- THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION SHALL PROVIDE AND MAINTAIN AMPLE MEANS AND DEVICES FOR THE TEMPORARY DIVERSION OF FLOW IN EXISTING SEWERS, DRAINS, AND DITCHES. THE CONTRACTOR SHALL ALSO PROMPTLY REMOVE AND PROPERLY DISPOSE OF ALL WATER OR SEWAGE ENTERING DRAINAGE TRENCHES AND SHALL KEEP TRENCHES AS DRY AS PRACTICABLE. THIS WORK SHALL BE INCIDENTAL TO THE PROJECT.
- ALL EXCAVATION NEAR EXISTING CABLES OR OTHER EXISTING UTILITY LINES SHALL BE PERFORMED BY HAND. ANY CABLE OR OTHER EXISTING UTILITY LINE THAT IS DAMAGED DURING THE PERFORMANCE OF THIS CONTRACT SHALL BE REPAIRED IMMEDIATELY, UNDER THE UTILITY OWNER'S DIRECTION AND AT THE CONTRACTOR'S EXPENSE. DURING THE PERIOD OF TIME THAT THE ABOVE TYPES OF CABLES OR UTILITIES ARE OUT OF SERVICE, DUE TO THE CONTRACTOR'S OPERATIONS, ALL CONTRACT WORK SHALL BE SUSPENDED UNLESS OTHERWISE DIRECTED BY THE NSR CONSTRUCTION MANAGER. THE CONTRACTOR WILL NOT BE ALLOWED TO MAKE CLAIMS FOR EXTRA COSTS OR TIME EXTENSIONS DUE TO SUCH STOPPAGES OF WORK.

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

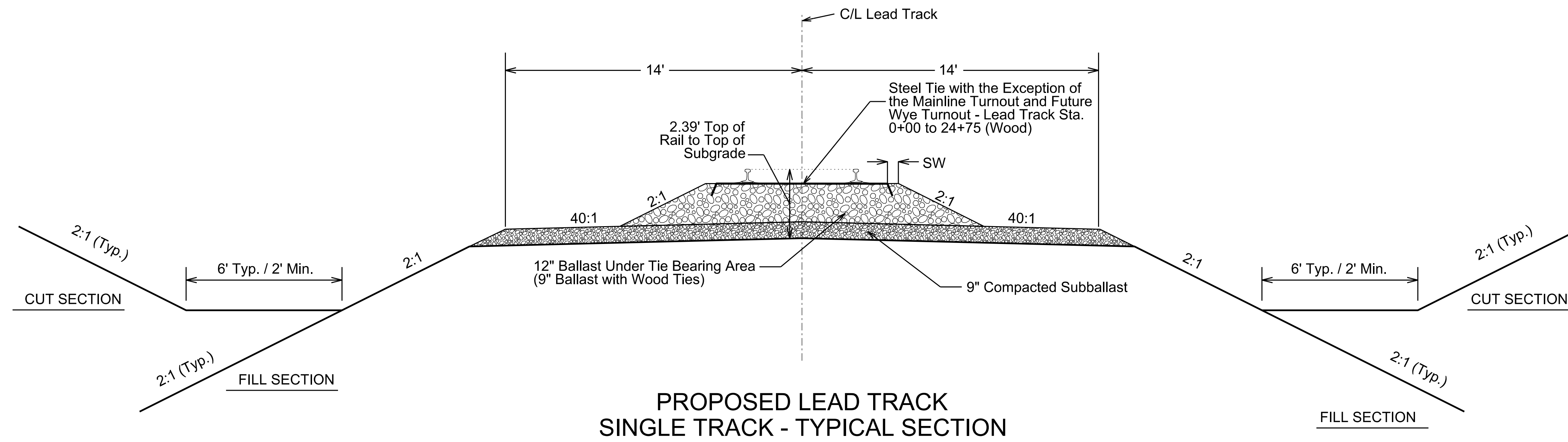
COPYRIGHT 2018 CROUCH ENGINEERING, INC. ALL RIGHTS RESERVED.
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FOR PERMISSION, CONTACT HARVEY A. CROUCH



NS NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
OWNING COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | | |
|----------|--|---------------|----------------------------|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION | BLYTHEWOOD, SC | | |
| TITLE | PROPOSED TRACKS TO SERVE PROJECT SCOUT GENERAL NOTES & LEGEND | | |
| DWN | EJU | PLO NO. D3327 | VRN 04825 |
| FILE NO. | TRK1115024 | | MILE POST R91.4 |
| CHK | DATE | MARCH 5, 2024 | DRAWING NUMBER TD-2023-105 |

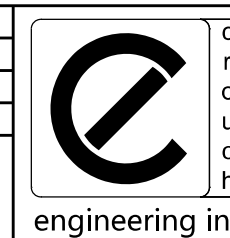
| | | |
|--|--------------|-------------|
| SW = Shoulder Width | | |
| Ballast width from end of tie to edge of slope | | |
| | Jointed Rail | Welded Rail |
| Inside of Curve | 6" | 6" |
| Outside of Curve | 12" | 12" |
| Tangent Track - Both Sides | 6" | 6" |



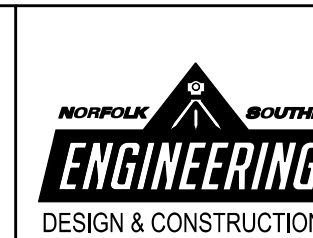
PROPOSED LEAD TRACK
SINGLE TRACK - TYPICAL SECTION

PHASE 1

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



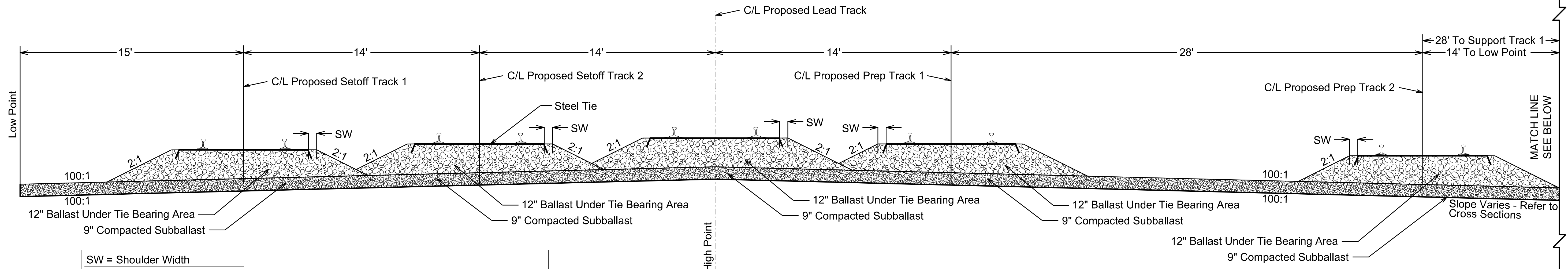
CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



SCALE: NONE



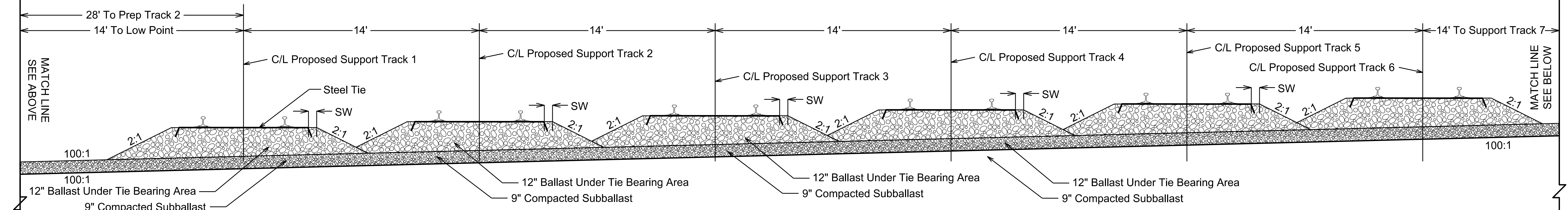
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|---|------|--------------------|-----------------|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT TYPICAL SECTIONS - 1 | | | |
| DWN | EVU | FILE NO. D3327 | FILE POST R91.4 |
| DWN | EVU | FILE NO. TRK115024 | DRAWING NUMBER |
| CHK | DATE | MARCH 5, 2024 | TD-2023-105 |



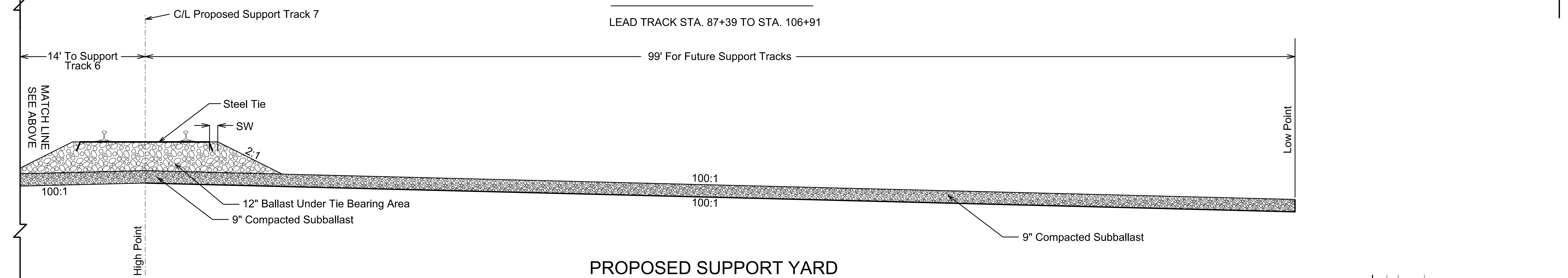
SW = Shoulder Width
Ballast width from end of tie to edge of slope

| | Jointed Rail | Welded Rail |
|----------------------------|--------------|-------------|
| Inside of Curve | 6" | 6" |
| Outside of Curve | 12" | 12" |
| Tangent Track - Both Sides | 6" | 6" |

**PROPOSED SUPPORT YARD
TYPICAL SECTION**
LEAD TRACK STA. 87+39 TO STA. 106+91



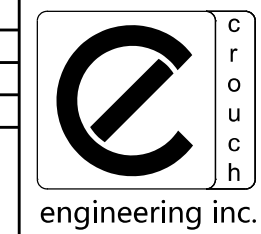
**PROPOSED SUPPORT YARD
TYPICAL SECTION**
LEAD TRACK STA. 87+39 TO STA. 106+91



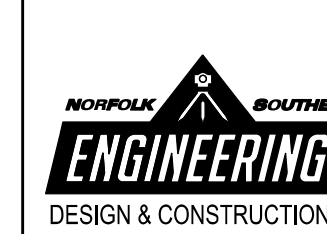
**PROPOSED SUPPORT YARD
TYPICAL SECTION**
LEAD TRACK STA. 87+39 TO STA. 106+91

PHASE 2

| |
|-------------------|
| PROJECT NO. 23050 |
| DATE: |
| DRAWN BY: EVU |
| CHECKED BY: |
| REVISIONS: |



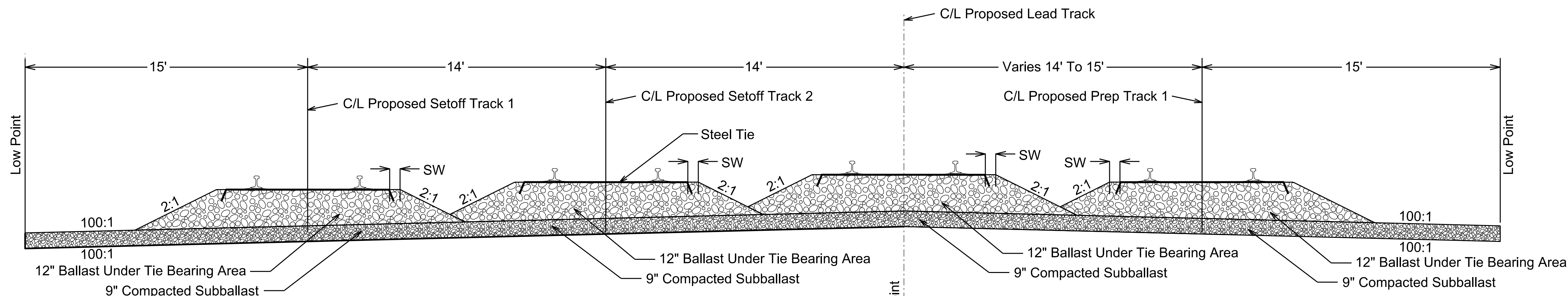
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BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | |
|-----------|--|-----------------|
| REV. BY: | DATE: | DESCRIPTION: |
| LOCATION: | BLYTHEWOOD, SC | |
| TITLE: | PROPOSED TRACKS TO SERVE PROJECT SCOUT TYPICAL SECTIONS - 2 | |
| DWN EVU | FILE NO. D3327 | FILE P851 R91.4 |
| CHK EVU | FILE NO. TRK115024 | DRAWING NUMBER |
| DATE: | MARCH 5, 2024 | TD-2023-105 |

SCALE: NONE

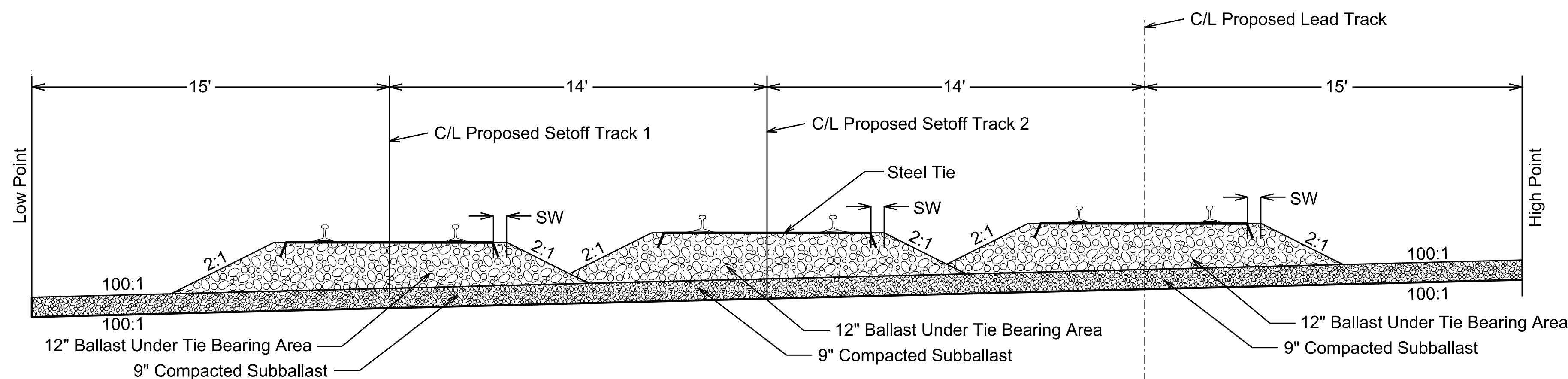


SW = Shoulder Width
Ballast width from end of tie to edge of slope

| | Jointed Rail | Welded Rail |
|----------------------------|--------------|-------------|
| Inside of Curve | 6" | 6" |
| Outside of Curve | 12" | 12" |
| Tangent Track - Both Sides | 6" | 6" |

PROPOSED TYPICAL SECTION - 4 TRACKS

LEAD TRACK STA. 125+00 TO STA. 134+69.38



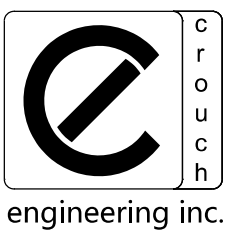
PROPOSED TYPICAL SECTION - 3 TRACKS

LEAD TRACK STA. STA. 136+71.54 TO STA. 147+83.78

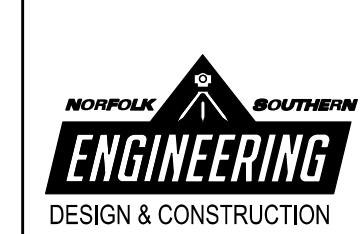
SCALE: NONE

PHASE 2

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



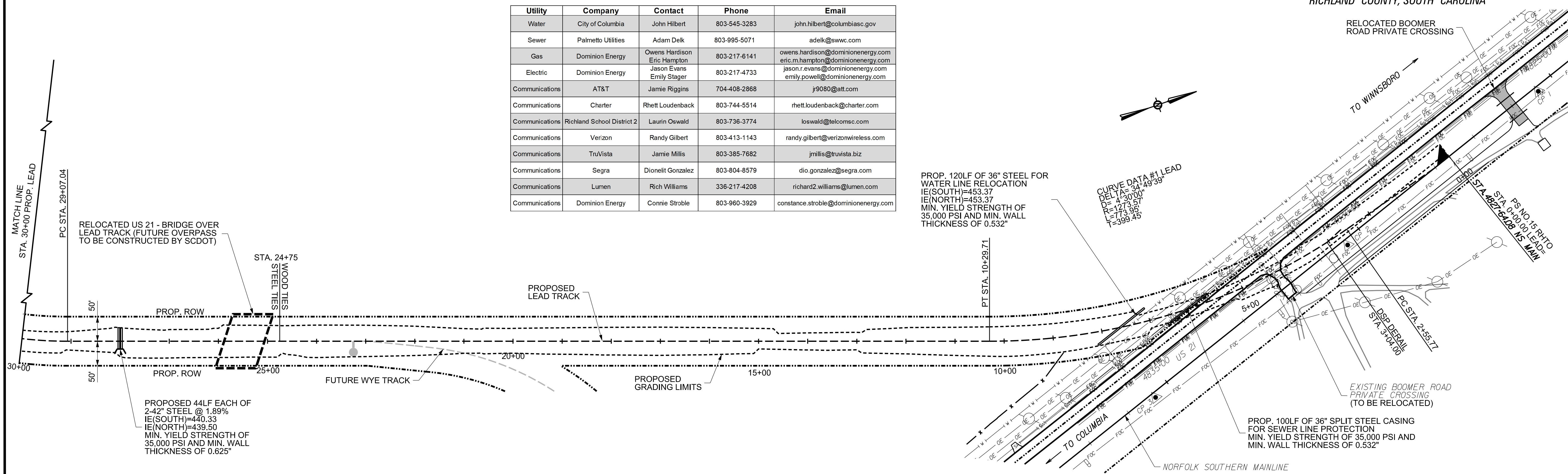
CROUCH ENGINEERING INC.
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PHONE NO. (615) 791-0630



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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | | |
|---|-----|---------------------|----------------|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT TYPICAL SECTIONS - 3 | | | |
| DWN | EVU | PLO NO: D3327 | VRN |
| DWN | EVU | FILE NO: TRK115024 | DRAWING NUMBER |
| CHK | | DATE: MARCH 5, 2024 | TD-2023-105 |

| Utility | Company | Contact | Phone | Email |
|----------------|----------------------------|--------------------------------|--------------|--|
| Water | City of Columbia | John Hilbert | 803-545-3283 | john.hilbert@columbiasc.gov |
| Sewer | Palmetto Utilities | Adam Delk | 803-995-5071 | adelk@sww.com |
| Gas | Dominion Energy | Owens Hardison Eric Hampton | 803-217-6141 | owens.hardison@dominionenergy.com eric.m.hampton@dominionenergy.com |
| Electric | Dominion Energy | Jason Evans Emily Stager | 803-217-4733 | jason.evans@dominionenergy.com emily.powell@dominionenergy.com |
| Communications | AT&T | Jamie Riggins | 704-408-2868 | jr9080@att.com |
| Communications | Charter | Rhett Loudenback | 803-744-5514 | rhett.loudenback@charter.com |
| Communications | Richland School District 2 | Laurin Oswald | 803-736-3774 | loswald@telcomsc.com |
| Communications | Verizon | Randy Gilbert | 803-413-1143 | randy.gilbert@verizonwireless.com |
| Communications | TruVista | Jamie Millis | 803-385-7682 | jmillis@truvista.biz |
| Communications | Segra | Dionelit Gonzalez | 803-804-8579 | dio.gonzalez@segra.com |
| Communications | Lumen | Rich Williams | 336-217-4208 | richard2.williams@lumen.com |
| Communications | Dominion Energy | Connie Stroble | 803-960-3929 | constance.stroble@dominionenergy.com |

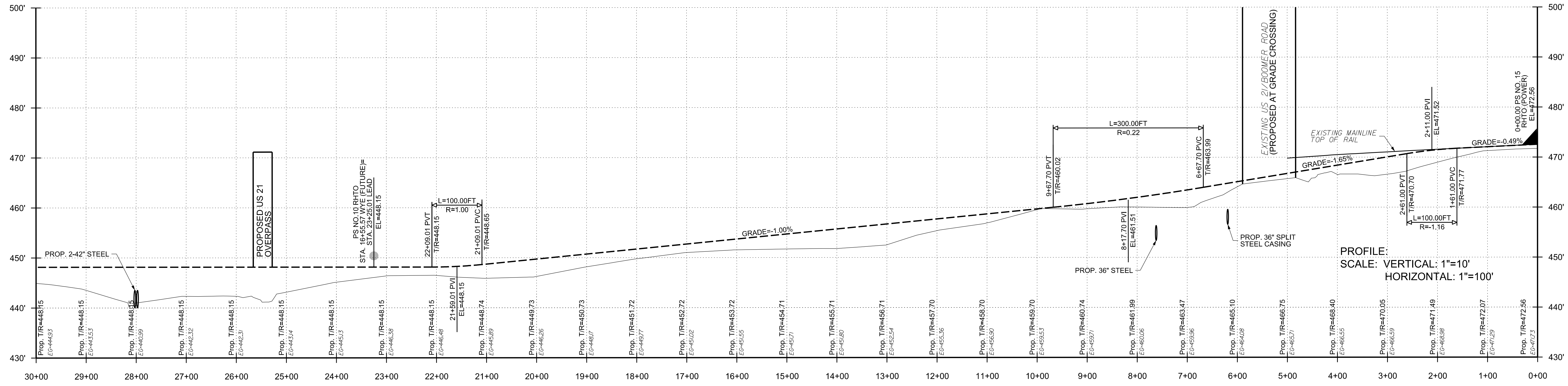


PROP. 120LF OF 36" STEEL FOR WATER LINE RELOCATION
 IE(SOUTH)=453.37
 IE(NORTH)=453.37
 MIN. YIELD STRENGTH OF 35,000 PSI AND MIN. WALL THICKNESS OF 0.532"

CURVE DATA #1 LEAD
 DELTA=34°49'39"
 DE=4°30'00"
 R=1273.97
 L=773.99
 T=399.45

PROPOSED 44LF EACH OF 2-42" STEEL @ 1.89%
 IE(SOUTH)=440.33
 IE(NORTH)=439.50
 MIN. YIELD STRENGTH OF 35,000 PSI AND MIN. WALL THICKNESS OF 0.625"

PROP. 100LF OF 36" SPLIT STEEL CASING FOR SEWER LINE PROTECTION
 MIN. YIELD STRENGTH OF 35,000 PSI AND MIN. WALL THICKNESS OF 0.532"

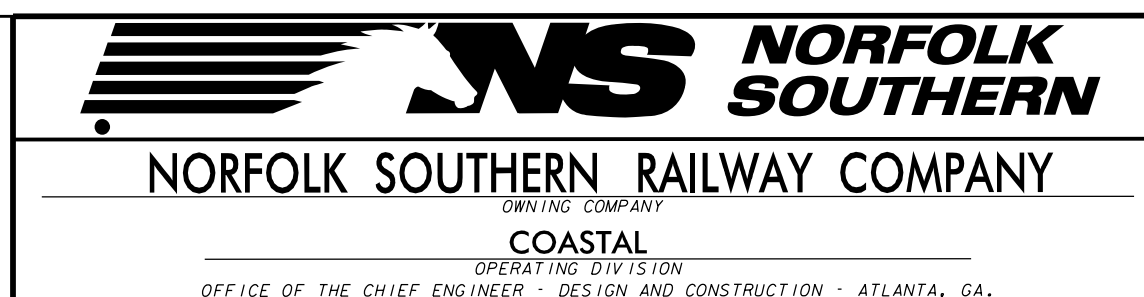
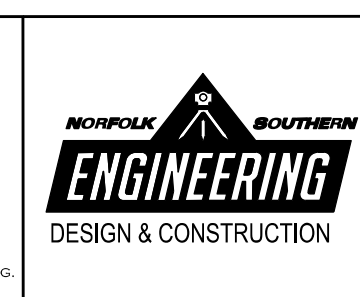


PROFILE:
 SCALE: VERTICAL: 1"=10'
 HORIZONTAL: 1"=100'

PHASE 1

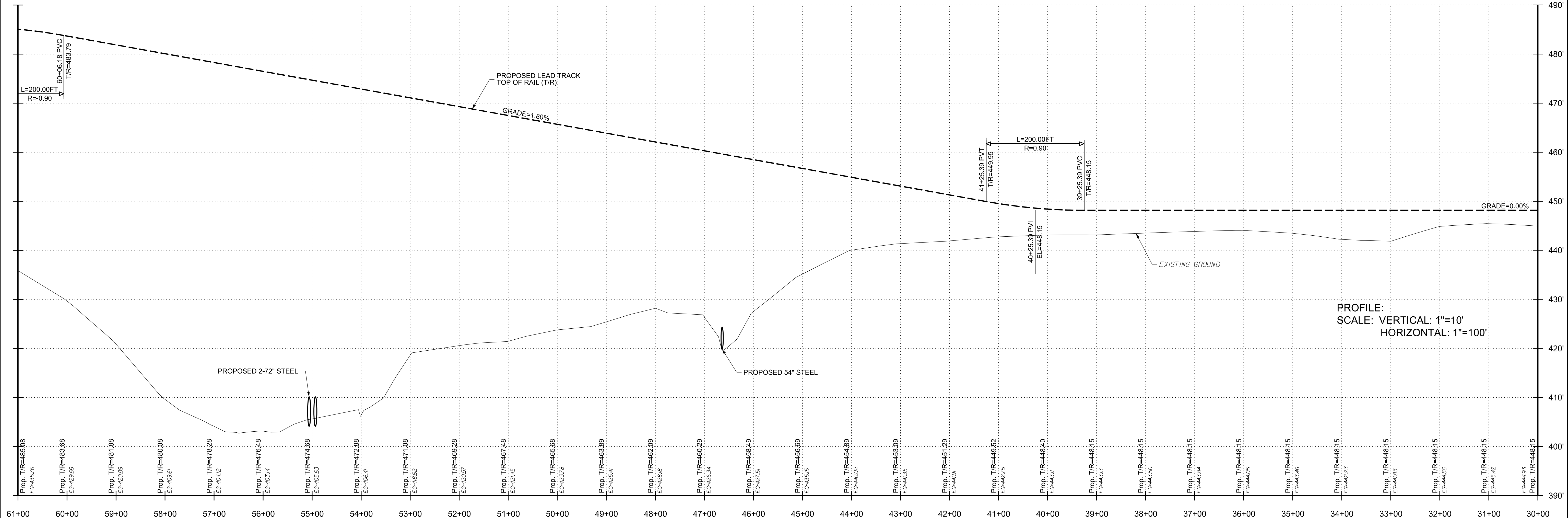
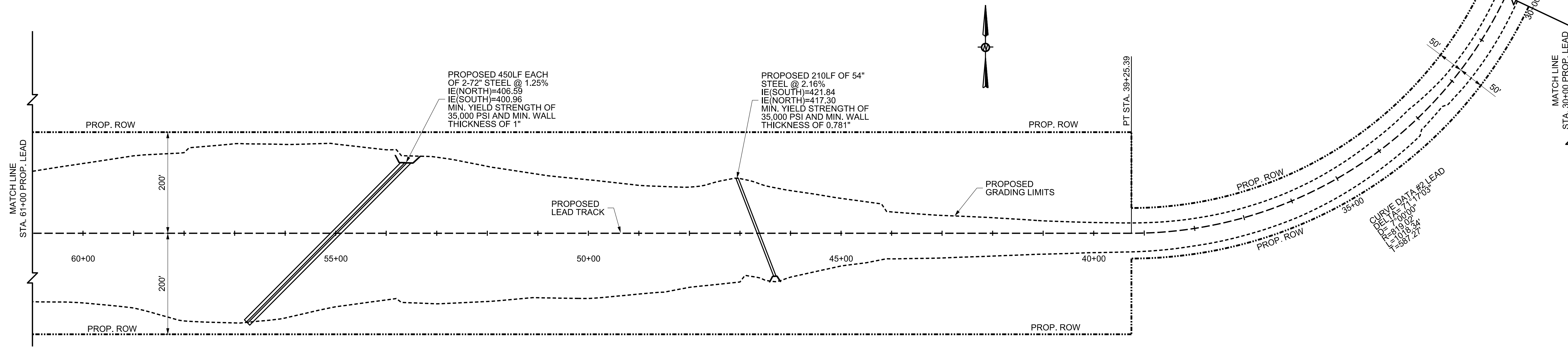
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|-------------|-------|
| PROJECT NO: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |

CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



| | | |
|--|----------|---|
| REV. NO. | DATE | DESCRIPTION |
| 1 | 03/07/24 | UPDATED STEEL PIPE DESIGN WITH HEADWALL |
| PROJECT: BLYTHEWOOD, SC TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PROPOSED LEAD STA 0+00 - 30+00 | | |
| DRN | EVU | P10 No. D3327 |
| CHK | EVU | FILE No. TRK115024 |
| | | DATE: MARCH 5, 2024 |
| | | MILE POST: 04825 |
| | | DRAWING NUMBER: TD-2023-105-R1 |

SCALE: 1"=100'



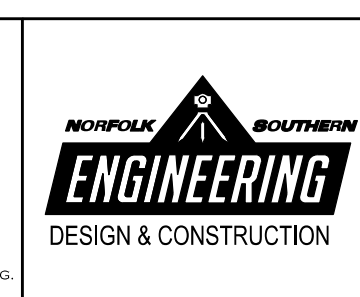
PROFILE:
SCALE: VERTICAL: 1"=10'
HORIZONTAL: 1"=100'

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| Prop. T/R=485.08 EG=435.76 | Prop. T/R=483.68 EG=436.66 | Prop. T/R=481.38 EG=430.89 | Prop. T/R=480.08 EG=409.61 | Prop. T/R=478.28 EG=404.42 | Prop. T/R=476.48 EG=403.14 | Prop. T/R=474.68 EG=405.63 | Prop. T/R=472.88 EG=406.41 | Prop. T/R=471.08 EG=466.62 | Prop. T/R=469.28 EG=460.57 | Prop. T/R=467.48 EG=429.45 | Prop. T/R=465.68 EG=423.76 | Prop. T/R=463.89 EG=426.41 | Prop. T/R=462.09 EG=428.68 | Prop. T/R=460.29 EG=426.34 | Prop. T/R=458.49 EG=427.51 | Prop. T/R=456.69 EG=435.05 | Prop. T/R=454.89 EG=440.02 | Prop. T/R=453.09 EG=441.35 | Prop. T/R=451.29 EG=441.91 | Prop. T/R=449.52 EG=442.75 | Prop. T/R=448.80 EG=443.01 | Prop. T/R=448.15 EG=443.13 | Prop. T/R=448.15 EG=443.50 | Prop. T/R=448.15 EG=443.84 | Prop. T/R=448.15 EG=444.05 | Prop. T/R=448.15 EG=443.46 | Prop. T/R=448.15 EG=446.23 | Prop. T/R=448.15 EG=446.53 | Prop. T/R=448.15 EG=444.86 | Prop. T/R=448.15 EG=446.42 | Prop. T/R=448.15 EG=444.93 | Prop. T/R=448.15 |
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PHASE 1

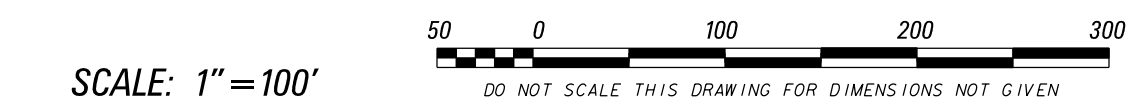
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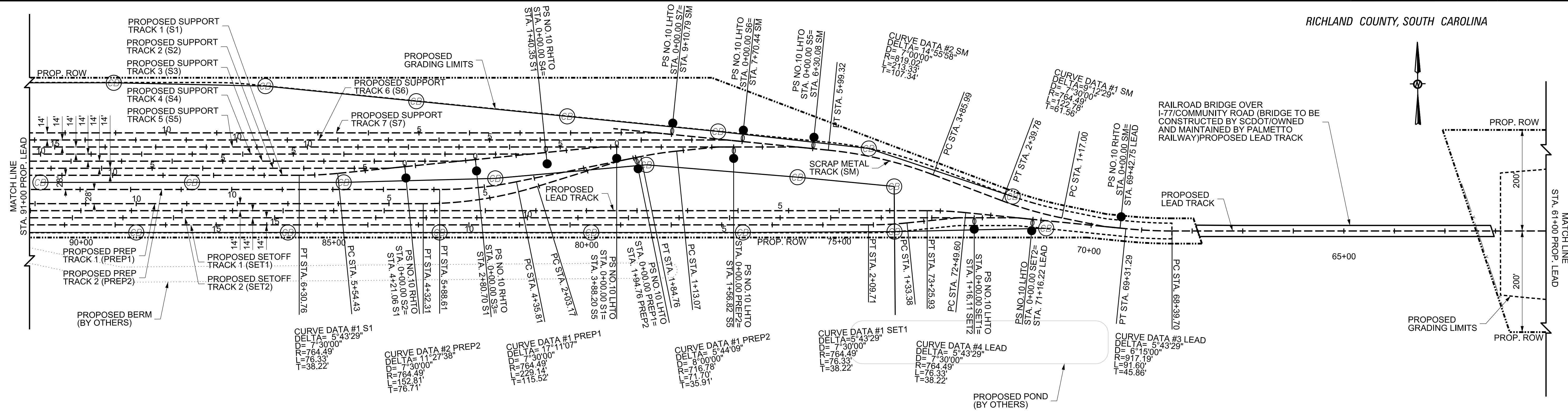
CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



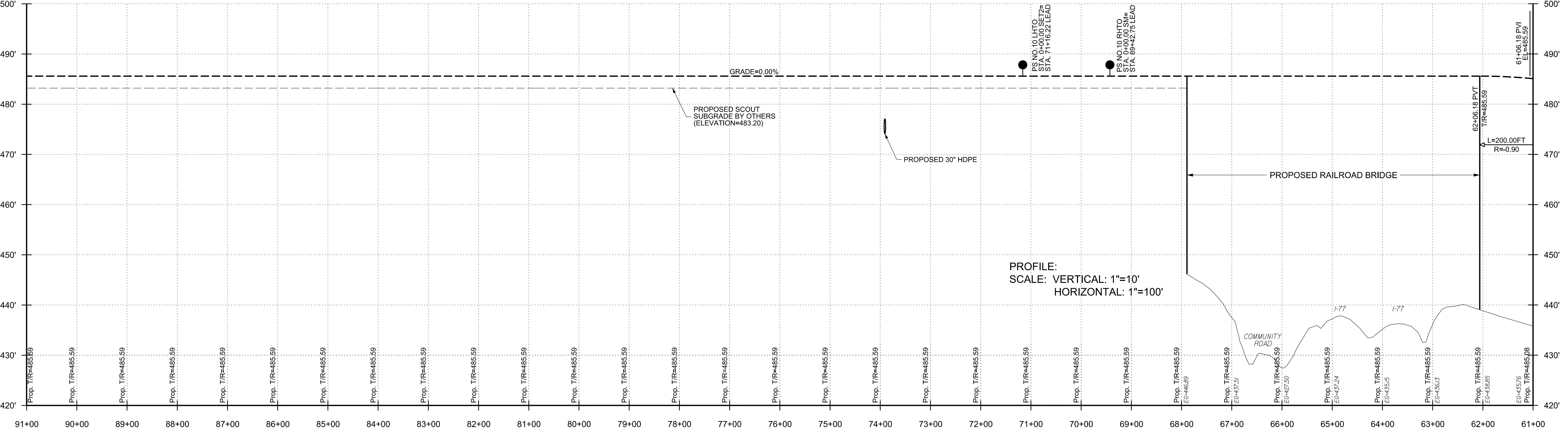
NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | | |
|--|--------------|---------------------------|---|
| REV | BY | DATE | DESCRIPTION |
| R1 | EVU/DA/02/24 | | UPDATED STEEL PIPE DESIGN WITH HEADWALL |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PROPOSED LEAD STA 30+00 - 61+00 | | | |
| DWN | EVU | FILE NO. D3327 | W/NO. 04825 |
| CHK | EVU | DATE MARCH 5, 2024 | DRAWING NUMBER TD-2023-105-R1 |





RAILROAD BRIDGE OVER I-77/COMMUNITY ROAD (BRIDGE TO BE CONSTRUCTED BY SCDOT/OWNED AND MAINTAINED BY PALMETTO RAILWAY) PROPOSED LEAD TRACK



PHASE 1
PHASE 2

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:

CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

NORFOLK SOUTHERN
DESIGN & CONSTRUCTION

NORFOLK SOUTHERN RAILWAY COMPANY

COASTAL
OPERATING DIVISION

OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.
CAD FILE# #FILEL#
DATE PRINTED# #DATE#

SCALE: 1"=100'

DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

| REV | BY | DATE | DESCRIPTION |
|-----|----|------|-------------|
| | | | |

LOCATION: BLYTHEWOOD, SC

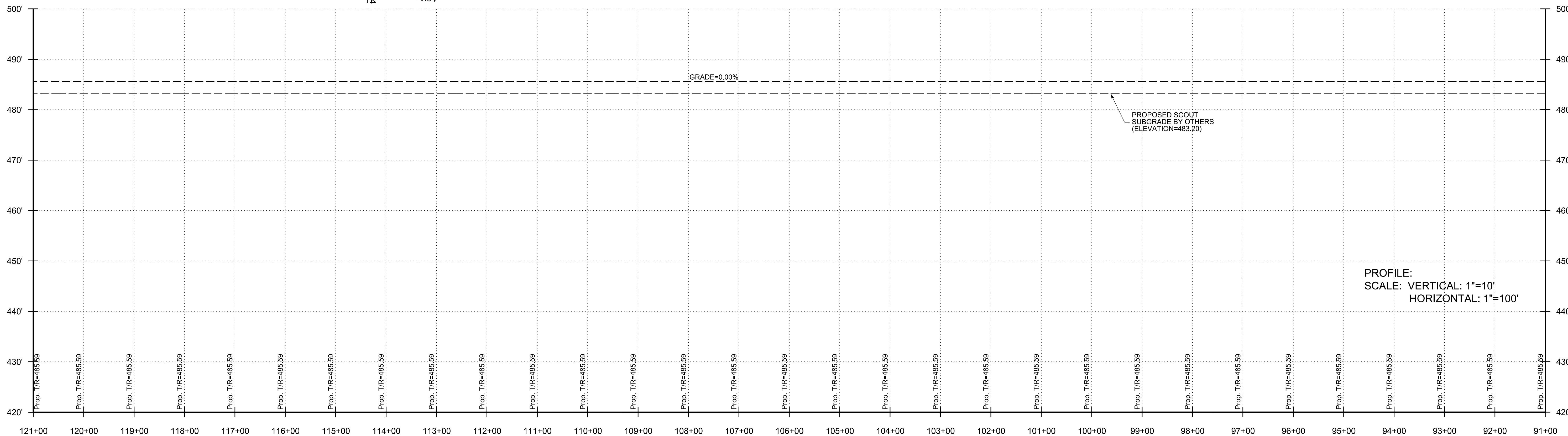
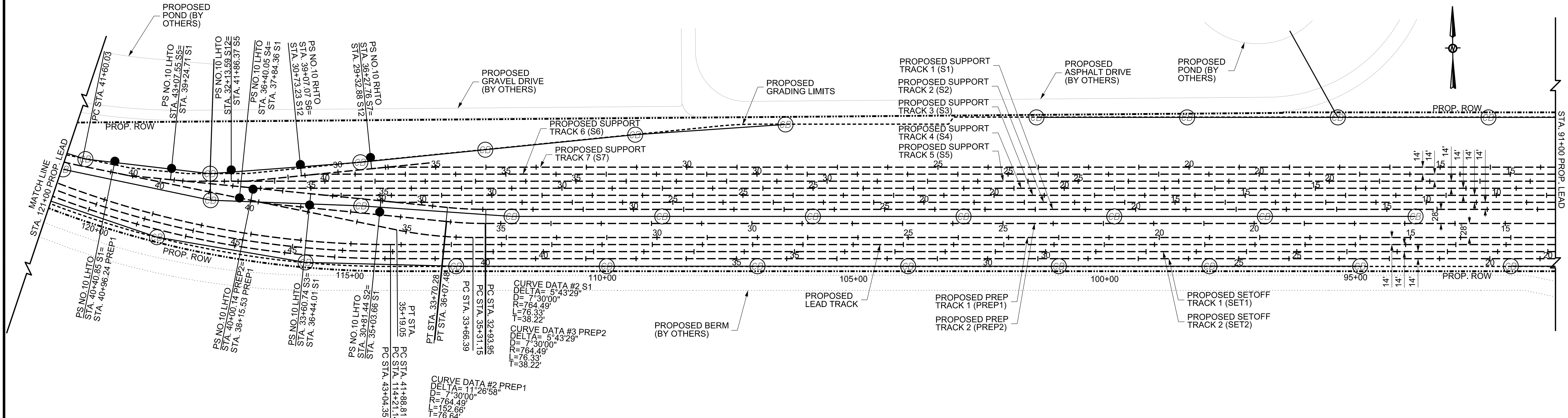
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PROPOSED LEAD STA 61+00 - 91+00

| DWN | EVD | PLOT NO. | YR | DATE | MILE POST |
|-----|-----|------------|----|---------------|-----------|
| | | D3327 | | | |
| | | TRK1115024 | | | |
| | | | | MARCH 5, 2024 | |

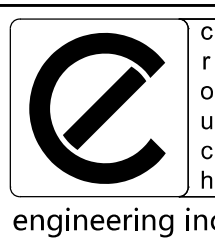
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DRAWING NUMBER: TD-2023-105

R91.4

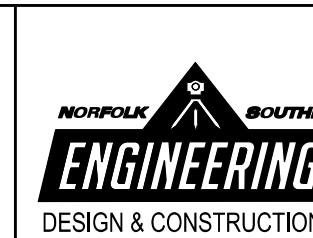
SHEET 10 OF 162



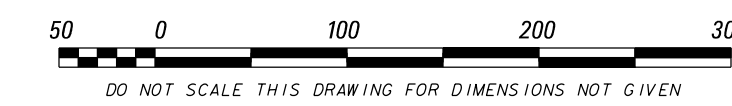
PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



SCALE: 1" = 100'



| REV | BY | DATE | DESCRIPTION |
|-----|----|------|-------------|
| | | | |

LOCATION: BLYTHEWOOD, SC

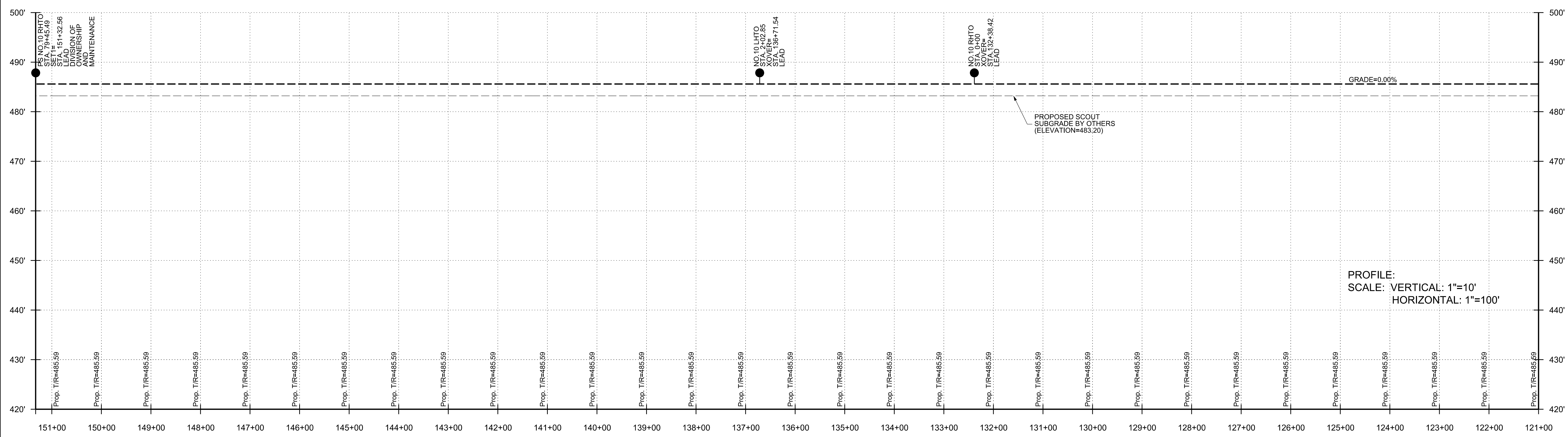
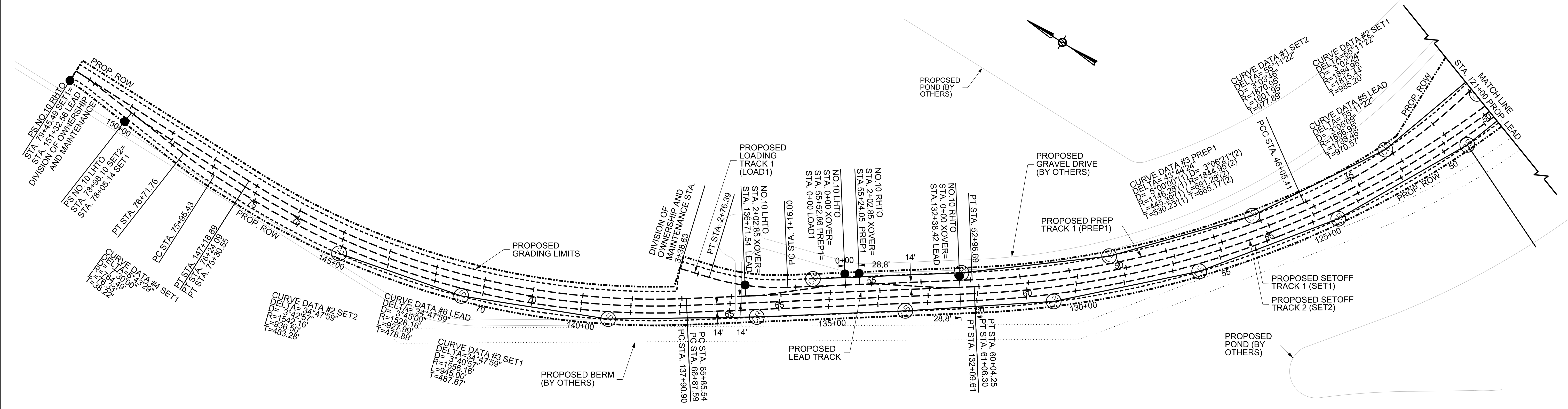
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT
PROPOSED LEAD STA 91+00 - 121+00

| | | | | | | |
|-----|-----|----------------|----------------|-------|-----------|-------|
| OWN | EVU | FILE NO. D3327 | REV | 04825 | FILE POST | R91.4 |
| DWN | EVU | TRK115024 | DRAWING NUMBER | | | |
| CHK | | DATE | MARCH 5, 2024 | | | |

TD-2023-105

SHEET 11 OF 162

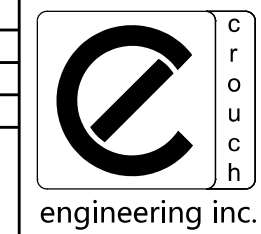
PHASE 2



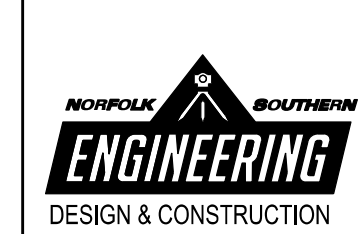
PROFILE:
SCALE: VERTICAL: 1"=10'
HORIZONTAL: 1"=100'

SCALE: 1" = 100'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

| | |
|-------------|-------|
| PROJECT NO: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



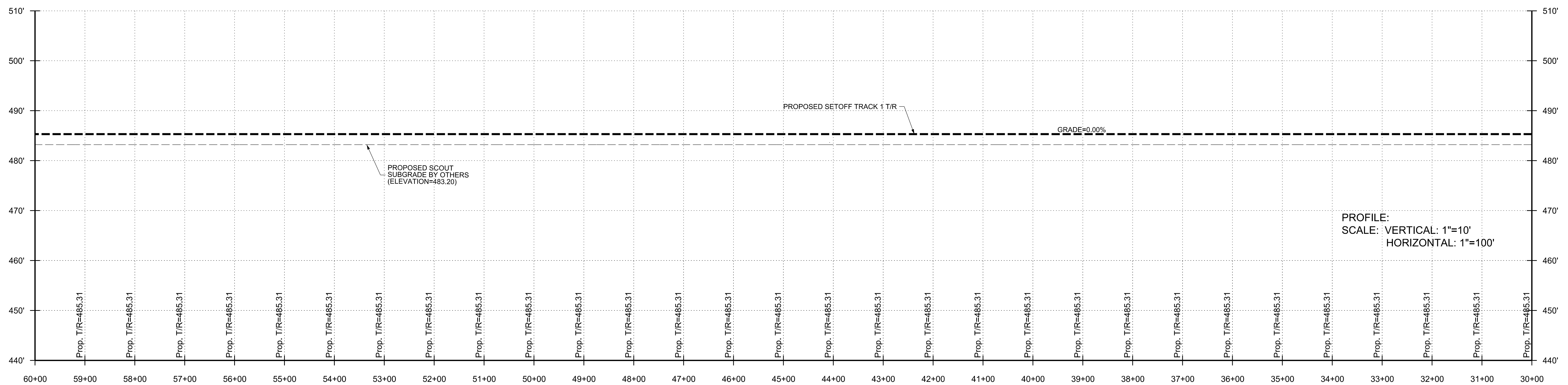
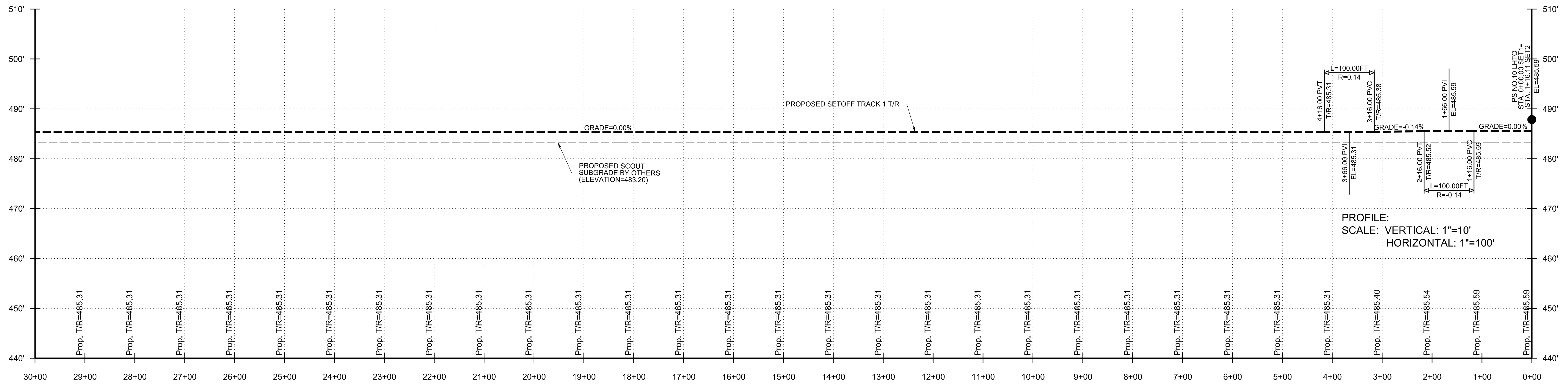
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NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL

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| REV. BY | DATE | DESCRIPTION |
| | | |
| LOCATION: BLYTHEWOOD, SC | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PROPOSED LEAD STA 121+00 - 152+00 | | |
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| | | DATE: MARCH 5, 2024 |
| | | ORIGIN: 04825 |
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| | | DATE: MARCH 5, 2024 |
| | | DRAWING NUMBER: TD-2023-105 |

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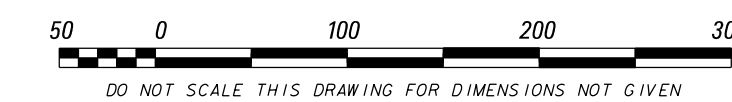
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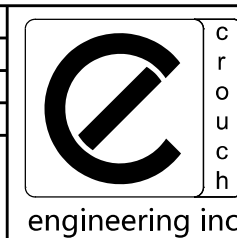
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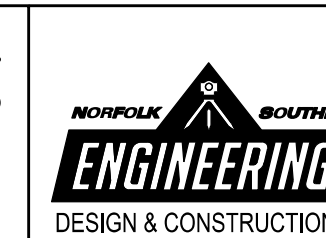


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PROJECT NO: 23050
DATE:
DRAWN BY: EVU
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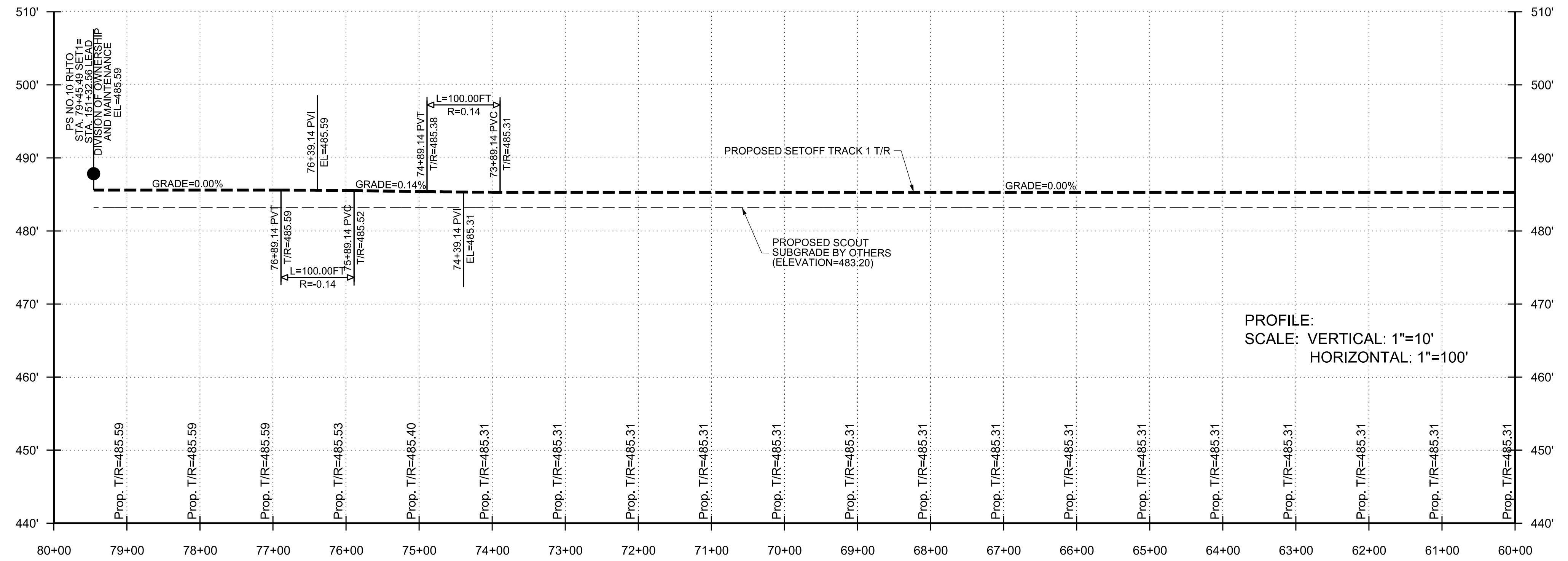
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NORFOLK SOUTHERN RAILWAY COMPANY
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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

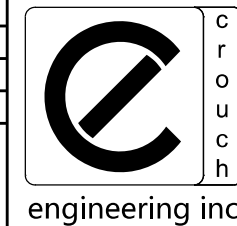
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| DWN | EVU | FILE NO.: D3327 | TRN |
| CHK | EVU | FILE NO.: TRK1115024 | FILE POST |
| | | DATE: MARCH 5, 2024 | 04825 |
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| | | | DRAWING NUMBER |
| | | | TD-2023-105 |

PHASE 2



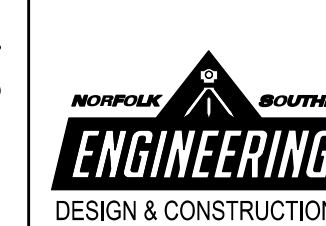
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| PROJECT NO: | 23050 |
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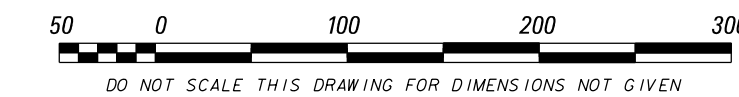
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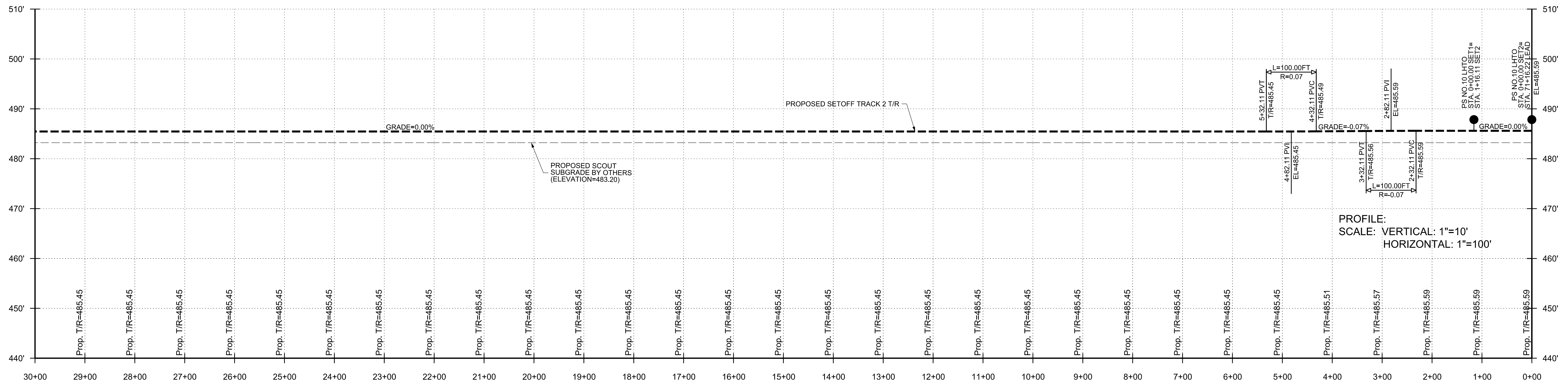
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OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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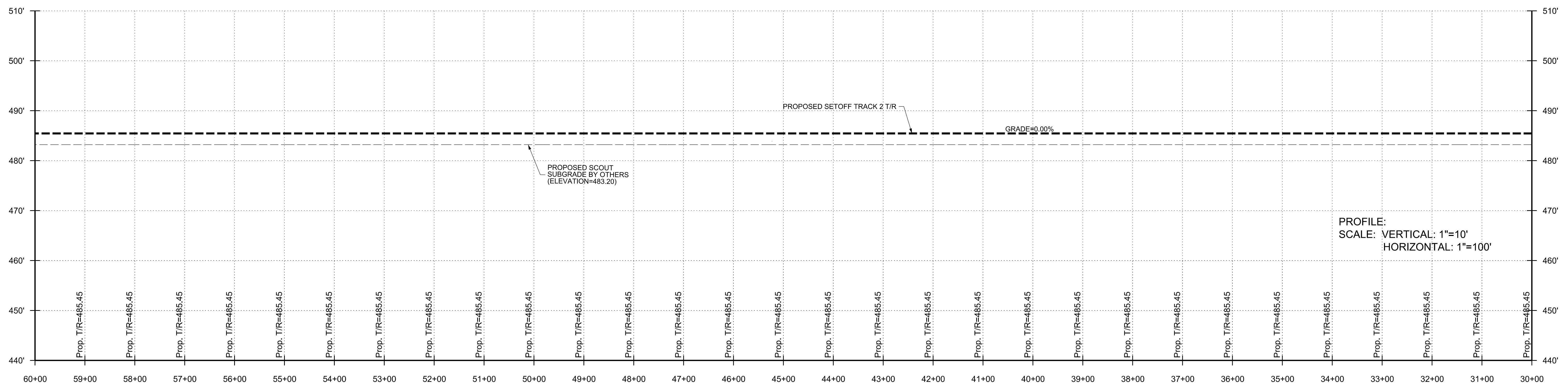


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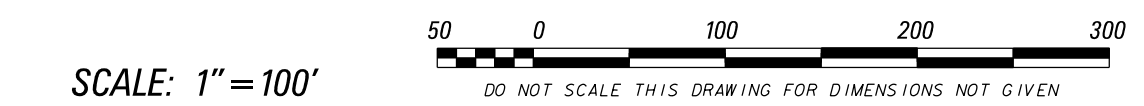
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| DWN | EVU | PTD NO. D3327 | VRN 04825 |
| DWN | EVU | FILE NO. TRK1115024 | DRAWING NUMBER |
| CHK | | DATE MARCH 5, 2024 | TD-2023-105 |
| | | | FILE POST R91.4 |



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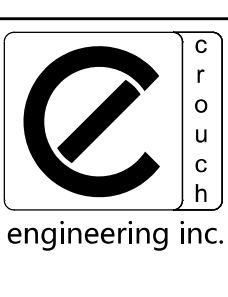


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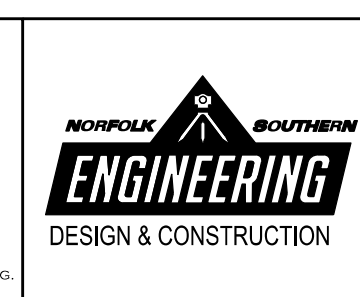


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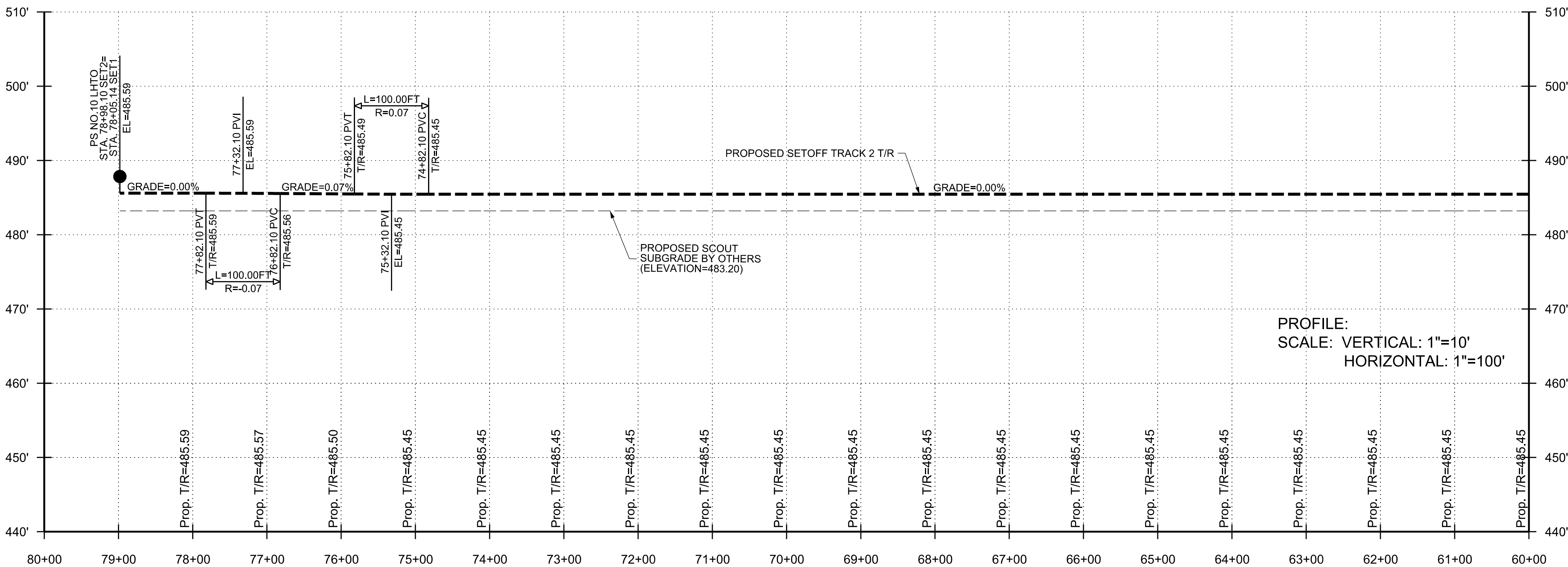


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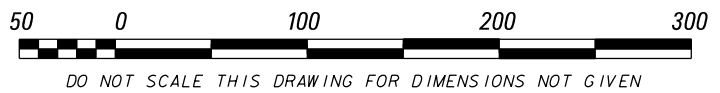


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| REV. BY: | DATE: | DESCRIPTION: |
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| LOCATION: BLYTHEWOOD, SC | | |
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| DATE: MARCH 5, 2024 | DRAWING NUMBER: TD-2023-105 | |

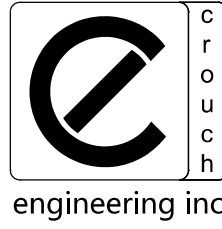


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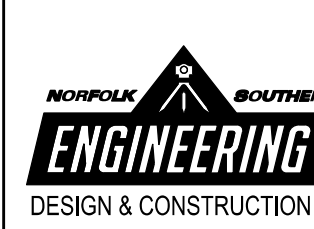
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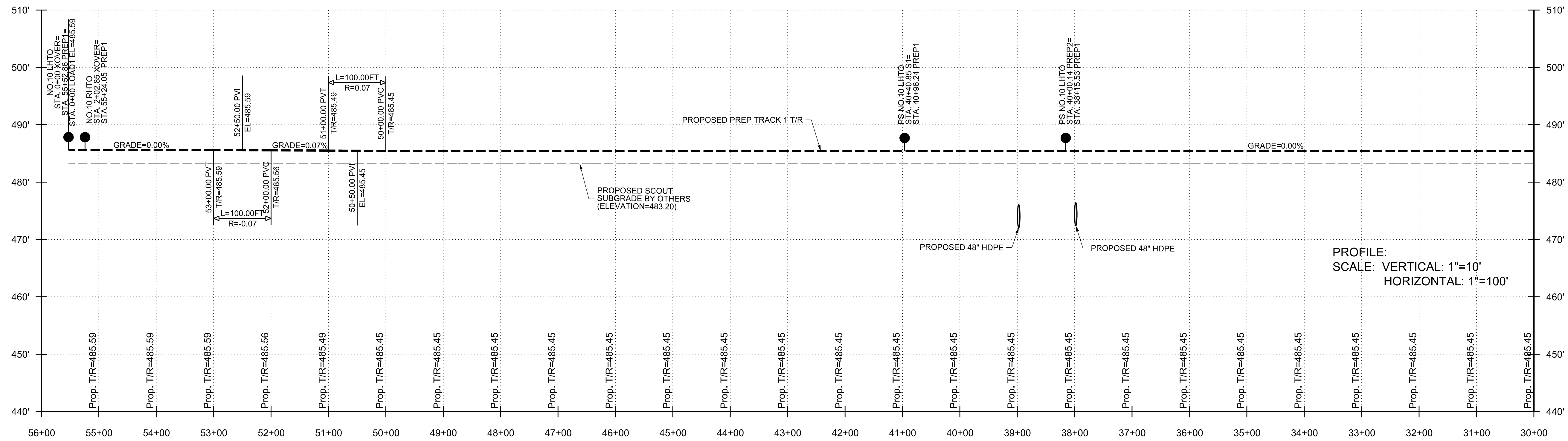
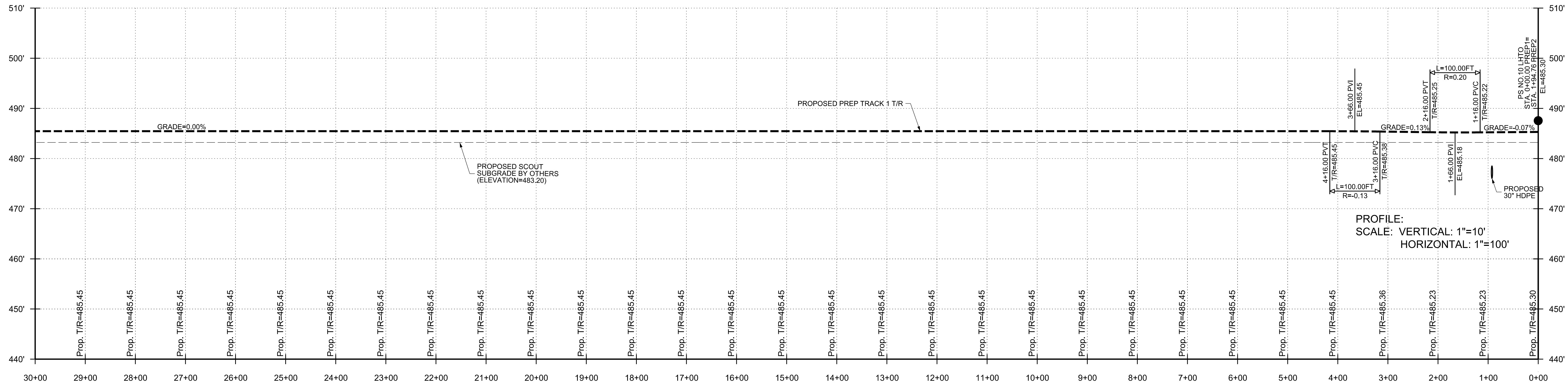
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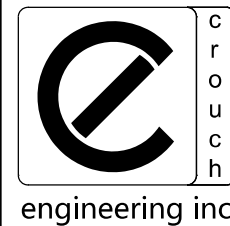
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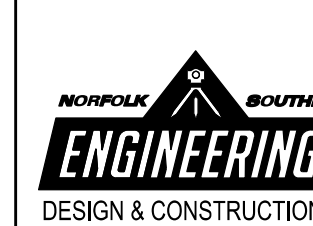


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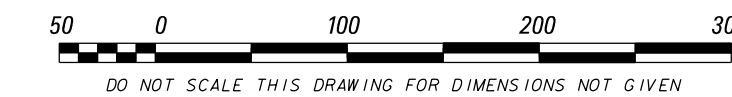
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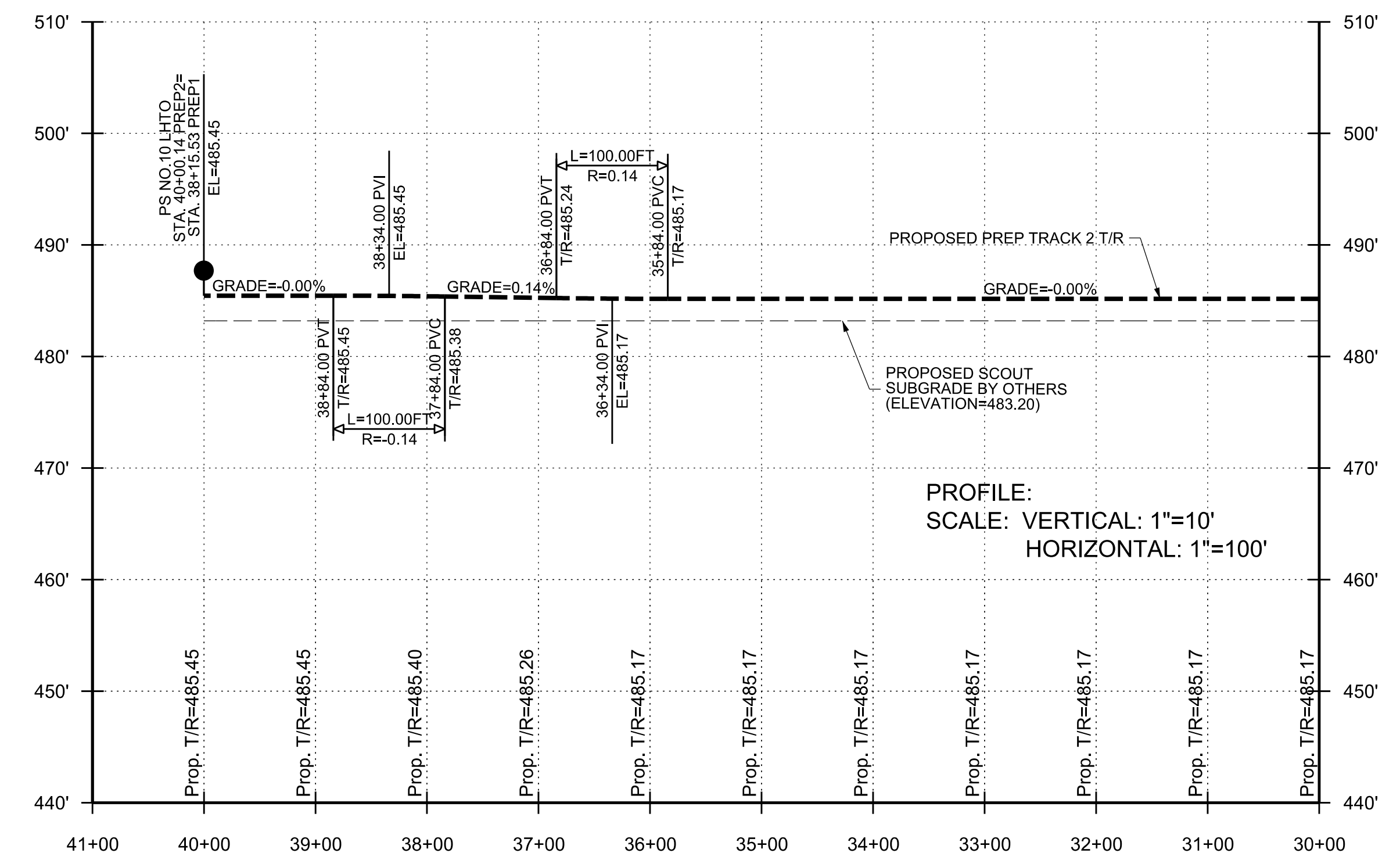
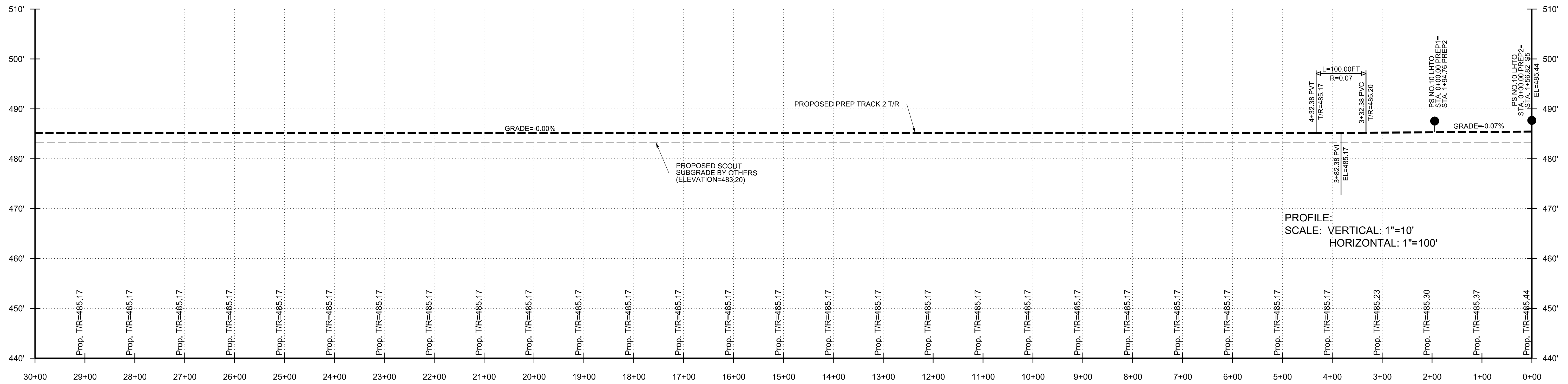


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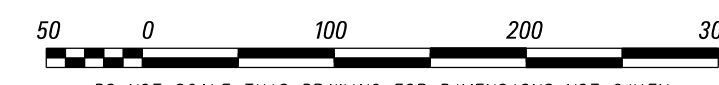


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| DWN | EVU | FILE NO.: D3327 | VRN: 04825 |
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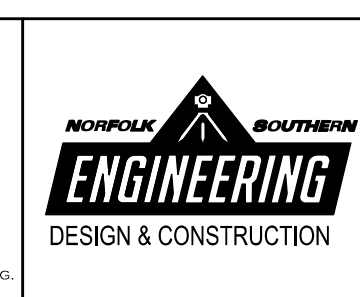
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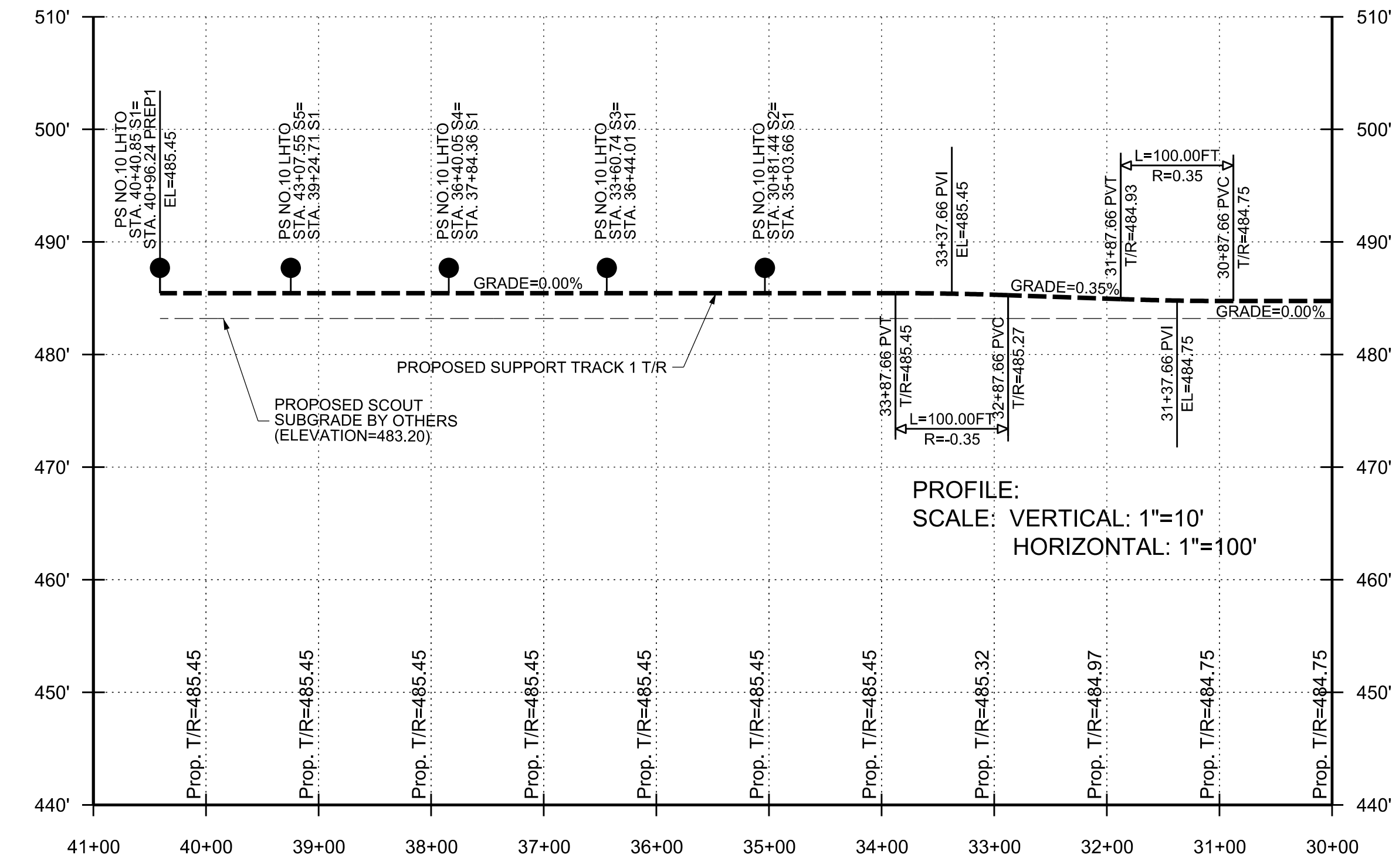
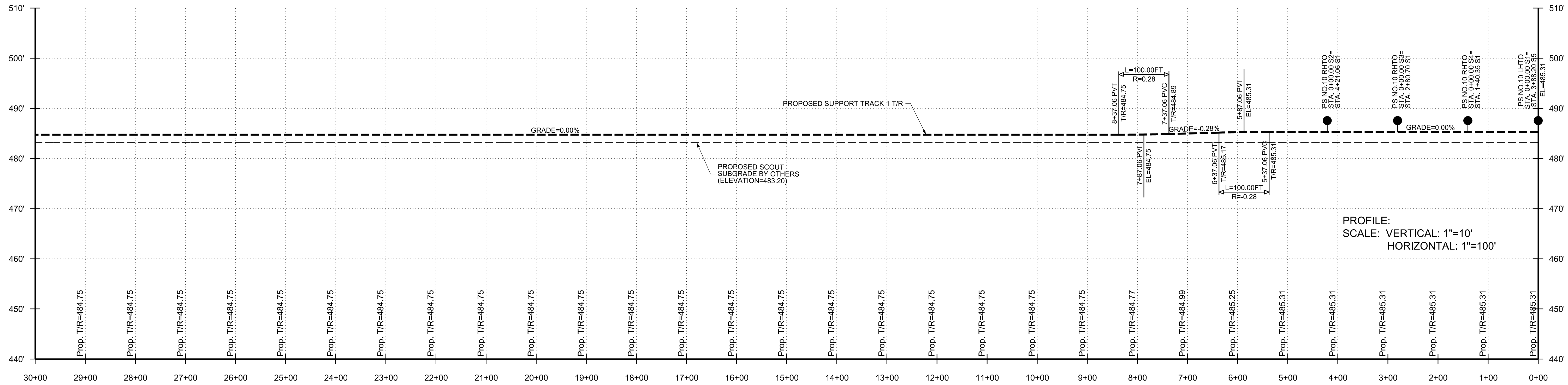
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LOCATION: **BLYTHEWOOD, SC**

TITLE: **PROPOSED TRACKS TO SERVE PROJECT SCOUT
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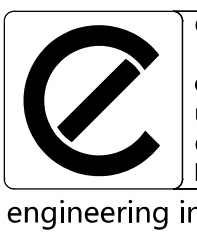
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TD-2023-105

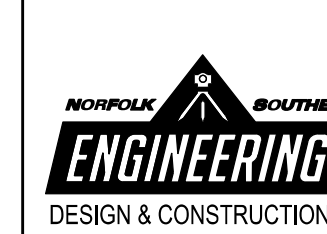


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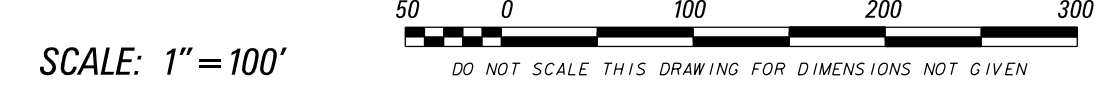
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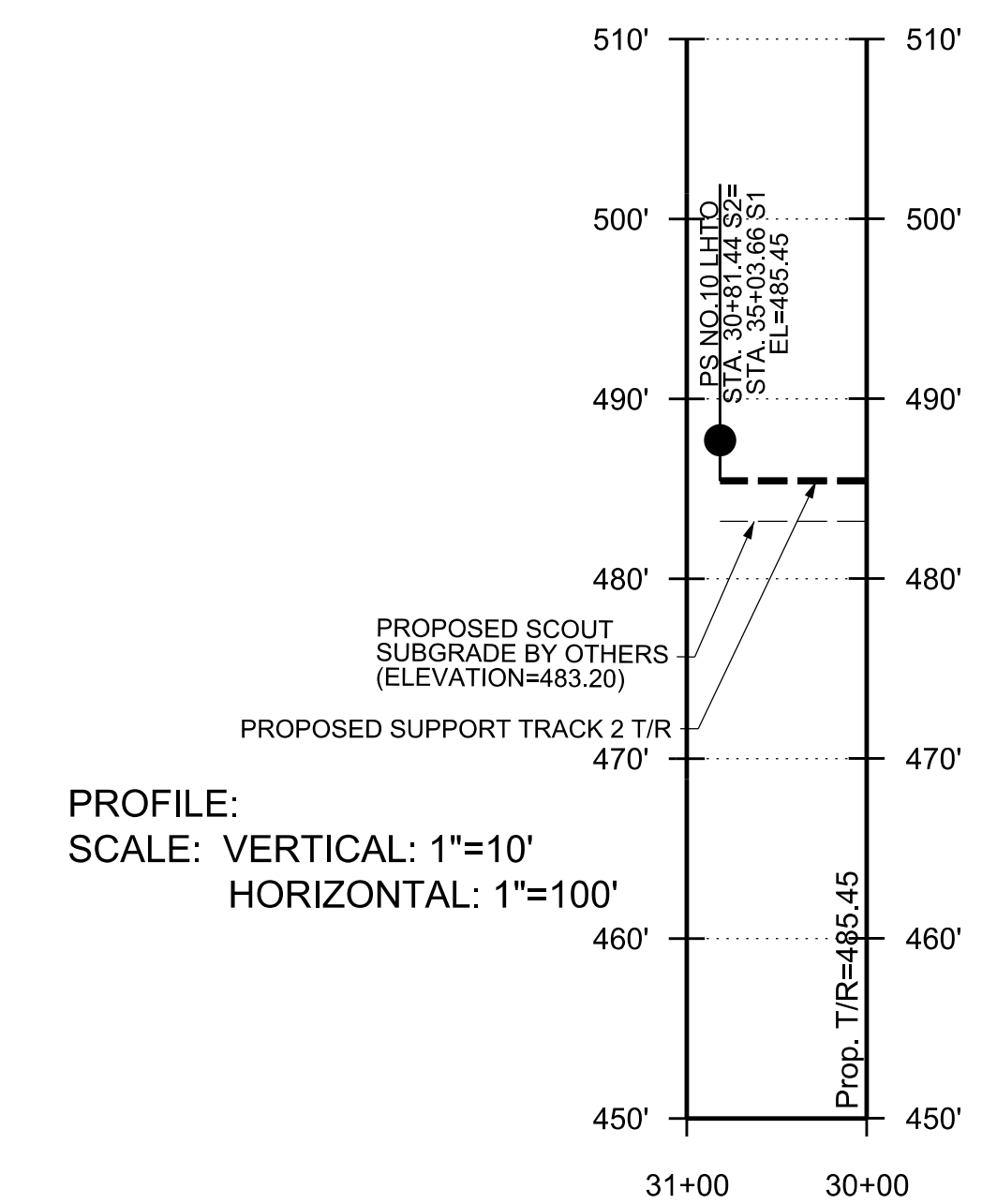
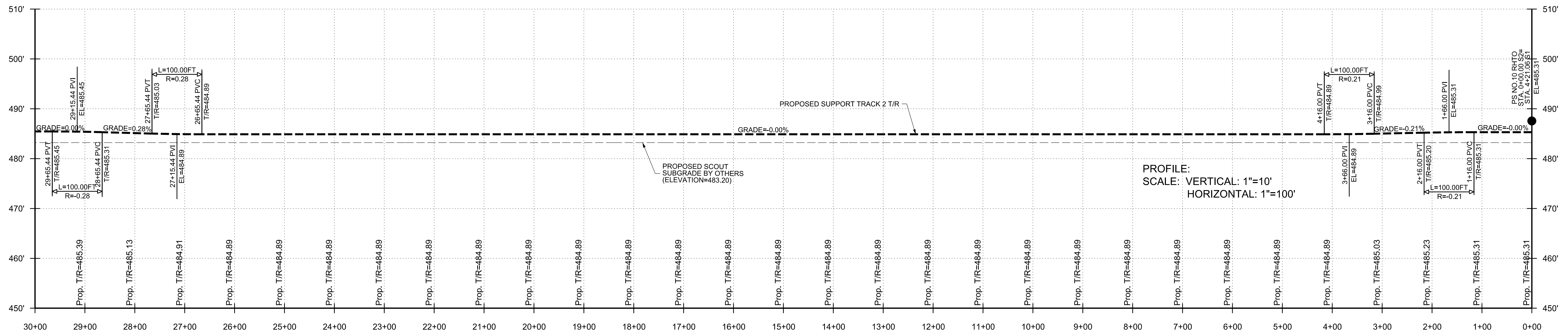
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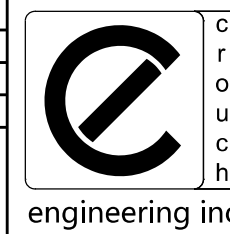


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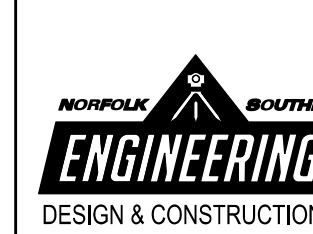
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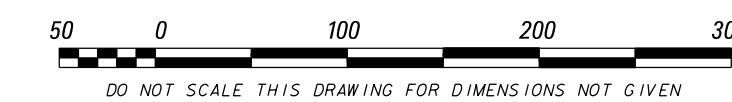


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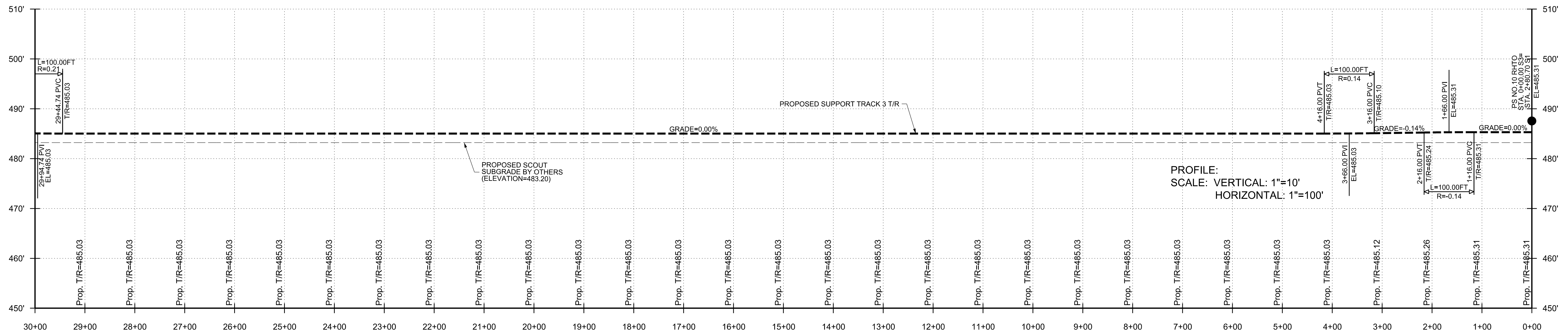
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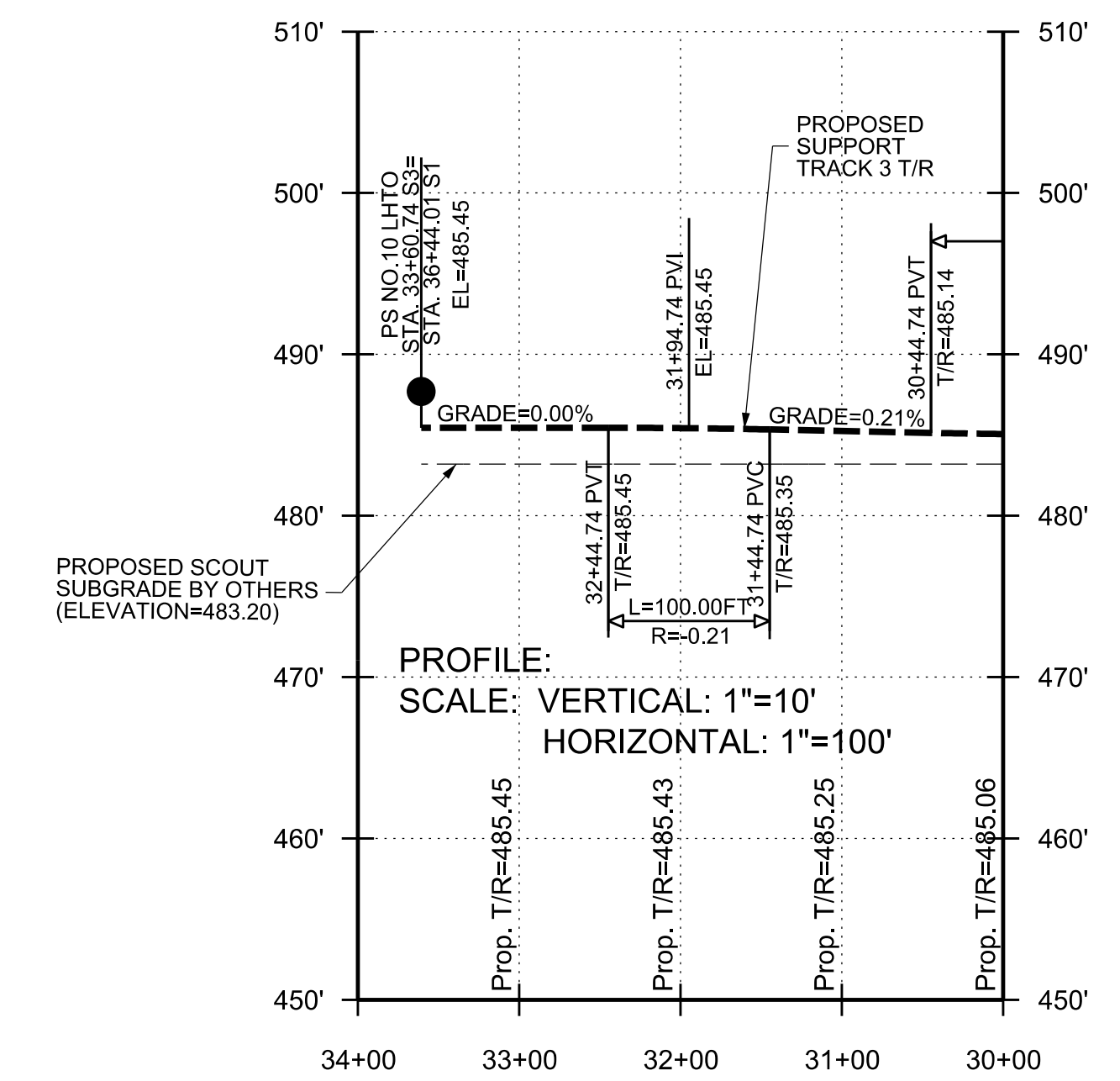
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COASTAL

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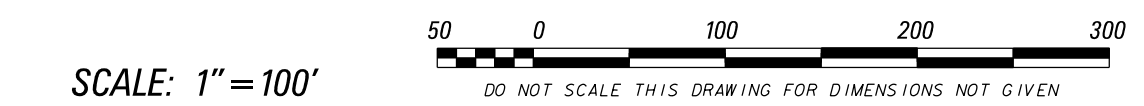
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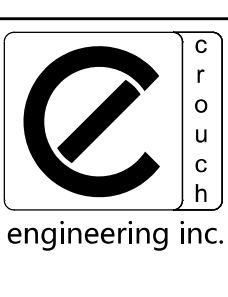


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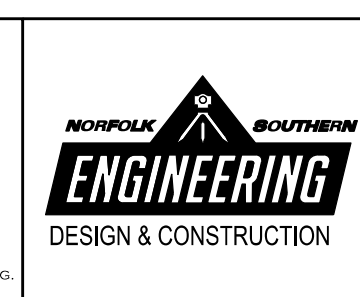


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| REVISIONS: | |

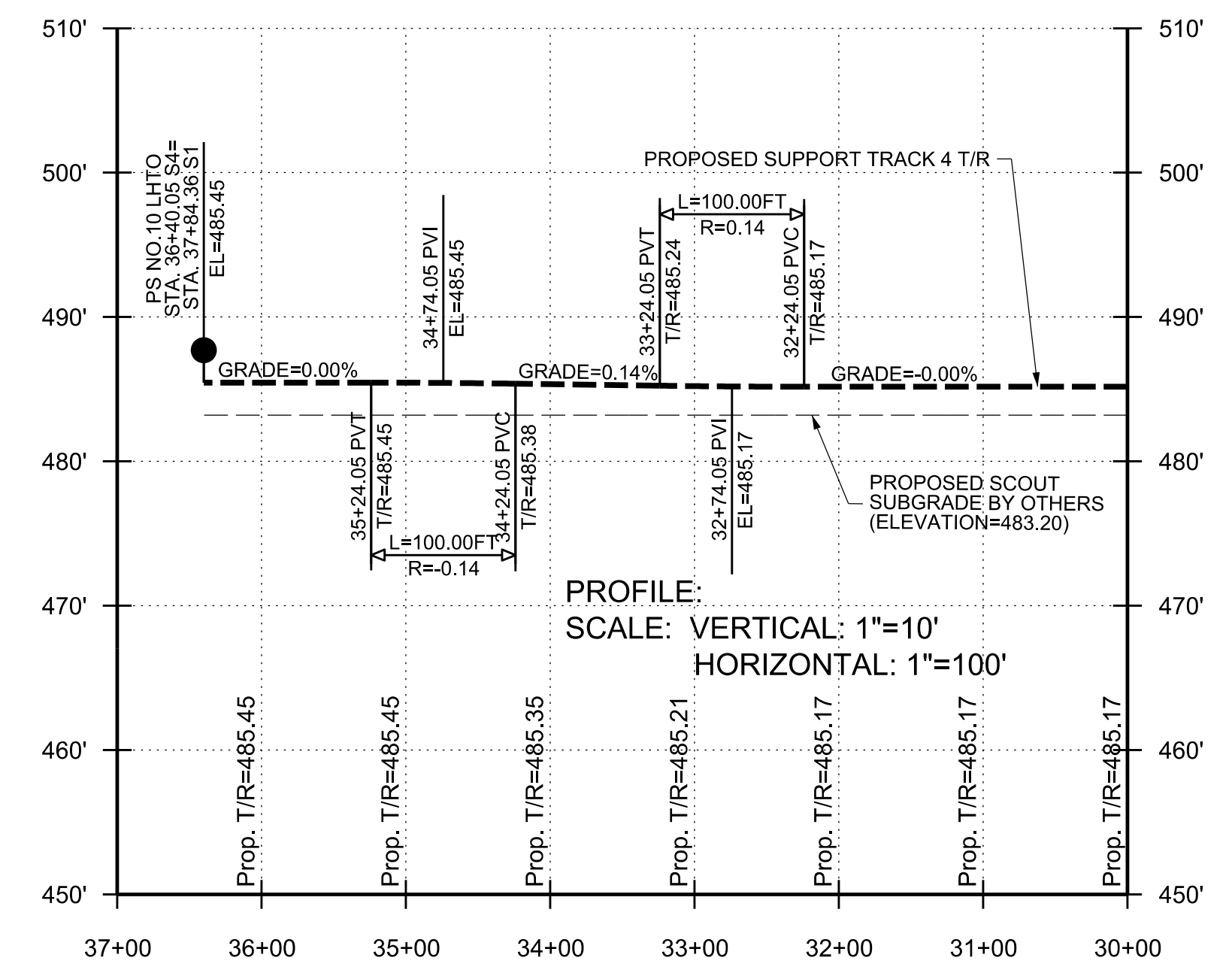
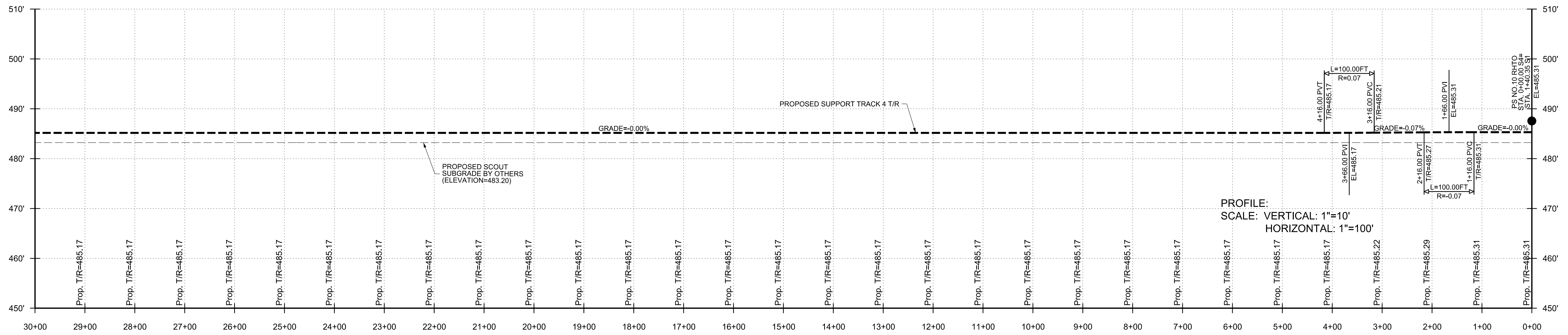


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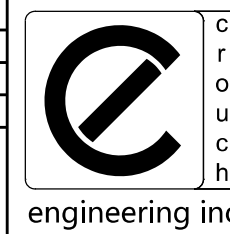
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| REV | BY | DATE | DESCRIPTION |
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| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PROPOSED SUPPORT TRACK 3 PROFILE | | | |
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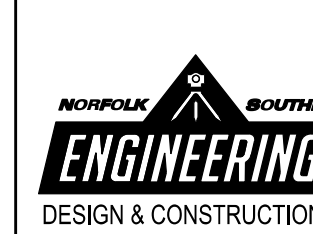


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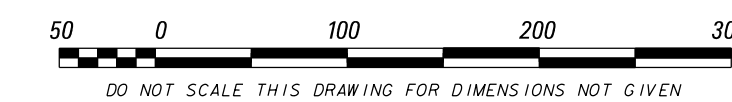
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SCALE: 1" = 100'



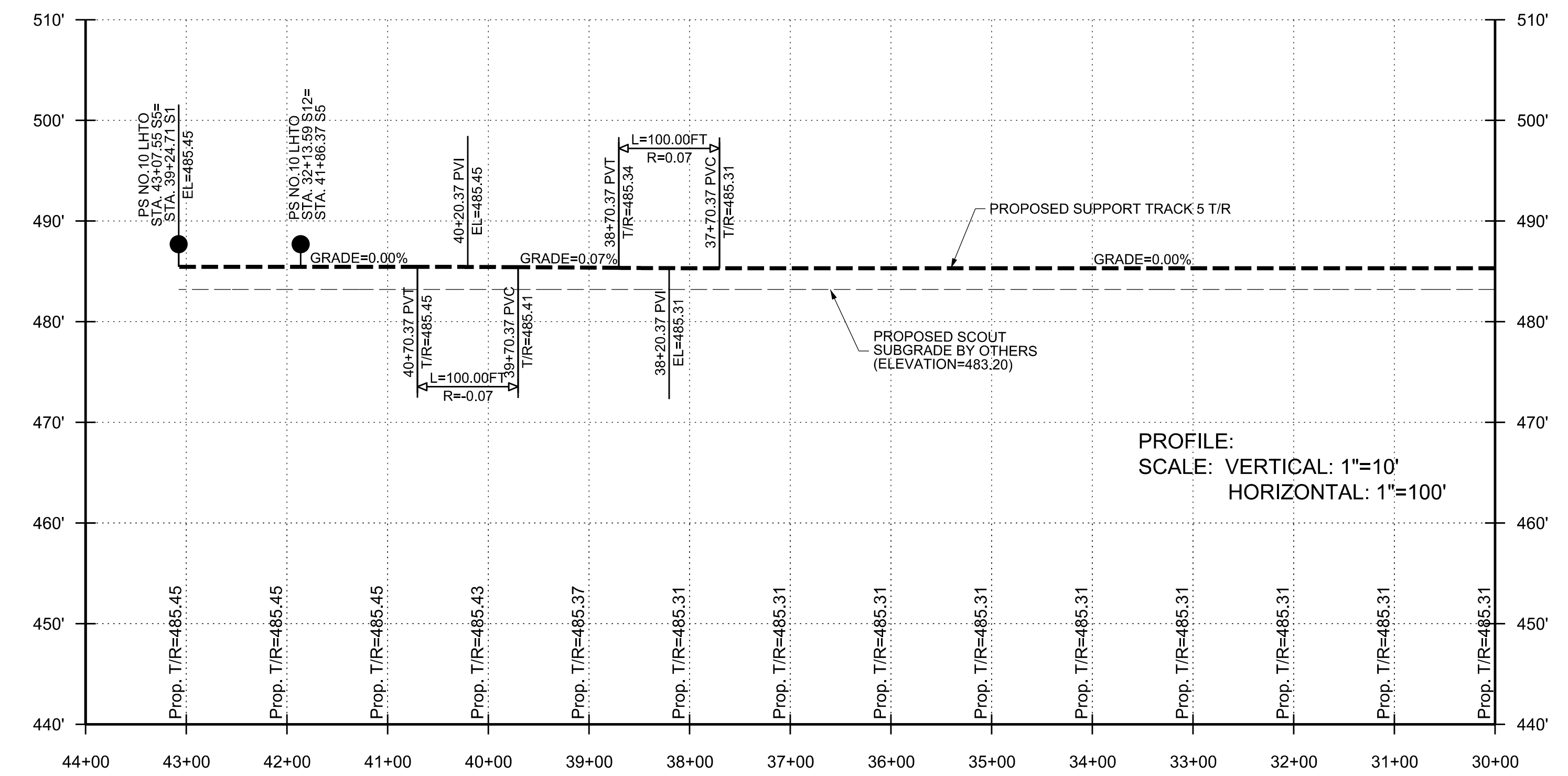
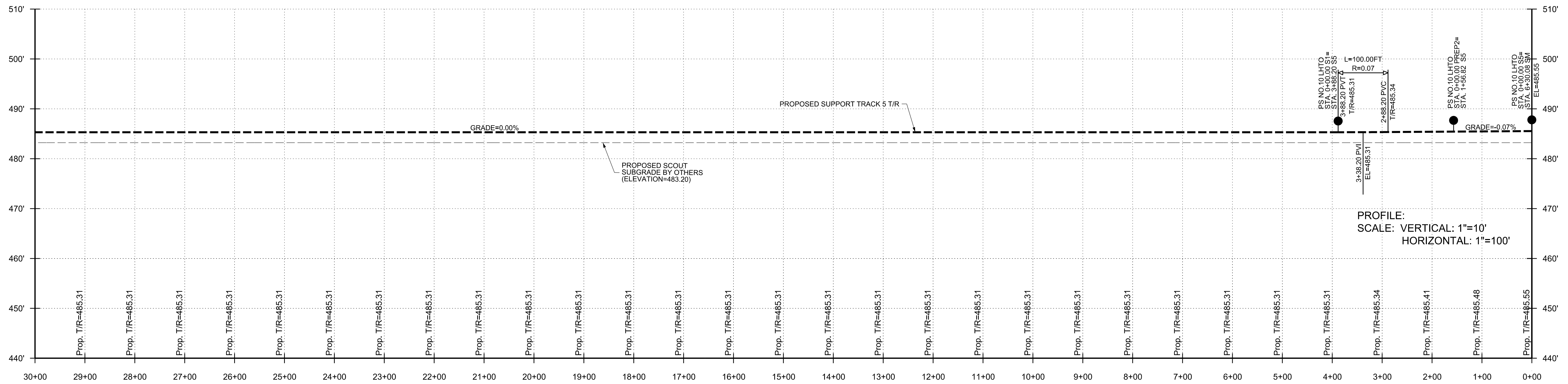
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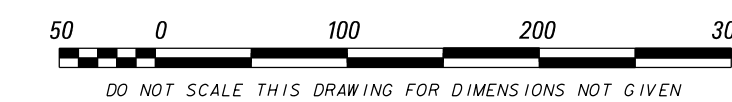
LOCATION: BLYTHEWOOD, SC

TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT
PROPOSED SUPPORT TRACK 4 PROFILE

| | | | | | | |
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| DWN | EVU | PLO NO. D3327 | VRN | 04825 | MILE POST | R91.4 |
| DWN | EVU | FILE NO. | TRK115024 | DRAWING NUMBER | | |
| CHK | | DATE | MARCH 5, 2024 | DRAWING NUMBER | TD-2023-105 | |



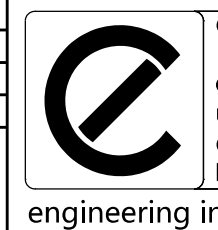
SCALE: 1" = 100'



DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

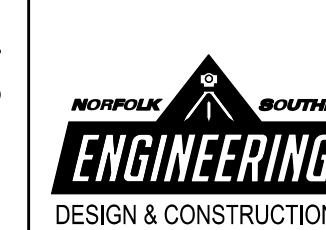
PHASE 2

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
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REVISIONS:



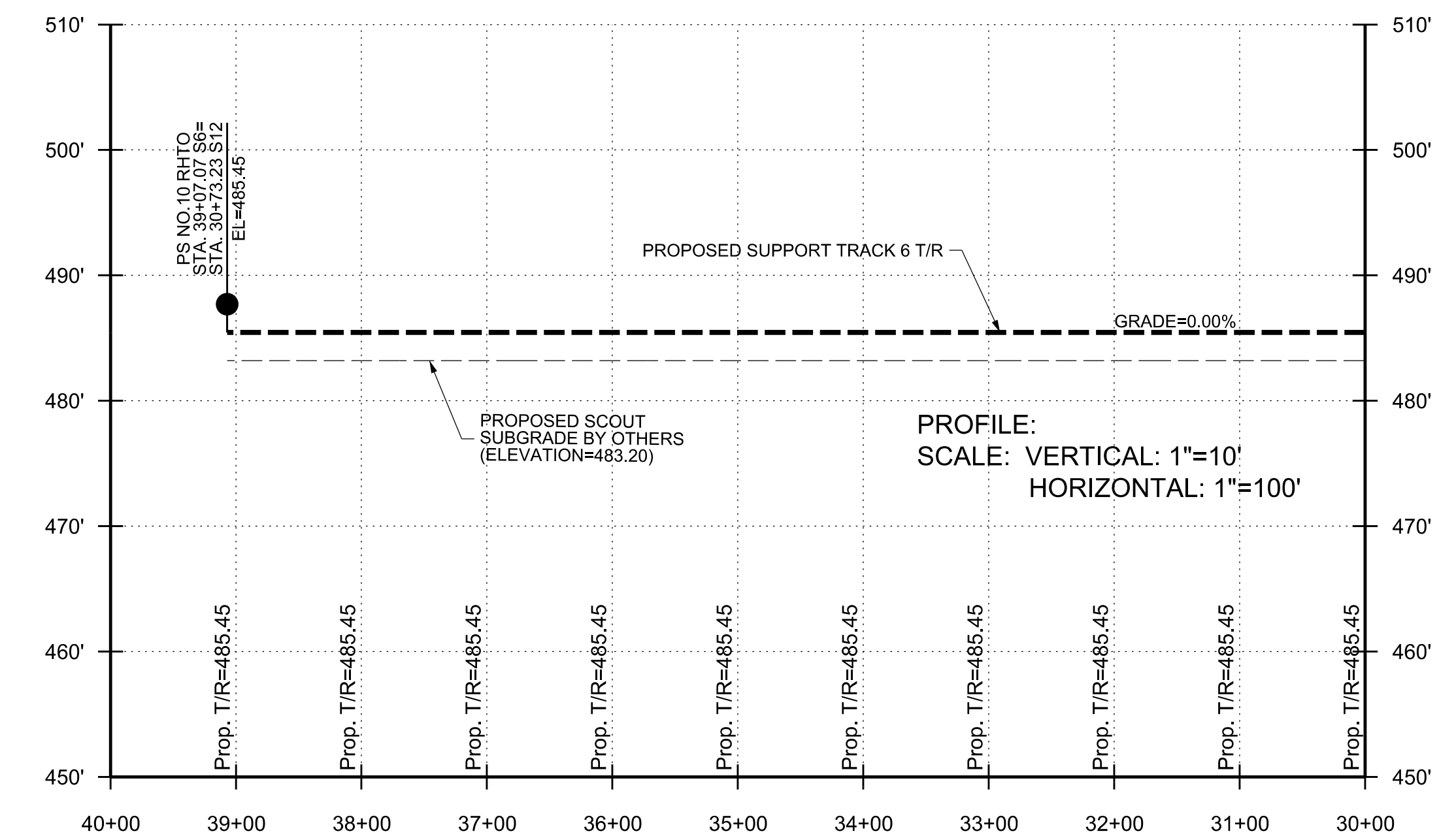
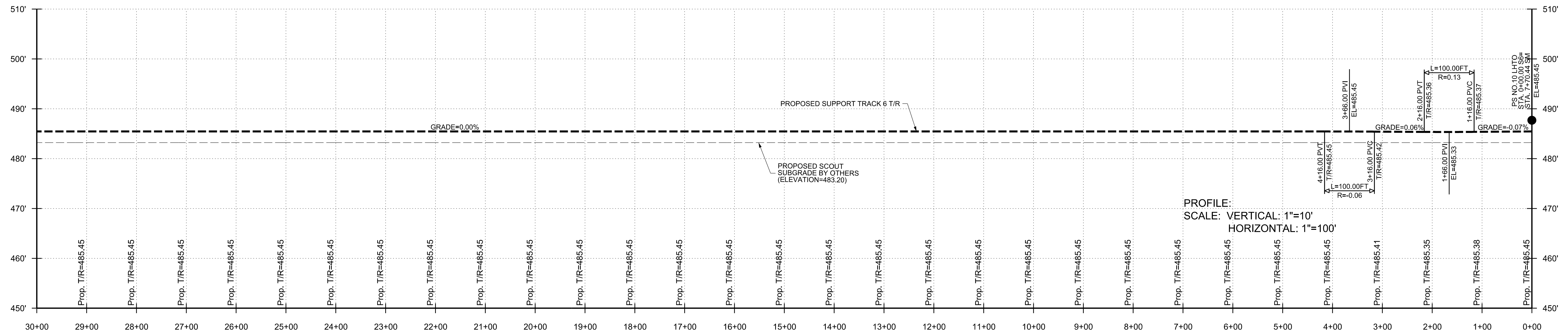
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BRENTWOOD, TN 37027
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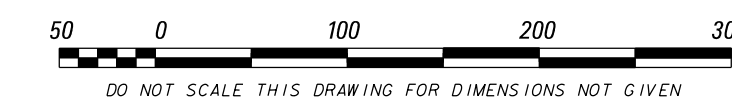


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COASTAL
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OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | | |
|---|-----|---------------------|----------------|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PROPOSED SUPPORT TRACK 5 PROFILE | | | |
| DWN | EVU | PLOT NO: D3327 | VRN |
| DWN | EVU | FILE NO: TRK115024 | DRAWING NUMBER |
| CHK | | DATE: MARCH 5, 2024 | TD-2023-105 |
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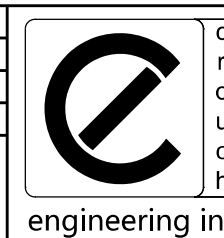


SCALE: 1" = 100'

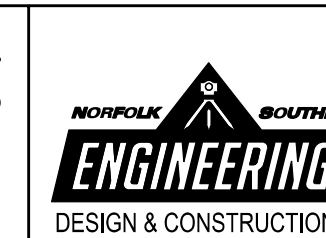


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| REV | BY | DATE | DESCRIPTION |
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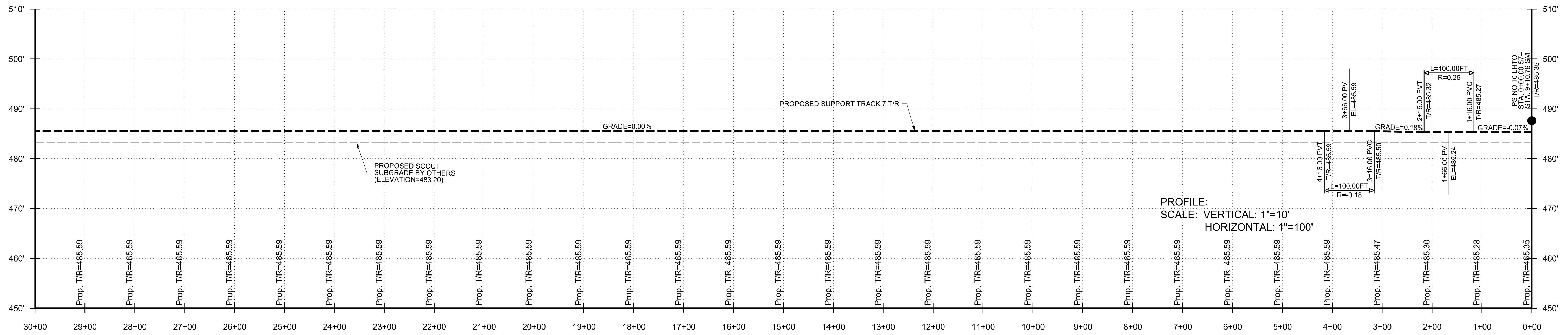
LOCATION: BLYTHEWOOD, SC
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT
PROPOSED SUPPORT TRACK 6 PROFILE

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| DRN: EVU | PTD NO: D3327 | VRN: 04825 | MILE POST: R91.4 |
| DWN: EVU | FILE NO: TRK115024 | DRAWING NUMBER | |
| CHK: | DATE: MARCH 5, 2024 | TD-2023-105 | |

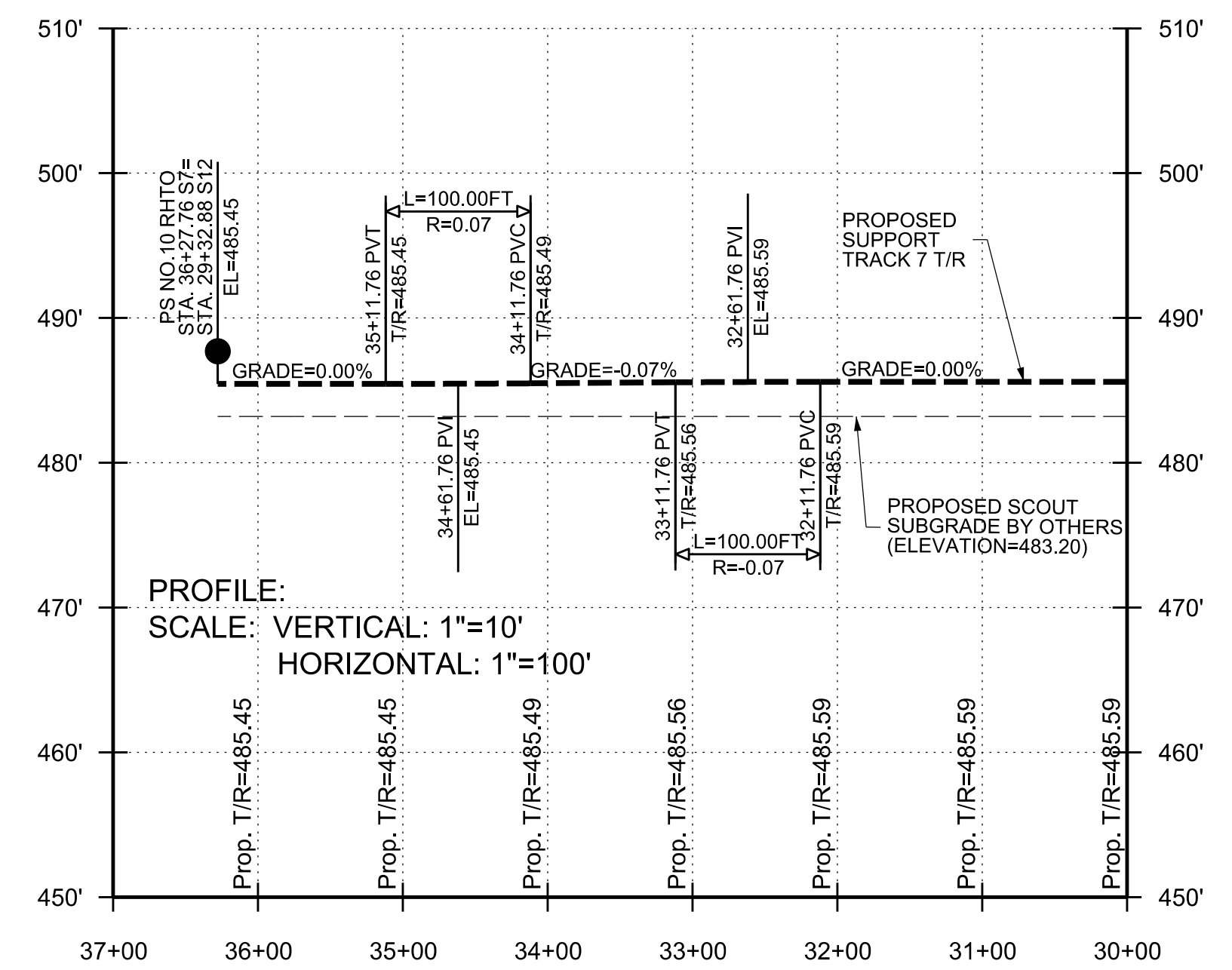
PHASE 2

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MODEL NAME: #MODELNAME# CADD FILE: #FILEL#
DATE PRINTED: #DATE# LAST SAVED: #LASTSAVEDDATE#

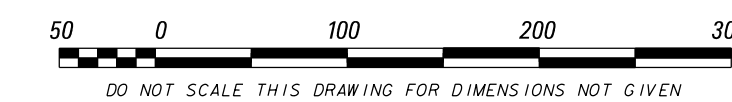


PROFILE:
SCALE: VERTICAL: 1"=10'
HORIZONTAL: 1"=100'



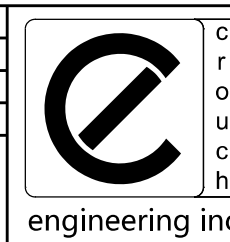
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HORIZONTAL: 1"=100'

SCALE: 1" = 100'

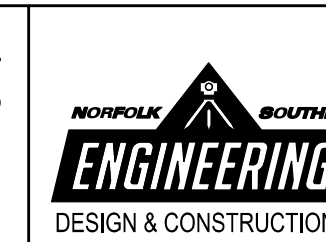


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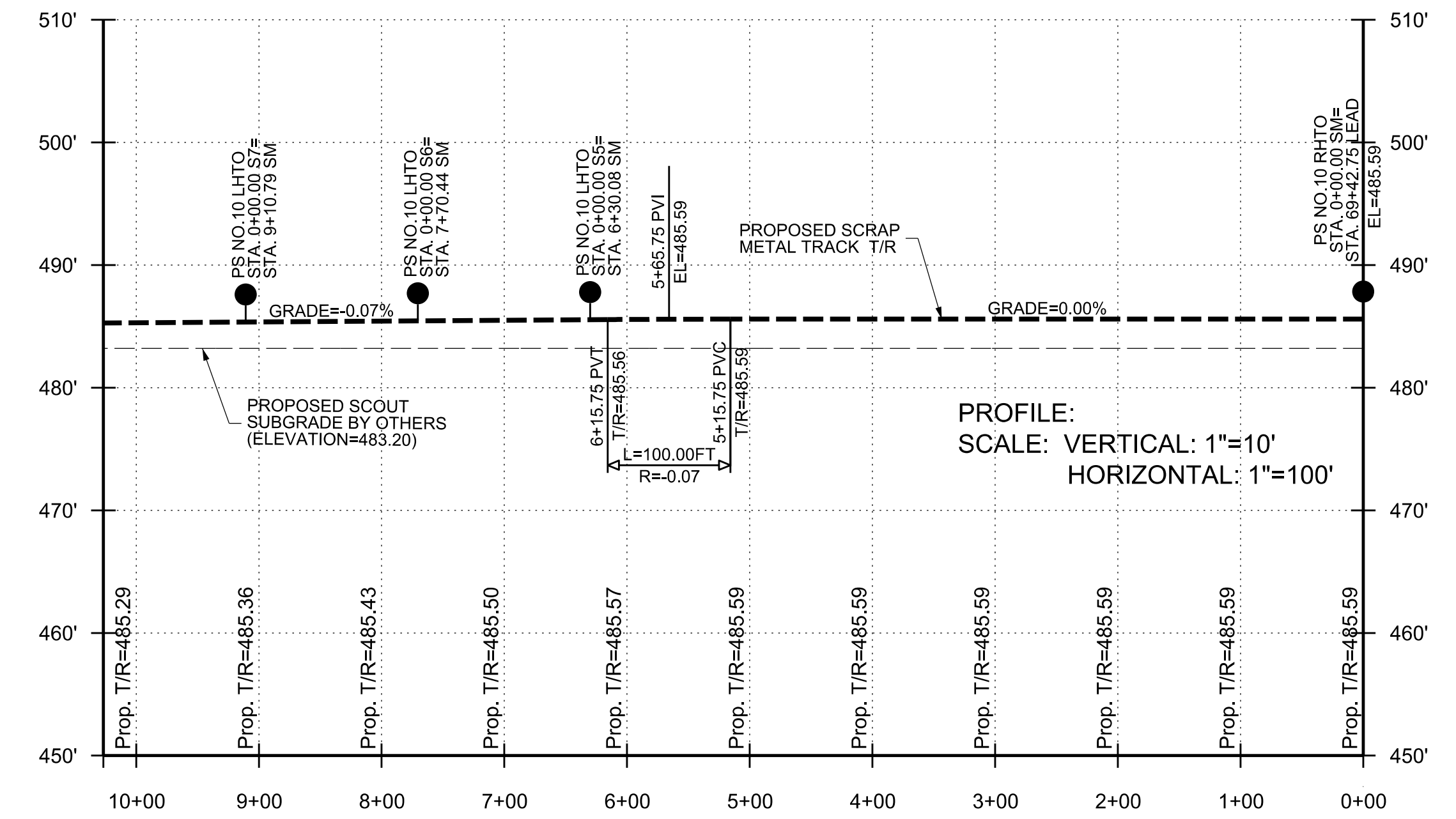
| REV | BY | DATE | DESCRIPTION |
|-----|----|------|-------------|
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LOCATION: **BLYTHEWOOD, SC**

TITLE: **PROPOSED TRACKS TO SERVE PROJECT SCOUT
PROPOSED SUPPORT TRACK 7 PROFILE**

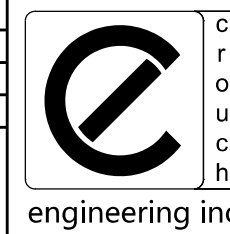
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| DWN | EVU | FILE NO. | TRK115024 | DRAWING NUMBER | | | |
| CHK | | DATE | MARCH 5, 2024 | DRAWING NUMBER | | | |

TD-2023-105

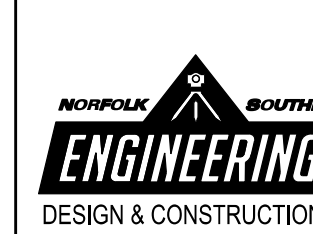


PHASE 2

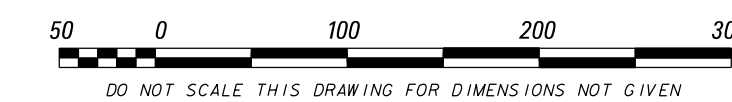
PROJECT NO: 23050
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SCALE: 1" = 100'



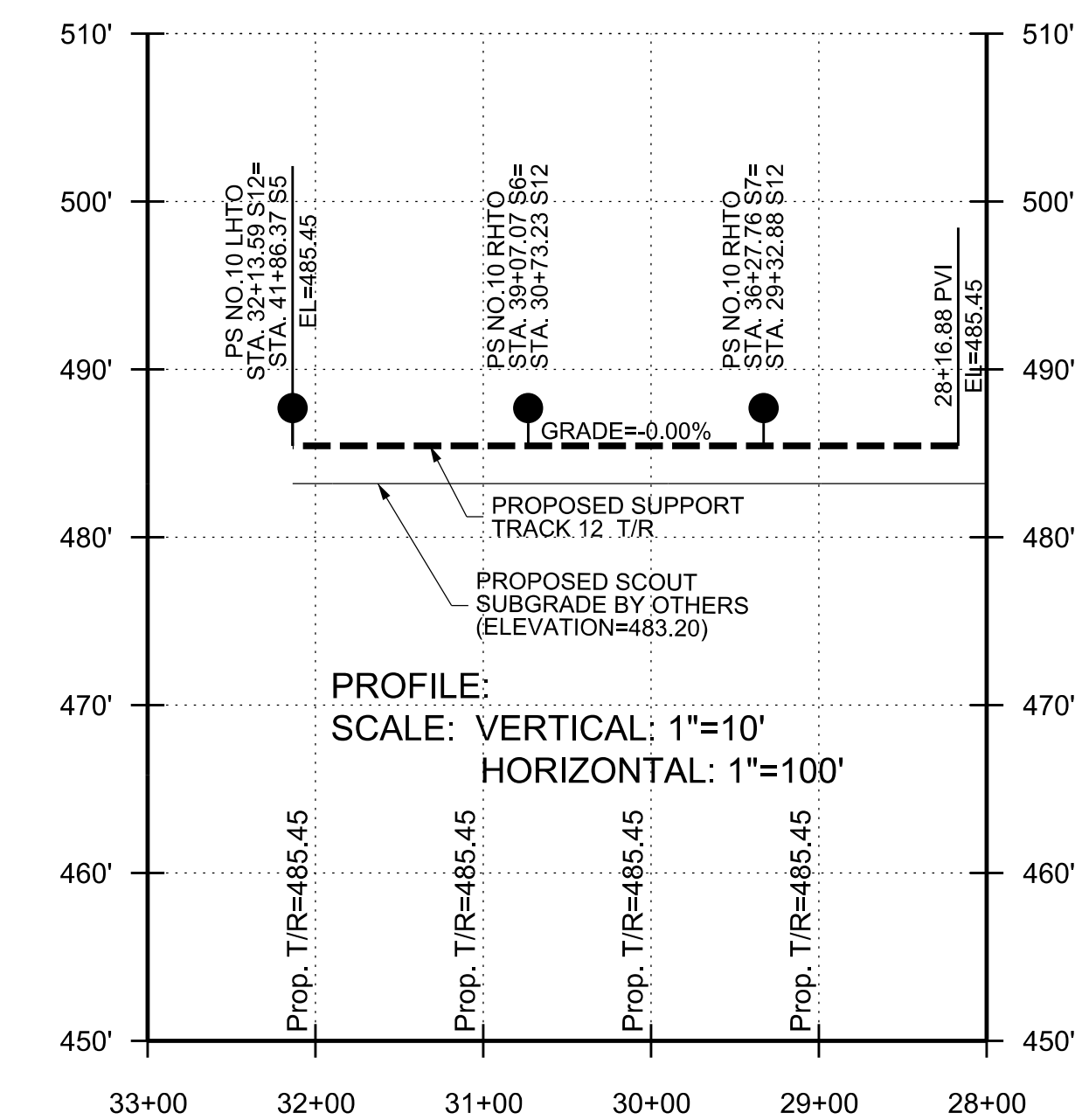
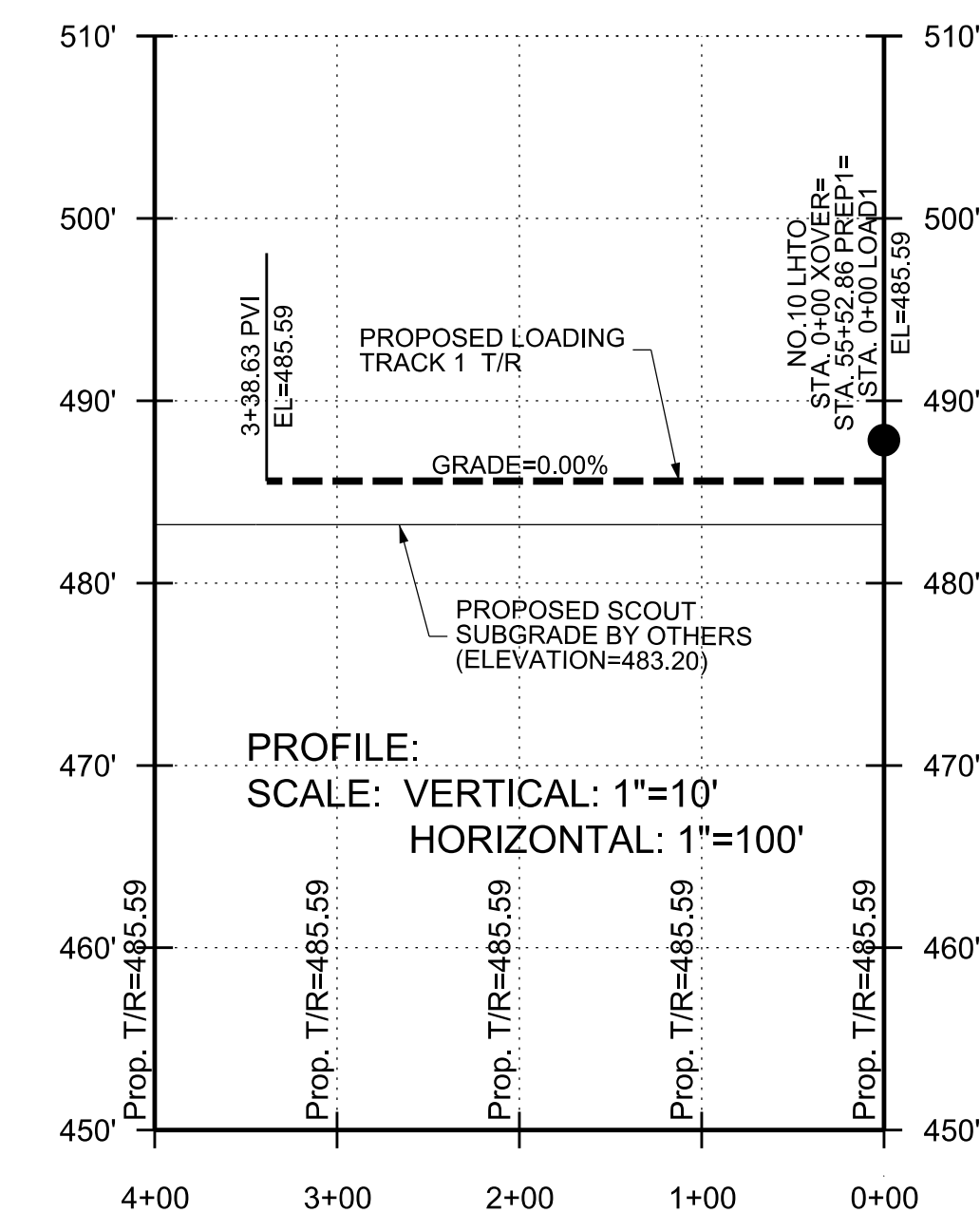
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| REV | BY | DATE | DESCRIPTION |
|-----|----|------|-------------|
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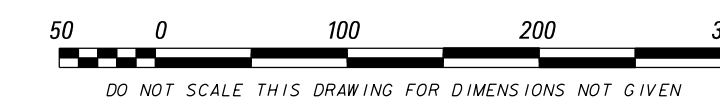
LOCATION: BLYTHEWOOD, SC

TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT
PROPOSED SCRAP METAL TRACK PROFILE

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|-----|-----|---------------------|-----|-------|----------------|-------------|
| DRN | EVU | PTD NO. D3327 | VRN | 04825 | FILE PDS# | R91.4 |
| DWN | EVU | FILE NO. TRK1115024 | | | DRAWING NUMBER | |
| CHK | | DATE MARCH 5, 2024 | | | DRAWING NUMBER | TD-2023-105 |

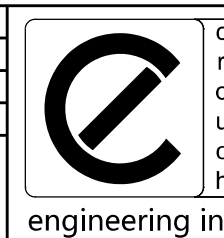


SCALE: 1" = 100'

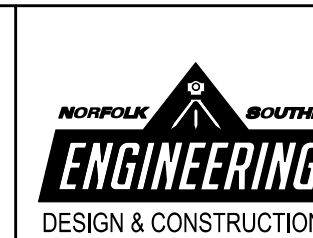


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PROJECT NO: 23050
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| REV | BY | DATE | DESCRIPTION |
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LOCATION: **BLYTHEWOOD, SC**

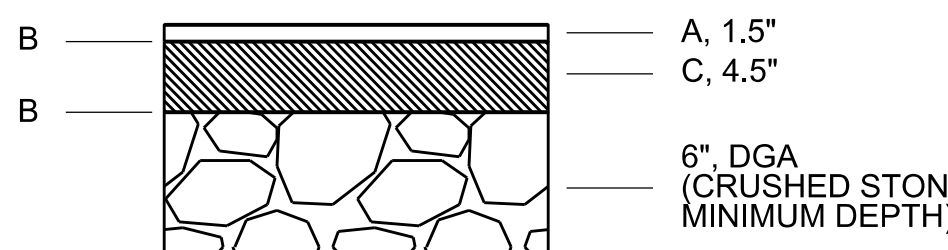
TITLE: **PROPOSED TRACKS TO SERVE PROJECT SCOUT
PROPOSED SUPPORT TRACK 12/LOADING TRACK 1 PROFILE**

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|-----|-----|----------|---------------|----------------|-------|-----------|-------|
| DRN | EVU | PTD NO. | D3327 | VRN | 04825 | MILE POST | R91.4 |
| DWN | EVU | FILE NO. | TRK115024 | DRAWING NUMBER | | | |
| CHK | | DATE | MARCH 5, 2024 | DRAWING NUMBER | | | |

TD-2023-105



TYPICAL PAVEMENT SECTION



MATERIAL DESIGNATION
 A - HMA SURFACE COURSE, 9.5MM SUPERPAVE (PER N.S. STDS.)
 B - TACK COAT
 C - HMA BASE COURSE, 19.5MM SUPERPAVE (PER N.S. STDS.)

NOTE:

THE CONTRACTOR IS REQUIRED TO MATCH EXISTING PAVING SECTION AND MUST CONTACT THE RICHLAND COUNTY HIGHWAY DEPARTMENT PRIOR TO BEGINNING ANY ROAD WORK.

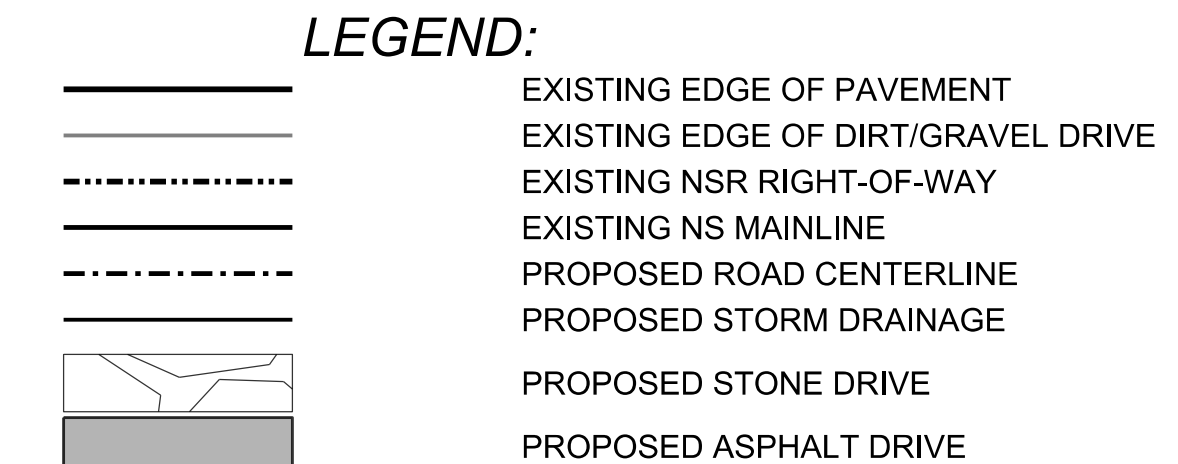
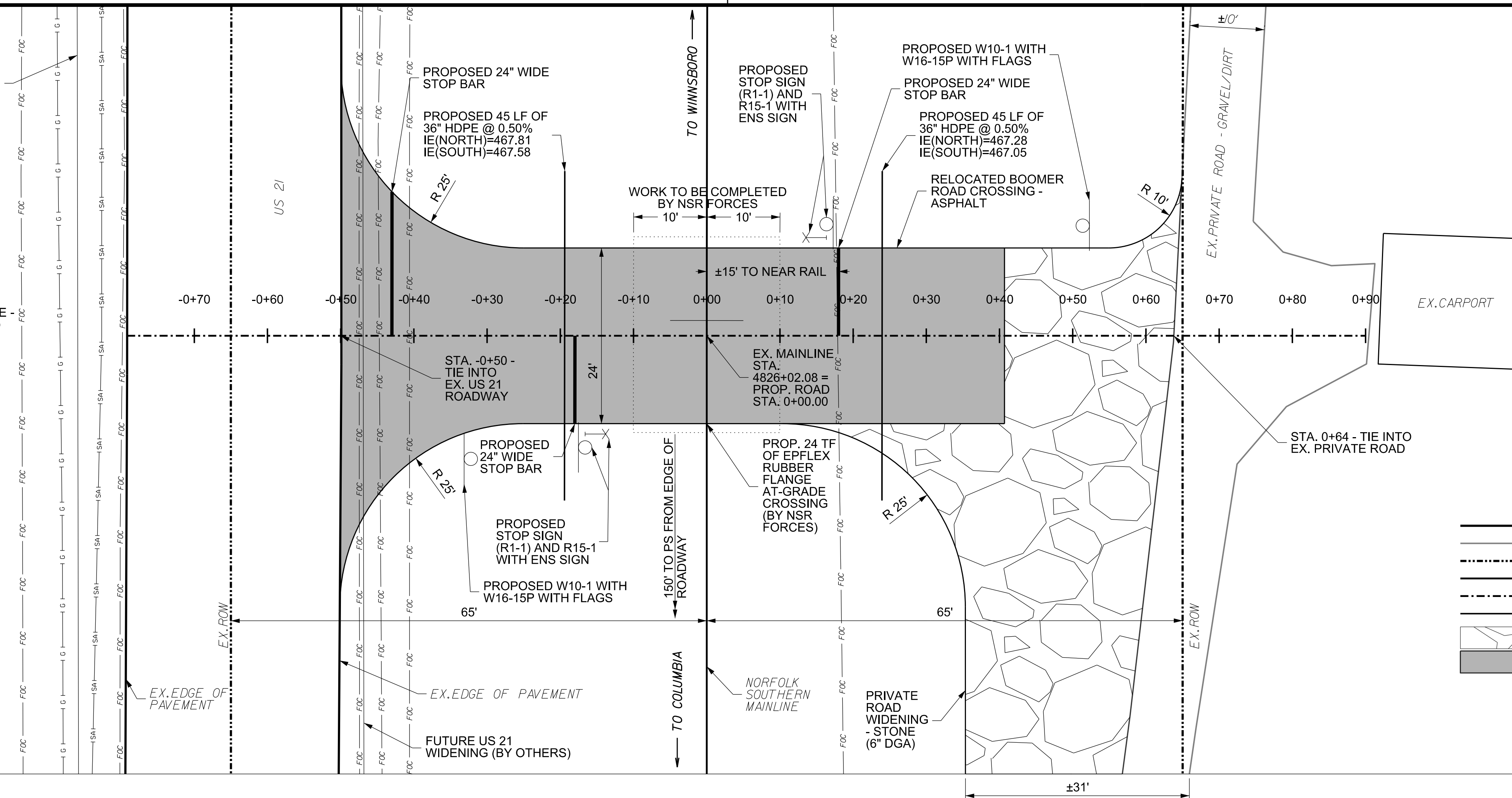
THE CONTRACTOR MUST USE THE PAVEMENT SECTION SHOWN AS A MINIMUM STANDARD IF THE EXISTING PAVEMENT SECTION CANNOT BE DETERMINED.

CONTRACTOR TO MATCH EXISTING PAVEMENT MARKINGS AFTER FINAL PAVING IS COMPLETED.

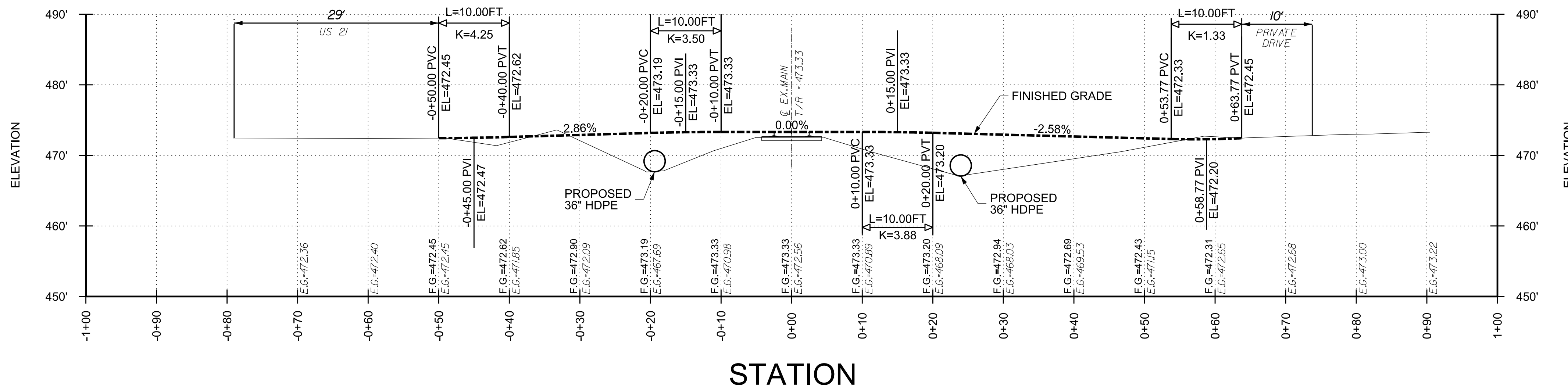
HOT MIX ASPHALT WILL BE FULL DEPTH IN GRADE CROSSINGS (APPROXIMATELY 7' BOTH SIDES OF PROPOSED TRACK), PLACED IN THREE (3) SEPARATE LIFTS, EACH LIFT COMPACTED SEPARATELY.

APPLY TACK COAT PRIOR TO PLACING HOT MIX ASPHALT OVER EXISTING PAVEMENT AND IN BETWEEN EACH LIFT OF ASPHALT.

THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING TEMPORARY TRAFFIC CONTROL PLANS, AND MUST OBTAIN PROPER APPROVAL FROM THE LOCAL HIGHWAY DEPARTMENT AHEAD OF ANY TEMPORARY CLOSURES. SEE SUPPLEMENTAL TEMPORARY TRAFFIC CONTROL PLANS FOR DETAILS.

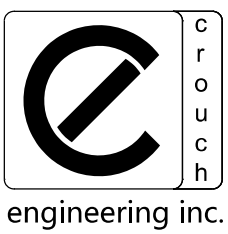


RELOCATED BOOMER ROAD CROSSING

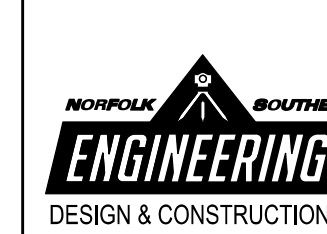


PHASE 1

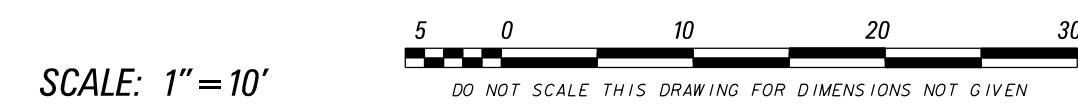
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|-------------|-------|
| PROJECT NO: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |



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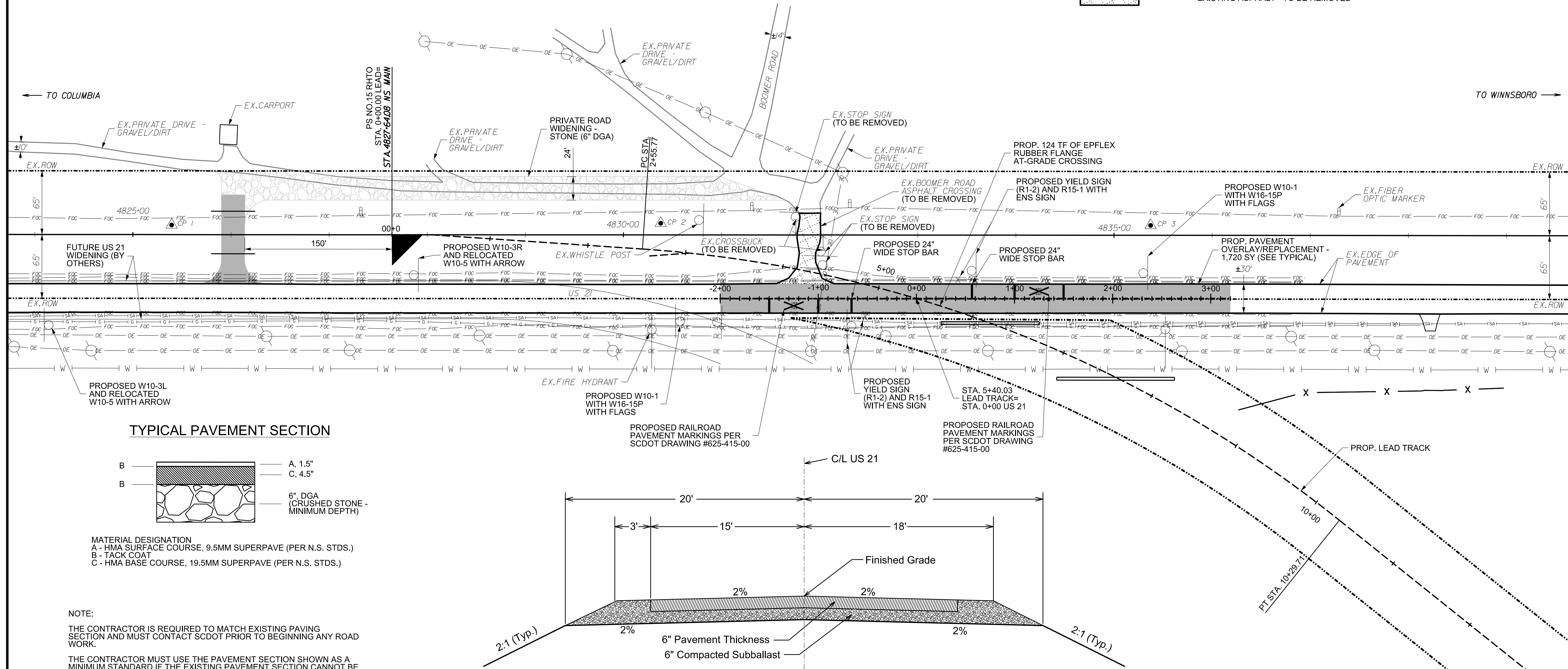
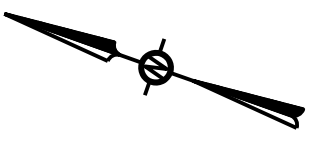
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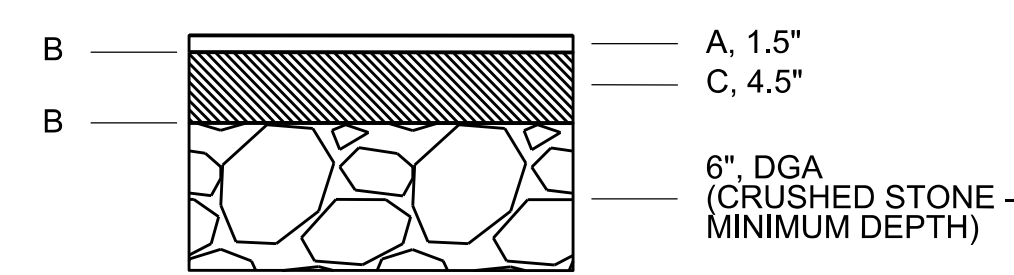
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| REV. BY: | DATE: | DESCRIPTION: |
| EVU | | |
| PROJECT: BLYTHEWOOD, SC | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT RELOCATED BOOMER ROAD CROSSING PLAN AND PROFILE | | |
| DWN: | FILE NO.: | DATE: |
| EVU | TRK1115024 | MARCH 5, 2024 |
| CHK: | DATE: | DATE: |
| | | |

LEGEND:

-  EXISTING EDGE OF PAVEMENT
-  EXISTING EDGE OF DIRT/GRAVEL DRIVE
-  EXISTING NSR RIGHT-OF-WAY
-  EXISTING NS MAINLINE
-  PROPOSED ROAD CENTERLINE
-  PROPOSED STORM DRAINAGE
-  PROPOSED STONE DRIVE
-  PROPOSED ASPHALT
-  EXISTING ASPHALT - TO BE REMOVED

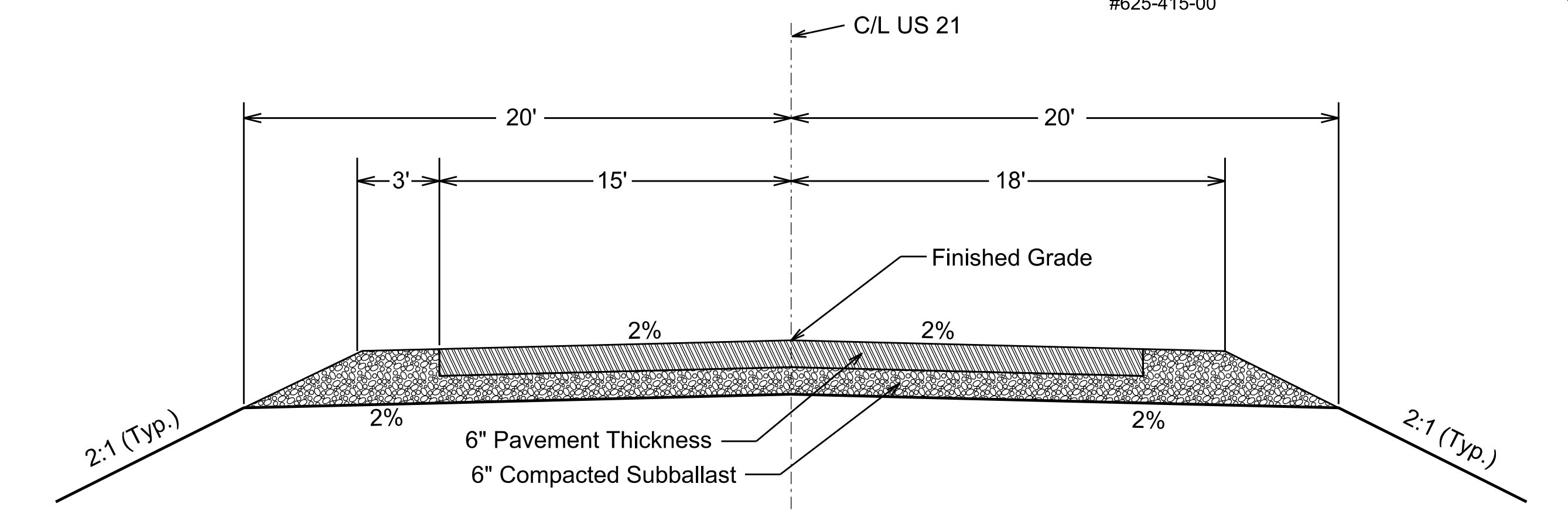


TYPICAL PAVEMENT SECTION



MATERIAL DESIGNATION
 A - HMA SURFACE COURSE, 9.5MM SUPERPAVE (PER N.S. STDS.)
 B - TACK COAT
 C - HMA BASE COURSE, 19.5MM SUPERPAVE (PER N.S. STDS.)

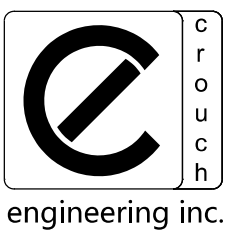
NOTE:
 THE CONTRACTOR IS REQUIRED TO MATCH EXISTING PAVING SECTION AND MUST CONTACT SCDOT PRIOR TO BEGINNING ANY ROAD WORK.
 THE CONTRACTOR MUST USE THE PAVEMENT SECTION SHOWN AS A MINIMUM STANDARD IF THE EXISTING PAVEMENT SECTION CANNOT BE DETERMINED.
 CONTRACTOR TO MATCH EXISTING PAVEMENT MARKINGS AFTER FINAL PAVING IS COMPLETED.
 HOT MIX ASPHALT WILL BE FULL DEPTH IN GRADE CROSSINGS (APPROXIMATELY 7' BOTH SIDES OF PROPOSED TRACK), PLACED IN THREE (3) SEPARATE LIFTS, EACH LIFT COMPACTED SEPARATELY.
 APPLY TACK COAT PRIOR TO PLACING HOT MIX ASPHALT OVER EXISTING PAVEMENT AND IN BETWEEN EACH LIFT OF ASPHALT.
 THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING TEMPORARY TRAFFIC CONTROL PLANS, AND MUST OBTAIN PROPER APPROVAL FROM SCDOT AHEAD OF ANY TEMPORARY CLOSURES. SEE SUPPLEMENTAL TEMPORARY TRAFFIC CONTROL PLANS FOR DETAILS.



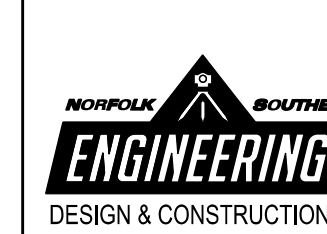
PROPOSED US 21 TYPICAL SECTION

PHASE 1
PHASE 2

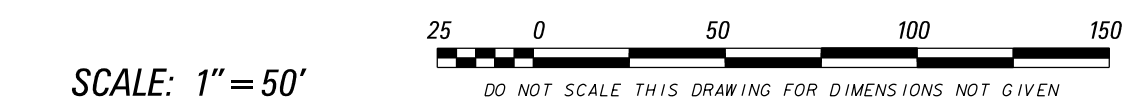
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| PROJECT NO. 23050 |
| DATE: |
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| REVISIONS: |



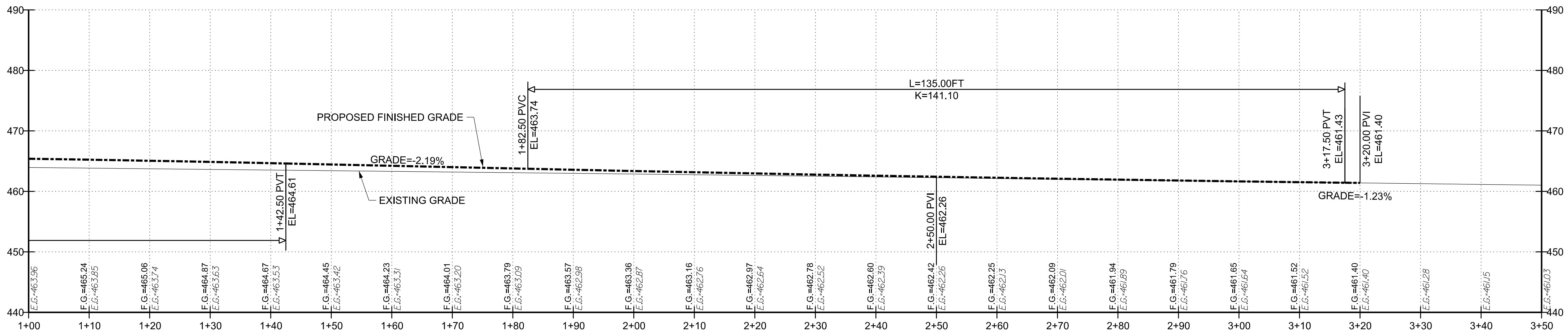
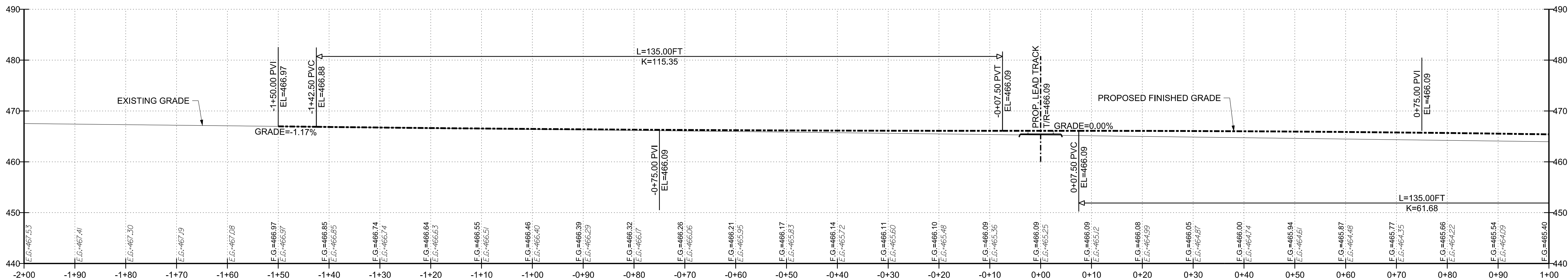
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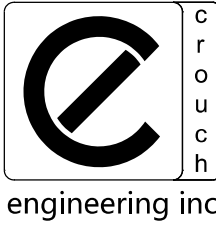


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| REV. BY: | DATE: | DESCRIPTION: |
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| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT US 21 TEMPORARY CROSSING PLAN | | |
| DWN | FILE NO. TRK1115024 | DRAWING NUMBER |
| CHK | DATE: MARCH 5, 2024 | TD-2023-105 |

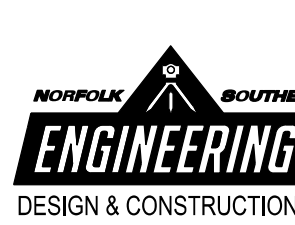


PHASE 2

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| DATE: | |
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| CHECKED BY: | |
| REVISIONS: | |

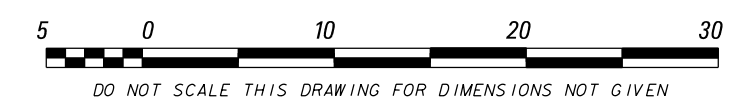


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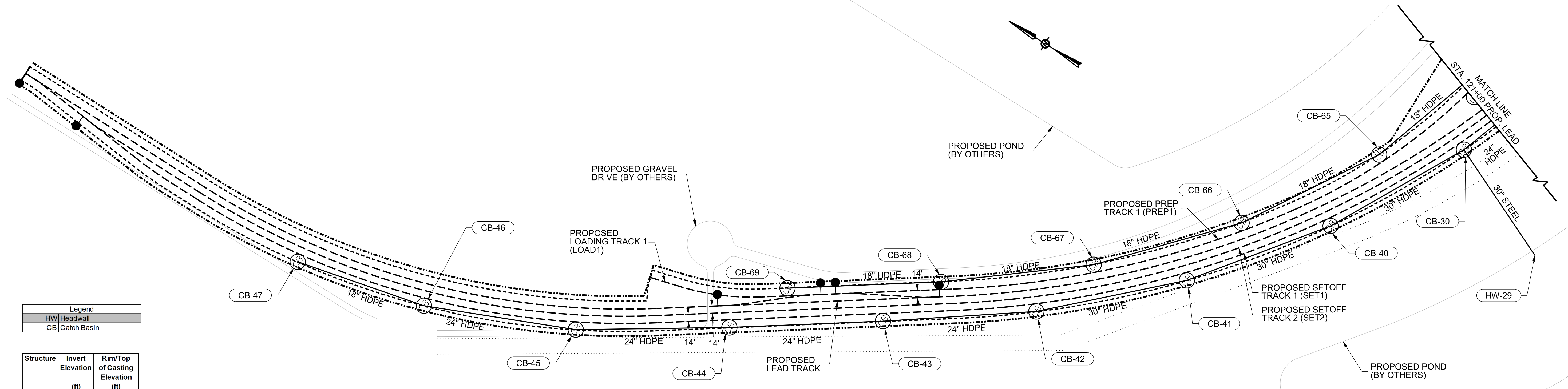


NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY

SCALE: 1" = 10'



| | | |
|-----------|--|----------------------------|
| REV. BY: | DATE: | DESCRIPTION: |
| LOCATION: | BLYTHEWOOD, SC | |
| TITLE: | PROPOSED TRACKS TO SERVE PROJECT SCOUT PROPOSED US 21 PROFILE | |
| DWN. EVU: | FILE NO. D3327 | VRN 04825 |
| CHK: | DATE MARCH 5, 2024 | DRAWING NUMBER TD-2023-105 |



Legend

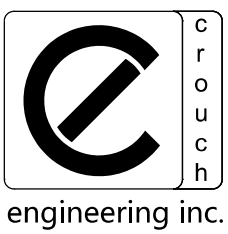
| | |
|----|-------------|
| HW | Headwall |
| CB | Catch Basin |

| Structure | Invert Elevation (ft) | Rim/Top of Casting Elevation (ft) |
|-----------|-----------------------|-----------------------------------|
| HW-01 | 439.00 | 483.37 |
| CB-02 | 447.25 | 483.37 |
| CB-03 | 480.15 | 483.85 |
| CB-04 | 475.37 | 483.37 |
| CB-05 | 476.27 | 483.37 |
| CB-06 | 477.17 | 483.37 |
| CB-07 | 478.07 | 483.37 |
| CB-08 | 478.97 | 483.37 |
| CB-09 | 479.87 | 483.37 |
| CB-10 | 474.24 | 483.32 |
| CB-11 | 474.82 | 483.04 |
| CB-12 | 475.72 | 482.89 |
| CB-13 | 476.62 | 483.16 |
| CB-14 | 477.52 | 483.24 |
| CB-15 | 478.42 | 482.82 |
| CB-16 | 479.32 | 482.82 |
| HW-17 | 464.00 | 482.82 |
| CB-18 | 472.96 | 482.82 |
| CB-19 | 478.42 | 482.82 |
| CB-20 | 479.32 | 482.82 |
| CB-21 | 473.86 | 482.82 |
| CB-22 | 474.76 | 482.82 |
| CB-23 | 475.66 | 482.82 |
| CB-24 | 476.56 | 483.18 |
| CB-25 | 477.46 | 483.20 |
| CB-26 | 478.36 | 483.49 |
| CB-27 | 479.26 | 483.66 |
| CB-28 | 480.16 | 483.66 |
| HW-29 | 427.00 | 483.37 |
| CB-30 | 439.43 | 483.37 |
| CB-31 | 472.67 | 483.37 |
| CB-32 | 473.57 | 483.37 |
| CB-33 | 474.47 | 483.37 |
| CB-34 | 475.37 | 483.37 |
| CB-35 | 476.27 | 483.37 |
| CB-36 | 477.17 | 483.37 |
| CB-37 | 478.07 | 483.37 |
| CB-38 | 478.97 | 483.37 |
| CB-39 | 479.87 | 483.37 |
| CB-40 | 473.89 | 483.37 |
| CB-41 | 474.59 | 483.37 |
| CB-42 | 475.49 | 483.37 |
| CB-43 | 476.39 | 483.37 |
| CB-44 | 477.29 | 483.37 |
| CB-45 | 478.19 | 483.37 |
| CB-46 | 479.09 | 483.37 |
| CB-47 | 479.97 | 483.37 |
| HW-48 | 458.00 | 483.37 |
| CB-49 | 470.55 | 483.52 |
| CB-50 | 476.91 | 483.52 |
| CB-51 | 477.66 | 483.37 |
| CB-52 | 478.56 | 483.16 |
| CB-53 | 479.46 | 482.96 |
| CB-54 | 472.12 | 483.28 |
| CB-55 | 473.02 | 483.04 |
| CB-56 | 473.92 | 483.24 |
| CB-57 | 474.82 | 482.82 |
| CB-58 | 475.72 | 482.82 |
| CB-59 | 476.62 | 482.82 |
| CB-60 | 477.52 | 482.82 |
| CB-61 | 478.42 | 482.82 |
| CB-62 | 479.32 | 482.82 |
| CB-63 | 480.00 | 483.50 |
| CB-64 | 471.30 | 483.52 |
| CB-65 | 472.05 | 483.50 |
| CB-66 | 472.95 | 483.50 |
| CB-67 | 473.85 | 483.50 |
| CB-68 | 474.75 | 483.50 |
| CB-69 | 475.65 | 483.50 |

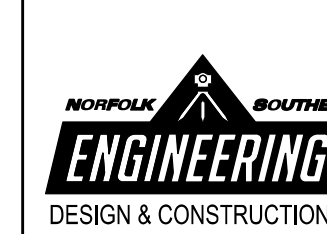
| From (Inlet) | To (Outlet) | Length (ft) | Inlet Invert Elevation (ft) | Outlet Invert Elevation (ft) | Slope (%) | Pipe Shape | Pipe Diameter (inches) | Pipe Material |
|--------------|-------------|-------------|-----------------------------|------------------------------|-----------|------------|------------------------|---------------|
| CB-02 | HW-01 | 165.00 | 447.25 | 439.00 | 5.00 | CIRCULAR | 36 | STEEL |
| CB-03 | CB-02 | 300.00 | 480.15 | 479.25 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-04 | CB-02 | 300.00 | 475.37 | 474.47 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-05 | CB-04 | 300.00 | 476.27 | 475.37 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-06 | CB-05 | 300.00 | 477.17 | 476.27 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-07 | CB-06 | 300.00 | 478.07 | 477.17 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-08 | CB-07 | 300.00 | 478.97 | 478.07 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-09 | CB-08 | 300.00 | 479.87 | 478.97 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-10 | CB-02 | 89.30 | 474.24 | 473.97 | 0.30 | CIRCULAR | 36 | HDPE |
| CB-11 | CB-10 | 192.10 | 474.82 | 474.24 | 0.30 | CIRCULAR | 36 | HDPE |
| CB-12 | CB-11 | 300.00 | 475.72 | 474.82 | 0.30 | CIRCULAR | 36 | HDPE |
| CB-13 | CB-12 | 300.00 | 476.62 | 475.72 | 0.30 | CIRCULAR | 30 | HDPE |
| CB-14 | CB-13 | 300.00 | 477.52 | 476.62 | 0.30 | CIRCULAR | 30 | HDPE |
| CB-15 | CB-14 | 300.00 | 478.42 | 477.52 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-16 | CB-15 | 300.00 | 479.32 | 478.42 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-18 | HW-17 | 197.00 | 472.96 | 464.00 | 4.55 | CIRCULAR | 30 | HDPE |
| CB-19 | CB-18 | 300.00 | 478.42 | 477.52 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-20 | CB-19 | 300.00 | 479.32 | 478.42 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-21 | CB-18 | 300.00 | 473.86 | 472.96 | 0.30 | CIRCULAR | 30 | HDPE |
| CB-22 | CB-21 | 300.00 | 474.76 | 473.86 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-23 | CB-22 | 300.00 | 475.66 | 474.76 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-24 | CB-23 | 300.00 | 476.56 | 475.66 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-25 | CB-24 | 300.00 | 477.46 | 476.56 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-26 | CB-25 | 300.00 | 478.36 | 477.46 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-27 | CB-26 | 300.00 | 479.26 | 478.36 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-28 | CB-27 | 300.00 | 480.16 | 479.26 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-30 | HW-29 | 248.60 | 439.43 | 427.00 | 5.00 | CIRCULAR | 30 | STEEL |
| CB-31 | CB-30 | 300.00 | 472.67 | 471.77 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-32 | CB-31 | 300.00 | 473.57 | 472.67 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-33 | CB-32 | 300.00 | 474.47 | 473.57 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-34 | CB-33 | 300.00 | 475.37 | 474.47 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-35 | CB-34 | 300.00 | 476.27 | 475.37 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-36 | CB-35 | 300.00 | 477.17 | 476.27 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-37 | CB-36 | 300.00 | 478.07 | 477.17 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-38 | CB-37 | 300.00 | 478.97 | 478.07 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-39 | CB-38 | 300.00 | 479.87 | 478.97 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-40 | CB-30 | 300.00 | 473.89 | 472.70 | 0.30 | CIRCULAR | 30 | HDPE |
| CB-41 | CB-40 | 300.00 | 474.59 | 473.69 | 0.30 | CIRCULAR | 30 | HDPE |
| CB-42 | CB-41 | 300.00 | 475.49 | 474.59 | 0.30 | CIRCULAR | 30 | HDPE |
| CB-43 | CB-42 | 300.00 | 476.39 | 475.49 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-44 | CB-43 | 300.00 | 477.29 | 476.39 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-45 | CB-44 | 300.00 | 478.19 | 477.29 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-46 | CB-45 | 300.00 | 479.09 | 478.19 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-47 | CB-46 | 260.81 | 479.87 | 479.09 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-49 | HW-48 | 228.40 | 470.55 | 459.13 | 5.00 | CIRCULAR | 48 | HDPE |
| CB-50 | CB-49 | 300.00 | 476.91 | 476.01 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-51 | CB-50 | 250.00 | 477.66 | 476.91 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-52 | CB-51 | 300.00 | 478.56 | 477.66 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-53 | CB-52 | 300.00 | 479.46 | 478.56 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-54 | CB-49 | 52.70 | 472.12 | 471.96 | 0.30 | CIRCULAR | 48 | HDPE |
| CB-55 | CB-54 | 300.00 | 473.02 | 472.12 | 0.30 | CIRCULAR | 48 | HDPE |
| CB-56 | CB-55 | 300.00 | 473.92 | 473.02 | 0.30 | CIRCULAR | 36 | HDPE |
| CB-57 | CB-56 | 300.00 | 474.82 | 473.92 | 0.30 | CIRCULAR | 36 | HDPE |
| CB-58 | CB-57 | 300.00 | 475.72 | 474.82 | 0.30 | CIRCULAR | 36 | HDPE |
| CB-59 | CB-58 | 300.00 | 476.62 | 475.72 | 0.30 | CIRCULAR | 30 | HDPE |
| CB-60 | CB-59 | 300.00 | 477.52 | 476.62 | 0.30 | CIRCULAR | 30 | HDPE |
| CB-61 | CB-60 | 300.00 | 478.42 | 477.52 | 0.30 | CIRCULAR | 24 | HDPE |
| CB-62 | CB-61 | 300.00 | 479.32 | 478.42 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-63 | CB-54 | 300.00 | 480.00 | 479.10 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-64 | CB-49 | 250.00 | 471.30 | 470.55 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-65 | CB-64 | 250.00 | 472.05 | 471.30 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-66 | CB-65 | 300.00 | 472.95 | 472.05 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-67 | CB-66 | 300.00 | 473.85 | 472.95 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-68 | CB-67 | 300.00 | 474.75 | 473.85 | 0.30 | CIRCULAR | 18 | HDPE |
| CB-69 | CB-68 | 300.00 | 475.65 | 474.75 | 0.30 | CIRCULAR | 18 | HDPE |

PHASE 2

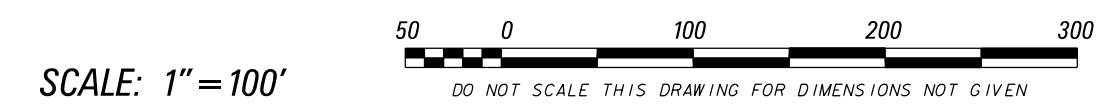
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DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

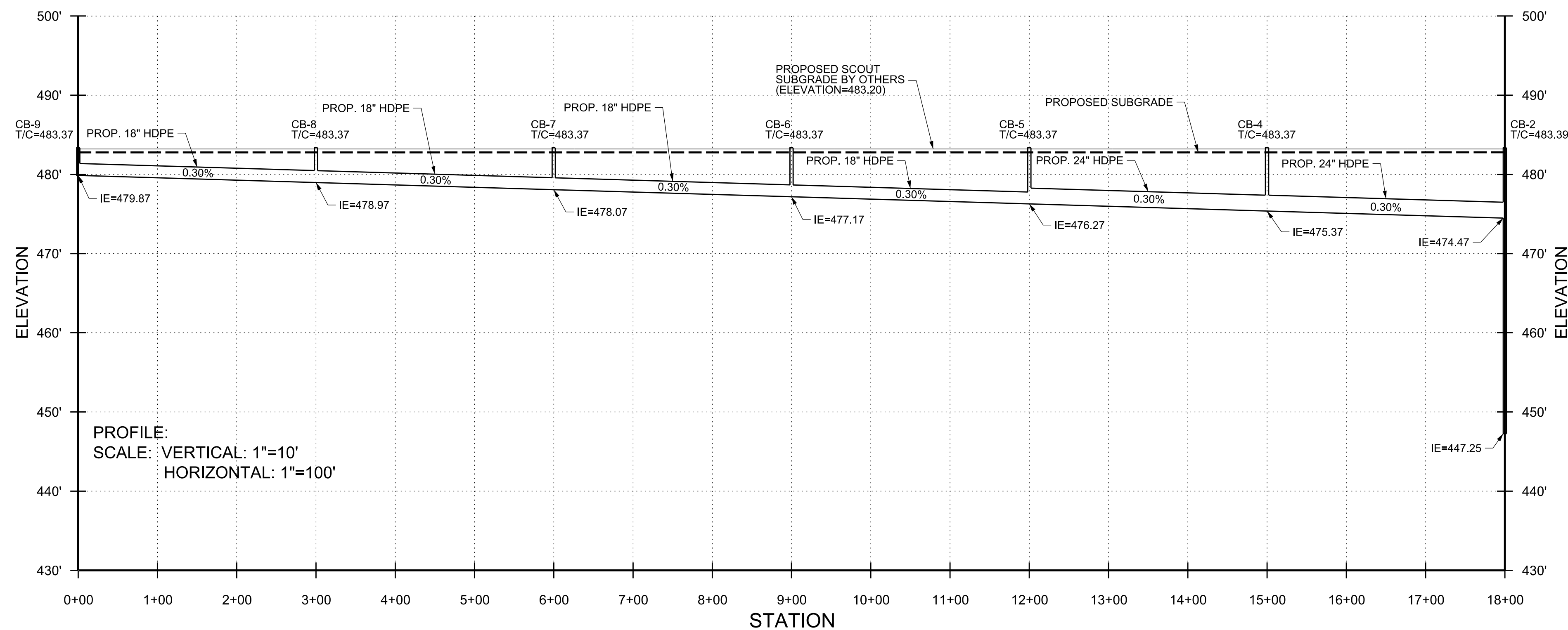


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NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

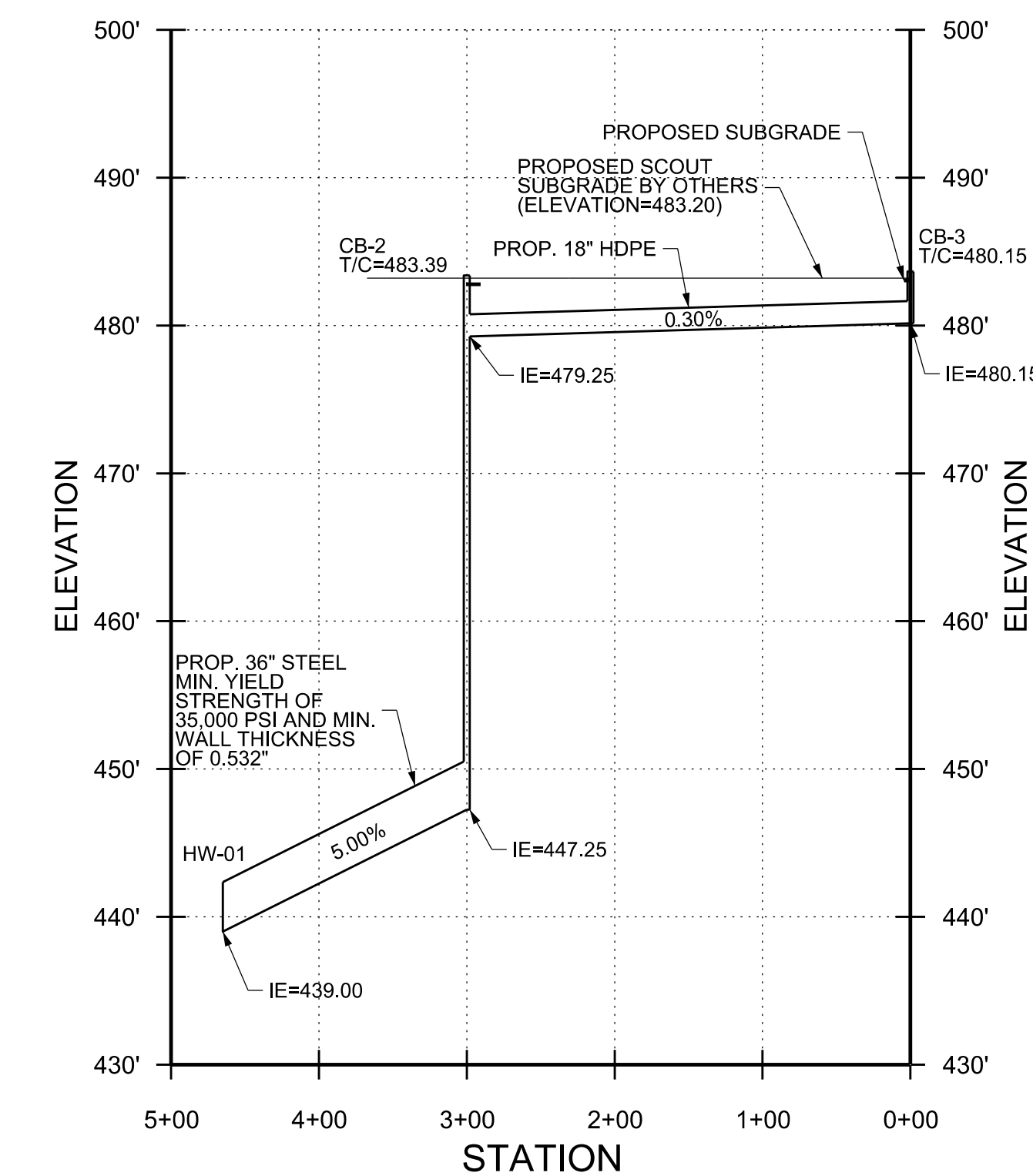


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| DWN | FILE NO. TRK115024 | DATE: MARCH 5, 2024 |
| CHK | DATE: MARCH 5, 2024 | TD-2023-105 |

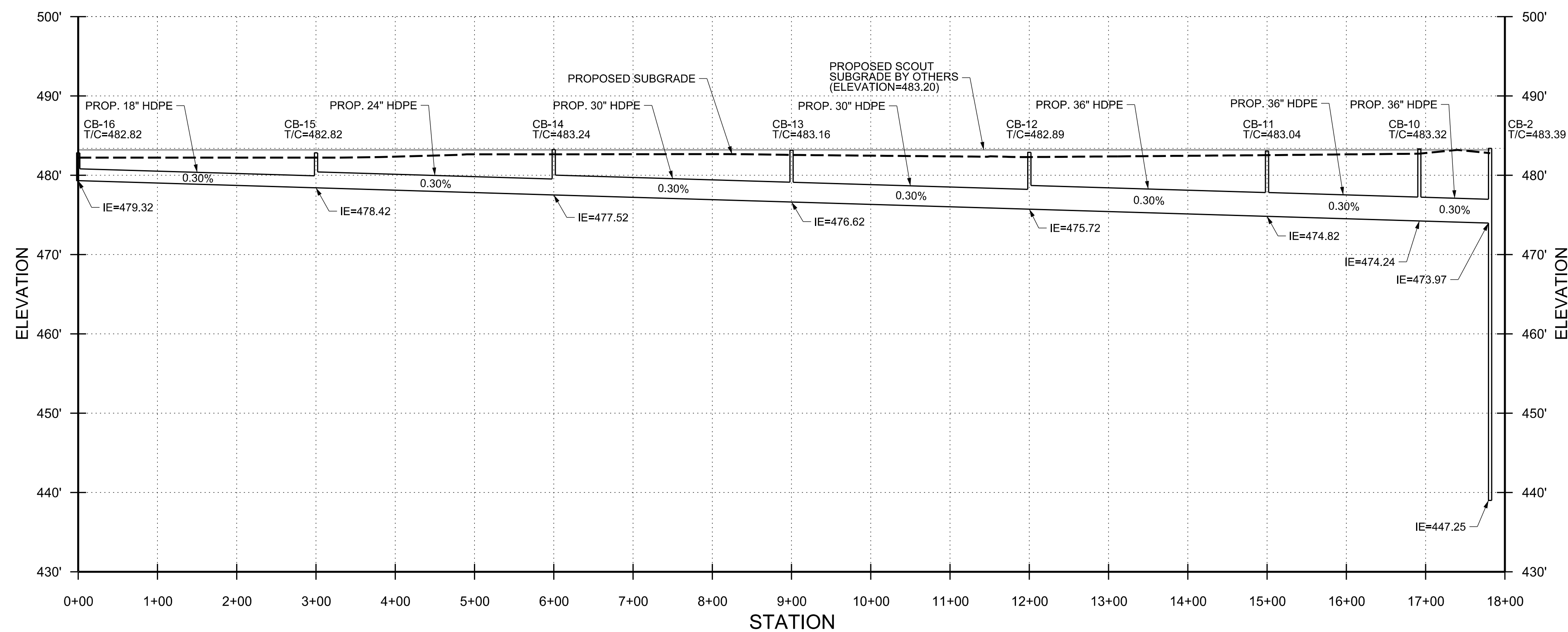
CB-9 to CB-2



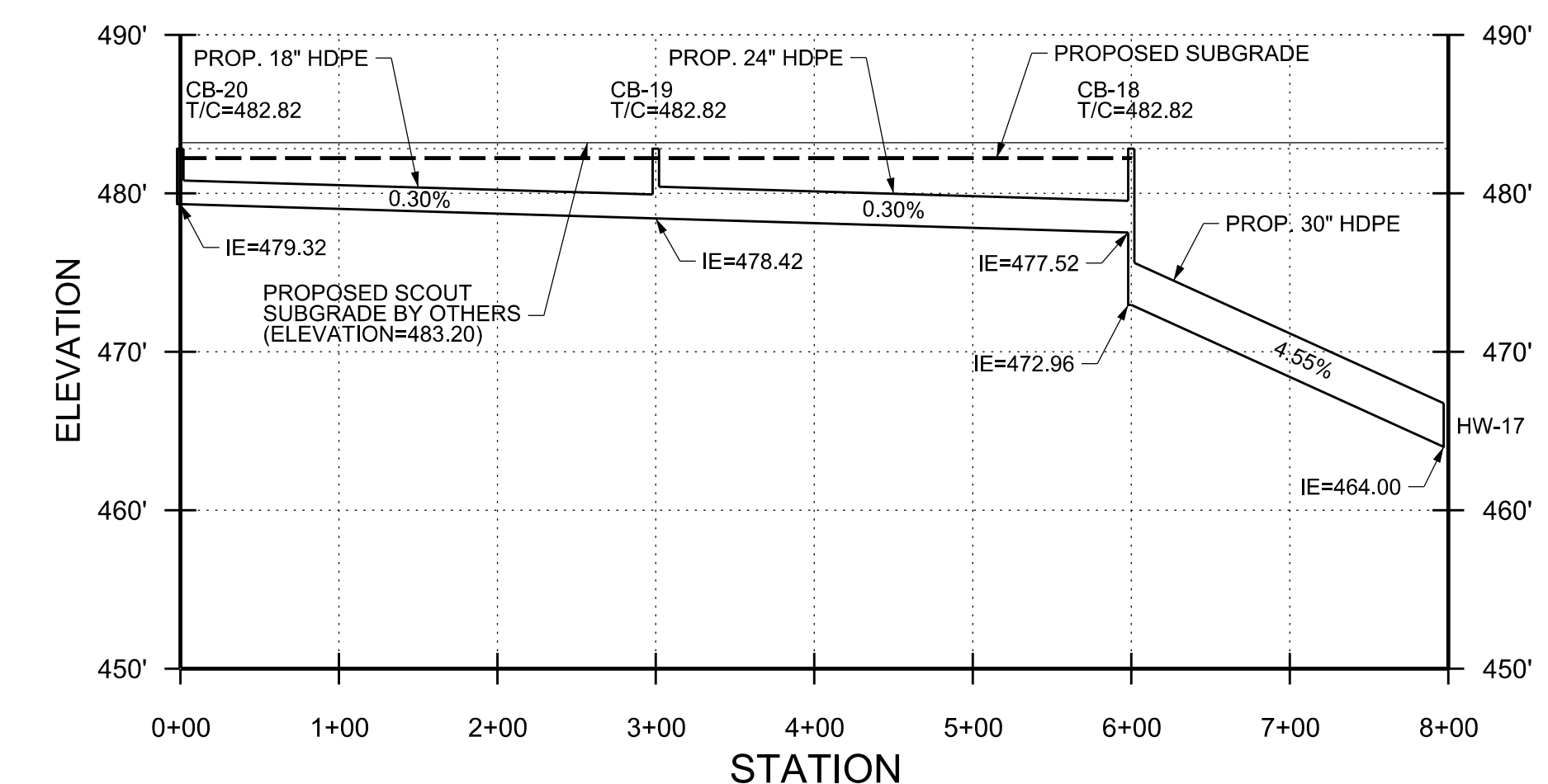
CB-03 to HW-01



CB-16 to CB-2

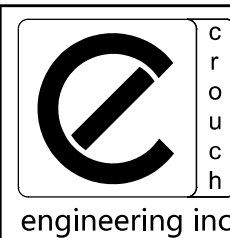


CB-20 to HW-17

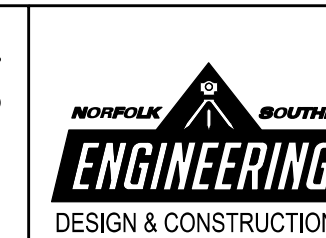


PHASE 2

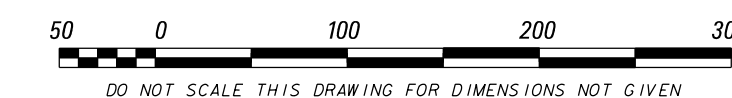
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DRAWN BY: EVU
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CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



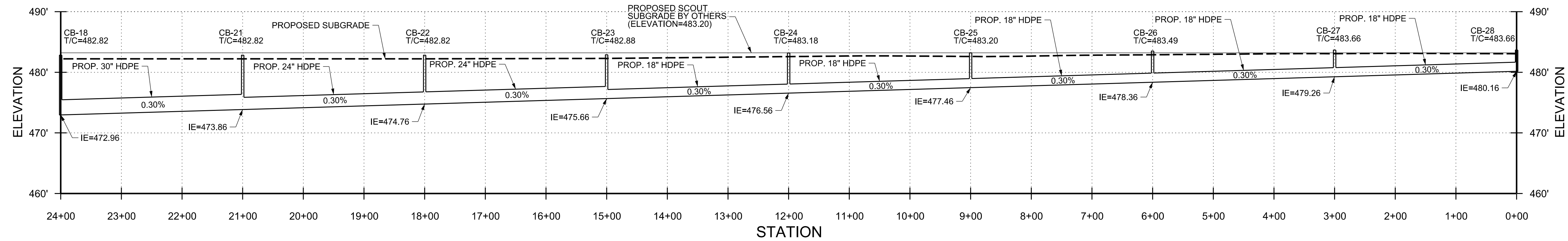
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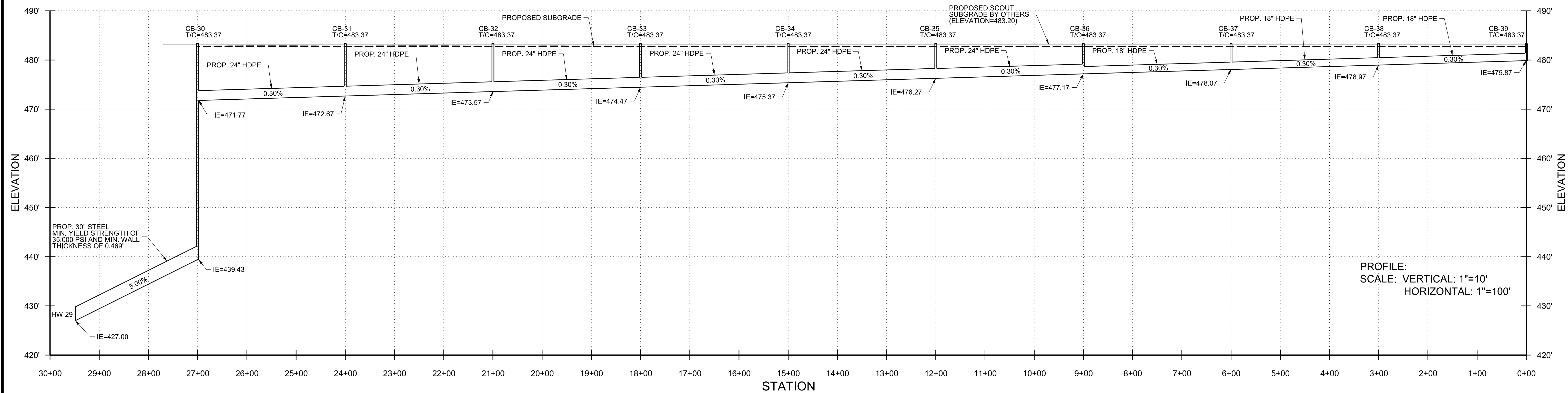
NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | |
|----------|--|----------------|
| REV. BY | DATE | DESCRIPTION |
| LOCATION | | BLYTHEWOOD, SC |
| TITLE | PROPOSED TRACKS TO SERVE PROJECT SCOUT STORM DRAINAGE PROFILES | |
| DWN. EVU | FILE NO. D3327 | VRN 04825 |
| CHK | FILE NO. TRK115024 | DRAWING NUMBER |
| | DATE MARCH 5, 2024 | TD-2023-105 |

CB-28 to CB-18



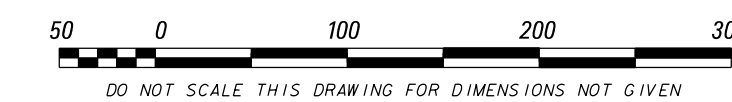
CB-39 to HW-29



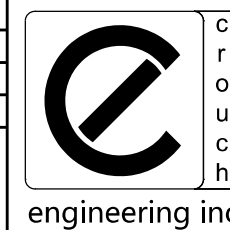
PROP. 30" STEEL
MIN. YIELD STRENGTH OF
33,000 PSI AND MIN. WALL
THICKNESS OF 0.469"

PROFILE:
SCALE: VERTICAL: 1"=10'
HORIZONTAL: 1"=100'

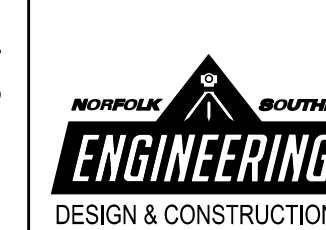
SCALE: 1" = 100'



PROJECT NO: 23050
DATE:
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CHECKED BY:
REVISIONS:



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PHONE NO. (615) 791-0630



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NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

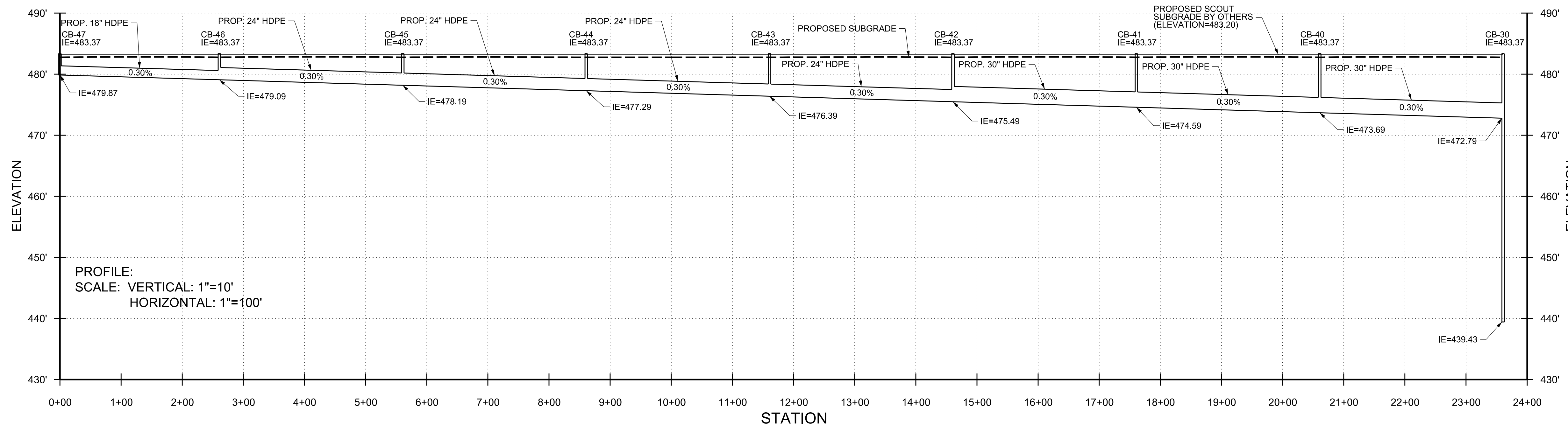
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LOCATION: BLYTHEWOOD, SC
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT STORM DRAINAGE PROFILES

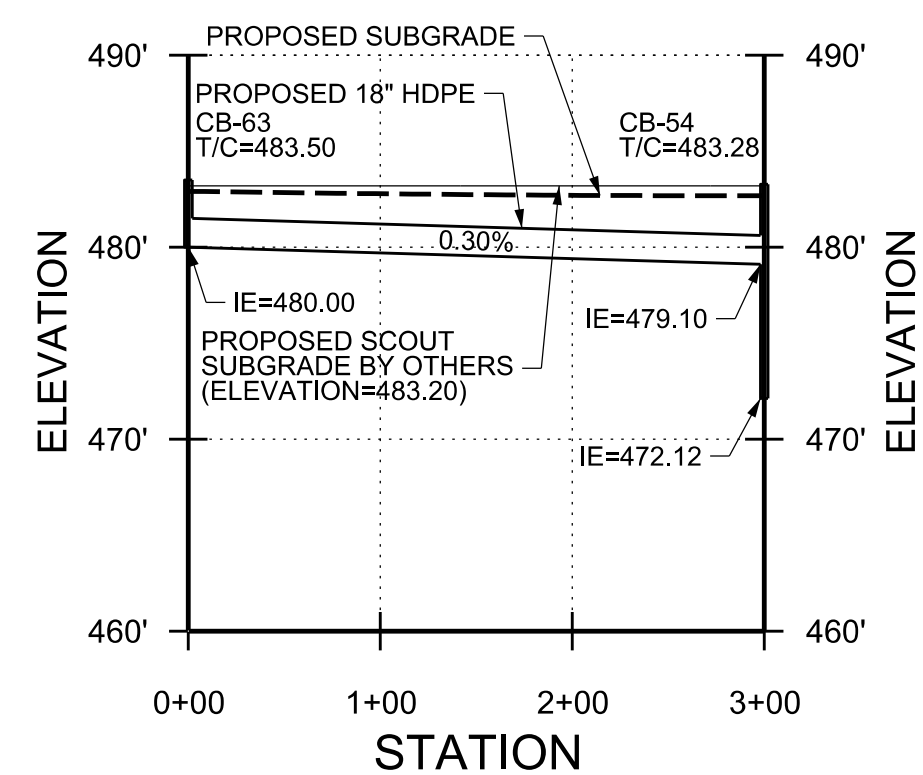
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| | | DATE | MARCH 5, 2024 | | | |

PHASE 2

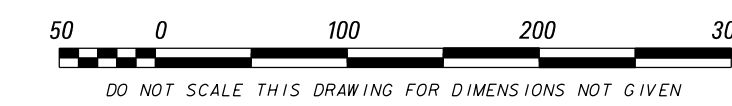
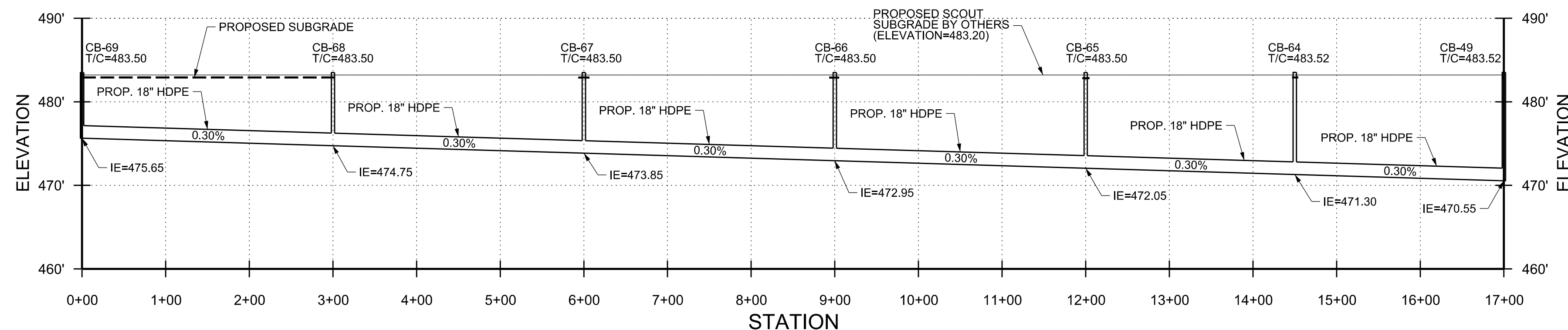
CB-47 to CB-30



CB-63 to CB-54

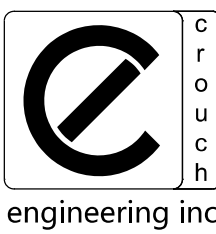


CB-69 to CB-49

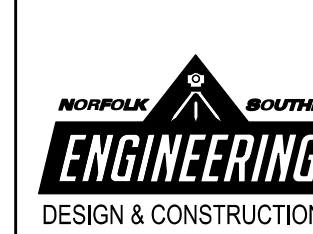


SCALE: 1" = 100'

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
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REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
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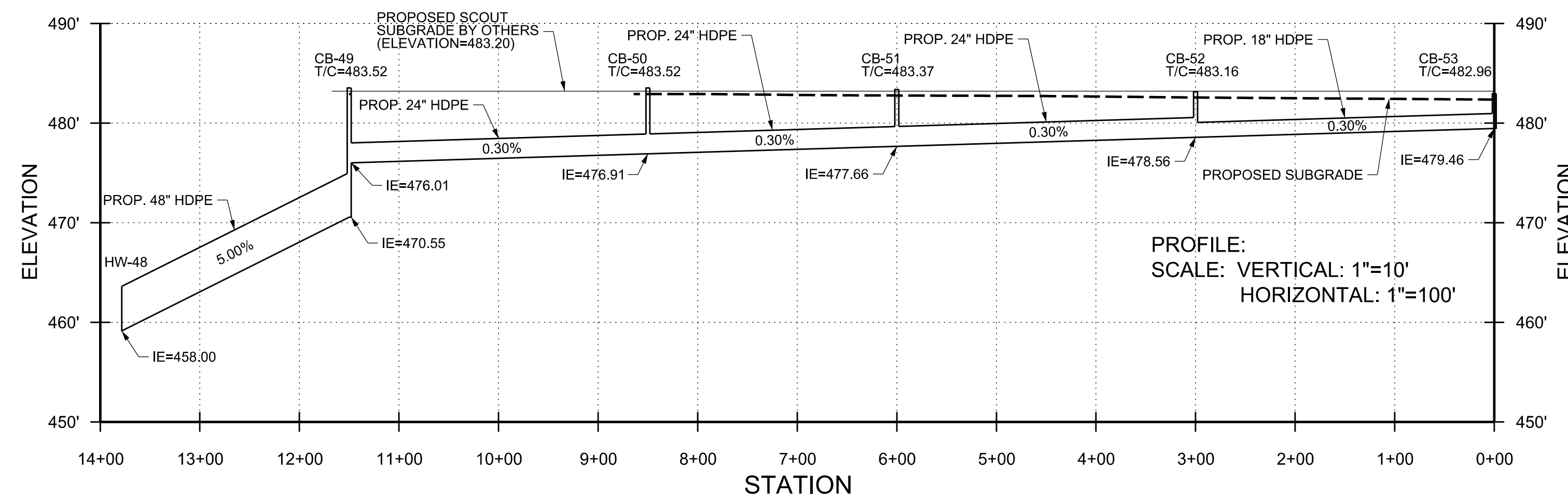


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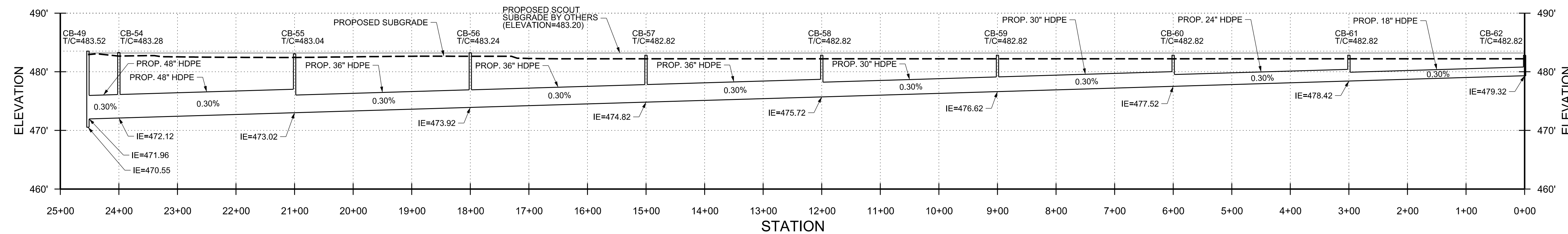
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| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT STORM DRAINAGE PROFILES | | | |
| DWN | EVU | PLOT NO.: D3327 | VRN: 04825 |
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PHASE 2

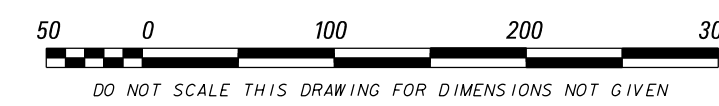
CB-53 to HW-48



CB-62 to CB-49



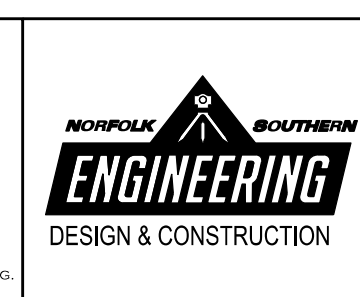
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PHASE 2

PROJECT NO: 23050
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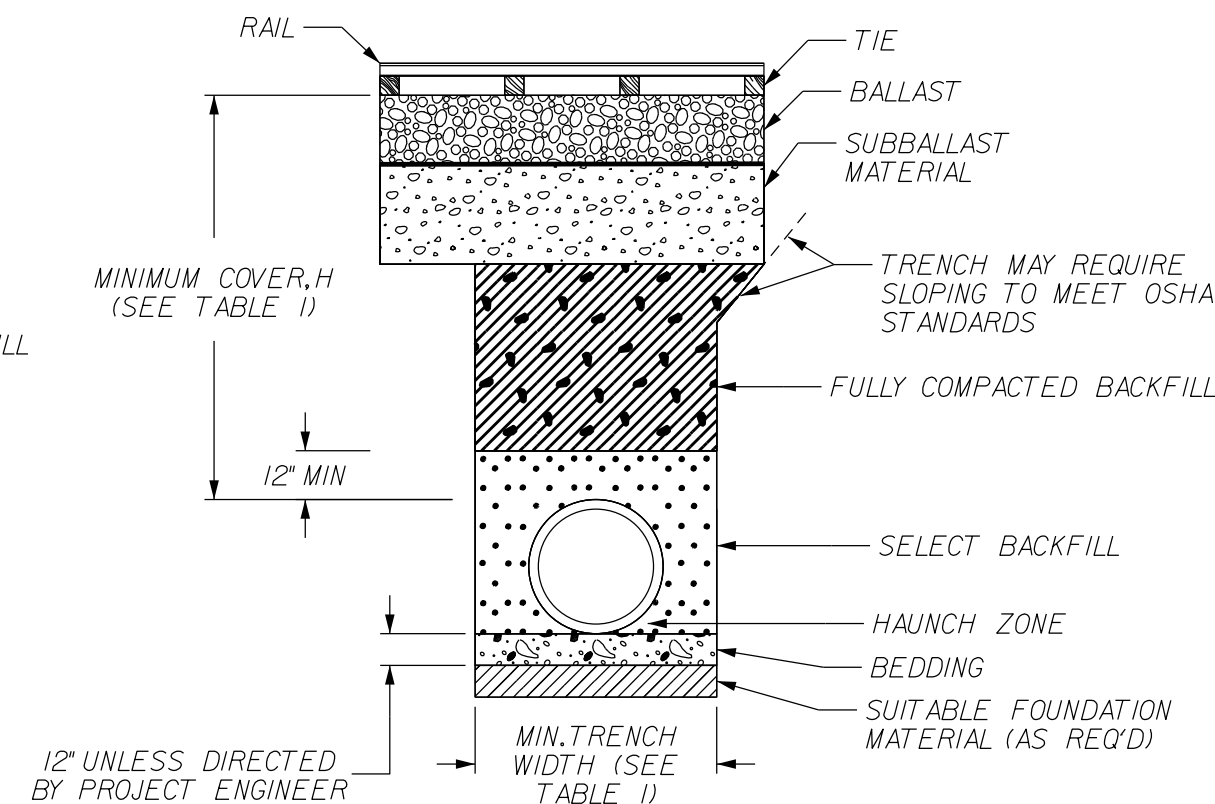
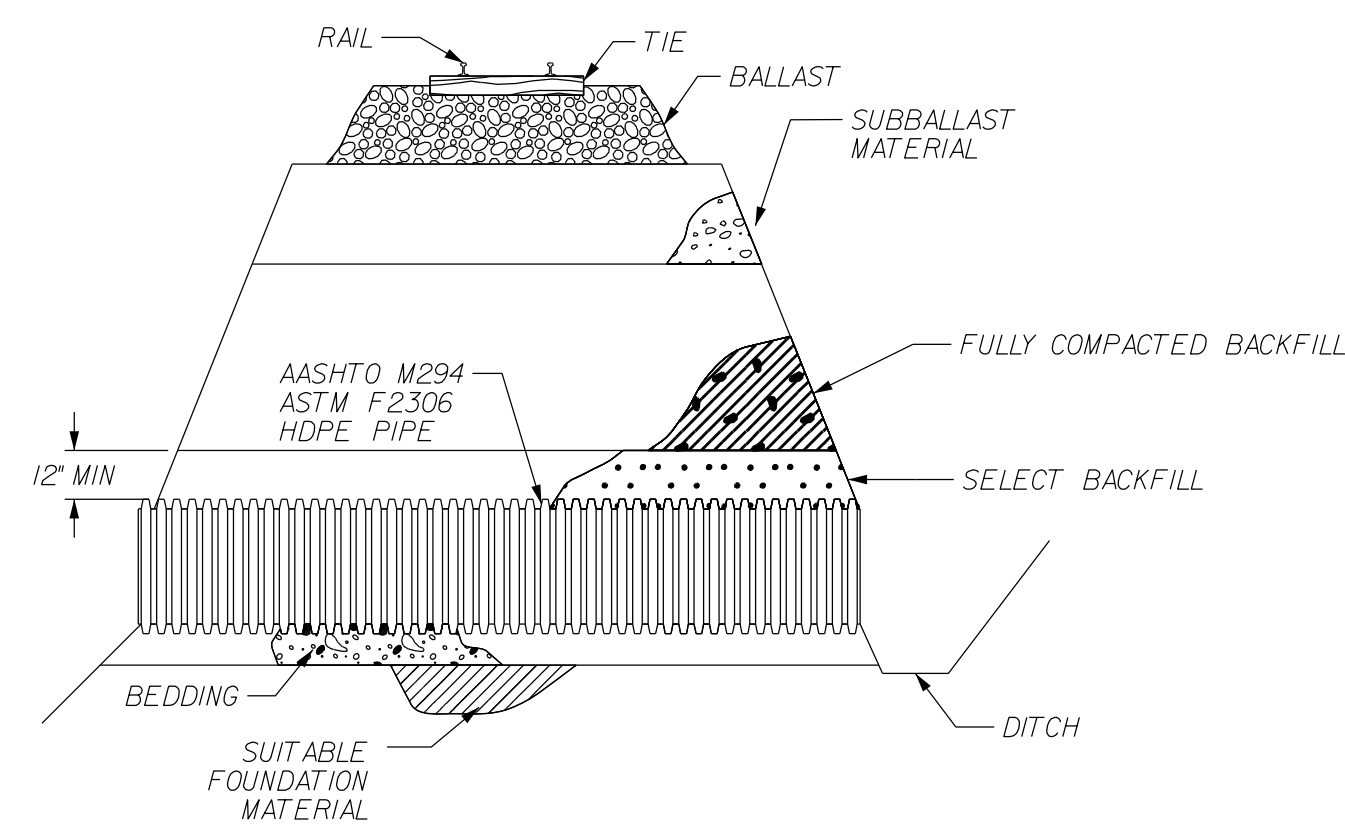
CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



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| | | | |
|---|-----|---------------------|----------------|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT STORM DRAINAGE PROFILES | | | |
| DWN | EVU | PTD NO: D3327 | VRN |
| DWN | EVU | FILE NO: TRK115024 | DRAWING NUMBER |
| CHK | | DATE: MARCH 5, 2024 | TD-2023-105 |

UNDER PROPOSED TRACK



LEGEND

- BALLAST
- SUBBALLAST
- BACKFILL
- SELECT BACKFILL
- BEDDING
- FOUNDATION

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO OPEN GRADED MATERIAL.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE UNSUITABLE MATERIAL TO THE REQUIRED DEPTH AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE DESIGN ENGINEER. DEPTH OF FOUNDATION IMPROVEMENT MAY BE REDUCED BY USE OF GEOTEXTILE FABRIC AND GRID. REQUIRED TRENCH WIDTH MAY INCREASE WHEN FOUNDATION MATERIALS ARE MODIFIED.
4. BEDDING: BEDDING MATERIAL SHALL CONFORM TO CATEGORY B DENSE GRADED AGGREGATE IN ACCORDANCE WITH SECTION GA - GRADED AGGREGATE OF THE NS STANDARD SPECIFICATIONS UNLESS STATED OTHERWISE BY THE DESIGN ENGINEER OR PLANS. MINIMUM BEDDING THICKNESS SHALL NOT BE LESS THAN 12 INCHES. THE MIDDLE THIRD OF THE BEDDING SHALL BE LOOSE AND UNIFORM IN DEPTH AND CONSISTENCY. AFTER PIPE IS IN PLACE, COMPACT BEDDING TO SELECT BACKFILL STANDARDS. BEDDING SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 95 PERCENT IN ACCORDANCE WITH AASHTO T 99.
5. SELECT BACKFILL: SELECT BACKFILL MATERIAL SHALL CONFORM TO CATEGORY B DENSE GRADED AGGREGATE IN ACCORDANCE WITH SECTION GA - GRADED AGGREGATE OF THE NS STANDARD SPECIFICATIONS UNLESS STATED OTHERWISE BY THE DESIGN ENGINEER OR PLANS. MINIMUM COMPACTION SHALL BE TO A DENSITY OF NOT LESS THAN 95 PERCENT IN ACCORDANCE WITH AASHTO T 99. BACKFILL MATERIAL SHALL BE PLACED ALONGSIDE THE PIPE IN UNIFORM LAYERS AND COMPACTED. WHEN VIBRATORY COMPACTION EQUIPMENT IS USED IN CONJUNCTION WITH OTHER METHODS OF COMPACTION, THE COMPACTED DEPTH OF A SINGLE LAYER OF BEDDING MATERIAL SHALL NOT EXCEED 6 INCHES (6-9 INCHES LOOSE). WHEN NO VIBRATORY COMPACTION EQUIPMENT IS USED, THE MAXIMUM COMPACTED THICKNESS OF ONE LAYER SHALL NOT EXCEED 3 INCHES (3-6 INCHES LOOSE). IF A HAND TAMPER IS USED, IT SHALL WEIGH NOT LESS THAN 20 POUNDS AND HAVE A TAMPING FACE NOT LESS THAN 6 INCHES X 6 INCHES.
6. THE CONTRACTOR SHOULD PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATIONS TO DESIGN ENGINEER, WHERE BACKFILL VERIFICATION IS NOT PROVIDED OR WHERE BACKFILL MAY BECOME SATURATED AFTER PLACEMENT, ONLY ASTM CLASS I OR II (CLEAN) BEDDING AND BACKFILL SHOULD BE USED.
7. BEDDING MATERIAL SHALL BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE EXTENDING FROM THE BOTTOM OF PIPE UP TO A DISTANCE EQUAL TO 1/3 OF THE PIPE'S DIAMETER UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

TABLE I
RECOMMENDED MINIMUM TRENCH WIDTHS,
MIN. COVER 1.2, 2.4, 5 AND MAX. COVER 1.2, 2.4, 5

| PIPE DIA. | MIN. TRENCH WIDTH | MINIMUM COVER | MAX. COVER CLASS I | MAX. COVER CLASS II |
|-----------|-------------------|---------------|--------------------|---------------------|
| 12" | 30" | 2" | 25" | 20" |
| 15" | 34" | 2" | 25" | 20" |
| 18" | 39" | 2" | 25" | 20" |
| 24" | 48" | 2" | 25" | 20" |
| 30" | 56" | 3" | 25" | 15" |
| 36" | 64" | 3" | 25" | 15" |
| 42" | 72" | 4" | 25" | 15" |
| 48" | 80" | 4" | 25" | 15" |
| 54" | 88" | 4" | 25" | 15" |
| 60" | 96" | 4" | 25" | 15" |

1. COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE.
2. LOADS GREATER THAN E-80 LOAD MAY REQUIRE ADDITIONAL COVER.
3. MINIMUM COVER MAY BE INCREASED TO PREVENT PIPE DAMAGE DUE TO ROUTINE TRACK MAINTENANCE.
4. MANUFACTURER NEEDS TO VERIFY ALLOWABLE FILL HEIGHTS PER DESIGN LOADS.
5. FILL HEIGHT CALCULATIONS DO NOT TAKE IN TO CONSIDERATION GROUND WATER, WHERE GROUND WATER IS ENCOUNTERED HAVE THE MANUFACTURER VERIFY FILL HEIGHTS.

HDPE PIPE TYPICAL TRENCH DETAIL

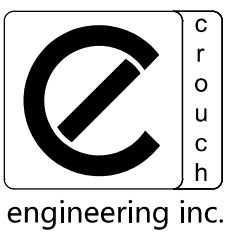
CONCRETE: 4000 PSI AT 28 DAYS REINFORCED WITH NO. 4 BARS 10" C/C EACH WAY WITH WINGS AND TOE SLAB DOWELED TO HEADWALL WITH BENT 16" DEFORMED NO. 5 BARS (EMBEDMENT LENGTH=8")

3/4" CHAMFER ON ALL EXPOSED EDGES.

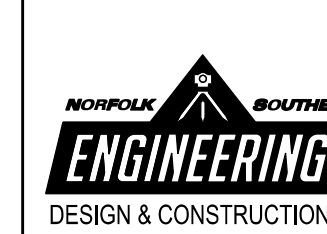
| PIPE SIZES | A | D | E | F | T (MIN) |
|------------|-------|--------|-------|-------|---------|
| 8" | 1'-8" | 3'-0" | 2'-0" | 6" | 6" |
| 18" | 2'-6" | 5'-0" | 2'-6" | 1'-9" | 6" |
| 24" | 4'-0" | 6'-6" | 4'-0" | 3'-3" | 6" |
| 30" | 4'-0" | 6'-6" | 4'-0" | 3'-3" | 6" |
| 36" | 5'-6" | 8'-0" | 5'-0" | 4'-5" | 6" |
| 48" | 5'-6" | 12'-6" | 6'-0" | 4'-5" | 6" |

WINGED HEADWALL
NOT TO SCALE

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



SCALE: NONE

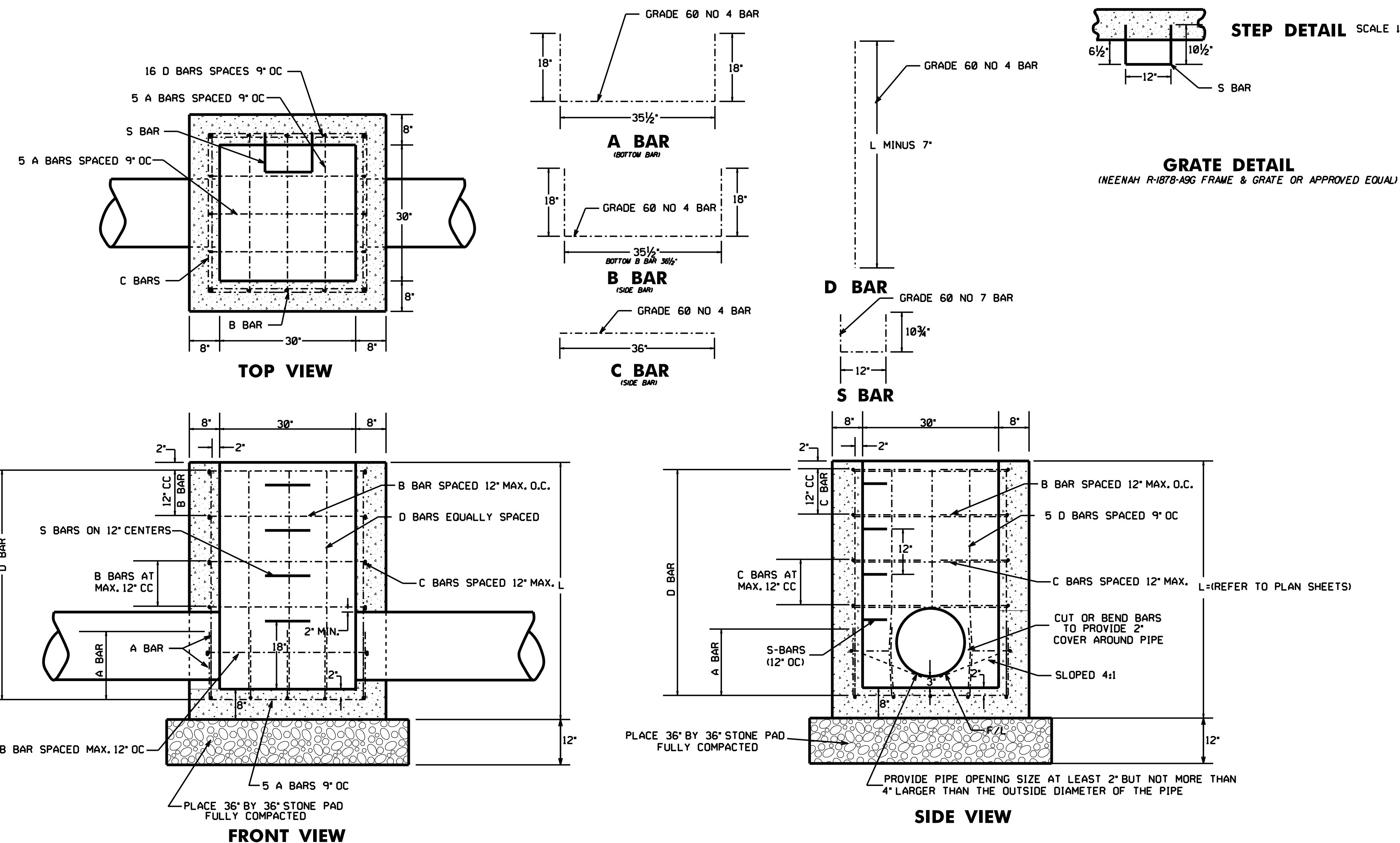


| | | |
|-----------|--|----------------|
| REV. BY: | DATE: | DESCRIPTION: |
| LOCATION: | BLYTHEWOOD, SC | |
| TITLE: | PROPOSED TRACKS TO SERVE PROJECT SCOUT HDPE TRENCH AND HEADWALL DETAILS | |
| DWN EVU | PLO NO: D3327 | VRN 04825 |
| DWN EVU | FILE NO: TRK115024 | DRAWING NUMBER |
| CHK | DATE: MARCH 5, 2024 | TD-2023-105 |

PHASE 2

REPRODUCTION AND DISTRIBUTION ONLY UNDER PERMISSION AND LICENSE BY CROUCH ENGINEERING. FOR PERMISSION CONTACT HARVEY A. CROUCH

MODEL NAME: #MODELNAME# CADD FILE: #FILEL# DATE PRINTED: #DATE# LAST SAVED: #LASTSAVEDDATE#



NOTES: USE 4000 PSI CONCRETE TYPE 1.
 REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
 ALL REINFORCING STEEL WILL HAVE MIN. COVER OF 2".
 GALVANIZING SHALL BE IN ACCORDANCE WITH ASTM A 123 G90.
 CHAMFER ALL EXPOSED EDGES OF CONCRETE 3/4".
 ALL BARS WILL BE LAPPED AT LEAST 18" AT SPLICES.
 THE MINIMUM DIAMETER OF BEND WILL BE 6 TIMES THE BAR DIAMETER.
 REINFORCING STEEL SHALL BE BENT AROUND PIPE OPENING WHEN POSSIBLE.
 IF STEEL IS CUT, A NO 4 DIAGONAL BAR SHALL BE USED TO TIE ALL CUT ENDS TOGETHER.
 GRATES MUST BE DUCTILE IRON.

PHASE 2

| | |
|-------------|-------|
| PROJECT NO: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |

CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630

NORFOLK SOUTHERN ENGINEERING
 DESIGN & CONSTRUCTION

NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

SCALE: NONE

| | | |
|-----------|---|----------------|
| REV. BY: | DATE: | DESCRIPTION: |
| LOCATION: | BLYTHEWOOD, SC | |
| TITLE: | PROPOSED TRACKS TO SERVE PROJECT SCOUT 30"x30" INLET DETAILS | |
| DWN. EVU | PLO. NO. D3327 | VRN. 04825 |
| FILE NO. | TRK1115024 | DRAWING NUMBER |
| DATE | MARCH 5, 2024 | TD-2023-105 |

REFERENCES

NATIONAL DOCUMENTS
 AASHTO M199, AASHTO M55, AASHTO M, ASTM A706

SCDOT DOCUMENTS
 SECTION 718 SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, QUALIFIED PRODUCT LIST 14

RELATED DRAWINGS & KEYWORDS
 719-550-00, 719-425-00

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
 NO. 8858
 N. EDWARD SYLVESTER, E.M.C.E., P.E.

E. Sylvester
 SIGNATURE

MARCH 2, 2009
 DATE

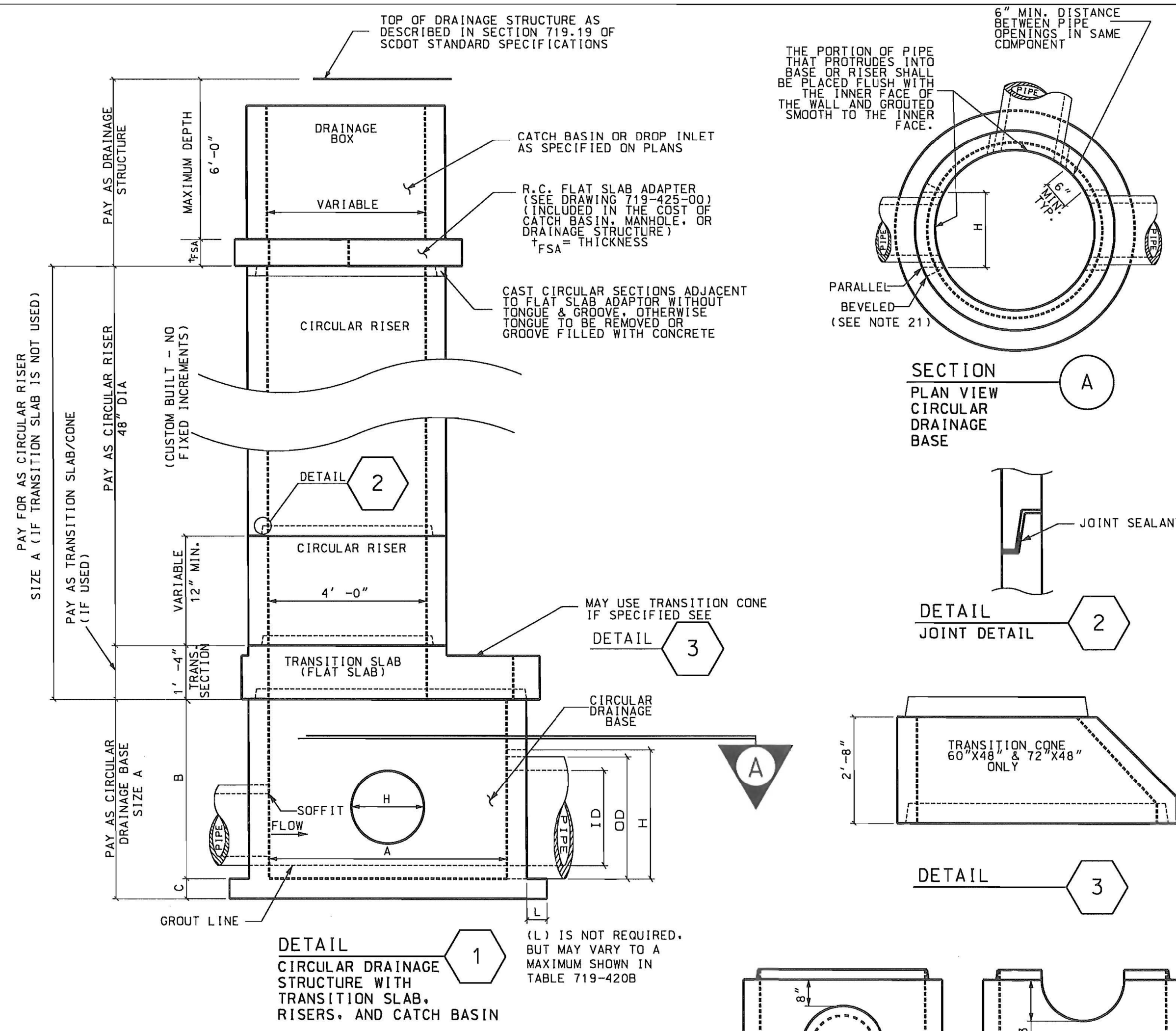
| 6 | | |
|---|--------|-----------------------|
| 5 | | |
| 4 | | |
| 3 | | |
| 2 | | |
| 1 | 3/2009 | KNB REVISED TABLE B |
| 0 | 3/2008 | DSO GENERAL REVISIONS |
| # | DATE | CHK DESCRIPTION |

SCDOT
 SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DESIGN STANDARDS OFFICE
 955 PARK STREET
 ROOM 405
 COLUMBIA, SC 29201

STANDARD DRAWING

DRAINAGE SUBSTRUCTURE CIRCULAR DRAINAGE BASE AND RISER

719-420-00
 EFFECTIVE LETTING DATE MAY, 2009



NOTES:

- ALL MATERIALS, DESIGN, MANUFACTURING, TESTING AND PRODUCT PERFORMANCE FOR PRECAST CONCRETE COMPONENTS AND ACCESSORIES SHALL BE IN ACCORDANCE WITH AASHTO M 199 AND SECTION 719 OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).
- PRECAST CONSTRUCTION SHALL USE A MINIMUM OF CLASS 4000P CONCRETE.
- BASE SECTIONS SHALL HAVE A BOTTOM POURED MONOLITHICALLY WITH THE WALL OR A SCDOT APPROVED WATER-STOP CAST INTO THE BOTTOM FOR THE JOINT TO THE WALL. PIPE MAY EXTEND INTO THE FLOOR TO THE BASE A MAXIMUM OF TWO INCHES.
- TRANSITION SLAB AND CONE SECTIONS SHALL PROVIDE FOR TRANSITION TO NO LESS THAN 48" DIAMETER RISERS OR TOP CONES WITH A JOINT EQUAL TO THAT OF A RISER SECTION. THE MINIMUM SLOPE ANGLE FOR TRANSITION CONE WALLS SHALL BE 45 DEGREES. TRANSITION SLABS AND CONE SECTIONS SHALL BE DESIGNED TO MEET A HS 20 LIVE LOAD.
- JOINTS SHALL BE TONGUE AND GROOVE. JOINT SEALANT SHALL MEET THE REQUIREMENTS OF SUPPLEMENTAL TECHNICAL SPECIFICATION SC-M-714. SIZE AND AMOUNT OF SEALANT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- REINFORCING STEEL SHALL BE ASTM A-706, LOW-ALLOY STEEL DEFORMED BARS FOR CONCRETE REINFORCEMENT, GRADE 60. WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M.
- SEE STANDARD DRAWING 719-550-00 FOR STEPS, WHICH ARE REQUIRED WHEN STRUCTURE DEPTH EXCEEDS 4'. STEPS SHALL BE ALIGNED IN ALL SECTIONS TO FORM A CONTINUOUS LADDER. STEPS SHALL BE ALIGNED WITH OPENING IN TOP OR FLAT SLAB ADAPTER SO AS TO PROVIDE REASONABLE ACCESS.
- LOCATION AND SIZE OF PIPES ARE SITE SPECIFIC. (SEE DRAINAGE PLANS). THE BOTTOM OF THE DRAINAGE BASE IS TO BE GROUTED TO THE LOWEST FLOW LINE ELEVATION OF ALL PIPES.
- AFTER PIPE IS SET INTO THE DRAINAGE STRUCTURE, THE REMAINING OPENING AROUND THE PIPE MUST BE SEALED WITH BRICK AND MORTAR OR CONCRETE FOR THE FULL WALL THICKNESS OF THE STRUCTURE.
- USE TYPE M MORTAR IN ACCORDANCE WITH SECTION 718 OF THE SCDOT STANDARD SPECIFICATION.
- SEE DRAWINGS IN SECTION 719 OF THE STANDARD DRAWINGS FOR DETAILS ON CATCH BASINS, DROP INLETS, AND MANHOLES.
- PRECAST CONCRETE STRUCTURES ARE REQUIRED FOR THE FOLLOWING APPLICATIONS UNLESS PROHIBITED BY THE PLANS OR SPECIAL PROVISIONS.
 - (a) ON DRAINAGE STRUCTURES WITH A DEPTH EQUAL TO OR GREATER THAN 12 FEET.
 - (b) ON DRAINAGE STRUCTURES WHERE THE FLOW LINE ELEVATION OF THE INLET PIPE IS EQUAL TO OR HIGHER THAN THE INSIDE TOP (SOFFIT) OF THE OUTLET PIPE.
 - (c) AS REQUIRED BY THE PROJECT PLANS.
- PRECAST CONCRETE STRUCTURES MAY BE USED ON ANY OTHER APPLICATION UNLESS PROHIBITED BY THE PLANS OR SPECIAL PROVISIONS.
- SEE STANDARD DRAWING 719-425-00 FOR DETAILS OF THE FLAT SLAB ADAPTER.
- SCDOT REQUIRES CONTRACTOR/MANUFACTURER TO PROVIDE SHOP DRAWINGS TO THE RESIDENT CONSTRUCTION ENGINEER PRIOR TO MANUFACTURE. THE MANUFACTURER IS RESPONSIBLE FOR CONFIGURATION OF THE PRECAST CONCRETE CIRCULAR DRAINAGE STRUCTURE IN ACCORDANCE WITH THIS STANDARD DRAWING.

PRECAST NOTES:

- THE USE OF PRECAST UNITS WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF OBTAINING SATISFACTORY INSTALLATIONS. SEE STANDARD DRAWINGS FOR PRECAST CONCRETE DRAINAGE BOX OR STRUCTURE FOR ADDITIONAL DETAILS AND SPECIFICATIONS.
- LIFT HOLES AND/OR DEVICES MAY BE PLACED AS NECESSARY. ALL LIFT HOLES SHALL BE GROUTED SHUT PRIOR TO COMPLETION OF THE INSTALLATION. ALL LIFTING METHODS MUST MEET OSHA REGULATIONS.
- THE CONTRACTOR SHALL USE A SINGLE SOURCE MANUFACTURER CHOSEN FROM THE LIST ON QUALIFIED PRODUCT LIST 14 FOR PRECAST ITEMS ON THIS DRAWING.
- PRECAST MANUFACTURER SHALL MEET ALL REQUIREMENTS OF QUALIFIED PRODUCT POLICY 14.
- CONTRACTOR MAY SUBMIT DESIGN DRAWINGS AND CALCULATIONS FOR MODIFICATIONS TO THIS ITEM ON A PROJECT BY PROJECT BASIS. MODIFICATIONS TO THESE ITEMS WILL NOT BE LISTED ON ANY QUALIFIED PRODUCT LIST. SUBMIT ALL PROPOSALS FOR PROJECT SPECIFIC MODIFICATIONS TO THE RESIDENT ENGINEER FOR REVIEW BY THE ENGINEER OF RECORD.

PRECAST INSTALLATION NOTES:

- H DIMENSION FOR HOLE OPENING IS MEASURED FROM THE INSIDE FACE OF THE DRAINAGE STRUCTURE AS SHOWN IN SECTION A. FOR BEVELED OPENINGS, 8" DIMENSION SHOWN IN DETAIL 4 IS MEASURED FROM THE LARGEST HOLE DIMENSION ON THE OUTSIDE FACE OF THE DRAINAGE STRUCTURE.
- BED SHALL BE PREPARED AND COMPACTED FOR PRECAST DRAINAGE STRUCTURE AS REQUIRED BY SCDOT STANDARD SPECIFICATIONS FOR PRECAST ITEMS. ELEVATION OF BEDDING MATERIAL SHALL BE APPROPRIATE TO ACCOMMODATE ELEVATION OF ALL PIPES AND REQUIRED BOX TOP ELEVATION.
- PLACE AND LEVEL PRECAST DRAINAGE STRUCTURE.
- PIPES SHALL BE INSTALLED AND GROUTED IN PLACE.
- PIPES AND DRAINAGE STRUCTURE SHALL BE BACKFILLED AND COMPACTED AS REQUIRED BY SCDOT STANDARD SPECIFICATIONS.

PAYMENT:

- THE COST OF THE FLAT SLAB ADAPTER SHALL BE INCLUDED IN THE BID PRICE OF THE INLET STRUCTURE CATCH BASIN, DROP INLET, OR MANHOLE.
- THE CONTRACT UNIT PRICE FOR PRECAST COMPONENTS SHALL INCLUDE THE COST OF FURNISHING ALL MATERIALS (BUILT IN PLACE OR PRECAST) AND WORK INCIDENTAL TO THE CONSTRUCTION OF THE STRUCTURE COMPLETE IN PLACE AS SHOWN, IN ACCORDANCE WITH THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).
- IF PRECAST CONCRETE CIRCULAR DRAINAGE STRUCTURES ARE USED TO CONSTRUCT CATCH BASINS, DROP INLETS, JUNCTION BOXES OR MANHOLES, THEN EXTRA DEPTH OF BOX WILL NOT BE MEASURED AND PAID FOR.
- THE PAY ITEM SHALL BE:

PRECAST CONCRETE DRAINAGE BASE - "DIA." - - - - - EACH
 PRECAST CONCRETE RISER - "DIA." - - - - - EACH
 PRECAST CONCRETE TRANSITION SECTION - FLAT SLAB (" TO ") - - - - - EACH
 PRECAST CONCRETE TRANSITION SECTION - CONE (" TO ") - - - - - EACH
 CATCH BASIN, DROP INLET, MANHOLE (AS SPECIFIED) - - - - - EACH

TABLE 719-420B

| RCP INSIDE DIA. (I) (D) | MAX OUTSIDE DIA. (OD) | MINIMUM OPENING (H) | MINIMUM REQUIRED DRAINAGE BASE DIA. (A) | DRAINAGE BASE (PAY HEIGHT) (H) (B) | BOTTOM THICKNESS (C) | (L) MAX |
|-------------------------|-----------------------|---------------------|---|------------------------------------|----------------------|---------|
| 15" | 21" | 24" | 48" | 48" | 6" | 6" |
| 18" | 24 1/2" | 28" | 48" | 48" | 6" | 6" |
| 24" | 31 1/2" | 34" | 48" | 48" | 6" | 6" |
| 30" | 38 1/2" | 42" | 60" | 60" | 8" | 8" |
| 36" | 45 1/2" | 49" | 60" | 60" | 8" | 8" |
| 42" | 52 1/2" | 56" | 72" | 72" | 8" | 8" |
| 48" | 59 1/2" | 64" | 72" | 72" | 8" | 8" |
| 54" | 66 1/2" | 71" | 84" | 80" | 8" | 8" |
| 60" | 73 1/2" | 78" | 96" | 88" | 8" | 8" |
| 66" | 80 1/2" | 85" | 120" | 96" | 10" | 10" |
| 72" | 87 1/2" | 92" | 120" | 96" | 10" | 10" |

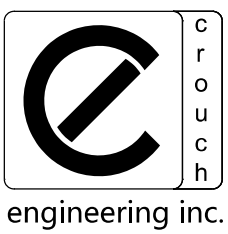
*** THE ADDITIONAL HEIGHT OF BASE ABOVE "BASE" PAY HEIGHTS WILL BE PAID AS RISER OF THE APPROPRIATE DIAMETER

TABLE 719-420A PRECAST ITEMS

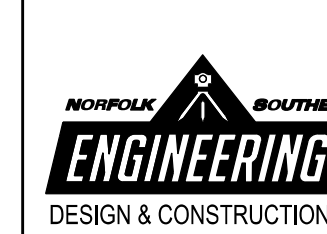
| (A) | DRAINAGE BASE | CIRCULAR RISER | TRANSITION SLAB | TRANSITION CONE |
|------|----------------------------------|--------------------------|--|---|
| 48" | 48" DIA. CIRCULAR DRAINAGE BASE | 48" DIA. CIRCULAR RISER | | |
| 60" | 60" DIA. CIRCULAR DRAINAGE BASE | 60" DIA. CIRCULAR RISER | 60" DIA. TO 48" DIA. CIRCULAR TRANSITION SLAB | 60" DIA. TO 48" DIA. CIRCULAR TRANSITION CONE |
| 72" | 72" DIA. CIRCULAR DRAINAGE BASE | 72" DIA. CIRCULAR RISER | 72" DIA. TO 48" DIA. CIRCULAR TRANSITION SLAB | 72" DIA. TO 48" DIA. CIRCULAR TRANSITION CONE |
| 84" | 84" DIA. CIRCULAR DRAINAGE BASE | 84" DIA. CIRCULAR RISER | 84" DIA. TO 48" DIA. CIRCULAR TRANSITION SLAB | |
| 96" | 96" DIA. CIRCULAR DRAINAGE BASE | 96" DIA. CIRCULAR RISER | 96" DIA. TO 48" DIA. CIRCULAR TRANSITION SLAB | |
| 120" | 120" DIA. CIRCULAR DRAINAGE BASE | 120" DIA. CIRCULAR RISER | 120" DIA. TO 48" DIA. CIRCULAR TRANSITION SLAB | |

THIS DRAWING IS NOT TO SCALE

PROJECT NO: 23050
 DATE:
 DRAWN BY: EVU
 CHECKED BY:
 REVISIONS:



CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



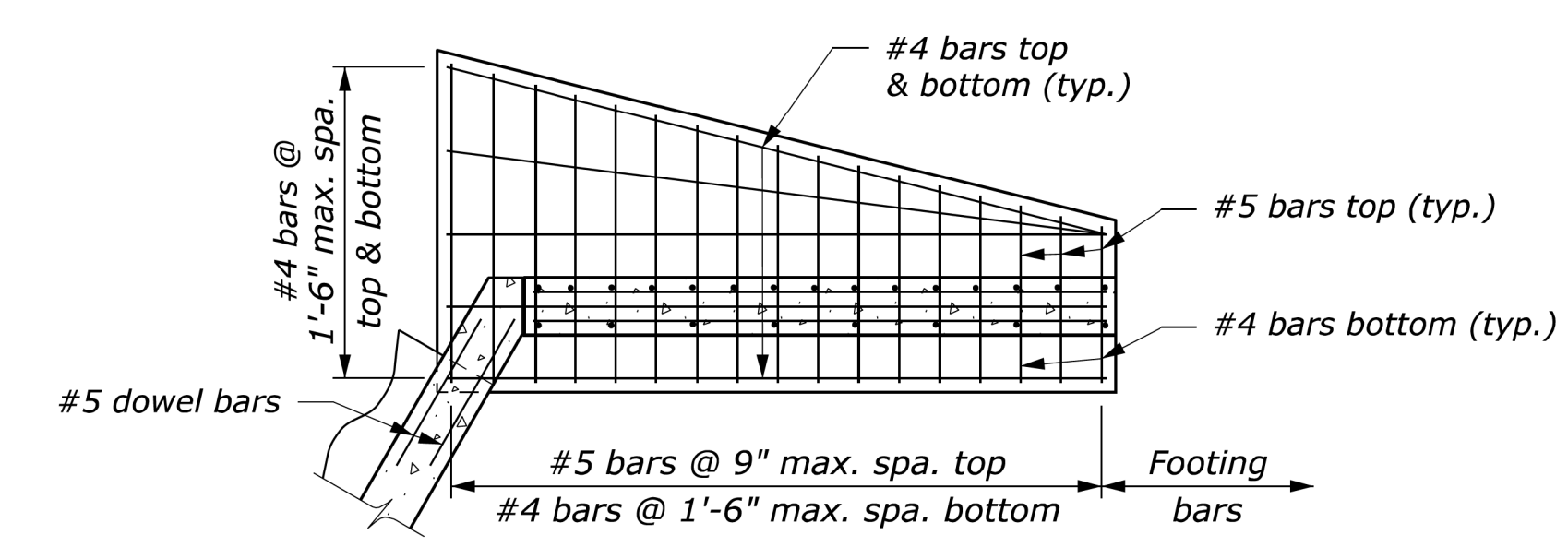
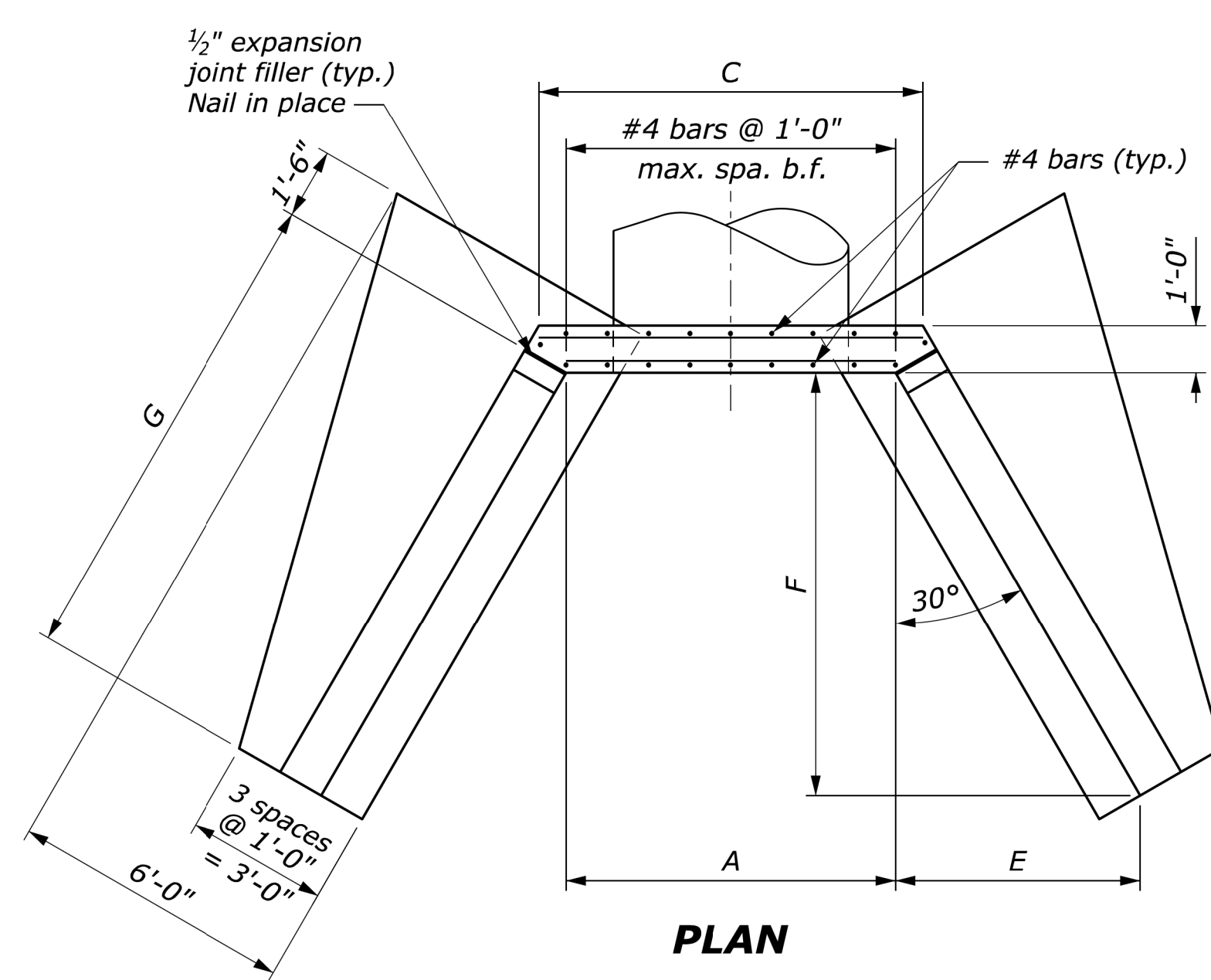
NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | |
|----------|--|----------------|
| REV BY | DATE | DESCRIPTION |
| EVU | | |
| LOCATION | BLYTHEWOOD, SC | |
| TITLE | PROPOSED TRACKS TO SERVE PROJECT SCOUT CATCH BASIN DETAILS | |
| DWN EVU | P/D NO: D3327 | VRN 04825 |
| CHK | FILE NO: TRK115024 | DRAWING NUMBER |
| | DATE: MARCH 5, 2024 | TD-2023-105 |

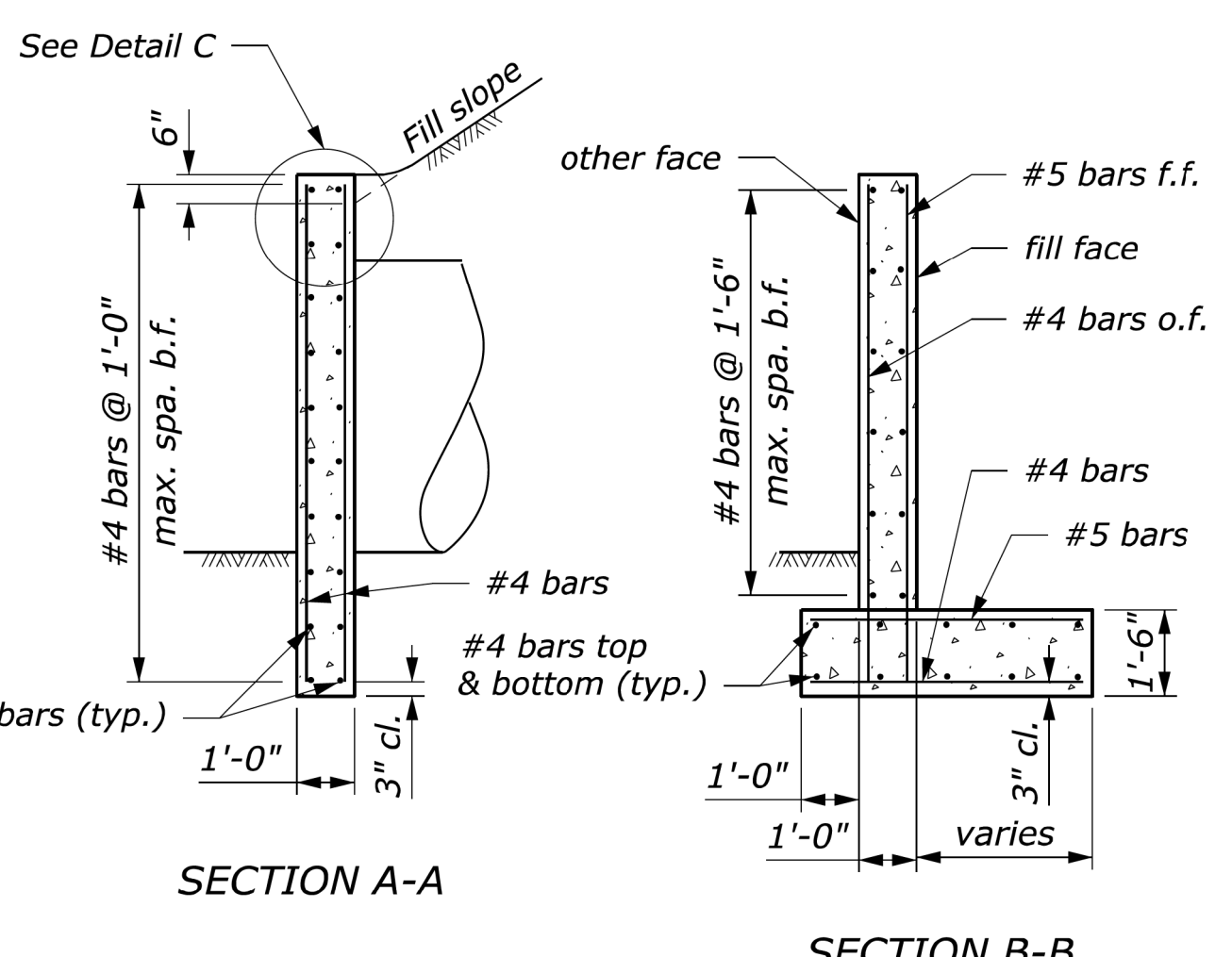
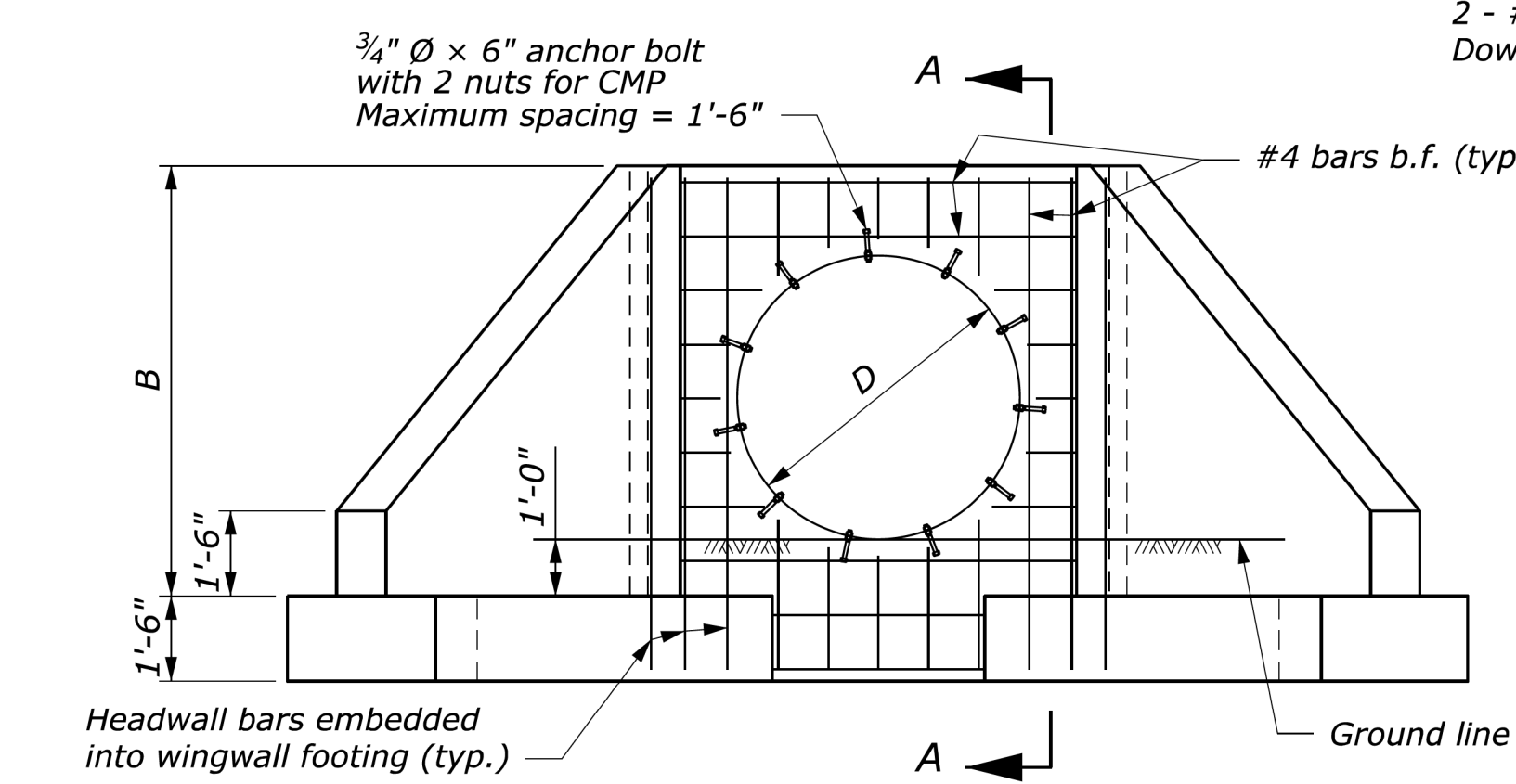
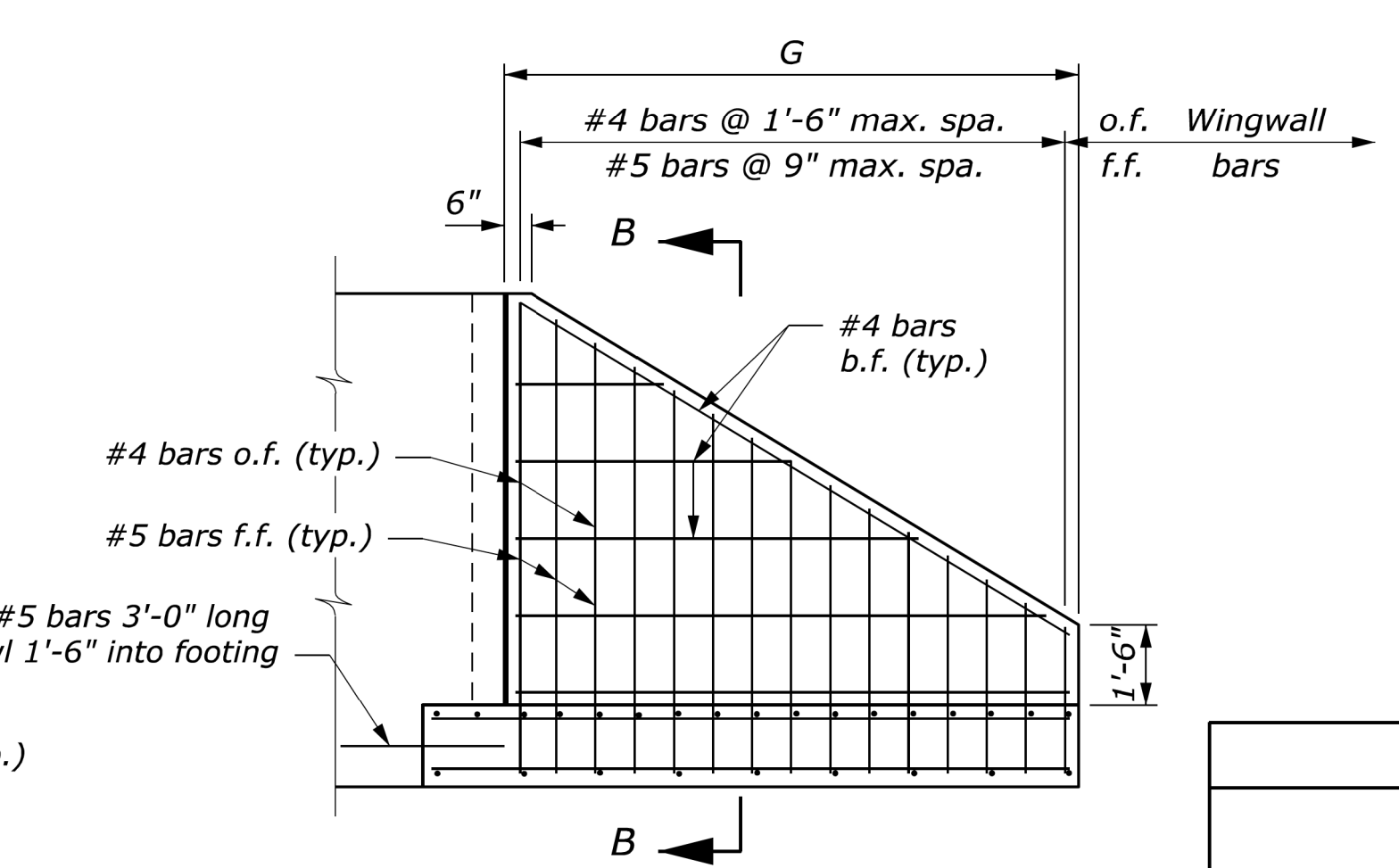
PHASE 2

SCALE: NONE

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|---------|--------------|
| PROJECT | SHEET NUMBER |
| | |



- NOTE:**
1. This detail applies for normal crossings and skewers up to 15°.
 2. On shallow fill where headwall is 2-feet or less below shoulder line, construct the headwall parallel to line and grade of the shoulder.
 3. Do not allow top of wingwall to project above fill slope, ditch slope or shoulder.
 4. Concrete shall conform to Section 601. Chamfer all exposed edges 3/4" and finish all exposed surfaces with a Class 1 ordinary surface finish. Joint filler shall conform to AASHTO M213 and shall be subsidiary to concrete quantity.
 5. Bell end of concrete pipe may replace bevel at inlet headwall.
 6. Quantities shown in table are for one headwall and two wingwalls and are based on CMP. Concrete and steel quantities shown will be used as basis for final payment for headwall/wingwalls constructed according to this standard.
 7. Reinforcing steel clearance is 2 inches unless shown otherwise.
 8. Anchor bolts shall conform to ASTM A307. Galvanize bolts and nuts to conform to ASTM A153. Anchor bolts shall be subsidiary to reinforcing steel quantity.



DIMENSIONS AND QUANTITIES

| | | D (Diameter of pipe culvert) | | | | | | | |
|--------------------|---|------------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | 42" | 48" | 60" | 66" | 72" | 78" | 84" | |
| 1V:1.5H fill slope | A | 5'-6" | 6'-0" | 6'-6" | 7'-0" | 7'-6" | 8'-0" | 8'-6" | 9'-0" |
| | B | 5'-11 1/2" | 6'-5 1/2" | 6'-11 1/2" | 7'-5 1/2" | 7'-11 1/2" | 8'-5 1/2" | 8'-11 1/2" | 9'-5 1/2" |
| | C | 6'-7 3/4" | 7'-1 3/4" | 7'-7 3/4" | 8'-1 3/4" | 8'-7 3/4" | 9'-1 3/4" | 9'-7 3/4" | 10'-1 3/4" |
| | E | 3'-10 1/2" | 4'-3 3/4" | 4'-9" | 5'-2 1/4" | 5'-7 1/4" | 6'-0 3/4" | 6'-5 3/4" | 6'-11" |
| | F | 6'-8 3/4" | 7'-5 3/4" | 8'-2 1/2" | 8'-11 3/4" | 9'-8 1/2" | 10'-5 3/4" | 11'-2 3/4" | 12'-0" |
| | G | 7'-9" | 8'-7 1/2" | 9'-6" | 10'-4 1/2" | 11'-2 3/4" | 12'-1 1/4" | 12'-11 1/2" | 13'-10 1/4" |
| Conc. (CUYD) | | 8.0 | 9.0 | 10.1 | 11.1 | 12.2 | 13.4 | 14.5 | 15.8 |
| Steel (LB) | | 651 | 738 | 818 | 878 | 977 | 1040 | 1152 | 1249 |
| 1V:2H fill slope | A | 5'-6" | 6'-0" | 6'-6" | 7'-0" | 7'-6" | 8'-0" | 8'-6" | 9'-0" |
| | B | 5'-11 1/2" | 6'-5 1/2" | 6'-11 1/2" | 7'-5 1/2" | 7'-11 1/2" | 8'-5 1/2" | 8'-11 1/2" | 9'-5 1/2" |
| | C | 6'-7 3/4" | 7'-1 3/4" | 7'-7 3/4" | 8'-1 3/4" | 8'-7 3/4" | 9'-1 3/4" | 9'-7 3/4" | 10'-1 3/4" |
| | E | 5'-2" | 5'-9" | 6'-3 3/4" | 6'-11" | 7'-5 3/4" | 8'-0 3/4" | 8'-7 3/4" | 9'-2 3/4" |
| | F | 8'-11 1/2" | 9'-11 3/4" | 10'-11 1/2" | 11'-11 3/4" | 12'-11 1/2" | 13'-11 3/4" | 14'-11 1/2" | 15'-11 3/4" |
| | G | 10'-4" | 11'-6 1/4" | 12'-7 3/4" | 13'-10" | 14'-11 1/2" | 16'-1 3/4" | 17'-3 1/4" | 18'-5 1/2" |
| Conc. (CUYD) | | 10.0 | 11.3 | 12.6 | 14.0 | 15.4 | 16.9 | 18.3 | 19.9 |
| Steel (LB) | | 798 | 911 | 1001 | 1104 | 1206 | 1315 | 1417 | 1554 |

Abbreviations:
 f.f. = Fill face
 o.f. = Other face
 b.f. = Both faces

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 OFFICE OF FEDERAL LANDS HIGHWAY

FLH STANDARD

CONCRETE HEADWALL/WINGWALL FOR SINGLE NORMAL 42" TO 84" PIPE CULVERT

STANDARD APPROVED FOR USE 6/2005 STANDARD
 REVISED: 601-5

C:\Users\Stephen.Chapman\OneDrive - DOT\OST\CADD\edits\FLH-Culvert.cel [Basa.B.US]
 20 September 2022 11:21 AM

PHASE 1

PROJECT NO: 23050
 DATE:
 DRAWN BY: EVU
 CHECKED BY:
 REVISIONS:

CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630

DESIGN & CONSTRUCTION

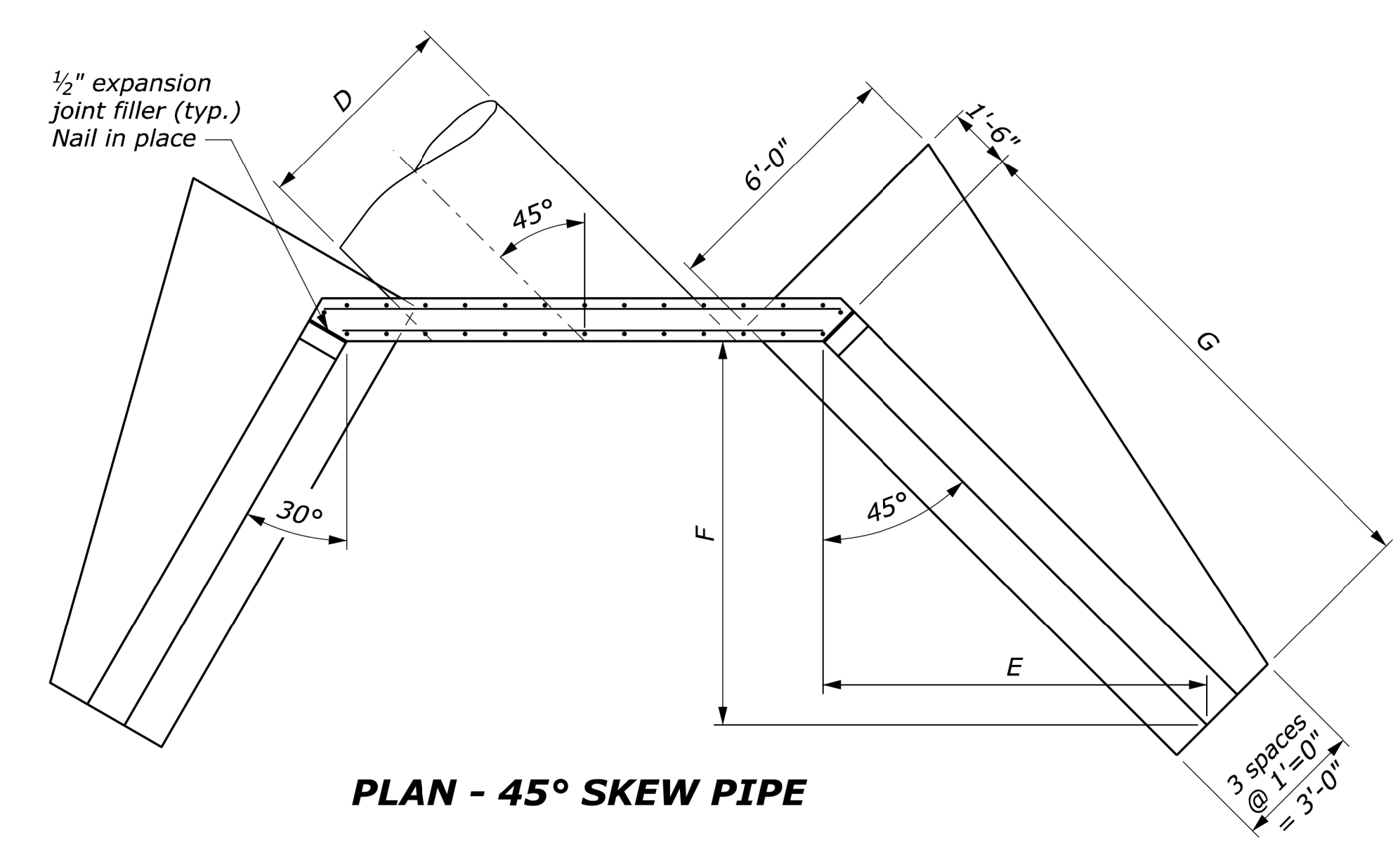
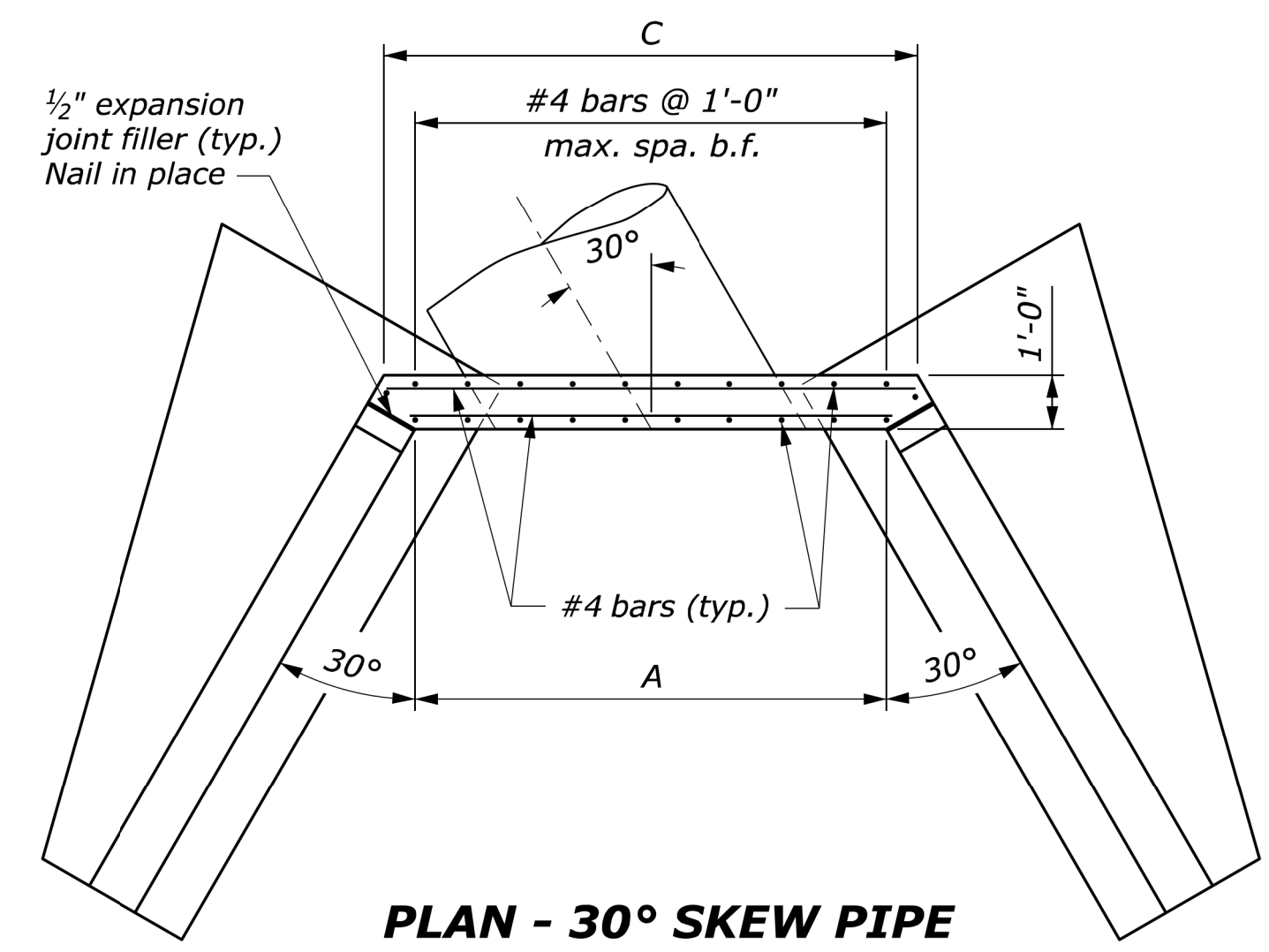
SCALE: NONE

NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY

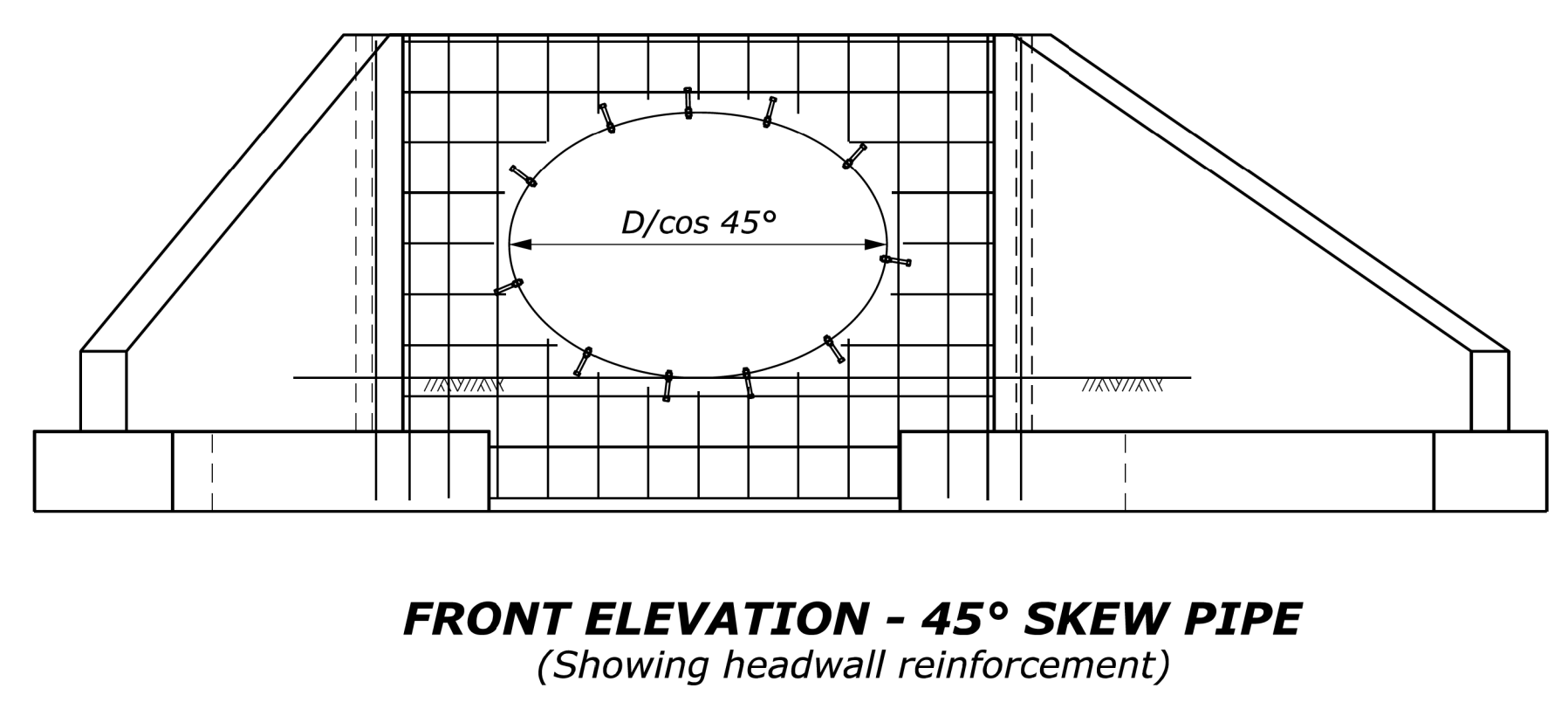
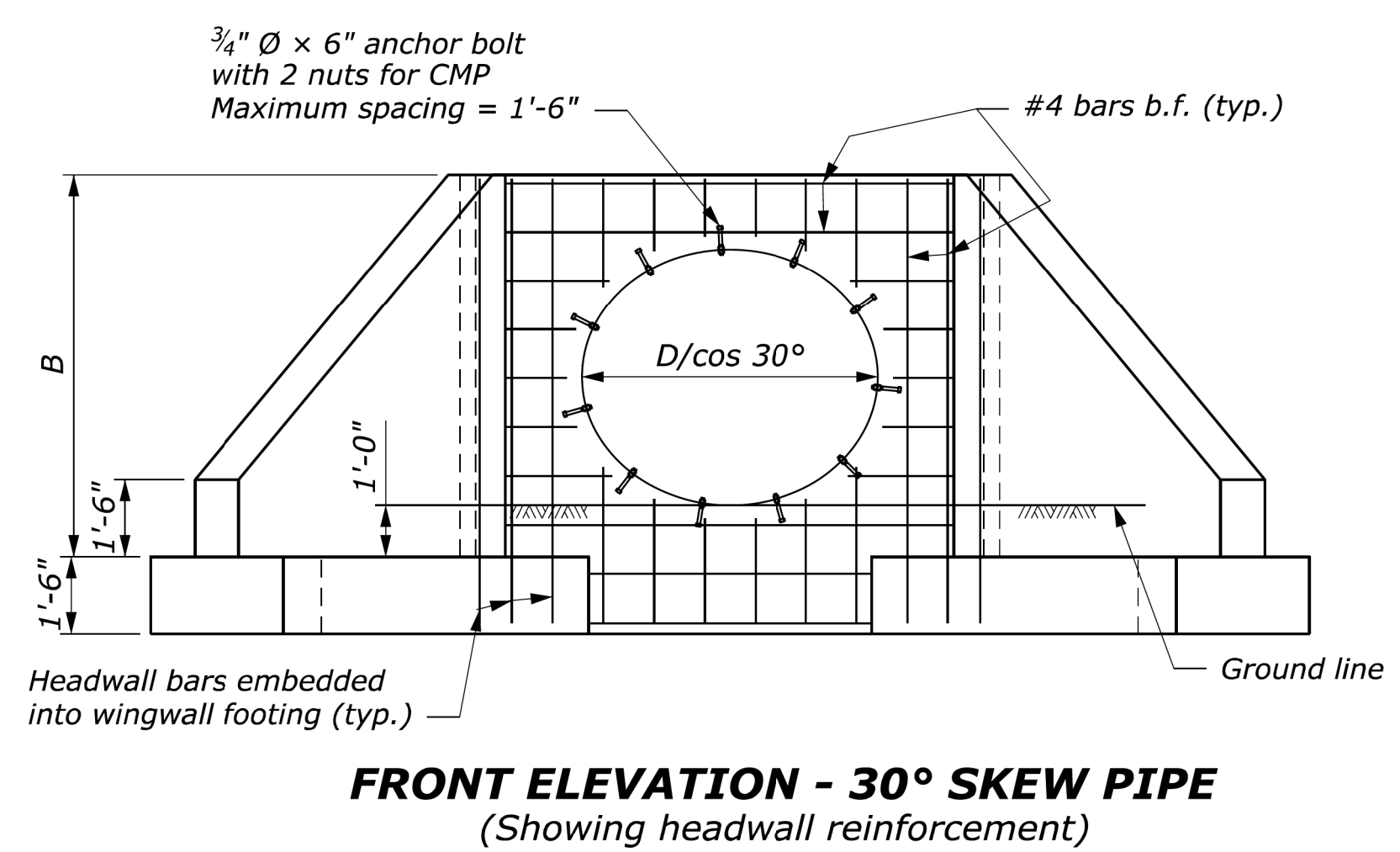
COASTAL
 OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | | |
|--|-----|--------------------|---------------------------|
| REV | BY | DATE | DESCRIPTION |
| R1 | EVU | 03/05/24 | ADDED SHEET |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT HEADWALL/WINGWALL DETAILS | | | |
| DWN | EVU | P10 NO. D3327 | VRN 04825 FILE POST R91.4 |
| DWN | EVU | FILE NO. TRK115024 | DRAWING NUMBER |
| CHK | | DATE MARCH 5, 2024 | TD-2023-105-R1 |

| | |
|---------|--------------|
| PROJECT | SHEET NUMBER |
| | |



- NOTE:**
- Use the 30° Skew Detail for skews greater than 15° to 37°30'. Use the 45° Skew Detail for skews greater than 37°30' to 45°.
 - Quantities shown in table are for one headwall and two wingwalls and are based on CMP. Concrete and steel quantities shown will be used as basis for final payment for headwall/wingwalls constructed according to this standard.
 - For dimensions and reinforcing details not shown, and additional notes see Standard 601-5.



DIMENSIONS AND QUANTITIES FOR 30° SKEW PIPE

| | | D (Diameter of pipe culvert) | | | | | | | |
|--------------------|--------------|------------------------------|------|------|------|------|------|------|------|
| | | 42" | 48" | 54" | 60" | 66" | 72" | 78" | 84" |
| 1V:1.5H fill slope | Conc. (CUYD) | 8.4 | 9.4 | 10.5 | 11.6 | 12.7 | 13.9 | 15.1 | 16.4 |
| | Steel (LB) | 682 | 764 | 853 | 908 | 1016 | 1080 | 1196 | 1294 |
| 1V:2H fill slope | Conc. (CUYD) | 10.4 | 11.7 | 13.0 | 14.5 | 15.9 | 17.4 | 18.9 | 20.5 |
| | Steel (LB) | 829 | 938 | 1036 | 1135 | 1245 | 1355 | 1461 | 1598 |

DIMENSIONS AND QUANTITIES FOR 45° SKEW PIPE

| | | D (Diameter of pipe culvert) | | | | | | | |
|--------------------|--------------|------------------------------|---------|----------|----------|----------|----------|----------|----------|
| | | 42" | 48" | 54" | 60" | 66" | 72" | 78" | 84" |
| 1V:1.5H fill slope | A | 8'-11¼" | 9'-8" | 10'-4¼" | 11'-0¾" | 11'-9¼" | 12'-6" | 13'-2¼" | 13'-11" |
| | C | 9'-11¼" | 10'-8" | 11'-4¼" | 12'-1" | 12'-9¼" | 13'-6" | 14'-2¼" | 14'-11" |
| | E | 6'-8¾" | 7'-5¾" | 8'-2½" | 8'-11¾" | 9'-8½" | 10'-5¾" | 11'-2¾" | 12'-0" |
| | F | 6'-8¾" | 7'-5¾" | 8'-2½" | 8'-11¾" | 9'-8½" | 10'-5¾" | 11'-2¾" | 12'-0" |
| | G | 9'-6" | 10'-7" | 11'-7½" | 12'-8¼" | 13'-9" | 14'-10" | 15'-10½" | 16'-11¼" |
| | Conc. (CUYD) | 9.5 | 10.6 | 11.8 | 13.1 | 14.4 | 15.7 | 17.1 | 18.5 |
| | Steel (LB) | 787 | 868 | 977 | 1051 | 1177 | 1249 | 1370 | 1490 |
| 1V:2H fill slope | E | 8'-11½" | 9'-11¾" | 10'-11½" | 11'-11¾" | 12'-11½" | 13'-11¾" | 14'-11½" | 15'-11¾" |
| | F | 8'-11½" | 9'-11¾" | 10'-11½" | 11'-11¾" | 12'-11½" | 13'-11¾" | 14'-11½" | 15'-11¾" |
| | G | 12'-8" | 14'-1¼" | 15'-6" | 16'-11¼" | 18'-4" | 19'-9¼" | 21'-2" | 22'-7" |
| | Conc. (CUYD) | 11.7 | 13.2 | 14.7 | 16.3 | 17.9 | 19.6 | 21.3 | 23.1 |
| | Steel (LB) | 951 | 1070 | 1190 | 1303 | 1440 | 1559 | 1695 | 1846 |

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

FLH STANDARD
CONCRETE HEADWALL/WINGWALL FOR SINGLE SKEW 42" TO 84" PIPE CULVERT

STANDARD APPROVED FOR USE 6/2005
REVISED:

STANDARD
601-6

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20 September 2022 11:21 AM

PHASE 1

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:

CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

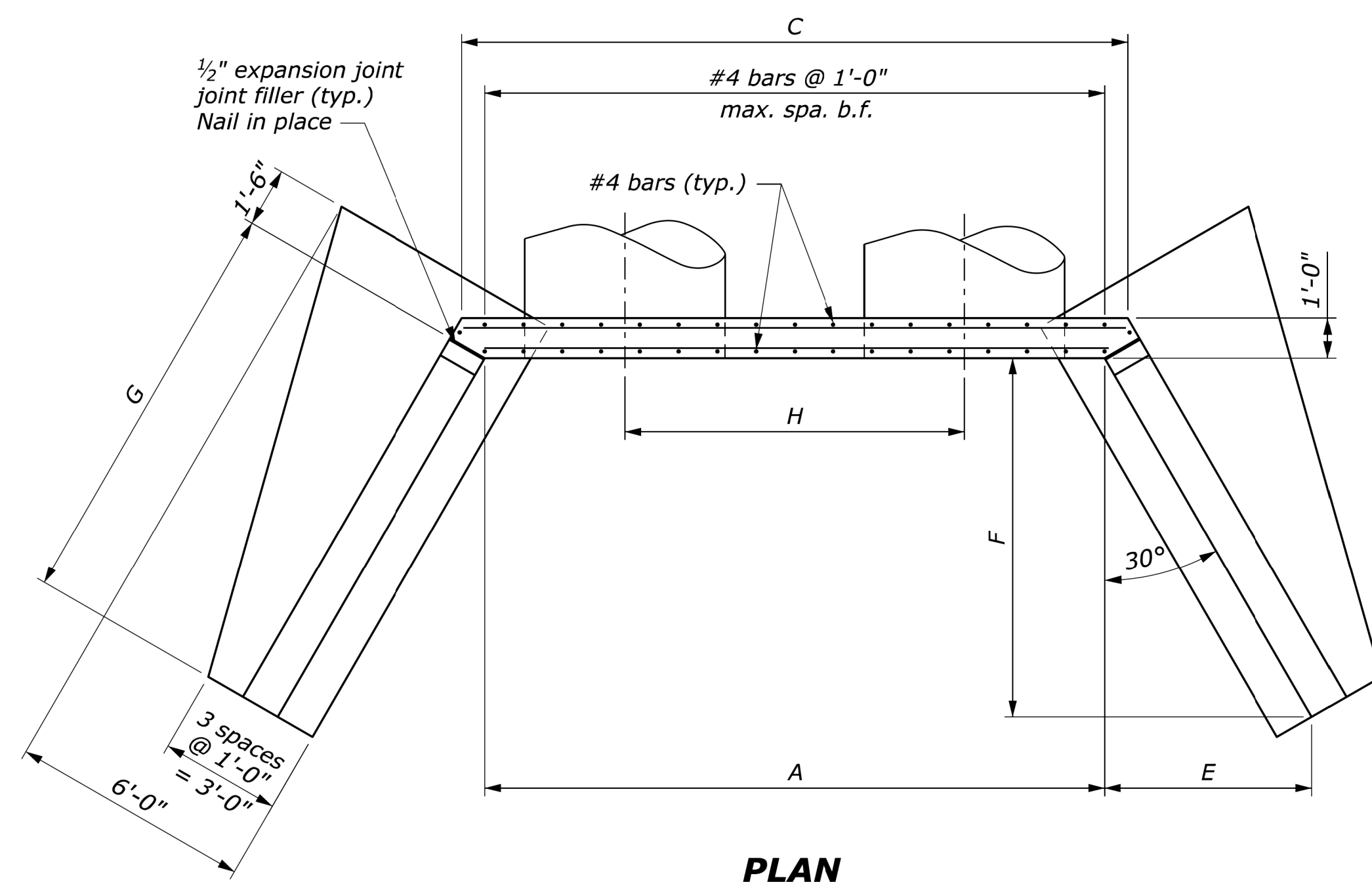
NORFOLK SOUTHERN ENGINEERING
DESIGN & CONSTRUCTION

NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | | | |
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| R1 | EVU | 03/24 | | |
| LOCATION: BLYTHEWOOD, SC | | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT HEADWALL/WINGWALL DETAILS | | | | |
| DWN | EVU | PTD NO. | D3327 | VRN |
| CHK | EVU | FILE NO. | TRK115024 | DRAWING NUMBER |
| | | DATE | MARCH 5, 2024 | TD-2023-105-R1 |

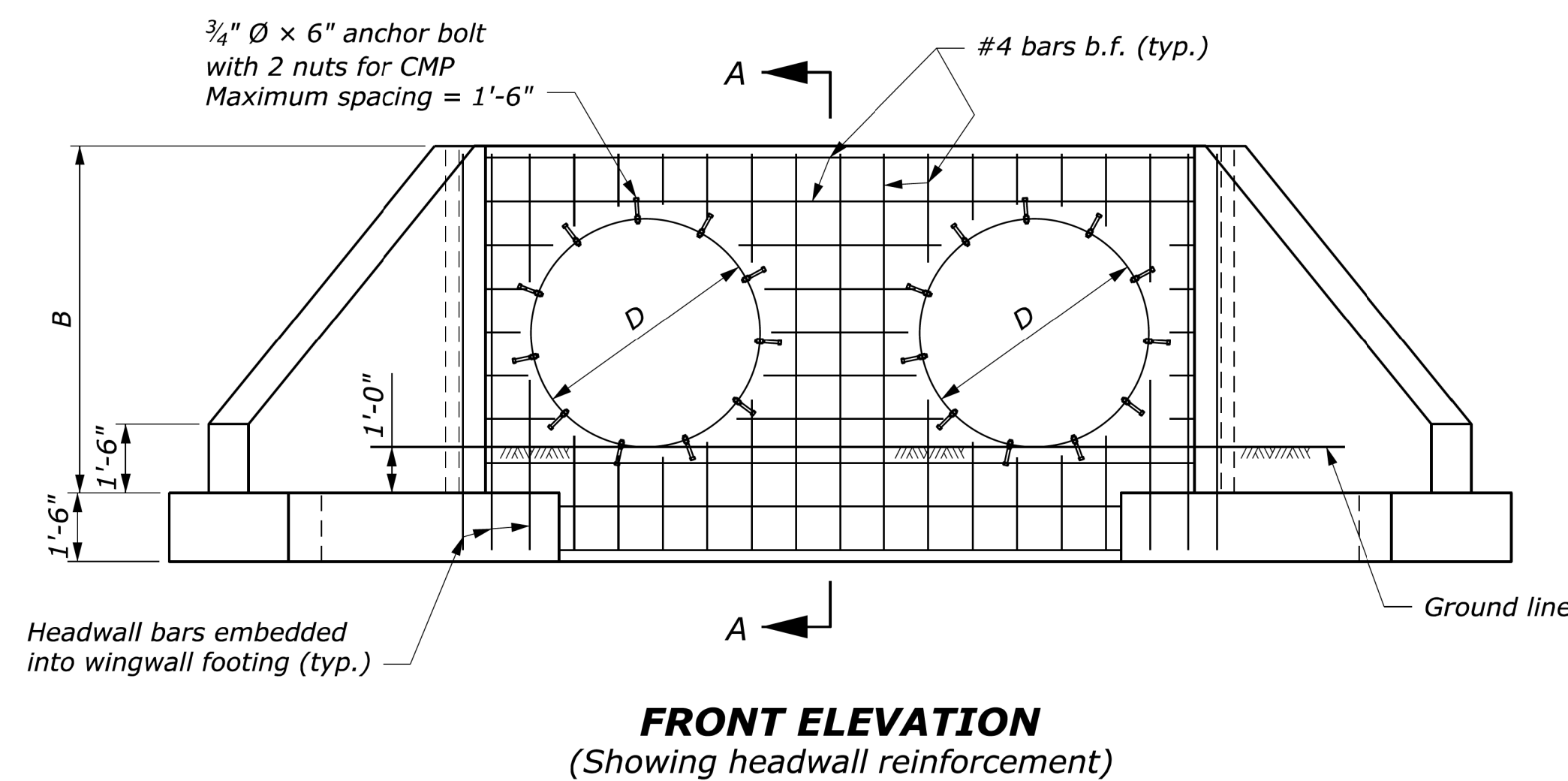
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|---------|--------------|
| PROJECT | SHEET NUMBER |
| | |



NOTE:

1. This detail applies for normal crossings and skewers up to 15°.
2. Quantities shown in table are for one headwall and two wingwalls and are based on CMP. Concrete and steel quantities shown will be used as basis for final payment for headwall/wingwalls constructed according to this standard.
3. For dimensions and reinforcing details not show, and additional notes see Standard 601-5.



| | | DIMENSIONS AND QUANTITIES | | | | | | | |
|----------------------------|--------------|-------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|--------|-------------------------------------|--------------------------------------|
| | | D (Diameter of pipe culvert) | | | | | | | |
| | | 42" | 48" | 54" | 60" | 66" | 72" | 78" | 84" |
| A | | 11'-6" | 12'-10 ³ / ₄ " | 14'-2" | 15'-6" | 16'-10" | 18'-2" | 19'-5 ³ / ₄ " | 20'-10" |
| C | | 12'-7 ³ / ₄ " | 14'-0" | 15'-3 ³ / ₄ " | 16'-7 ³ / ₄ " | 17'-11 ³ / ₄ " | 19'-4" | 20'-7 ³ / ₄ " | 21'-11 ³ / ₄ " |
| H | | 6'-0" | 6'-10" | 7'-8" | 8'-6" | 9'-4" | 10'-2" | 11'-0" | 11'-10" |
| 1V:1.5H fill slope | Conc. (CUYD) | 9.3 | 10.6 | 11.9 | 13.2 | 14.6 | 16.1 | 17.6 | 19.2 |
| | Steel (LB) | 752 | 850 | 961 | 1020 | 1166 | 1228 | 1380 | 1488 |
| 1V:2H fill slope | Conc. (CUYD) | 11.3 | 12.9 | 14.4 | 16.1 | 17.8 | 19.6 | 21.4 | 23.3 |
| | Steel (LB) | 900 | 1023 | 1144 | 1247 | 1395 | 1503 | 1644 | 1793 |
| Add. Conc. per pipe (CUYD) | | 1.3 | 1.6 | 1.8 | 2.1 | 2.4 | 2.7 | 3.0 | 3.4 |
| Add. Steel per pipe (LB) | | 120 | 122 | 154 | 165 | 202 | 213 | 254 | 267 |

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

FLH STANDARD
**CONCRETE HEADWALL/WINGWALL
FOR MULTIPLE NORMAL
42" TO 84" PIPE CULVERT**

STANDARD APPROVED FOR USE 6/2005
REVISED:

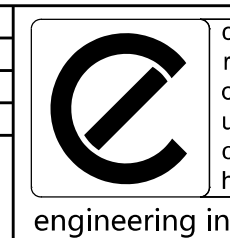
STANDARD
601-7

NO SCALE

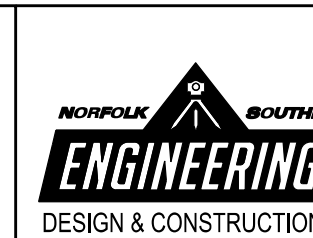
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PHASE 1

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| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

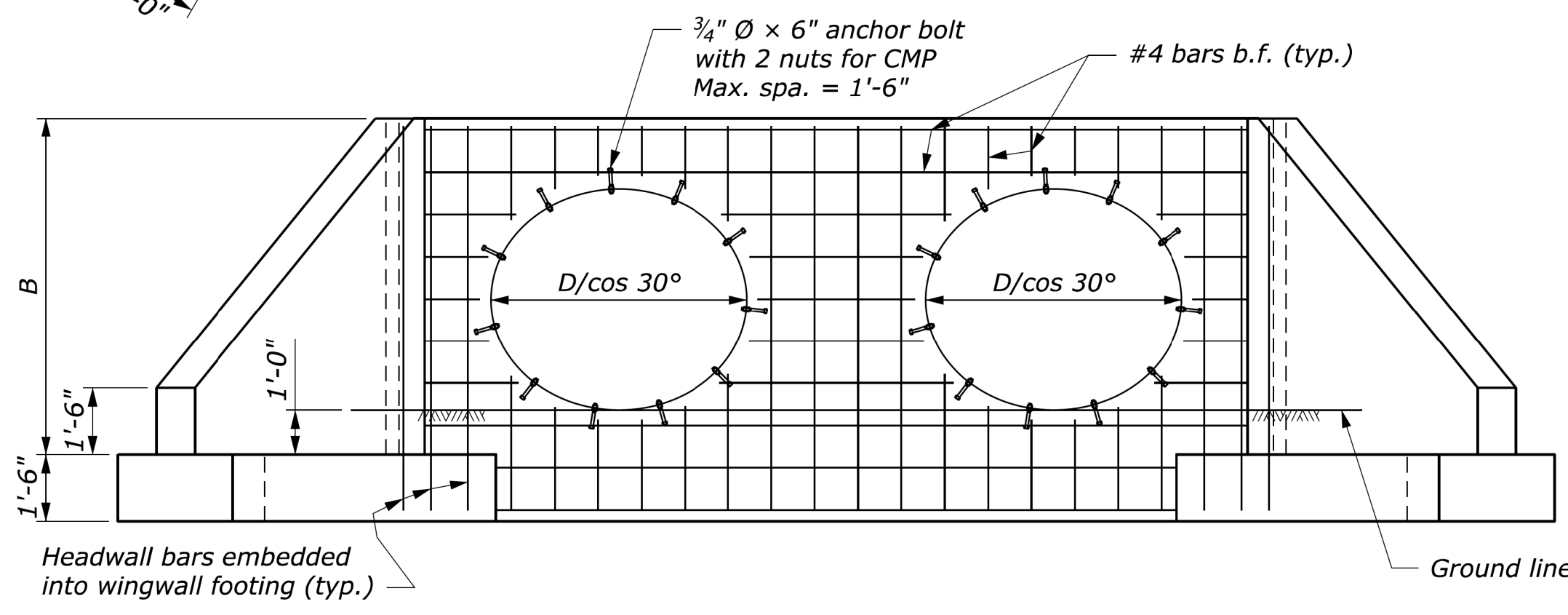
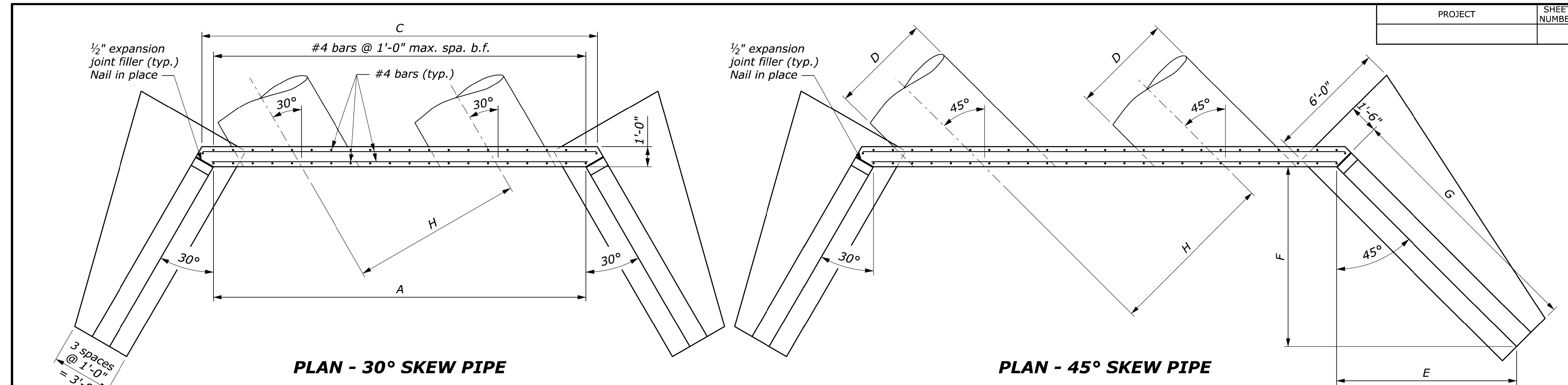


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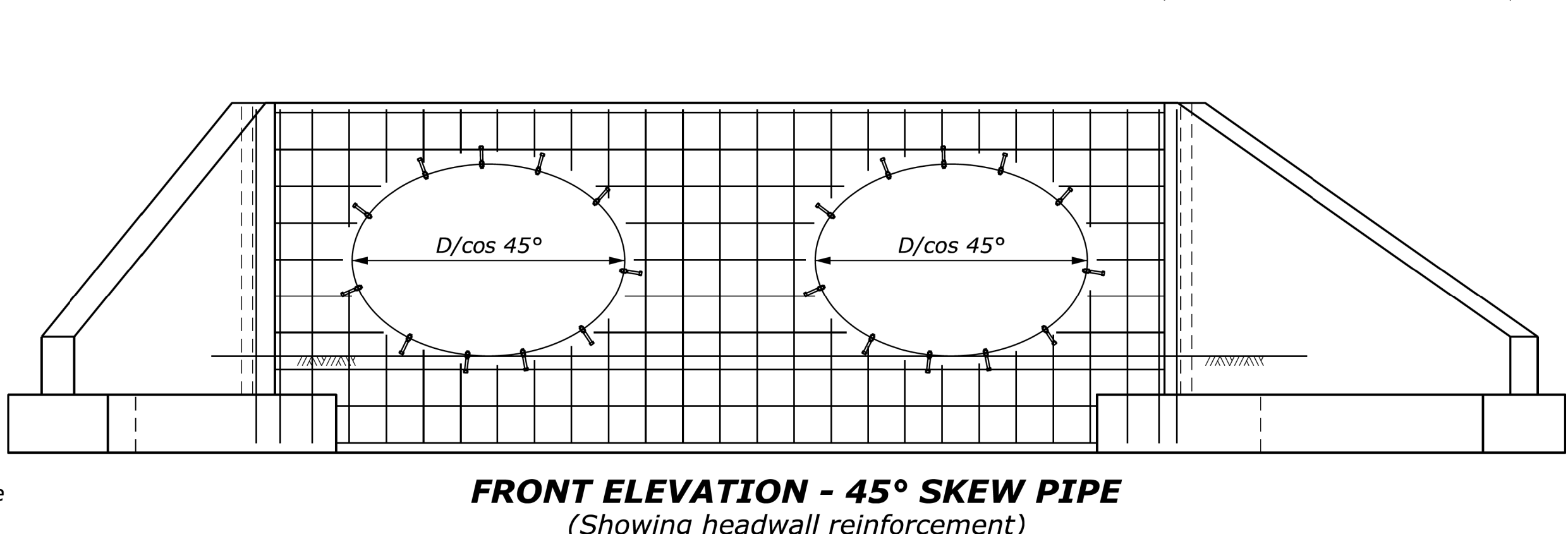


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| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT HEADWALL/WINGWALL DETAILS | | | |
| DWN | EVU | PTD NO. D3327 | VRN 04825 FILE POST R91.4 |
| DWN | EVU | FILE NO. TRK115024 | DRAWING NUMBER |
| CHK | | DATE MARCH 5, 2024 | TD-2023-105-R1 |

| | |
|---------|--------------|
| PROJECT | SHEET NUMBER |
| | |



FRONT ELEVATION - 30° SKEW PIPE
(Showing headwall reinforcement)



FRONT ELEVATION - 45° SKEW PIPE
(Showing headwall reinforcement)

NOTE:

- Use the 30° Skew Detail for skews greater than 15° to 37°30'. Use the 45° Skew Detail for skews greater than 37°30' to 45°.
- Quantities shown in table are for one headwall and two wingwalls and are based on CMP. Concrete and steel quantities shown will be used as basis for final payment for headwall/wingwalls constructed according to this standard.
- For dimensions and reinforcing details not shown, and additional notes see Standards 601-5 and 6.

DIMENSIONS AND QUANTITIES FOR 30° SKEW PIPE

| | | D (Diameter of pipe culvert) | | | | | | | |
|----------------------------|--------------|------------------------------|------------|------------|------------|------------|------------|------------|-------------|
| | | 42" | 48" | 54" | 60" | 66" | 72" | 78" | 84" |
| A | | 13'-11 1/2" | 15'-6" | 17'-0 1/4" | 18'-6 3/4" | 20'-1 1/4" | 21'-8" | 23'-2 1/4" | 24'-8 3/4" |
| C | | 15'-1 1/4" | 16'-7 3/4" | 18'-2" | 19'-8 1/2" | 21'-3" | 22'-9 3/4" | 24'-4" | 25'-10 3/4" |
| H | | 6'-0" | 6'-10" | 7'-8" | 8'-6" | 9'-4" | 10'-2" | 11'-0" | 11'-10" |
| 1V:1.5H fill slope | Conc. (CUYD) | 9.9 | 11.2 | 12.6 | 14.0 | 15.5 | 17.1 | 18.6 | 20.3 |
| | Steel (LB) | 797 | 896 | 1014 | 1086 | 1227 | 1303 | 1463 | 1573 |
| 1V:2H fill slope | Conc. (CUYD) | 11.9 | 13.5 | 15.1 | 16.9 | 18.6 | 20.5 | 22.4 | 24.4 |
| | Steel (LB) | 945 | 1070 | 1196 | 1313 | 1456 | 1578 | 1728 | 1877 |
| Add. Conc. per pipe (CUYD) | | 1.5 | 1.8 | 2.1 | 2.4 | 2.8 | 3.1 | 3.5 | 3.9 |
| Add. Steel per pipe (LB) | | 135 | 152 | 171 | 190 | 223 | 236 | 280 | 293 |

DIMENSIONS AND QUANTITIES FOR 45° SKEW PIPE

| | | D (Diameter of pipe culvert) | | | | | | | |
|----------------------------|--------------|------------------------------|--------|------------|------------|-------------|-------------|--------|------------|
| | | 42" | 48" | 54" | 60" | 66" | 72" | 78" | 84" |
| A | | 17'-5 1/4" | 19'-4" | 21'-2 1/4" | 23'-1 1/4" | 24'-11 1/2" | 26'-10 1/2" | 28'-9" | 30'-7 3/4" |
| C | | 18'-5 1/4" | 20'-4" | 22'-2 1/4" | 24'-1 1/4" | 25'-11 1/2" | 27'-10 1/2" | 29'-9" | 31'-7 3/4" |
| H | | 6'-0" | 6'-10" | 7'-8" | 8'-6" | 9'-4" | 10'-2" | 11'-0" | 11'-10" |
| 1V:1.5H fill slope | Conc. (CUYD) | 11.3 | 12.8 | 14.4 | 16.1 | 17.7 | 19.5 | 21.3 | 23.3 |
| | Steel (LB) | 926 | 1037 | 1180 | 1269 | 1453 | 1541 | 1708 | 1843 |
| 1V:2H fill slope | Conc. (CUYD) | 13.5 | 15.4 | 17.2 | 19.2 | 21.2 | 23.4 | 25.6 | 27.9 |
| | Steel (LB) | 1091 | 1239 | 1393 | 1521 | 1716 | 1852 | 2032 | 2199 |
| Add. Conc. per pipe (CUYD) | | 1.8 | 2.2 | 2.6 | 3.0 | 3.4 | 3.8 | 4.3 | 4.8 |
| Add. Steel per pipe (LB) | | 158 | 178 | 224 | 241 | 288 | 305 | 350 | 367 |

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

FLH STANDARD

CONCRETE HEADWALL/WINGWALL FOR MULTIPLE SKEW 42" TO 84" PIPE CULVERT

STANDARD APPROVED FOR USE 6/2005

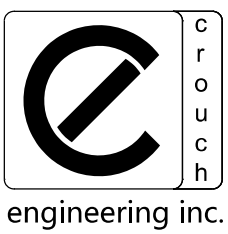
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NO SCALE

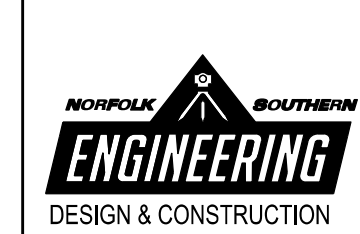
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| CHECKED BY: | |
| REVISIONS: | |



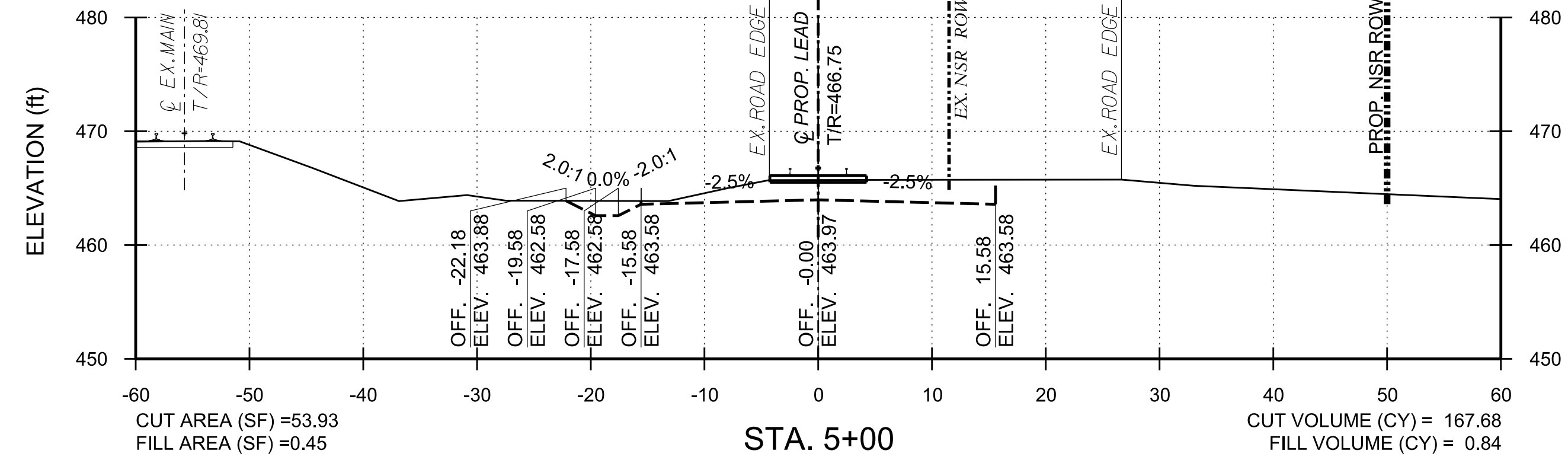
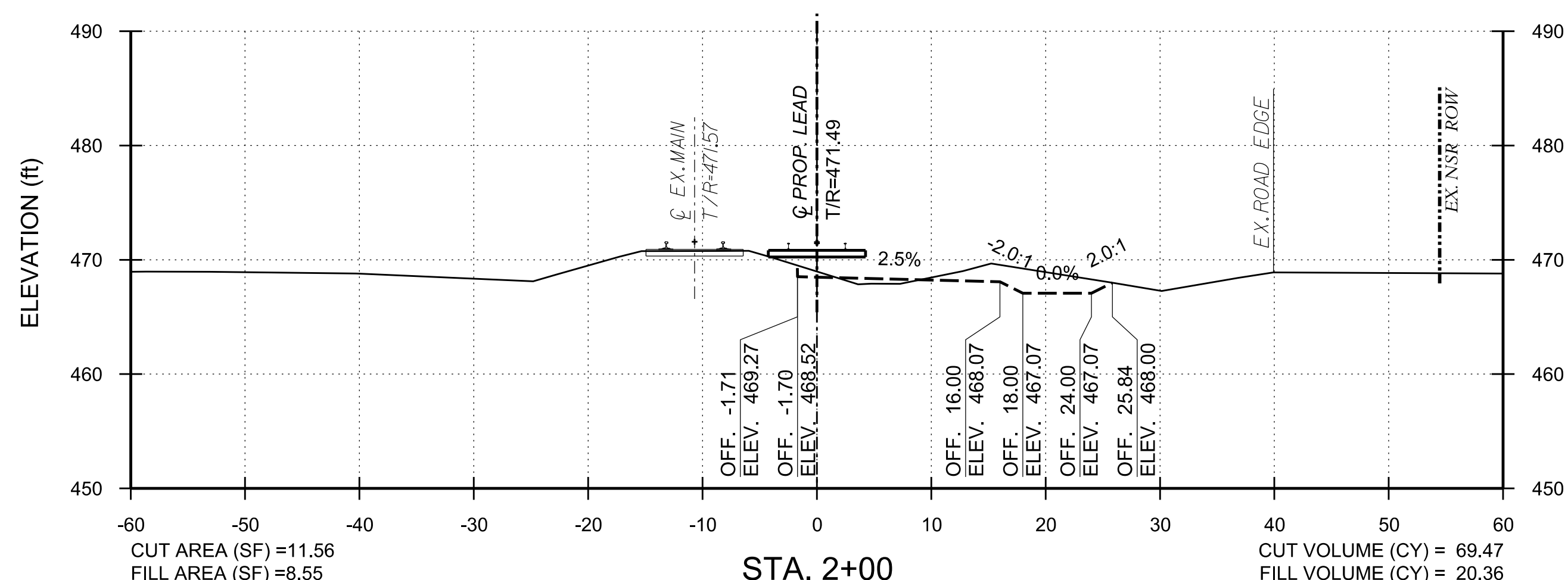
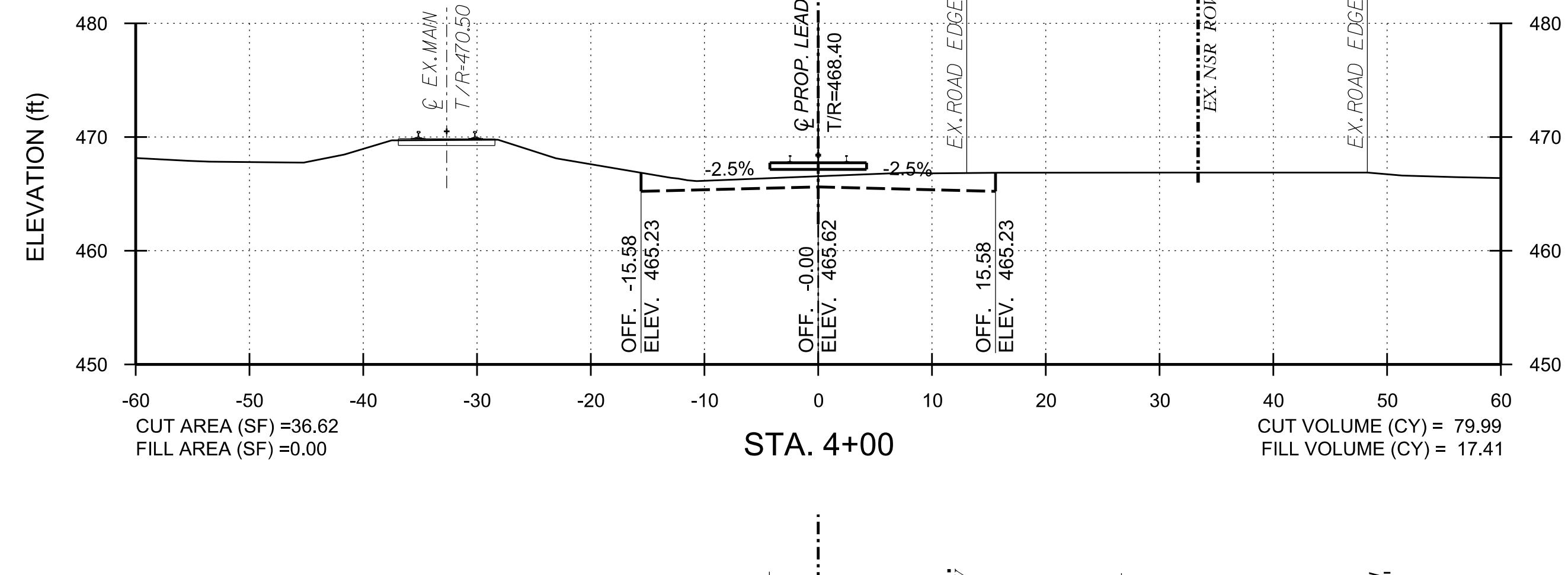
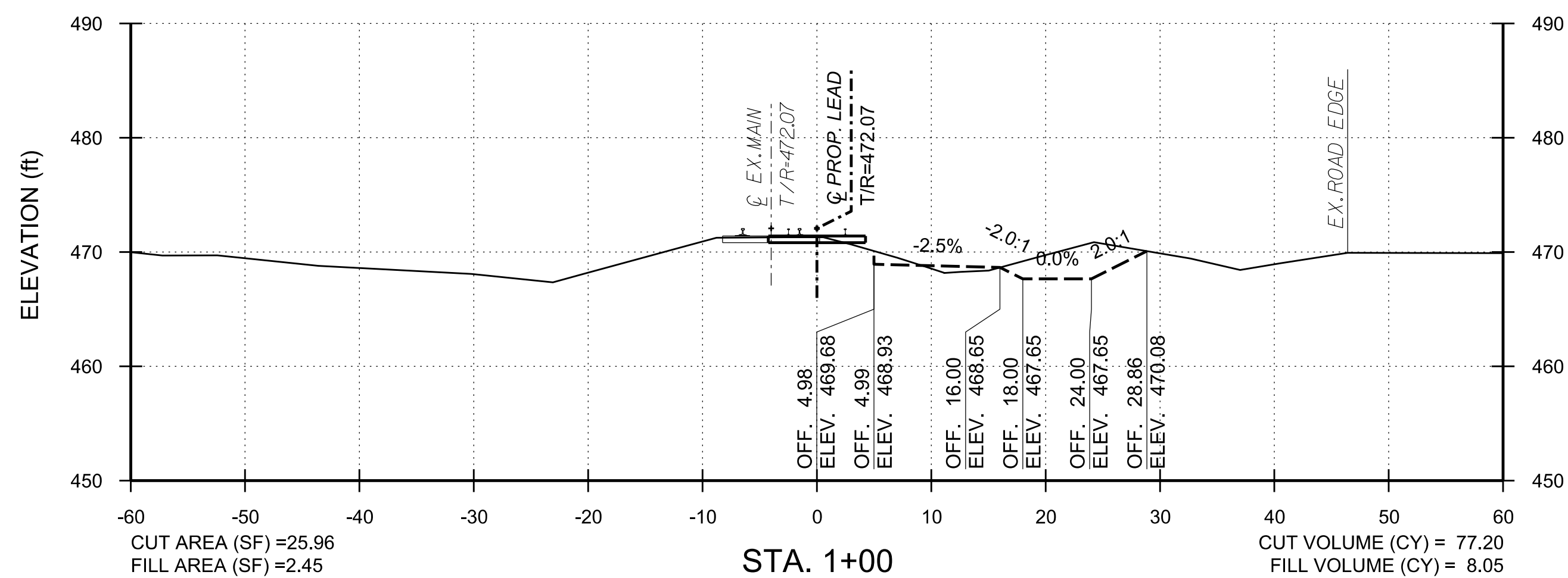
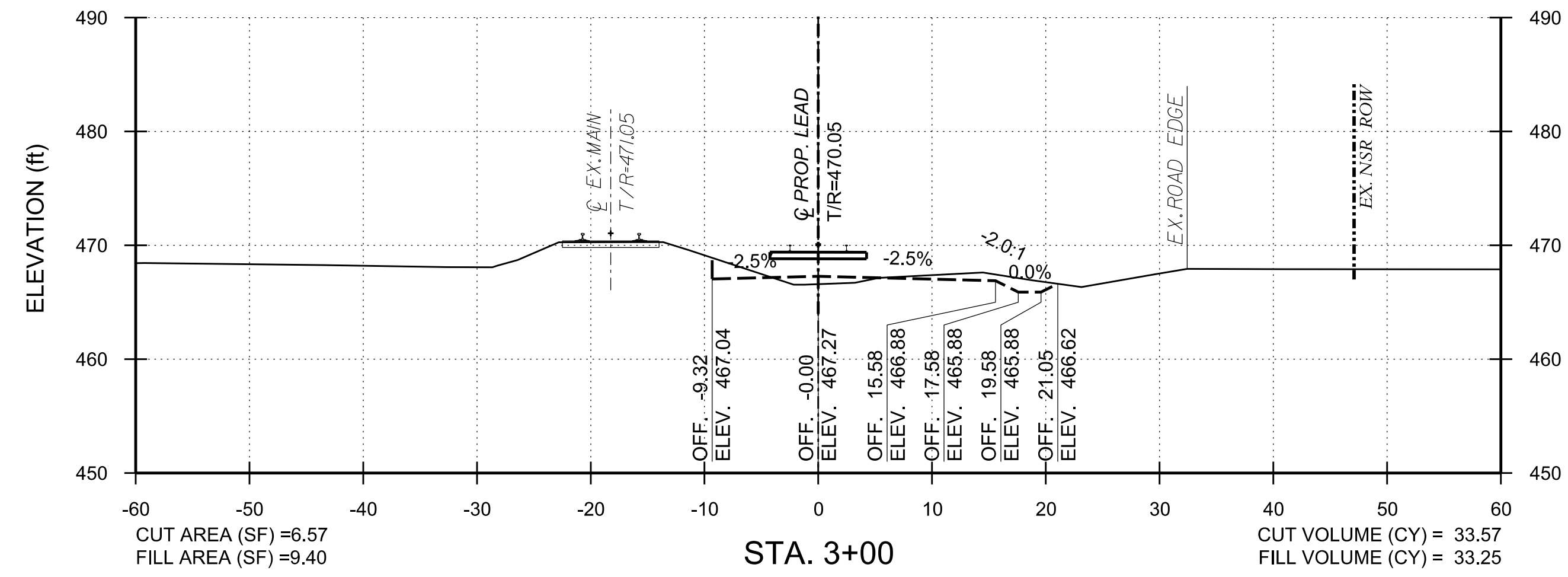
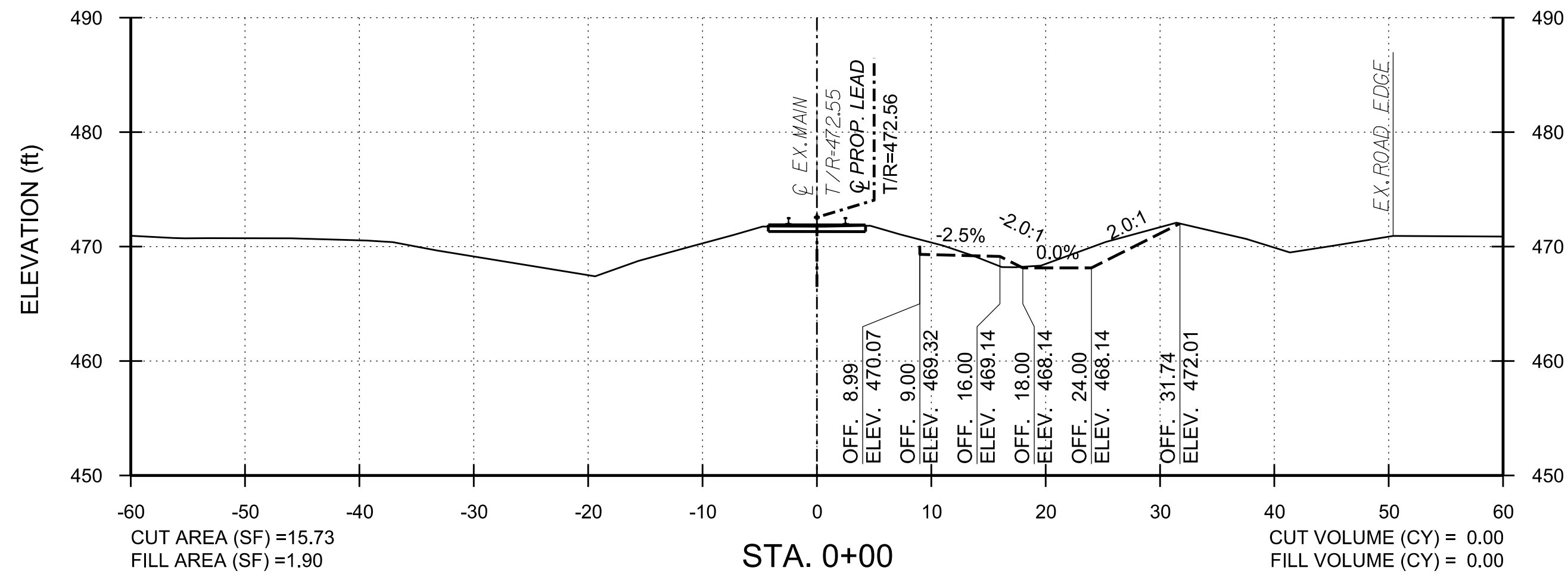
CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



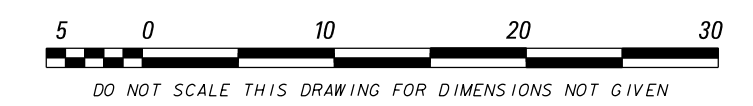
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT HEADWALL/WINGWALL DETAILS | | | |
| DWN | EVU | PLO NO. D3327 | VRN 04825 |
| CHK | EVU | FILE NO. TRK115024 | DRAWING NUMBER |
| | | DATE MARCH 5, 2024 | TD-2023-105-R1 |

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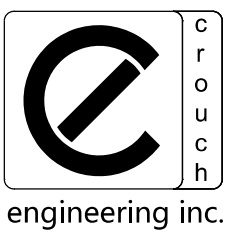


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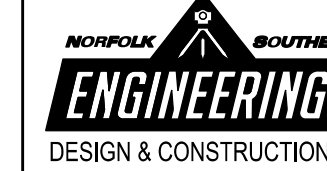


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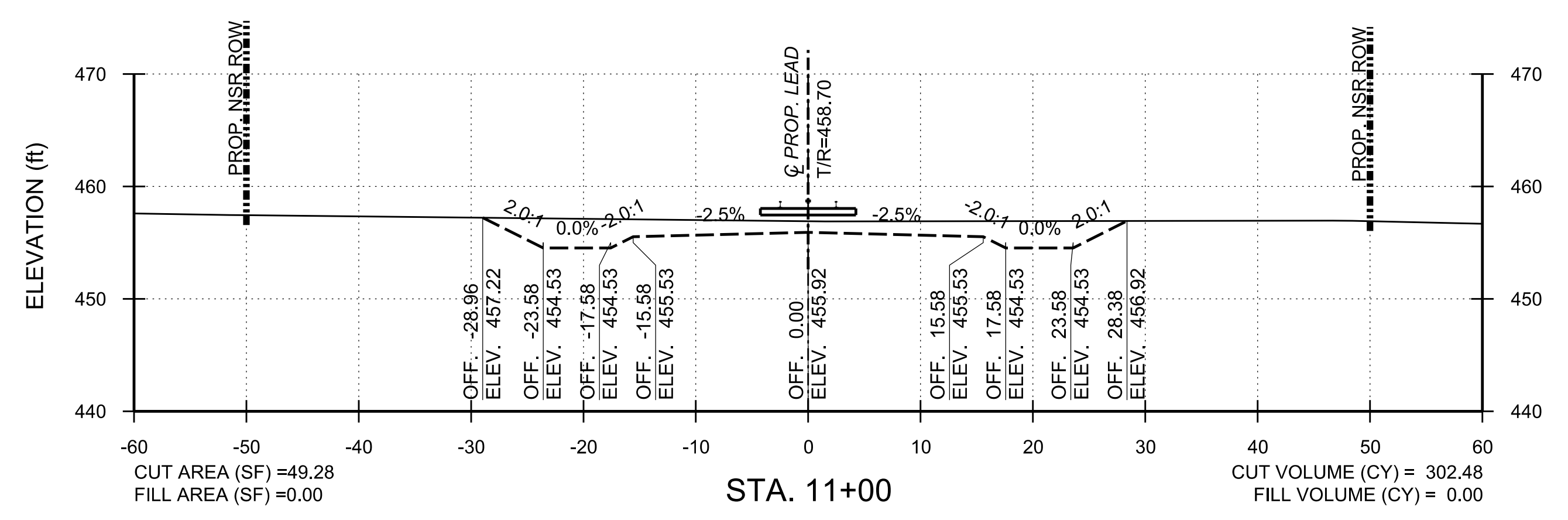
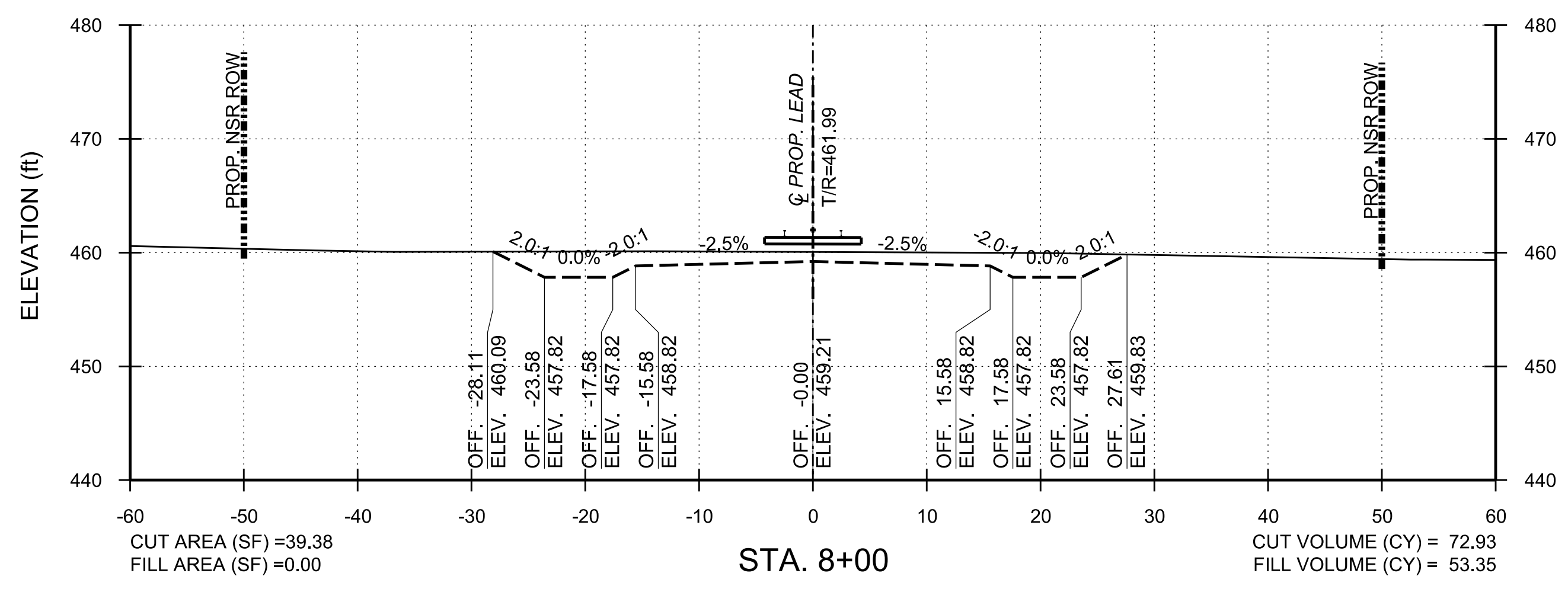
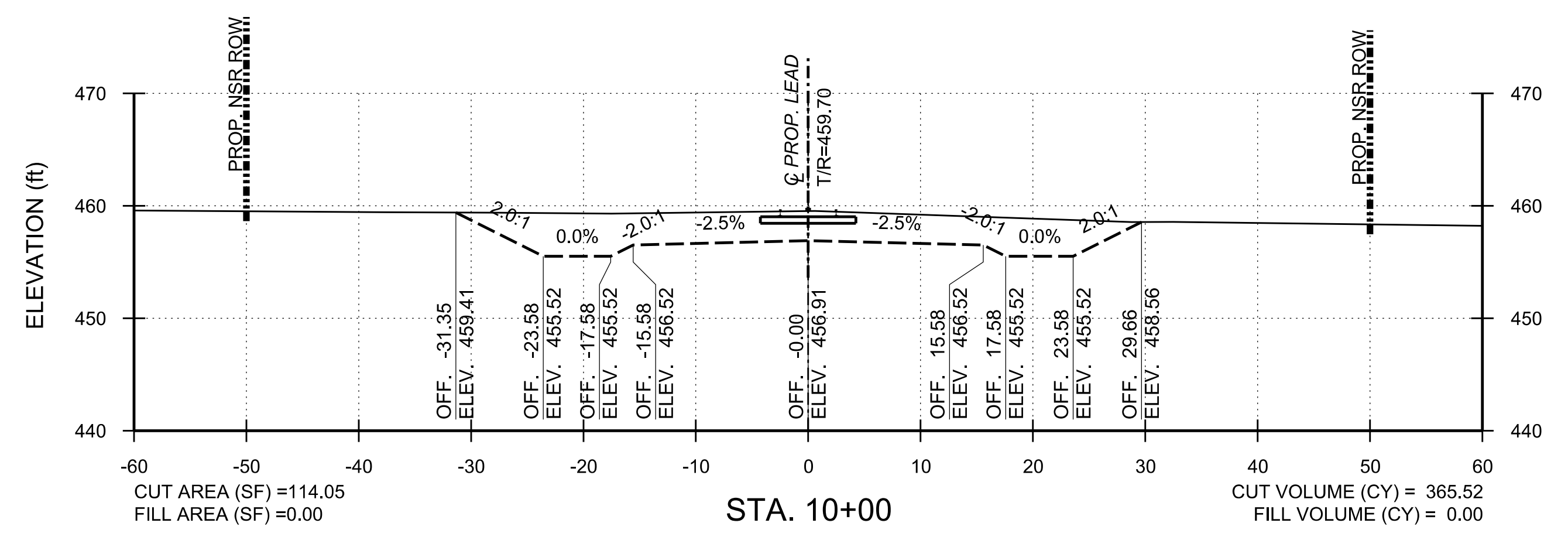
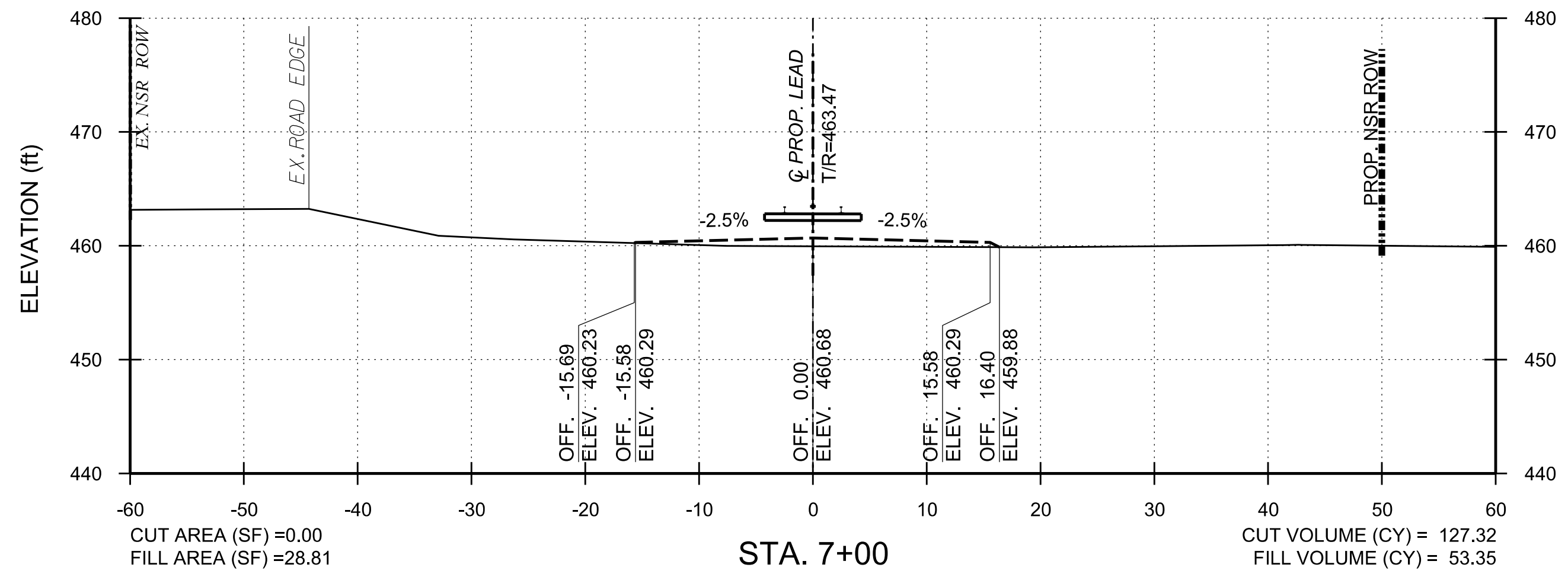
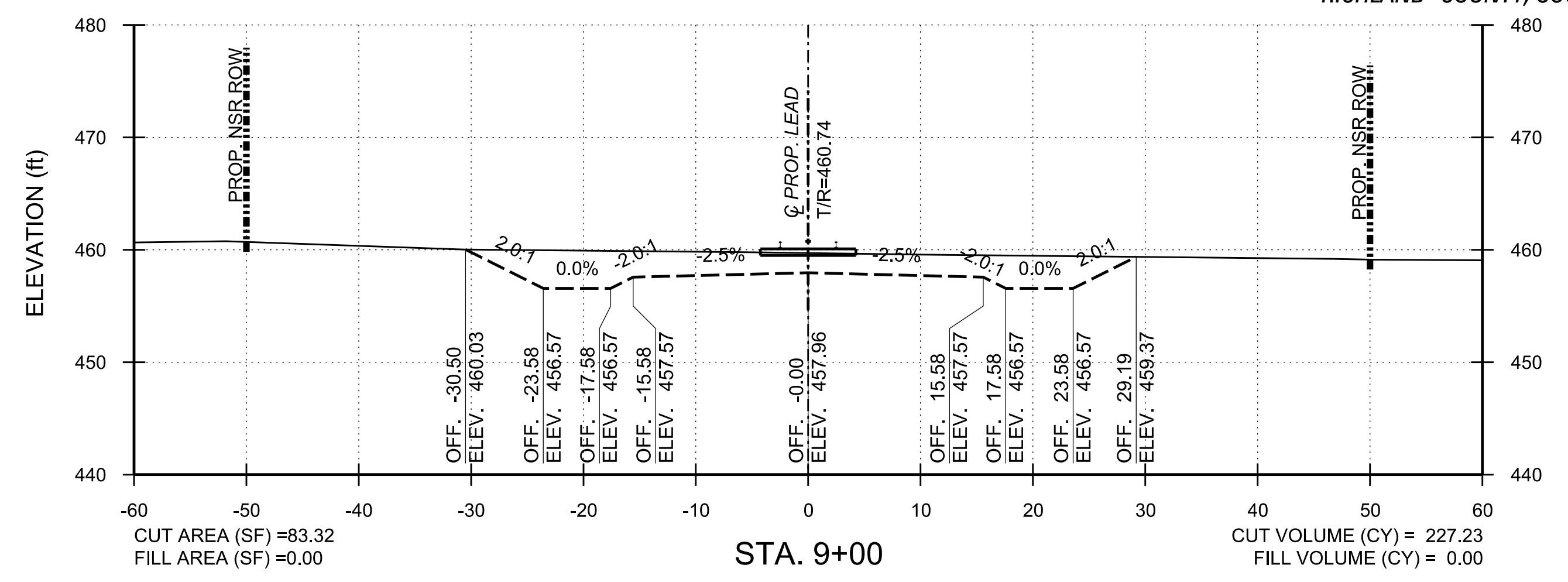
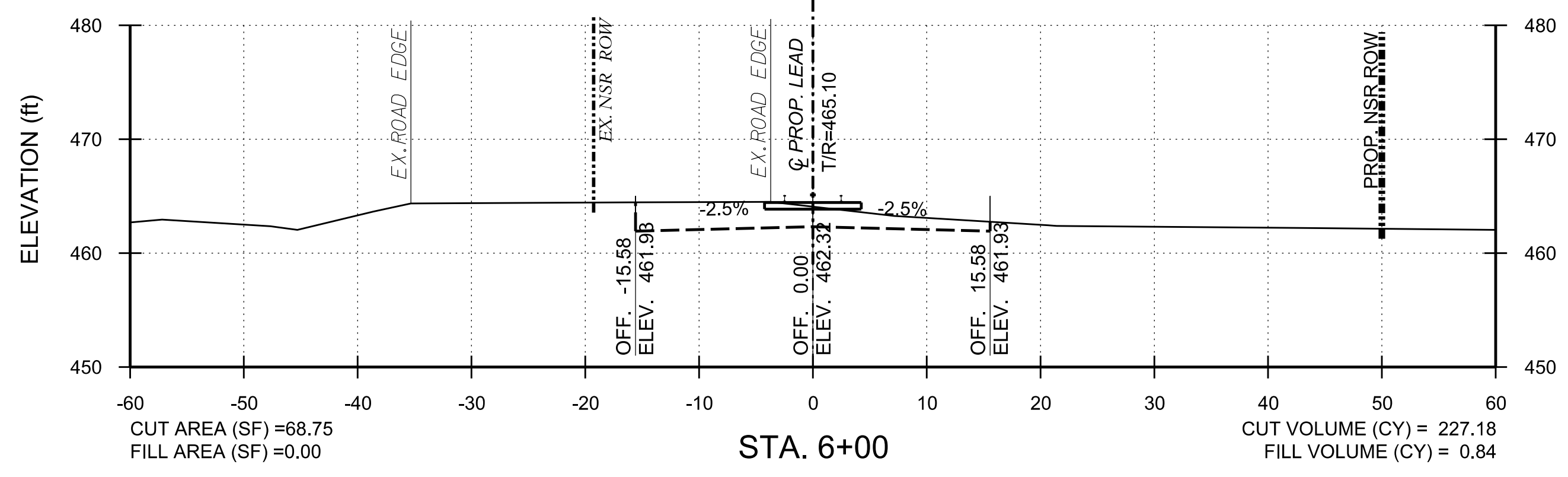
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| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

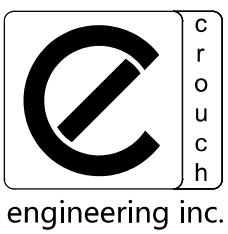


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| TITLE: | PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS |
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| DATE: | MARCH 5, 2024 |
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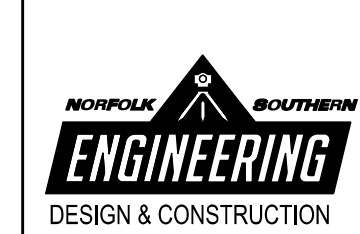


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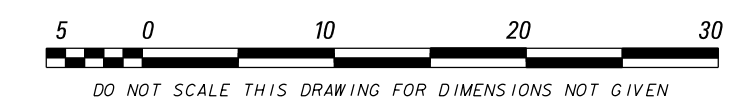
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REVISIONS:



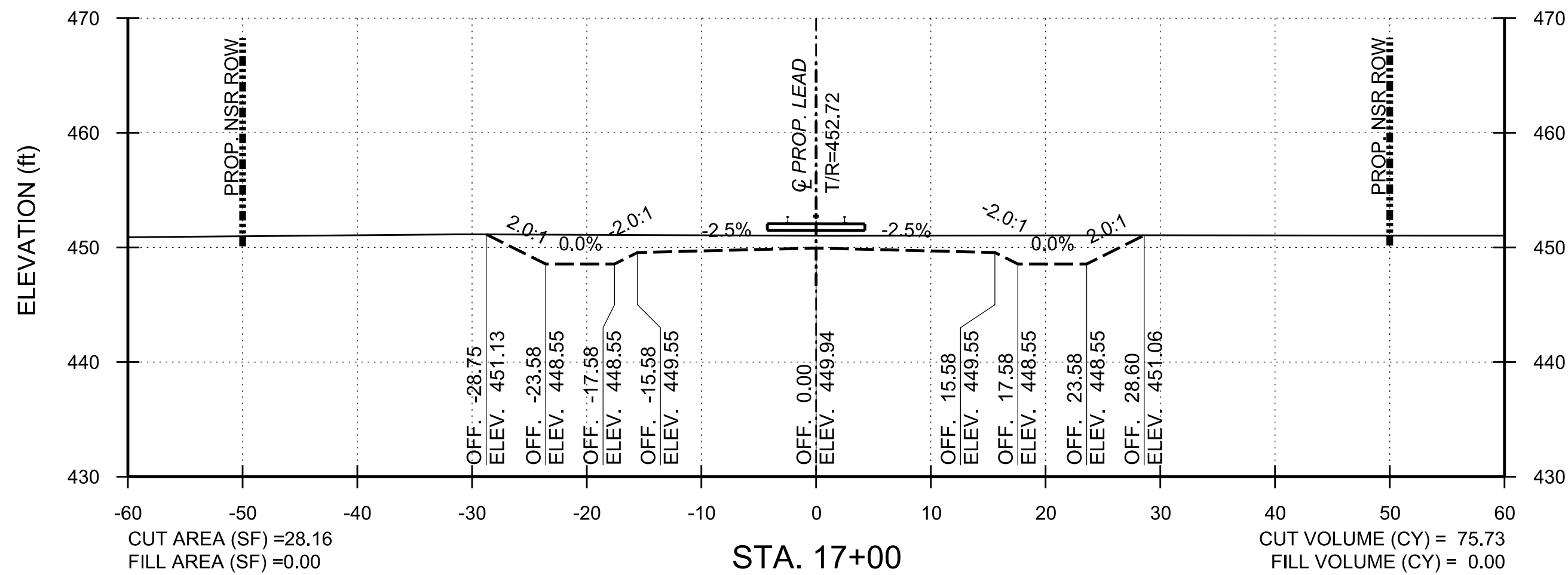
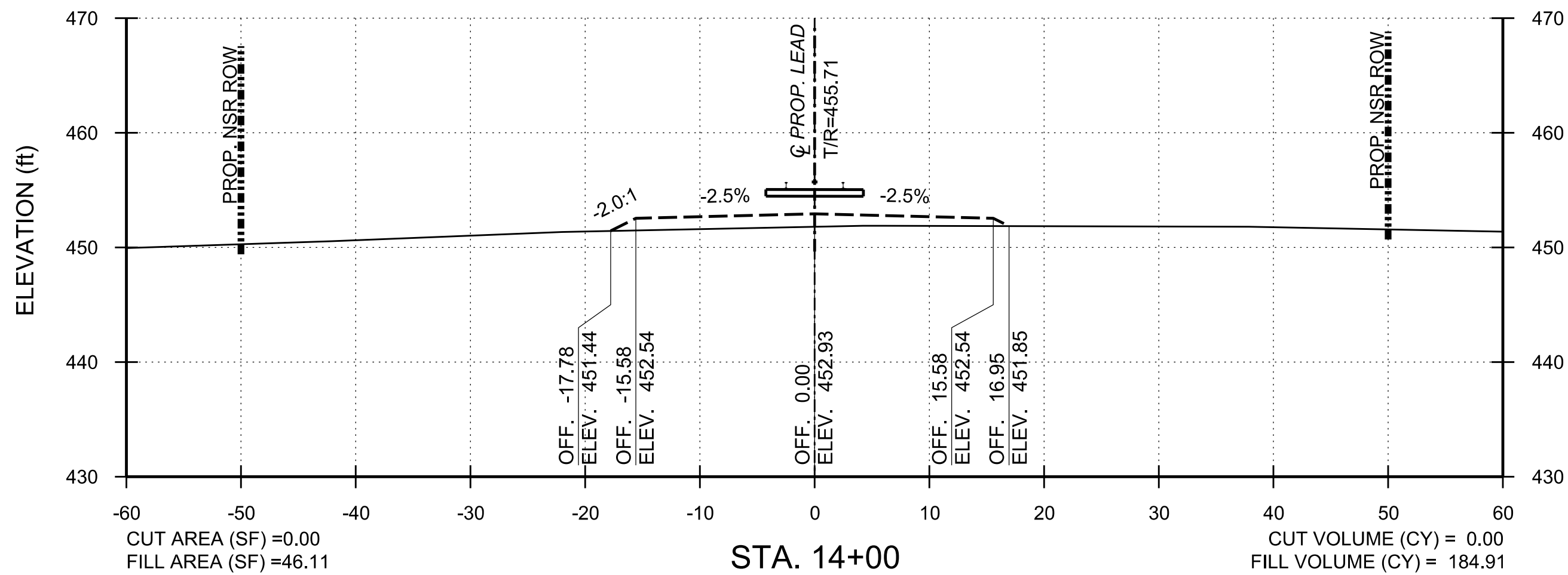
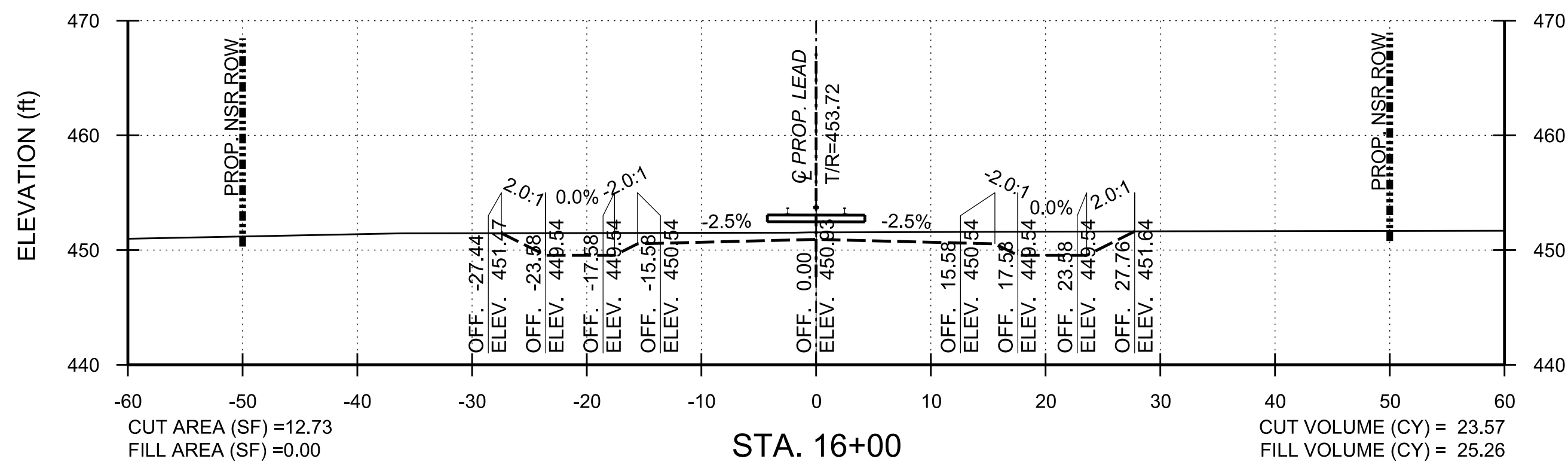
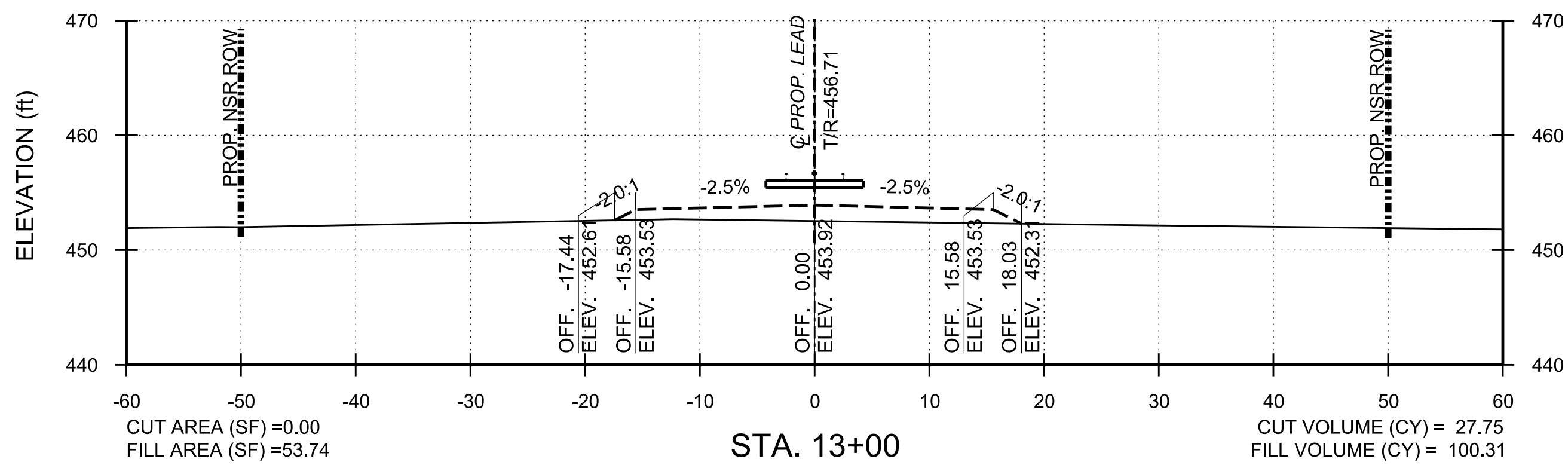
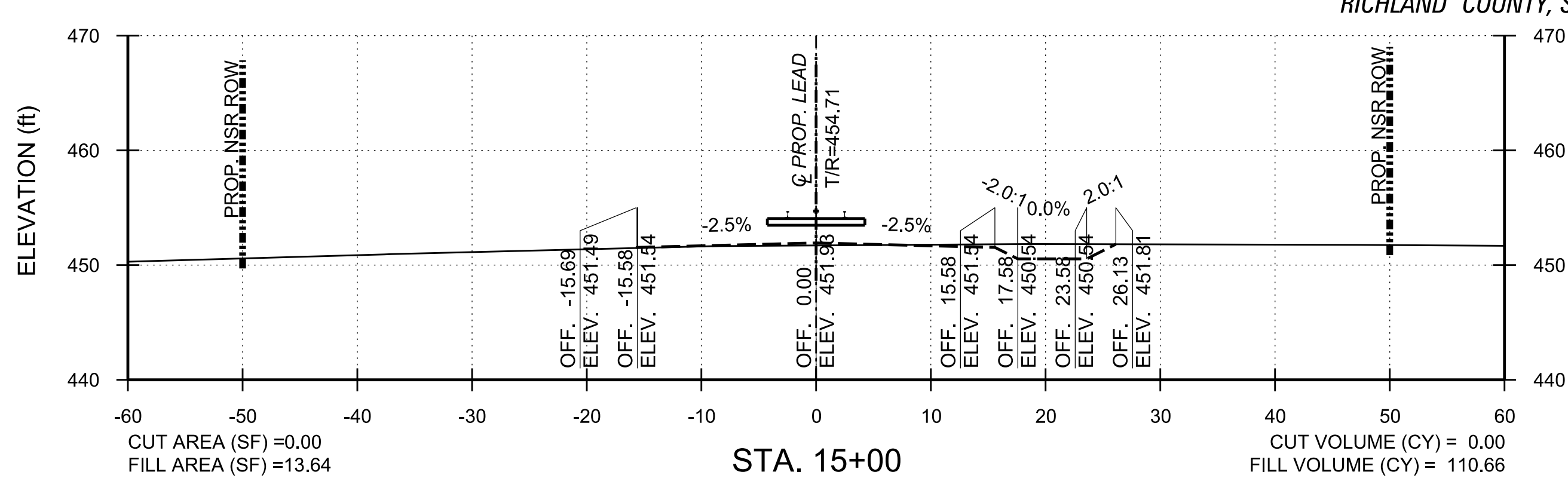
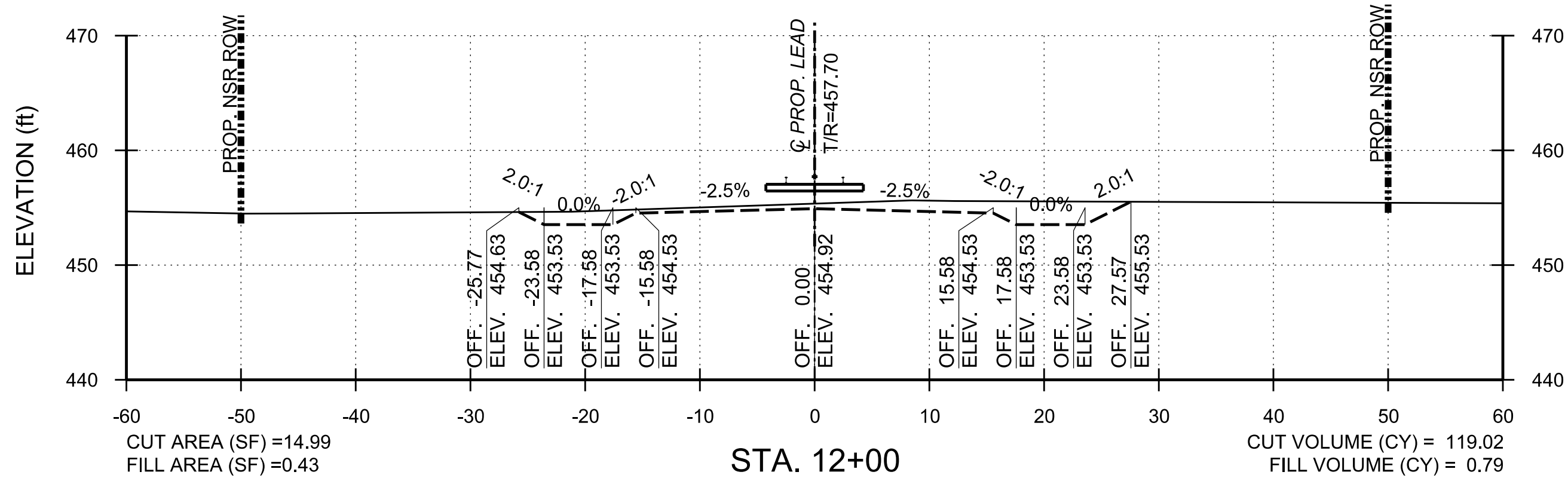
CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



SCALE: 1" = 10'

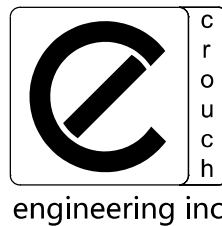


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| LOCATION | BLYTHEWOOD, SC | |
| TITLE | PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | |
| DWN | FILE NO. D3327 | VRN 04825 |
| CHK | FILE NO. TRK115024 | DATE MARCH 5, 2024 |
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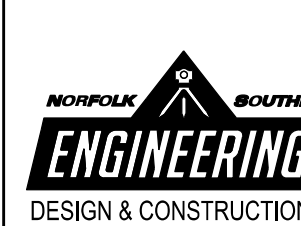


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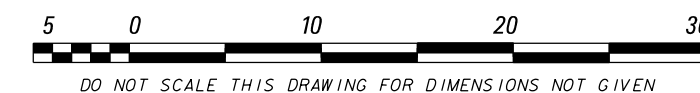
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CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

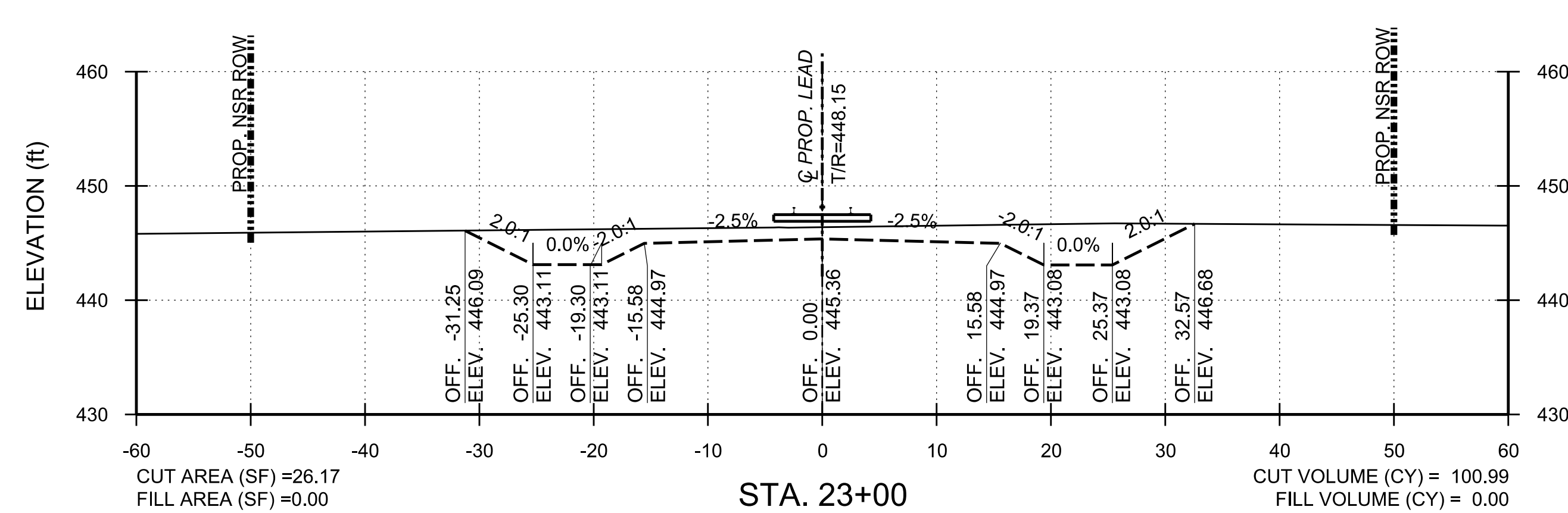
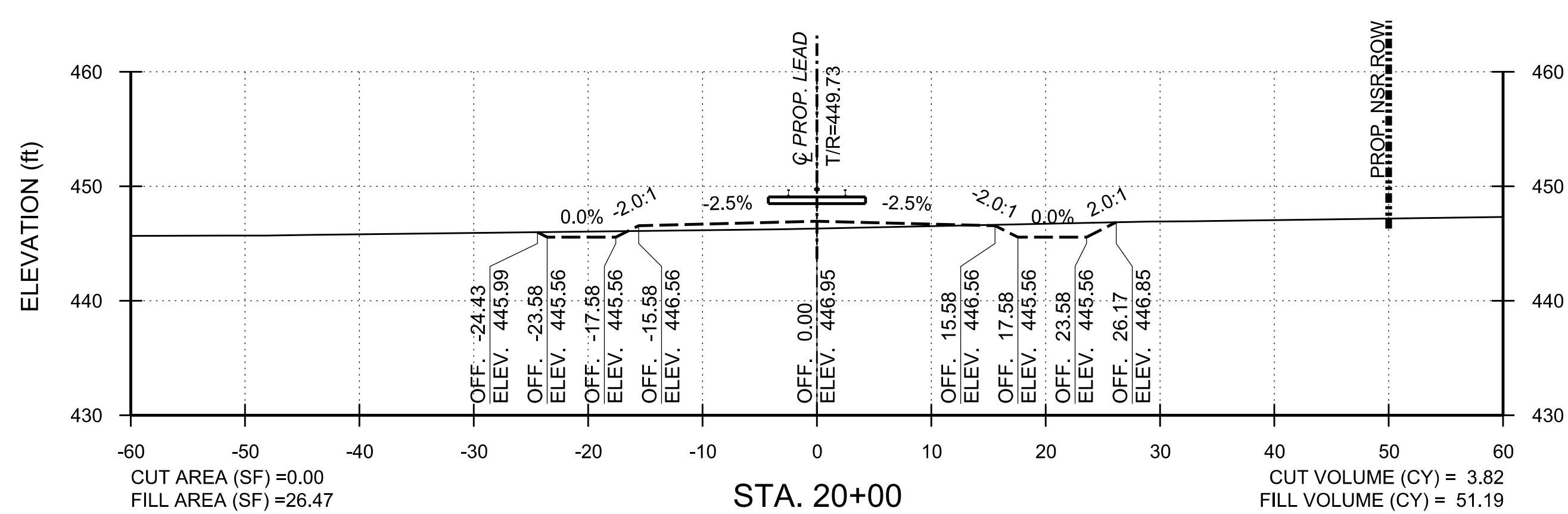
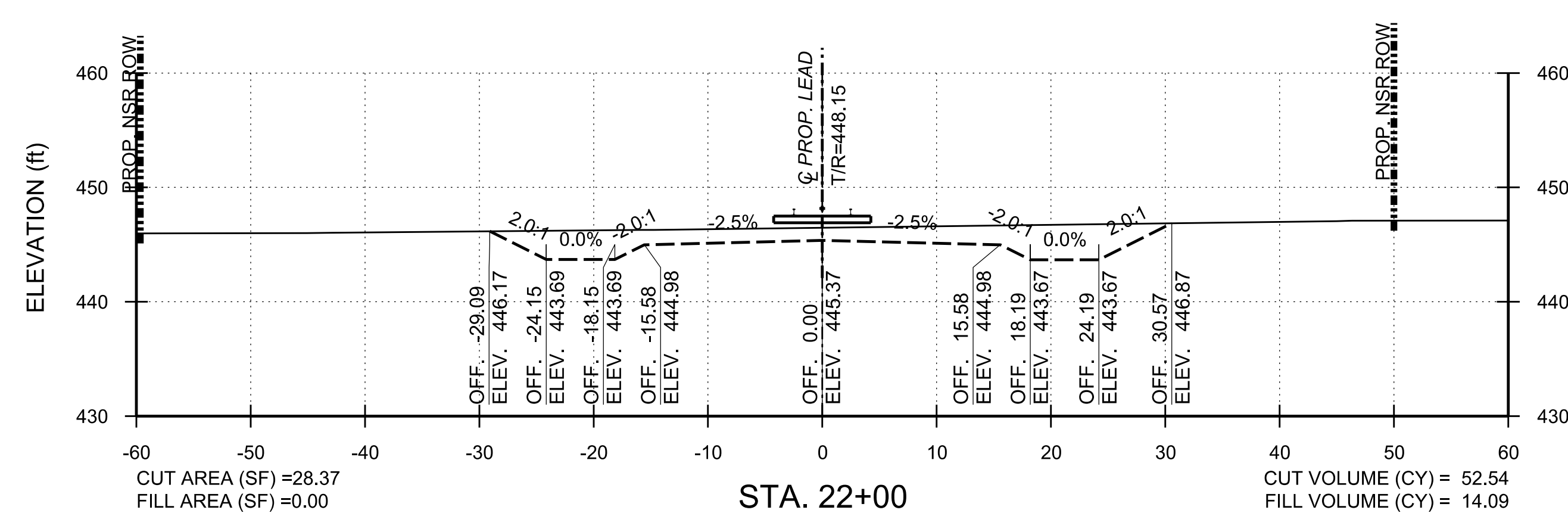
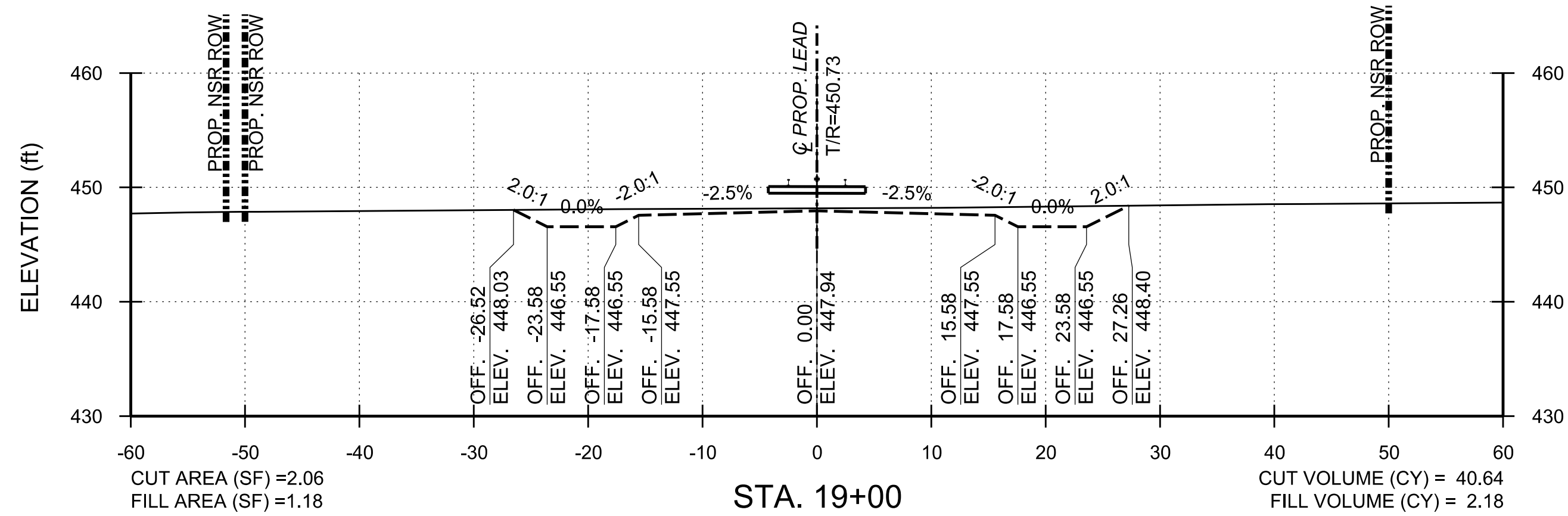
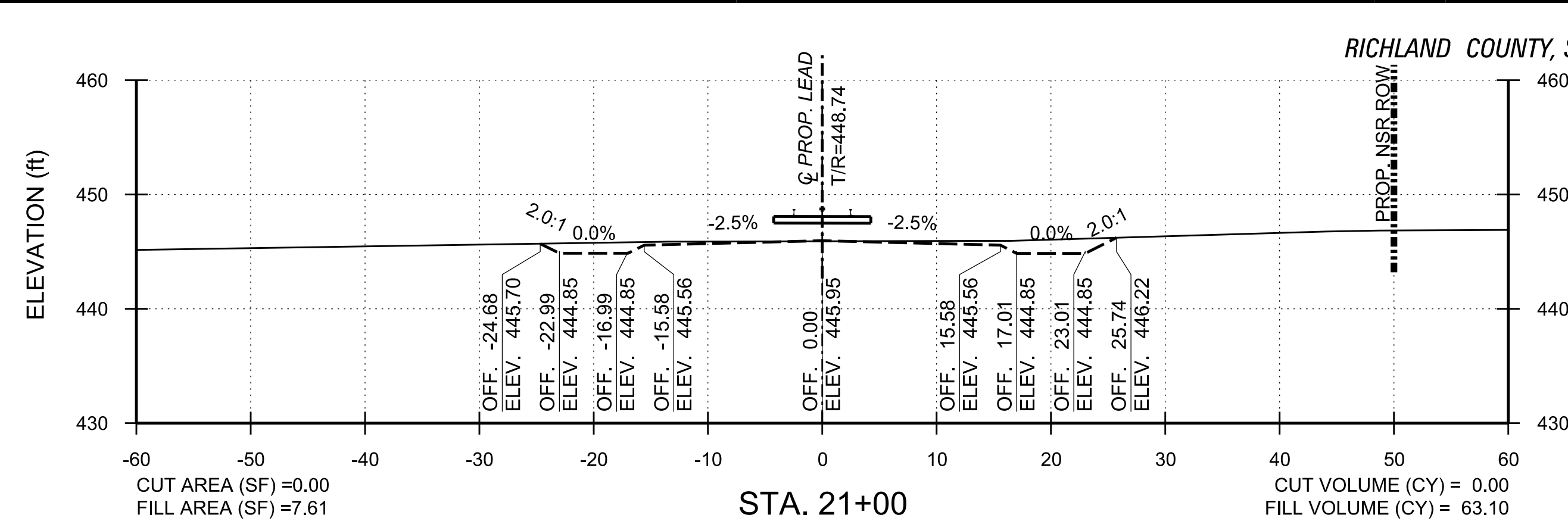
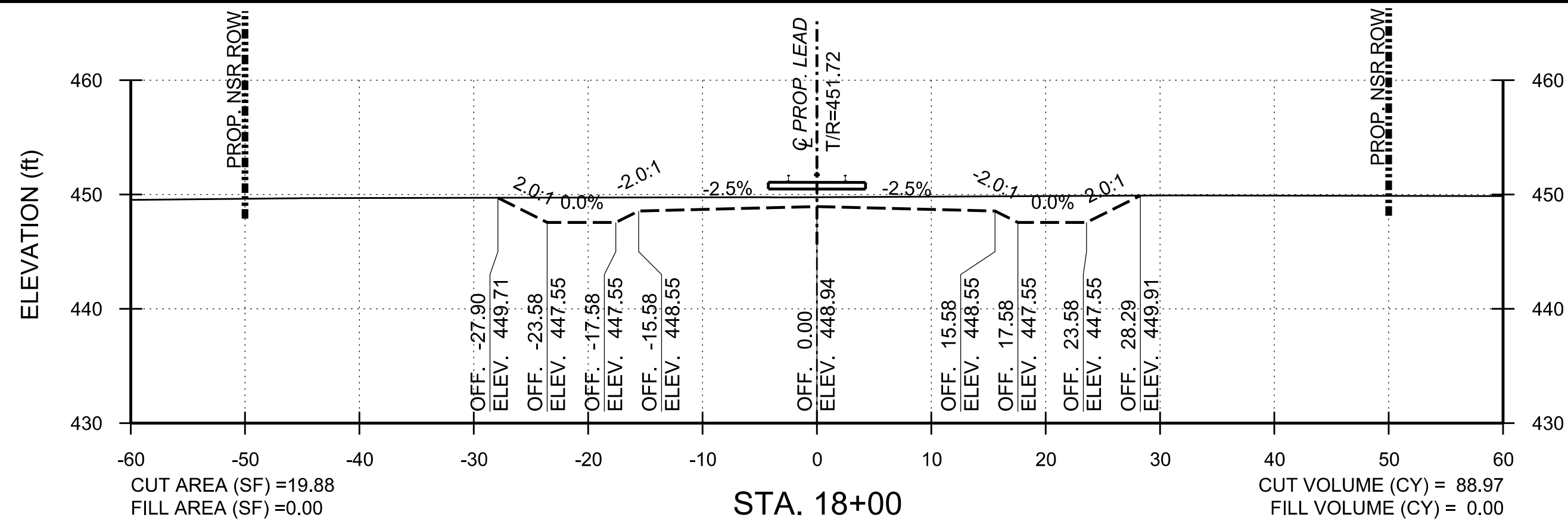


SCALE: 1" = 10'

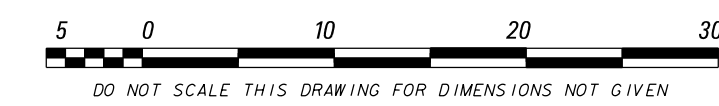


NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | |
|--|---------------------|-----------------------------|
| REV. BY | DATE | DESCRIPTION |
| | | BLYTHEWOOD, SC |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | |
| DESIGNED BY: EVU | PROJECT NO: D3327 | YEAR: 04825 |
| DRAWN BY: EVU | FILE NO: TRK115024 | DRAWING NUMBER: R91.4 |
| CHECKED BY: | DATE: MARCH 5, 2024 | DRAWING NUMBER: TD-2023-105 |

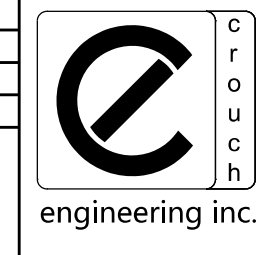


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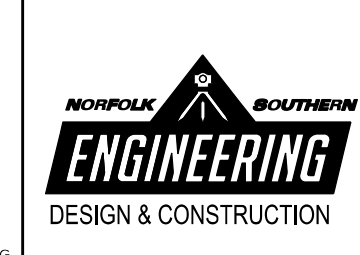


PHASE 1

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|-------------|-------|
| PROJECT NO. | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |

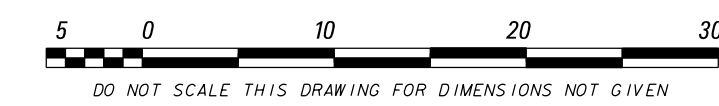
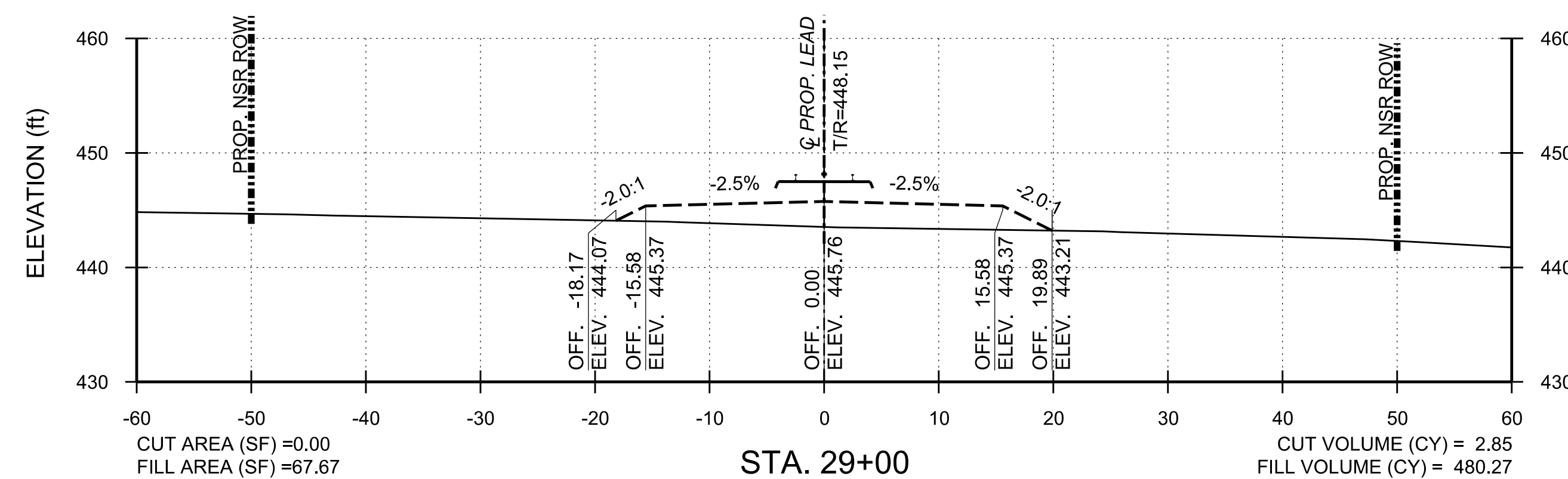
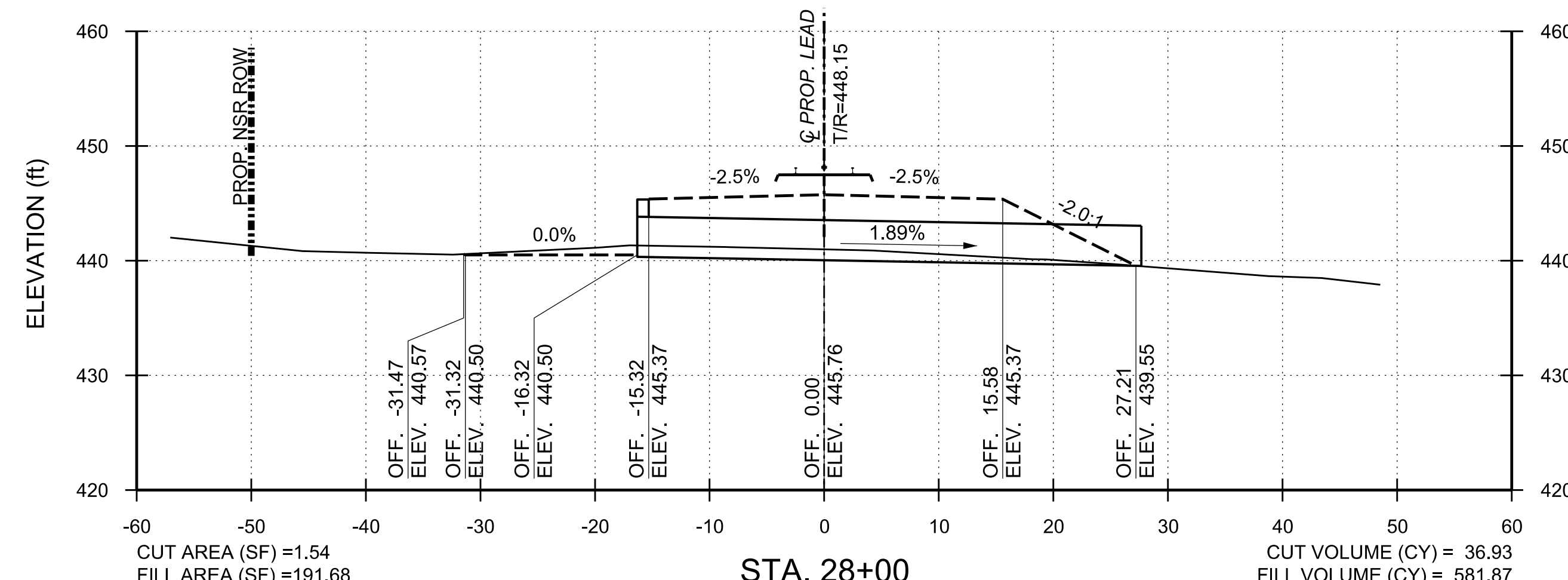
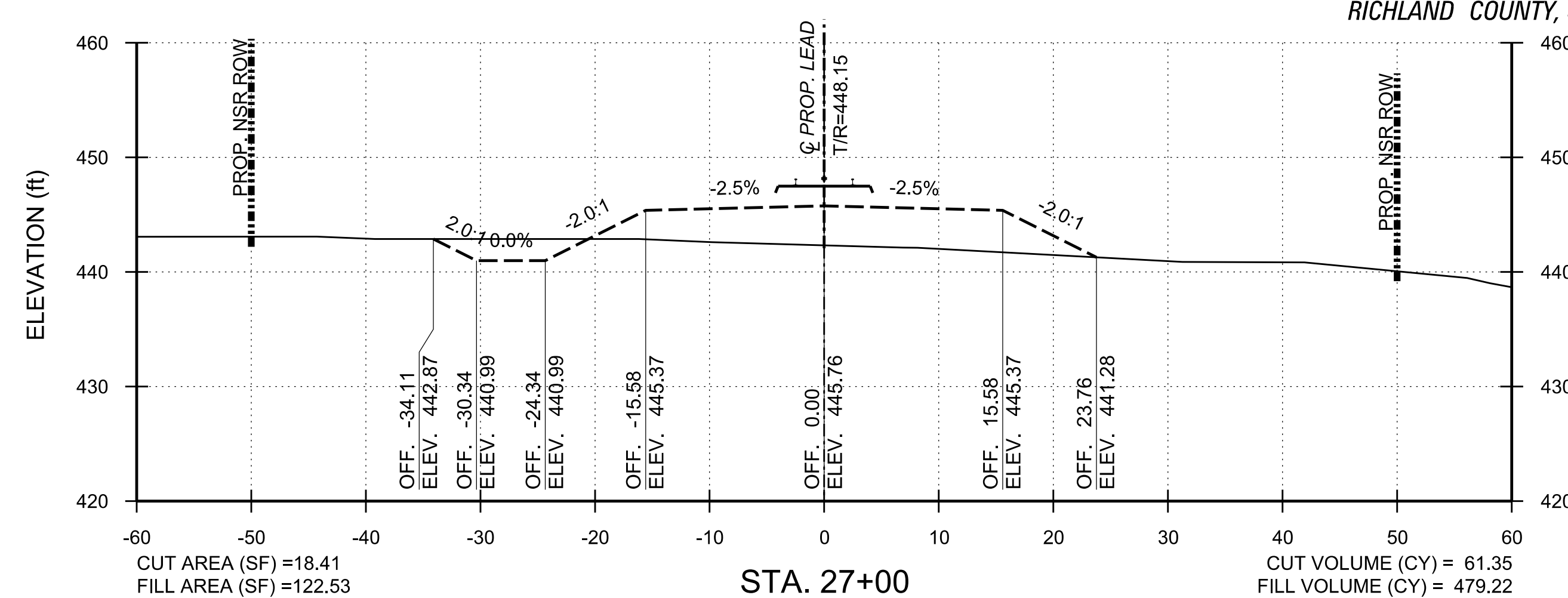
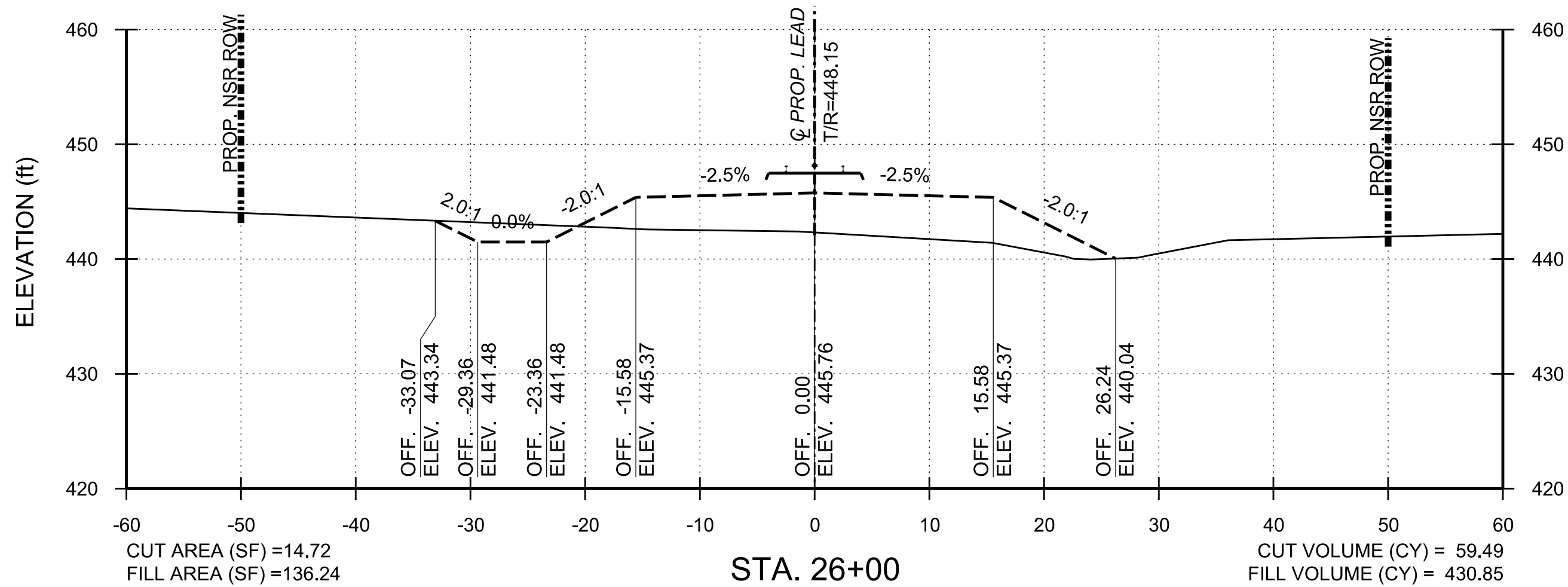
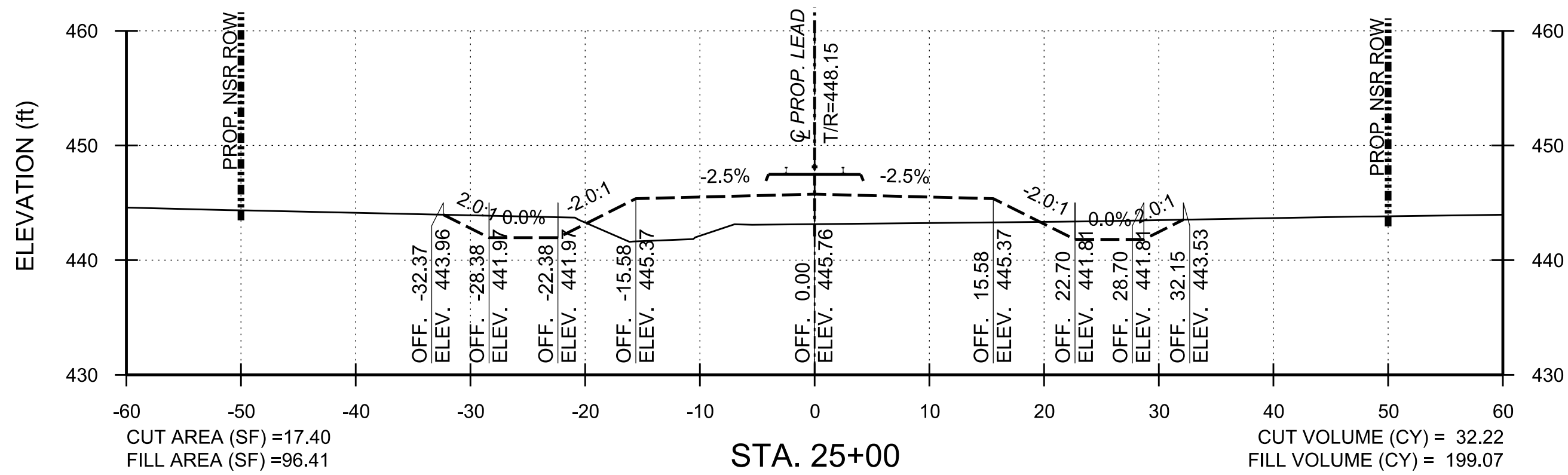
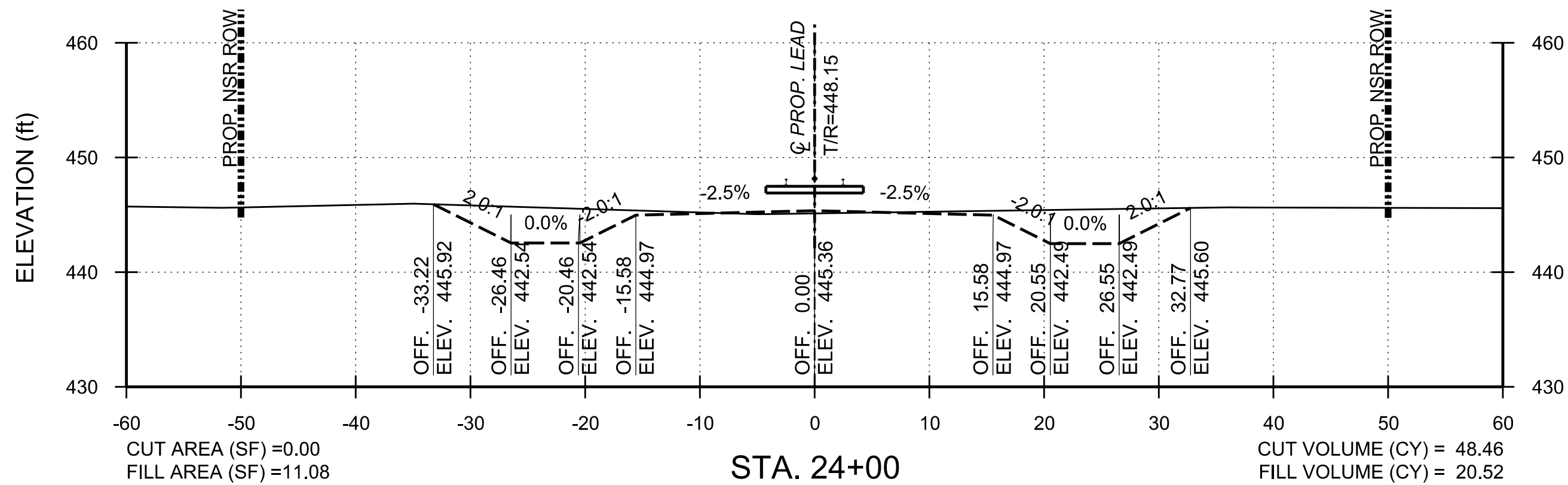


CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



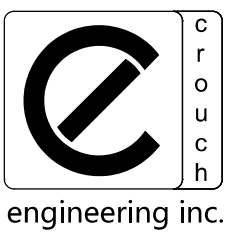
NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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| REV. BY: | DATE: | DESCRIPTION: |
| | | BLYTHEWOOD, SC |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | |
| DWN | PTD NO. D3327 | VRN |
| EVU | FILE NO. TRK115024 | 04825 |
| CHK | DATE MARCH 5, 2024 | 981.4 |
| DRAWING NUMBER: TD-2023-105 | | |

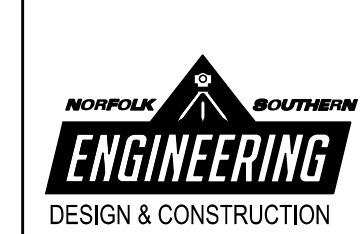


PHASE 1

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| PROJECT NO: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |

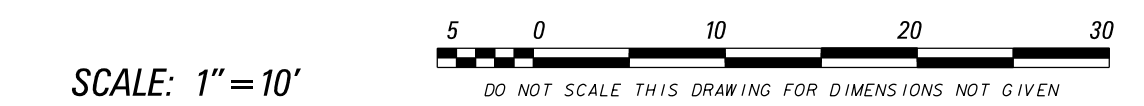
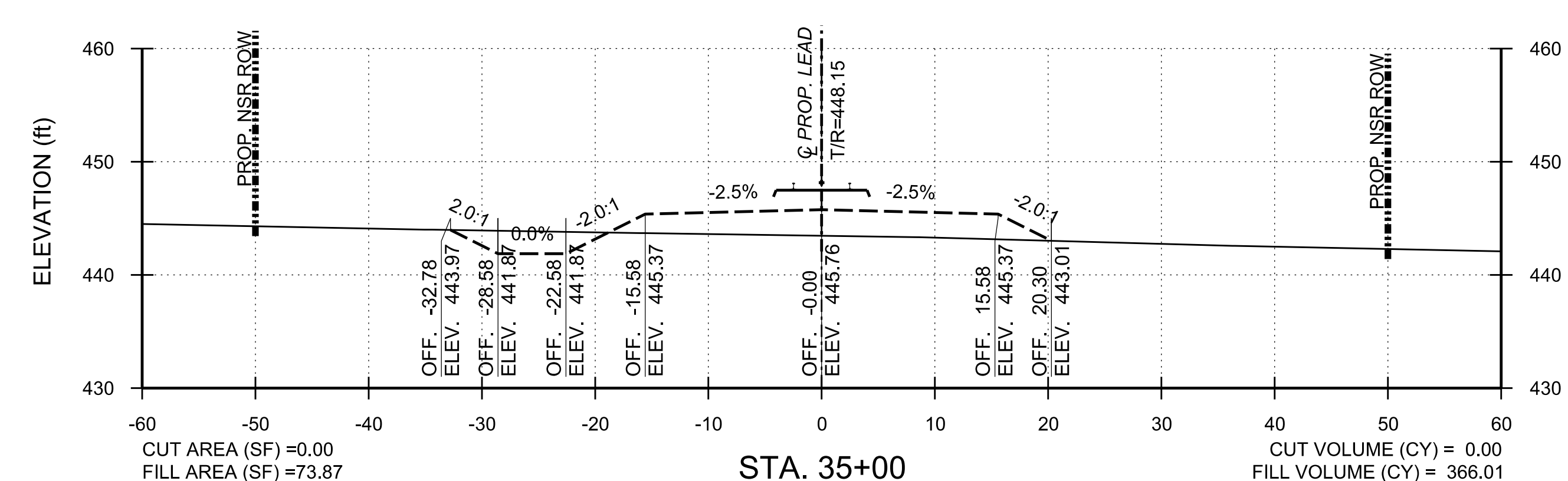
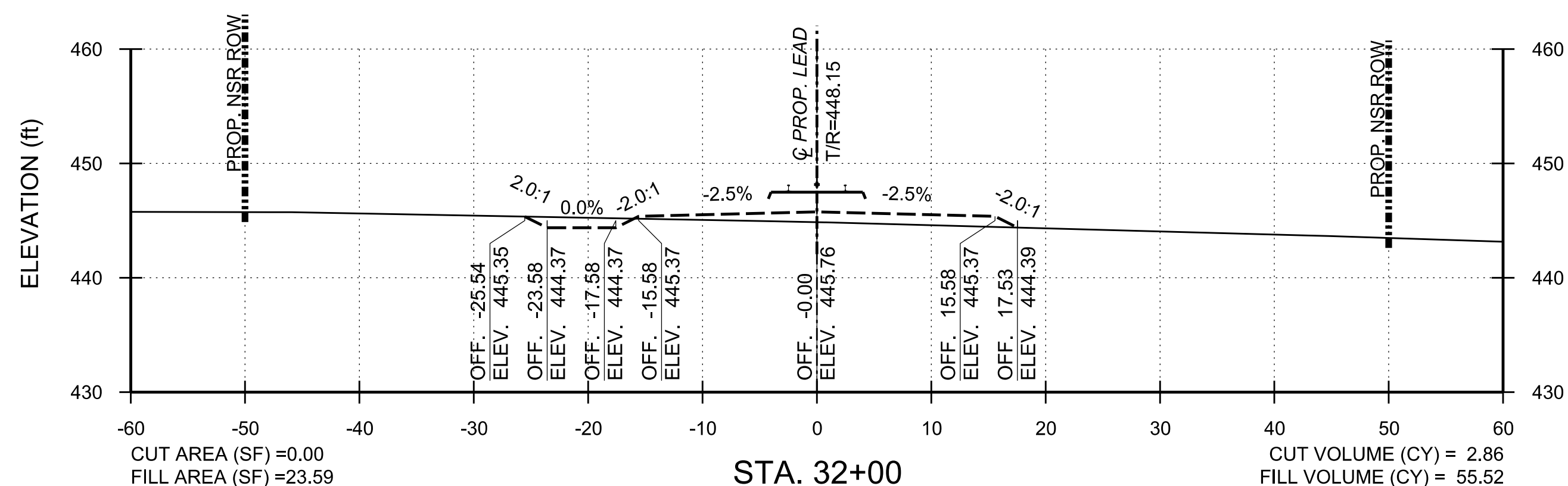
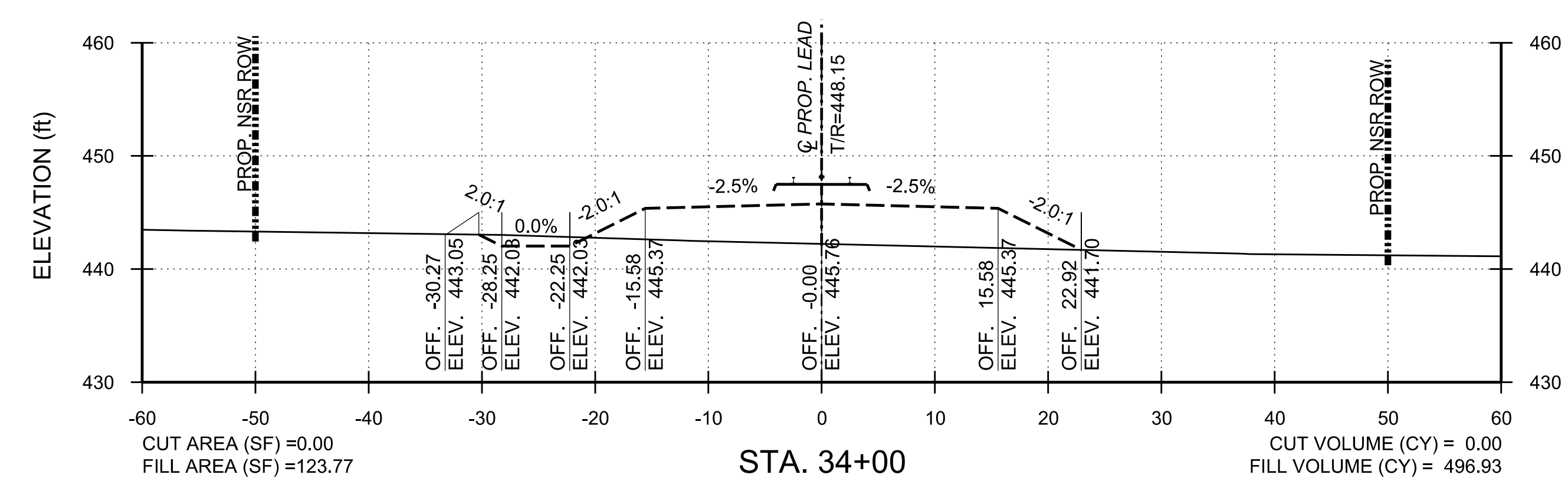
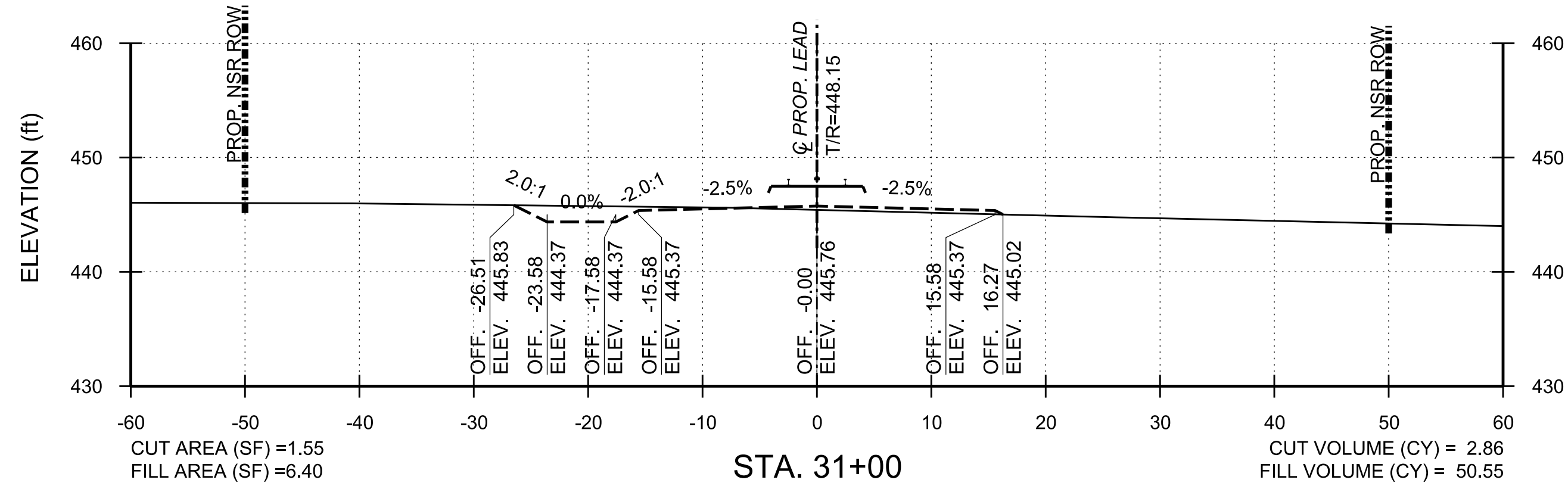
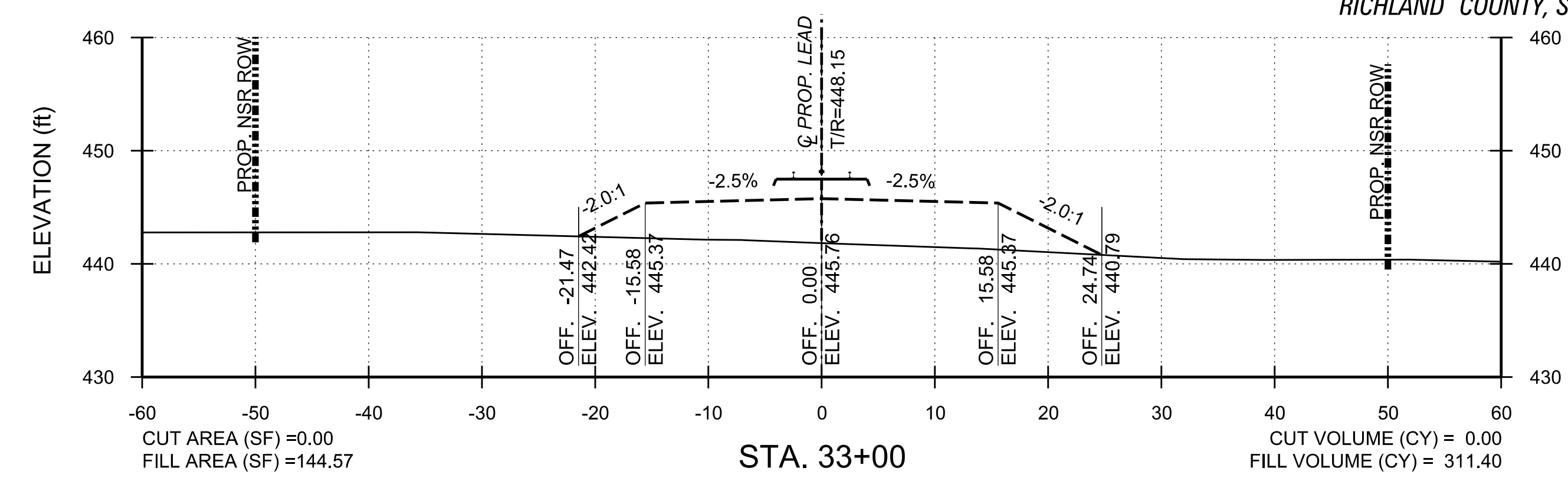
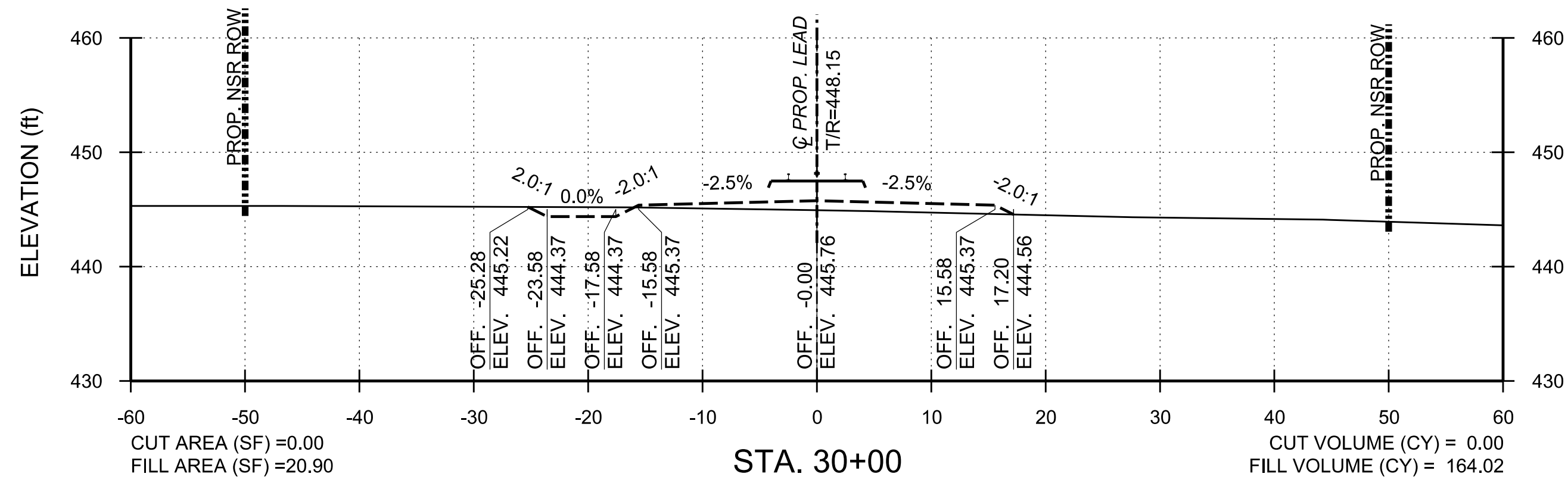


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5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



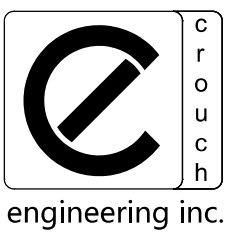
NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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|--|--------------|--------------------|---|
| REV | BY | DATE | DESCRIPTION |
| R1 | EVU/DA/02/24 | | UPDATED STEEL PIPE DESIGN WITH HEADWALL |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | PTD NO. D3327 | YRIN 04825 |
| CHK | EVU | FILE NO. TRK115024 | DRAWING NUMBER R91.4 |
| DATE: MARCH 5, 2024 | | TD-2023-105-R1 | |

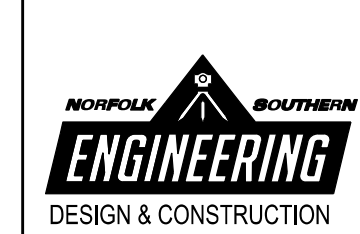


PHASE 1

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| PROJECT NO.: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |

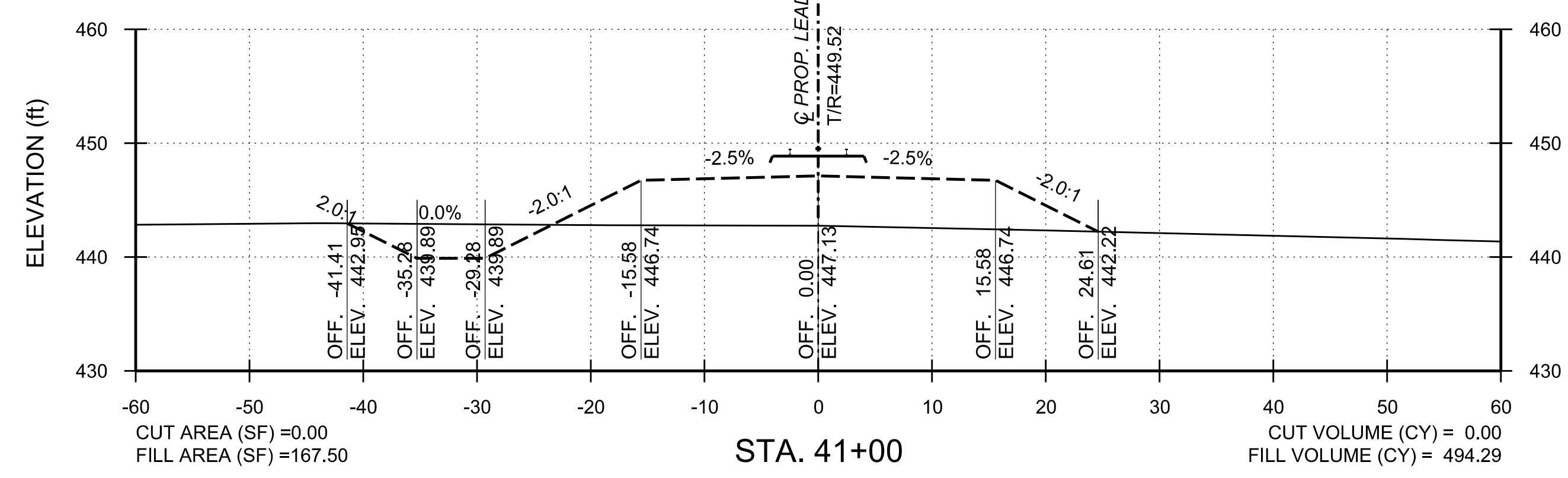
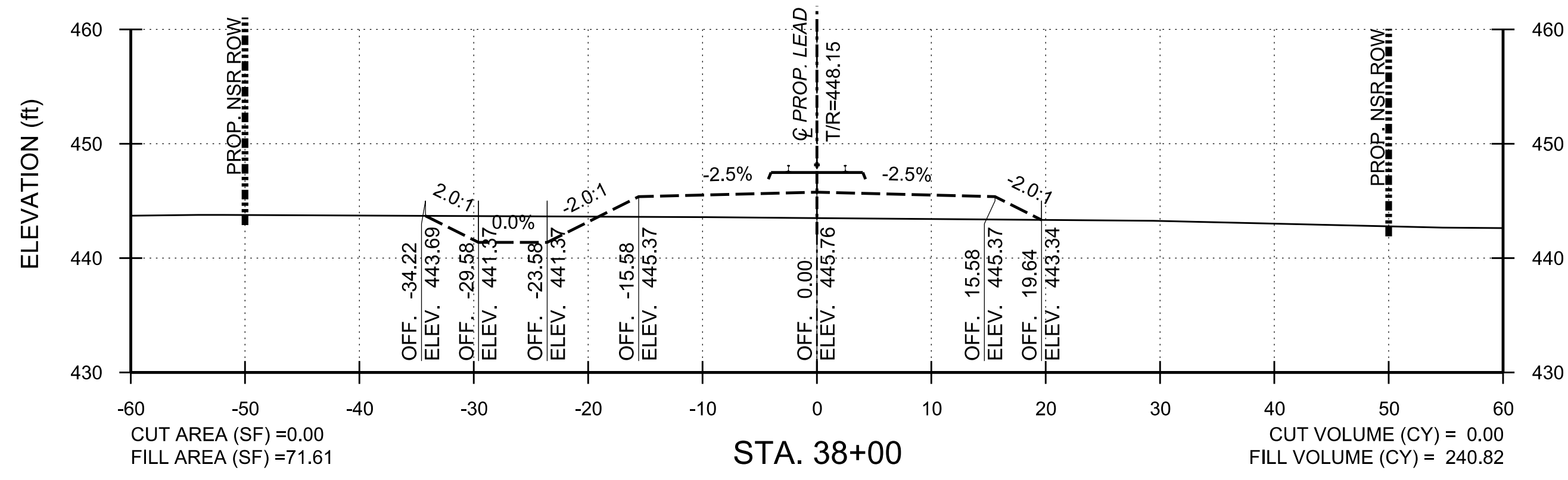
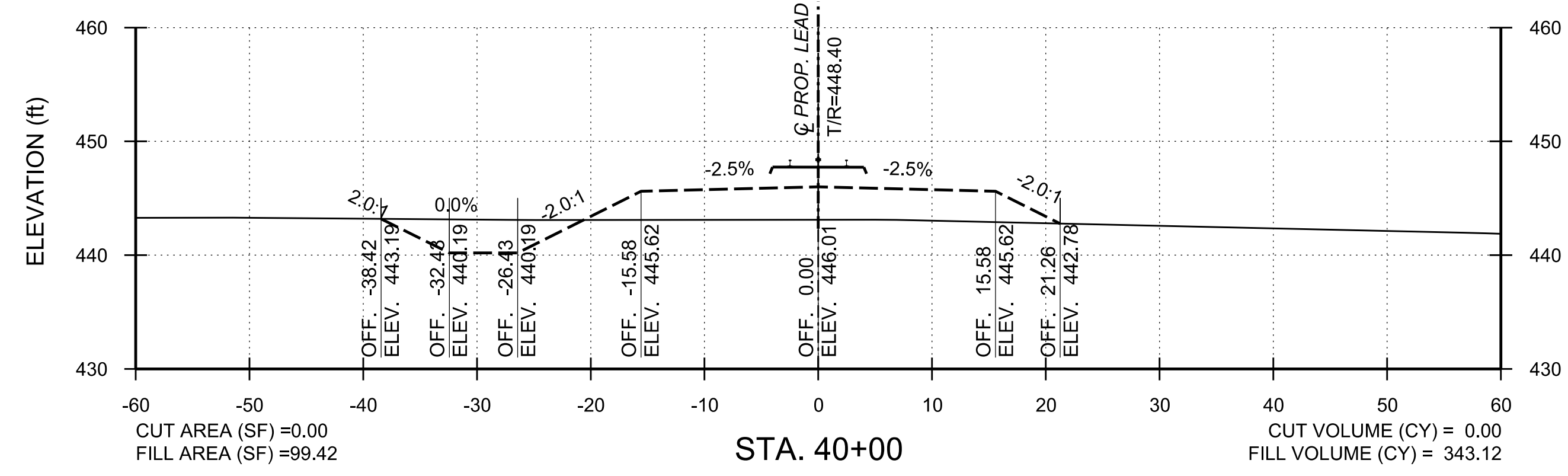
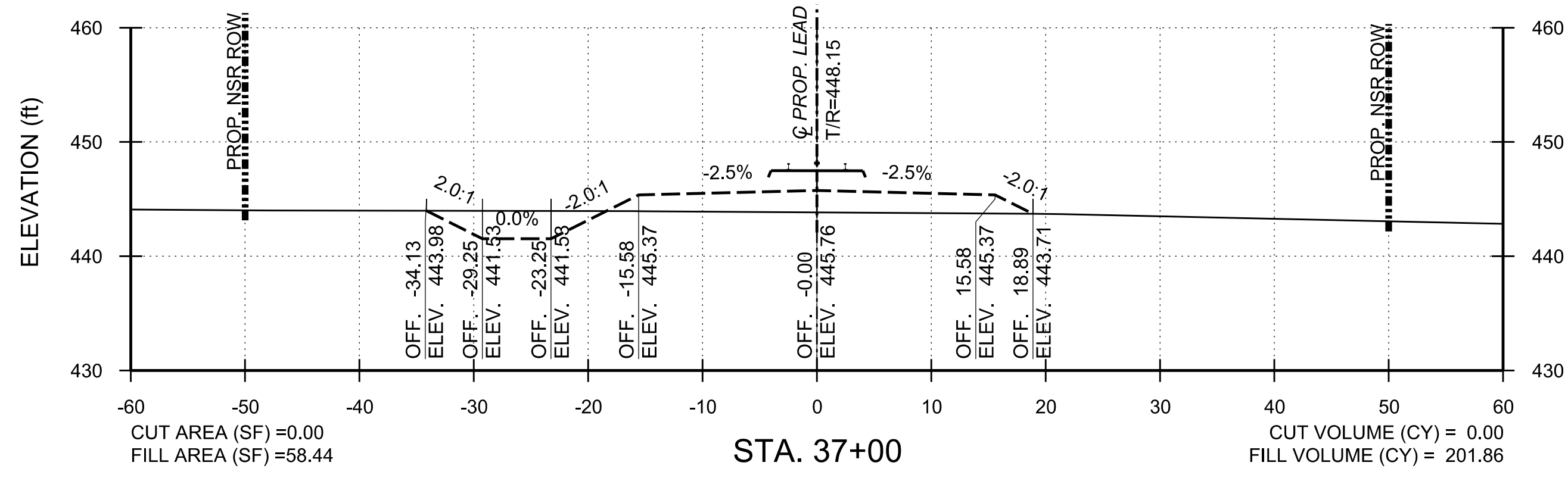
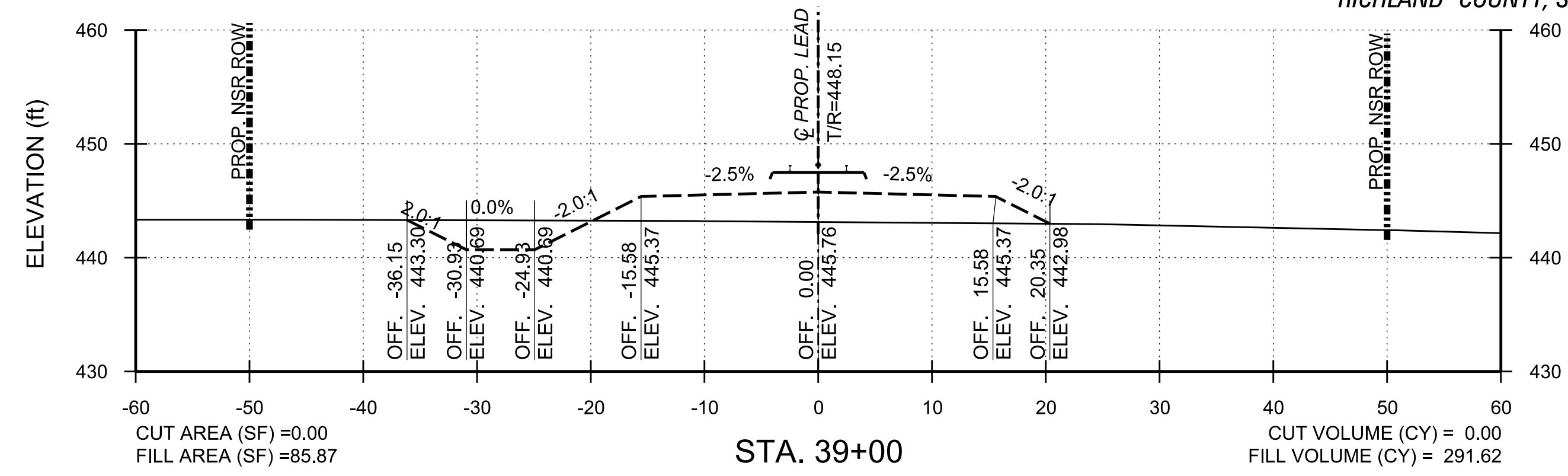
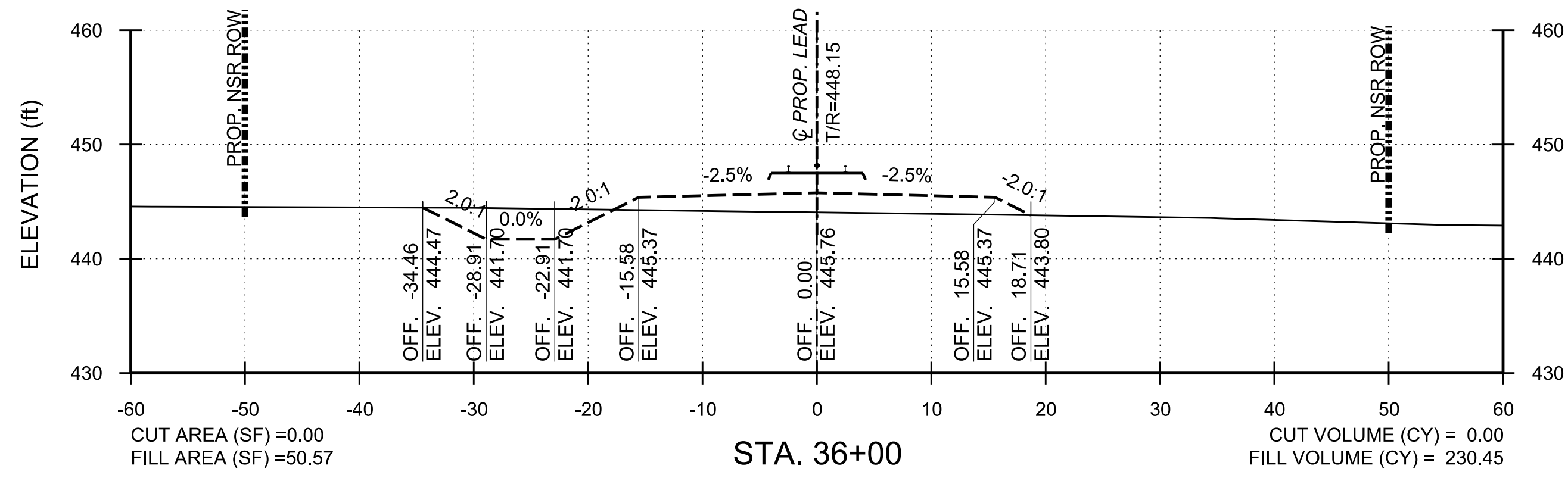


CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

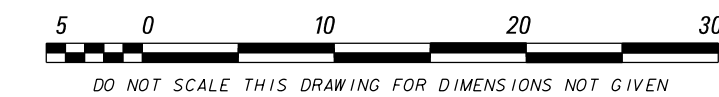


NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | |
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| REV. BY: | DATE: | DESCRIPTION: |
| | | BLYTHEWOOD, SC |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | |
| DWN: | PTD NO.: | VRN: |
| EVU | D3327 | 04825 |
| FILE NO.: | TRK1115024 | DRAWING NUMBER: |
| DATE: | MARCH 5, 2024 | TD-2023-105 |
| CHK: | | |

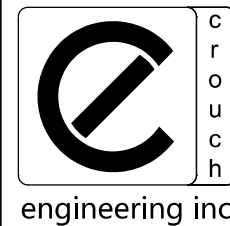


SCALE: 1" = 10'

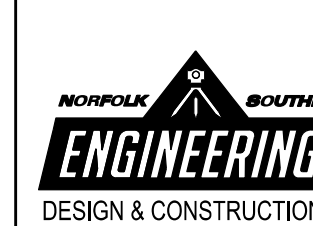


PHASE 1

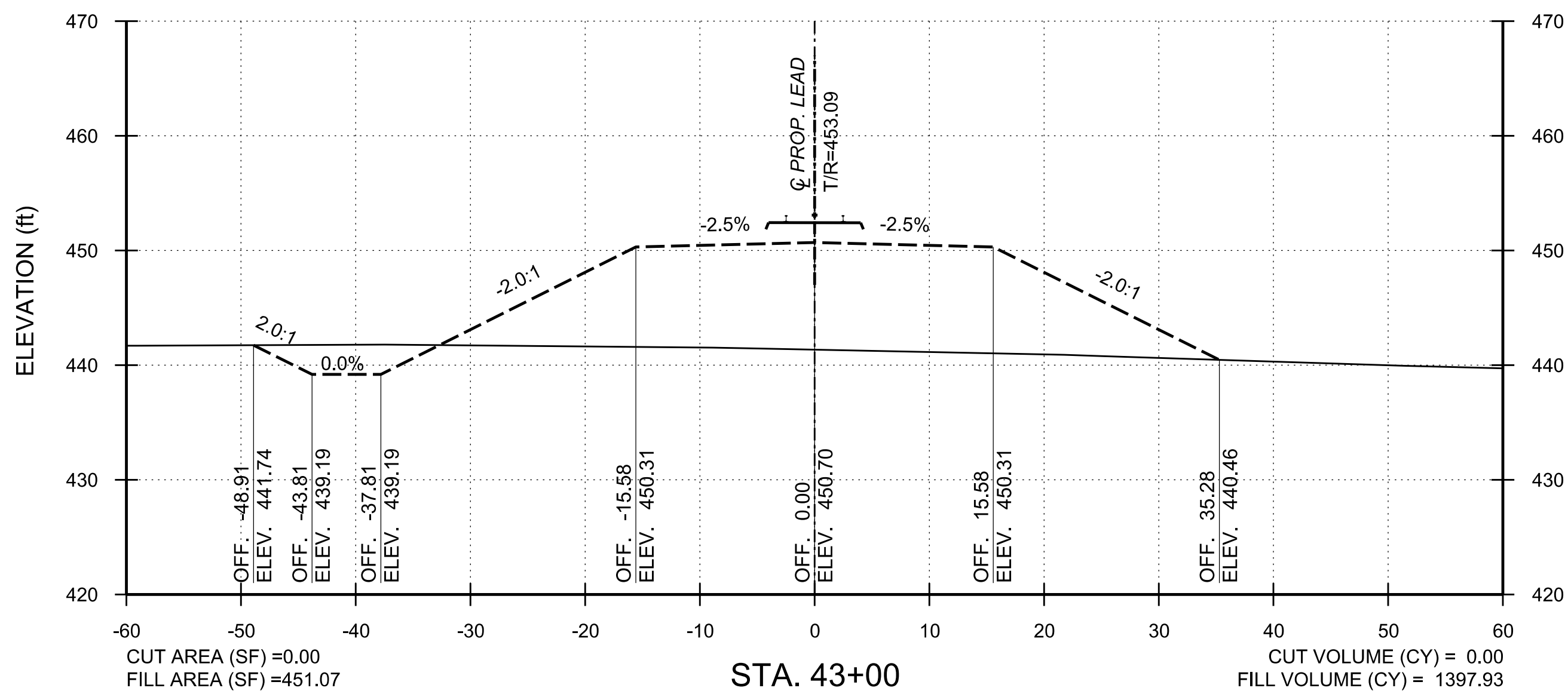
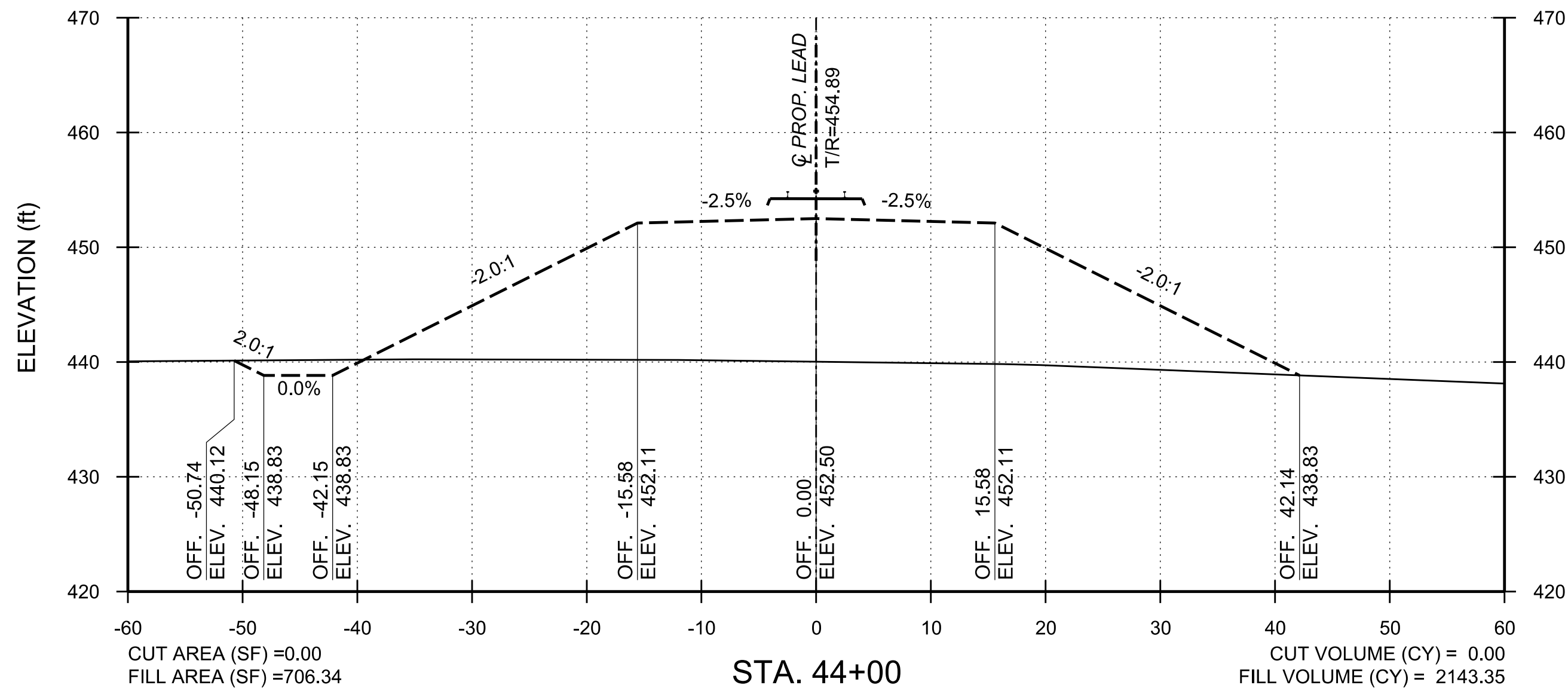
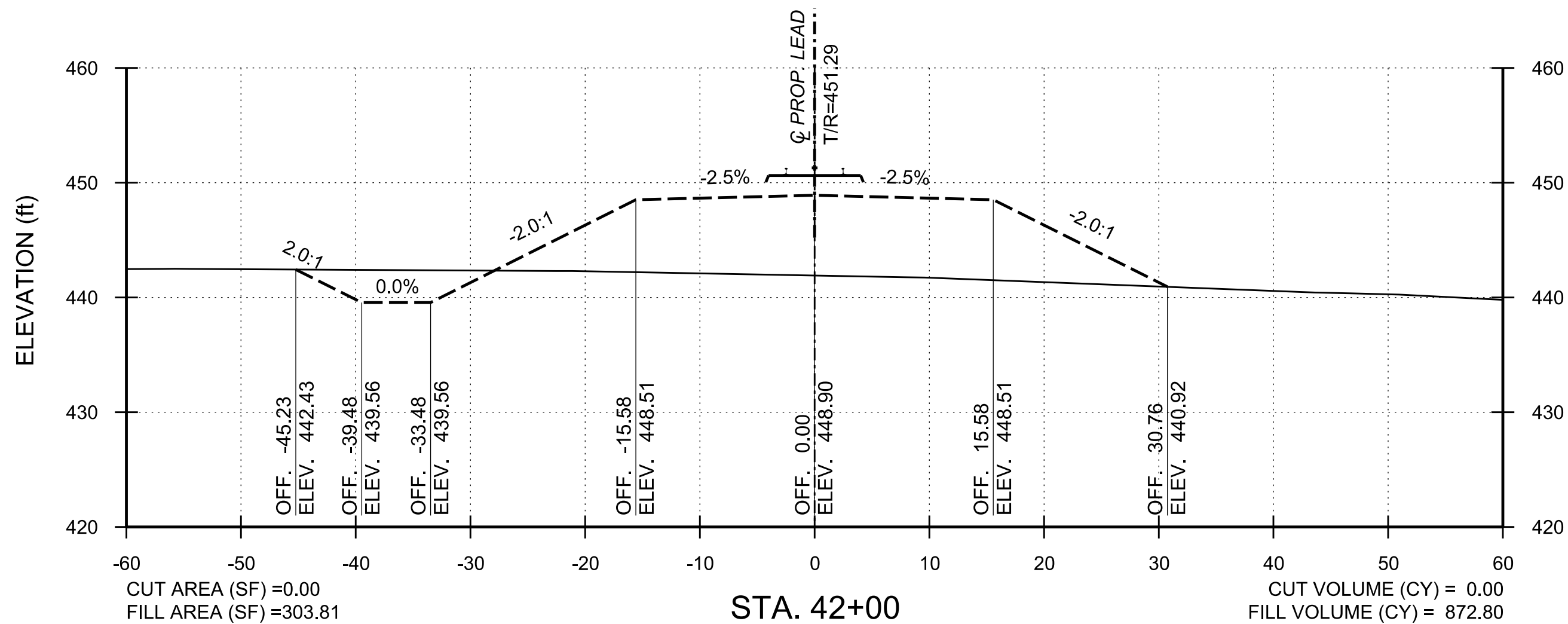
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|--------------|-------|
| PROJECT NO.: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |



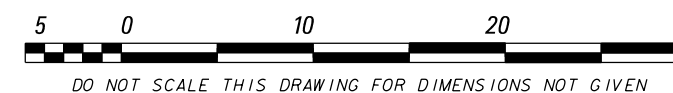
CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



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|-----------|---|-----------------|
| REV. BY: | DATE: | DESCRIPTION: |
| LOCATION: | BLYTHEWOOD, SC | |
| TITLE: | PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | |
| DWN. EVU | PTD. NO. D3327 | VRN |
| DWN. EVU | FILE NO. TRK1115024 | 04825 |
| CHK | DATE MARCH 5, 2024 | FILE POST R91.4 |
| | | DRAWING NUMBER |
| | | TD-2023-105 |

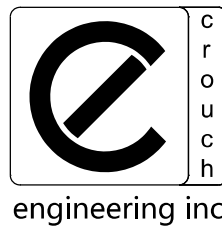


SCALE: 1" = 10'

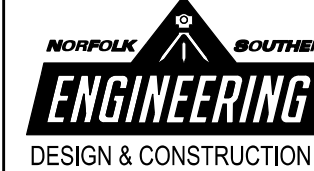


PHASE 1

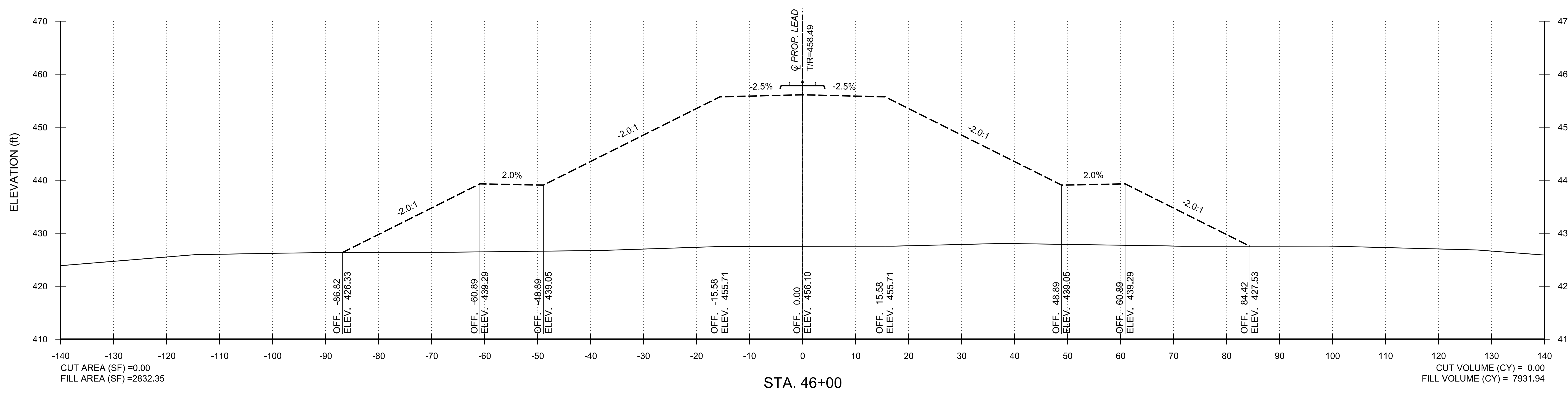
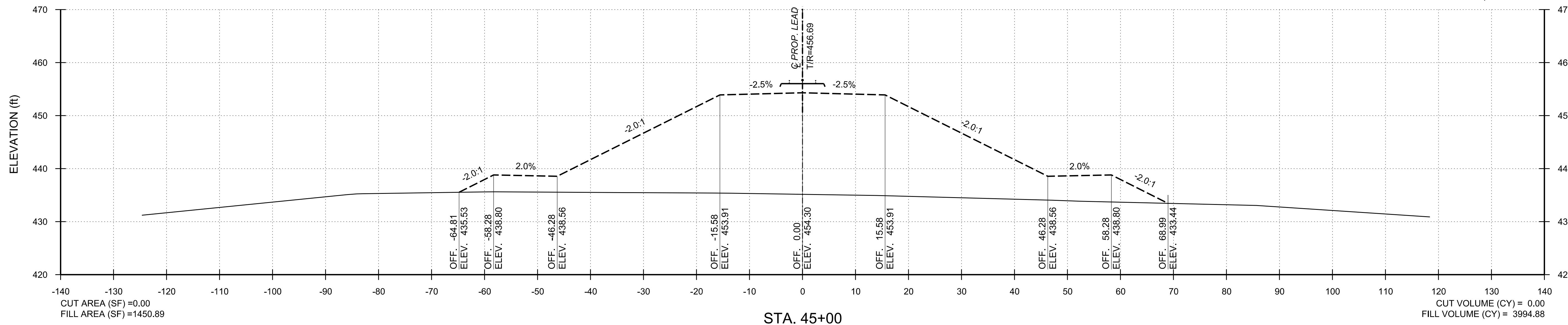
PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

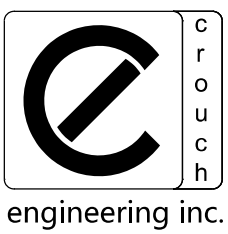


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| REV. BY: | DATE: | DESCRIPTION: |
| LOCATION: BLYTHEWOOD, SC | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | |
| DWN: EVU | PTD NO.: D3327 | VRN: 04825 |
| DWN: EVU | FILE NO.: TRK1115024 | DRAWING NUMBER: R91.4 |
| CHK: | DATE: MARCH 5, 2024 | TD-2023-105 |

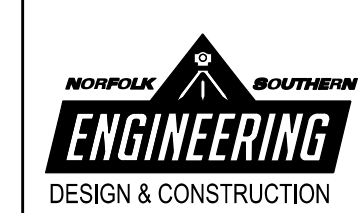


PHASE 1

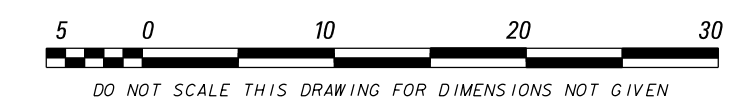
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 DATE:
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 REVISIONS:



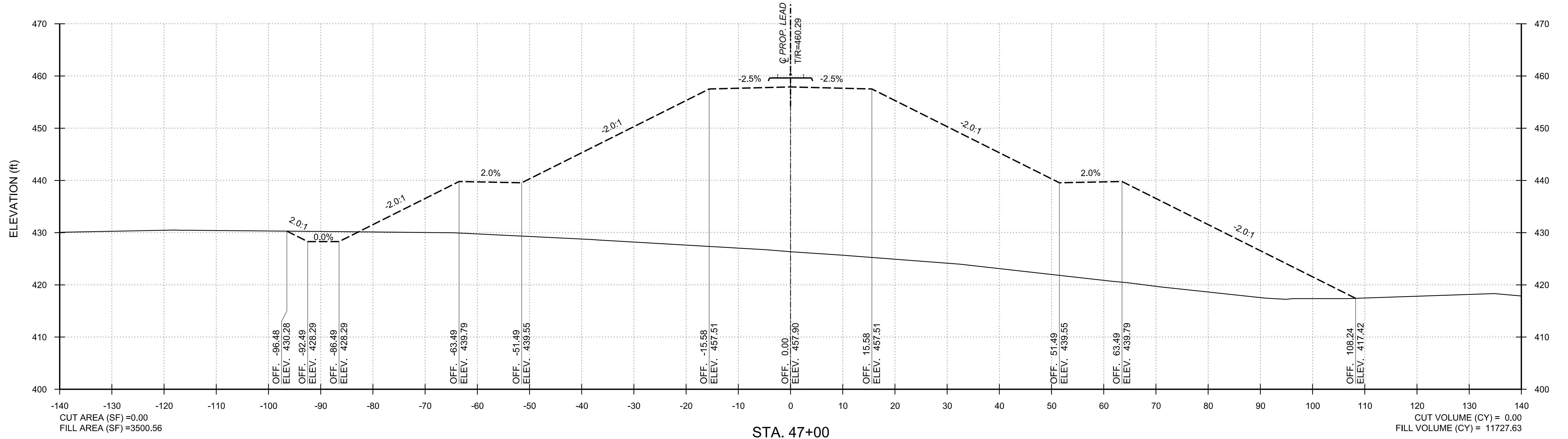
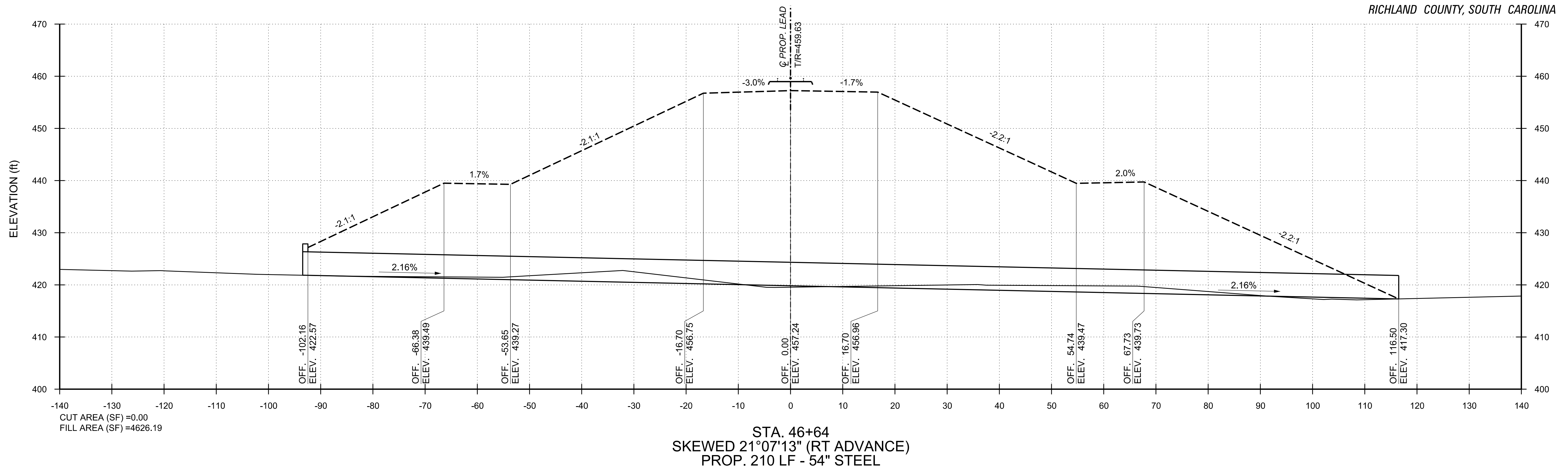
CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

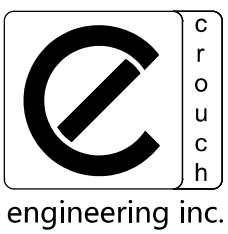


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| REV. BY: | DATE: | DESCRIPTION: |
| LOCATION: | BLYTHEWOOD, SC | |
| TITLE: | PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | |
| DWN. EVU | FILE NO. D3327 | VRN. 04825 |
| DWN. EVU | FILE NO. TRK1115024 | DRAWING NUMBER. 891.4 |
| CHK. | DATE. MARCH 5, 2024 | TD-2023-105 |

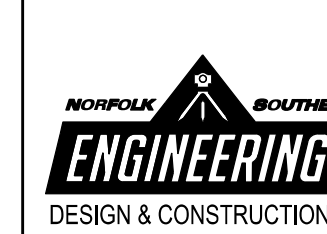


PHASE 1

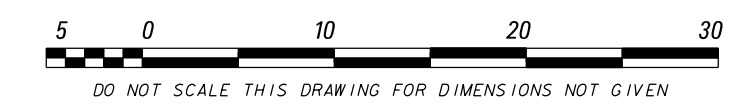
PROJECT NO: 23050
 DATE:
 DRAWN BY: EVU
 CHECKED BY:
 REVISIONS:



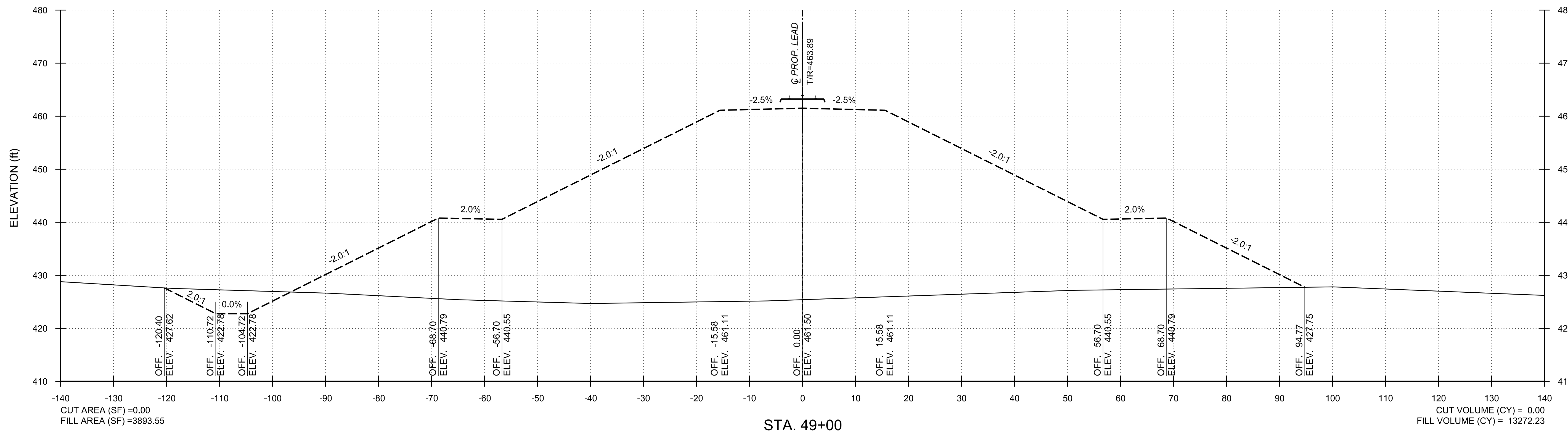
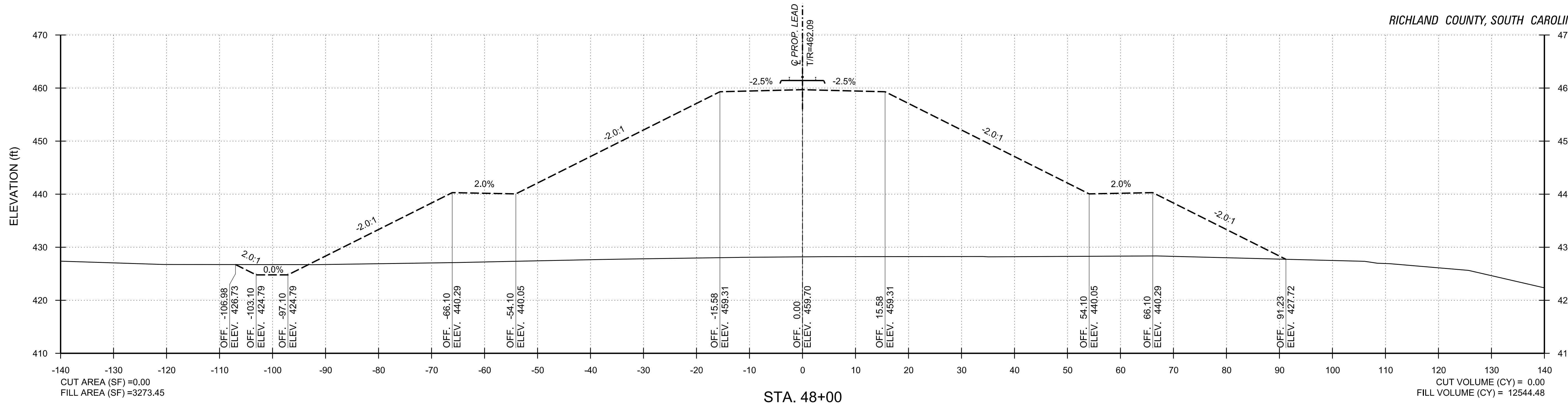
CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



SCALE: 1" = 10'

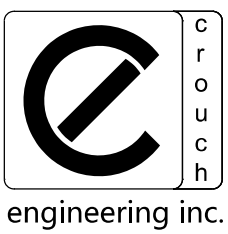


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|--|---------------|--------------------|---|
| REV | BY | DATE | DESCRIPTION |
| R1 | EVU | 03/05/24 | UPDATED STEEL PIPE DESIGN WITH HEADWALL |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | P10 NO: D3327 | YRN: 04825 |
| CHK | EVU | FILE NO: TRK115024 | DRAWING NUMBER: R91.4 |
| DATE | MARCH 5, 2024 | | |
| TD-2023-105-R1 | | | |

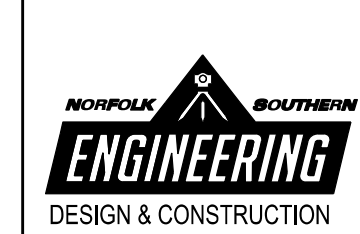


PHASE 1

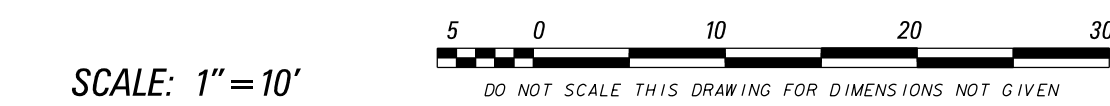
PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

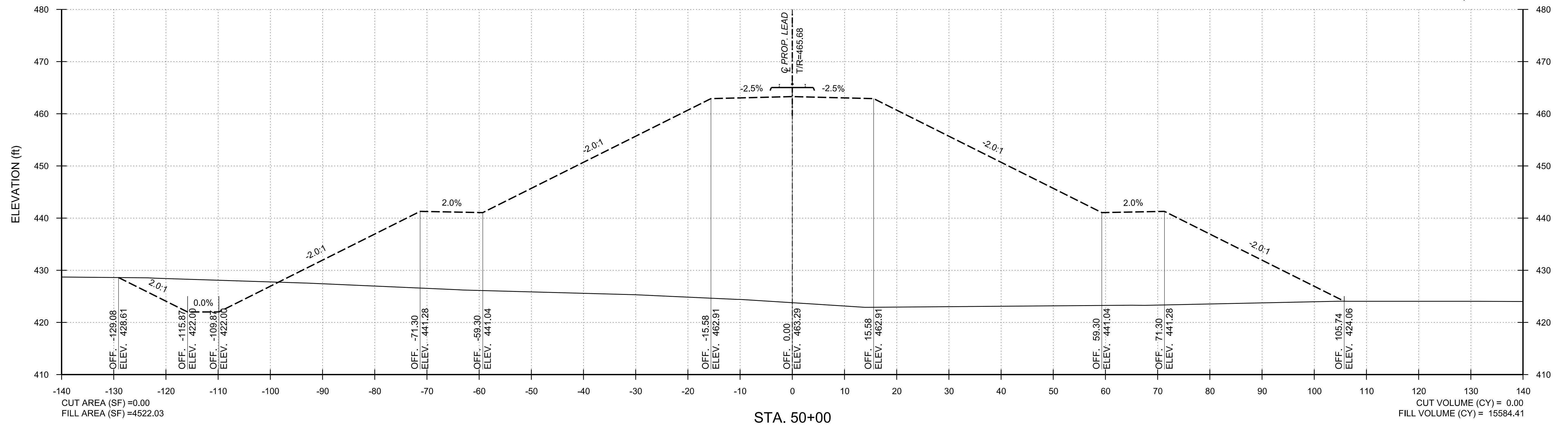


| REV. | BY | DATE | DESCRIPTION |
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| | | | |

LOCATION: **BLYTHEWOOD, SC**

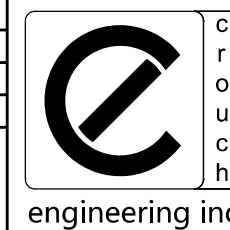
TITLE: **PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS**

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| DWN | EVU | PTD NO. D3327 | VRN | 04825 | MILE POST | R91.4 |
| CHK | | FILE NO. TRK1115024 | | | DRAWING NUMBER | |
| | | DATE MARCH 5, 2024 | | | DRAWING NUMBER | TD-2023-105 |



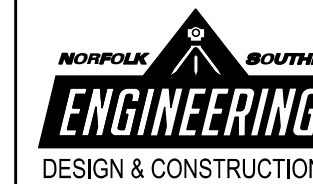
PHASE 1

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:

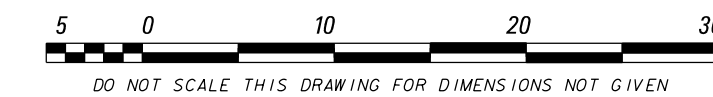


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BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

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FOR PERMISSION, CONTACT HARVEY A. CROUCH



SCALE: 1" = 10'



NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

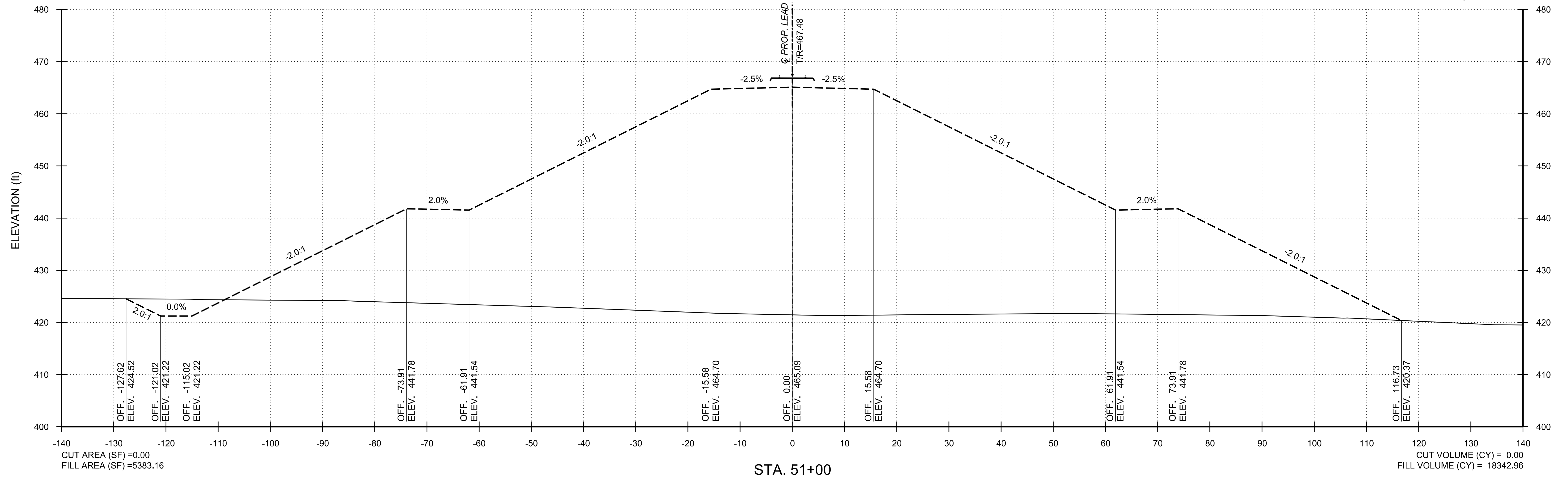
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| REV | BY | DATE | DESCRIPTION |
|-----|----|------|-------------|
| | | | |

LOCATION: **BLYTHEWOOD, SC**

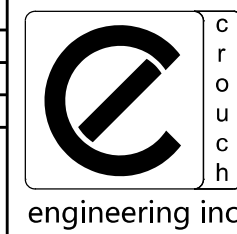
TITLE: **PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS**

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|-----|-----|---------------|---------------|----------------|-----------|-------|
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| CHK | | DATE | MARCH 5, 2024 | TD-2023-105 | | |

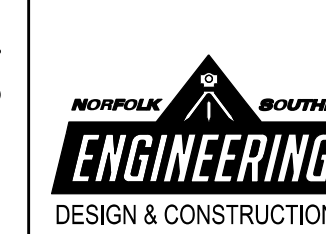


PHASE 1

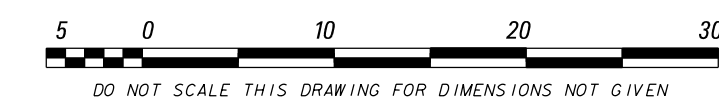
PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



SCALE: 1" = 10'

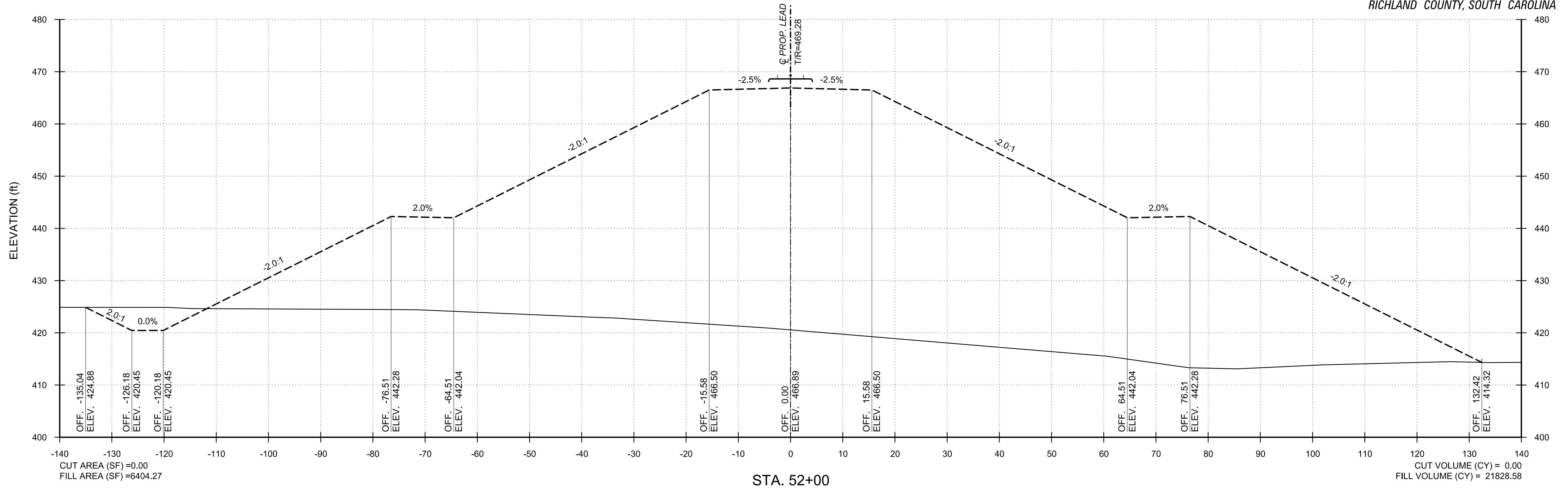


| REV | BY | DATE | DESCRIPTION |
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LOCATION: BLYTHEWOOD, SC

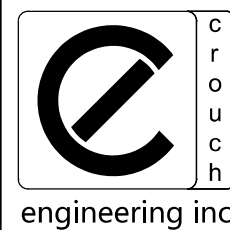
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

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| DWN | EVU | PTD NO. D3327 | VRN | 04825 | FILE POST | R91.4 |
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| | | DATE | MARCH 5, 2024 | | | TD-2023-105 |

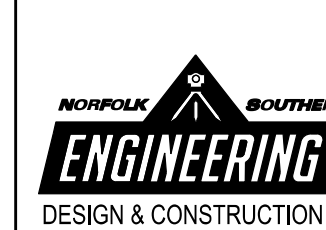


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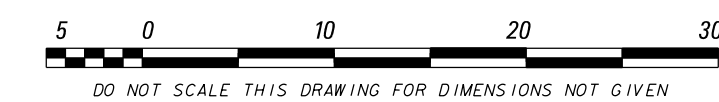
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DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



SCALE: 1" = 10'



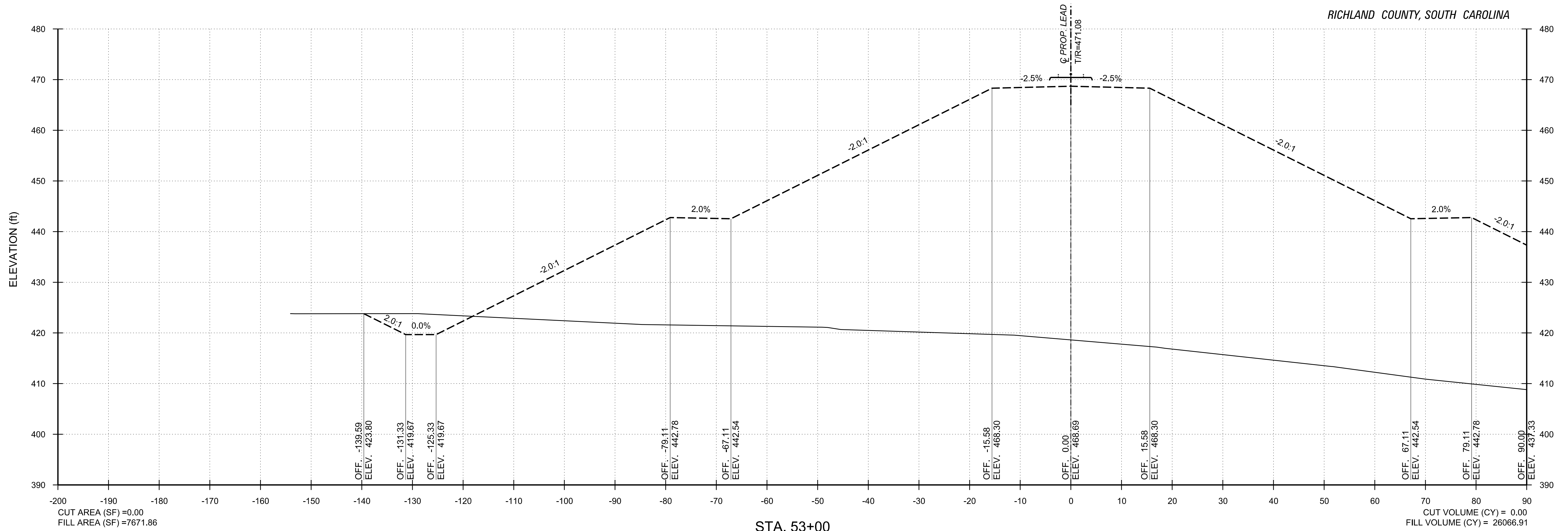
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
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LOCATION: BLYTHEWOOD, SC

TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

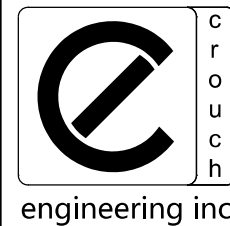
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| CHK | | DATE | MARCH 5, 2024 | DRAWING NUMBER | TD-2023-105 | | |



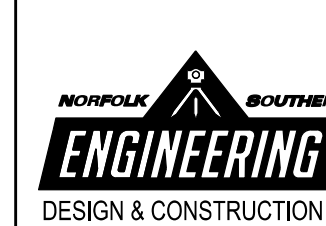
STA. 53+00

PHASE 1

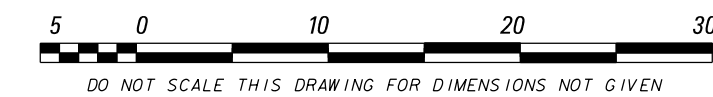
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CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630

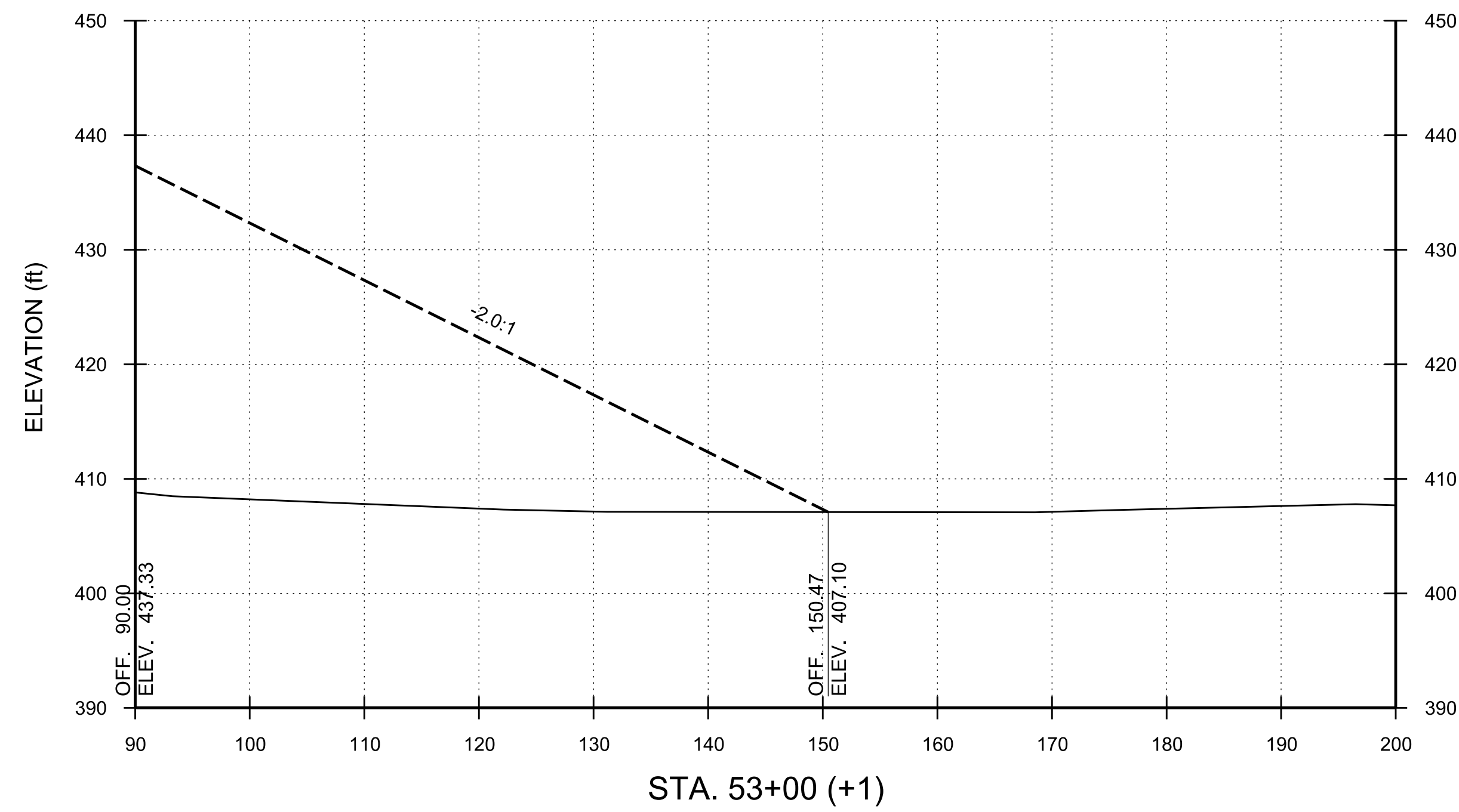


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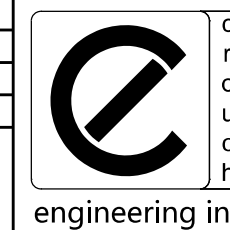
OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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| REV | BY | DATE | DESCRIPTION |
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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | PTD NO: D3327 | VRN |
| | | | 04825 |
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| CHK | DATE | DRAWING NUMBER | |
| | MARCH 5, 2024 | TD-2023-105 | |

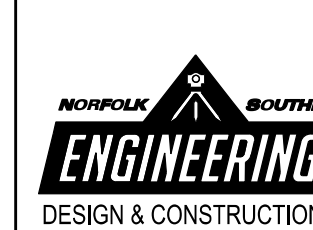


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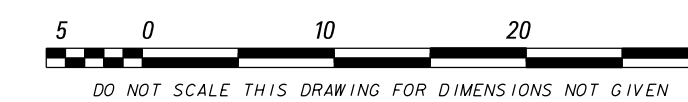
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CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



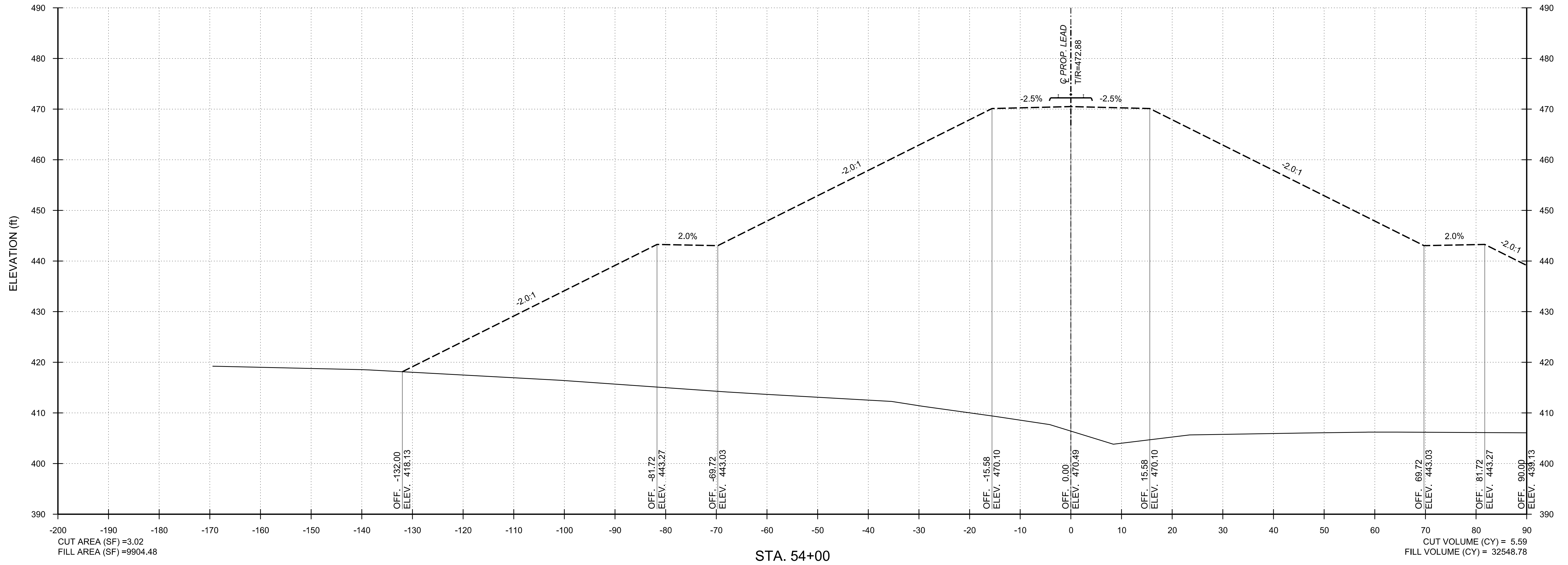
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| REV. BY: | DATE: | DESCRIPTION: |
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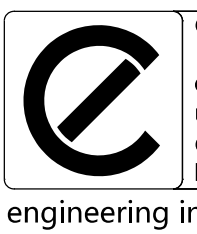
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 FOR PERMISSION, CONTACT HARVEY A. CROUCH

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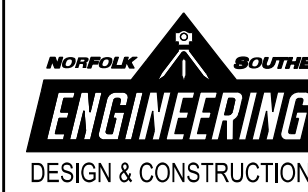


PHASE 1

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DATE:
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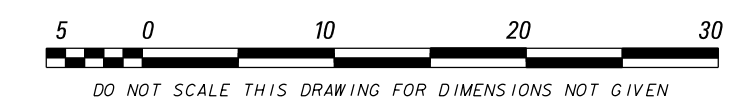


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BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL

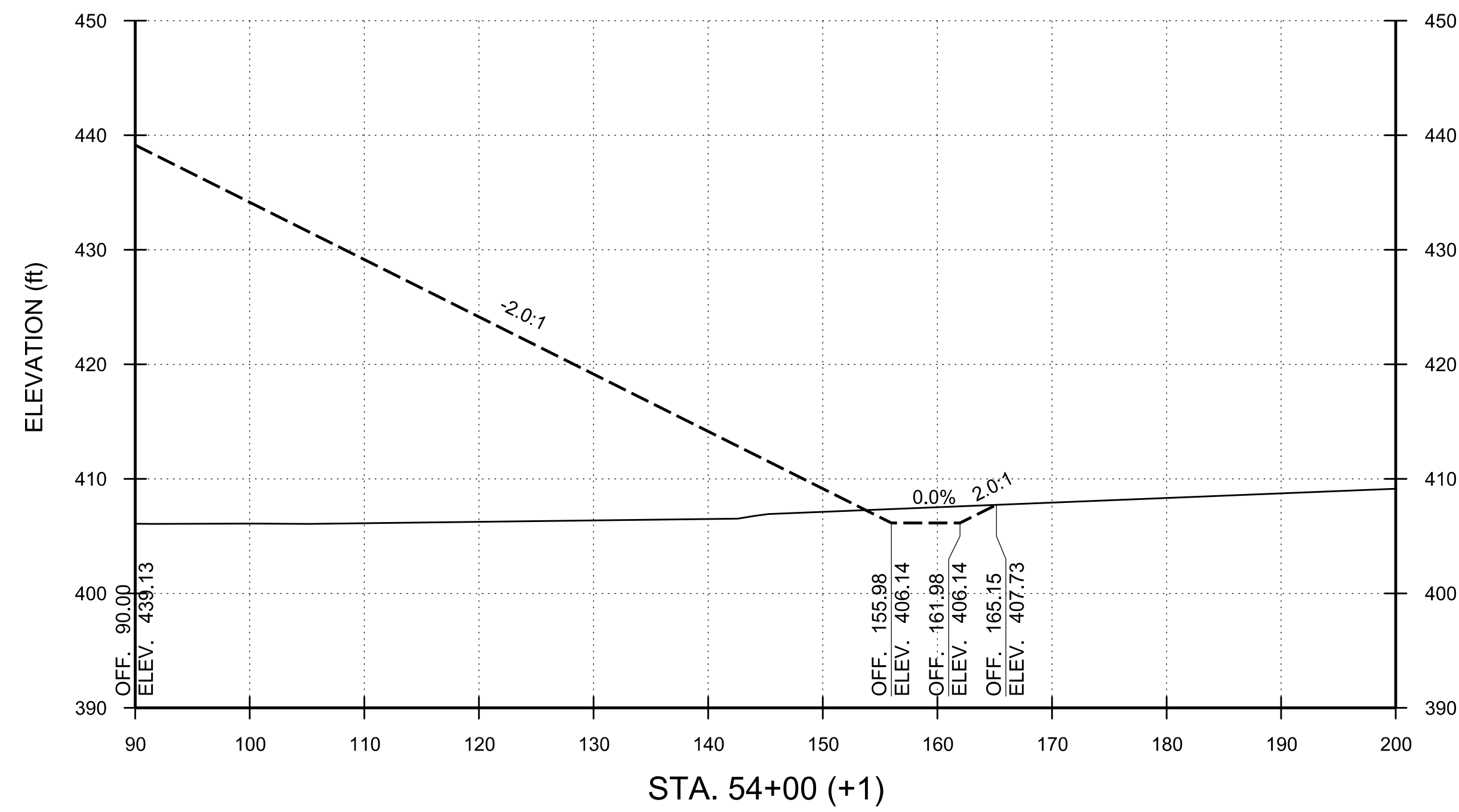
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| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | PLOT NO. D3327 | VRN |
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| FILE NO. | TRK1115024 | | DRAWING NUMBER |
| CHK | DATE | MARCH 5, 2024 | TD-2023-105 |

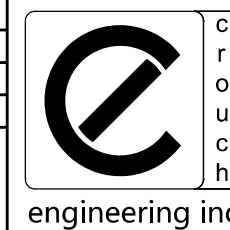
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FOR PERMISSION, CONTACT HARVEY A. CROUCH

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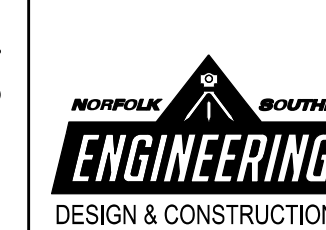


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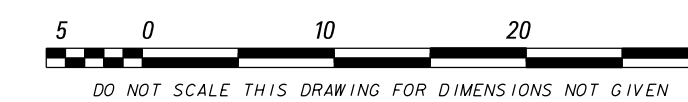
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CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



SCALE: 1" = 10'

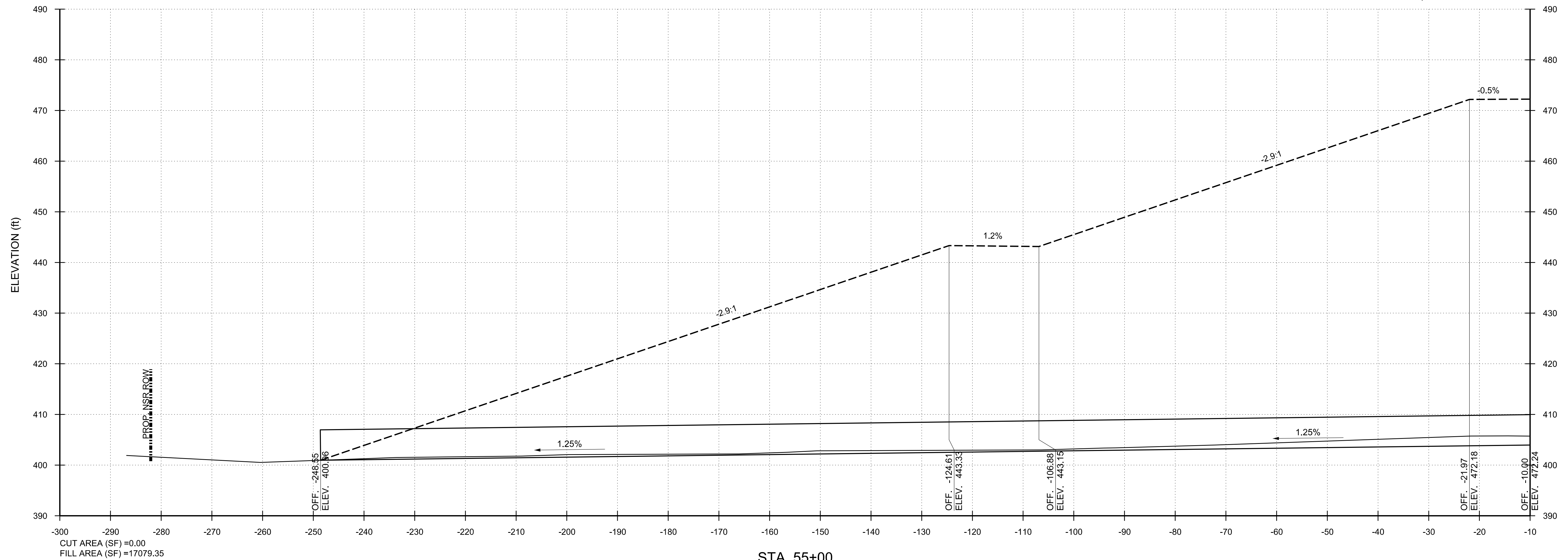


| REV | BY | DATE | DESCRIPTION |
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LOCATION: BLYTHEWOOD, SC

TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

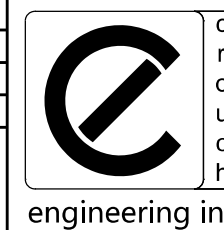
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| CHK | | DATE | MARCH 5, 2024 | DRAWING NUMBER | | | |



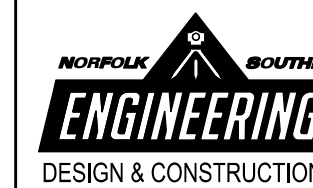
STA. 55+00
SKEWED 44°50'24" (LT ADVANCE)
PROP. 450 LF - 2 - 72" STEEL

PHASE 1

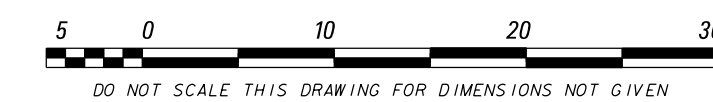
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DRAWN BY: EVU
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REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



SCALE: 1" = 10'



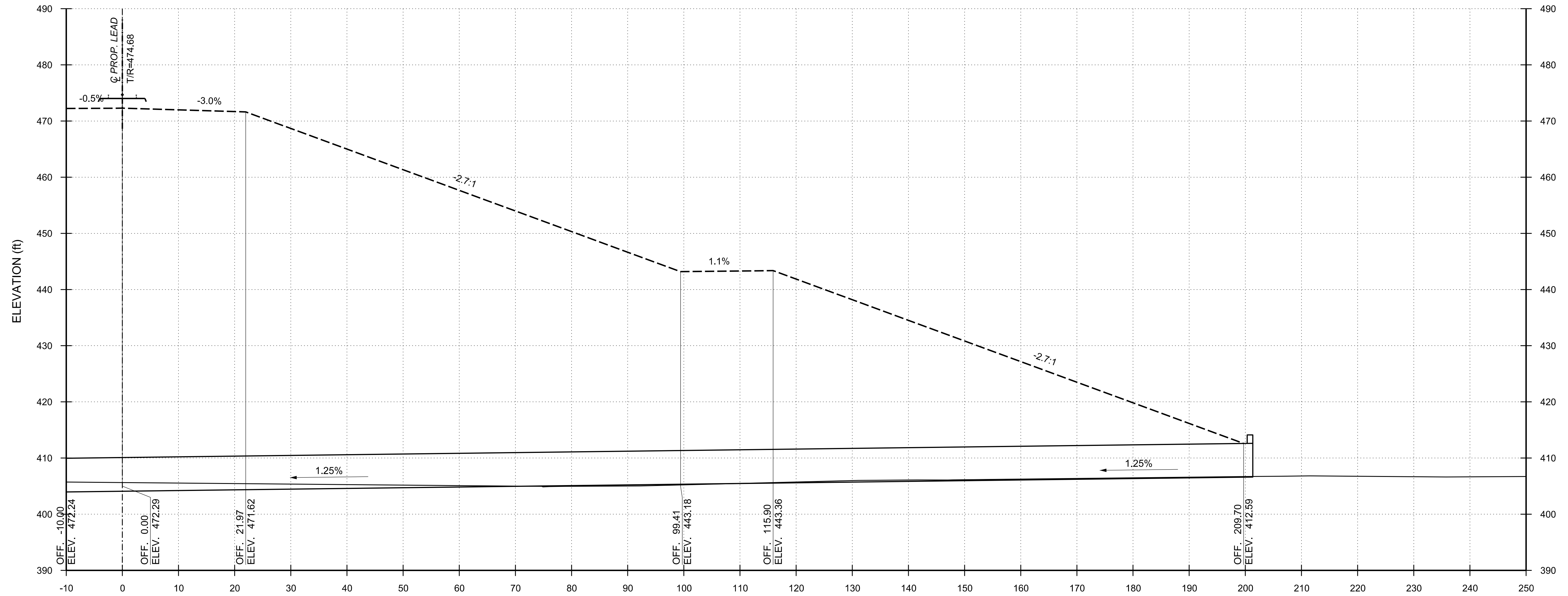
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

R1 EVU/DA/02/24 UPDATED STEEL PIPE DESIGN WITH HEADWALL

LOCATION BLYTHEWOOD, SC

TITLE PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

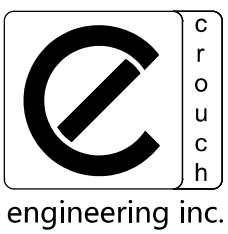
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| CHK | DATE MARCH 5, 2024 | TD-2023-105-R1 | |



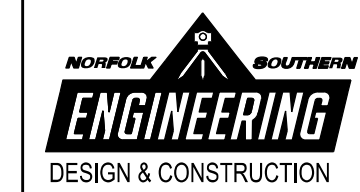
STA. 55+00 (+1)
 SKEWED 44°50'24" (LT ADVANCE)
 PROP. 450 LF 2 - 72" STEEL

PHASE 1

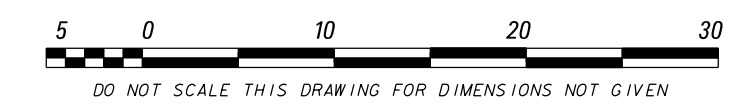
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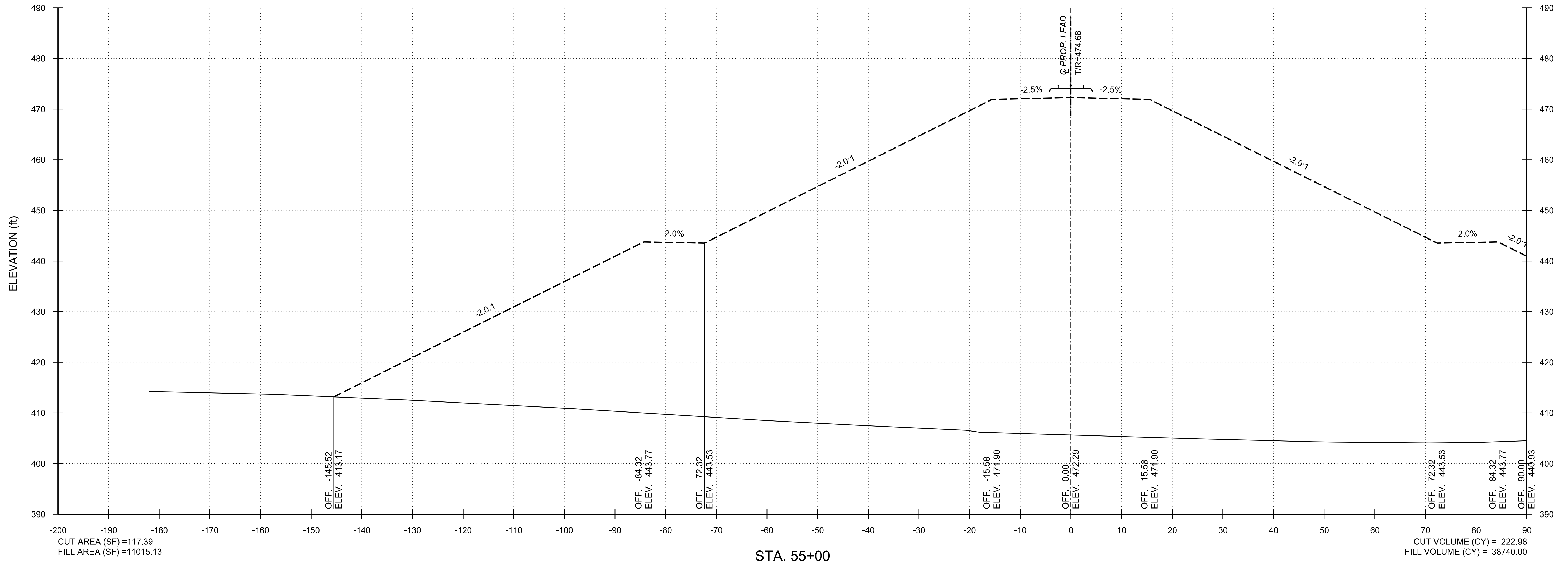
CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

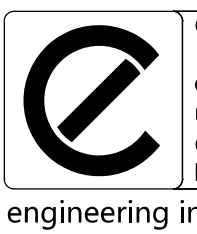


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| REV | BY | DATE | DESCRIPTION |
| R1 | EVU | 03/05/24 | UPDATED STEEL PIPE DESIGN WITH HEADWALL |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | FILE NO. D3327 | VRN 04825 FILE POST R91.4 |
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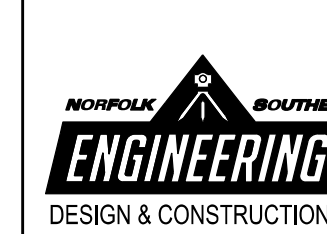


PHASE 1

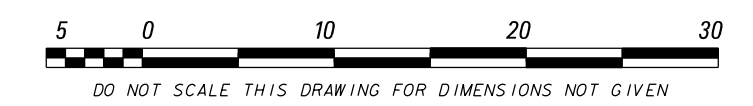
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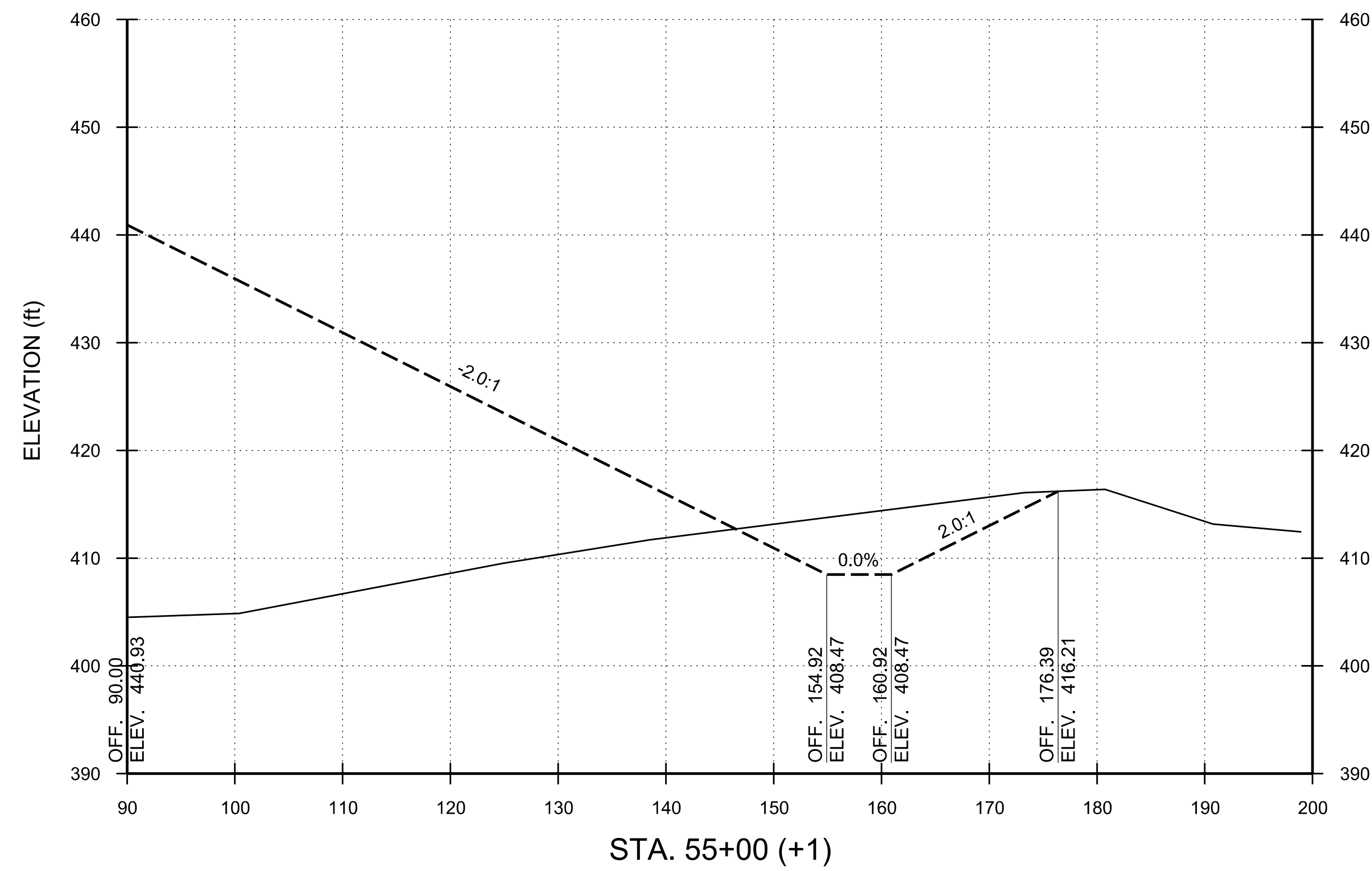
CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



SCALE: 1" = 10'

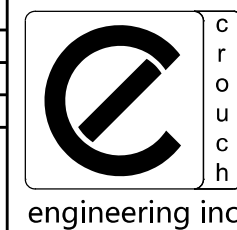


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| DWN | EVU | PLOT NO: D3327 | VRN |
| FILE NO: | TRK1115024 | DATE | MARCH 5, 2024 |
| CHK | | | |
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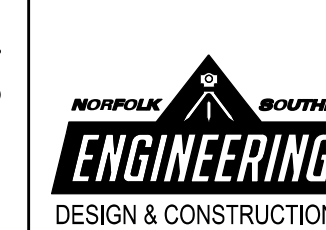


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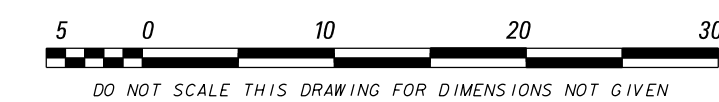
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 DRAWN BY: EVU
 CHECKED BY:
 REVISIONS:



CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



SCALE: 1" = 10'



NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

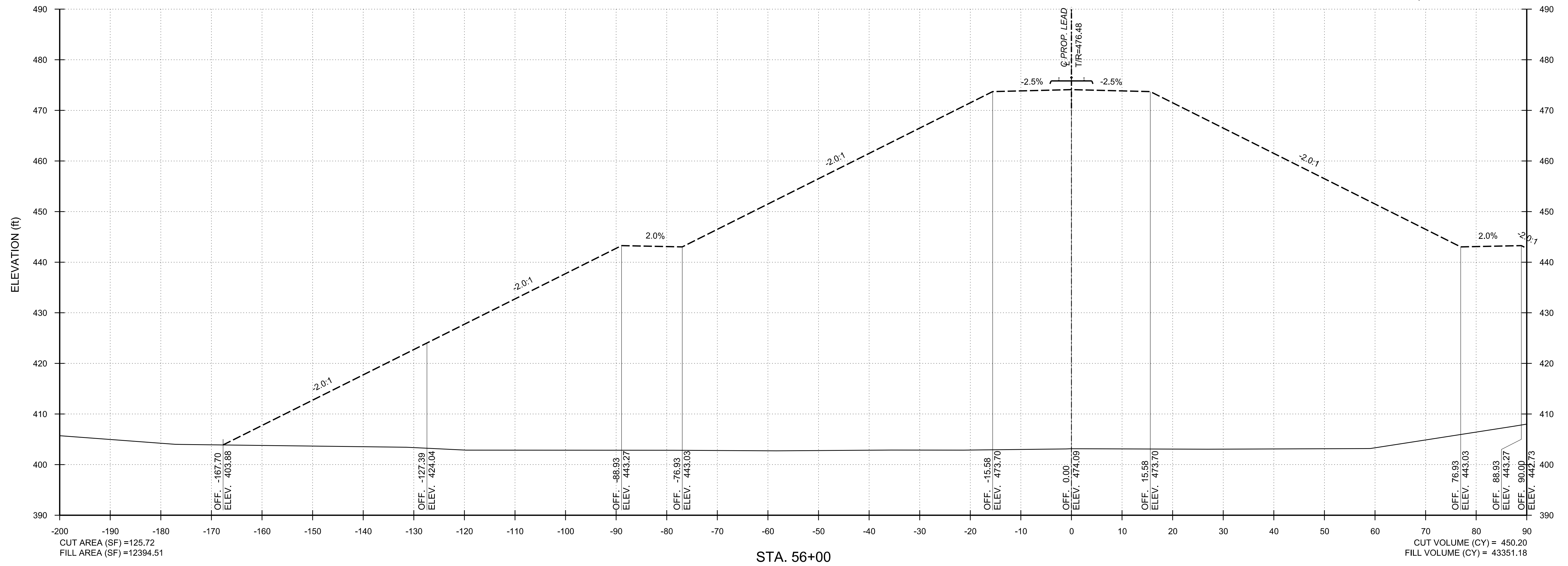
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LOCATION: **BLYTHEWOOD, SC**

TITLE: **PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS**

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| DRN | EVU | PTD NO. | D3327 | VRN | 04825 | FILE POST | R91.4 |
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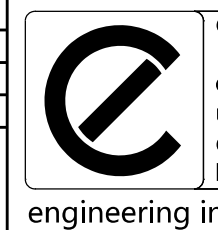
DRAWING NUMBER: **TD-2023-105**



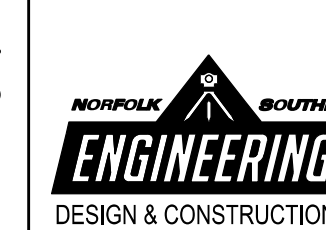
STA. 56+00

PHASE 1

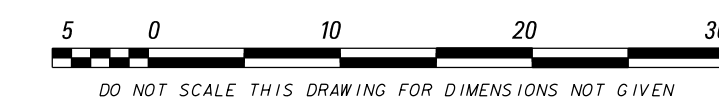
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CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



SCALE: 1" = 10'



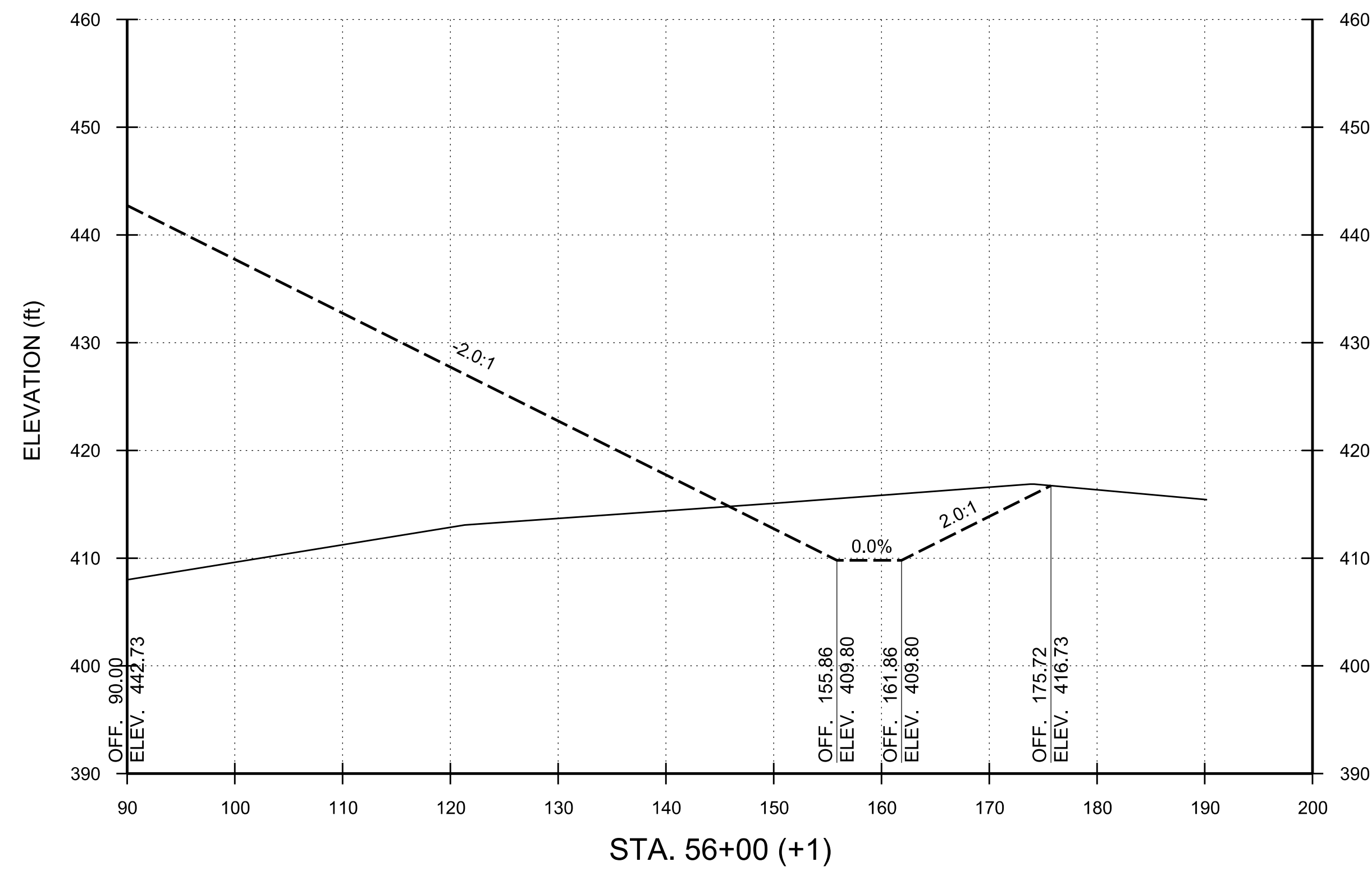
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|----|------|-------------|
| | | | |

LOCATION: BLYTHEWOOD, SC

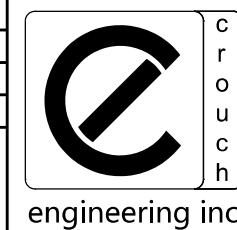
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

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| | | DATE | MARCH 5, 2024 | | | | |

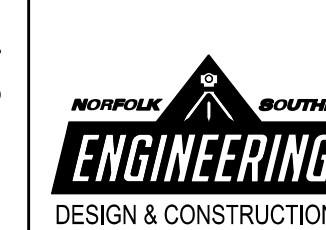


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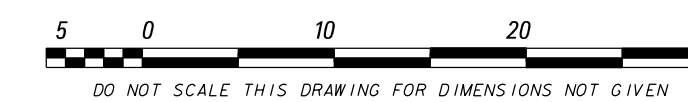
PROJECT NO: 23050
 DATE:
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 REVISIONS:



CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



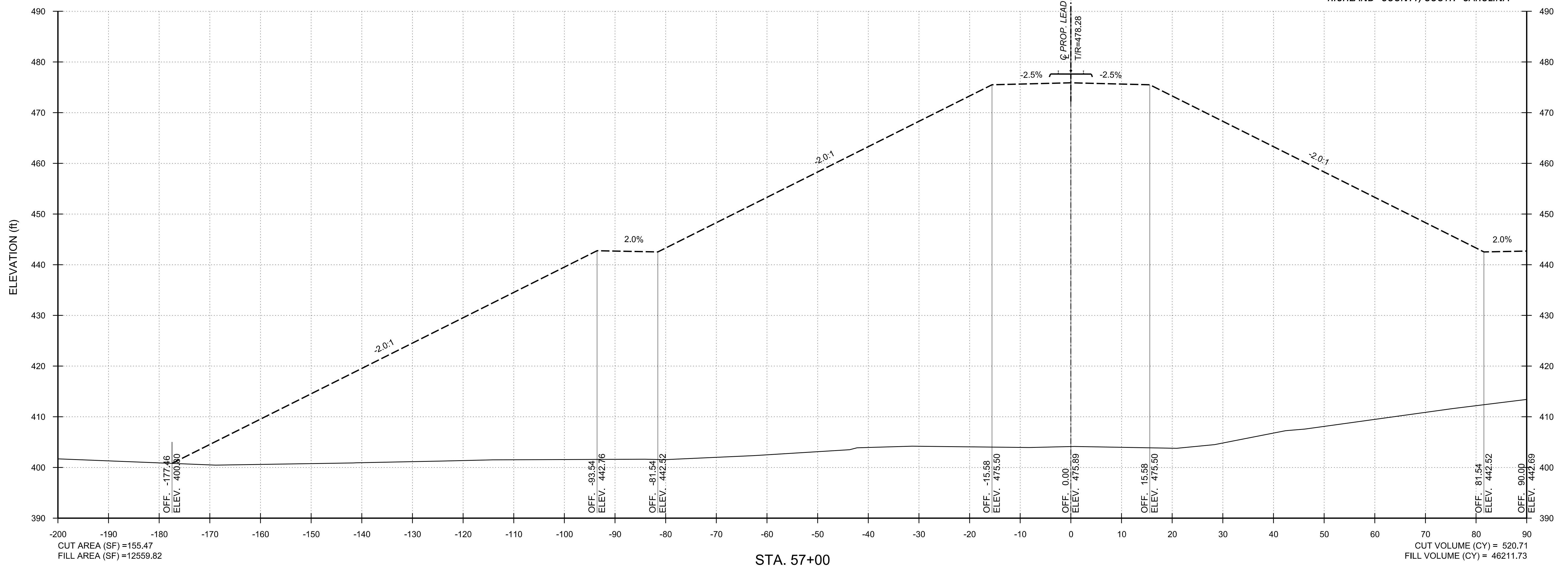
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| DRN | PTD NO. | YRN | FILE POST |
| EVU | D3327 | | 04825 R91.4 |
| DWN | FILE NO. | TRK1115024 | DRAWING NUMBER |
| CHK | DATE | MARCH 5, 2024 | TD-2023-105 |

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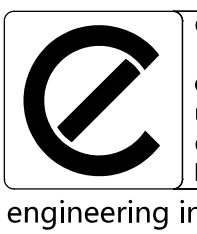
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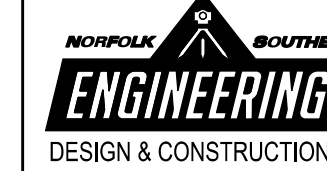
STA. 57+00

PHASE 1

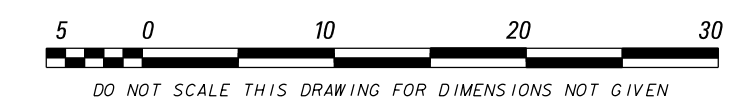
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| PROJECT NO. | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |



CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630

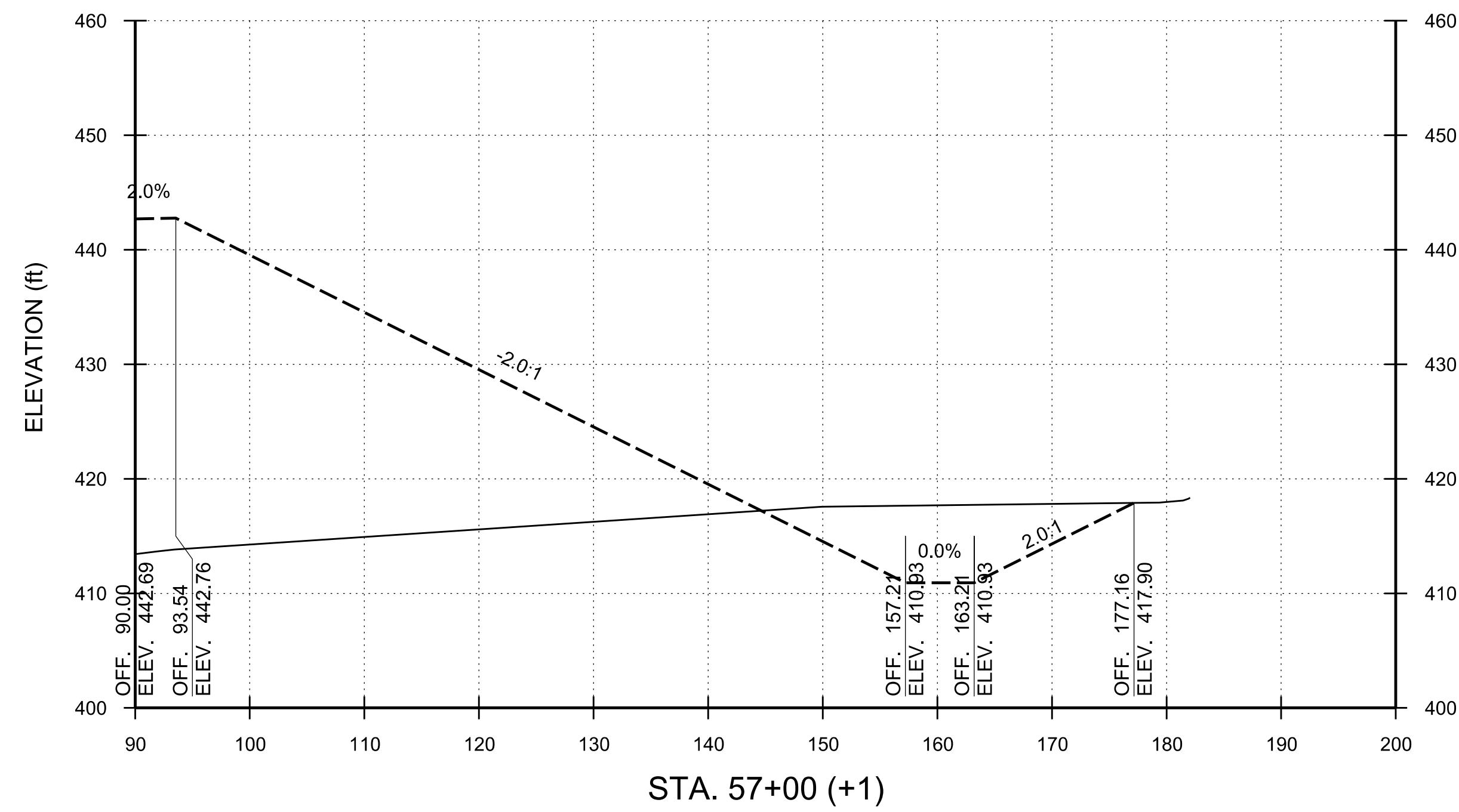


SCALE: 1" = 10'



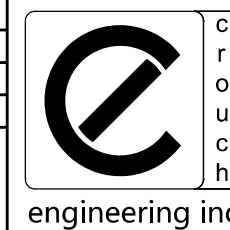
NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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| REV | BY | DATE | DESCRIPTION |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | PTD NO. D3327 | VRN |
| CHK | EVU | FILE NO. TRK1115024 | DRAWING NUMBER |
| DATE: MARCH 5, 2024 | | | TD-2023-105 |

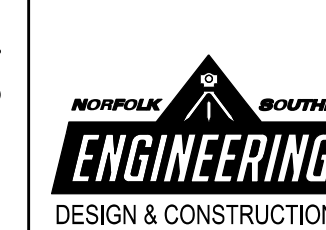


PHASE 1

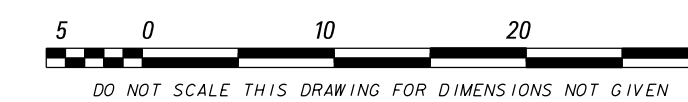
PROJECT NO: 23050
 DATE:
 DRAWN BY: EVU
 CHECKED BY:
 REVISIONS:



CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



SCALE: 1" = 10'

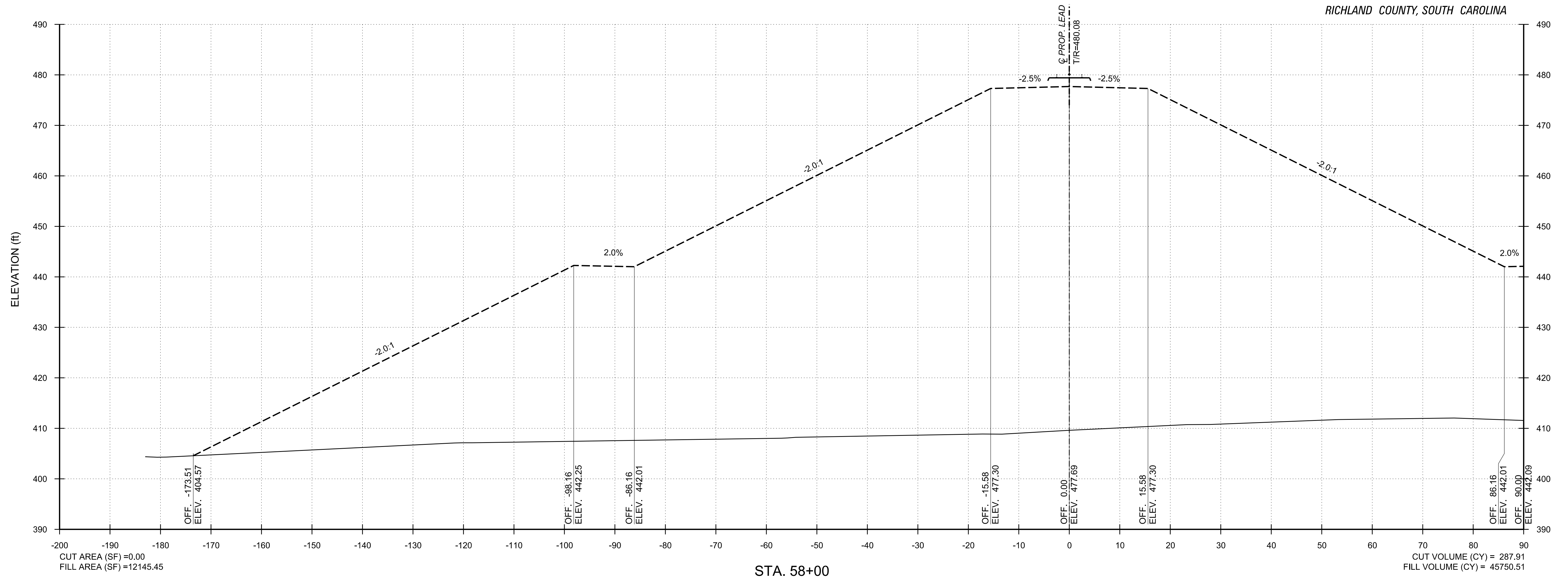


| REV | BY | DATE | DESCRIPTION |
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LOCATION: **BLYTHEWOOD, SC**

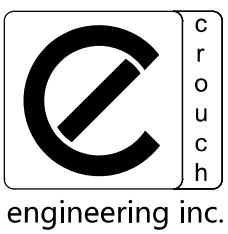
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| CHK | | DATE | MARCH 5, 2024 | DRAWING NUMBER | | | |

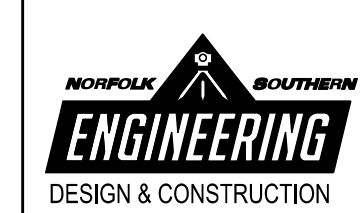


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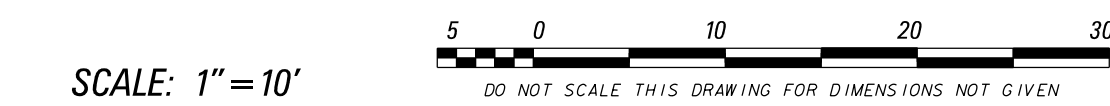
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| REVISIONS: | |



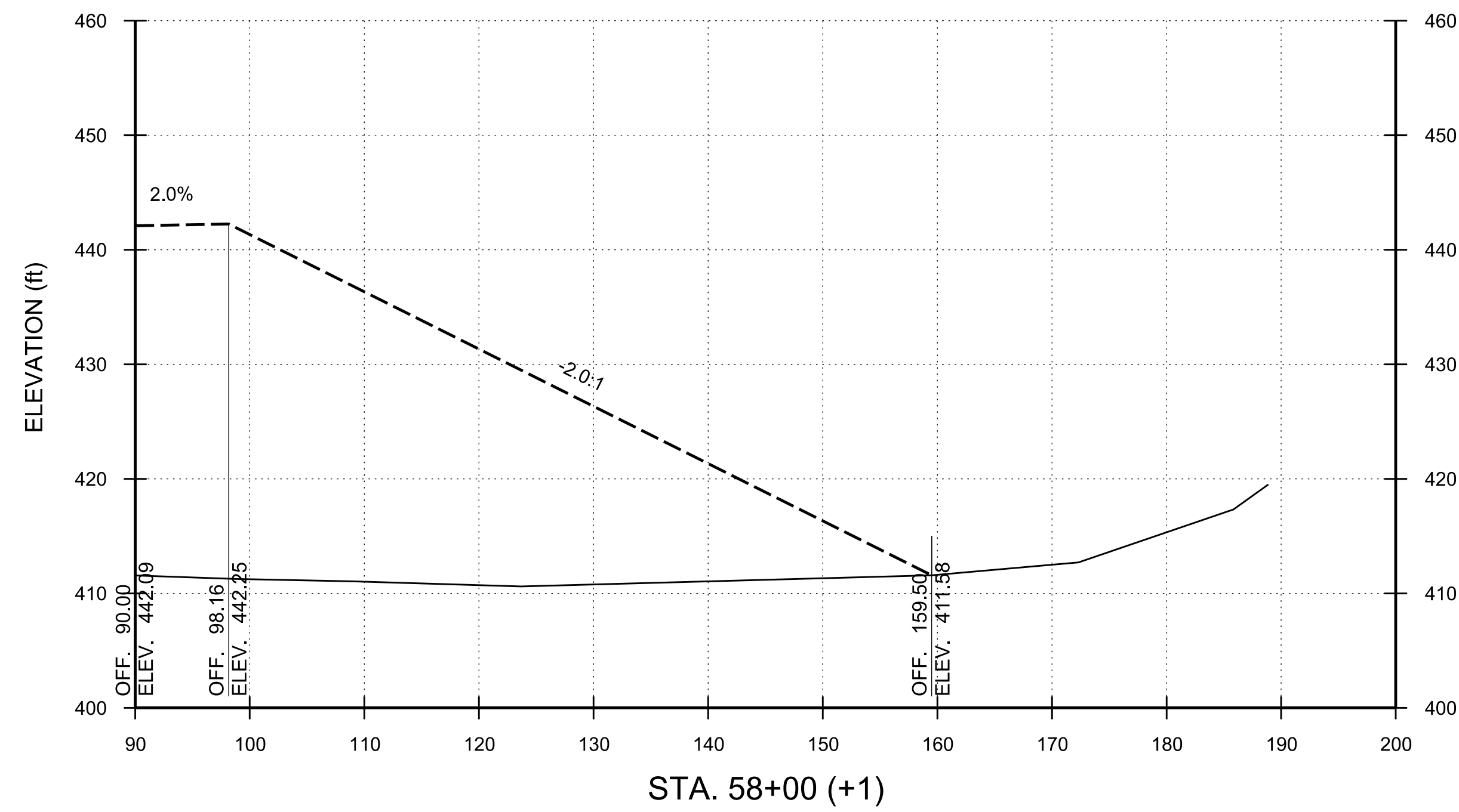
CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

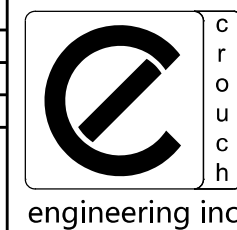


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| DWN: | EVU | FILE NO.: D3327 |
| CHK: | EVU | FILE NO.: TRK1115024 |
| DATE: | MARCH 5, 2024 | |
| DRAWING NUMBER: | 04825 | FILE POST: R91.4 |
| DRAWING NUMBER: | TD-2023-105 | |

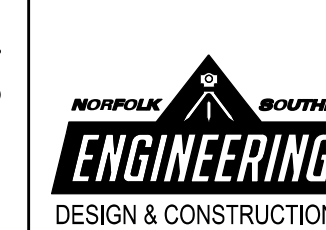


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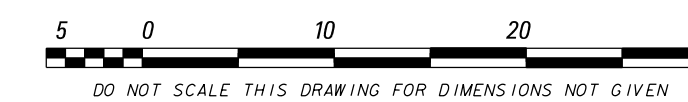
PROJECT NO: 23050
 DATE:
 DRAWN BY: EVU
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 REVISIONS:



CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
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SCALE: 1" = 10'



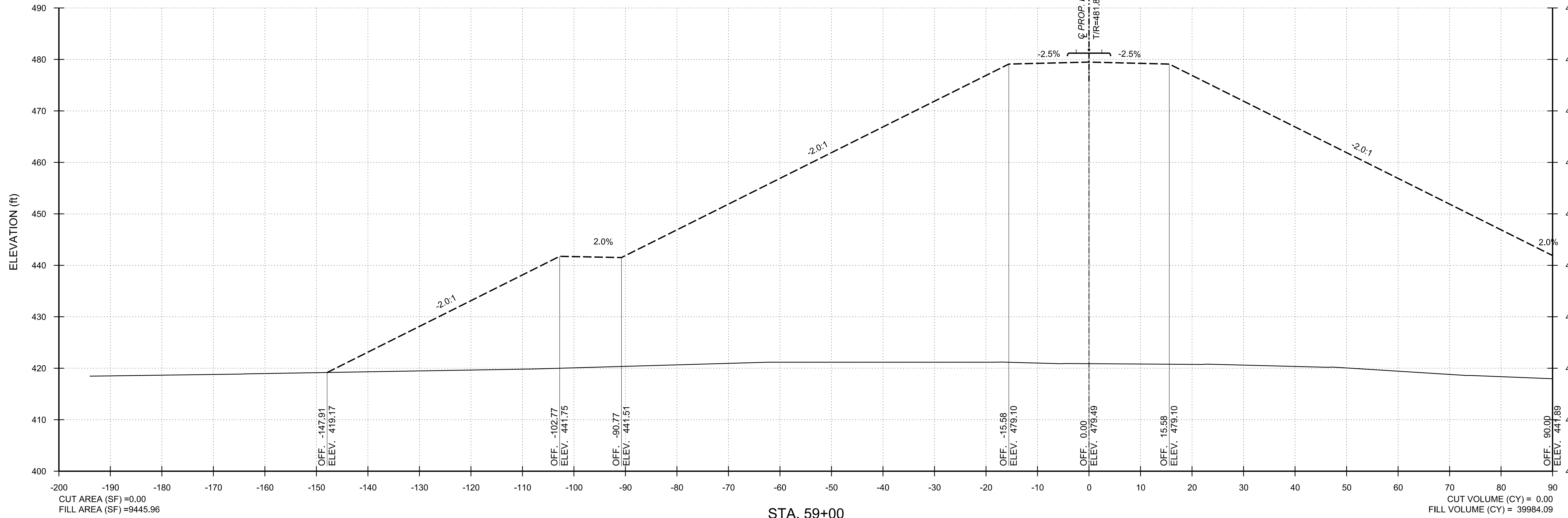
OPERATING DIVISION: COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
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LOCATION: BLYTHEWOOD, SC

TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

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| DRN: EVU | PTD NO: D3327 | VRN: | 04825 | FILE POST: R91.4 |
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| CHK: | DATE: MARCH 5, 2024 | TD-2023-105 | | |



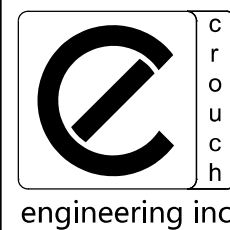
STA. 59+00

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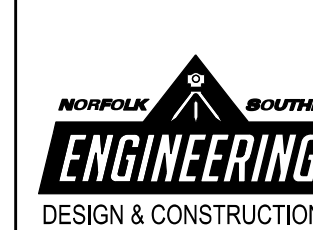
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PHASE 1

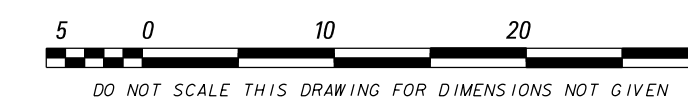
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DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



SCALE: 1" = 10'

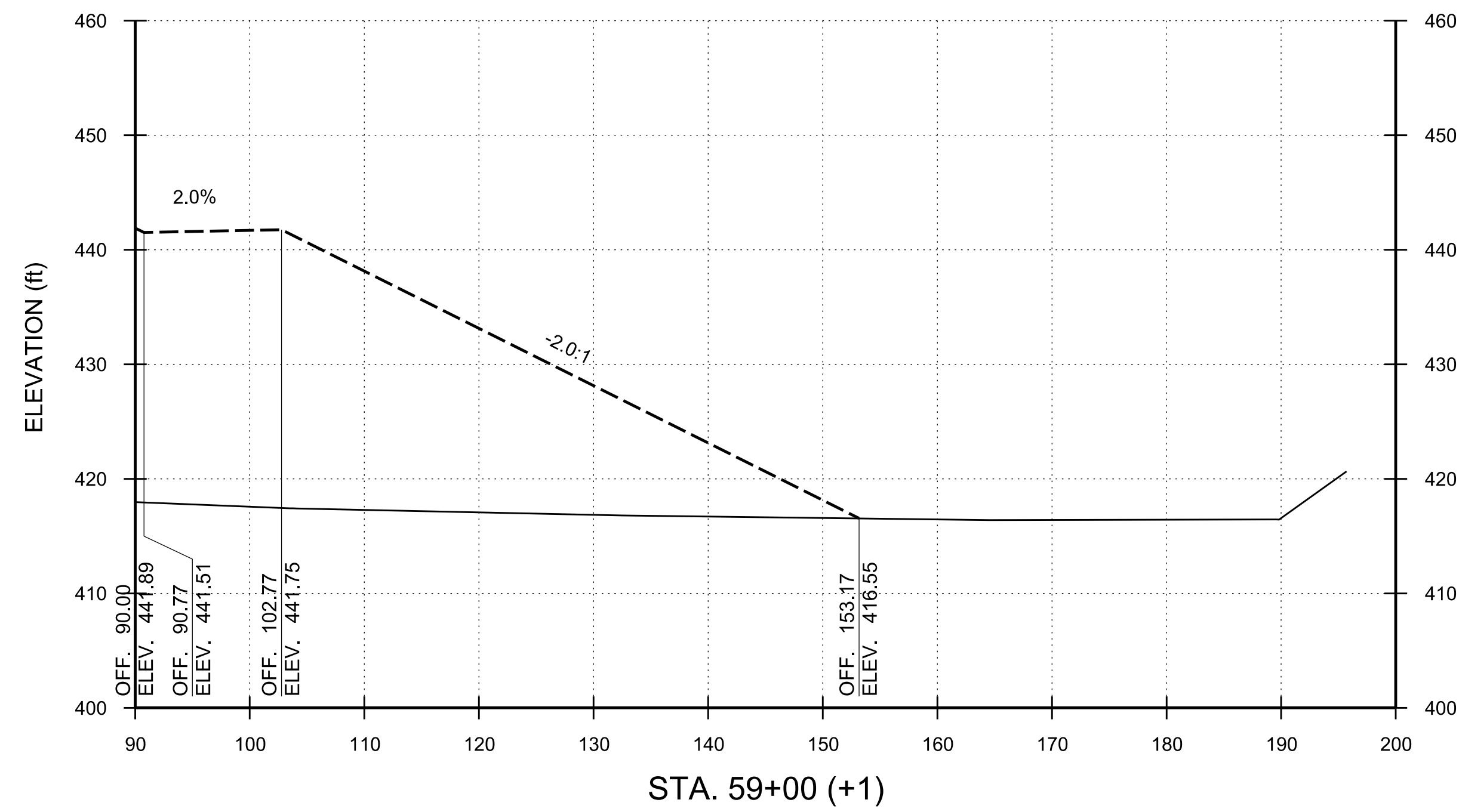


OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
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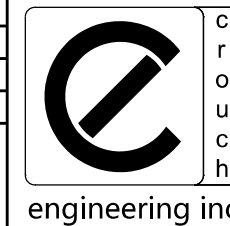
LOCATION: BLYTHEWOOD, SC
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

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| DRN | EVU | PTD NO. D3327 | VRN | 04825 | FILE POST | R91.4 |
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| CHK | | DATE | MARCH 5, 2024 | TD-2023-105 | | |

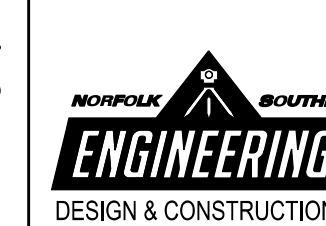


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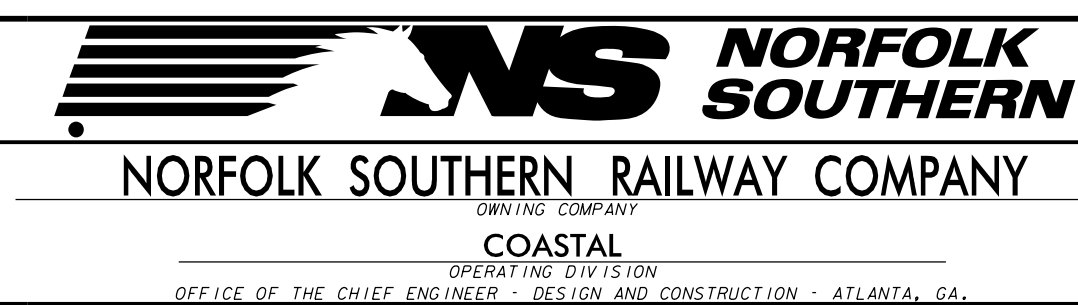
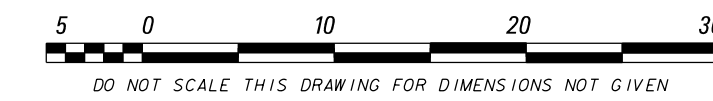
PROJECT NO: 23050
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CROUCH ENGINEERING INC.
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 BRENTWOOD, TN 37027
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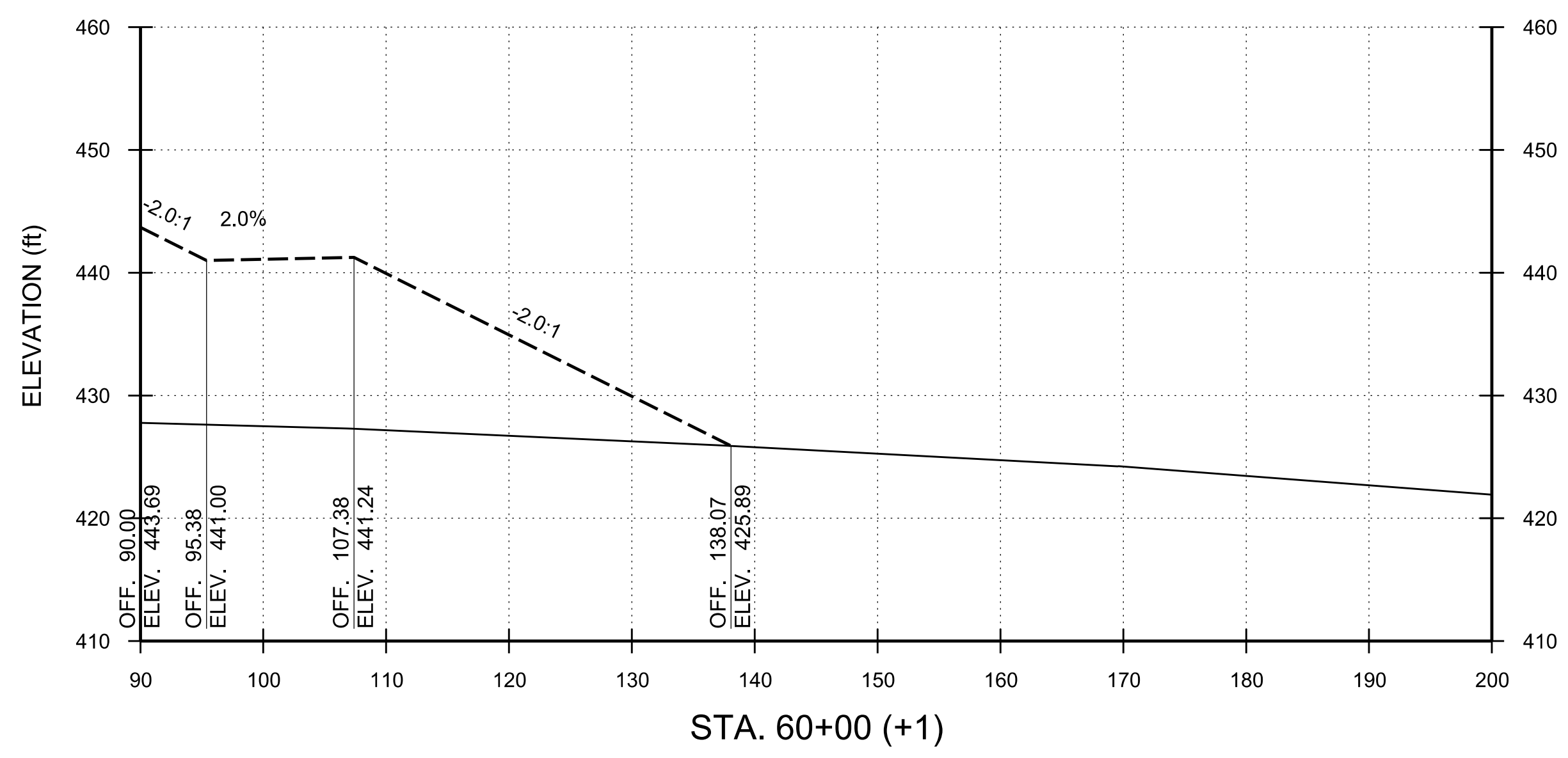
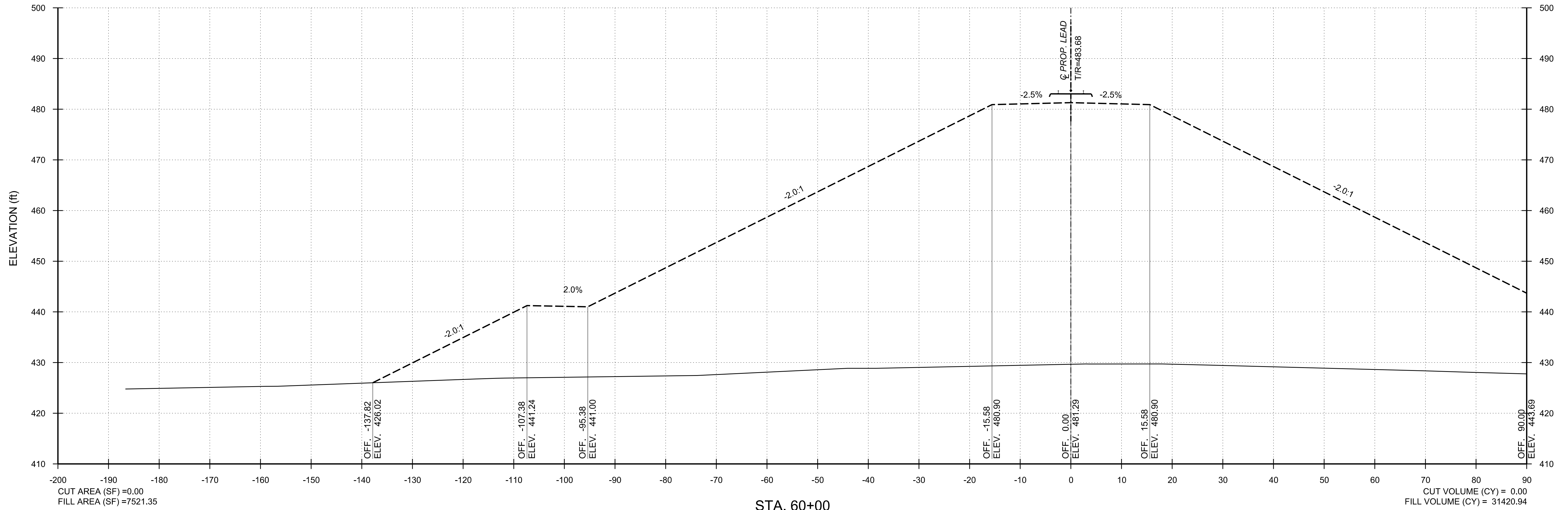


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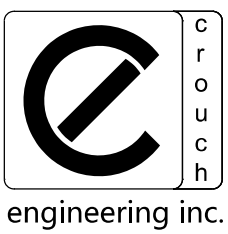
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| LOCATION | BLYTHEWOOD, SC | | |
| TITLE | PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | |
| DRN | EVU | PTD NO. D3327 | VRN |
| DWN | EVU | FILE NO. TRK1115024 | FILE POST |
| CHK | | DATE | |
| | | MARCH 5, 2024 | |
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| | | | DRAWING NUMBER |
| | | | TD-2023-105 |

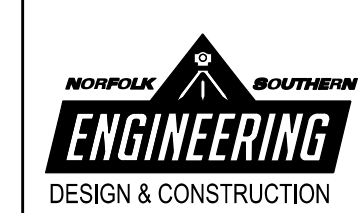


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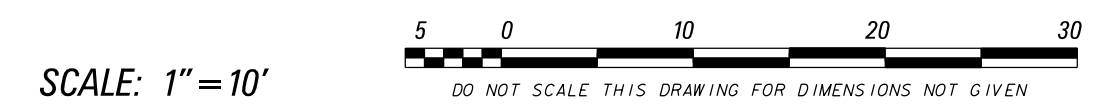
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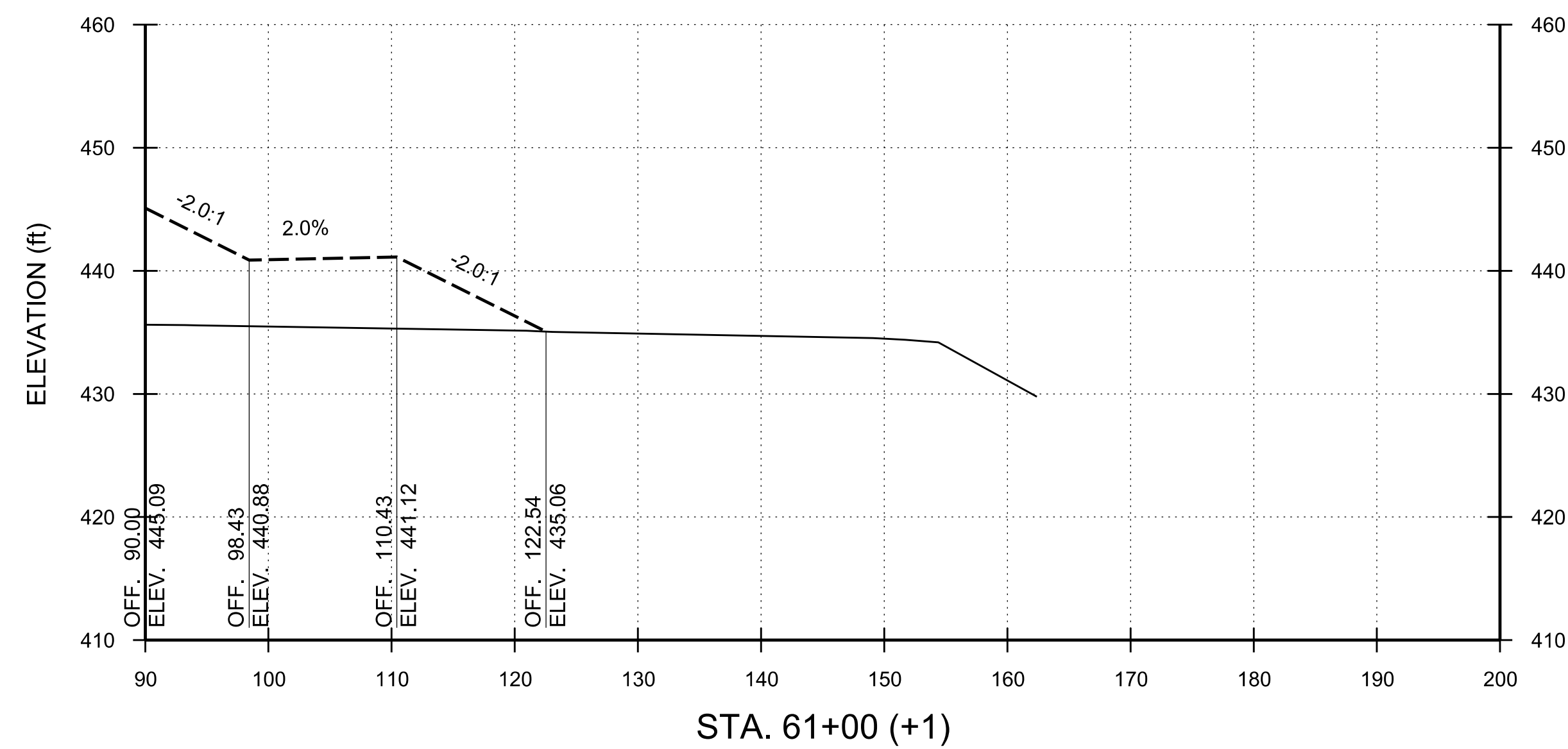
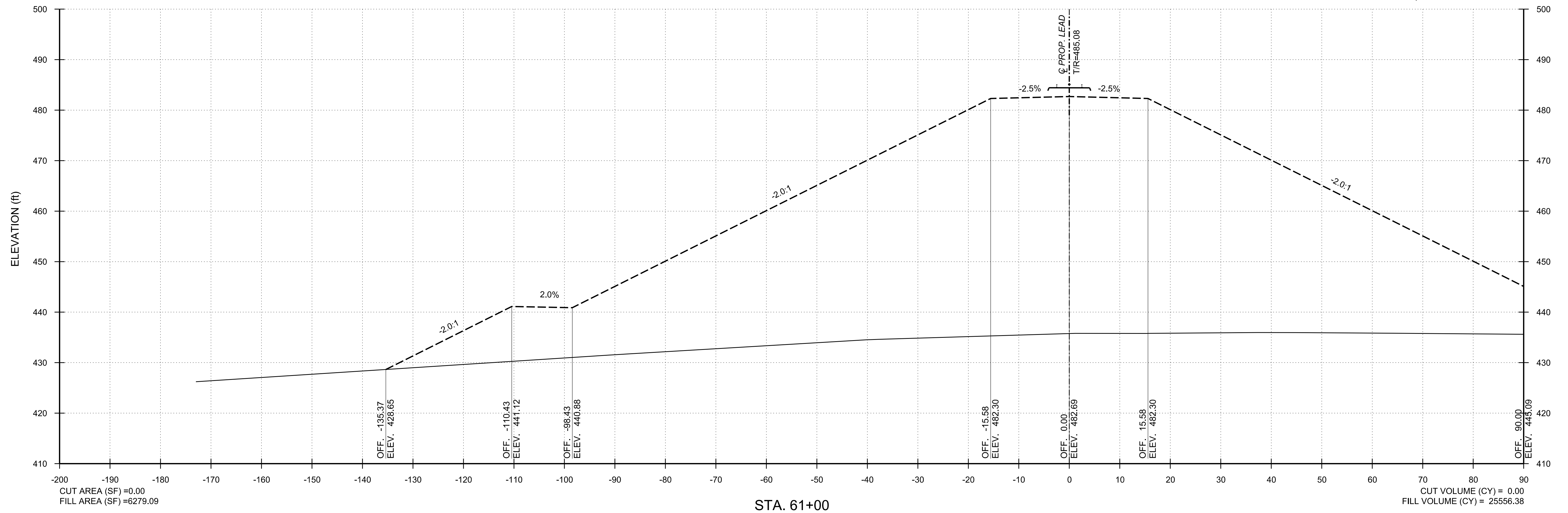
CROUCH ENGINEERING INC.
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BRENTWOOD, TN 37027
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NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

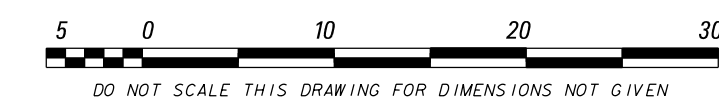


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| REV | BY | DATE | DESCRIPTION |
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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | PTD NO: D3327 | YRN |
| CHK | EVU | FILE NO: TRK1115024 | 04825 |
| | | DATE: MARCH 5, 2024 | WILE POST: R91.4 |
| | | | DRAWING NUMBER: TD-2023-105 |



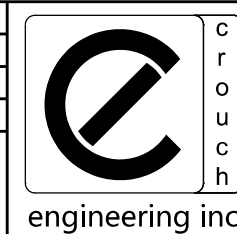
I-77 BRIDGE CONSTRUCTION BETWEEN STATIONS 61+00 AND 69+00

SCALE: 1" = 10'

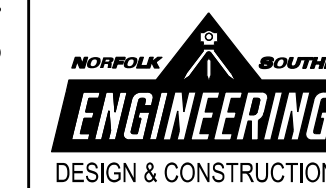


PHASE 1

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
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REVISIONS:



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NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL

OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

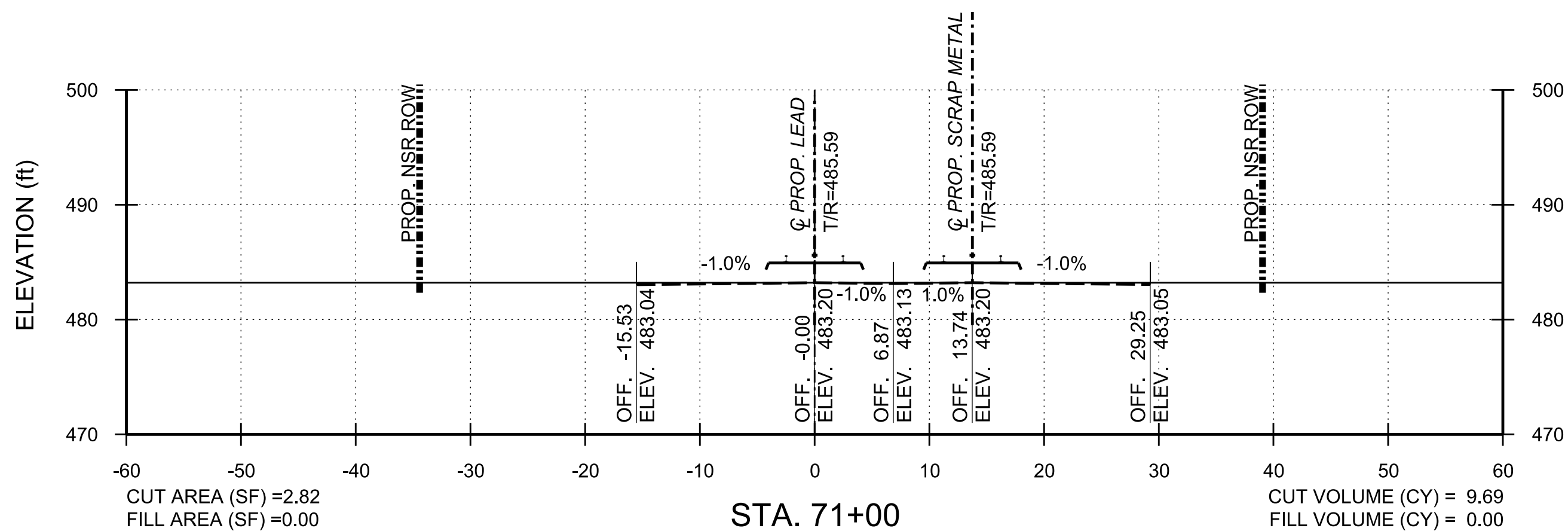
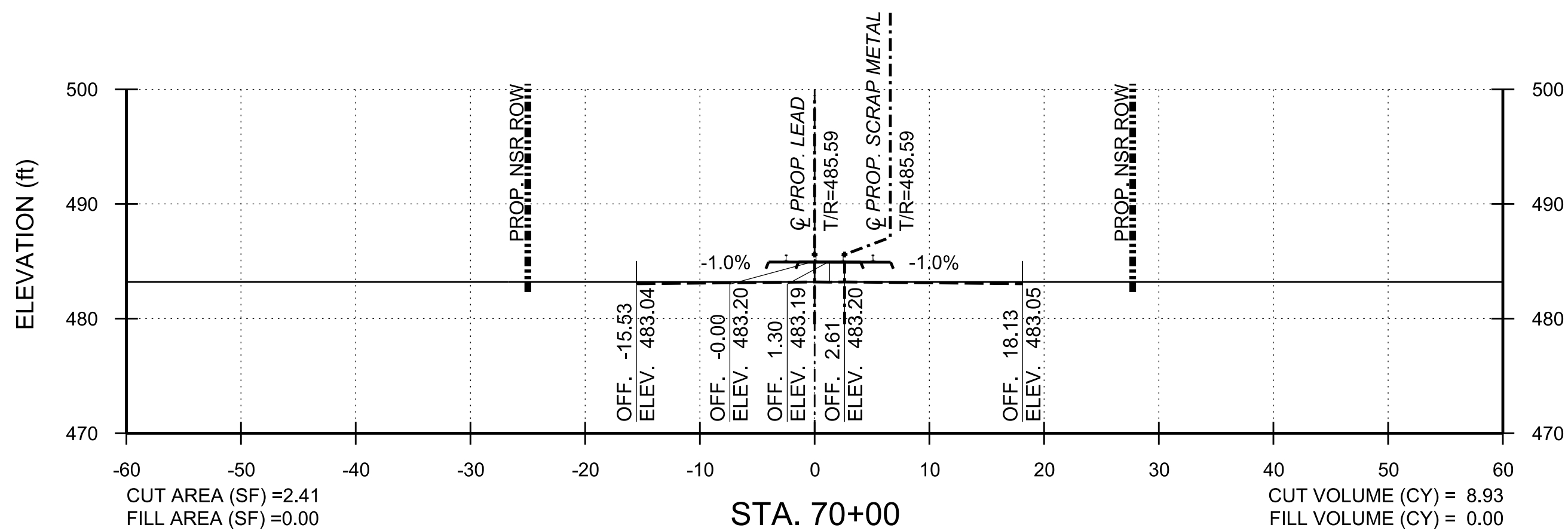
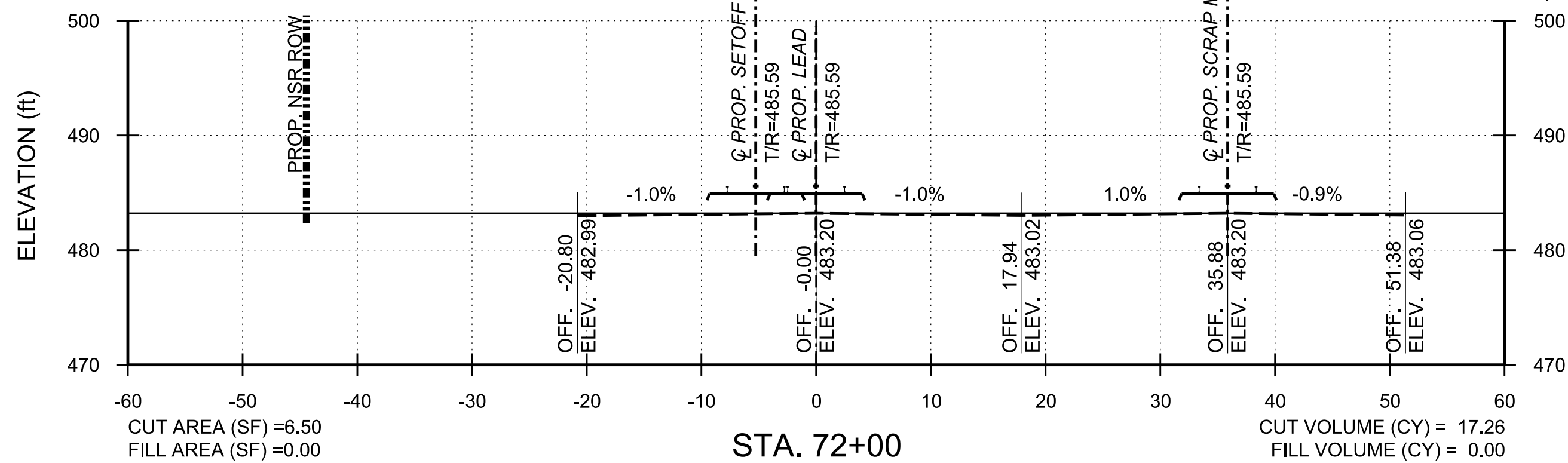
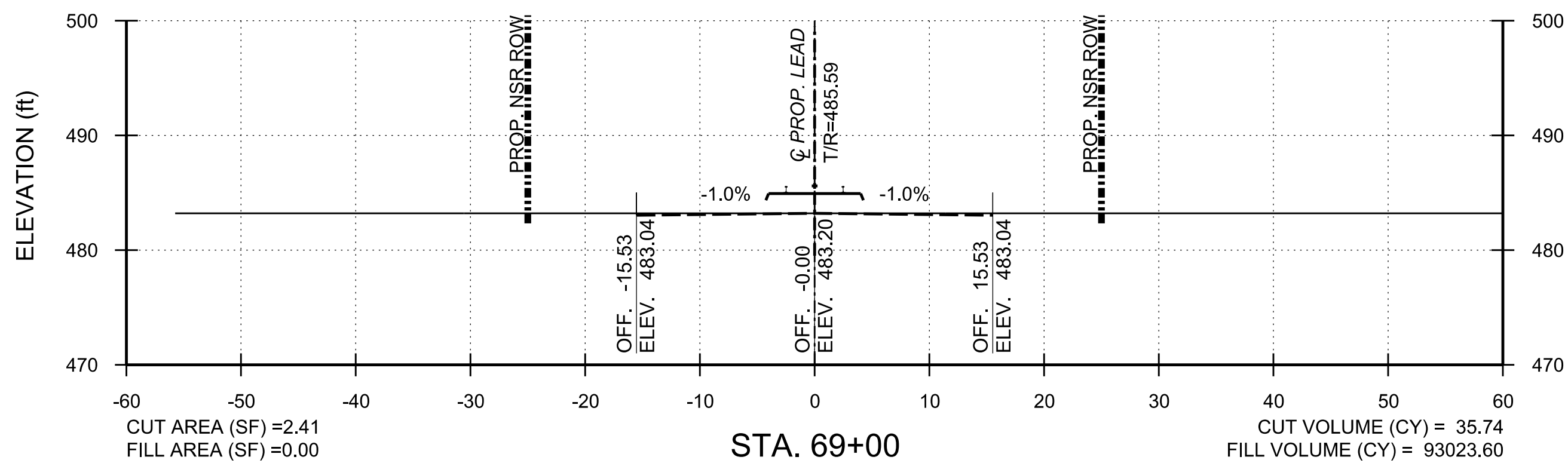
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LOCATION: BLYTHEWOOD, SC

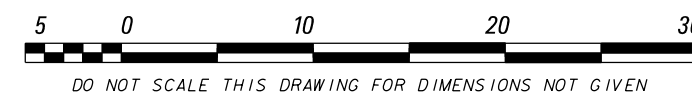
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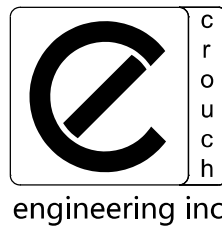
TD-2023-105



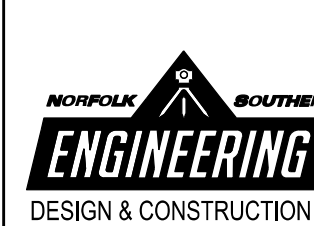
SCALE: 1" = 10'



PROJECT NO: 23050
DATE:
DRAWN BY: EVU
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CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



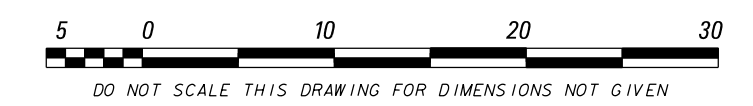
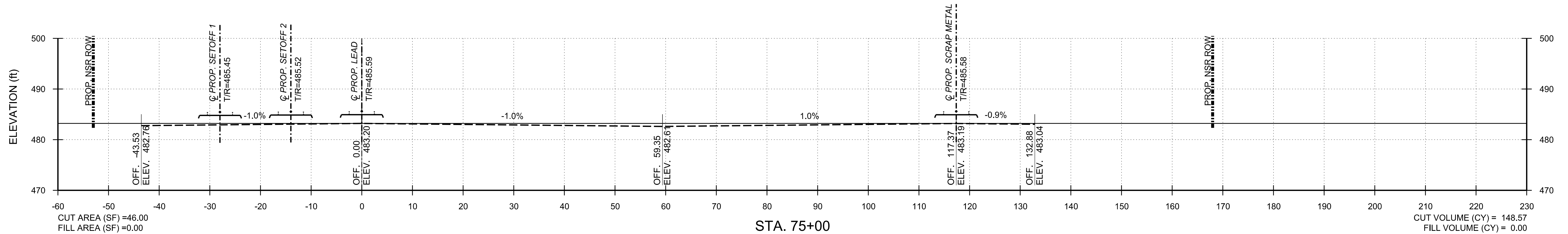
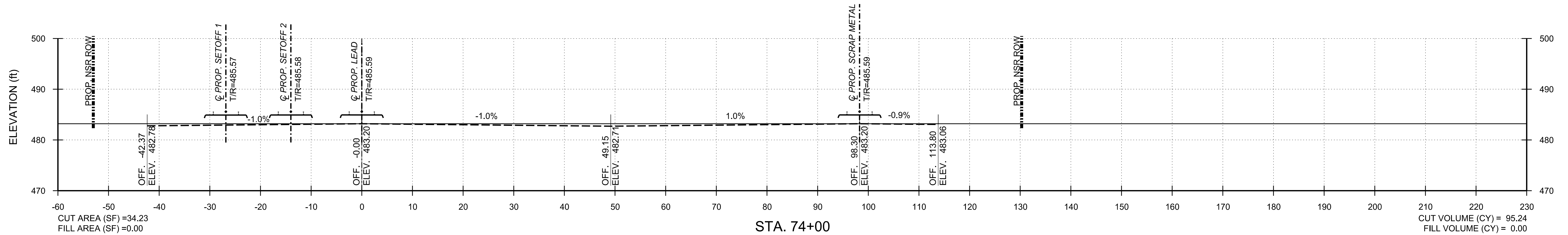
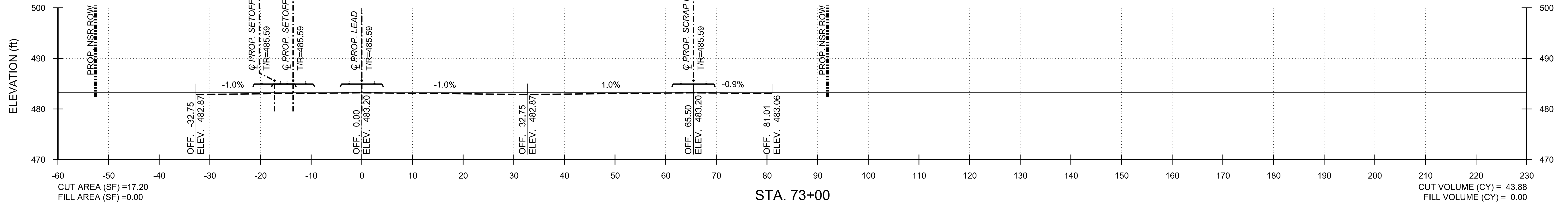
NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL

| | | | |
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| REV | BY | DATE | DESCRIPTION |
| | | | BLYTHEWOOD, SC |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | PTD NO. D3327 | VRN 04825 |
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| CHK | | DATE MARCH 5, 2024 | DRAWING NUMBER TD-2023-105 |

PHASE 2

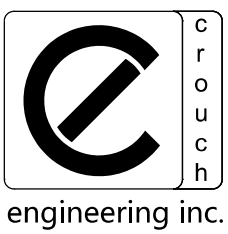
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REPRODUCTION AND DISTRIBUTION ONLY UNDER PERMISSION AND LICENSE BY CROUCH ENGINEERING.
FOR PERMISSION, CONTACT HARVEY A. CROUCH

MODEL NAME: #MODELNAME# CADD FILE: #FILEL#
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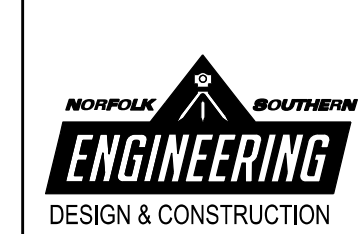


PHASE 2

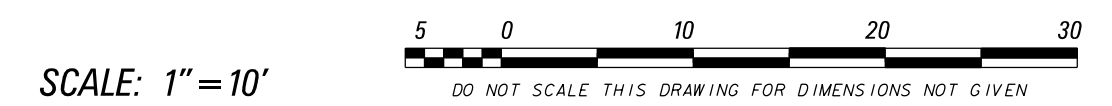
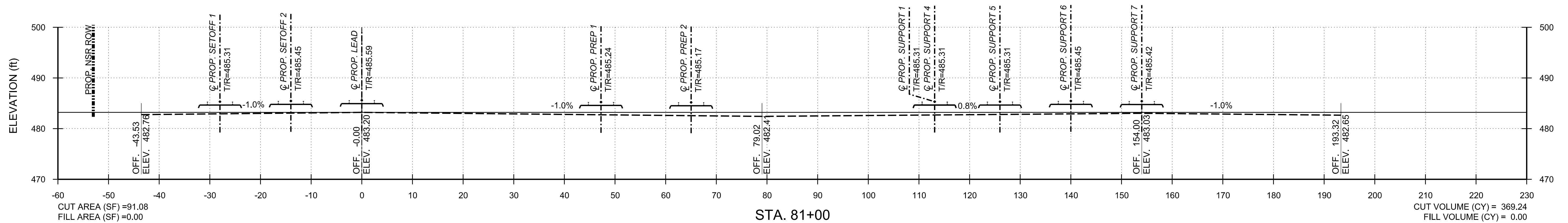
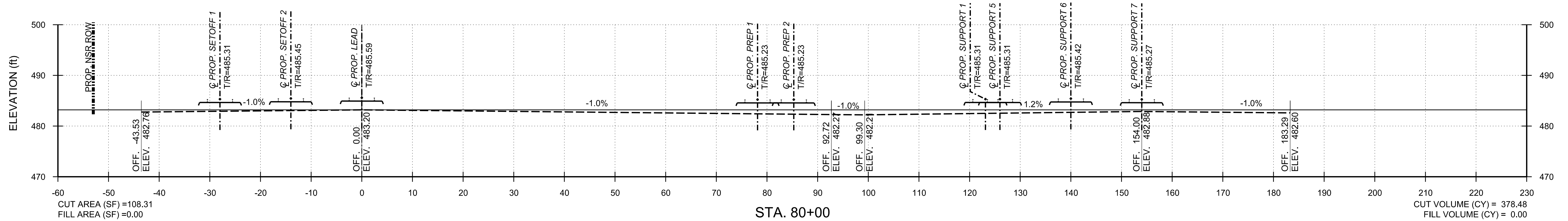
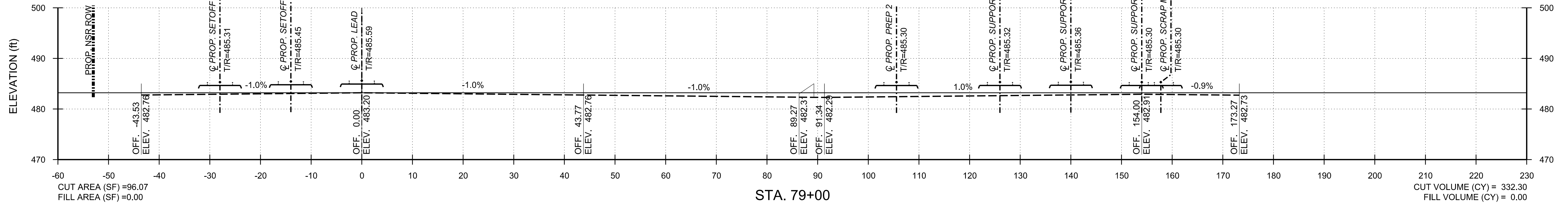
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| PROJECT NO: | 23050 |
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CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630



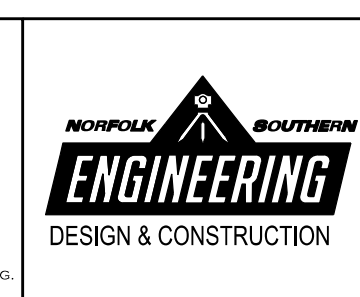
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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | FILE NO. D3327 | DATE |
| CHK | | FILE NO. TRK1115024 | DATE |
| | | DATE MARCH 5, 2024 | |
| | | DRAWING NUMBER 04825 | FILE POST R91.4 |
| | | TD-2023-105 | |



PHASE 2

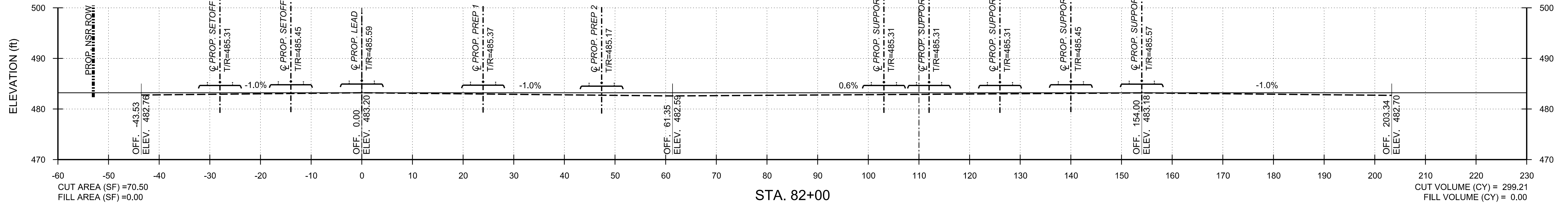
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| DATE: | |
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CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630

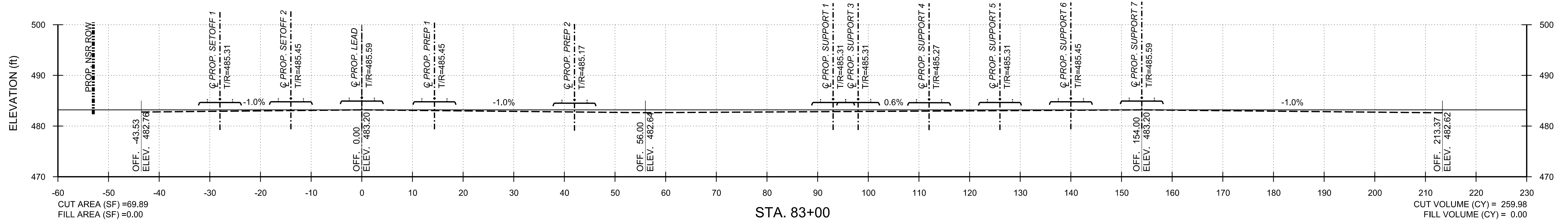


NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

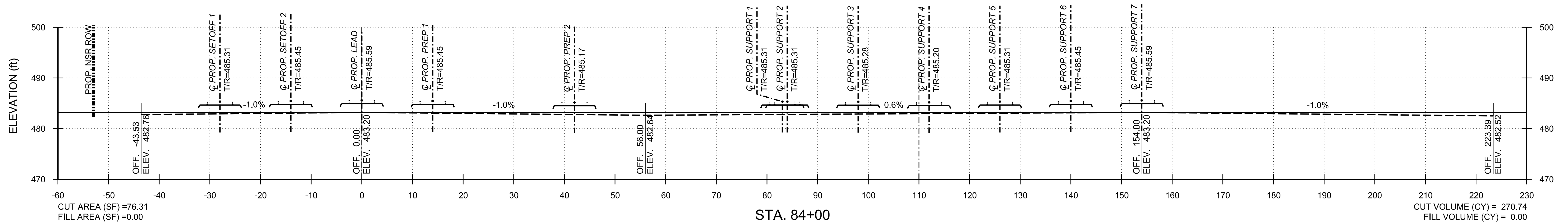
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| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | FILE NO. D3327 | FILE POST 04825 |
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| DATE | MARCH 5, 2024 | | |
| | TD-2023-105 | | |



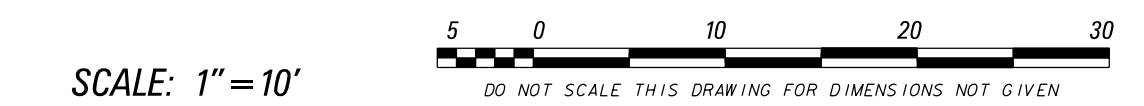
STA. 82+00



STA. 83+00



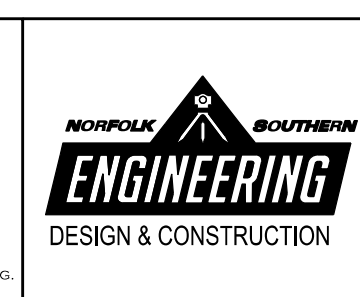
STA. 84+00



PHASE 2

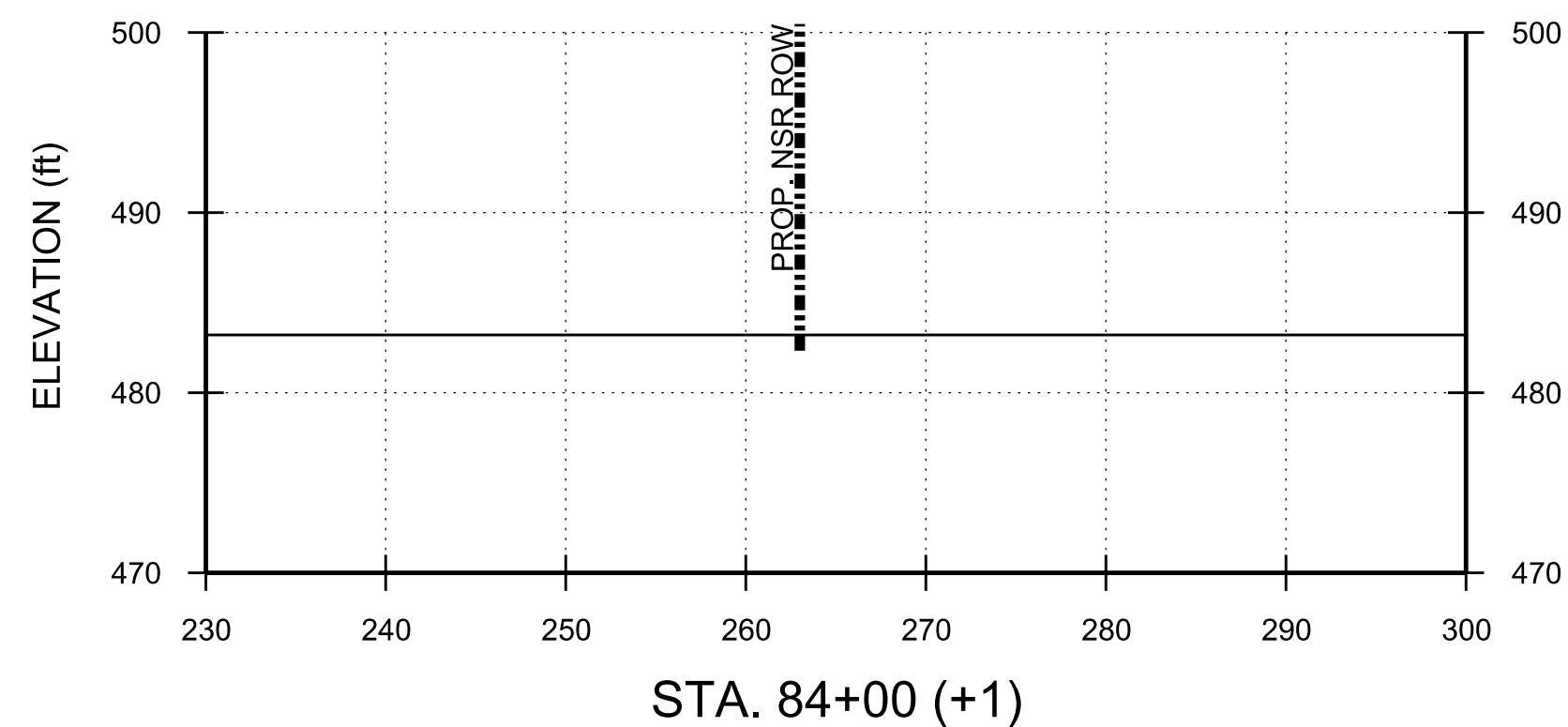
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| PROJECT NO. | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |

CROUCH ENGINEERING INC.
 5115 MARYLAND WAY, STE 225
 BRENTWOOD, TN 37027
 PHONE NO. (615) 791-0630

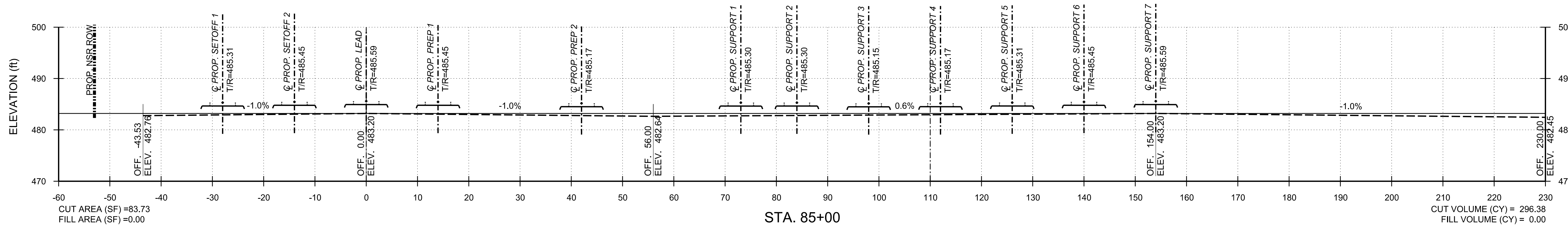


NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

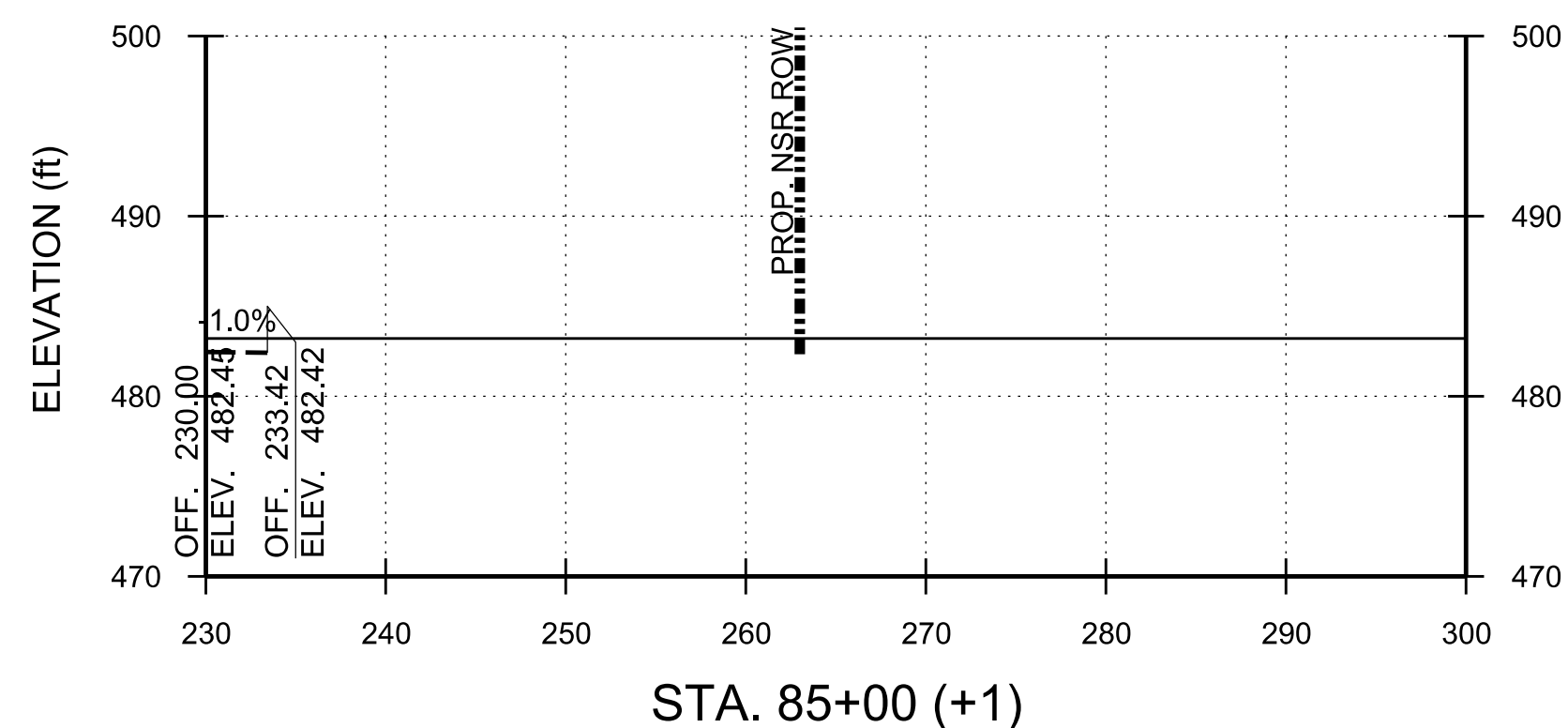
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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | FILE NO. D3327 | VRN 04825 |
| CHK | | DATE MARCH 5, 2024 | DRAWING NUMBER TD-2023-105 |
| | | | FILE POST R91.4 |



STA. 84+00 (+1)

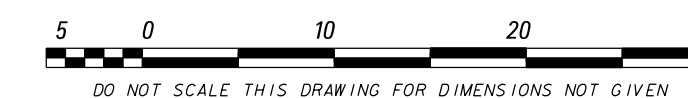


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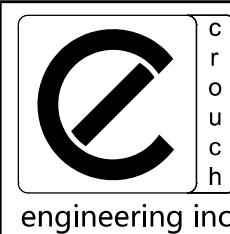


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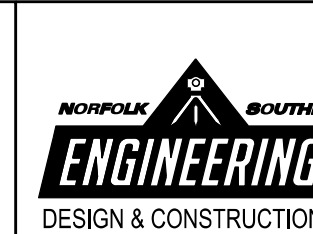
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REVISIONS:



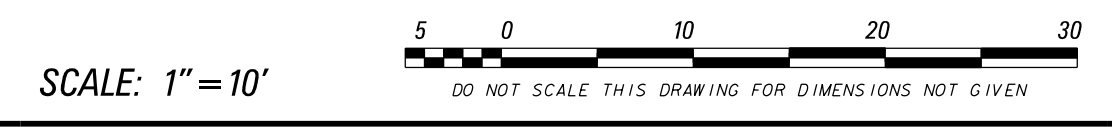
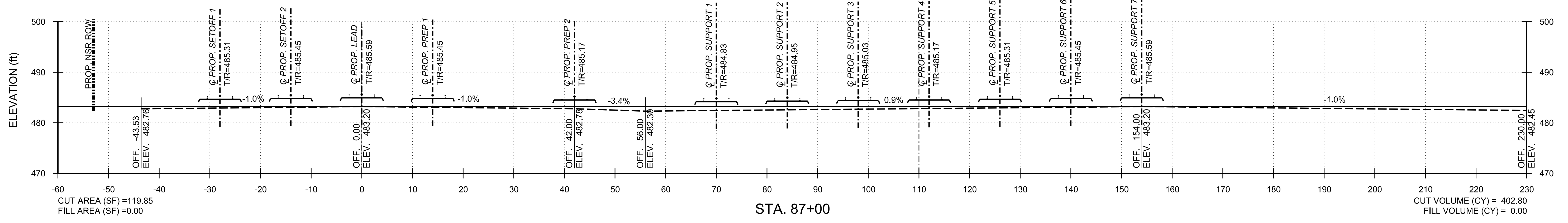
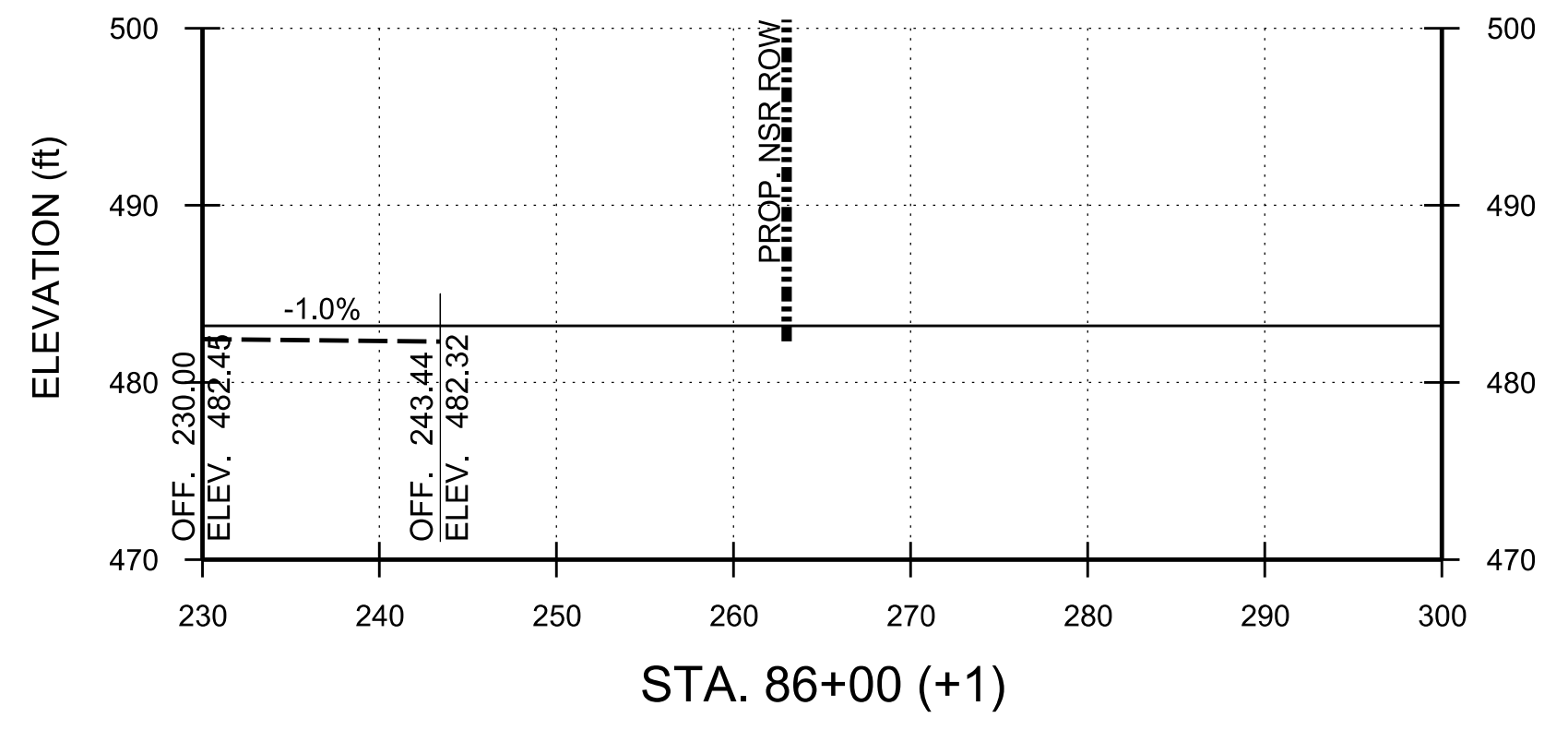
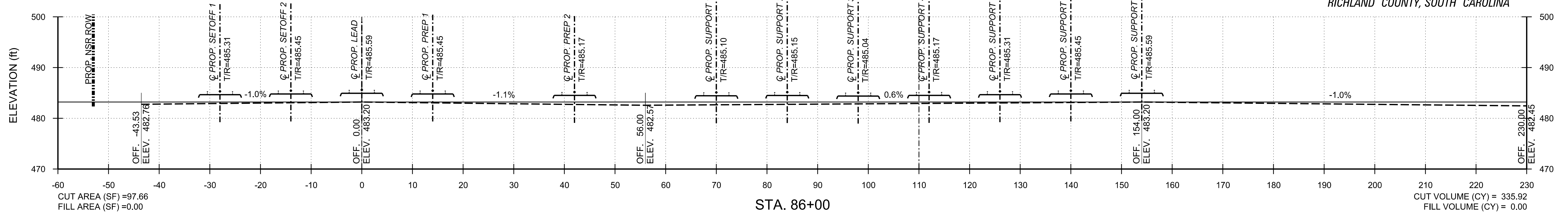
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BRENTWOOD, TN 37027
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NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

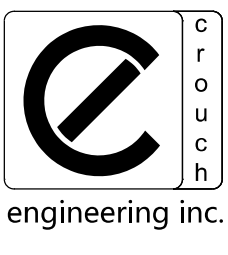
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| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | FILE NO. D3327 | FILE POST 04825 R91.4 |
| DWN | EVU | FILE NO. TRK1115024 | DRAWING NUMBER |
| CHK | DATE | MARCH 5, 2024 | TD-2023-105 |

PHASE 2

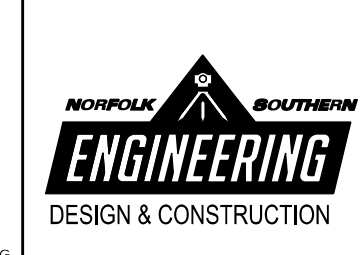


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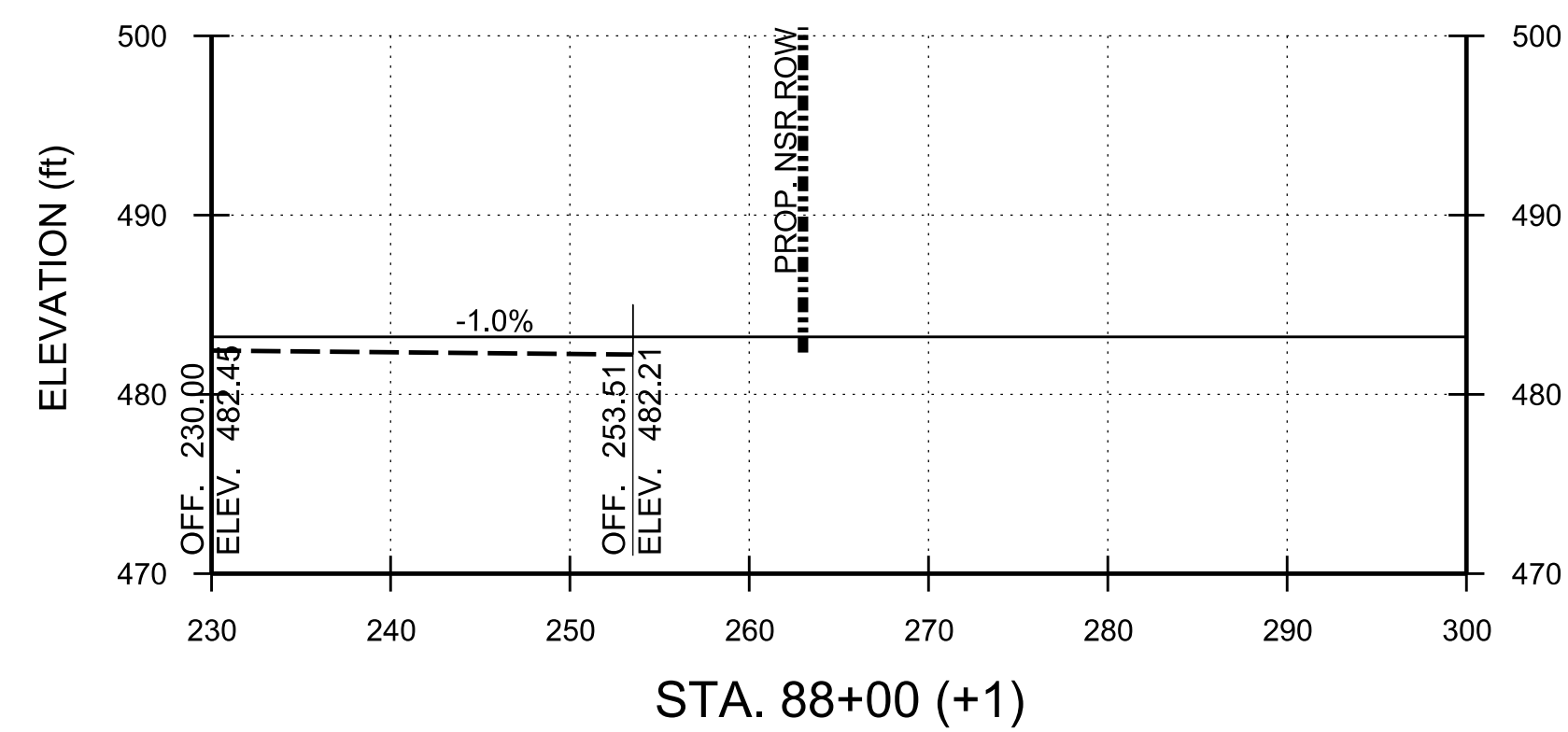
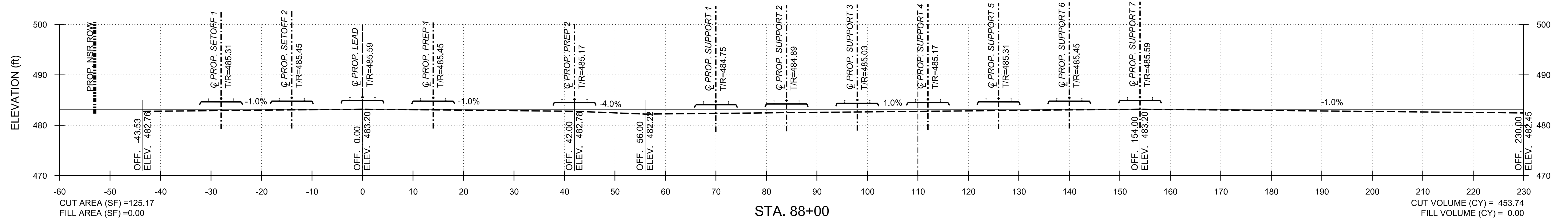
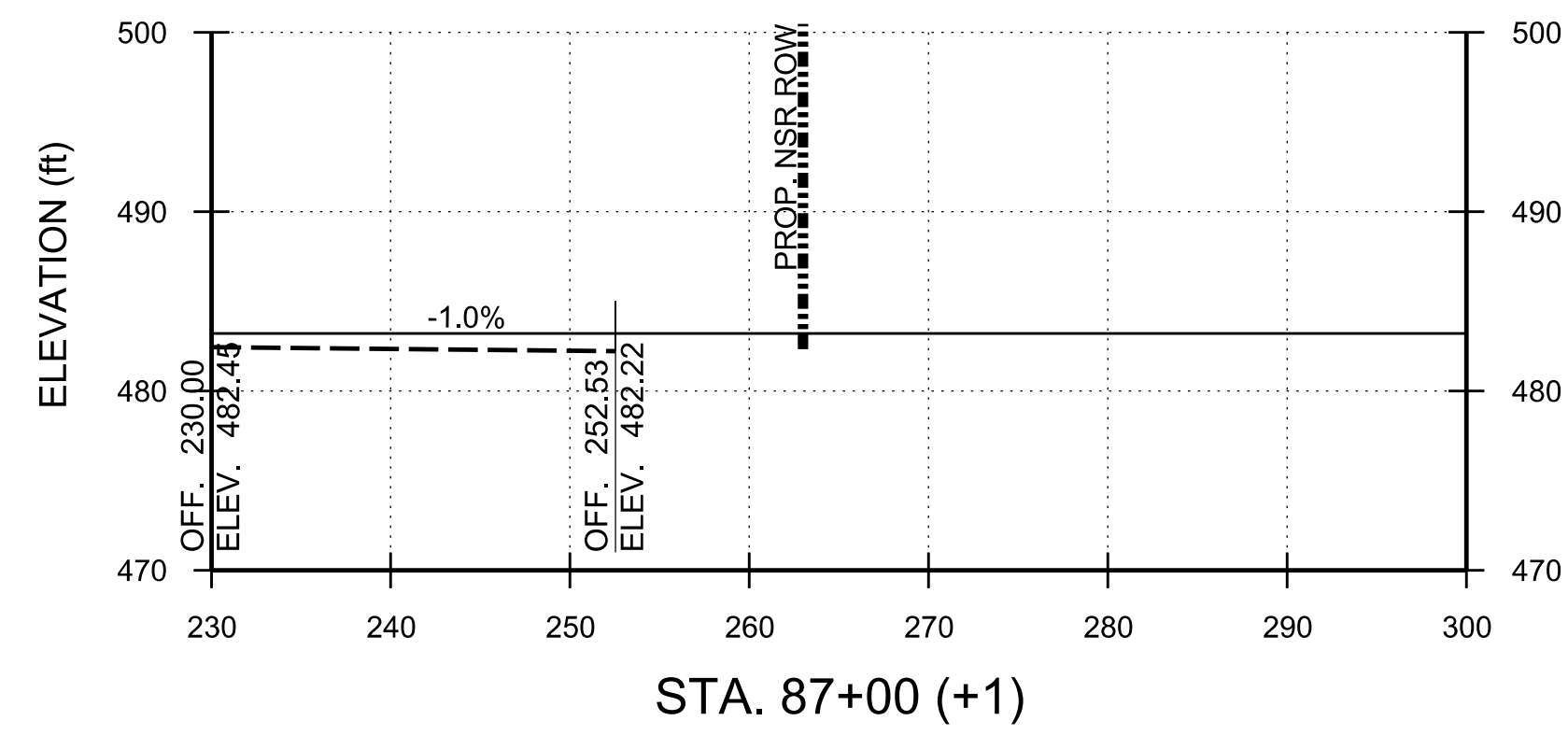


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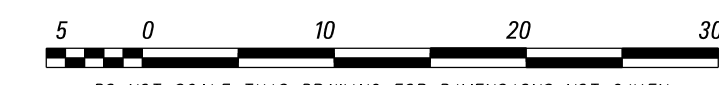


OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.
 MODEL NAME: #MODELNAME# CADD FILE: #FILEL#
 DATE PRINTED: #DATE# LAST SAVED: #LASTSAVEDDATE#

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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
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| | | DATE MARCH 5, 2024 | TD-2023-105 |



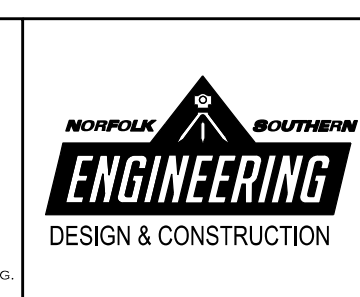
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DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN



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PROJECT NO: 23050
DATE:
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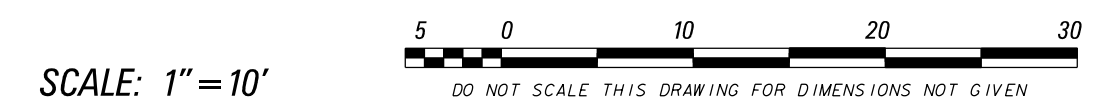
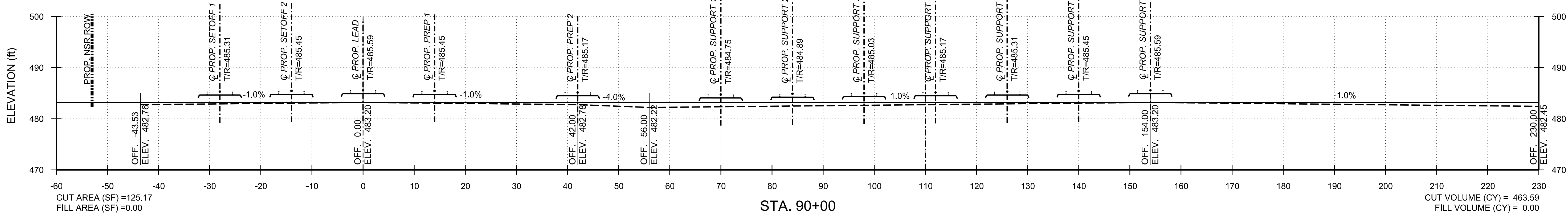
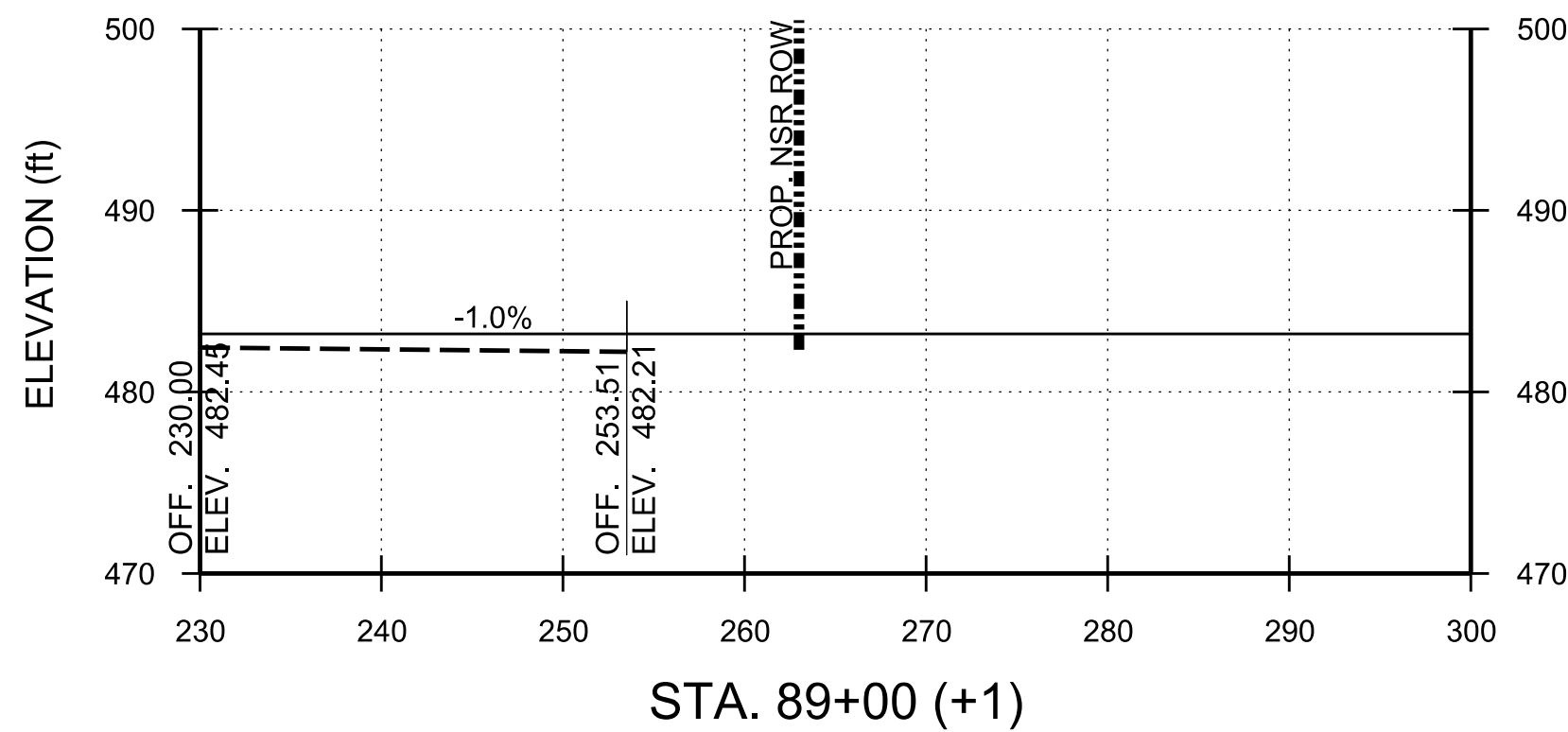
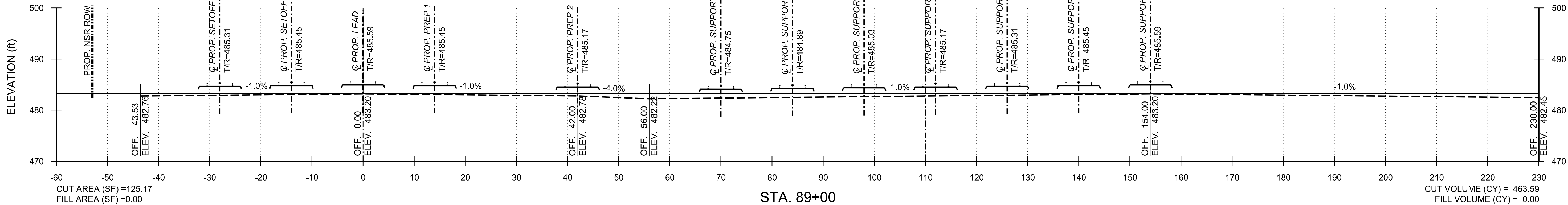


NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.
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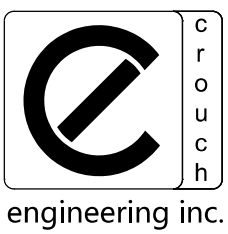
LOCATION: BLYTHEWOOD, SC
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

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| DWN | EVU | PTD NO. D3327 | VRN | 04825 | FILE POST | R91.4 |
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| CHK | | DATE | MARCH 5, 2024 | TD-2023-105 | | |

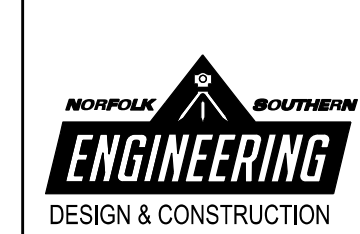


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| PROJECT NO. | 23050 |
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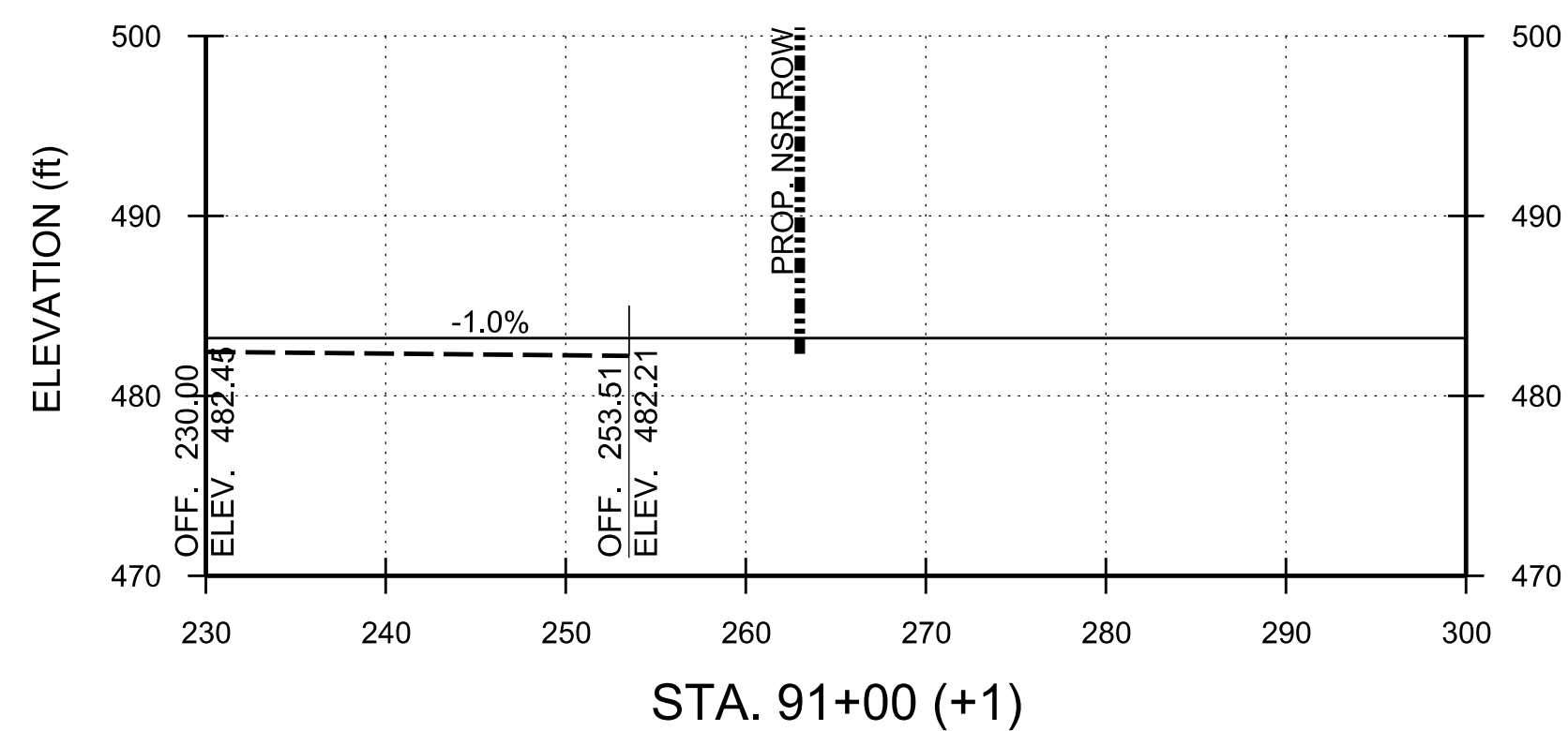
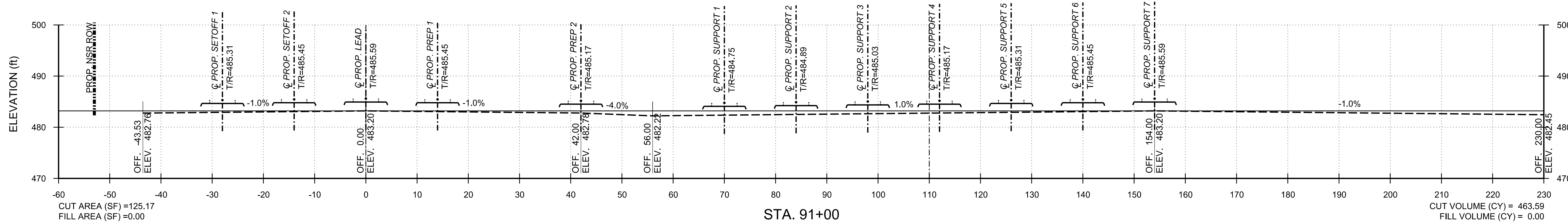
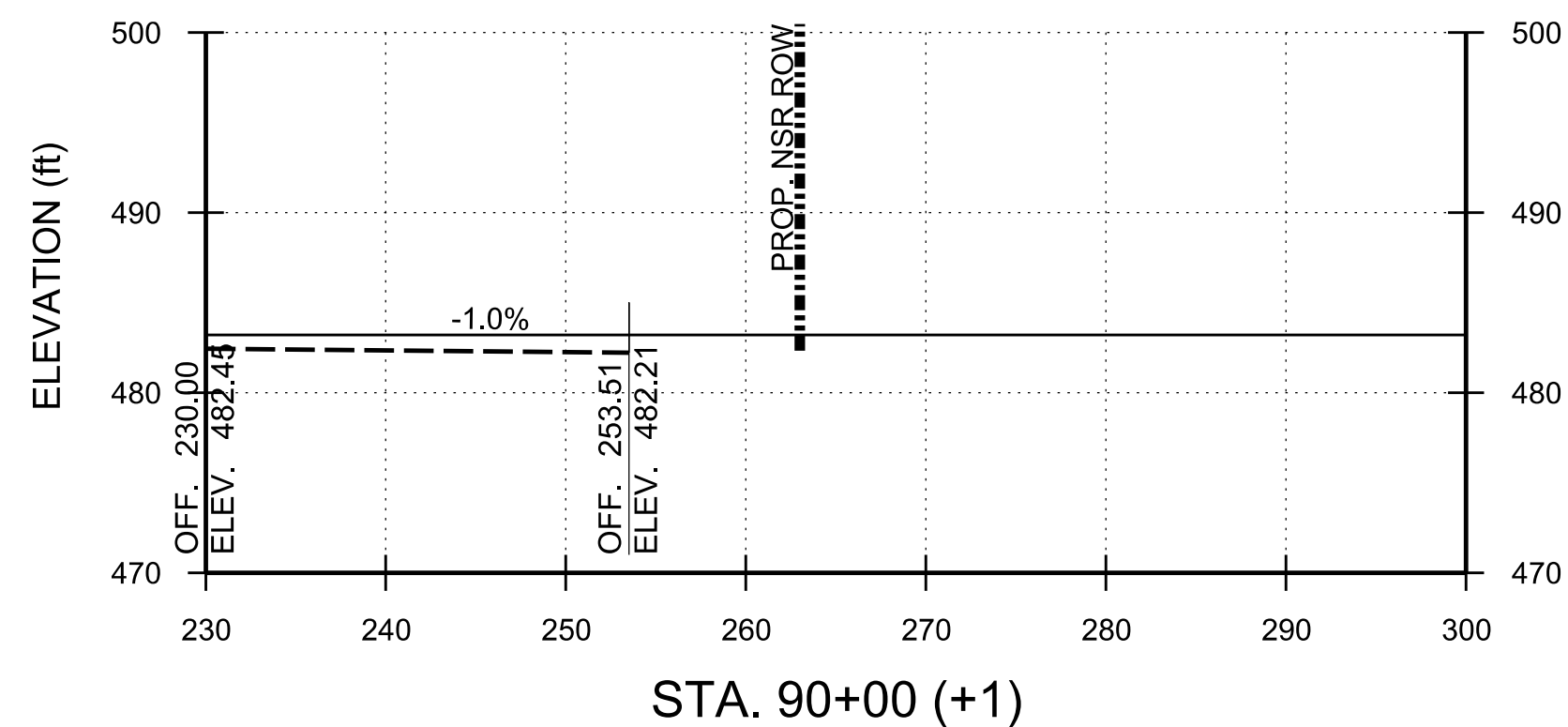


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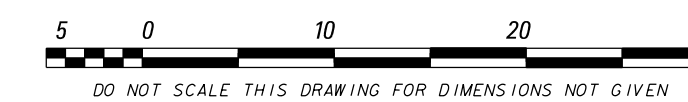


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 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

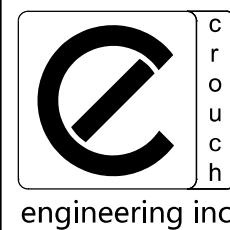
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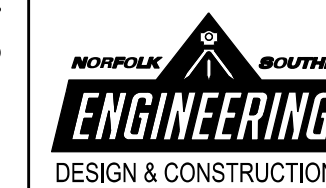
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PROJECT NO: 23050
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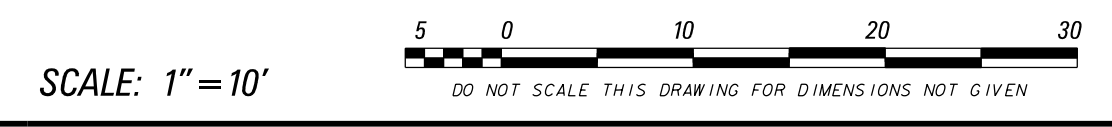
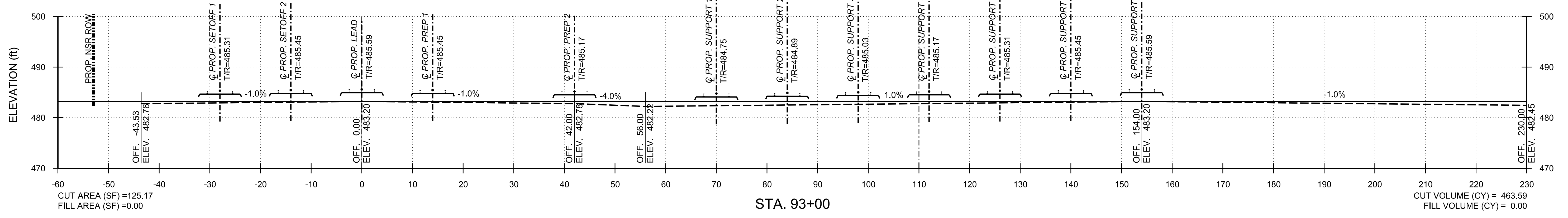
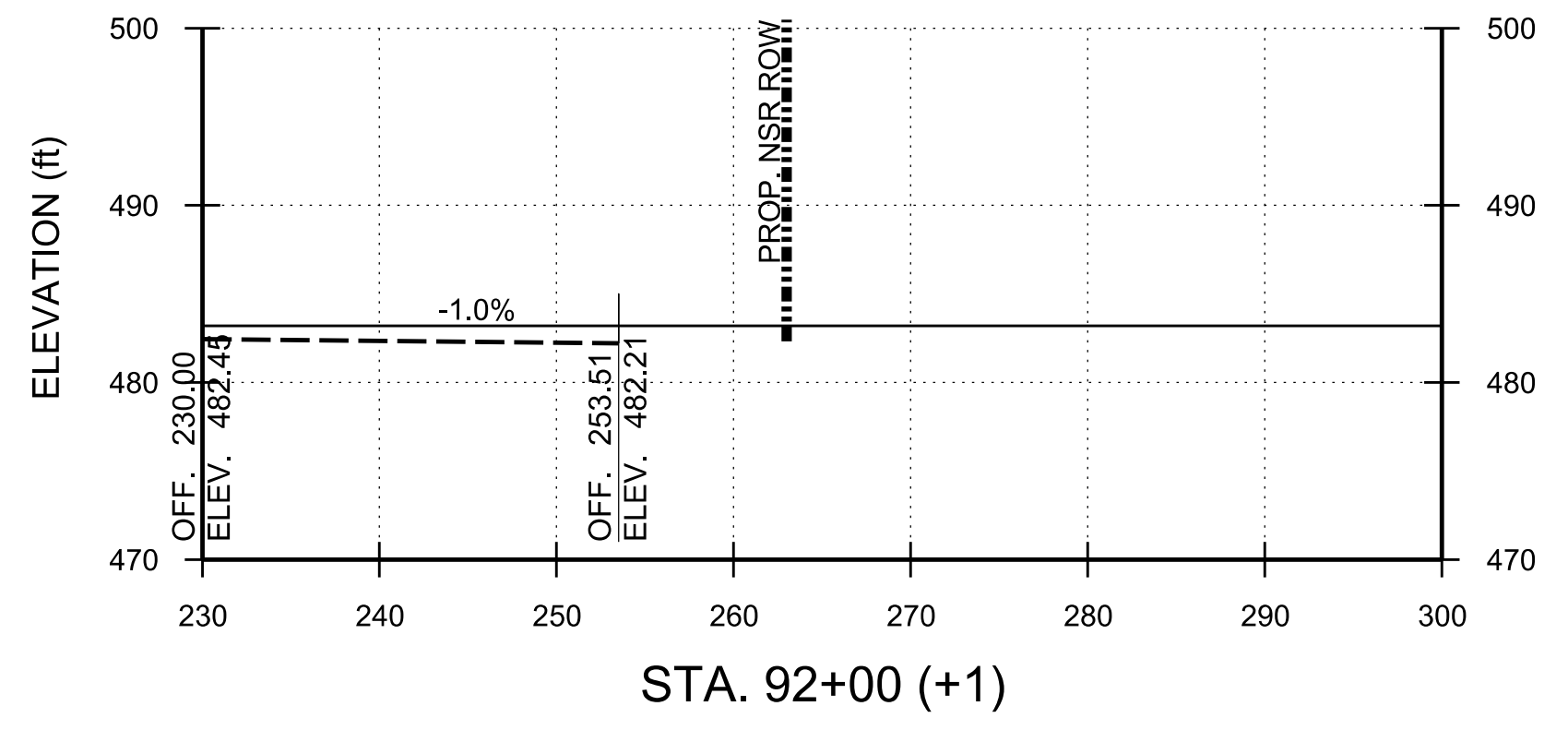
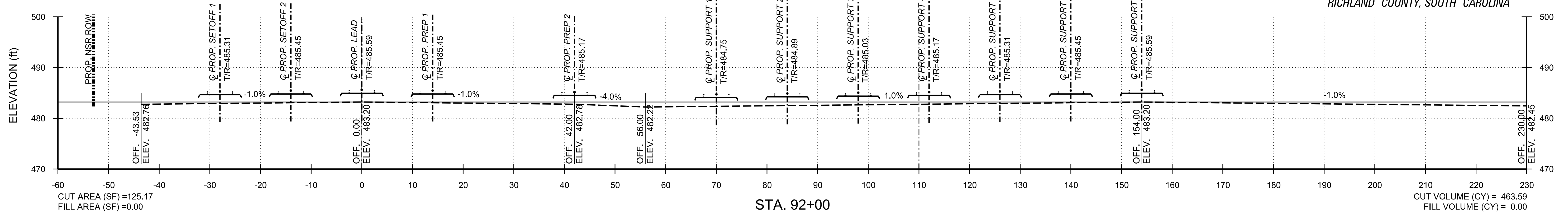
NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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LOCATION: BLYTHEWOOD, SC
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

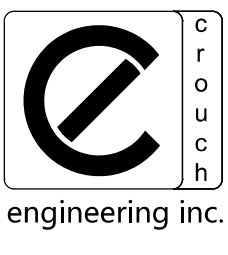
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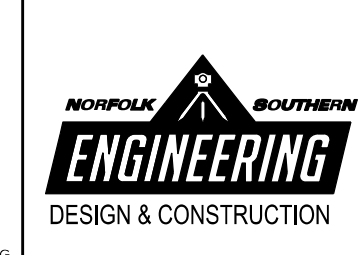


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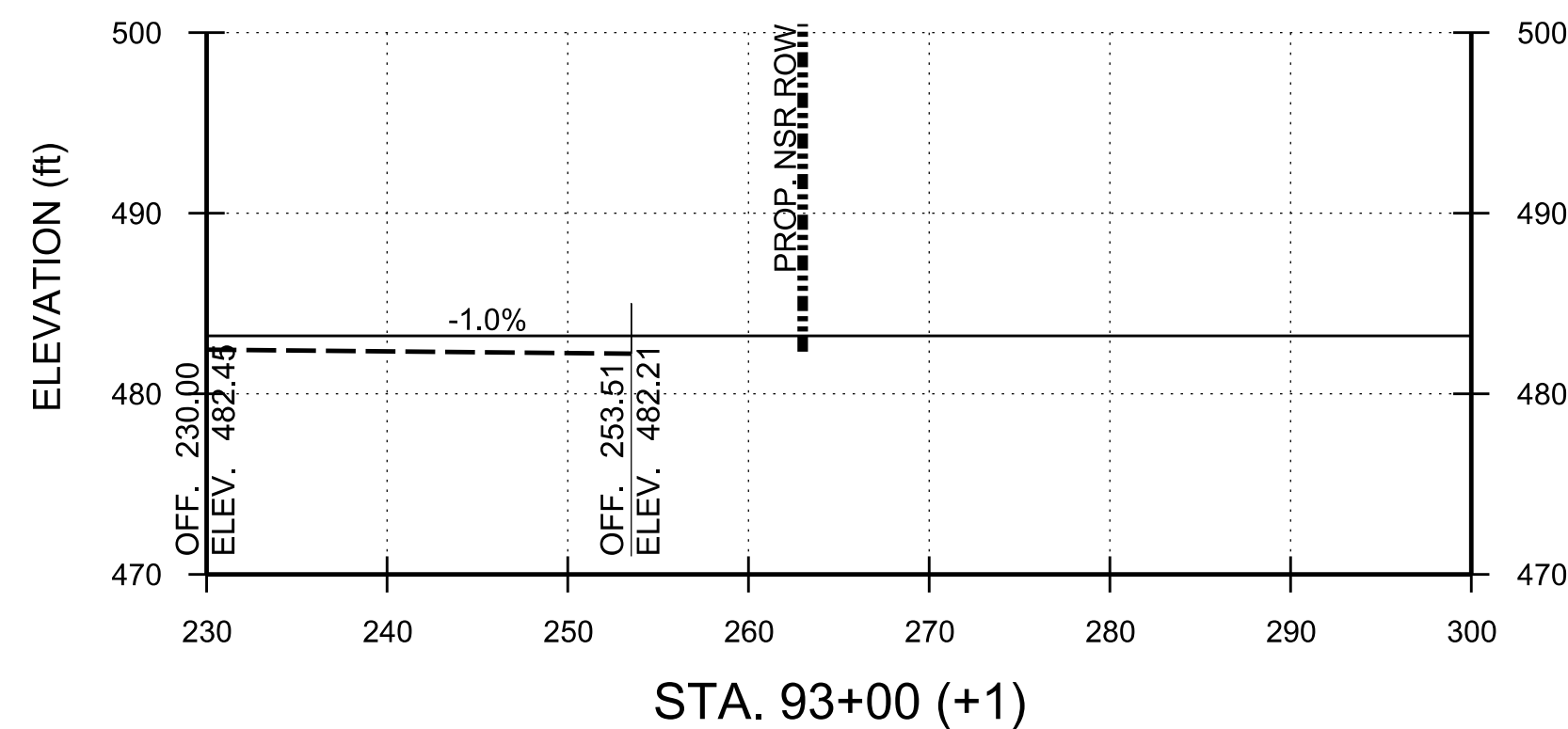


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BRENTWOOD, TN 37027
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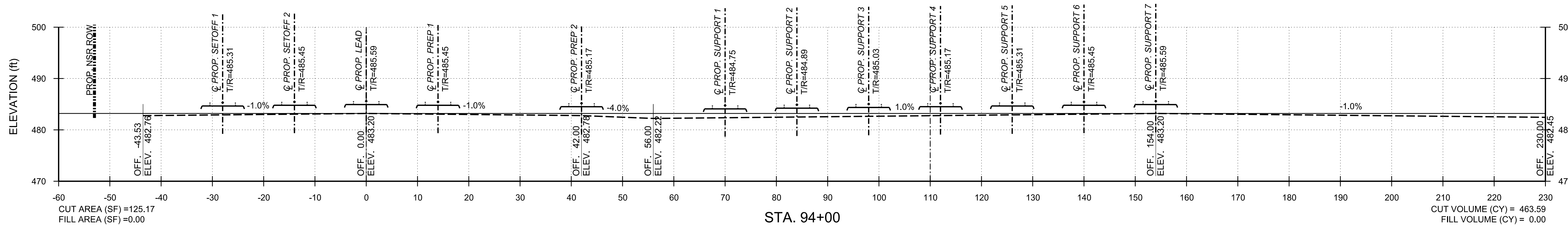


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OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.
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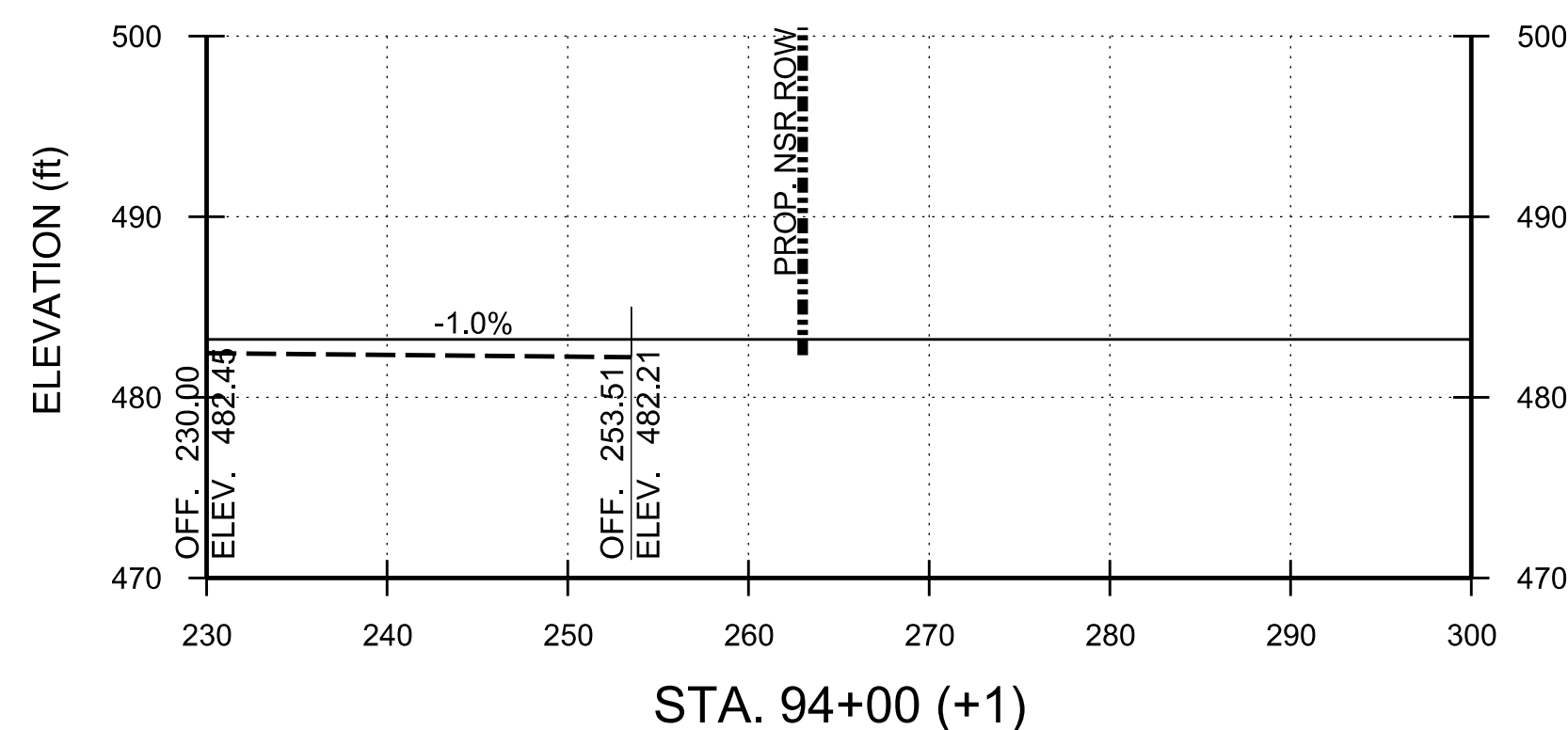
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| CHK | | DATE: MARCH 5, 2024 | TD-2023-105 |



STA. 93+00 (+1)

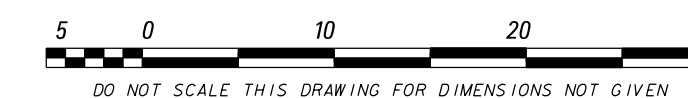


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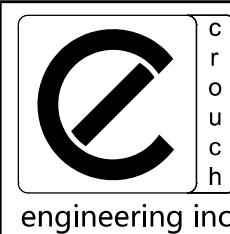


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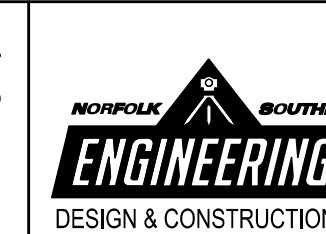
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COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
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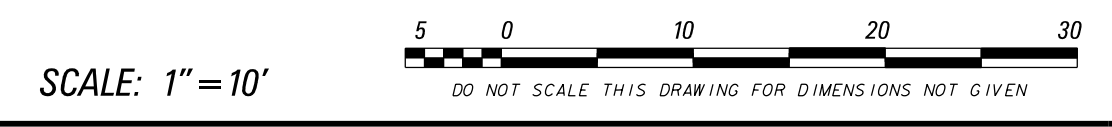
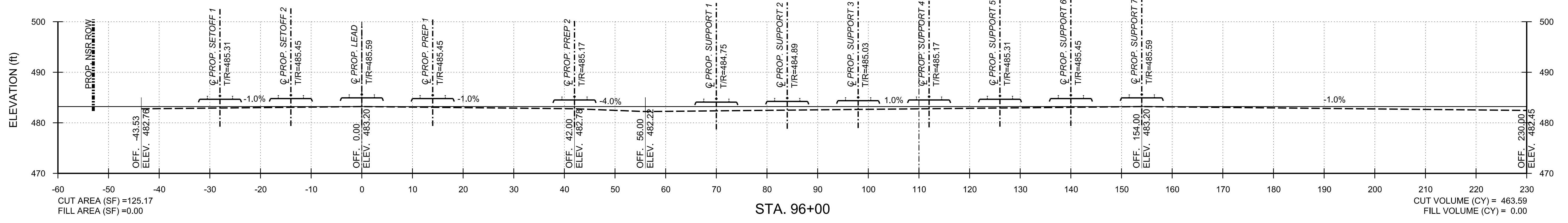
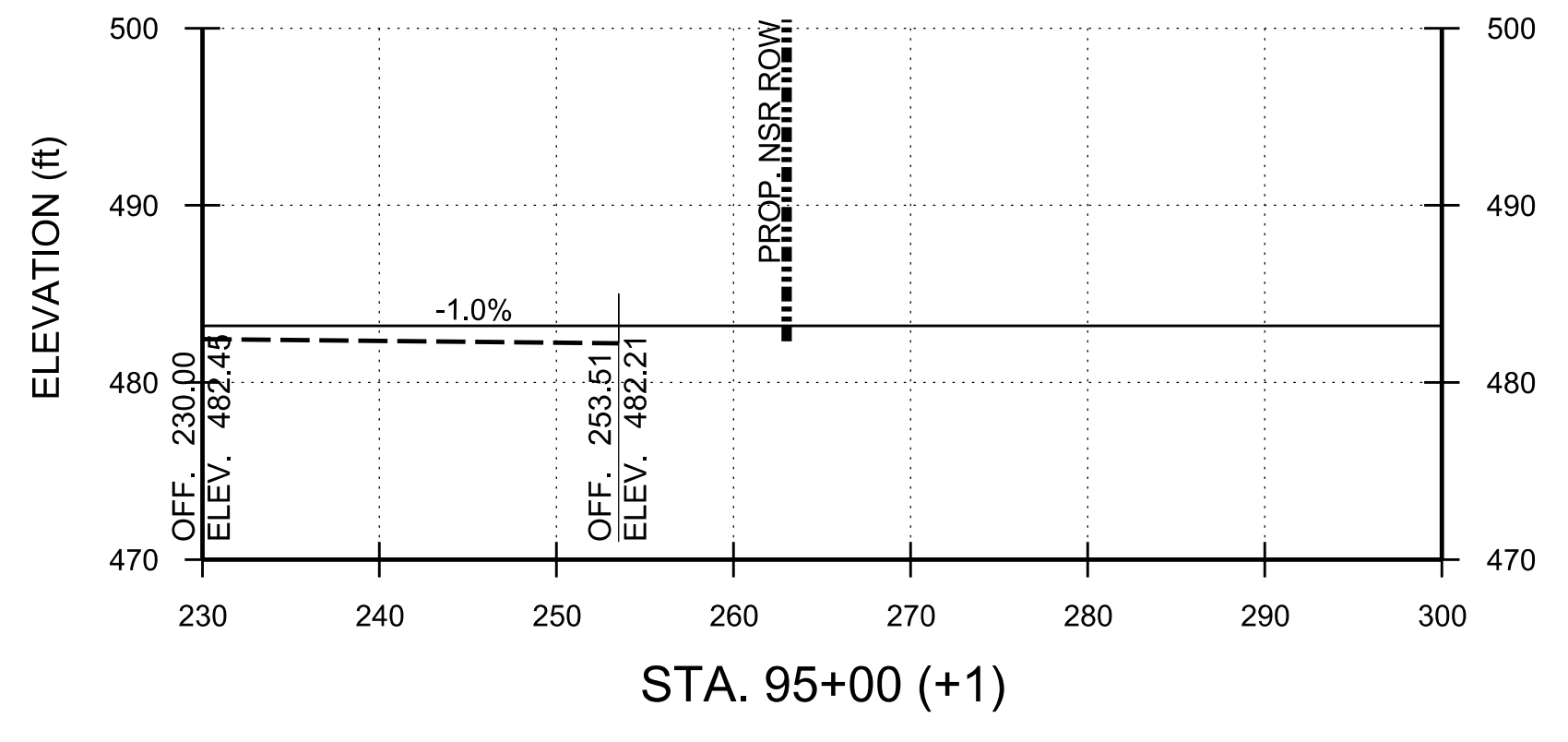
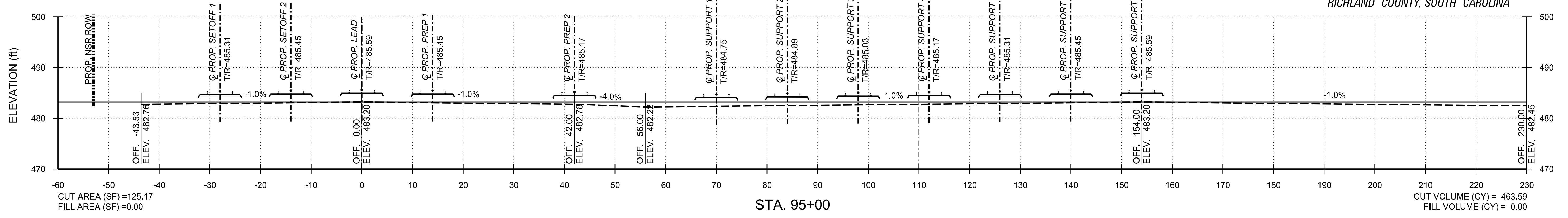
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TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

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| DWN | EVU | FILE NO. | TRK1115024 | DRAWING NUMBER | | |
| CHK | | DATE | MARCH 5, 2024 | TD-2023-105 | | |

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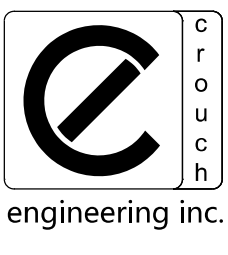
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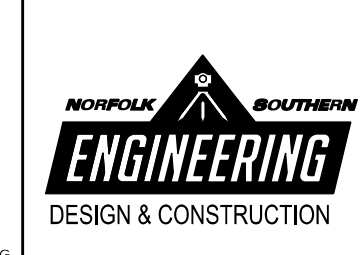


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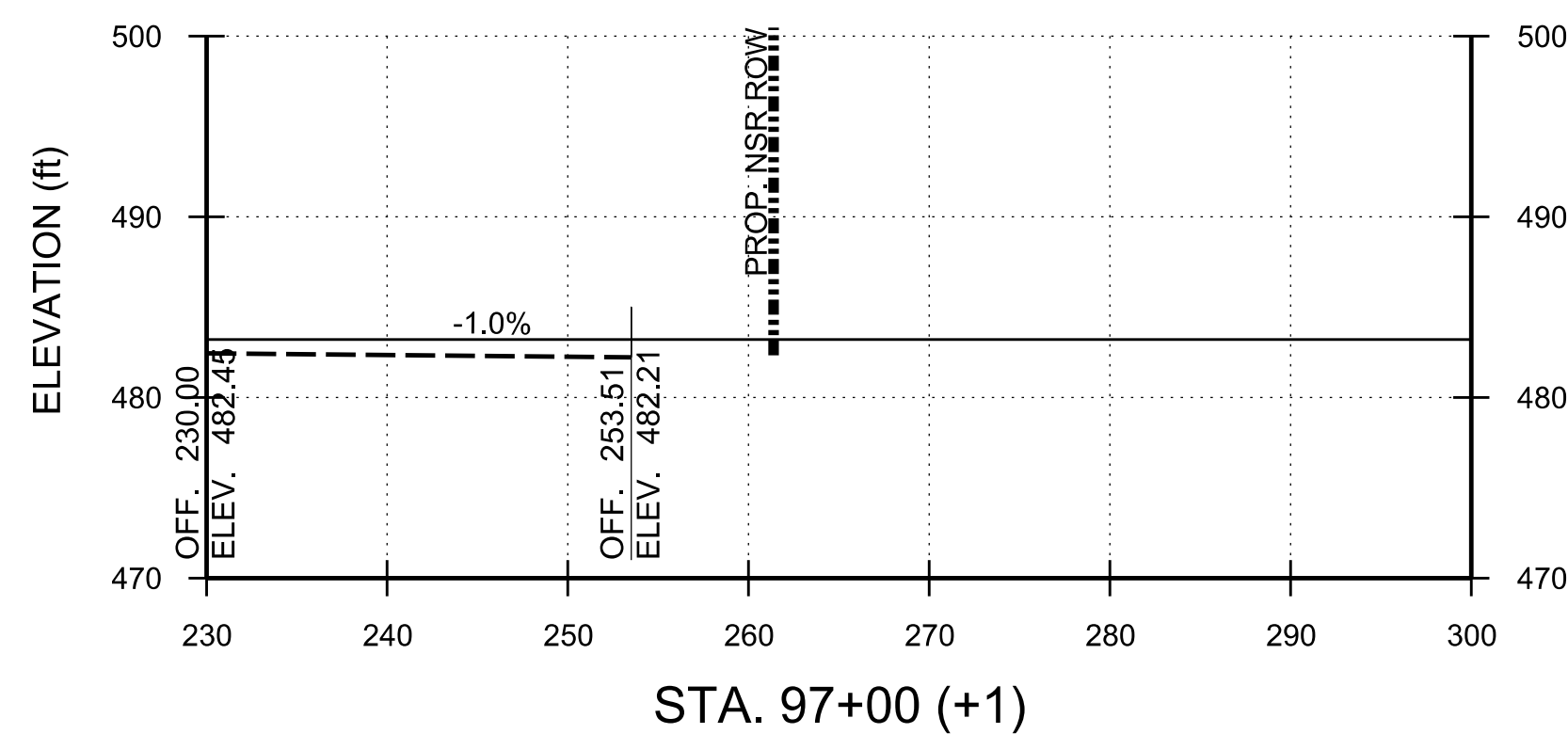
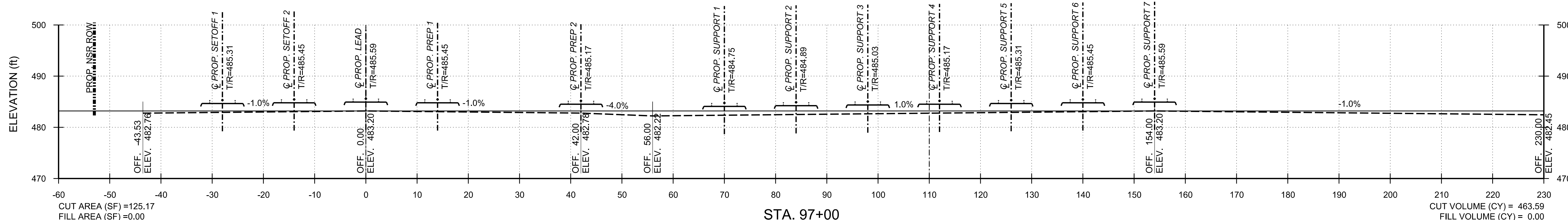
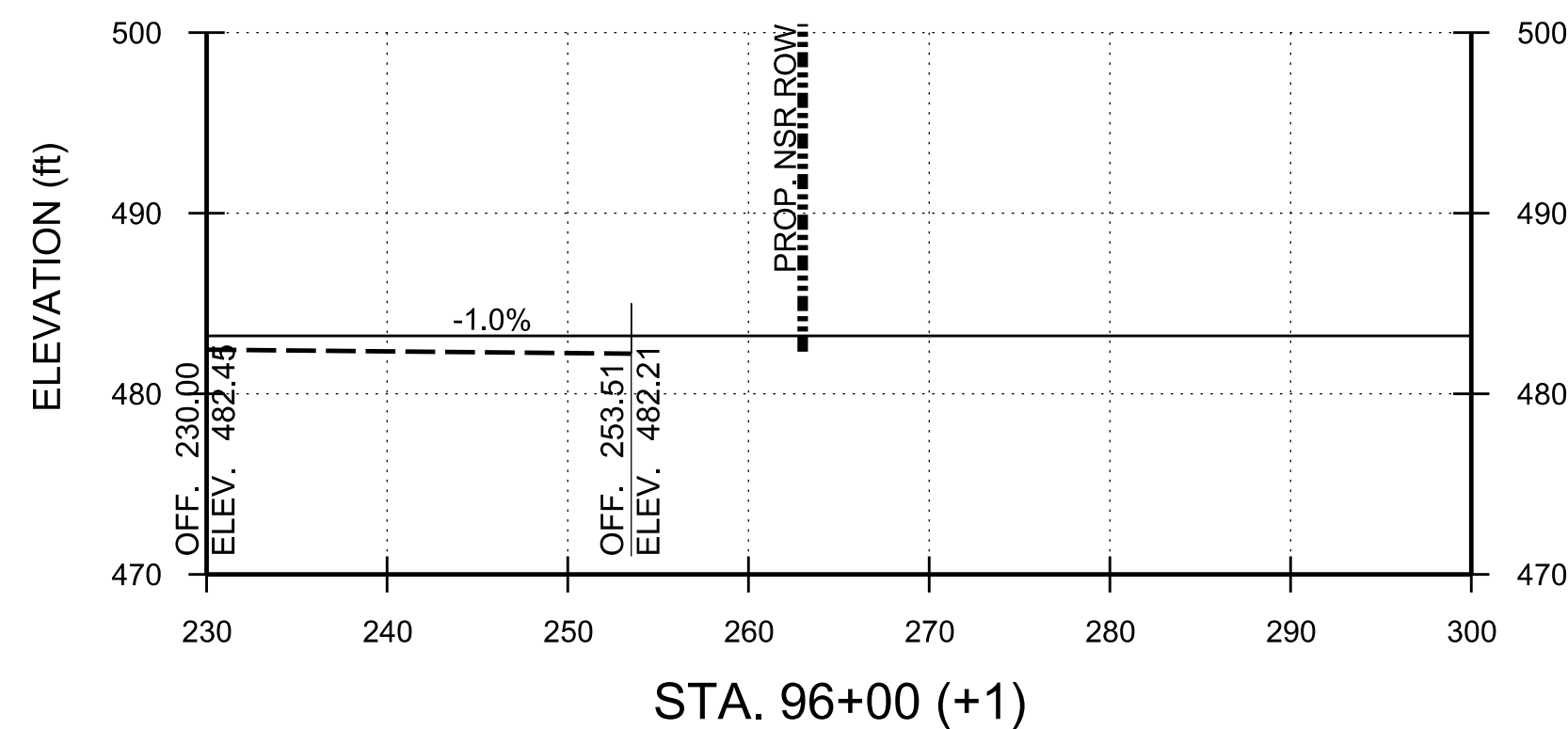


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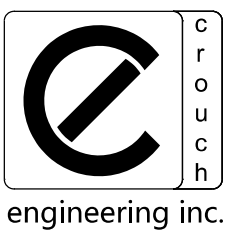
NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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| REV. BY: | DATE: | DESCRIPTION: |
| EVU | D3327 | BLYTHEWOOD, SC |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | |
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| DRAWING NUMBER: TD-2023-105 | | |

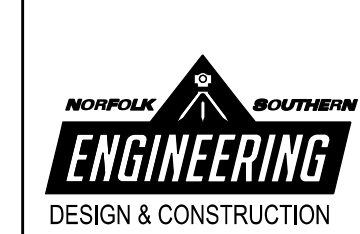


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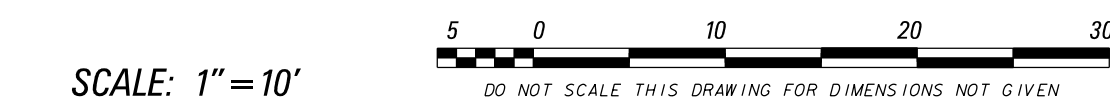
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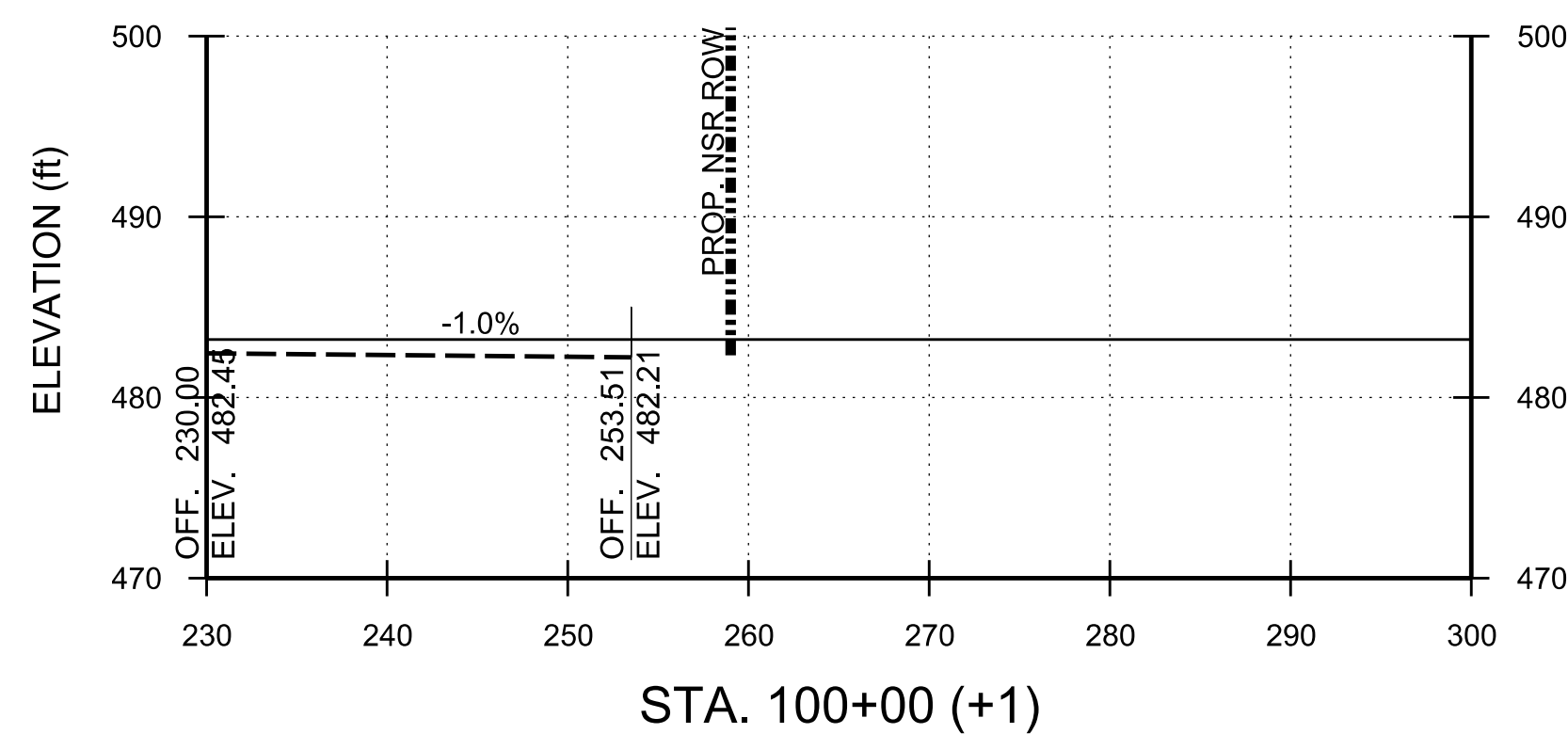
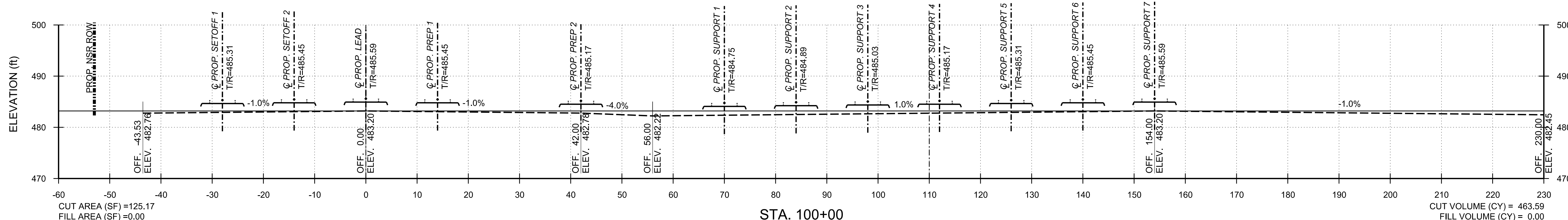
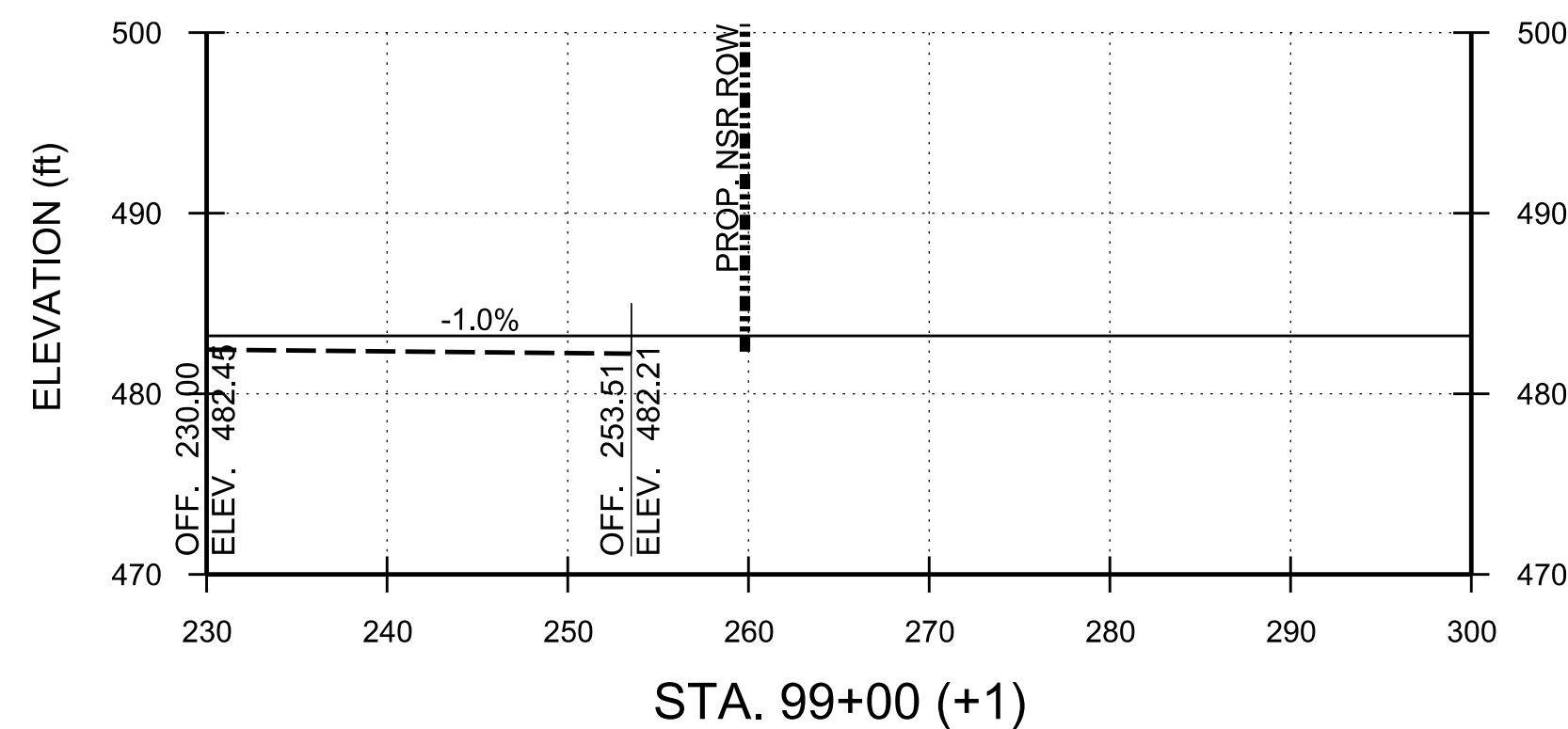
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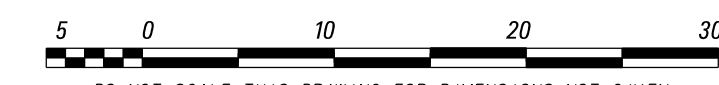
NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.



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| REV | BY | DATE | DESCRIPTION |
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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | FILE NO. D3327 | FILE POST R91.4 |
| DWN | EVU | FILE NO. TRK1115024 | DRAWING NUMBER |
| CHK | | DATE MARCH 5, 2024 | TD-2023-105 |



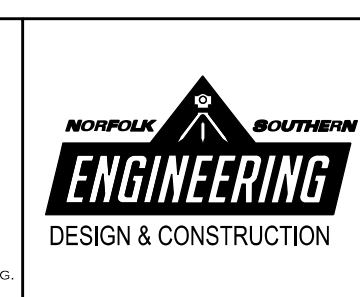
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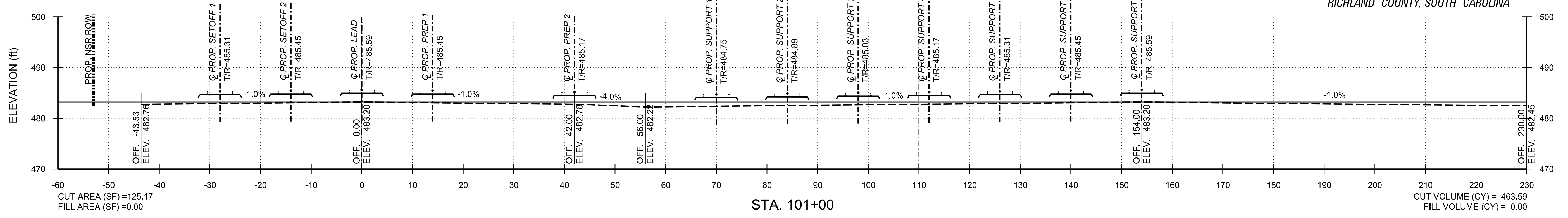


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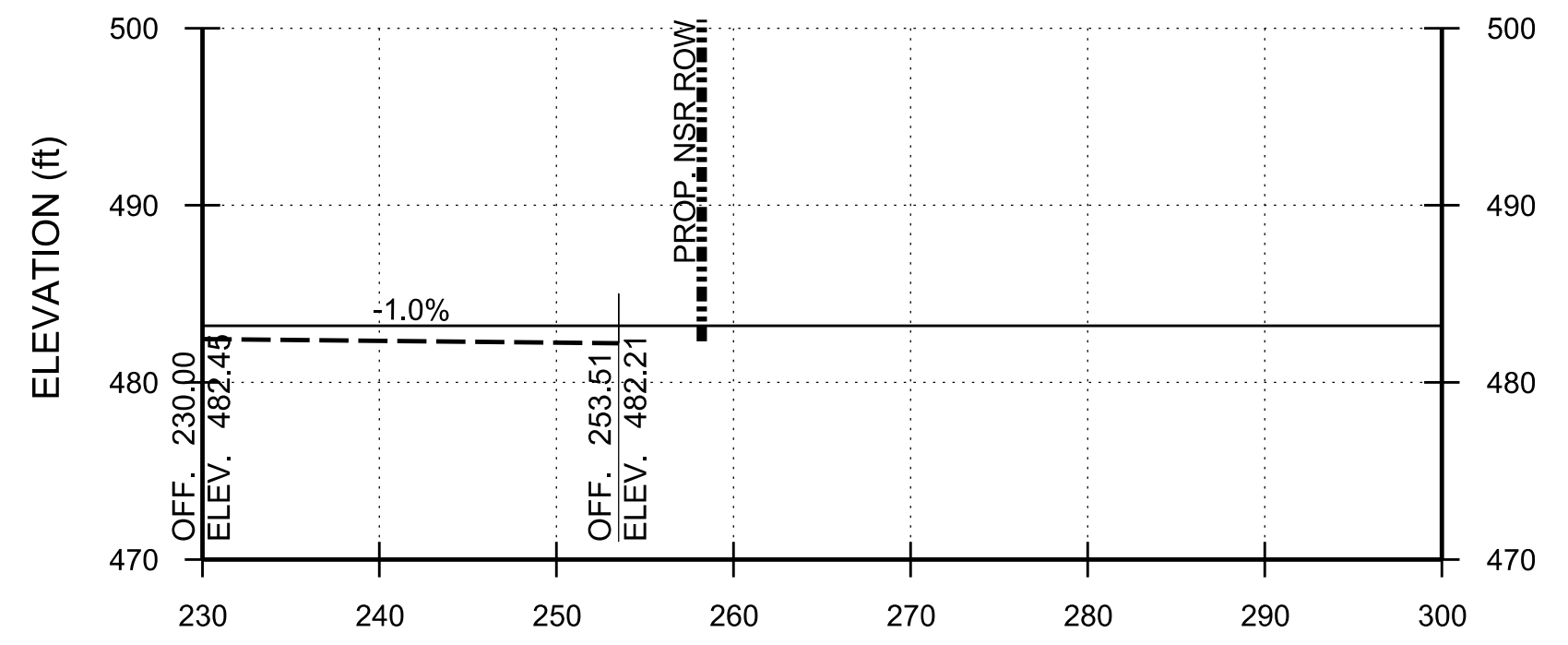
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LOCATION: BLYTHEWOOD, SC
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS

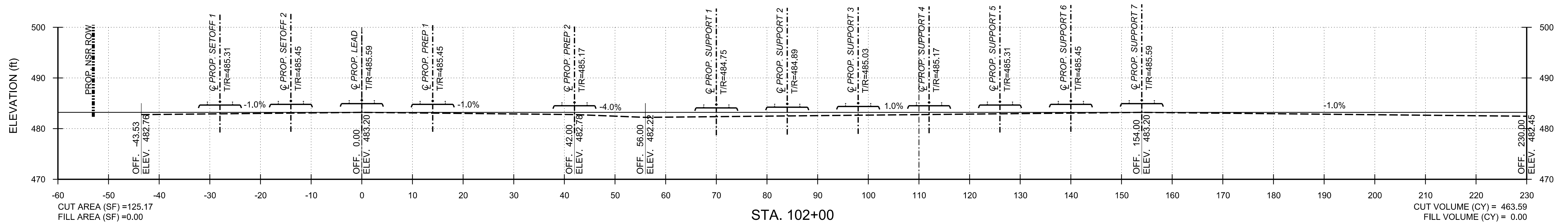
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| | | | | TD-2023-105 | | |



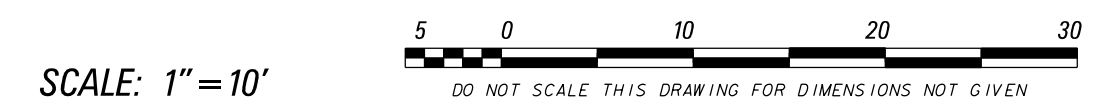
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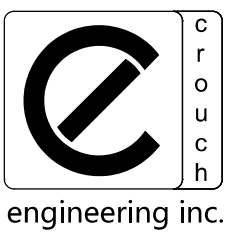


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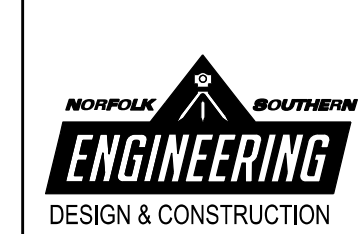


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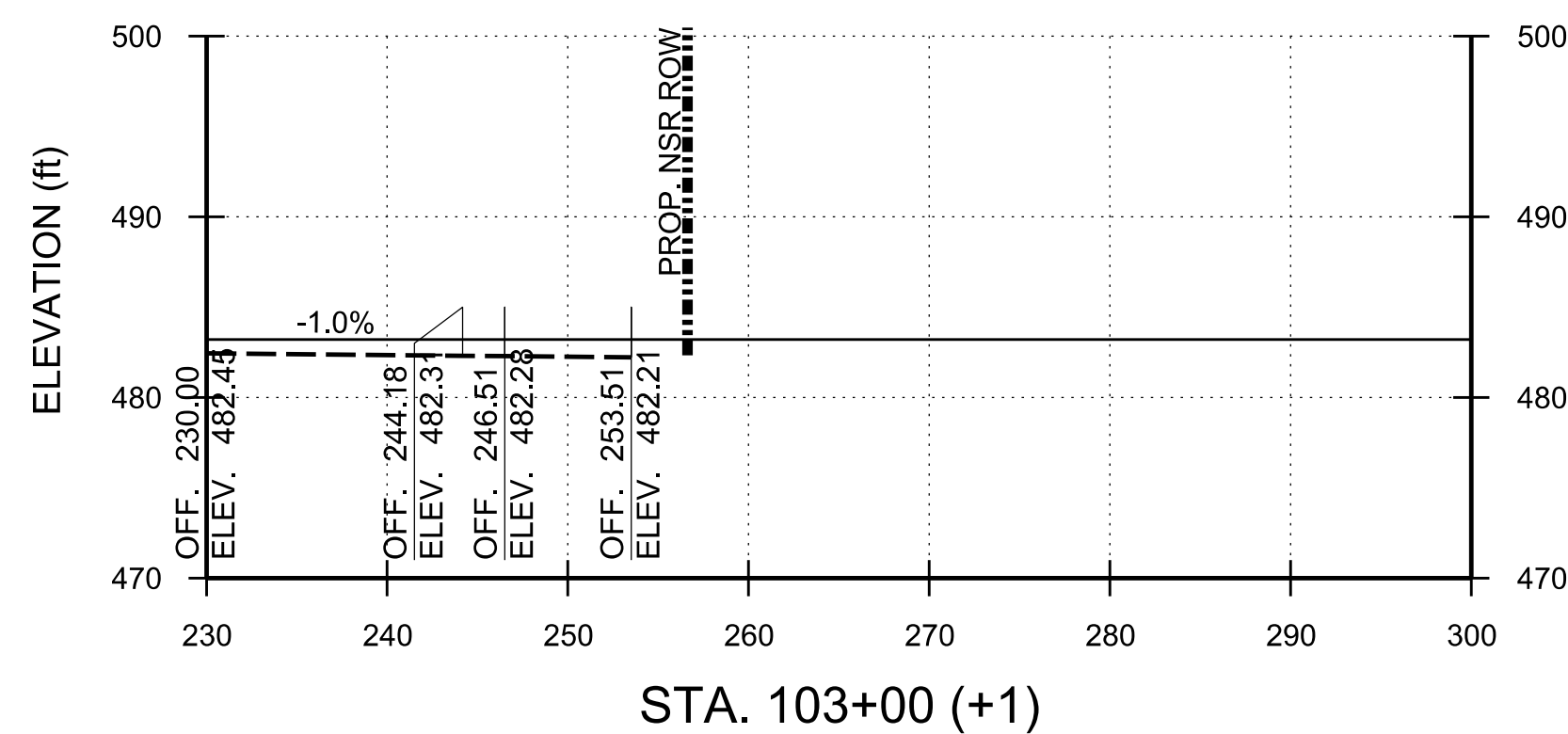
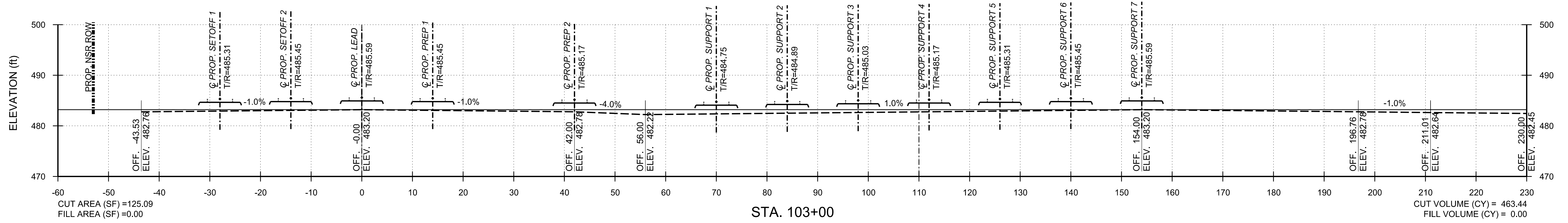
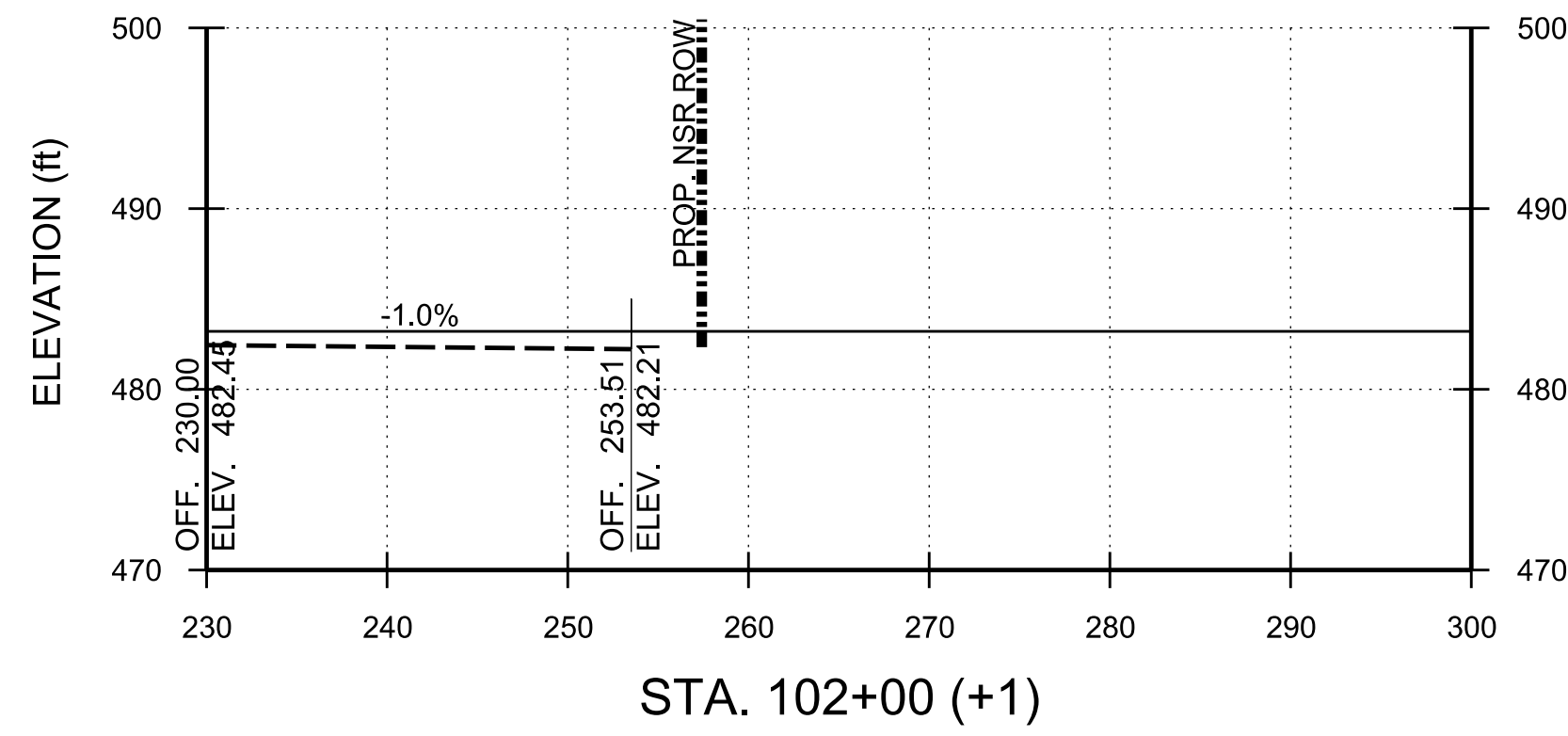


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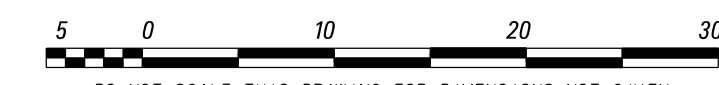


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DATE PRINTED: #DATE# LAST SAVED: #LASTSAVEDDATE#

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| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
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| | | DATE: MARCH 5, 2024 | TD-2023-105 |



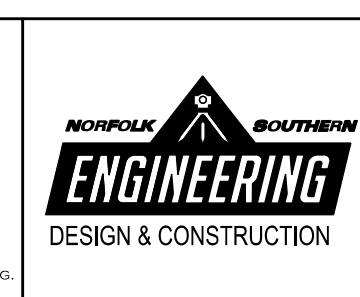
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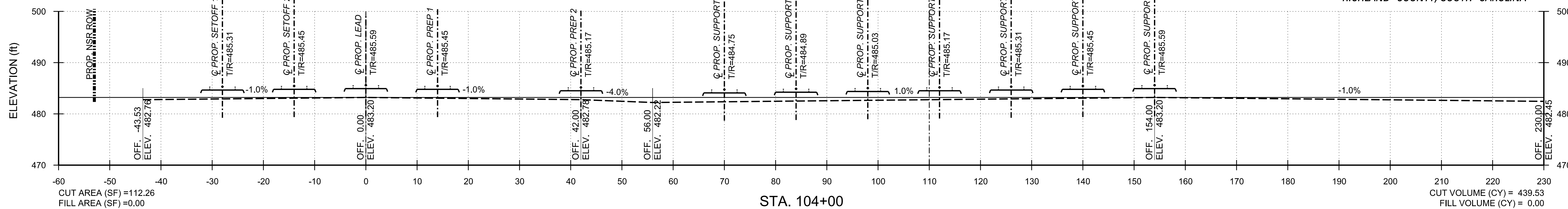
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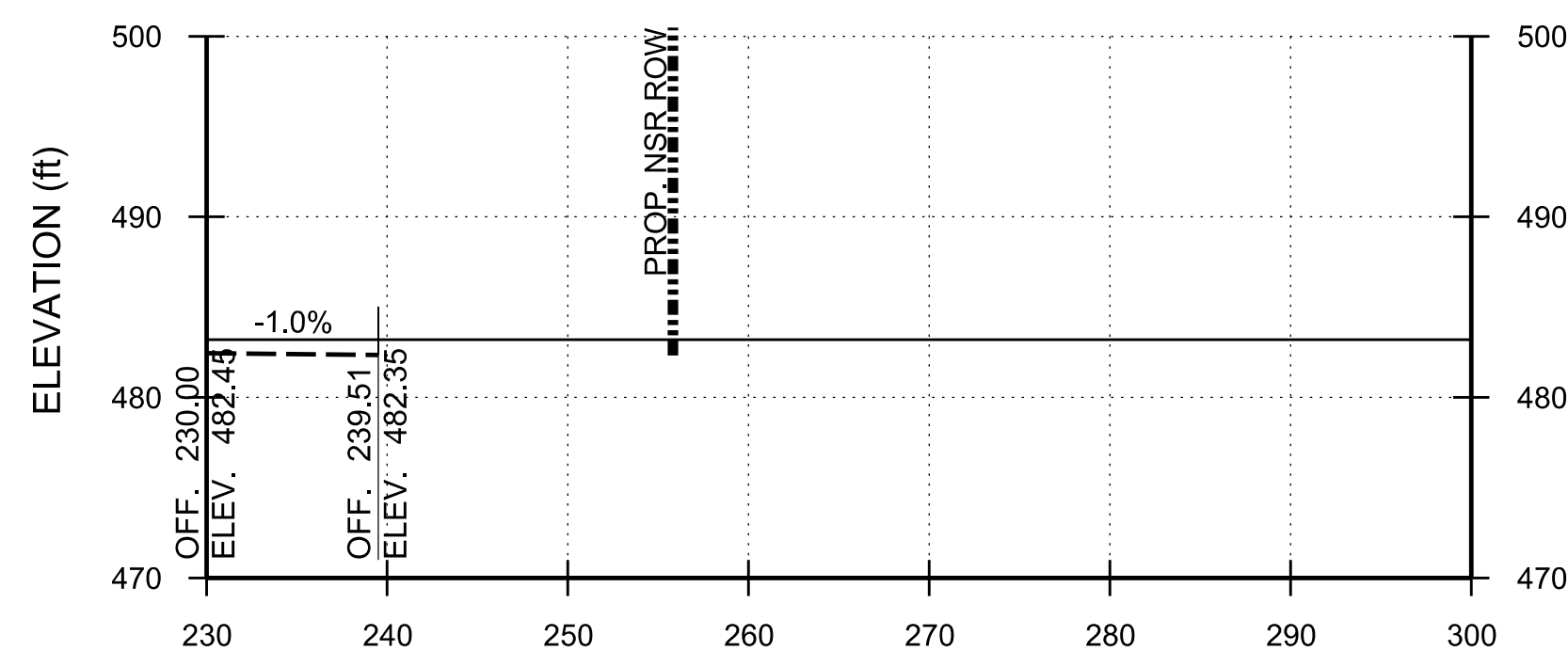


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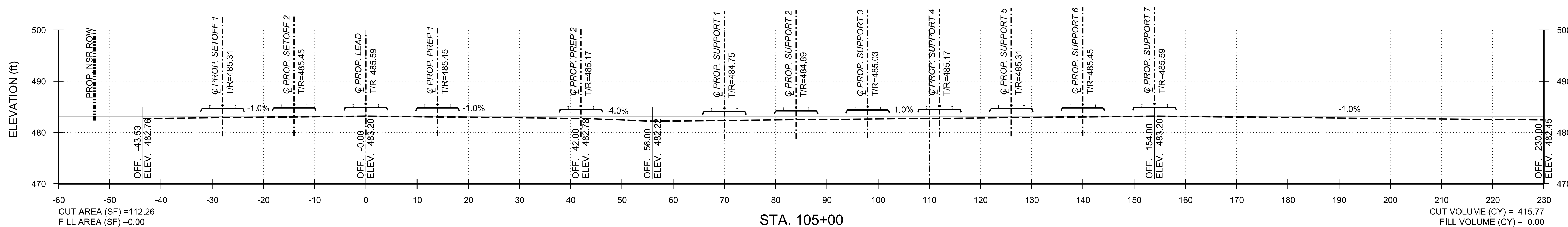
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| LOCATION: BLYTHEWOOD, SC | | | |
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| DWN | EVU | PTD NO: D3327 | VRN |
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| DRAWING NUMBER: TD-2023-105 | | | |



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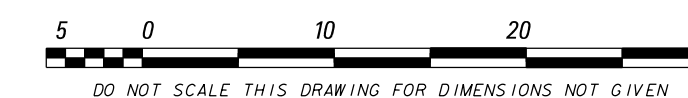


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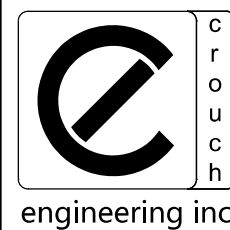
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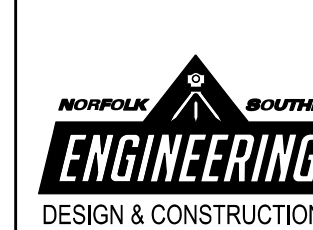


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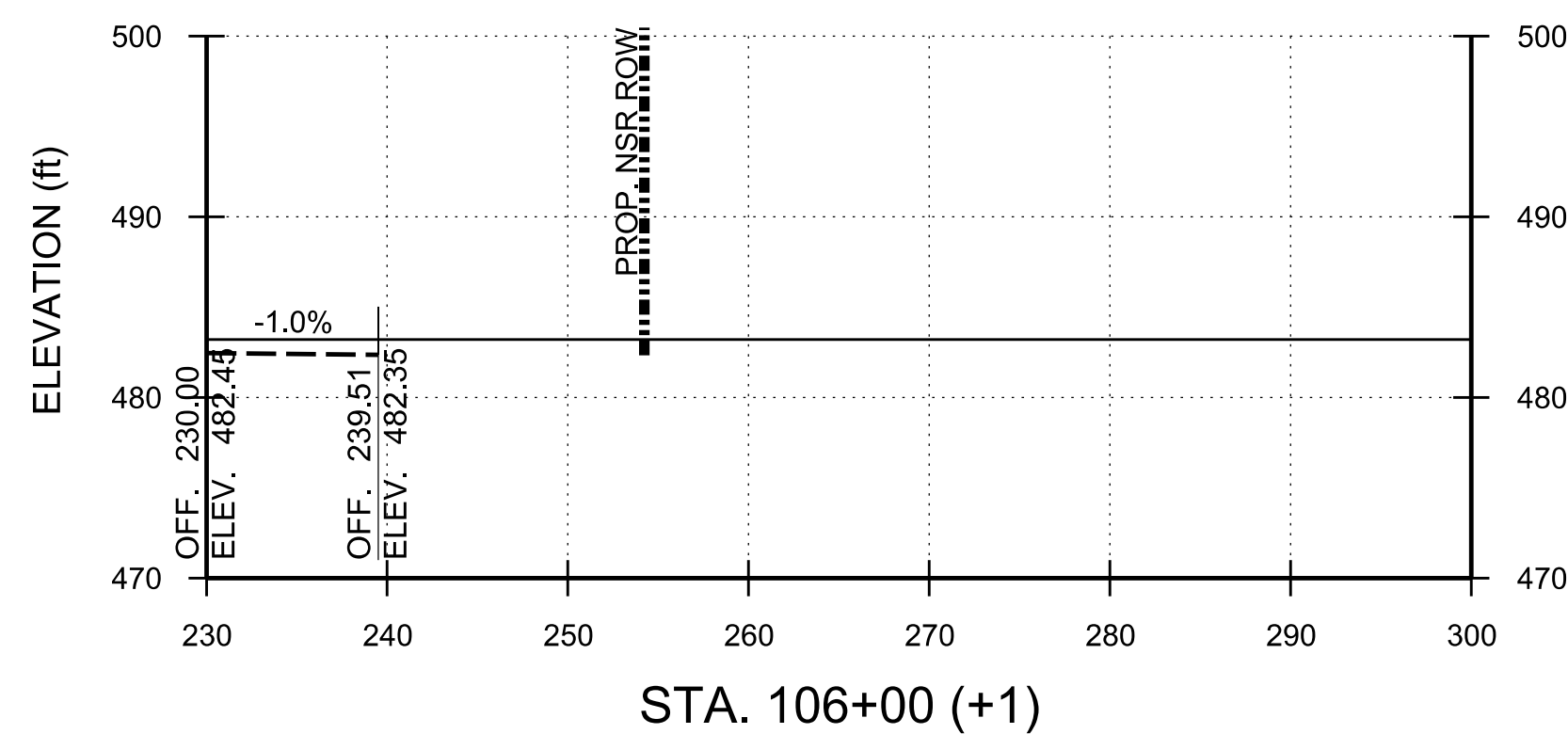
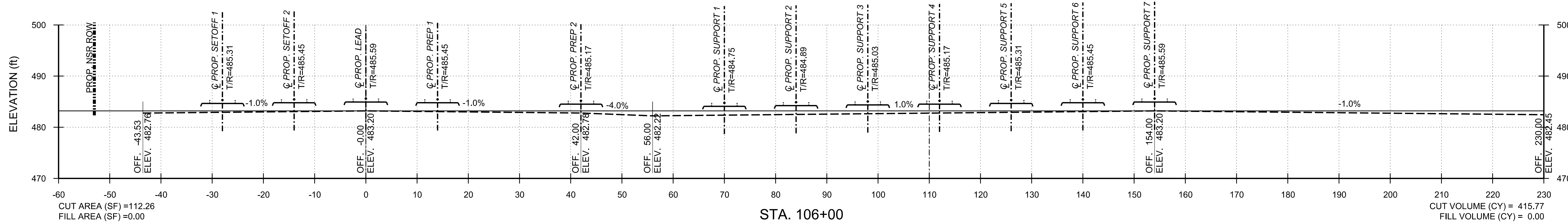
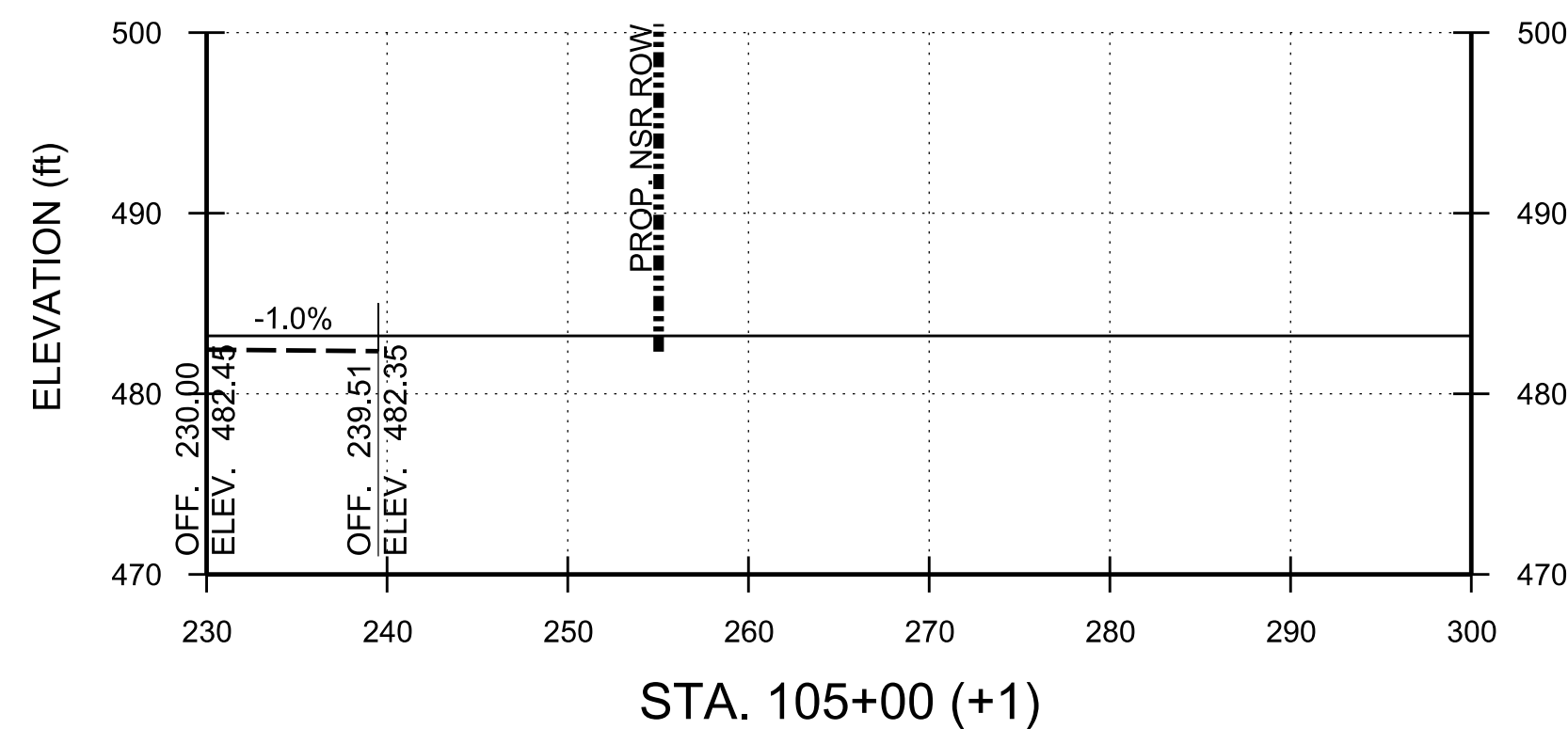


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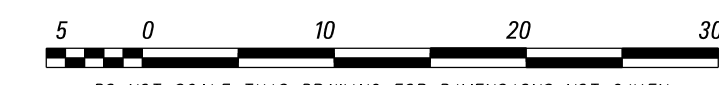


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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
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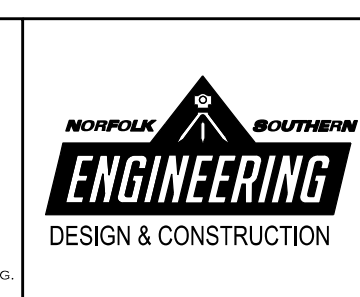
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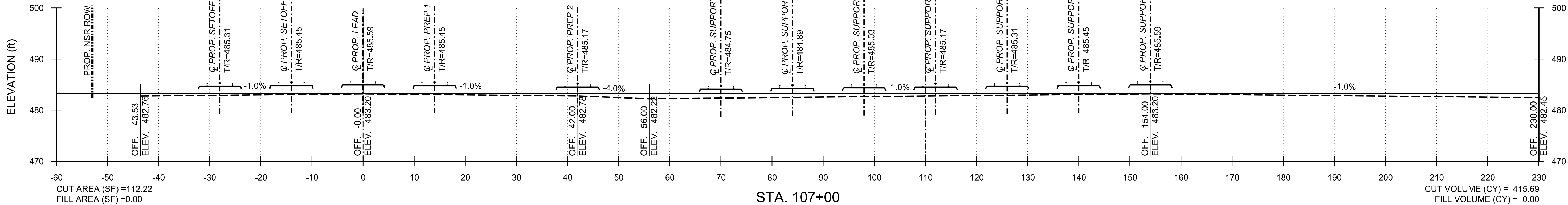
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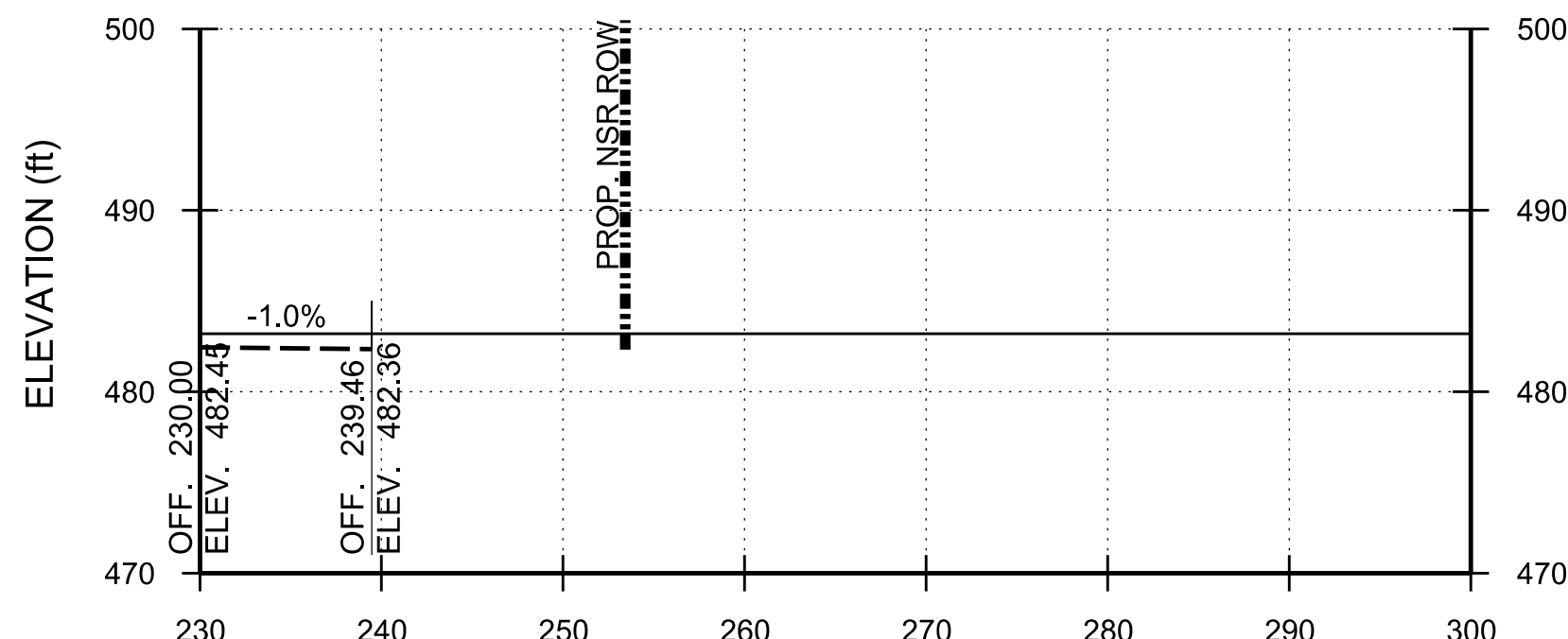


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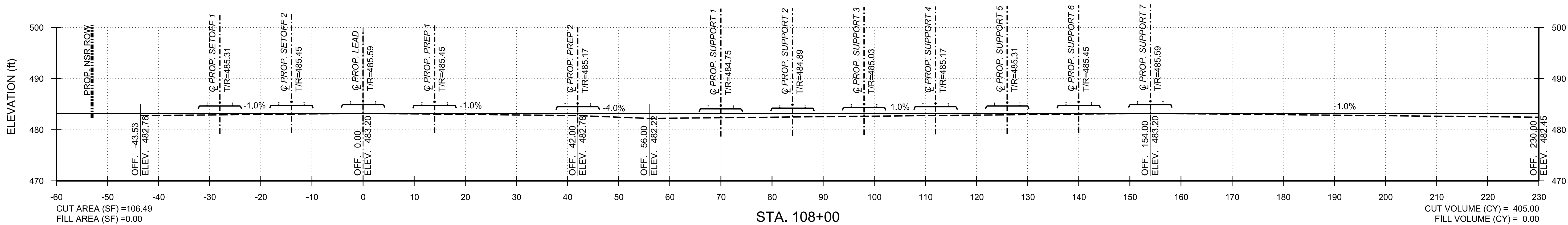
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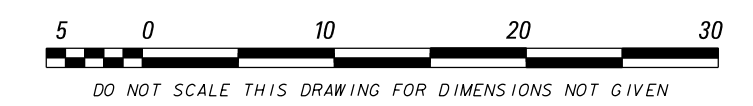


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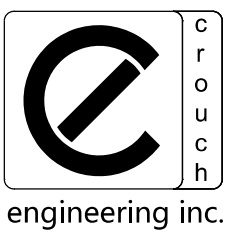
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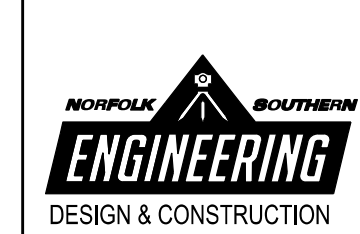


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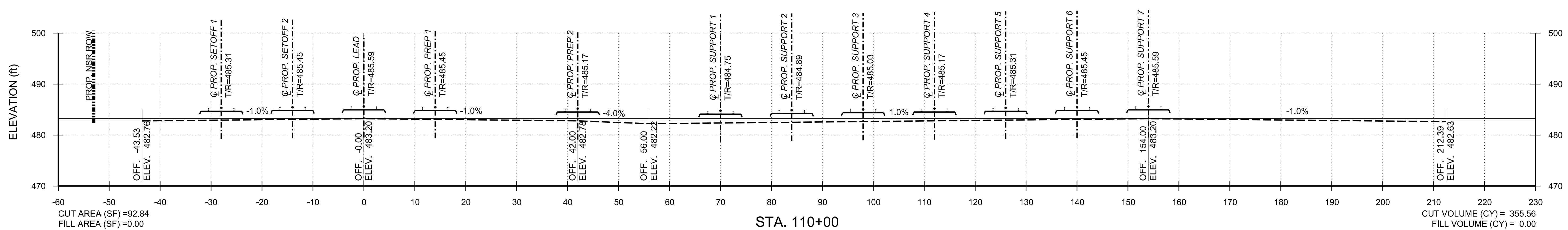
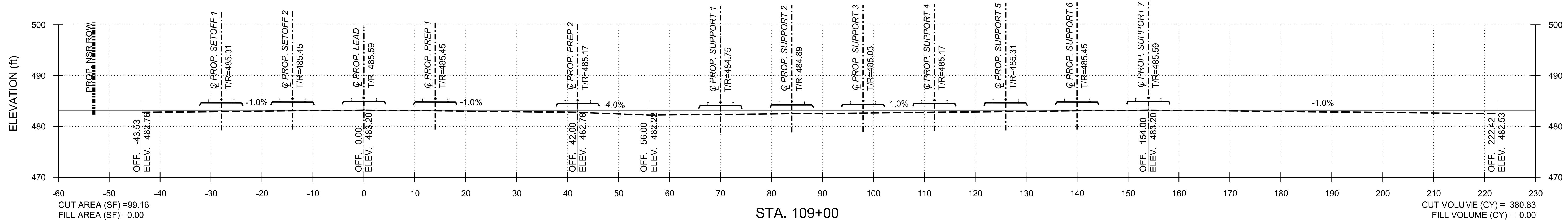
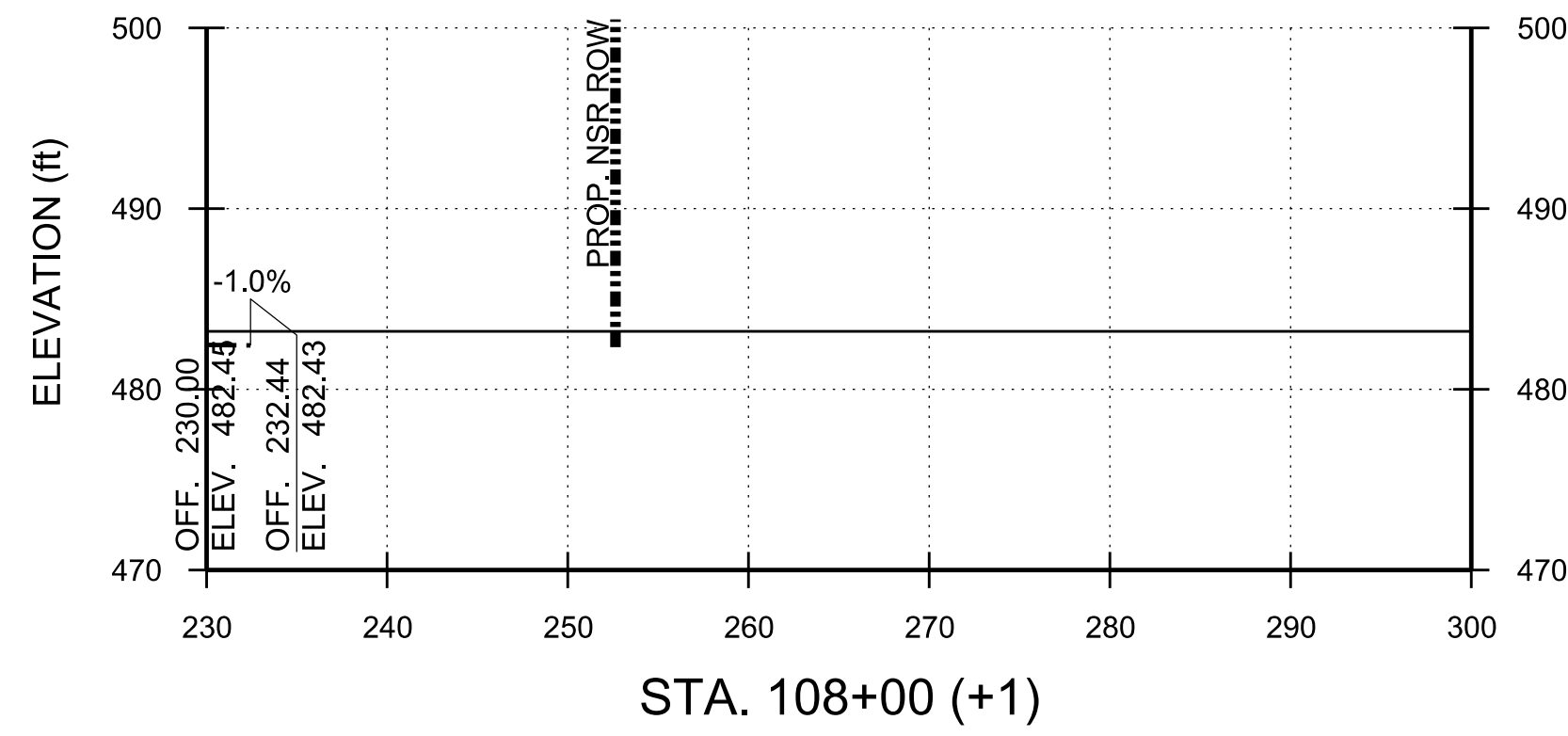
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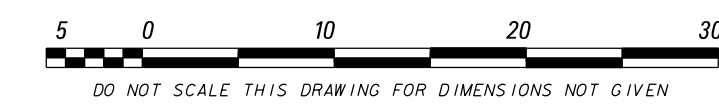
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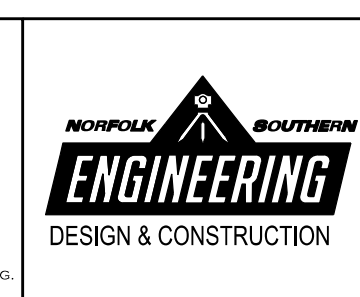


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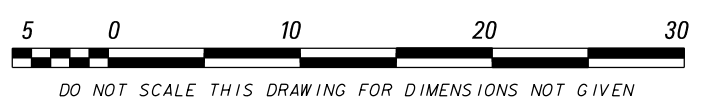
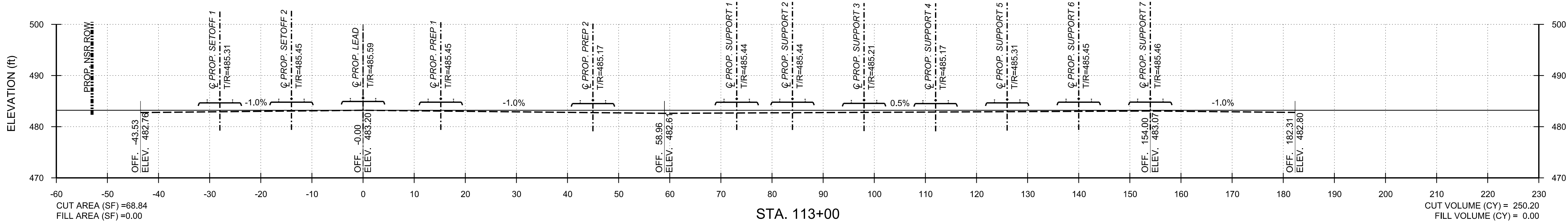
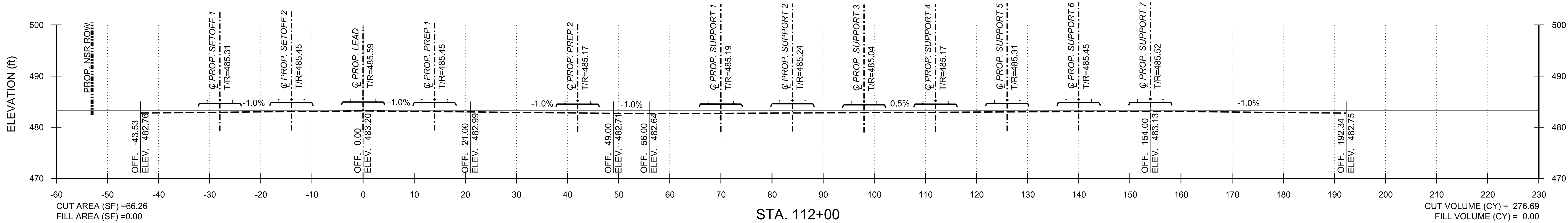
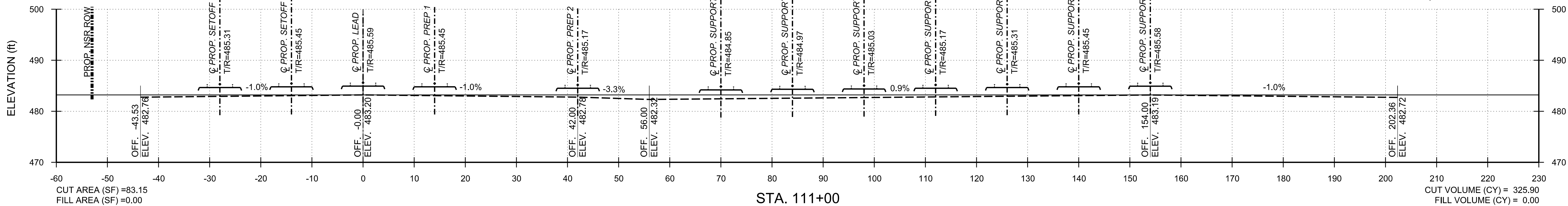
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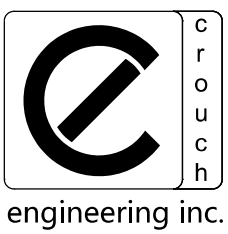
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| DWN | EVU | FILE NO. D3327 | VRN 04825 |
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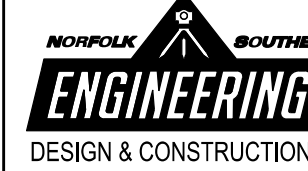


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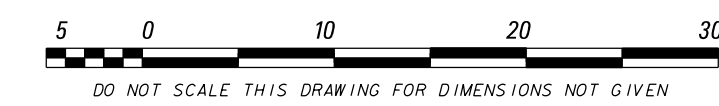
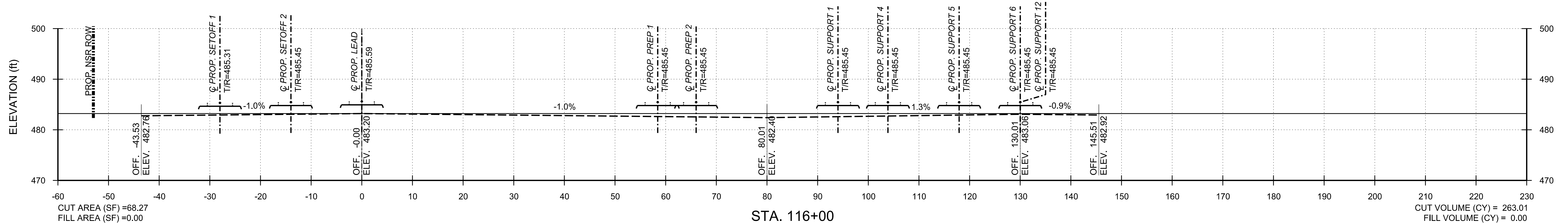
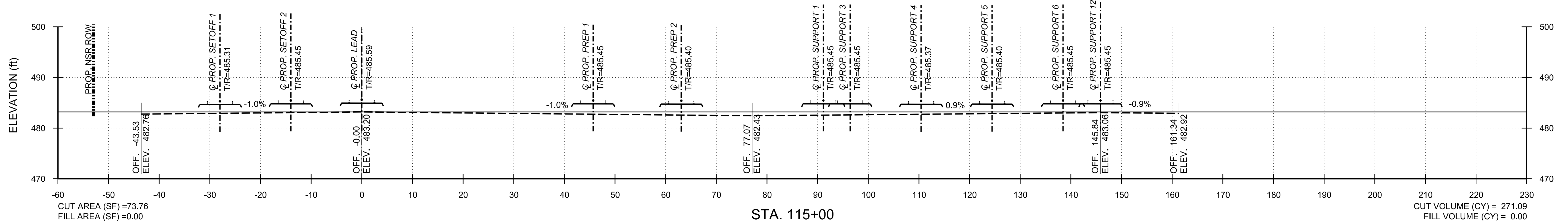
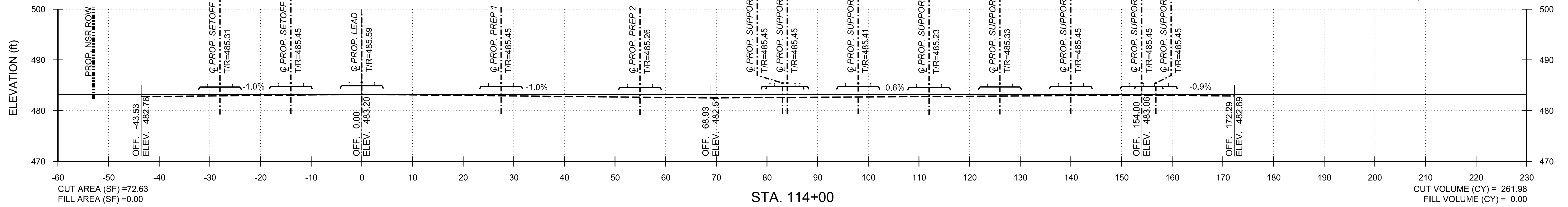


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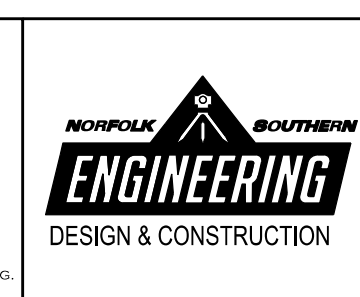
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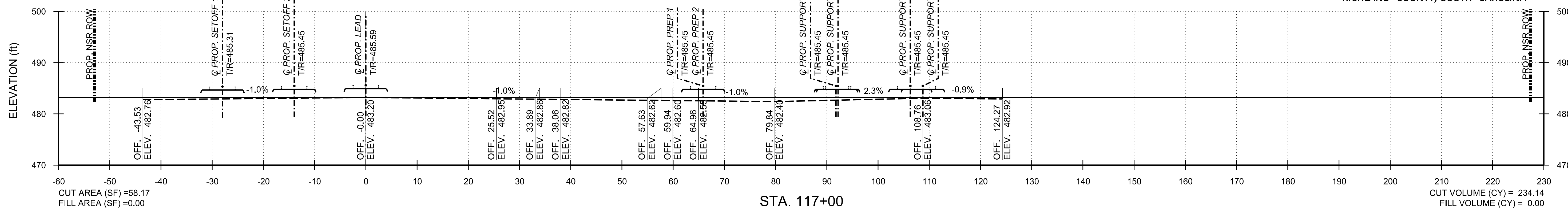
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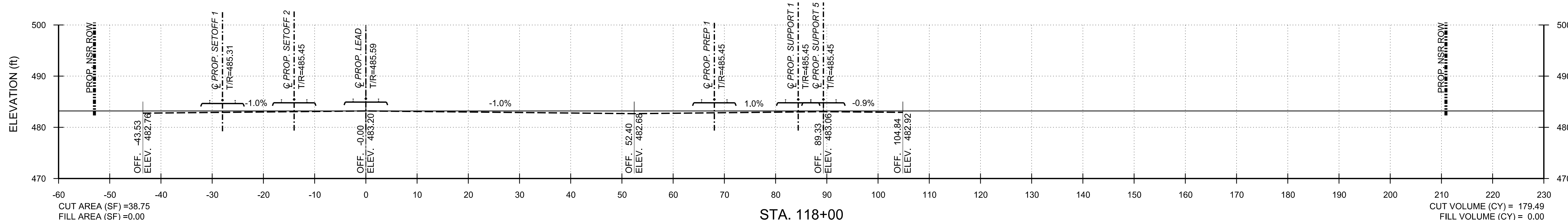


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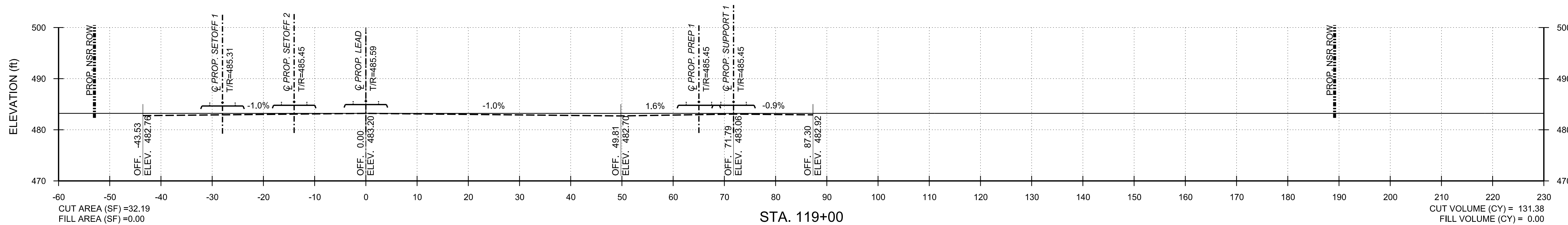
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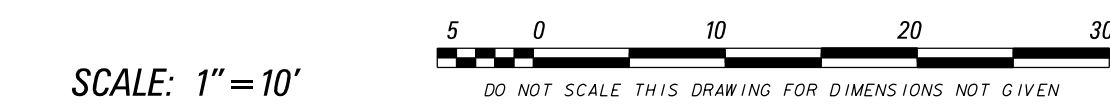
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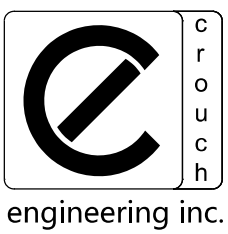


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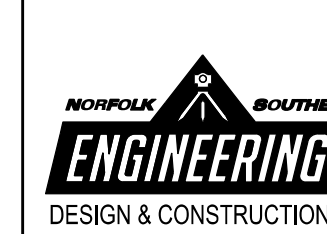


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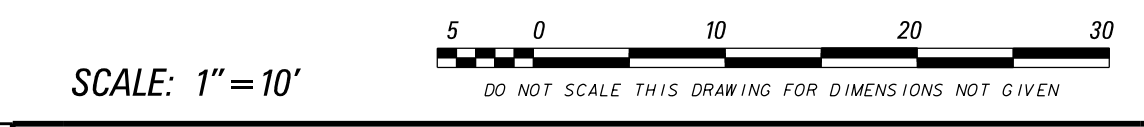
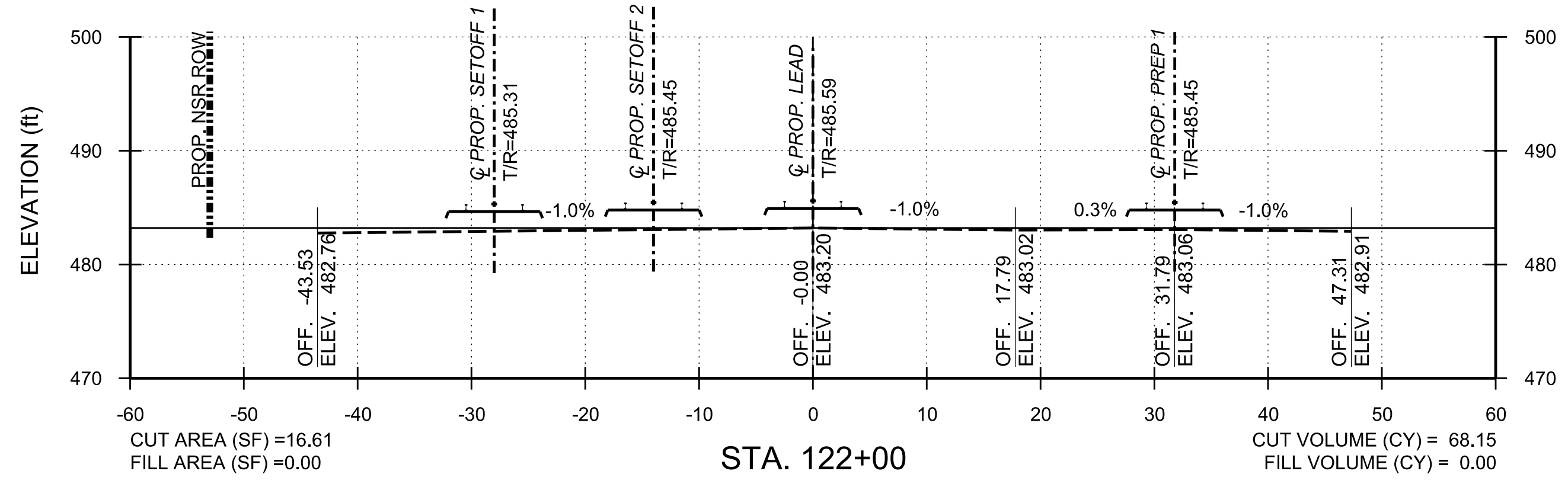
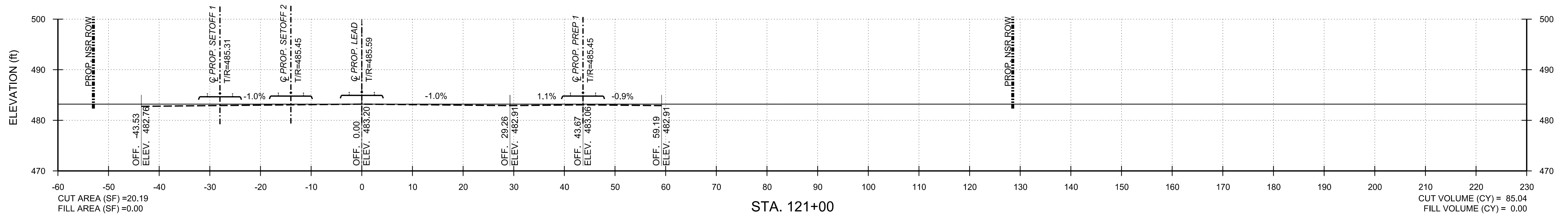
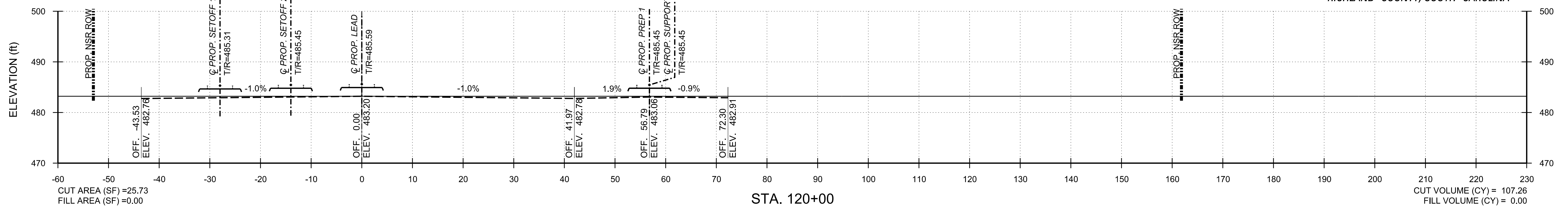


CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630

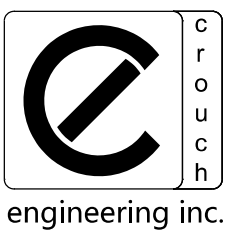


NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

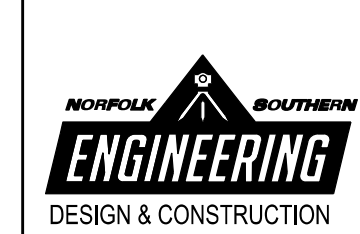
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| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | FILE NO. D3327 | VRN 04825 |
| CHK | | FILE NO. TRK1115024 | DATE MARCH 5, 2024 |
| | | | WILE POST R91.4 |
| | | | DRAWING NUMBER TD-2023-105 |



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| PROJECT NO.: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |



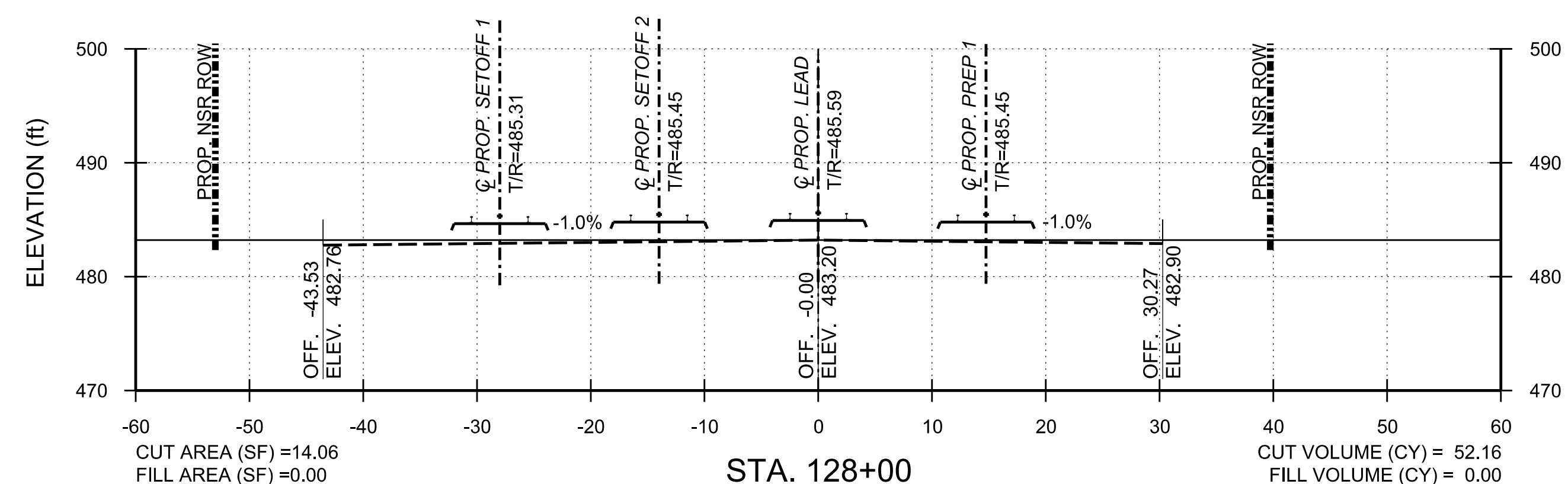
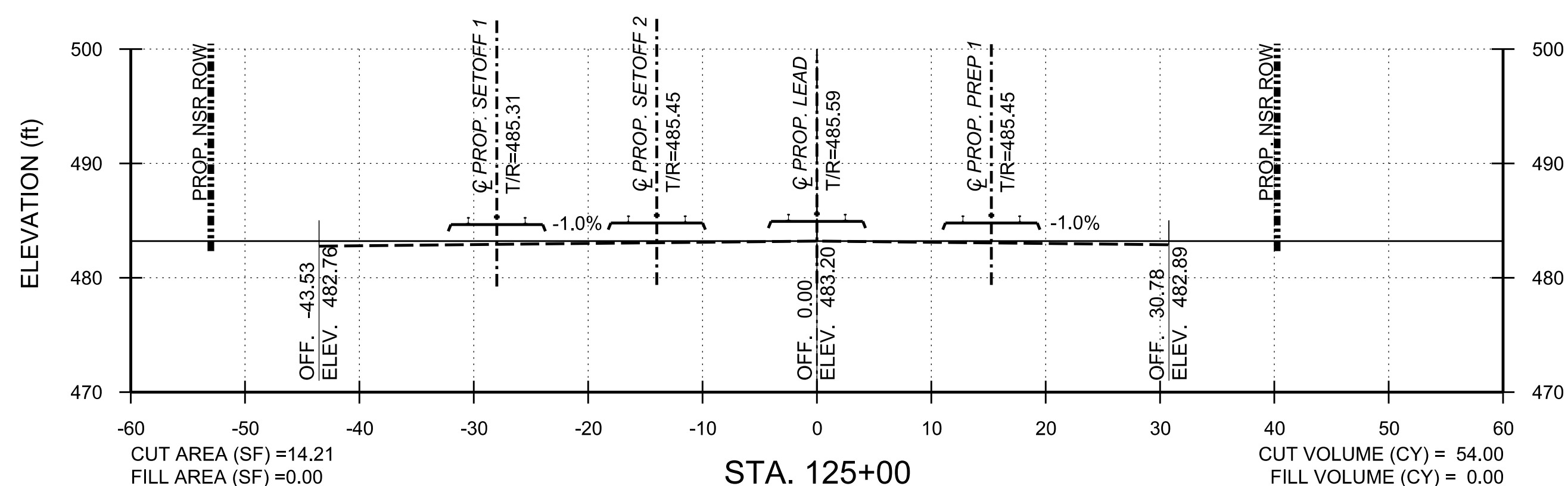
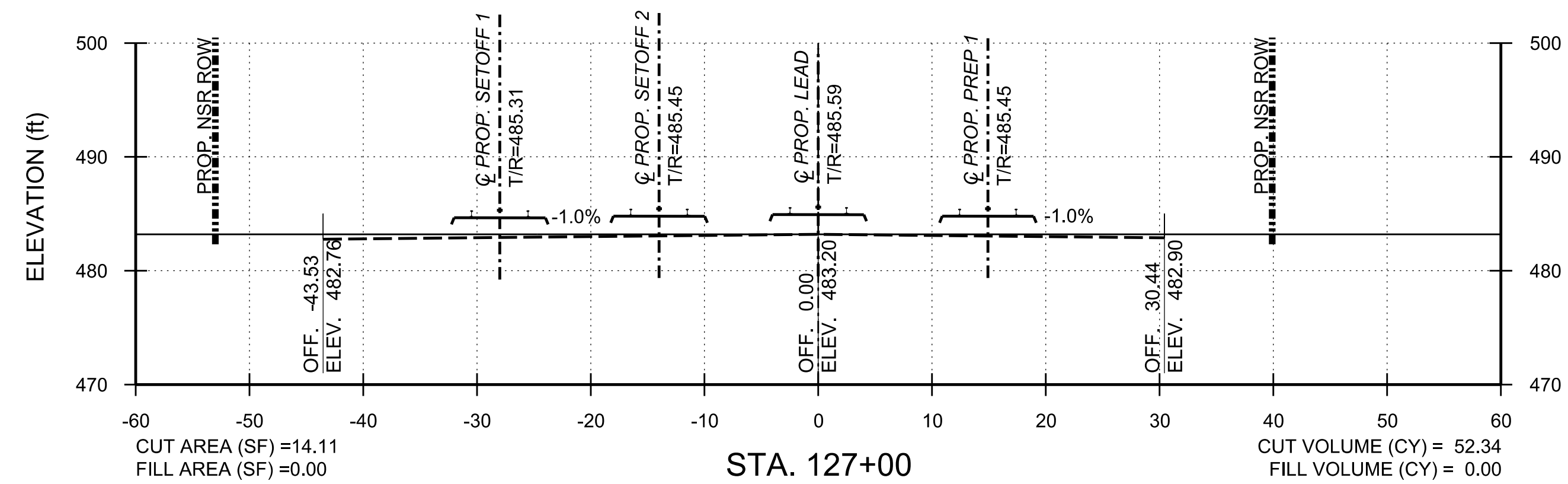
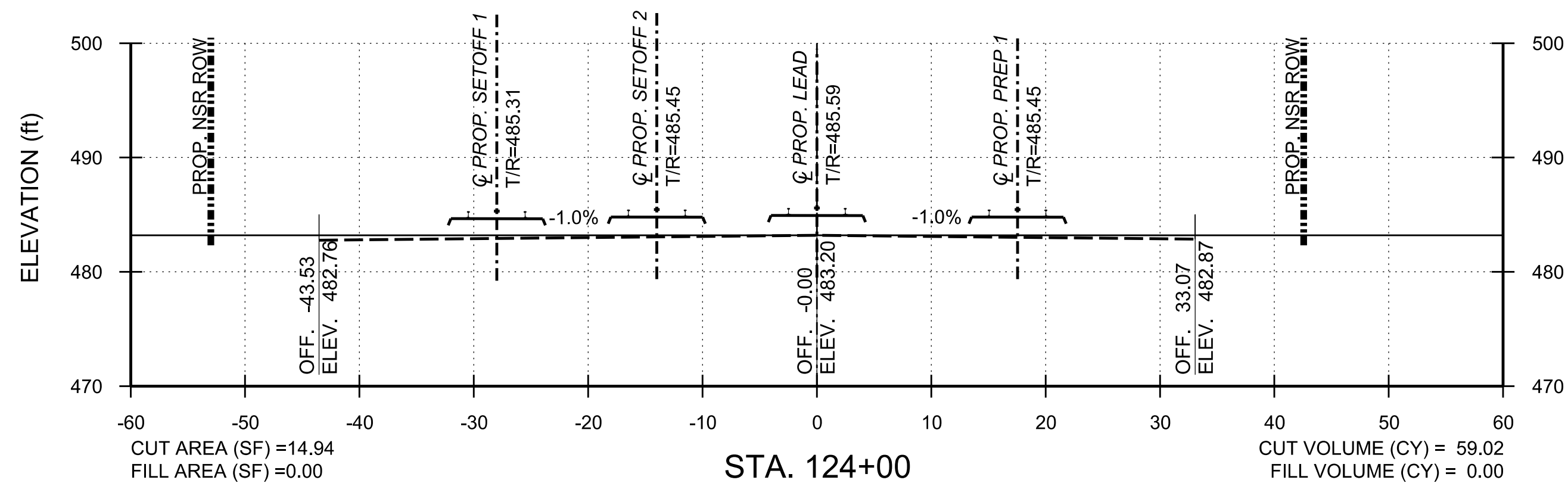
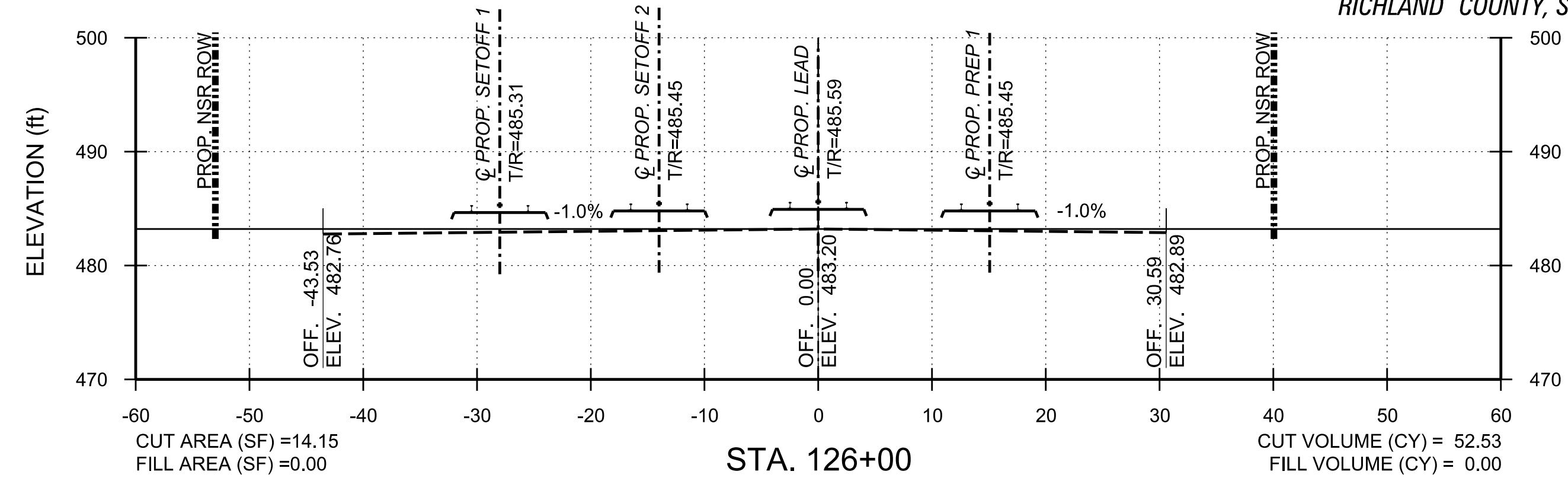
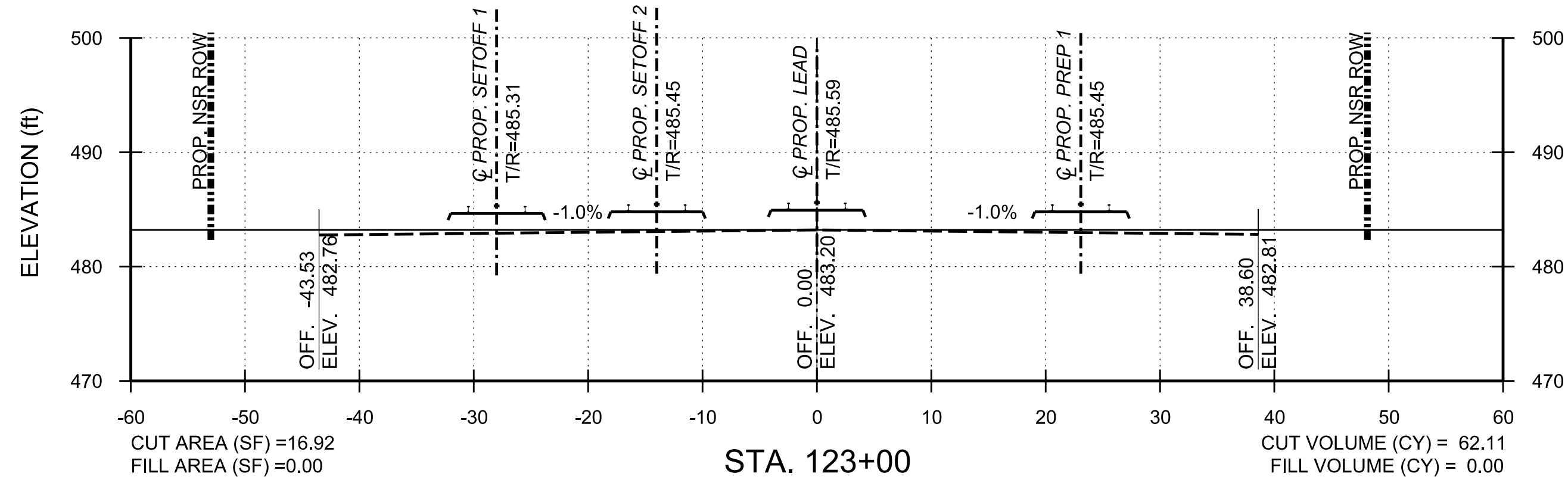
CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



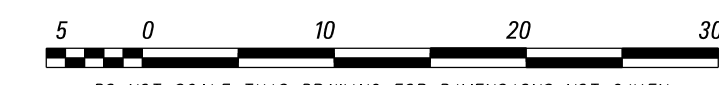
NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | |
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| REV. BY: | DATE: | DESCRIPTION: |
| | | |
| LOCATION: | BLYTHEWOOD, SC | |
| TITLE: | PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | |
| DWN. EVU | FILE NO. D3327 | VRN 04825 |
| CHK | FILE NO. TRK115024 | DATE MARCH 5, 2024 |
| | | DRAWING NUMBER TD-2023-105 |

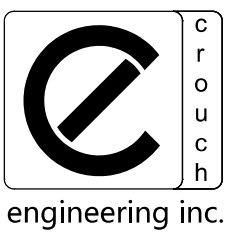
PHASE 2



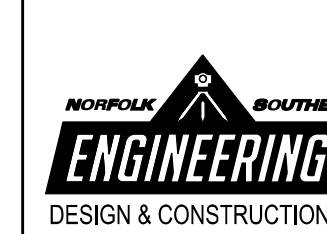
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DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN



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| PROJECT NO: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
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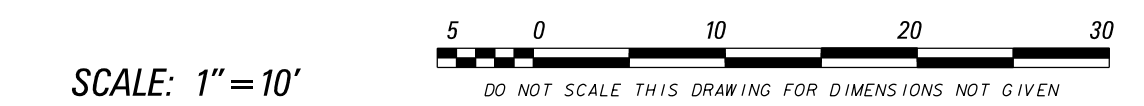
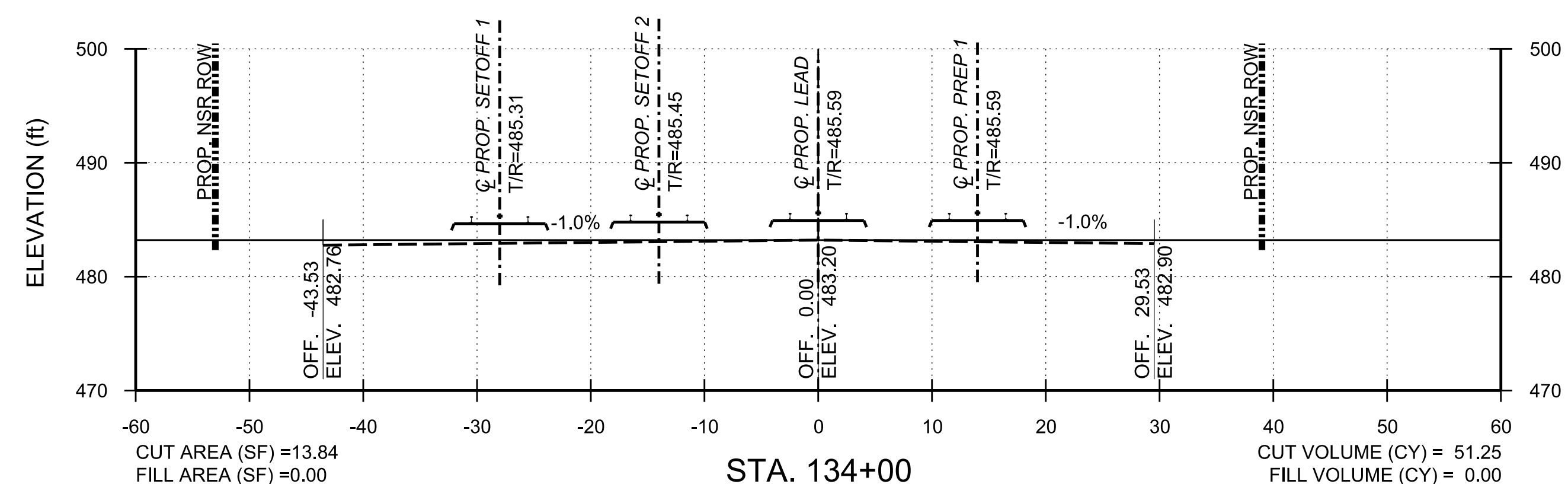
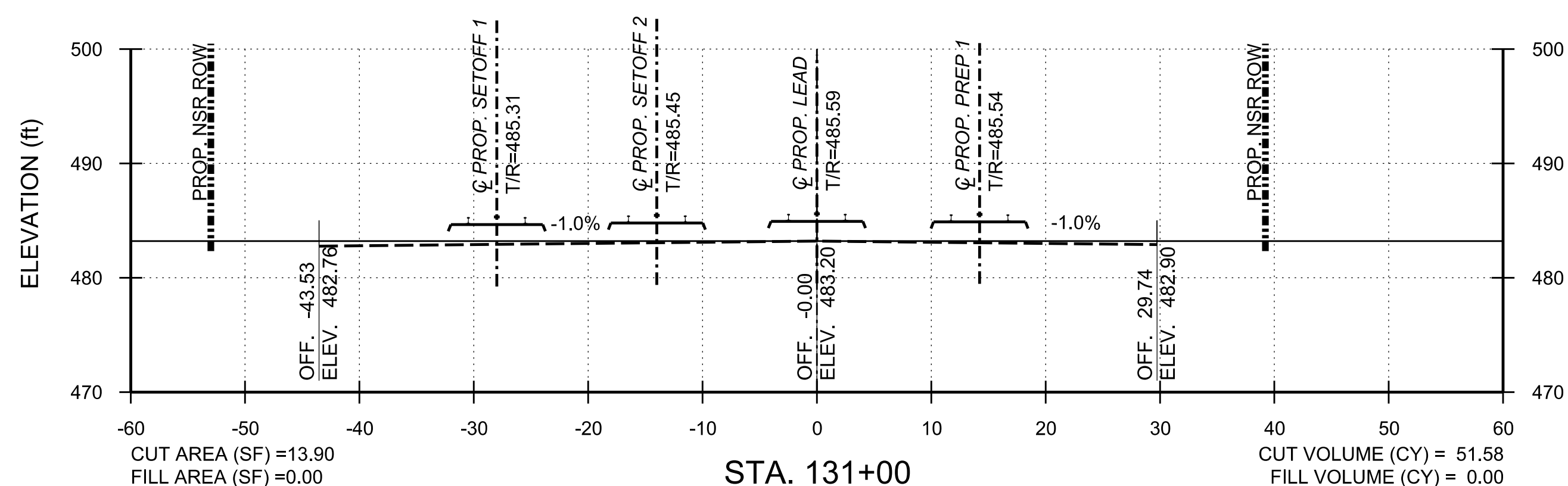
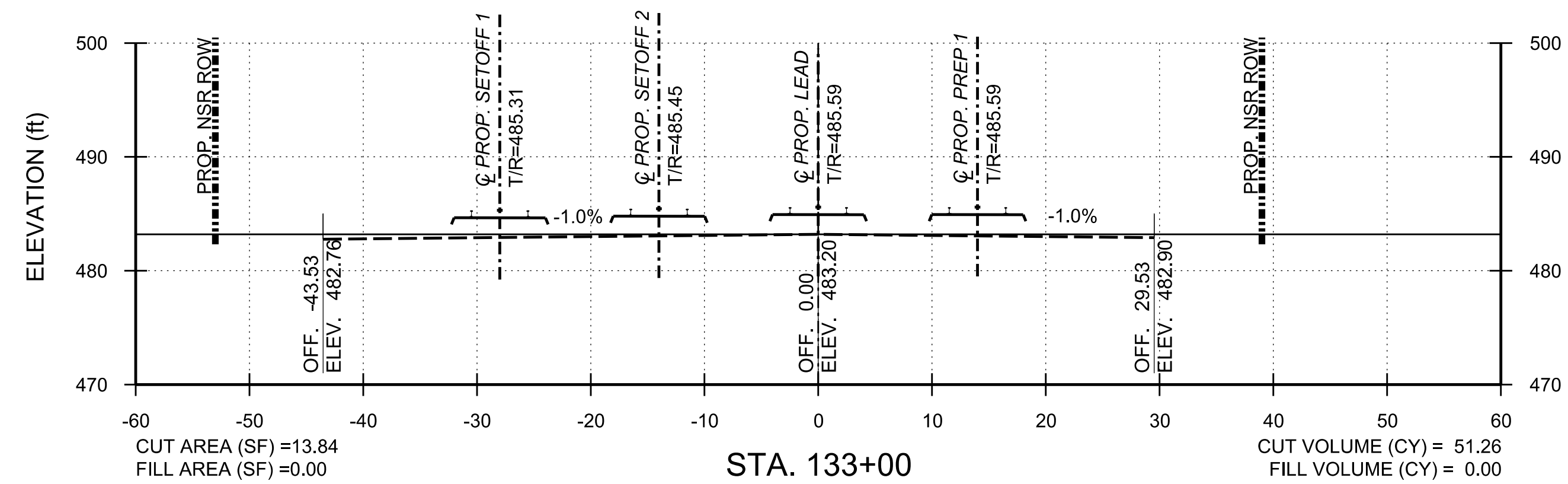
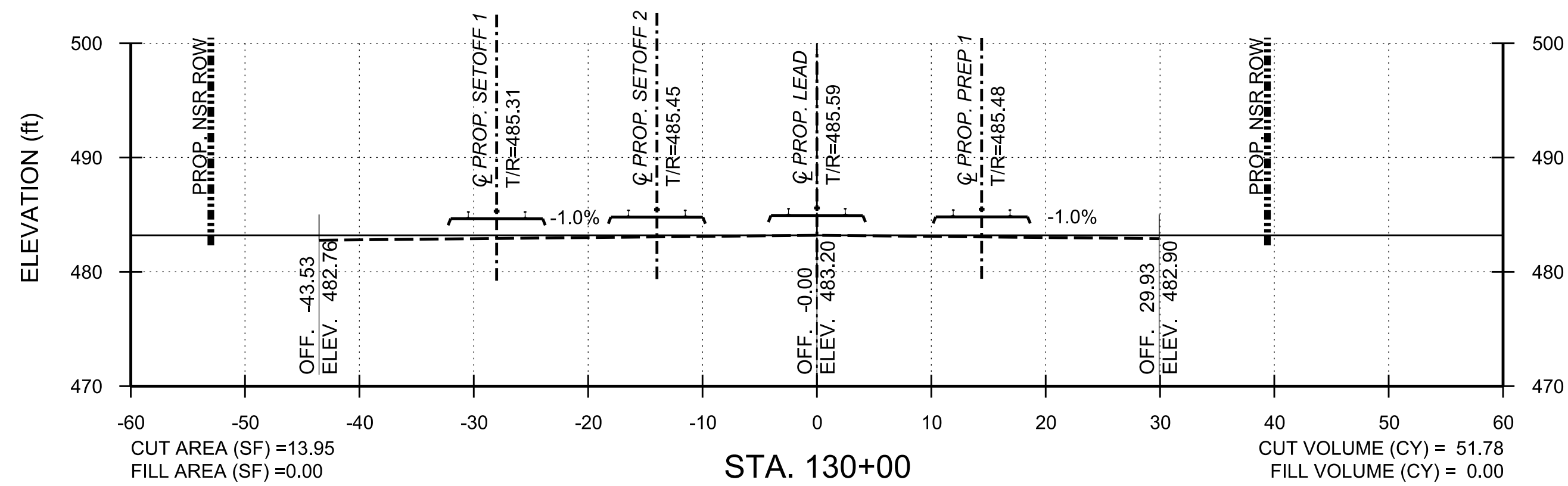
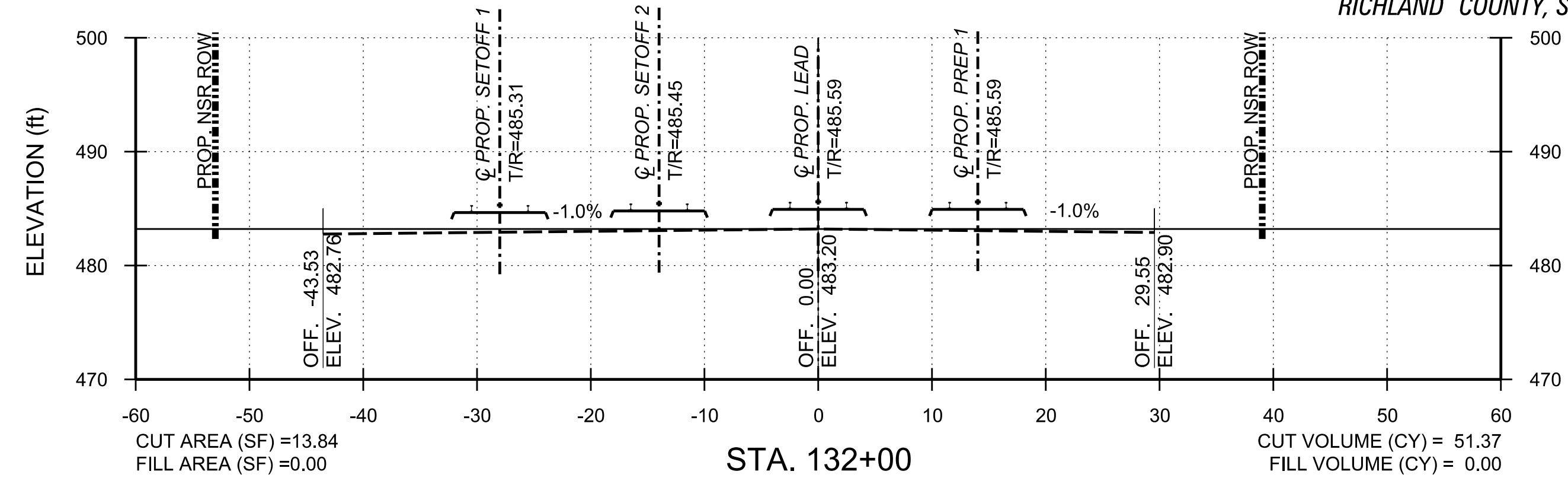
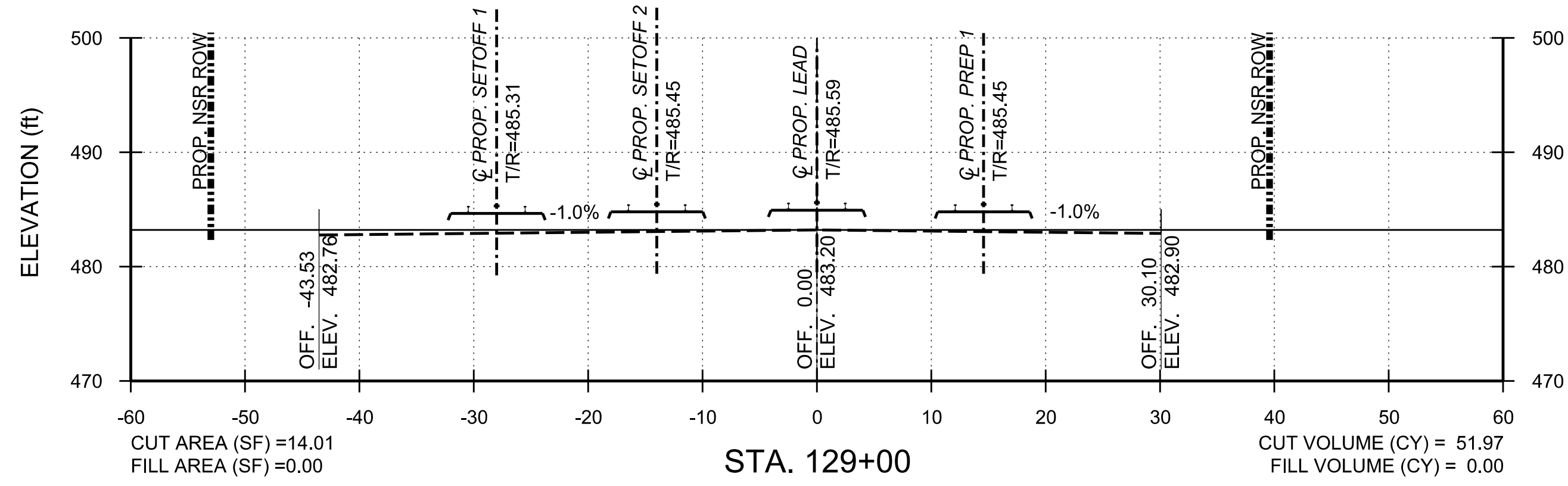
CROUCH ENGINEERING INC.
5115 MARYLAND WAY, STE 225
BRENTWOOD, TN 37027
PHONE NO. (615) 791-0630



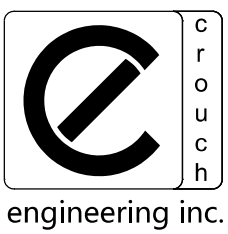
NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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| REV. BY: | DATE: | DESCRIPTION: |
| | | BLYTHEWOOD, SC |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | |
| DWN: | FILE NO.: | DATE: |
| EVU | D3327 | MARCH 5, 2024 |
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| MILE POST: | | R91.4 |

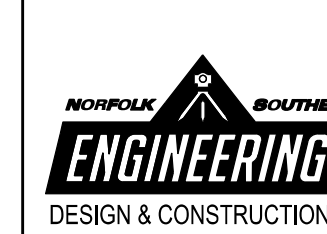
PHASE 2



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| PROJECT NO: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
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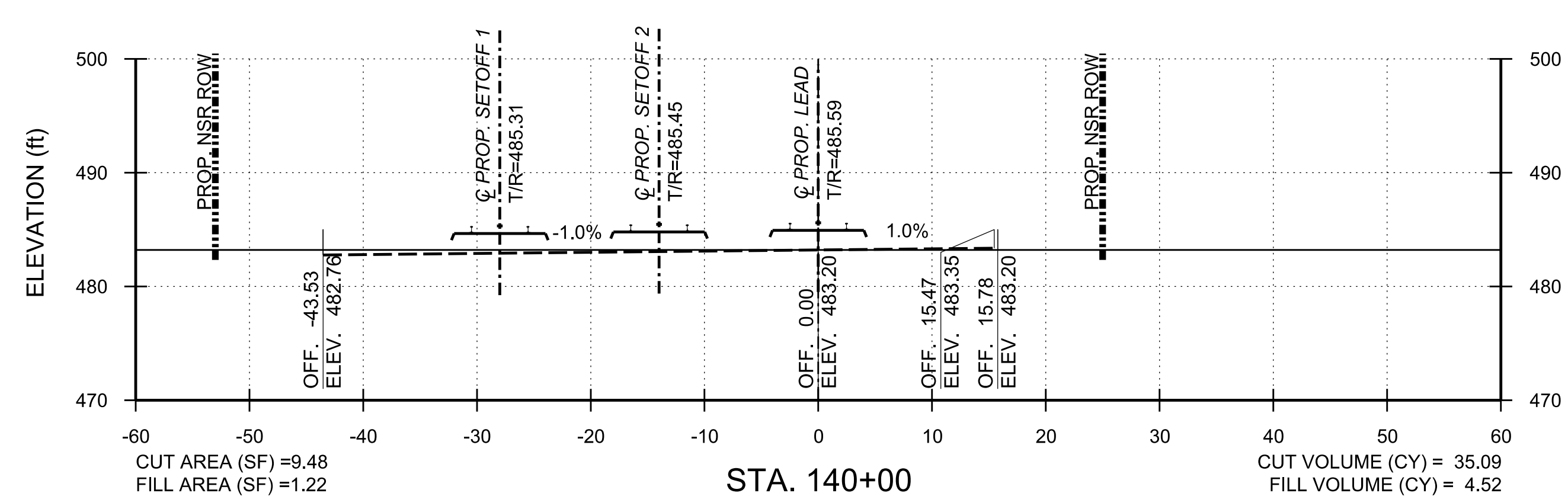
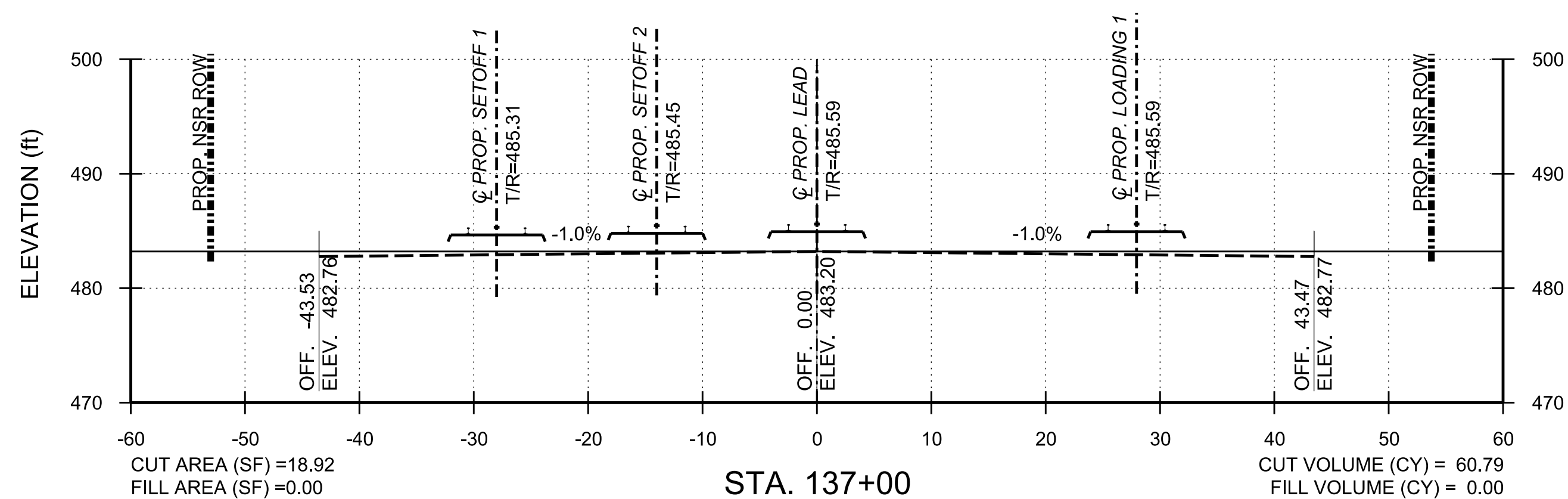
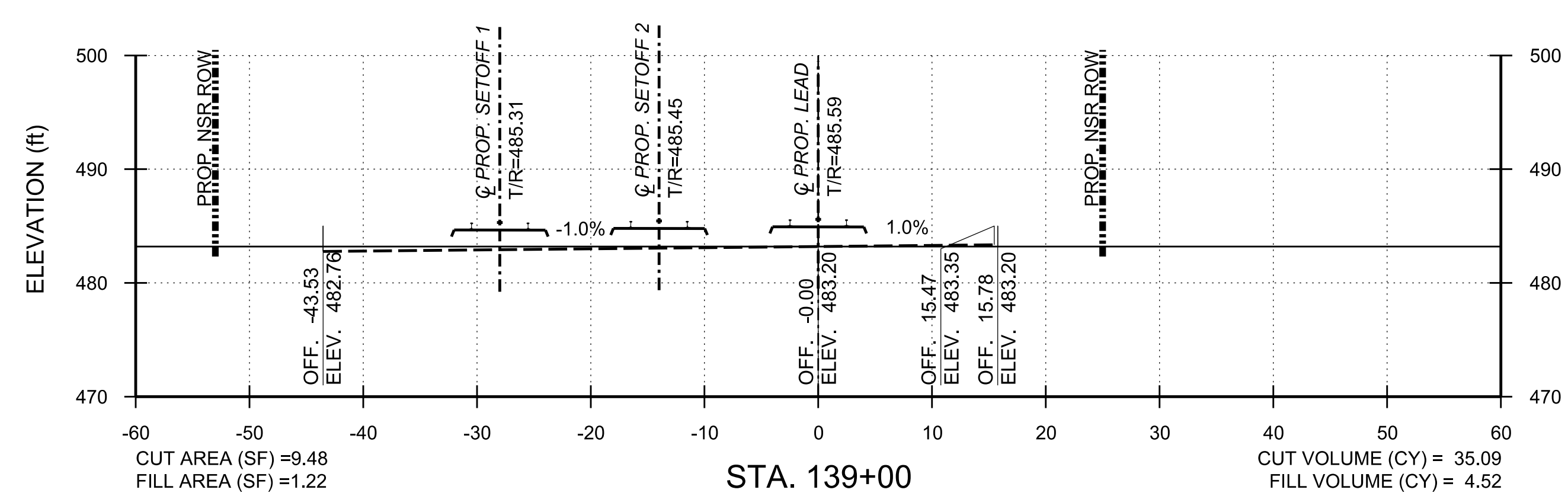
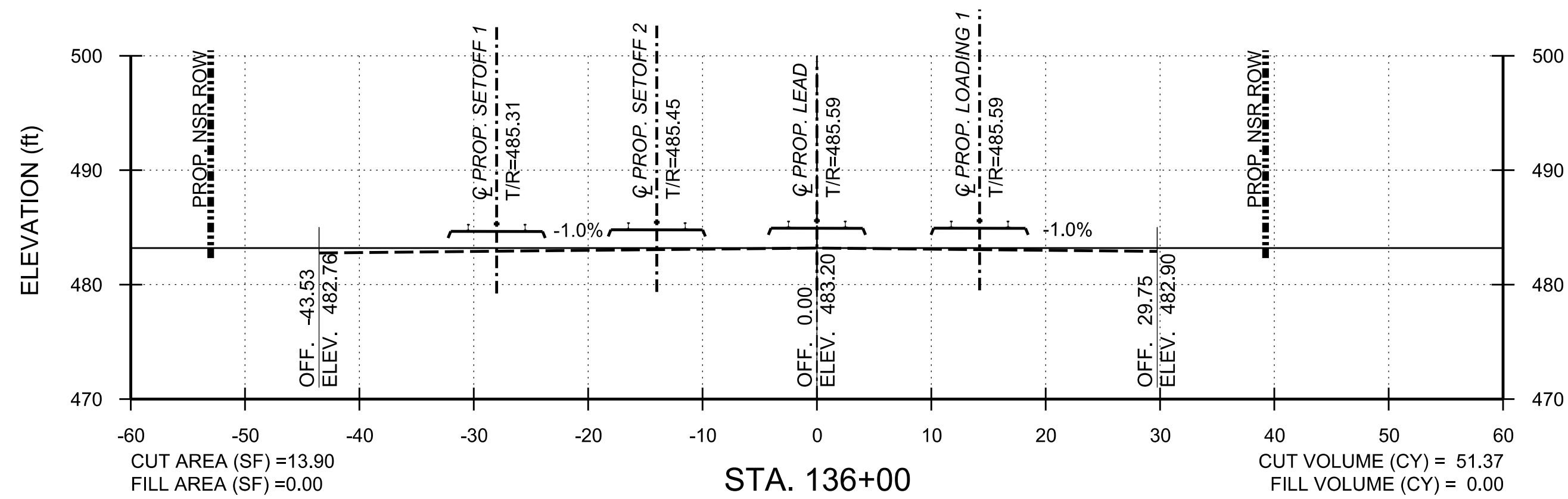
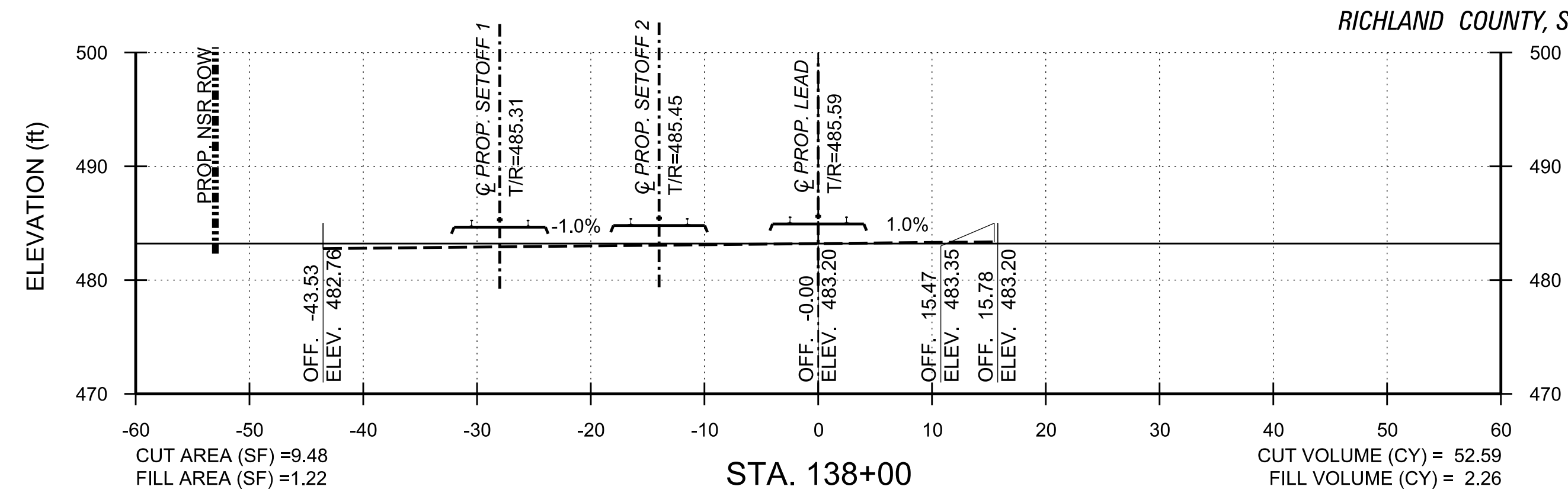
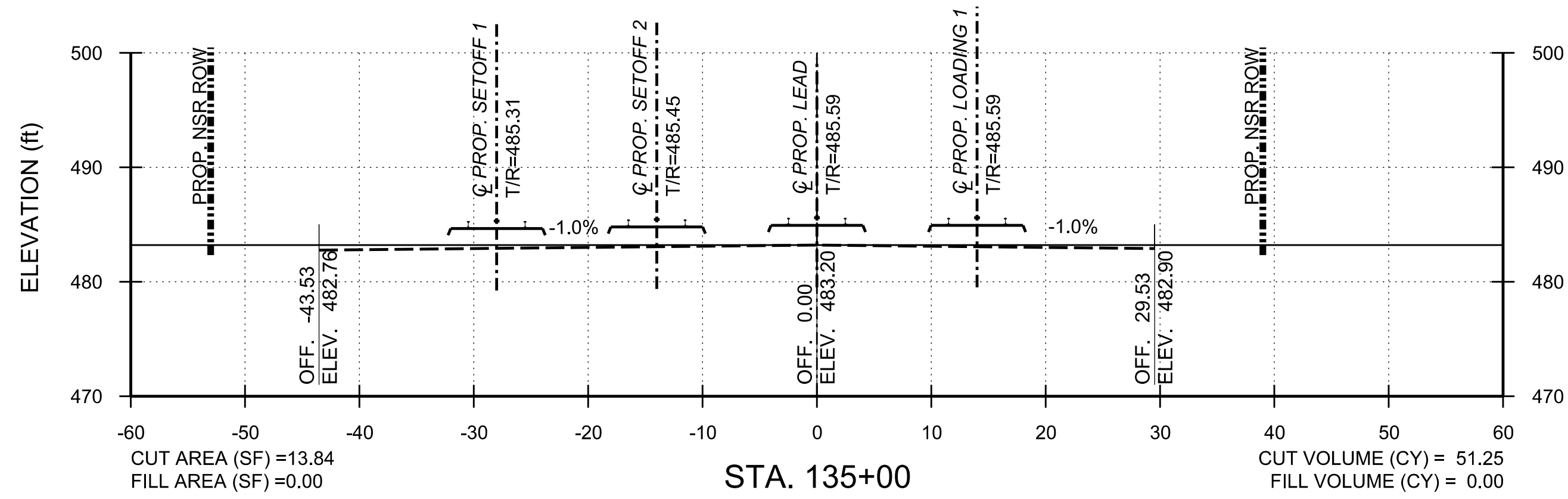
CROUCH ENGINEERING INC.
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 BRENTWOOD, TN 37027
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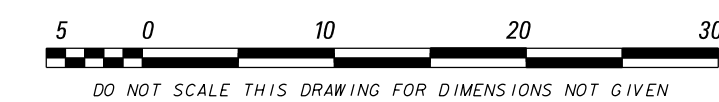
NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

PHASE 2

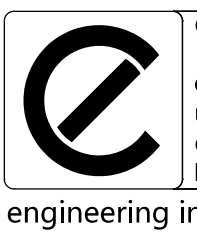
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| REV | BY | DATE | DESCRIPTION |
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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | FILE NO. D3327 | DATE 04/25 |
| CHK | EVU | FILE NO. TRK115024 | DATE MARCH 5, 2024 |
| DRAWING NUMBER: TD-2023-105 | | | WILE POST: R91.4 |



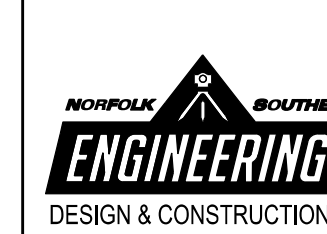
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PROJECT NO: 23050
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 DRAWN BY: EVU
 CHECKED BY:
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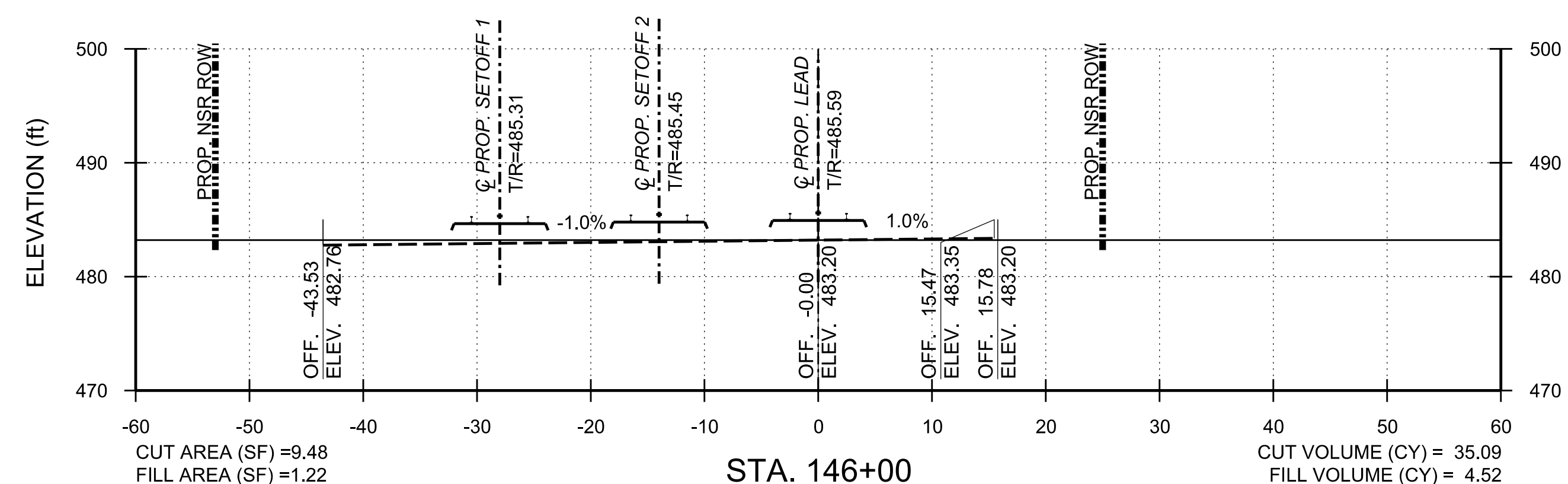
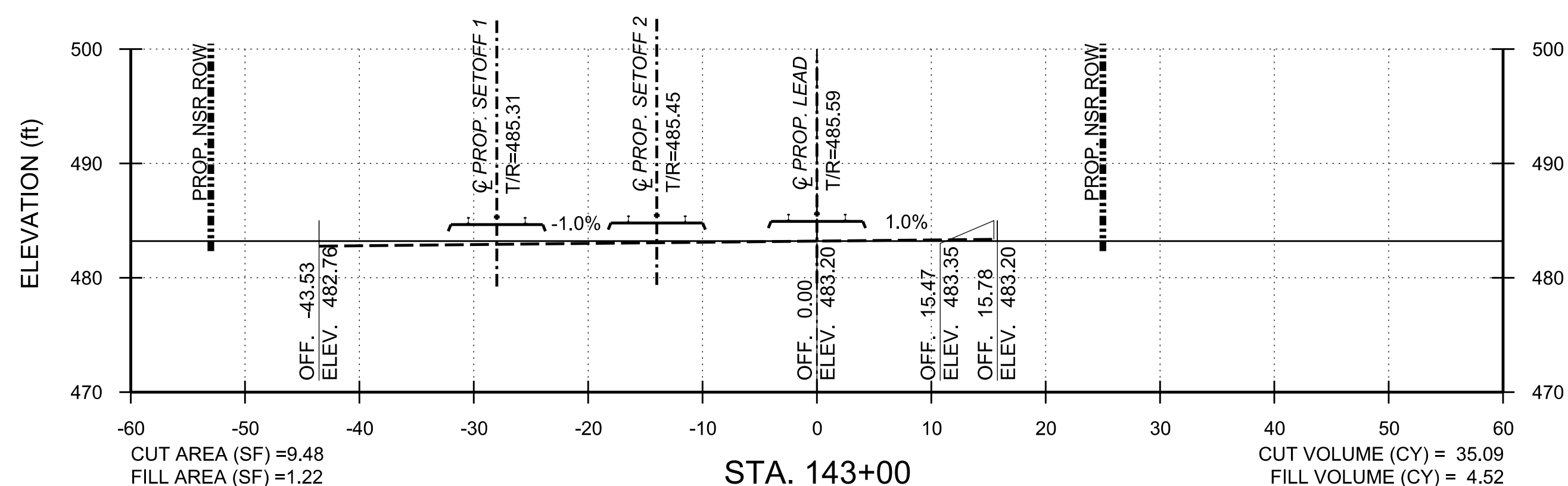
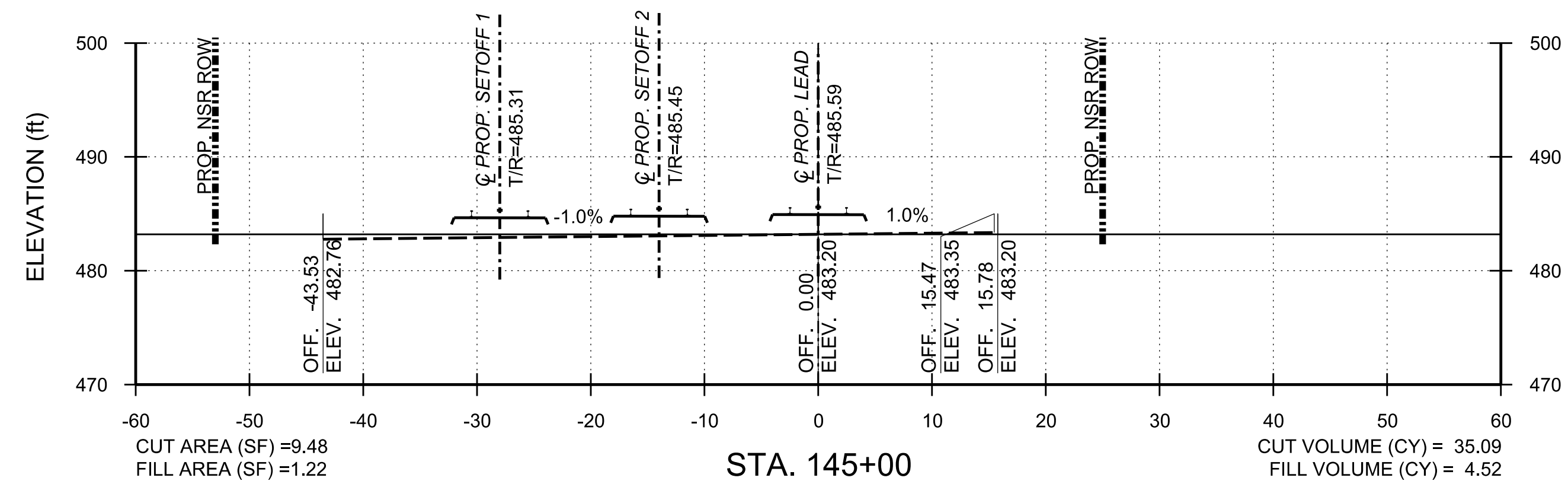
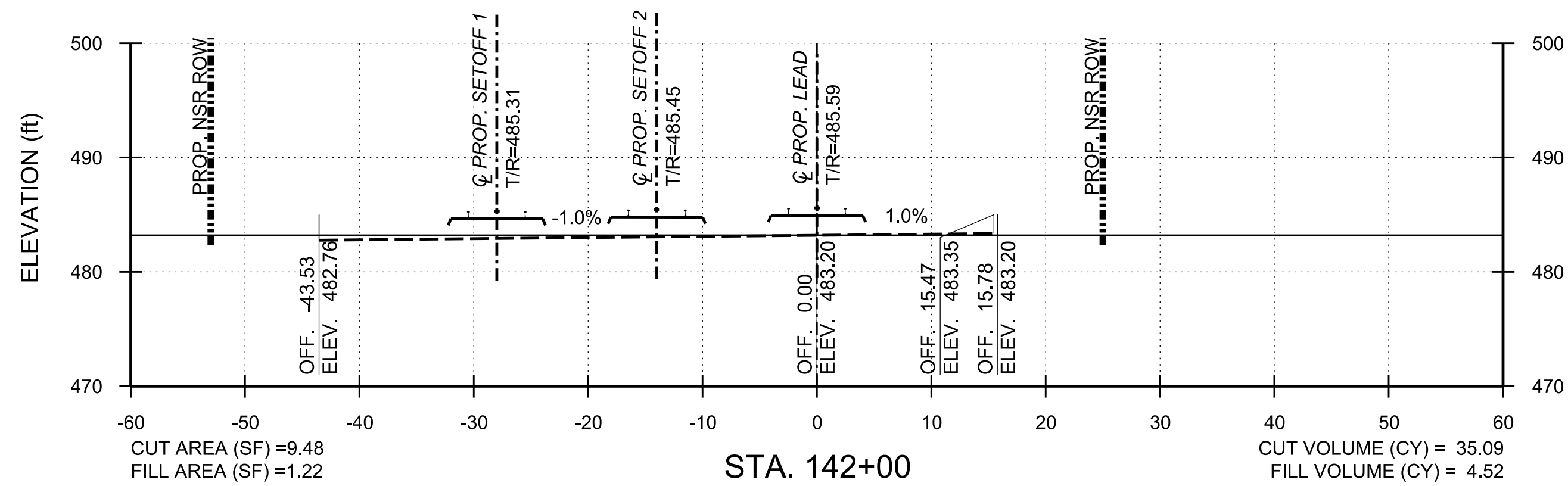
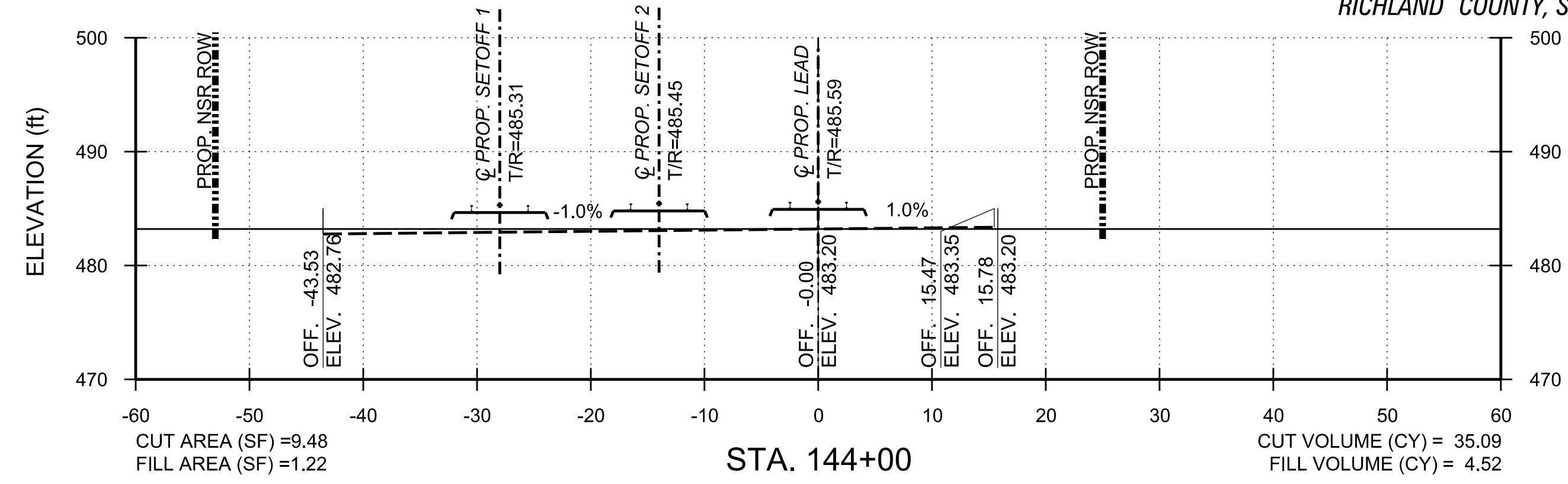
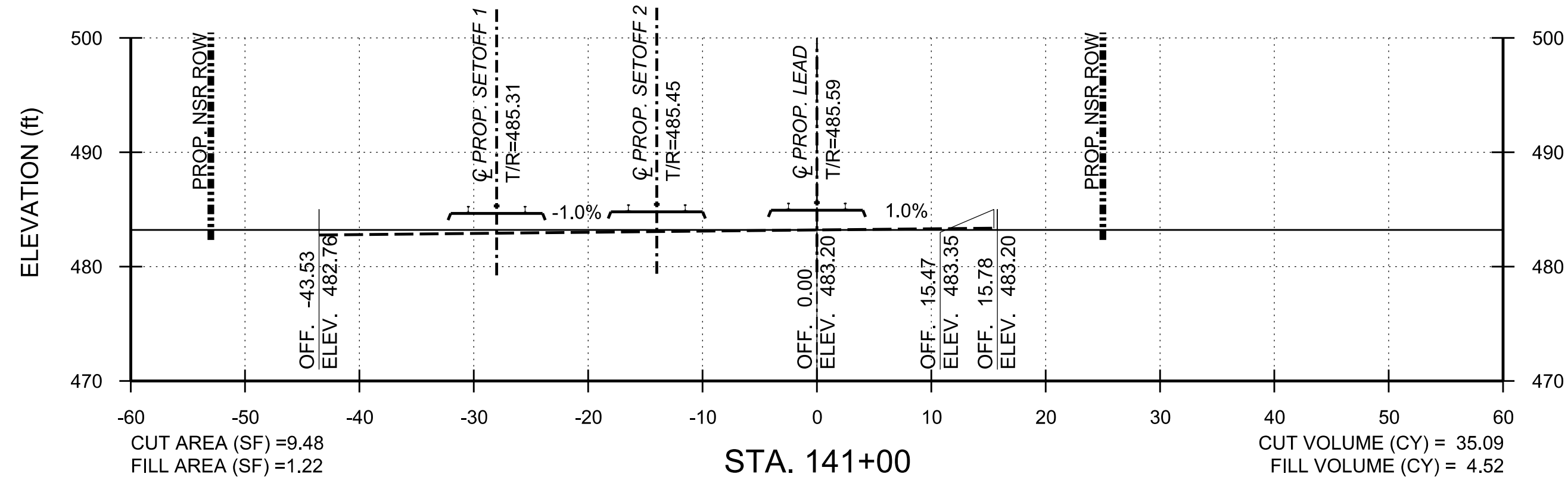
NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL

PHASE 2

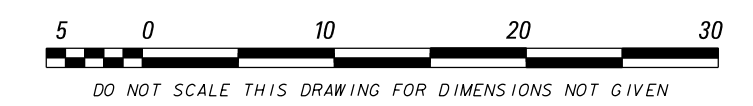
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| REV | BY | DATE | DESCRIPTION |
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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | FILE NO. D3327 | DATE 04825 |
| CHK | EVU | FILE NO. TRK1115024 | DATE MARCH 5, 2024 |
| DRAWING NUMBER | | | TD-2023-105 |

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 DATE PRINTED: #DATE# LAST SAVED: #LASTSAVEDDATE#

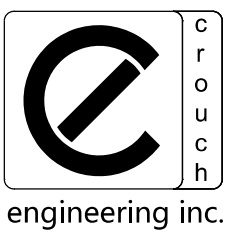


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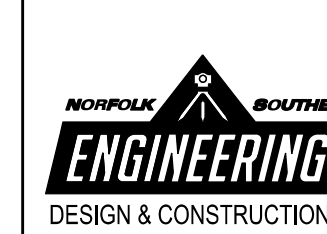


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| PROJECT NO. | 23050 |
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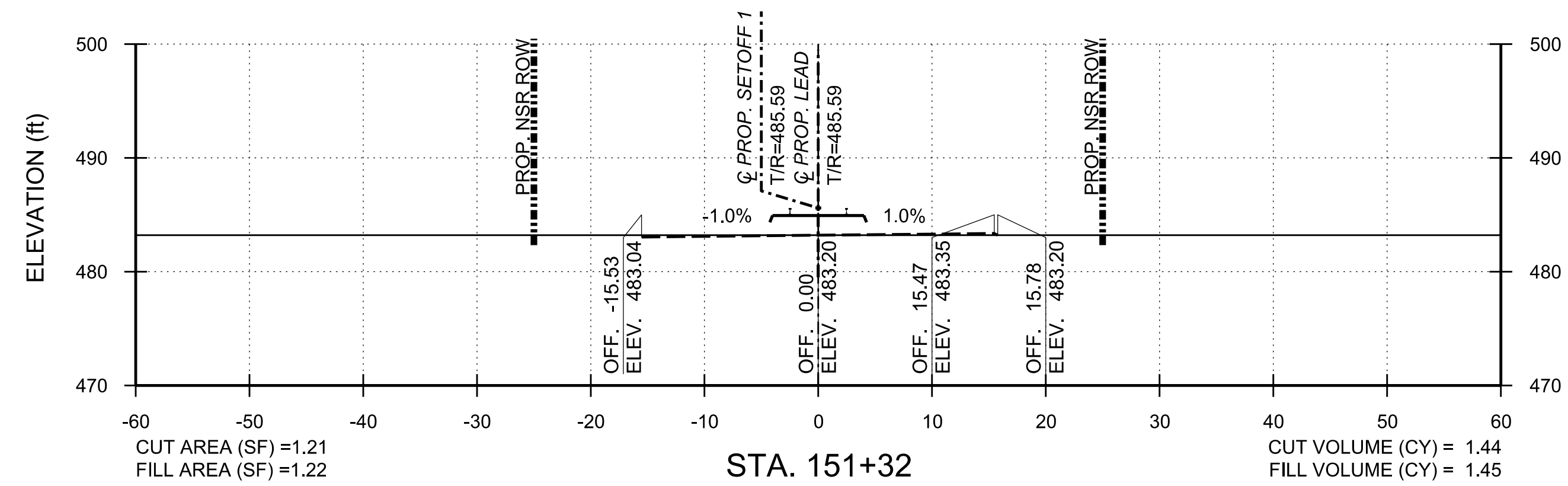
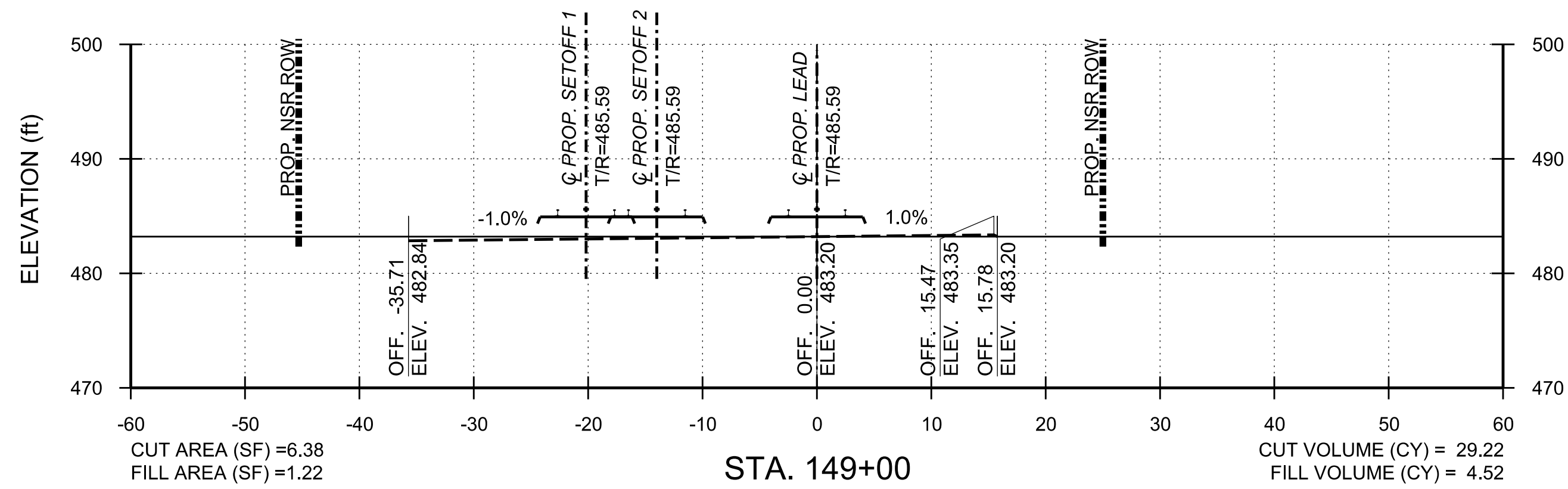
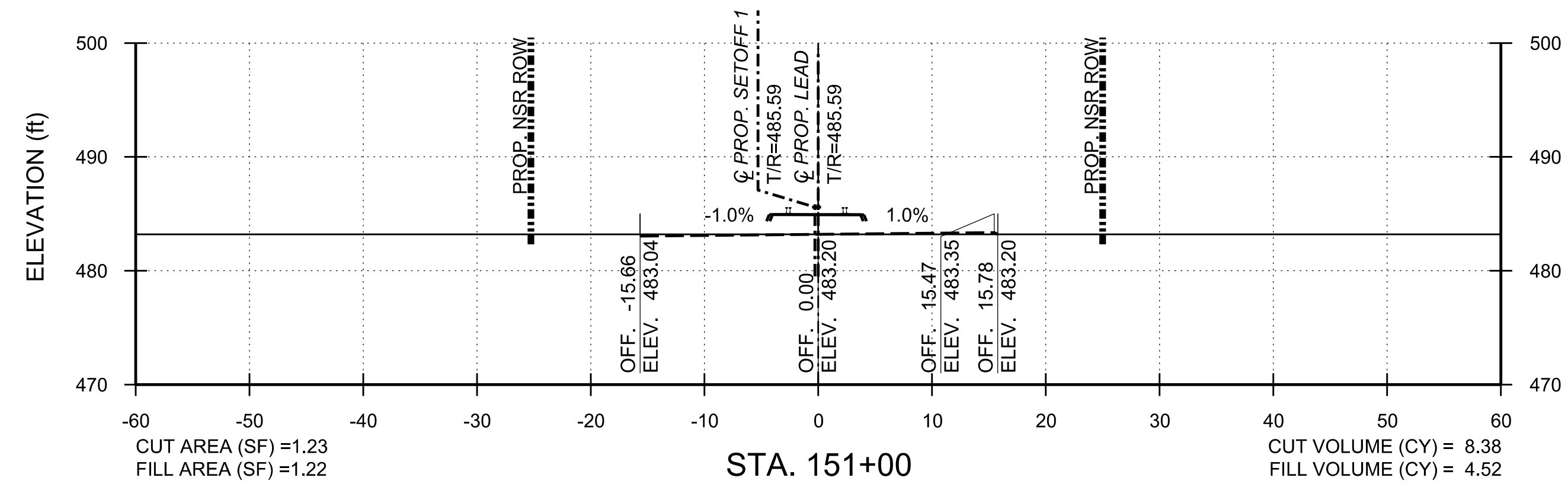
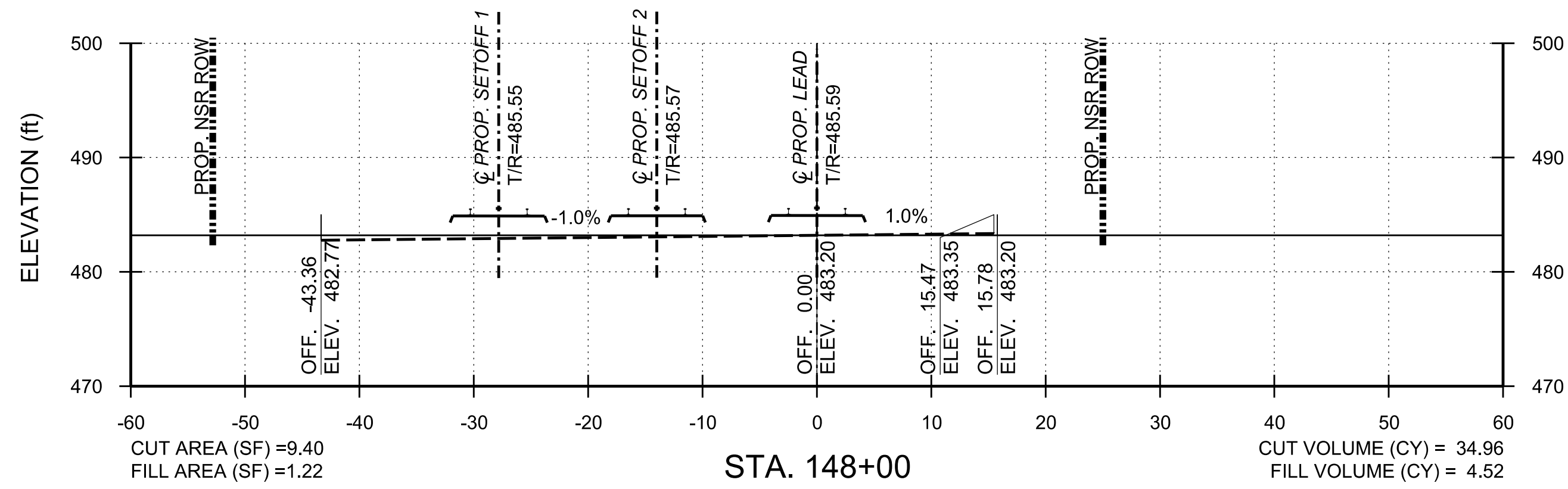
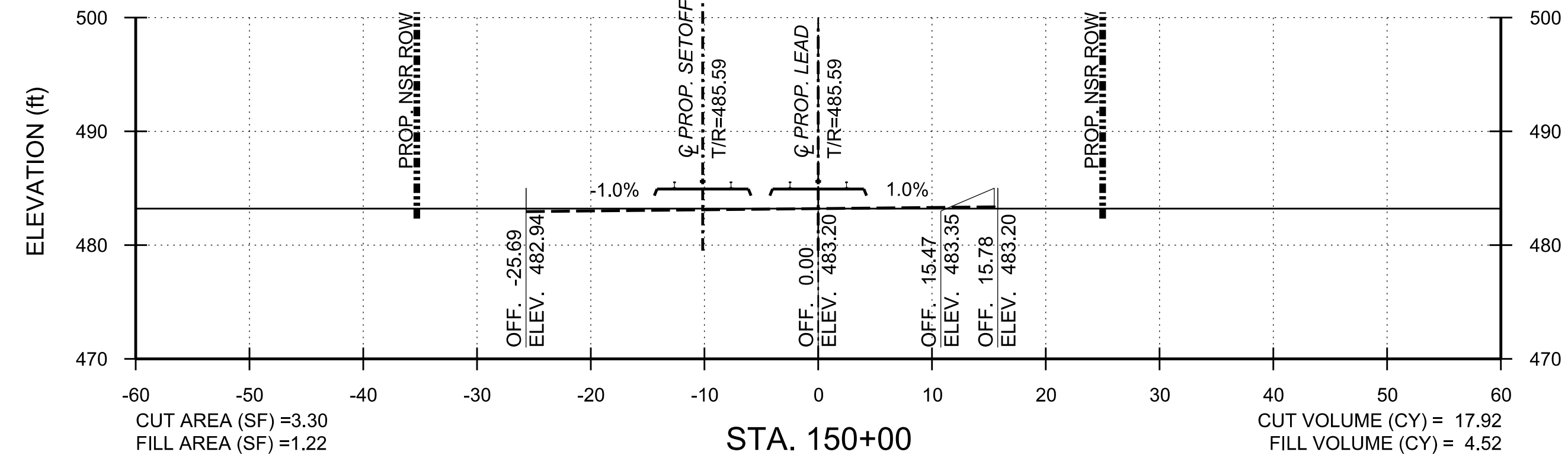
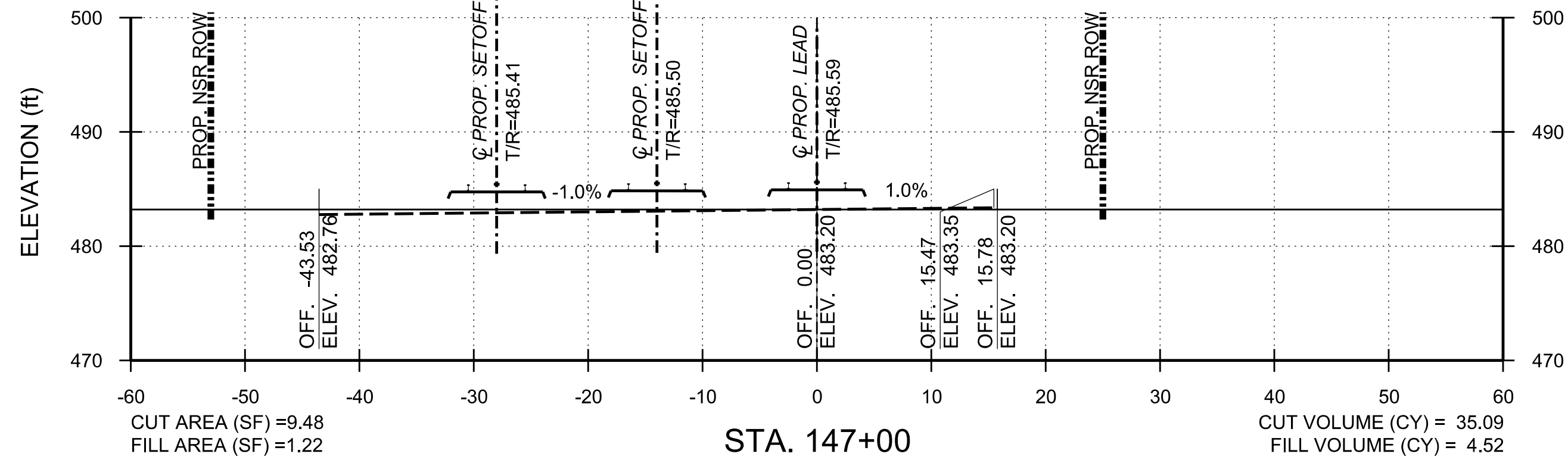


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| REV. BY | DATE | DESCRIPTION |
| | | |
| LOCATION | BLYTHEWOOD, SC | |
| TITLE | PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | |
| DWN | PTD NO. D3327 | VRN |
| DWN | FILE NO. TRK115024 | 04825 |
| CHK | DATE MARCH 5, 2024 | FILE POST R91.4 |
| | | DRAWING NUMBER |
| | | TD-2023-105 |

PHASE 2

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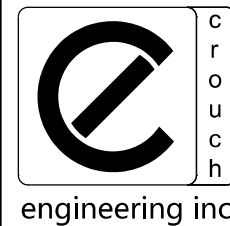
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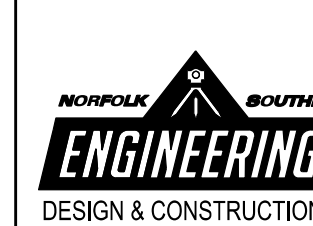
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 NET= 442,640 CY (BORROW)

PHASE 2

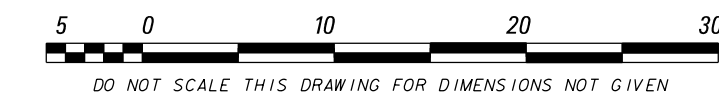
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 DRAWN BY: EVU
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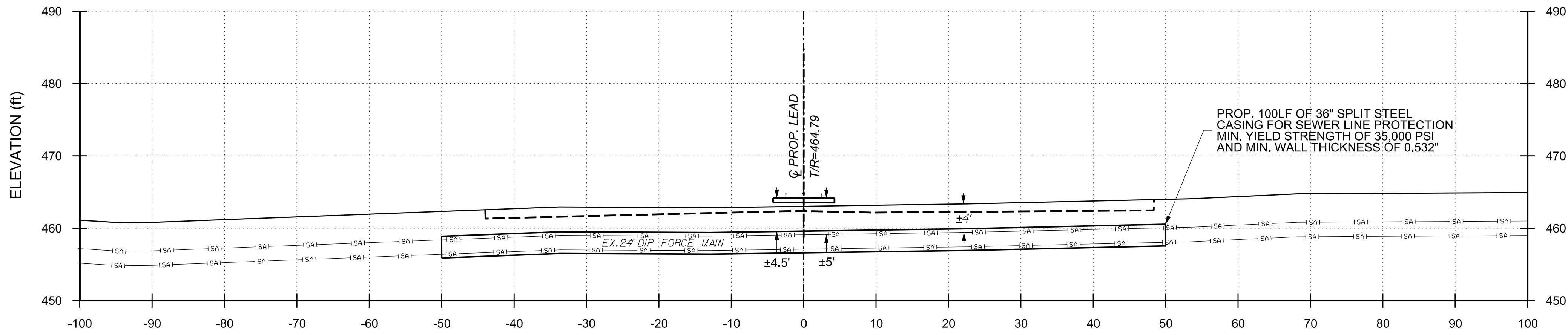


SCALE: 1" = 10'

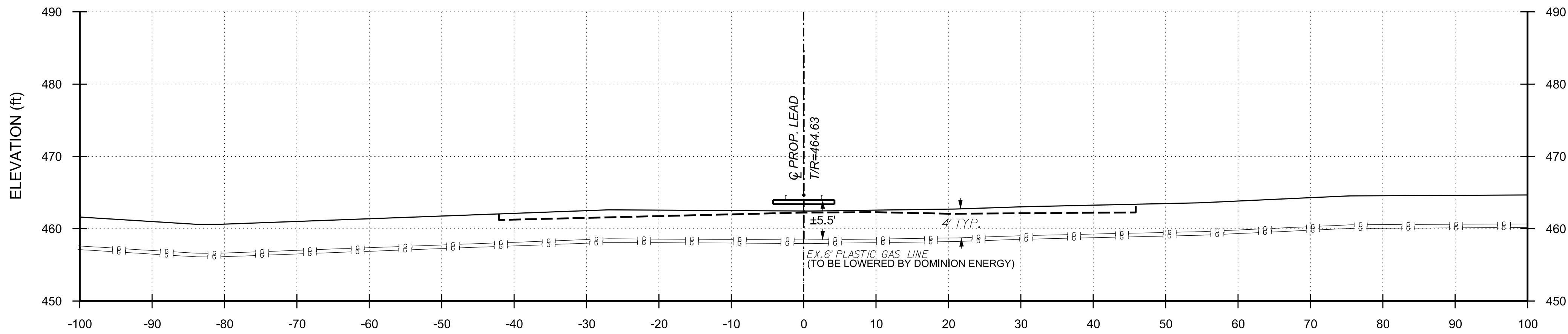


OPERATING DIVISION
 COASTAL
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT CROSS SECTIONS | | | |
| DWN | EVU | FILE NO.: D3327 | VRN |
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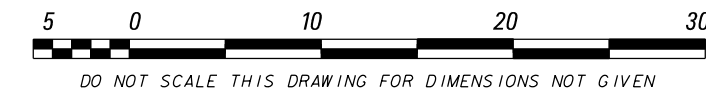


STA. 6+19
 SKEWED 70°9'27" - LT ADVANCE
 UNDERGROUND SANITARY SEWER (PALMETTO UTILITIES)



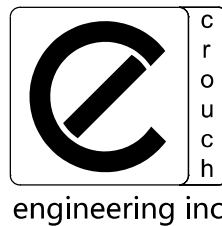
STA. 6+29
 SKEWED 69°9'19" - LT ADVANCE
 UNDERGROUND GAS LINE (DOMINION ENERGY)

SCALE: 1" = 10'

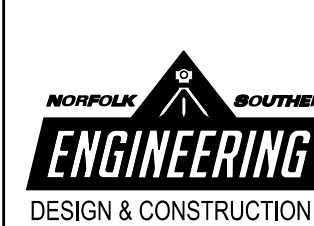


PHASE 1

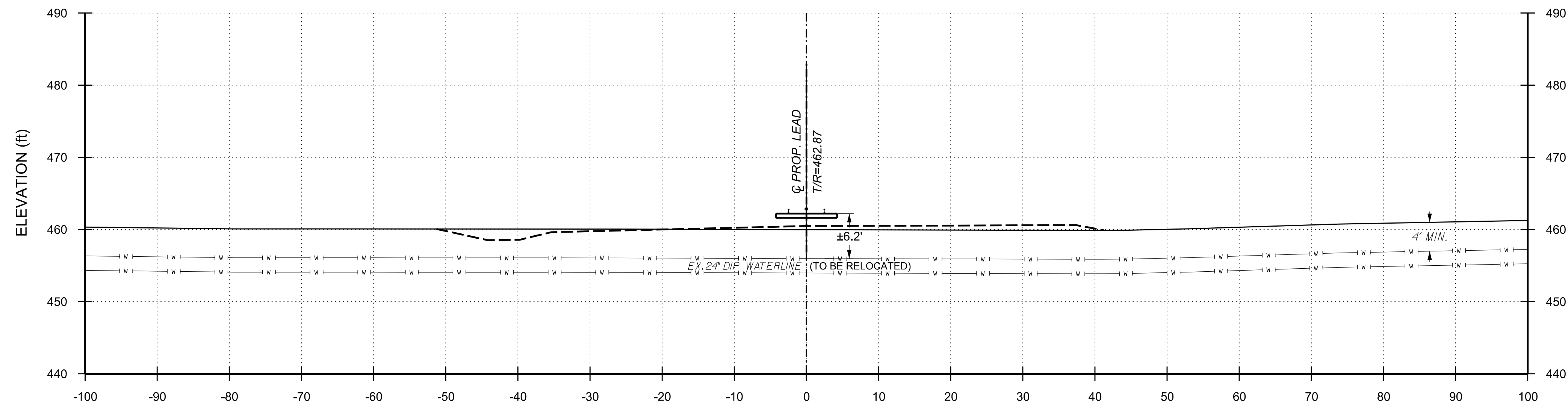
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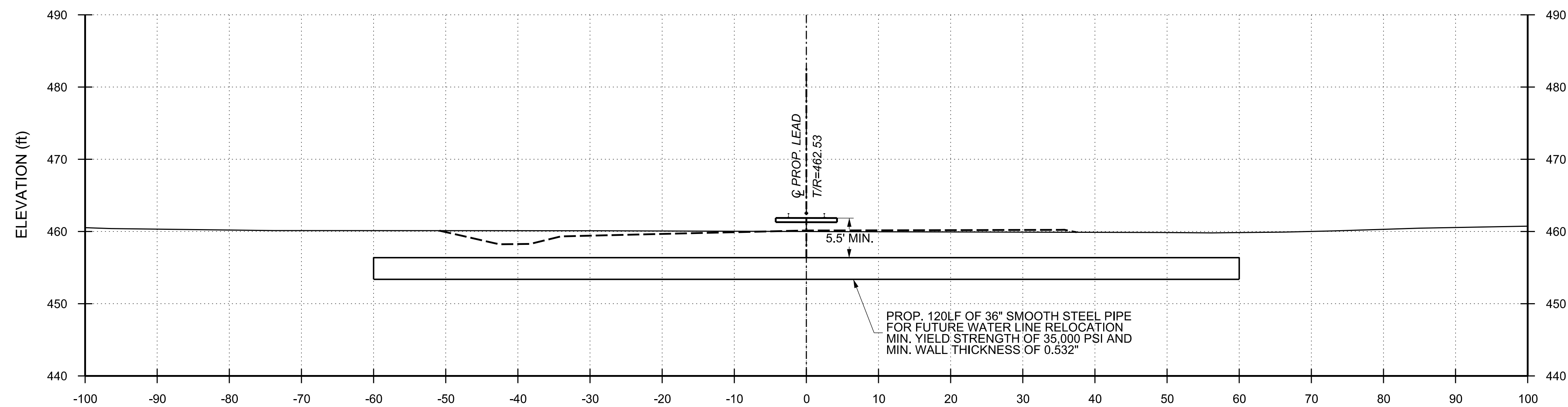
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 PHONE NO. (615) 791-0630



| | | |
|----------|--|-----------------|
| REV. BY | DATE | DESCRIPTION |
| LOCATION | BLYTHEWOOD, SC | |
| TITLE | PROPOSED TRACKS TO SERVE PROJECT SCOUT UTILITY CROSS SECTIONS | |
| DWN | FILE NO. D3327 | FILE POST R91.4 |
| CHK | FILE NO. TRK1115024 | DRAWING NUMBER |
| DATE | MARCH 5, 2024 | TD-2023-105 |

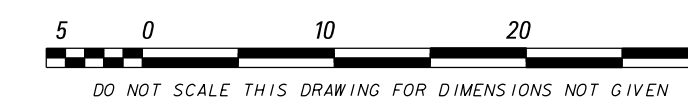


STA. 7+39
 SKEWED 64°34'10" - LT ADVANCE
 UNDERGROUND WATERLINE (CITY OF COLUMBIA)



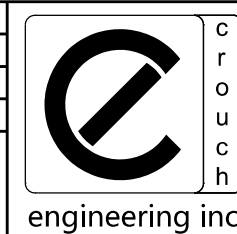
STA. 7+62
 SKEWED 63°26'50" - LT ADVANCE
 PROPOSED RELOCATED UNDERGROUND WATERLINE CASING (CITY OF COLUMBIA)

SCALE: 1" = 10'

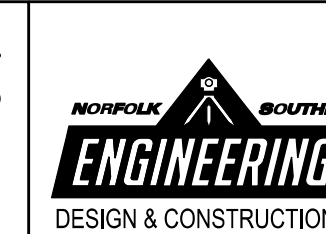


PHASE 1

PROJECT NO: 23050
 DATE:
 DRAWN BY: EVU
 CHECKED BY:
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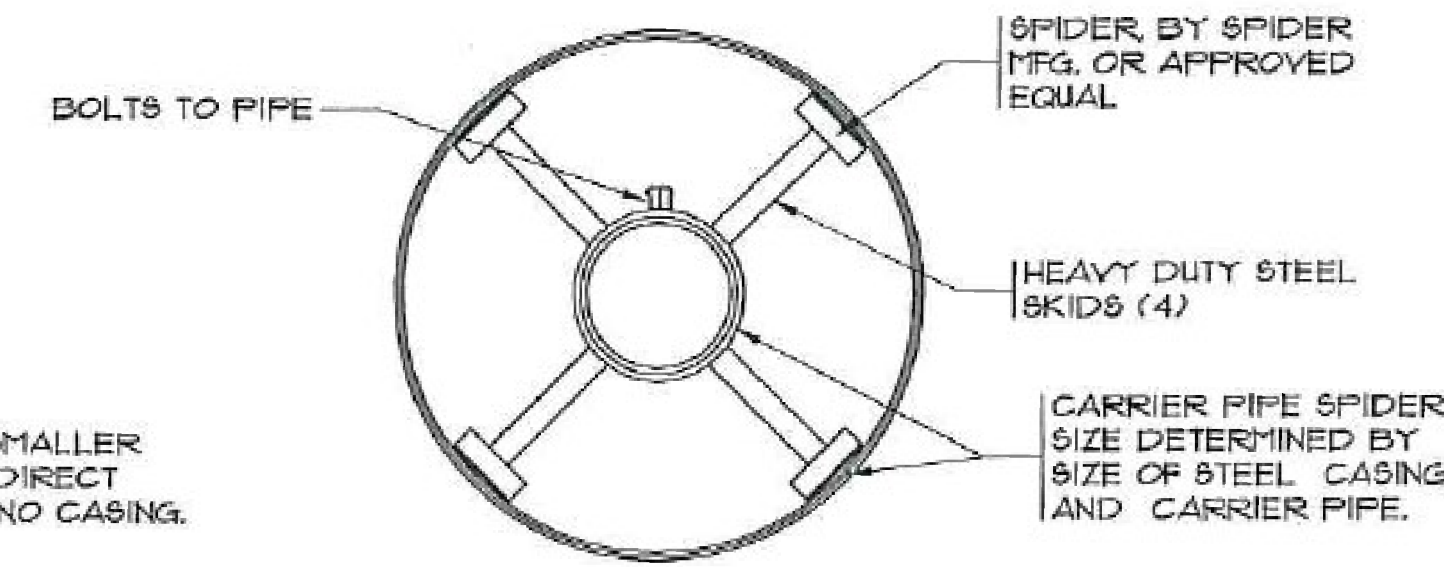
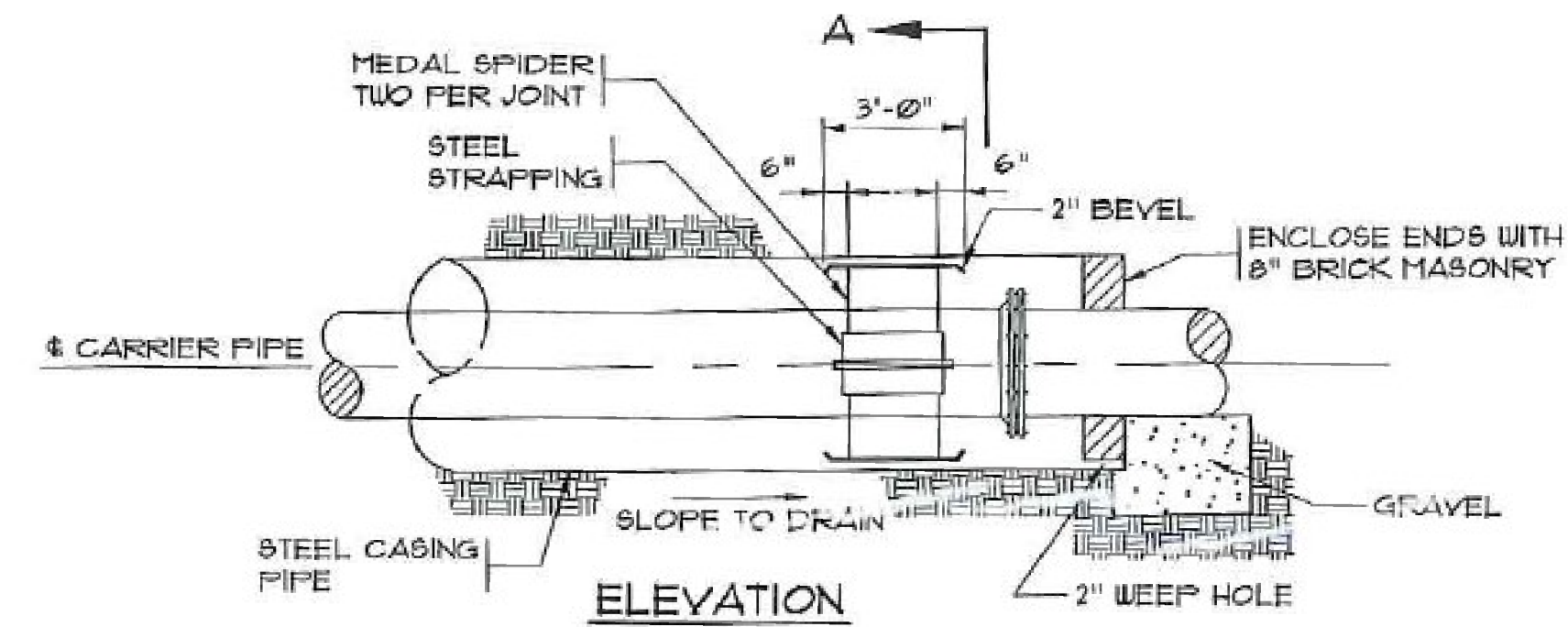


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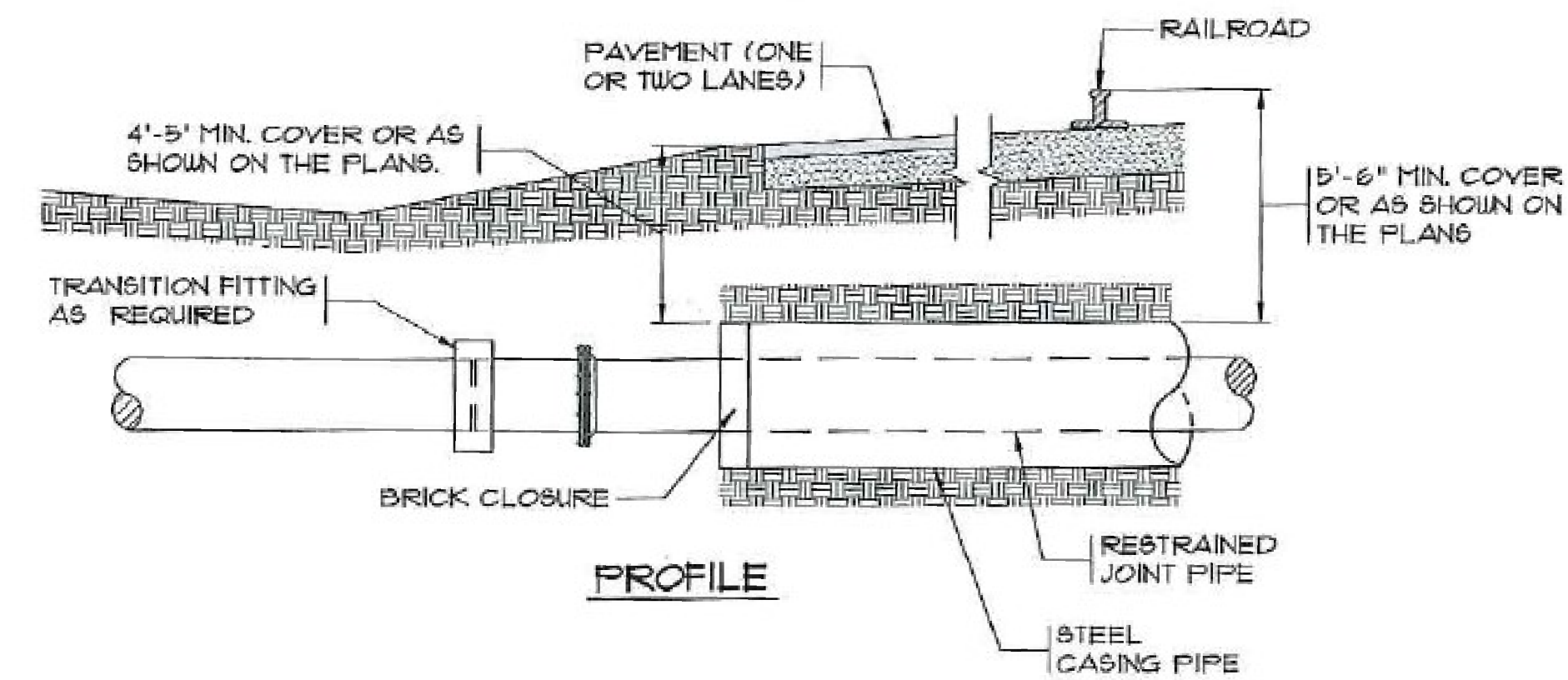
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| REV | BY | DATE | DESCRIPTION |
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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT UTILITY CROSS SECTIONS | | | |
| DRN | EVU | FILE NO. D3327 | FILE POST R91.4 |
| DWN | EVU | FILE NO. TRK1115024 | DRAWING NUMBER |
| CHK | DATE | MARCH 5, 2024 | TD-2023-105 |



NOTE:
4" PIPE & SMALLER
SHALL BE DIRECT
BORED W/ NO CASING.

SECTION "A"

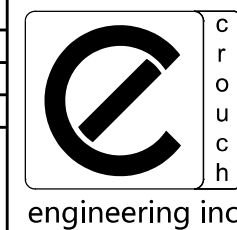


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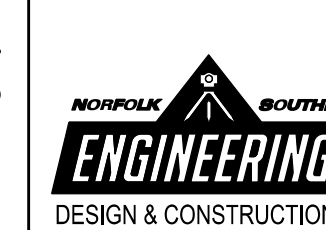
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REVISIONS:

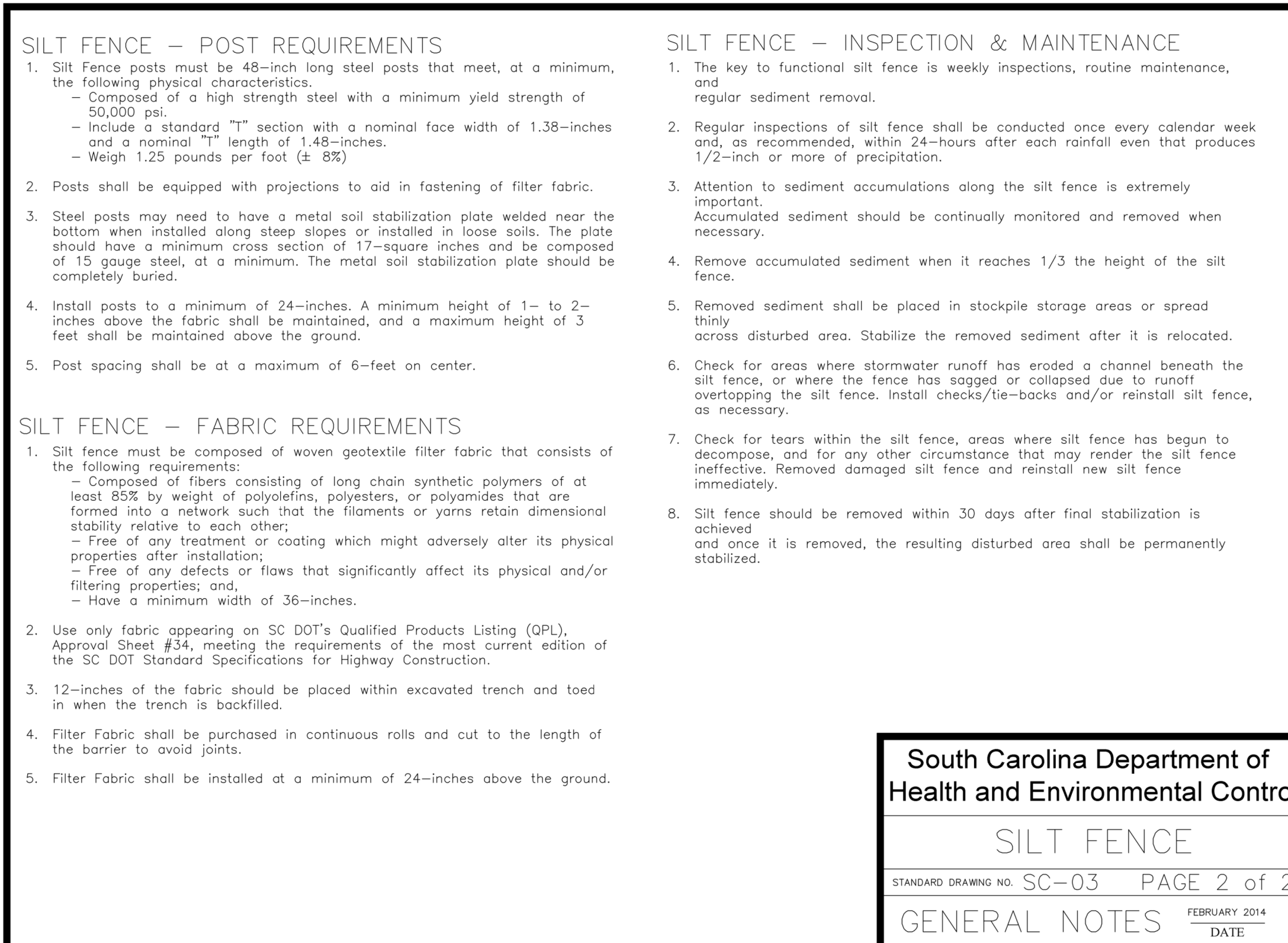
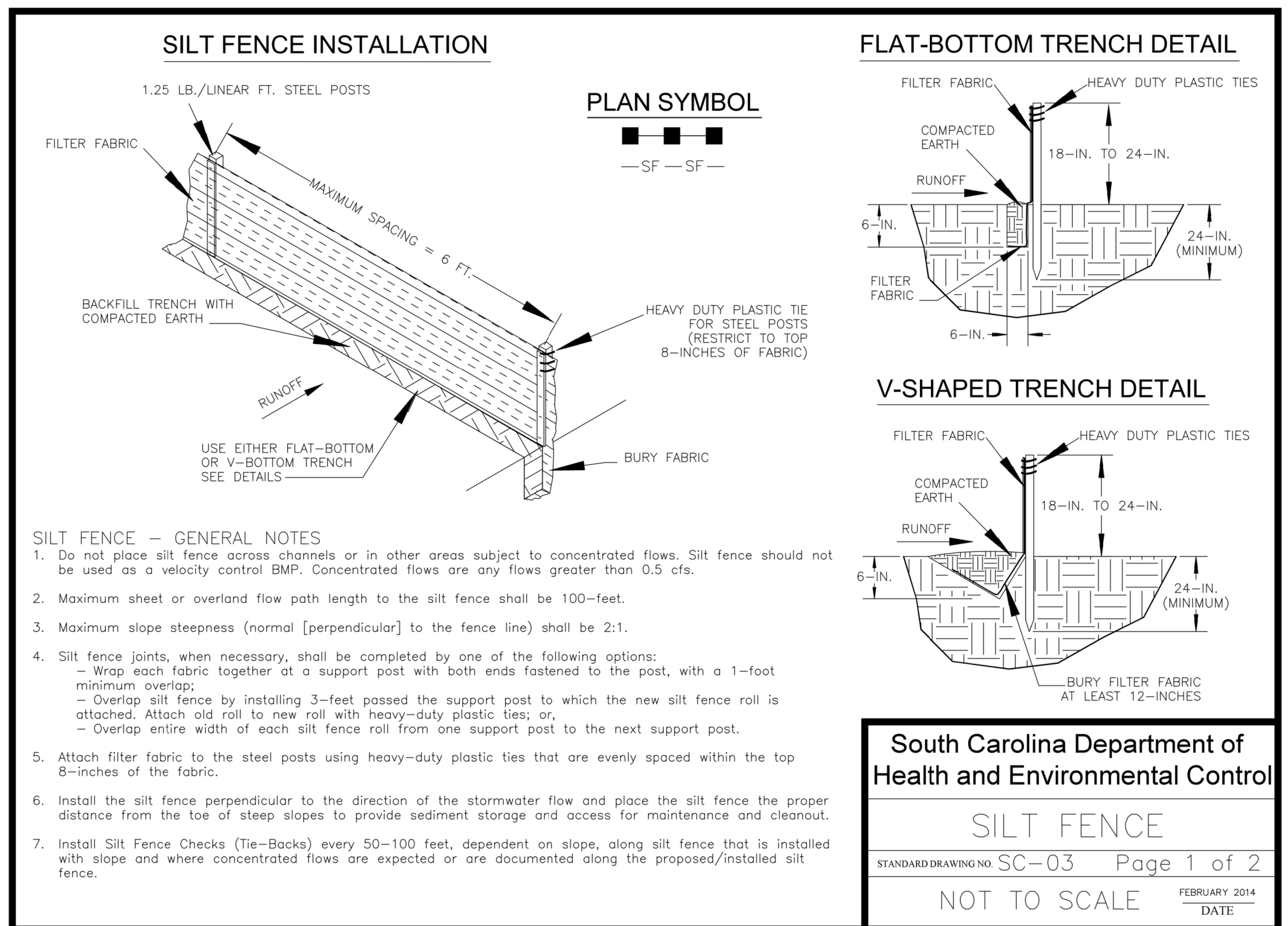
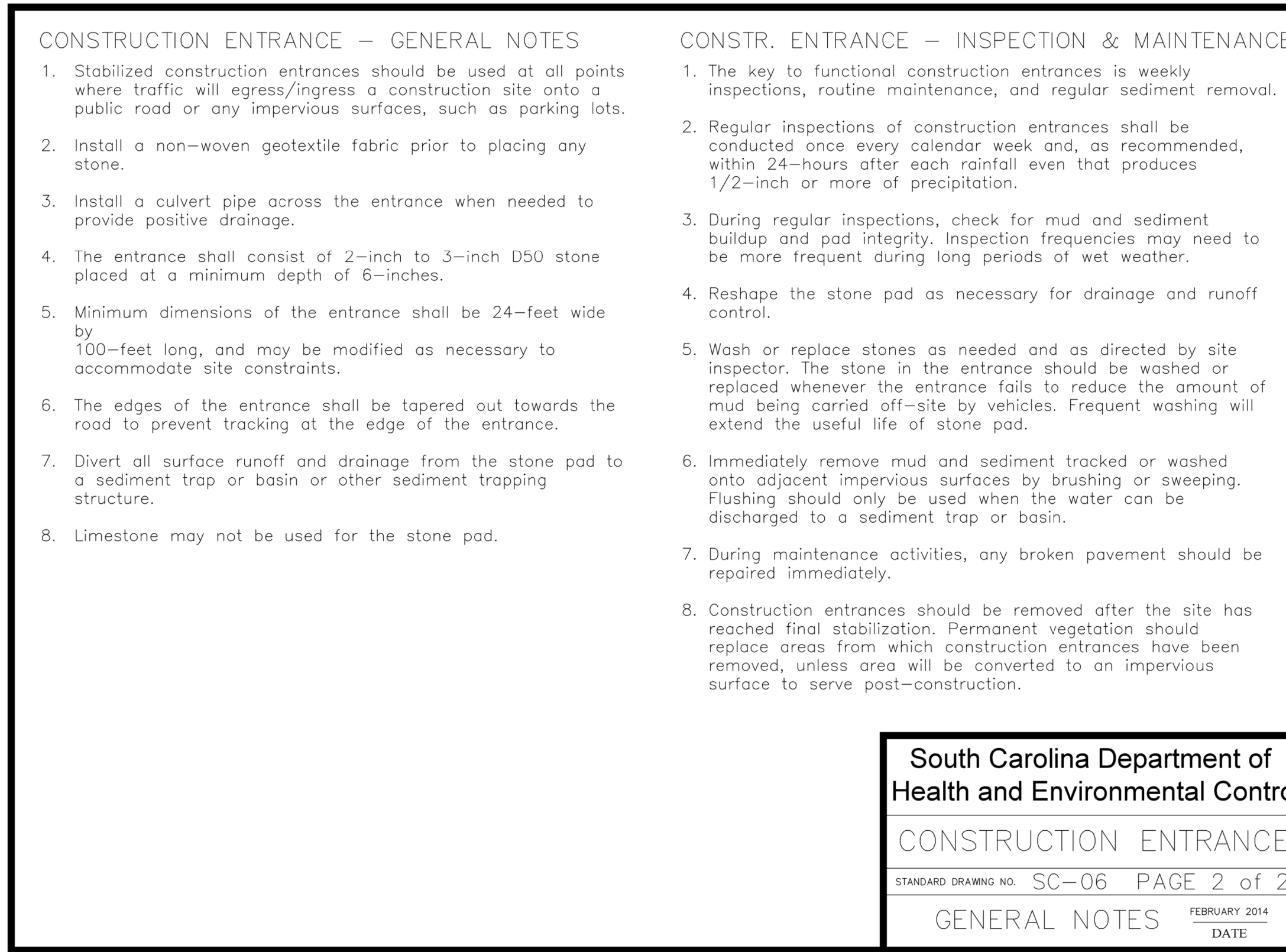
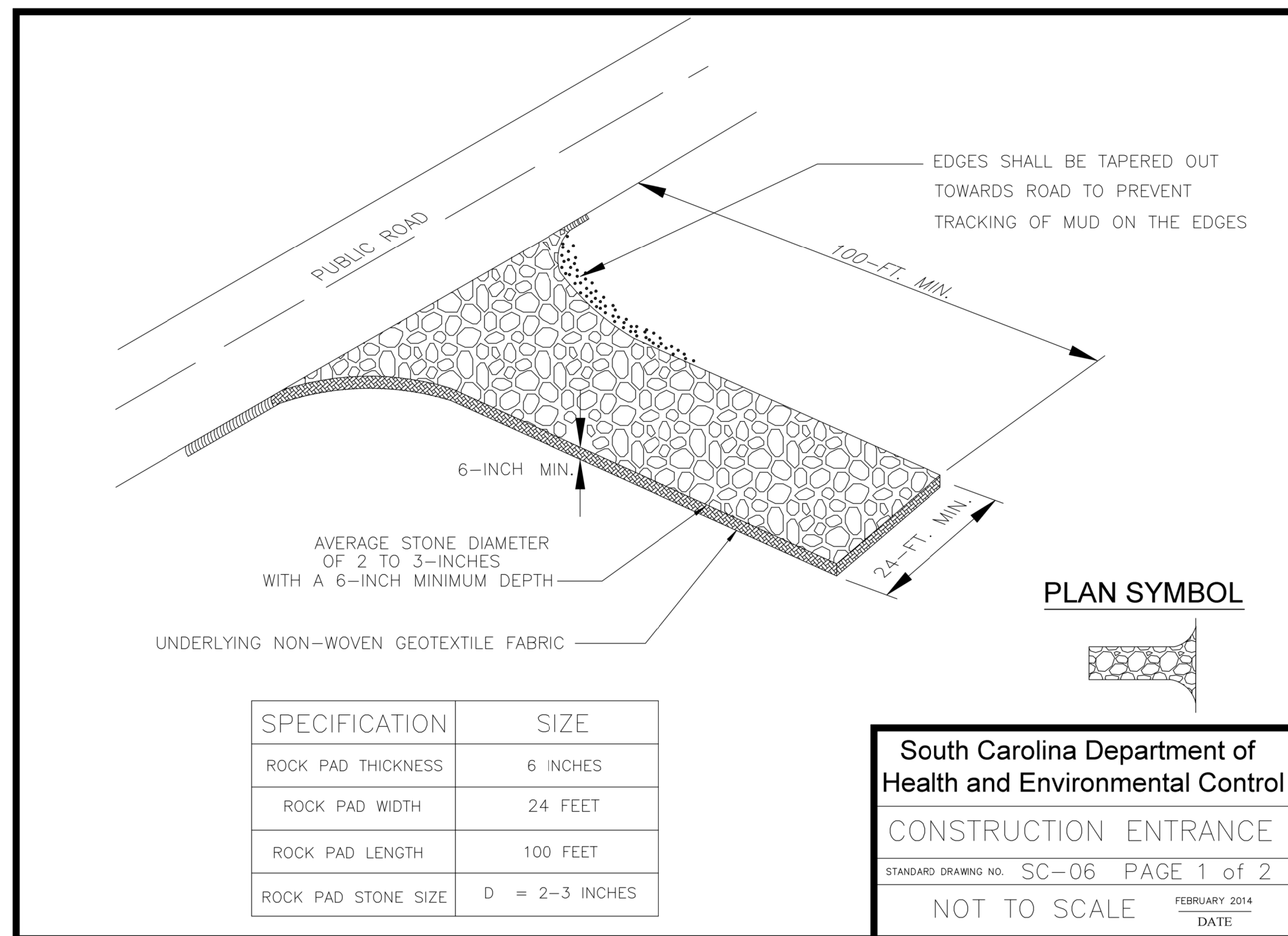


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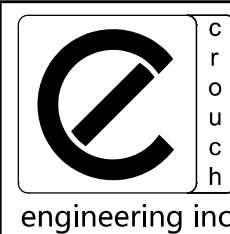
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| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT SPLIT STEEL CASING DETAILS | | | | |
| DRN | EVU | PTD NO. | D3327 | VRN |
| CHK | EVU | FILE NO. | TRK1115024 | DRAWING NUMBER |
| DATE | MARCH 5, 2024 | | FILE PDS# | 04825 |
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| | | | | TD-2023-105-R1 |

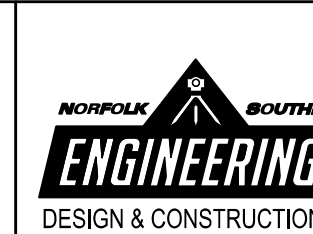


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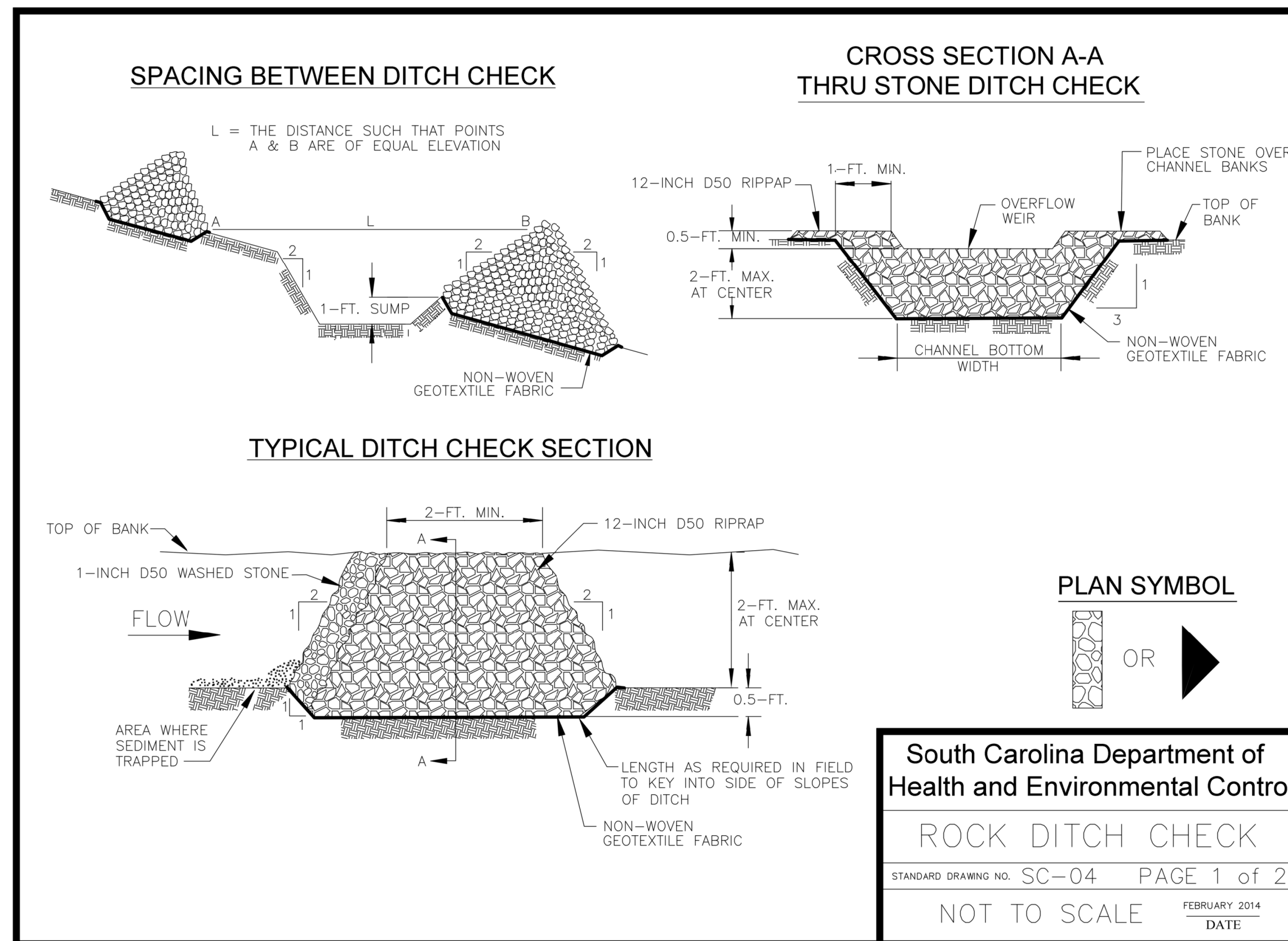
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| REV. BY: | DATE: | DESCRIPTION: |
| LOCATION: | | BLYTHEWOOD, SC |
| TITLE: | | PROPOSED TRACKS TO SERVE PROJECT SCOUT EROSION AND SEDIMENT CONTROL DETAILS |
| DWN EVU | PLOT NO. D3327 | VRN 04825 |
| DWN EVU | FILE NO. TRK115024 | DRAWING NUMBER |
| CHK | DATE MARCH 5, 2024 | TD-2023-105 |



ROCK DITCH CHECK – GENERAL NOTES

1. Rock Ditch Checks should not be placed in Waters of the State or USGS blue-line streams (unless approved by Federal Authorities).
2. Rock Ditch Checks should be installed in steeply sloped channels where adequate vegetation cannot be established. This BMP measure should only be used in small open channels.
3. A non-woven geotextile fabric shall be installed over the soil surface where the rock ditch check is to be placed.
4. The body of the rock ditch check shall be composed of 12-inch D50 Riprap. The upstream face may be composed of 1-inch D50 washed stone.
5. Rock Ditch Checks should not exceed a height of 2-feet at the centerline of the channel.
6. Rock Ditch Checks should have a minimum top flow length of 2-feet.
7. Riprap should be placed over channel banks to prevent water from cutting around the ditch check.
8. The riprap should be placed by hand or mechanical placement (no dumping of rock to form dam) to achieve complete coverage of the channel. Doing so will also ensure that the center of the check is lower than the edges.
9. The maximum spacing between the dams should be such that the toe of the upstream check is at the same elevation as the top of the downstream check.

ROCK DITCH CHECK – INSPECTION & MAINTENANCE

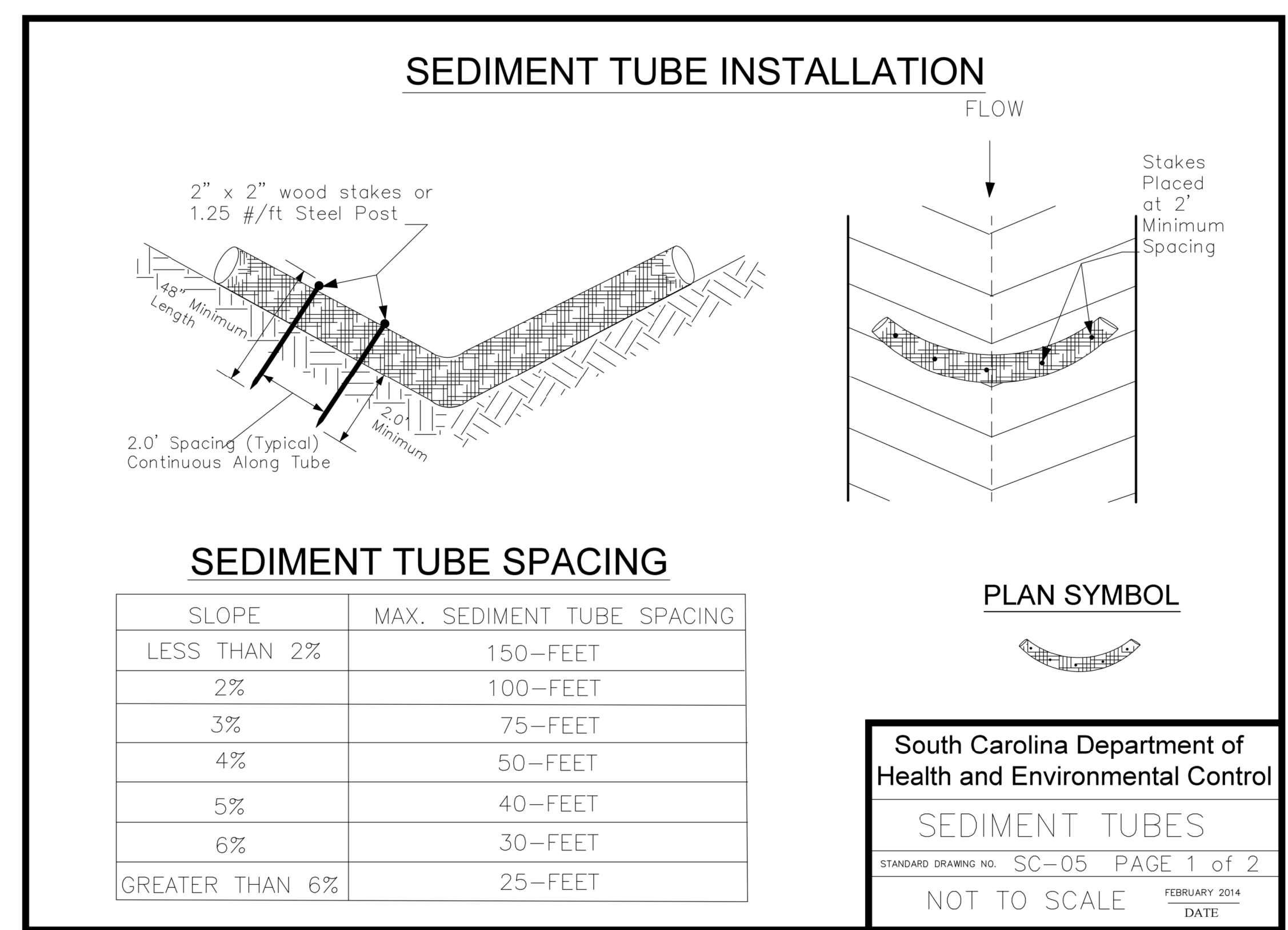
1. The key to functional rock ditch check is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of rock ditch checks shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
3. Attention to sediment accumulations in front of the rock ditch check is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
4. Remove accumulated sediment when it reaches 1/3 the height of the rock ditch check.
5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
6. Inspect Rock Ditch Checks' edges for erosion and evidence of runoff bypassing the installed check. If evident repair promptly as necessary to prevent erosion and bypassing.
7. In the case of grass-lined ditches, channels, and swales, rock ditch checks should be removed when the grass has matured sufficiently to protect the ditch or swale unless the slope of the swale is greater than 4%.
8. After construction is completed and final stabilization is reached, the entirety of the rock ditch check should be removed if vegetation will be used for permanent erosion control measures. The area beneath the removed rock ditch check must be addressed with permanent stabilization measures.

South Carolina Department of Health and Environmental Control

ROCK DITCH CHECK

STANDARD DRAWING NO. SC-04 PAGE 2 of 2

GENERAL NOTES FEBRUARY 2014 DATE



SEDIMENT TUBES – GENERAL NOTES

1. Sediment tubes may be installed along contours, in drainage conveyance channels, and around inlets to help prevent off-site discharge of sediment-laden stormwater runoff.
2. Sediment tubes are elongated tubes of compacted geotextiles, curled excelsior wood, natural coconut fiber, or hardwood mulch. Straw, pine needle, and leaf mulch-filled sediment tubes are not permitted.
3. The outer netting of the sediment tube should consist of seamless, high-density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density polyethylene non-degradable material.
4. Sediment tubes, when used as checks within channels, should range between 18-inches and 24-inches depending on channel dimensions. Diameters outside this range may be allowed where necessary when approved.
5. Curled excelsior wood, or natural coconut products that are rolled up to create a sediment tube are not allowed.
6. Sediment tubes should be staked using wooden stakes, (2-inch X 2-inch) or steel posts (standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot) at a minimum of 48-inches in length placed on 2-foot centers.
7. Install all sediment tubes to ensure that no gaps exist between the soil and the bottom of the tube. Manufacturer's recommendations should always be consulted before installation.
8. The ends of adjacent sediment tubes should be overlapped 6-inches to prevent flow and sediment from passing through the field joint.
9. Sediment tubes should not be stacked on top of one another, unless recommended by manufacturer.
10. Each sediment tube should be installed in a trench with a depth equal to 1/5 the diameter of the sediment tube.
11. Sediment tubes should continue up the side slopes a minimum of 1-foot above the design flow depth of the channel.
12. Install stakes at a diagonal facing incoming runoff.

SEDIMENT TUBES – INSPECTION & MAINTENANCE

1. The key to functional sediment tubes is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of sediment tubes shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
3. Attention to sediment accumulations in front of the sediment tube is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
4. Remove accumulated sediment when it reaches 1/3 the height of the sediment tube.
5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
6. Large debris, trash, and leaves should be removed from in front of tubes when found.
7. If erosion causes the edges to fall to a height equal to or below the height of the sediment tube, repairs should be made immediately to prevent runoff from bypassing tube.
8. Sediment tubes should be removed after the contributing drainage area has been completely stabilized. Permanent vegetation should replace areas from which sediment tubes have been removed.

South Carolina Department of Health and Environmental Control

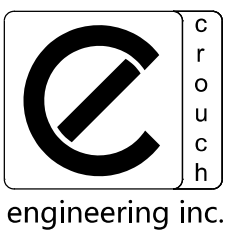
SEDIMENT TUBES

STANDARD DRAWING NO. SC-05 PAGE 2 of 2

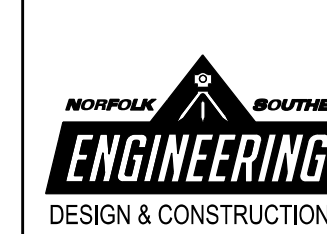
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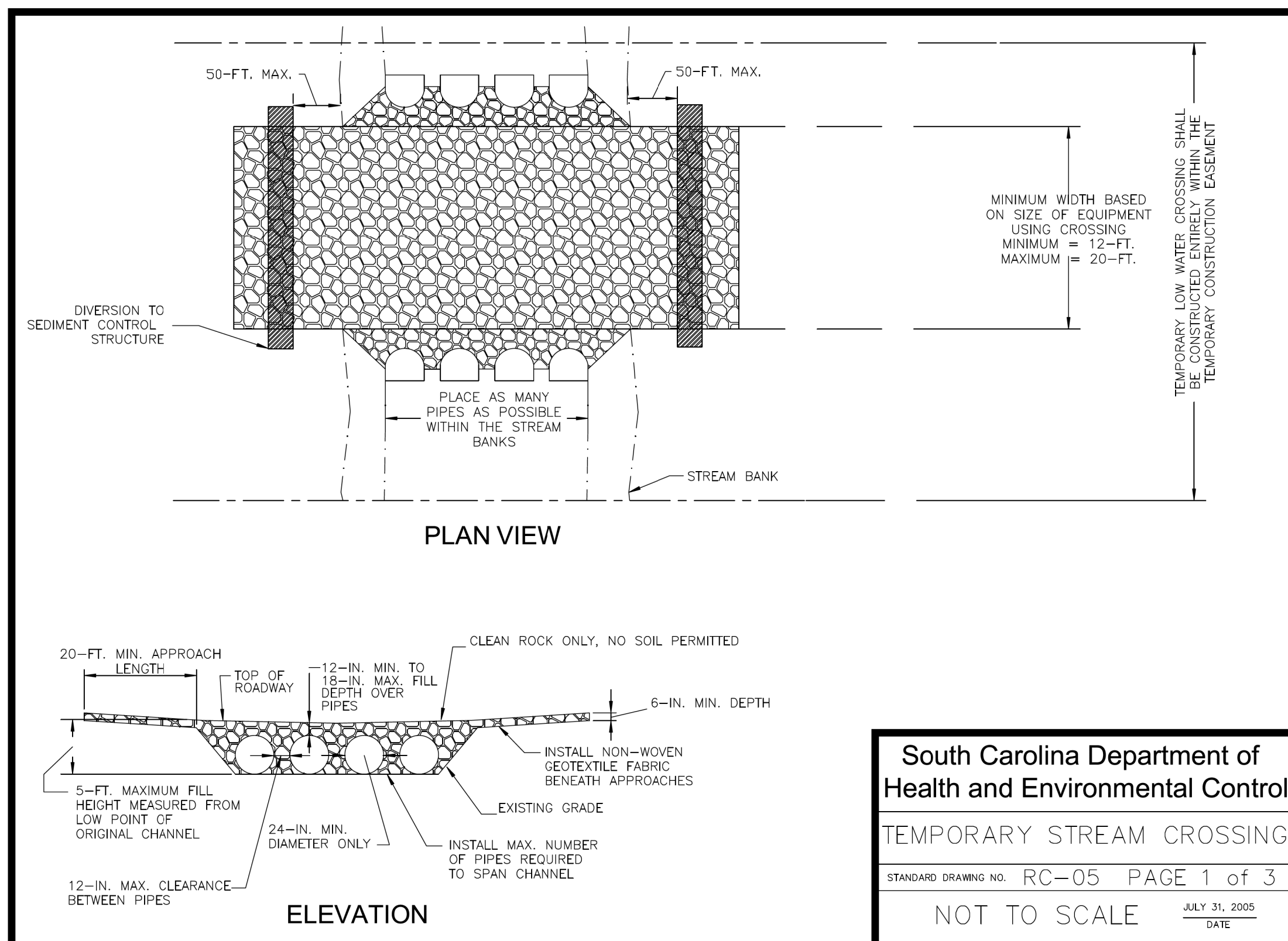


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| REV. BY: | DATE: | DESCRIPTION: |
| LOCATION: | BLYTHEWOOD, SC | |
| TITLE: | PROPOSED TRACKS TO SERVE PROJECT SCOUT EROSION AND SEDIMENT CONTROL DETAILS | |
| DRAWN BY: | FILE NO.: | DATE: |
| EVU | D3327 | MARCH 5, 2024 |
| CHECKED BY: | TRK115024 | |
| DATE: | | |
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South Carolina Department of Health and Environmental Control
 TEMPORARY STREAM CROSSING
 STANDARD DRAWING NO. RC-05 PAGE 1 of 3
 NOT TO SCALE
 JULY 31, 2005
 DATE

TEMPORARY STREAM LOW WATER CROSSING

Prior to constructing a temporary stream crossing, the owner/person financially responsible for the project must submit an Application for Permit to Construct Across or Along a Stream to the South Carolina Department of Health and Environmental Control (SC DHEC). Temporary stream crossings require authorization. Refer to the US Army Corps of Engineers and SCDHEC nationwide 401 and 404 regulations for information on permitting requirements.

Installation:

Crossings shall be installed prior to any other activities.

Pump-around diversions shall be installed and maintained prior to any excavation and during the installation of the crossing.

Crossings shall be placed in temporary construction easements only.

The temporary waterway crossing shall be at right angles to the stream. Where approach conditions dictate, the crossing may vary 15 degrees from a line drawn perpendicular to the centerline of the stream at the intended crossing location. However every effort shall be taken to install the crossing perpendicular to the stream. All fill materials associated with the roadway approach shall be limited to a maximum height of 2-feet above the existing flood plain elevation.

A water diverting structure such as a dike or swale shall be constructed (across the roadway on both roadway approaches) 50-feet (maximum) on either side of the waterway crossing. This will prevent roadway surface runoff from directly entering the waterway. The 50-feet is measured from the top of the waterway bank. The flow captured in these dikes and swales shall be directed to a sediment trapping structure. If the roadway approach is constructed with a reverse grade away from the waterway, a separate diverting structure is not required.

Streambank clearing shall be kept to a minimum. Do not excavate rock bottom streambeds to install the crossing. Lay the culvert pipes on the streambed "as is" when applicable. Place as many pipes as possible within the low area of the stream. Place remaining pipes required to cross the stream on the existing stream bottom.

The maximum number of pipes as possible should be placed within the stream banks with a maximum spacing of 12-inches between pipes. The minimum sized pipe culvert that may be used is 24-inches.

The length of the culvert shall be adequate to extend the full width of the crossing, including side slopes. The slope of the culvert shall be at least 0.25 feet per foot.

Coarse aggregate of clean limestone riprap with a 6-inch D50 stone or greater will be used to form the crossing. The depth of stone cover over the culvert shall be equal to 1/2 the diameter of the culvert or 12-inches, whichever is greater but no greater than 18-inches.

South Carolina Department of Health and Environmental Control
 TEMPORARY STREAM CROSSING
 STANDARD DRAWING NO. RC-05 PAGE 2 of 3
 GENERAL NOTES
 JULY 31, 2005
 DATE

TEMPORARY STREAM LOW WATER CROSSING

Installation:

All fill materials associated with the roadway approach shall be limited to a maximum height of 2-feet above the existing flood plain elevation.

The approaches to the structure shall consist of clean stone or concrete fill only with a minimum thickness of 6-inches. The minimum approach length shall be 20-feet and the width shall be equal to the width of the structure.

Inspection and Maintenance:

Inspect crossings every seven (7) calendar days and within 24-hours after each rainfall event that produces 1/2-inches or more of precipitation. Check the structure integrity and for excessive sediment deposition and replace fill stone as needed.

Clean mud and/or sediment from the roadway and do not allow it to enter the stream.

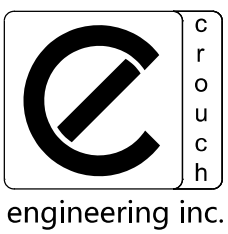
The structure shall be removed when it is no longer required to provide access to the construction area. During removal, leave stone and geotextile fabric for approaches in place. Place fill over the approaches as part of the stream bank restoration operation.

A temporary culvert crossing should be in place no longer than 24-months.

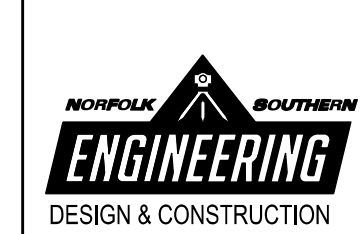
South Carolina Department of Health and Environmental Control
 TEMPORARY STREAM CROSSING
 STANDARD DRAWING NO. RC-05 PAGE 3 of 3
 GENERAL NOTES
 JULY 31, 2005
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PHASE 1

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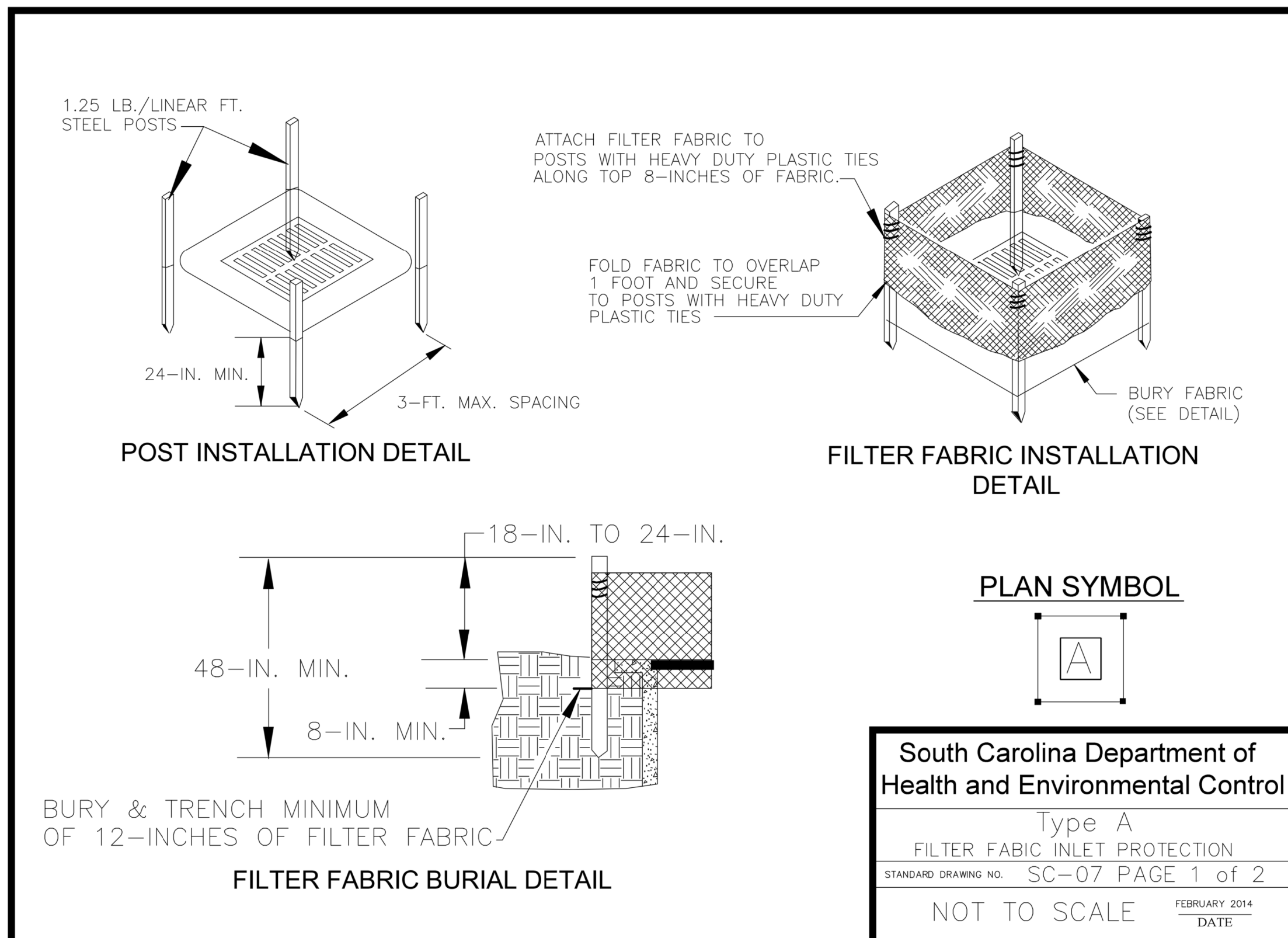


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| REV. BY | DATE | DESCRIPTION |
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| LOCATION | BLYTHEWOOD, SC | |
| TITLE | PROPOSED TRACKS TO SERVE PROJECT SCOUT EROSION AND SEDIMENT CONTROL DETAILS | |
| DWN EVU | PTD NO. D3327 | VRN 04825 FILE POST R91.4 |
| DWN EVU | FILE NO. TRK115024 | DRAWING NUMBER |
| CHK | DATE MARCH 5, 2024 | TD-2023-105 |



TYPE A – FILTER FABRIC REQUIREMENTS

- Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:
 - Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other;
 - Free of any treatment or coating which might adversely alter its physical properties after installation;
 - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and,
 - Have a minimum width of 36-inches.
- Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
- 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
- Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
- Filter Fabric shall be installed at a minimum of 24-inches above the ground.

TYPE A – POST REQUIREMENTS

- Silt Fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics:
 - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
 - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
 - Weigh 1.25 pounds per foot (± 8%)
- Posts shall be equipped with projections to aid in fastening of filter fabric.
- Install posts to a minimum of 24-inches. A minimum height of 1- to 2- inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
- Post spacing shall be at a maximum of 3-feet on center.

TYPE A – INSPECTION & MAINTENANCE

- The key to functional inlet protection is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
- Attention to sediment accumulations along the filter fabric is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- Remove accumulated sediment when it reaches 1/3 the height of the filter fabric. When a sump is installed in front of the fabric, sediment should be removed when it fills approximately 1/3 the depth of the sump.
- Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- Check for areas where stormwater runoff has eroded a channel beneath the filter fabric, or where the fabric has sagged or collapsed due to runoff overlapping the inlet protection.
- Check for tears within the filter fabric, areas where fabric has begun to decompose, and for any other circumstance that may render the inlet protection ineffective. Removed damaged fabric and reinstall new filter fabric immediately.
- Inlet protection structures should be removed after all the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare areas immediately.

South Carolina Department of Health and Environmental Control

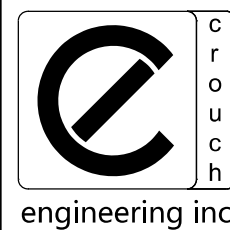
Type A
FILTER FABRIC INLET PROTECTION

STANDARD DRAWING NO. SC-07 PAGE 2 of 2

GENERAL NOTES FEBRUARY 2014 DATE

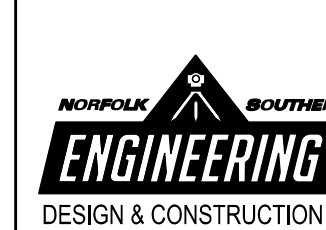
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LOCATION: BLYTHEWOOD, SC

TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT
EROSION AND SEDIMENT CONTROL DETAILS

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| DSN | EVU | PTD NO. D3327 | VRN | 04825 | FILE POST | R91.4 |
| DWN | EVU | FILE NO. | TRK1115024 | | DRAWING NUMBER | |
| CHK | | DATE | MARCH 5, 2024 | | | TD-2023-105 |

NOTES:
PERMANENT SEEDING

1. APPLY TOPSOIL IF SURFACE SOIL IS NOT ADEQUATE FOR PLANT GROWTH.
2. DISK THE SOIL FOR OPTIMAL GERMINATION.
3. APPLY 1-1/2 TON OF GROUND COURSE TEXTURED AGRICULTURAL LIMESTONE PER ACRE (70 LBS / 1000 SQ FT), UNLESS SOIL TEST INDICATES OTHERWISE.
4. APPLY A MINIMUM OF 1000 POUNDS PER ACRE OF A COMPLETE 10-10-10 FERTILIZER (23 LBS / 1000 SQ FT) OR EQUIVALENT, UNLESS SOIL TEST INDICATES OTHERWISE.
5. EVENLY APPLY SEED (SEE TABLE FOR TYPE BASED ON SEASON).
6. COVER SEEDED AREA WITH MULCH OR EC BLANKET OR TRM BASED ON PLANS. APPLY MULCH TO PROVIDE A MINIMUM OF 75% COVERAGE (2 TONS PER ACRE OR 90 LBS PER 1000 SQ FT).
7. KEEP SEEDED AREAS ADEQUATELY MOIST.
8. RE-SEED OR OVERSEED AS NECESSARY TO ACHIEVE FINAL STABILIZATION (70% COVERAGE OF EACH SQ YARD).

TEMPORARY SEEDING

1. ONLY APPLY LIME IF THE SOIL PH IS BELOW 5.0.
2. APPLY A MINIMUM OF 500 POUNDS PER ACRE OF A COMPLETE 10-10-10 FERTILIZER (23 LBS / 1000 SQ FT) OF EQUIVALENT, UNLESS SOIL TEST INDICATES OTHERWISE.
3. EVENLY APPLY SEED (SEE TABLE FOR TYPE BASED ON SEASON).
4. COVER SEEDED AREA WITH MULCH. APPLY MULCH TO PROVIDE A MINIMUM OF 75% COVERAGE (1.5-2 TONS PER ACRE OR 90 LBS PER 1000 SQ FT).
5. KEEP SEEDED AREAS ADEQUATELY MOIST.
6. RE-SEED OR OVERSEED AS NECESSARY TO PROVIDE TEMPORARY COVERAGE.

Permanent Seeding - Upstate

| Species | Lbs/Ac | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Bahia Grass (Alone) | 40 | | | | | | | | | | | | |
| Bahia Grass (Mix) | 30 | | | | | | | | | | | | |
| Bermuda Grass (hulled) (Alone) | 8-12 | | | | | | | | | | | | |
| Bermuda Grass (hulled) (Mix) | 4-6 | | | | | | | | | | | | |
| Fescue, Tall (KY31) Alone | 40 | | | | | | | | | | | | |
| Fescue, Tall (KY31) mix | 20 | | | | | | | | | | | | |
| Sericea Lespedeza (Scarified) Alone or Mix (inoculate with EL Inoculant) | 40 | | | | | | | | | | | | |
| Ladino Clover (mix only) Inoculate with AB Inoculant | 2 | | | | | | | | | | | | |
| For Steep Slopes/Cut Slopes | | | | | | | | | | | | | |
| Weeping Lovegrass (Alone) | 4 | | | | | | | | | | | | |
| Weeping Lovegrass (Mix) | 2 | | | | | | | | | | | | |
| Crownvetch (Mix) (Inoculate with Type M Inoculant) | 8-10 | | | | | | | | | | | | |

July 31, 2005 South Carolina DHEC Storm Water Management BMP Handbook Appendix C C-2

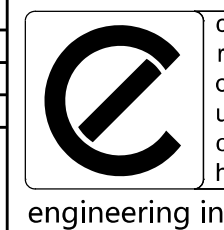
Temporary Seeding - Upstate

| Species | Lbs/ac | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------------------------------------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Browntop Millet (Alone) | 40 | | | | | | | | | | | | |
| Browntop Millet (Mix) | 10 | | | | | | | | | | | | |
| Rye Grain (Alone) | 56 | | | | | | | | | | | | |
| Rye Grain (Mix) | 10 | | | | | | | | | | | | |
| Rye Grass (Alone) | 50 | | | | | | | | | | | | |
| Rye Grass (Mix) | 8 | | | | | | | | | | | | |
| For Steep Slopes/Cut Slopes | | | | | | | | | | | | | |
| Weeping Lovegrass (Alone) | 4 | | | | | | | | | | | | |
| Weeping Lovegrass (Mix) | 2 | | | | | | | | | | | | |

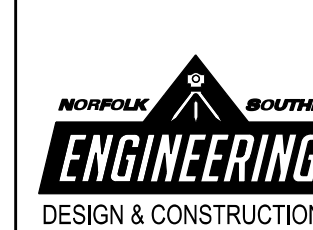
July 31, 2005 South Carolina DHEC Storm Water Management BMP Handbook Appendix C C-1

PHASE 1

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:

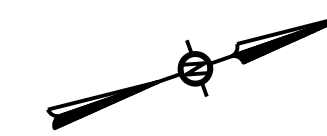


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PHONE NO. (615) 791-0630

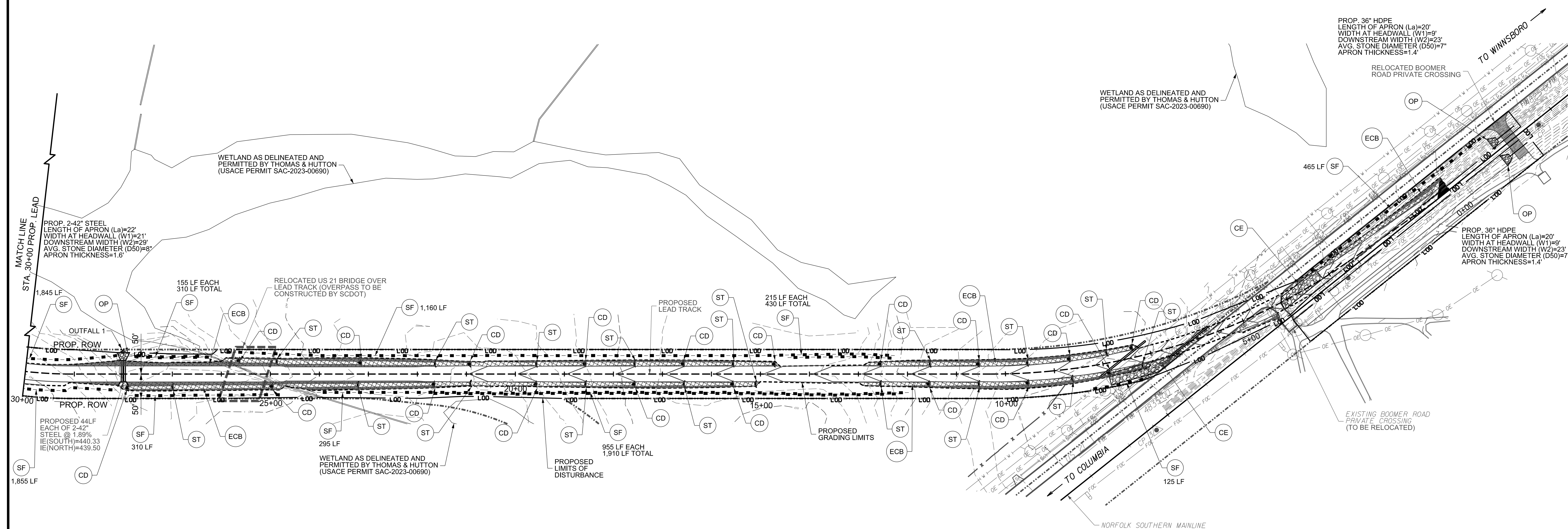


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COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | |
|----------|--|----------------------------|
| REV. BY | DATE | DESCRIPTION |
| LOCATION | | BLYTHEWOOD, SC |
| TITLE | PROPOSED TRACKS TO SERVE PROJECT SCOUT EROSION AND SEDIMENT CONTROL DETAILS | |
| DWN | PTD NO. D3327 | VRN 04825 |
| EQU | FILE NO. TRK1115024 | FILE POST R91.4 |
| CHK | DATE MARCH 5, 2024 | DRAWING NUMBER TD-2023-105 |



*TREE AND BRUSH CLEARING SHALL BE PERFORMED BETWEEN US 21 AND THE NSR MAINLINE FROM RIMER POND ROAD TO RELOCATED BOOMER ROAD.

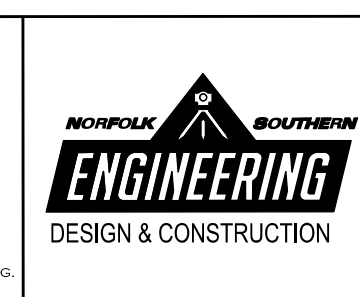


| LEGEND | | | |
|-------------------------|------|-------------------------------|-----------|
| EXISTING MINOR CONTOURS | --- | (SF) SILT FENCE | --- |
| EXISTING MAJOR CONTOURS | ---- | (CE) CONSTRUCTION EXIT | [Pattern] |
| PROPOSED MINOR CONTOURS | --- | (CD) CHECK DAM | [Symbol] |
| PROPOSED MAJOR CONTOURS | ---- | (ST) SEDIMENT TUBE | [Symbol] |
| PROPOSED TRACKS | --- | (OP) OUTLET PROTECTION | [Symbol] |
| LIMITS OF GRADING | --- | (ECB) EROSION CONTROL MATTING | [Pattern] |
| LIMITS OF DISTURBANCE | --- | (IP) INLET PROTECTION | [Symbol] |
| OUTFALLS | * | | |

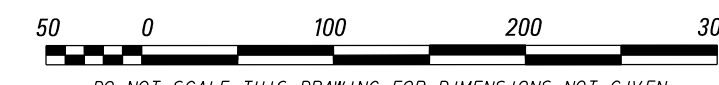
PHASE 1

| | |
|-------------|-------|
| PROJECT NO: | 23050 |
| DATE: | |
| DRAWN BY: | EJU |
| CHECKED BY: | |
| REVISIONS: | |

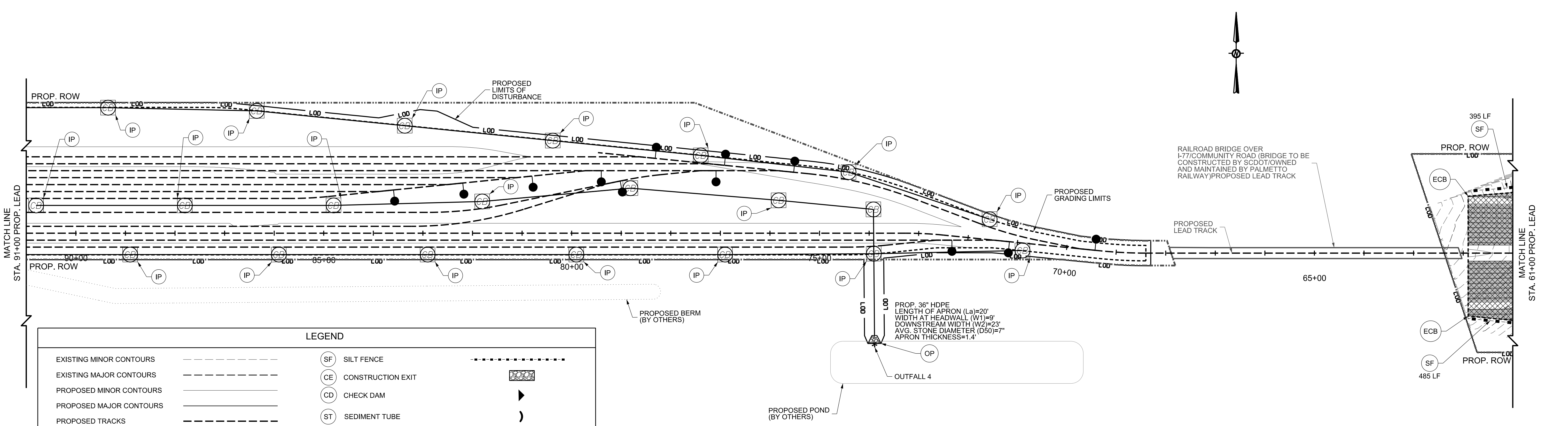
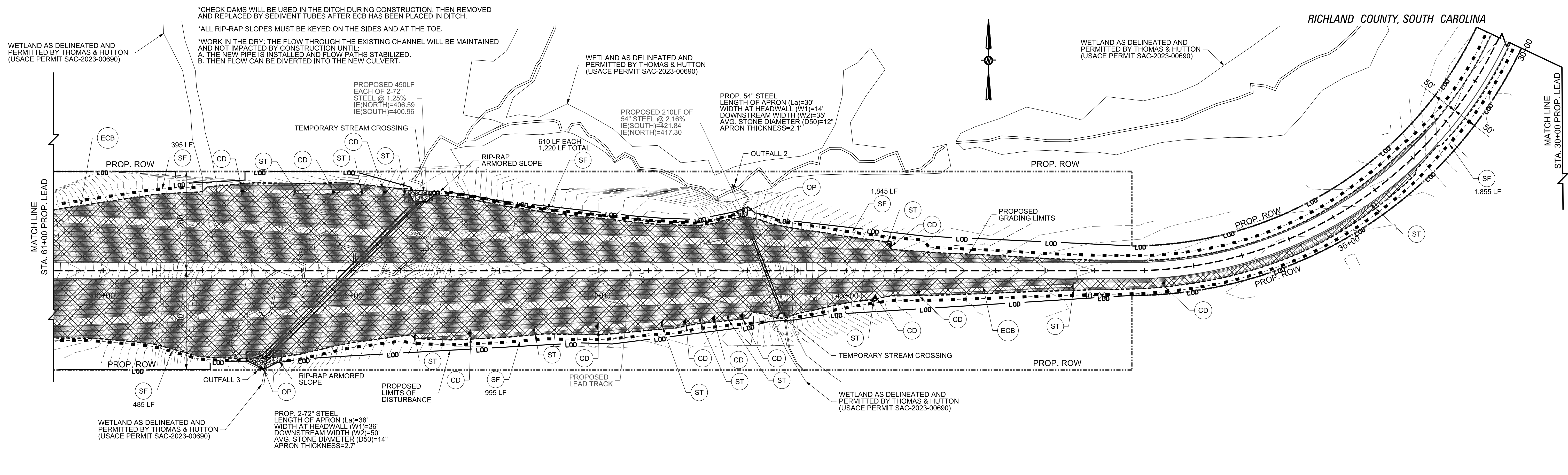
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 BRENTWOOD, TN 37027
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SCALE: 1" = 100'



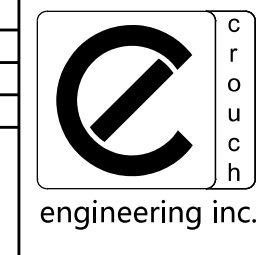
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| REV | DATE | DESCRIPTION |
| R1 | EJU/03/07/24 | ADDED TREE CLEARING NOTE AND UPDATED STEEL PIPE DESIGN |
| LOCATION: BLYTHEWOOD, SC | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PROPOSED LEAD STA 0+00 - 30+00 EROSION AND SEDIMENT CONTROL | | |
| DRN | EJU | FILE NO. D3327 |
| CHK | | DATE MARCH 5, 2024 |
| DRW | EJU | TRK1115024 |
| CHK | | DATE MARCH 5, 2024 |
| DRW | EJU | 04825 |
| CHK | | TD-2023-105-R1 |



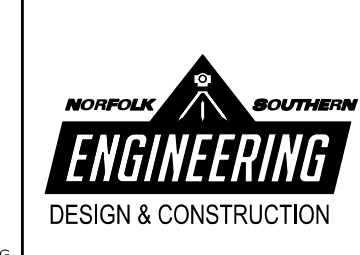
| LEGEND | |
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| EXISTING MINOR CONTOURS | --- |
| EXISTING MAJOR CONTOURS | ---- |
| PROPOSED MINOR CONTOURS | ---- |
| PROPOSED MAJOR CONTOURS | ---- |
| PROPOSED TRACKS | ---- |
| LIMITS OF GRADING | ---- |
| LIMITS OF DISTURBANCE | --- |
| OUTFALLS | * |
| SF SILT FENCE | --- |
| CE CONSTRUCTION EXIT | ▢ |
| CD CHECK DAM | ▴ |
| ST SEDIMENT TUBE |) |
| OP OUTLET PROTECTION | ▢ |
| ECB EROSION CONTROL MATTING | ▤ |
| IP INLET PROTECTION | ▢ |

PHASE 1
PHASE 2

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:

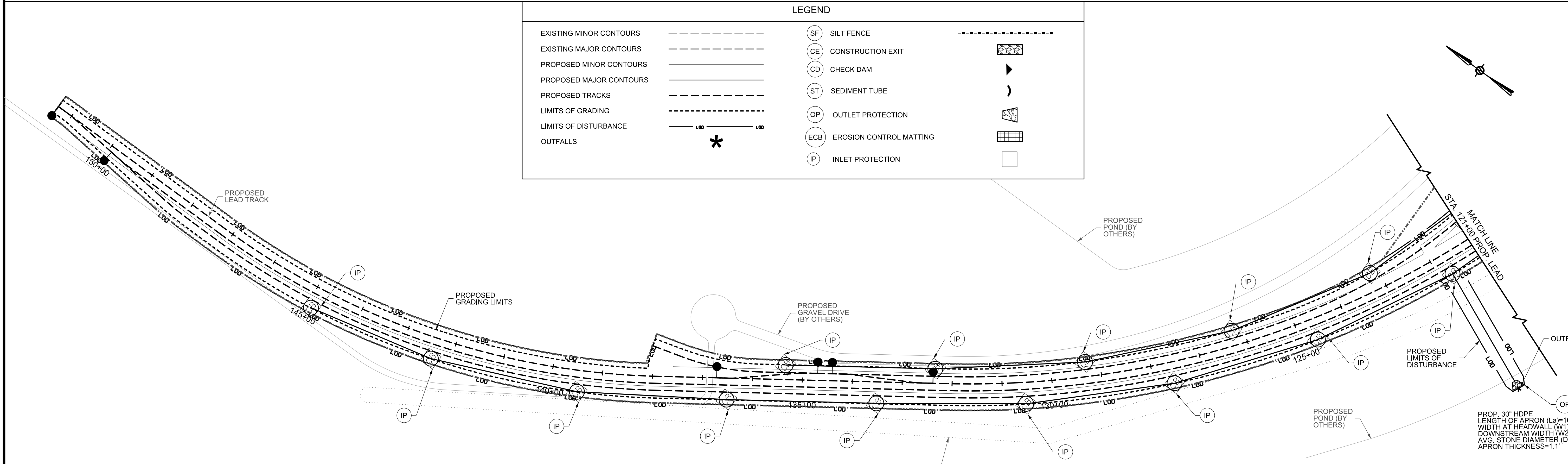
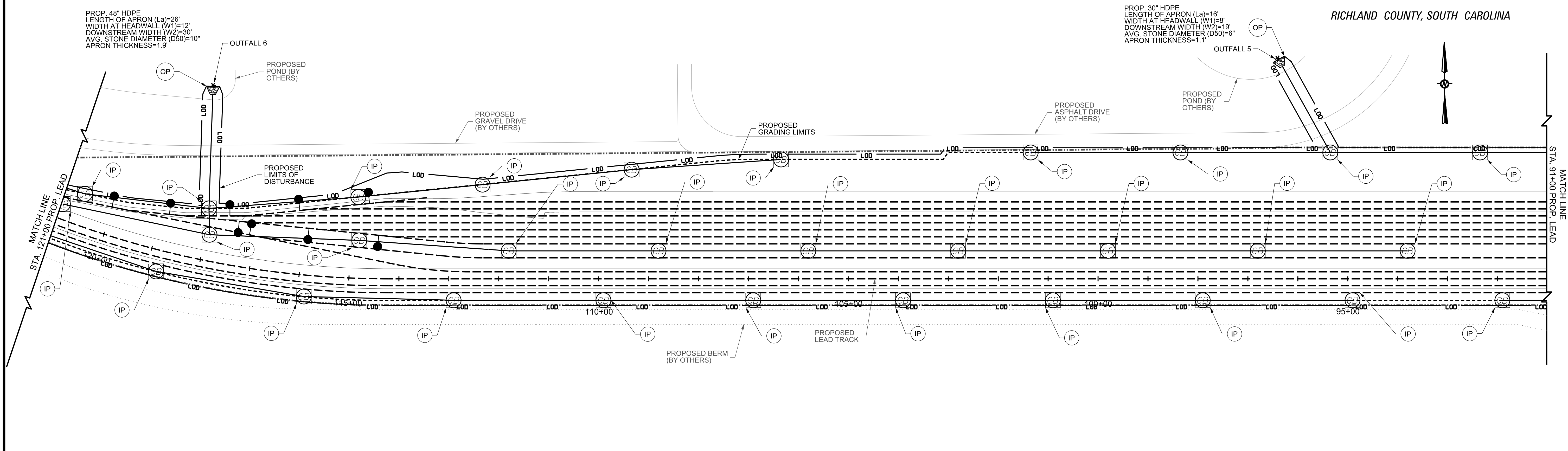


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| | |
|--|--|
| SCALE: 1" = 100' | DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN |
| R1 EVU/03/24 UPDATED STEEL PIPE DESIGN WITH HEADWALL LOCATION: BLYTHEWOOD, SC TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PROPOSED LEAD STA 30+00 - 91+00 EROSION AND SEDIMENT CONTROL | FILE NO.: D3327 SHEET NO.: 04825 DATE: MARCH 5, 2024 DRAWING NUMBER: TD-2023-105-R1 |



LEGEND

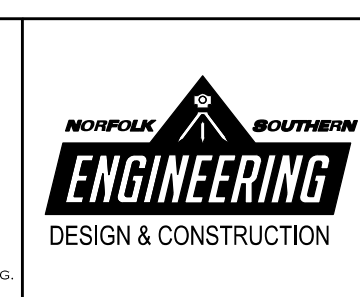
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| EXISTING MINOR CONTOURS | --- | (SF) | SILT FENCE | ----- |
| EXISTING MAJOR CONTOURS | ---- | (CE) | CONSTRUCTION EXIT | [Hatched Box] |
| PROPOSED MINOR CONTOURS | --- | (CD) | CHECK DAM | [Arrow] |
| PROPOSED MAJOR CONTOURS | ---- | (ST) | SEDIMENT TUBE | [Curve] |
| PROPOSED TRACKS | --- | (OP) | OUTLET PROTECTION | [Triangle] |
| LIMITS OF GRADING | ---- | (ECB) | EROSION CONTROL MATTING | [Grid] |
| LIMITS OF DISTURBANCE | --- | (IP) | INLET PROTECTION | [Square] |
| OUTFALLS | * | | | |

SCALE: 1" = 100'
DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:

PHASE 2

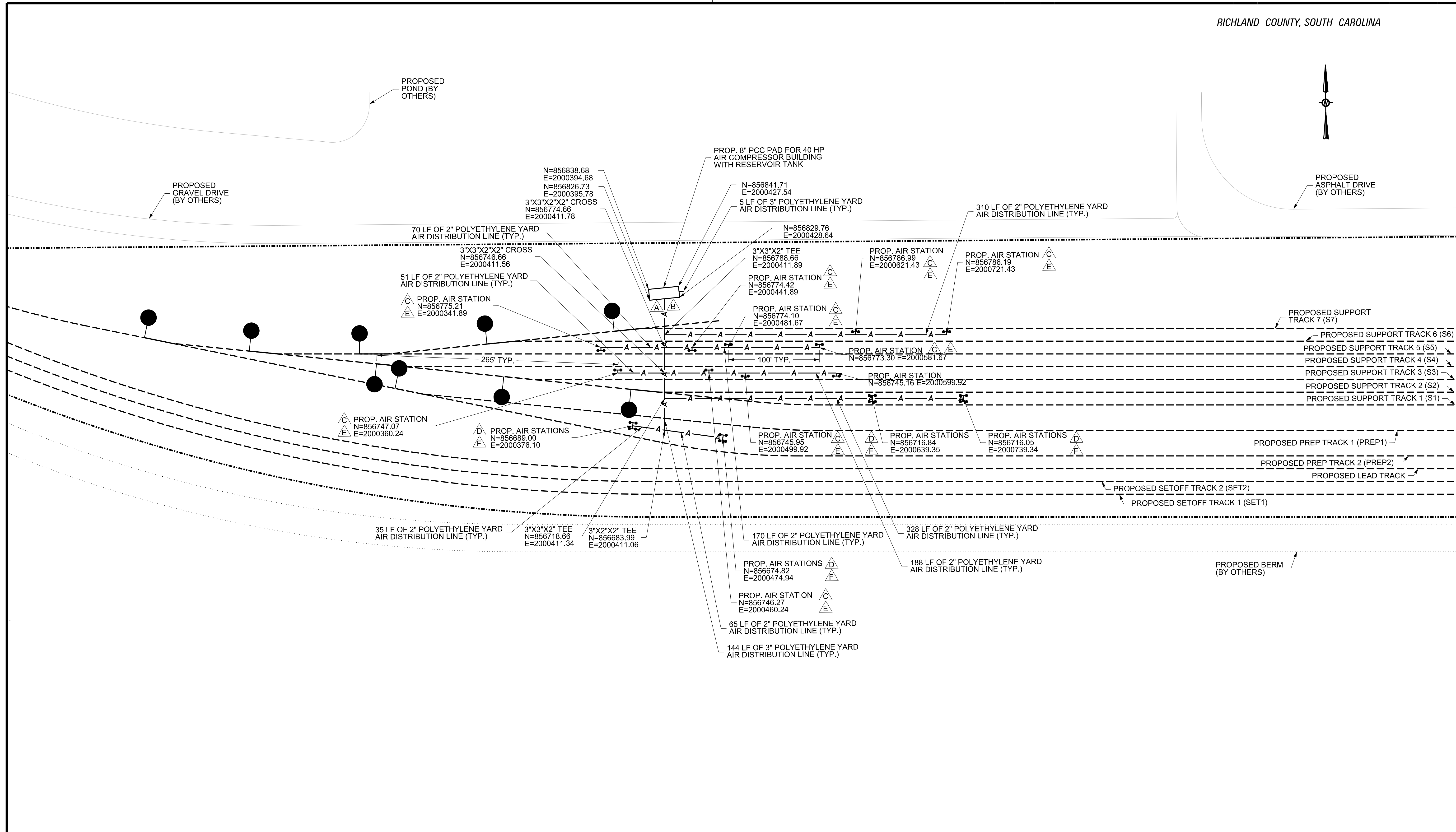
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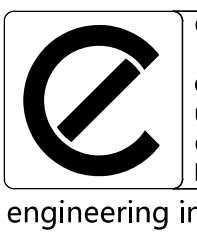
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| REV. BY | DATE | DESCRIPTION |
| EVU | | |
| FILE NO. | TRK1115024 | DRAWING NUMBER |
| DATE | MARCH 5, 2024 | TD-2023-105 |

LOCATION: BLYTHEWOOD, SC
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT
PROPOSED LEAD STA 91+00 - 121+00
EROSION AND SEDIMENT CONTROL

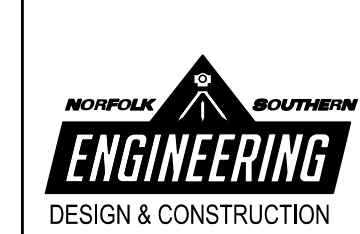


PHASE 2

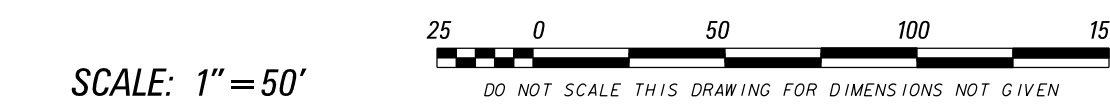
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| PROJECT NO: | 23050 |
| DATE: | |
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| CHECKED BY: | |
| REVISIONS: | |



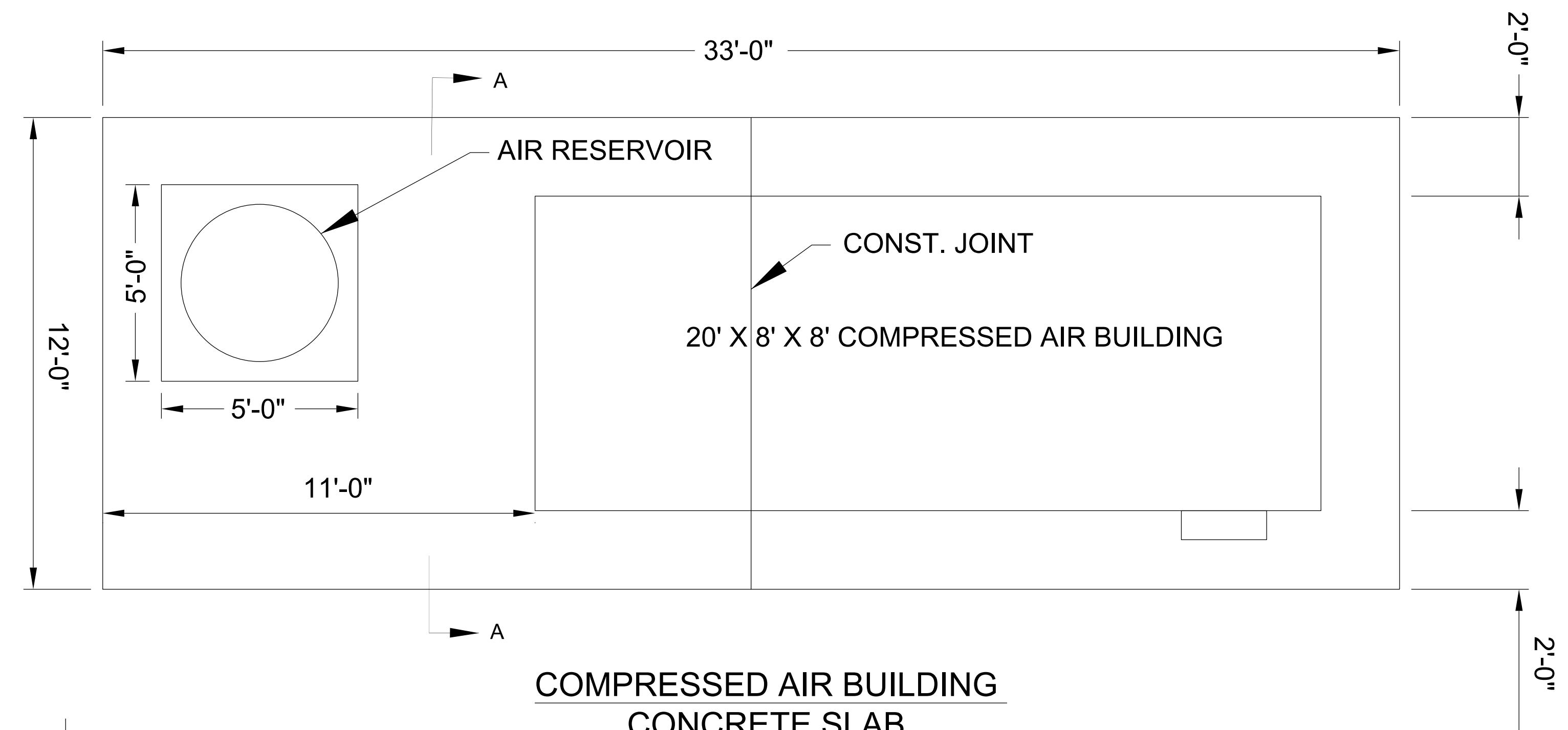
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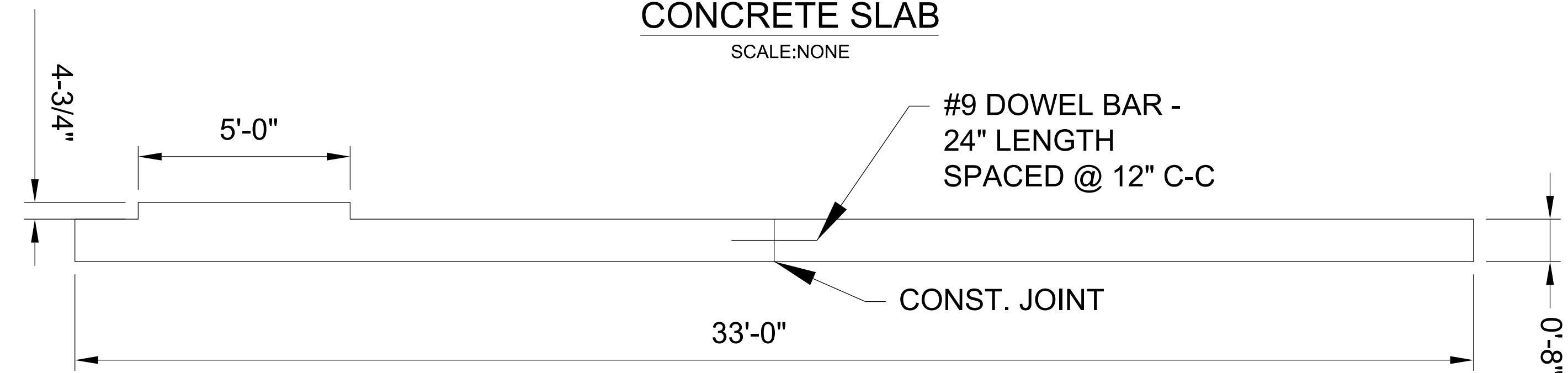


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| REV. BY: | DATE: | DESCRIPTION: |
| | | |
| LOCATION: BLYTHEWOOD, SC | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PROPOSED YARD AIR (WEST) | | |
| DWN: | FILE NO.: | FILE PDS#: |
| EVU | D3327 | R91.4 |
| CHK: | DATE: | DRAWING NUMBER: |
| | MARCH 5, 2024 | TD-2023-105 |



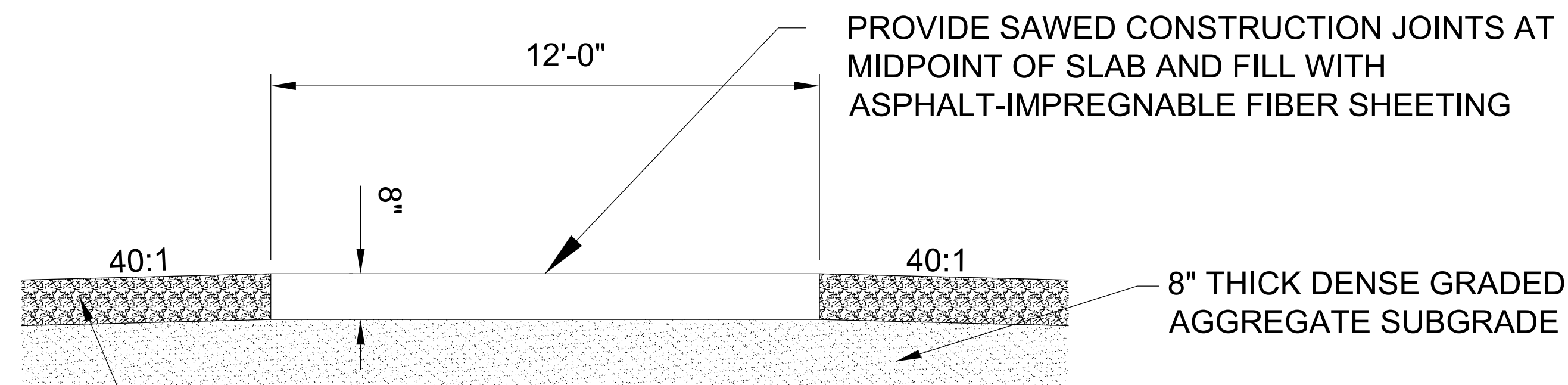
**COMPRESSED AIR BUILDING
CONCRETE SLAB**

SCALE:NONE



**COMPRESSED AIR BUILDING
CONCRETE SLAB PROFILE**

SCALE:NONE

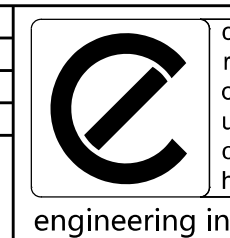


**SECTION A-A COMPRESSED AIR BUILDING
CONCRETE SLAB - 4,000 PSI (TYPE I OR TYPE III)**

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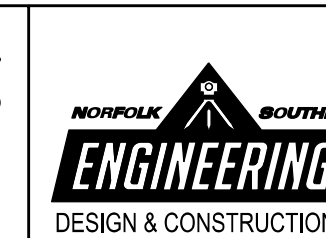
PHASE 2

| | |
|-------------|-------|
| PROJECT NO: | 23050 |
| DATE: | |
| DRAWN BY: | EVU |
| CHECKED BY: | |
| REVISIONS: | |



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FOR PERMISSION, CONTACT HARVEY A. CROUCH



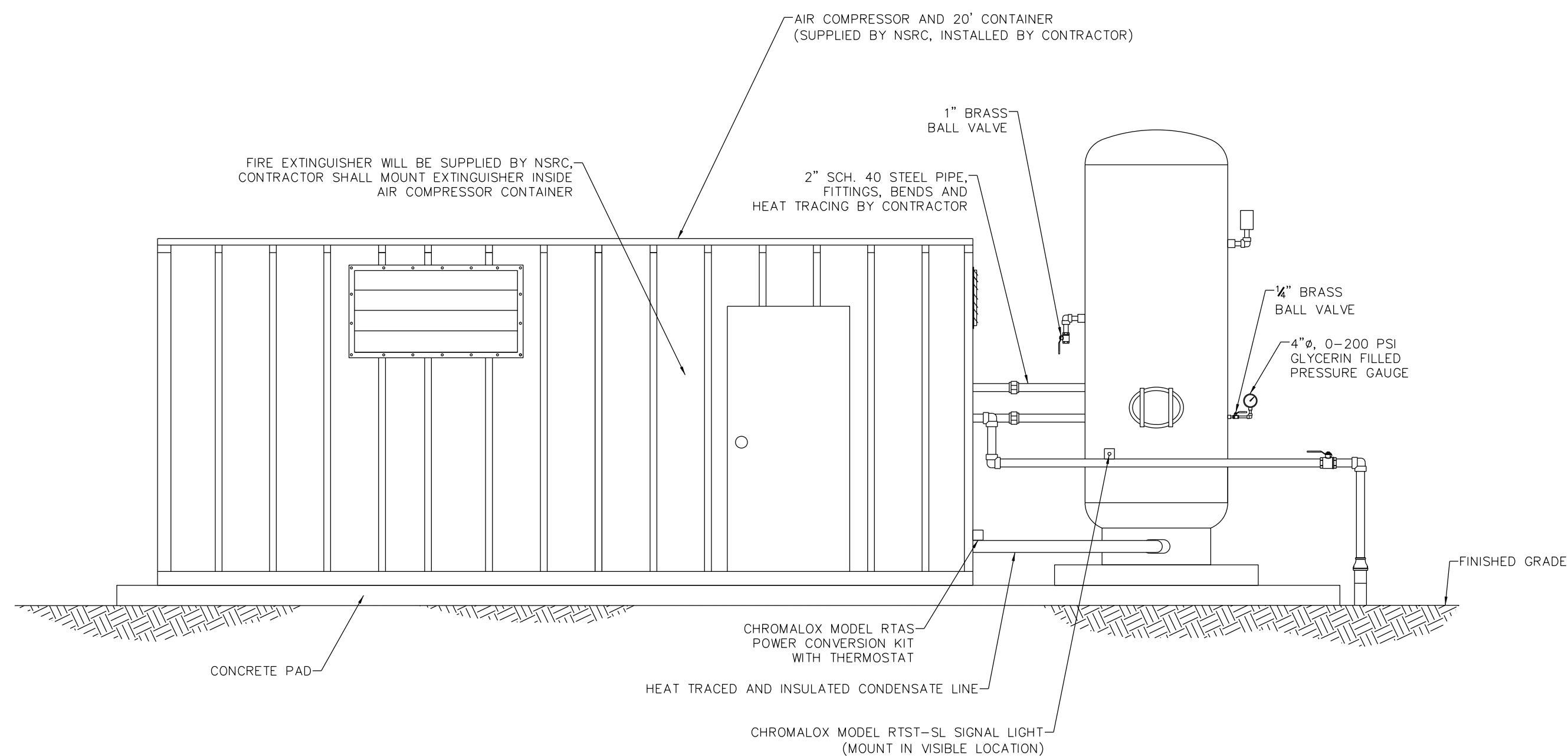
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DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

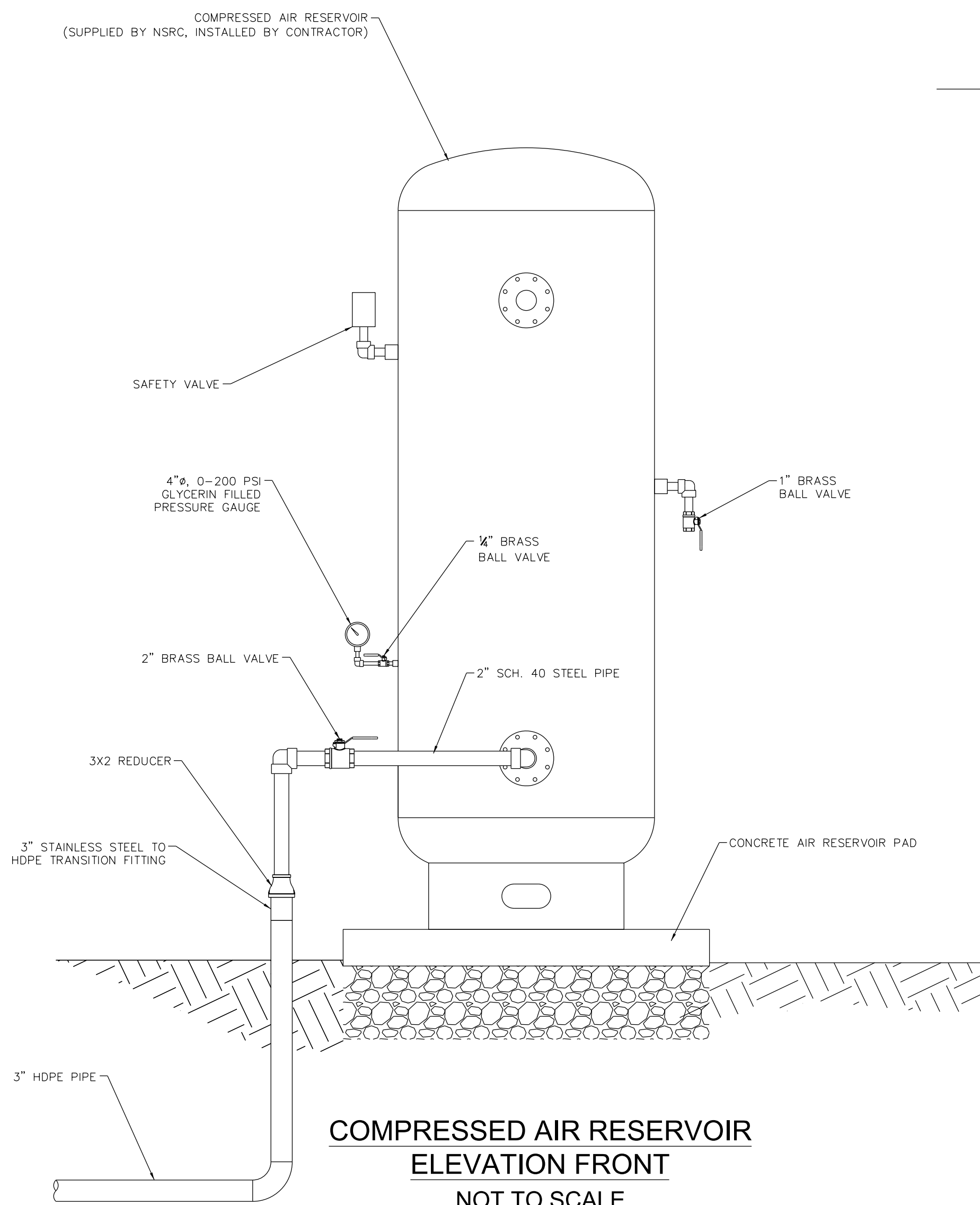


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DATE PRINTED: #DATE# LAST SAVED: #LASTSAVEDDATE#

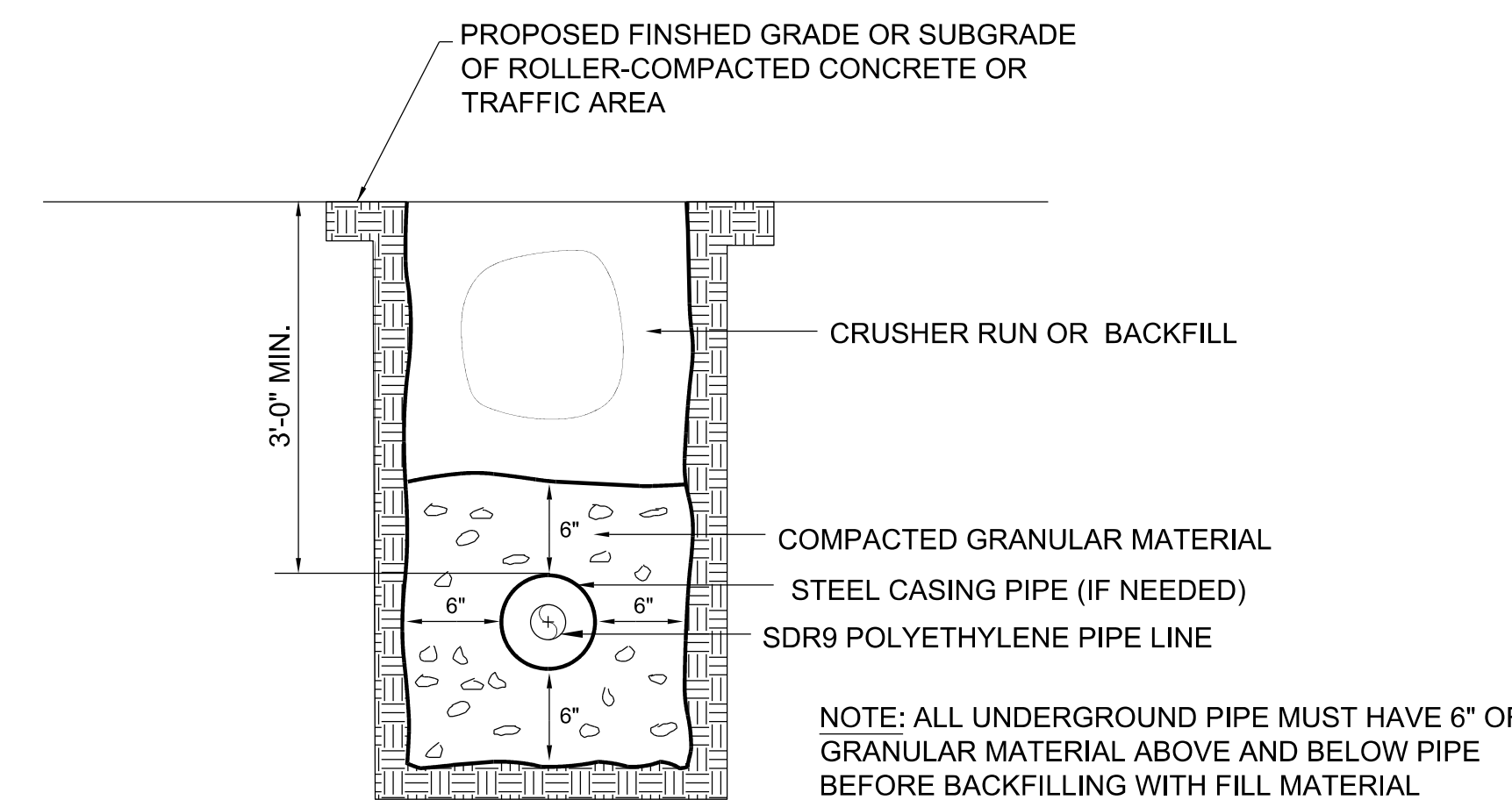
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| REV | BY | DATE | DESCRIPTION |
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| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT AIR SYSTEM DETAILS | | | |
| DWN | EVU | PLOT NO.: D3327 | VRN |
| | | FILE NO.: TRK1115024 | 04825 |
| CHK | | DATE: MARCH 5, 2024 | FILE POST: R91.4 |
| | | | DRAWING NUMBER: TD-2023-105 |



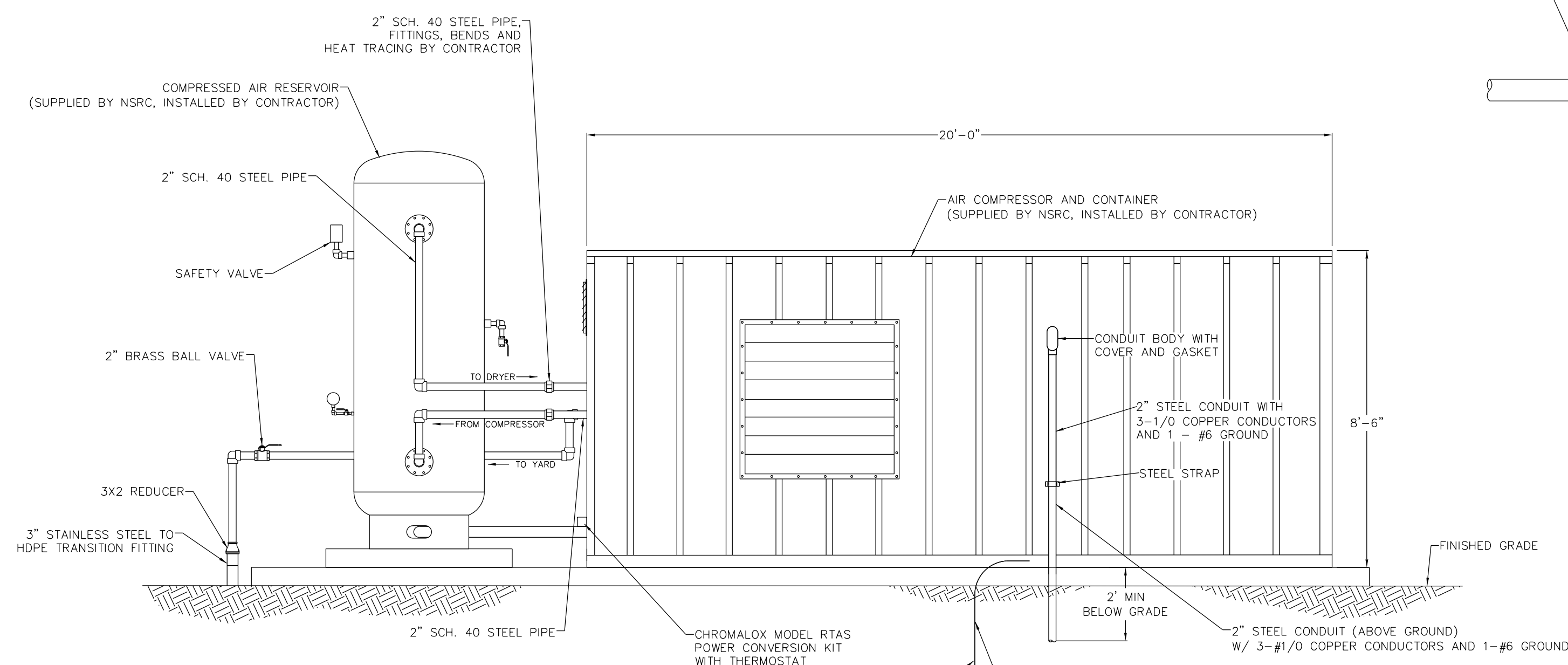
**COMPRESSOR AND RESERVOIR
ELEVATION FRONT
NOT TO SCALE**



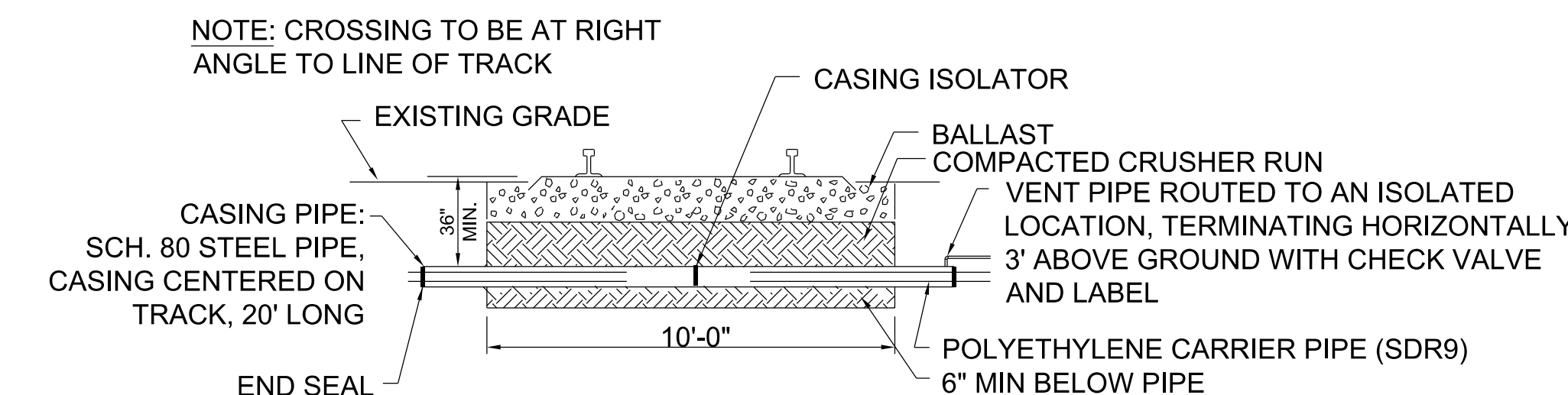
**COMPRESSED AIR RESERVOIR
ELEVATION FRONT
NOT TO SCALE**



**A TYPICAL TRENCH DETAIL
NOT TO SCALE**



**COMPRESSOR AND RESERVOIR
ELEVATION BACK
NOT TO SCALE**

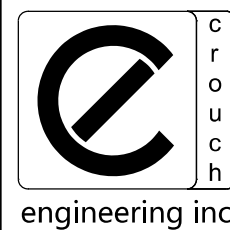


**B TRACK CROSSING
NOT TO SCALE**

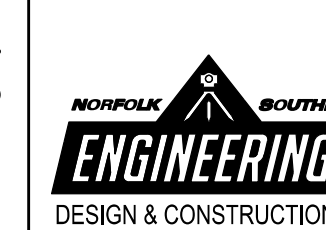
ALL COPPER GROUND WIRING SHALL BE ENCLOSED IN STEEL CONDUIT EXTENDING BELOW GRADE. GROUND WIRE SHALL BE CADWELDED TO GROUND ROD.

COPPER GROUND TO ELECTRICAL DISTRIBUTION PANEL INSIDE COMPRESSOR ENCLOSURE

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



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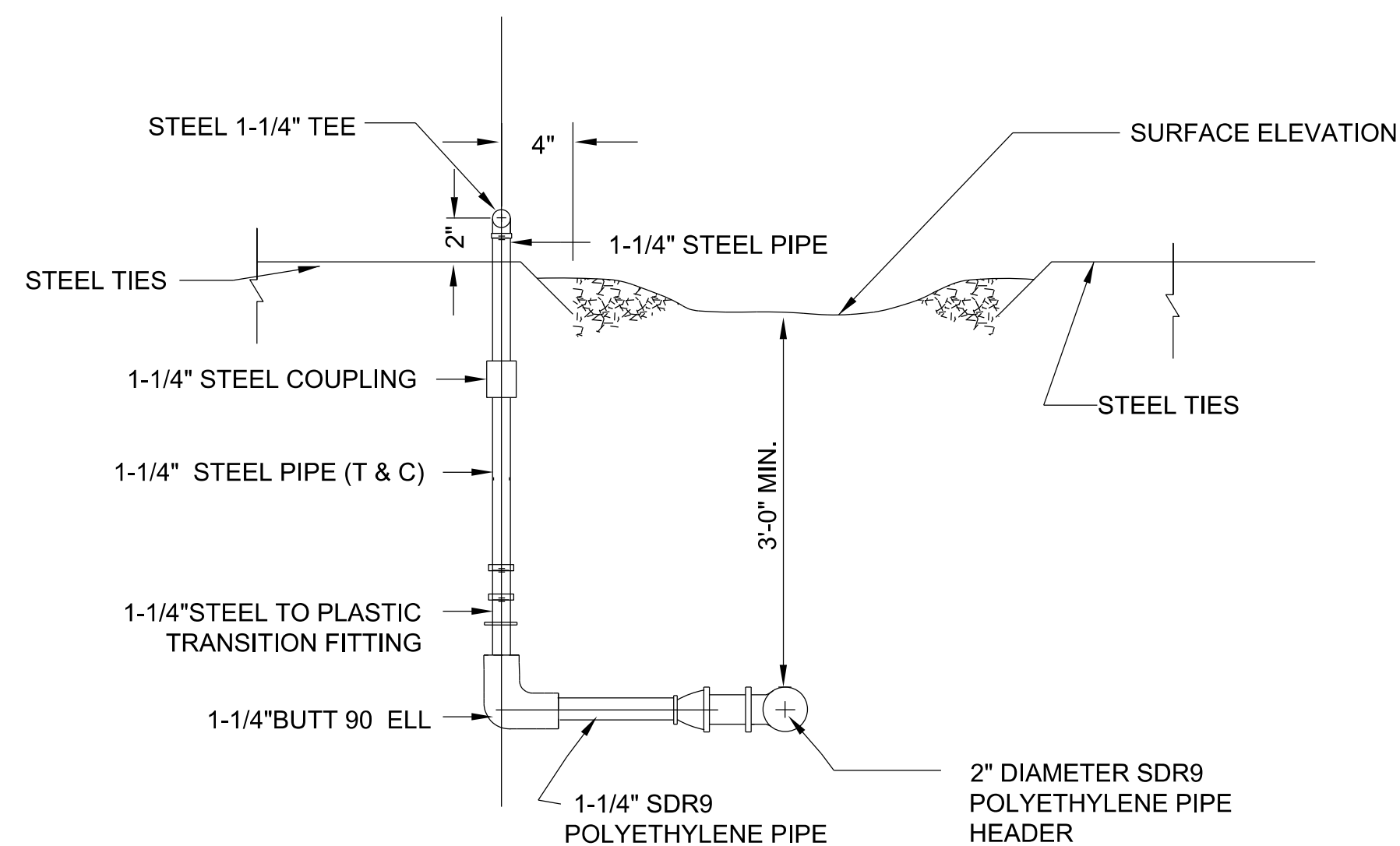
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DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

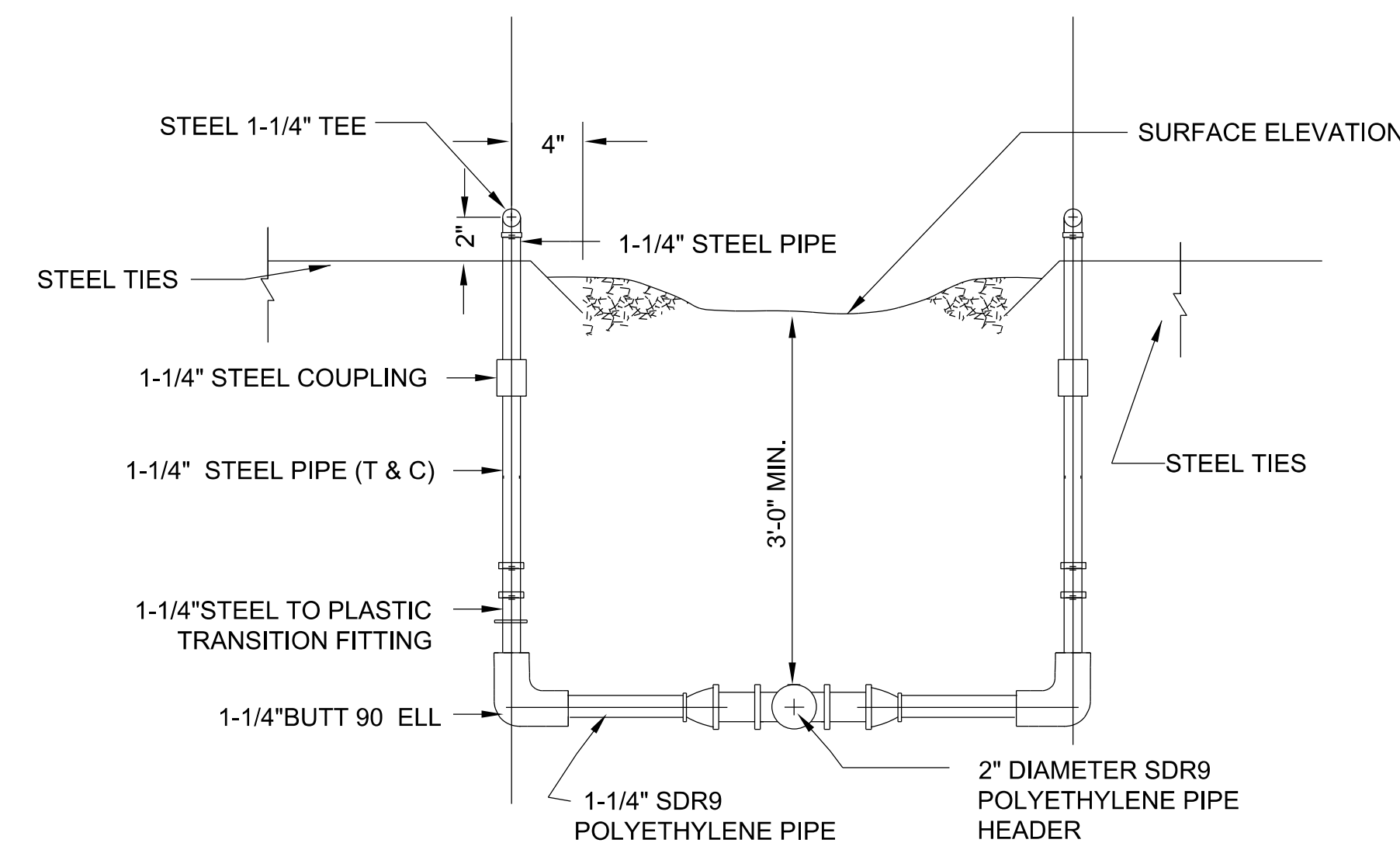


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| REV. BY | DATE | DESCRIPTION |
| LOCATION: BLYTHEWOOD, SC | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT AIR SYSTEM DETAILS | | |
| DWN EVU | PLO NO: D3327 | VRN 04825 |
| DWN EVU | FILE NO: TRK115024 | DRAWING NUMBER |
| CHK | DATE: MARCH 5, 2024 | TD-2023-105 |

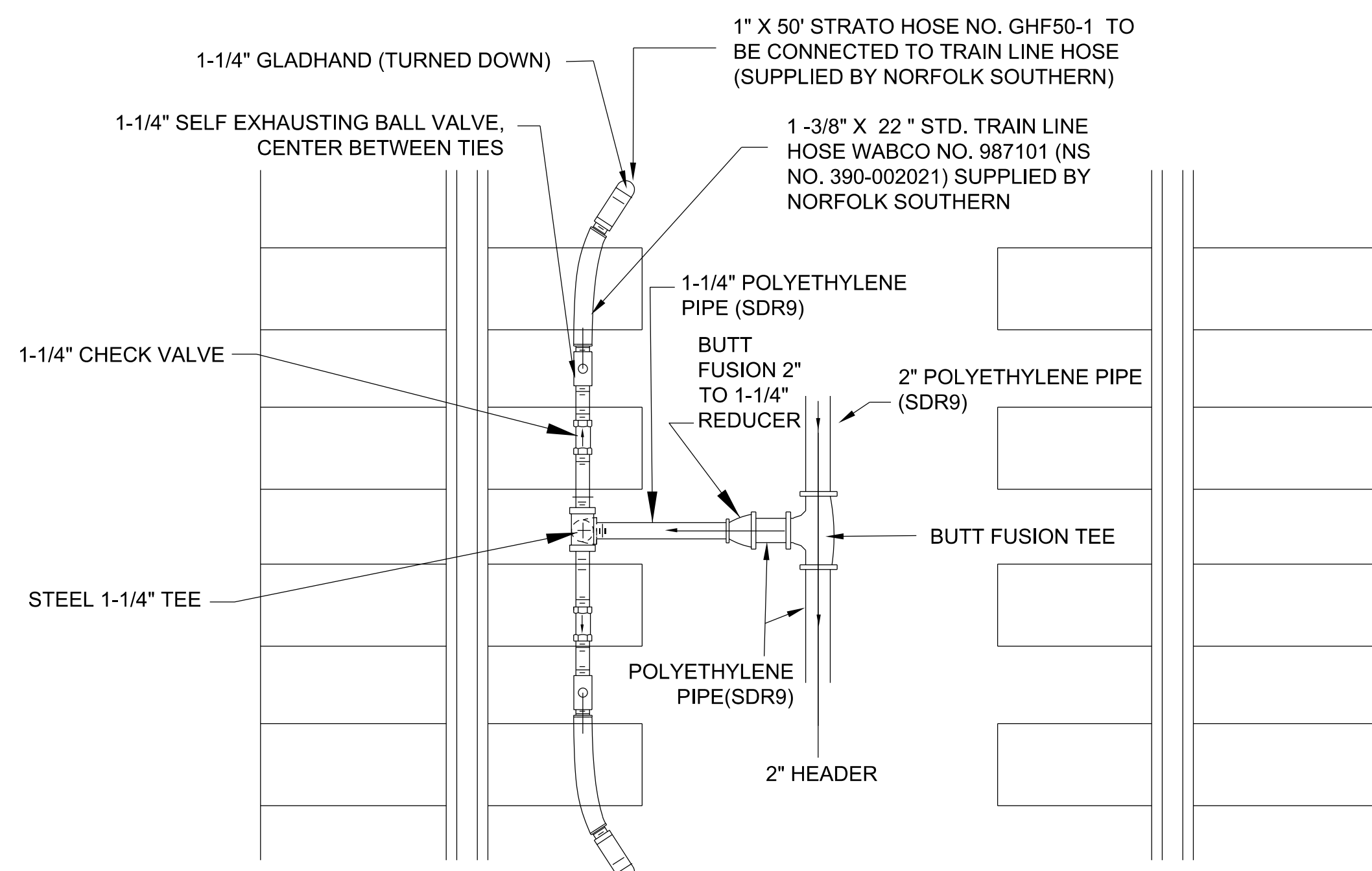
PHASE 2



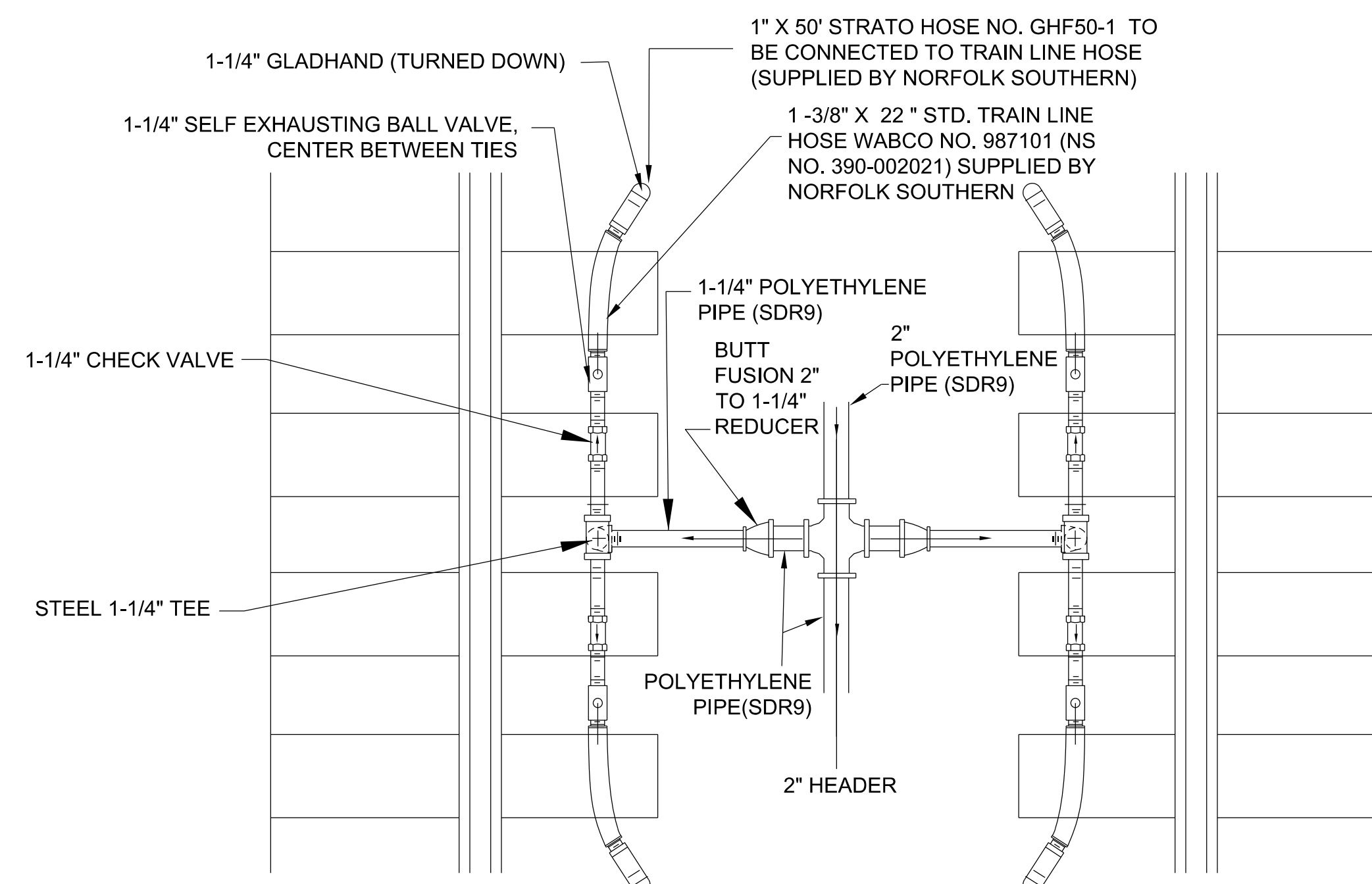
C ELEVATION - OUTLET DETAIL - MAIN PERPENDICULAR OR PARALLEL TO TRACK SIMILAR
NOT TO SCALE



D ELEVATION - DOUBLE OUTLET DETAIL - MAIN PERPENDICULAR OR PARALLEL TO TRACK SIMILAR
NOT TO SCALE



E PLAN - OUTLET DETAIL - MAIN PARALLEL TO TRACKS
NOT TO SCALE

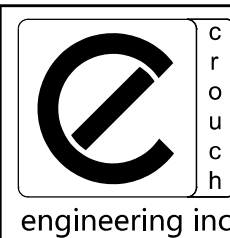


F PLAN - DOUBLE OUTLET DETAIL - MAIN PARALLEL TO TRACKS
NOT TO SCALE

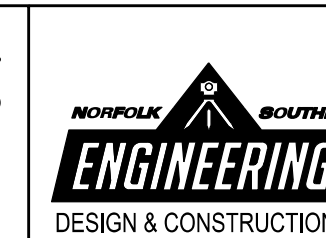
SCALE: NTS

DO NOT SCALE THIS DRAWING FOR DIMENSIONS NOT GIVEN

PROJECT NO: 23050
DATE:
DRAWN BY: EVU
CHECKED BY:
REVISIONS:



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OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | | |
|--|-----|---------------------|----------------|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION: BLYTHEWOOD, SC | | | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT AIR SYSTEM DETAILS | | | |
| DWN | EVU | PLOT NO: D3327 | VRN |
| DWN | EVU | FILE NO: TRK1115024 | DRAWING NUMBER |
| CHK | | DATE: MARCH 5, 2024 | TD-2023-105 |

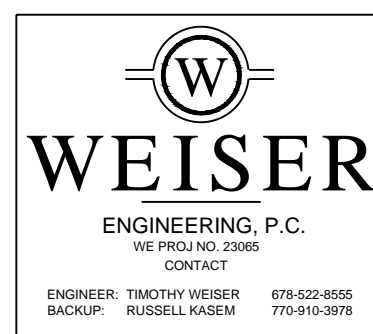
PHASE 2

MODEL NAME: #MODELNAME#
DATE PRINTED: #DATE#
CADD FILE: #FILEL#
LAST SAVED: #LASTSAVEDDATE#

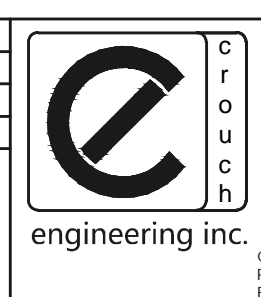
| Sheet List | | | | |
|------------|---------|-------|----------|--|
| Sheet | Drawing | Phase | Revision | Drawing Name |
| 121 | E001 | 2 | | ELECTRICAL PROJECT INFORMATION |
| 122 | E002 | 2 | | ELECTRICAL LEGEND & ABBREVIATION |
| 123 | E003 | 2 | | ELECTRICAL GENERAL INFORMATION |
| 124 | E100 | 2 | | OVERALL ELECTRICAL PROPOSED PLAN |
| 125 | E101 | 2 | | PARTIAL ELECTRICAL PLAN- ZONE 1 |
| 126 | E102 | 2 | | PARTIAL ELECTRICAL PLAN- ZONE 2 |
| 127 | E103 | 2 | | PARTIAL ELECTRICAL PLAN- ZONE 3 |
| 128 | E104 | 2 | | PARTIAL ELECTRICAL PLAN- ZONE 4 |
| 129 | E105 | 2 | | PARTIAL ELECTRICAL PLAN- ZONE 5 |
| 130 | E106 | 2 | | PARTIAL ELECTRICAL PLAN- ZONE 6 |
| 131 | E107 | 2 | | PARTIAL ELECTRICAL PLAN- ZONE 7 |
| 132 | E151 | 2 | | PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 1 |
| 133 | E152 | 2 | | PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 2 |
| 134 | E153 | 2 | | PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 3 |
| 135 | E154 | 2 | | PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 4 |
| 136 | E155 | 2 | | PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 5 |
| 137 | E156 | 2 | | PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 6 |
| 138 | E157 | 2 | | PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 7 |
| 139 | E158 | 1 | | UTILITY DUCTBANK PLAN |
| 140 | E200 | 2 | | ENLARGED ELECTRICAL PROPOSED PLANS |
| 141 | E201 | 2 | | ENLARGED ELECTRICAL PROPOSED PLANS |
| 142 | E202 | 2 | | ENLARGED ELECTRICAL PROPOSED PLANS |
| 143 | E203 | 2 | | ENLARGED ELECTRICAL PROPOSED PLANS |
| 144 | E204 | 2 | | ENLARGED ELECTRICAL PROPOSED PLANS |
| 145 | E300 | 2 | | ELECTRICAL ONE LINE DIAGRAM |
| 146 | E301 | 2 | | ELECTRICAL ONE LINE DIAGRAM- TAP CONFIGURATION |
| 147 | E350 | 2 | | ELECTRICALGROUNDING RISER DIAGRAM |
| 148 | E400 | 2 | | ELECTRICAL SCHEDULES |
| 149 | E401 | 2 | | ELECTRICAL SCHEDULES |
| 150 | E500 | 2 | | ELECTRICAL DETAILS |
| 151 | E501 | 2 | | ELECTRICAL DETAILS |
| 152 | E502 | 2 | | ELECTRICAL DETAILS |
| 153 | E503 | 2 | | ELECTRICAL DETAILS |
| 154 | E504 | 2 | | ELECTRICAL DETAILS |
| 155 | E700 | 2 | | OVERALL PHOTOMETRIC PLAN |
| 156 | E701 | 2 | | PARTIAL PHOTOMETRIC PLAN- ZONE 1 |
| 157 | E702 | 2 | | PARTIAL PHOTOMETRIC PLAN- ZONE 2 |
| 158 | E703 | 2 | | PARTIAL PHOTOMETRIC PLAN- ZONE 3 |
| 159 | E704 | 2 | | PARTIAL PHOTOMETRIC PLAN- ZONE 4 |
| 160 | E705 | 2 | | PARTIAL PHOTOMETRIC PLAN- ZONE 5 |
| 161 | E706 | 2 | | PARTIAL PHOTOMETRIC PLAN- ZONE 6 |
| 162 | E707 | 2 | | PARTIAL PHOTOMETRIC PLAN- ZONE 7 |

GENERAL PROJECT NOTES:

- FURNISH MATERIALS AND LABOR FOR A COMPLETE ELECTRICAL INSTALLATION AS INDICATED ON THESE DRAWINGS. THE INSTALLATION SHALL COMPLY WITH THE LATEST LOCALLY ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA-70), THE LIFE SAFETY CODE (NFPA-101), AND ALL LOCALLY ENFORCED CODES AND ESTABLISHED CONTRACTOR RULES.
- THE ELECTRICAL INSTALLATION IN THE AREAS OF THE FUEL LOAD OUT SHALL COMPLY WITH NFPA 70, NATIONAL ELECTRICAL CODE (NEC) ARTICLES 500, 501 AND 515 REQUIREMENTS FOR HAZARDOUS LOCATIONS. SEAL-OFFS SHALL BE INSTALLED 18" OF THE HAZARDOUS LOCATION AND AT THE SOURCE. SEAL-OFFS SHALL BE PACKED AND PROPERLY SEALED.
- MATERIAL AND EQUIPMENT SHALL BE NEW, WHERE INDUSTRY-RECOGNIZED STANDARDS FOR MATERIAL OR EQUIPMENT EXIST. MATERIAL AND EQUIPMENT SHALL COMPLY WITH SUCH STANDARDS. THESE STANDARDS INCLUDE, BUT ARE NOT LIMITED TO:
 - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
 - INSTITUTE OF CABLE ENGINEERS ASSOCIATION
 - ILLUMINATION ENGINEERING SOCIETY
 - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
 - UNDERWRITERS' LABORATORIES, INC. (EQUIPMENT SHALL BEAR U.L. LABELS WHERE SUCH LABELS ARE AVAILABLE)
- THE ELECTRICAL INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF NFPA 70, THE NATIONAL ELECTRICAL CODE (NEC).
- THE ELECTRICAL INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF NFPA 70E, THE ELECTRICAL SAFETY CODE.
- THE ELECTRICAL INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE (NESC).
- THE ELECTRICAL INSTALLATION AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE NORFOLK SOUTHERN STANDARD ELECTRICAL SPECIFICATIONS FOR MATERIALS & CONSTRUCTION.
- CONDUCTORS FOR BRANCH CIRCUITS SHALL BE COPPER WITH 600V TYPE THWN INSULATION. CONDUCTORS SHALL BE STRANDED FOR SIZES #8 AND LARGER, SOLID FOR SIZES #10 AND SMALLER. BRANCH CIRCUIT CONDUCTORS SHALL BE #12 MINIMUM SIZE. CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE REQUIREMENTS.
- ELECTRICAL CABLE OR CONDUCTORS DAMAGED OR REMOVED FROM RACEWAYS SHALL NOT BE REUSED.
- WORK SHALL BE PERFORMED ON A SCHEDULE AND IN A MANNER AS DESCRIBED HEREIN OR BY OTHER DIVISIONS OR SECTIONS OF THE SPECIFICATIONS, OR AS CALLED FOR BY INSTRUCTIONS TO BIDDERS OR BY NORFOLK SOUTHERN CRITERIA. WHERE INTERRUPTION OF ELECTRICAL POWER TO EXISTING FACILITIES WOULD ADVERSELY AFFECT THE NORMAL OPERATION OF OTHER PORTIONS OF NORFOLK SOUTHERN PROPERTY, THIS WORK SHALL BE DONE AT A TIME OTHER THAN THE NORFOLK SOUTHERN FACILITY NORMAL WORKING HOURS. SCHEDULE SHALL BE SUBMITTED IN WRITING FOR NORFOLK SOUTHERN CONSTRUCTION MANAGER APPROVAL AT LEAST TWO WEEKS IN ADVANCE OF THE PROPOSED POWER INTERRUPTION.
- NOTIFY NORFOLK SOUTHERN CONSTRUCTION MANAGER OF ANY NONFUNCTIONING MATERIAL OR POTENTIALLY UNSAFE CONDITION WITHIN THE EXISTING AND INVOLVED SYSTEMS THAT IS OBSERVED DURING THE CONDUCT OF THE WORK. PROPOSALS FOR THIS WORK SHALL BE BASED UPON EXAMINATION OF THE SITE AND CONDITIONS THEREON AND/OR THEREIN. PROPOSALS SHALL TAKE INTO CONSIDERATION SAID CONDITIONS WHICH MAY AFFECT WORK COVERED BY THIS SPECIFICATION.
- THE RATINGS, LOCATION AND USAGE OF ANY EXISTING MATERIAL (ELECTRICAL CIRCUIT, ETC.) SHOWN BY THE PLANS OR INVOLVED IN THE WORK SHALL BE VERIFIED AT THE SITE.
- WHERE SYSTEMS ARE ADDED TO, NEW MATERIAL SHALL BE OF THE SAME TYPE, STYLE AND MANUFACTURE AS THE EXISTING SYSTEM MATERIAL, WHERE AVAILABLE.
- ELECTRICAL CONDUCTORS SHALL BE COLOR CODED AS REQUIRED BY CODE AND CONSISTENT WITH COLOR CODING FOR EXISTING FACILITY SYSTEMS.
- WORK SHALL BE PERFORMED WITHIN THE ACCESS, PROPRIETY, SECURITY, AND HOUSEKEEPING CONDITIONS SPECIFIED HEREIN OR BY OTHER DIVISIONS OR SECTIONS OF THE SPECIFICATIONS, OR AS CALLED FOR BY INSTRUCTIONS TO BIDDERS OR BY NORFOLK SOUTHERN CRITERIA.
- COORDINATE WITH NORFOLK SOUTHERN CONSTRUCTION MANAGER TO BE MADE AWARE OF ANY HAZARDOUS CONDITION OR MATERIAL THAT MAY EXIST AT THE SITE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE AND UNDERSTAND THE EXTENT OF THE EXISTING ELECTRICAL SERVICE DISTRIBUTION AND BACKFEED AS REQUIRED.
- FIELD LOCATE ALL UNDERGROUND PUBLIC AND NORFOLK SOUTHERN UTILITIES OF ALL TRADES AND GROUNDING SYSTEMS PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OR REWORK OF ANY DAMAGED UTILITIES AND GROUNDING SYSTEMS WITH NOT COST TO NORFOLK SOUTHERN RAILROAD.
- ALL UNDERGROUND CONDUITS DIRECTIONALLY BORED IN AREAS **OTHER** THAN BELOW TRACKS SHALL BE SDR-11, SMOOTH-WALL HDPE TYPE AND SHALL BE DIRECTIONALLY BORED A MINIMUM OF 36" BELOW FINISHED GRADE. UNLESS OTHERWISE ANNOTATED.
- ALL NON-UNDERTRACK UNDERGROUND CONDUITS INSTALLED IN TRENCHES SHALL BE SCHEDULE 80 PVC WITH CARLON TYPE SPACERS INFILLED WITH SAND. COORDINATE DUCT BANKS AND/OR CONCRETE ENCASUREMENT REQUIREMENTS WITH DUCT BANK PROFILE DETAILS.
- ALL UNDERGROUND CONDUITS INSTALLED PERPENDICULAR TO TRACK SHALL BE INSTALLED AT MINIMUM OF 6' BELOW BOTTOM OF TIE. CONDUITS SHALL BE RGS TYPE.
- DIRECTIONAL BORE ONLY WHERE GIVEN PROPER UTILITY CLEARANCE AND AUTHORIZATION.
- ALL CONDUIT AND GROUNDING CONDUCTORS SHALL BE A MINIMUM OF 36" COVER. UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL HAVE A MASTER ELECTRICIAN PROVIDE ALL ELECTRICAL CONNECTIONS, AND TERMINATIONS.
- REFER TO DETAILS FOR UNDERGROUND STRUCTURE NOT LIMITED TO PULLBOX AND MANHOLE REQUIREMENTS.
- COORDINATE ELECTRICAL OUTAGES AND RECONNECTIONS WITH NORFOLK SOUTHERN CONSTRUCTION MANAGER.
- CONFIRM ALL CONDITIONS IN THE FIELD PRIOR TO SUBMISSION OF BID.
- THE CONTRACTOR SHALL MAINTAIN A FULL SET OF ELECTRICAL DRAWINGS ONSITE AND REDLINE DRAWINGS FOR ACCURATE RECORD DRAWING SET.
- PROVIDE BARRIERS AND TRAFFIC RATED STEEL PLATES OVER OPENINGS SUCH AS TRENCHES, BORE PITS, AND PULLBOXES WHEN NOT ACTIVELY WORKING WITHIN THE AREA.
- REQUEST FOR ELECTRICAL OUTAGES A MINIMUM OF 1-WEEK PRIOR TO THE OUTAGE TO THE NORFOLK SOUTHERN RAILROAD PROJECT MANAGER.
- CONTRACTOR SHALL CONTACT AND COORDINATE NEW SERVICE REQUIREMENTS AND SCHEDULING WITH DOMINION.
- CONTRACTOR TO SCHEDULE THE DOMINION PRE-CONSTRUCTION MEETING ON SITE INCLUDING THE NORFOLK SOUTHERN PROJECT MANAGER AND ENGINEER.
- CONTRACTOR TO BE ONSITE DURING DOMINION ENERGIZING.



PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:



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|----------|---|------------------------|----------------------------|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION | BLYTHEWOOD, SC E001 | | |
| TITLE | PROPOSED TRACKS TO SERVE PROJECT SCOUT ELECTRICAL PROJECT INFORMATION - GENERAL NOTES | | |
| DWN | RJK | FILE NO. D3327 | MILE POST 04825 R91.4 |
| CHK | TJW | DATE FEBRUARY 16, 2024 | DRAWING NUMBER TD-2023-105 |

GENERAL NOTES

A-1,3,5

 A-1,3,5. ADJACENT TO ARROW INDICATES HOMERUN OF CIRCUITS 1,3,5 TO PANEL A. MARKS ACROSS RACEWAY RUNS INDICATE THE NUMBER OF #12 AWG CONDUCTORS. UNLESS NOTED NO MARKS INDICATE TWO #12 AWG CONDUCTORS. MULTI-WIRE BRANCH CIRCUITS SHALL BE PROVIDED WITH DEDICATED NEUTRALS PER PHASE. DO NOT SHARE NEUTRAL CONDUCTORS.

NUMERAL AND LOWER CASE LETTER INDICATES CIRCUIT CONNECTION AND SWITCH LEG DESIGNATION RESPECTIVELY. UPPER CASE LETTER INDICATES FIXTURE TYPE.

- NOTES:**
- ALL SYMBOLS INDICATED IN THIS LEGEND MAY NOT BE USED ON THE PLANS.
 - DIMENSIONS INDICATED IN LEGEND ARE TO BOTTOM OF OUTLET OR EQUIPMENT, UNLESS OTHERWISE INDICATED. DIMENSIONS INDICATED ARE TO COMPLY WITH ACCESSIBILITY CODE(S).
 - REFER TO SPECIFICATIONS FOR FINISH COLOR/TYPE OF DEVICES AND DEVICE PLATES; WHERE NOT INDICATED IN SPECIFICATIONS, CONFIRM FINISH REQUIREMENTS WITH ARCHITECT OR OWNER.
 - REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF LIGHTING FIXTURES.

SYMBOL LEGEND - RACEWAY

| | |
|--|--|
| | RACEWAY INSTALLED EXPOSED ON WALLS AND/OR ON CEILING. |
| | RACEWAY INSTALLED CONCEALED IN WALLS AND/OR ABOVE CEILING. |
| | RACEWAY INSTALLED CONCEALED BELOW FLOOR OR SLAB. |
| | DIRECT FLEXIBLE CONNECTION TO EQUIPMENT - PROVIDE RACEWAY 6' MAXIMUM LENGTH WHERE CONCEALED, 18' MAXIMUM LENGTH WHERE EXPOSED. |
| | BELOW GRADE ELECTRICAL RACEWAY |
| | OVERHEAD ELECTRICAL CIRCUIT |
| | BELOW GRADE COMMUNICATION RACEWAY |
| | CABLE TRAY OR LADDER RACK AS DESIGNATED ON DRAWINGS. |

SYMBOL LEGEND - GROUNDING

| | |
|--|---|
| | MASTER GROUND BAR (MGB) OR FLOOR GROUND BAR (FGB) |
| | LIGHTNING PROTECTION AIR TERMINAL |
| | EXOTHERMIC WELD TYPE BOND |
| | MECHANICAL 2-HOLE BARREL LUG BOND |
| | GROUND ROD |
| | GROUND ROD WITH INSPECTION SLEEVE |
| | GROUNDING CONDUCTOR |

SYMBOL LEGEND - POWER

| | |
|--|---|
| | MECHANICAL EQUIPMENT TAG - REFER TO MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE FOR ADDITIONAL INFORMATION AND BRANCH CIRCUIT REQUIREMENTS. |
| | PANELBOARD - FLUSH OR SURFACE MOUNTED, VOLTAGE AS INDICATED IN SCHEDULE. |
| | DISCONNECT SWITCH - RATING/POLES/ENCLOSURE/FUSING AS INDICATED. (EXAMPLE: 30/3/3R/NF) |
| | WEATHER PROOF ENCLOSURE PROVIDED FOR DEVICE OR EQUIPMENT. |
| | DUPLEX RECEPTACLE - 18" A.F.F. OR AT HEIGHT INDICATED. NEMA-5-20R |
| | DOUBLE DUPLEX RECEPTACLE - 18" A.F.F. OR AT HEIGHT INDICATED |
| | DUPLEX 20A GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE- 18" A.F.F. OR AT HEIGHT INDICATED |
| | DOUBLE DUPLEX 20A GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE- 18" A.F.F. OR AT HEIGHT INDICATED |
| | DUPLEX 20A RECEPTACLE - XX" A.F.F. AS NOTED ON PLANS. |
| | SINGLE 20A RECEPTACLE - XX" A.F.F. AS NOTED ON PLANS. |
| | JUNCTION BOX - CEILING/WALL/FLOOR MOUNTED. |
| | CENTER HATCHING INDICATES OUTLETS TO BE INSTALLED ABOVE COUNTER TOPS. INSTALL DEVICES HORIZONTALLY ABOVE COUNTER TOP AND/OR BACKSPASH, OR AS INDICATED ON ARCHITECTURAL DRAWINGS. COORDINATE ALL LOCATIONS WITH ARCHITECTURAL DETAILS AND ELEVATIONS. MAXIMUM OUTLET HEIGHT SHALL BE 46" TO CENTERLINE OF OUTLET PER ADA ADULT OBSTRUCTED REACH REQUIREMENTS. |
| | SPECIAL RECEPTACLE AS NOTED - 18" A.F.F., UNLESS OTHERWISE NOTED |
| | POWER POLE |
| | MOTORIZED DAMPER 120V POWER CONNECTION. DIV 26 TO PROVIDE 4"x4" DEVICE BOX WITH 20A TOGGLE SWITCH FOR LOCAL DISCONNECT AND FLEX CONENCTION TO CONTROL POWER TRANSFORMER SUPPLIED BY DIV 23. PROVIDE 120V CONNECTION FROM NEAREST VAV OR PIU CIRCUIT. |
| | MOTOR - SIZE AS INDICATED |
| | GRAPHIC SYMBOL FOR WALL TO REMAIN, UNLESS OTHERWISE NOTED. |
| | GRAPHIC SYMBOL FOR WALL TO BE DEMOLISHED, UNLESS OTHERWISE NOTED. |
| | INDICATES DEVICE, FIXTURE, OR EQUIPMENT TO BE DEMOLISHED. REMOVE DEVICE, FIXTURE, OR EQUIPMENT AND ASSOCIATED CIRCUITING BACK TO THE POINT OF CONNECTION TO OTHER CIRCUITRY TO REMAIN. |

LINETYPE LEGEND

| | |
|--|--|
| | PROPOSED MEDIUM VOLTAGE - UNDERGROUND DUCT |
| | PROPOSED MEDIUM VOLTAGE - AERIAL CIRCUIT |
| | PROPOSED LOW VOLTAGE ELECTRICAL - UNDERGROUND DUCT |
| | PROPOSED LOW VOLTAGE ELECTRICAL - AERIAL CIRCUIT |
| | PROPOSED COMMUNICATION - UNDERGROUND DUCT |
| | PROPOSED COMMUNICATION - AERIAL CIRCUIT |
| | PROPOSED FIBER - UNDERGROUND DUCT |
| | EXISTING MEDIUM VOLTAGE - UNDERGROUND DUCT |
| | EXISTING MEDIUM VOLTAGE - AERIAL CIRCUIT |
| | EXISTING LOW VOLTAGE ELECTRICAL - UNDERGROUND DUCT |
| | EXISTING LOW VOLTAGE ELECTRICAL - AERIAL CIRCUIT |
| | EXISTING COMMUNICATION - UNDERGROUND DUCT |
| | EXISTING COMMUNICATION - AERIAL CIRCUIT |
| | EXISTING FIBER - UNDERGROUND DUCT |

SYMBOL LEGEND - ONE LINE

| | |
|--|---|
| | DRAWOUT MEDIUM VOLTAGE VACUUM BREAKER AF = AMP FRAME NC/NO = NORMALLY CLOSED / NORMALLY OPEN |
| | ANSI RELAY AND CT ---:5 = CT RATIO ANSI RELAY DEVICE - SEE ANSI DEVICE SCHEDULE |
| | VISIBLE FAULT INDICATOR |
| | LIGHTNING ARRESTOR WITH RATING |
| | FUSED CUTOUT WITH FUSE RATING AND TYPE |
| | DRAWOUT CIRCUIT BREAKER: AT = AMP TRIP AF = AMP FRAME P = POLE AIC = AMPERES INTERRUPTING CAPACITY LSIG: ELECTRONIC TRIP ADJUSTMENTS INCLUDE LONGTIME PICKUP, LONGTIME DELAY, SHORT-TIME PICKUP, SHORT-TIME DELAY, INSTANTANEOUS, GROUND FAULT PICKUP AND DELAY LSIA: ELECTRONIC TRIP ADJUSTMENTS INCLUDE LONGTIME PICKUP, LONGTIME DELAY, SHORT-TIME PICKUP, SHORT-TIME DELAY, INSTANTANEOUS, GROUND FAULT ALARM LSI: SAME AS LSIG, BUT WITHOUT GROUND FAULT FUNCTION |
| | FUSIBLE SWITCH: _/3 = SWITCH SIZE AND POLES _ = FUSE SIZE |
| | CIRCUIT BREAKER: AT = AMP TRIP AF = AMP FRAME P = POLE AIC = AMPERES INTERRUPTING CAPACITY ELECTRONIC LONG-TIME, SHORT-TIME, INSTANTANEOUS, GROUND FAULT REQ. |
| | NORMALLY OPEN CONTACT |
| | NORMALLY CLOSED CONTACT |
| | CONTACTOR COIL |
| | RELAY COIL |
| | TRANSFER SWITCH (AUTOMATIC OR MANUAL PER PLANS) |
| | TRANSFORMER |
| | PANEL WITH MAIN LUGS - SEE PANEL SCHEDULE FOR DETAILS |
| | PANEL WITH MAIN BREAKER - SEE PANEL SCHEDULE FOR DETAILS |
| | MINI-POWER ZONE - PANEL WITH INTEGRAL DRY-TYPE TRANSFORMER WITH PRIMARY AND SECONDARY OVER CURRENT PROTECTION |
| | ELECTRICAL CONNECTION |
| | LUGS |
| | CURRENT TRANSFORMERS |
| | UTILITY COMPANY METER WITH CURRENT TRANSFORMERS |
| | GROUND FAULT RELAY |
| | SHUNT TRIP UNIT |
| | POWER FACTOR METER |
| | AMMETER SWITCH |
| | VOLTMETER SWITCH |
| | POWER QUALITY METER |
| | PHOTOCELL |
| | ELECTRONIC TRIP - LONGTIME, SHORT-TIME, INSTANTANEOUS, GROUND FAULT |
| | FUSED DISCONNECT SWITCH - FRAME RATING/ POLES / NEMA ENCLOSURE |
| | DISCONNECT SWITCH - FRAME RATING/ POLES / NEMA ENCLOSURE |
| | SURGE PROTECTION DEVICE |
| | MANHOLE |
| | PULLBOX |
| | RACEWAY/FEEDER/FIBER OPTIC CABLE TAG |

SYMBOL LEGEND - SHEETS

| | |
|--|--|
| | KEY NOTE |
| | GRAPHIC SCALE GRAPHIC SCALE WITH SCALE INDICATED ON DRAWINGS 1 inch = # feet |
| | NORTH ARROW |
| | CALLOUT LEADER |
| | CONTINUATION |
| | CONDUIT STUB UP |
| | SECTION LEADER WITH TAG |
| | RAIL TURNOUT |
| | OCR PORTAL TRUCK/TRAIN |
| | T-BAR |
| | GATE ARM WITH BOLLARD PROTECTION |
| | GATE KIOSK WITH BOLLARD PROTECTION |

ANSI DEVICE LEGEND

| | |
|------|---|
| (23) | TRANSFORMER WINDING TEMPERATURE CONTROL |
| (25) | SYNCHRONIZING OR SYNCHRONISM-CHECK DEVICE |
| (26) | APPARATUS THERMAL DEVICE |
| (27) | UNDERVOLTAGE RELAY |
| (32) | DIRECTIONAL POWER RELAY |
| (33) | POSITION SWITCH |
| (37) | UNDERCURRENT OR UNDERPOWER RELAY |
| (46) | REVERSE PHASE OR PHASE BALANCE CURRENT RELAY |
| (47) | PHASE-SEQUENCE VOLTAGE RELAY |
| (49) | TRANSFORMER THERMAL RELAY |
| (50) | INSTANTANEOUS OVERCURRENT OR RATE-OF-RISE RELAY |
| (51) | A-C TIME OVERCURRENT RELAY |
| (52) | A-C CIRCUIT BREAKER |
| (55) | POWER FACTOR RELAY |
| (59) | OVERVOLTAGE RELAY |
| (62) | TIME-DELAY STOPPING OR OPENING RELAY |
| (63) | LIQUID OR GAS PRESSURE OR VACUUM RELAY |
| (67) | A-C DIRECTIONAL OVERCURRENT |
| (79) | A-C RECLOSING RELAY |
| (81) | FREQUENCY RELAY |
| (83) | AUTOMATIC SELECTIVE CONTROL OR TRANSFER RELAY |
| (86) | LOCKING-OUT RELAY |
| (87) | DIFFERENTIAL PROTECTIVE RELAY |

O OVER FREQUENCY N NEUTRAL P PHASE
 U UNDER FREQUENCY G GROUND

SYMBOL LEGEND - LIGHTING

| | |
|--|---|
| | POLE MOUNTED LED FIXTURE - REFER TO FIXTURE AND POLE SCHEDULES FOR EXACT QUANTITY |
| | POLE / LIGHT POLE / POLE MOUNTED LIGHT |
| | HIGH-MAST POLE - FIXTURES AS INDICATED |

ELECTRICAL ABBREVIATIONS

| | | | |
|-----------|--|-------|---|
| A | AMMETER, AMPERE, AUTOMATIC, PHASE A | KOMIL | THOUSAND CIRCULAR MILS |
| AC | ALTERNATING CURRENT | KVA | KILOVOLT-AMPERES |
| ACEG | AC EQUIPMENT GROUNDING | KW | KILOWATTS |
| ADMIN | ADMINISTRATION | KWH | KILOWATT-HOURS |
| AIC | AMPERE INTERRUPTING CURRENT | L | LENGTH, LONG |
| AF | AMPERE FRAME | LA | LIGHTNING ARRESTOR |
| AFF | ABOVE FINISH FLOOR | LTG | LIGHTING |
| AFG | ABOVE FINISHED GRADE | LV | LOW VOLTAGE |
| AHU | AIR HANDLING UNIT | MAX | MAXIMUM |
| ANN | ANNUNCIATOR | MAINT | MAINTENANCE |
| AT | AMPERE TRIP | MCB | MAIN CIRCUIT BREAKER |
| ATS | AUTOMATIC TRANSFER SWITCH | MCC | MOTOR CONTROL CENTER |
| AWG | AMERICAN WIRE GAUGE | MCP | MOTOR CIRCUIT PROTECTOR |
| B | PHASE B | MFR | MANUFACTURER |
| BFG | BELOW FINISHED GRADE | MGB | MASTER GROUND BAR |
| BLDG | BUILDING | MH | MANHOLE, METAL HALIDE |
| BKR | BREAKER | MIN | MINIMUM, MINUTE |
| BSTC | BARE STRANDED TINNED COPPER COMMUNICATIONS, CONDUIT, PHASE C | MLO | MAIN LUGS ONLY |
| C | CABINET | MM | MULTIMODE (FIBER OPTIC CABLE) |
| CAB | CABINET | MTD | MOUNTED |
| CB | CIRCUIT BREAKER | MTG | MOUNTING |
| CCTV | CLOSED CIRCUIT TELEVISION | MTR,M | MOTOR |
| CCVE | CLOSED CIRCUIT VIDEO EQUIPMENT | MTS | MANUAL TRANSFER SWITCH |
| CKT | CIRCUIT | MV | MEDIUM VOLTAGE |
| CLG | CEILING | MVA | MEGA VOLT AMPERES |
| CMU | CONCRETE MASONRY UNIT | N,NEU | NEUTRAL |
| COL | COLUMN | NEC | NATIONAL ELECTRICAL CODE |
| COM | COMMUNICATIONS | NC | NORMALLY CLOSED |
| CONTRL | CONTROL | NIC | NOT IN CONTRACT |
| CONTR | CONTRACTOR | NL | NIGHT LIGHT |
| CPT | CONTROL POWER TRANSFORMER | NO | NUMBER, NORMALLY OPEN |
| CR | CONTROL RELAY | NTS | NOT TO SCALE |
| DCTV | CAMERA SECURITY (CCTV) | OD | OUTSIDE DIAMETER |
| CT | CURRENT TRANSFORMER | OPNG | OPENING |
| CTL | CONTROL | OS | OCCUPANCY SENSOR |
| CU | COPPER | OSP | OUTSIDE PLANT |
| D | DEEP, DEPTH | PB | PULLBOX |
| DC | DIRECT CURRENT | P | POLE |
| DEM | DEMOLISH AND REMOVE | PBX | PRIVATE BRANCH EXCHANGE |
| DET | DETAIL | PC | PHOTOELECTRIC CELL |
| DIA | DIAMETER | PDU | POWER DISTRIBUTION UNIT |
| DISC | DISCONNECT | PF | POWER FACTOR |
| DN | DOWN | PH-Ø | PHASE |
| DPST | DOUBLE POLE SINGLE THROW | PIR | PASSIVE INFRARED |
| DR | DOOR | PKG | PACKAGE |
| DTT OR DT | DRY TYPE TRANSFORMER | PNL | PANEL, PANELBOARD |
| DWG | DRAWING | PREP | PREPARATION |
| E | ELECTRICAL, EXPULSION (FUSE) | PROP | PROPOSED |
| EA | EACH | PT | POTENTIAL TRANSFORMER |
| EF | EXHAUST FAN | P/T | PAN/TILT |
| ELEC | ELECTRIC(AL) | P/T/Z | PAN/TILT/ZOOM |
| EMER | EMERGENCY | PQM | POWER QUALITY METER |
| EMT | ELECTRIC METALLIC TUBING | PVC | POLYVINYL CHLORIDE |
| EQUIP | EQUIPMENT | PWR | POWER |
| ETR | EXISTING DEVICE TO REMAIN | QTY | QUANTITY |
| EXIST | EXISTING | R | RADIUS, RISER |
| EPO | EMERGENCY POWER OFF | REC | RECEPTACLE |
| F | FIBER OPTIC CABLE | REF | REFRIGERATOR |
| FA | FIRE ALARM | REL | RELOCATE |
| FAA | FIRE ALARM ANNUNCIATOR | REQD | REQUIRED |
| FACP | FIRE ALARM CONTROL PANEL | REV | REVISED, REVISION |
| FAP | FIRE ALARM PANEL | RF | RADIO FREQUENCY WIRELESS COMMUNICATIONS |
| FDR | FEEDER | RIGS | RIGID GALVANIZED STEEL CONDUIT |
| FI | FAULT INDICATOR | RMS | ROOT MEAN SQUARE |
| FIXT | FIXTURE | SCHED | SCHEDULE |
| FL | FLOODLIGHT | SD | STORM DRAIN |
| FLEX | FLEXIBLE | SECT | SECTION |
| FLR | FLOOR | SHLD | SHIELDED |
| FLUOR | FLUORESCENT | SOV | SOLENOID OPERATED VALVE |
| FIC | FURNISHED IN CONTRACT | SPEC | SPECIFICATION |
| FH | FULL HEIGHT | SPST | SINGLE POLE SINGLE THROW |
| FIN | FINISHED | SQ | SQUARE |
| FLR | FLOOR | ST | SHUNT TRIP |
| FO | FIBER OPTIC | STBY | STAND BY |
| FOIC | FURNISHED BY OWNER INSTALLED BY CONTRACTOR | STD | STANDARD |
| FSCS | FIRE FIGHTER SMOKE CONTROL STATION | SBTC | SOLID BARE TINNED COPPER |
| FSD | FIRE SMOKE DAMPER | SM | SINGLE MODE (FIBER OPTIC CABLE) |
| FT | FEET/FOOT | SST | SUBSTATION TRANSFORMER |
| FU | FUSE | STR | STRAND |
| FUT | FUTURE | SUB | SUBSTATION |
| FVNR | FULL VOLTAGE NON-REVERSING | SW | SWITCH |
| G | GROUND | SWBD | SWITCHBOARD |
| GALV | GALVANIZED | SWGR | SWITCHGEAR |
| GEN | GENERAL, GENERATOR | SYS | SYSTEM |
| GF | GROUND FAULT | T | TIMER |
| GFCI | GROUND FAULT CIRCUIT INTERRUPTER | TB | TERMINAL BLOCK |
| GFI | GROUND FAULT INTERRUPTER | TBR | TO BE RELOCATED |
| GND | GROUND | TEMP | TEMPORARY, TEMPERATURE |
| GPC | GEORGIA POWER COMPANY | TIE | TIE BREAKER |
| GRC | GALVANIZED RIGID CONDUIT | TTB | TELEPHONE TERMINAL BOARD |
| GRS | GALVANIZED RIGID STEEL | TVSS | TRANSIENT VOLTAGE SURGE SUPPRESSION |
| HH | HAND HOLE | TYP | TYPICAL |
| HML | HIGHMAST TOWER | UD | UNDER DRAIN |
| HMT | HIGHMAST TOWER | UL | UNDERWRITERS LABORATORIES |
| HOA | HAND-OFF-AUTO | V | VOLT(S) |
| HORIZ | HORIZONTAL | VFD | VARIABLE FREQUENCY DRIVE |
| HP | HORSE POWER | VFI | VACUUM FAULT INTERRUPTER |
| HZ | HERTZ (CYCLES PER SECOND) | VT | VOLTAGE TRANSFORMER |
| IC | INTERRUPTING CAPACITY (RMS SYMMETRICAL) | W | WATT(S), WIRE, WIDE, WEST, WATER |
| ID | INNERDUCT | W/ | WITH |
| IN | INCH | W/O | WITHOUT |
| INSTR | INSTRUMENT | WHM | WATT HOUR METER |
| J, J-BOX | JUNCTION BOX | WP | WEATHERPROOF, WEATHERPROOF TRANSFORMER |
| KAIC | AMPERE INTERRUPTING CURRENT (THOUSANDS) | XFMR | TRANSFORMER |
| | | Z | IMPEDANCE |

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CROUCH ENGINEERING INC.
 5115 Maryl and Way, STE 225
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NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 DIVISION: OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

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| | | | |
|-----------|-------|----------------|--|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION | | | BLYTHEWOOD, SC |
| TITLE | | | PROPOSED TRACKS TO SERVE PROJECT SCOUT ELECTRICAL LEGEND & ABBREVIATIONS |
| DWN | RJK | FILE NO. | TRK1115024 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| PID | D3327 | MRN | 04825 |
| MILE POST | R91.4 | DRAWING NUMBER | TD-2023-105 |

NEMA RATINGS NON-HAZARDOUS LOCATIONS

| | |
|----------|---|
| NEMA 1 | TYPE 1 ENCLOSURES CONSTRUCTED FOR INDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS AND TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT). |
| NEMA 2 | TYPE 2 ENCLOSURES CONSTRUCTED FOR INDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT); AND TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (DRIPPING AND LIGHT SPLASHING). |
| NEMA 3 | TYPE 3 ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT AND WINDBLOWN DUST); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (RAIN, SLEET, SNOW); AND THAT WILL BE UNDAMAGED BY THE EXTERNAL FORMATION OF ICE ON THE ENCLOSURE. |
| NEMA 3R | TYPE 3R ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (RAIN, SLEET, SNOW); AND THAT WILL BE UNDAMAGED BY THE EXTERNAL FORMATION OF ICE ON THE ENCLOSURE. |
| NEMA 3S | TYPE 3S ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT AND WINDBLOWN DUST); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (RAIN, SLEET, SNOW); AND FOR WHICH THE EXTERNAL MECHANISM(S) REMAIN OPERABLE WHEN ICE LADEN. |
| NEMA 3X | TYPE 3X ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT AND WINDBLOWN DUST); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (RAIN, SLEET, SNOW); THAT PROVIDES AN ADDITIONAL LEVEL OF PROTECTION AGAINST CORROSION AND THAT WILL BE UNDAMAGED BY THE EXTERNAL FORMATION OF ICE ON THE ENCLOSURE. |
| NEMA 3XR | TYPE 3XR ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (RAIN, SLEET, SNOW); THAT WILL BE UNDAMAGED BY THE EXTERNAL FORMATION OF ICE ON THE ENCLOSURE THAT PROVIDES AN ADDITIONAL LEVEL OF PROTECTION AGAINST CORROSION; AND THAT WILL BE UNDAMAGED BY THE EXTERNAL FORMATION OF ICE ON THE ENCLOSURE. |
| NEMA 3SX | TYPE 3SX ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT AND WINDBLOWN DUST); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (RAIN, SLEET, SNOW); THAT PROVIDES AN ADDITIONAL LEVEL OF PROTECTION AGAINST CORROSION; AND FOR WHICH THE EXTERNAL MECHANISM(S) REMAIN OPERABLE WHEN ICE LADEN. |
| NEMA 4 | TYPE 4 ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT AND WINDBLOWN DUST); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (RAIN, SLEET, SNOW, SPLASHING WATER, AND HOSE DIRECTED WATER); AND THAT WILL BE UNDAMAGED BY THE EXTERNAL FORMATION OF ICE ON THE ENCLOSURE. |
| NEMA 4X | TYPE 4X ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (WINDBLOWN DUST); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (RAIN, SLEET, SNOW, SPLASHING WATER, AND HOSE DIRECTED WATER); THAT PROVIDES AN ADDITIONAL LEVEL OF PROTECTION AGAINST CORROSION; AND THAT WILL BE UNDAMAGED BY THE EXTERNAL FORMATION OF ICE ON THE ENCLOSURE. |
| NEMA 5 | TYPE 5 ENCLOSURES CONSTRUCTED FOR INDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT AND SETTLING AIRBORNE DUST, LINT, FIBERS, AND FLYINGS); AND TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (DRIPPING AND LIGHT SPLASHING). |
| NEMA 6 | TYPE 6 ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (HOSE DIRECTED WATER AND THE ENTRY OF WATER DURING OCCASIONAL TEMPORARY SUBMERSION AT A LIMITED DEPTH); AND THAT WILL BE UNDAMAGED BY THE EXTERNAL FORMATION OF ICE ON THE ENCLOSURE. |
| NEMA 6P | TYPE 6P ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (HOSE DIRECTED WATER AND THE ENTRY OF WATER DURING PROLONGED SUBMERSION AT A LIMITED DEPTH); THAT PROVIDES AN ADDITIONAL LEVEL OF PROTECTION AGAINST CORROSION AND THAT WILL BE UNDAMAGED BY THE EXTERNAL FORMATION OF ICE ON THE ENCLOSURE. |
| NEMA 12 | TYPE 12 ENCLOSURES CONSTRUCTED (WITHOUT KNOCKOUTS) FOR INDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT AND CIRCULATING DUST, LINT, FIBERS, AND FLYINGS); AND TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (DRIPPING AND LIGHT SPLASHING). |
| NEMA 12K | TYPE 12K ENCLOSURES CONSTRUCTED (WITH KNOCKOUTS) FOR INDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT AND CIRCULATING DUST, LINT, FIBERS, AND FLYINGS); AND TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (DRIPPING AND LIGHT SPLASHING). |
| NEMA 13 | TYPE 13 ENCLOSURES CONSTRUCTED FOR INDOOR USE TO PROVIDE A DEGREE OF PROTECTION TO PERSONNEL AGAINST ACCESS TO HAZARDOUS PARTS; TO PROVIDE A DEGREE OF PROTECTION OF THE EQUIPMENT INSIDE THE ENCLOSURE AGAINST INGRESS OF SOLID FOREIGN OBJECTS (FALLING DIRT AND CIRCULATING DUST, LINT, FIBERS, AND FLYINGS); TO PROVIDE A DEGREE OF PROTECTION WITH RESPECT TO HARMFUL EFFECTS ON THE EQUIPMENT DUE TO THE INGRESS OF WATER (DRIPPING AND LIGHT SPLASHING); AND TO PROVIDE A DEGREE OF PROTECTION AGAINST THE SPRAYING, SPLASHING, AND SEEPAGE OF OIL AND NON-CORROSIVE COOLANTS. |

NEMA RATINGS HAZARDOUS LOCATIONS

| | |
|---------|--|
| NEMA 7 | TYPE 7 ENCLOSURES CONSTRUCTED FOR INDOOR USE IN HAZARDOUS (CLASSIFIED) LOCATIONS CLASSIFIED AS CLASS I, DIVISION 1, GROUPS A, B, C, OR D AS DEFINED IN NFPA 70. |
| NEMA 8 | TYPE 8 ENCLOSURES CONSTRUCTED FOR EITHER INDOOR OR OUTDOOR USE IN HAZARDOUS (CLASSIFIED) LOCATIONS CLASSIFIED AS CLASS I, DIVISION 1, GROUPS A, B, C, AND D AS DEFINED IN NFPA 70. |
| NEMA 9 | TYPE 9 ENCLOSURES CONSTRUCTED FOR INDOOR USE IN HAZARDOUS (CLASSIFIED) LOCATIONS CLASSIFIED AS CLASS II, DIVISION 1, GROUPS E, F, OR G AS DEFINED IN NFPA 70. |
| NEMA 10 | TYPE 10 ENCLOSURES CONSTRUCTED TO MEET THE REQUIREMENTS OF THE MINE SAFETY AND HEALTH ADMINISTRATION, 30 CFR, PART 18. |

GROUNDING REQUIREMENTS

- ALL CIRCUITS SHALL BE PROVIDED WITH EQUIPMENT GROUNDING CONDUCTOR. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE GREEN IN COLOR AND SIZED AS INDICATED ON PLANS.
- ALL GROUNDING ELECTRODES SHALL BE PERMANENTLY BONDED WITH EXOTHERMIC TYPE BONDS.
- ALL RESISTANCE TO GROUND MEASUREMENTS FOR SEPARATELY PROVIDED ELECTRICAL SYSTEMS SHALL NOT BE GREATER THAN 10 OHMS. PROVIDE SUPPLEMENTARY GROUND RODS OR TRENCH ELECTRODES AS REQUIRED.

ELECTRICAL EQUIPMENT DISTRIBUTION CLASS LIGHTNING ARRESTORS

| SERVICE VOLTAGE LINE TO LINE KV | DISTRIBUTION CLASS ARRESTORS | | | | | |
|---------------------------------|------------------------------|------|------------------------------|------|--------------------------------------|------|
| | SOLIDLY GROUND SYSTEM | | LOW RESISTANCE GROUND SYSTEM | | HIGH RESISTANCE OR UNGROUNDED SYSTEM | |
| | ARRESTER RATINGS KV | | | | | |
| | Nominal | MCOV | Nominal | MCOV | Nominal | MCOV |
| 2.3 | 3 | 2.55 | 3 | 2.55 | 3 | 2.55 |
| 2.4 | 3 | 2.55 | 3 | 2.55 | 6 | 5.1 |
| 3.3 | 3 | 2.55 | 3 | 2.55 | 6 | 5.1 |
| 4 | 3 | 2.55 | 6 | 5.1 | 6 | 5.1 |
| 4.16 | 6 | 5.1 | 6 | 5.1 | 6 | 5.1 |
| 4.76 | 6 | 5.1 | 6 | 5.1 | 9 | 7.65 |
| 4.8 | 6 | 5.1 | 6 | 5.1 | 9 | 7.65 |
| 6.6 | 6 | 5.1 | 6 | 5.1 | 9 | 7.65 |
| 6.9 | 6 | 5.1 | 6 | 5.1 | 9 | 7.65 |
| 7.2 | 6 | 5.1 | 6 | 5.1 | 10 | 8.4 |
| 8.32 | 9 | 7.65 | 9 | 7.65 | 12 | 10.2 |
| 8.4 | 9 | 7.65 | 9 | 7.65 | 12 | 10.2 |
| 11 | 9 | 7.65 | 9 | 7.65 | 15 | 12.7 |
| 11.5 | 9 | 7.65 | 10 | 8.4 | 18 | 15.3 |
| 12 | 10 | 8.4 | 10 | 8.4 | 18 | 15.3 |
| 12.47 | 10 | 8.4 | 12 | 10.2 | 18 | 15.3 |
| 13.2 | 12 | 10.2 | 12 | 10.2 | 18 | 15.3 |
| 13.8 | 12 | 10.2 | 12 | 10.2 | 18 | 15.3 |
| 14.4 | 12 | 10.2 | 12 | 10.2 | 21 | 17 |
| 18 | 15 | 12.7 | 15 | 12.7 | 27 | 22 |
| 20.78 | 18 | 15.3 | 18 | 15.3 | 30 | 24.4 |
| 22 | 18 | 15.3 | 18 | 15.3 | 30 | 24.4 |
| 22.86 | 18 | 15.3 | 21 | 17 | --- | --- |
| 23 | 18 | 15.3 | 21 | 17 | --- | --- |
| 24.94 | 21 | 17 | 24 | 19.5 | --- | --- |
| 25.8 | 21 | 17 | 24 | 19.5 | --- | --- |
| 26.4 | 21 | 17 | 24 | 19.5 | --- | --- |
| 33 | 27 | 22 | 30 | 24.4 | --- | --- |
| 34.5 | 30 | 24.4 | 30 | 24.4 | --- | --- |
| 38 | 30 | 24.4 | --- | --- | --- | --- |

ELECTRICAL AERIAL DISTRIBUTION CLASS LIGHTNING ARRESTORS

| SYSTEM VOLTAGE (KV RMS) | VARISTAR ARRESTORS | | |
|-------------------------|-------------------------------------|---|--------------------------|
| | FOUR-WIRE WYE MULTIGROUNDED NEUTRAL | THREE-WIRE WYE SOLIDLY GROUNDED NEUTRAL | DELTA AND UNGROUNDED WYE |
| | | | |
| 2.4 | 2.54 | --- | --- |
| 4.16Y/2.4 | 4.4Y/2.54 | 3 | 6 |
| 4.16 | 4.4 | --- | 6 |
| 4.8 | 5.08 | --- | 6 |
| 6.9 | 7.26 | --- | 9 |
| 8.32Y/4.8 | 8.8Y/5.08 | 6 | 9 |
| 12.0Y/6.93 | 12.7Y/7.33 | 9 | 12 |
| 12.47Y/7.2 | 13.2Y/7.62 | 9 | 15 |
| 13.2Y/7.62 | 13.97Y/8.07 | 10 | 15 |
| 13.8Y/7.97 | 14.52Y/8.38 | 10 | 15 |
| 13.8 | 14.52 | --- | --- |
| 20.78Y/12.0 | 22Y/12.7 | 15 | 21 |
| 22.86Y/13.2 | 24.2Y/13.87 | 18 | 24 |
| 23 | 24.34 | --- | --- |
| 24.94Y/14.4 | 26.4Y/15.24 | 18 | 27 |
| 27.6Y/15.93 | 29.3Y/16.89 | 21 | 30 |
| 34.5Y/19.92 | 36.5Y/21.08 | 27 | 36 |
| 46Y/26.6 | 48.3Y/28 | 36 | --- |

| SIZE | WIRE AMPACITY TABLE | | |
|--------------|---------------------------------|--|---|
| | TEMPERATURE RATING OF CONDUCTOR | | |
| | 60°C (140°F) | 75°C (167°F) | 90°C (194°F) |
| AWG OR KCMIL | TYPES: TW, UF | TYPES: RHW, THHW, THW, THWN, XHHW, USE, ZW | TYPES: TBS, SA, SIS, FEP, FEPB, MI, RHH, RHW-2, THHN, THHW, THW-2, THWN-2, USE-2, XHH, XHHW |
| | Copper | | |
| 12 AWG | 20 | 25 | 30 |
| 10 AWG | 30 | 35 | 40 |
| 8 AWG | 40 | 50 | 55 |
| 6 AWG | 55 | 65 | 75 |
| 4 AWG | 70 | 85 | 95 |
| 3 AWG | 85 | 100 | 115 |
| 2 AWG | 95 | 115 | 130 |
| 1 AWG | 110 | 130 | 145 |
| 1/0 AWG | 125 | 150 | 170 |
| 2/0 AWG | 145 | 175 | 195 |
| 3/0 AWG | 165 | 200 | 225 |
| 4/0 AWG | 195 | 230 | 260 |
| 250 KCMIL | 215 | 255 | 290 |
| 300 KCMIL | 240 | 285 | 320 |
| 350 KCMIL | 260 | 310 | 350 |
| 400 KCMIL | 280 | 335 | 380 |
| 500 KCMIL | 320 | 380 | 430 |
| 600 KCMIL | 350 | 420 | 475 |
| 700 KCMIL | 385 | 460 | 520 |
| 750 KCMIL | 400 | 475 | 535 |
| 800 KCMIL | 410 | 490 | 555 |
| 900 KCMIL | 435 | 520 | 585 |

NOTE:
1. USE 60°C COLUMN FOR CIRCUITS UP TO 100 AMPERES.
2. USE 75°C COLUMN FOR CIRCUITS 100 AMPERES OR GREATER.
3. REFER TO FEEDER SCHEDULE AND ONE LINE DIAGRAMS FOR ADDITIONAL REQUIREMENTS.

EQUIPMENT GROUNDING CONDUCTOR

| RATING OR SETTING OF AUTOMATIC OVERCURRENT DEVICE IN CIRCUIT AHEAD OF EQUIPMENT, CONDUIT, ETC., NOT EXCEEDING (AMPERES) | SIZE (AWG OR KCMIL) | |
|---|---------------------|---|
| | COPPER WIRE NO. | ALUMINUM OR COPPER-CLAD ALUMINUM WIRE NO. |
| 15 | 14 AWG | 12 AWG |
| 20 | 12 AWG | 10 AWG |
| 30 | 10 AWG | 8 AWG |
| 40 | 10 AWG | 8 AWG |
| 60 | 10 AWG | 8 AWG |
| 100 | 8 AWG | 6 AWG |
| 200 | 6 AWG | 4 AWG |
| 300 | 4 AWG | 2 AWG |
| 400 | 3 AWG | 1 AWG |
| 500 | 2 AWG | 1/0 AWG |
| 600 | 1 AWG | 2/0 AWG |
| 800 | 1/0 AWG | 3/0 AWG |
| 1000 | 2/0 AWG | 4/0 AWG |
| 1200 | 3/0 AWG | 250 KCMIL |
| 1600 | 4/0 AWG | 350 KCMIL |
| 2000 | 250 KCMIL | 400 KCMIL |
| 2500 | 350 KCMIL | 600 KCMIL |
| 3000 | 400 KCMIL | 600 KCMIL |
| 4000 | 500 KCMIL | 800 KCMIL |
| 5000 | 700 KCMIL | 1200 KCMIL |
| 6000 | 800 KCMIL | 1200 KCMIL |

NOTE:
1. REFER TO FEEDER SCHEDULE AND ONE LINE DIAGRAMS FOR EQUIPMENT GROUNDING CONDUCTOR REQUIREMENTS.
2. MV CABLES HAVE 1/3 NEUTRAL TAPE. REFER TO NEC 250.190(C)(2) FOR ADDITIONAL INFORMATION.

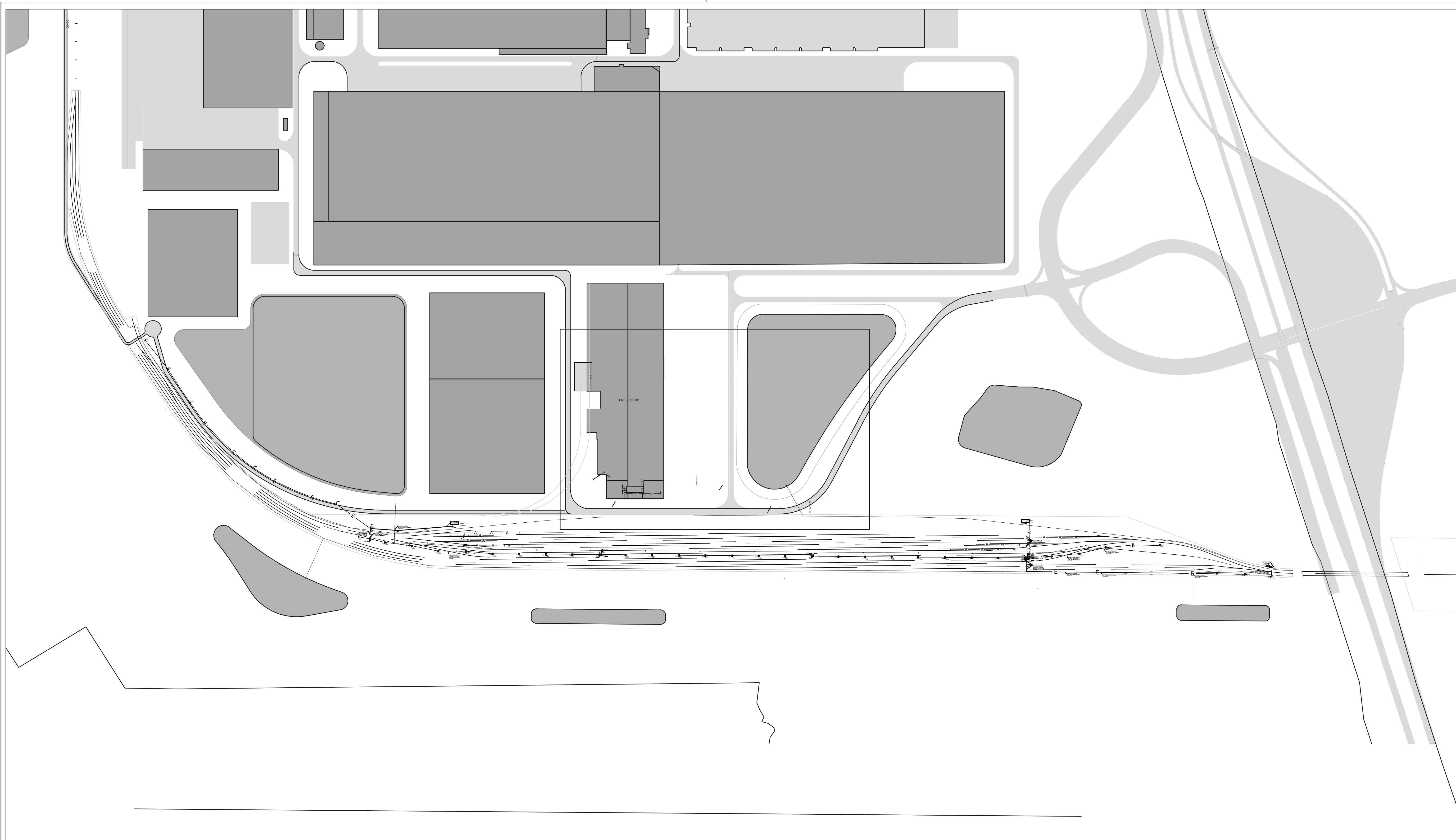
| RACEWAY FILL TABLE | | | | | | | | | | | | | |
|---|----------------|---------------------------|-------|----|-------|------|-----|------|-----|------|-----|-----|------|
| DESIGNER CONSOLIDATION NUMBER OF CONDUCTORS AND FIXTURES WIRES IN EMT, IMC, RIGID AND PVC (SCHEDULE 40 & 80), BASED ON CONDUIT FILL TABLES. | | | | | | | | | | | | | |
| TYPE | CONDUCTOR SIZE | CONDUITS TRADE SIZE (IN.) | | | | | | | | | | | |
| | | 0.5" | 0.75" | 1" | 1.25" | 1.5" | 2" | 2.5" | 3" | 3.5" | 4" | 5" | 6" |
| THHN, THWN, THWN-2 | 14 AWG | 9 | 17 | 28 | 51 | 70 | 118 | 170 | 265 | 358 | 464 | 736 | 1055 |
| | 12 AWG | 6 | 12 | 20 | 37 | 51 | 86 | 124 | 193 | 261 | 338 | 537 | 770 |
| | 10 AWG | 4 | 7 | 13 | 23 | 32 | 54 | 78 | 122 | 164 | 213 | 338 | 485 |
| | 8 AWG | 2 | 4 | 7 | 13 | 18 | 31 | 45 | 70 | 95 | 123 | 195 | 279 |
| | 6 AWG | 1 | 3 | 5 | 9 | 13 | 22 | 32 | 51 | 68 | 89 | 141 | 202 |
| | 4 AWG | 1 | 1 | 3 | 6 | 8 | 14 | 20 | 31 | 42 | 54 | 86 | 134 |
| | 3 AWG | 1 | 1 | 3 | 5 | 7 | 12 | 17 | 26 | 35 | 46 | 73 | 105 |
| | 2 AWG | 1 | 1 | 2 | 4 | 6 | 10 | 14 | 22 | 30 | 39 | 61 | 88 |
| | 1 AWG | 0 | 1 | 1 | 3 | 4 | 7 | 10 | 16 | 22 | 29 | 45 | 65 |
| | 1/0 AWG | 0 | 1 | 1 | 2 | 3 | 6 | 9 | 14 | 18 | 24 | 38 | 55 |
| | 2/0 AWG | 0 | 1 | 1 | 1 | 3 | 5 | 7 | 11 | 15 | 20 | 32 | 46 |
| | 3/0 AWG | 0 | 1 | 1 | 1 | 2 | 4 | 6 | 9 | 13 | 17 | 26 | 38 |
| | 4/0 AWG | 0 | 0 | 1 | 1 | 1 | 3 | 5 | 8 | 10 | 14 | 22 | 31 |
| | 250 KCMIL | 0 | 0 | 1 | 1 | 1 | 3 | 4 | 6 | 8 | 11 | 18 | 25 |
| | 300 KCMIL | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 5 | 7 | 9 | 15 | 22 |
| | 350 KCMIL | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 5 | 6 | 8 | 13 | 19 |
| | 400 KCMIL | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 4 | 5 | 7 | 12 | 17 |
| | 500 KCMIL | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 6 | 10 | 14 |
| | 600 KCMIL | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 3 | 5 | 6 | 12 |
| | 700 KCMIL | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 4 | 7 | 10 |
| | 750 KCMIL | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 4 | 7 | 9 |
| | 800 KCMIL | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 4 | 6 | 9 |
| | 900 KCMIL | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 3 | 6 | 8 |
| | 1000 KCMIL | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 5 | 7 |

GROUNDING ELECTRODE TABLE

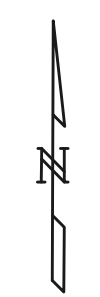
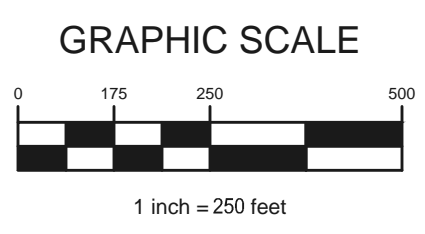
| GROUNDING ELECTRODE CONDUCTOR FOR ALTERNATING-CURRENT SYSTEMS | | | |
|--|-----------------------------------|---------------------------------------|----------------------------------|
| SIZE OF LARGEST UNGROUNDED SERVICE-ENTRANCE CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS | | SIZE OF GROUNDING ELECTRODE CONDUCTOR | |
| COPPER | ALUMINUM OR COPPER-CLAD ALUMINUM | COPPER | ALUMINUM OR COPPER-CLAD ALUMINUM |
| 2 AWG OR SMALLER | 1/0 AWG OR SMALLER | 8 AWG | 6 AWG |
| 1 AWG OR 1/0 AWG | 2/0 AWG OR 3/0 AWG | 6 AWG | 4 AWG |
| 2/0 AWG OR 3/0 AWG | 4/0 AWG OR 250 KCMIL | 4 AWG | 2 AWG |
| OVER 3/0 AWG THROUGH 350 KCMIL | OVER 250 KCMIL THROUGH 500 KCMIL | 2 AWG | 1/0 AWG |
| OVER 350 KCMIL THROUGH 600 KCMIL | OVER 500 KCMIL THROUGH 900 KCMIL | 1/0 AWG | 3/0 AWG |
| OVER 600 KCMIL THROUGH 1100 KCMIL | OVER 900 KCMIL THROUGH 1750 KCMIL | 2/0 AWG | 4/0 AWG |
| OVER 1100 KCMIL | OVER 1750 KCMIL | 3/0 AWG | 250 KCMIL |

K & T FUSES FOR POLE MOUNTED XFMR

| KVA | RATED LINE VOLTAGE (KV) | | | | | | | | | | |
|-----|-------------------------|------|-----|-----|------|----|------|------|------|------|--|
| | 2.4 | 4.16 | 4.8 | 7.2 | 7.62 | 12 | 13.2 | 13.8 | 14.4 | 22.9 | |
| 10 | 6 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | |
| 15 | 8 | 6 | 6 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | |
| 25 | | | | | | | | | | | |



1 OVERALL ELECTRICAL PROPOSED PLAN
E100 SCALE: 1"=250'



PHASE 2

WEISER
ENGINEERING, P.C.
WE PROJ NO: 23065
CONTACT
ENGINEER: TIMOTHY WEISER 678-622-8555
BACKUP: RUSSELL KASEM 770-910-3978

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

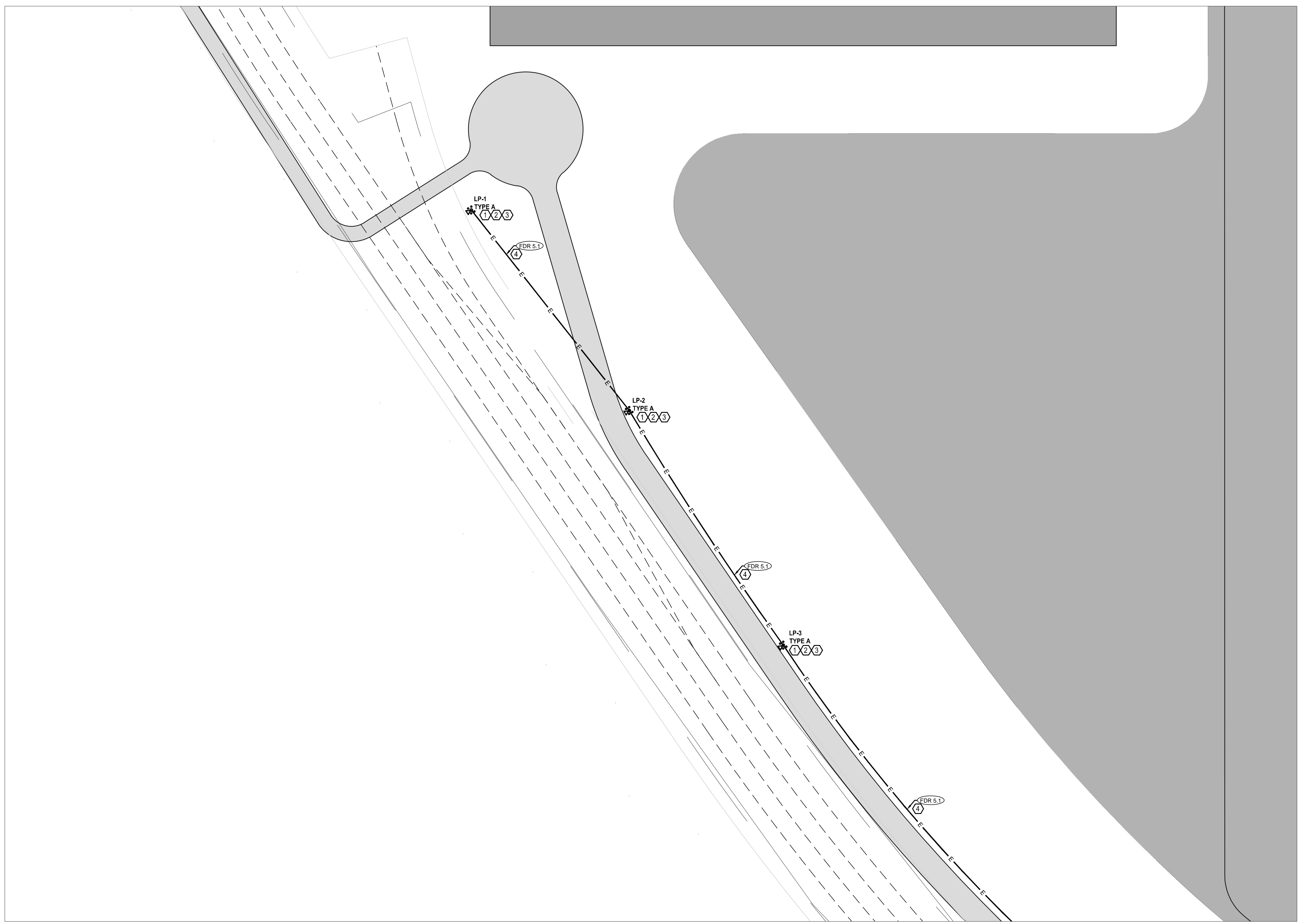
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5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
OWNING COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E100 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT OVERALL ELECTRICAL PROPOSED PLAN |
| DWN | RJK | PID No. D3327 | WRN 04825 MILE POST R91.4 |
| DWN | RJK | FILE No. TRK1115024 | DRAWING NUMBER |
| CHK | TJW | DATE FEBRUARY 16, 2024 | TD-2023-105 |

MODEL NAME: \$MODELNAME\$ CADD FILE: \$FILEL\$
DATE PRINTED: \$DATE\$ LAST SAVED: \$LASTSAVEDDATE\$

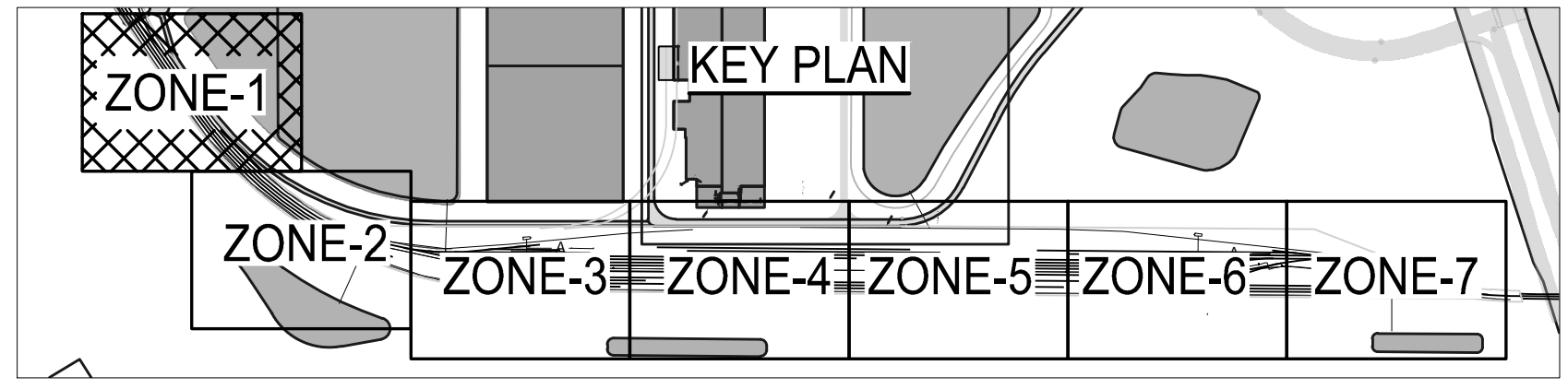
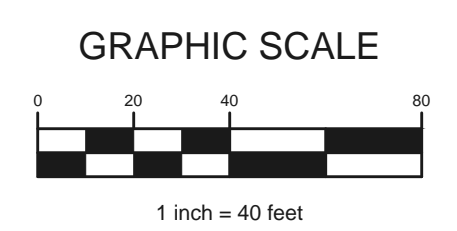


GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF TIE. RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.

KEY NOTES:

- ① REFERENCE POLE DETAILS ON E501 FOR ADDITIONAL REQUIREMENTS ON POLE TYPE INDICATED.
- ② PROVIDE (QTY OF 4) 12" DIAMETER PROTECTIVE BOLLARDS. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.
- ③ AREA LIGHT FIXTURE CONTROLLED BY INTEGRAL PHOTOCCELL. CIRCUIT FEEDING FIXTURE SHALL BE UNSWITCHED.
- ④ CONDUIT TO BE INSTALLED 3'-0" OFF EDGE OF ROADWAY.



1 PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 1
E101 SCALE: 1"= 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
678-622-8555
770-910-3978

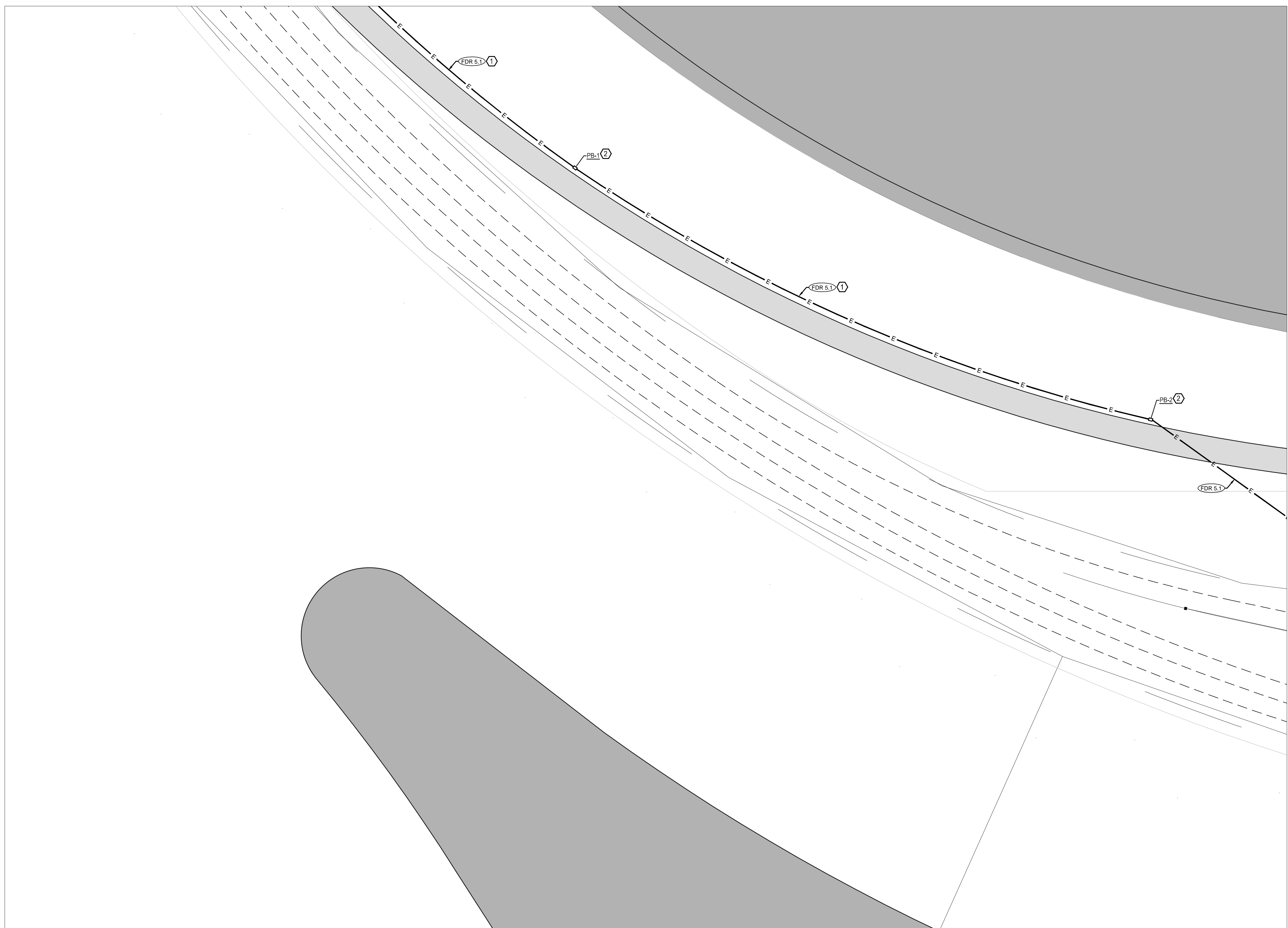
PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW

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PHONE NO. (615) 791-0630

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | | |
|--|-----|------------------------|----------------------------|
| REV | BY | DATE | DESCRIPTION |
| | | | BLYTHEWOOD, SC |
| LOCATION | | | E101 |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 1 | | | |
| DRN | RJK | PRJ No. D3327 | MILE POST 04825 |
| DRN | RJK | FILE No. TRK1115024 | R91.4 |
| CHK | TJW | DATE FEBRUARY 16, 2024 | DRAWING NUMBER TD-2023-105 |

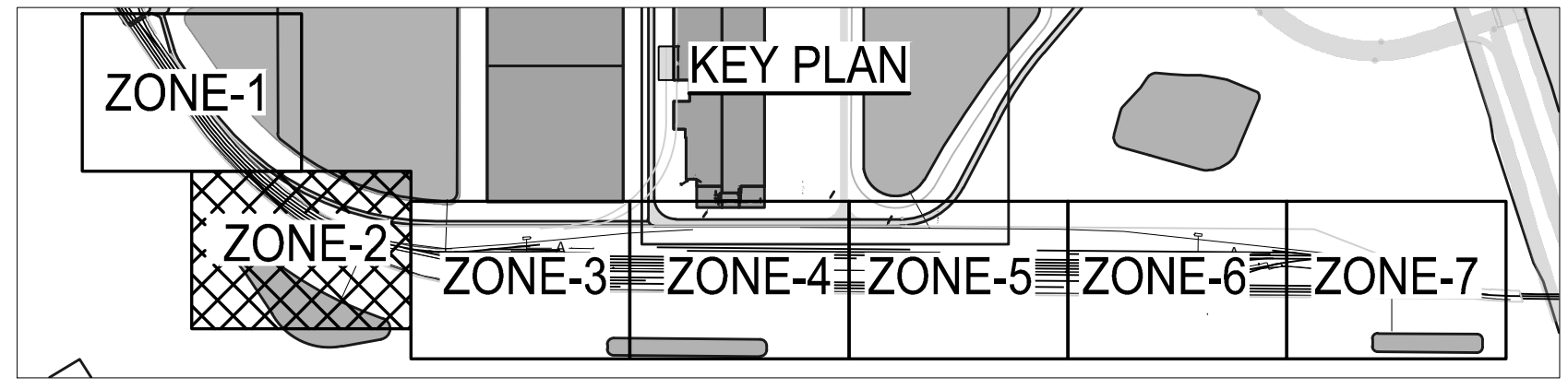
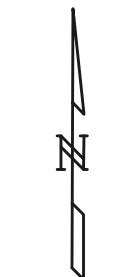
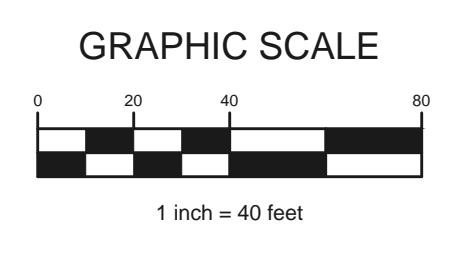


GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF TIE. RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.

KEY NOTES:

- ① CONDUIT TO BE INSTALLED 3'-0" OFF EDGE OF ROADWAY.
- ② INSTALL 24x36x36 TIER 22 RATED PULLBOX WITH OPEN BOTTOM AND COVER LABELED "ELECTRIC". SEE DETAILS AND SCHEDULES FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 2
E102 SCALE: 1"= 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
678-622-8555
770-910-3978

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW

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CROUCH ENGINEERING INC.
5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

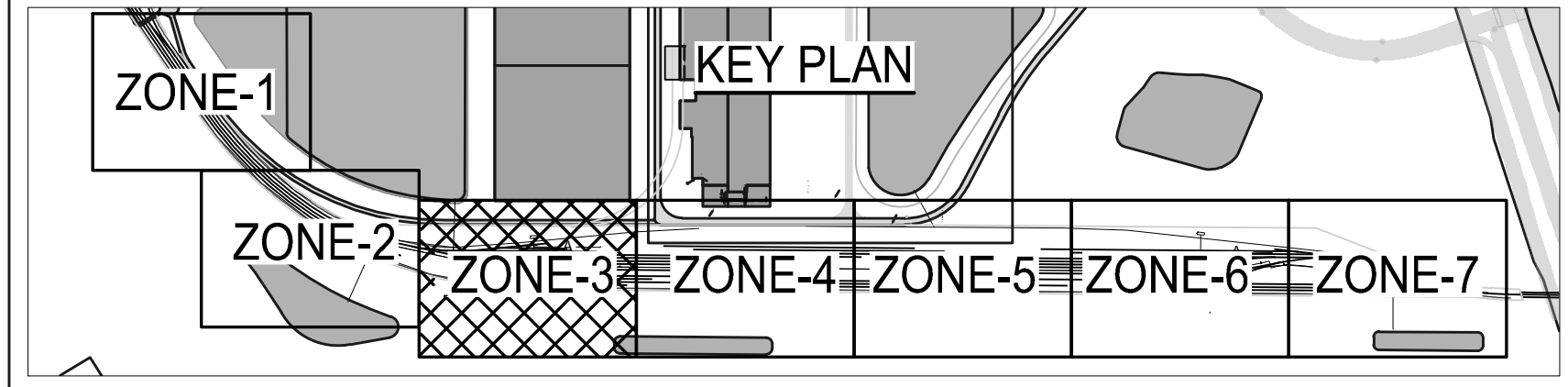
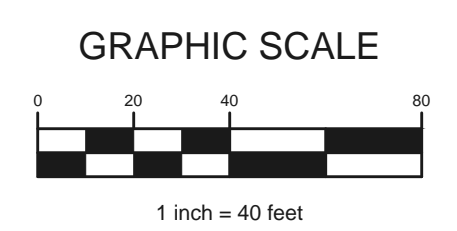
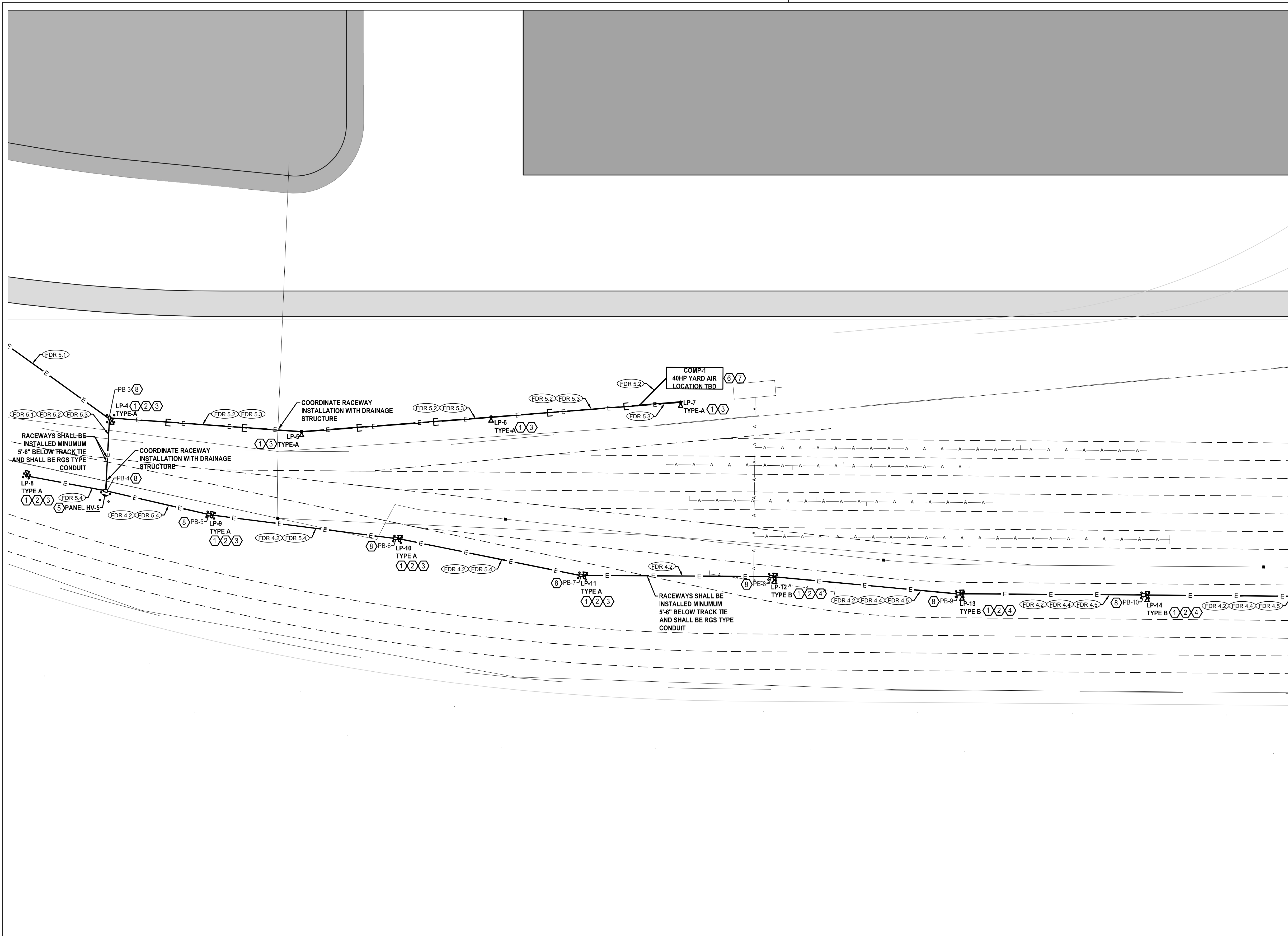
| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC |
| | | | E102 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 2 |
| DWN | RJK | FILE NO. D3327 | MILE POST 04825 |
| DWN | RJK | FILE NO. TRK1115024 | DRAWING NUMBER R91.4 |
| CHK | TJW | DATE FEBRUARY 16, 2024 | DRAWING NUMBER TD-2023-105 |

GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF TIE. RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.

KEY NOTES:

- ① REFERENCE POLE DETAILS ON E501 FOR ADDITIONAL REQUIREMENTS ON POLE TYPE INDICATED.
- ② PROVIDE (QTY OF 4) 12" DIAMETER PROTECTIVE BOLLARDS. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.
- ③ AREA LIGHT FIXTURE(S) CONTROLLED BY INTEGRAL PHOTOCELL. CIRCUIT FEEDING FIXTURE SHALL BE UNSWITCHED.
- ④ POLE HOUSES AREA LIGHT FIXTURE(S) AND TASK LIGHTING FIXTURES. AREA LIGHTS TO BE CONTROLLED BY INTEGRAL PHOTOCELL, AND TASK LIGHTS TO BE CONTROLLED BY LIGHTING CONTACTOR PANEL WITH PHOTOCELL, AND H.O.A. SWITCH. SEE ONE LINE DIAGRAM AND DETAILS FOR ADDITIONAL REQUIREMENTS.
- ⑤ INSTALL PANEL BOARD ON EQUIPMENT H-FRAME STRUCTURE. REFERENCE THE ENLARGED ELECTRICAL PLANS FOR ADDITIONAL REQUIREMENTS.
- ⑥ COORDINATE EXACT LOCATION OF SERVICE DISCONNECT LOCATED ON THE INTERIOR OF THE AIR COMPRESSOR BUILDING WITH EQUIPMENT SHOP DRAWINGS. TURN RACEWAY UP ON EXTERIOR WALL AND TERMINATE ON THE LINESIDE OF THE SERVICE DISCONNECT.
- ⑦ INSTALL 10"x0.75" DIAMETER GROUND ROD AND BOND TO EXTERIOR OF COMPRESSOR BUILDING AND MAIN SERVICE GROUND BAR.
- ⑧ INSTALL 24X36X36 TIER 22 RATED PULLBOX WITH OPEN BOTTOM AND COVER LABELED "ELECTRIC". SEE DETAILS AND SCHEDULES FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 3
E103 SCALE: 1" = 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
678-522-8555
770-910-3878

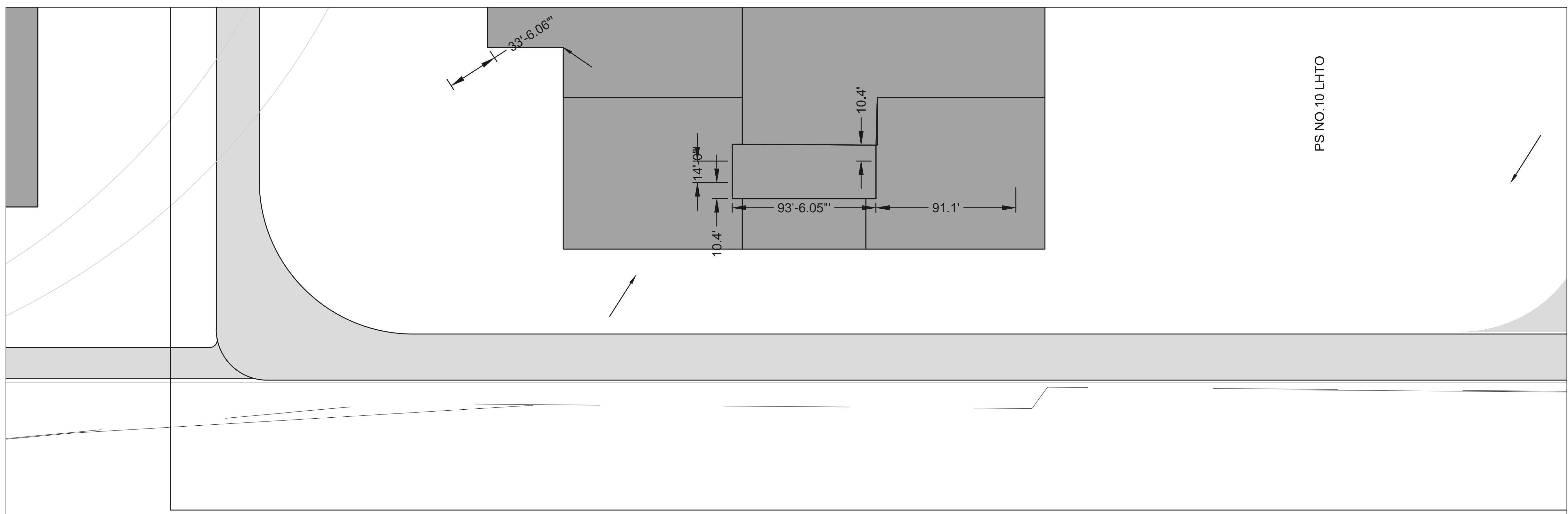
PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

CROUCH ENGINEERING INC.
5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

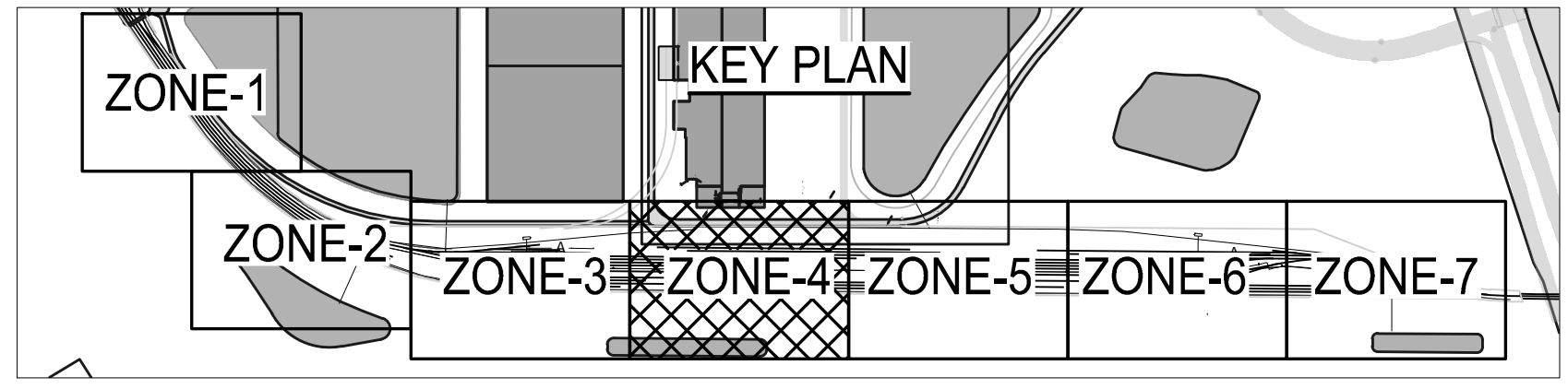
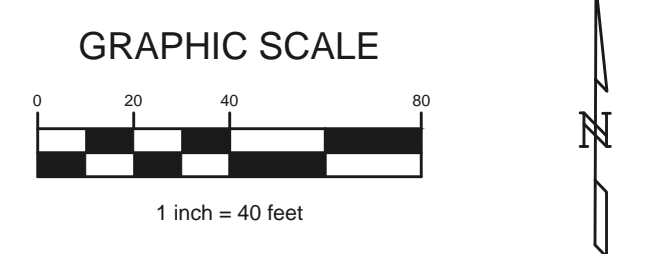
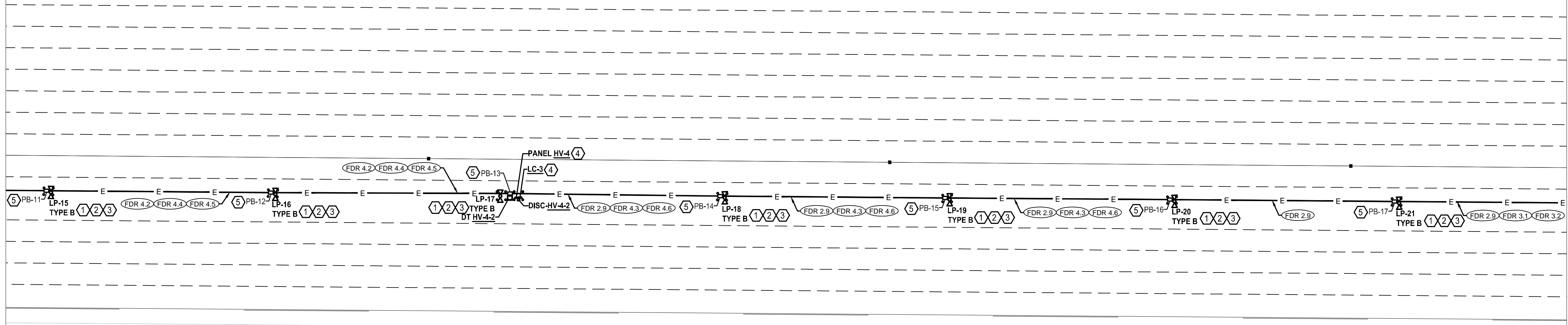
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NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|-------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 3 |
| DWN | RJK | 03/16/2024 | FILE NO. TRK1115024 |
| CHK | TJW | FEBRUARY 16, 2024 | DATE |
| | | | MILE POST: 04825 |
| | | | R91.4 |
| | | | DRAWING NUMBER: TD-2023-105 |



- GENERAL NOTES:**
- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
 - B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
 - C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF THE RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
 - D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
 - E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.

- KEY NOTES:**
- ① REFERENCE POLE DETAILS ON E501 FOR ADDITIONAL REQUIREMENTS ON POLE TYPE INDICATED.
 - ② PROVIDE (QTY OF 4) 12" DIAMETER PROTECTIVE BOLLARDS. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.
 - ③ POLE HOUSES AREA LIGHT FIXTURE(S) AND TASK LIGHTING FIXTURES. AREA LIGHTS TO BE CONTROLLED BY INTEGRAL PHOTOCELL, AND TASK LIGHTS TO BE CONTROLLED BY LIGHTING CONTACTOR PANEL WITH PHOTOCELL, AND H.O.A. SWITCH. SEE ONE LINE DIAGRAM AND DETAILS FOR ADDITIONAL REQUIREMENTS.
 - ④ INSTALL PANELBOARD AND LIGHTING CONTACTOR PANEL ON EQUIPMENT H-FRAME STRUCTURE. REFERENCE THE ENLARGED ELECTRICAL PLANS FOR ADDITIONAL REQUIREMENTS.
 - ⑤ INSTALL 24X36X36 TIER 22 RATED PULLBOX WITH OPEN BOTTOM AND COVER LABELED "ELECTRIC". SEE DETAILS AND SCHEDULES FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 4
E104 SCALE: 1"= 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
WE PROJ NO. 23065
CONTACT
ENGINEER: TIMOTHY WEISER 678-622-8555
BACKUP: RUSSELL KASEM 770-910-3078

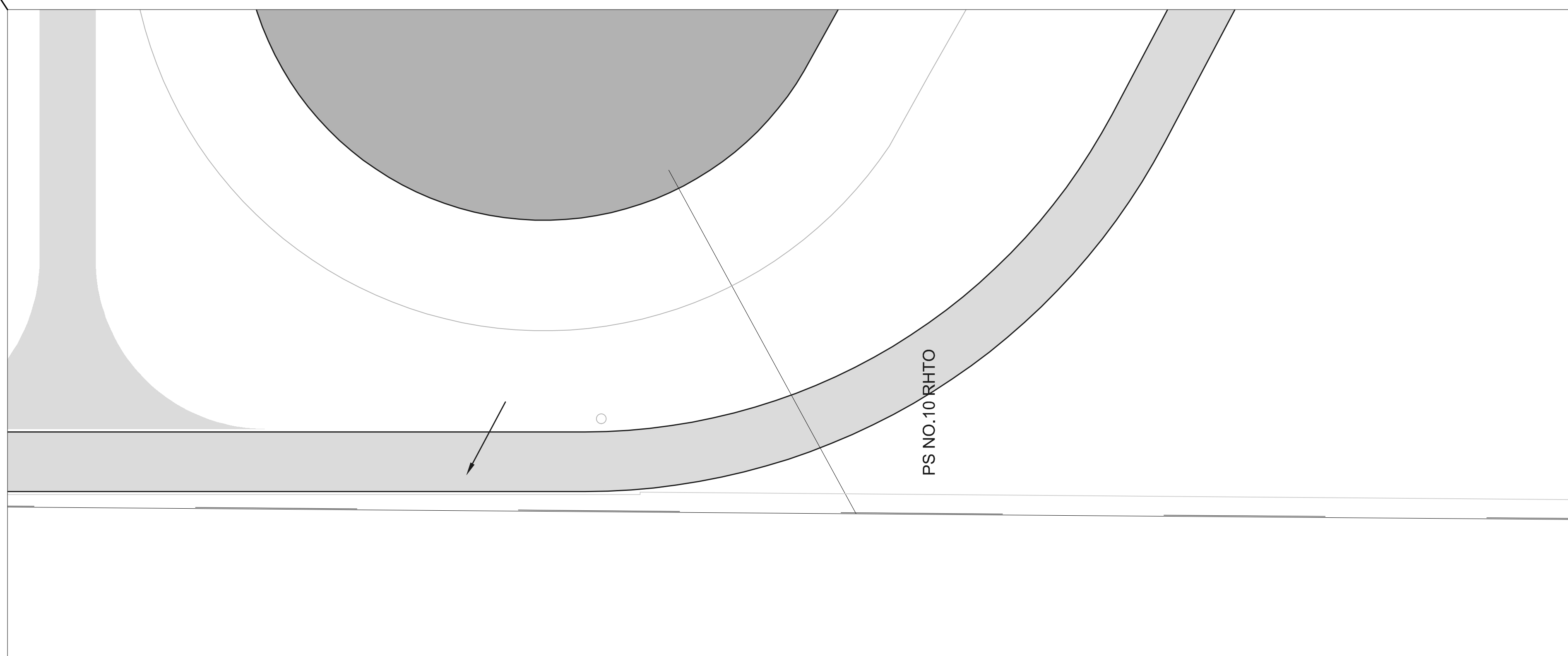
PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

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engineering inc.

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5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630
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COASTAL
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | | |
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| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION | | | BLYTHEWOOD, SC E104 |
| TITLE | | | |
| PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL PROPOSED PLAN - ZONE 4 | | | |
| DWN | RJK | FILE NO. | TRK1115024 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| MILE POST | | | 04825 R91.4 |
| DRAWING NUMBER | | | TD-2023-105 |

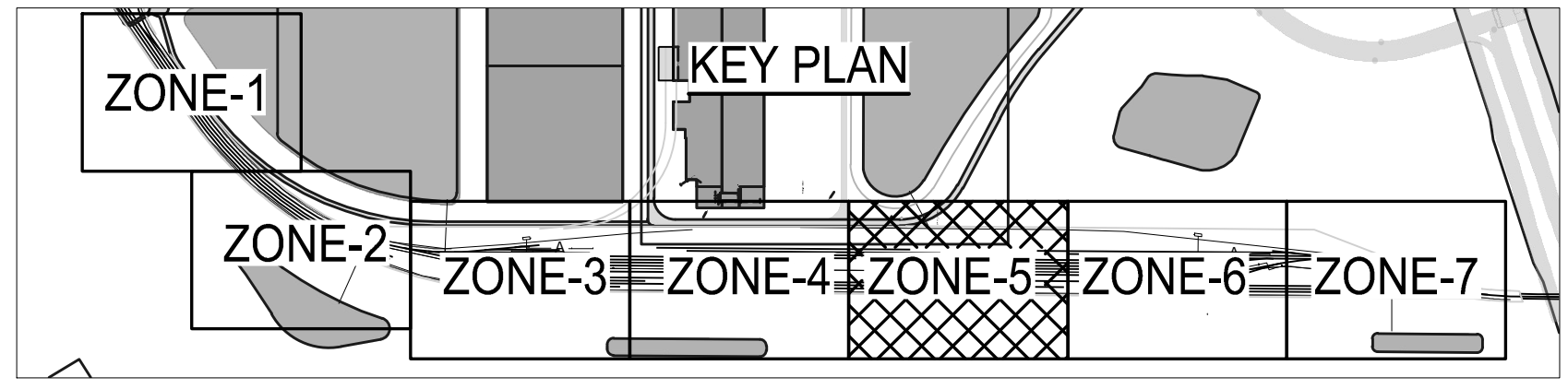
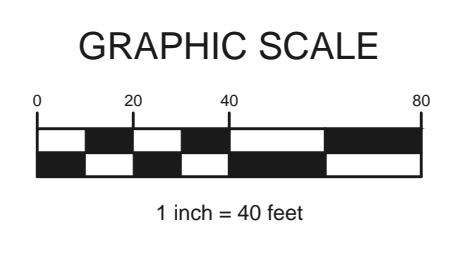
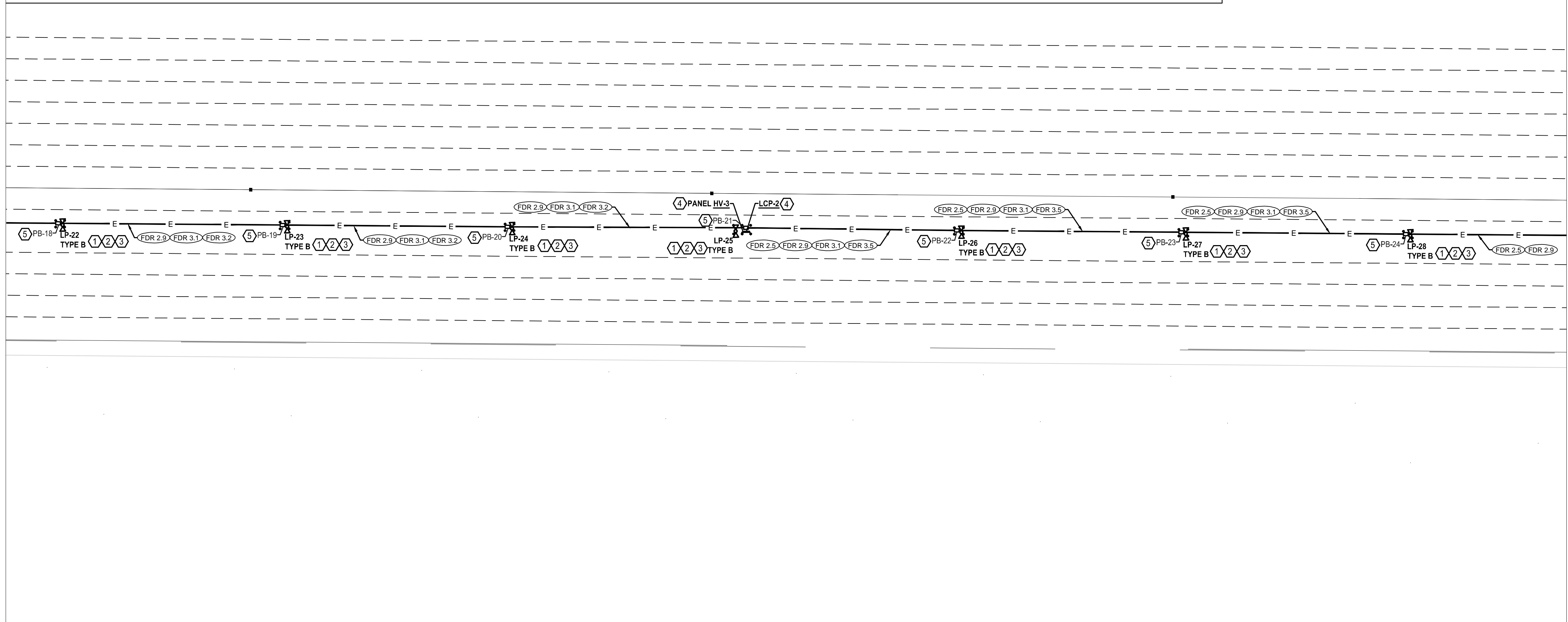


GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF THE RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.

KEY NOTES:

- ① REFERENCE POLE DETAILS ON E501 FOR ADDITIONAL REQUIREMENTS ON POLE TYPE INDICATED.
- ② PROVIDE (QTY OF 4) 12" DIAMETER PROTECTIVE BOLLARDS. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.
- ③ POLE HOUSES AREA LIGHT FIXTURE(S) AND TASK LIGHTING FIXTURES. AREA LIGHTS TO BE CONTROLLED BY INTEGRAL PHOTOCELL, AND TASK LIGHTS TO BE CONTROLLED BY LIGHTING CONTACTOR PANEL WITH PHOTOCELL, AND H.O.A. SWITCH. SEE ONE LINE DIAGRAM AND DETAILS FOR ADDITIONAL REQUIREMENTS.
- ④ INSTALL PANELBOARD AND LIGHTING CONTACTOR PANEL ON EQUIPMENT H-FRAME STRUCTURE. REFERENCE THE ENLARGED ELECTRICAL PLANS FOR ADDITIONAL REQUIREMENTS.
- ⑤ INSTALL 24X36X36 TIER 22 RATED PULLBOX WITH OPEN BOTTOM AND COVER LABELED "ELECTRIC". SEE DETAILS AND SCHEDULES FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 5
E105 SCALE: 1"= 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
WE PROJ. NO. 23065
CONTACT
ENGINEER: TIMOTHY WEISER 678-522-8555
BACKUP: RUSSELL KASEM 770-910-3978

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

C
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engineering inc.

CROUCH ENGINEERING INC.
5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

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NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
COASTAL
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

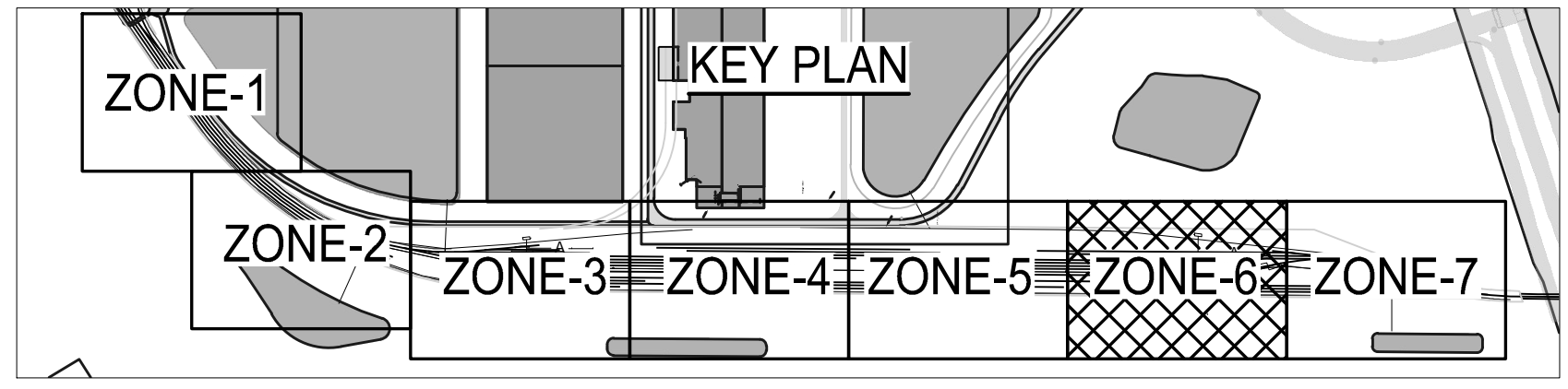
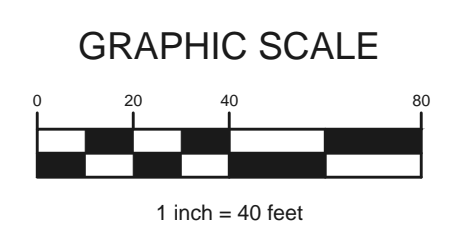
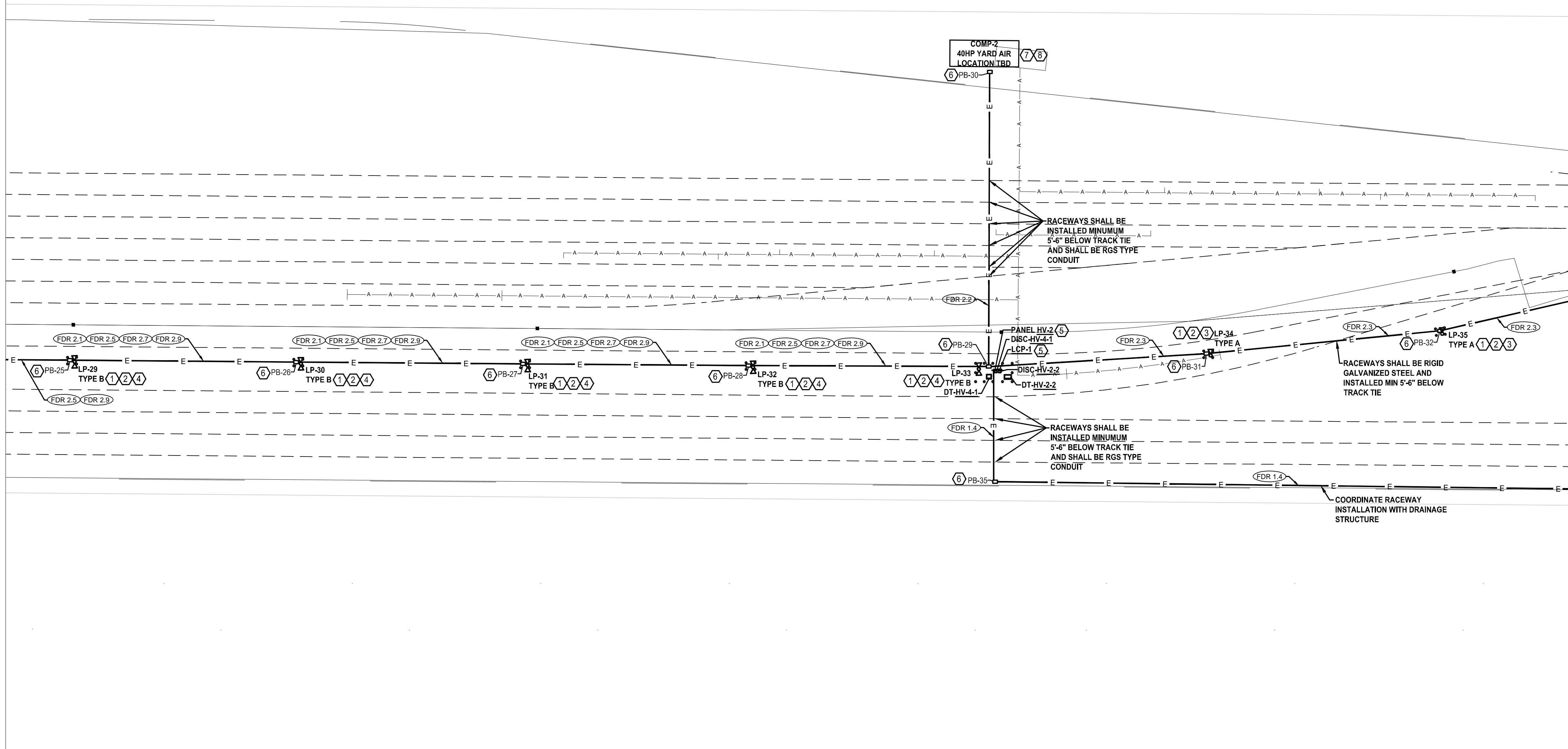
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| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION | | | BLYTHEWOOD, SC E105 |
| TITLE | | | |
| PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 5 | | | |
| DWN | RJK | FILE NO. | TRK1115024 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| MILE POST | | | 04825 R91.4 |
| DRAWING NUMBER | | | TD-2023-105 |

GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF TIE. RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.

KEY NOTES:

- ① REFERENCE POLE DETAILS ON E501 FOR ADDITIONAL REQUIREMENTS ON POLE TYPE INDICATED.
- ② PROVIDE (QTY OF 4) 12" DIAMETER PROTECTIVE BOLLARDS. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.
- ③ AREA LIGHT FIXTURE CONTROLLED BY INTEGRAL PHOTOCELL. CIRCUIT FEEDING FIXTURE SHALL BE UNSWITCHED.
- ④ POLE HOUSES AREA LIGHT FIXTURE(S) AND TASK LIGHTING FIXTURES. AREA LIGHTS TO BE CONTROLLED BY INTEGRAL PHOTOCELL, AND TASK LIGHTS TO BE CONTROLLED BY LIGHTING CONTACTOR PANEL WITH PHOTOCELL, AND H.O.A. SWITCH. SEE ONE LINE DIAGRAM AND DETAILS FOR ADDITIONAL REQUIREMENTS.
- ⑤ INSTALL PANELBOARD AND LIGHTING CONTACTOR PANEL ON EQUIPMENT H-FRAME STRUCTURE. REFERENCE THE ENLARGED ELECTRICAL PLANS FOR ADDITIONAL REQUIREMENTS.
- ⑥ INSTALL 24X36X36 TIER 22 RATED PULLBOX WITH OPEN BOTTOM AND COVER LABELED "ELECTRIC". SEE DETAILS AND SCHEDULES FOR ADDITIONAL REQUIREMENTS.
- ⑦ COORDINATE EXACT LOCATION OF SERVICE DISCONNECT LOCATED ON THE INTERIOR OF THE AIR COMPRESSOR BUILDING WITH EQUIPMENT SHOP DRAWINGS. TURN RACEWAY UP ON EXTERIOR WALL AND TERMINATE ON THE LINESIDE OF THE SERVICE DISCONNECT.
- ⑧ INSTALL 10X0.75" DIAMETER GROUND ROD AND BOND TO EXTERIOR OF COMPRESSOR BUILDING AND MAIN SERVICE GROUND BAR.



1 PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 6
E106 SCALE: 1"= 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
WE PROJ NO. 23065
CONTACT
ENGINEER: TIMOTHY WEISER 678-922-8655
BACKUP: RUSSELL KASEM 770-910-3878

| | |
|-------------|------------|
| PROJECT NO: | 23065 |
| DATE: | 12.15.2023 |
| DRAWN BY: | RJK |
| CHECKED BY: | TJW |
| REVISIONS: | |

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engineering inc.

CROUCH ENGINEERING INC.
5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

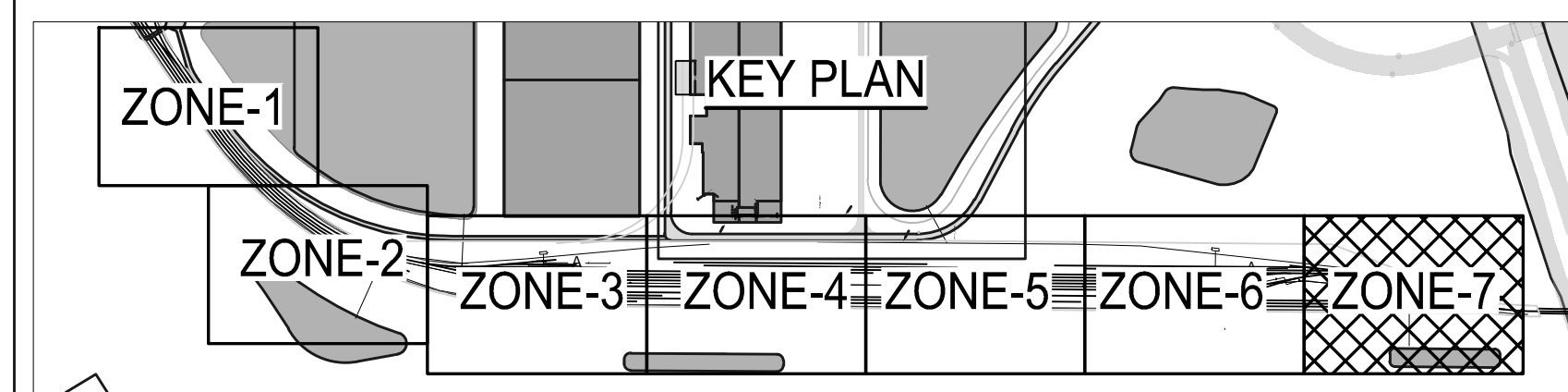
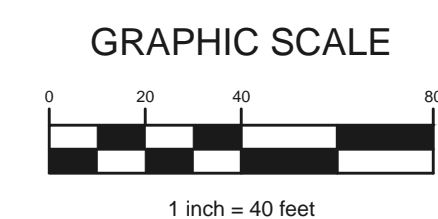
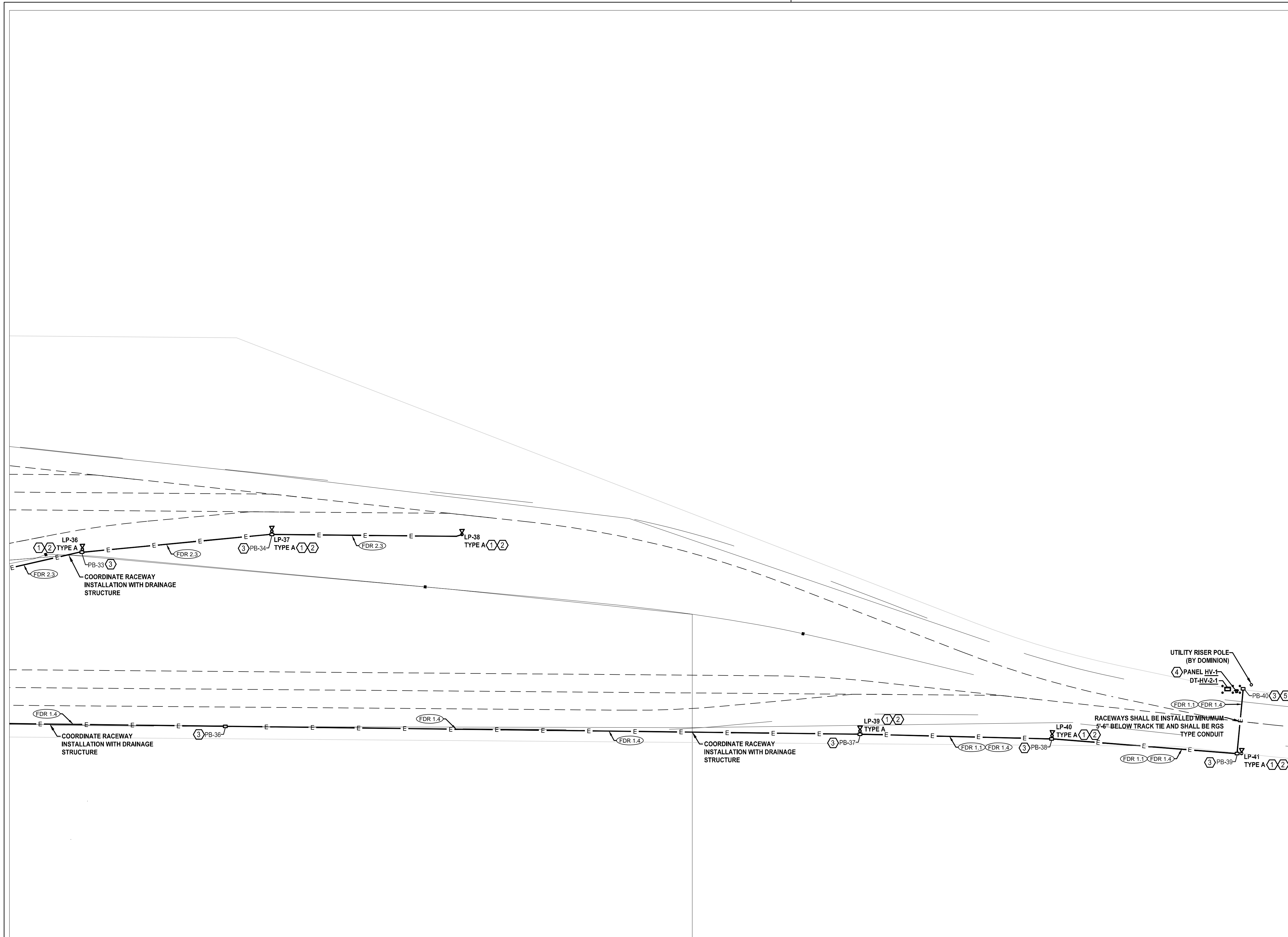
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|---|-----|----------------|---------------------|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION | | | BLYTHEWOOD, SC E106 |
| TITLE | | | |
| PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 6 | | | |
| DWN | RJK | FILE NO. | D3327 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| PRJ | | MILE POST | 04825 |
| | | DRAWING NUMBER | R91.4 |
| | | | TD-2023-105 |

GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF TIE. RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.

KEY NOTES:

- ① REFERENCE POLE DETAILS ON E501 FOR ADDITIONAL REQUIREMENTS ON POLE TYPE INDICATED.
- ② AREA LIGHT FIXTURE CONTROLLED BY INTEGRAL PHOTOCCELL. CIRCUIT FEEDING FIXTURE SHALL BE UNSWITCHED.
- ③ INSTALL 24X36X36 TIER 22 RATED PULLBOX WITH OPEN BOTTOM AND COVER LABELED "ELECTRIC". SEE DETAILS AND SCHEDULES FOR ADDITIONAL REQUIREMENTS.
- ④ INSTALL PANELBOARD ON EQUIPMENT H-FRAME STRUCTURE. REFERENCE THE ENLARGED ELECTRICAL PLANS FOR ADDITIONAL REQUIREMENTS.
- ⑤ CONTRACTOR TO COORDINATE WITH DOMINION TIE-IN OF RACEWAYS TO PULLBOX FOR NEW SERVICE LATERAL SPLICE. CONTRACTOR TO INSTALL SERVICE LATERAL TO PULLBOX WITH SLACK FOR DOMINION TO SPLICE FEEDERS TO CIRCUIT. REFER TO THE GENERAL NOTES ON E001 AND ELECTRICAL ONE LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 7
E107 SCALE: 1"= 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
WE PROJ. NO. 23065
CONTACT
ENGINEER: TIMOTHY WEISER 678-622-8655
BACKUP: RUSSELL KASEM 770-910-3878

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

C
r
o
u
c
h
engineering inc.

CROUCH ENGINEERING INC.
5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

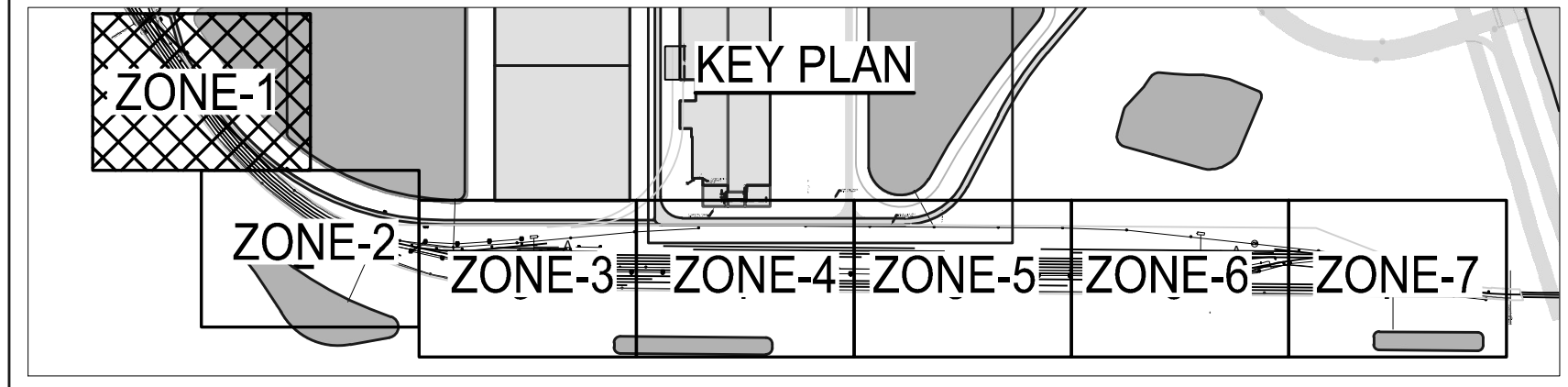
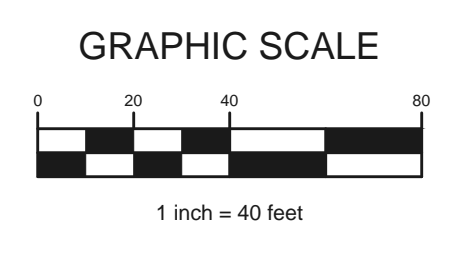
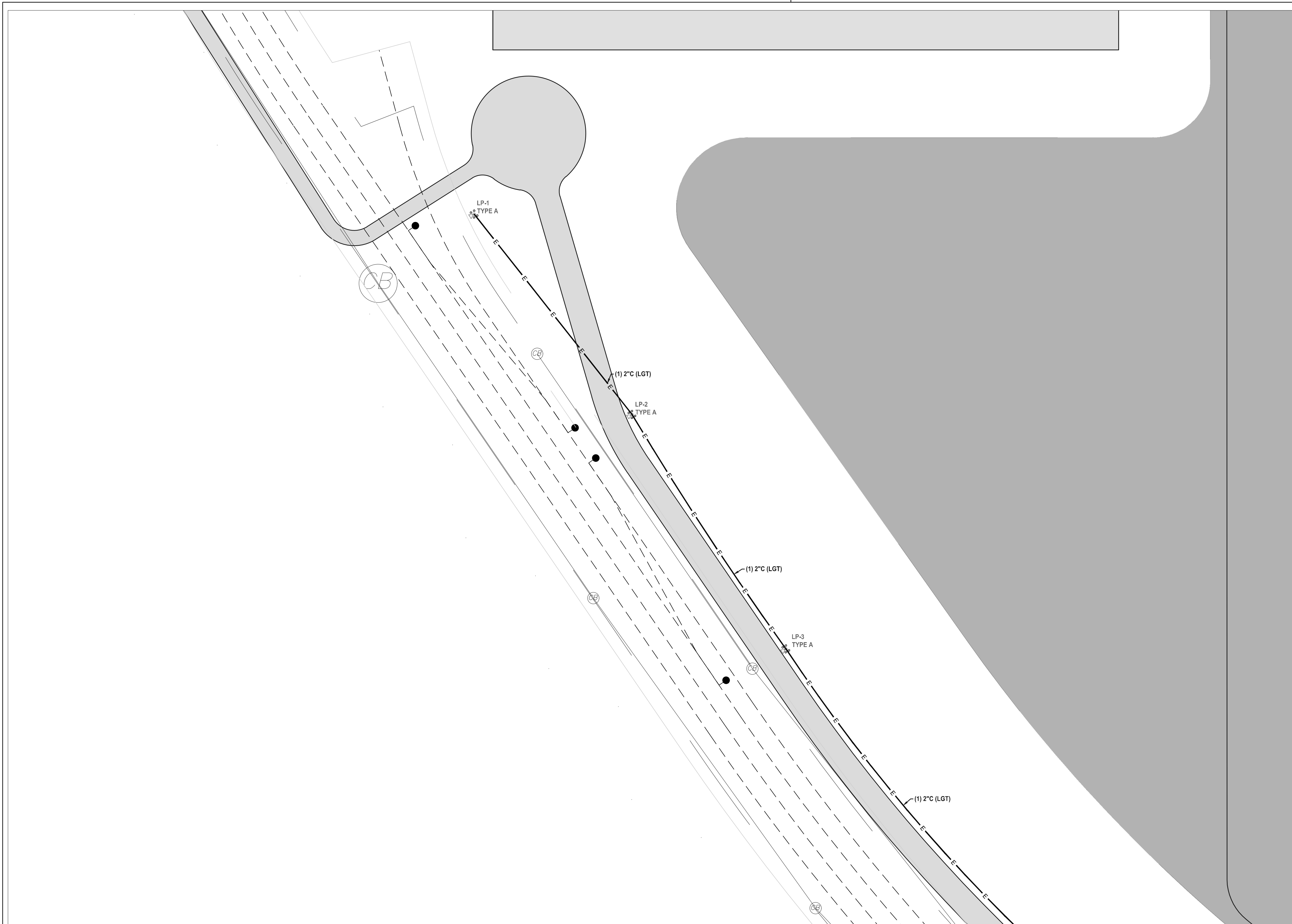
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NORFOLK SOUTHERN RAILWAY COMPANY
OPERATING DIVISION
COASTAL
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| | | | | |
|--|-----|----------|-------------------|-----------------|
| REV | BY | DATE | DESCRIPTION | E107 |
| | | | BLYTHEWOOD, SC | |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL PROPOSED PLAN- ZONE 7 | | | | |
| DWN | RJK | FILE NO. | TRK1115024 | DRAWING NUMBER |
| CHK | TJW | DATE | FEBRUARY 16, 2024 | TD-2023-105 |
| | | | | MILE POST R91.4 |

GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF TIE. RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 1
E151 SCALE: 1"= 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
678-622-8555
770-910-3978

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

C **r** **o** **u** **c** **h**
e
engineering inc.

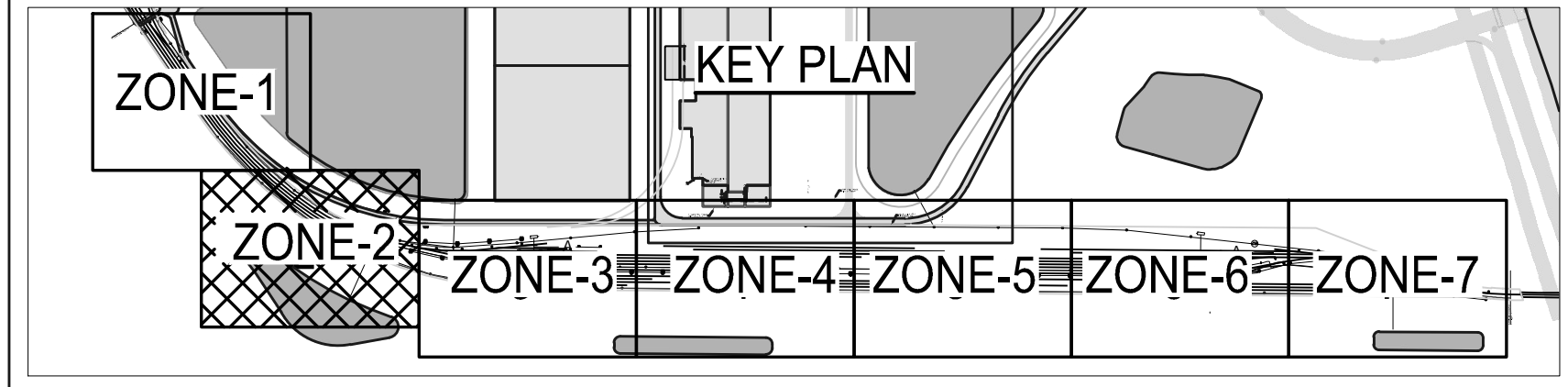
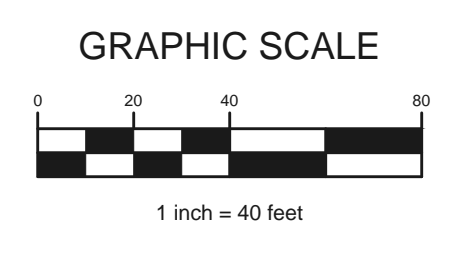
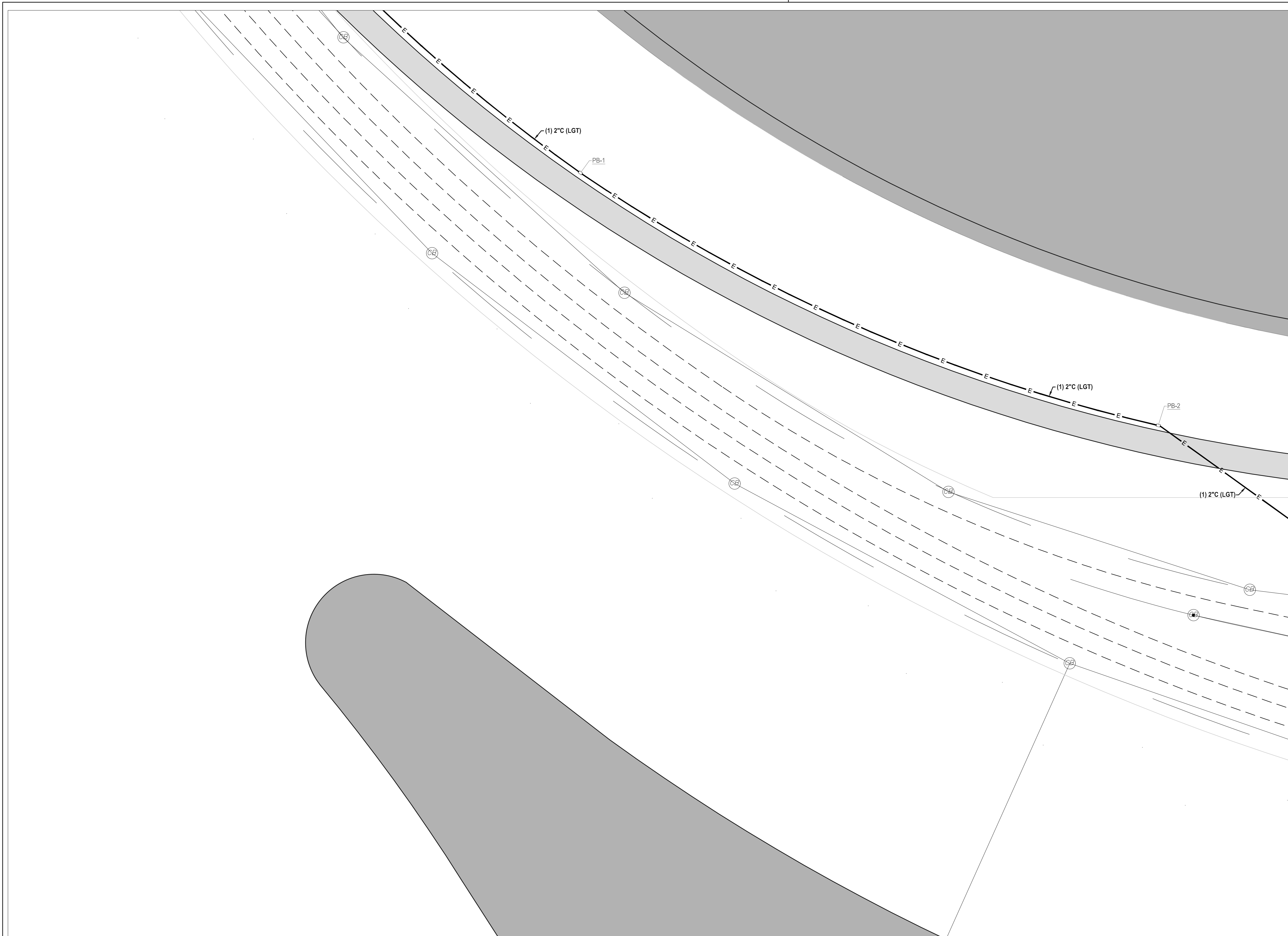
CROUCH ENGINEERING INC.
5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E151 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 1 |
| DWN | RJK | FILE No. TRK1115024 | MILE POST 04825 R91.4 |
| CHK | TJW | DATE FEBRUARY 16, 2024 | DRAWING NUMBER TD-2023-105 |

GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF TIE. RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 2
 E152 SCALE: 1"= 40'-0"

PHASE 2

WEISER
 ENGINEERING, P.C.
 WE PROJ NO: 23065
 CONTACT
 ENGINEER: TIMOTHY WEISER 678-622-8555
 BACKUP: RUSSELL KASEM 770-910-3978

PROJECT NO: 23065
 DATE: 12.15.2023
 DRAWN BY: RJK
 CHECKED BY: TJW
 REVISIONS:

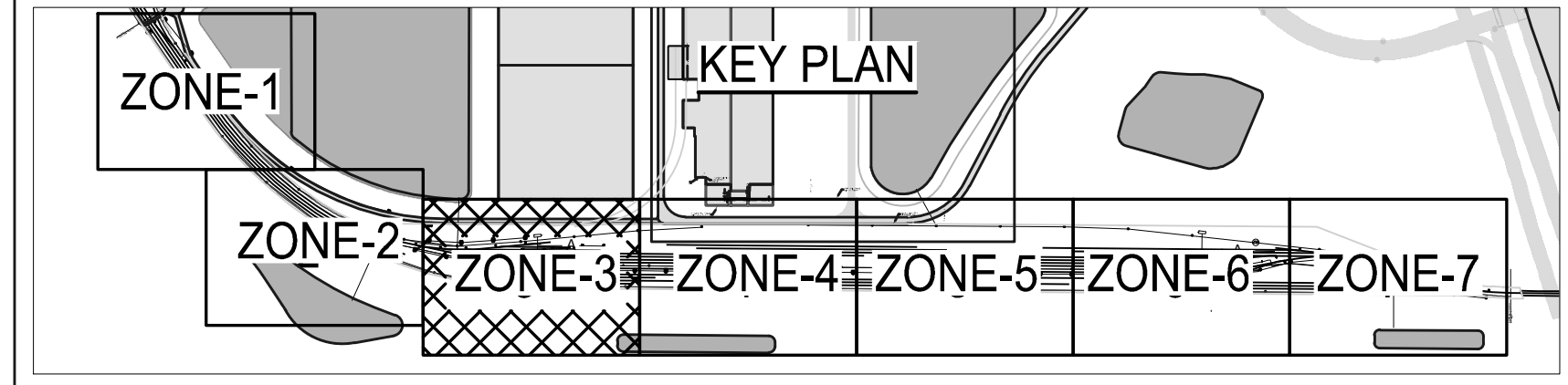
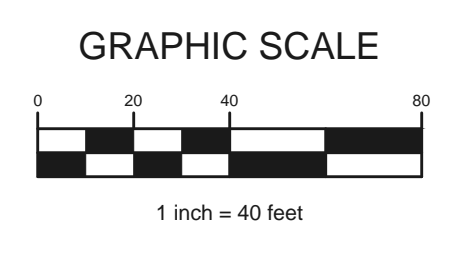
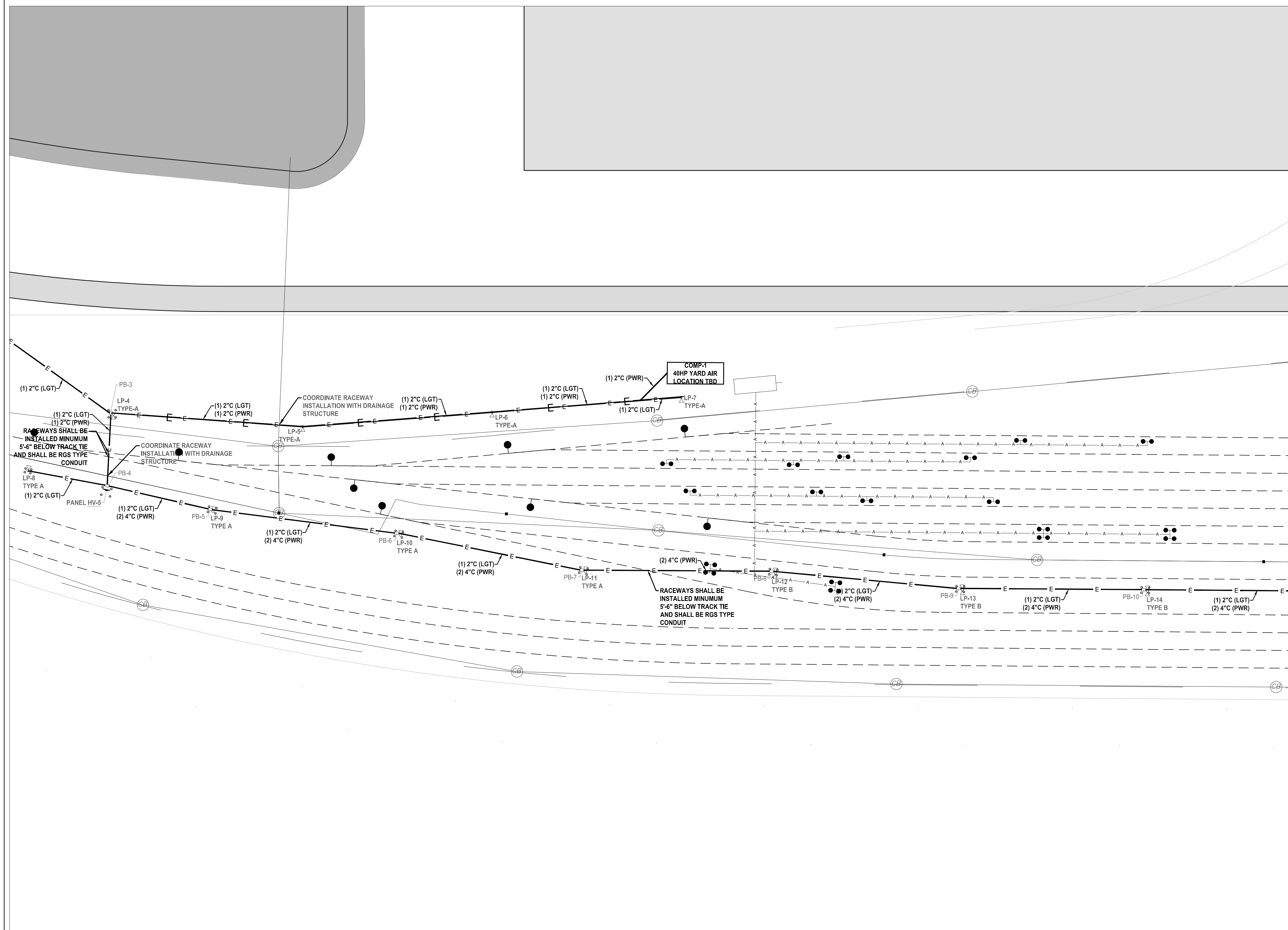
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 engineering inc.
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 5115 Maryl and Way, STE 225
 Brentwood, TN 37027
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 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 2 |
| DWN | RJK | FILE NO. D3327 | OPERATING DIVISION |
| CHK | TJW | DATE FEBRUARY 16, 2024 | DRAWING NUMBER |
| | | | MILE POST: 04825 |
| | | | R91.4 |
| | | | TD-2023-105 |

GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF TIE. RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL DUCTBANK PLAN-ZONE 3
E153 SCALE: 1"= 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
ENGINEER: TIMOTHY WEISER
BACKUP: RUSSELL KASEM

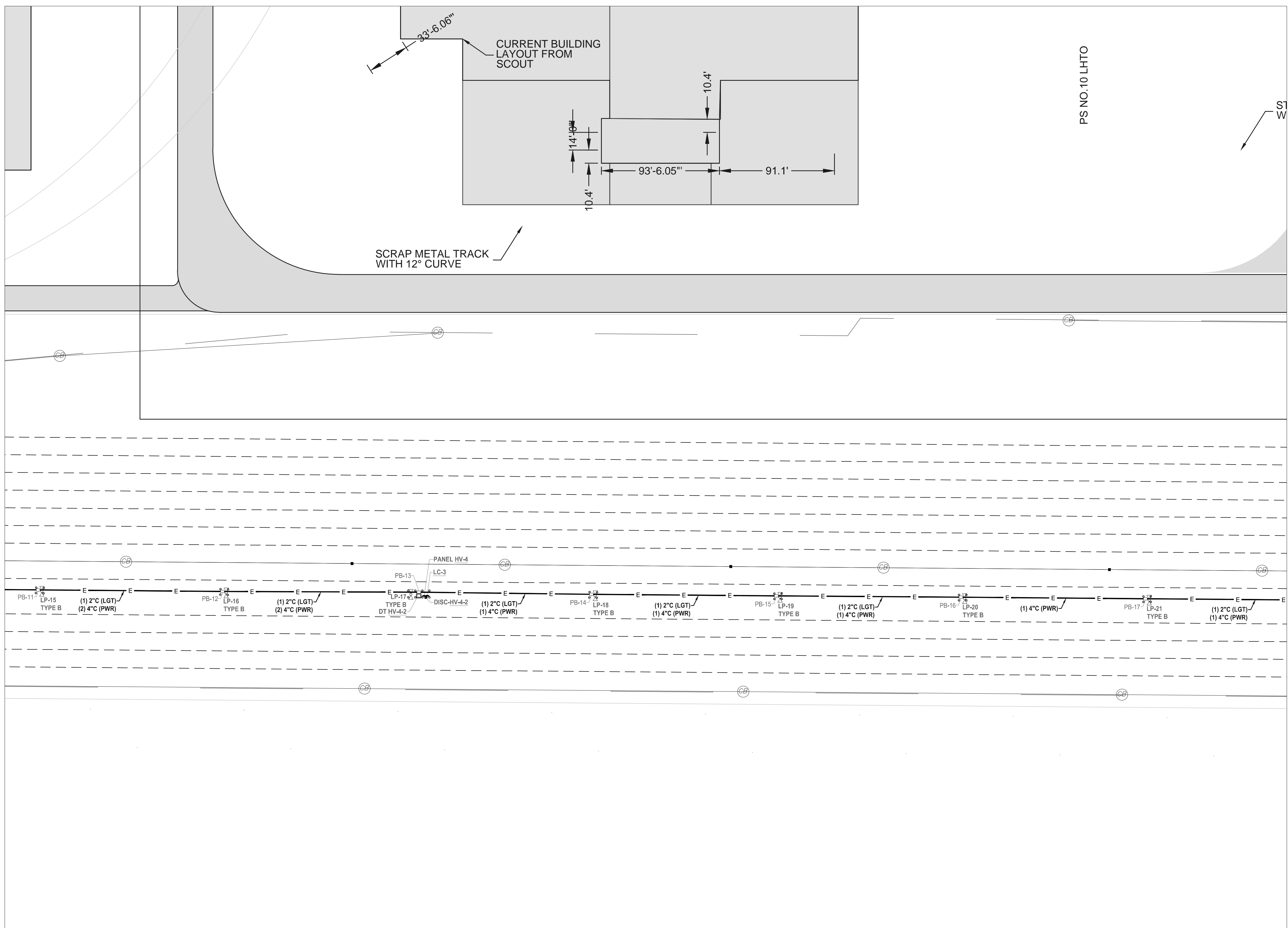
PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

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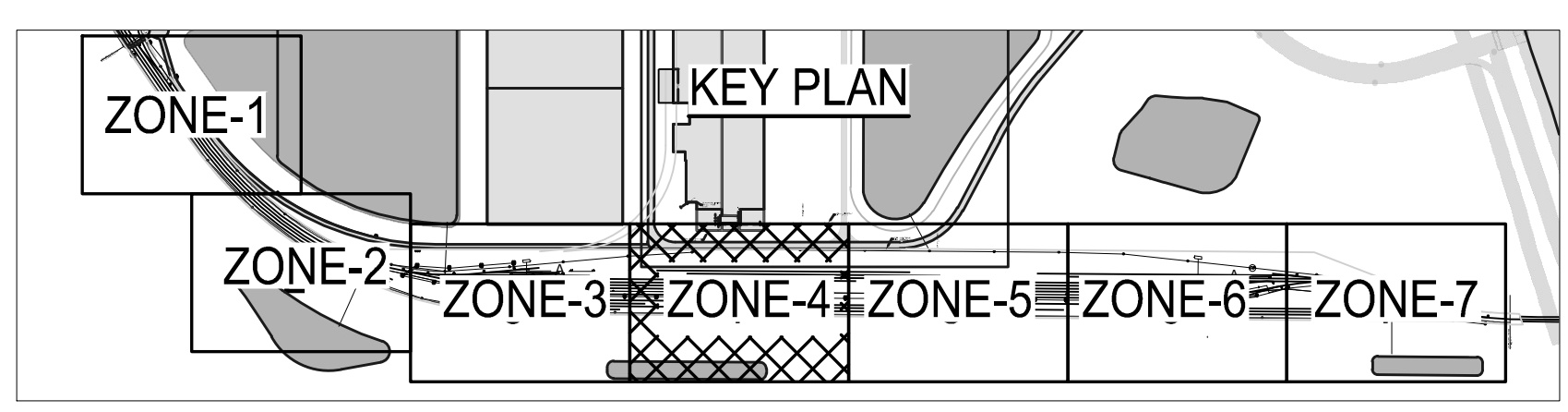
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5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|-------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 3 |
| DWN | RJK | FILE NO. TRK1115024 | MILE POST: 04825 |
| CHK | TJW | DATE: FEBRUARY 16, 2024 | DRAWING NUMBER: TD-2023-105 |



- GENERAL NOTES:**
- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
 - B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
 - C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF THE RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
 - D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
 - E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 4
E154 SCALE: 1"= 40'-0"

PHASE 2

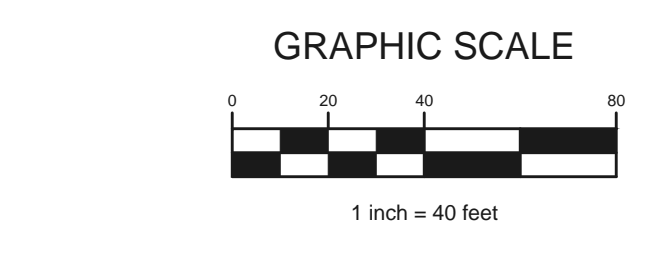
WEISER
ENGINEERING, P.C.
678-522-8555
770-910-3578

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

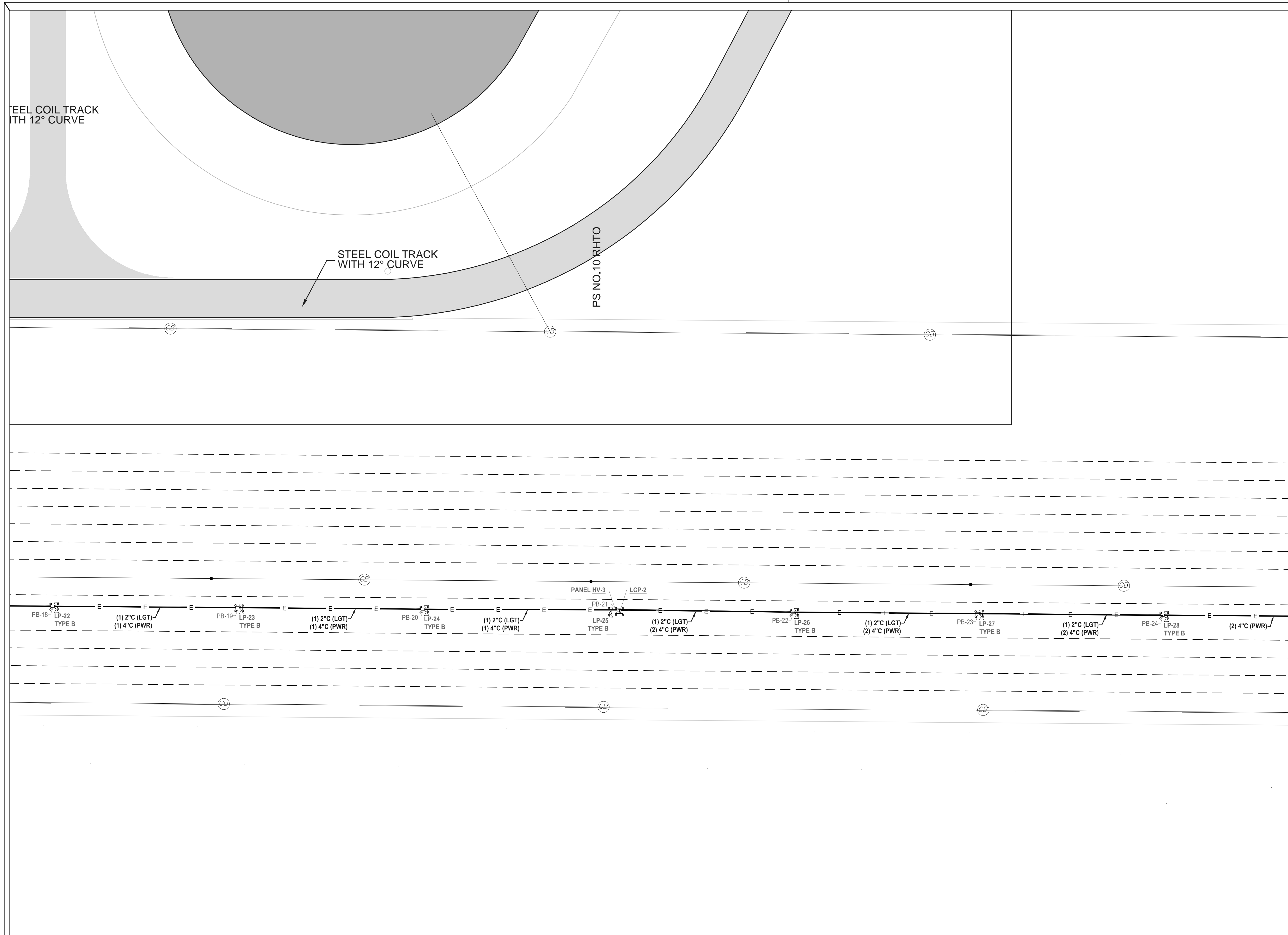
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ngineering inc.

CROUCH ENGINEERING INC.
5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

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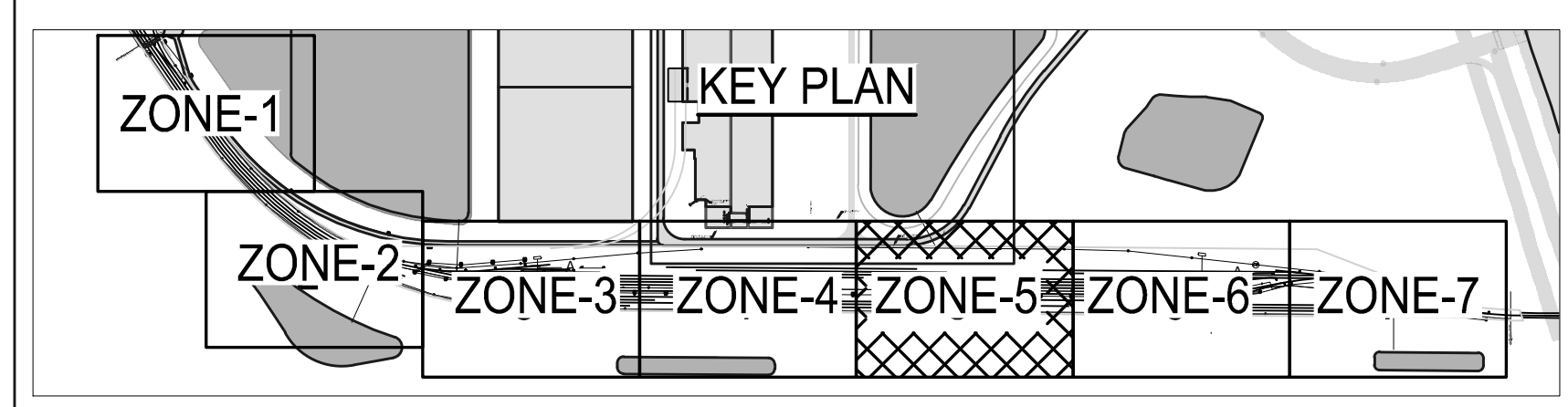
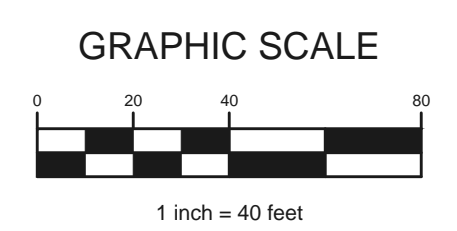


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|---|-----|----------|---------------------|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION | | | BLYTHEWOOD, SC E154 |
| TITLE | | | |
| PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 4 | | | |
| DWN | RJK | FILE NO. | TRK1115024 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| DRAWING NUMBER | | | 04825 |
| MILE POST | | | R91.4 |
| DRAWING NUMBER | | | TD-2023-105 |



GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF THE RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 5
 E155 SCALE: 1"= 40'-0"

PHASE 2

WEISER
 ENGINEERING, P.C.
 WE PROJ. NO. 23065
 CONTACT
 ENGINEER: TIMOTHY WEISER 678-522-8555
 BACKUP: RUSSELL KASEM 770-910-3578

PROJECT NO: 23065
 DATE: 12.15.2023
 DRAWN BY: RJK
 CHECKED BY: TJW
 REVISIONS:

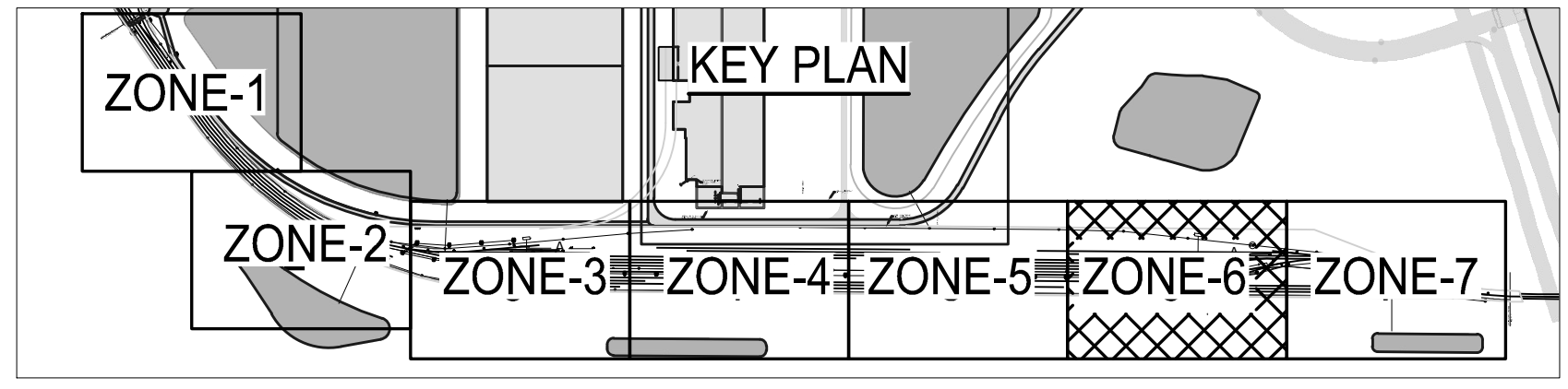
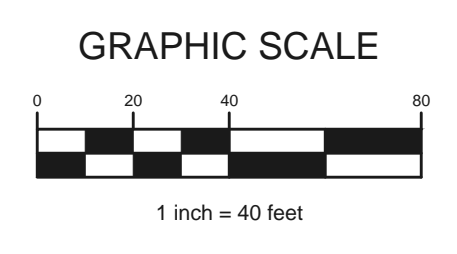
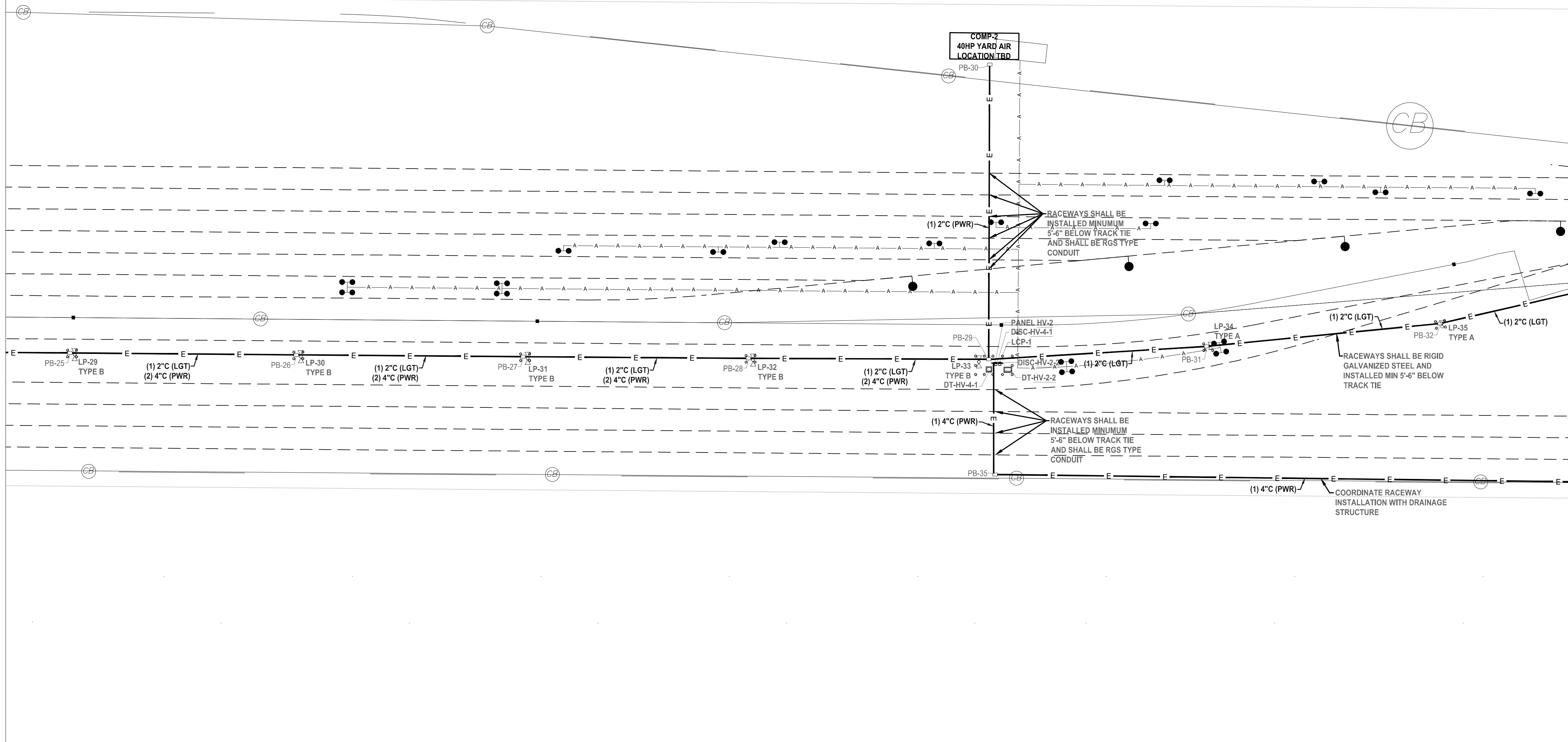
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 5115 Maryl and Way, STE 225
 Brentwood, TN 37027
 PHONE NO. (615) 791-0630
 engineering inc.

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 NORFOLK SOUTHERN RAILWAY COMPANY
 COASTAL
 OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|----------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E155 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 5 |
| DWN | RJK | FILE No. D3327 | TRK1115024 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| | | | MILE POST: 04825 R91.4 |
| | | | DRAWING NUMBER: TD-2023-105 |

GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF TIE. RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 6
 E156 SCALE: 1"= 40'-0"

PHASE 2

WEISER
 ENGINEERING, P.C.
 WE PROJ. NO. 23065
 CONTACT
 ENGINEER: TIMOTHY WEISER 678-922-8655
 BACKUP: RUSSELL KASEM 770-910-3878

PROJECT NO: 23065
 DATE: 12.15.2023
 DRAWN BY: RJK
 CHECKED BY: TJW
 REVISIONS:

C **r** **o** **u** **c** **h**
e **n** **g** **i** **n** **g** **i** **n** **c**
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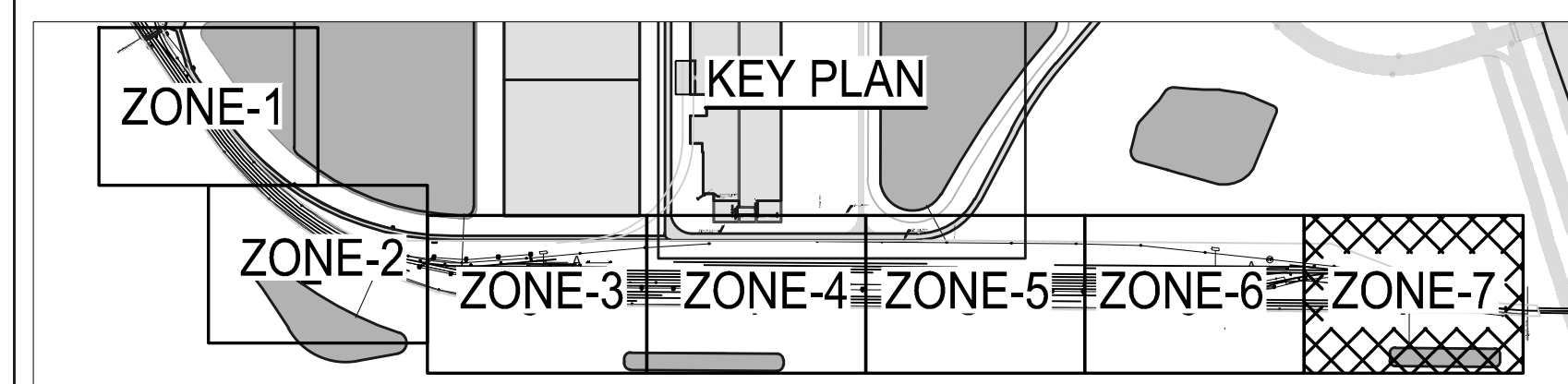
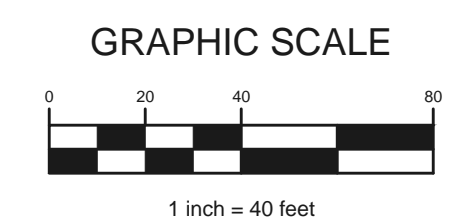
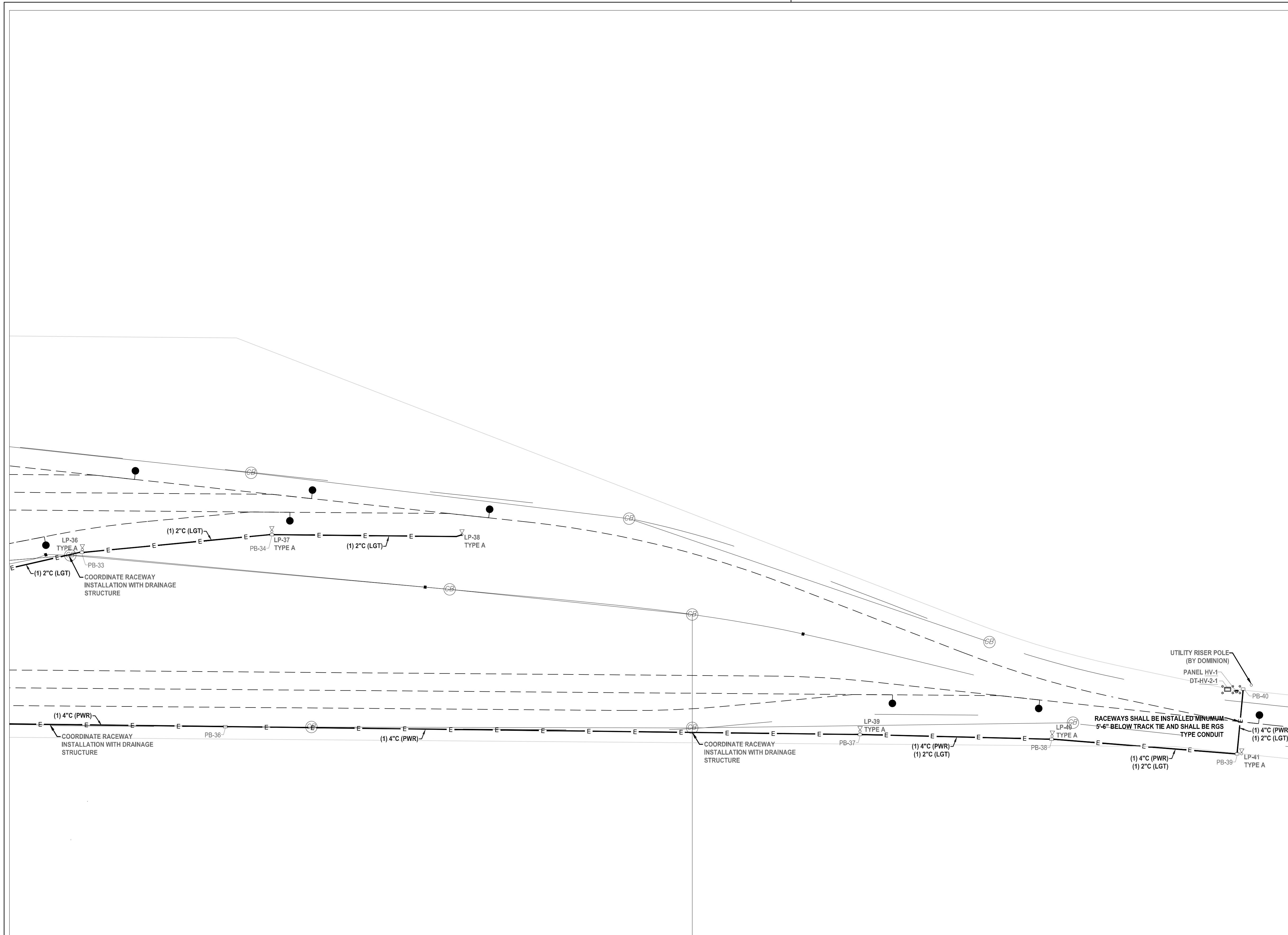
CROUCH ENGINEERING INC.
 5115 Maryl and Way, STE 225
 Brentwood, TN 37027
 PHONE NO. (615) 791-0630

NORFOLK SOUTHERN
 NORFOLK SOUTHERN RAILWAY COMPANY
 DIVISION COMPANY
 COASTAL
 OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E156 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 6 |
| DWN | RJK | FILE NO. D3327 | MRN 04825 MILE POST R91.4 |
| DWN | RJK | FILE NO. TRK1115024 | DRAWING NUMBER |
| DWN | TJW | DATE FEBRUARY 16, 2024 | DRAWING NUMBER TD-2023-105 |

GENERAL NOTES:

- A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE STRANDED COPPER WITH XXHW INSULATION.
- B. ALL SPLICES WITHIN IN-GRADE PULLBOXES SHALL BE UL LISTED FOR SUBMERSIBLE TYPE APPLICATIONS.
- C. ALL DUCTS ROUTED BELOW TRACKS SHALL BE RIGID GALVANIZED STEEL INSTALLED 5'-6" BELOW BOTTOM OF TIE. RGS RACEWAYS SHALL EXTEND A MINIMUM OF 10'-0" FROM THE EDGE OF TRACK PRIOR TO TRANSITIONING TO SCHEDULE 80 PVC.
- D. UNLESS OTHERWISE INDICATED, ALL DUCTS ROUTED BELOW GRADE OTHER THAN BELOW TRACKS SHALL BE SCHEDULE 80 PVC. REFERENCE THE E150 SERIES AND ELECTRICAL DETAILS FOR DUCT BANK PROFILE REQUIREMENTS.
- E. UNLESS OTHERWISE INDICATED, ALL IN-GRADE PULLBOXES SHALL BE TIER 22, 24x36x36, OPEN BOTTOM, WITH COVER LABELED "ELECTRIC". INSTALL BOXES ON A 6" GRAVEL BASE. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.



1 PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 7
E157 SCALE: 1"= 40'-0"

PHASE 2

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678-622-8655
770-910-3878

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

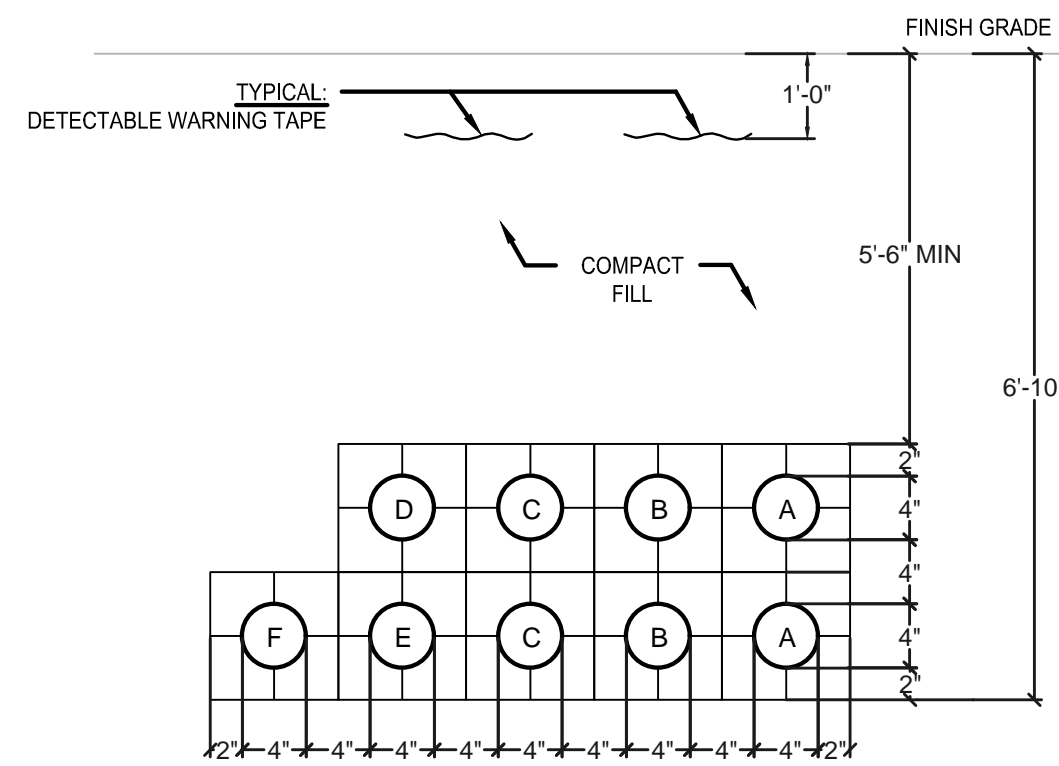
C
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engineering inc.

CROUCH ENGINEERING INC.
5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|-------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E157 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL ELECTRICAL DUCTBANK PLAN- ZONE 7 |
| DWN | RJK | FILE No. D3327 | TRK1115024 |
| CHK | TJW | DATE: FEBRUARY 16, 2024 | |
| | | | MILE POST: 04825 R91.4 |
| | | | DRAWING NUMBER: TD-2023-105 |

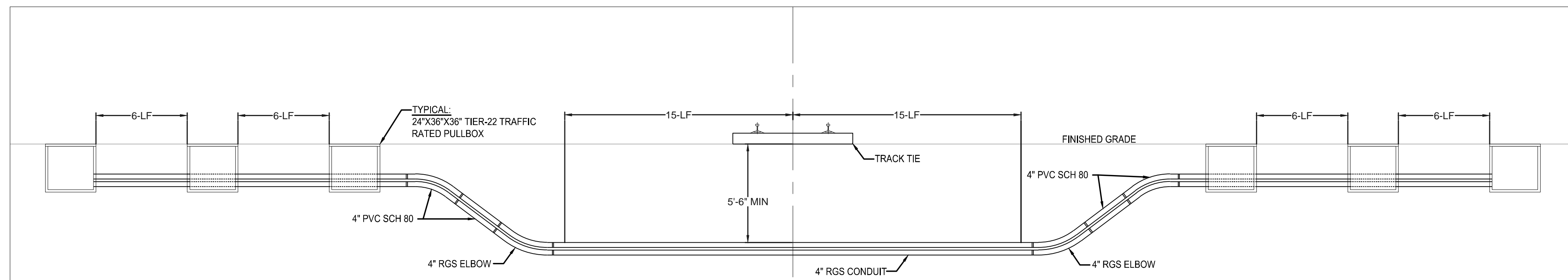
| DUCT BANK RACEWAY SCHEDULE | | | | |
|----------------------------|-----|------|-------------------|----------------------------|
| DESIGNATION | QTY | SIZE | TYPE | CUSTOMER |
| A | 2 | 4" | RIGID STEEL (RGS) | AT&T |
| B | 2 | 4" | RIGID STEEL (RGS) | VERIZON |
| C | 2 | 4" | RIGID STEEL (RGS) | CHARTER |
| D | 1 | 4" | RIGID STEEL (RGS) | SEGRA |
| E | 1 | 4" | RIGID STEEL (RGS) | TRUVISTA |
| F | 1 | 4" | RIGID STEEL (RGS) | RICHLAND SCHOOL DISTRICT 2 |



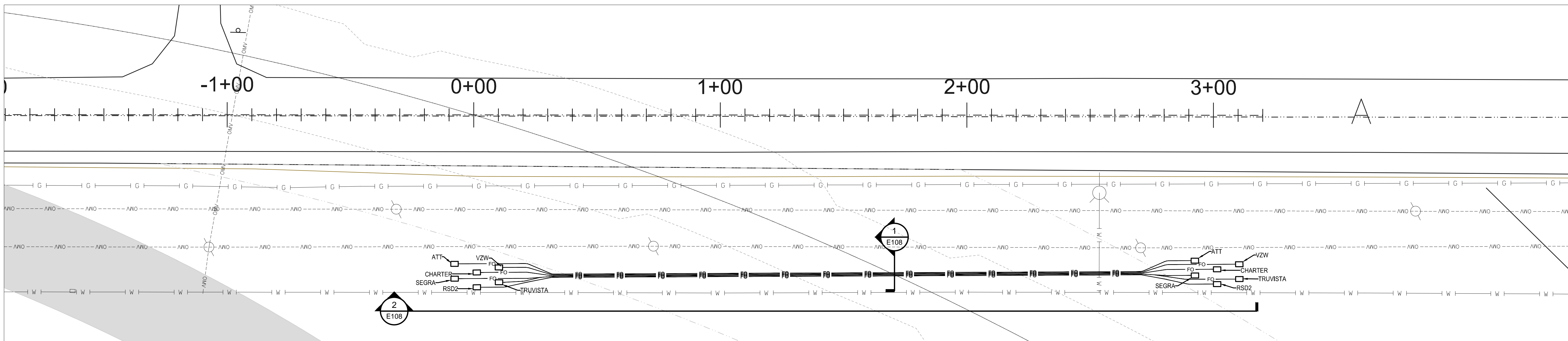
GENERAL NOTES:

A. UNLESS OTHERWISE INDICATED ALL RACEWAYS SHALL BE RIGID STEEL (RGS) TYPE.

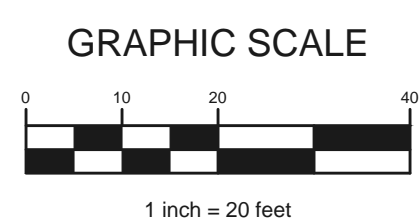
1 ELECTRICAL DUCT BANK DETAIL- CROSS SECTION
E158 SCALE: NONE



2 UTILITY DUCTBANK PLAN- ELEVATION
E158 SCALE: 1"= 5'-0"



3 UTILITY DUCTBANK PLAN
E158 SCALE: 1"= 20'-0"



PHASE 1

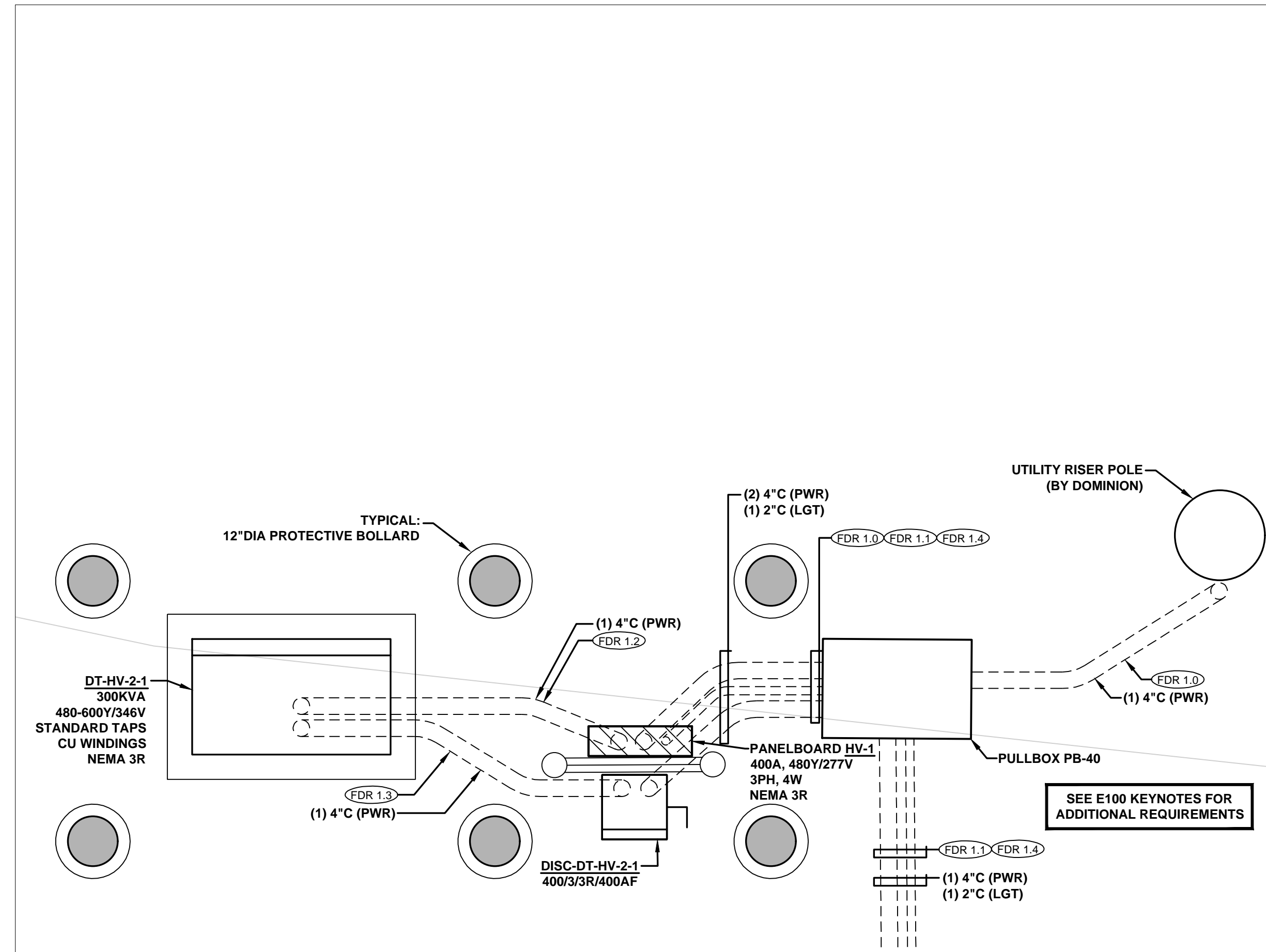
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ENGINEERING, P.C.
PROJECT NO. 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

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5115 Maryl and Way, STE 225
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PHONE NO. (615) 791-0630

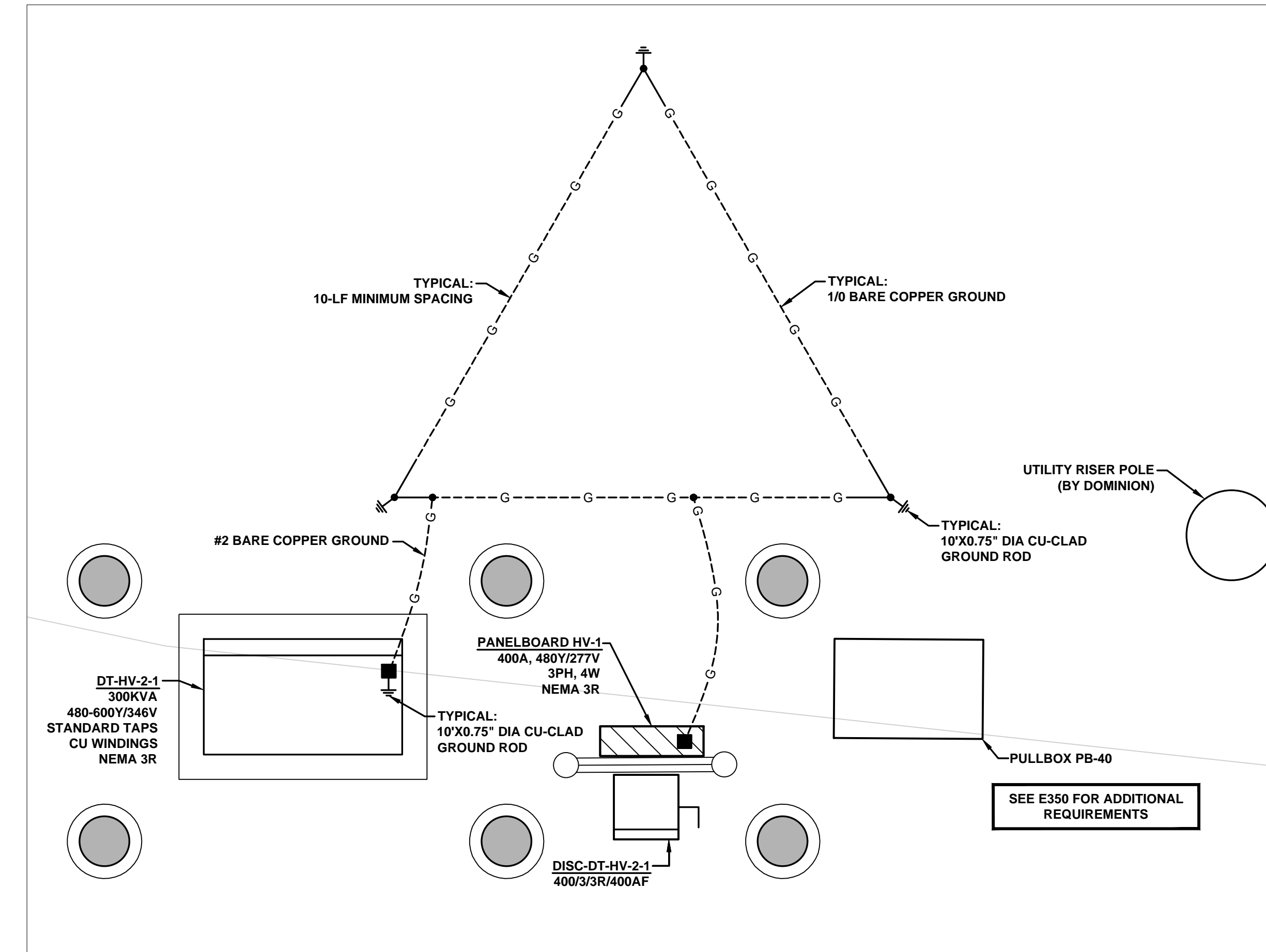
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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

NORFOLK SOUTHERN
OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|---|
| | | | LOCATION: BLYTHEWOOD, SC E158 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT UTILITY DUCTBANK PLAN |
| DWN | RJK | FILE No. D3327 | MRN 04825 MILE POST R91.4 |
| DWN | RJK | FILE No. TRK1115024 | DRAWING NUMBER |
| CHK | TJW | DATE FEBRUARY 16, 2024 | TD-2023-105 |



1 HV-1 ENLARGED ELECTRICAL PLAN- POWER
E200 SCALE: 1/2" = 1'-0"



2 HV-1 ENLARGED ELECTRICAL PLAN- GROUNDING
E200 SCALE: 1/2" = 1'-0"

PHASE 2

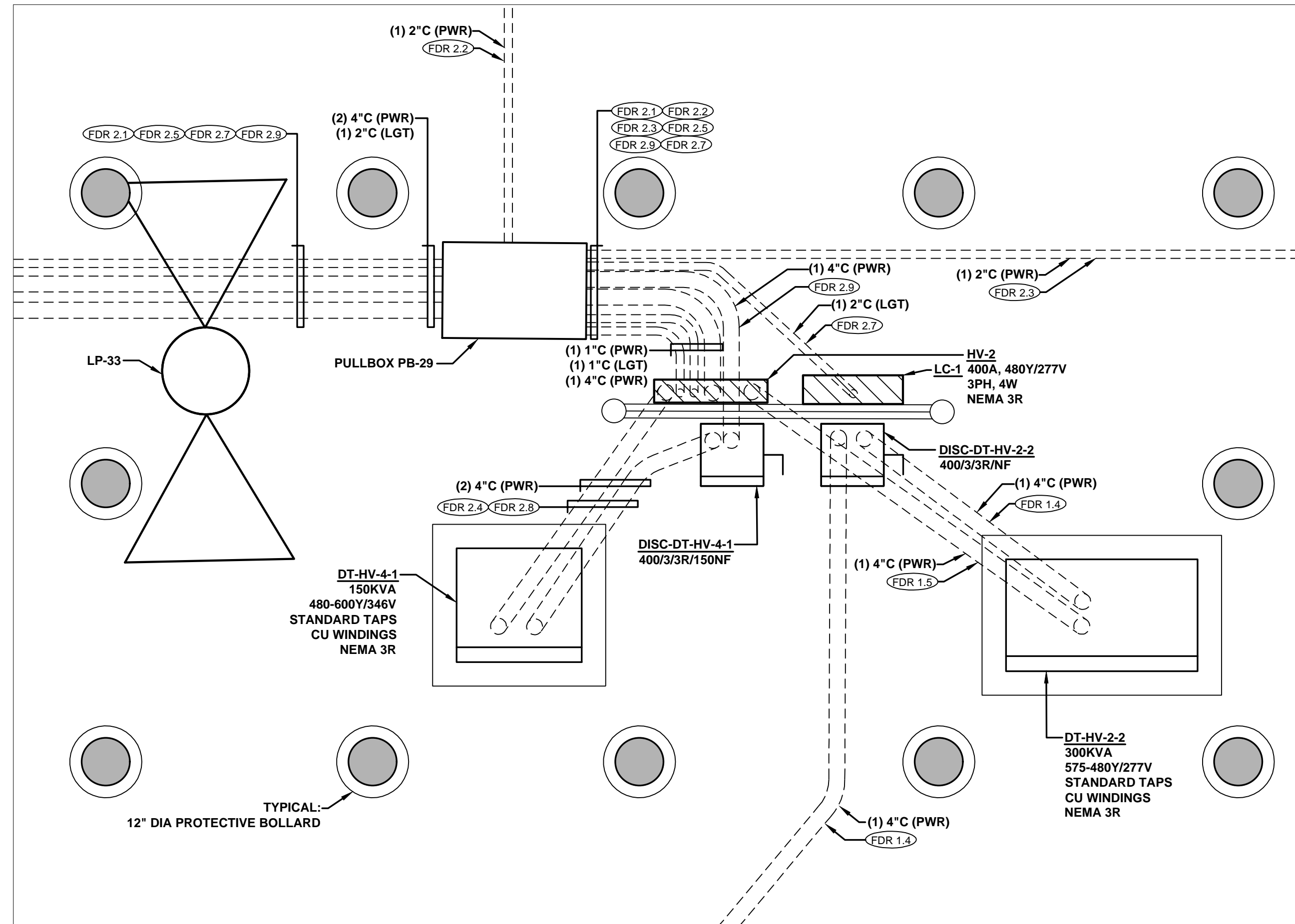
WEISER
ENGINEERING, P.C.
PROJECT NO. 23065
DATE: 12.15.2023
DRAWN BY: RJK
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REVISIONS:

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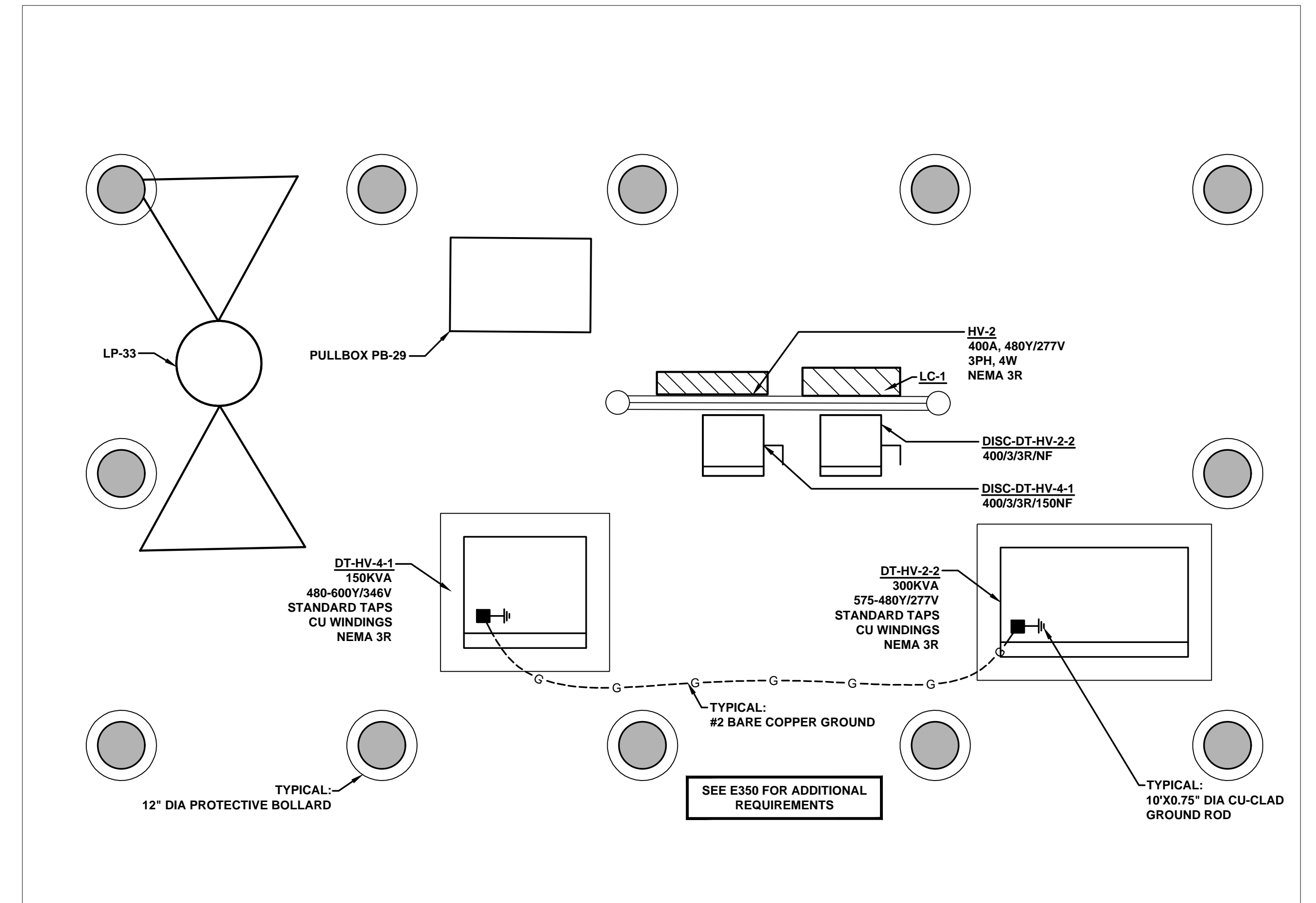
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Brentwood, TN 37027
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OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E200 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT ENLARGED ELECTRICAL PROPOSED PLANS |
| DWN | RJK | FILE NO. D3327 | MILE POST 04825 R91.4 |
| DWN | RJK | FILE NO. TRK1115024 | DRAWING NUMBER |
| CHK | TJW | DATE FEBRUARY 16, 2024 | TD-2023-105 |

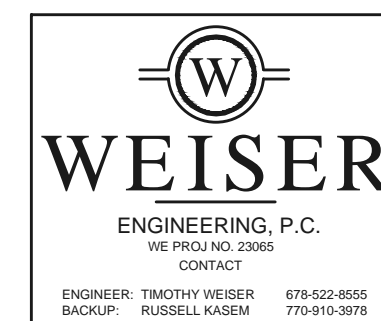


1 HV-2 ENLARGED ELECTRICAL PLAN- POWER
E201 SCALE: 1/2" = 1'-0"

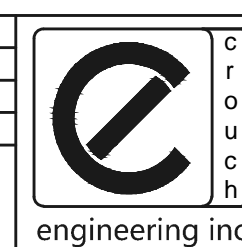


2 HV-2 ENLARGED ELECTRICAL PLAN- GROUNDING
E201 SCALE: 1/2" = 1'-0"

PHASE 2



PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:



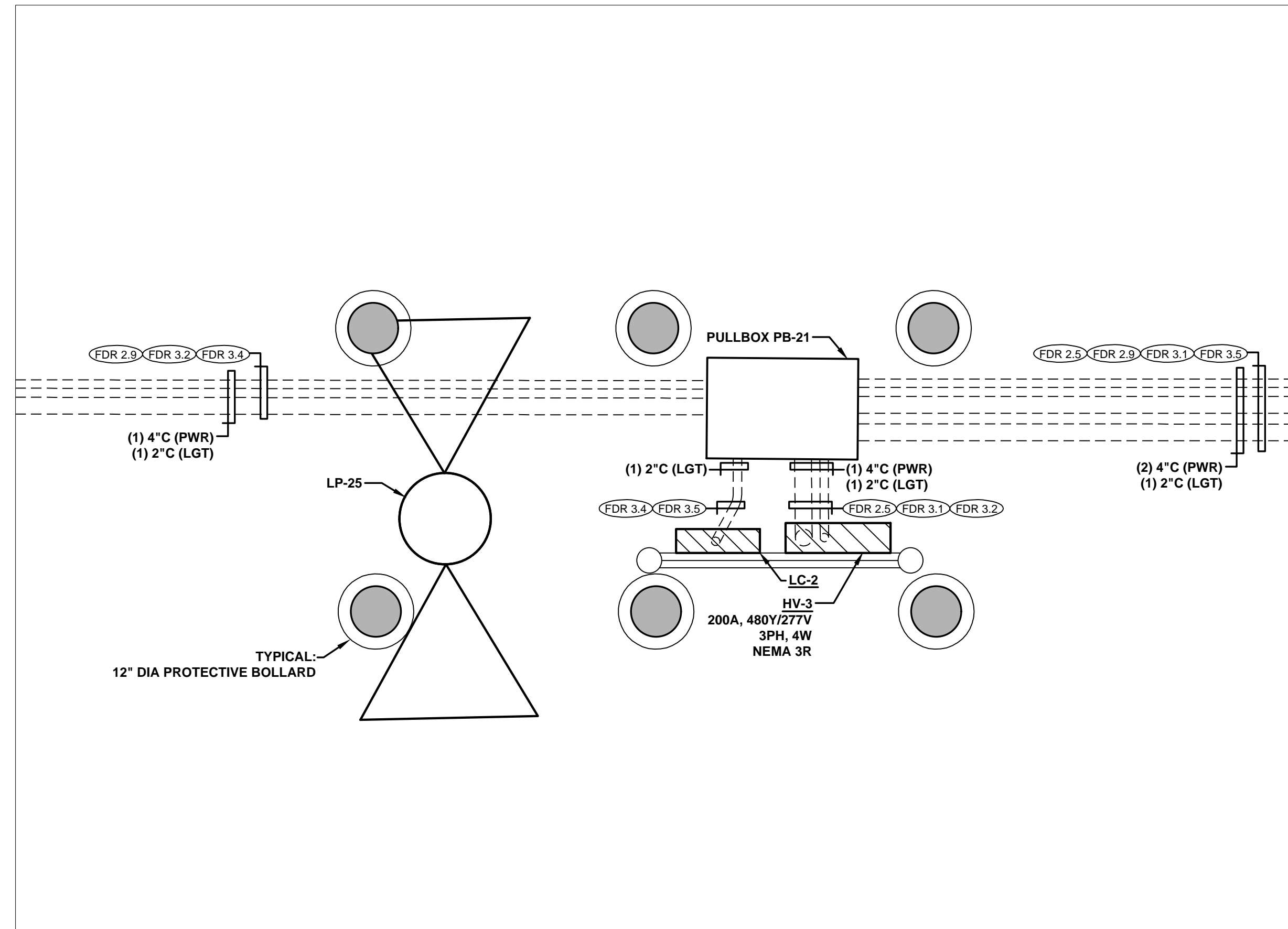
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Brentwood, TN 37027
PHONE NO. (615) 791-0630



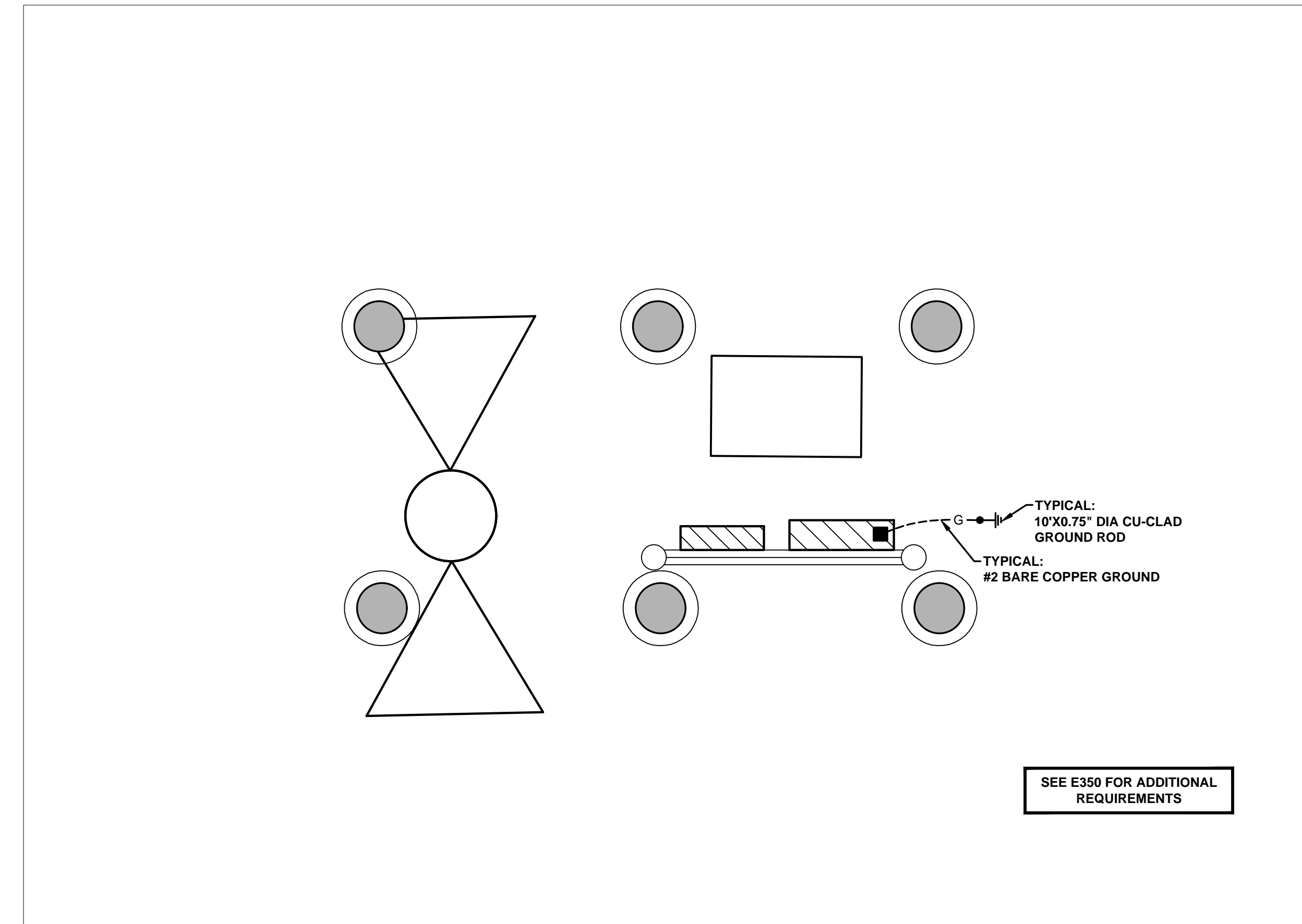
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OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|-------------------|---|
| 1 | RJK | 12/15/2023 | PROPOSED TRACKS TO SERVE PROJECT SCOUT ENLARGED ELECTRICAL PROPOSED PLANS |
| 2 | TJW | FEBRUARY 16, 2024 | |

LOCATION: BLYTHEWOOD, SC E201
MILE POST: 04825 R91.4
DRAWING NUMBER: TD-2023-105



1 HV-3 ENLARGED ELECTRICAL PLAN- POWER
E202 SCALE: 1/2" = 1'-0"



2 HV-3 ENLARGED ELECTRICAL PLAN- GROUNDING
E202 SCALE: 1/2" = 1'-0"

PHASE 2

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678-522-8555
770-910-3878

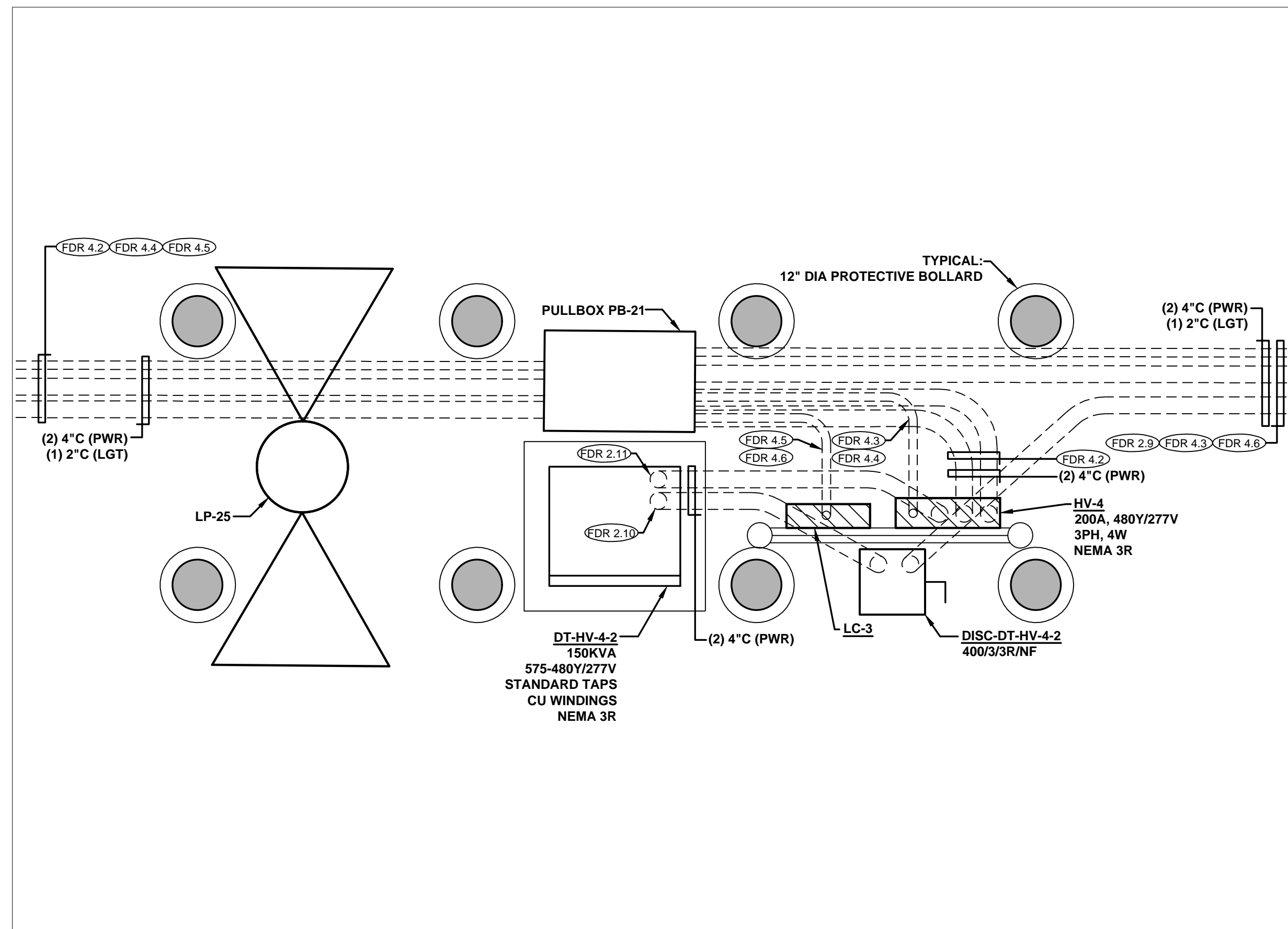
PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

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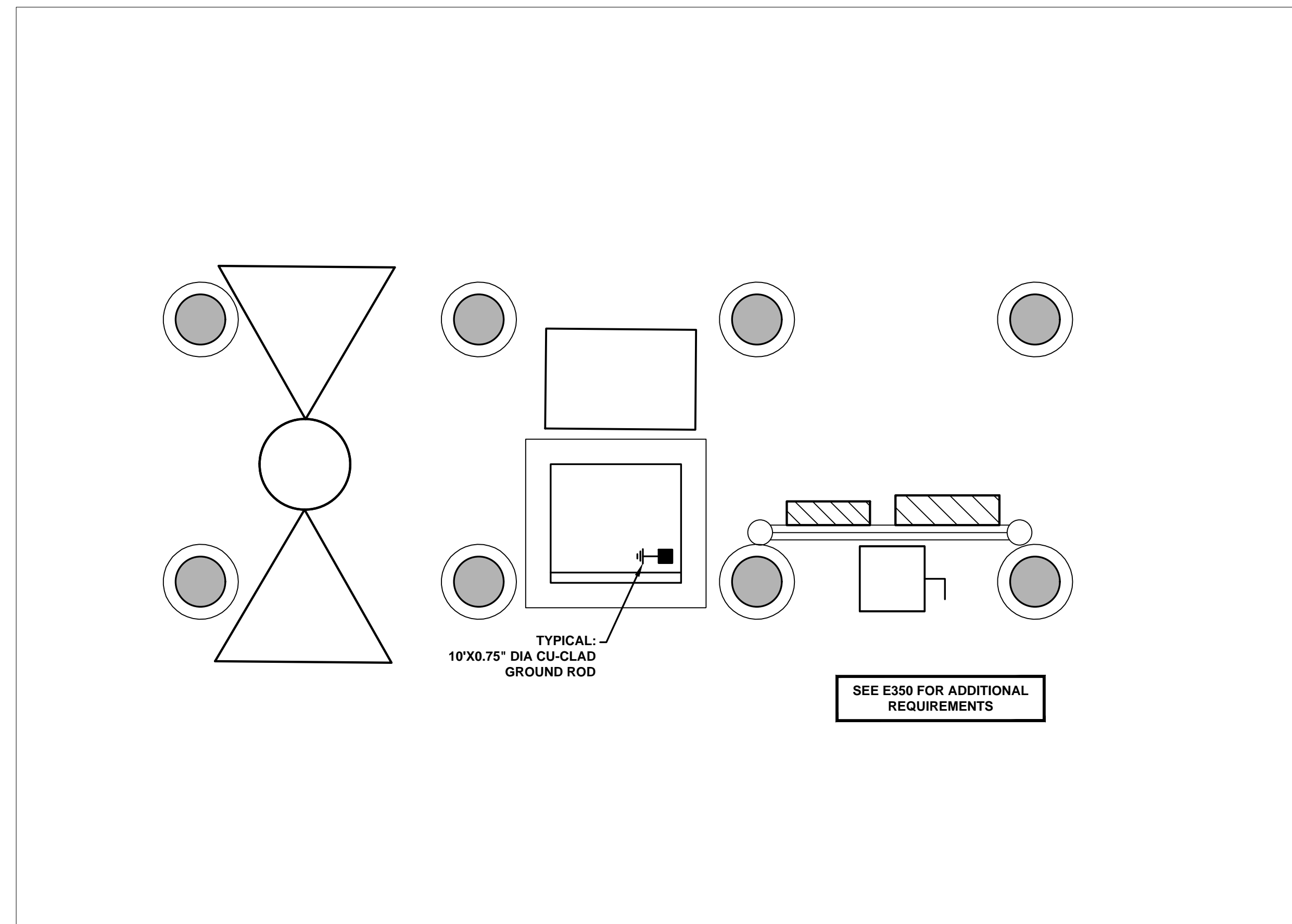
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Brentwood, TN 37027
PHONE NO. (615) 791-0630

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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|-------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E202 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT ENLARGED ELECTRICAL PROPOSED PLANS |
| DWN | RJK | FILE NO. D3327 | TRK1115024 |
| CHK | TJW | DATE: FEBRUARY 16, 2024 | DRAWING NUMBER: TD-2023-105 |



1 HV-4 ENLARGED ELECTRICAL PLAN- POWER
E203 SCALE: 1/2" = 1'-0"



2 HV-4 ENLARGED ELECTRICAL PLAN- GROUNDING
E203 SCALE: 1/2" = 1'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
ENGINEER: TIMOTHY WEISER
BACKUP: RUSSELL KASEM

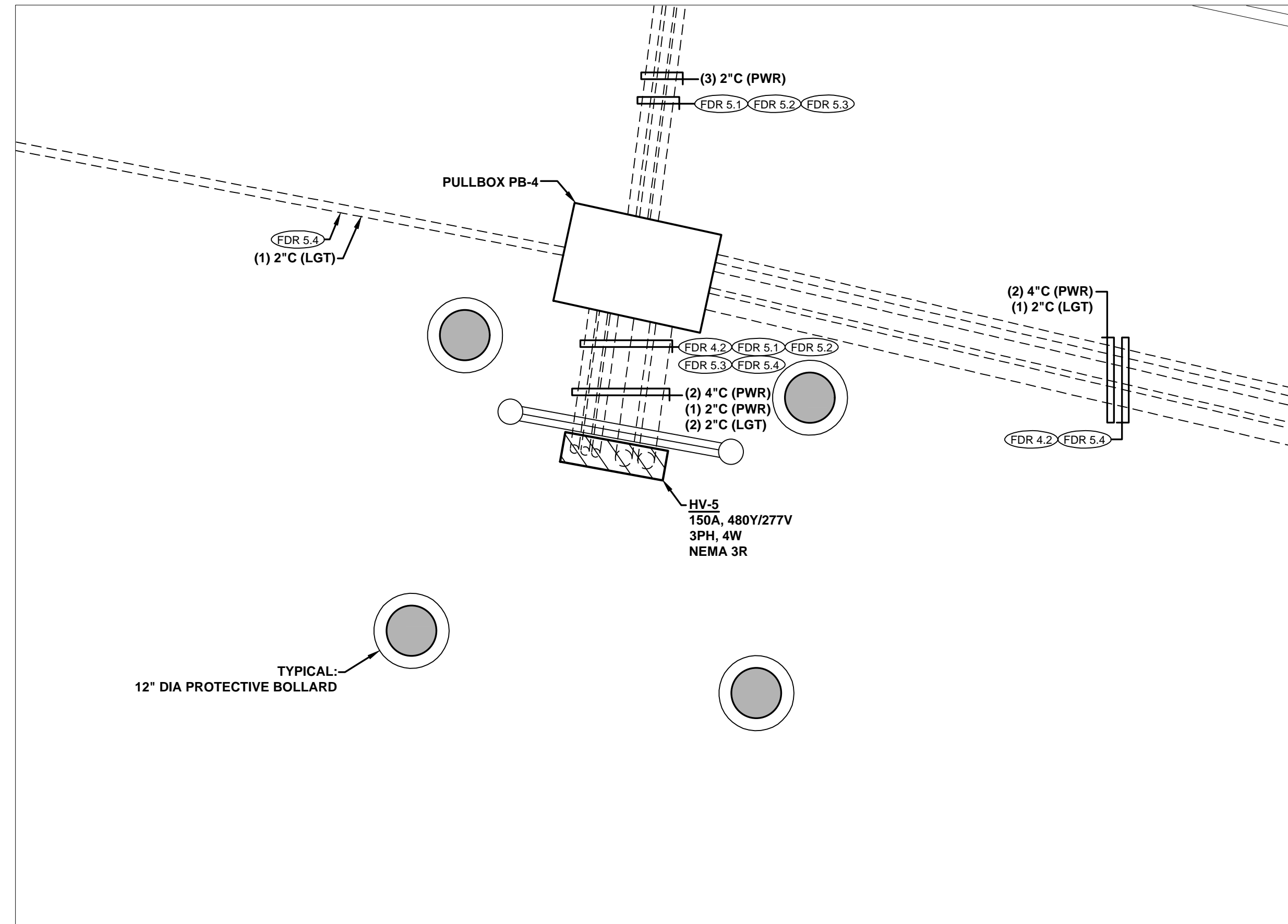
PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW

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engineering inc.

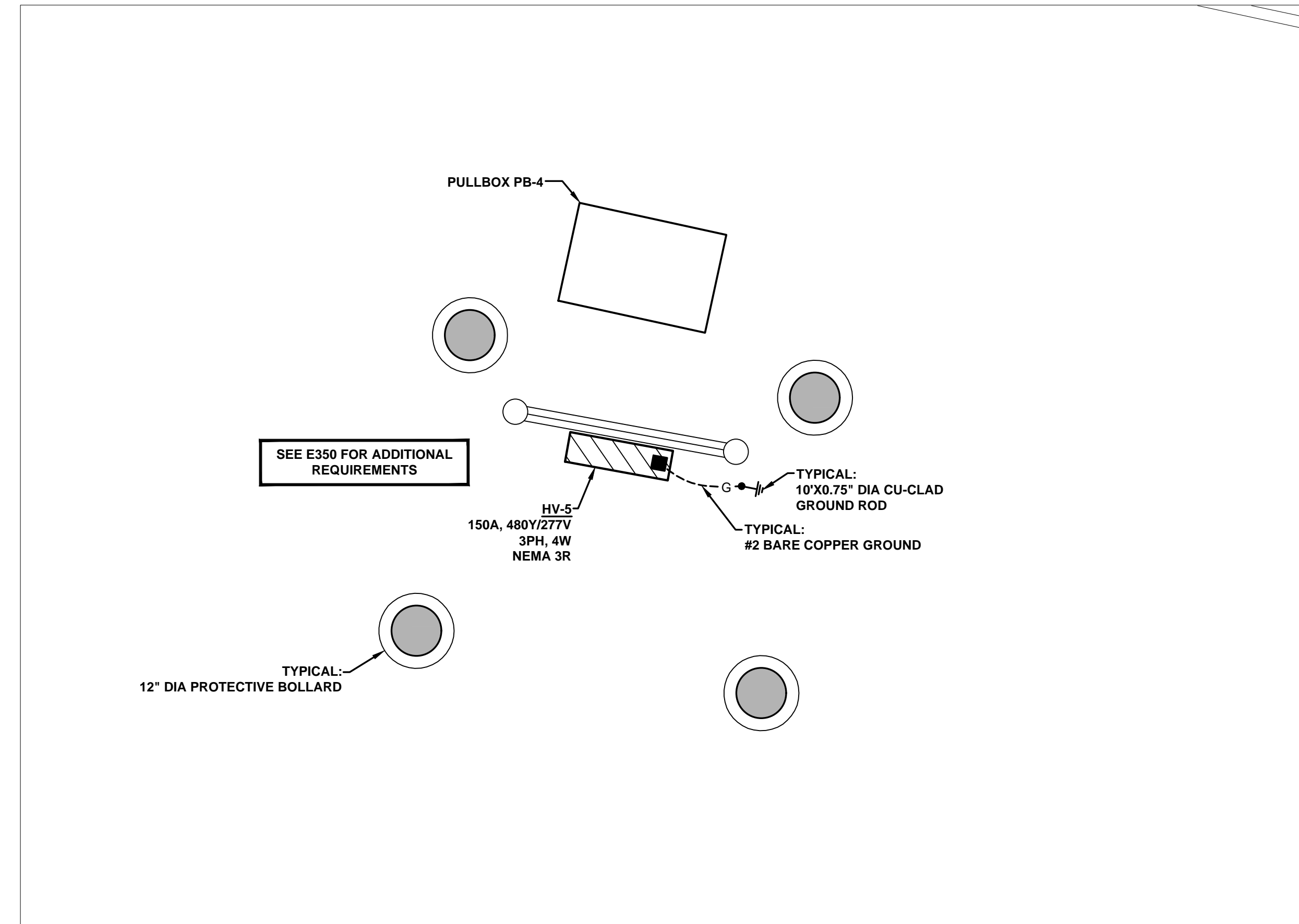
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Brentwood, TN 37027
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| REV | BY | DATE | DESCRIPTION |
|-----|-----|-------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E203 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT ENLARGED ELECTRICAL PROPOSED PLANS |
| DWN | RJK | FILE No. D3327 | TRK1115024 |
| CHK | TJW | DATE: FEBRUARY 16, 2024 | |



1 HV-3 ENLARGED ELECTRICAL PLAN- POWER
E204 SCALE: 1/2" = 1'-0"



2 HV-3 ENLARGED ELECTRICAL PLAN- GROUNDING
E204 SCALE: 1/2" = 1'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
678-922-8555
770-910-3978

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

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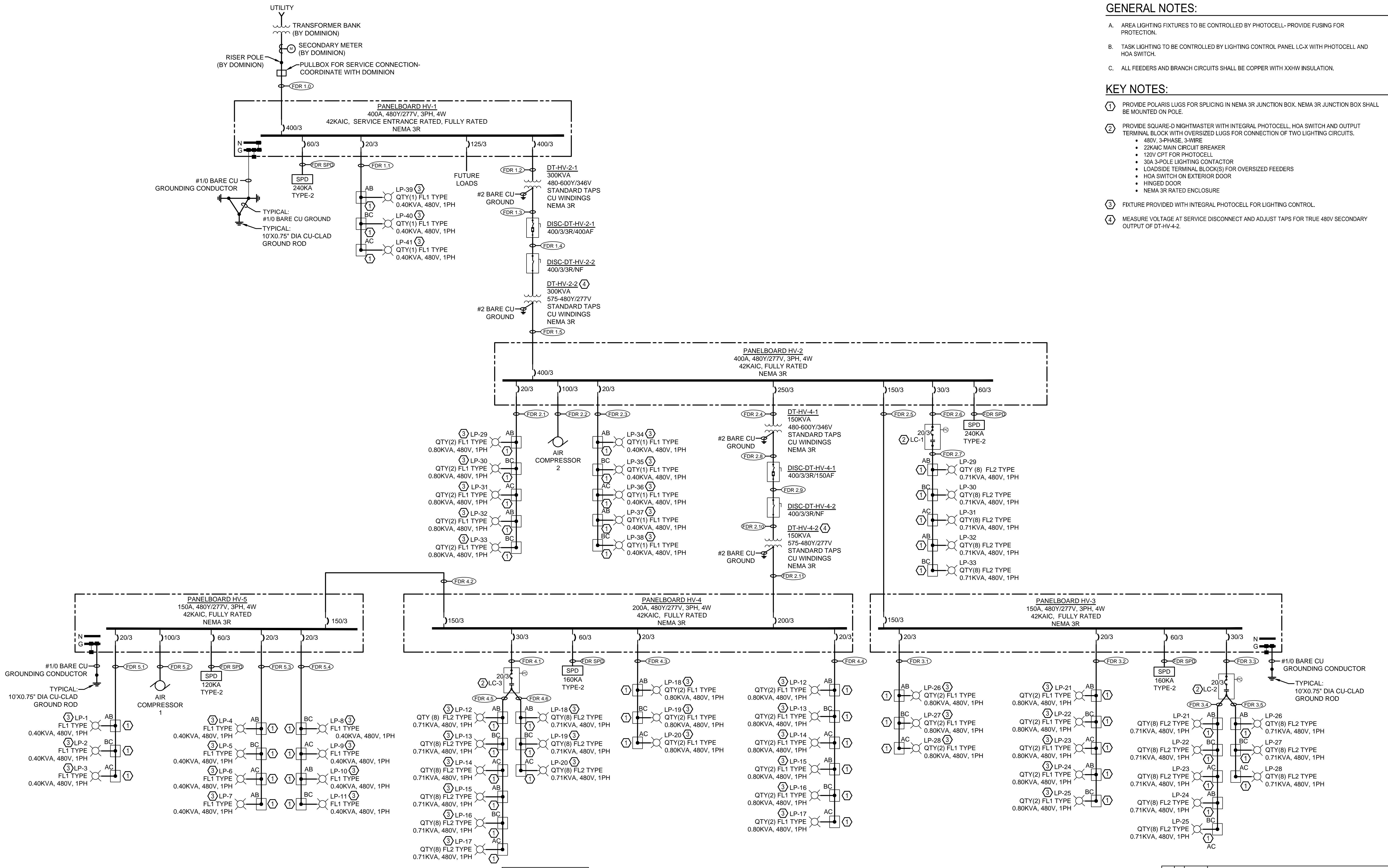
| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E204 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT ENLARGED ELECTRICAL PROPOSED PLANS |
| DWN | RJK | FILE NO. D3327 | MILE POST 04825 R91.4 |
| DWN | RJK | FILE NO. TRK1115024 | DRAWING NUMBER |
| CHK | TJW | DATE FEBRUARY 16, 2024 | TD-2023-105 |

GENERAL NOTES:

- A. AREA LIGHTING FIXTURES TO BE CONTROLLED BY PHOTOCELL- PROVIDE FUSING FOR PROTECTION.
- B. TASK LIGHTING TO BE CONTROLLED BY LIGHTING CONTROL PANEL LC-X WITH PHOTOCELL AND HOA SWITCH.
- C. ALL FEEDERS AND BRANCH CIRCUITS SHALL BE COPPER WITH XXHW INSULATION.

KEY NOTES:

- ① PROVIDE POLARIS LUGS FOR SPLICING IN NEMA 3R JUNCTION BOX. NEMA 3R JUNCTION BOX SHALL BE MOUNTED ON POLE.
- ② PROVIDE SQUARE-D NIGHTMASTER WITH INTEGRAL PHOTOCELL, HOA SWITCH AND OUTPUT TERMINAL BLOCK WITH OVERSIZED LUGS FOR CONNECTION OF TWO LIGHTING CIRCUITS.
 - 480V, 3-PHASE, 3-WIRE
 - 22KAIC MAIN CIRCUIT BREAKER
 - 120V CPT FOR PHOTOCELL
 - 30A 3-POLE LIGHTING CONTACTOR
 - LOADSIDE TERMINAL BLOCK(S) FOR OVERSIZED FEEDERS
 - HOA SWITCH ON EXTERIOR DOOR
 - HINGED DOOR
 - NEMA 3R RATED ENCLOSURE
- ③ FIXTURE PROVIDED WITH INTEGRAL PHOTOCELL FOR LIGHTING CONTROL.
- ④ MEASURE VOLTAGE AT SERVICE DISCONNECT AND ADJUST TAPS FOR TRUE 480V SECONDARY OUTPUT OF DT-HV-4-2.



PHASE 2

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WE PROJ NO. 23065
ENGINEER: TIMOTHY WEISER 678-622-8655
BACKUP: RUSSELL KASEM 770-910-3978

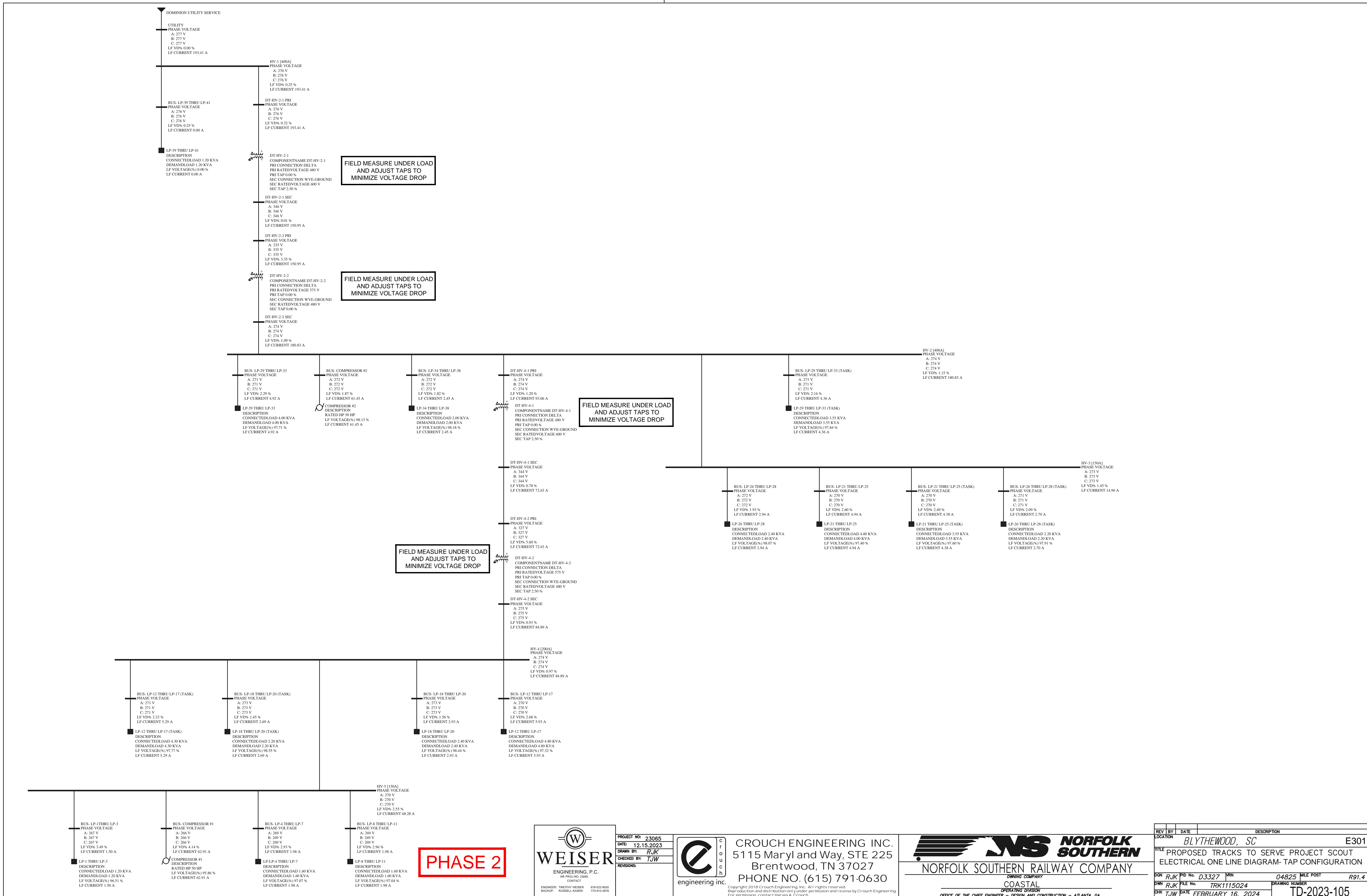
PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

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NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
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OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|----|------|-------------|
| | | | |

LOCATION: BLYTHEWOOD, SC E300
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT ELECTRICAL ONE LINE DIAGRAM
DWN: RJK PWD No: D3327 WRN 04825 MILE POST: R91.4
CHK: TJW FILE No: TRK1115024 DRAWING NUMBER
DATE: FEBRUARY 16, 2024 TD-2023-105



FIELD MEASURE UNDER LOAD
AND ADJUST TAPS TO
MINIMIZE VOLTAGE DROP

FIELD MEASURE UNDER LOAD
AND ADJUST TAPS TO
MINIMIZE VOLTAGE DROP

FIELD MEASURE UNDER LOAD
AND ADJUST TAPS TO
MINIMIZE VOLTAGE DROP

FIELD MEASURE UNDER LOAD
AND ADJUST TAPS TO
MINIMIZE VOLTAGE DROP

PHASE 2

WEISER
ENGINEERING, P.C.
WE PROJ NO: 23065
CONTACT:
ENGINEER: TIMOTHY WEISER 678-622-8655
BACKUP: RUSSELL KASEM 770-910-3878

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

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engineering inc.

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5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630

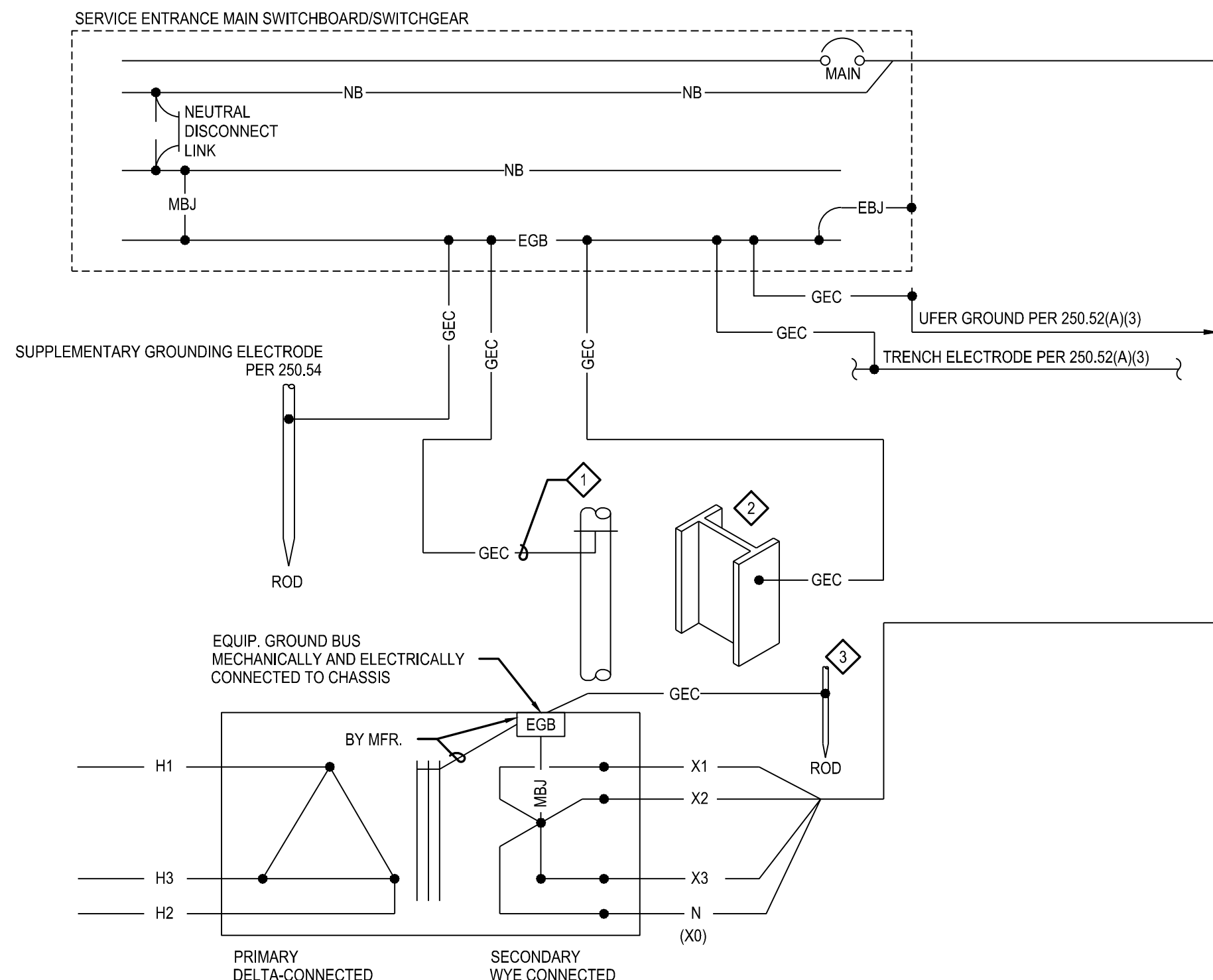
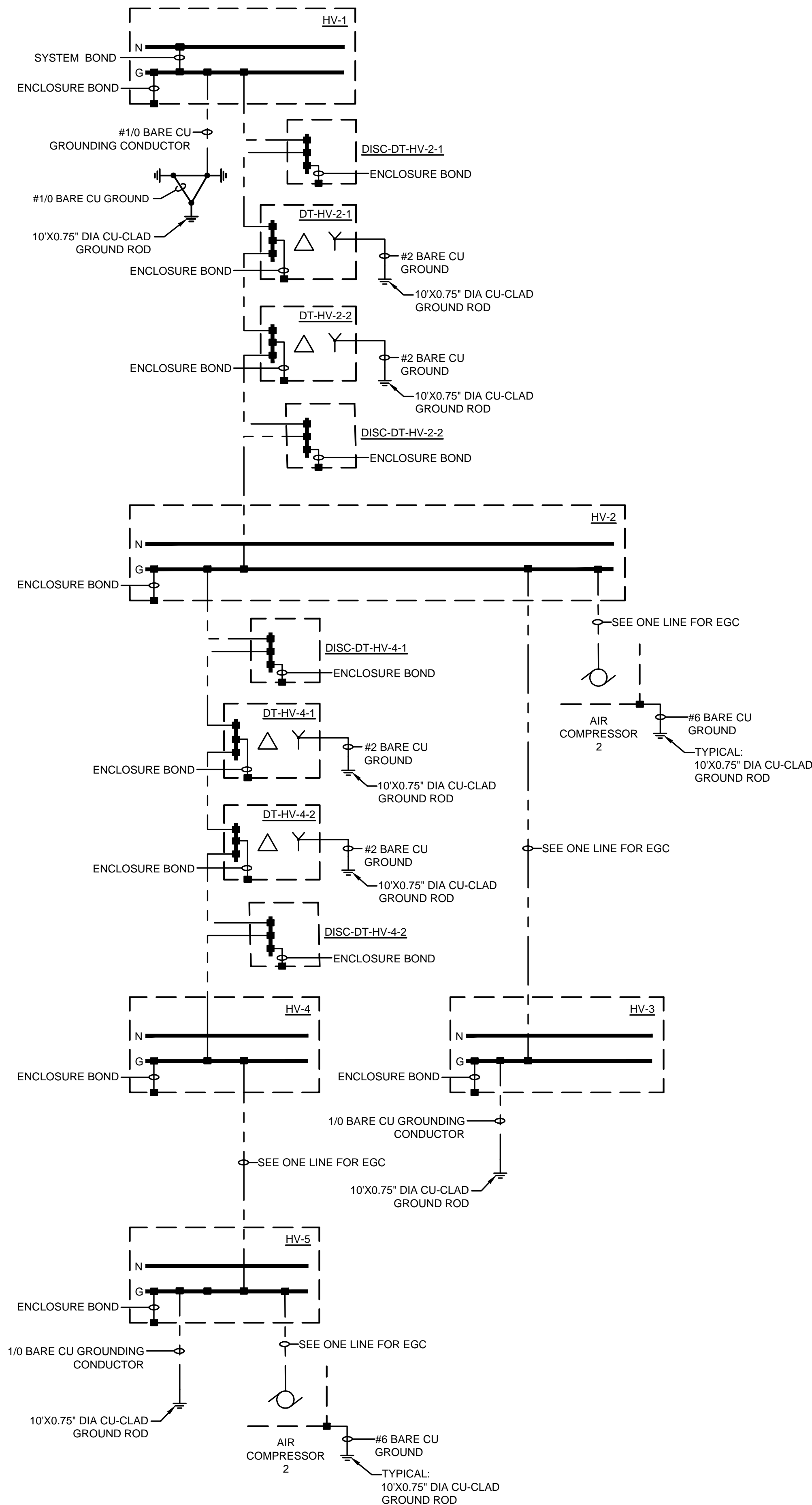
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| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------|------------------------|
| 1 | TJW | 02/16/2024 | ISSUE FOR CONSTRUCTION |

LOCATION: BLYTHEWOOD, SC E301
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT ELECTRICAL ONE LINE DIAGRAM- TAP CONFIGURATION
DWN: RJK FILE NO.: TRK1115024
CHK: TJW DATE: FEBRUARY 16, 2024

GENERAL NOTES:

- A. REFER TO ELECTRICAL ONE LINE DIAGRAM FOR EQUIPMENT GROUNDING CONDUCTOR (EGC) SIZES INSTALLED WITH FEEDERS.
- B. BOND ALL METALLIC ENCLOSURES TO GROUND.

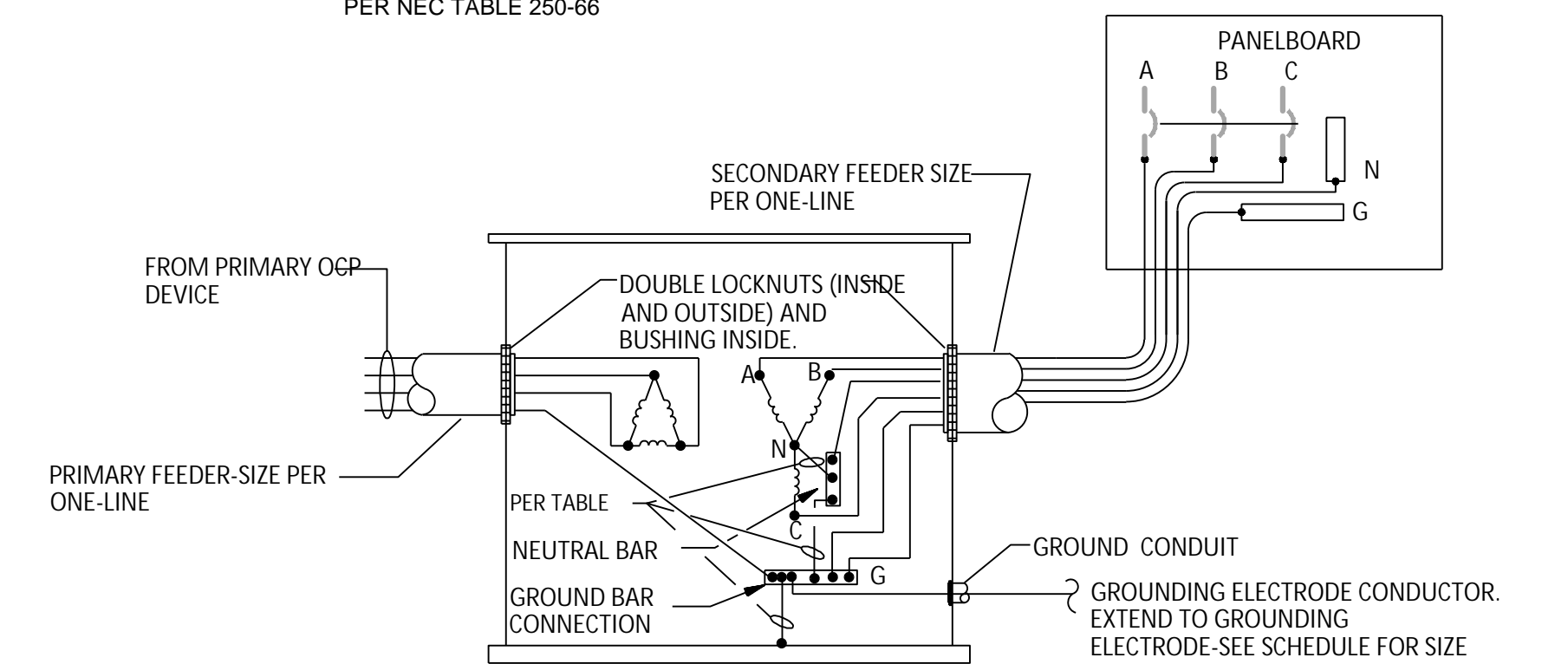


| KVA | CONDUCTOR | CONDUIT SIZE |
|-------|-----------|--------------|
| 9 | 1 #8 | 3/4" C |
| 15 | 1 #8 | 3/4" C |
| 30 | 1 #8 | 3/4" C |
| 45 | 1 #6 | 3/4" C |
| 75 | 1 #2 | 3/4" C |
| 112.5 | 1 #1/0 | 3/4" C |
| 150 | 1 #1/0 | 3/4" C |
| 225 | 1 #2/0 | 3/4" C |
| 300 | 1 #2/0 | 3/4" C |
| 500 | 1 #3/0 | 3/4" C |

GROUNDING ELECTRODE CONDUCTOR SCHEDULE PER NEC TABLE 250-66

NOTES

1. DETAIL TYPICAL FOR 3-PHASE TRANSFORMERS WITH 480 VOLT PRIMARY AND 208/120 SECONDARY VOLTAGES
2. BONDING JUMPER AND GROUNDING ELECTRODE CONDUCTOR SHALL BE SIZED PER NEC 250-66.
3. BONDING JUMPER AND REQUIRED GROUNDING ELECTRODE CONDUCTOR SHALL BE SAME SIZE. IF THE SECONDARY FEEDER CONDUCTORS ARE GREATER THAN 1100CMIL COPPER OR 1750CMIL ALUMINUM, THE BONDING JUMPER SHALL BE INCREASED IN SIZE TO 12.5 PERCENT OF THE CROSS-SECTIONAL AREA OF THE SECONDARY PHASE CONDUCTOR.



- LEGEND:**
- NB NEUTRAL BUS
 - EGB EQUIPMENT GROUND BUS
 - N NEUTRAL CONDUCTOR
 - GEC GROUNDING ELECTRODE CONDUCTOR BARE OR INSUL. SIZED PER 250.66
 - EBJ EQUIPMENT BONDING JUMPER, PER 250.102
 - EGC EQUIPMENT GROUNDING CONDUCTOR BARE OR INSUL. PER 250.110
 - MBJ MAIN BONDING JUMPER, PER 250.28
- NOTES:**
- 1 NEAREST EFFECTIVELY GROUNDING METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH EARTH FOR 10 FEET OR MORE, LOCATED WITHIN 5FT FROM POINT OF ENTRANCE TO BUILDING AND ELECTRICALLY CONTINUOUS TO POINTS OF CONNECTION OF THE GROUNDING ELECTRODE CONDUCTOR AND ANY BONDING CONDUCTORS. THE GEC SHALL BE SIZED PER SECTION 250.66, INSTALLED PER 250.104.
 - 2 NEAREST EFFECTIVELY GROUNDING STRUCTURAL METAL FRAMING MEMBER. THE GEC SHALL BE SIZED PER SECTION 250.66.
 - 3 UTILITY REQUIREMENTS ONLY WITHIN TRANSFORMER CONNECTION COMPARTMENTS. SIZED PER UTILITY REQUIREMENTS.

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PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

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Brentwood, TN 37027
PHONE NO. (615) 791-0630

NORFOLK SOUTHERN
NORFOLK SOUTHERN RAILWAY COMPANY
COASTAL OPERATING DIVISION
OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------|---|
| 1 | RJK | 12/15/2023 | PROPOSED TRACKS TO SERVE PROJECT SCOUT ELECTRICAL GROUNDING RISER DIAGRAM |

LOCATION: BLYTHEWOOD, SC E350
MILE POST: 04825 R91.4
FILE NO: TRK1115024
DATE: FEBRUARY 16, 2024
DRAWING NUMBER: TD-2023-105

| FEEDER SCHEDULE | | | | | | | | | | | | | | |
|-----------------|---------------------|----------------------------------|-------|-------------|-------|---------------|-----------------|-------------------|------------------|-------|-----------|---------------|--------------|----------------------|
| TAG# | SOURCE | DESTINATION | OCF | VOLTAGE (V) | PHASE | PARALLEL SETS | PHASE CONDUCTOR | NEUTRAL CONDUCTOR | GROUND CONDUCTOR | AMPS | IMPEDANCE | DISTANCE (FT) | VOLTAGE DROP | PERCENT VOLTAGE DROP |
| FDR 1.0 | UTILITY TRANSFORMER | HV-1 | 400/3 | 480 | 3 | 1 | 600KCMIL | 600KCMIL | NA | 305.0 | 0.047 | 75 | 1.9 | 0.39% |
| FDR 1.1 | HV-1 | LP-39 THRU LP-41 (AREA LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 2.0 | 0.700 | 500 | 1.2 | 0.25% |
| FDR 1.2 | HV-1 | DT-HV-2-1 | 400/3 | 480 | 3 | 1 | 600KCMIL | NA | 3 | 298.0 | 0.047 | 20 | 0.5 | 0.10% |
| FDR 1.3 | DT-HV-2-1 | DISC-DT-HV-2-1 | 400/3 | 600 | 3 | 1 | 600KCMIL | NA | 3 | 151.0 | 0.047 | 20 | 0.2 | 0.04% |
| FDR 1.4 | DISC-DT-HV-2-1 | DISC-DT-HV-2-2 | 400/3 | 600 | 3 | 1 | 500KCMIL | NA | 3 | 151.0 | 0.050 | 1500 | 19.6 | 3.27% |
| FDR 1.5 | DT-HV-2-2 | HV-2 | 400/3 | 480 | 3 | 1 | 600KCMIL | 600KCMIL | 3 | 181.0 | 0.047 | 20 | 0.3 | 0.06% |
| FDR 2.1 | HV-2 | LP-29 THRU LP-33 (AREA LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 3.5 | 0.700 | 840 | 3.6 | 0.74% |
| FDR 2.2 | HV-2 | AIR COMPRESSOR #2 | 100/3 | 480 | 3 | 1 | 1 | NA | 8 | 80.0 | 0.160 | 200 | 4.4 | 0.92% |
| FDR 2.3 | HV-2 | LP-34 THRU LP-38 | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 3.5 | 0.700 | 1000 | 4.2 | 0.88% |
| FDR 2.4 | HV-2 | DT-HV-4-1 | 250/3 | 480 | 3 | 1 | 250KCMIL | NA | 4 | 146.0 | 0.073 | 20 | 0.4 | 0.08% |
| FDR 2.5 | HV-2 | HV-3 | 150/3 | 480 | 3 | 1 | 3/0 | 3/0 | 4 | 30.4 | 0.094 | 1200 | 5.9 | 1.24% |
| FDR 2.6 | HV-2 | LC-1 | 30/3 | 480 | 3 | 1 | 10 | NA | 10 | 3.5 | 1.100 | 10 | 0.1 | 0.01% |
| FDR 2.7 | LC-1 | LP-29 THRU LP-33 (TASK LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 3.0 | 0.700 | 840 | 3.1 | 0.64% |
| FDR 2.8 | DT-HV-4-1 | DISC-DT-HV-4-1 | NA | 600 | 3 | 1 | 3/0 | NA | 6 | 116.8 | 0.094 | 20 | 0.4 | 0.06% |
| FDR 2.9 | DISC-DT-HV-4-1 | DISC-DT-HV-4-2 | 150/3 | 600 | 3 | 1 | 3/0 | NA | 6 | 116.8 | 0.094 | 2400 | 45.6 | 7.61% |
| FDR 2.10 | DISC-DT-HV-4-2 | DT-HV-4-2 | 150/3 | 600 | 3 | 1 | 3/0 | NA | 6 | 116.8 | 0.094 | 20 | 0.4 | 0.06% |
| FDR 2.11 | DT-HV-4-2 | HV-4 | 200/3 | 480 | 3 | 1 | 250KCMIL | 250KCMIL | 4 | 146.0 | 0.073 | 20 | 0.4 | 0.08% |
| FDR 3.1 | HV-3 | LP-26 THRU LP-28 (AREA LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 2.9 | 0.700 | 586 | 2.4 | 0.49% |
| FDR 3.2 | HV-3 | LP-21 THRU LP-25 (AREA LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 3.3 | 0.700 | 845 | 3.4 | 0.71% |
| FDR 3.3 | HV-3 | LC-2 | 30/3 | 480 | 3 | 1 | 10 | NA | 10 | 6.8 | 1.100 | 20 | 0.3 | 0.06% |
| FDR 3.4 | LC-2 | LP-21 THRU LP-25 (TASK LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 3.0 | 0.700 | 790 | 3.3 | 0.68% |
| FDR 3.5 | LC-2 | LP-26 THRU LP-28 (TASK LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 2.0 | 0.700 | 860 | 2.1 | 0.43% |
| FDR 4.1 | HV-4 | LC-3 | 30/3 | 480 | 3 | 1 | 10 | NA | 10 | 7.7 | 1.100 | 20 | 0.3 | 0.06% |
| FDR 4.2 | HV-4 | HV-5 | 150/3 | 480 | 3 | 2 | 500KCMIL | 500KCMIL | 250KCMIL | 123.8 | 0.050 | 2500 | 13.4 | 2.79% |
| FDR 4.3 | HV-4 | LP-18 THRU LP-20 (AREA LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 2.0 | 0.700 | 731 | 1.8 | 0.37% |
| FDR 4.4 | HV-4 | LP-12 THRU LP-17 (AREA LIGHTS) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 4.0 | 0.700 | 1042 | 5.1 | 1.05% |
| FDR 4.5 | LC-3 | LP-12 THRU LP-17 (TASK LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 4.5 | 0.700 | 862 | 4.7 | 0.98% |
| FDR 4.6 | LC-3 | LP-18 THRU LP-20 (TASK LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 2.5 | 0.700 | 641 | 1.9 | 0.40% |
| FDR 5.1 | HV-5 | LP-1 THRU LP-3 (AREA LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 1.0 | 0.700 | 2300 | 2.8 | 0.58% |
| FDR 5.2 | HV-5 | AIR COMPRESSOR #1 | 100/3 | 480 | 3 | 1 | 1/0 | NA | 6 | 80.0 | 0.130 | 520 | 9.4 | 1.95% |
| FDR 5.3 | HV-5 | LP-4 THRU LP-7 (AREA LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 2.0 | 0.700 | 700 | 1.7 | 0.35% |
| FDR 5.4 | HV-5 | LP-8 THRU LP-11 (AREA LIGHTING) | 20/3 | 480 | 3 | 1 | 8 | NA | 8 | 2.0 | 0.700 | 750 | 1.8 | 0.38% |

GENERAL NOTES:

1. ALL FEEDERS' LENGTHS ARE HORIZONTAL DISTANCE FROM SOURCE TO DESTINATION PLUS 20-FT FOR TERMINATIONS.
2. LP-X FEEDERS INCLUDE 50-FT PER POLE TO ACCOUNT FOR RISER LENGTH

| LIGHTING FIXTURE SCHEDULE | | | | | | | | |
|---------------------------|-------------------|--|--|----------------|-------|-------------|----------------|-------|
| TYPE | MANUFACTURER | BASIS OF DESIGN DESCRIPTION | CATALOG NUMBER | LED COLOR TEMP | WATTS | MOUNTING | | NOTES |
| | | | | | | TYPE | HEIGHT | |
| FL1 | LITHONIA LIGHTING | RSX4 LED FLOODLIGHT. TYPE 2 WIDE DISTRIBUTION, LED FIXTURE 5000K, 480V SINGLE PHASE. NATURAL ALUMINUM FINISH. SEVEN WIRE TWIST LOCK RECEPTACLE W/ 480V PHOTOCELL | RSX4 LED P2 50K R2 480V IS DNAXD HS PER7 DF DLL480F 1.5 CUL JU | 5000K | 320W | SLIP-FITTER | 42-FT | 1, 2 |
| FL2 | LITHONIA LIGHTING | RSX2 LED FLOODLIGHT. TYPE 5 WIDE DISTRIBUTION, LED FIXTURE 5000K, 480V SINGLE PHASE. NATURAL ALUMINUM FINISH. | RSX2 LED P1 50K R5 480V IS DNAXD | 5000K | 71W | SLIP-FITTER | 6-FT AND 12-FT | - |

GENERAL NOTES - APPLICABLE TO ALL LIGHTING FIXTURES

A *DESCRIPTION* SPECIFIES FIXTURE BY DESCRIPTION, AND MAY ALSO INDICATE MANUFACTURERS' CATALOG NUMBER OR SERIES NUMBER. PROVIDE WITH ITEMS INDICATED.

B *MOUNTING* GENERALLY INDICATES THE MOUNTING CONDITIONS; PENDANT STEM LENGTHS, MOUNTING HEIGHTS, OPTIONS, AND OTHER ADDITIONAL INFO ARE INDICATED IN THE *NOTES* OR AS INDICATED ON THE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF LIGHTING FIXTURES, COORDINATE WITH EXACT CEILING CONFIGURATION.

C THE LIGHTING FIXTURE SCHEDULE IS PREDICATED ON PERFORMANCE AND IS DESIGNED TO MEET CERTAIN AESTHETIC AND BUDGETARY CRITERIA. SPECIFIC LIGHTING FIXTURES WERE SELECTED BY TYPE, PHOTOMETRIC PERFORMANCE, LIGHTING PATTERN AND LUMEN OUTPUT. ANY PROPOSED SUBSTITUTION TO THE ABOVE SPECIFIED LIGHTING FIXTURE SCHEDULE MUST BE OF EQUAL OR GREATER QUALITY WITH REGARDS TO PHYSICAL APPEARANCE, CONSTRUCTION GRADE, DIMENSIONS, FINISHES, LENSING, ACCESSORIES AND PHOTOMETRY. ANY SUBSTITUTIONS TO THE ABOVE MUST HAVE ALL OF THE REQUIRED INFORMATION CONFIRMING THE ABOVE INCLUDED WITH THE SHOP DRAWING SUBMITTAL IN A COMPARISON FORMAT FOR PROPER REVIEW BY THE SPECIFYING ENGINEER. ANY PROPOSED *EQUAL* SUBMITTAL THAT DOES NOT MEET THIS CRITERIA WILL BE REJECTED. REFER TO CONTRACT SPECIFICATIONS FOR SUBMITTAL AND PRIOR APPROVAL TO BID REQUIREMENTS.

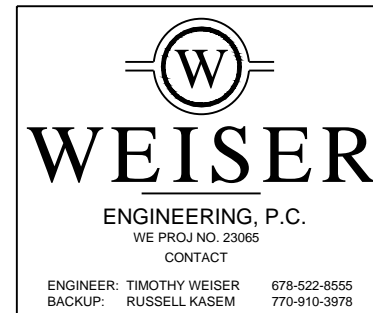
D ENSURE THAT ALL FIXTURES INTENDED FOR USE IN EXTERIOR INSTALLATIONS HAVE BEEN SPECIFIED WITH UL LISTING FOR USE IN DAMP RATED LOCATIONS. PROVIDE NECESSARY NEMA 3R BACK BOXES AND ASSOCIATED COVERS WHERE REQUIRED BY CODE.

NOTES - APPLICABLE TO LIGHTING FIXTURES INDICATED

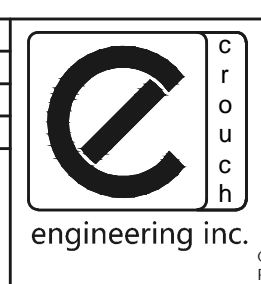
- 1 PHOTOCELL SHIPS LOSE- FIELD INSTALL PHOTOCELL ON 7-WIRE TWIST LOCK RECEPTACLE. ACCESSORY ORDERED AND SHIPPED SEPARATELY.
- 2 PROVIDE AND FIELD INSTALL HOUSE SHIELD. ACCESSORY ORDERED AND SHIPPED SEPARATELY.

| PULLBOX SCHEDULE | | | | | | | | | |
|------------------|----------|----------------|------------|----------|----------|-----------------|--------------|---|--|
| TAG | BOX TYPE | COMMUNICATIONS | BOX RATING | BOX SIZE | BOX SIZE | N/E COORDINATES | | COMMENTS | |
| | | | | | | N | E | | |
| PB-1 | X | | | X | X | 857145.5662 | 1999258.6794 | | |
| PB-2 | X | | | X | X | 856946.2854 | 1999714.6254 | | |
| PB-3 | X | | | X | X | 856812.0018 | 1999902.7258 | | |
| PB-4 | X | | | X | X | 856754.5997 | 1999899.6461 | | |
| PB-5 | X | | | X | X | 856735.8801 | 1999981.1647 | | |
| PB-6 | X | | | X | X | 856717.0213 | 2000128.5516 | | |
| PB-7 | X | | | X | X | 856687.8745 | 2000274.7870 | | |
| PB-8 | X | | | X | X | 856686.8988 | 2000424.6794 | | |
| PB-9 | X | | | X | X | 856673.3781 | 2000572.2633 | | |
| PB-10 | X | | | X | X | 856672.4015 | 2000718.5339 | | |
| PB-11 | X | | | X | X | 856671.2016 | 2000864.6989 | | |
| PB-12 | X | | | X | X | 856669.9501 | 2001010.7167 | | |
| PB-13 | X | | | X | X | 856669.3648 | 2001166.3693 | | |
| PB-14 | X | | | X | X | 856667.6865 | 2001303.0574 | | |
| PB-15 | X | | | X | X | 856666.4555 | 2001449.4086 | | |
| PB-16 | X | | | X | X | 856665.4071 | 2001595.6988 | | |
| PB-17 | X | | | X | X | 856664.1644 | 2001741.8126 | | |
| PB-18 | X | | | X | X | 856663.0062 | 2001887.9579 | | |
| PB-19 | X | | | X | X | 856661.8965 | 2002034.0325 | | |
| PB-20 | X | | | X | X | 856660.7165 | 2002180.3917 | | |
| PB-21 | X | | | X | X | 856659.2440 | 2002332.8269 | | |
| PB-22 | X | | | X | X | 856658.3356 | 2002472.7424 | | |
| PB-23 | X | | | X | X | 856657.1897 | 2002618.8000 | | |
| PB-24 | X | | | X | X | 856655.9661 | 2002764.8845 | | |
| PB-25 | X | | | X | X | 856654.8613 | 2002911.1507 | | |
| PB-26 | X | | | X | X | 856653.6197 | 2003057.4478 | | |
| PB-27 | X | | | X | X | 856652.4455 | 2003204.0587 | | |
| PB-28 | X | | | X | X | 856651.3808 | 2003349.8064 | | |
| PB-29 | X | | | X | X | 856650.7578 | 2003505.2269 | | |
| PB-30 | X | | | X | X | 856841.2828 | 2003505.8969 | | |
| PB-31 | X | | | X | X | 856659.1052 | 2003645.9218 | | |
| PB-32 | X | | | X | X | 856673.8728 | 2003796.9662 | | |
| PB-33 | X | | | X | X | 856706.6796 | 2003942.3608 | | |
| PB-34 | X | | | X | X | 856720.6173 | 2004092.0683 | | |
| PB-35 | X | | | X | X | 856576.2451 | 2003509.2907 | | |
| PB-36 | X | | | X | X | 856569.4111 | 2004055.3796 | | |
| PB-37 | X | | | X | X | 856563.1916 | 2004555.3790 | | |
| PB-38 | X | | | X | X | 856559.4847 | 2004706.3605 | | |
| PB-39 | X | | | X | X | 856547.9674 | 2004852.5269 | | |
| PB-40 | X | | | X | X | 856598.9608 | 2004857.2239 | COORDINATE PULLBOX LOCATION WITH DOMINION | |

PHASE 2



PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:



CROUCH ENGINEERING INC.
5115 Maryl and Way, STE 225
Brentwood, TN 37027
PHONE NO. (615) 791-0630



| | | | |
|---|-----|------------------------|----------------------------|
| REV | BY | DATE | DESCRIPTION |
| | | | BLYTHEWOOD, SC E400 |
| LOCATION | | | |
| TITLE PROPOSED TRACKS TO SERVE PROJECT SCOUT ELECTRICAL SCHEDULES | | | |
| DWN | RJK | FILE NO. D3327 | MILE POST 04825 |
| DWN | RJK | FILE NO. TRK1115024 | DRAWING NUMBER R91.4 |
| CHK | TJW | DATE FEBRUARY 16, 2024 | DRAWING NUMBER TD-2023-105 |

| ELECTRICAL POWER POLE SCHEDULE | | | | | | | | | |
|--------------------------------|----------|-----|---------------|-------|-------------|-------------------------|-----------------|-------------|-------------|
| POLE DETAILS | | | | | ACCESSORIES | | N/E COORDINATES | | |
| POLE IDENTIFICATION | EXISTING | NEW | HEIGHT (FEET) | CLASS | WOODEN POLE | AREA FLOOD LIGHTING QTY | TASK LIGHT QTY | N | E |
| | | | | | | | | | |
| LP-1 | X | | 50 | 3 | X | 1 | - | 857845.1329 | 1998665.907 |
| LP-2 | X | | 50 | 3 | X | 1 | - | 857687.5238 | 1998790.024 |
| LP-3 | X | | 50 | 3 | X | 1 | - | 857503.1157 | 1998911.103 |
| LP-4 | X | | 50 | 3 | X | 1 | - | 856811.1079 | 1999904.671 |
| LP-5 | X | | 50 | 3 | X | 1 | - | 856801.2453 | 2000054.347 |
| LP-6 | X | | 50 | 3 | X | 1 | - | 856812.6964 | 2000203.909 |
| LP-7 | X | | 50 | 3 | X | 1 | - | 856824.333 | 2000353.457 |
| LP-8 | X | | 50 | 3 | X | 1 | 8 | 856766.3215 | 1999837.338 |
| LP-9 | X | | 50 | 3 | X | 1 | 8 | 856734.0206 | 1999983.468 |
| LP-10 | X | | 50 | 3 | X | 1 | 8 | 856715.3404 | 2000131.659 |
| LP-11 | X | | 50 | 3 | X | 1 | 8 | 856686.409 | 2000277.519 |
| LP-12 | X | | 50 | 3 | X | 2 | 8 | 856685.471 | 2000427.6 |
| LP-13 | X | | 50 | 3 | X | 2 | 8 | 856672.2581 | 2000575.289 |
| LP-14 | X | | 50 | 3 | X | 2 | 8 | 856671.2815 | 2000721.56 |
| LP-15 | X | | 50 | 3 | X | 2 | 8 | 856670.0816 | 2000867.725 |
| LP-16 | X | | 50 | 3 | X | 2 | 8 | 856668.8301 | 2001013.742 |
| LP-17 | X | | 50 | 3 | X | 2 | 8 | 856667.6582 | 2001160.053 |
| LP-18 | X | | 50 | 3 | X | 2 | 8 | 856666.5665 | 2001306.083 |
| LP-19 | X | | 50 | 3 | X | 2 | 8 | 856665.3356 | 2001452.434 |
| LP-20 | X | | 50 | 3 | X | 2 | 8 | 856664.2872 | 2001598.725 |
| LP-21 | X | | 50 | 3 | X | 2 | 8 | 856663.0445 | 2001744.838 |
| LP-22 | X | | 50 | 3 | X | 2 | 8 | 856661.8863 | 2001890.984 |
| LP-23 | X | | 50 | 3 | X | 2 | 8 | 856660.7765 | 2002037.058 |
| LP-24 | X | | 50 | 3 | X | 2 | 8 | 856659.5966 | 2002183.418 |
| LP-25 | X | | 50 | 3 | X | 2 | 8 | 856658.407 | 2002329.644 |
| LP-26 | X | | 50 | 3 | X | 2 | 8 | 856657.2157 | 2002475.768 |
| LP-27 | X | | 50 | 3 | X | 2 | 8 | 856656.0698 | 2002621.826 |
| LP-28 | X | | 50 | 3 | X | 2 | 8 | 856654.8462 | 2002767.91 |
| LP-29 | X | | 50 | 3 | X | 2 | 8 | 856653.7413 | 2002914.176 |
| LP-30 | X | | 50 | 3 | X | 1 | - | 856652.4998 | 2003060.474 |
| LP-31 | X | | 50 | 3 | X | 1 | - | 856651.3256 | 2003207.084 |
| LP-32 | X | | 50 | 3 | X | 1 | - | 856650.2609 | 2003352.832 |
| LP-33 | X | | 50 | 3 | X | 1 | - | 856649.0806 | 2003498.79 |
| LP-34 | X | | 50 | 3 | X | 1 | - | 856648.8277 | 2003648.712 |
| LP-35 | X | | 50 | 3 | X | 1 | - | 856647.8373 | 2003798.339 |
| LP-36 | X | | 50 | 3 | X | 1 | - | 856708.8906 | 2003942.772 |
| LP-37 | X | | 50 | 3 | X | 1 | - | 856723.087 | 2004092.065 |
| LP-38 | X | | 50 | 3 | X | 1 | - | 856720.547 | 2004241.899 |
| LP-39 | X | | 50 | 3 | X | 1 | - | 856665.6288 | 2004555.408 |
| LP-40 | X | | 50 | 3 | X | 1 | - | 856562.0091 | 2004706.705 |
| LP-41 | X | | 50 | 3 | X | 1 | - | 856547.9632 | 2004856.005 |

| PANEL: HV-1 | | | | | | | | | |
|--|-------|-------------------|---------|-------|------|---------------|--|--|--|
| ROOM/LOCATION: H-FRAME | | | | | | | | | |
| FED FROM: UTILITY TRANSFORMER | | | | | | | | | |
| AIC RATING: 42KAIC | | | | | | | | | |
| VOLTAGE & PHASE: 277/480Y-3Ø | | | | | | | | | |
| MOUNTING: SURFACE | | | | | | | | | |
| AMPERAGE: 400A | | | | | | | | | |
| MAIN: MCB / Bottom Fed (NOTE 5) | | | | | | | | | |
| DESCRIPTION | KVA | BKR | PHASE | BKR | KVA | DESCRIPTION | | | |
| LP-39 THRU LP-41 | 0.4 | 20/3 | 1 A 2 | 400/3 | 27.7 | HV-2 (NOTE 5) | | | |
| --- | 0.4 | --- | 3 B 4 | --- | 27.7 | --- | | | |
| --- | 0.4 | --- | 5 C 6 | --- | 27.7 | --- | | | |
| FUTURE LOADS | 25.0 | 125/3 | 7 A 8 | 20/3 | --- | SPARE | | | |
| --- | 25.0 | --- | 9 B 10 | --- | --- | --- | | | |
| --- | 25.0 | --- | 11 C 12 | --- | --- | --- | | | |
| SPARE | --- | 20/3 | 13 A 14 | 20/3 | --- | SPARE | | | |
| --- | --- | --- | 15 B 16 | --- | --- | --- | | | |
| --- | --- | --- | 17 C 18 | --- | --- | --- | | | |
| SPACE | --- | --- | 19 A 20 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 21 B 22 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 23 C 24 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 25 A 26 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 27 B 28 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 29 C 30 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 31 A 32 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 33 B 34 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 35 C 36 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 37 A 38 | 60/3 | --- | SPD | | | |
| SPACE | --- | --- | 39 B 40 | --- | --- | --- | | | |
| SPACE | --- | --- | 41 C 42 | --- | --- | --- | | | |
| CONNECTED | D.F. | DEMAND | | | | | | | |
| EXISTING LOAD | 0.0 | x | 1.25 | 0.0 | | | | | |
| COOLING: | 0.0 | x | 0.00 | 0.0 | | | | | |
| HEATING: | 0.0 | x | 0.00 | 0.0 | | | | | |
| KITCHEN: | 0.0 | PER NEC 220.56 | 0.0 | | | | | | |
| LIGHTING: | 52.6 | x | 1.25 | 65.8 | | | | | |
| MOTORS: | 166.2 | x | 1.00 | 166.2 | | | | | |
| LARGEST MOTOR | 55.0 | PER NEC 220.18(A) | 13.8 | | | | | | |
| OTHER: | 75.0 | x | 1.00 | 75.0 | | | | | |
| RECEPTACLES: | 0.0 | PER NEC 220.44 | 0.0 | | | | | | |
| CONNECTED KVA | 293.8 | DEMAND KVA: | 320.7 | | | | | | |
| AVERAGE CONNECTED AMPS | 353.0 | DEMAND AMPS: | 391.7 | | | | | | |
| NOTES: | | | | | | | | | |
| (1)- SERVICE RATED | | | | | | | | | |
| (2)- NEMA 3R ENCLOSURE | | | | | | | | | |
| (3)- BOTTOM FED | | | | | | | | | |
| (4)- FULLY RATED | | | | | | | | | |
| (5)- PROVIDE OVERSIZED LUGS- SEE FEEDER SCHEDULE | | | | | | | | | |

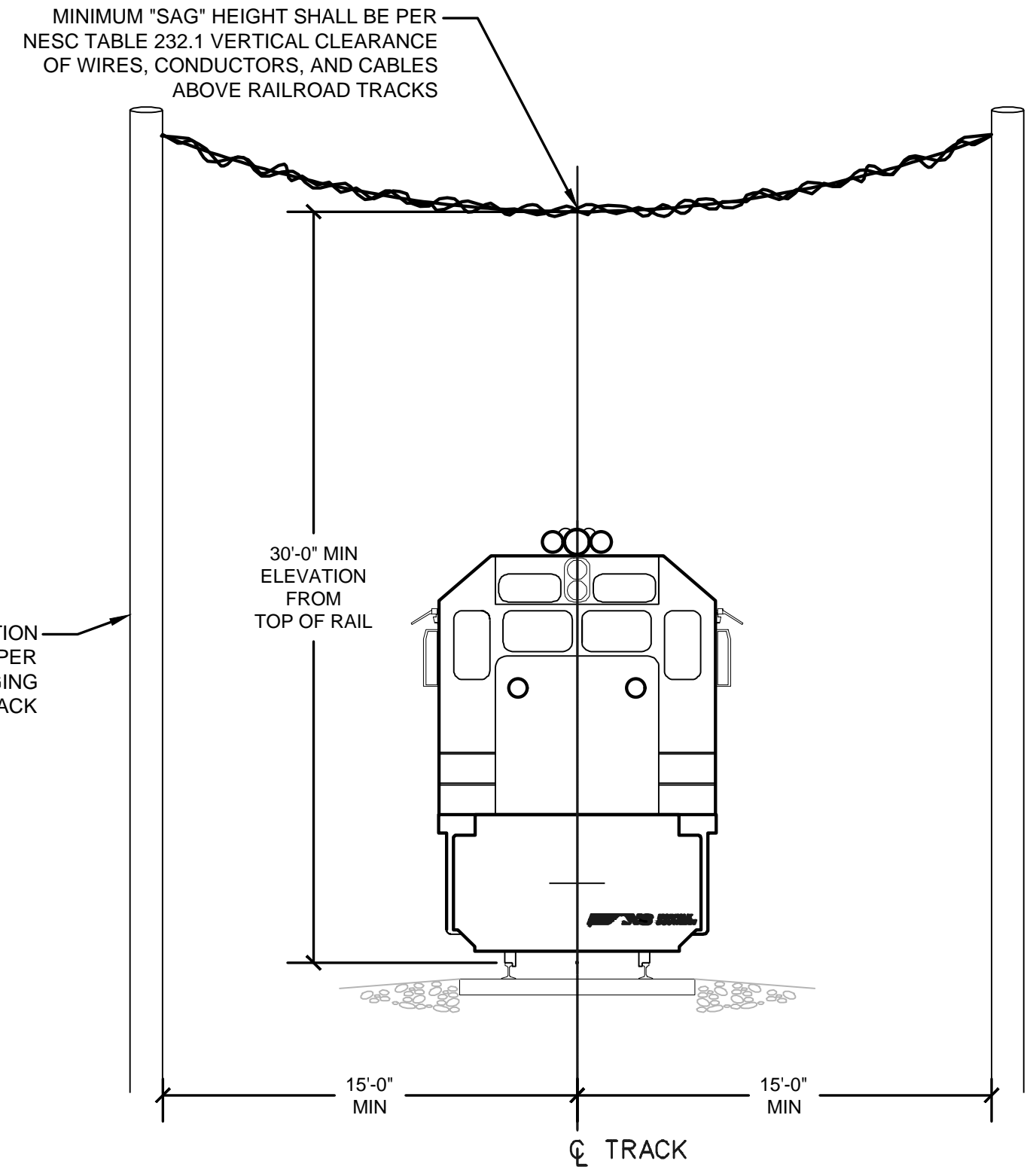
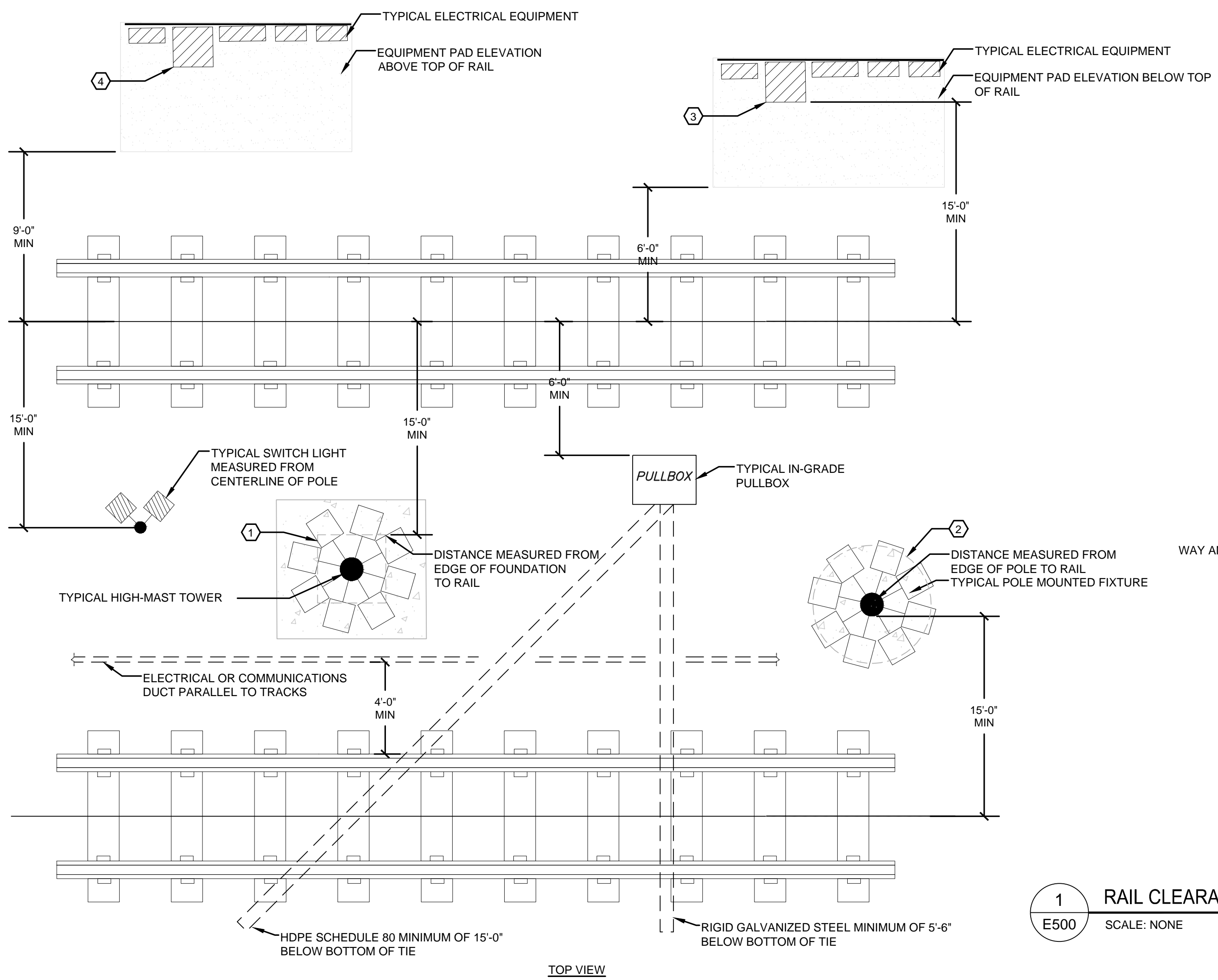
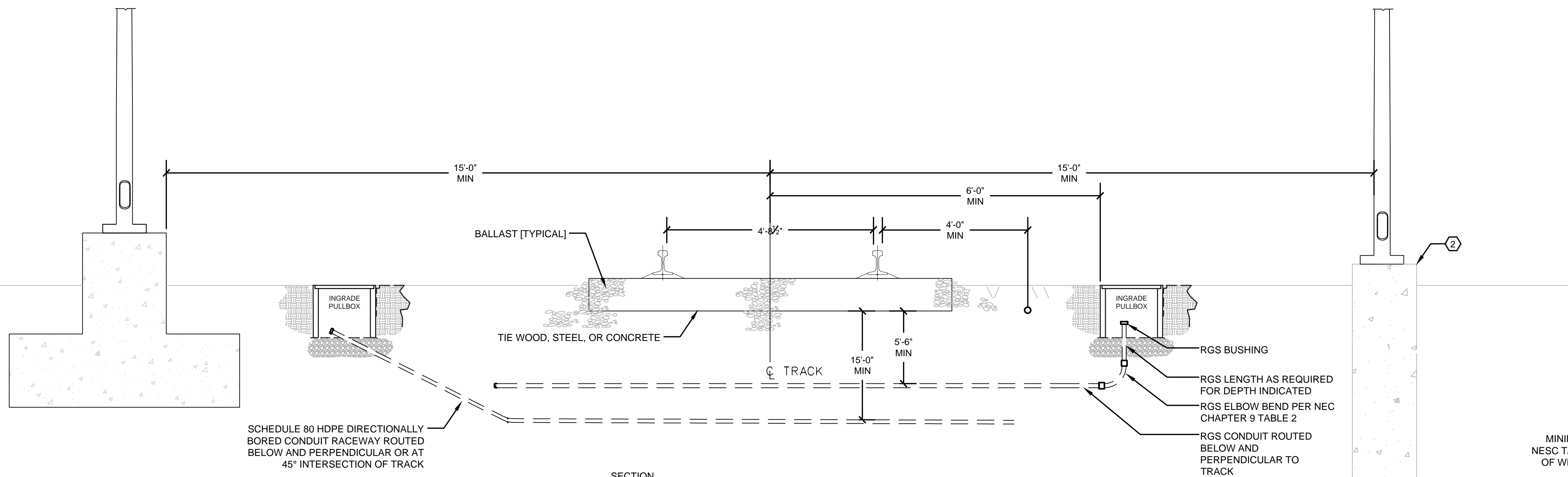
| PANEL: HV-2 | | | | | | | | | |
|--|-------|-------------------|---------|-------|------|-------------------|--|--|--|
| ROOM/LOCATION: H-FRAME | | | | | | | | | |
| FED FROM: HV-1 | | | | | | | | | |
| AIC RATING: 42KAIC | | | | | | | | | |
| VOLTAGE & PHASE: 277/480Y-3Ø | | | | | | | | | |
| MOUNTING: SURFACE | | | | | | | | | |
| AMPERAGE: 400A | | | | | | | | | |
| MAIN: MCB / Bottom Fed (NOTE 4) | | | | | | | | | |
| DESCRIPTION | KVA | BKR | PHASE | BKR | KVA | DESCRIPTION | | | |
| LP-29 THRU LP-33 | 1.2 | 20/3 | 1 A 2 | 100/3 | 27.7 | AIR COMPRESSOR #2 | | | |
| --- | 1.6 | --- | 3 B 4 | --- | --- | --- | | | |
| --- | 1.6 | --- | 5 C 6 | --- | 27.7 | --- | | | |
| LP-34 THRU LP-41 | 1.6 | 20/3 | 7 A 8 | 20/3 | 1.1 | LC-1 | | | |
| --- | 2.0 | --- | 9 B 10 | --- | 1.4 | --- | | | |
| --- | 1.6 | --- | 11 C 12 | --- | 1.1 | --- | | | |
| HV-3 | 34.0 | 150/3 | 13 A 14 | 250/3 | 6.5 | HV-4 (NOTE 4) | | | |
| --- | 34.2 | --- | 15 B 16 | --- | 6.9 | --- | | | |
| --- | 34.0 | --- | 17 C 18 | --- | 6.5 | --- | | | |
| --- | --- | --- | 19 A 20 | --- | --- | --- | | | |
| --- | --- | --- | 21 B 22 | --- | --- | --- | | | |
| --- | --- | --- | 23 C 24 | --- | --- | --- | | | |
| --- | --- | --- | 25 A 26 | --- | --- | --- | | | |
| --- | --- | --- | 27 B 28 | --- | --- | --- | | | |
| --- | --- | --- | 29 C 30 | --- | --- | --- | | | |
| --- | --- | --- | 31 A 32 | --- | --- | --- | | | |
| --- | --- | --- | 33 B 34 | --- | --- | --- | | | |
| --- | --- | --- | 35 C 36 | --- | --- | --- | | | |
| --- | --- | --- | 37 A 38 | 60/3 | --- | SPD | | | |
| --- | --- | --- | 39 B 40 | --- | --- | --- | | | |
| --- | --- | --- | 41 C 42 | --- | --- | --- | | | |
| CONNECTED | D.F. | DEMAND | | | | | | | |
| EXISTING LOAD | 0.0 | x | 1.25 | 0.0 | | | | | |
| COOLING: | 0.0 | x | 0.00 | 0.0 | | | | | |
| HEATING: | 0.0 | x | 0.00 | 0.0 | | | | | |
| KITCHEN: | 0.0 | PER NEC 220.56 | 0.0 | | | | | | |
| LIGHTING: | 51.4 | x | 1.25 | 64.3 | | | | | |
| MOTORS: | 166.2 | x | 1.00 | 166.2 | | | | | |
| LARGEST MOTOR | 55.0 | PER NEC 220.18(A) | 13.8 | | | | | | |
| OTHER: | 0.0 | x | 1.00 | 0.0 | | | | | |
| RECEPTACLES: | 0.0 | PER NEC 220.44 | 0.0 | | | | | | |
| CONNECTED KVA | 217.6 | DEMAND KVA: | 244.2 | | | | | | |
| AVERAGE CONNECTED AMPS | 261.9 | DEMAND AMPS: | 299.7 | | | | | | |
| NOTES: | | | | | | | | | |
| (1)- NEMA 3R ENCLOSURE | | | | | | | | | |
| (2)- BOTTOM FED | | | | | | | | | |
| (3)- FULLY RATED | | | | | | | | | |
| (4)- PROVIDE OVERSIZED LUGS- SEE FEEDER SCHEDULE | | | | | | | | | |

| PANEL: HV-3 | | | | | | | | | |
|--|------|-------------------|---------|------|-----|------------------|--|--|--|
| ROOM/LOCATION: H-FRAME | | | | | | | | | |
| FED FROM: HV-2 | | | | | | | | | |
| AIC RATING: 42KAIC | | | | | | | | | |
| VOLTAGE & PHASE: 277/480Y-3Ø | | | | | | | | | |
| MOUNTING: SURFACE | | | | | | | | | |
| AMPERAGE: 150A | | | | | | | | | |
| MAIN: MCB / Bottom Fed (NOTE 4) | | | | | | | | | |
| DESCRIPTION | KVA | BKR | PHASE | BKR | KVA | DESCRIPTION | | | |
| LP-21 THRU LP-25 | 1.2 | 20/3 | 1 A 2 | 20/3 | 0.8 | LP-26 THRU LP-28 | | | |
| --- | 1.6 | --- | 3 B 4 | --- | 0.8 | --- | | | |
| --- | 1.2 | --- | 5 C 6 | --- | 0.8 | --- | | | |
| LP-34 THRU LP-41 | 1.6 | 20/3 | 7 A 8 | 30/3 | 2.5 | LC-2 | | | |
| --- | 2.0 | --- | 9 B 10 | --- | 2.5 | --- | | | |
| --- | 1.6 | --- | 11 C 12 | --- | 2.5 | --- | | | |
| SPARE | --- | 20/3 | 13 A 14 | 20/3 | --- | SPARE | | | |
| --- | --- | --- | 15 B 16 | --- | --- | --- | | | |
| --- | --- | --- | 17 C 18 | --- | --- | --- | | | |
| SPARE | --- | 20/3 | 19 A 20 | 20/3 | --- | SPARE | | | |
| --- | --- | --- | 21 B 22 | --- | --- | --- | | | |
| --- | --- | --- | 23 C 24 | --- | --- | --- | | | |
| SPACE | --- | --- | 25 A 26 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 27 B 28 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 29 C 30 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 31 A 32 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 33 B 34 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 35 C 36 | --- | --- | SPACE | | | |
| SPACE | --- | --- | 37 A 38 | 60/3 | --- | SPD | | | |
| SPACE | --- | --- | 39 B 40 | --- | --- | --- | | | |
| SPACE | --- | --- | 41 C 42 | --- | --- | --- | | | |
| CONNECTED | D.F. | DEMAND | | | | | | | |
| EXISTING LOAD | 0.0 | x | 1.25 | 0.0 | | | | | |
| COOLING: | 0.0 | x | 0.00 | 0.0 | | | | | |
| HEATING: | 0.0 | x | 0.00 | 0.0 | | | | | |
| KITCHEN: | 0.0 | PER NEC 220.56 | 0.0 | | | | | | |
| LIGHTING: | 19.1 | x | 1.25 | 23.9 | | | | | |
| MOTORS: | 0.0 | x | 1.00 | 0.0 | | | | | |
| LARGEST MOTOR | 0.0 | PER NEC 220.18(A) | 0.0 | | | | | | |
| OTHER: | 0.0 | x | 1.00 | 0.0 | | | | | |
| RECEPTACLES: | 0.0 | PER NEC 220.44 | 0.0 | | | | | | |
| CONNECTED KVA | 19.1 | DEMAND KVA: | 23.9 | | | | | | |
| AVERAGE CONNECTED AMPS | 23.0 | DEMAND AMPS: | 31.1 | | | | | | |
| NOTES: | | | | | | | | | |
| (1)- NEMA 3R ENCLOSURE | | | | | | | | | |
| (2)- BOTTOM FED | | | | | | | | | |
| (3)- FULLY RATED | | | | | | | | | |
| (4)- PROVIDE OVERSIZED LUGS- SEE FEEDER SCHEDULE | | | | | | | | | |

| PANEL: HV-4 | | | | | | | | | |
|---------------------------------|-----|------|-------|------|-----|------------------|--|--|--|
| ROOM/LOCATION: H-FRAME | | | | | | | | | |
| FED FROM: HV-2 | | | | | | | | | |
| AIC RATING: 42KAIC | | | | | | | | | |
| VOLTAGE & PHASE: 277/480Y-3Ø | | | | | | | | | |
| MOUNTING: SURFACE | | | | | | | | | |
| AMPERAGE: 200A | | | | | | | | | |
| MAIN: MCB / Bottom Fed (NOTE 4) | | | | | | | | | |
| DESCRIPTION | KVA | BKR | PHASE | BKR | KVA | DESCRIPTION | | | |
| LP-12 THRU LP-17 | 1.6 | 20/3 | 1 A 2 | 20/3 | 0.8 | LP-18 THRU LP-20 | | | |
| --- | 1.6 | --- | 3 B 4 | --- | 0.8 | --- | | | |
| --- | 1.6 | --- | 5 C 6 | --- | 0.8 | --- | | | |

KEY NOTES:

- ① FOUNDATION ELEVATION IS ABOVE TOP OF RAIL.
- ② FOUNDATION ELEVATION IS BELOW TOP OF RAIL.
- ③ EQUIPMENT HOUSEKEEPING PAD ELEVATION IS BELOW TOP OF RAIL.
- ④ EQUIPMENT HOUSEKEEPING PAD ELEVATION IS ABOVE TOP OF RAIL.



1 RAIL CLEARANCE REQUIREMENTS
E500 SCALE: NONE

WEISER
ENGINEERING, P.C.
ENGINEER: TIMOTHY WEISER
BACKUP: RUSSELL KASEM

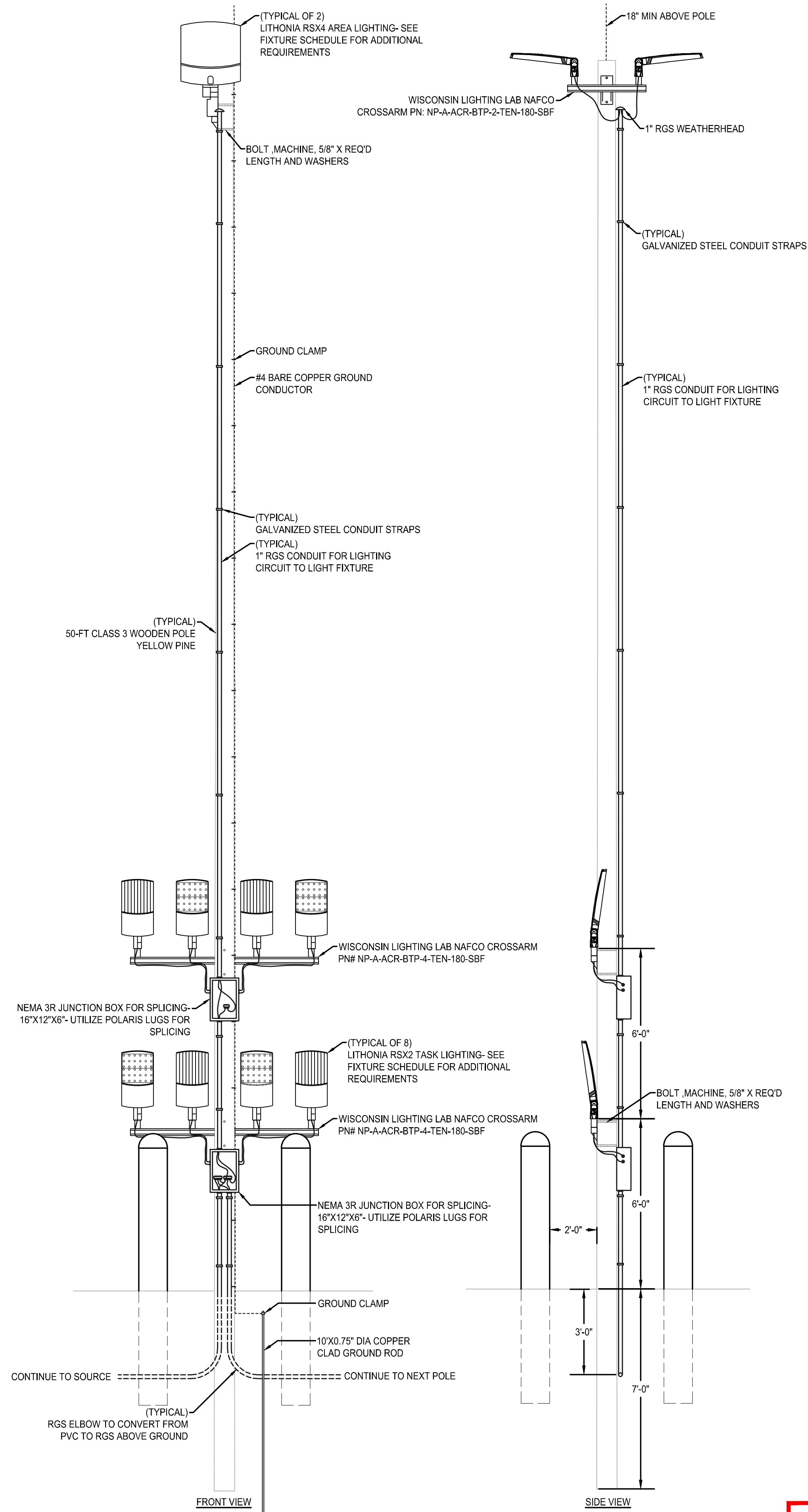
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DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

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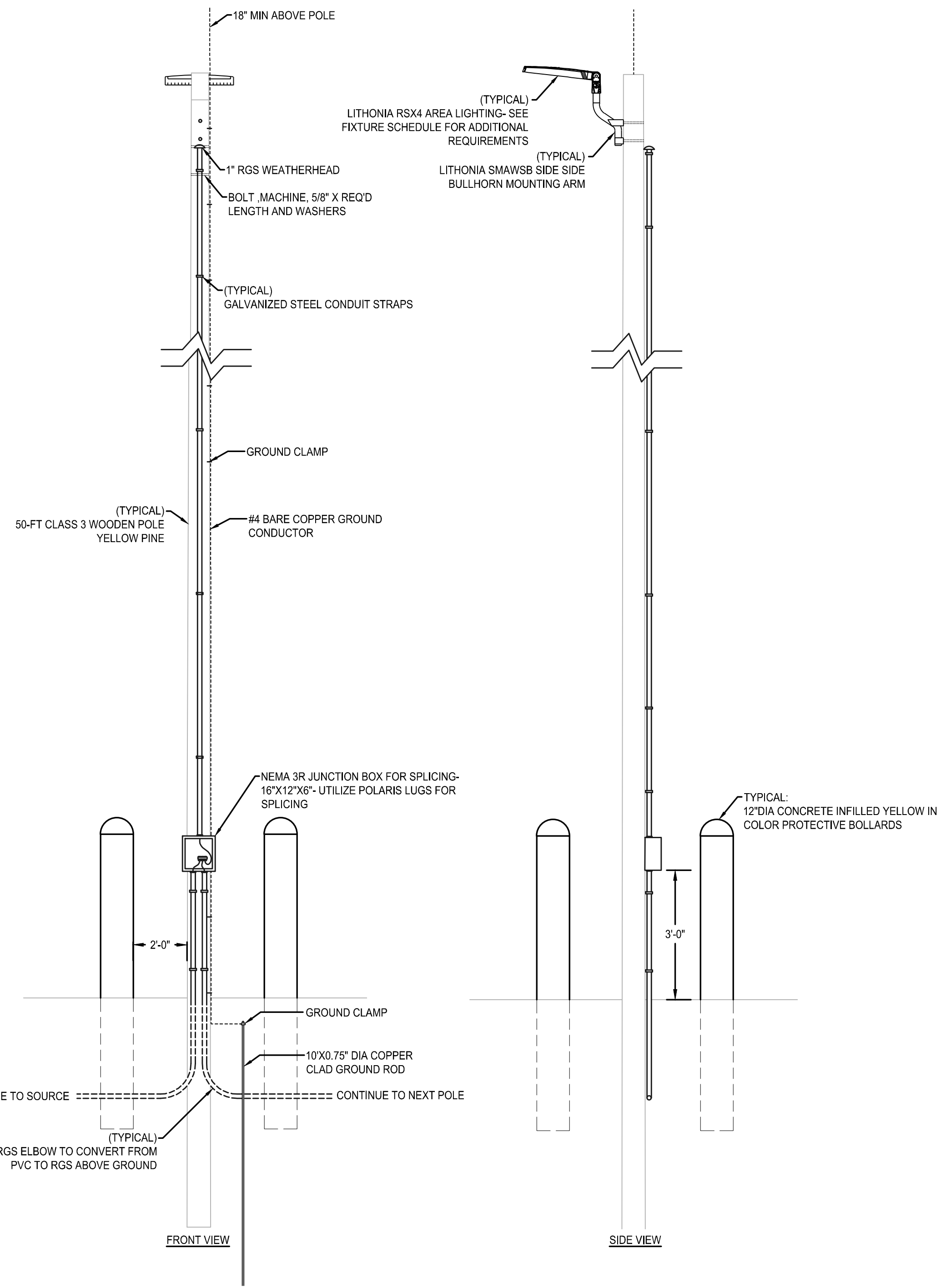
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5115 Maryl and Way, STE 225
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PHONE NO. (615) 791-0630

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COASTAL
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| REV | BY | DATE | DESCRIPTION |
|---|-----|----------|---------------------|
| | | | |
| LOCATION | | | BLYTHEWOOD, SC E500 |
| TITLE | | | |
| PROPOSED TRACKS TO SERVE PROJECT SCOUT ELECTRICAL DETAILS | | | |
| DWN | RJK | FILE NO. | TRK1115024 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| DRAWING NUMBER | | | TD-2023-105 |
| MILE POST | | | 04825 R91.4 |



1 TYPE B- AREA LIGHT POLE WITH TASK LIGHTING DETAIL
E501 SCALE: 3/8"=1'-0"



2 TYPE A- AREA LIGHT POLE
E501 SCALE: 3/8"=1'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
WE PROJ NO: 23065
CONTACT
ENGINEER: TIMOTHY WEISER 678-622-8555
BACKUP: RUSSELL KASEM 770-910-3978

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

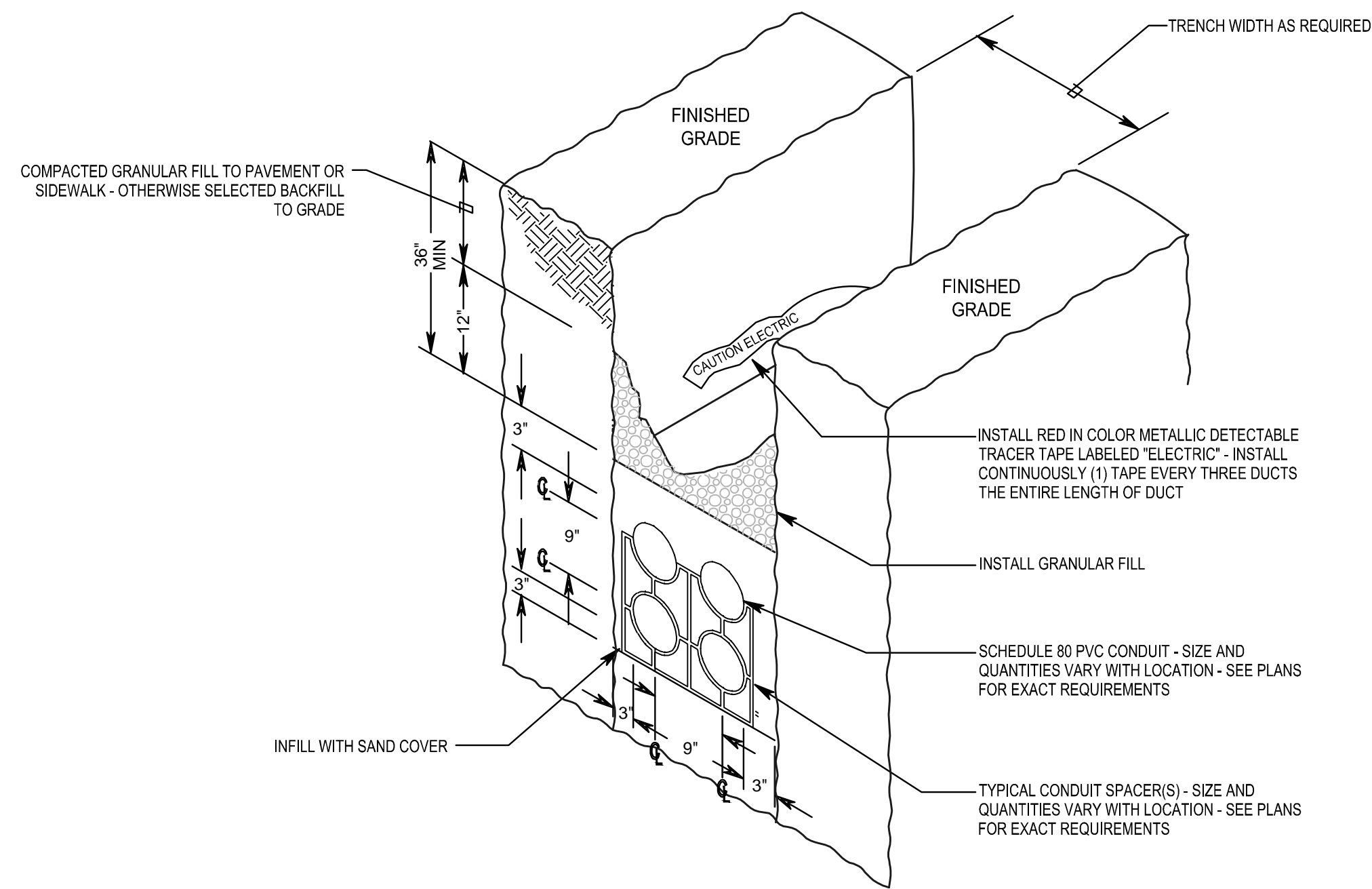
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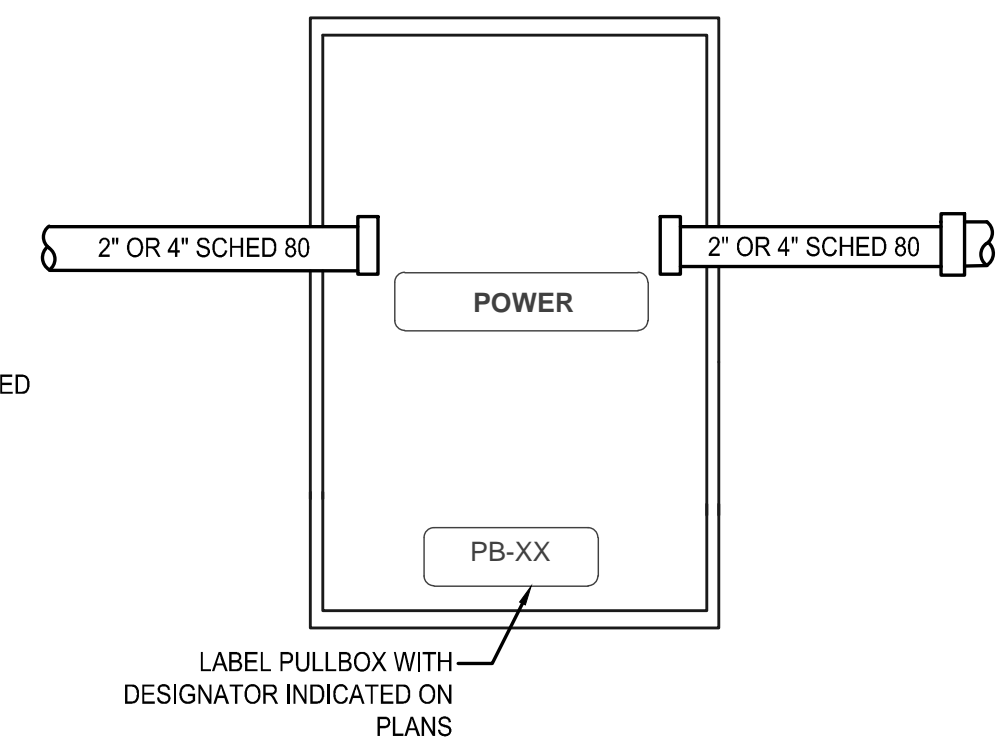
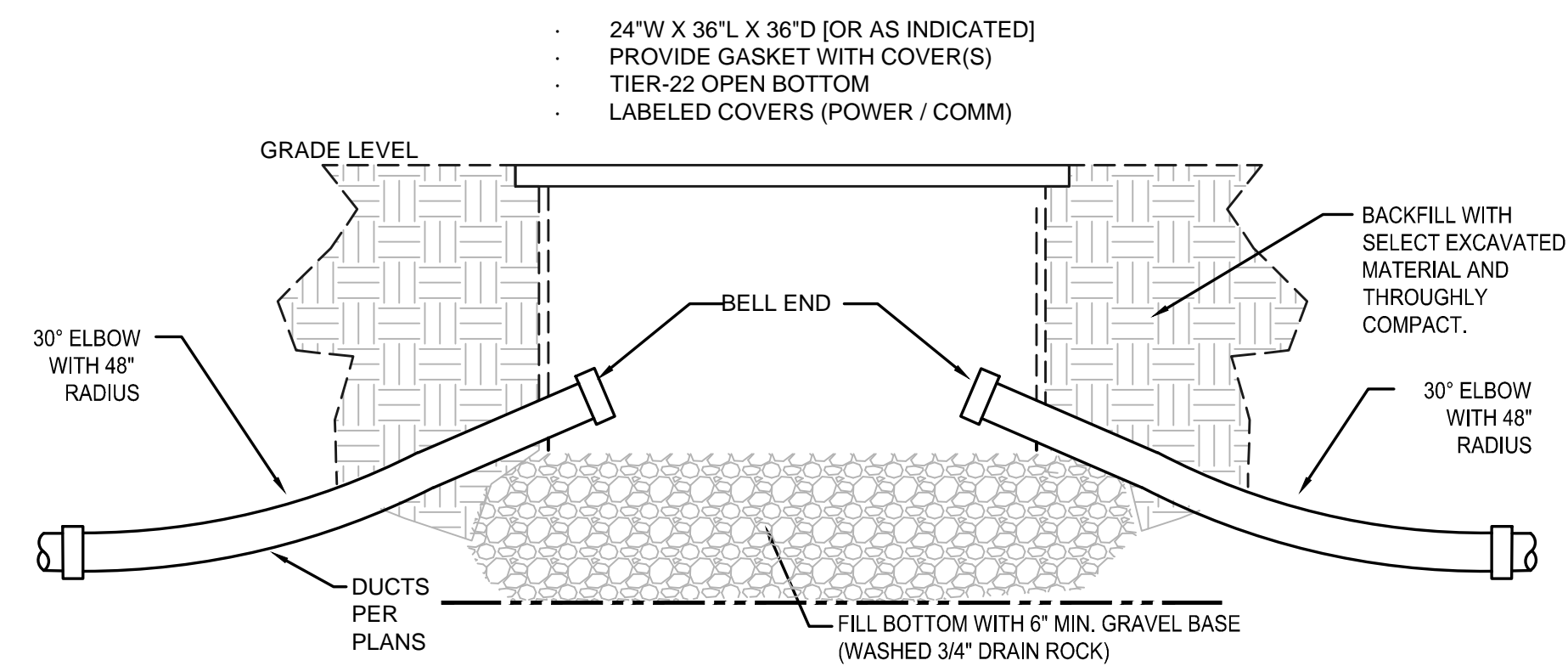
| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E501 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT ELECTRICAL DETAILS |
| DWN | RJK | PID No. D3327 | MILE POST 04825 R91.4 |
| DWN | RJK | FILE No. TRK1115024 | DRAWING NUMBER |
| CHK | TJW | DATE FEBRUARY 16, 2024 | TD-2023-105 |

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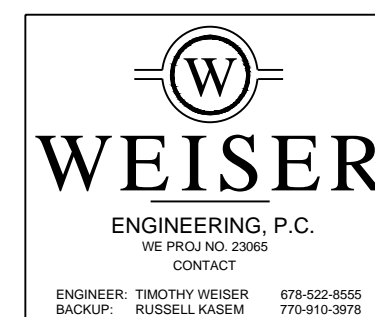


ALL CIRCUITS WITH A VOLTAGE GREATER THAN 600VAC SHALL BE CLASSIFIED AS MEDIUM VOLTAGE. SUCH CIRCUITS SHALL BE INSTALLED WITH A MINIMUM SEPARATION OF 12" FROM DUCTS HOUSING ELECTRICAL OR COMMUNICATIONS CIRCUITS.

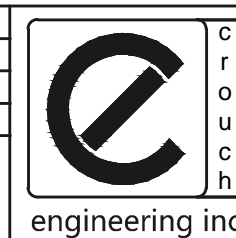
1 TYPICAL DUCT BANK FOR NON-CONCRETE ENCASED
E502 SCALE: NONE



2 TIER-22 PULLBOX DETAIL
E502 SCALE: NONE



PROJECT NO: 23065
DATE: 12.15.2023
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REVISIONS:



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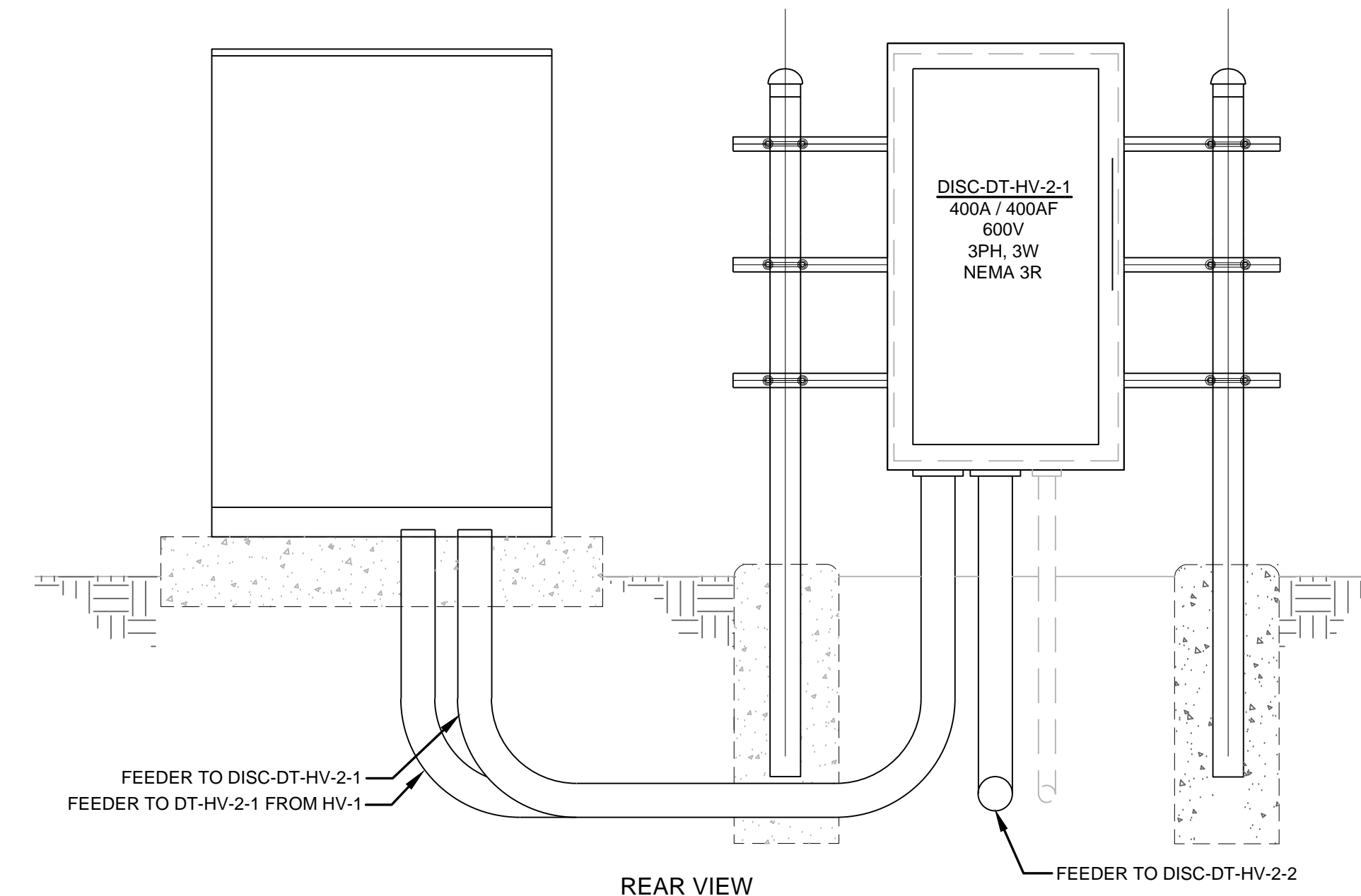
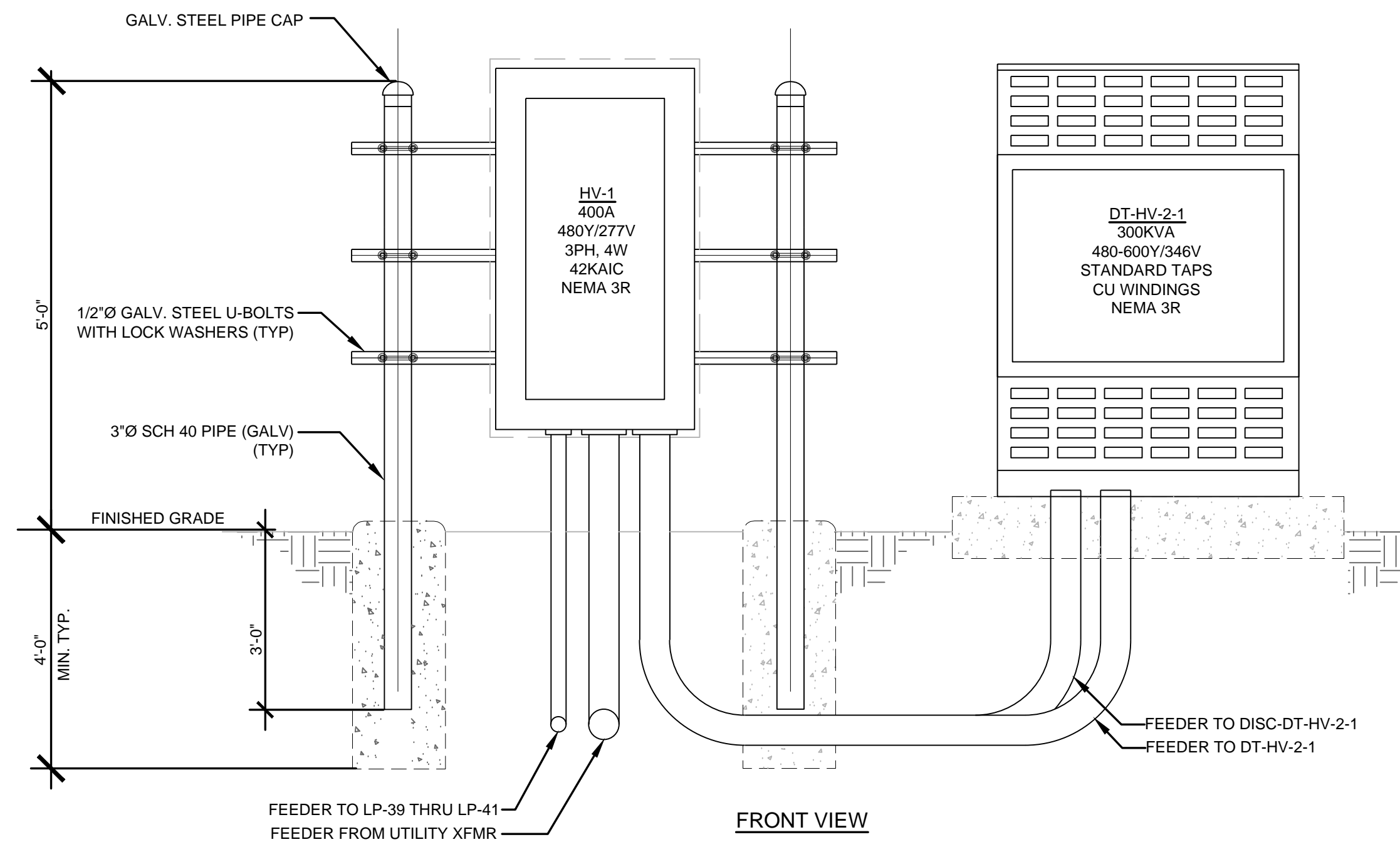
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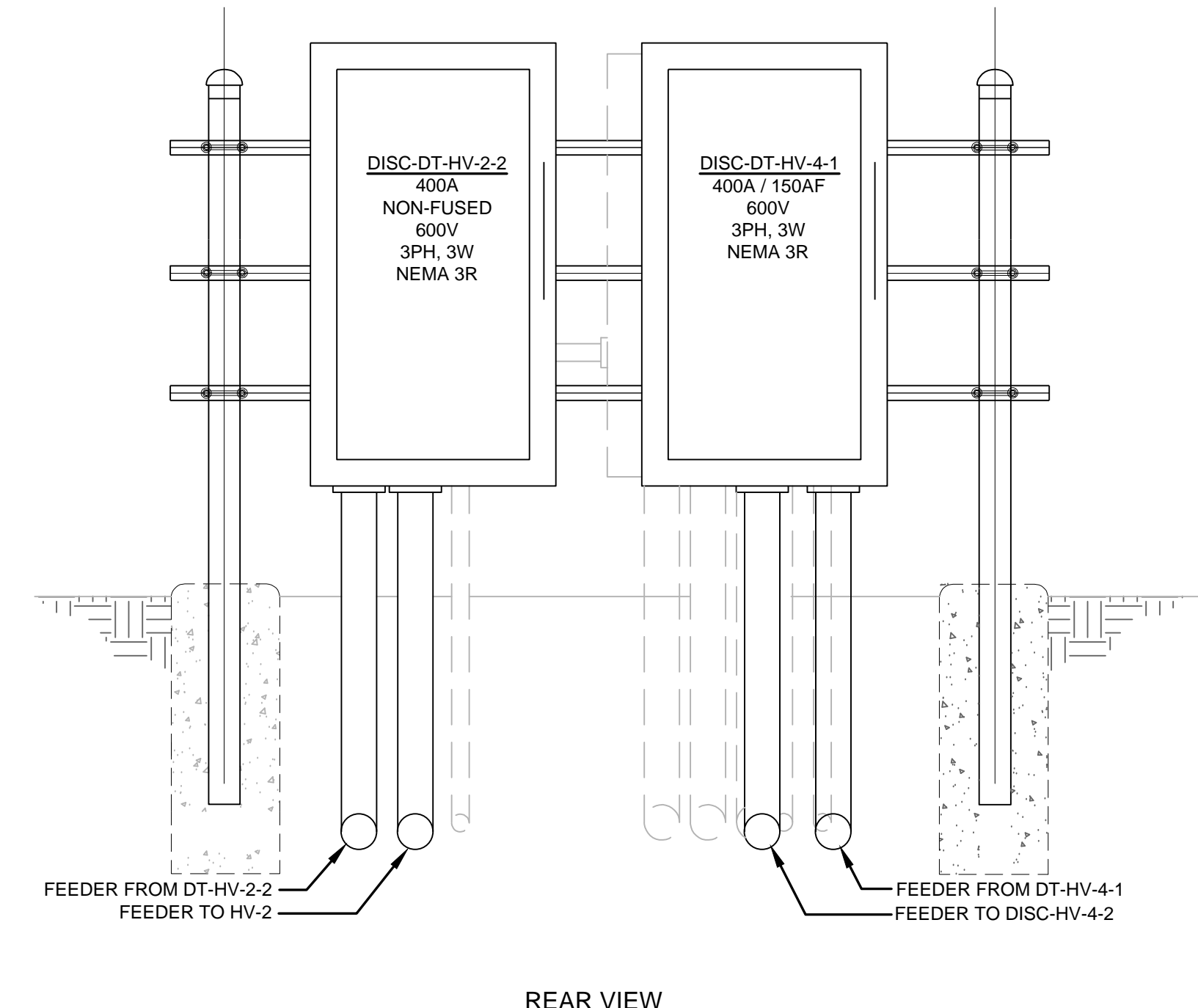
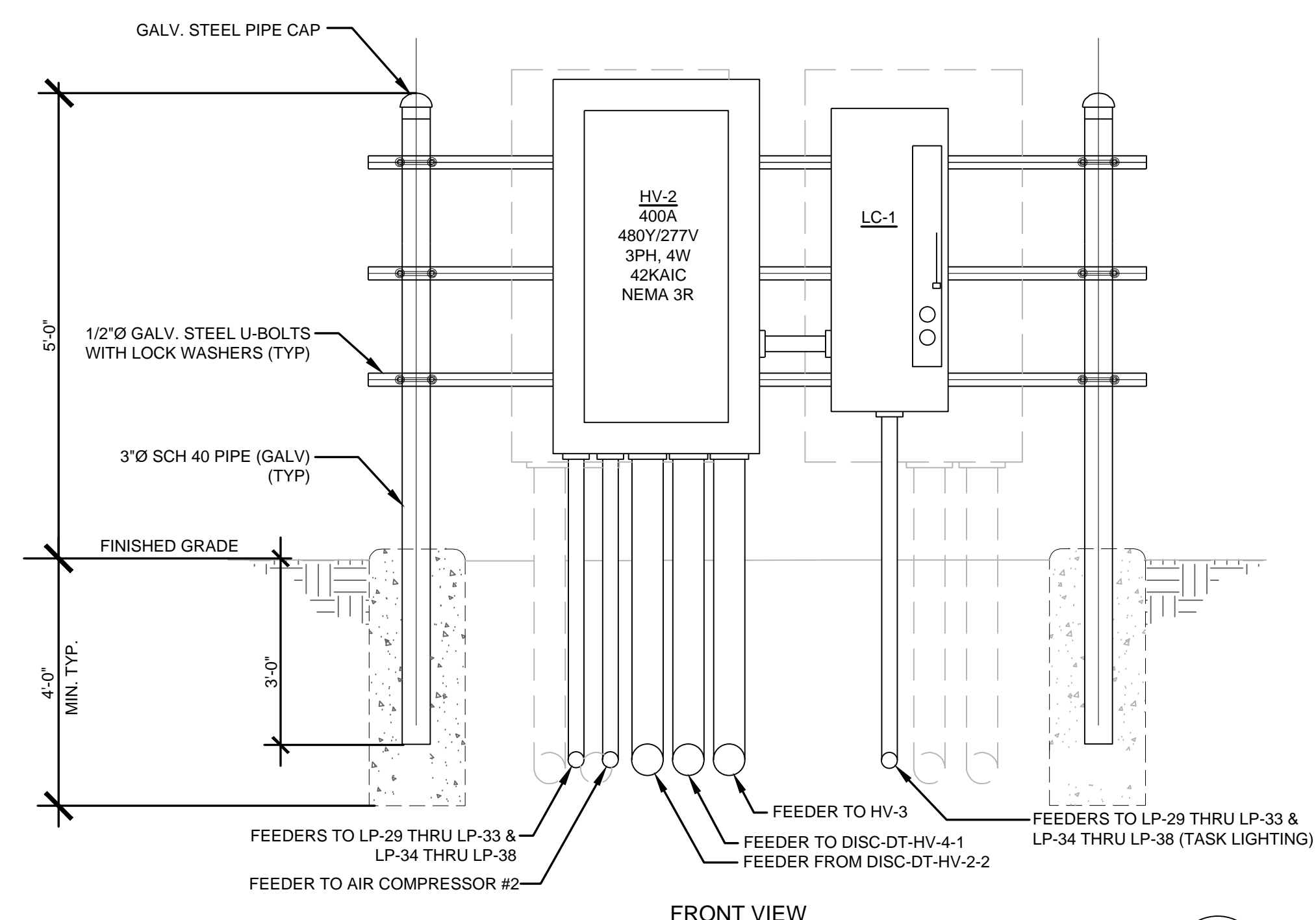
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|-----|-----|------------------------|--|
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| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT ELECTRICAL DETAILS |
| DGN | RJK | PID No. D3327 | MRN 04825 MILE POST R91.4 |
| DWN | RJK | FILE No. TRK1115024 | DRAWING NUMBER |
| CHK | TJW | DATE FEBRUARY 16, 2024 | TD-2023-105 |



1 HV-1 H-FRAME DETAIL
E503 SCALE: NONE



2 HV-2 H-FRAME DETAIL
E503 SCALE: NONE

PHASE 2

WEISER
ENGINEERING, P.C.
678-622-8555
770-910-3078

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

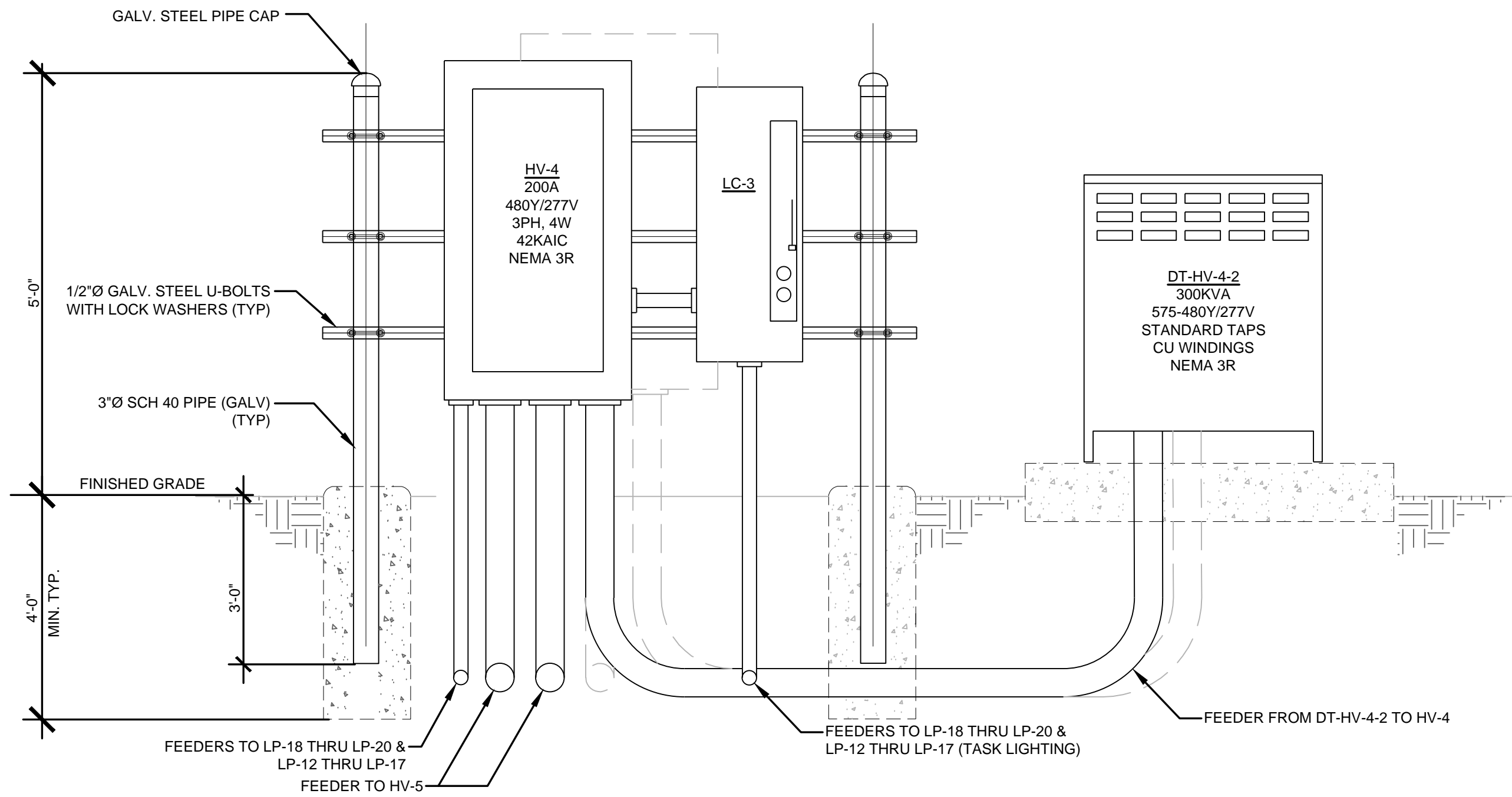
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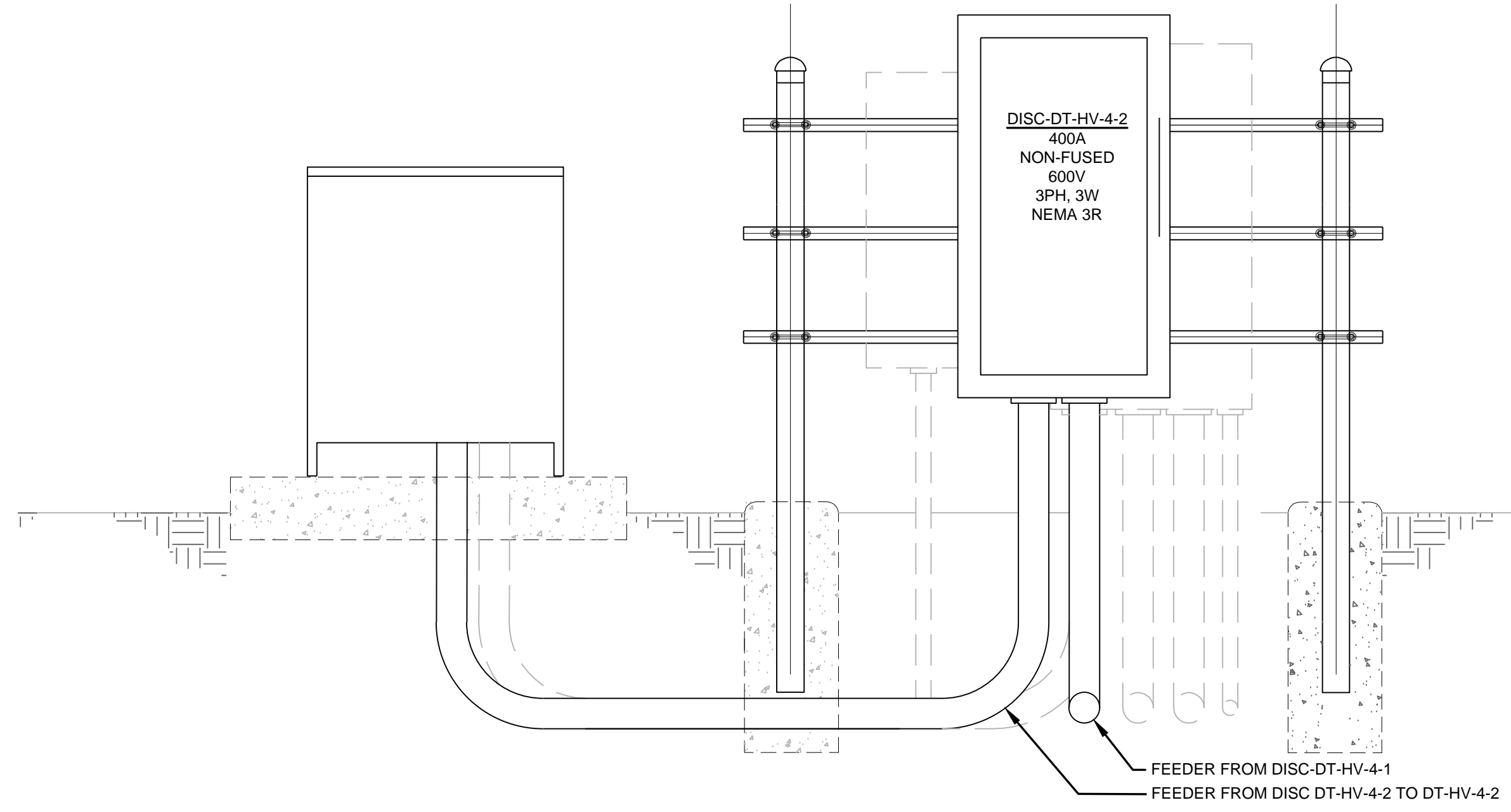
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COASTAL
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| REV | BY | DATE | DESCRIPTION |
| | | | BLYTHEWOOD, SC |
| LOCATION | | | E503 |
| TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT OVERALL ELECTRICAL PROPOSED PLAN | | | |
| DGN | RJK | PID No. D3327 | MILE POST 04825 R91.4 |
| DWN | RJK | FILE No. TRK1115024 | DRAWING NUMBER |
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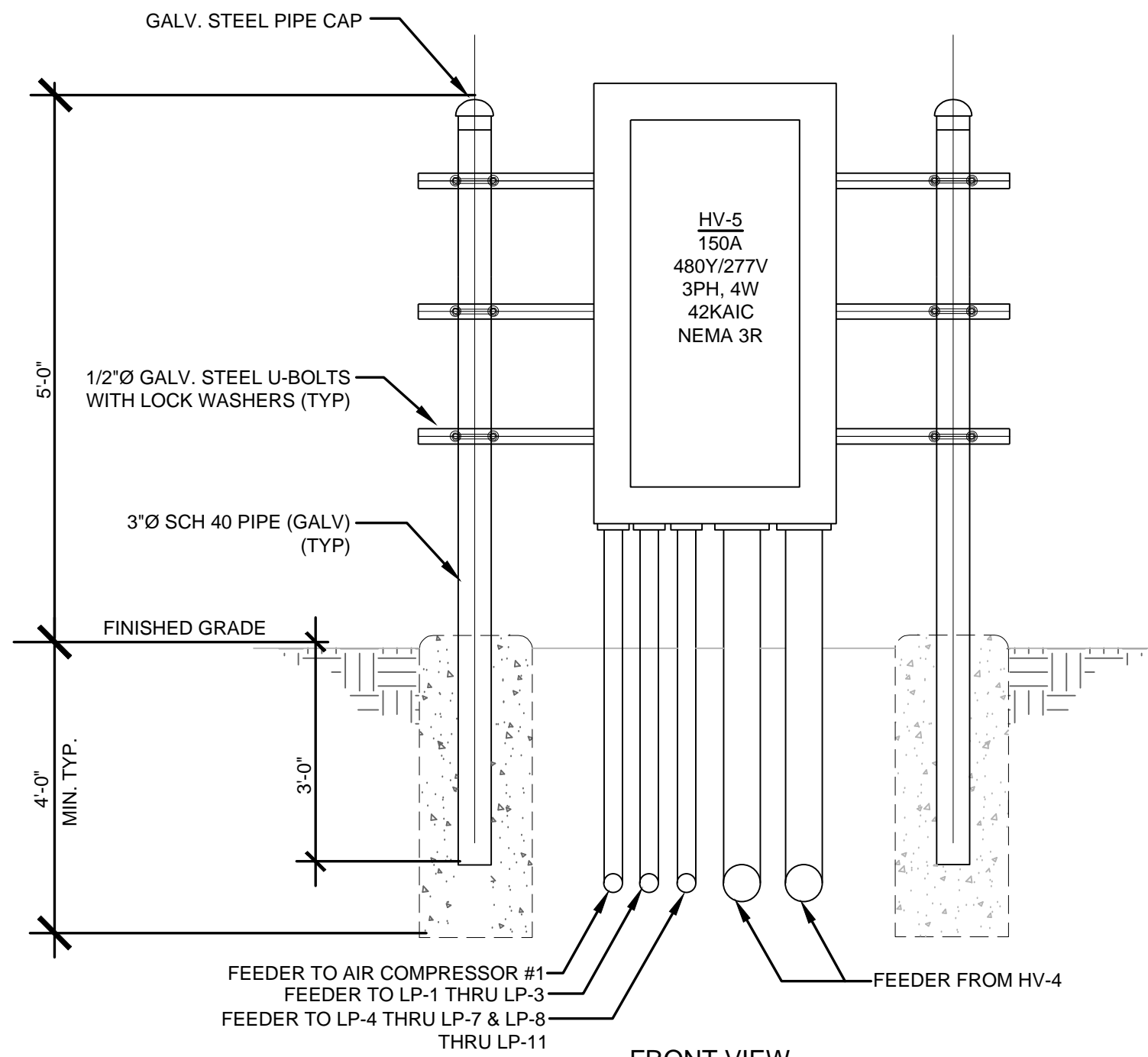


FRONT VIEW

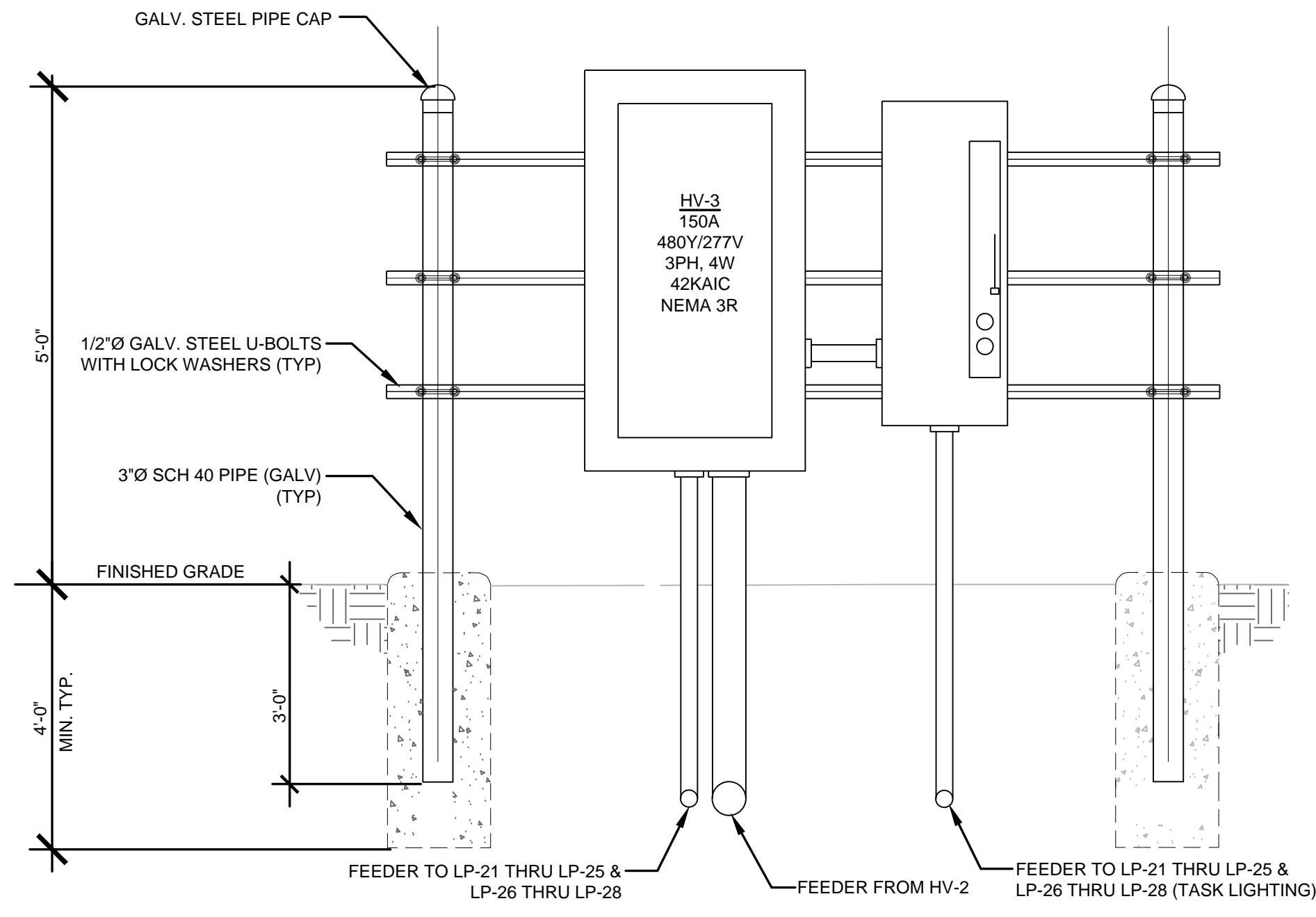


REAR VIEW

1 HV-4 H-FRAME DETAIL
E504 SCALE: NONE



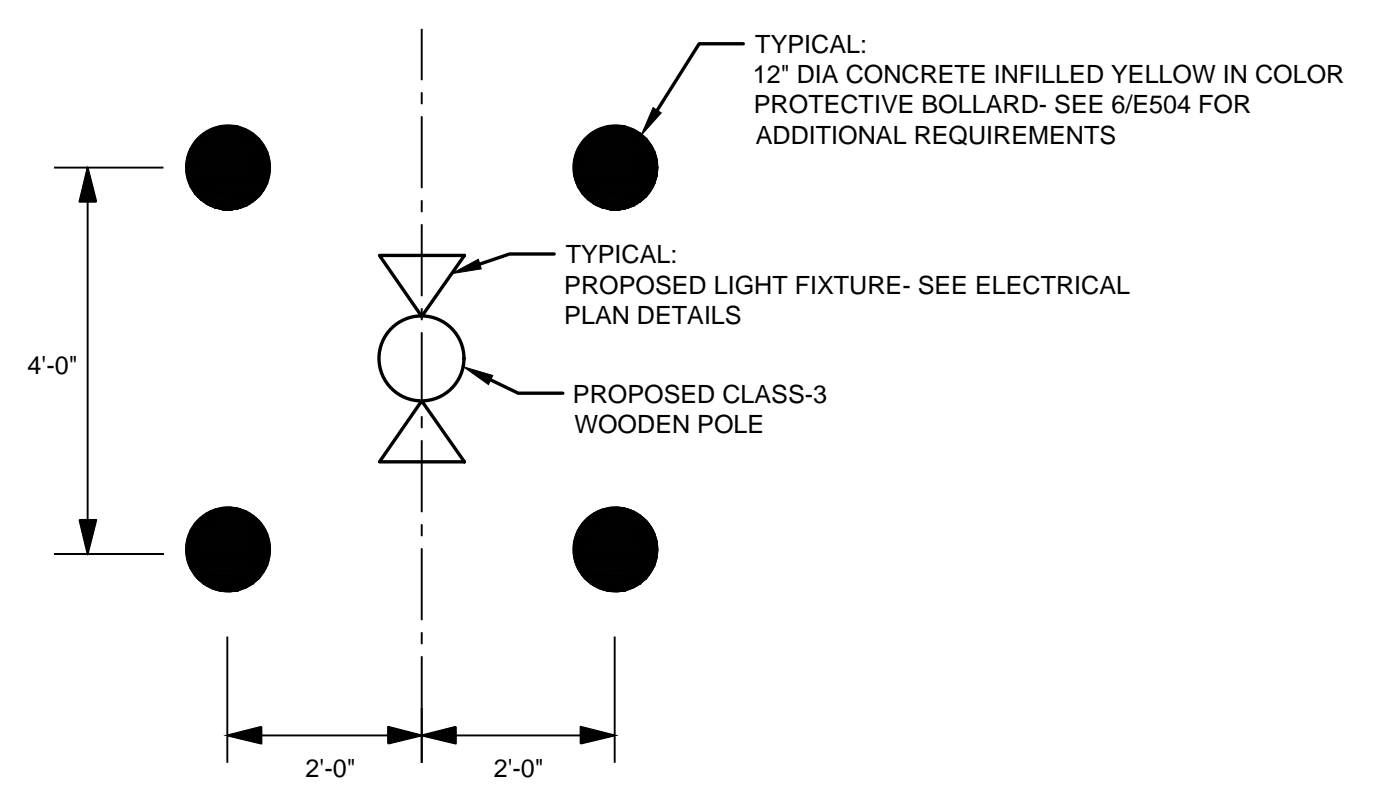
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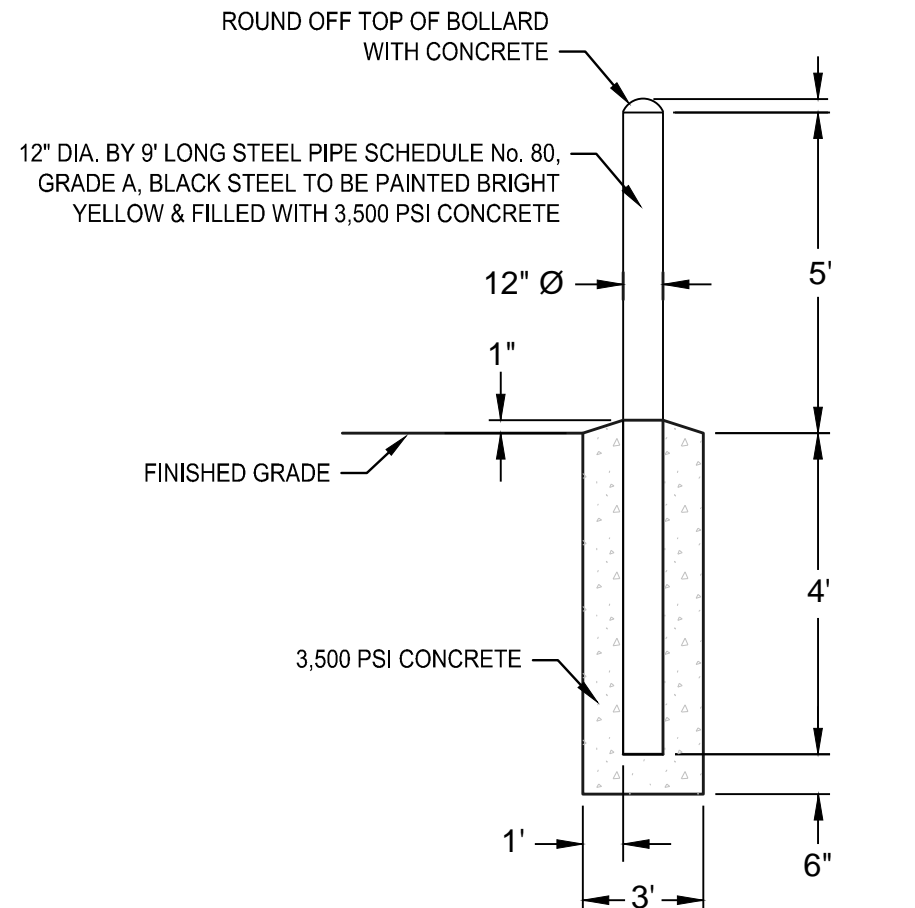
FRONT VIEW

2 HV-5 H-FRAME DETAIL
E504 SCALE: NONE

3 HV-3 H-FRAME DETAIL
E504 SCALE: NONE



4 POLE BOLLARD PLACEMENT DETAIL
E504 SCALE: NONE



5 BOLLARD DETAIL
E504 SCALE: NONE

PHASE 2

WEISER
ENGINEERING, P.C.
WE PROJ NO. 23065
CONTACT
ENGINEER: TIMOTHY WEISER
BACKUP: RUSSELL KASEM
678-622-8655
770-910-3078

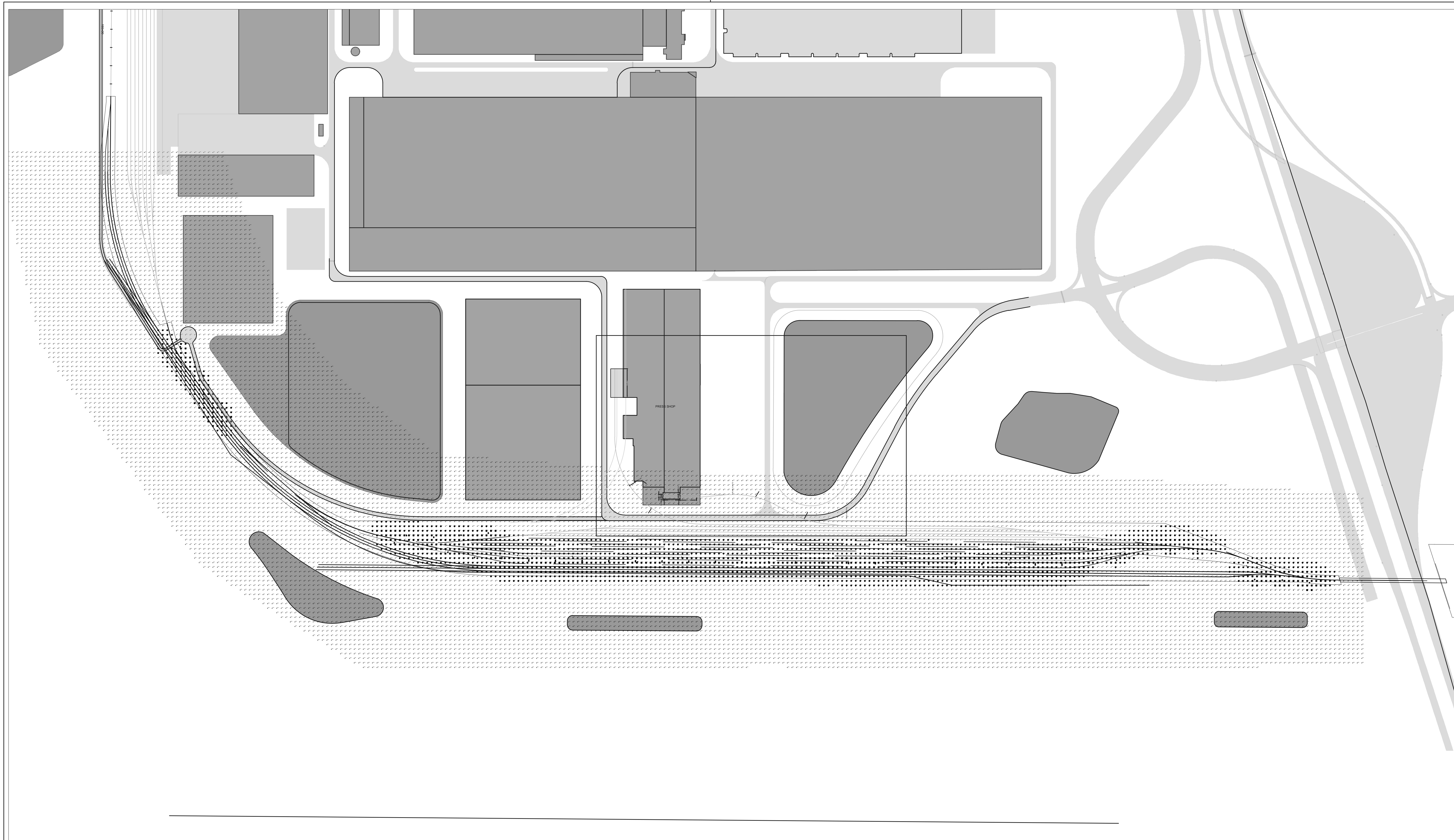
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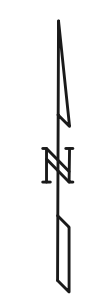
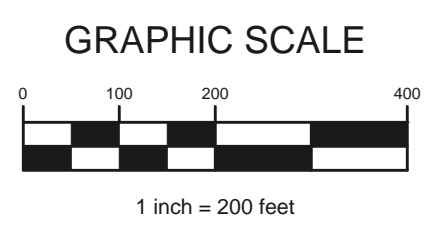
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| 1 | RJK | 12/15/2023 | ISSUE FOR PERMIT |
| 2 | TJW | 02/16/2024 | REVISED FOR CONSTRUCTION |

LOCATION: BLYTHEWOOD, SC E504
TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT OVERALL ELECTRICAL PROPOSED PLAN
DGN: RJK PID No. D3327 WRN 04825 MILE POST R91.4
DWN: RJK FILE No. TRK1115024 DRAWING NUMBER
CHK: TJW DATE FEBRUARY 16, 2024 TD-2023-105



1 OVERALL PHOTOMETRIC PLAN
E700 SCALE: 1" = 250'-0"



PHASE 2

WEISER
ENGINEERING, P.C.
WE PROJ NO. 23065
CONTACT
ENGINEER: TIMOTHY WEISER 678-622-8555
BACKUP: RUSSELL KASEM 770-910-3978

PROJECT NO: 23065
DATE: 12.15.2023
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CHECKED BY: TJW
REVISIONS:

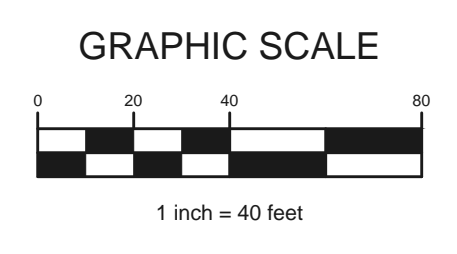
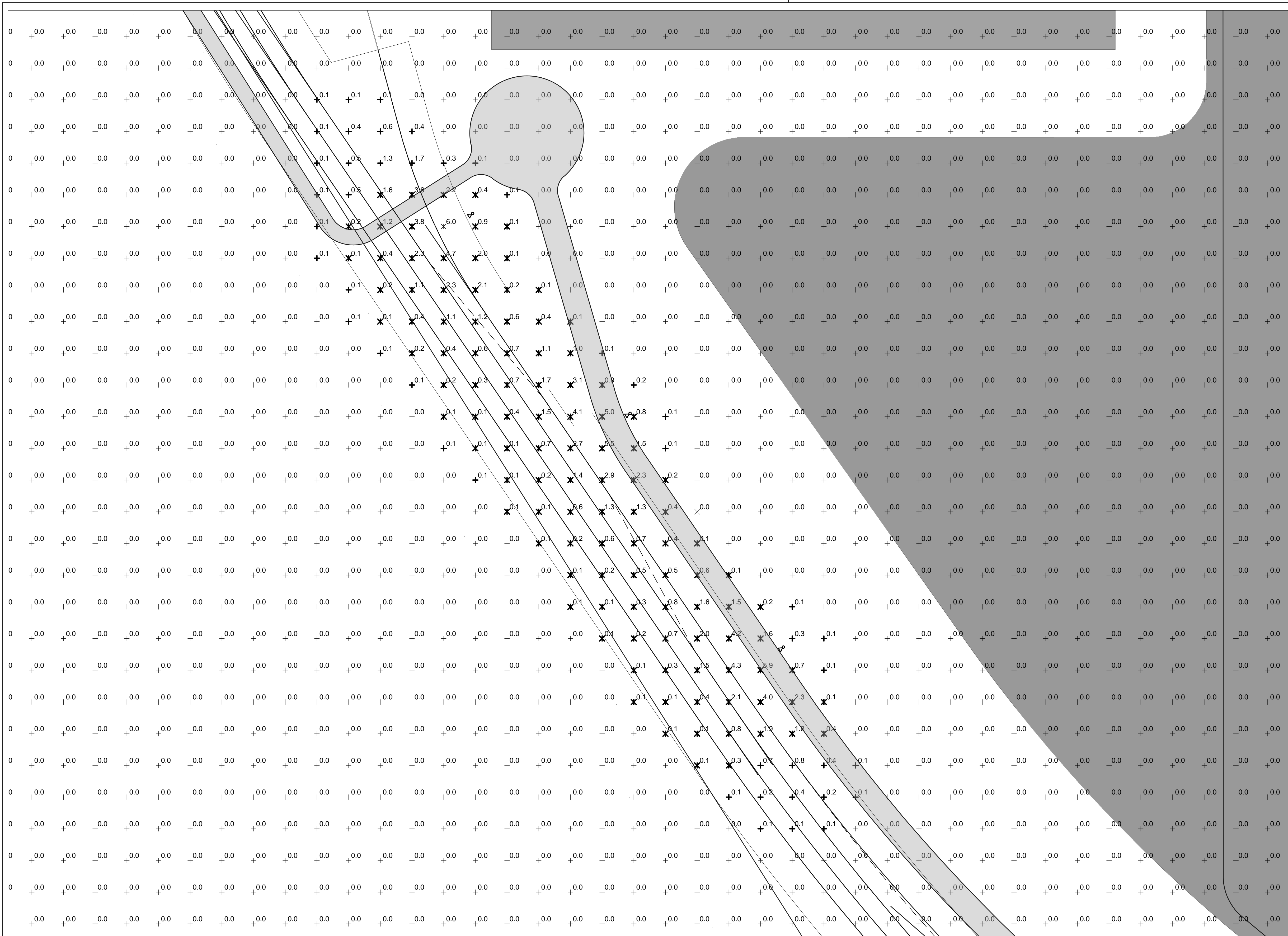
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| | | | LOCATION: BLYTHEWOOD, SC E700 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT OVERALL PHOTOMETRIC PLAN |
| DWN | RJK | FILE NO. D3327 | MILE POST 04825 R91.4 |
| DWN | RJK | FILE NO. TRK1115024 | DRAWING NUMBER |
| CHK | TJW | DATE FEBRUARY 16, 2024 | TD-2023-105 |

MODEL NAME: \$MODELNAME\$ CADD FILE: \$FILEL\$
DATE PRINTED: \$DATE\$ LAST SAVED: \$LASTSAVEDDATE\$



1 PARTIAL PHOTOMETRIC PLAN- ZONE 1
 E701 SCALE: 1"= 40'-0"

PHASE 2

WEISER
 ENGINEERING, P.C.
 WE PROJ NO. 23065
 CONTRACT
 ENGINE: TIMOTHY WEISER 678-622-8655
 BACKUP: RUSSELL KASEM 770-910-3978

PROJECT NO: 23065
 DATE: 12.15.2023
 DRAWN BY: RJK
 CHECKED BY: TJW
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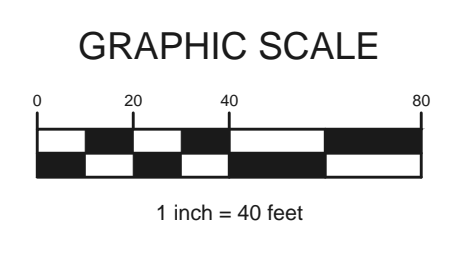
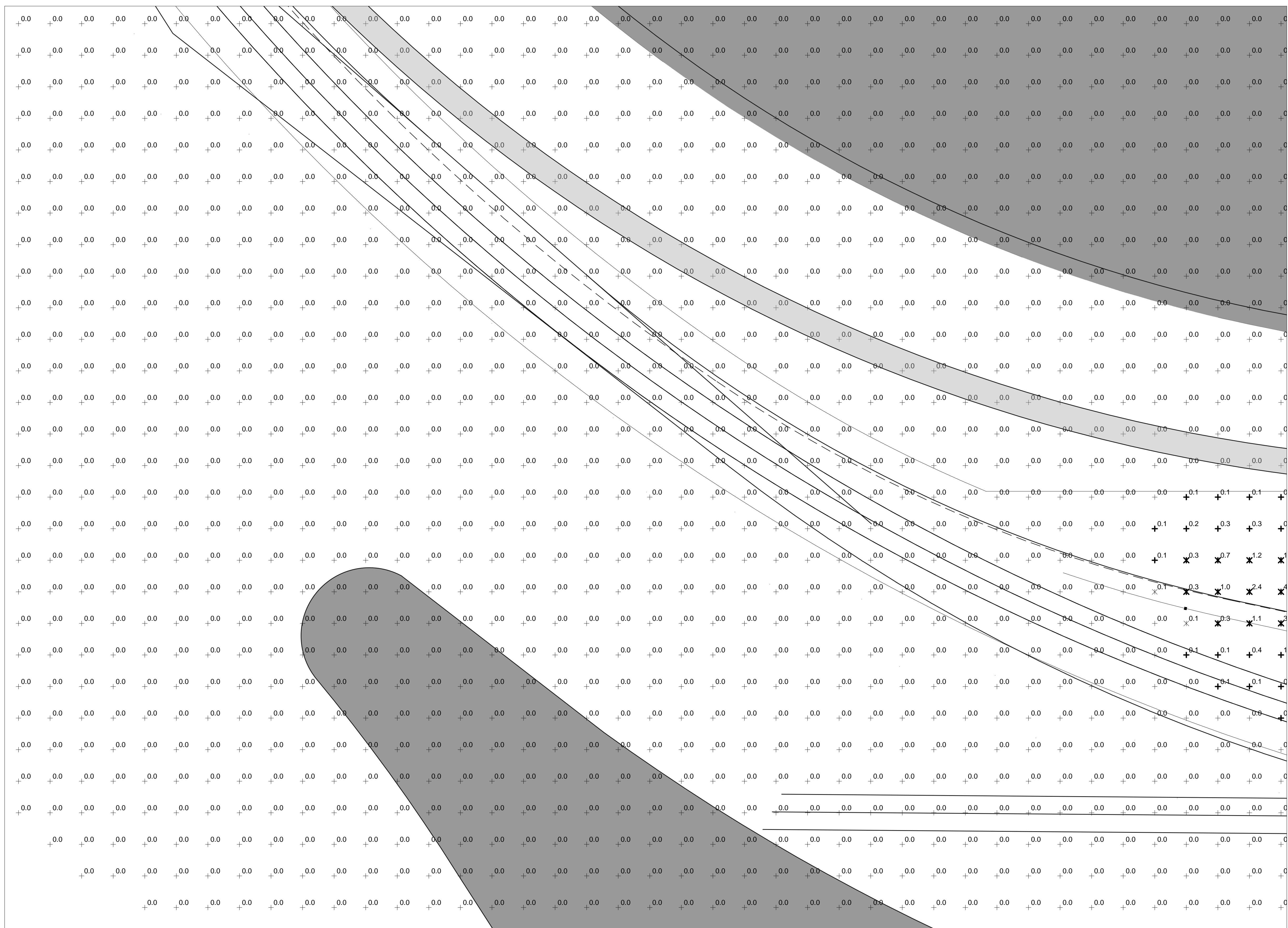
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 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E701 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL PHOTOMETRIC PLAN- ZONE 1 |
| DWN | RJK | PID No. D3327 | MRN 04825 MILE POST R91.4 |
| DWN | RJK | FILE No. TRK1115024 | DRAWING NUMBER |
| CHK | TJW | DATE FEBRUARY 16, 2024 | TD-2023-105 |

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1 PARTIAL PHOTOMETRIC PLAN- ZONE 2
E702 SCALE: 1"= 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
WE PROJ NO. 23065
CONTRACT
ENGINEER: TIMOTHY WEISER 678-622-8655
BACKUP: RUSSELL KASEM 770-910-3978

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

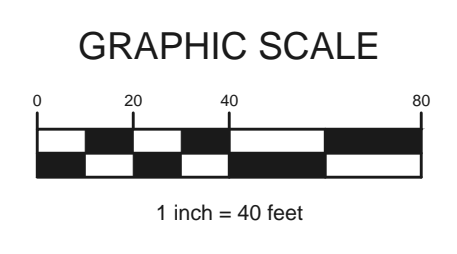
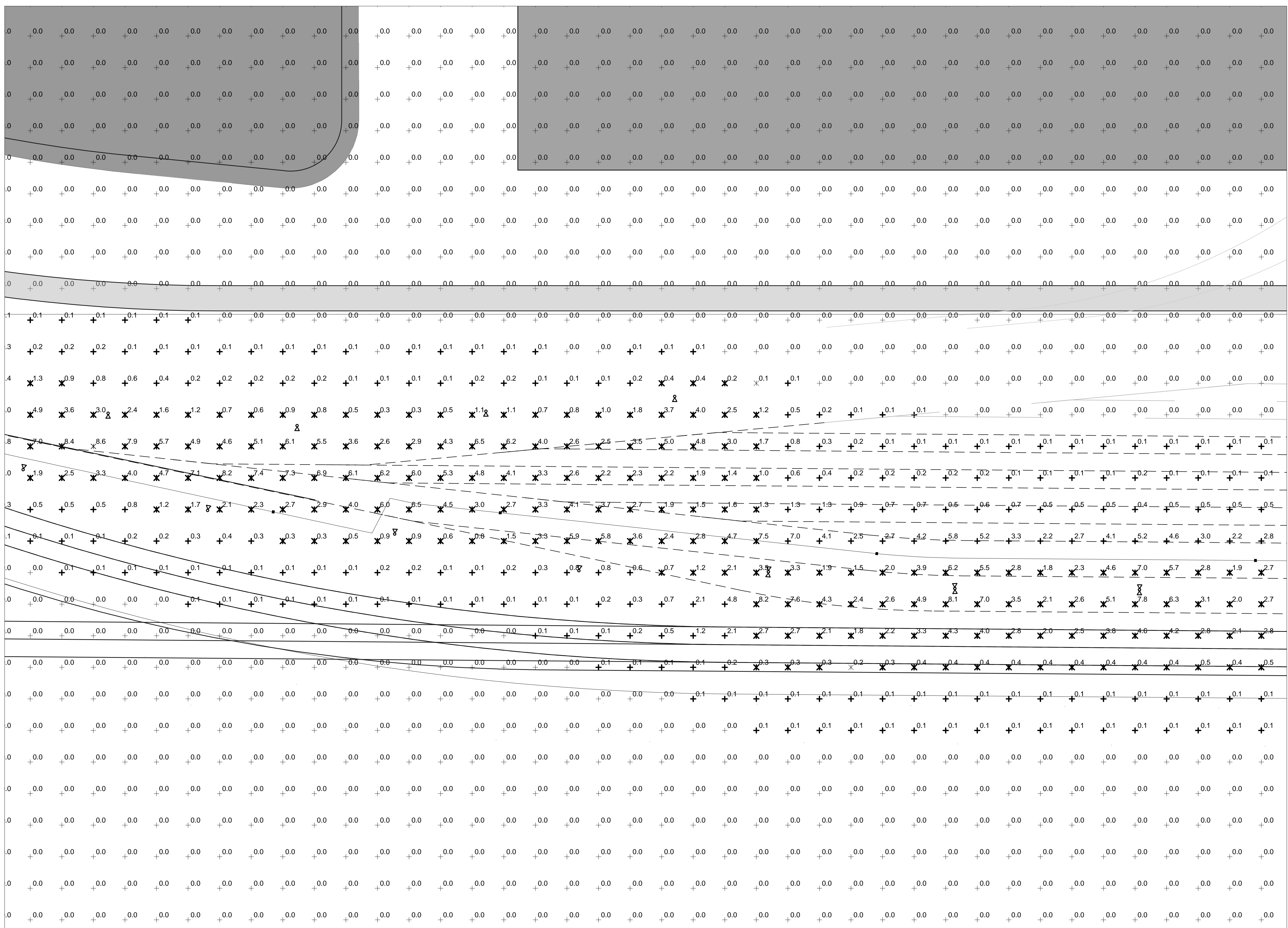
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| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION | | | BLYTHEWOOD, SC E702 |
| TITLE | | | |
| PROPOSED TRACKS TO SERVE PROJECT SCOUT | | | |
| PARTIAL PHOTOMETRIC PLAN- ZONE 2 | | | |
| DWN | RJK | FILE NO. | TRK1115024 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| DRAWING NUMBER | | | 04825 |
| MILE POST | | | R91.4 |
| DRAWING NUMBER | | | TD-2023-105 |

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DATE PRINTED: \$DATE\$ LAST SAVED: \$LASTSAVEDDATE\$



1 PARTIAL PHOTOMETRIC PLAN- ZONE 3
 E703 SCALE: 1"= 40'-0"

PHASE 2

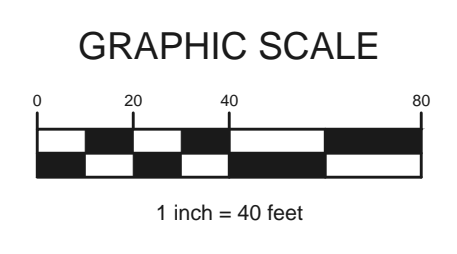
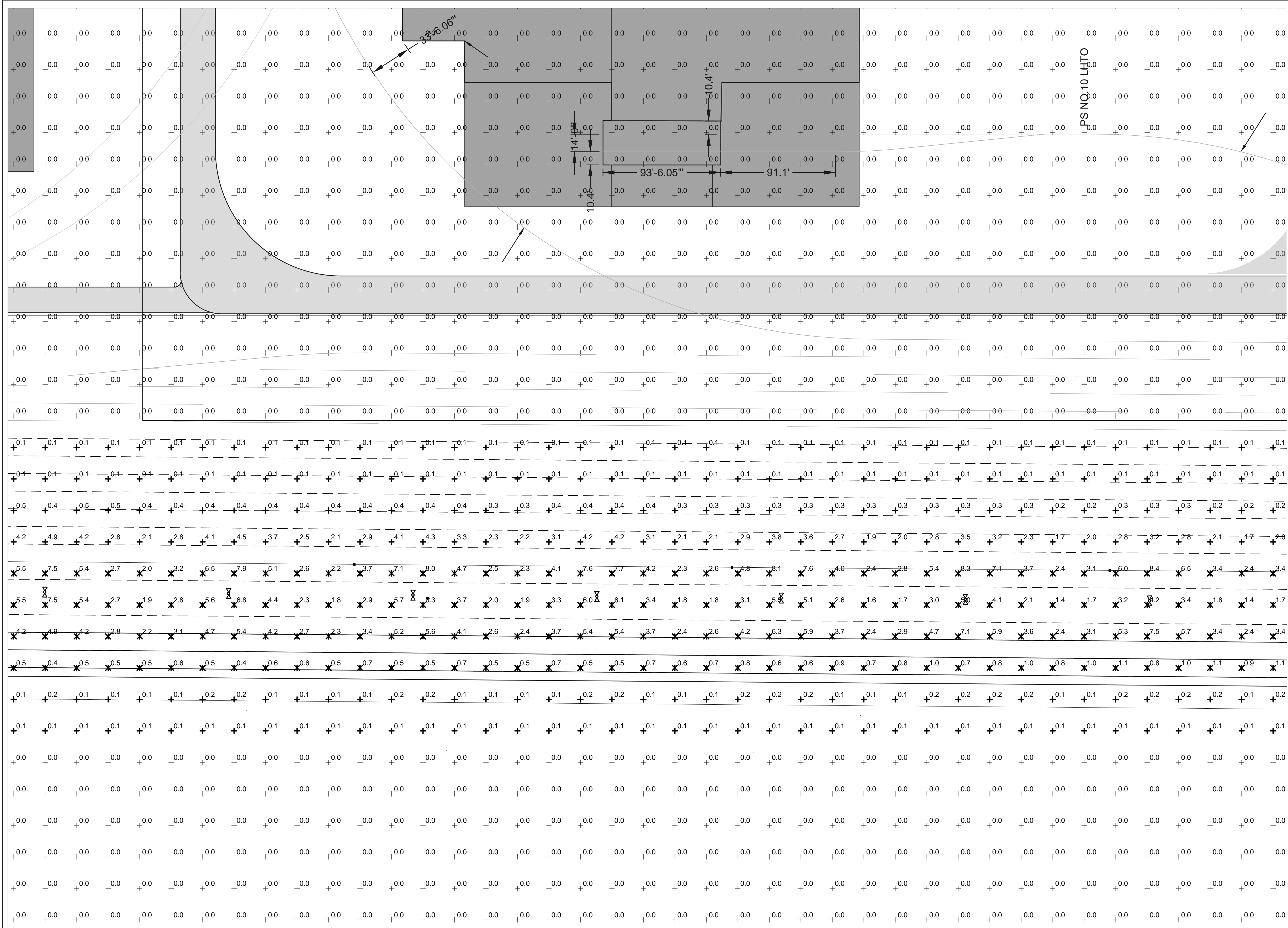
WEISER
 ENGINEERING, P.C.
 WE PROJ. NO. 23065
 CONTRACT
 ENGINEER: TIMOTHY WEISER 678-522-8555
 BACKUP: RUSSELL KASEM 770-910-3978

PROJECT NO: 23065
 DATE: 12.15.2023
 DRAWN BY: RJK
 CHECKED BY: TJW
 REVISIONS:

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 5115 Maryl and Way, STE 225
 Brentwood, TN 37027
 PHONE NO. (615) 791-0630
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 COASTAL
 OPERATING DIVISION
 OFFICE OF THE CHIEF ENGINEER - DESIGN AND CONSTRUCTION - ATLANTA, GA.

| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E703 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL PHOTOMETRIC PLAN- ZONE 3 |
| DWN | RJK | FILE No. TRK1115024 | DRAWING NUMBER TD-2023-105 |
| CHK | TJW | DATE FEBRUARY 16, 2024 | |



1 PARTIAL PHOTOMETRIC PLAN- ZONE 4
 E704 SCALE: 1"= 40'-0"

PHASE 2

WEISER
 ENGINEERING, P.C.
 WE PROJ. NO. 23065
 CONTACT
 ENGINEER: TIMOTHY WEISER 678-922-8655
 BACKUP: RUSSELL KASEM 770-910-3978

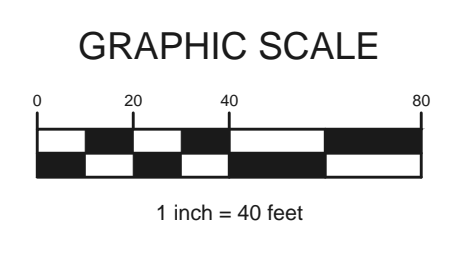
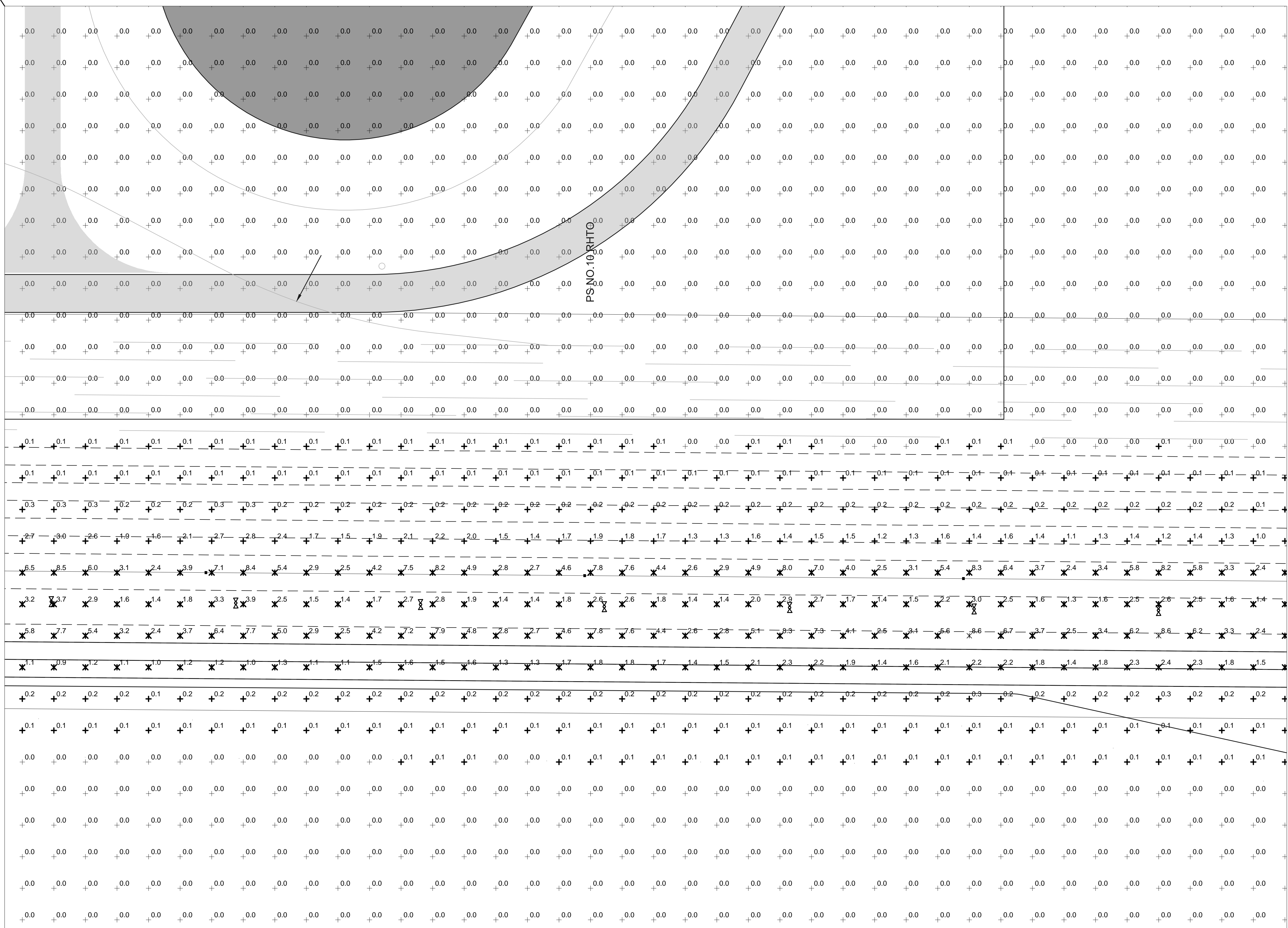
PROJECT NO: 23065
 DATE: 12.15.2023
 DRAWN BY: RJK
 CHECKED BY: TJW
 REVISIONS:

CROUCH
 engineering inc.

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| REV | BY | DATE | DESCRIPTION |
|-----|-----|------------------------|--|
| | | | LOCATION: BLYTHEWOOD, SC E704 |
| | | | TITLE: PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL PHOTOMETRIC PLAN- ZONE 4 |
| DWN | RJK | FILE No. TRK1115024 | DRAWING NUMBER |
| CHK | TJW | DATE FEBRUARY 16, 2024 | TD-2023-105 |



1 PARTIAL PHOTOMETRIC PLAN- ZONE 5
E705 SCALE: 1"= 40'-0"

PHASE 2

WEISER
ENGINEERING, P.C.
678-522-8555
770-910-3578

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

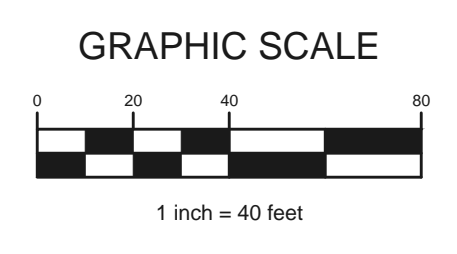
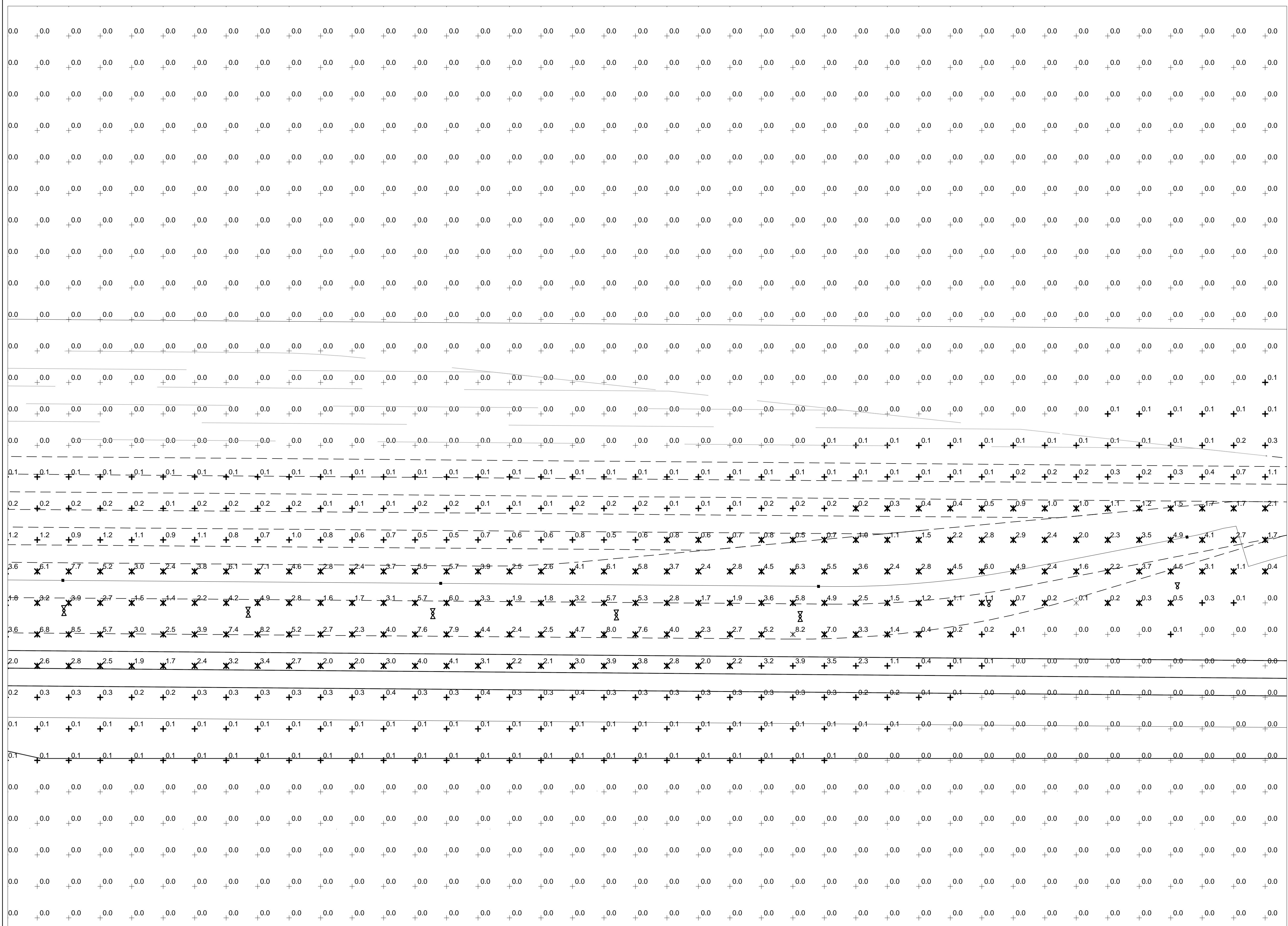
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| | | | |
|----------------|-----|-------------|--|
| REV | BY | DATE | DESCRIPTION |
| | | | |
| LOCATION | | | BLYTHEWOOD, SC E705 |
| TITLE | | | PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL PHOTOMETRIC PLAN- ZONE 5 |
| DWN | RJK | FILE NO. | TRK1115024 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| DRAWING NUMBER | | TD-2023-105 | |

MODEL NAME: \$MODELNAME\$ CADD FILE: \$FILEL\$
DATE PRINTED: \$DATE\$ LAST SAVED: \$LASTSAVEDDATE\$



1 PARTIALPHOTOMETRIC PLAN- ZONE 6
E706 SCALE: 1"= 40'-0"

PHASE 2

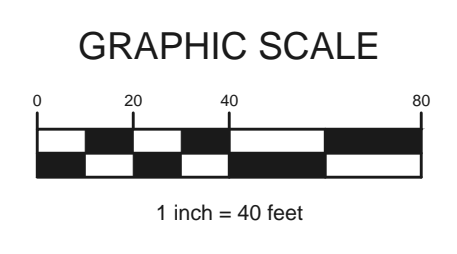
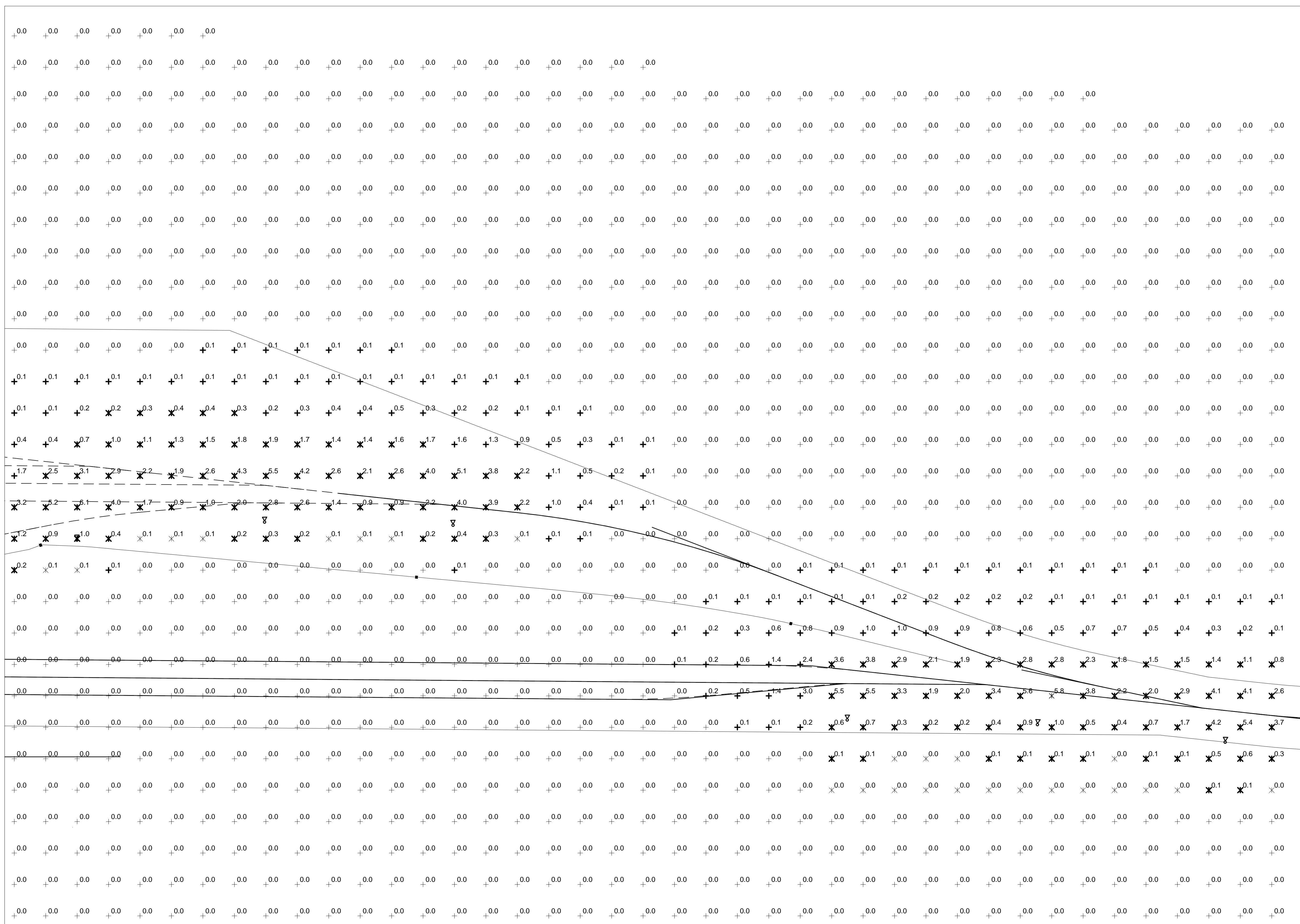
WEISER
ENGINEERING, P.C.
WE PROJ. NO. 23065
CONTRACT
ENGINEER: TIMOTHY WEISER 678-622-8655
BACKUP: RUSSELL KASEM 770-910-3978

PROJECT NO: 23065
DATE: 12.15.2023
DRAWN BY: RJK
CHECKED BY: TJW
REVISIONS:

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| | | | |
|--|----------------|-----------|-------------------|
| REV | BY | DATE | DESCRIPTION |
| LOCATION | BLYTHEWOOD, SC | | |
| TITLE | | | E706 |
| PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL PHOTOMETRIC PLAN- ZONE 6 | | | |
| DWN | RJK | FILE No. | TRK1115024 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| DWN | RJK | FILE No. | D3327 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| OPERATING DIVISION | 04825 | MILE POST | R91.4 |
| DRAWING NUMBER | | | TD-2023-105 |



1 PARTIAL PHOTOMETRIC PLAN- ZONE 7
 E707 SCALE: 1"= 40'-0"

PHASE 2

WEISER
 ENGINEERING, P.C.
 WE PROJ. NO. 23065
 CONTACT
 ENGINEER: TIMOTHY WEISER 678-522-8655
 BACKUP: RUSSELL KASEM 770-910-3978

PROJECT NO: 23065
 DATE: 12.15.2023
 DRAWN BY: RJK
 CHECKED BY: TJW
 REVISIONS:

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| REV | BY | DATE | DESCRIPTION |
|----------------|-----|-------------|--|
| | | | |
| LOCATION | | | BLYTHEWOOD, SC E707 |
| TITLE | | | PROPOSED TRACKS TO SERVE PROJECT SCOUT PARTIAL PHOTOMETRIC PLAN- ZONE 7 |
| DWN | RJK | FILE No. | TRK1115024 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| DWN | RJK | FILE No. | D3327 |
| CHK | TJW | DATE | FEBRUARY 16, 2024 |
| MILE POST | | 04825 R91.4 | |
| DRAWING NUMBER | | TD-2023-105 | |

MODEL NAME: \$MODELNAME\$ CADD FILE: \$FILEL\$
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