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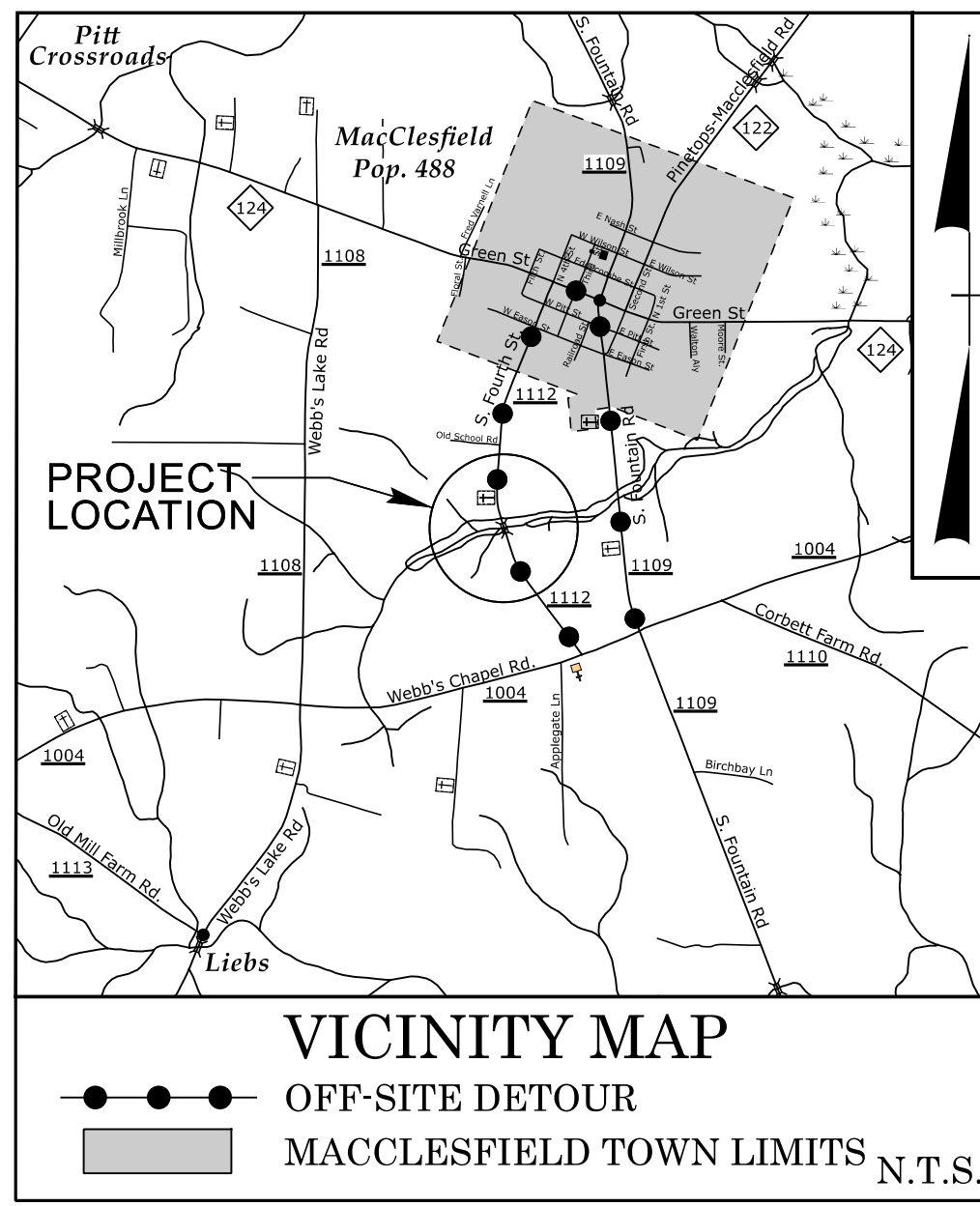
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TIP PROJECT: BP4-R023

CONTRACT: DD00474

See Sheet 1A For Index of Sheets



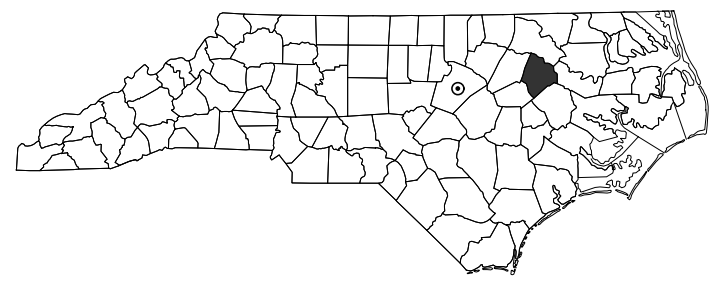
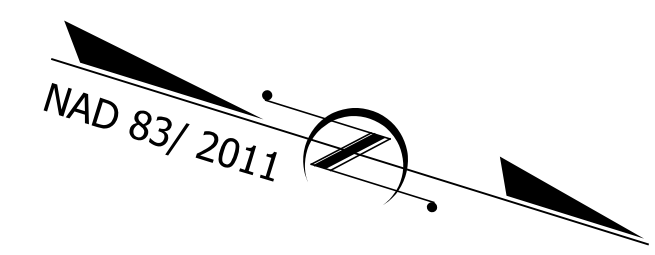
FINAL PLAN SET SUBMITTAL

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

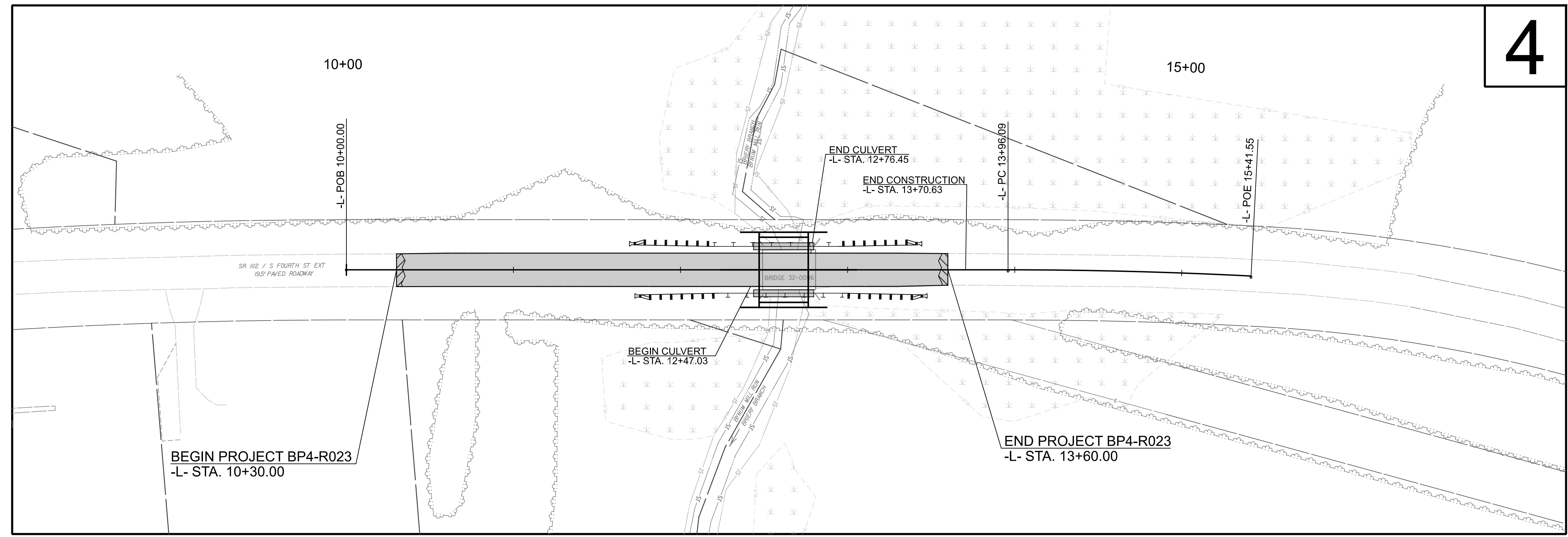
EDGECOMBE COUNTY

LOCATION: *REPLACEMENT OF BRIDGE NO. 096 ON SR 1112 (S. 4TH ST.)
OVER BYNUM MILL RUN*

TYPE OF WORK: *GRADING, DRAINAGE, PAVING, & STRUCTURE*



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP4-R023	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
BP4.R023.1		P.E.	
BP4.R023.2		R/W & UTIL.	
BP4.R023.3		CONST.	



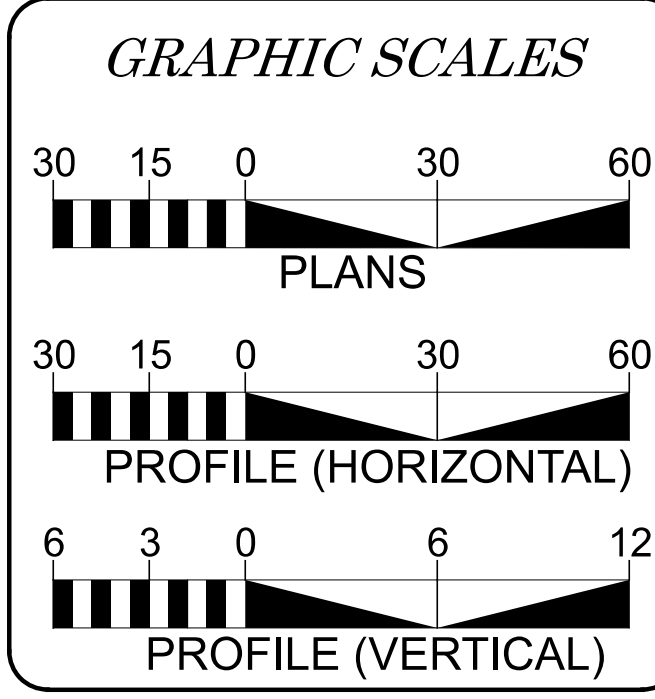
4

TO SR 1004
(WEBBS CHAPEL RD)

TO MACCLESFIELD

THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



DESIGN DATA
 ADT 2021 = 300
 V = 60MPH
 FUNC CLASS = LOCAL
 SUBREGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT BP4-R023 = 0.058 MILES
 LENGTH OF STRUCTURE TIP PROJECT BP4-R023 = 0.005 MILES
 TOTAL LENGTH TIP PROJECT BP4-R023 = 0.063 MILES

PLANS PREPARED BY:
wsp
 434 FAYETTEVILLE ST. #1500
 RALEIGH, N.C. 27601
 NC ENG. F. 1253
 2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
APRIL 5, 2023

LETTING DATE:
OCTOBER 8, 2024

PLANS PREPARED FOR:
 DIVISION OF HIGHWAYS
 DIVISION 4
 509 WARD BLVD
 WILSON, NC 27895

CHRISTOPHER H. LEE, PE
 PROJECT ENGINEER

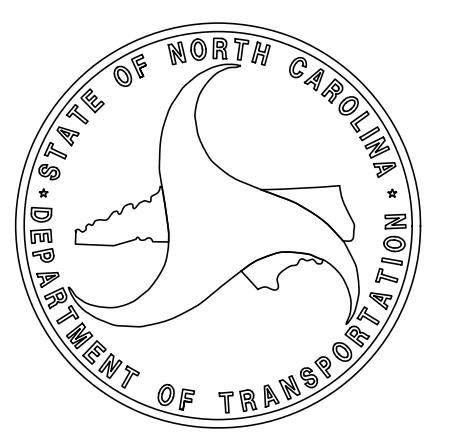
CHAD COGGINS
 NCDOT CONTACT
 DIVISION 4 PROJECT MANAGER

HYDRAULICS ENGINEER

DocuSigned by:
 Charles Heafner
 SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

Signed by:
 Christopher H. Lee, PE
 SIGNATURE: _____ P.E.



INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2A-1	PAVEMENT SCHEDULE, TYPICAL SECTIONS, WEDGING DETAILS, AND MILLING DETAIL
2C1 and 2C-2	GUARDRAIL DETAILS
3B-1	ROADWAY SUMMARIES
4	PLAN AND PROFILE SHEET
RW-01 thru RW-04	SURVEY CONTROL SHEETS
TMP-1 thru TMP-4	TRANSPORTATION MANAGEMENT PLANS
EC-1 thru EC-5	EROSION CONTROL PLANS
UC-1 thru UC-5 UO-1 thru UO-2 X-1 thru X-6	UTILITY CONSTRUCTION PLANS UTILITY BY OTHERS CROSS-SECTIONS
C-1 thru C-5	CULVERT PLANS (CULVERT 320096)

GENERAL NOTES:

2024 SPECIFICATIONS
EFFECTIVE: 01-16-2024
REVISED:

GRADE LINE:
GRADING AND SURFACING:
THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

SUPERELEVATION:
ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:
ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

SUBSURFACE DRAINS:
SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

DRIVEWAYS:
DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.03 AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

GUARDRAIL:
THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

SUBSURFACE PLANS:
NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

UTILITIES:
UTILITY OWNERS ON THIS PROJECT ARE DUKE ENERGY,
EDGEcombe COUNTY WATER AND SEWER, AND TOWN OF MACCLESFIELD
ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:
ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.

2024 ROADWAY ENGLISH STANDARD DRAWINGS EFF. 01-16-2024 REV.

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" CONTRACTS STANDARDS AND DEVELOPMENT UNIT - N. C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N. C., DATED JANUARY 16, 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.03	METHOD OF CLEARING - METHOD III
225.02	GUIDE FOR GRADING SUBGRADE - SECONDARY AND LOCAL
225.04	METHOD OF OBTAINING SUPERELEVATION - TWO LANE PAVEMENT
DIVISION 3 - PIPE CULVERTS	
300.01	METHOD OF PIPE INSTALLATION
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	METHOD OF SHOULDER CONSTRUCTION - HIGH SIDE OF SUPERELEVATED CURVE - METHOD I
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	PAVEMENT REPAIRS
DIVISION 7 - CONCRETE PAVEMENTS AND SHOULDERS	
700.05	TYING PROPOSED PAVEMENT TO EXISTING
DIVISION 8 - INCIDENTALS	
806.01	CONCRETE RIGHT-OF-WAY MARKER
815.02	SUBSURFACE DRAIN
862.01	GUARDRAIL PLACEMENT
862.02	GUARDRAIL INSTALLATION
862.03	STRUCTURE ANCHOR UNITS
876.01	RIP RAP IN CHANNELS

BP4-R023

4RDI	IA
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ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED STATE OF NORTH CAROLINA

ROADWAY DESIGN UNIT















PREPARED BY

434 FAYETTEVILLE ST. #1500
RALEIGH, N.C. 27601
NC ENG P-1255












STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale











BOUNDARIES AND PROPERTY:

State Line	_____
County Line	_____
Township Line	_____
City Line	_____
Reservation Line	_____
Property Line	_____
Existing Iron Pin (EIP)	_____ 
Computed Property Corner	_____ 
Existing Concrete Monument (ECM)	_____ 
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	_____ 
Existing Historic Property Boundary	_____ 
Known Contamination Area: Soil	_____
Potential Contamination Area: Soil	_____
Known Contamination Area: Water	_____
Potential Contamination Area: Water	_____
Contaminated Site: Known or Potential	_____ 

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	_____ 
Sign	_____ 
Well	_____ 
Small Mine	_____ 
Foundation	_____ 
Area Outline	_____ 
Cemetery	_____ 
Building	_____ 
School	_____ 
Church	_____ 
Dam	_____ 


























HYDROLOGY:

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	_____ 













RAILROADS:

Standard Gauge	_____ 
RR Signal Milepost	_____ 
Switch	_____ 
RR Abandoned	_____
RR Dismantled	_____

RIGHT OF WAY & PROJECT CONTROL:

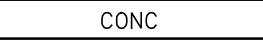


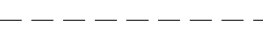

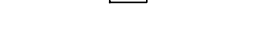

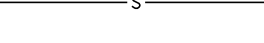
Primary Horiz Control Point	_____ 
Primary Horiz and Vert Control Point	_____ 
Secondary Horiz and Vert Control Point	_____ 
Vertical Benchmark	_____ 
Existing Right of Way Monument	_____ 
Proposed Right of Way Monument (Rebar and Cap)	_____ 
Proposed Right of Way Monument (Concrete)	_____ 
Existing Permanent Easement Monument	_____ 
Proposed Permanent Easement Monument (Rebar and Cap)	_____ 
Existing C/A Monument	_____ 
Proposed C/A Monument (Rebar and Cap)	_____ 
Proposed C/A Monument (Concrete)	_____ 
Existing Right of Way Line	_____ 
Proposed Right of Way Line	_____ 
Existing Control of Access Line	_____ 
Proposed Control of Access Line	_____ 
Proposed ROW and CA Line	_____ 
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 Aerial Utility Easement	_____ 

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	_____
Existing Curb	_____
Proposed Slope Stakes Cut	_____ 
Proposed Slope Stakes Fill	_____ 
Proposed Curb Ramp	_____ 
Existing Metal Guardrail	_____ 
Proposed Guardrail	_____ 
Existing Cable Guiderail	_____ 
Proposed Cable Guiderail	_____ 
Equality Symbol	_____ 
Pavement Removal	_____ 
VEGETATION:	
Single Tree	_____ 
Single Shrub	_____ 
Hedge	_____ 










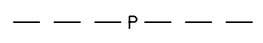
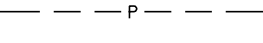
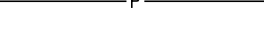

Woods Line	_____ 
Orchard	_____ 
Vineyard	_____ 

EXISTING STRUCTURES:




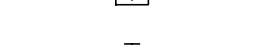


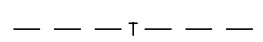
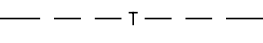
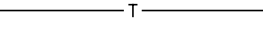
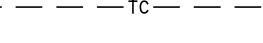
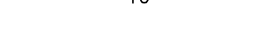





MAJOR:	
Bridge, Tunnel or Box Culvert	_____ 
Bridge Wing Wall, Head Wall and End Wall	_____ 
MINOR:	
Head and End Wall	_____ 
Pipe Culvert	_____ 
Footbridge	_____ 
Drainage Box: Catch Basin, DI or JB	_____ 
Paved Ditch Gutter	_____
Storm Sewer Manhole	_____ 
Storm Sewer	_____ 

UTILITIES:










* SUE - Subsurface Utility Engineering
LOS - Level of Service - A,B,C or D (Accuracy)

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	_____ 
U/G Power Line Test Hole (SUE - LOS A)*	_____ 
U/G Power Line (SUE - LOS B)*	_____ 
U/G Power Line (SUE - LOS C)*	_____ 
U/G Power Line (SUE - LOS D)*	_____ 











TELEPHONE:

Existing Telephone Pole	_____ 
Proposed Telephone Pole	_____ 
Telephone Manhole	_____ 
Telephone Pedestal	_____ 
Telephone Cell Tower	_____ 
U/G Telephone Cable Hand Hole	_____ 
U/G Telephone Test Hole (SUE - LOS A)*	_____ 
U/G Telephone Cable (SUE - LOS B)*	_____ 
U/G Telephone Cable (SUE - LOS C)*	_____ 
U/G Telephone Cable (SUE - LOS D)*	_____ 
U/G Telephone Conduit (SUE - LOS B)*	_____ 
U/G Telephone Conduit (SUE - LOS C)*	_____ 
U/G Telephone Conduit (SUE - LOS D)*	_____ 
U/G Fiber Optics Cable (SUE - LOS B)*	_____ 
U/G Fiber Optics Cable (SUE - LOS C)*	_____ 
U/G Fiber Optics Cable (SUE - LOS D)*	_____ 








WATER:

Water Manhole	_____ 
Water Meter	_____ 
Water Valve	_____ 
Water Hydrant	_____ 
U/G Water Line Test Hole (SUE - LOS A)*	_____ 
U/G Water Line (SUE - LOS B)*	_____ 
U/G Water Line (SUE - LOS C)*	_____ 
U/G Water Line (SUE - LOS D)*	_____ 
Above Ground Water Line	_____ 









TV:

TV Pedestal	_____ 
TV Tower	_____ 
U/G TV Cable Hand Hole	_____ 
U/G TV Test Hole (SUE - LOS A)*	_____ 
U/G TV Cable (SUE - LOS B)*	_____ 
U/G TV Cable (SUE - LOS C)*	_____ 
U/G TV Cable (SUE - LOS D)*	_____ 
U/G Fiber Optic Cable (SUE - LOS B)*	_____ 
U/G Fiber Optic Cable (SUE - LOS C)*	_____ 
U/G Fiber Optic Cable (SUE - LOS D)*	_____ 












GAS:

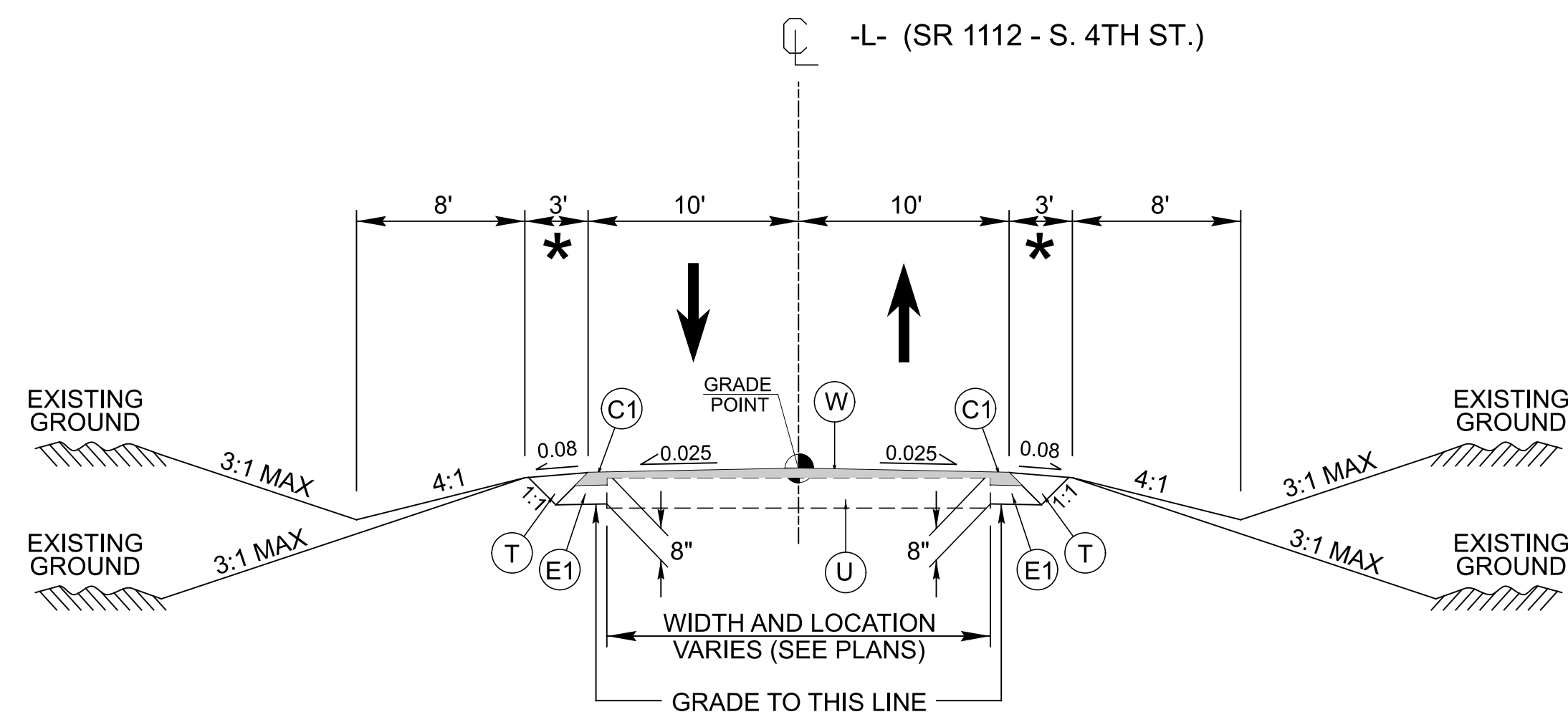
Gas Valve	_____ 
Gas Meter	_____ 
U/G Gas Line Test Hole (SUE - LOS A)*	_____ 
U/G Gas Line (SUE - LOS B)*	_____ 
U/G Gas Line (SUE - LOS C)*	_____ 
U/G Gas Line (SUE - LOS D)*	_____ 
Above Ground Gas Line	_____ 

SANITARY SEWER:

Sanitary Sewer Manhole	_____ 
Sanitary Sewer Cleanout	_____ 
U/G Sanitary Sewer Line	_____ 
Above Ground Sanitary Sewer	_____ 
SS Force Main Line Test Hole (SUE - LOS A)*	_____ 
SS Force Main Line (SUE - LOS B)*	_____ 
SS Force Main Line (SUE - LOS C)*	_____ 
SS Force Main Line (SUE - LOS D)*	_____ 

MISCELLANEOUS:

Utility Pole	_____ 
Utility Pole with Base	_____ 
Utility Located Object	_____ 
Utility Traffic Signal Box	_____ 
Utility Unknown U/G Line (SUE - LOS B)*	_____ 
U/G Tank; Water, Gas, Oil	_____ 
Underground Storage Tank, Approx. Loc.	_____ 
A/G Tank; Water, Gas, Oil	_____ 
Geoenvironmental Boring	_____ 
Abandoned According to Utility Records	_____ 
End of Information	_____ 



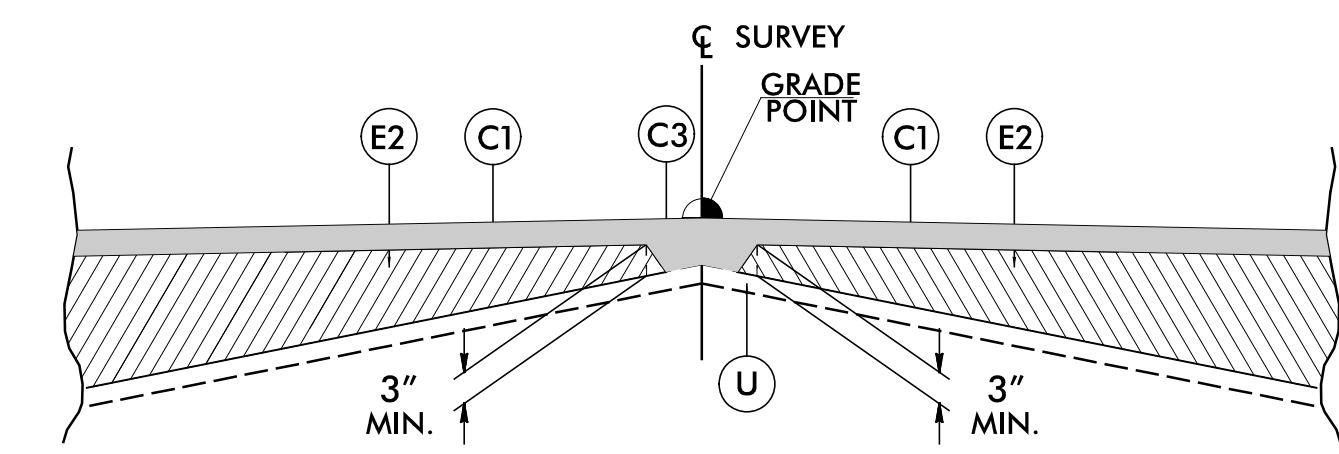
TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1 AS FOLLOWS:
 -L- STA. 10+30.00 TO 12+20.00
 -L- STA. 12+85.00 TO 13+70.63

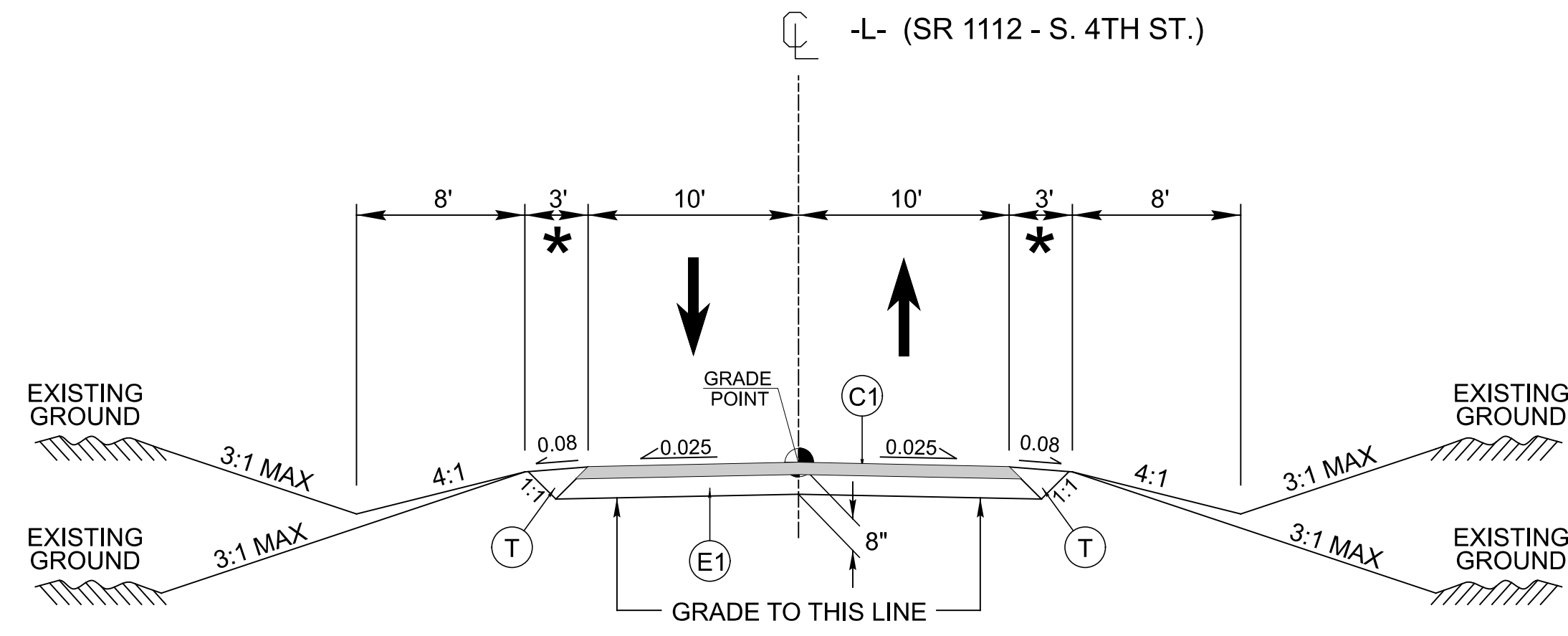
* SHOULDER WIDTH 7' WITH GUARDRAIL
 NOTE: SHOULDER WORK ONLY FROM
 -L- STA. 13+60 TO 13+70.63

PAVEMENT SCHEDULE (PRELIMINARY)	
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" IN DEPTH.
E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" OR GREATER THAN 5.5" IN DEPTH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V	INCIDENTAL MILLING BITUMINOUS PAVEMENT (1.5" MAX. DEPTH). SEE MILLING DETAIL.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAILS).

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



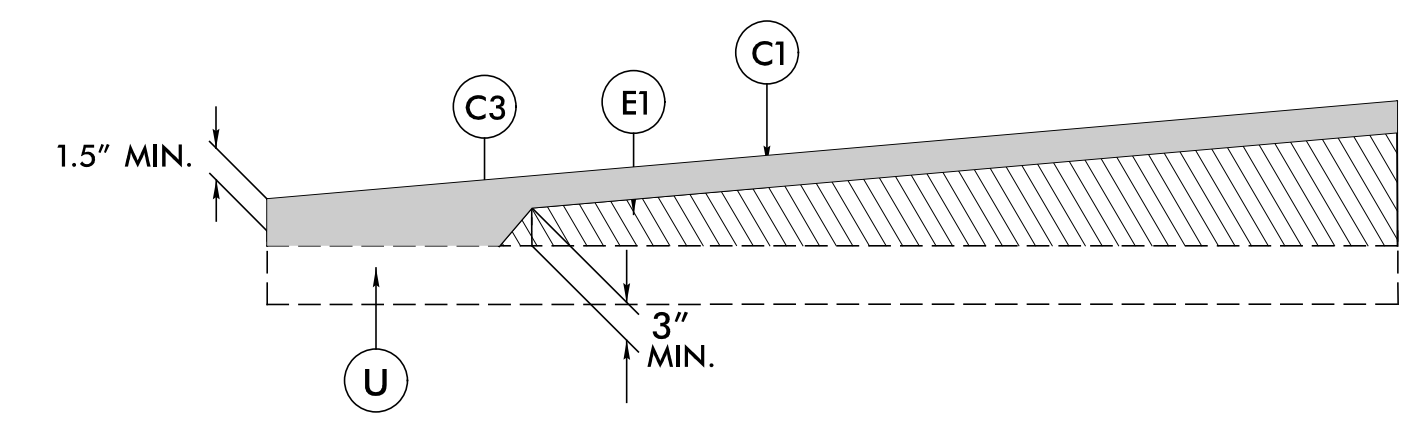
DETAIL SHOWING METHOD OF WEDGING NO. 1



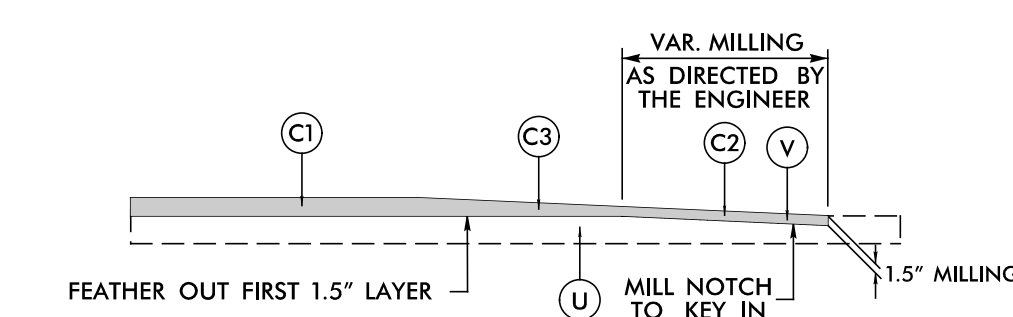
TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2 AS FOLLOWS:
 -L- STA. 12+20.00 TO 12+85.00

* SHOULDER WIDTH 7' WITH GUARDRAIL

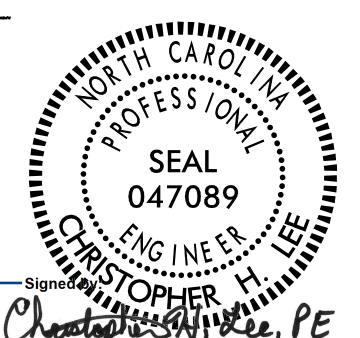


WEDGING DETAIL FOR RESURFACING



INCIDENTAL MILLING OF EXISTING PAVEMENT AS DIRECTED BY ENGINEER

-L- STA. 10+30.00 TO 12+20.00
 -L- STA. 12+85.00 TO 13+60.00



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

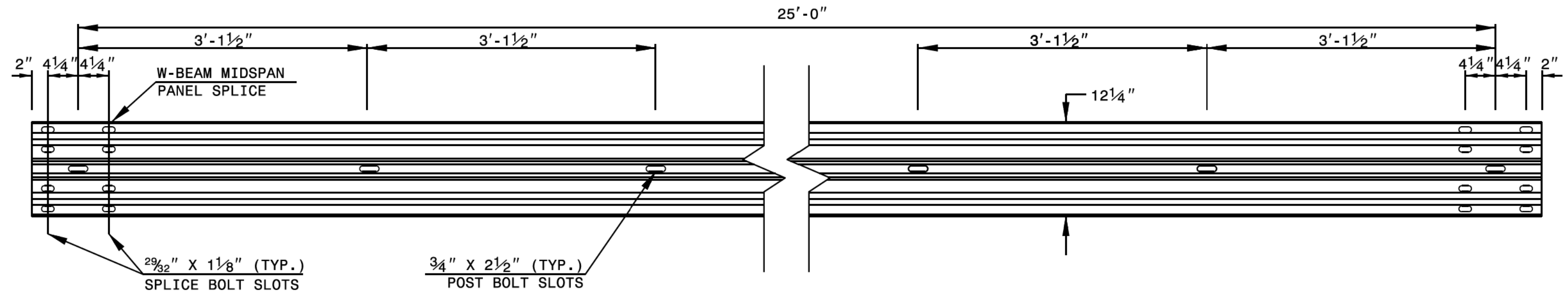


STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

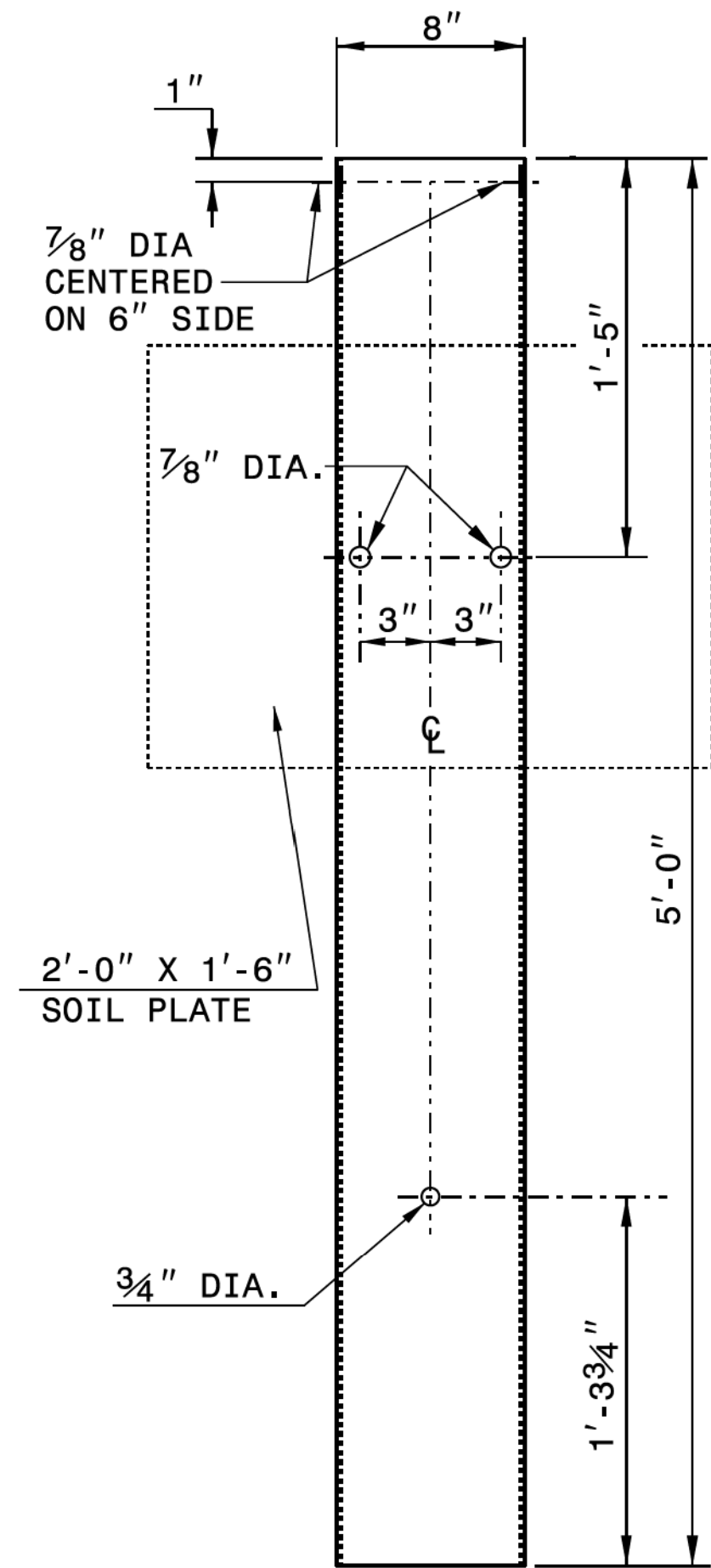
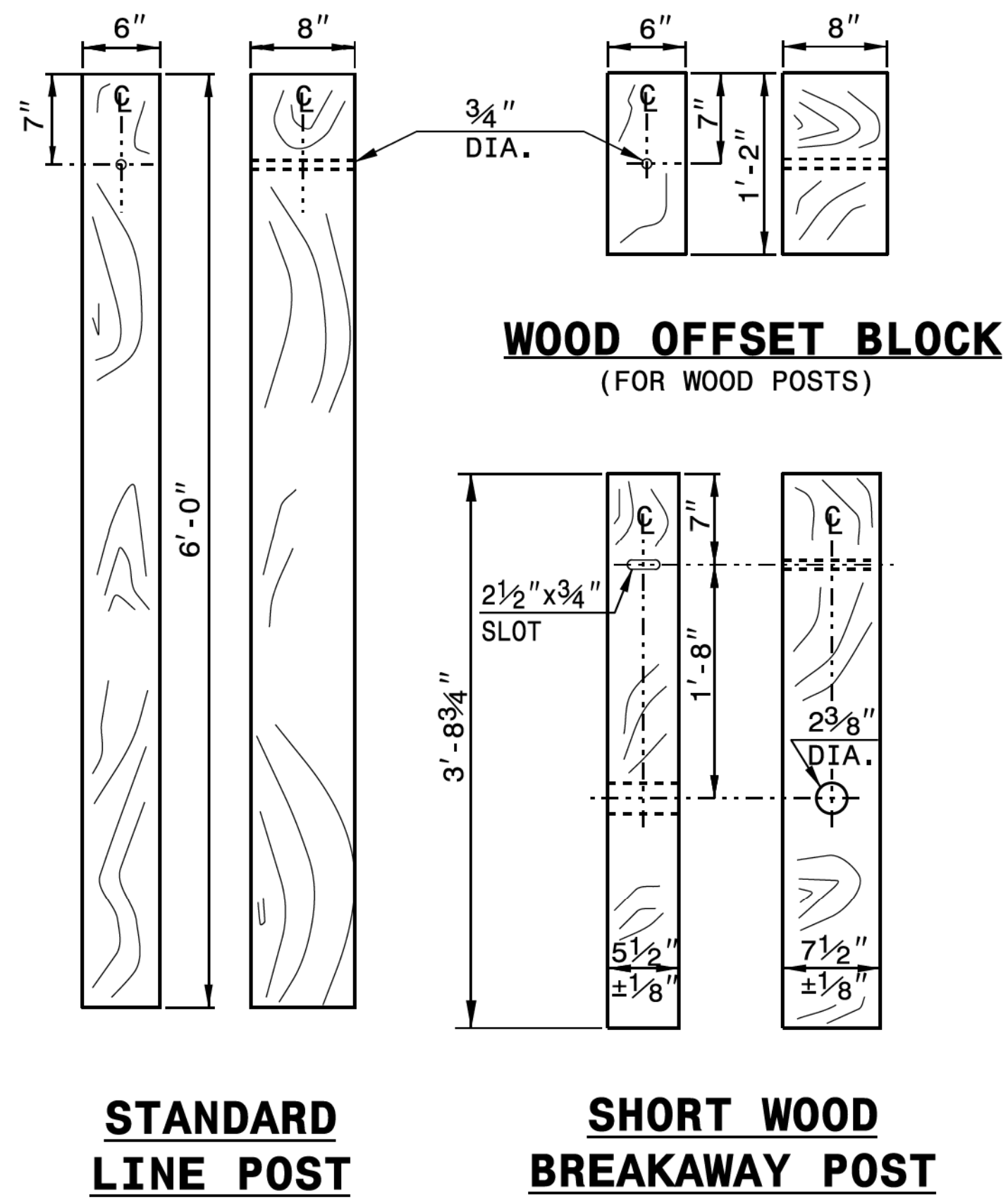
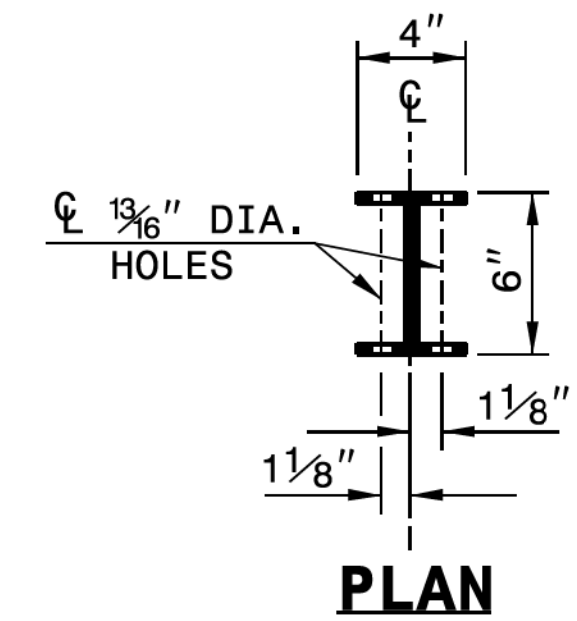
ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 6 OF 8

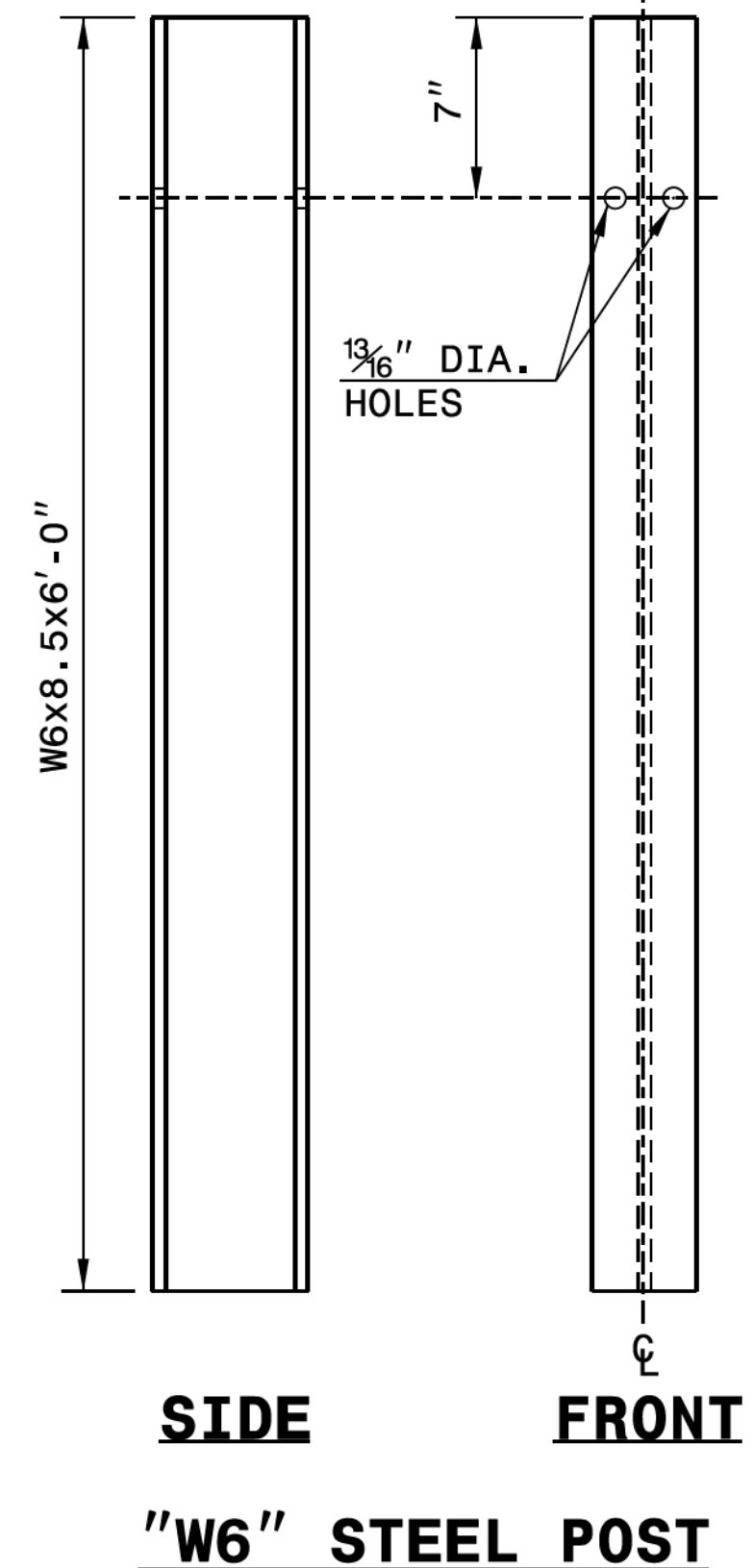
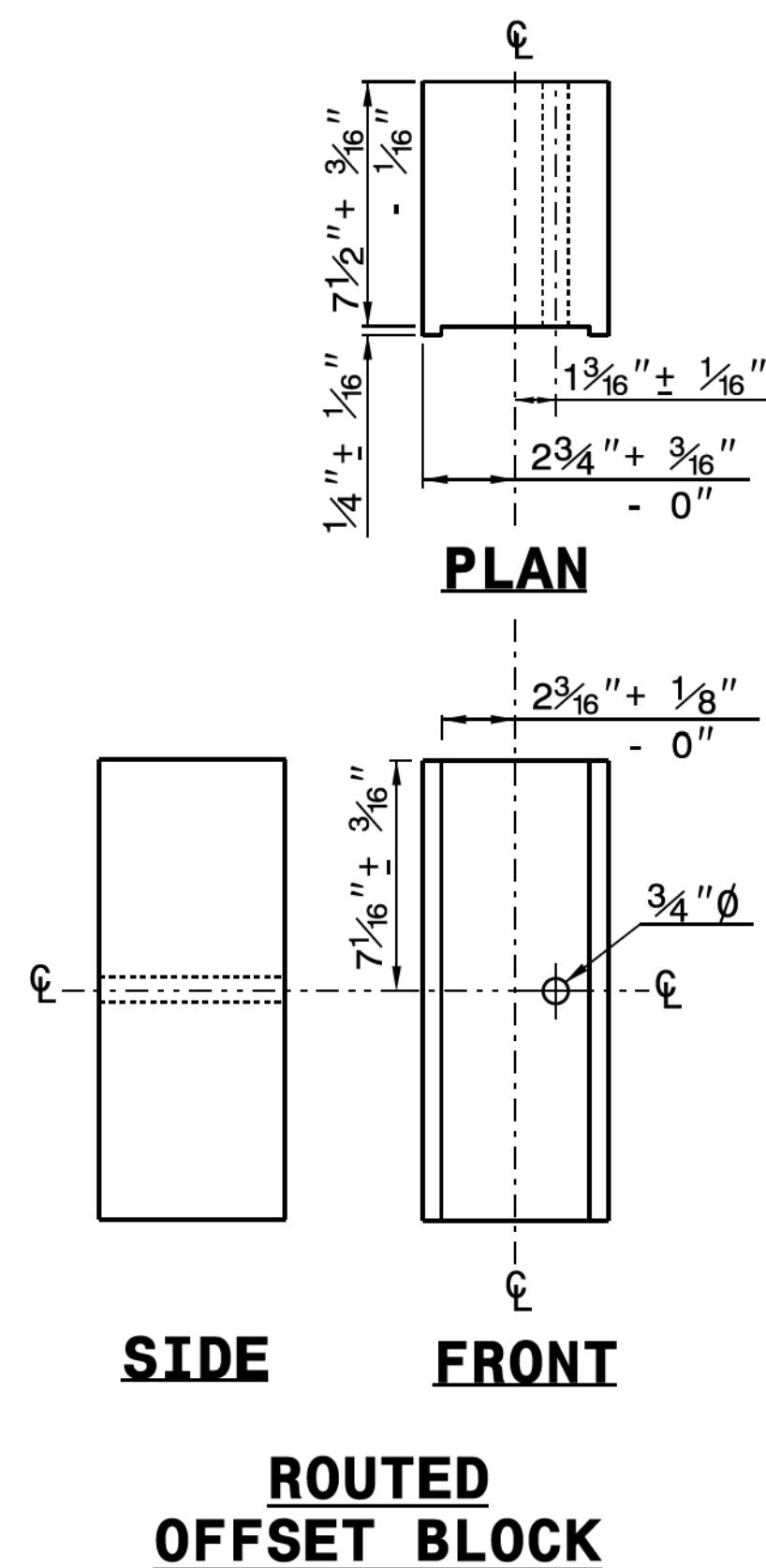
862D02



STANDARD W-BEAM GUARDRAIL



SYSTEM PARTS



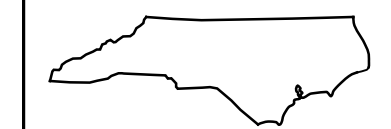
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 6 OF 8

862D02

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
STATE OF NORTH CAROLINA



ROADWAY DESIGN UNIT

PREPARED BY
WSP

434 FAYETTEVILLE ST. #1500
RALEIGH, NC 27601
NC ENG P-1253



CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

ORIGINAL BY: J. HOWERTON DATE: 3-7-2018
MODIFIED BY: DATE: _____
CHECKED BY: DATE: _____
FILE SPEC.: _____

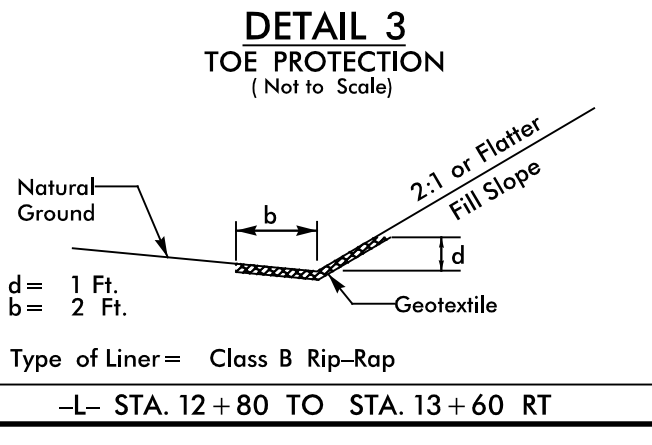
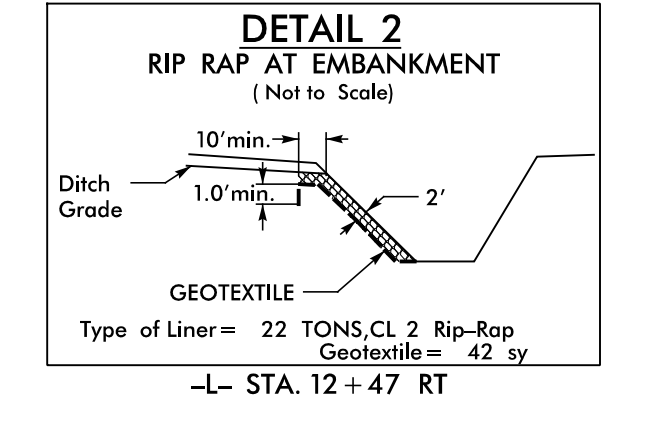
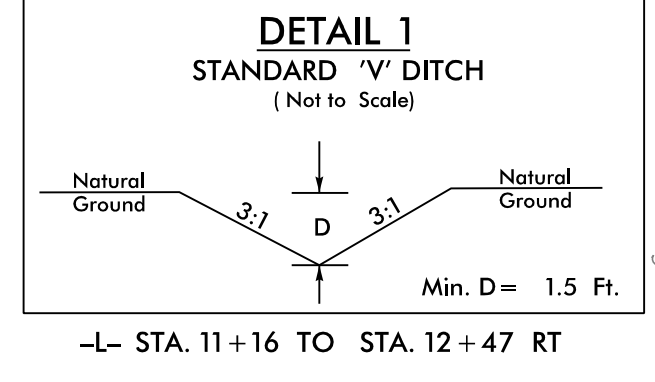
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ROADWAY DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE
<p>ELEVATION</p> <p>NOTE: **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER. *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11 1/2" IF CONCRETE BACKWALL IS NOT PRESENT. -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" X 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB. -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER). -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW. -SEE SHEET 3 FOR POST SECTIONS 1 THRU 9.</p>	
<p>PLAN VIEW</p> <p>GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE</p>	
SHEET 1 OF 7 862D03	ROADWAY DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ROADWAY DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE - SUB REGIONAL TIER
<p>ELEVATION</p> <p>NOTE: **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER. *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11 1/2" IF CONCRETE BACKWALL IS NOT PRESENT. -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" X 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB. -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER). -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW. -SEE SHEET 3 FOR POST SECTIONS 1 THRU 9.</p>	
<p>PLAN VIEW</p> <p>GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE - SUB REGIONAL TIER</p>	
SHEET 2 OF 7 862D03	ROADWAY DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE - SUB REGIONAL TIER

<p>CONTRACT STANDARDS AND DEVELOPMENT UNIT Office 919-707-6950 FAX 919-250-4119</p>	<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>
<p>SEE TITLE BLOCK</p>	
ORIGINAL BY: J HOWERTON MODIFIED BY: CHECKED BY: FILE SPEC.:	DATE: 06-22-12 DATE: DATE: DATE:

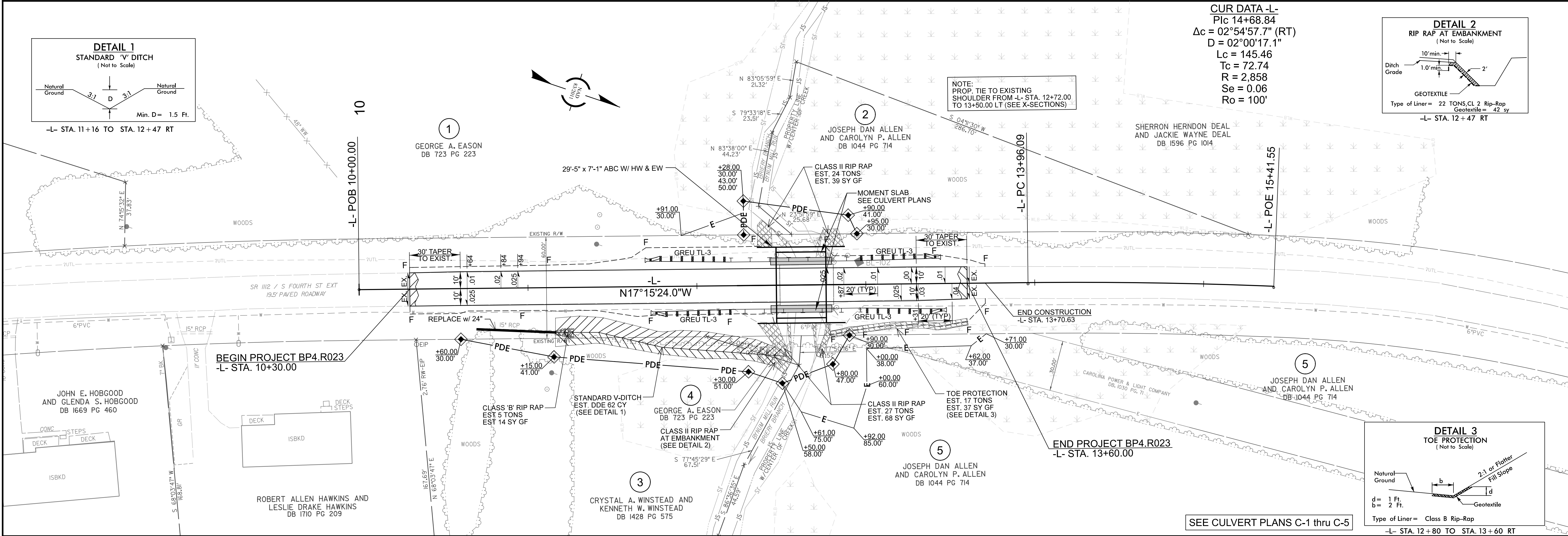


PROJECT REFERENCE NO. _____ SHEET NO. _____	BP4.R023 4RD1 2C-2 ROADWAY DESIGN ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED STATE OF NORTH CAROLINA	
ROADWAY DESIGN UNIT WSP 434 FAYETTEVILLE ST. #1500 RALEIGH, NC 27601 NC ENG P-1253	



CUR DATA -L-
Pc = 14+68.84
 $\Delta c = 02^{\circ}54'57.7''$ (RT)
D = $02^{\circ}00'17.1''$
Lc = 145.46
Tc = 72.74
R = 2,858
Se = 0.06
Ro = 100'

NOTE:
PROP. TIE TO EXISTING
SHOULDER FROM -L- STA. 12+72.00
TO 13+50.00 LT (SEE X-SECTIONS)



SEE CULVERT PLANS C-1 thru C-5

BP4-R023

4RDI 4

ROADWAY DESIGN ENGINEER

SEAL 047089

HYDRAULIC DESIGN ENGINEER

SEAL 032312

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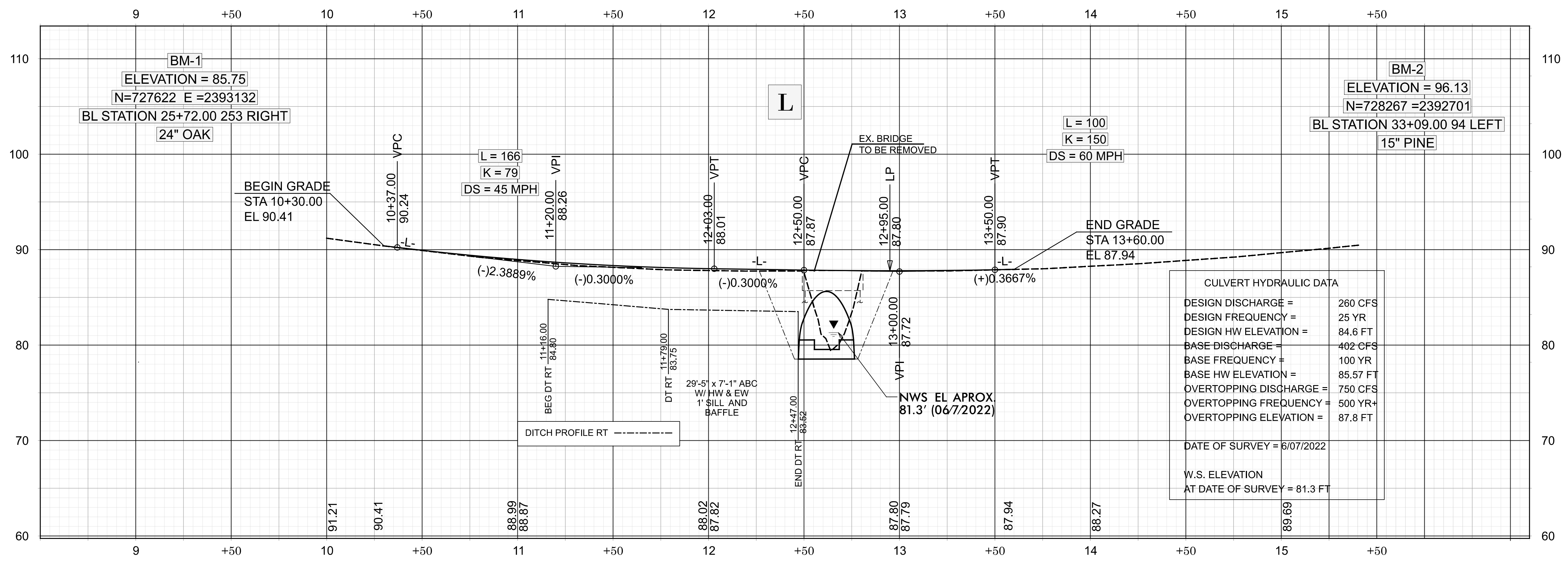
STATE OF NORTH CAROLINA

ROADWAY DESIGN UNIT

PREPARED BY

WSP

434 FAYETTEVILLE ST. #1500
RALEIGH, N.C. 27601
NC ESG P-1253



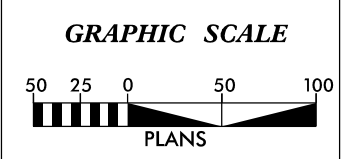
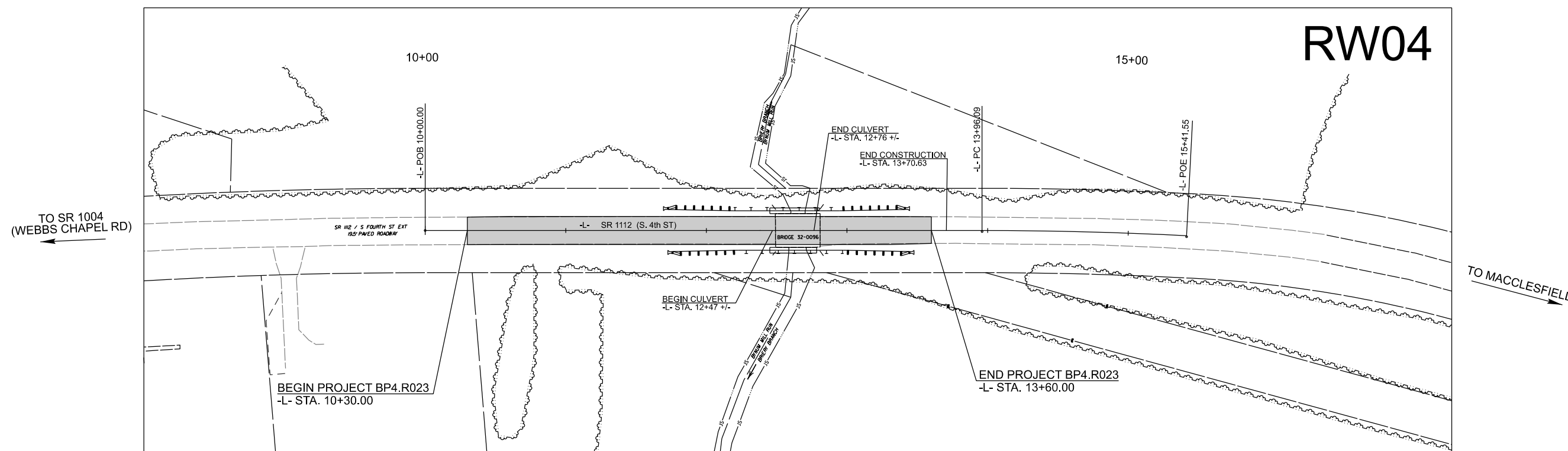
TIP PROJECT: BP4.R023

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP4.R023	RW01	7

SURVEY CONTROL, EXISTING CENTERLINES,
RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

EDGECOMBE COUNTY



DATUM DESCRIPTION
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT 320096-1 WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 725801.22(ft) EASTING: 2393984.13(ft) ELEVATION: 114.33(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9999092
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM BR0019-2 TO -L- STATION 10+30.00 IS N 33°33'35" W 1830.48(ft)
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:

wsp

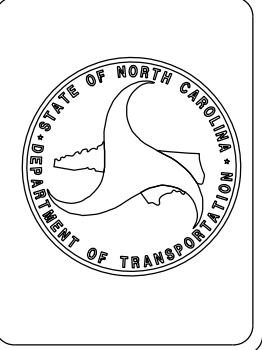
WSP USA Inc.
128 TALBERT ROAD
SUITE A
MOORESVILLE, NC 28117
TEL: 704.662.0100
WWW.WSP.COM

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: 4/25/2023	LETTING DATE: 3/28/2028
--	-----------------------------------

PROFESSIONAL LAND SURVEYOR

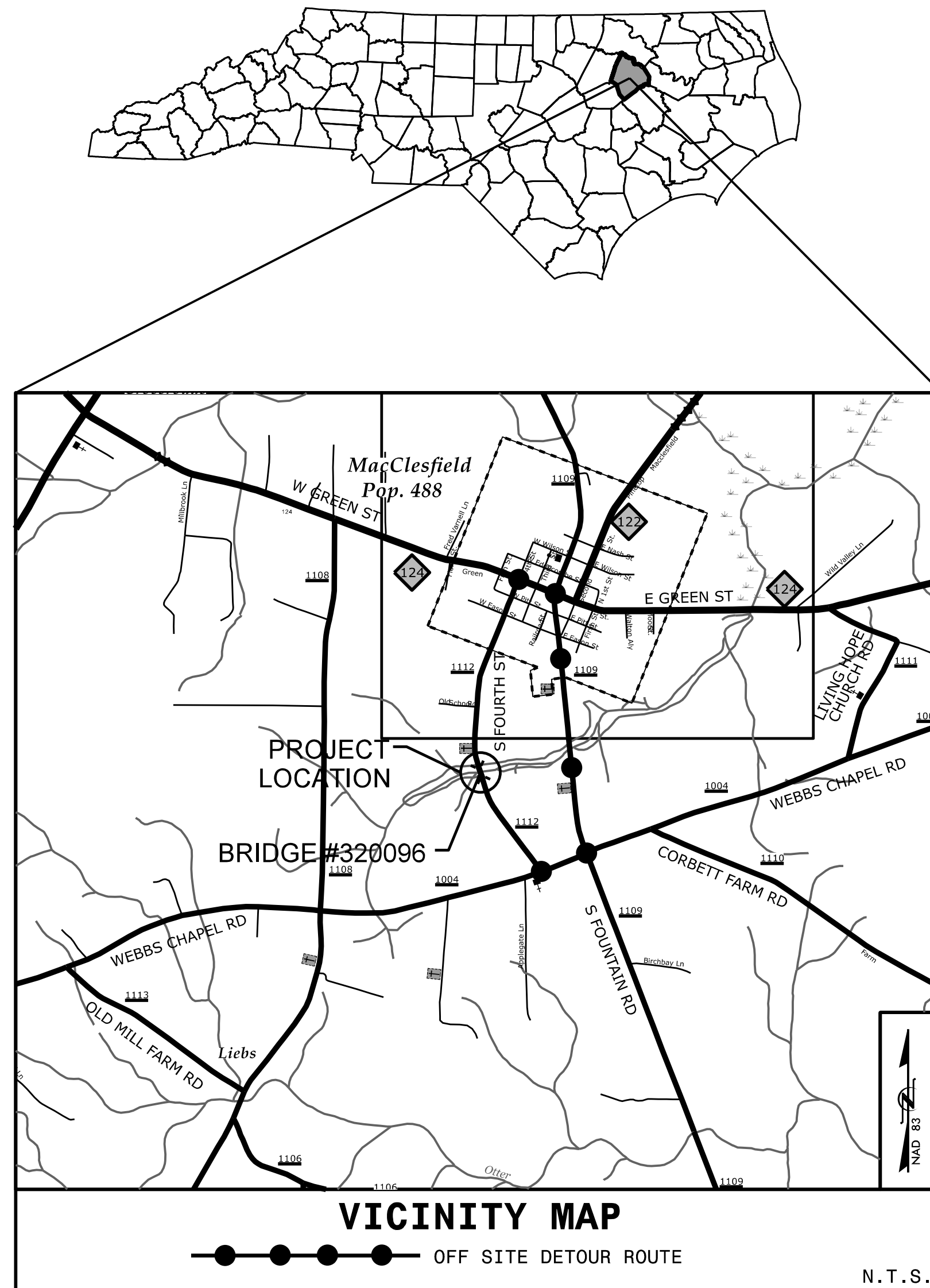
DocuSigned by:
Clint Benson
921CD8BB7070436... 9/27/2024
SIGNATURE: Date:



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

EDGECOMBE COUNTY



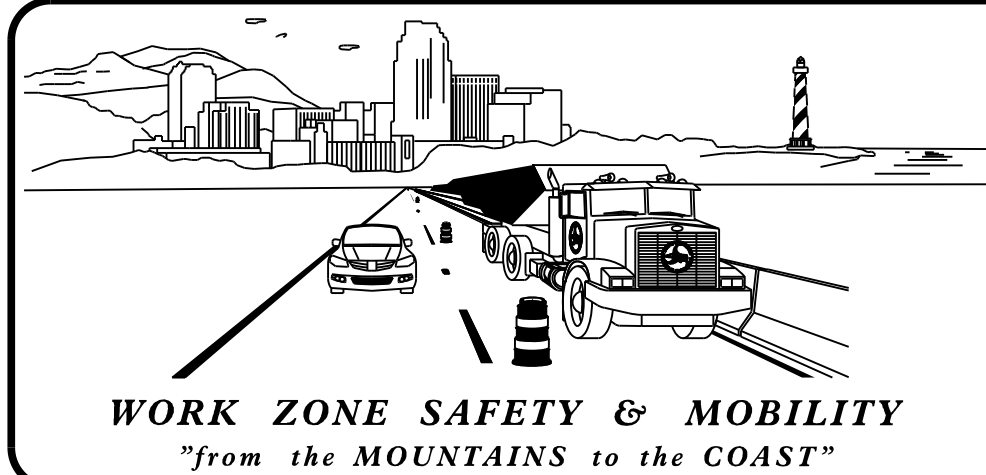
LOCATION: REPLACEMENT OF BRIDGE NO. 320096 ON SR 1112 (S FOURTH ST)
OVER BYNUM HILL RUN

<u>INDEX OF SHEETS</u>	
<u>SHEET NO.</u>	<u>TITLE</u>
TMP-1	TITLE SHEET, VICINITY MAP, & INDEX OF SHEETS
TMP-1A	ROADWAY STANDARD DRAWINGS & LEGEND
TMP-1B	TRANSPORTATION OPERATIONS PLAN
TMP-2	SR 1112 (S FOURTH ST) ROAD CLOSURE AND DETOUR ROUTE
TMP-3	INSET A DETAIL
TMP-4	SIGN PANEL DESIGN (S FOURTH ST)

SHEET NO.
TMP-1

TIP PROJECT: BP4.R023

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



PLANS PREPARED BY:
EMILY MURRAY, P.E.
PROJECT ENGINEER
ZACHARY THORNTON, P.E.
PROJECT DESIGN ENGINEER

NCDOT CONTACTS:
SPENCER B. JENNINGS
PROJECT ENGINEER
KENNETH C. THORNEWELL, P.E.
PROJECT DESIGN ENGINEER



PLANS PREPARED BY:
VOLKERT
5430 Wade Park Blvd., Suite 410
Raleigh, NC 27607
Tel. 919-854-0344 Fax. 919-854-0355
NC License No. F-0765

APPROVED: _____
DATE: 8/14/2024
SEAL

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMP
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS
1205.15	PAVEMENT MARKINGS - REDUCED CONFLICT INTERSECTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION
1267.01	FEXIBLE DELINEATORS - INSTALLATION
1267.02	FEXIBLE DELINEATORS - SPACING TABLES
1267.03	FEXIBLE DELINEATORS - INTERCHANGE PLACEMENT

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)

- WORK AREA
- REMOVAL

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

\$\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$DCN\$\$\$\$\$
 \$\$\$USERNAME\$\$\$\$\$

VOLKERT
 5430 Wade Park Blvd., Suite 410
 Raleigh, NC 27607
 Tel. 919-854-0344 Fax. 919-854-0355
 NC License No. F-0765

APPROVED: _____
 DATE: 8/14/2024

**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

ROADWAY STANDARD
 DRAWINGS & LEGEND

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TRAFFIC PATTERN ALTERATIONS

- A) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- B) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- C) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

- D) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.
- E) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- F) WHEN EXISTING SIGNS CONFLICT WITH THE WZTC SIGNS AND/OR DEVICES COVER EXISTING SIGNS.

TRAFFIC CONTROL DEVICES

- G) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKING AND MARKERS

- H) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING
SR 1112 (S FOURTH ST)	HOT SPRAY THERMOPLASTIC

- I) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- J) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

LOCAL NOTES

- K) IN ORDER TO HAVE TIME TO ADEQUATELY REROUTE SCHOOL BUSES, EDGEcombe COUNTY SCHOOLS WILL BE CONTACTED AT LEAST ONE MONTH PRIOR TO ROAD CLOSURE. CONTACT PERSON IS RHONDA WAINRIGHT - TRANSPORTATION SUPERVISOR AT 252-641-2660.
- L) EDGEcombe COUNTY EMERGENCY SERVICES WILL BE CONTACTED AT LEAST ONE MONTH PRIOR TO ROAD CLOSURE TO MAKE THE NECESSARY TEMPORARY REASSIGNMENTS TO PRIMARY RESPONSE UNITS. CONTACT DANIEL WEBB - EMERGENCY SERVICES COORDINATOR AT 252-641-7806.

PHASING NOTES

THE TERM RSD REFER TO ROADWAY STANDARD DRAWINGS.

PHASE I

PRIOR TO ANY CONSTRUCTION OPERATIONS, INSTALL CMS 2 BOARDS ACCORDING TO SHEET TMP-2, 14 DAYS BEFORE ROAD CLOSURE. INSTALL ADVANCE WARNING SIGNS ACCORDING TO RSD 1101.02 (SHEET 3 OF 3) AND PLACE AND COVER OFF-SITE DETOUR SIGNS AS SHOWN AND IN ACCORDANCE WITH RSD 1101.03 (SHEET 1 OF 9)

PHASE II

USING OFF-SITE, UNCOVER DETOUR SIGNS, CLOSE -L-(SR 1112/S FOURTH ST) TO TRAFFIC, REMOVE EXISTING BRIDGE AND ANY SIGNS WITHIN PROJECT LIMITS, AND CONSTRUCT BRIDGE AND ROADWAY UP TO AND INCLUDING THE FINAL LAYER OF SURFACE COURSE.

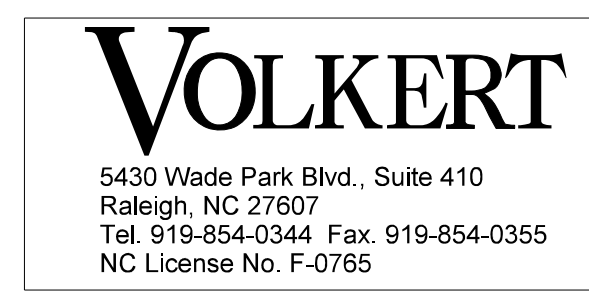
PHASE III

UPON COMPLETION OF BRIDGE, AND ROADWAY, PLACE FINAL PAVEMENT MARKINGS IN ACCORDANCE WITH RSD 1205.01, 1205.02 AND 1205.12. REMOVE BARRICADES AND DETOUR SIGNS AND OPEN -L- (SR 1112/S FOURTH ST) TO TRAFFIC.

TRAFFIC MANAGEMENT STRATEGY

PROPOSED BRIDGE AND ROADWAY CONSTRUCTION WILL BE PERFORMED UNDER A ROAD CLOSURE, WITH TRAFFIC OPERATING ON AN OFF-SITE DETOUR (1.3 MILES).

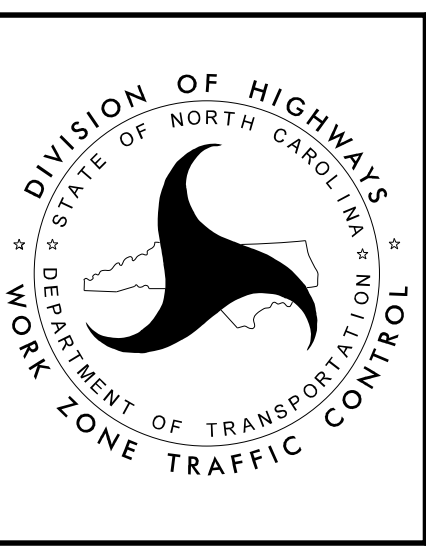
ROADS USED FOR OFF-SITE DETOUR INCLUDE SR 1004 (WEBBS CHAPEL RD), SR 1109 (S FOUNTAIN RD), AND NC 124 (GREEN ST).



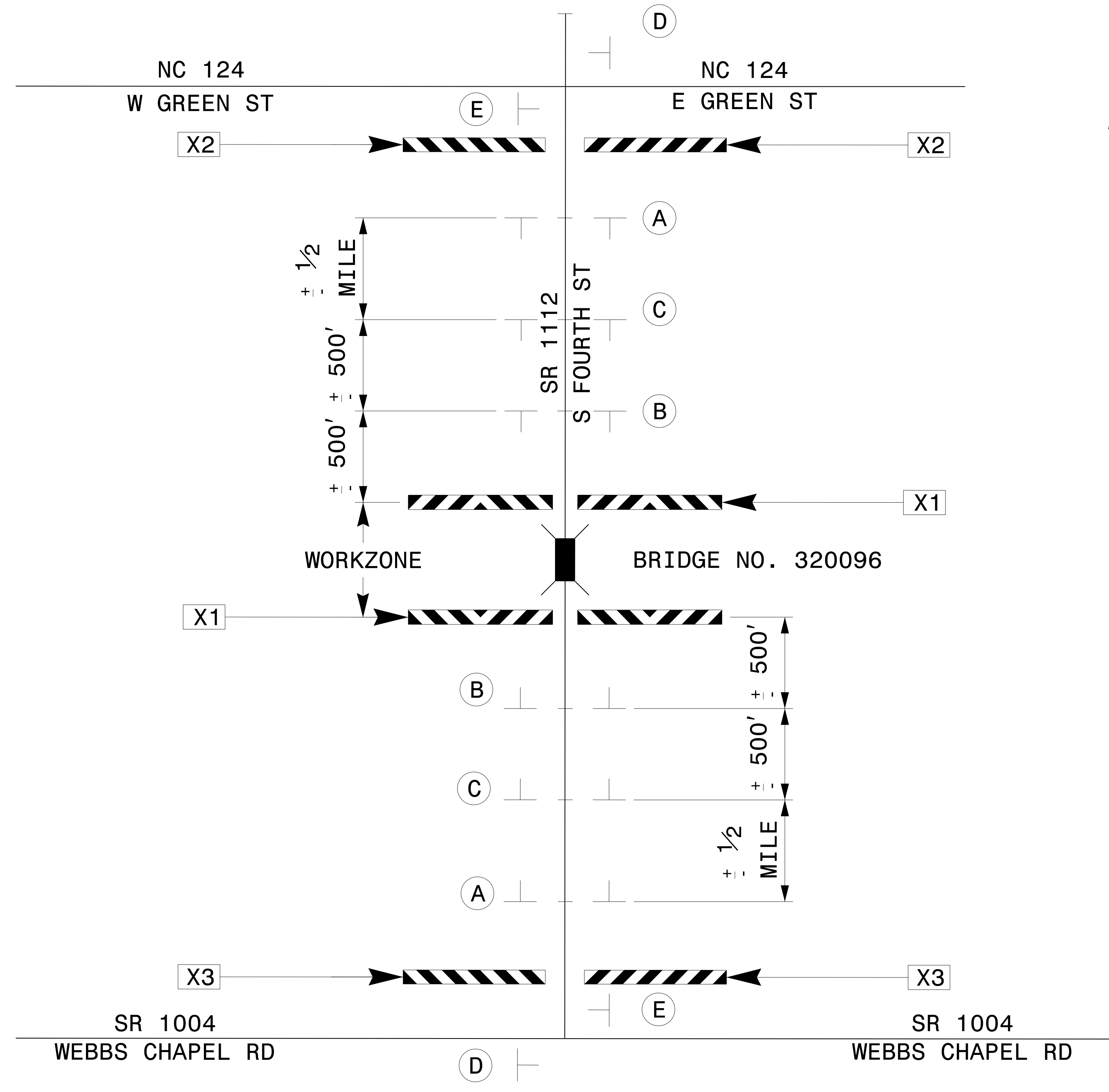
APPROVED: _____
DATE: 8/14/2024

DocuSign
SEAL
CALVIN STEWART
E4D7243
REGISTERED PROFESSIONAL ENGINEER
SECRETARY J. THORNTON

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



**TRANSPORTATION
OPERATIONS
PLAN**

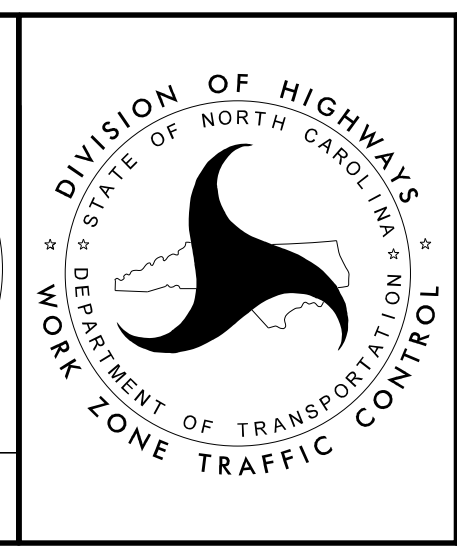


REFER TO ROADWAY STANDARD DRAWING 1101.03,
SHEET 1 OF 9 FOR APPLICABLE NOTES.

8/14/2024 P:\PROJECTS\Engineering\Projects\10780\60 BP4.R023\1320096 SR 1112 over Bynum MillRun in Edgecombe Co\6.0 TMP, PMP, Signing Plans (V)\TMP\ORD\BP4.R023_TMP_01_TSH.dgn User: zachary.thornton

VOLKERT
5430 Wade Park Blvd., Suite 410
Raleigh, NC 27607
Tel: 919-854-0344 Fax: 919-854-0355
NC License No. F-0765

APPROVED: _____
DATE: 8/14/2024
DocuSigned by:
Ezra J. Thompson
SEAL E4D10587C8849A
NORTH CAROLINA PROFESSIONAL ENGINEER EXAMINER
GARY J. THORNTON



INSET A DETAIL

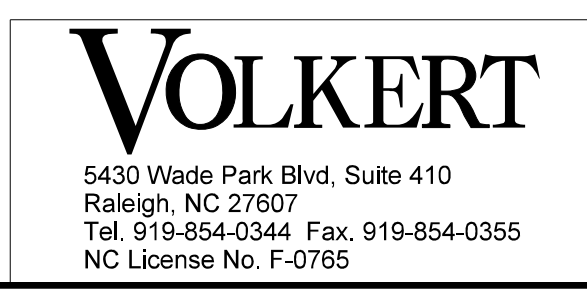
**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

8/14/2024
 P:\PROJECTS\Engineering Projects\10780\60 BP4.R023\1320096 SR 112 over Bynum MillRun in Edgecombe Co\6.0 TMP, PMP, Signing Plans (V)\TMP\ORD\BP4.R023.TMP_03_SpecialSignDesign.dgn
 User: zachary.thornton

<p>SIGN NUMBER: SP-1 BACKG COLOR: Fluorescent Orange</p> <p>TYPE: D COPY COLOR: Black</p> <p>QUANTITY: 6</p> <p>SIGN WIDTH: 3'-0" HEIGHT: 3'-0"</p> <p>TOTAL AREA: 9.0 Sq.Ft.</p> <p>BORDER TYPE: INSET RECESS: 0.38" WIDTH: 0.38" RADII: 1.5"</p> <p>NO. Z BARS: N/A MAT'L: 0.080" ALUMINUM LENGTH: N/A</p> <p>NOTES:</p> <ol style="list-style-type: none"> Legend and border shall be direct applied non-reflective sheeting. Background shall be Grade B, fluorescent orange, reflective sheeting. To be mounted with Detour signing. 	<p>DESIGN BY: ZJT CHECKED BY: CEH DATE: JUL 30, 2024</p> <p>PROJECT ID: BP4.R023 LOCATION: OFFSITE DETOUR DIV: 4</p> <div style="text-align: center;"> </div> <p style="text-align: center;">Spacing Factor is 1 unless specified otherwise</p>
---	---

LETTER POSITIONS

Letter spacings are to start of next letter											Series/Size
											Text Length
S	o	u	t	h							C 2000
9.3	13.3	17.2	20.9	23.7							17.5
F	o	u	r	t	h						C 2000
8.2	11.8	15.7	19.8	22.0	24.8						19.6
S	t	r	e	e	t						C 2000
8.9	12.7	15.4	17.9	21.6	24.9						18.2



APPROVED: _____

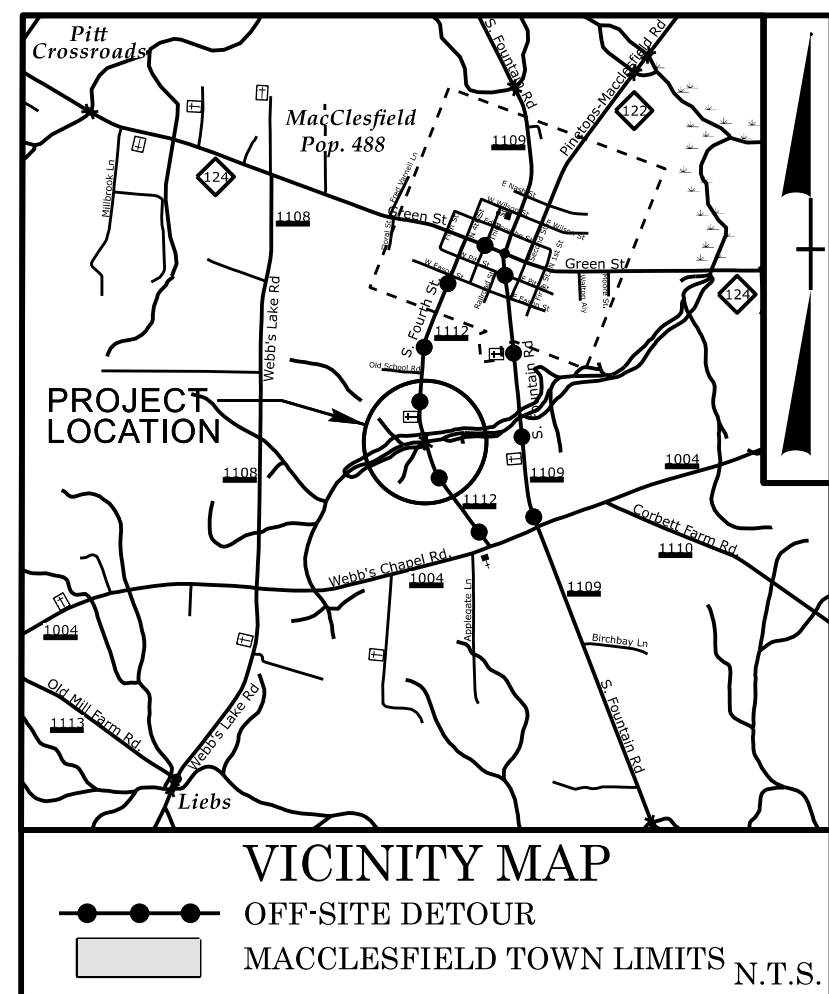
DATE: 8/14/2024

DocuSigned by: *Zachary Thornton*

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIGN PANEL DESIGN

TIP PROJECT: BP4-R023

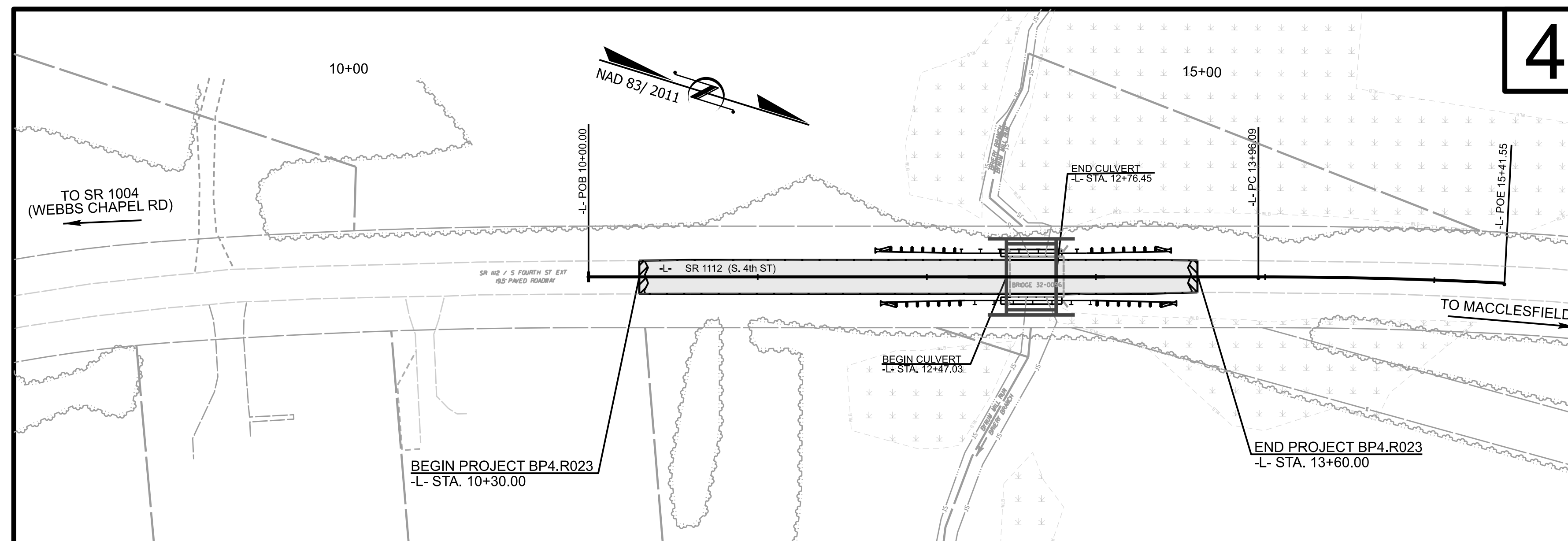


STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 PLAN FOR PROPOSED
 HIGHWAY EROSION CONTROL
 EDGECOMBE COUNTY

LOCATION: *REPLACEMENT OF BRIDGE NO. 096 ON SR 1112 (S. 4TH ST.)
 OVER BYNUM MILL RUN*

TYPE OF WORK: *GRADING, DRAINAGE, PAVING, & STRUCTURE*

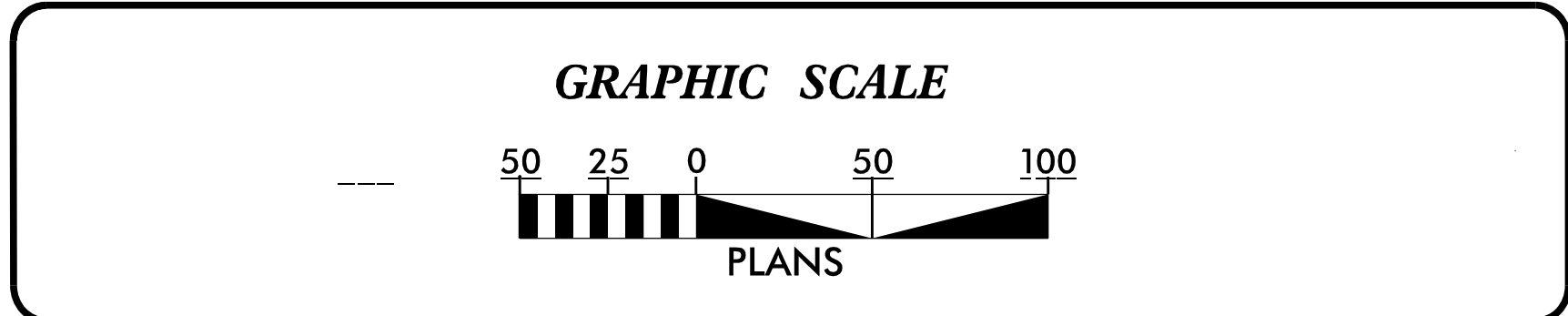
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP4-R023	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
BP4R023		P.E.	



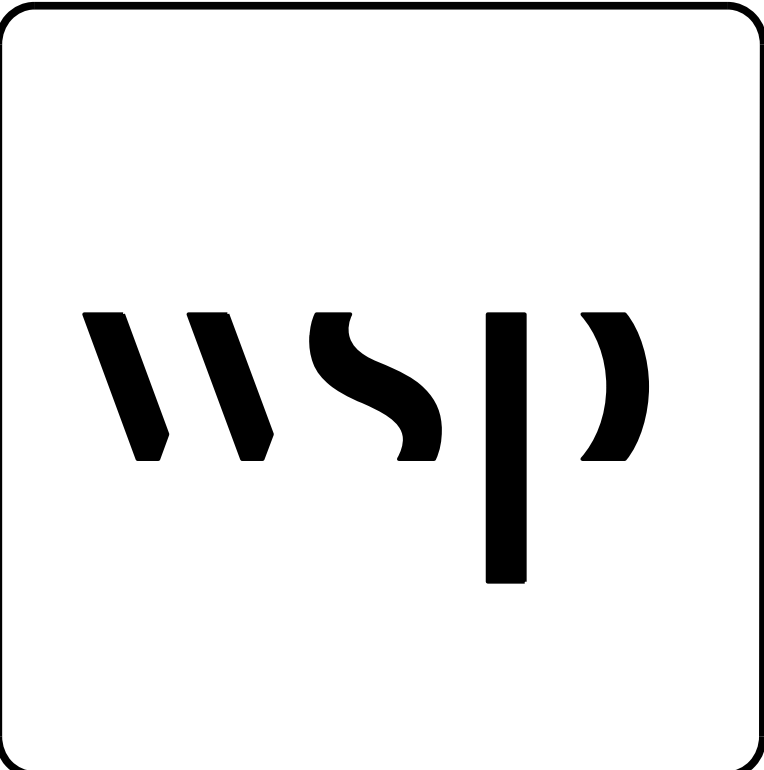
THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT
 Refer To E. C. Special Provisions for Special Considerations.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL AND LAND RESOURCES.



Prepared in the Office of:
wsp
 4021 STIRRUP CREEK DRIVE
 Durham, NC 27703
 NC ENG F-1253

Designed by:
EKENE OKORIE, EI 4452
 NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. BP4-R023	SHEET NO. EC-02
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

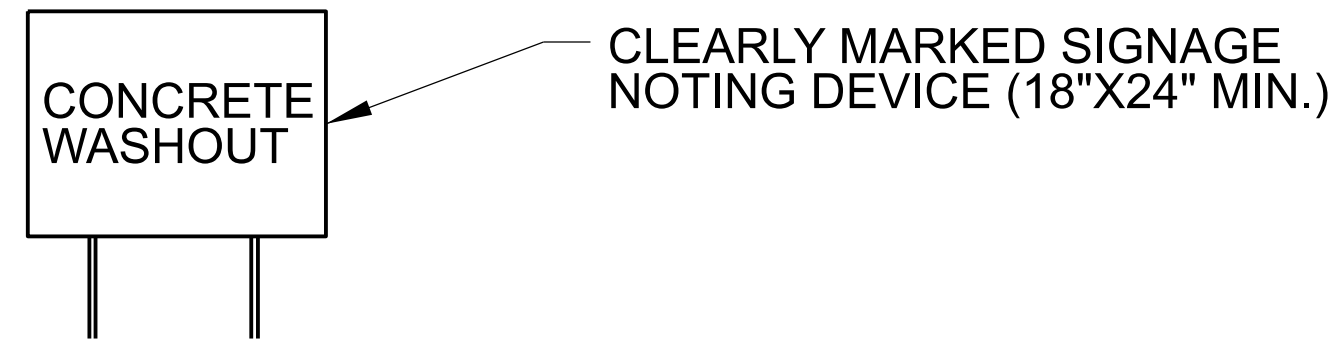
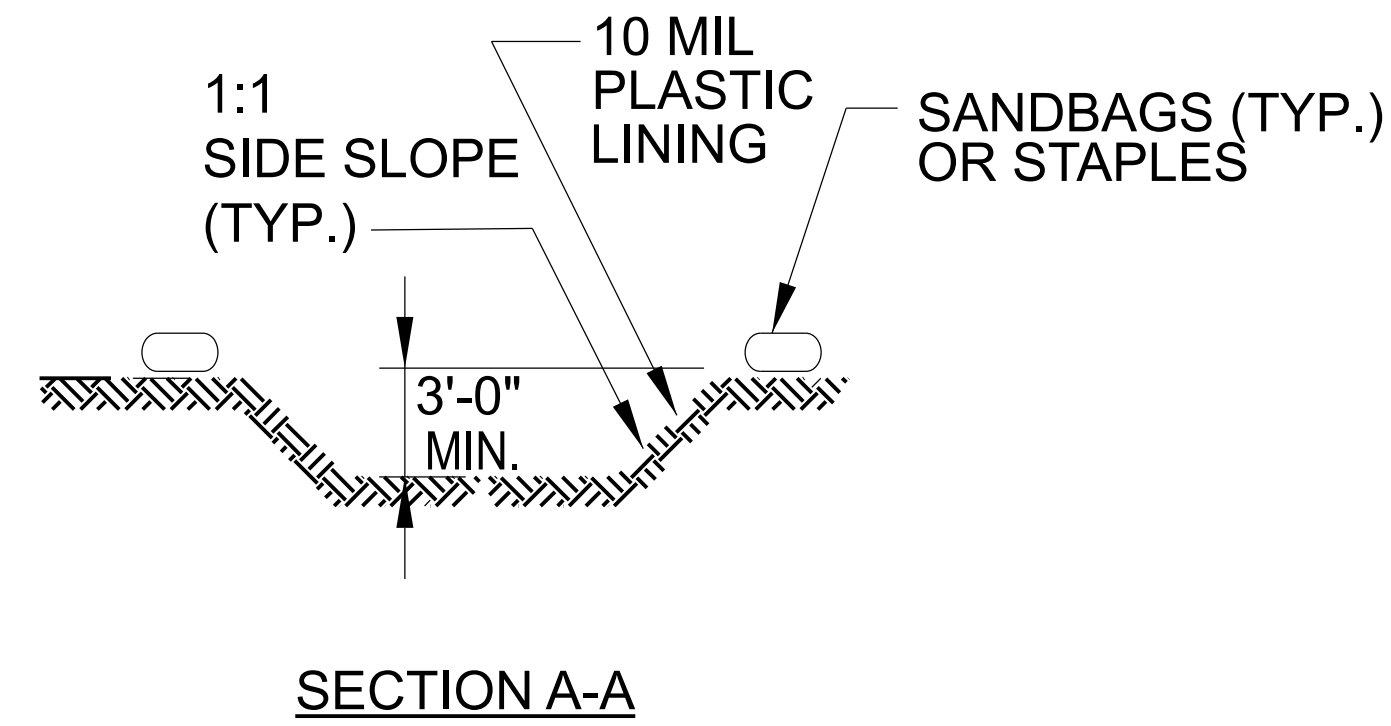
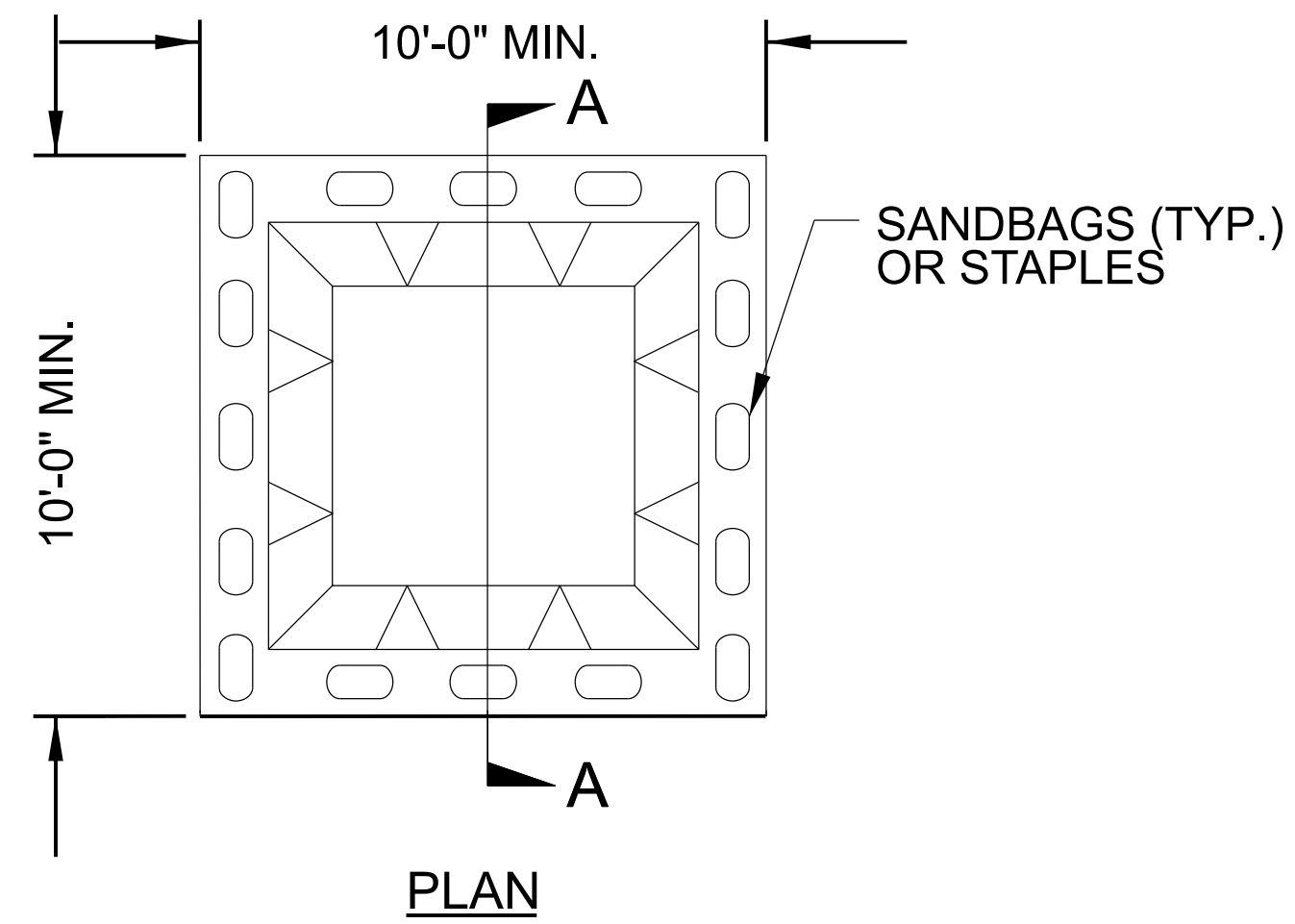
EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A		1636.03	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

5/25/20

PROJECT REFERENCE NO.	SHEET NO.
BP4-R023	EC-02A
R/W SHEET NO.	
ROADWAY DESIGN	HYDRAULICS ENGINEER

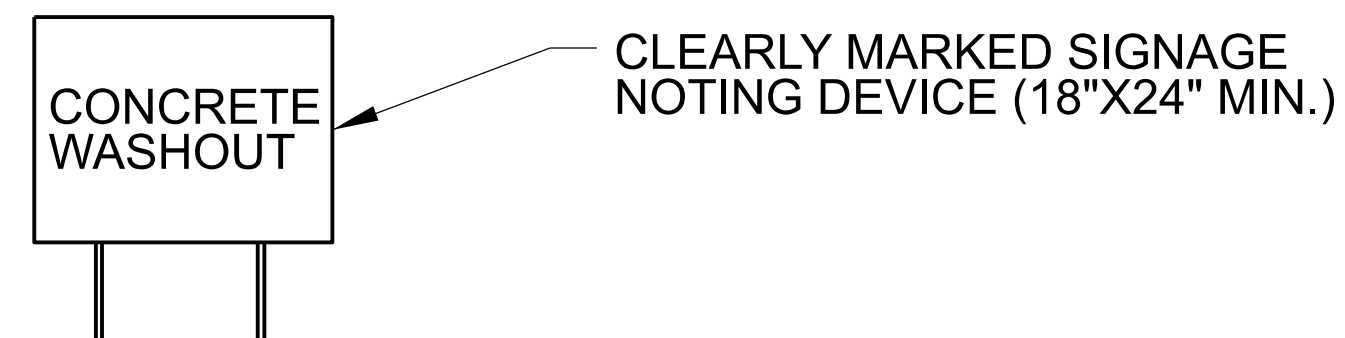
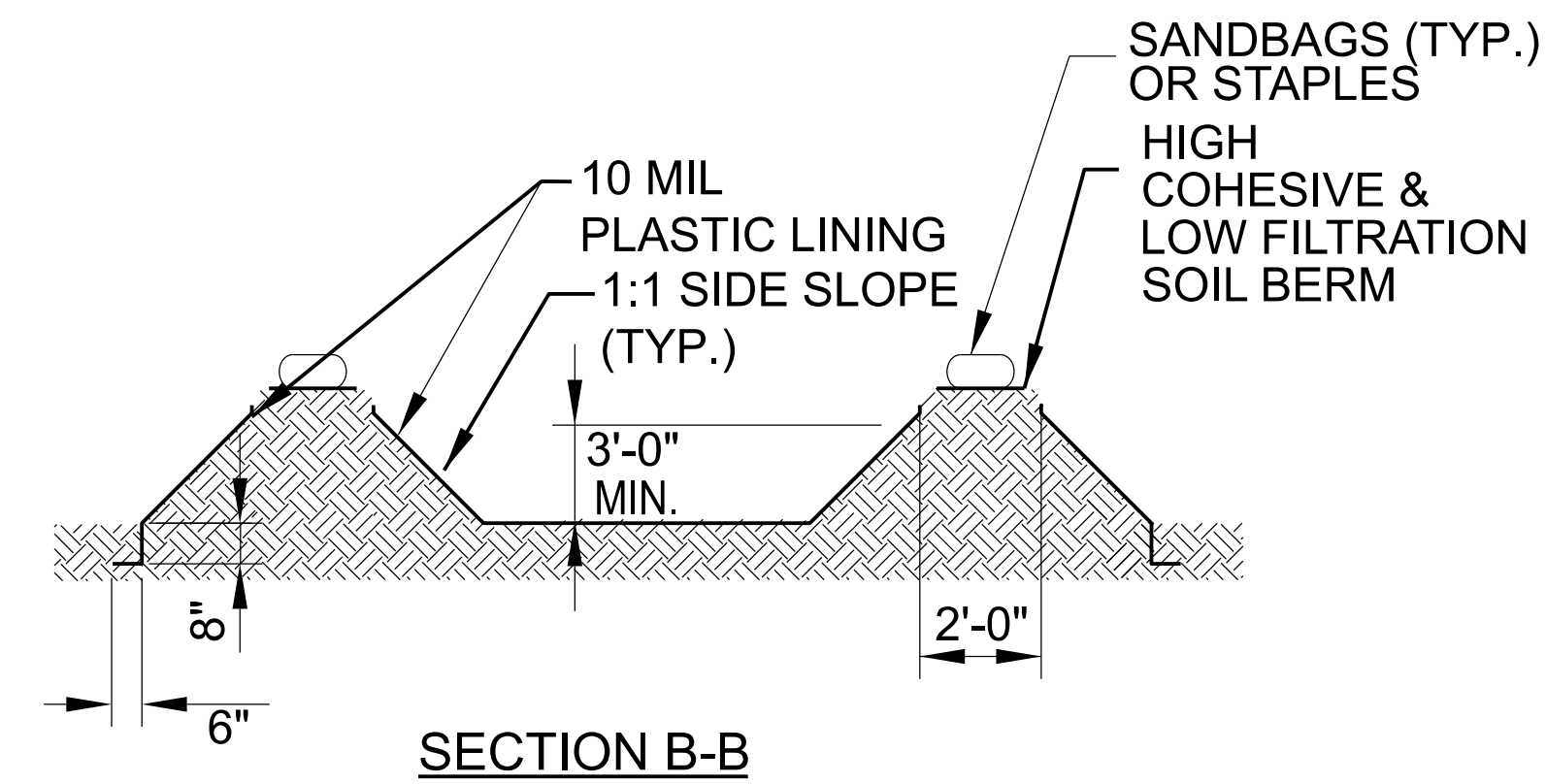
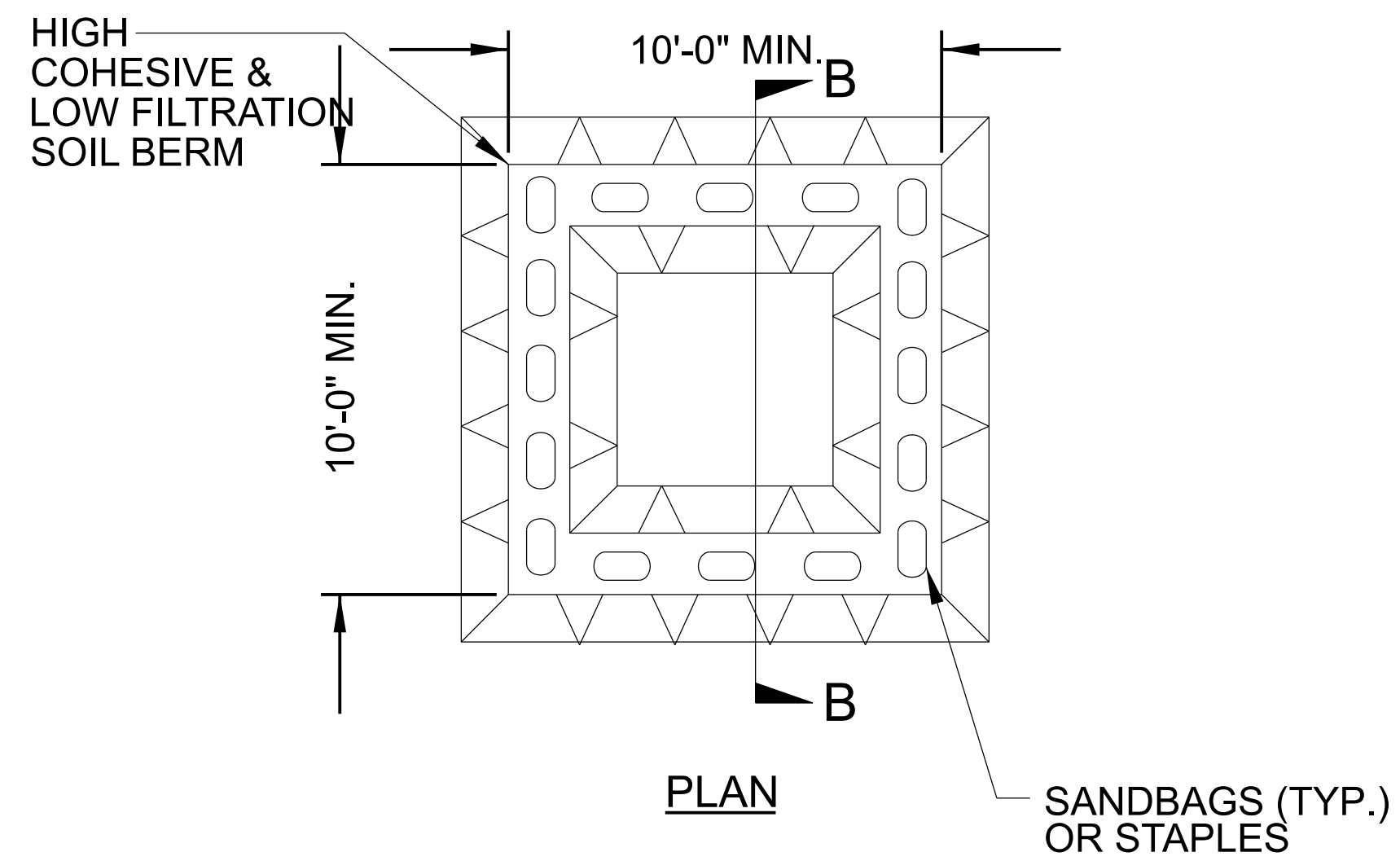
ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

NOTES:

1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

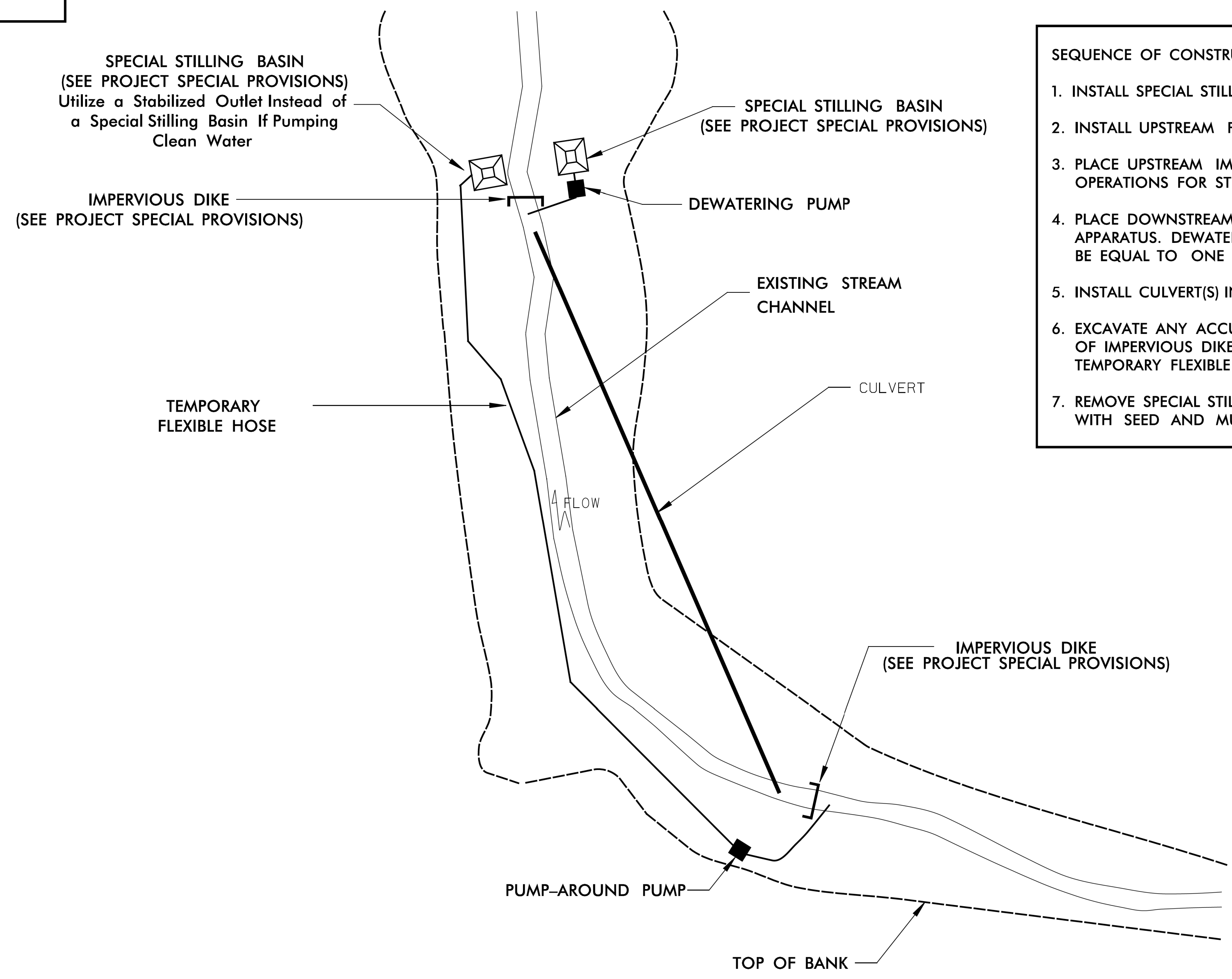
NOTES:

1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

PROJECT REFERENCE NO.	SHEET NO.
BP4-R023	EC-02B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EXAMPLE OF PUMP-AROUND OPERATION

- NOTES:
- 1) All excavation shall be performed in only dry or isolated areas of the work zone.
 - 2) Impervious dikes are to be used to isolate work from stream flow when necessary.
 - 3) Maintenance of stream flow operations shall be incidental to the work. This includes polyethylene sheeting, diversion pipes, pumps and hoses.
 - 4) Pumps and hoses shall be of sufficient size to dewater the work area.



- SEQUENCE OF CONSTRUCTION FOR TYPICAL WORK AREA
1. INSTALL SPECIAL STILLING BASIN(S).
 2. INSTALL UPSTREAM PUMP AND TEMPORARY FLEXIBLE HOSE.
 3. PLACE UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
 4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DEWATER ENTRAPPED AREA. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
 5. INSTALL CULVERT(S) IN ACCORDANCE WITH THE PLANS.
 6. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM IMPERVIOUS DIKES FIRST).
 7. REMOVE SPECIAL STILLING BASIN(S) AND BACKFILL. STABILIZE DISTURBED AREA WITH SEED AND MULCH.

5/25/20

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
BP4-R023	EC-03A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

5/25/20

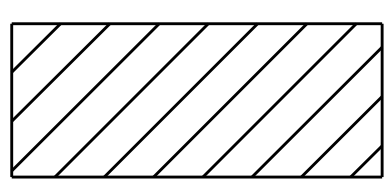
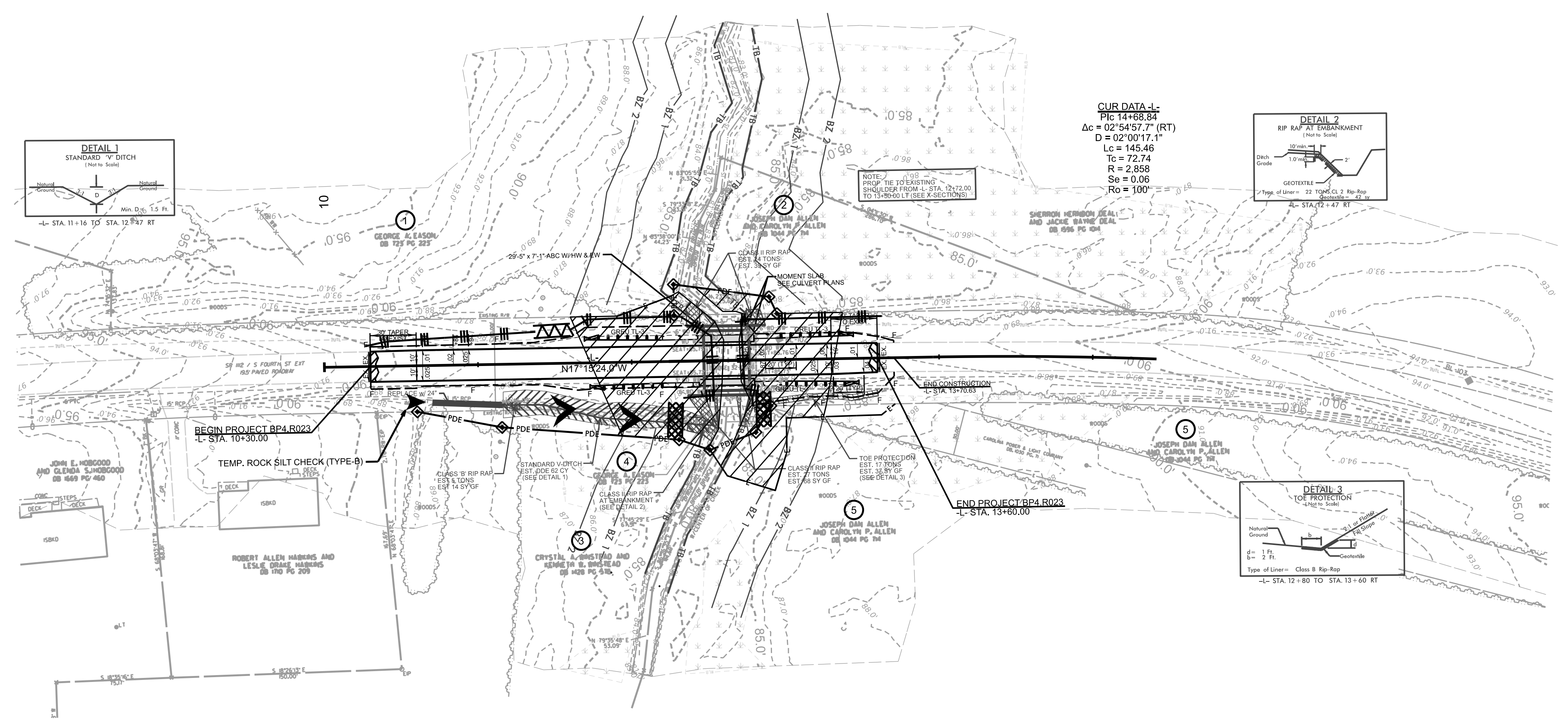
5/26/20

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

NOTE:
IMPERVIOUS DIKES MAY BE MODIFIED AND/OR
ELIMINATED AS DIRECTED.

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS - TYPE - B AT
DRAINAGE OUTLETS.

NOTE:
UTILIZE SPECIAL STILLING BASIN TO
DEWATER WORK SITE AS DIRECTED.



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

BRIDGE REMOVAL AND BRIDGE MAINTENANCE SHALL BE PER
REQUIREMENTS IN THE NCDOT BEST MANAGEMENT PRACTICES
FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL

BP4-R023
EC-4 CONST.4

HYDRAULICS
ENGINEER

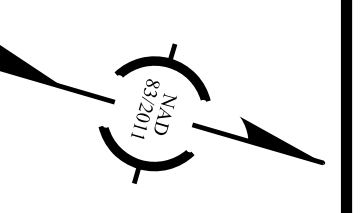
STATE OF NORTH CAROLINA

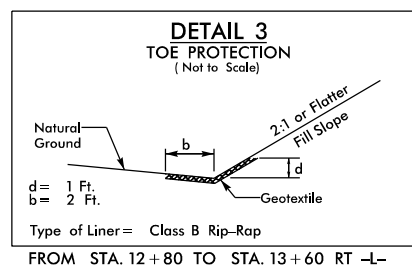
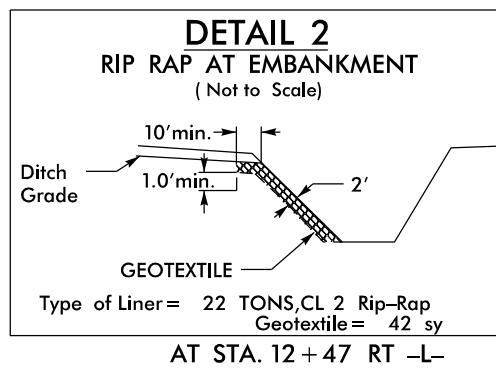
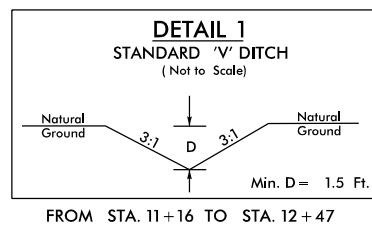
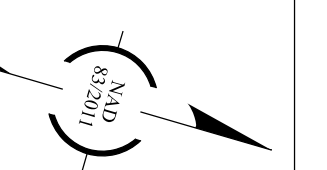


ROADWAY DESIGN UNIT

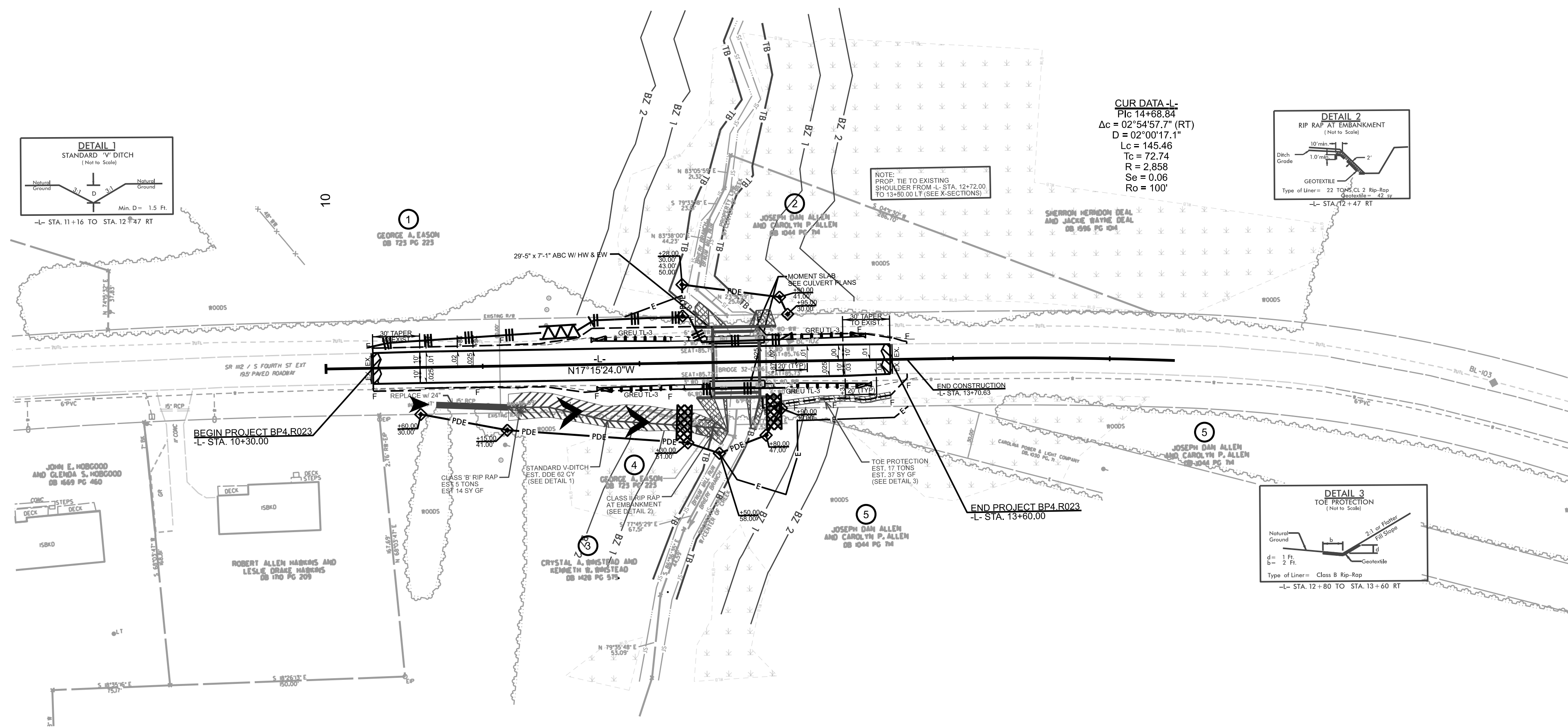
PREPARED BY

wsp
4021 STIRRUP CREEK DRIVE
DURHAM, NC 27703
NC ENG P-1253

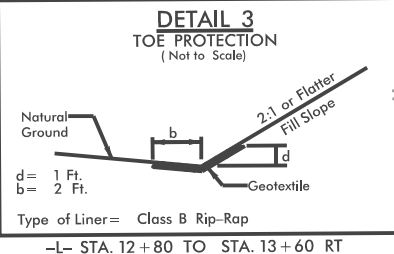
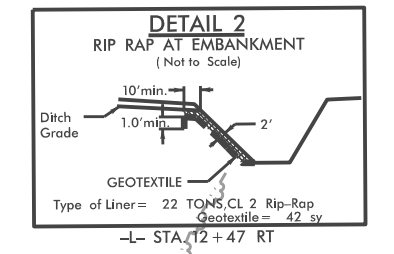




INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.
-L- STA 11+16 TO 12+47 RT



CUR DATA -L-
Pc 14+88.84
Δc = 02°54'57.7" (RT)
D = 02'00"17.1"
Lc = 145.46
Tc = 72.74
R = 2.858
Se = 0.06
Ro = 100'

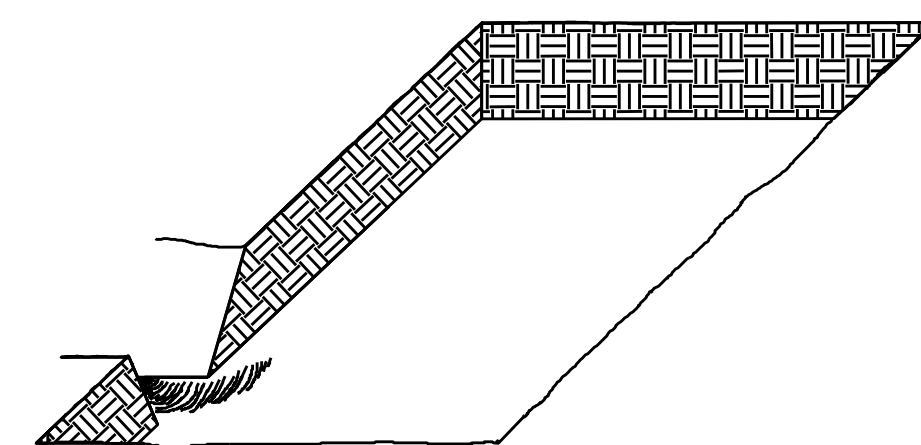


PLANTING DETAILS

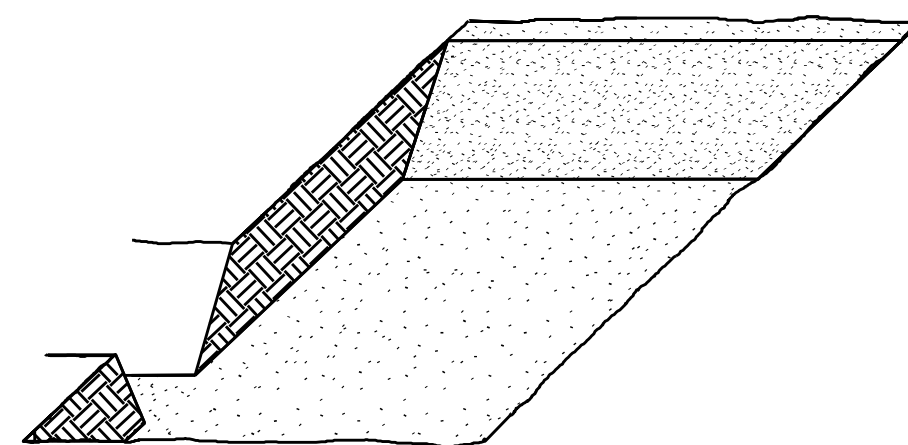
SEEDLING / LINER BAREROOT PLANTING DETAIL

HEALING IN

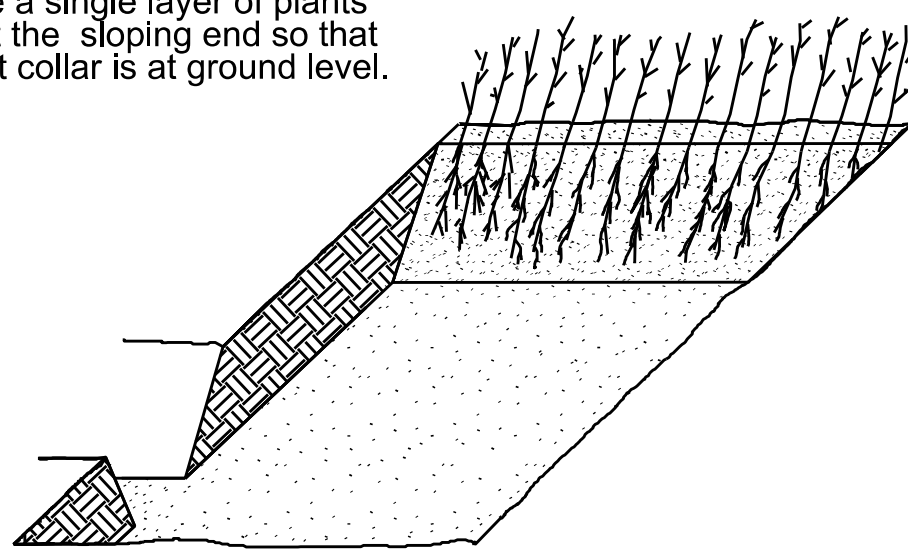
1. Locate a healing-in site in a shady, well protected area.
2. Excavate a flat bottom trench 12 inches deep and provide drainage.



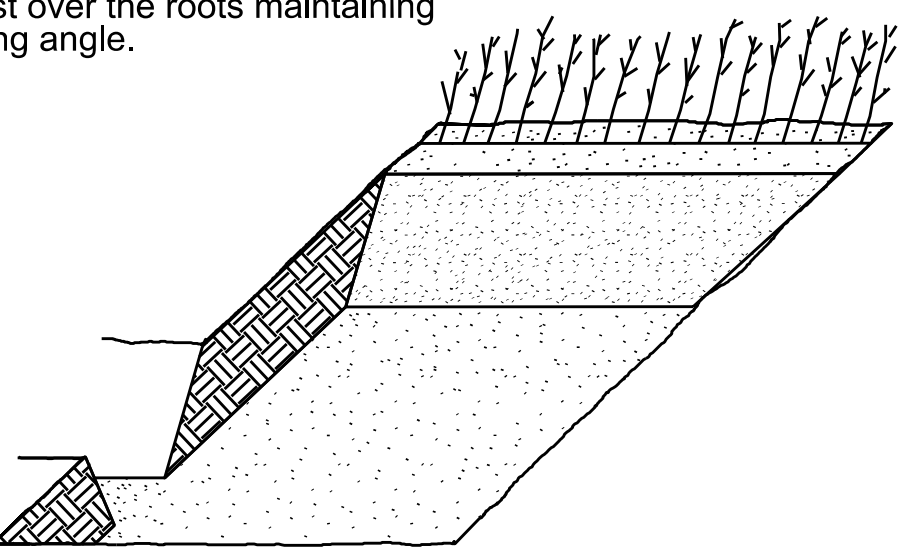
3. Backfill the trench with 2 inches well rotted sawdust. Place a 2 inch layer of well rotted sawdust at a sloping angle at one end of the trench.



4. Place a single layer of plants against the sloping end so that the root collar is at ground level.

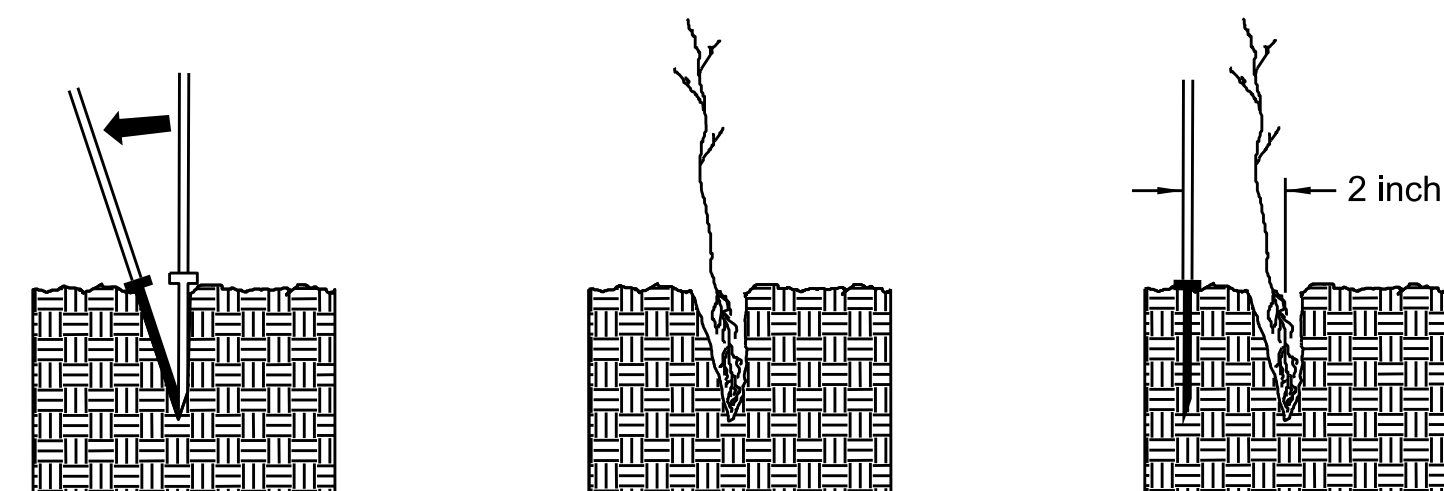


5. Place a 2 inch layer of well rotted sawdust over the roots maintaining a sloping angle.

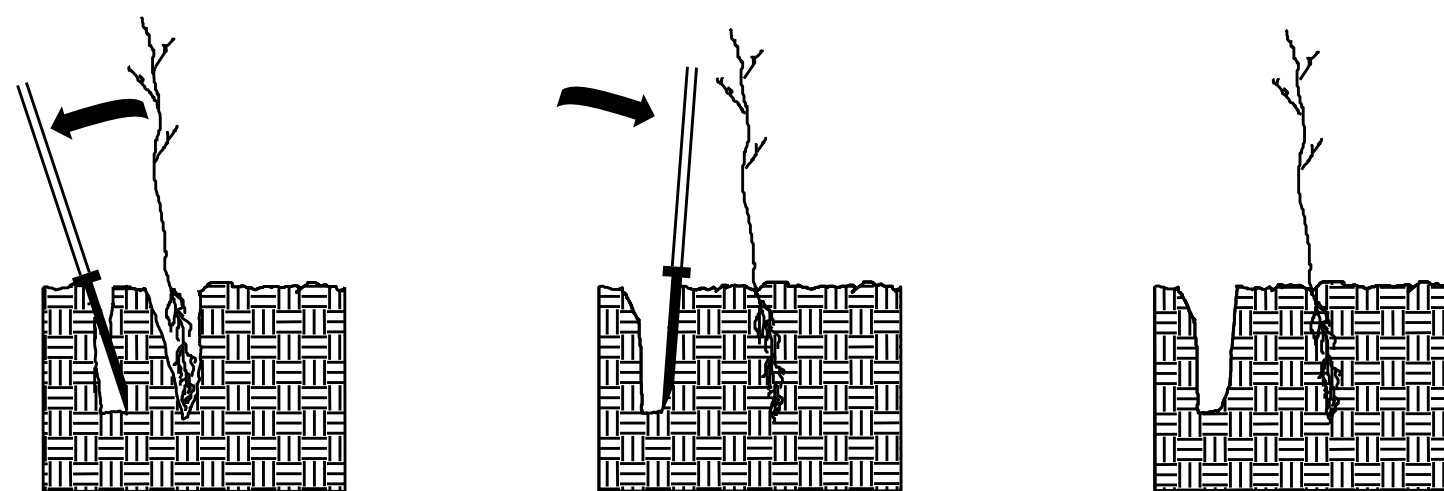


6. Repeat layers of plants and sawdust as necessary and water thoroughly.

DIBBLE PLANTING METHOD USING THE KBC PLANTING BAR



1. Insert planting bar as shown and pull handle toward planter.
2. Remove planting bar and place seedling at correct depth.
3. Insert planting bar 2 inches toward planter from seedling.



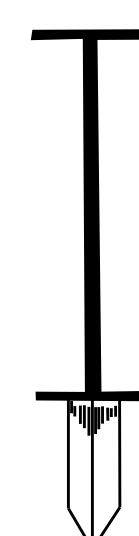
4. Pull handle of bar toward planter, firming soil at bottom.
5. Push handle forward firming soil at top.
6. Leave compaction hole open. Water thoroughly.

PLANTING NOTES:

PLANTING BAG
During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



KBC PLANTING BAR
Planting bar shall have a blade with a triangular cross section, and shall be 12 inches long, 4 inches wide and 1 inch thick at center.



ROOT PRUNING
All seedlings shall be root pruned, if necessary, so that no roots extend more than 10 inches below the root collar.

REFORESTATION

- TREE REFORESTATION SHALL BE PLANTED 6 FT. TO 10 FT. ON CENTER, RANDOM SPACING, AVERAGING 8 FT. ON CENTER, APPROXIMATELY 680 PLANTS PER ACRE.

REFORESTATION

MIXTURE, TYPE, SIZE, AND FURNISH SHALL CONFORM TO THE FOLLOWING:

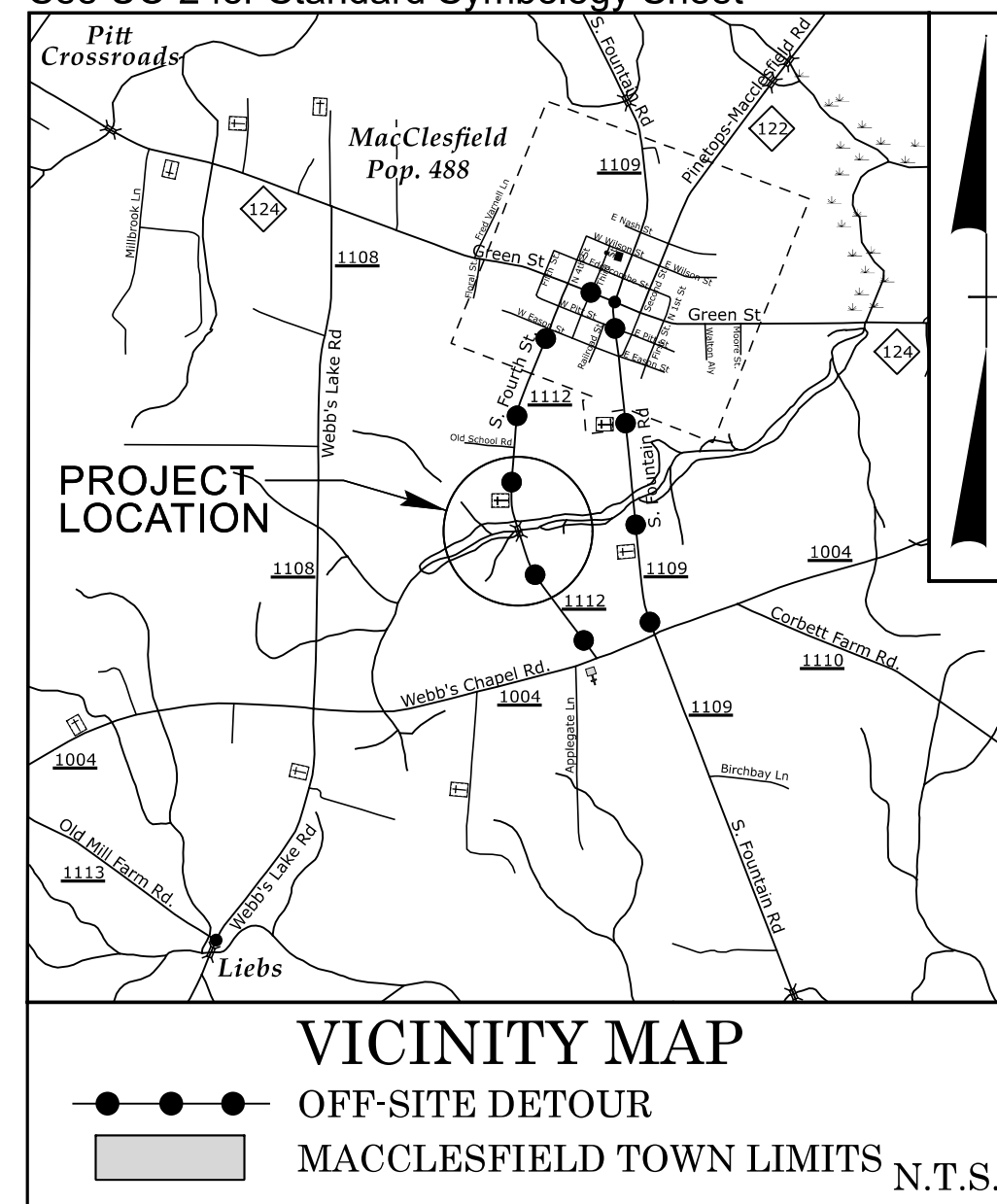
34% LIRIODENDRON TULIPIFERA	TULIP POPLAR	12 in - 18 in BR
33% PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	12 in - 18 in BR
33% BETULA NIGRA	RIVER BIRCH	12 in - 18 in BR

REFORESTATION DETAIL SHEET

N.C.D.O.T. - ROADSIDE ENVIRONMENTAL UNIT

CONTRACT: TIP PROJECT: BP4.R023

See UC-1 For Index of Sheets
See UC-2 for Standard Symbology Sheet

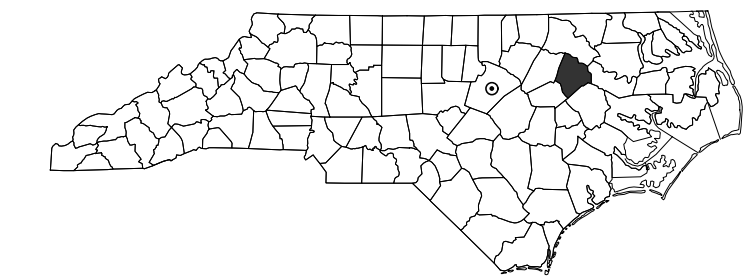
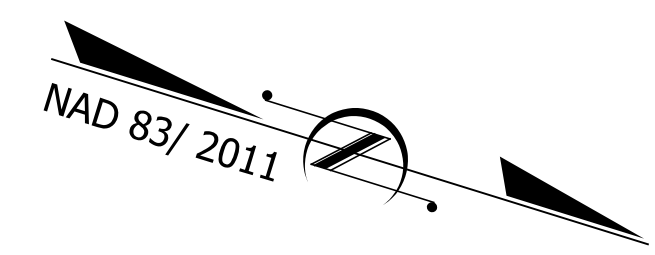


STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

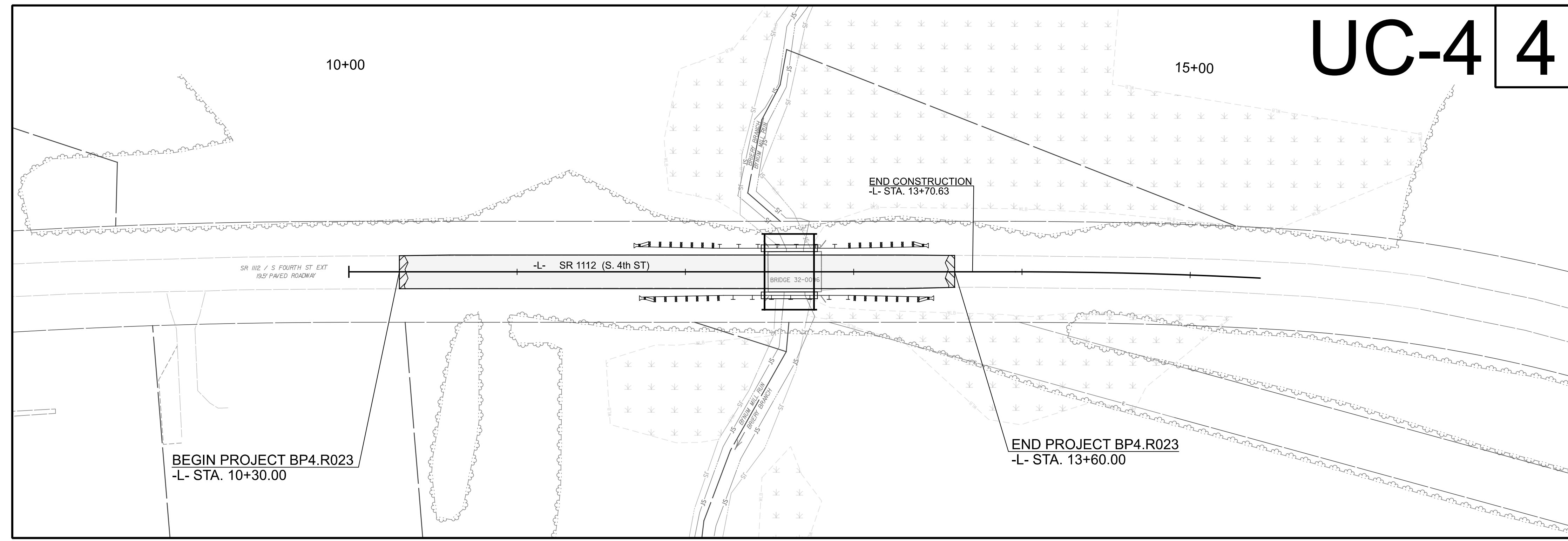
UTILITY CONSTRUCTION PLANS EDGEcombe COUNTY

LOCATION: *REPLACEMENT OF BRIDGE NO. 096 ON SR 1112 (S. 4TH ST.)
OVER BYNUM MILL RUN*

TYPE OF WORK: *WATER LINE RELOCATION*

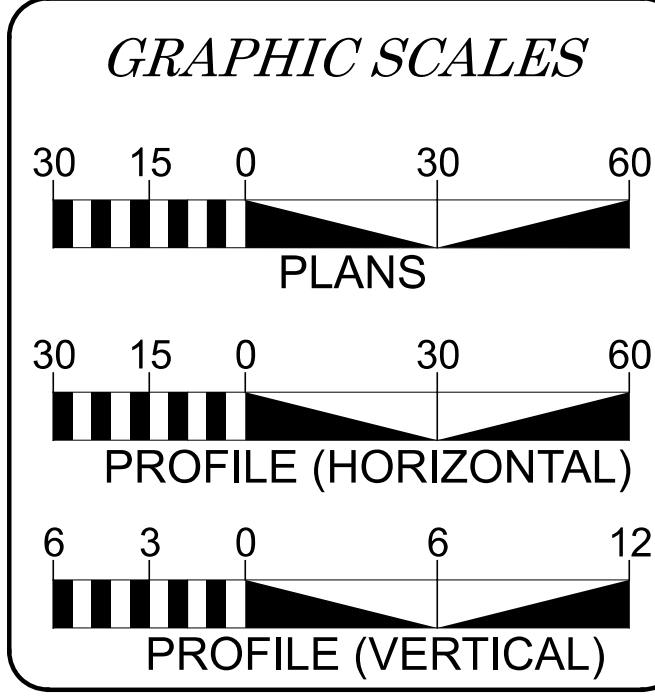


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	BP4.R023	UC-1
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
BP4.R023.1		P.E.



UC-4 4

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

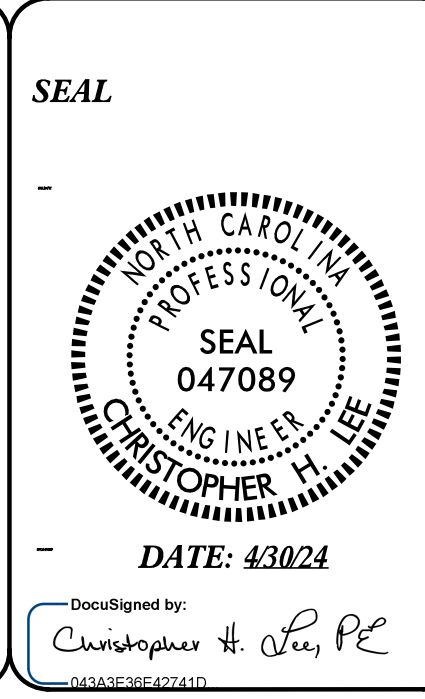


INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A	DETAILS
UC-4	UTILITY CONSTRUCTION SHEET
UC-5	PROFILE SHEET

WATER AND SEWER OWNERS ON PROJECT

(A) WATER - TOWN OF MACCLESFIELD
 (B) WATER - EDGEcombe COUNTY WATER AND SEWER



PREPARED IN THE OFFICE OF

wsp

434 FAYETTEVILLE ST. #1500
RALEIGH, N.C. 27601
NC ENG F-1253

CHRISTOPHER H. LEE, PE CONSULTANT CONTACT #1
 BRIAN R. PEASE, EI CONSULTANT CONTACT #2

**DIVISION OF HIGHWAYS
DIVISION 4**
509 WARD BLVD.
PO BOX 3165
WILSON, NC 27895
(252)640-6437

RANDY A. DAVIS DIVISION BRIDGE PROGRAM MANAGER
 COREY MCLAMB, PE DIVISION CONST ENGINEER
 KEITH EASON, PE DIVISION ENGINEER
 KYLE A. PLEASANT DIVISION UTILITES ENGINEER

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11¼ Degree Bend	
22½ Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	
Water Meter	
Relocate Water Meter	
Remove Water Meter	
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement Method	
Encasement	

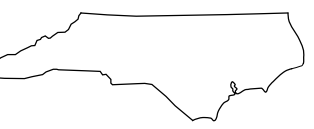
Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

EXISTING UTILITIES SYMBOLS

Power Pole		*Underground Power Line	
Telephone Pole		*Underground Telephone Cable	
Joint Use Pole		*Underground Telephone Conduit	
Utility Pole		*Underground Fiber Optics Telephone Cable	
Utility Pole with Base		*Underground TV Cable	
H-Frame Pole		*Underground Fiber Optics TV Cable	
Power Transmission Line Tower		*Underground Gas Pipeline	
Water Manhole		Aboveground Gas Pipeline	
Power Manhole		*Underground Water Line	
Telephone Manhole		Aboveground Water Line	
Sanitary Sewer Manhole		*Underground Gravity Sanitary Sewer Line	
Hand Hole for Cable		Aboveground Gravity Sanitary Sewer Line	
Power Transformer		*Underground SS Forced Main Line	
Telephone Pedestal		Underground Unknown Utility Line	
CATV Pedestal		SUE Test Hole	
Gas Valve		Water Meter	
Gas Meter		Water Valve	
Located Miscellaneous Utility Object		Fire Hydrant	
Abandoned According to Utility Records	AATUR	Sanitary Sewer Cleanout	
End of Information	E.O.I.		

*For Existing Utilities
 Utility Line Drawn from Record (Type as Shown)
 Designated Utility Line (Type as Shown)

STATE OF NORTH CAROLINA



ROADWAY DESIGN UNIT

PREPARED BY



434 FAYETTEVILLE ST. #1500
RALEIGH, N.C. 27601
NC ENG P-1253

REVISIONS

GENERAL NOTES

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2024.
2. THE EXISTING UTILITIES BELONG TO THE TOWN OF MACCLESFIELD AND EDGECOMBE COUNTY WATER AND SEWER. THE CONTACT PERSON FOR THE TOWN OF MACCLESFIELD IS BENJI LASSITER AND CAN BE REACHED AT (252)373-7976. THE CONTACT PERSON FOR EDGECOMBE COUNTY WATER AND SEWER IS VERNON LEE AND CAN BE REACHED AT (252)813-9746.
3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.
4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.
5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.
6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.

UTILITY CONSTRUCTION

7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.
8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.
9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, "SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

PROJECT SPECIFIC NOTES

1. ENGINEER SHALL INSPECT ALL MATERIALS ONSITE PRIOR TO INSTALLATION. DAMAGED MATERIALS SHALL BE REPLACED OR REPAIRED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. WATER MAINS CROSSING UNDER STORM DRAIN PIPE SHALL HAVE 24" MIN VERTICAL CLEARANCE UNLESS SPECIFIED ON THE PLAN/PROFILE.
3. PROPOSED 6" WATER LINE SHALL BE FUSIBLE PVC WATER PIPE, C900, DR 18 WITH RESTRAINED JOINT DI FITTINGS AT THE BENDS, SLEEVES, AND 3 JOINTS BEYOND THE TIE-IN ON EACH END.
4. INSTALL CHANGEABLE MESSAGE BOARD/MARQUEE ON EITHER SIDE OF PROJECT AREA TO ALERT RESIDENTS XX DAYS AHEAD OF TIE-IN WORK. WILL NEED TO COORDINATE WITH ENGINEER PRIOR TO BEGINNING WORK.

STATE OF NORTH CAROLINA

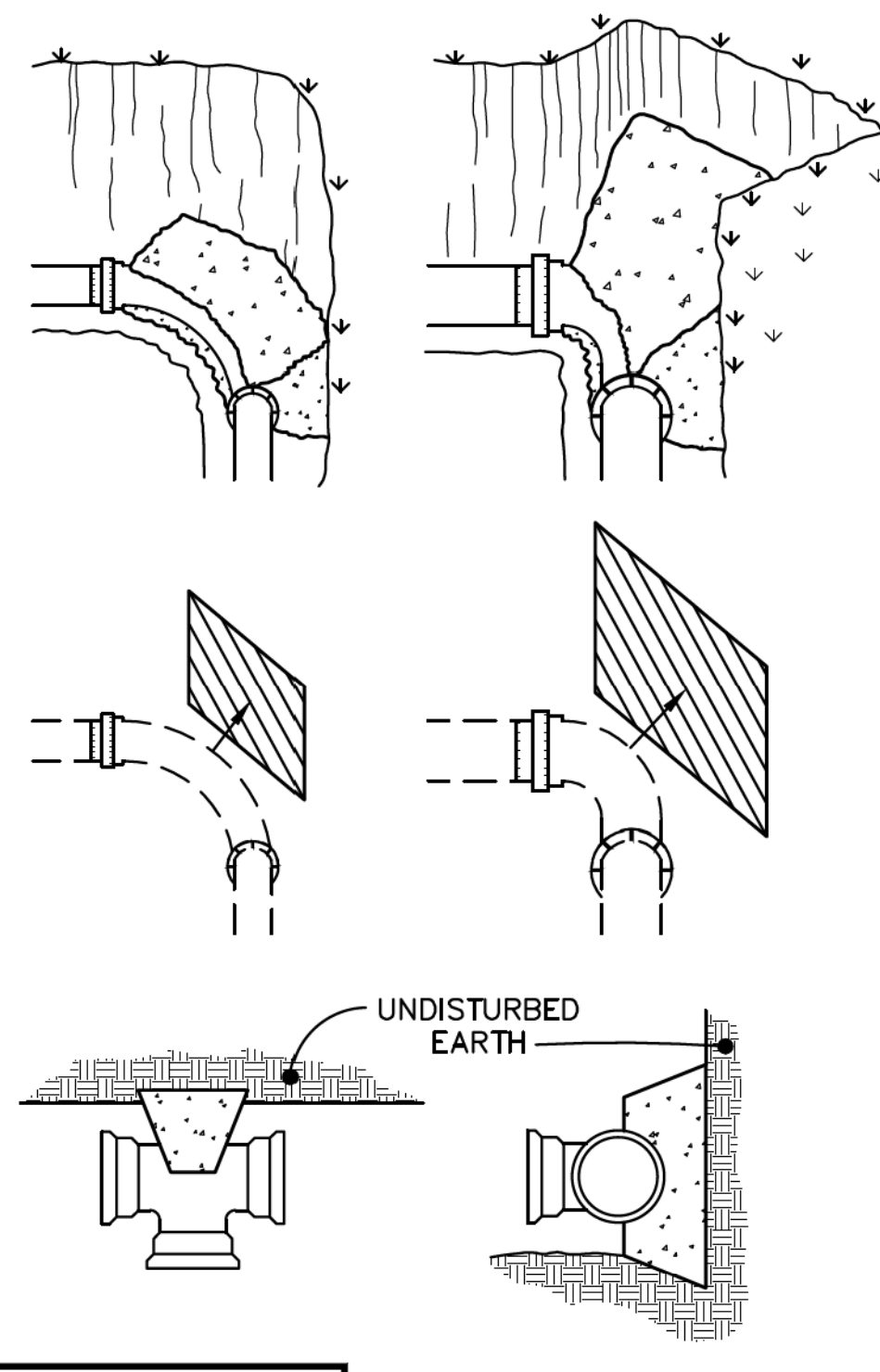


ROADWAY DESIGN UNIT

PREPARED BY

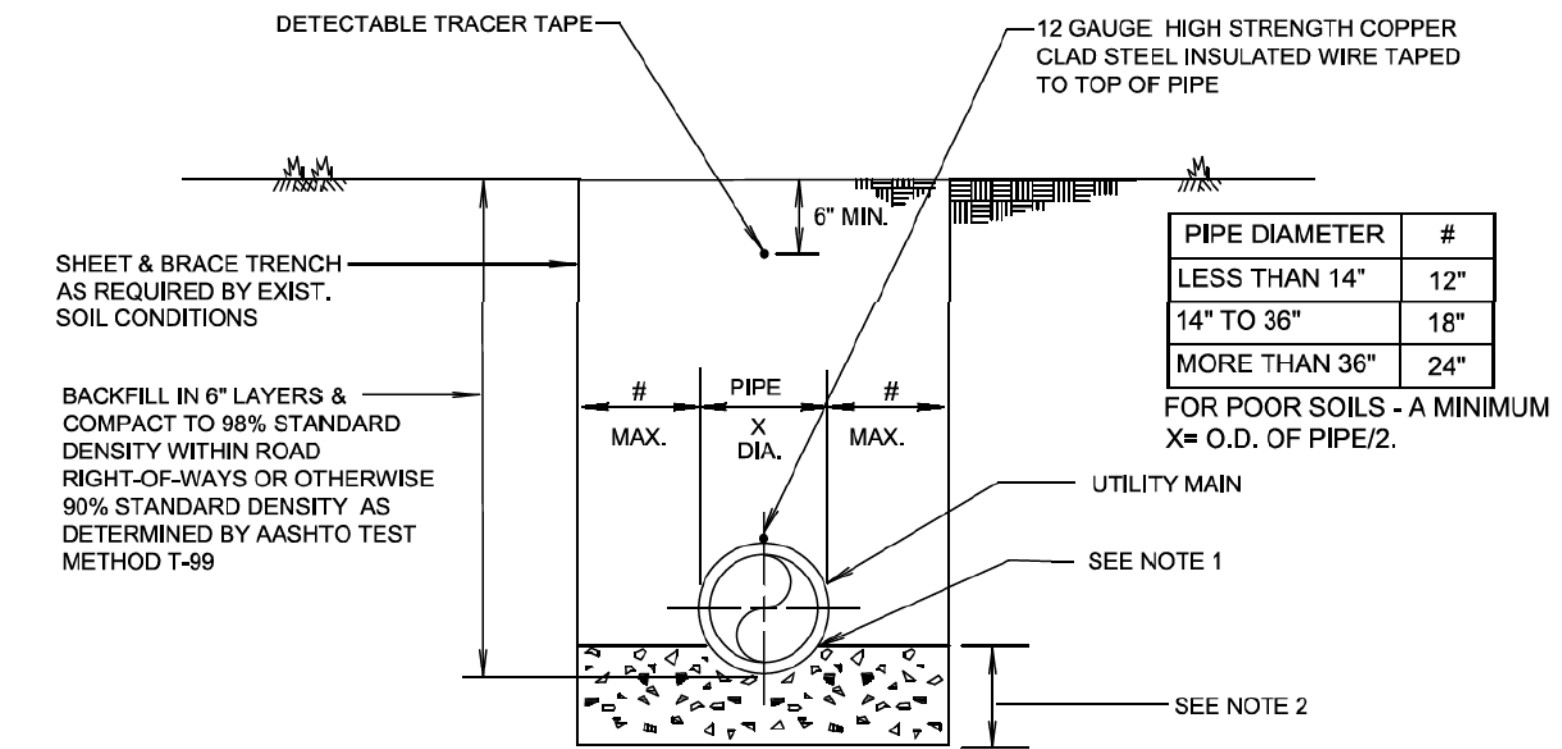
434 FAYETTEVILLE ST. #1500
RALEIGH, N.C. 27601
NC ENG P-1253

PROJECT TYPICAL DETAILS



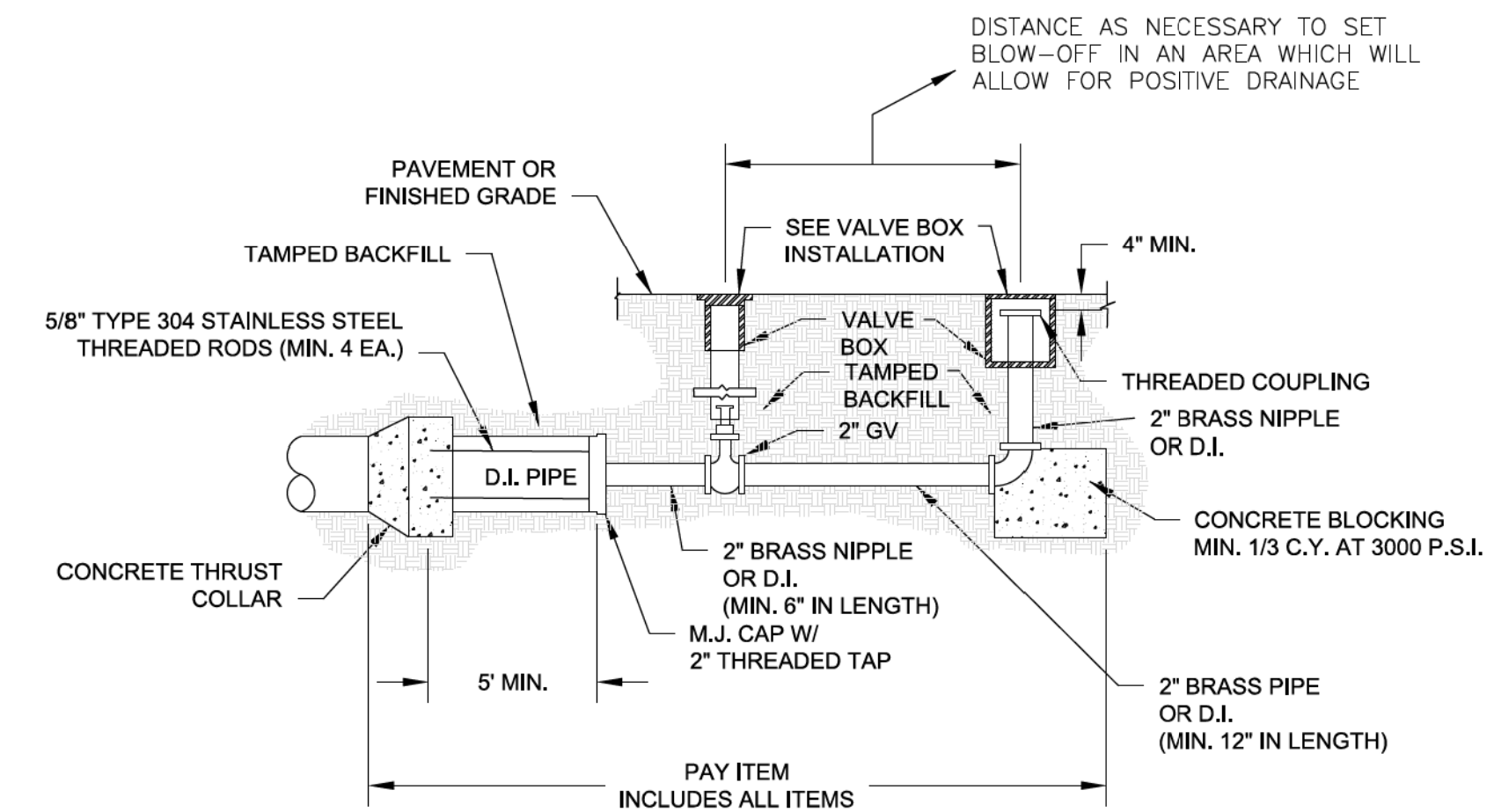
MINIMUM CONCRETE BLOCKING (C.Y.) *					
NOMINAL PIPE DIAMETER INCHES	TEES & DEAD ENDS	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4	1/3	1/3	1/3	1/3	1/3
6	1/3	1/3	1/3	1/3	1/3
8	1/3	1/2	1/3	1/3	1/3
10	2/3	3/4	1/2	1/3	1/3
12	3/4	1.0	2/3	1/3	1/3

NOTES:
 1. FITTING SHALL BE WRAPPED WITH A MINIMUM 4 MIL PLASTIC.
 2. NO CONCRETE SHALL COVER BOLTS OR GLANDS.
 3. PIPE DIAMETERS BEYOND 12 INCHES SHALL UTILIZE A PROFESSIONAL ENGINEER'S SEALED DESIGN CONSISTING OF RESTRAINED JOINT PIPE OR BLOCKING.
 * CONCRETE SHALL BE 3,000 P.S.I. MIX.



- NOTES:**
- SHAPE BOTTOM OF TRENCH TO FIT BOTTOM QUARTER ON SIDES OF AND BENEATH PIPE. BED ONE-QUARTER THE PIPE OUTSIDE DIAMETER ON THE SIDES OF AND 6" BENEATH PIPE WITH #67 STONE. EXCAVATE UNDER EACH BELL SUFFICIENTLY TO PREVENT ANY LOAD ON BELL.
 - WHERE UNSTABLE SOIL IS ENCOUNTERED, EXCAVATE THE SOIL AS DIRECTED BY THE ENGINEERS AND BACKFILL WITH AT LEAST 8" OF #467 STONE. THE BACKFILL SHALL BE COMPACTED AND SHAPED TO FORM A BED FOR THE PIPE.
 - BACKFILL IN 6" LAYERS AND COMPACT TO 98% STANDARD DENSITY WITHIN ROAD RIGHT-OF-WAYS OR OTHERWISE 90% STANDARD DENSITY AS DETERMINED BY AASHTO TEST METHOD T-99.

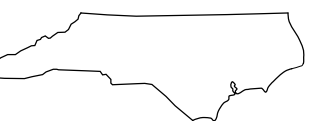
UTILITY PRESSURE MAINS TRENCH, BEDDING & BACKFILL DETAIL



PERMANENT BLOW-OFF ASSEMBLY

NOT TO SCALE

- NOTES:**
- THE TOP OF THE BLOW-OFF STANDPIPE SHALL BE NO MORE THAN 4-6" BELOW GRADE.
 - BLOW-OFFS SHALL BE LOCATED IN AREAS WHICH WILL ALLOW FOR POSITIVE DRAINAGE WHEN UTILIZED.
 - ALL MATERIALS USED IN THE POTABLE WATER SYSTEM MUST BE NSF61 AND NSF372 CERTIFIED AND MEET THE LATEST FEDERAL SAFE DRINKING WATER ACT REQUIREMENTS.

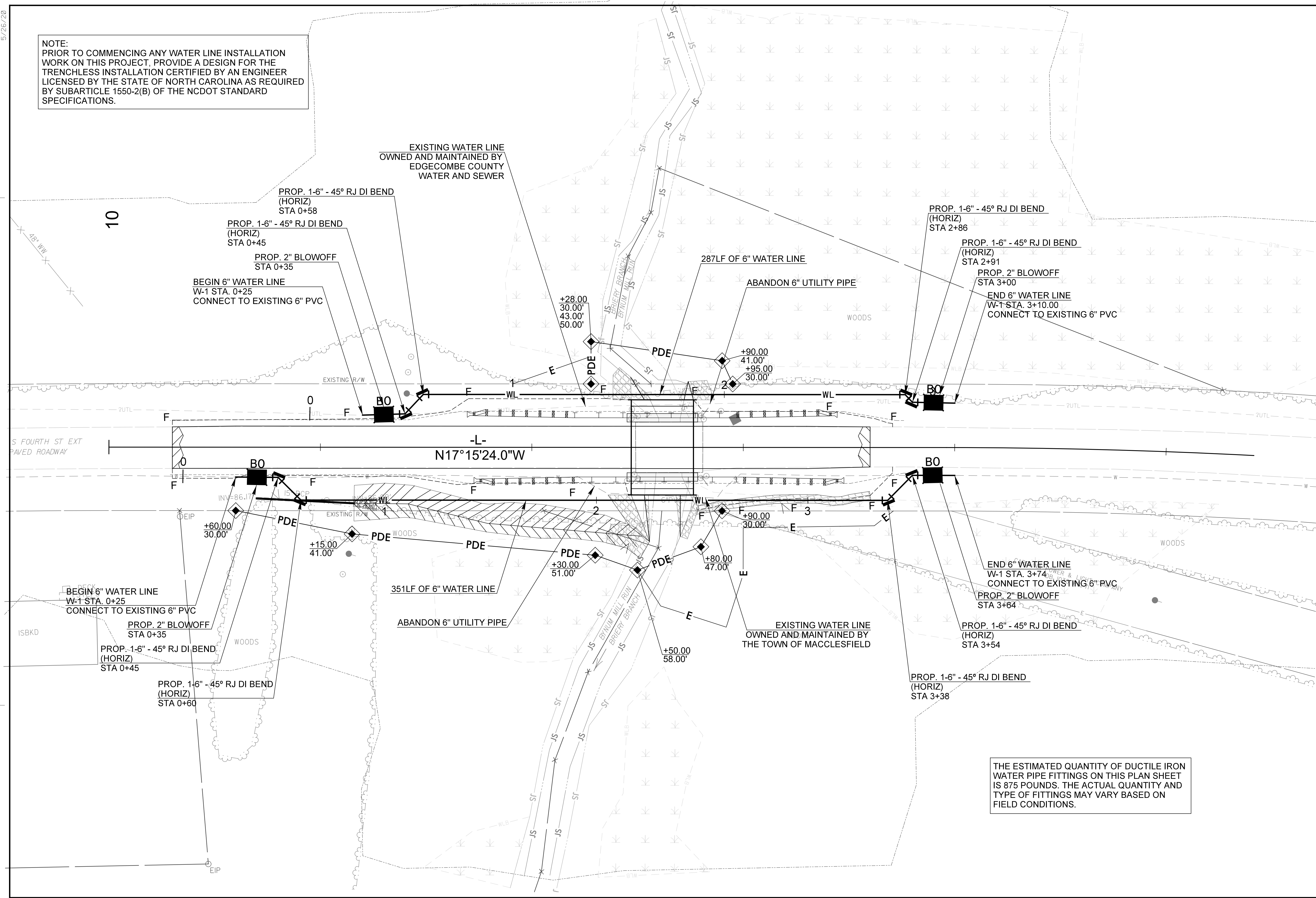
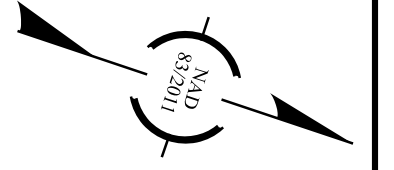


NOTE:
PRIOR TO COMMENCING ANY WATER LINE INSTALLATION
WORK ON THIS PROJECT, PROVIDE A DESIGN FOR THE
TRENCHLESS INSTALLATION CERTIFIED BY AN ENGINEER
LICENSED BY THE STATE OF NORTH CAROLINA AS REQUIRED
BY SUBARTICLE 1550-2(B) OF THE NCDOT STANDARD
SPECIFICATIONS.

BP4.R023
UC-4
UTILITIES DESIGN
ENGINEER
NORTH CAROLINA
PROFESSIONAL
SEAL
047089
CHRISTOPHER H. LEE
DATE: 5/27/2024

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
STATE OF NORTH CAROLINA
ROADWAY DESIGN UNIT
PREPARED BY
WSP
434 FAYETTEVILLE ST. #1500
RALEIGH, N.C. 27601
NC ENG P-1253

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

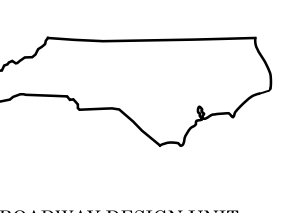


THE ESTIMATED QUANTITY OF DUCTILE IRON
WATER PIPE FITTINGS ON THIS PLAN SHEET
IS 875 POUNDS. THE ACTUAL QUANTITY AND
TYPE OF FITTINGS MAY VARY BASED ON
FIELD CONDITIONS.

UTILITIES DESIGN ENGINEER

DATE: 5/17/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



ROADWAY DESIGN UNIT

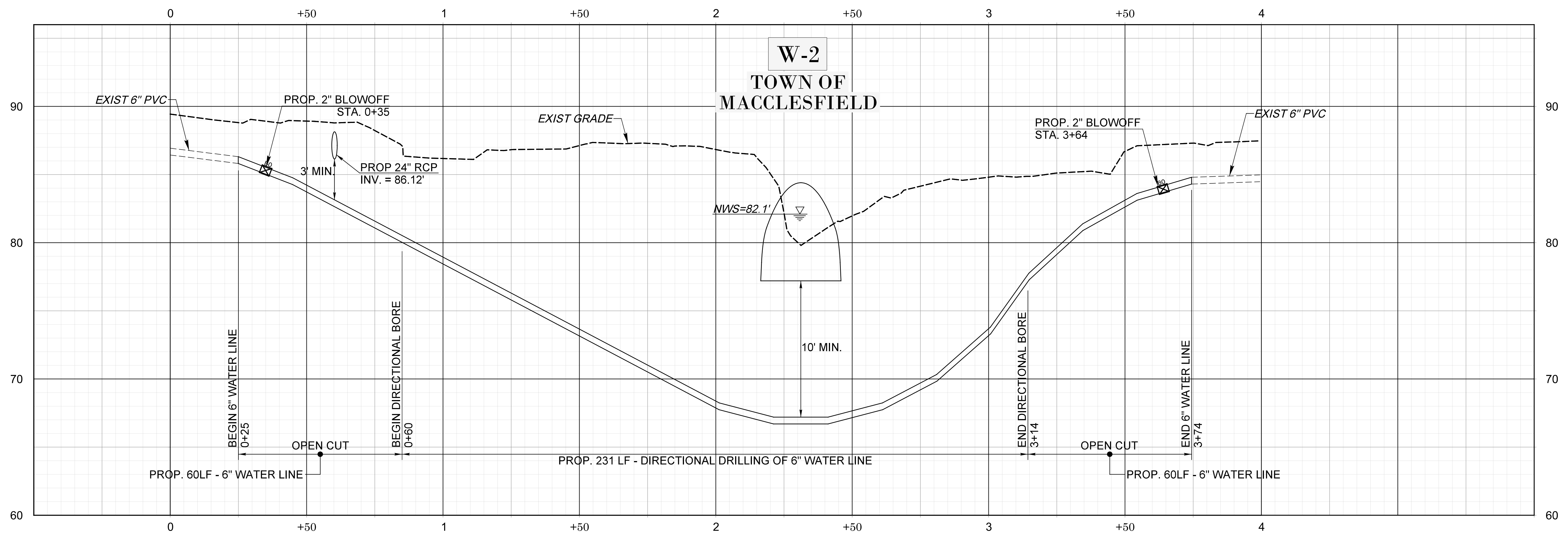
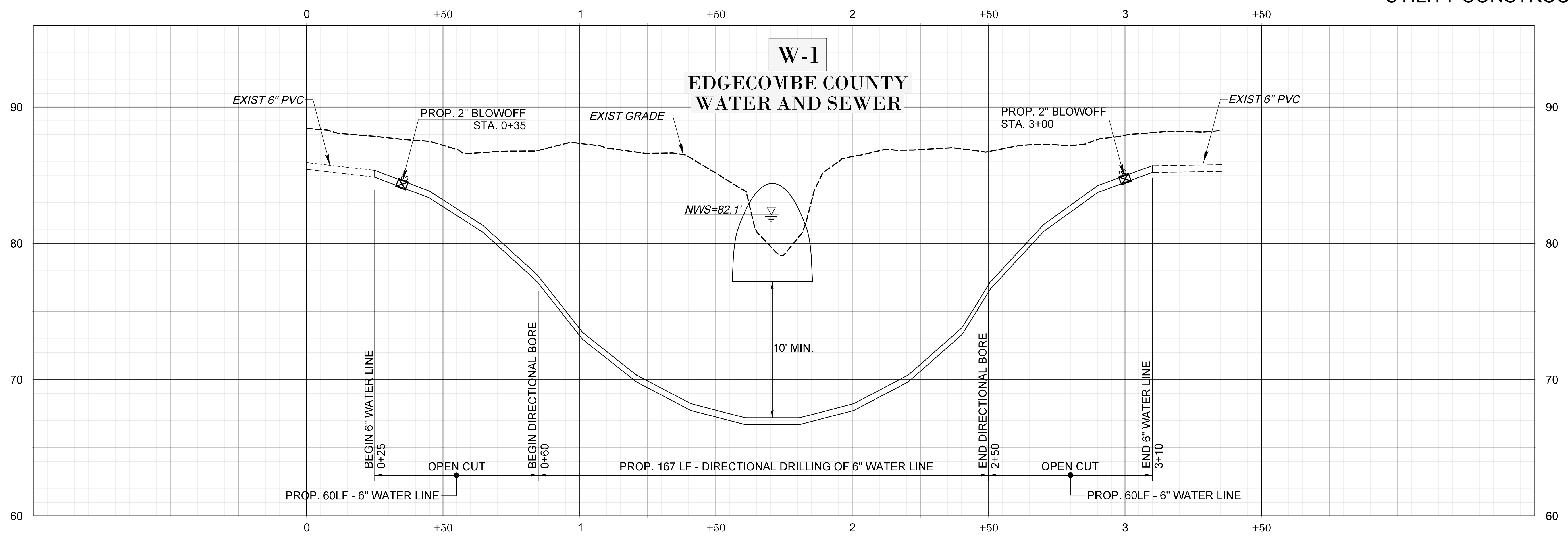
PREPARED BY

434 FAYETTEVILLE ST. #1500
RALEIGH, N.C. 27601
NC ENG P-1253

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

REVISIONS



09/08/09

TIP PROJECT: BP4.R023

CONTRACT:

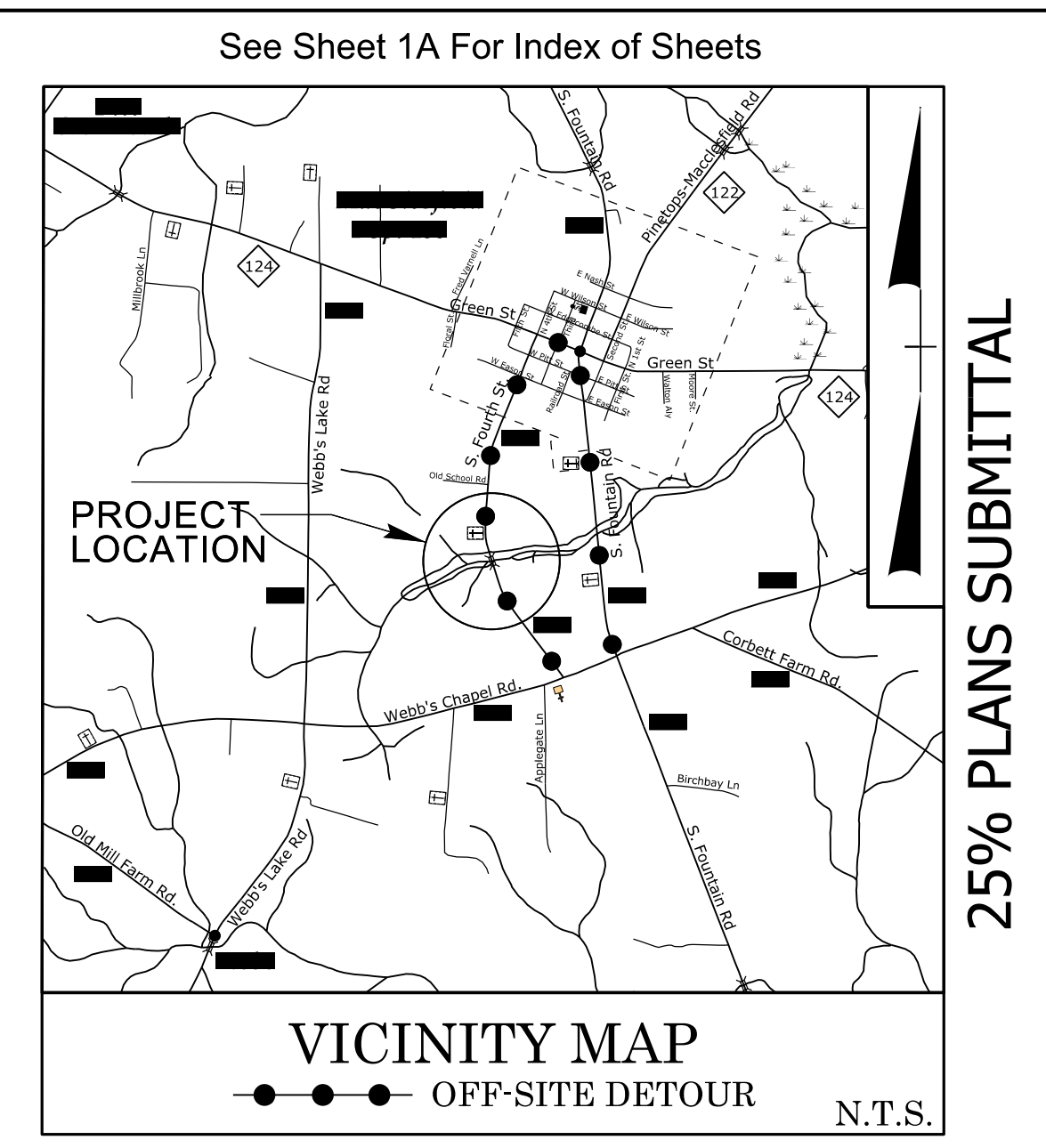
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP4.R023	UO-1	2

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

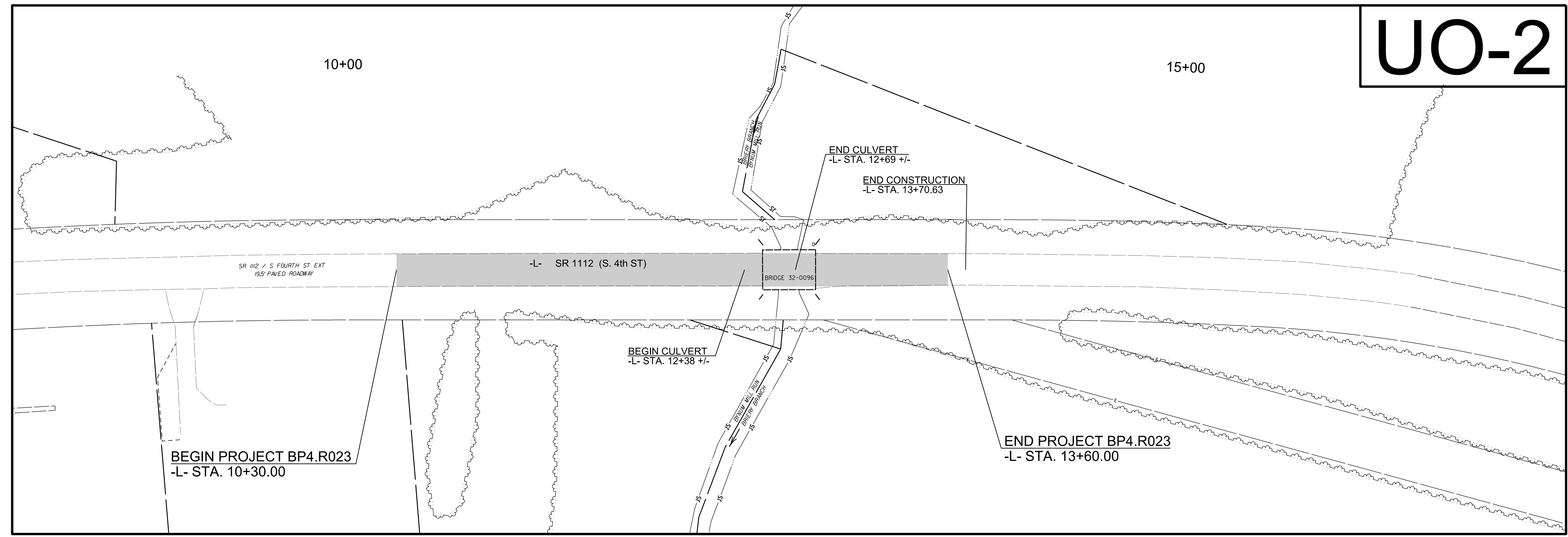
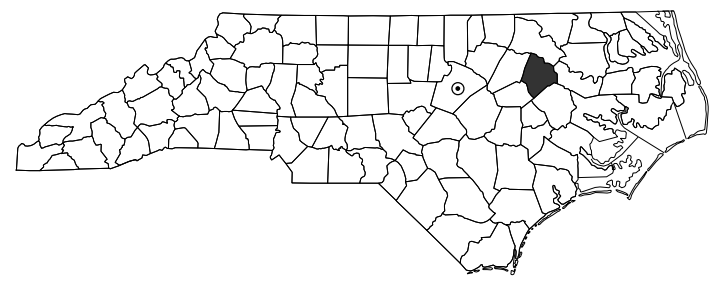
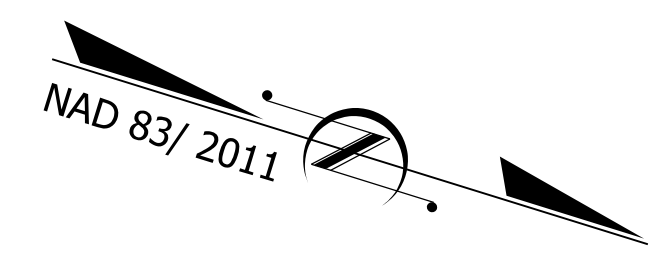
UTILITIES BY OTHERS PLANS
EDGEcombe COUNTY

LOCATION: *BRIDGE NO. 096 ON SR 1112 (S. 4TH ST.)
OVER BYNUM MILL RUN*

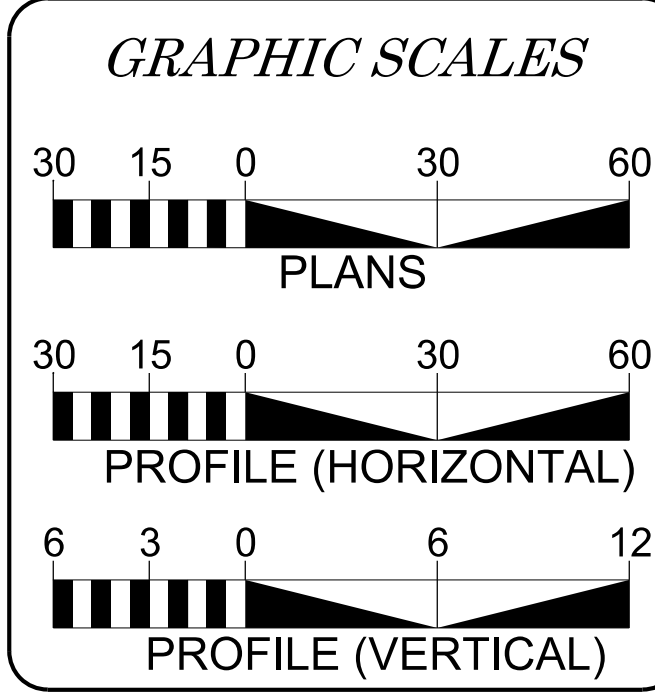
TYPE OF WORK: *UTILITIES BY OTHERS*



25% PLANS SUBMITTAL



UO-2



INDEX OF SHEETS

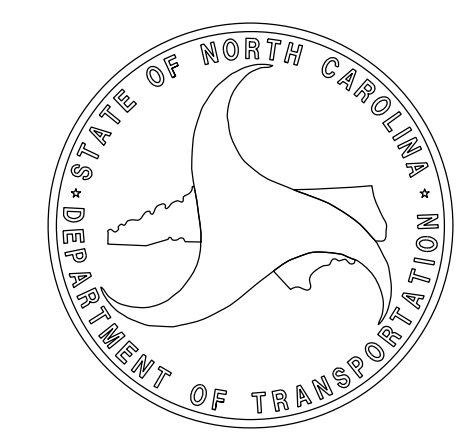
SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2	PLAN SHEET

UTILITY OWNERS WITH CONFLICTS:

A. NEXGEN BROADBAND (INACTIVE)- TELECOMMUNICATIONS
B. PITT & GREENE EMC - POWER

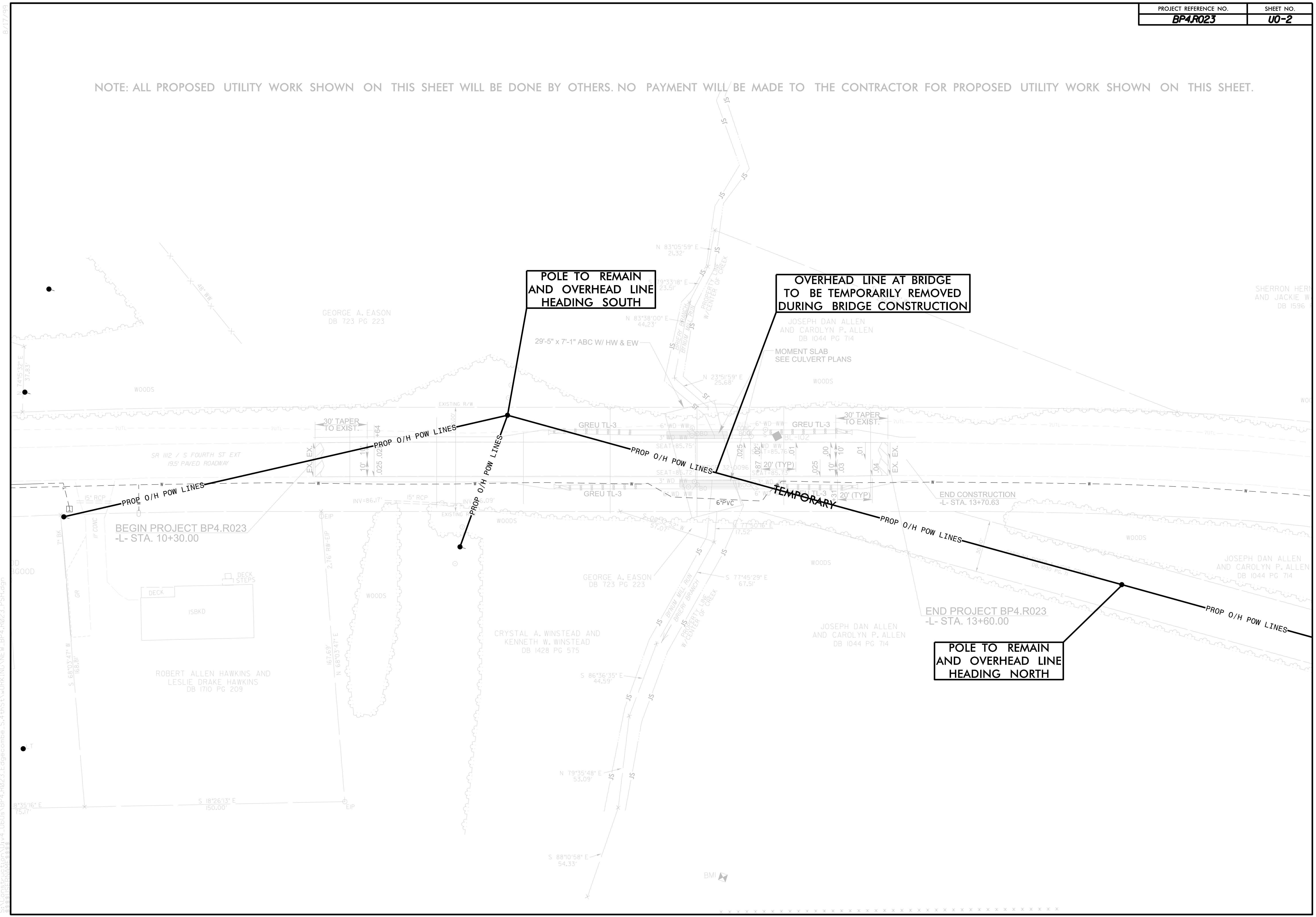
DIVISION OF HIGHWAYS
DIVISION 4
509 WARD BLVD
WILSON, NC 27895

KYLE PLEASANT PROJECT UTILITIES COORDINATOR



ADDISON GAINNEY, PE
PROJECT CONTACT #1

NOTE: ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR PROPOSED UTILITY WORK SHOWN ON THIS SHEET.



31-JAN-2024 16:59
 S:\Construction\BP4.R023_Edgecombe_S4\4\4\St\w\WORKING\NEW_BP4.R023_PSH.dgn
 8/17/23

SHERRON HER
AND JACKIE W
DB 1596

JOSEPH DAN ALLEN
AND CAROLYN P. ALLEN
DB 1044 PG 714

BEGIN PROJECT BP4.R023
-L- STA. 10+30.00

END PROJECT BP4.R023
-L- STA. 13+60.00

POLE TO REMAIN
AND OVERHEAD LINE
HEADING NORTH

POLE TO REMAIN
AND OVERHEAD LINE
HEADING SOUTH

OVERHEAD LINE AT BRIDGE
TO BE TEMPORARILY REMOVED
DURING BRIDGE CONSTRUCTION

TEMPORARY

END CONSTRUCTION
-L- STA. 13+70.63



ROBERT ALLEN HAWKINS AND
LESLIE DRAKE HAWKINS
DB 1710 PG 209

GEORGE A. EASON
DB 723 PG 223

CRYSTAL A. WINSTEAD AND
KENNETH W. WINSTEAD
DB 1428 PG 575

GEORGE A. EASON
DB 723 PG 223

JOSEPH DAN ALLEN
AND CAROLYN P. ALLEN
DB 1044 PG 714

SR 112 / S FOURTH ST EXT
19.5' PAVED ROADWAY

WOODS

WOODS

WOODS

WOODS

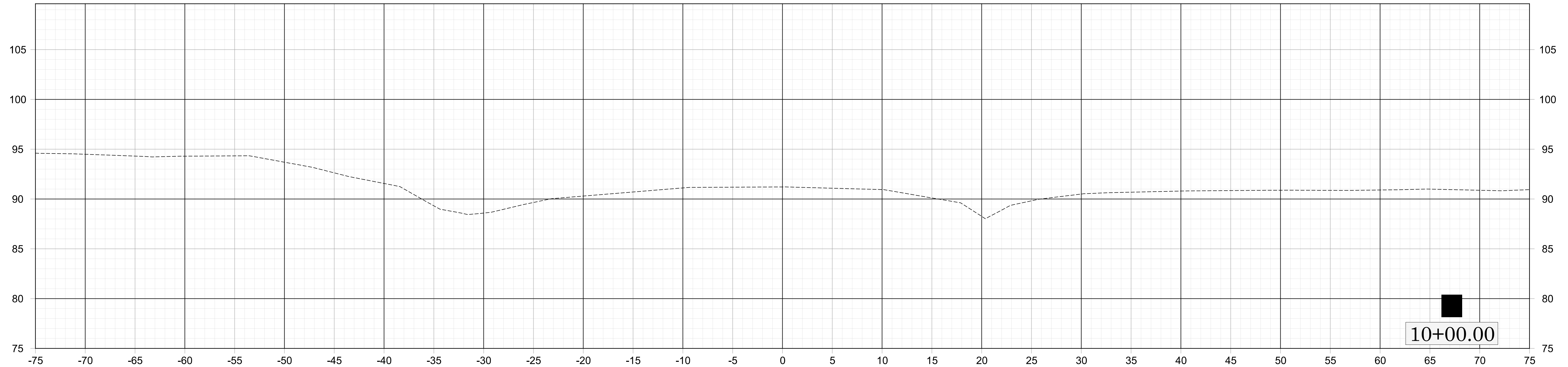
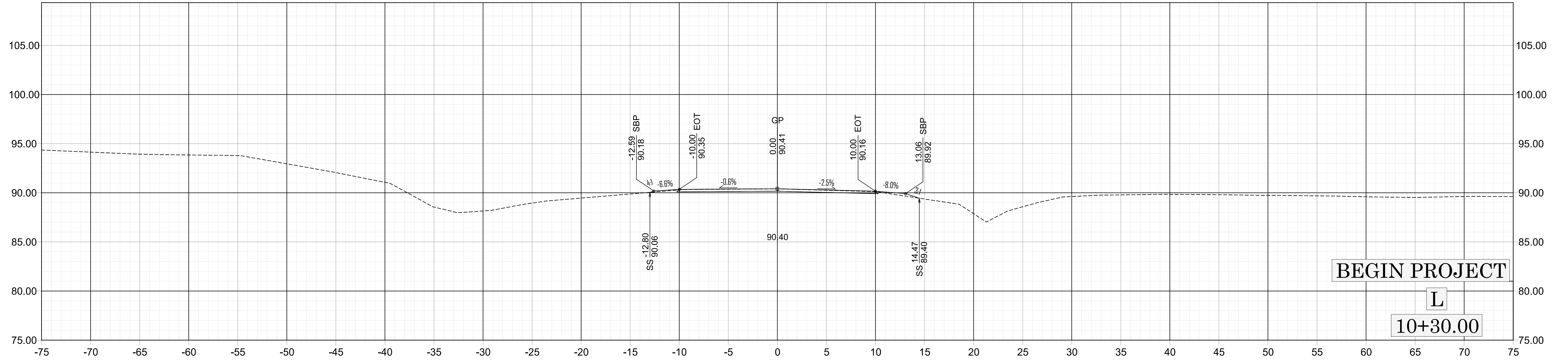
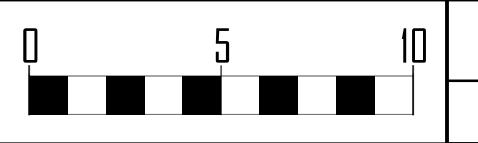
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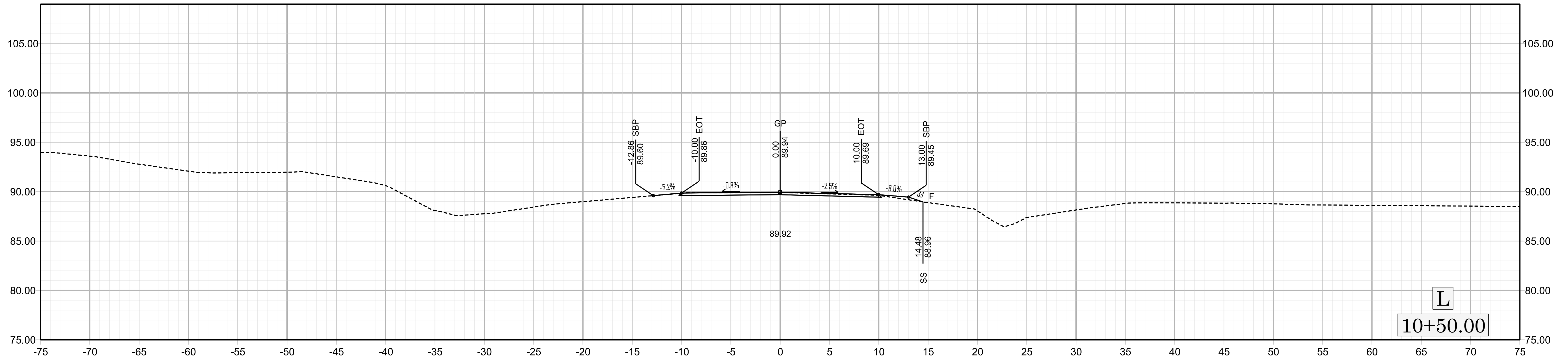
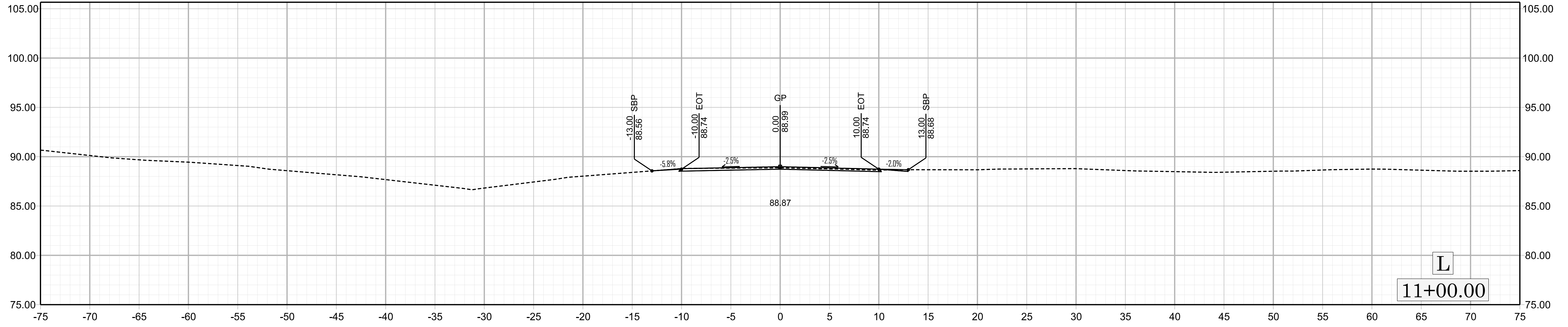
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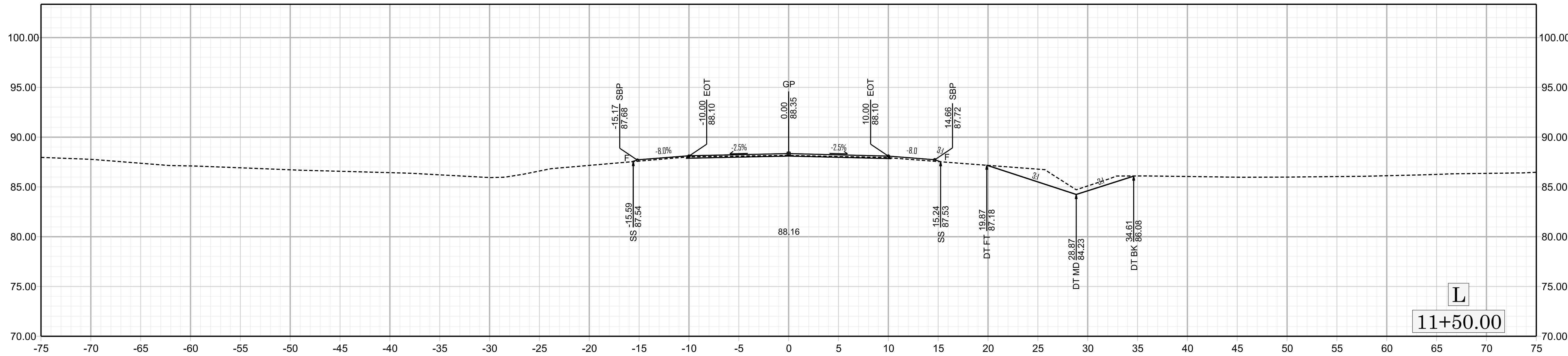
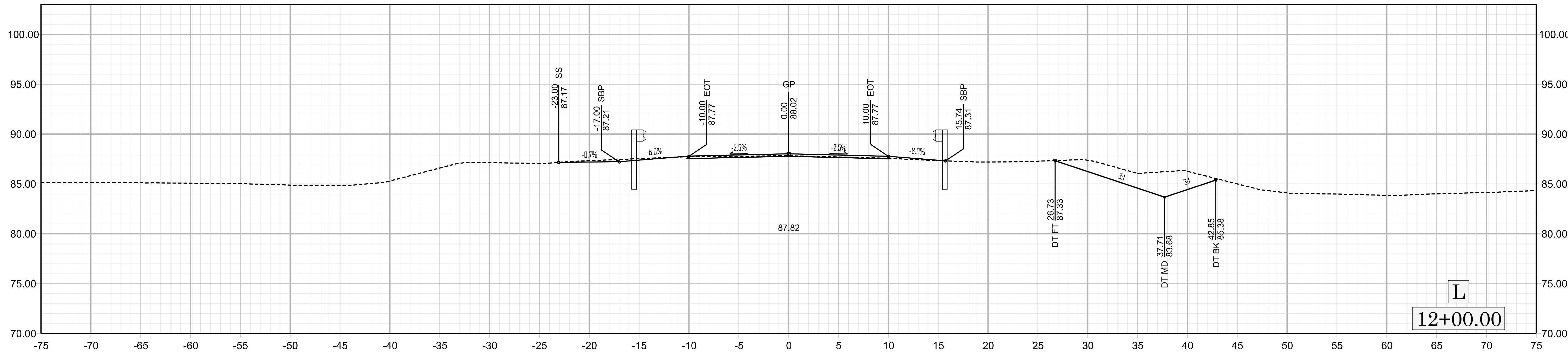
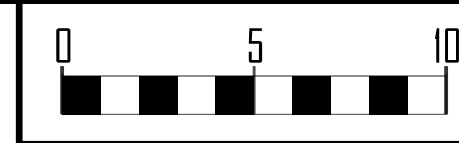
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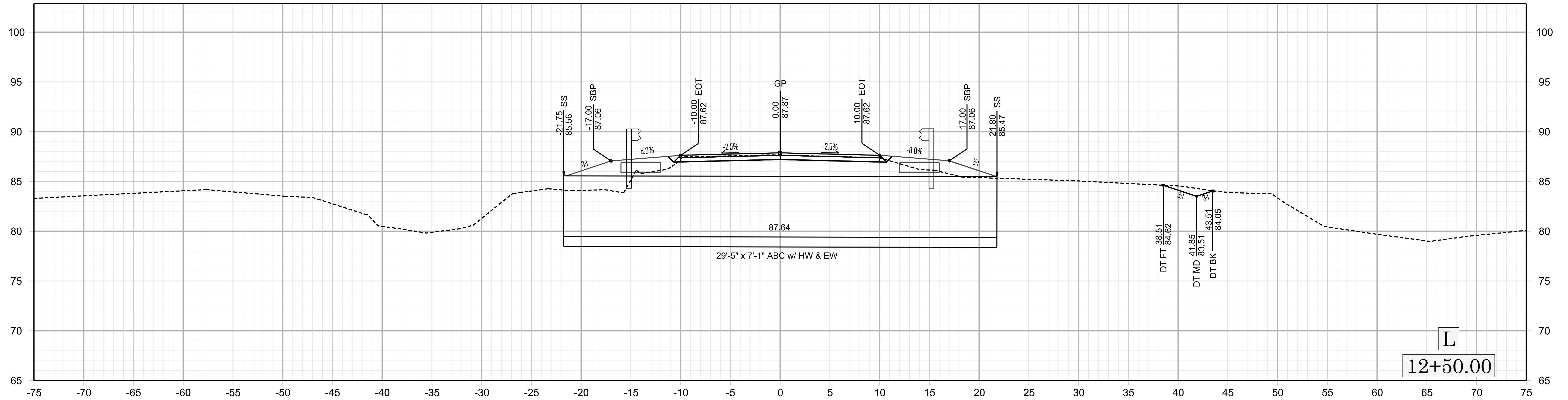
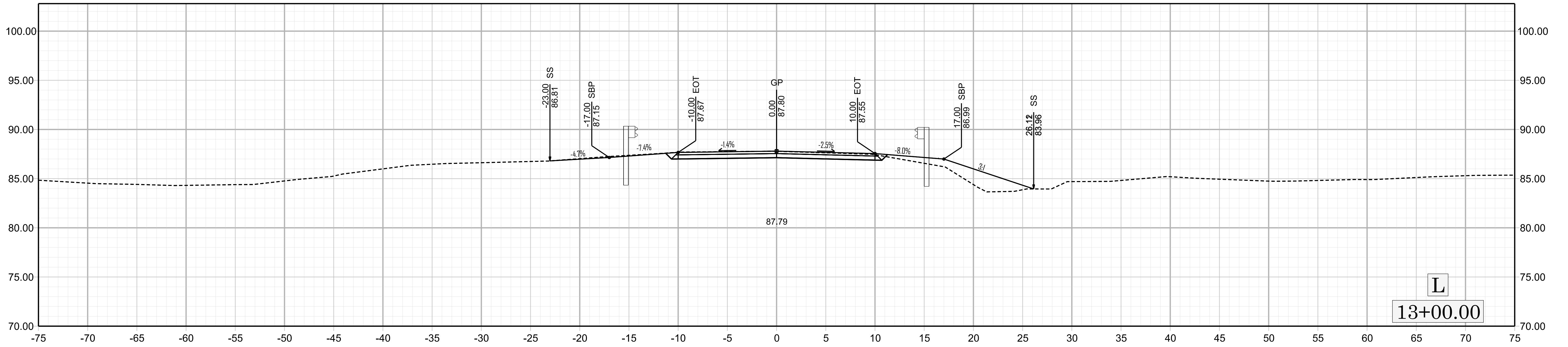
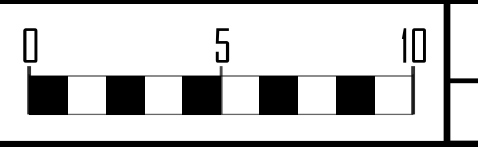
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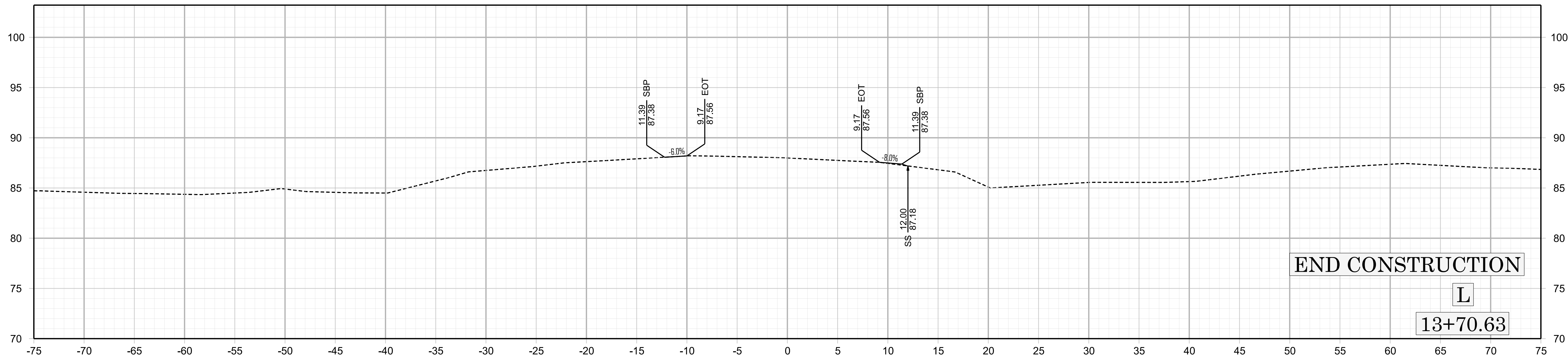
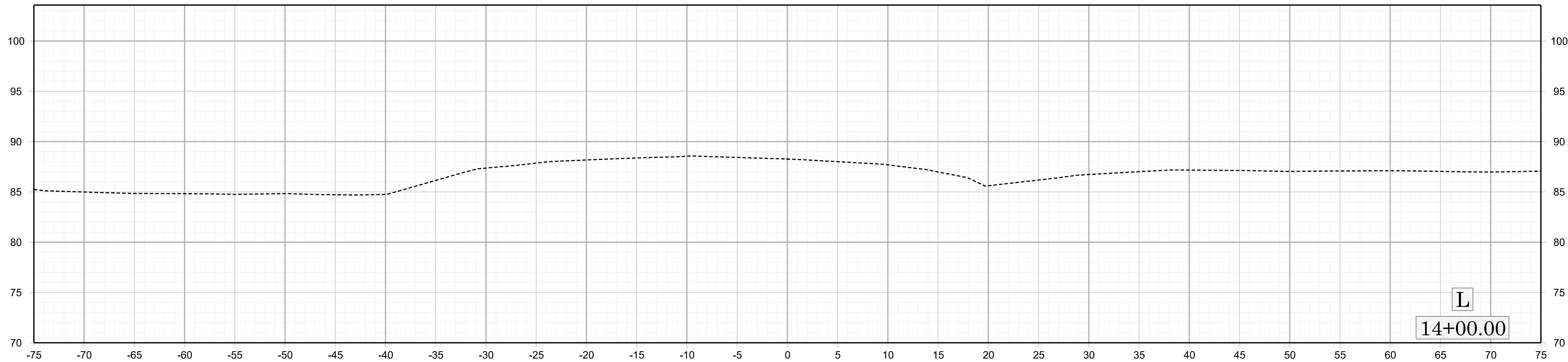
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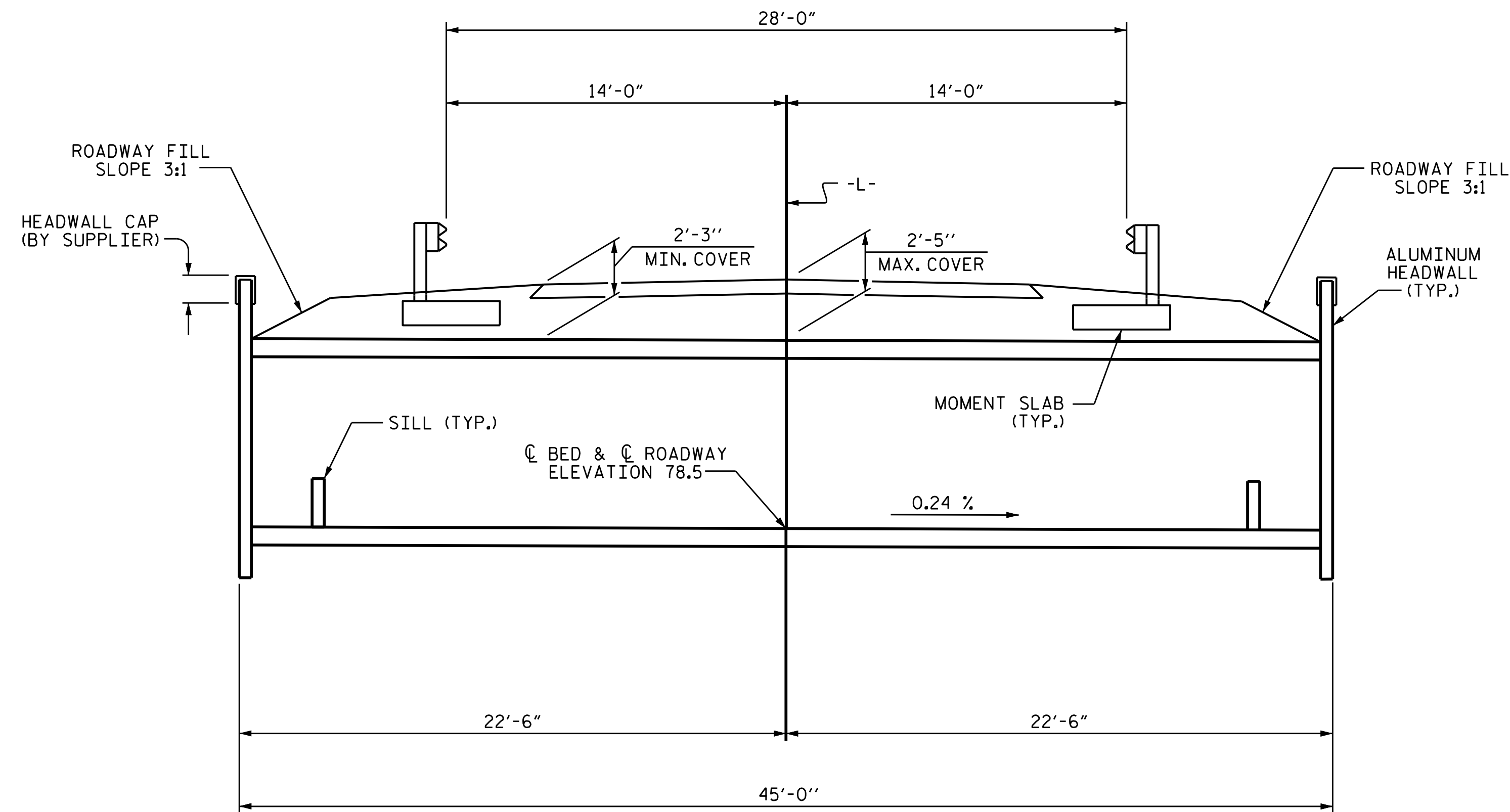




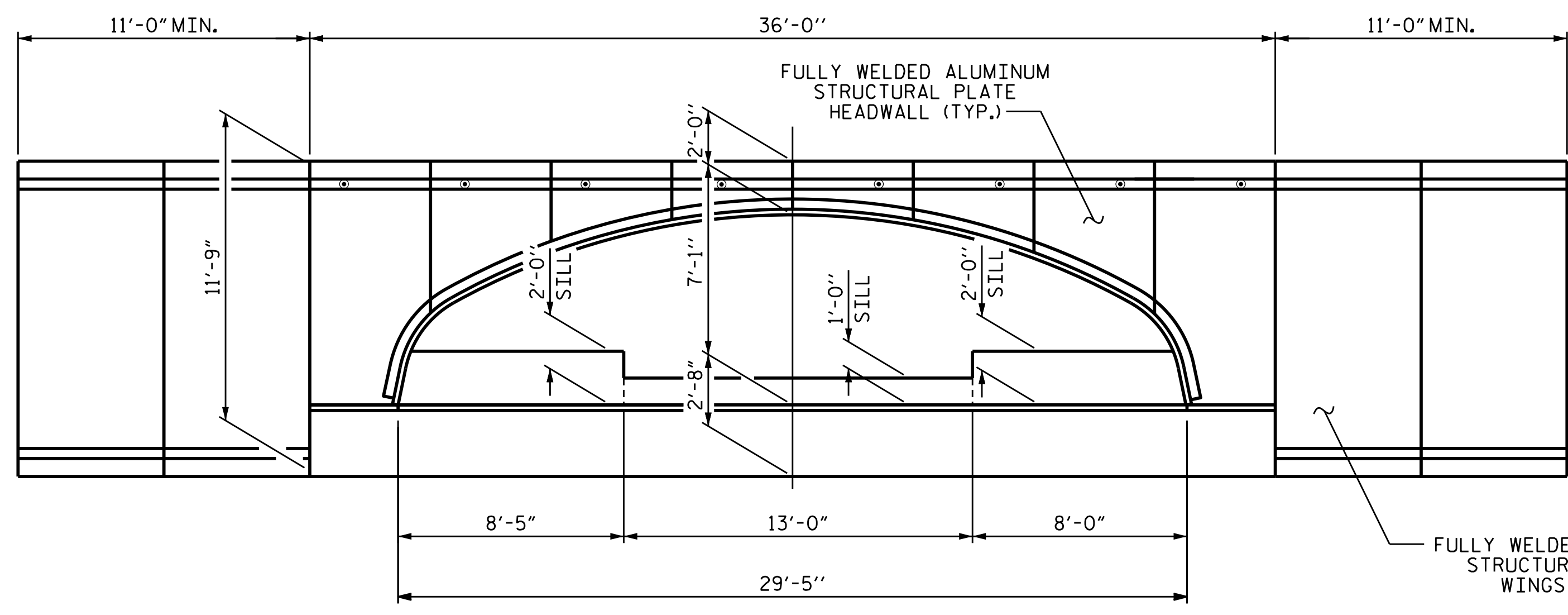




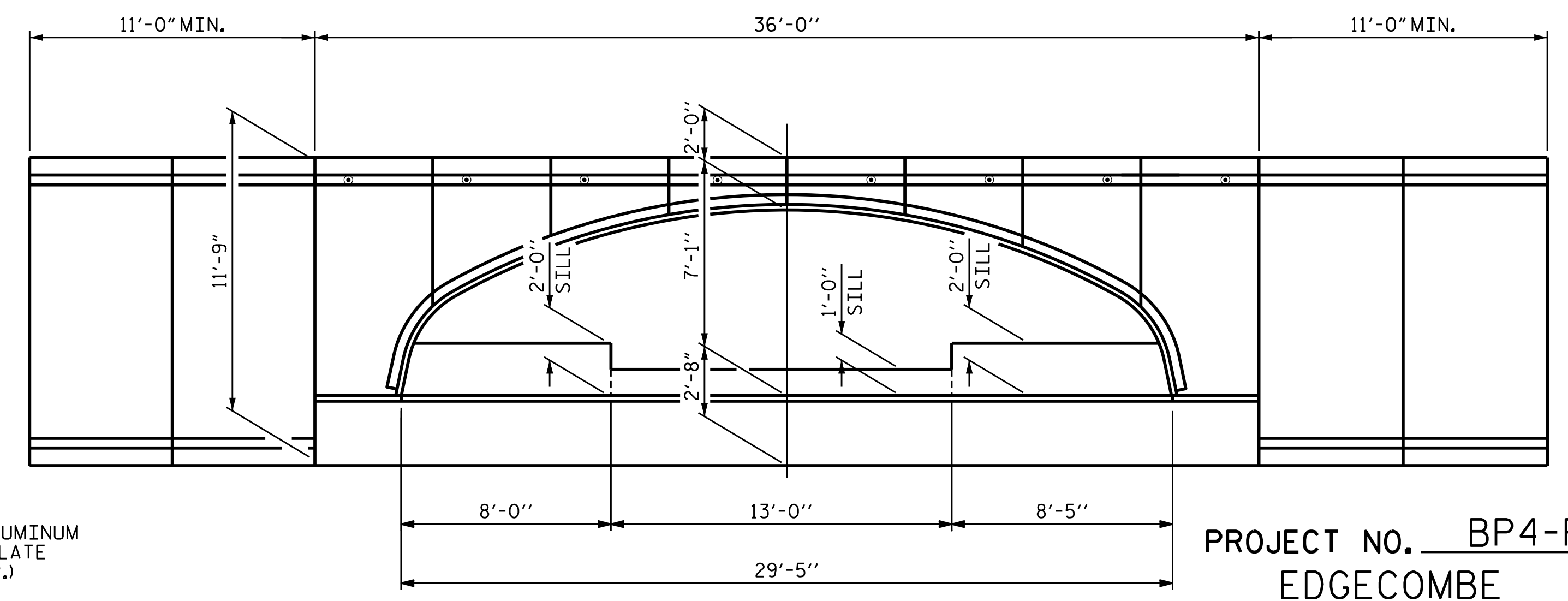




CULVERT SECTION NORMAL TO ROADWAY



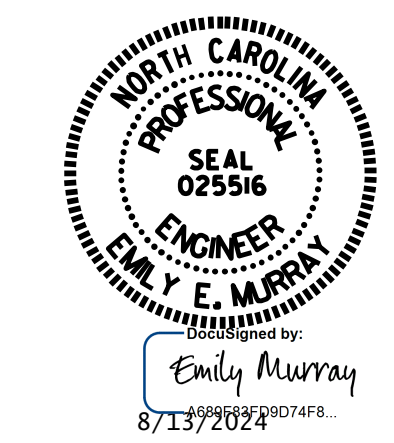
INLET END ELEVATION



OUTLET END ELEVATION

PROJECT NO. BP4-R023
EDGEcombe COUNTY
 STATION: 12+61.74 -L-

SHEET 2 OF 3



VOLKERT
 5430 Wade Park Blvd., Suite 410
 Raleigh, NC 27607
 Tel. 919-854-0344 Fax. 919-854-0355
 NC License No. F-0765

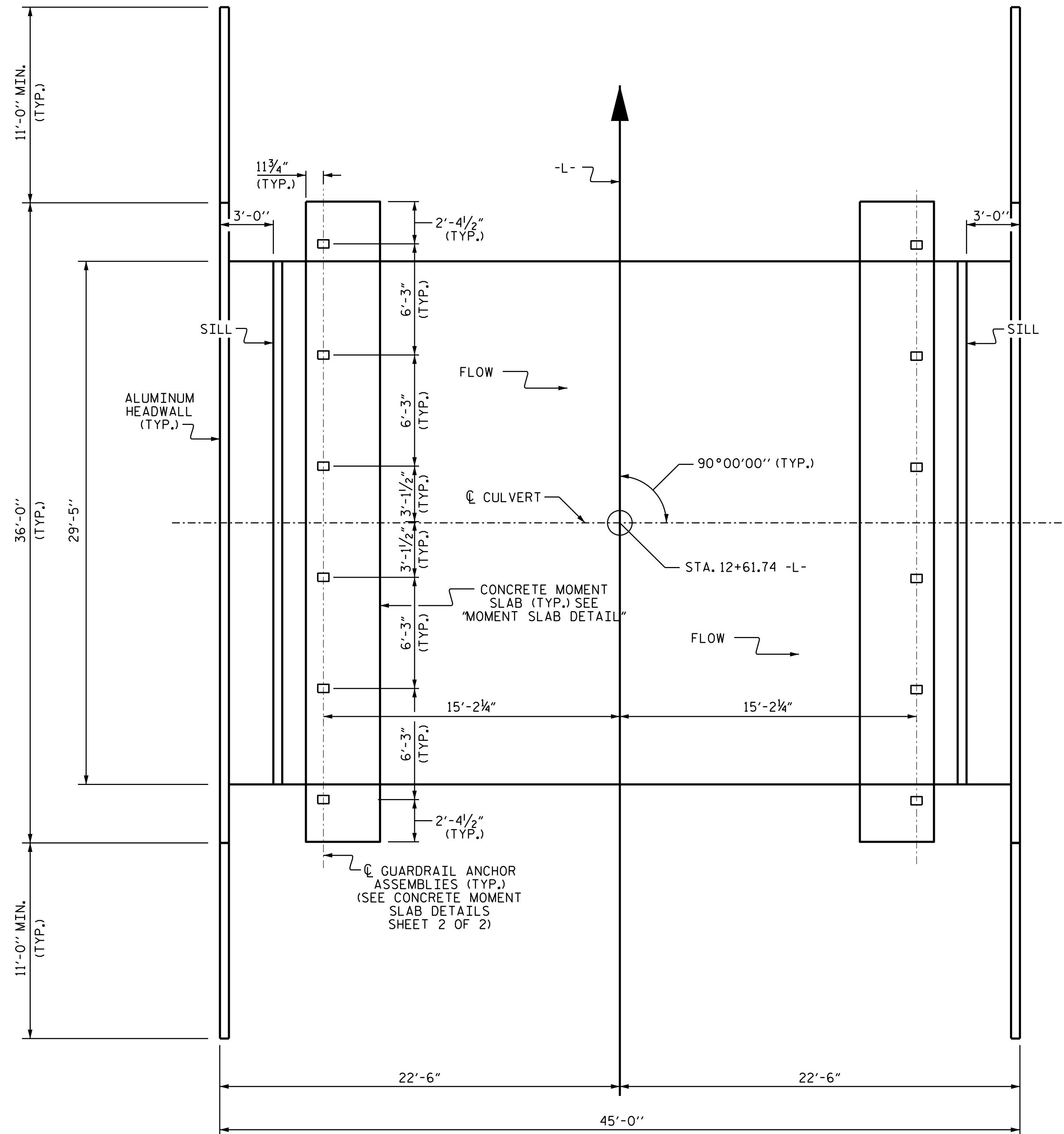
DOCUMENT NOT CONSIDERED
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 SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

29'-5" X 7'-1"
 ALUMINUM
 BOX CULVERT
 90°00'00" SKEW

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	C-2
1			3			TOTAL SHEETS
2			4			5

DRAWN BY : D. A. GLADDEN DATE : 6/23
 CHECKED BY : A. Y. WU DATE : 3/24
 DESIGN ENGINEER OF RECORD: E. E. MURRAY DATE : 3/24



PLAN OF CULVERT

PROJECT NO. BP4-R023
EDGEcombe COUNTY
 STATION: 12+61.74 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 29'-5" X 7'-1"
 ALUMINUM
 BOX CULVERT
 90°00'00" SKEW

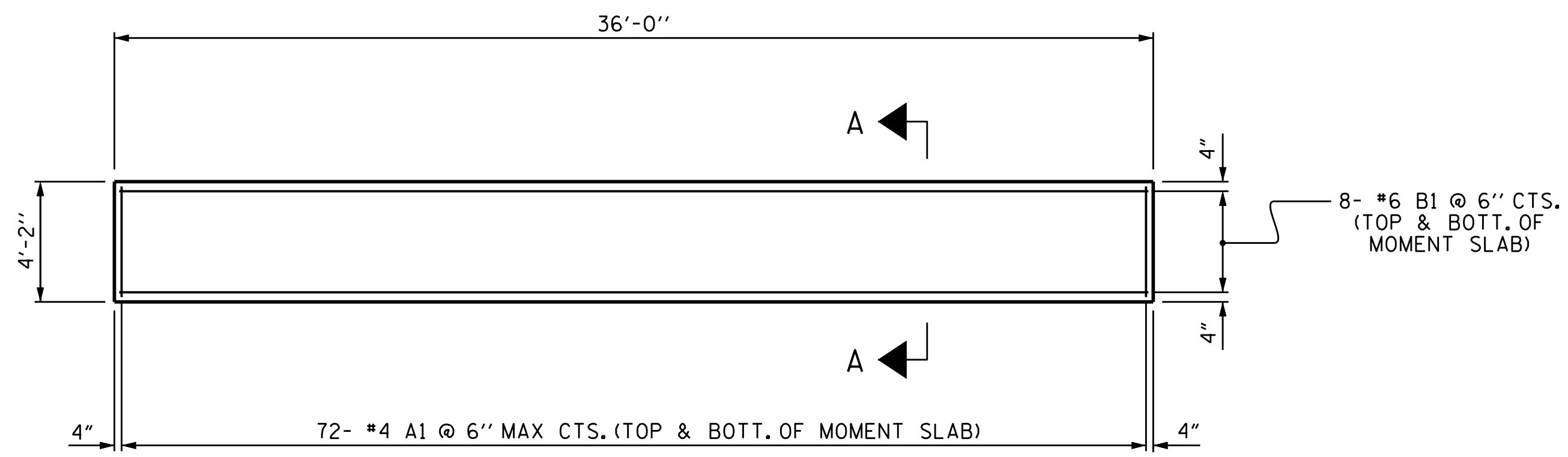


VOLKERT
 5430 Wade Park Blvd., Suite 410
 Raleigh, NC 27607
 Tel. 919-854-0344 Fax. 919-854-0355
 NC License No. F-0765

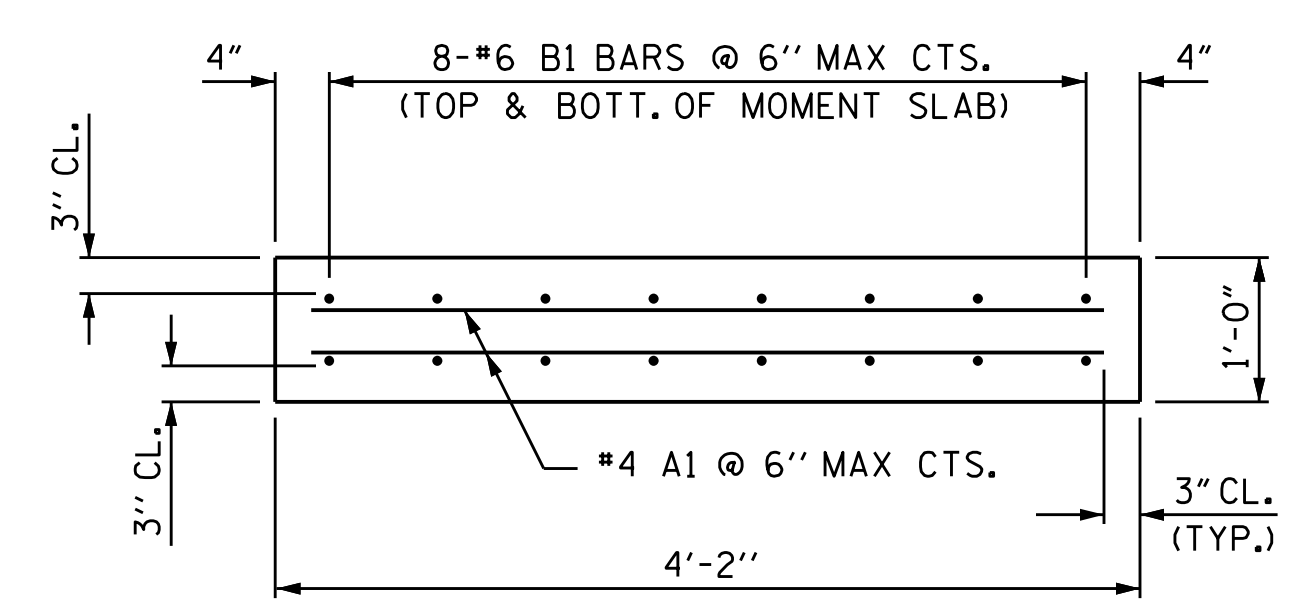
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	C-3
1			3			TOTAL SHEETS
2			4			5

DRAWN BY : D. A. GLADDEN DATE : 6/23
 CHECKED BY : A. Y. WU DATE : 3/24
 DESIGN ENGINEER OF RECORD: E. E. MURRAY DATE : 3/24



PLAN OF CONCRETE MOMENT SLAB



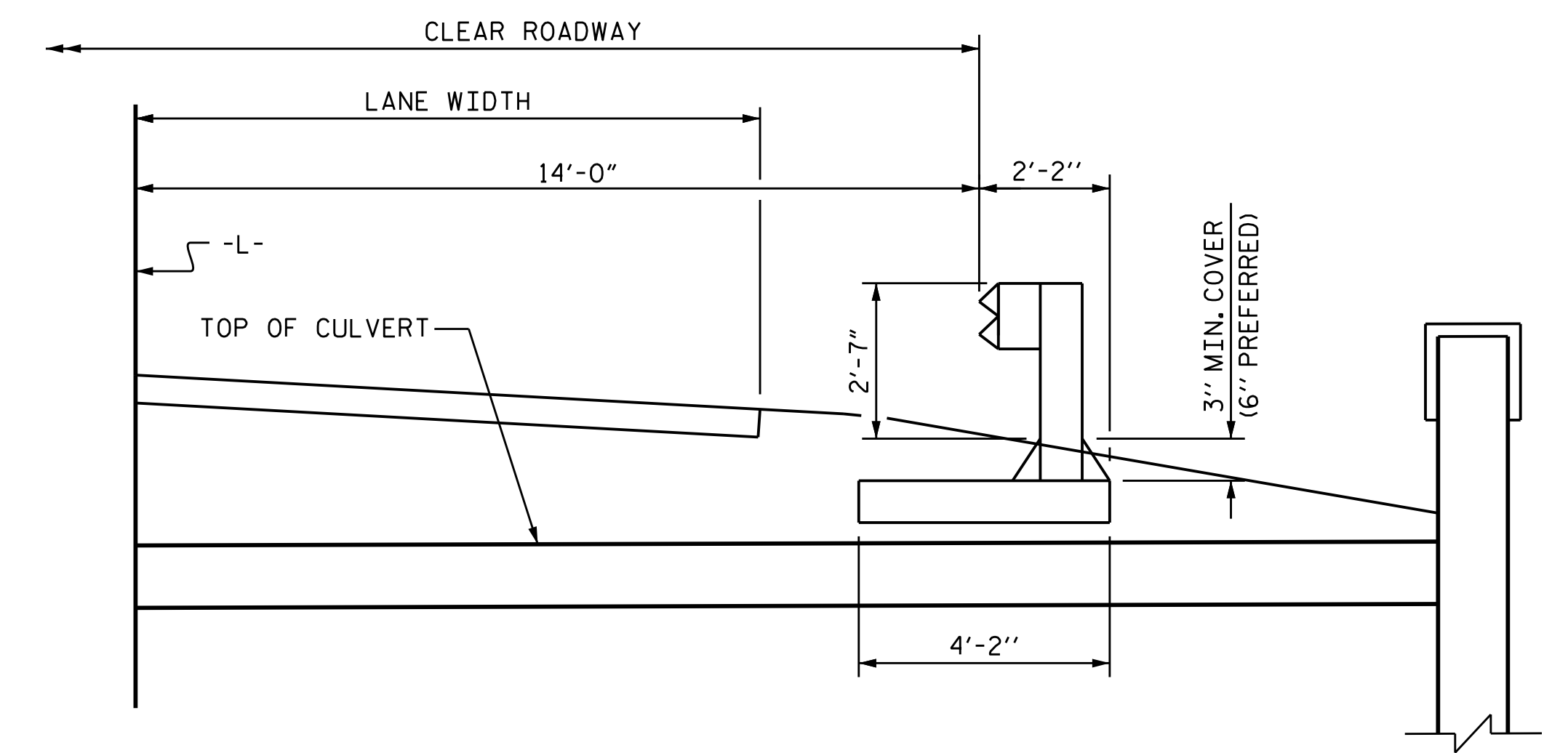
SECTION A-A

NOTE: ALSO SEE SECTION A-A ON "CONCRETE MOMENT SLAB DETAILS" SHEET 2 OF 2.

NOTES

FOR GUARDRAIL ANCHORAGE TO MOMENT SLAB DETAILS, SEE SHEET 2 OF 2 AND NCDOT STD. DWG. 862.03, SHEET 7 OF 7.
 CONTRACTOR SHALL LAYOUT AND INSTALL ALL ANCHORS IN MOMENT SLABS PRIOR TO CASTING MOMENT SLAB CONCRETE.
 MOMENT SLAB REINFORCING STEEL MAY BE SHIFTED AS NECESSARY TO CLEAR GUARDRAIL ANCHOR ASSEMBLY. CARE SHOULD BE TAKEN TO KEEP THE SHIFTING OF REINFORCING STEEL TO A MINIMUM.

BILL OF MATERIAL FOR ONE MOMENT SLAB					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
A1	144	4	STR	3'-8"	353
B1	16	6	STR	35'-6"	853
REINFORCING STEEL				LBS.	1206
CLASS AA CONCRETE				CU. YD.	5.6



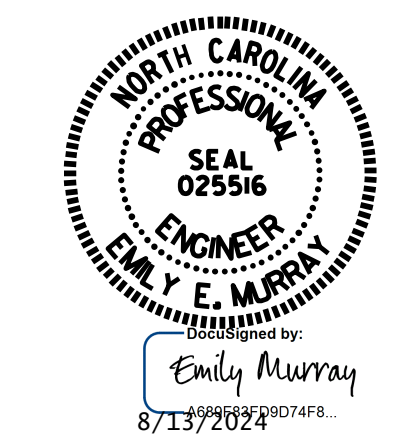
SECTION THRU SHOULDER

NOTE: FOR GUARDRAIL ANCHORAGE TO MOMENT SLAB DETAILS SEE SHEET 2 OF 2 AND NCDOT STD. DRAWING 862.03, SHEET 7 OF 9.

PROJECT NO. BP4-R023
EDGEcombe COUNTY
 STATION: 12+61.74 -L-

SHEET 1 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
CONCRETE MOMENT SLAB DETAILS



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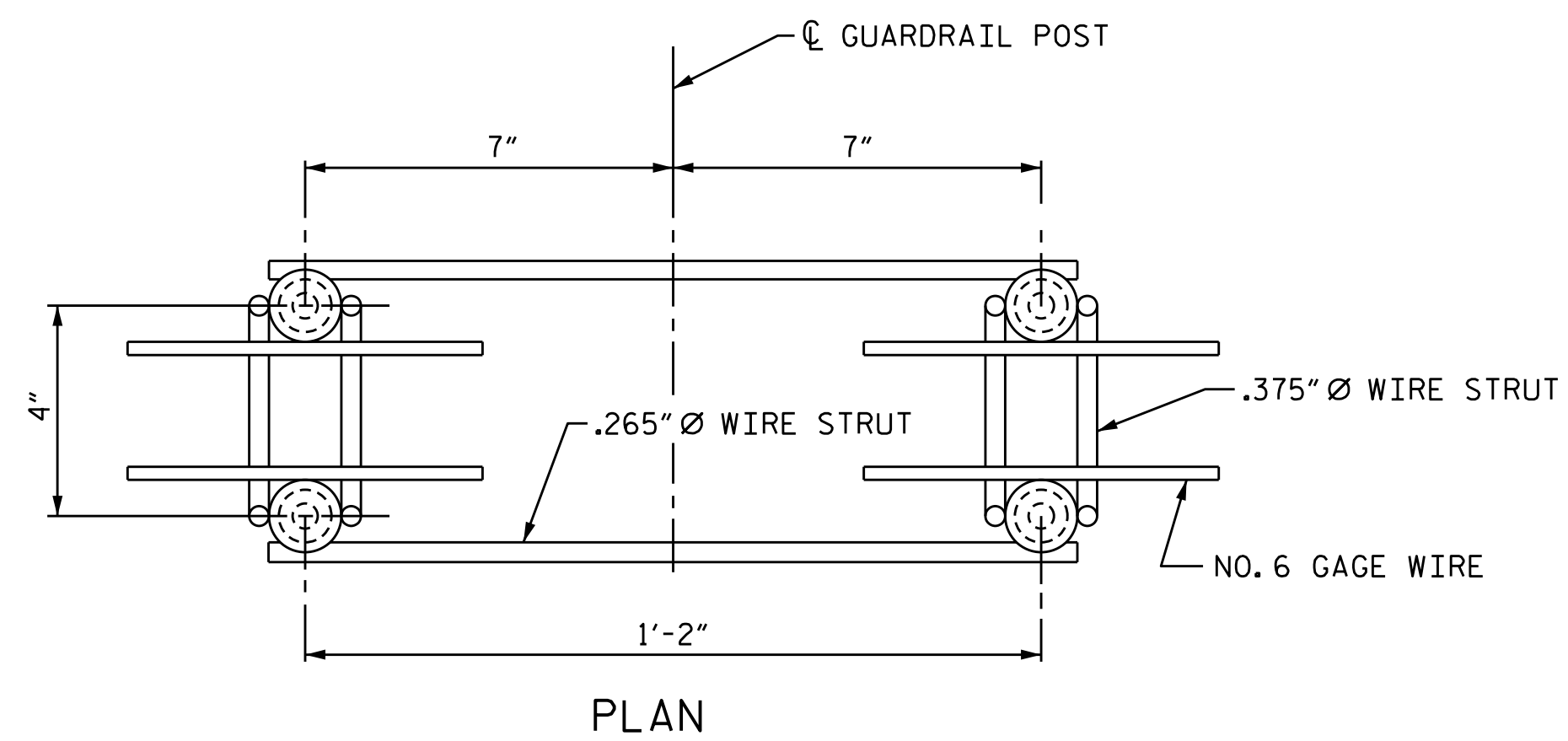
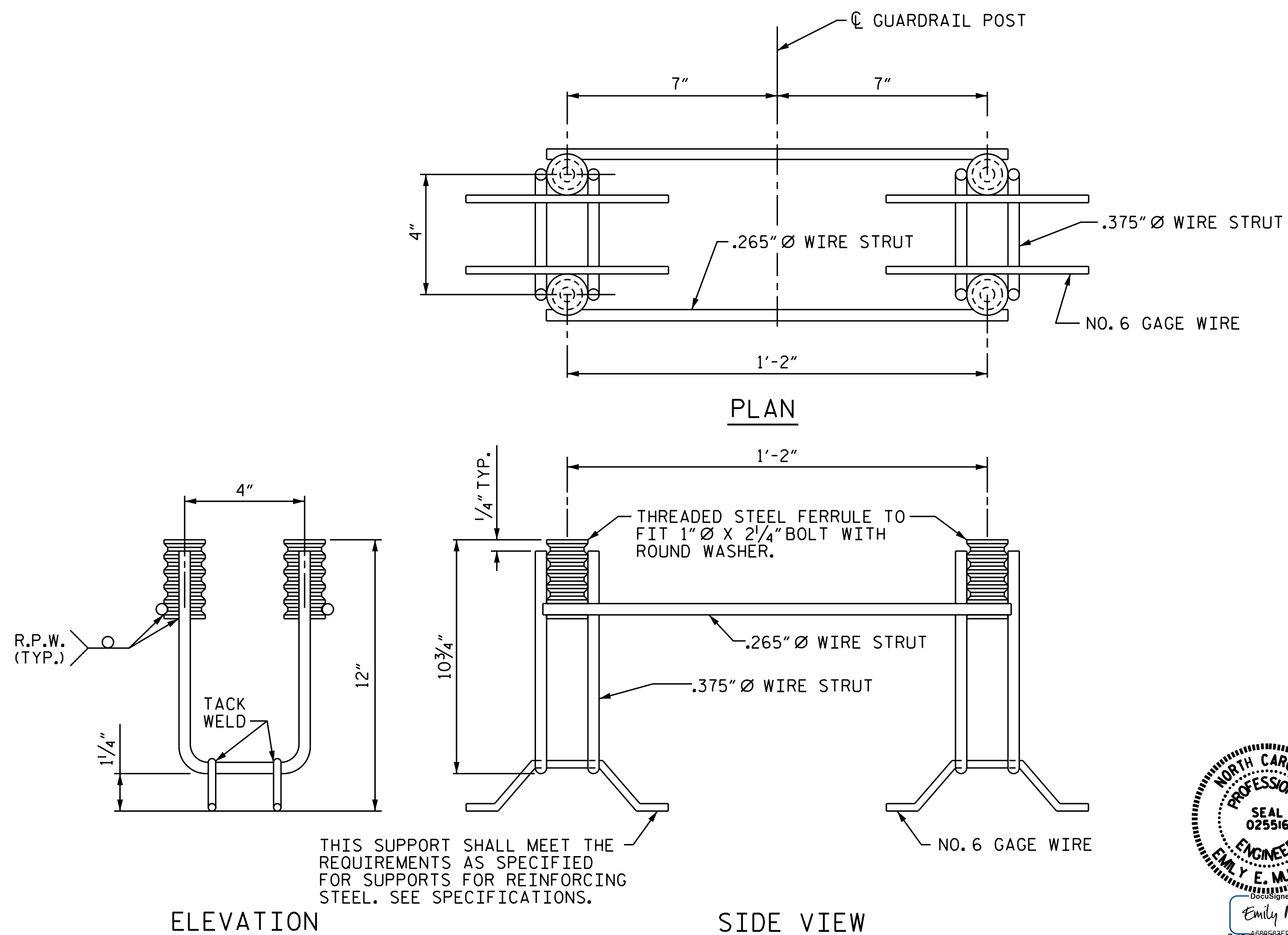
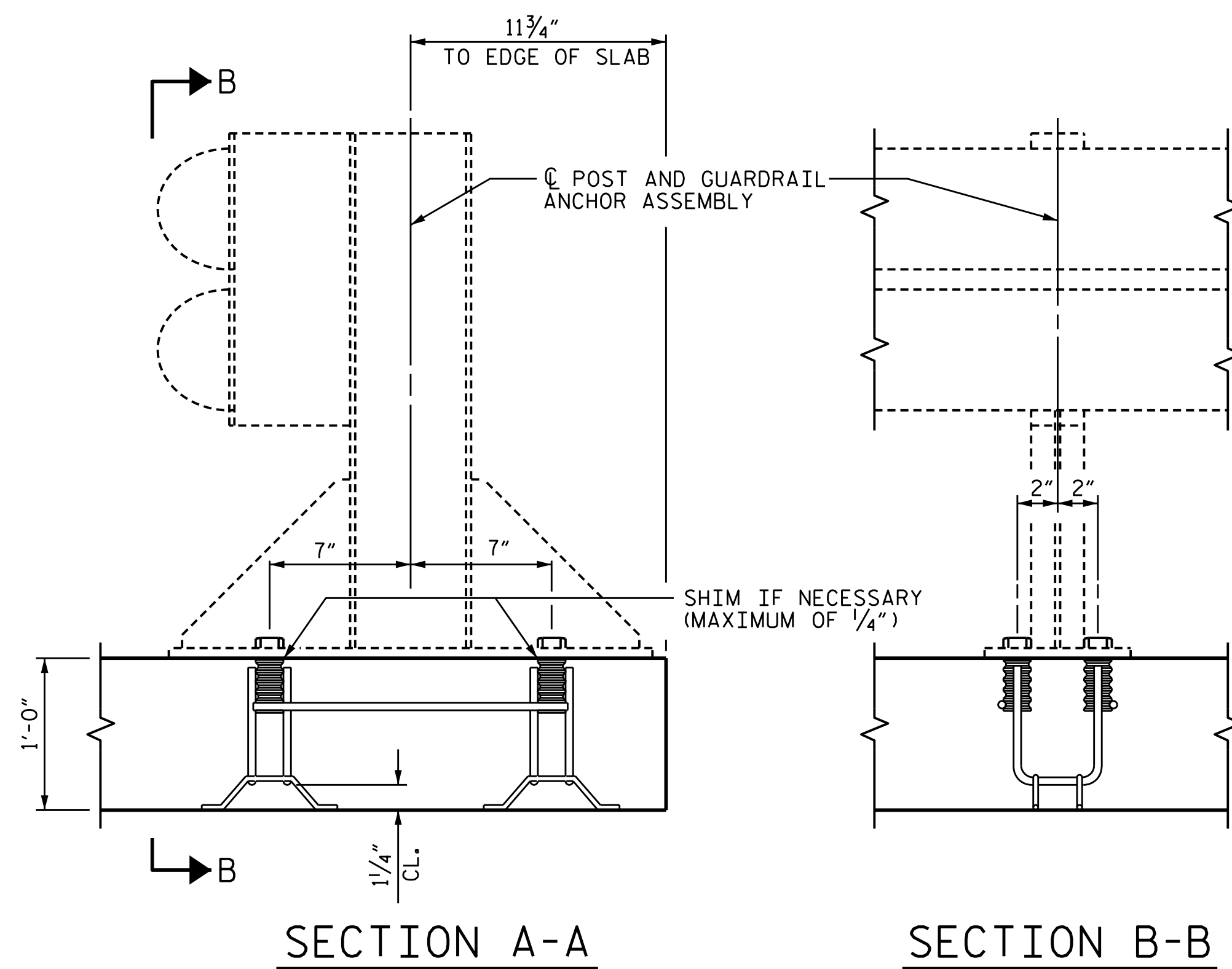
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	C-4
1			3			TOTAL SHEETS
2			4			5

DRAWN BY : D. A. GLADDEN DATE : 6/23
 CHECKED BY : A. Y. WU DATE : 3/24
 DESIGN ENGINEER OF RECORD: E. E. MURRAY DATE : 3/24

NOTES

- THE GUARDRAIL ANCHOR ASSEMBLY SHALL CONSIST OF THE FOLLOWING COMPONENTS :
- A. FERRULES SHALL BE MADE FROM STEEL MEETING THE REQUIREMENTS OF AASHTO M169, GRADE 12L14 AND SHALL HAVE A MINIMUM LENGTH OF THREADS OF 2 1/2".
 - B. 4 - 1" Ø X 2 1/4" BOLTS WITH WASHERS, BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A307. BOLTS AND WASHERS SHALL BE GALVANIZED. (AT THE CONTRACTOR'S OPTION, STAINLESS STEEL BOLTS AND WASHERS MAY BE USED AS AN ALTERNATE FOR THE 1" Ø X 2 1/4" GALVANIZED BOLTS AND WASHERS. THEY SHALL CONFORM TO OR EXCEED THE MECHANICAL REQUIREMENTS OF ASTM A307. THE USE OF THIS ALTERNATE SHALL BE APPROVED BY THE ENGINEER.)
 - C. WIRE STRUTS SHOWN IN THE GUARDRAIL ANCHOR ASSEMBLY DETAIL ARE MINIMUM ALLOWABLE SIZE AND SHALL HAVE A MINIMUM TENSILE STRENGTH OF 100,000 P.S.I. AS AN OPTION, A 3/16" Ø WIRE STRUT WITH A MINIMUM TENSILE STRENGTH OF 90,000 PSI IS ACCEPTABLE.
- GUARDRAIL ANCHOR ASSEMBLY WITH BOLTS SHALL BE ASSEMBLED IN THE SHOP. BOLT THREADS MAY BE RECUT AS NECESSARY TO INSURE FIT.
- THE COST OF THE GUARDRAIL ANCHOR ASSEMBLY COMPLETE IN PLACE, SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR CLASS "AA" CONCRETE.
- FERRULES TO BE PLUGGED DURING POURING OF SLAB AS RECOMMENDED BY THE MANUFACTURER.
- AT THE CONTRACTOR'S OPTION, FERRULES WITH OPEN OR CLOSED ENDS MAY BE USED.
- PAYMENT FOR GUARDRAIL, POSTS, AND POST BASE PLATES IS INCLUDED IN ROADWAY PAY ITEMS.
- SLAB REINFORCING STEEL MAY BE SHIFTED AS NECESSARY TO CLEAR GUARDRAIL ANCHOR ASSEMBLY. CARE SHOULD BE TAKEN TO KEEP THE SHIFTING OF REINFORCING STEEL TO A MINIMUM.
- THE CONTRACTOR MAY USE ADHESIVELY ANCHORED ANCHOR BOLTS IN PLACE OF GUARDRAIL ANCHOR ASSEMBLY. LEVEL TWO FIELD TESTING IS REQUIRED, AND THE YIELD LOAD OF THE 1" Ø BOLT IS 21.8 KIPS. FOR ADHESIVELY ANCHORED ANCHOR BOLTS OR DOWELS, SEE STANDARD SPECIFICATIONS.

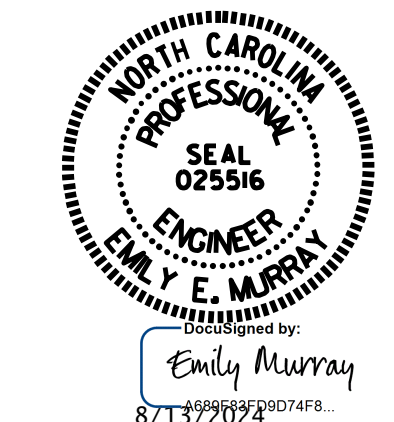


THIS SUPPORT SHALL MEET THE REQUIREMENTS AS SPECIFIED FOR SUPPORTS FOR REINFORCING STEEL. SEE SPECIFICATIONS.

PROJECT NO. BP4-R023
EDGEcombe COUNTY
 STATION: 12+61.74 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**CONCRETE MOMENT
 SLAB DETAILS**
 ANCHORAGE DETAILS FOR
 GUARDRAIL ANCHOR ASSEMBLY



ASSEMBLED BY : D. A. GLADDEN	DATE : 6/23
CHECKED BY : A. Y. WU	DATE : 3/24
DRAWN BY : FCJ 6/88	REV. 10/11 MAA/GM
CHECKED BY : ARB 6/88	REV. 12/17 MAA/THC
	REV. 6/19 MAA/THC

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	C-5
1			3			TOTAL SHEETS
2			4			5

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STANDARD NOTES

DESIGN DATA:

SPECIFICATIONS	AASHTO (CURRENT)
LIVE LOAD	SEE PLANS
IMPACT ALLOWANCE	SEE AASHTO
STRESS IN EXTREME FIBER OF STRUCTURAL STEEL - AASHTO M270 GRADE 36	20,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50W ...	27,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50	27,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION - GRADE 60	24,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR	SEE AASHTO
STRUCTURAL TIMBER - TREATED OR UNTREATED EXTREME FIBER STRESS	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN OF TIMBER	375 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH	30 LBS. PER CU. FT. (MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2024 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N. C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED $\frac{3}{4}$ " WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO $1\frac{1}{2}$ " RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A $\frac{1}{4}$ " FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A $\frac{1}{4}$ " RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.

ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE $\frac{7}{8}$ " \emptyset SHEAR STUDS FOR THE $\frac{3}{4}$ " \emptyset STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - $\frac{7}{8}$ " \emptyset STUDS FOR 4 - $\frac{3}{4}$ " \emptyset STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF $\frac{7}{8}$ " \emptyset STUDS ALONG THE BEAM AS SHOWN FOR $\frac{3}{4}$ " \emptyset STUDS BASED ON THE RATIO OF 3 - $\frac{7}{8}$ " \emptyset STUDS FOR 4 - $\frac{3}{4}$ " \emptyset STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0".

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST $\frac{5}{16}$ " IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY $\frac{1}{16}$ " OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.

METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINIS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.