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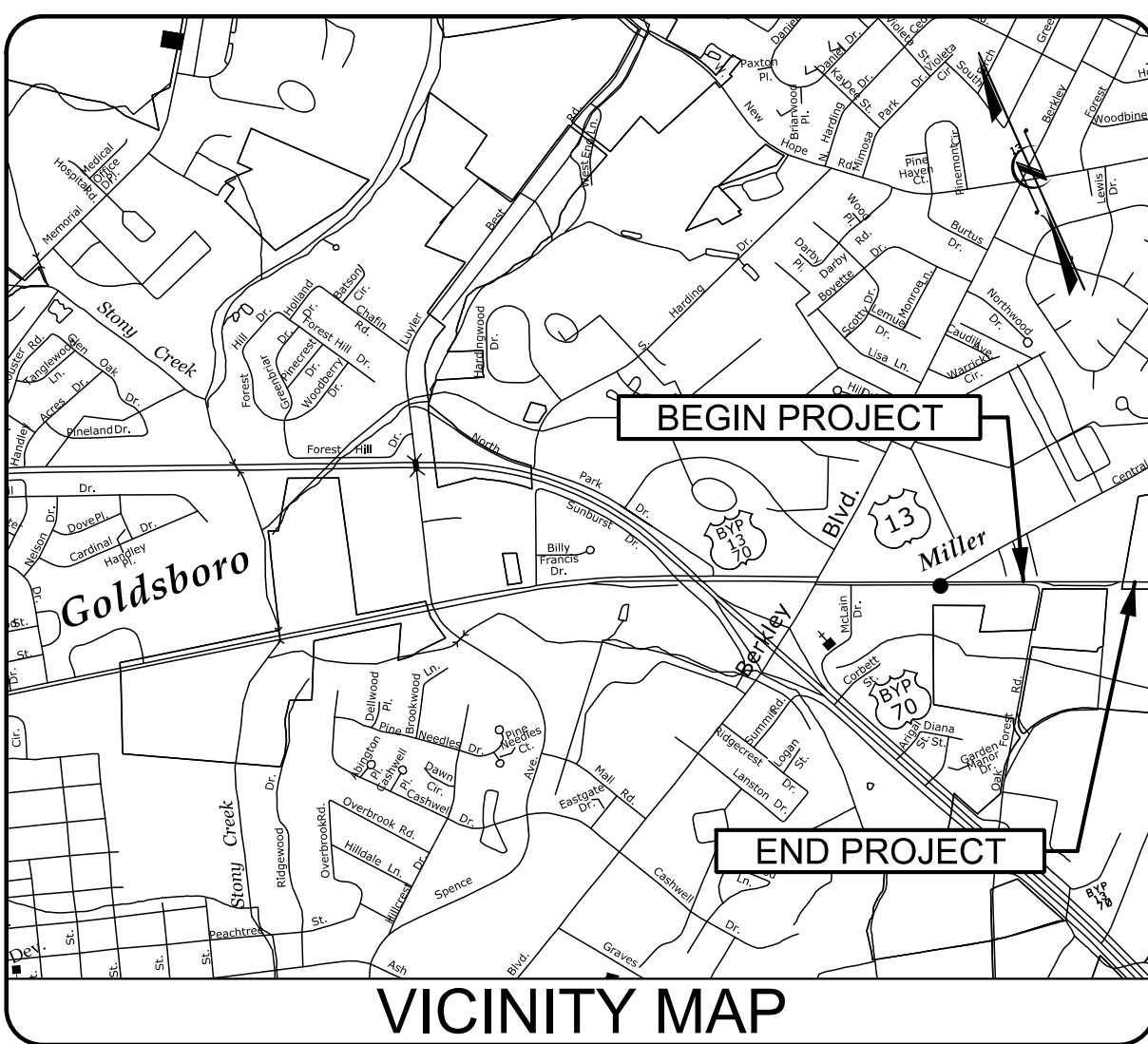
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TIP PROJECT: U-5724

CONTRACT: C204540

SEE SHEET RR-1A FOR INDEX OF SHEETS



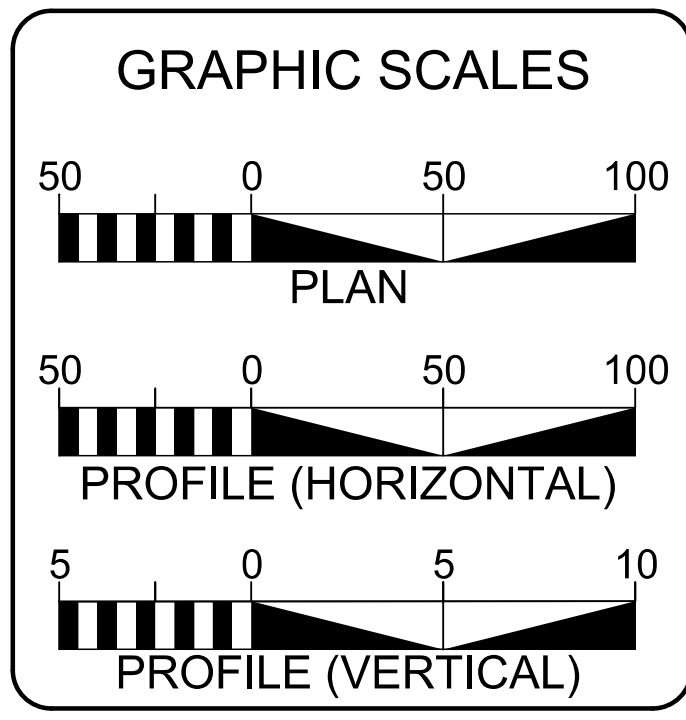
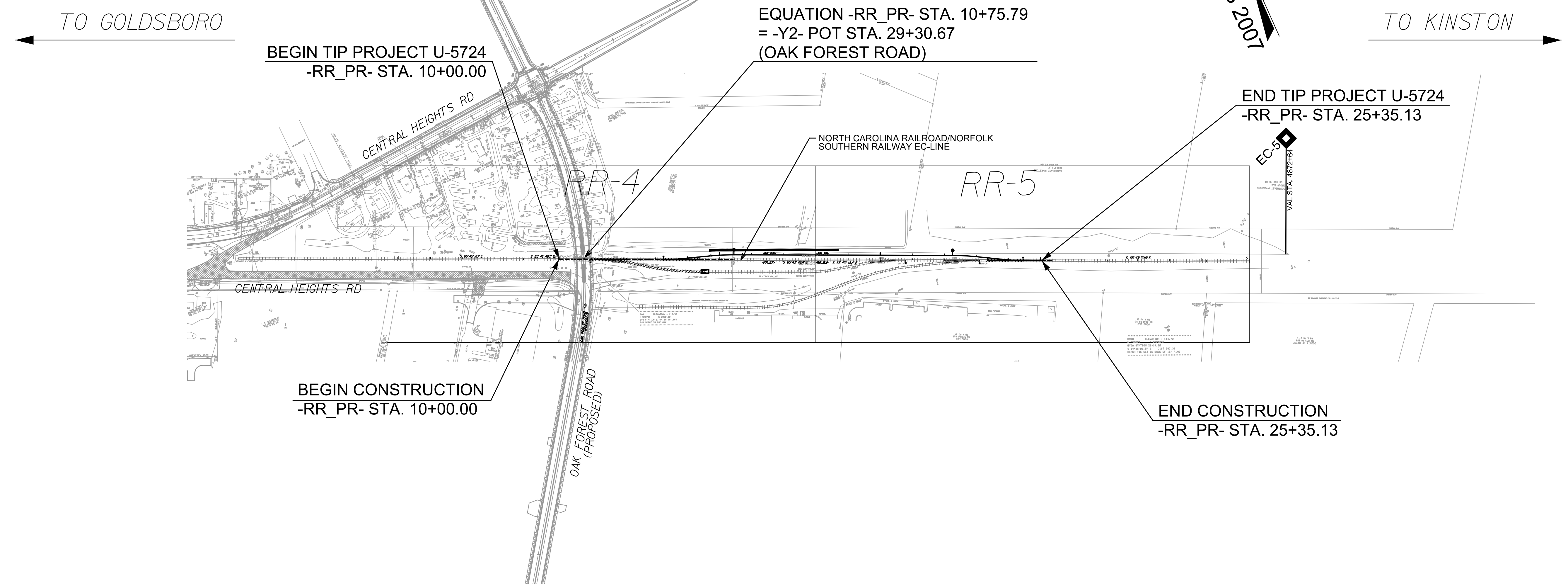
STATE OF NORTH CAROLINA
RAIL DIVISION

WAYNE COUNTY

LOCATION: SEAHORSE SIDING RELOCATION (MP EC-4.6)
TYPE OF WORK: DRAINAGE, GRADING, TRACKWORK

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5724	RR-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
54016.1.2		P.E.	
54016.3.1		CONST./UTIL CONST.	

**DOCUMENT NOT CONSIDERED FINAL
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PROJECT LENGTH	
LENGTH OF RAIL TIP PROJECT	0.291 MILES
LENGTH OF STRUCTURES TIP PROJECT	0.000 MILES
TOTAL LENGTH OF RAIL TIP PROJECT	0.291 MILES
LENGTH MEASURED ALONG -RR_PR-	
NCDOT CONTACT:	BRAD SMYTHE, P.E. NCDOT PROJECT MANAGER

HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
N/A

LETTING DATE:
11/15/2022

RAIL ENGINEER

DocuSigned by:
Corey P. Vernier
10/13/2022
SIGNATURE: P.E.

HYDRAULICS ENGINEER

DocuSigned by:
Paul H. Cameron
10/13/2022
SIGNATURE: P.E.

NC DEPARTMENT OF TRANSPORTATION
RAIL DIVISION
DESIGN AND CONSTRUCTION

HNTB
HNTB NORTH CAROLINA, P.C.
 243 E. Six Forks Road, Suite 200
 Raleigh, North Carolina 27609
 NC License No: C-1524

PROJECT REFERENCE NO. U-5724
 SHEET NO. RR-1A
 R/W SHEET NO.
 DATE: OCTOBER 13, 2022

INDEX OF SHEETS	
SHEET NUMBER	DESCRIPTION
RR-1	COVER SHEET
RR-1A	INDEX OF DRAWINGS, GENERAL NOTES AND STANDARDS
RR-1B	CONVENTIONAL PLAN SHEET SYMBOLS
RR-1C	CONVENTIONAL PLAN SHEET ABBREVIATIONS
RR-2A	PROPOSED TRACK TYPICAL SECTIONS
RR-2B THRU RR-2C	TRACK HORIZONTAL ALIGNMENT GEOMETRY
RR-2D	EXCAVATION ADJUSTMENT TO ACTIVE TRACK DETAIL & BENCHING DETAIL
RR-2E	EARTH MOUND DETAIL
RR-4 THRU RR-5	PROPOSED TRACK PLAN AND PROFILE SHEETS (-RR_PR-)
EC-17 THRU EC-25	EROSION CONTROL PLANS
X-60 THRU X-71	CROSS SECTIONS

GENERAL NOTES FOR RAILROAD GRADING:

THE PROPOSED GRADE LINES SHOWN DENOTE THE FINAL ELEVATION OF THE PROPOSED TOP OF LOW RAIL AT THE CENTERLINE OF TRACK AS SHOWN ON THE TYPICAL SECTIONS. WHERE NO PROPOSED GRADE LINES ARE SHOWN, THE PROFILES SHOWN DEPICT THE EXISTING TOP OF LOW RAIL.

RAILROAD SAFETY:

THE CONTRACTOR THAT WILL ENTER NORTH CAROLINA RAILROAD CORRIDOR SHALL OBTAIN A RIGHT-OF-ENTRY AGREEMENT FROM NORTH CAROLINA RAILROAD COMPANY IN ADVANCE.

INFORMATION AVAILABLE:
<https://www.ncrr.com/corridor-access/>

ALL CONTRACTOR AND SUBCONTRACTOR EMPLOYEES THAT WILL ENTER NORTH CAROLINA RAILROAD CORRIDOR , PERFORM WORK WITHIN 25' OF AN ACTIVE TRACK, OR OTHERWISE HAVE THE POTENTIAL TO FOUL AN ACTIVE TRACK SHALL OBTAIN THE FOLLOWING SAFETY CREDENTIALS IN ADVANCE.

1. NORFOLK SOUTHERN ROADWAY WORKER PROTECTION TRAINING (NS RWP)- INFORMATION AVAILABLE:
www.rctrainers.com
2. E-RAILSAFE CERTIFICATION - INFORMATION AVAILABLE:
http://www.e-railsafe.com/index_narrow.html

ONLY AFTER RECEIPT OF A FULLY EXECUTED RIGHT-OF-ENTRY AGREEMENT FROM NORTH CAROLINA RAILROAD COMPANY CAN CONTRACTOR OR SUBCONTRACTOR EMPLOYEES ENTER NORTH CAROLINA RAILROAD CORRIDOR. EVERY EMPLOYEE SHALL DISPLAY BOTH NS RWP AND E-RAILSAFE BADGES AT ALL TIMES.

ALL CONSTRUCTION ACTIVITIES ON THE NORTH CAROLINA RAILROAD CORRIDOR, WITHIN 25' OF AN ACTIVE TRACK, OR OTHERWISE HAVE THE POTENTIAL TO FOUL AN ACTIVE TRACK SHALL BE COORDINATED WITH THE NORFOLK SOUTHERN FLAGMAN. SUCH ACTIVITIES ARE SUBJECT TO STOPPAGE TO ENSURE SAFETY OF PASSING TRAINS.

Note: Not To Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA RAIL DIVISION

HNTB HNTB NORTH CAROLINA, P.C. 243 E. Six Forks Road, Suite 200 Raleigh, North Carolina 27609 NC License No: C-15524

DATE: OCTOBER 13, 2022

Table with Project Reference No. (U-5724), Sheet No. (RR-1B), and RW Sheet No.

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

Table listing symbols for State Line, County Line, Township Line, City Line, Reservation Line, Property Line, Existing Iron Pin, Property Corner, Property Monument, Parcel / Sequence Number, Existing Fence Line, Proposed Woven Wire Fence, Proposed Chain Link Fence, Proposed Barbed Wire Fence, Existing Wetland Boundary, Proposed Wetland Boundary, Existing Endangered Animal Boundary, Existing Endangered Plant Boundary.

BUILDINGS AND OTHER CULTURE:

Table listing symbols for Gas Pump Vent or U/G Tank Cap, Sign, Well, Small Mine, Foundation, Area Outline, Cemetery, Building, School, Church, Dam.

HYDROLOGY:

Table listing symbols for Stream or Body of Water, Hydro, Pool or Reservoir, Jurisdictional Stream, Buffer Zone 1, Buffer Zone 2, Flow Arrow, Disappearing Stream, Spring, Wetland, Proposed Lateral, Tail, Head Ditch, False Sump.

RIGHT OF WAY:

Table listing symbols for Baseline Control Point, Existing Right of Way Marker, Existing Right of Way Line, Proposed Right of Way Line, Proposed Right of Way Line with Iron Pin and Cap Marker, Proposed Right of Way Line with Concrete or Granite Marker, Existing Control of Access, Proposed Control of Access, Existing Easement Line, Proposed Temporary Construction Easement, Proposed Temporary Drainage Easement, Proposed Permanent Drainage Easement, Proposed Permanent Drainage / Utility Easement, Proposed Permanent Utility Easement, Proposed Temporary Utility Easement, Proposed Permanent Easement with Iron Pin and Cap Marker.

ROADS AND RELATED FEATURES:

Table listing symbols for Existing Edge of Pavement, Existing Curb, Proposed Slope Stakes Cut, Proposed Slope Stakes Fill, Proposed Wheel Chair Ramp, Existing Metal Guardrail, Proposed Guardrail, Existing Cable Guiderail, Proposed Cable Guiderail, Pavement Removal.

VEGETATION:

Table listing symbols for Single Tree, Single Shrub, Hedge, Woods Line, Orchard, Vineyard.

EXISTING STRUCTURES:

Table listing symbols for MAJOR: Bridge, Tunnel or Box Culvert, Bridge Wing Wall, Head Wall and End Wall; MINOR: Head and End Wall, Pipe Culvert, Footbridge, Drainage Box: Catch Basin, DI or JB, Paved Ditch Gutter, Storm Sewer Manhole, Storm Sewer.

UTILITIES:

Table listing symbols for POWER: Existing Power Pole, Proposed Power Pole, Existing Joint Use Pole, Proposed Joint Use Pole, Power Manhole, Power Line Tower, Power Transformer, U/G Power Cable Hand Hole, H-Frame Pole, Recorded U/G Power Line, Designated U/G Power Line (S.U.E.*).

TELEPHONE:

Table listing symbols for Existing Telephone Pole, Proposed Telephone Pole, Telephone Manhole, Telephone Booth, Telephone Pedestal, Telephone Cell Tower, U/G Telephone Cable Hand Hole, Recorded U/G Telephone Cable, Designated U/G Telephone Cable (S.U.E.*), Recorded U/G Telephone Conduit, Designated U/G Telephone Conduit (S.U.E.*), Recorded U/G Fiber Optics Cable, Designated U/G Fiber Optics Cable (S.U.E.*).

WATER:

Table listing symbols for Water Manhole, Water Meter, Water Valve, Water Hydrant, Recorded U/G Water Line, Designated U/G Water Line (S.U.E.*), Above Ground Water Line.

TV:

Table listing symbols for TV Satellite Dish, TV Pedestal, TV Tower, U/G TV Cable Hand Hole, Recorded U/G TV Cable, Designated U/G TV Cable (S.U.E.*), Recorded U/G Fiber Optic Cable, Designated U/G Fiber Optic Cable (S.U.E.*).

GAS:

Table listing symbols for Gas Valve, Gas Meter, Recorded U/G Gas Line, Designated U/G Gas Line (S.U.E.*), Above Ground Gas Line.

SANITARY SEWER:

Table listing symbols for Sanitary Sewer Manhole, Sanitary Sewer Cleanout, U/G Sanitary Sewer Line, Above Ground Sanitary Sewer, Recorded SS Forced Main Line, Designated SS Forced Main Line (S.U.E.*).

MISCELLANEOUS:

Table listing symbols for Utility Pole, Utility Pole with Base, Utility Located Object, Utility Traffic Signal Box, Utility Unknown U/G Line, U/G Tank; Water, Gas, Oil, A/G Tank; Water, Gas, Oil, U/G Test Hole (S.U.E.*), Abandoned According to Utility Records, End of Information, Potential Soil Contamination, Proposed Retaining Wall, Temporary Shoring.

STATE OF NORTH CAROLINA RAIL DIVISION

HNTB NORTH CAROLINA, P.C.
243 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

DATE: OCTOBER 13, 2022

PROJECT REFERENCE NO. U-5724	SHEET NO. RR-1C
R/W SHEET NO.	

CONVENTIONAL PLAN SHEET SYMBOLS AND ABBREVIATIONS

RAILROADS:

Curve Information	$D_c = \frac{x^2}{xx'}$ $E_a = x \cdot x''$ $L_s = xxx'$
Curve Label	
Existing Track to be Removed	
Existing Track to be Retained	
Existing Track to be Shifted	
Milepost	
Point of Inflection No Curve (PINC)	
Proposed Track	
Proposed Power Operated Turnout	
Proposed Hand Throw Turnout	
Profile Grade Line	

ABBREVIATIONS:

TRACK ALIGNMENT - HORIZONTAL:

CD	Cant Deficiency
CS	Curve to Spiral
Dc	Degree of Curvature
Ea	Actual Superelevation (Inches)
Eu	Unbalance Elevation (Inches)
I	Curve Intersection Angle
L	Length of Curve
Ls	Length of Spiral
PI	Point of Intersection
PI/TO	Point of Intersection / Turnout
POL	Point on Line
PS	Point of Switch
PC	Point of Curve
PT	Point of Tangent
POT	Point on Tangent
R	Radius
SC	Spiral to Curve
ST	Spiral to Tangent
TO	Turnout
TS	Tangent to Spiral
X	Spiral Tangent Length to Offset
Y	Spiral Tangent Offset

TRACK ALIGNMENT - VERTICAL:



EL	Elevation
L	Vertical Curve Length
R	Rate of Change
T/R	Top of Rail
VPC	Vertical Point of Curve
VPI	Vertical Point of Intersection
VPT	Vertical Point of Tangent

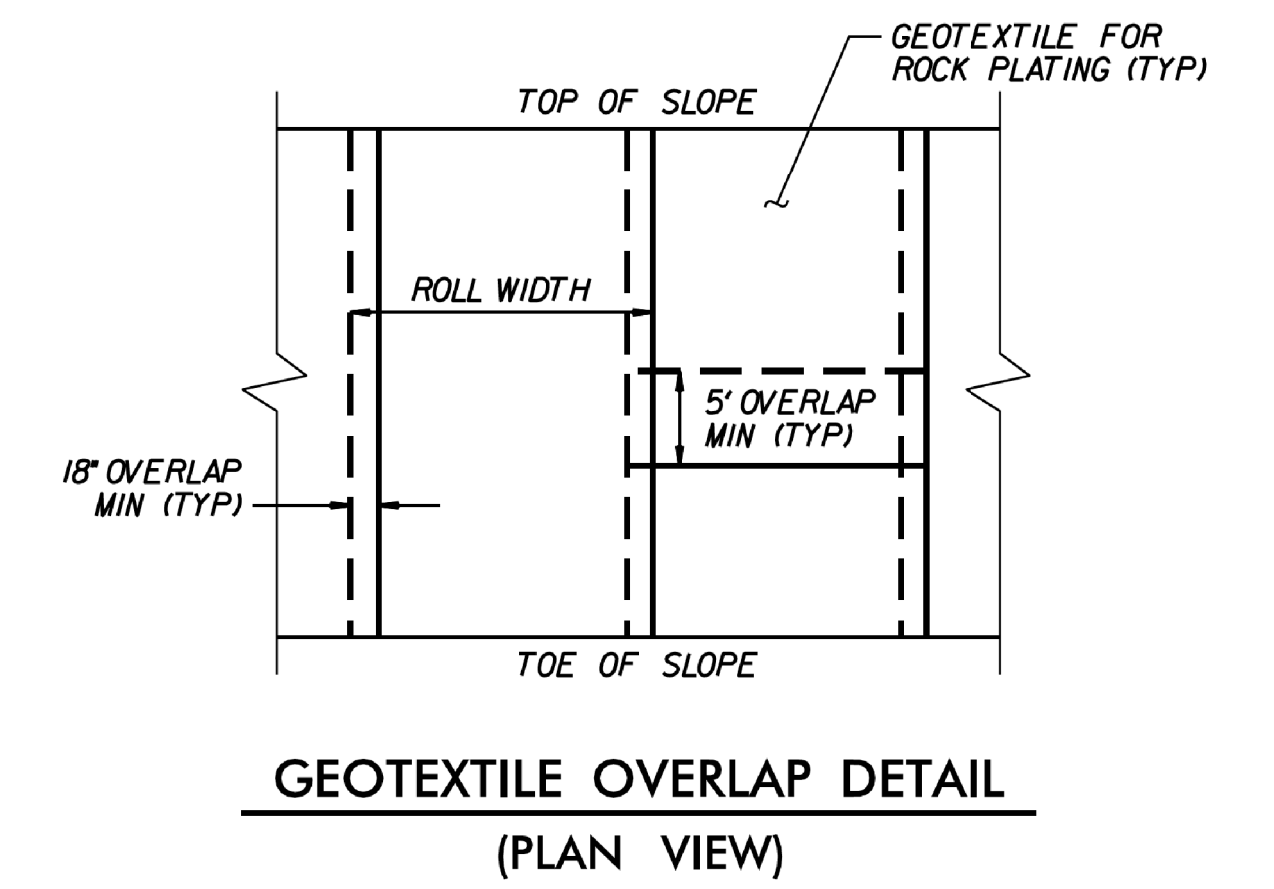
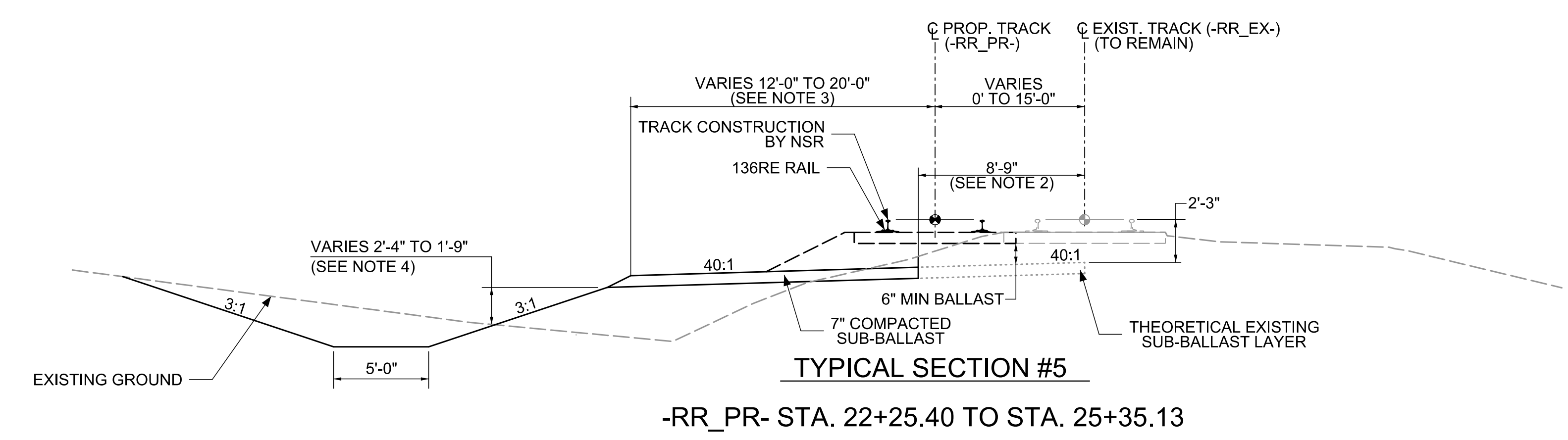
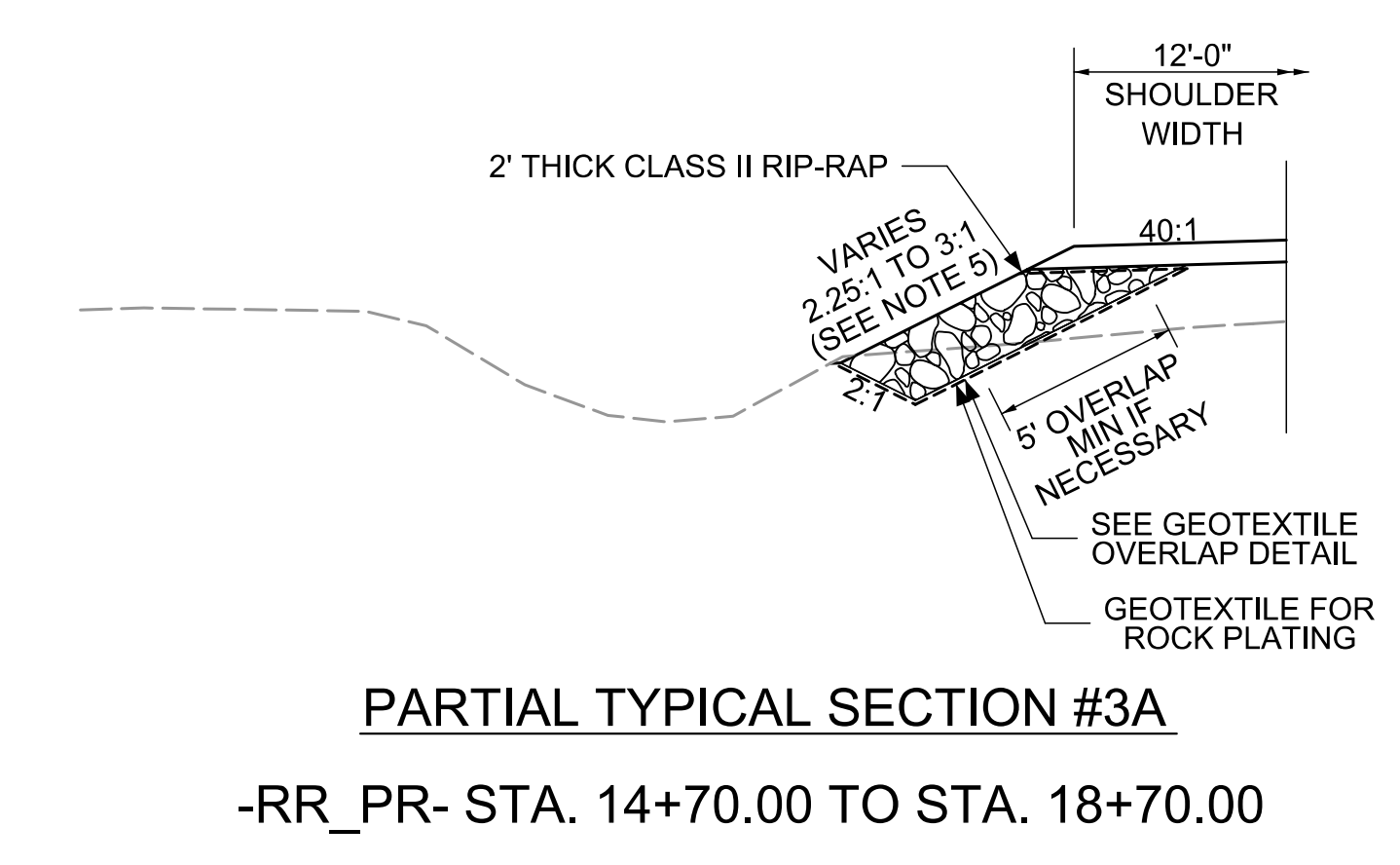
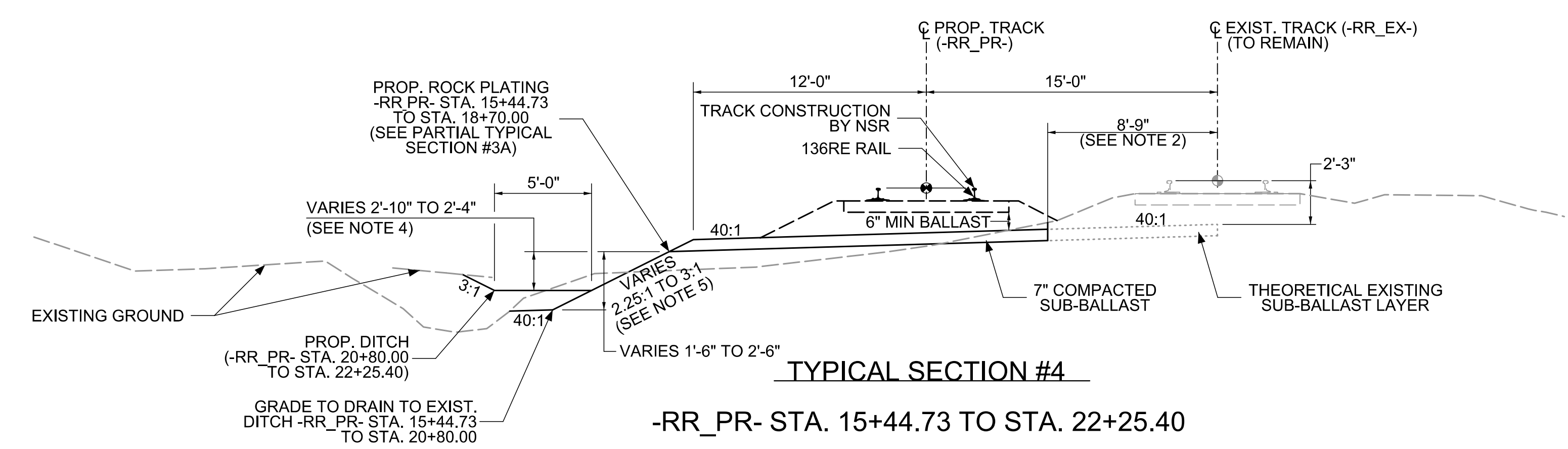
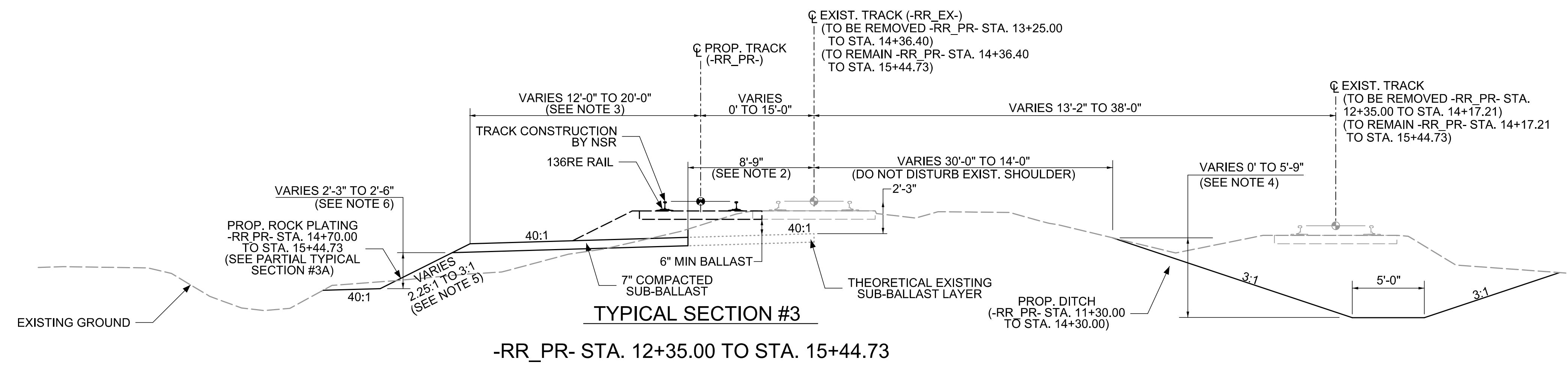
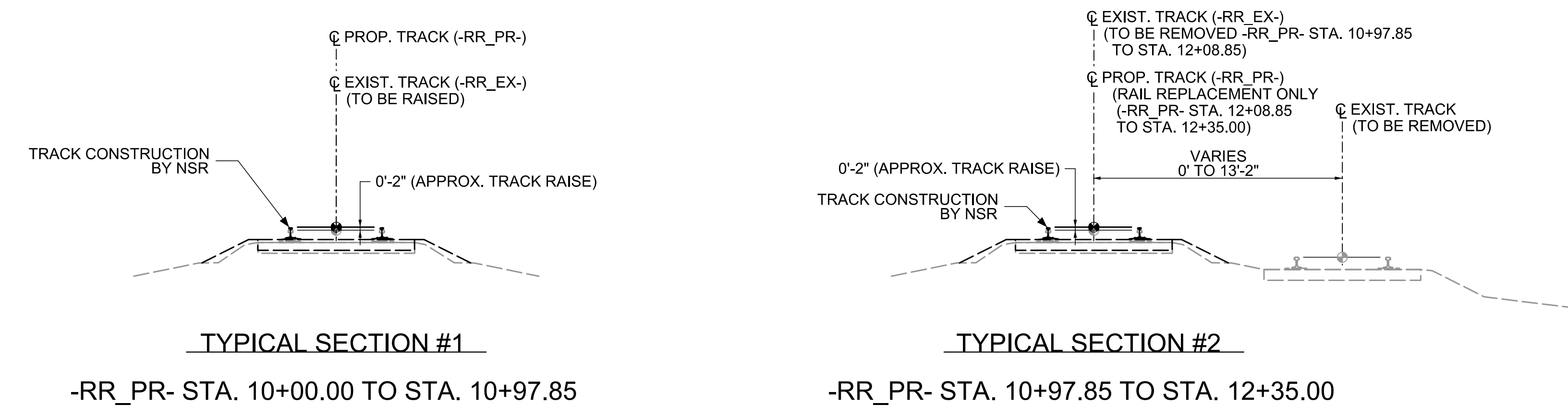
DRAINAGE:

CIP	Cast Iron Pipe
BCCMP	Bituminous Coated Corrugated Metal Pipe
HDPE	High Density Polyethylene Pipe
INV.	Invert
PSRM	Permanent Soil Reinforcement Matting
RCB	Reinforced Concrete Box Culvert
RCP	Reinforced Concrete Pipe
WSP	Welded Steel Pipe
STB	Stone Box Culvert
SYGF	Square Yards Geotextile Fabric
NWSEL	Normal Water Surface Elevation
HPDE	High Density Polyethylene

MISCELLANEOUS:

ABS	Absolute
AEI	Automatic Equipment Identification
AVE	Avenue
AH	Ahead
BK	Back
B	Baseline
BLDG	Building
BLVD	Boulevard
CB	Catch Basin
C	Centerline
CLR	Clear
CONC	Concrete
CONST.	Construction
DWG	Drawing
E	East
EL	Elevation
ESMT	Easement
EXIST.	Existing
EB	East Bound
FT	Feet
FND	Foundation
GRD	Ground
HW	Headwall
HORIZ.	Horizontal
HTTO	Hand Throw Turnout
LT	Left
LH	Left hand
MIN	Minimum
MP	Milepost
MPH	Miles Per Hour
N	North
N/A	Not Applicable
NB	North Bound
NO.	Number
NCDOT	North Carolina Department of Transportation
NCRR	North Carolina Railroad
NSR	Norfolk Southern Railway
OTM	Other Track Material
PAVT	Pavement
PGL	Profile Grade Line
POTO	Power Operated Turnout
PROP.	Proposed
RD	Road
RT	Right
RR	Railroad
RH	Right hand
R/W	Right-of-Way
REQ'D	Required
S	South
SEG	Segment
STA	Station
SR	State Route
SHLDR	Shoulder
SHT	Sheet
SWM	Storm Water Management
TRK	Track
V	Velocity (MPH)
VERT	Vertical
W	West
W/	With
WB	West Bound



PROJECT REFERENCE NO. U-5724		SHEET NO. RR-2A	
R/W SHEET NO.			
RAILROAD DESIGN ENGINEER		HYDRAULICS ENGINEER	
			
10/13/2022		10/13/2022	



- NOTES:
- THE TYPICAL SECTIONS TAKE PRECEDENCE OVER THE CROSS SECTIONS. CROSS SECTIONS ARE PROVIDED FOR REFERENCE ONLY.
 - DIMENSION SHOWN IS FOR BIDDING PURPOSES ONLY AND MUST BE COORDINATED WITH THE NORFOLK SOUTHERN REPRESENTATIVE PRIOR TO CONSTRUCTION. SEE 'EXCAVATION ADJACENT TO ACTIVE TRACK DETAIL' FOR REQUIREMENTS.
 - PROPOSED LEFT SUB-BALLAST WIDTH VARIES ACCORDING TO THE FOLLOWING:
 - STA. 12+35.00 TO 13+05.00: 14'-0" TO 20'-0"
 - STA. 13+05.00 TO 13+56.25: 20'-0"
 - STA. 13+56.25 TO 14+37.05: 20'-0" TO 12'-0"
 - STA. 14+37.05 TO 15+44.73: 12'-0"
 - STA. 22+25.40 TO 23+33.08: 12'-0"
 - STA. 23+33.08 TO 24+13.88: 12'-0" TO 20'-0"
 - STA. 24+13.88 TO 24+65.13: 20'-0"
 - STA. 24+65.13 TO 25+35.13: 20'-0" TO 14'-0"
 - DITCH ELEVATIONS ARE CONTROLLED BY SPECIAL DITCH GRADES SHOWN ON THE PROFILES.
 - EMBANKMENT SLOPE VARIES ACCORDING TO THE FOLLOWING: (SLOPES STEEPER THAN 3:1 SHALL REQUIRE ROCK PLATING.)
 - STA. 12+35.00 TO 14+70.00: 3:1
 - STA. 14+70.00 TO 15+20.00: 3:1 TO 2.25:1
 - STA. 15+20.00 TO 17+70.00: 2.25:1
 - STA. 17+70.00 TO 18+70.00: 2.25:1 TO 3:1
 - STA. 18+70.00 TO 22+25.40: 3:1

10/13/2022
 2:rr_psh_2A.dgn
 HNTB

HORIZONTAL CURVE GEOMETRY SHEET

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	U-5724	RR-2B
DATE: OCTOBER 13, 2022		R/W SHEET NO.
		RAILROAD DESIGN ENGINEER
		 10/13/2022

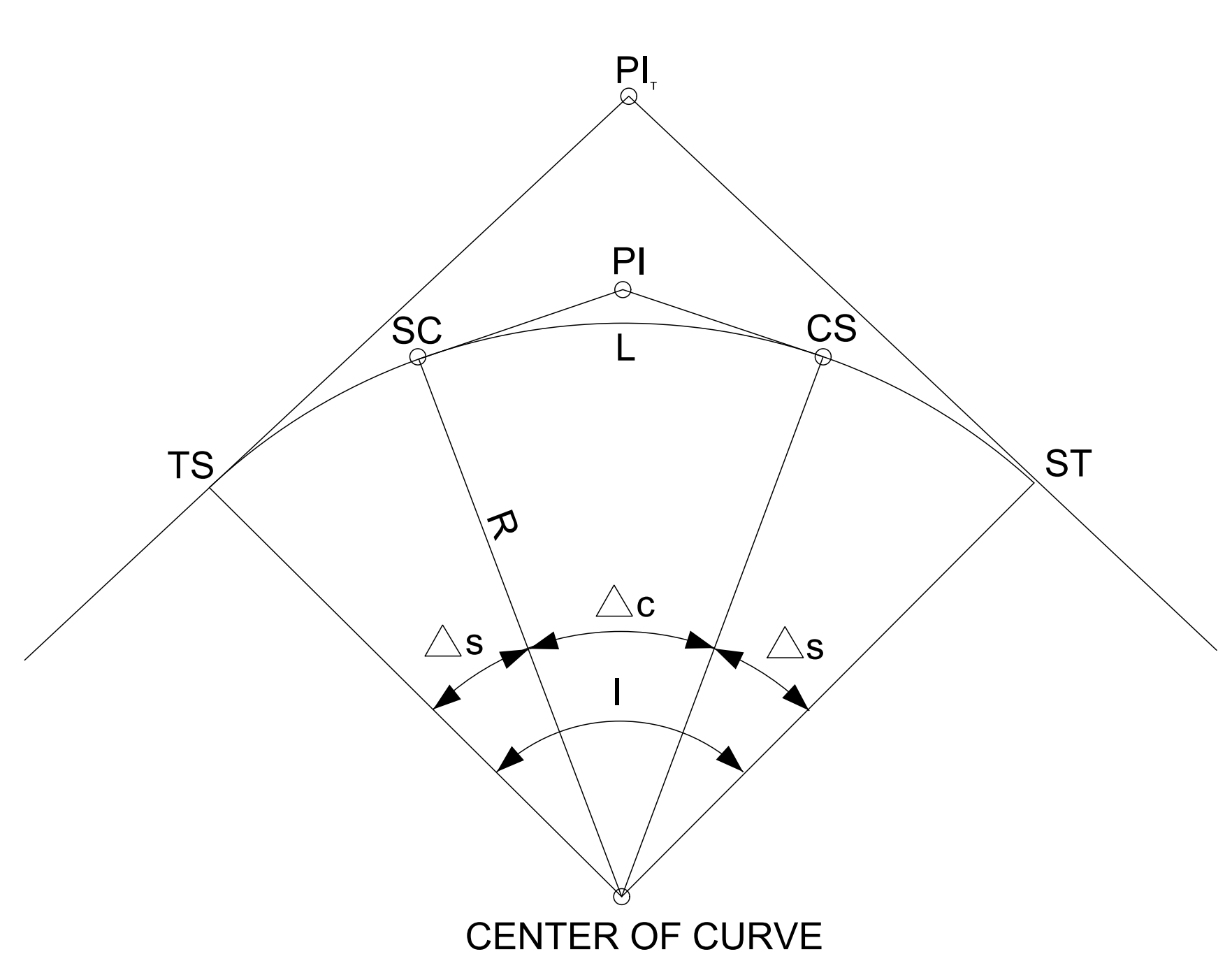


FIGURE A
CIRCULAR CURVE WITH SPIRAL TRANSITION CURVES

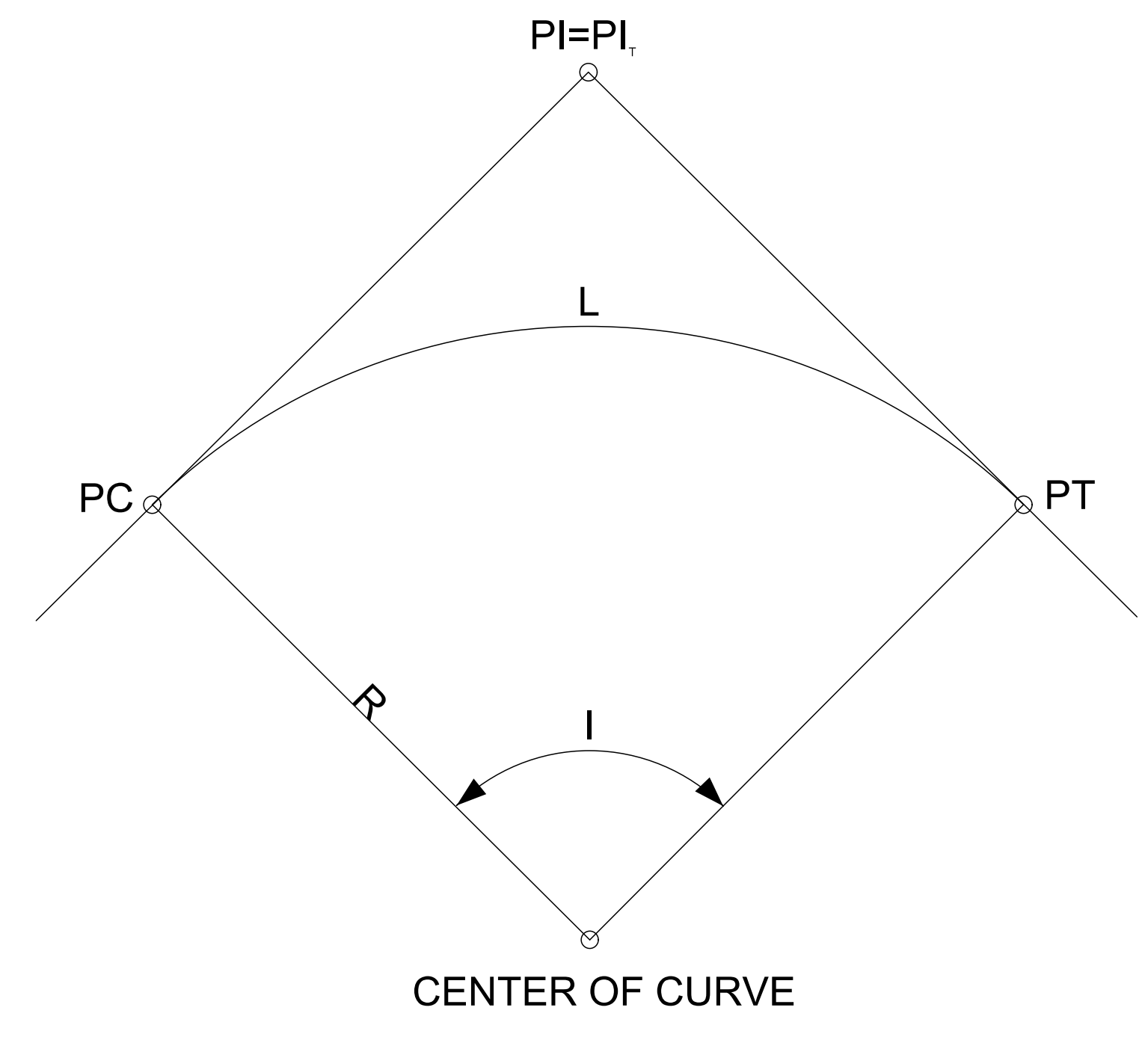


FIGURE B
SIMPLE CIRCULAR CURVE

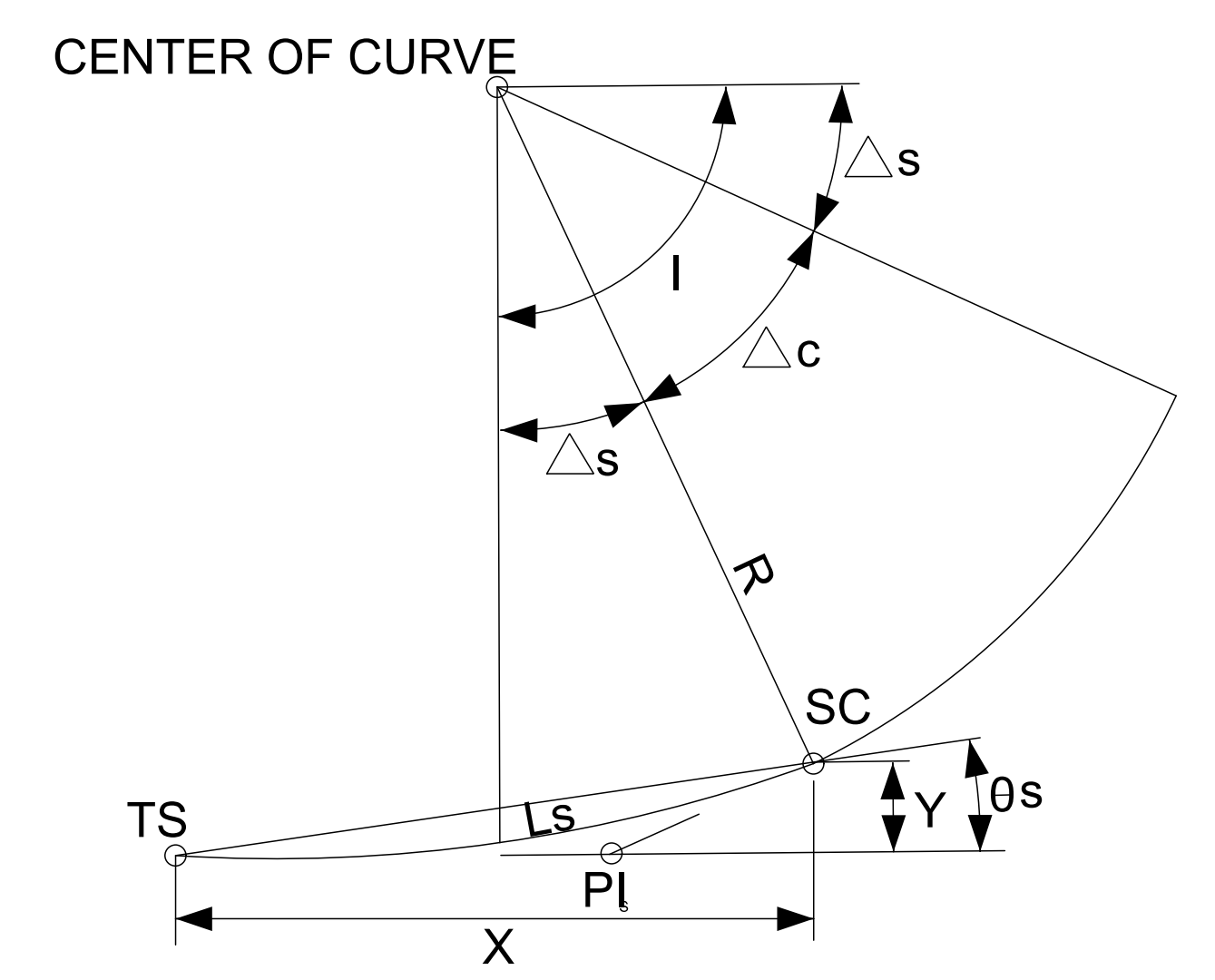


FIGURE C
SPIRAL TRANSITION CURVE

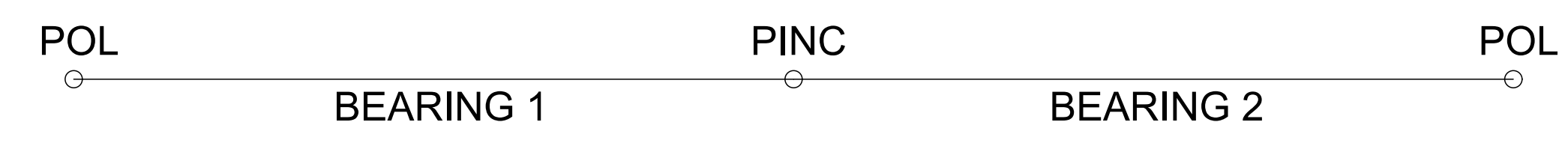
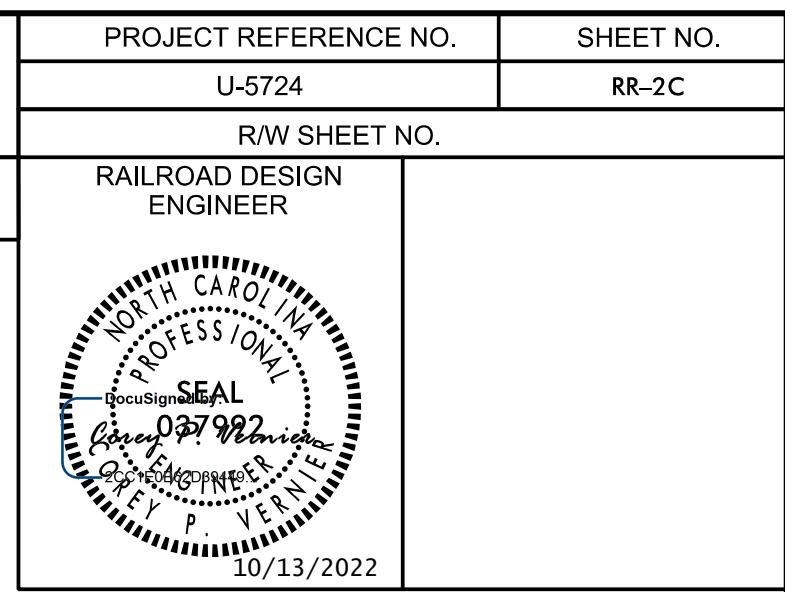


FIGURE D
DEFLECTION BETWEEN TANGENTS

- | | | | |
|----------------|-------------------------------------|-----------------|--|
| R | RADIUS OF CURVATURE | PI _c | POINT OF INTERSECTION (CIRCULAR CURVE) |
| D _c | DEGREE OF CURVATURE (CHORD DEFINED) | PI _i | POINT OF INTERSECTION (TANGENT) |
| L | LENGTH OF CURVE (CHORD DEFINED) | PI _s | POINT OF INTERSECTION (SPIRAL) |
| I | TOTAL INTERSECTION ANGLE | PC | TANGENT TO CIRCULAR CURVE |
| Δ _c | CURVE ANGLE | PT | CIRCULAR CURVE TO TANGENT |
| Δ _s | SPIRAL ANGLE | TS | TANGENT TO SPIRAL |
| θ _s | SPIRAL DEFLECTION | SC | SPIRAL TO CIRCULAR CURVE |
| L _s | LENGTH OF SPIRAL | CS | CIRCULAR CURVE TO SPIRAL |
| X | SPIRAL TANGENT LENGTH TO OFFSET | ST | SPIRAL TO TANGENT |
| Y | SPIRAL TANGENT OFFSET | PINC | POINT OF INTERSECTION NO CURVE |



PROPOSED -RR_PR- TRACK ALIGNMENT

Point 8000
 N 593,798.1645 E 2,320,057.1354 Sta 10+00.00

Course from 8000 to 8002
 S 65°46' 48.69" E Dist 97.8500

Point 8002
 N 593,758.0227 E 2,320,146.3724 Sta 10+97.85

Course from 8002 to 8003
 S 65°46' 48.69" E Dist 182.9642

Point 8003 - Point of Intersection - No Curve
 N 593,682.9638 E 2,320,313.2319 Sta 12+80.81

Course from 8003 to 8004
 S 65°43' 48.37" E Dist 44.1858

Point 8004 - Point of Switch
 N 593,664.8019 E 2,320,353.5125 Sta 13+25.00

Course from 8004 to 8005
 S 65°43' 48.37" E Dist 31.2500

Point 8005 - Point of Intersection - Turnout
 N 593,651.9570 E 2,320,382.0006 Sta 13+56.25

Course from 8005 to PC RR_PR-101
 S 71°27' 17.37" E Dist 112.1534

Curve RR_PR 101 Ea = 0.00", V = 10 mph

Curve RR_PR-101

Chord Definition

P.I. Station 15+06.63 N 593,604.1292 E 2,320,524.5693
 Delta = 5° 43' 29.00" (RT)
 Degree = 7° 30' 00.00"
 Tangent = 38.2239
 Length = 76.3296
 Radius = 764.4894
 External = 0.9550
 Long Chord = 76.3524
 Mid. Ord. = 0.9538
 P.C. Station 14+68.40 N 593,616.2864 E 2,320,488.3302
 P.T. Station 15+44.73 N 593,588.4178 E 2,320,559.4149
 C.C. N 592,891.4945 E 2,320,245.1826
 Back
 Ahead
 Chord Bear

Course from PT RR_PR-101 to PC RR_PR-102
 S 65°43' 48.37" E Dist 680.6676

Curve RR_PR 102 Ea = 0.00", V = 10 mph

Curve Curve RR_PR-102

Chord Definition

P.I. Station 22+63.62 N 593,292.9279 E
 Delta = 5°43' 29.00" (RT)
 Degree = 7° 30' 00.00"
 Tangent = 38.2239
 Length = 76.3296
 Radius = 764.4894
 External = 0.9550
 Long Chord = 76.3524
 Mid. Ord. = 0.9538
 P.C. Station 22+25.40 N 593,308.6393 E 2,321,179.9247
 P.T. Station 23+01.73 N 593,273.8191 E 2,321,247.8749
 C.C. N 592,611.7159 E 2,320,865.6924
 Back S 65°43' 48.37" E
 Ahead S 60°00' 19.37" E
 Chord Bear S 62°52' 03.87" E

Course from PT RR_PR-102 to 8006
 S 60°00' 19.37" E Dist 112.1534

Point 8006 - Point of Intersection - Turnout
 N 593,217.7515 E 2,321,345.0079 Sta 24+13.88

Course from 8006 to 8007
 S 65°43' 48.37" E Dist 31.2500

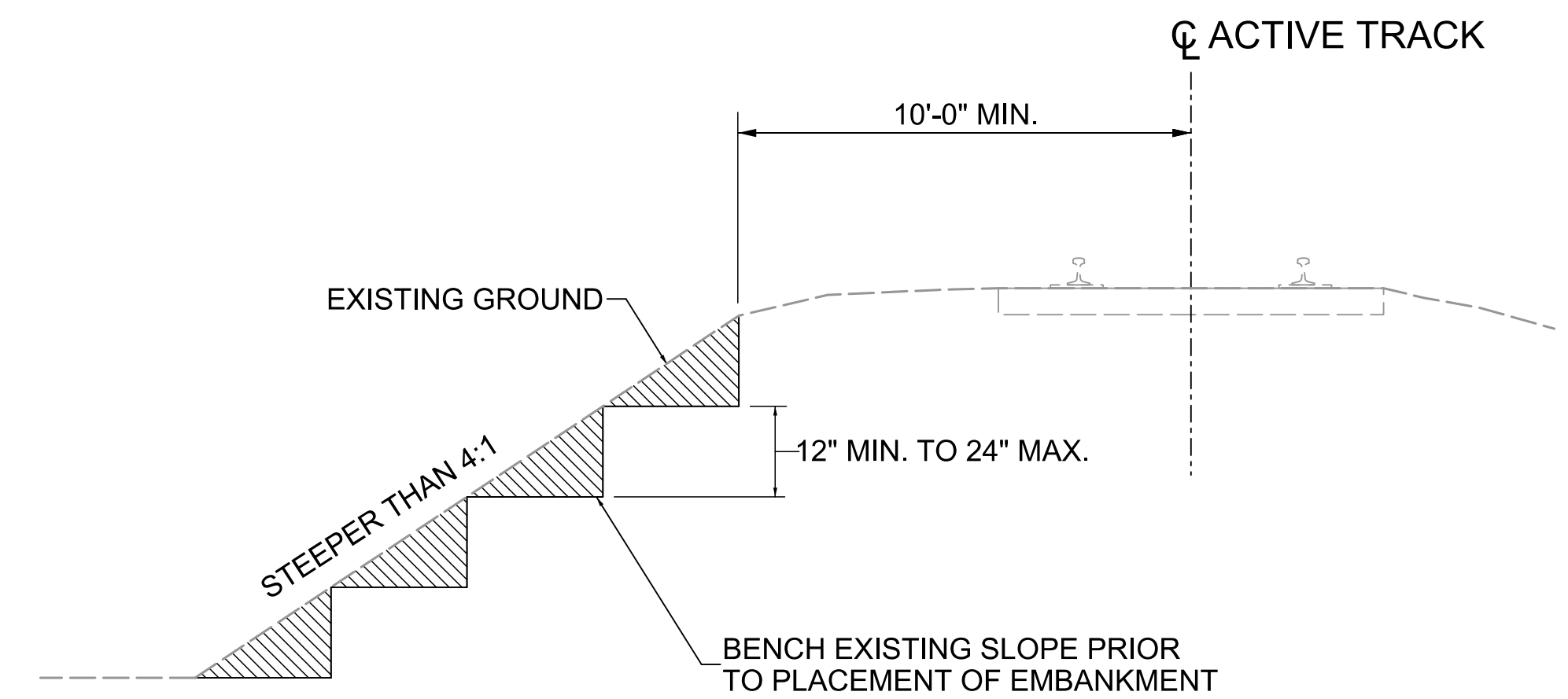
Point 8007 - Point of Switch
 N 593,204.9066 E 2,321,373.4960 Sta 24+45.13

Course from 8007 to 8008
 S 65°43' 48.37" E Dist 90.0000

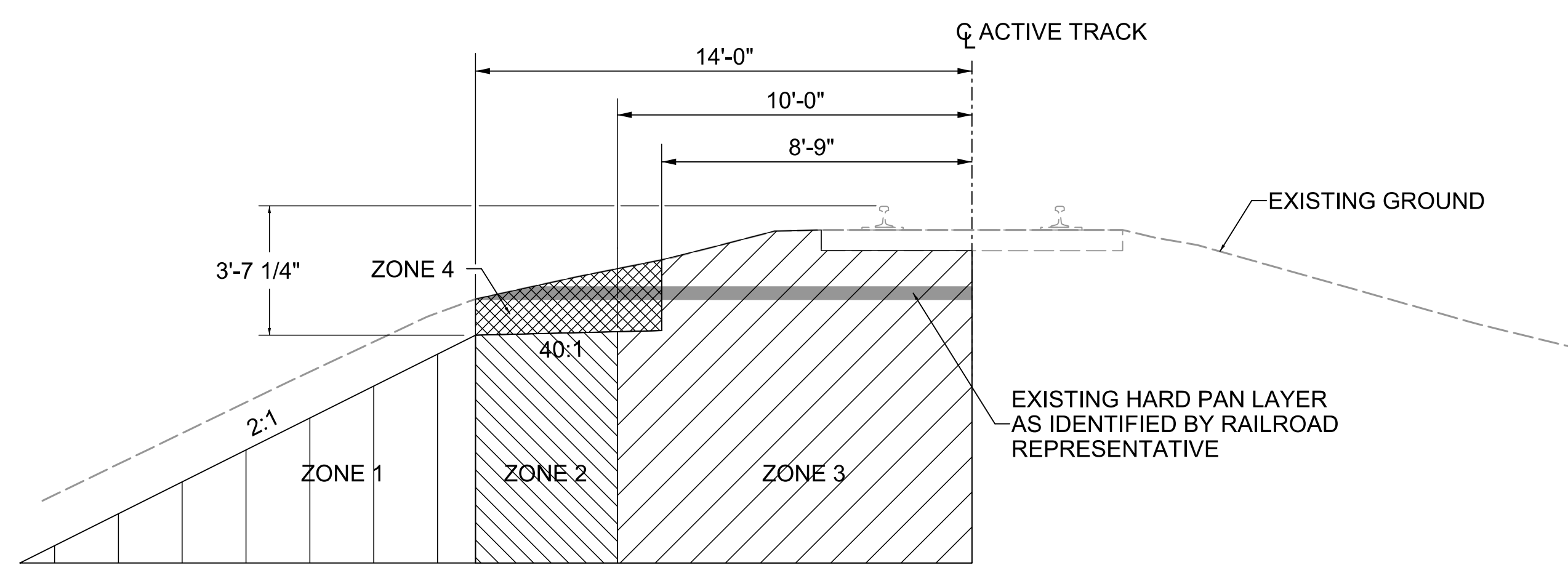
Point 8008
 N 593,167.9134 E 2,321,455.5418 Sta 25+35.13

PROJECT REFERENCE NO. U-5724		SHEET NO. RR-2D	
R/W SHEET NO.			
RAILROAD DESIGN ENGINEER			

PARTIAL SECTION BENCHING DETAIL




EXCAVATION ADJACENT TO ACTIVE TRACK



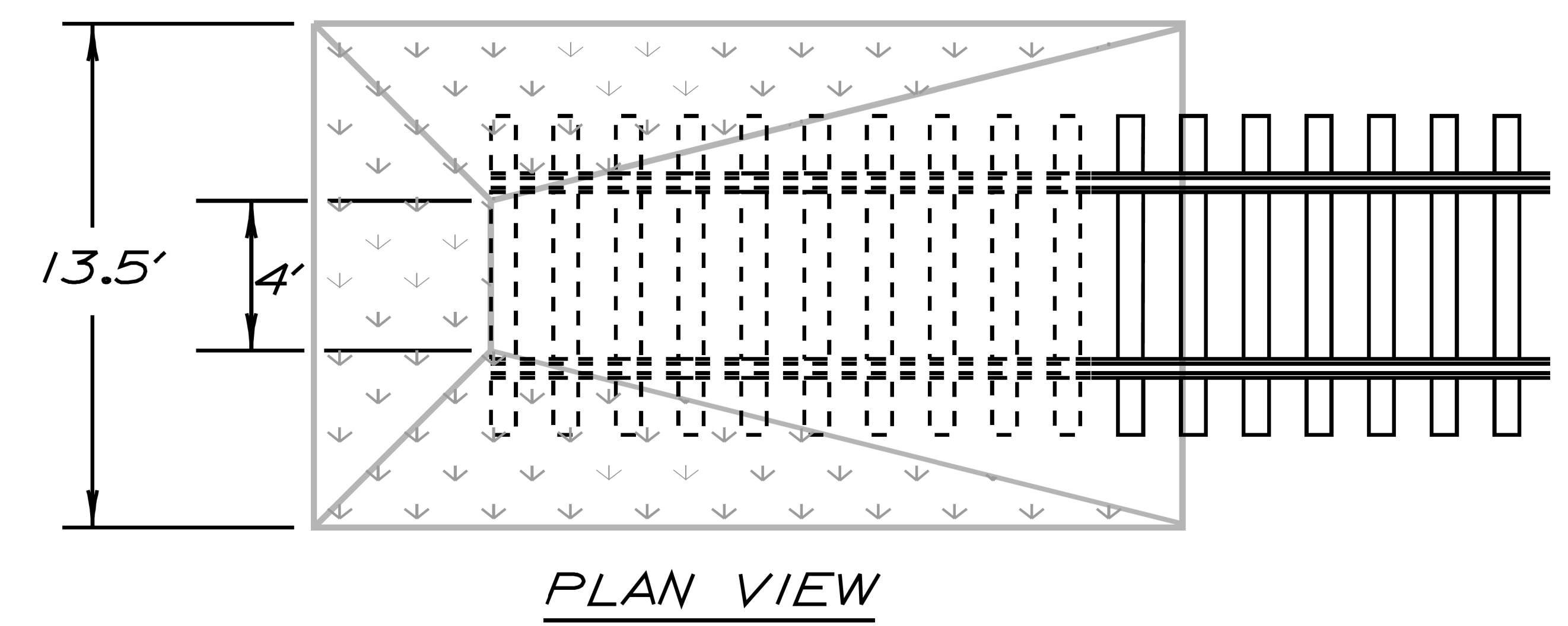
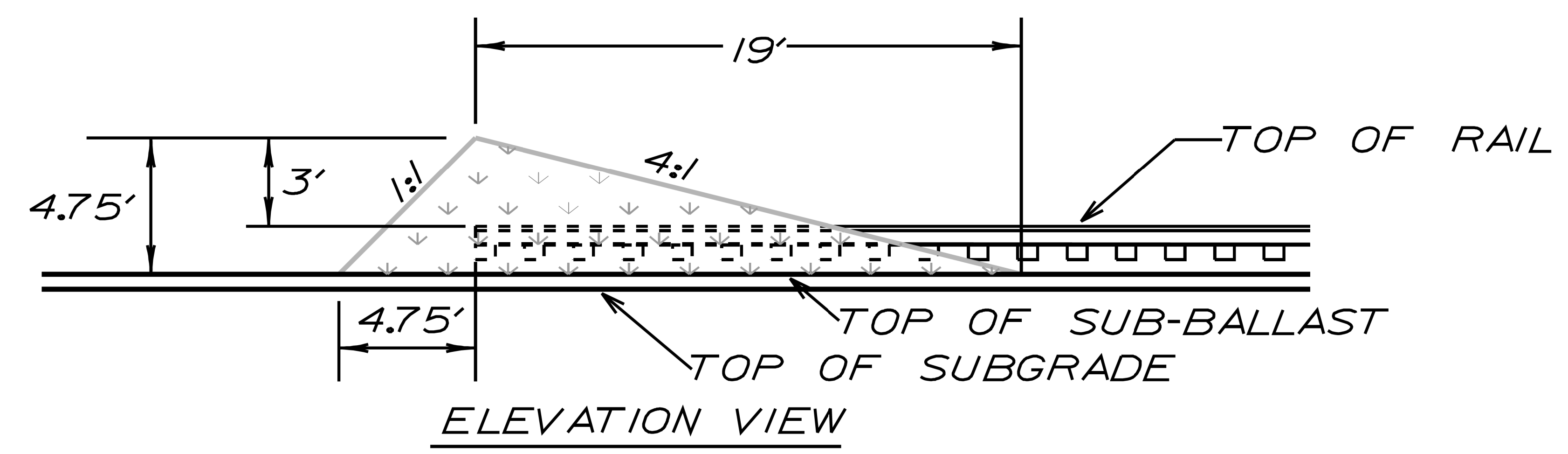
EXCAVATION AND SHORING REQUIREMENTS

ALL EXCAVATION ADJACENT TO ACTIVE TRACK MUST BE COORDINATED WITH THE RAILROAD REPRESENTATIVE PRIOR TO EXCAVATION. IF THE CONTRACTOR PROPOSES TO INSTALL SHORING WITHIN ZONE 1 OR ZONE 2 AS NOTED BELOW THAT IS NOT DETAILED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL SUBMIT THE PROPOSED SHORING SYSTEM TO THE RAILROAD FOR APPROVAL PRIOR TO INSTALLATION.

- ZONE 1 - EXCAVATION WITHIN ZONE 1 WILL REQUIRE SHORING FOR THE PROTECTION OF THE RAILROAD EXCEPT WHEN LIMITS OF EXCAVATION COMPLY WITH THE SPECIAL PROVISIONS OR WHEN BENCHING AN EXISTING SLOPE THAT FALLS WITHIN ZONE 1.
- ZONE 2 - EXCAVATION WITHIN ZONE 2 WILL REQUIRE SHORING FOR THE PROTECTION OF THE RAILROAD EXCEPT WHEN LIMITS OF EXCAVATION COMPLY WITH THE SPECIAL PROVISIONS OR BENCHING AN EXISTING SLOPE THAT FALLS WITHIN ZONE 2. CONTRACTOR DESIGNED SHORING SHALL CONSIST OF INTERLOCKING SHEETING.
- ZONE 3 - NO EXCAVATIONS WILL BE ALLOWED IN ZONE 3 EXCEPT FOR WHERE SPECIFICALLY DETAILED IN THE PLANS.
- ZONE 4 - EXCAVATION WITHIN ZONE 4 ABOVE THE HARD PAN LAYER IS PERMITTED. EXCAVATION THROUGH AND BELOW THE HARD PAN LAYER IS PERMITTED ONLY AFTER THE RAILROAD REPRESENTATIVE DETERMINES IT NECESSARY TO PENETRATE THE HARD PAN LAYER. EXCAVATION THROUGH AND BELOW THE HARD PAN LAYER SHALL BE PERFORMED PER SPECIAL PROVISION.

PROJECT REFERENCE NO.	SHEET NO.
U-5724	RR-2E
RW SHEET NO.	
RAILROAD DESIGN ENGINEER	
	

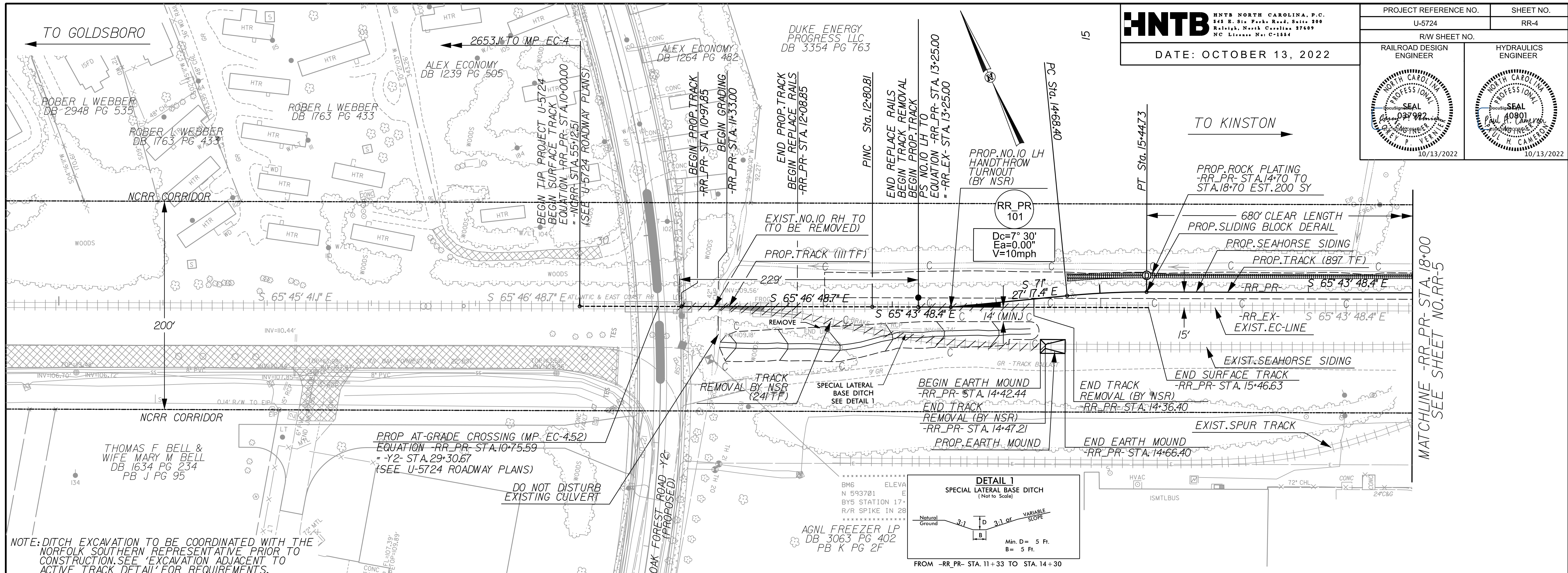
DETAIL



NORFOLK SOUTHERN RAILWAY COMPANY

**EARTH MOUND
DETAIL**

AUGUST 2000
Atlanta, Georgia



HNTB HNTB NORTH CAROLINA, P.C.
 843 E. Six Forks Road, Suite 300
 Raleigh, North Carolina 27609
 NC License No: C-1584

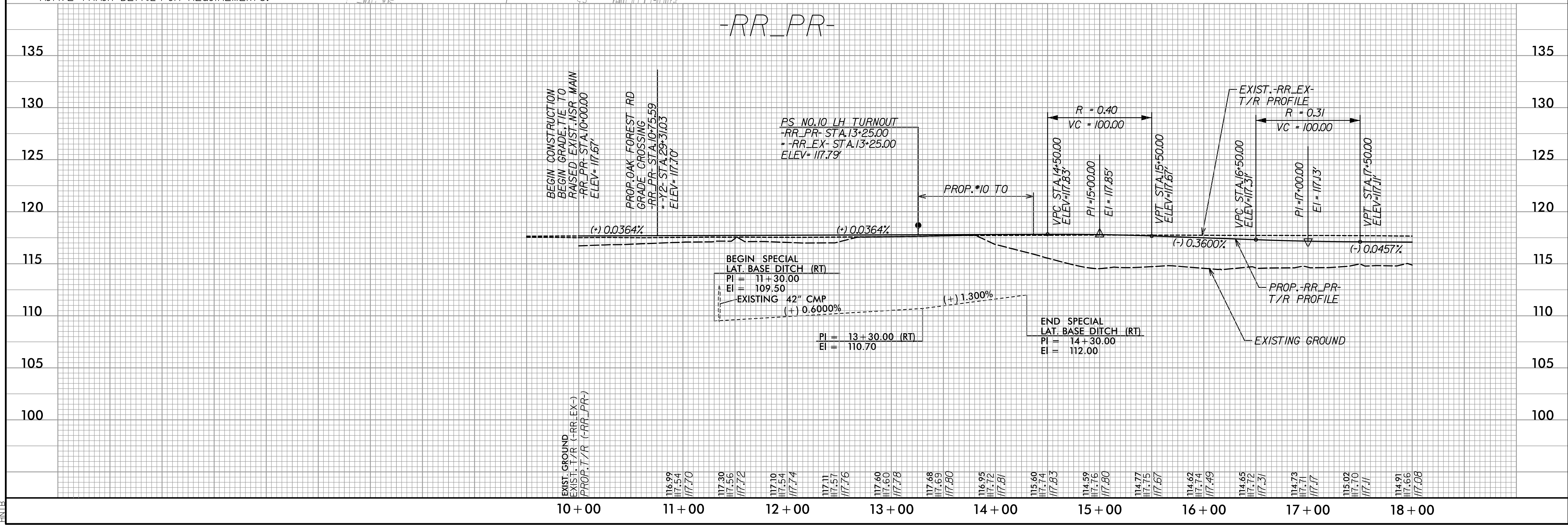
PROJECT REFERENCE NO. U-5724 SHEET NO. RR-4

R/W SHEET NO. RAILROAD DESIGN ENGINEER HYDRAULICS ENGINEER

DATE: OCTOBER 13, 2022

Professional Engineer Seal: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL, No. 03792, Exp. 10/13/2022

Professional Engineer Seal: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL, No. A0801, Exp. 10/13/2022



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TO GOLDSBORO

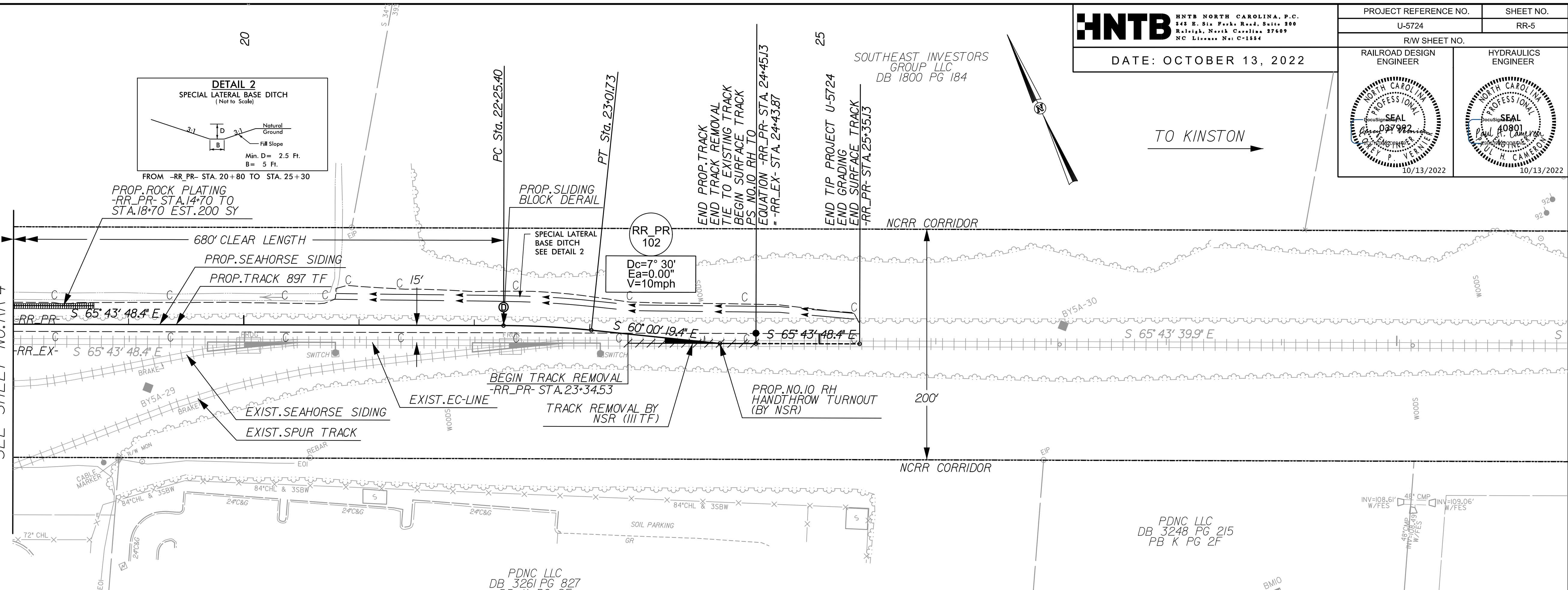
HNTB
HNTB NORTH CAROLINA, P.C.
243 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-15114

PROJECT REFERENCE NO. U-5724	SHEET NO. RR-5
RWY SHEET NO.	
RAILROAD DESIGN ENGINEER	HYDRAULICS ENGINEER

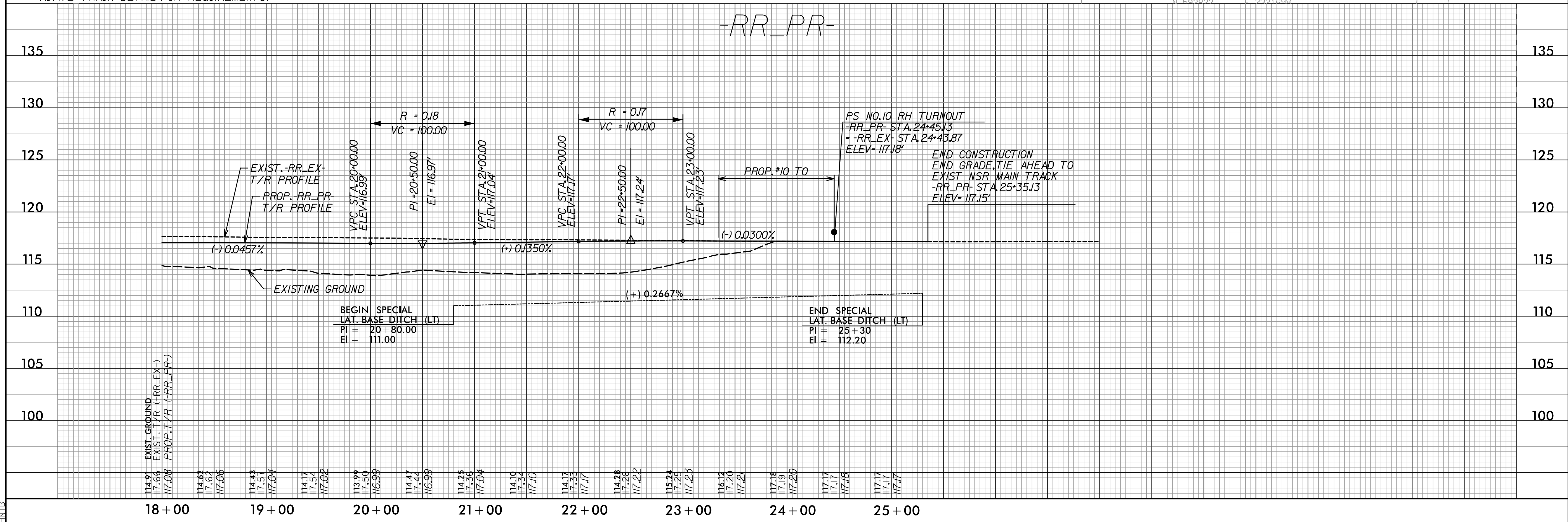
DATE: OCTOBER 13, 2022

TO KINSTON

MATCHLINE -RR_PR- STA. 18+00
SEE SHEET NO. RR-4



NOTE: DITCH EXCAVATION TO BE COORDINATED WITH THE NORFOLK SOUTHERN REPRESENTATIVE PRIOR TO CONSTRUCTION. SEE 'EXCAVATION ADJACENT TO ACTIVE TRACK' DETAIL FOR REQUIREMENTS.



10/13/2022
HNTB