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7/24/2017

TIP PROJECT: I-4700

CONTRACT: C204266

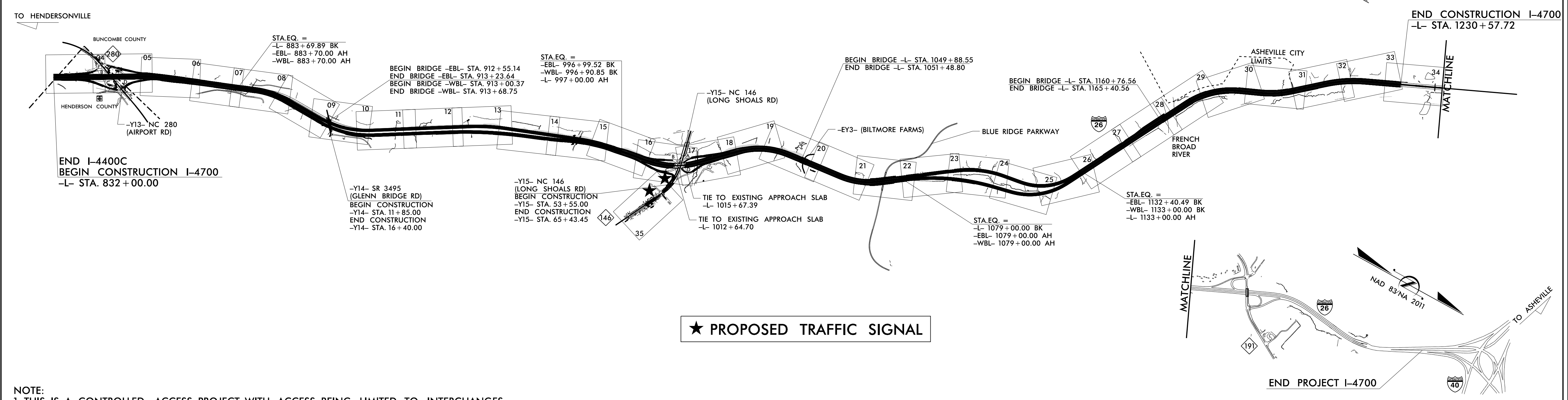
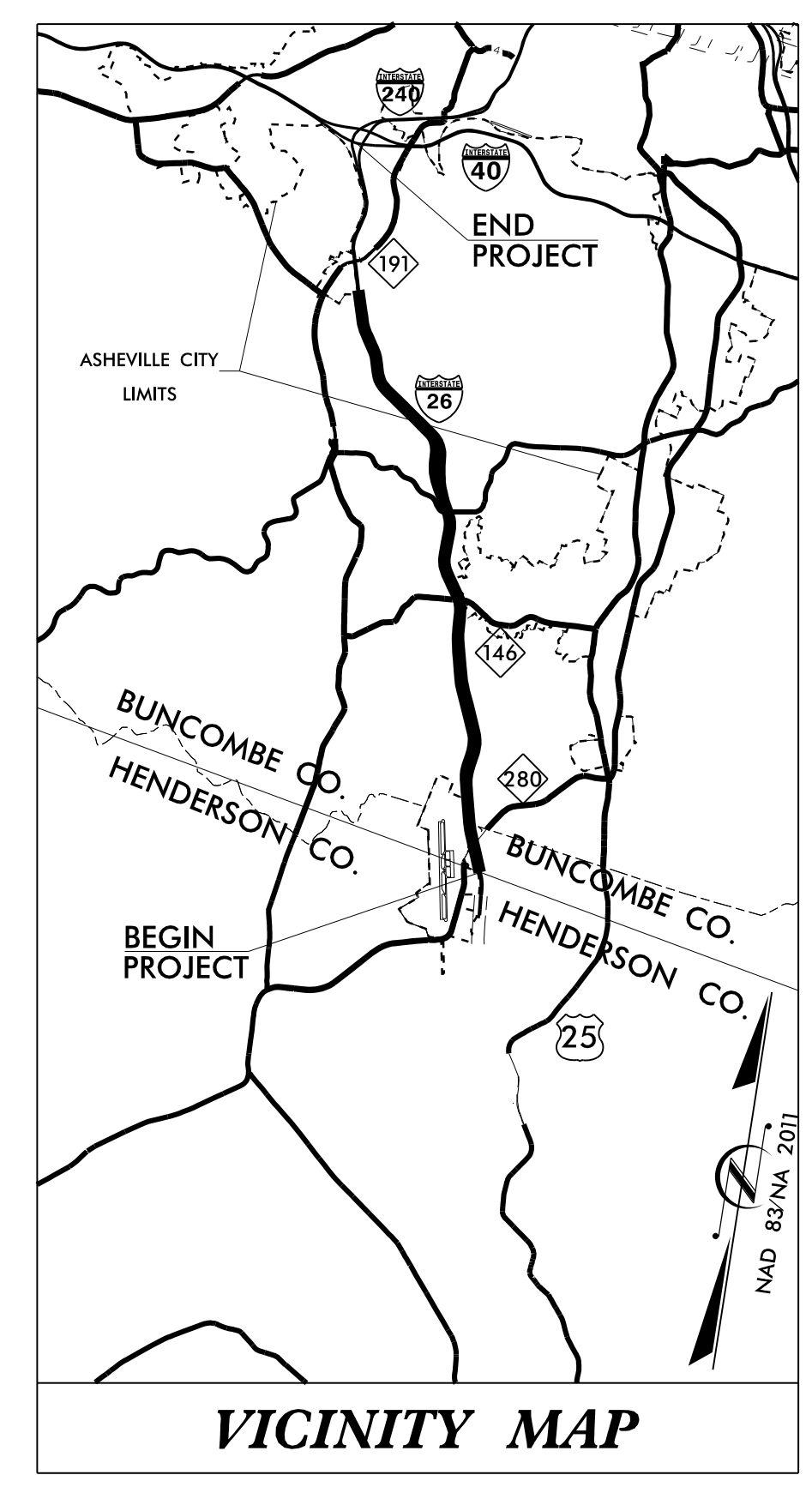
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BUNCOMBE & HENDERSON COUNTIES

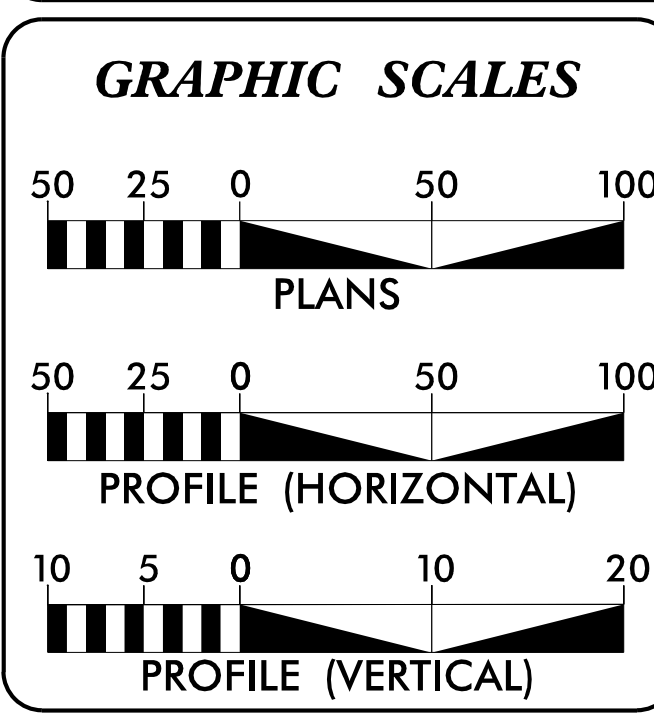
LOCATION: I-26 FROM NC 280 (EXIT 40) TO I-40 AT ASHEVILLE

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURES, CULVERTS,
RETAINING WALLS, SOUND WALLS, SIGNALS AND SIGNING**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-4700	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
36030.1.FS4	IMNHF-026-1(86)9	I-4700A(P.E.)	
36030.1.FS3	IMNHF-026-1(86)9	I-4700B(P.E.)	
36030.1.5		I-4700A(UTIL)	
36030.1.6		I-4700B(UTIL)	
36030.2.3		I-4700A(R/W)	
36030.2.4		I-4700B(R/W)	
36030.3.GV4	NHPP-026-1(199)6	I-4700(CONST)	



NOTE:
1. THIS IS A CONTROLLED- ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.



DESIGN DATA

ADT 2019 = 84,662
ADT 2040 = 117,900
K = 10
D = 55%
T = 10% *
V = 65 MPH
* TTST = 4% DUAL 6%
FUNC CLASS = INTERSTATE STATEWIDE TIER

PROJECT LENGTH

TOTAL LENGTH OF ROADWAY TIP PROJECT	I-4700 = 7.359 MI
TOTAL LENGTH OF STRUCTURES OF TIP PROJECT	I-4700 = 0.131 MI
TOTAL LENGTH OF TIP PROJECT	I-4700 = 7.490 MI

NOTE: LENGTHS WERE CALCULATED USING THE WBL ALIGNMENT

Prepared In the Office of:

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:
JULY 1, 2018

LETTING DATE:
JULY 16, 2019

JOSEPH OLSON, P.E.
PROJECT ENGINEER

MARC WHITMORE, P.E.
PROJECT DESIGN ENGINEER

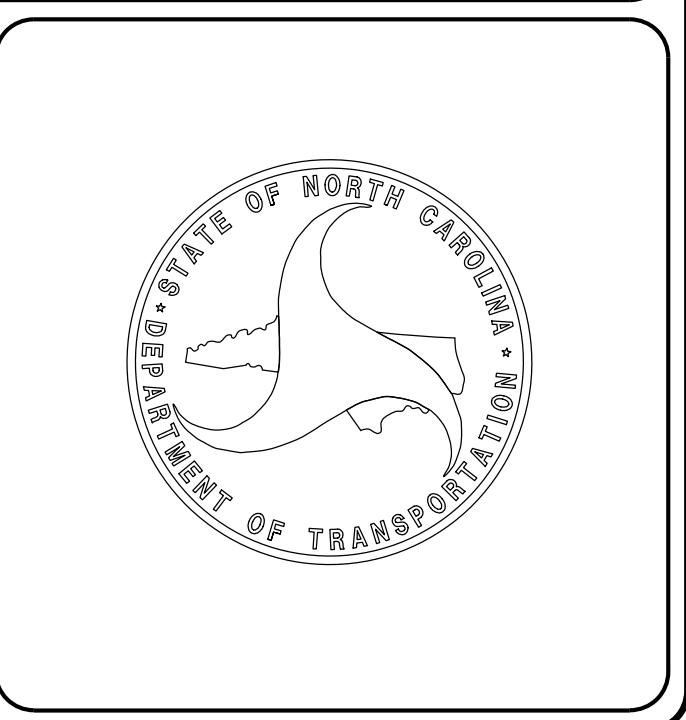
WANDA AUSTIN, P.E.
NCDOT CONTACT

HYDRAULICS ENGINEER

DocuSigned by:
John Blannett
5/16/2019
SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

DocuSigned by:
Marc Whitmore
5/16/2019
SIGNATURE: _____ P.E.



GENERAL NOTES:

2018 SPECIFICATIONS
EFFECTIVE: 01-16-2018
REVISED:

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED 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 11.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 AND 225.05 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. 560.02

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

BERM DITCHES:

BERM DITCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 240.01 AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

SUBSURFACE DRAINS:

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

SHOULDER DRAINS:

SHOULDER DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 816.03 AND DETAILS IN PLANS AT LOCATIONS DIRECTED BY THE ENGINEER.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADIUS OR RADIUS AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

STREET TURNOUT:

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADIUS NOTED ON PLANS.

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. IN LOCATIONS WHERE

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC NOT SHOWN ON THE PLANS WILL BE PAID FOR AT THE CONTRACT PRICE FOR "TEMPORARY SHORING".

END BENTS:

THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE

CHARTER - COMMUNICATIONS

PSNC - GAS

MSD ENGINEERING - SEWER

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

RIGHT-OF-WAY MARKERS:

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

CURB RAMPS:

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.05 and/or 848.06.

FENCING:

ALL EXISTING C/A FENCE TO BE REMOVED.

ROCK:

ROCK MAY BE ENCOUNTERED 925+50 THRU 929+50, 944+50 THRU 949+00, 992+50 THRU 998+50 AND 1032+50 THRU 1047+00 RIGHT. BLASTING MAY BE REQUIRED FOR EXCAVATION ON THE PROJECT. SEE SECTION 220 OF THE STANDARD SPECIFICATIONS AND IF APPLICABLE, ROCK BLASTING PROVISION.

TEMPORARY SHORING:

ESTIMATED SHORING QUANTITIES FOR DRAINAGE PIPE INSTALLATIONS HAVE BEEN ADDED.

2018 ROADWAY ENGLISH STANDARD DRAWINGS

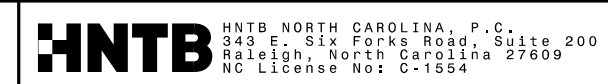
EFF. 01-16-2018
REV.

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

Table with columns: STD. NO., DIVISION, and TITLE. Lists various engineering standards such as Earthwork, Pipe Culverts, Major Structures, Subgrade, Bases and Shoulders, Asphalt Bases and Pavements, Concrete Pavements and Shoulders, Incidentals, and Right-of-Way Markers.

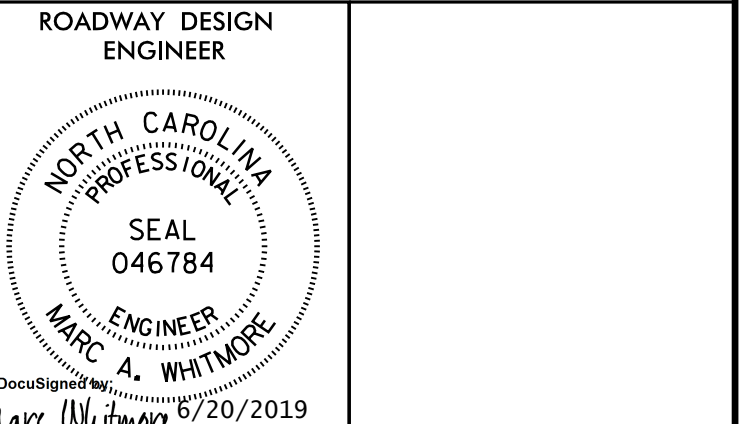
INDEX OF SHEETS

Table with columns: SHEET NUMBER and SHEET. Lists sheet numbers (1, 1A, 1B, 2A-1 THRU 2A-8, etc.) and their corresponding titles (Title Sheet, Index of Sheets, General Notes, Conventional Symbols, etc.).



PROJECT REFERENCE NO. 1-4700 SHEET NO. 1A

R/W SHEET NO.



Documented by Marc A. Whitmore 8/20/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

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

12/2/2016

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ EIP
Computed Property Corner	-----
Property Monument	□ ECM
Parcel/Sequence Number	①23
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	---WLB---
Proposed Wetland Boundary	WLB
Existing Endangered Animal Boundary	---EAB---
Existing Endangered Plant Boundary	---EPB---
Existing Historic Property Boundary	---HPB---
Known Contamination Area: Soil	☠-S-☠
Potential Contamination Area: Soil	☠-S-☠
Known Contamination Area: Water	☠-W-☠
Potential Contamination Area: Water	☠-W-☠
Contaminated Site: Known or Potential	☠?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○ S
Well	○ W
Small Mine	⊗
Foundation	□
Area Outline	□
Cemetery	□
Building	□
School	□
Church	□
Dam	▬

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	□
Jurisdictional Stream	---JS---
Buffer Zone 1	---BZ 1---
Buffer Zone 2	---BZ 2---
Flow Arrow	←
Disappearing Stream	→
Spring	○
Wetland	▽
Proposed Lateral, Tail, Head Ditch	▬
False Sump	▽

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ MILEPOST 35
Switch	□ SWITCH
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY & PROJECT CONTROL:

Secondary Horiz and Vert Control Point	◆
Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	◆
Exist Permanent Easement Pin and Cap	◇
New Permanent Easement Pin and Cap	◆
Vertical Benchmark	⊠
Existing Right of Way Marker	△
Existing Right of Way Line	-----
New Right of Way Line	○ R W
New Right of Way Line with Pin and Cap	○ R W ◆
New Right of Way Line with Concrete or Granite R/W Marker	○ R W ◆
New Control of Access Line with Concrete C/A Marker	○ C/A
Existing Control of Access	○ C/A
New Control of Access	○ C/A
Existing Easement Line	---E---
New Temporary Construction Easement	---E---
New Temporary Drainage Easement	---TDE---
New Permanent Drainage Easement	---PDE---
New Permanent Drainage / Utility Easement	---DUE---
New Permanent Utility Easement	---PUE---
New Temporary Utility Easement	---TUE---
New Aerial Utility Easement	---AUE---

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	---C---
Proposed Slope Stakes Fill	---F---
Proposed Curb Ramp	○ CR
Existing Metal Guardrail	---T---
Proposed Guardrail	---T---
Existing Cable Guiderail	---□---
Proposed Cable Guiderail	---□---
Equality Symbol	⊕
Pavement Removal	▨

VEGETATION:

Single Tree	☼
Single Shrub	☼

Note: Not to Scale *S.U.E. = Subsurface Utility Engineering

Hedge	-----
Woods Line	-----
Orchard	☼ ☼ ☼ ☼
Vineyard	□ Vineyard

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	CONC
Bridge Wing Wall, Head Wall and End Wall	CONC WW
MINOR:	
Head and End Wall	CONC HW
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	○ S
Storm Sewer	---S---

UTILITIES:

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 LOS B (S.U.E.*)	---P---
U/G Power Line LOS C (S.U.E.*)	---P---
U/G Power Line LOS D (S.U.E.*)	---P---

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Pedestal	⊠
Telephone Cell Tower	⊠
U/G Telephone Cable Hand Hole	○
U/G Telephone Cable LOS B (S.U.E.*)	---T---
U/G Telephone Cable LOS C (S.U.E.*)	---T---
U/G Telephone Cable LOS D (S.U.E.*)	---T---
U/G Telephone Conduit LOS B (S.U.E.*)	---TC---
U/G Telephone Conduit LOS C (S.U.E.*)	---TC---
U/G Telephone Conduit LOS D (S.U.E.*)	---TC---
U/G Fiber Optics Cable LOS B (S.U.E.*)	---T FO---
U/G Fiber Optics Cable LOS C (S.U.E.*)	---T FO---
U/G Fiber Optics Cable LOS D (S.U.E.*)	---T FO---

WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
U/G Water Line LOS B (S.U.E.*)	---W---
U/G Water Line LOS C (S.U.E.*)	---W---
U/G Water Line LOS D (S.U.E.*)	---W---
Above Ground Water Line	---A/G Water---

TV:

TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	○
U/G TV Cable LOS B (S.U.E.*)	---TV---
U/G TV Cable LOS C (S.U.E.*)	---TV---
U/G TV Cable LOS D (S.U.E.*)	---TV---
U/G Fiber Optic Cable LOS B (S.U.E.*)	---TV FO---
U/G Fiber Optic Cable LOS C (S.U.E.*)	---TV FO---
U/G Fiber Optic Cable LOS D (S.U.E.*)	---TV FO---

GAS:

Gas Valve	◇
Gas Meter	⊕
U/G Gas Line LOS B (S.U.E.*)	---G---
U/G Gas Line LOS C (S.U.E.*)	---G---
U/G Gas Line LOS D (S.U.E.*)	---G---
Above Ground Gas Line	---A/G Gas---

SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	---SS---
Above Ground Sanitary Sewer	---A/G Sanitary Sewer---
SS Forced Main Line LOS B (S.U.E.*)	---FSS---
SS Forced Main Line LOS C (S.U.E.*)	---FSS---
SS Forced Main Line LOS D (S.U.E.*)	---FSS---

MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	⊠
Utility Unknown U/G Line LOS B (S.U.E.*)	---ZUTL---
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	⊕
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
U/G Test Hole LOS A (S.U.E.*)	●
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

6/2/2019

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

PROJECT REFERENCE NO. 1-4700	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER MARC A. WHITMORE SEAL 046784 NORTH CAROLINA PROFESSIONAL ENGINEER 5/16/2019	PAVEMENT DESIGN ENGINEER JOSEPH HOLLAND SEAL 024964 NORTH CAROLINA PROFESSIONAL ENGINEER 5/16/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

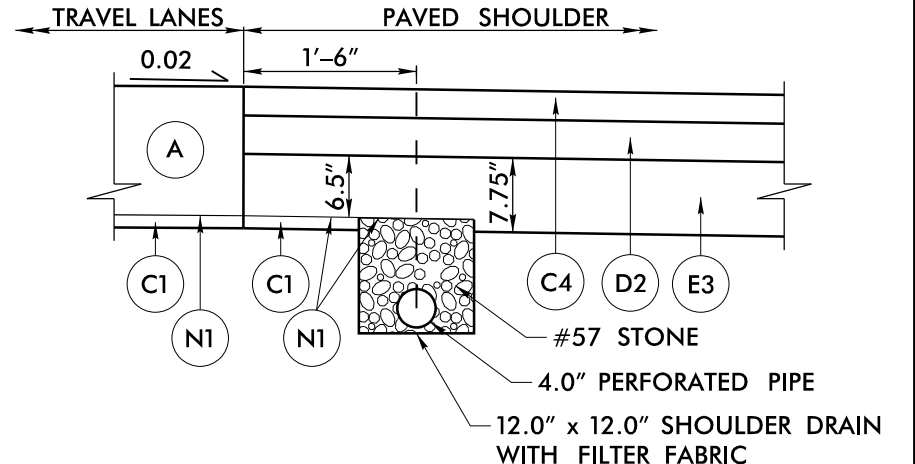
FINAL PAVEMENT SCHEDULE

A	13.5" PORTLAND CEMENT CONCRETE PAVEMENT (WITH DOWELS)
C1	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 138 LBS PER SQ. YD.
C2	2.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 138 LBS PER SQ. YD. IN EACH OF TWO LAYERS
C3	3.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS PER SQ. YD. IN EACH OF TWO LAYERS
C4	3.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS PER SQ. YD. IN EACH OF TWO LAYERS
C5	1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS PER SQ. YD.
C6	1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS PER SQ. YD.
C7	VARIABLE ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D AT AN AVERAGE RATE OF 112 LBS PER SQ. YD. PER INCH
C8	3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS PER SQ. YD. IN EACH OF TWO LAYERS
D1	2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS PER SQ. YD.
D2	4.0" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS PER SQ. YD.
E1	4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS PER SQ. YD.
E2	4.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 513 LBS PER SQ. YD.
E3	6.5" OR 7.75" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 371 LBS PER SQ. YD. AND 442 LBS PER SQ. YD. (SEE SHOULDER DRAIN DETAIL)
E4	5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS PER SQ. YD.
K	12" CLASS IV SUBGRADE STABILIZATION
N1	NONWOVEN GEOTEXTILE INTERLAYER
N2	GEOTEXTILE FOR SOIL STABILIZATION
R1	2'-6" CONCRETE CURB AND GUTTER
R2	CONCRETE SHOULDER BERM GUTTER
R3	5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED)
R4	SINGLE SLOPE CONCRETE BARRIER
R5	PRECAST REINFORCED CONCRETE BARRIER
R6	CONCRETE BARRIER RAIL WITH MOMENT SLAB
R7	EXPRESSWAY GUTTER
S	CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING, 1.5" DEPTH
Y	MILLED RUMBLE STRIPS

PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

SHOULDER DRAIN SUMMARY

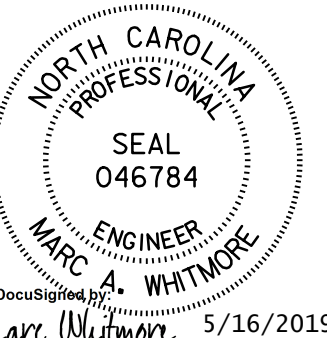

LINE	LOCATION	BEGIN STA.	END STA.	OUTLET LOCATIONS
-L-	Outside Shoulder (Eastbound)	832+00.00	837+50.00	832+18 (2GI 0401), 835+10 (2GI 0408), 836+50 (2GI 0409)
-L-	Outside Shoulder (Eastbound)	841+80.00	855+40.00	841+80 (2GI 0417), 843+00 (2GI 0423), 845+00, 849+20 (2GI 0506), 852+20
-L-	Outside Shoulder (Eastbound)	865+00.00	872+00.00	866+68 (2GI 0617), 867+45 (2GI 0620), 872+00
-L/EBL-	Outside Shoulder (Eastbound)	872+00.00	887+60.00	875+00, 876+50, 879+50, 881+50, 884+50, 887+60 (2GI 0806)
-EBL-	Outside Shoulder (Eastbound)	901+16.00	912+00.00	904+00, 907+00, 909+00, 912+00
-EBL-	Outside Shoulder (Eastbound)	913+50.00	951+43.00	914+40 (2GI 1016), 916+70 (2GI 1022), 919+70, 922+70, 925+70, 931+70, 934+70, 937+70, 941+70, 944+70, 947+15 (2GI 1221), 950+10 (2GI 1225), 951+43 (2GI 1303)
-EBL-	Outside Shoulder (Eastbound)	964+15.00	983+41.00	964+15 (2GI 1402), 967+20, 970+20, 972+70 (2GI 1411), 975+70, 976+60 (2GI 1419), 979+20 (2GI 1503), 981+50, 982+60 (2GI 1514)
-EBL/L-	Outside Shoulder (Eastbound)	994+92.00	1005+00.00	997+35 (DI 1609), 999+60 (2GI 1612), 1000+92 (2GI 1614), 1002+20 (2GI 1620)
-L-	Outside Shoulder (Eastbound)	1009+20.00	1012+70.00	1009+20 (2GI 1714), 1010+60 (2GI 1720)
-L-	Outside Shoulder (Eastbound)	1016+00.00	1022+00.00	1019+00 (2GI 1805), 1022+00
-Y15RPAAL-	Outside Shoulder (Eastbound)	10+10.00	15+00.00	12+10 (2GI 1818), 10+10
-L-	Outside Shoulder (Eastbound)	1048+50.00	1049+80.00	1048+50
-L-	Outside Shoulder (Eastbound)	1051+80.00	1055+00.00	1051+80 (2GI 2032), 1054+60
-L-	Median Shoulder (Eastbound)	832+00.00	870+60.00	832+20 (2GI 0402), 838+10 (2GI 0411), 840+45 (2GI 0416), 842+05 (2GI 0418), 845+45 (2GI 0427), 849+20 (2GI 0505), 850+50 (2GI 0510), 854+70 (2GI 0519), 858+40 (2GI 0525), 862+70 (2GI 0606), 866+65 (2GI 0613), 870+60 (2GI 0621)
-L/EBL-	Median Shoulder (Eastbound)	870+60.00	909+50.00	874+60 (2GI 0702), 878+60 (2GI 0712), 881+60 (2GI 0715), 885+55 (2GI 0801), 887+60 (2GI 0807), 888+90 (2GI 0812), 891+05 (2GI 0815), 893+20 (2GI 0817), 895+90 (2GI 0820), 902+35 (2GI 0901), 905+20 (2GI 0904), 907+35 (2GI 0905), 909+50 (2GI 0906)
-EBL/L-	Median Shoulder (Eastbound)	929+00.00	1002+00.00	931+67 (2GI 1109), 934+20 (2GI 1118), 938+00, 940+20 (2GI 1208), 943+50, 947+15 (2GI 1223), 951+50 (2GI 1304), 955+20 (2GI 1317), 958+20 (2GI 1320), 961+30 (2GI 1324), 964+20 (2GI 1401), 969+20, 972+70 (2GI 1410), 976+60 (2GI 1418), 979+10 (2GI 1502), 981+00 (2GI 1509), 982+60 (2GI 1513), 986+70 (2GI 1519), 996+00 (2GI 1606), 997+20 (2GI 1608), 1000+90 (2GI 1615)
-L-	Median Shoulder (Eastbound)	1021+40.00	1049+80.00	1022+05 (2GI 1809), 1026+50 (2GI 1813), 1030+10 (2GI 1902), 1032+90 (2GI 1911), 1034+40 (2GI 1915), 1037+50 (2GI 1918), 1039+40 (2GI 1922), 1044+30 (2GI 2012), 1045+50 (2GI 2016), 1046+80 (2GI 2020)
-L-	Median Shoulder (Eastbound)	1051+80.00	1055+00.00	1051+80 (2GI 2033)
-L-	Outside Shoulder (Westbound)	832+00.00	840+00.00	832+00, 834+00 (2GI 0407), 838+10 (2GI 0413)
-L-	Outside Shoulder (Westbound)	842+60.00	872+00.00	842+05 (2GI 0420), 845+00, 847+50, 850+50 (2GI 0509), 852+50, 854+70 (2GI 0521), 862+00
-L/WBL-	Outside Shoulder (Westbound)	872+00.00	908+30.00	872+00, 875+00, 878+00, 881+00, 883+50 (2GI 0718), 885+60 (2GI 0804), 887+60 (2GI 0809), 888+95 (2GI 0814), 891+10 (2GI 0816), 893+50, 895+70 (2GI 0821), 898+00, 901+00, 904+00, 907+00, 908+30
-WBL/L-	Outside Shoulder (Westbound)	928+00.00	1002+00.00	930+90 (2GI 1107), 933+90, 936+90, 939+90, 940+50, 943+75 (2GI 1216), 946+70 (2GI 1219), 948+70 (2GI 1226), 951+00, 952+10 (2GI 1305), 954+50 (2GI 1313), 957+00, 960+00 (2GI 1323), 962+80 (2GI 1325), 966+20 (2GI 1404), 966+75 (2GI 1405), 971+40 (2GI 1406), 972+80 (2GI 1409), 974+50 (2GI 1413), 976+70 (2GI 1417), 980+00 (2GI 1506), 980+80, 983+30 (2GI 1516), 986+50, 989+50, 994+40 (2GI 1601), 995+90 (2GI 1604), 998+90, 1000+90 (2GI 1618)
-L-	Outside Shoulder (Westbound)	1022+00.00	1049+80.00	1025+00 (2GI 1812), 1027+10 (2GI 1819), 1030+10 (2GI 1904), 1032+00, 1034+40 (2GI 1916), 1037+40 (2GI 1921), 1040+40, 1043+50 (2GI 2008), 1046+60 (2GI 2017)
-L-	Outside Shoulder (Westbound)	1051+80.00	1055+00.00	1051+80 (2GI 2031), 1054+60
-L-	Median Shoulder (Westbound)	832+00.00	855+30.00	832+20 (2GI 0403), 838+10 (2GI 0412), 840+45 (2GI 0416), 842+05 (2GI 0419), 845+45 (2GI 0427), 849+20 (2GI 0504), 850+50 (2GI 0510), 854+70 (2GI 0502)
-L-	Median Shoulder (Westbound)	865+70.00	870+60.00	866+65 (2GI 0616), 870+60 (2GI 0623)
-L/WBL-	Median Shoulder (Westbound)	870+60.00	887+60.00	874+60 (2GI 0701), 878+60 (2GI 0711), 881+60 (2GI 0716), 885+55 (2GI 0803), 887+60 (2GI 0808)
-WBL-	Median Shoulder (Westbound)	900+00.00	912+30.00	902+00 (2GI 0901), 904+80 (2GI 0904), 907+00 (2GI 0905), 909+25 (2GI 0906), 911+10 (2GI 1002), 912+30 (2GI 1040)



SHOULDER DRAIN DETAIL SEE SUMMARY TABLE FOR LOCATIONS

REVISIONS

15-MAY-2019 13:42
15-MAY-2019 13:42
HNTB

PROJECT REFERENCE NO. I-4700	SHEET NO. 2A-2
ROADWAY DESIGN ENGINEER 	PAVEMENT DESIGN ENGINEER 
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SHOULDER DRAIN SUMMARY (CONT.)

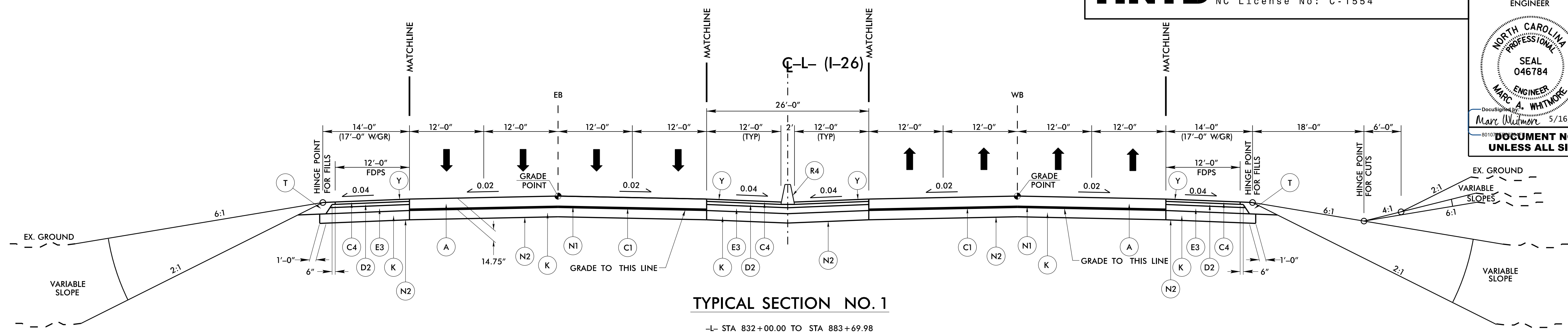
LINE	LOCATION	BEGIN STA.	END STA.	OUTLET LOCATIONS
-WBL-	Median Shoulder (Westbound)	914+00.00	981+10.00	916+70 (2GI 1023), 920+50, 922+50 (2GI 1029), 923+70 (2GI 1032), 928+60, 933+00, 934+50 (2GI 1117), 937+50 (2GI 1201), 942+00, 943+70 (2GI 1217), 947+40 (2GI 1222), 951+60 (2GI 1302), 954+40 (2GI 1315), 958+40 (2GI 1318), 963+40, 968+40, 972+70 (2GI 1407), 976+70 (2GI 1416), 979+20 (2GI 1501), 981+10 (2GI 1508)
-WBL-	Median Shoulder (Westbound)	995+50.00	1011+50.00	995+90 (2GI 1603), 997+10 (2GI 1608), 1000+90 (2GI 1613), 1004+30 (2GI 1703), 1007+50 (2GI 1712), 1011+50 (2GI 1721)
-WBL-	Median Shoulder (Westbound)	1020+10.00	1026+50.00	1020+10 (2GI 1808), 1022+10 (2GI 1810), 1026+50 (2GI 1814)
-L-	Median Shoulder (Westbound)	1051+80.00	1055+00.00	1051+80 (2GI 2034)
-LEBL-	Outside Shoulder (Eastbound)	1055+00.00	1094+00.00	1057+00 (2GI 2103), 1059+50, 1061+00 (2GI 2107), 1065+00 (2GI 2112), 1066+30 (2GI 2114), 1068+70 (2GI 2202), 1071+00 (2GI 2205), 1072+50 (2GI 2206), 1075+00 (2GI 2212), 1078+20, 1080+80 (2GI 2224), 1084+80, 1085+10 (2GI 2308), 1089+00 (2GI 2316), 1093+00 (2GI 2321), 1094+00
-EBL-	Outside Shoulder (Eastbound)	1110+40.00	1160+60.00	1113+00 (2GI 2506), 1114+50 (2GI 2510), 1117+00 (2GI 2517), 1119+10 (2GI 2521), 1122+00 (2GI 2602), 1124+00 (2GI 2605), 1125+90 (2GI 2608), 1128+00, 1129+40 (2GI 2611), 1132+00, 1134+00 (2GI 2618), 1137+50, 1138+00 (2GI 2701), 1142+00 (2GI 2706), 1147+00 (2GI 2713), 1148+50 (2GI 2715), 1151+50 (2GI 2801), 1153+60 (2GI 2822), 1155+50 (2GI 2809), 1157+33 (2GI 2813), 1158+35 (2GI 2819)
-L-	Outside Shoulder (Eastbound)	1184+00.00	1208+00.00	1184+00 (2GI 3016), 1185+90 (2GI 3017), 1188+90 (2GI 3101), 1192+90 (2GI 3108), 1195+40 (2GI 3109), 1196+90 (2GI 3114), 1200+00, 1200+90 (2GI 3120), 1203+50, 1204+90 (2GI 3204)
-L-	Outside Shoulder (Eastbound)	1221+50.00	1230+50.00	1223+90 (2GI 3305), 1227+90 (2GI 3309), 1230+50
-L-	Median Shoulder (Eastbound)	1055+00.00	1060+50.00	1057+00 (2GI 2106)
-LEBL-	Median Shoulder (Eastbound)	1075+00.00	1109+00.00	1075+00 (2GI 2210), 1081+52 (2GI 2227), 1084+00 (2GI 2303), 1087+50 (2GI 2311), 1088+90 (2GI 2315), 1093+00, 1097+00 (2GI 2402), 1101+00 (2GI 2408), 1105+00 (2GI 2413), 1109+00 (2GI 2418)
-LEBL-	Median Shoulder (Eastbound)	1134+00.00	1160+50.00	1134+00 (2GI 2621), 1138+00 (2GI 2705), 1142+00 (2GI 2711), 1148+50 (2GI 2718), 1151+50 (2GI 2805), 1155+50 (2GI 2810), 1158+35 (2GI 2817)
-L-	Median Shoulder (Eastbound)	1166+12.00	1189+00.00	1166+12 (2GI 2915), 1169+00 (2GI 2908), 1173+00 (2GI 2911), 1176+95 (2GI 3003), 1178+90 (2GI 3006), 1183+25 (2GI 3010), 1185+90 (2GI 3020)
-L-	Median Shoulder (Eastbound)	1200+90.00	1227+90.00	1200+90 (2GI 3119), 1204+90 (2GI 3202), 1208+90 (2GI 3207), 1212+90 (2GI 3215), 1220+90 (2GI 3302), 1223+90 (2GI 3307), 1227+90 (2GI 3310)
-L-	Outside Shoulder (Westbound)	1055+00.00	1060+46.00	1057+00 (2GI 2101), 1059+00
-LWBL-	Outside Shoulder (Westbound)	1075+00.00	1109+00.00	1075+00 (2GI 2213), 1078+20 (2GI 2222), 1081+20, 1082+20 (2GI 2301), 1084+00 (2GI 2304), 1085+90 (2GI 2309), 1087+50 (2GI 2313), 1090+50 (2GI 2318), 1093+00, 1094+50 (2GI 2322), 1097+00 (2GI 2405), 1099+00 (2GI 2406), 1101+00 (2GI 2411), 1105+00 (2GI 2416), 1108+00, 1109+00 (2GI 2501)
-WBL-	Outside Shoulder (Westbound)	1130+00.00	1160+30.00	1130+00 (2GI 2612), 1133+00, 1134+00 (2GI 2619), 1136+00, 1138+00 (2GI 2702), 1140+00, 1142+00 (2GI 2708), 1145+00, 1148+50 (2GI 2714), 1150+00, 1151+50 (2GI 2802), 1154+00, 1155+50 (2GI 2808), 1157+35 (2GI 2815), 1158+35 (2GI 2818)
-L-	Outside Shoulder (Westbound)	1165+50.00	1189+16.00	1165+50 (2GI 2901), 1169+00 (2GI 2910), 1173+00 (2GI 2912), 1175+00 (2GI 2914), 1176+95 (2GI 3001), 1178+90 (2GI 3005), 1182+00, 1183+25 (2GI 3012), 1185+90 (2GI 3018), 1188+90 (2GI 3104)
-L-	Outside Shoulder (Westbound)	1200+90.00	1230+50.00	1200+90 (2GI 3118), 1204+90 (2GI 3203), 1207+00, 1208+90 (2GI 3209), 1211+00, 1212+90 (2GI 3211), 1216+00, 1220+90 (2GI 3304), 1223+90 (2GI 3308), 1227+90 (2GI 3312), 1230+50
-L-	Median Shoulder (Westbound)	1055+00.00	1078+00.00	1057+00 (2GI 2102), 1061+00 (2GI 2109), 1065+00 (2GI 2111), 1068+90 (2GI 2201), 1072+50 (2GI 2208), 1075+00 (2GI 2211)
-WBL-	Median Shoulder (Westbound)	1106+55.00	1160+50.00	1109+00 (2GI 2502), 1112+00 (2GI 2504), 1115+50 (2GI 2515), 1118+50 (2GI 2519), 1122+00 (2GI 2601), 1125+15 (2GI 2606), 1128+60 (2GI 2610), 1130+00 (2GI 2613), 1134+00 (2GI 2617), 1138+00 (2GI 2704), 1142+00 (2GI 2707), 1148+50 (2GI 2716), 1151+50 (2GI 2804), 1155+50 (2GI 2807), 1158+35 (2GI 2820)
-L-	Median Shoulder (Westbound)	1166+12.00	1168+30.00	1166+12 (2GI 2905)
-L-	Median Shoulder (Westbound)	1185+90.00	1208+26.00	1185+90 (2GI 3019), 1188+90 (2GI 3102), 1192+90 (2GI 3106), 1195+40 (2GI 3113), 1196+50 (2GI 3116), 1200+90 (2GI 3121), 1204+90 (2GI 3205)
-L-	Median Shoulder (Westbound)	1221+50.00	1227+90.00	1223+90 (2GI 3306), 1227+90 (2GI 3311)

REVISIONS

16-MAY-2019 10:48 AM
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 HNTB

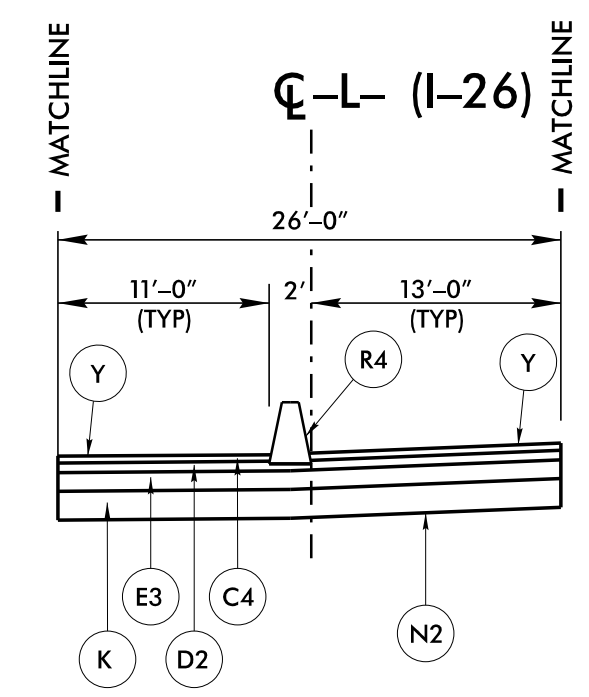
6/2/2019

PROJECT REFERENCE NO. 1-4700	SHEET NO. 2A-3
ROADWAY DESIGN ENGINEER MARC A. WHITMORE 5/16/2019	PAVEMENT DESIGN ENGINEER JOSEPH HOLLAND 5/16/2019
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



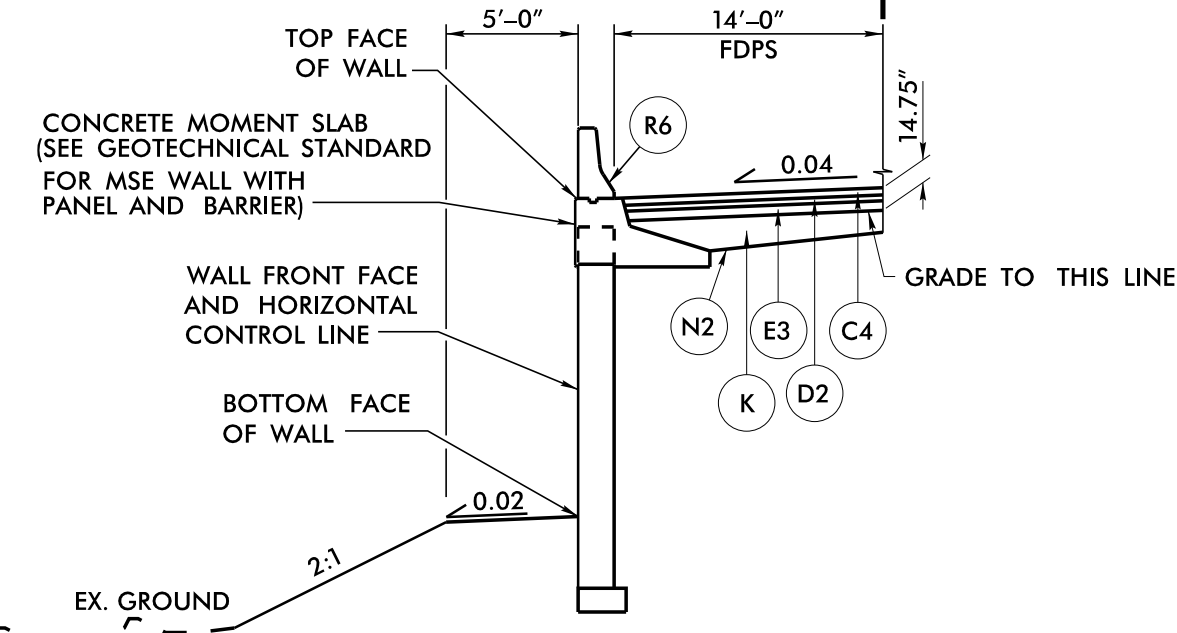
TYPICAL SECTION NO. 1

- L- STA 832+00.00 TO STA 883+69.98
- L- STA 1055+00.00 TO STA 1079+00.00
- L- STA 1133+00.00 TO STA 1160+76.56
- L- STA 1165+40.56 TO STA 1230+57.72



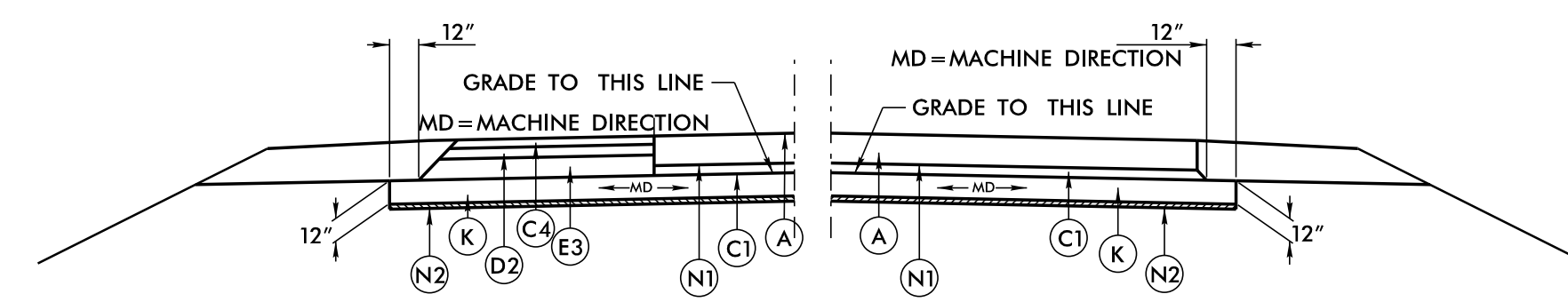
SHIFTED BARRIER DETAIL

USE IN CONJUNCTION WITH TYPICAL SECTIONS NO.1
 -L- STA 1060+00.00 TO 1075+00.00

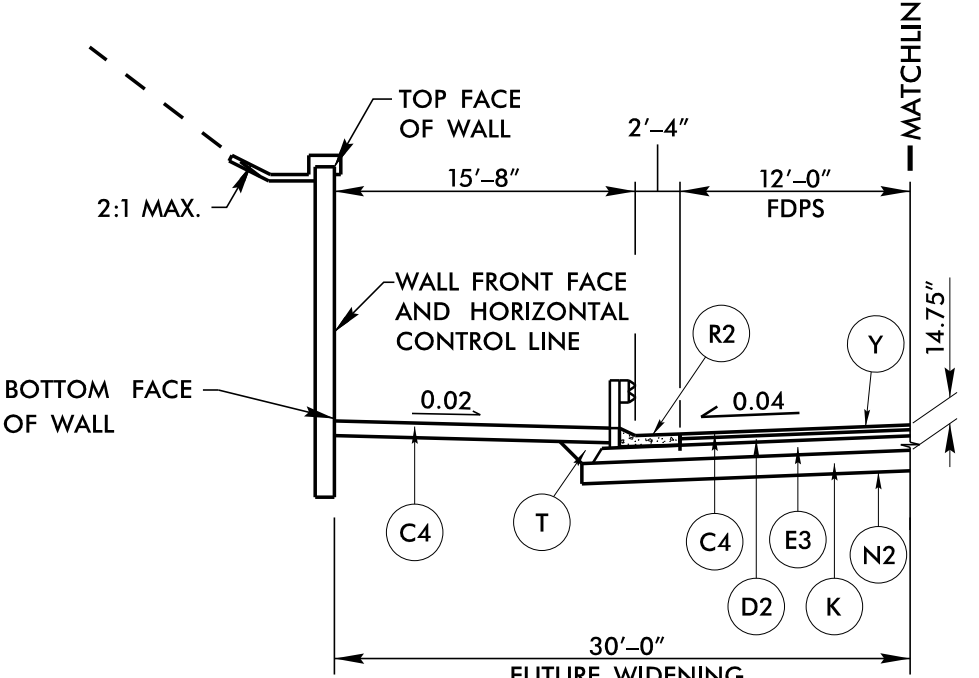


FILL WALL WITH MOMENT SLAB DETAIL

USE IN CONJUNCTION WITH TYPICAL SECTIONS NO.1, 3, 4, 5 & 6
 -EBL- STA 886+00.00 TO STA 891+50.00 LT -L- STA 1172+00.00 TO STA 1181+30.00 RT (INVERT)
 -EBL- STA 1094+75.00 TO STA 1102+25.00 LT -L- STA 1193+75.00 TO STA 1206+75.00 RT (INVERT)
 -L- STA 1164+98.96 TO STA 1170+00.00 RT (INVERT) -L- STA 1195+25.00 TO STA 1198+25.00 LT
 -L- STA 1165+82.66 TO STA 1175+00.00 LT

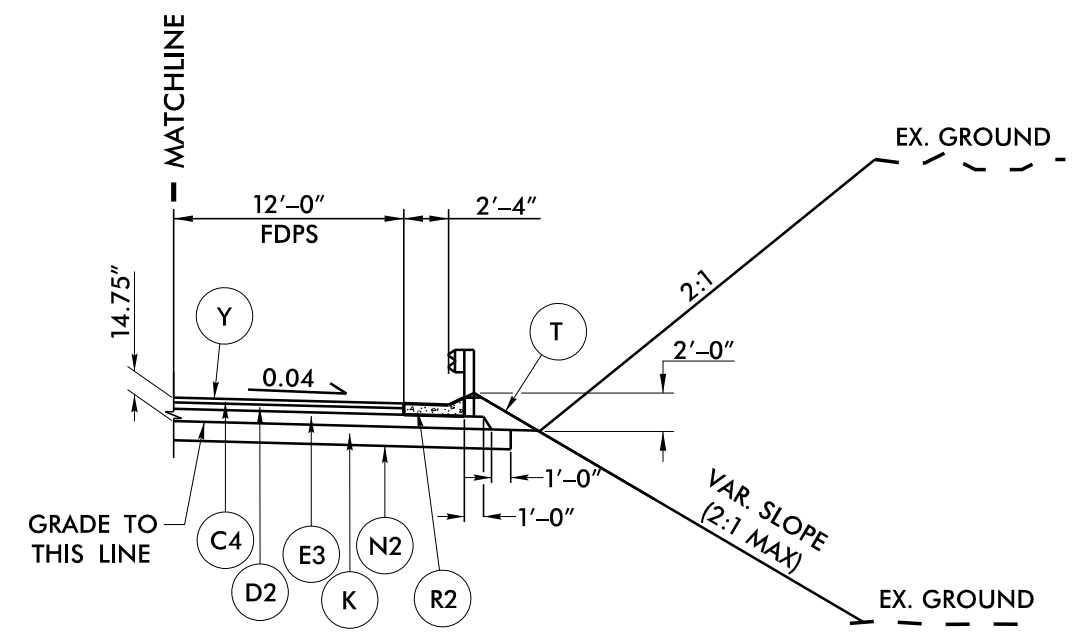


CLASS IV SUBGRADE STABILIZATION-GEOTEXTILE FOR CEMENT CONCRETE PAVEMENT STABILIZATION



OFFSET CUT WALL WITH SHOULDER BERM GUTTER DETAIL

USE IN CONJUNCTION WITH TYPICAL SECTION NO.1
 -L- STA. 1070+60.00 TO STA. 1078+00.00 LT



SHOULDER BERM GUTTER DETAIL

USE IN CONJUNCTION WITH TYPICAL SECTIONS NO.1, 2, 3 & 4
 -L- STA 832+00.00 TO STA 833+84.17 LT (INVERT) -WBL- STA 1081+00.00 TO STA 1093+89.00 RT
 -L- STA 832+00.00 TO STA 837+83.27 RT -WBL- STA 1088+50.00 TO STA 1128+50.00 LT (INVERT)
 -L- STA 863+03.71 TO STA 868+70.00 LT (INVERT) -WBL- STA 1100+50.00 TO STA 1133+00.00 RT
 -L- STA 863+50.00 TO STA 871+00.00 RT -EBL- STA 1084+38.51 TO STA 1089+00.00 RT
 -L- STA 874+75.00 TO STA 879+10.00 LT (INVERT) -EBL- STA 1093+00.00 TO STA 1094+75.00 LT (INVERT)
 -L- STA 878+40.00 TO -WBL- STA 889+50.00 RT -EBL- STA 1094+00.00 TO STA 1124+00.00 RT
 -WBL- STA 922+50.00 TO STA 980+06.63 LT (INVERT) -EBL- STA 1102+25.00 TO STA 1132+40.49 LT (INVERT)
 -WBL- STA 925+60.00 TO STA 932+25.00 RT -L- STA 1133+00.00 TO STA 1140+75.00 LT (INVERT)
 -EBL- STA 931+00.00 TO STA 990+60.00 LT (INVERT) -L- STA 1133+00.00 TO STA 1160+10.49 RT
 -WBL- STA 950+00.00 TO STA 960+00.00 RT -L- STA 1170+00.00 TO STA 1172+00.00 RT
 -WBL- STA 980+00.00 TO STA 986+00.00 RT -L- STA 1175+00.00 TO STA 1184+00.00 LT (INVERT)
 -WBL- STA 988+70.00 TO STA 996+90.85 RT -L- STA 1181+30.00 TO STA 1193+75.00 RT
 -EBL- STA 996+75.00 TO STA 996+99.52 LT (INVERT) -L- STA 1198+25.00 TO STA 1229+75.00 LT (INVERT)
 -L- STA 997+00.00 TO STA 1002+54.49 LT (INVERT) -L- STA 1206+75.00 TO STA 1230+00.00 RT
 -L- STA 997+00.00 TO STA 999+14.70 RT -L- STA 1330+00.00 TO STA 15+00.00 RT
 -L- STA 1026+50.00 TO STA 1049+64.39 RT -Y13RPA- STA 10+00.00 TO STA 16+82.34 LT (INVERT)
 -L- STA 1029+08.18 TO STA 1033+00.00 LT (INVERT) -Y13RPC- STA 10+00.00 TO STA 11+25.00 RT
 -L- STA 1044+25.00 TO STA 1049+64.39 LT (INVERT) -Y15RPA- STA 10+00.00 TO STA 15+38.64 RT
 -L- STA 1051+72.97 TO STA 1069+00.00 RT -Y15RPB- STA 10+00.00 TO STA 14+50.73 LT (INVERT)
 -L- STA 1051+72.97 TO STA 1079+00.00 LT (INVERT) -Y15RPC- STA 10+00.00 TO STA 14+91.54 RT
 -EBL- STA 1079+00.00 TO STA 1081+00.00 LT (INVERT)

OFFSET CUT WALL WITH CONCRETE BARRIER DETAIL

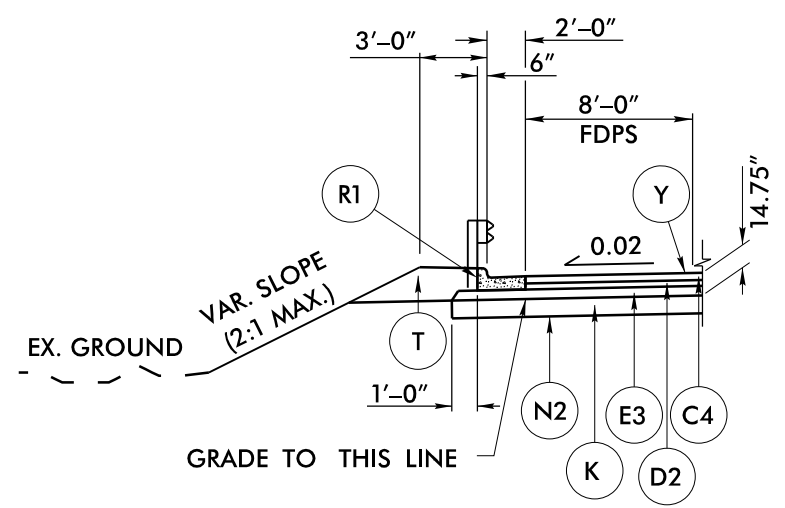
USE IN CONJUNCTION WITH TYPICAL SECTIONS NO.1
 -L- STA 1070+40.00 TO STA 1077+35.00 RT
 -L- STA 1151+50.00 TO STA 1161+75.00 LT (INVERT)

NOTE: SEE PLANS FOR SUPERELEVATIONS, TURN LANES, MONOLITHIC ISLANDS, CURB AND GUTTER, AND LANE TAPER LOCATIONS.

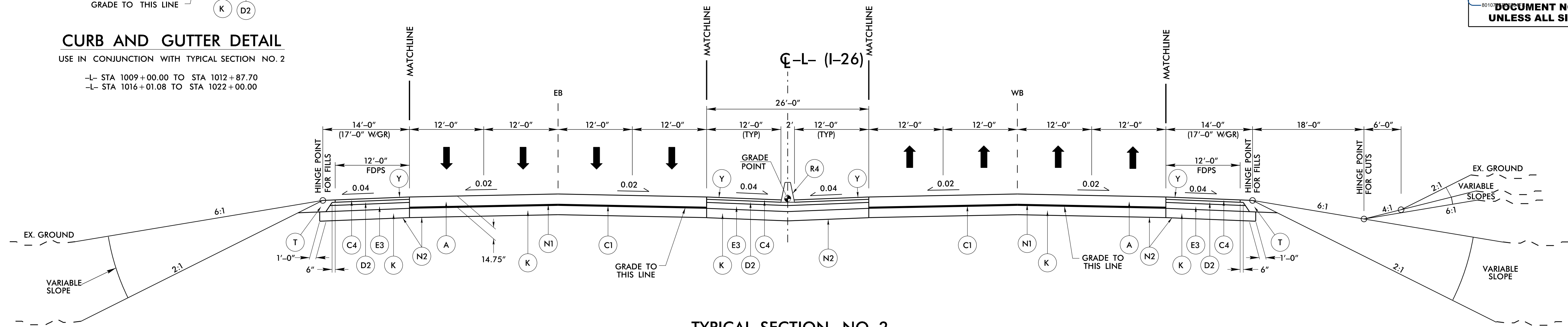
A	13.5" PCCP
C1	1.25" S9.5B
C2	2.5" S9.5B
C3	3" S9.5B
C4	3" S9.5C
C5	1.5" S9.5B
C6	1.5" S9.5C
C7	VARIABLE S9.5D
C8	3" S9.5D
D1	2.5" I19.0C
D2	4" I19.0C
E1	4" B25.0C
E2	4.5" B25.0C
E3	6.5" OR 7.75" B25.0C* *SEE SHOULDER DRAIN DETAIL SHEET 2A-1
E4	5" B25.0C
K	12" CLASS IV SUBGRADE STABILIZATION
N1	NONWOVEN GEOTEXTILE INTERLAYER
N2	GEOTEXTILE FOR SOIL STABILIZATION
R1	2'-6" C & G
R2	CONC. SHOULDER BERM GUTTER
R3	5" MONO. CONC. ISLAND (SURFACE MOUNTED)
R4	SINGLE SLOPE CONC. BARRIER
R5	PRECAST REINFORCED CONC. BARRIER
R6	CONCRETE BARRIER RAIL W/MOMENT SLAB
R7	EXPRESSWAY GUTTER
S	CONC. SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V	MILLING 1.5" DEPTH
Y	MILLED RUMBLE STRIP
PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE	

REVISIONS

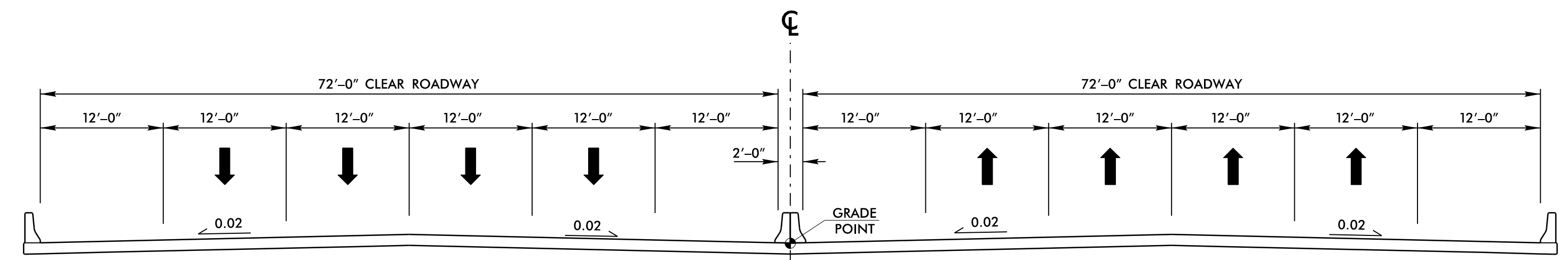
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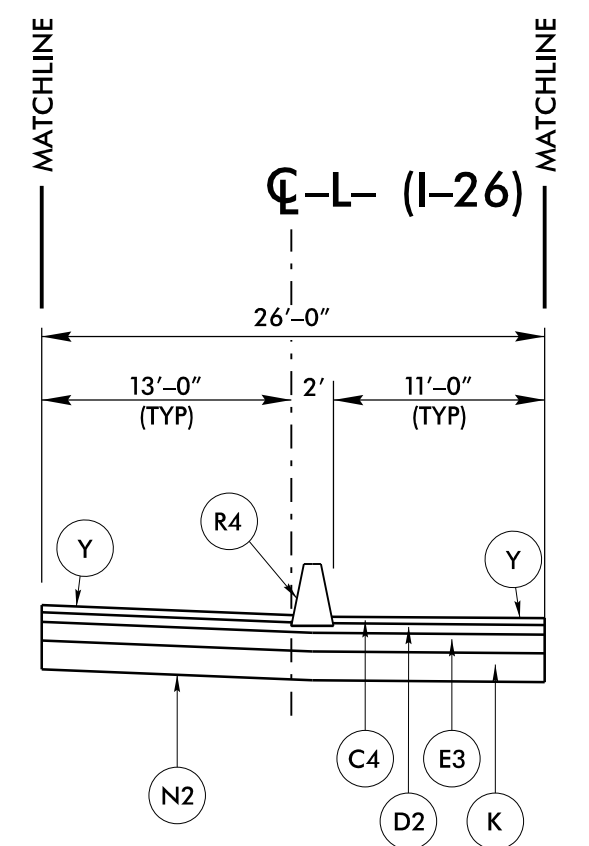
CURB AND GUTTER DETAIL
 USE IN CONJUNCTION WITH TYPICAL SECTION NO. 2
 -L- STA 1009+00.00 TO STA 1012+87.70
 -L- STA 1016+01.08 TO STA 1022+00.00



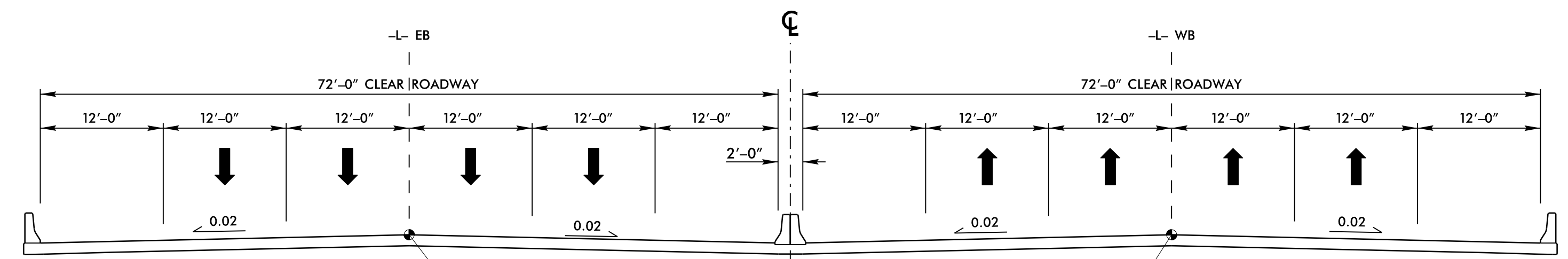
TYPICAL SECTION NO. 2
 -L- STA. 997+00.00 TO STA. 1049+88.55
 STA. 1051+48.80 TO STA. 1055+00.00



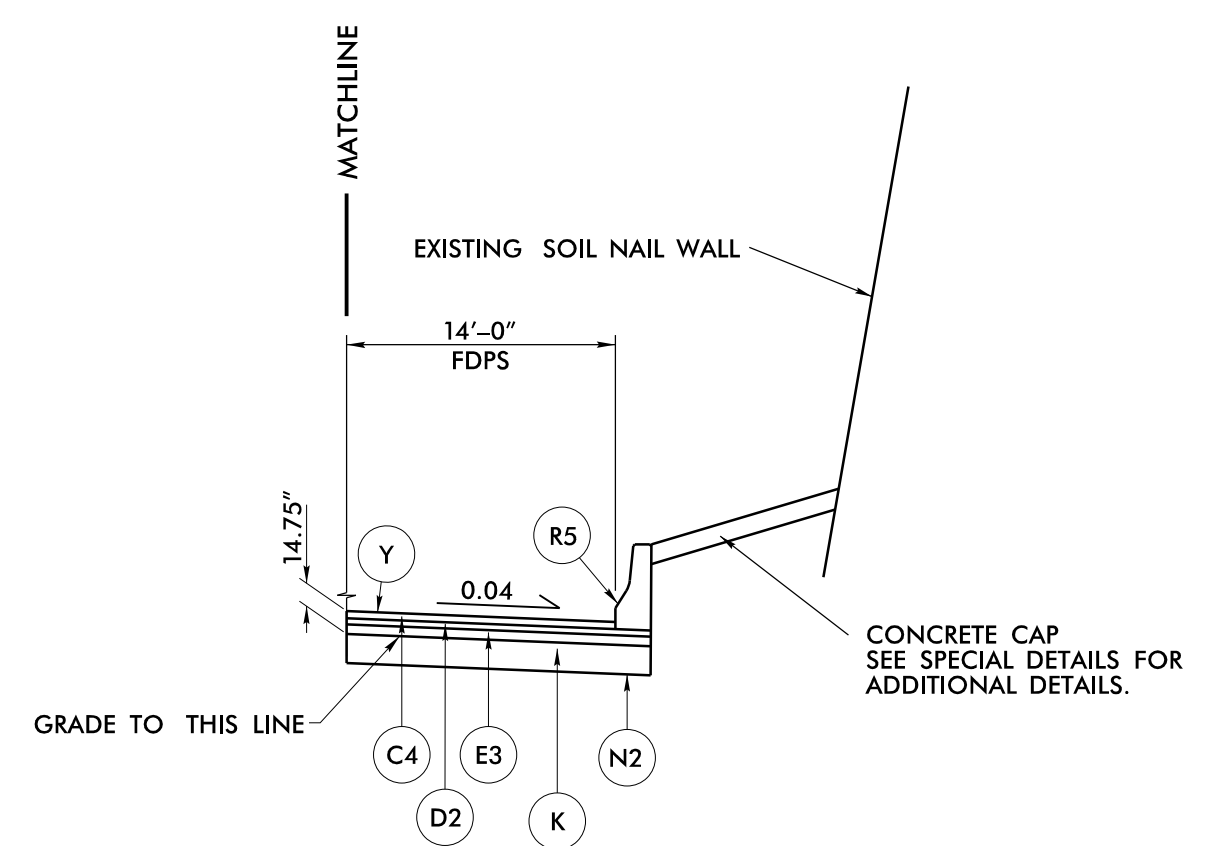
BRIDGE TYPICAL
 I-26 OVER BILTMORE FARMS
 -L- STA 1049+88.55 TO STA 1051+48.80



SHIFTED BARRIER DETAIL
 USE IN CONJUNCTION WITH TYPICAL SECTIONS NO. 2
 -L- STA 1028+50.00 TO 1049+00.00



BRIDGE TYPICAL
 I-26 OVER FRENCH BROAD RIVER
 -L- STA 1160+76.56 TO STA 1165+40.56



BARRIER WITH CONCRETE CAP DETAIL
 USE IN CONJUNCTION WITH TYPICAL NO. 2
 -L- STA 1024+09.96 TO STA 1025+35.58
 -Y15RPD- STA 10+00.00 TO STA 12+39.56 LT (INVERT)

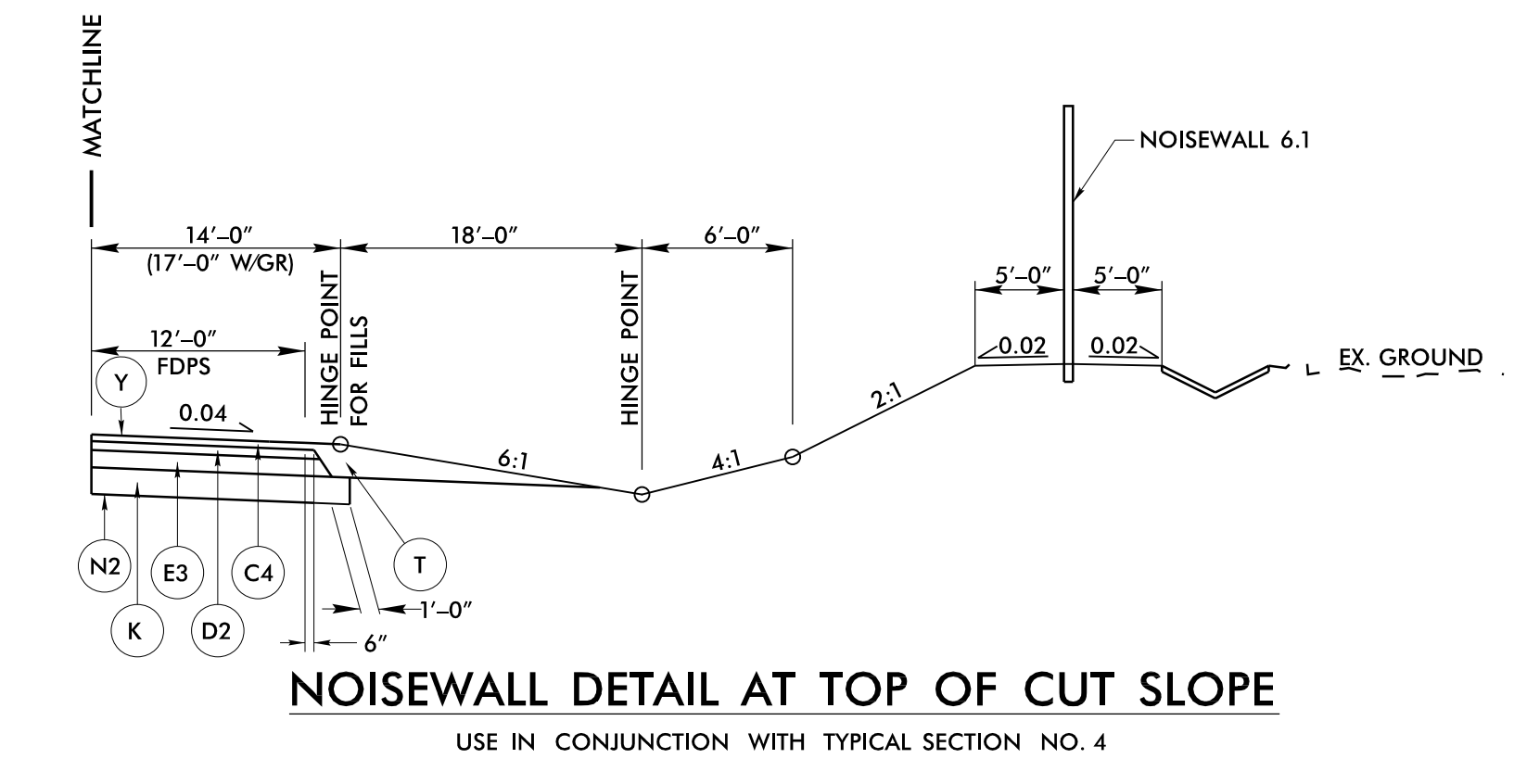
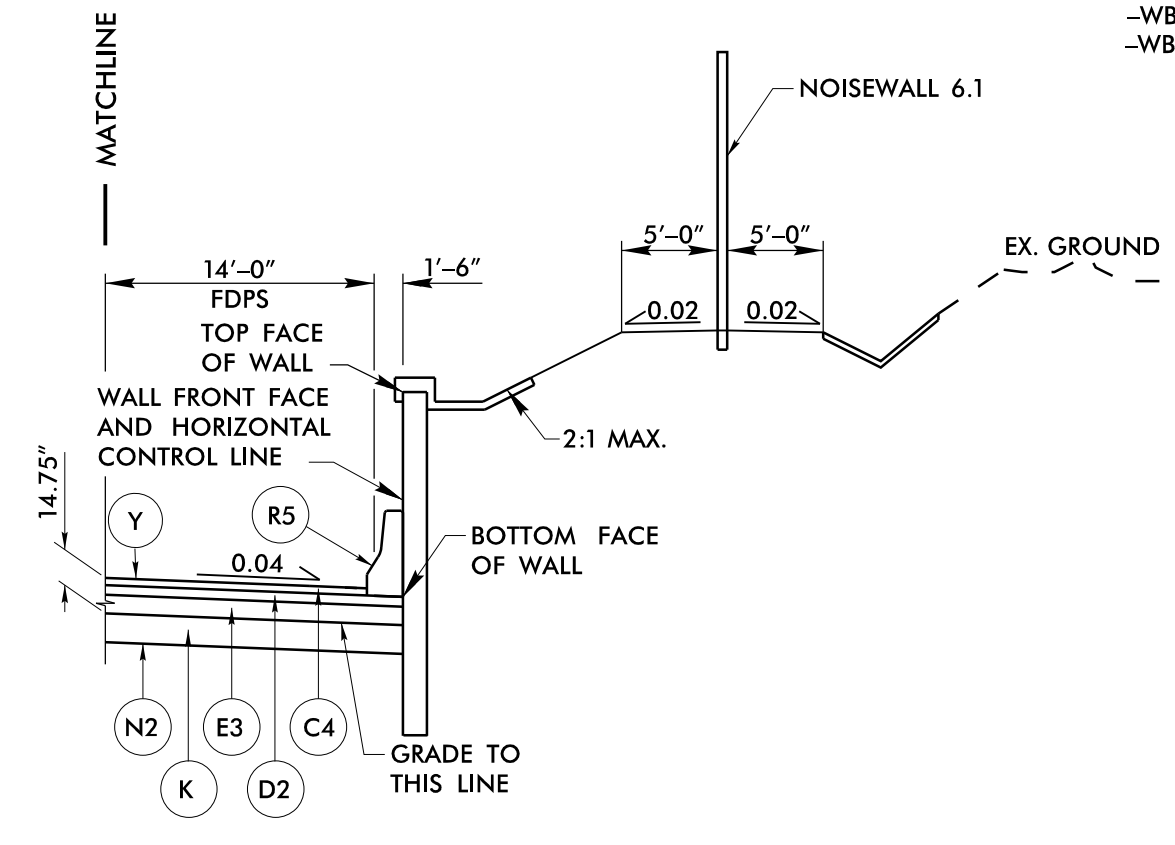
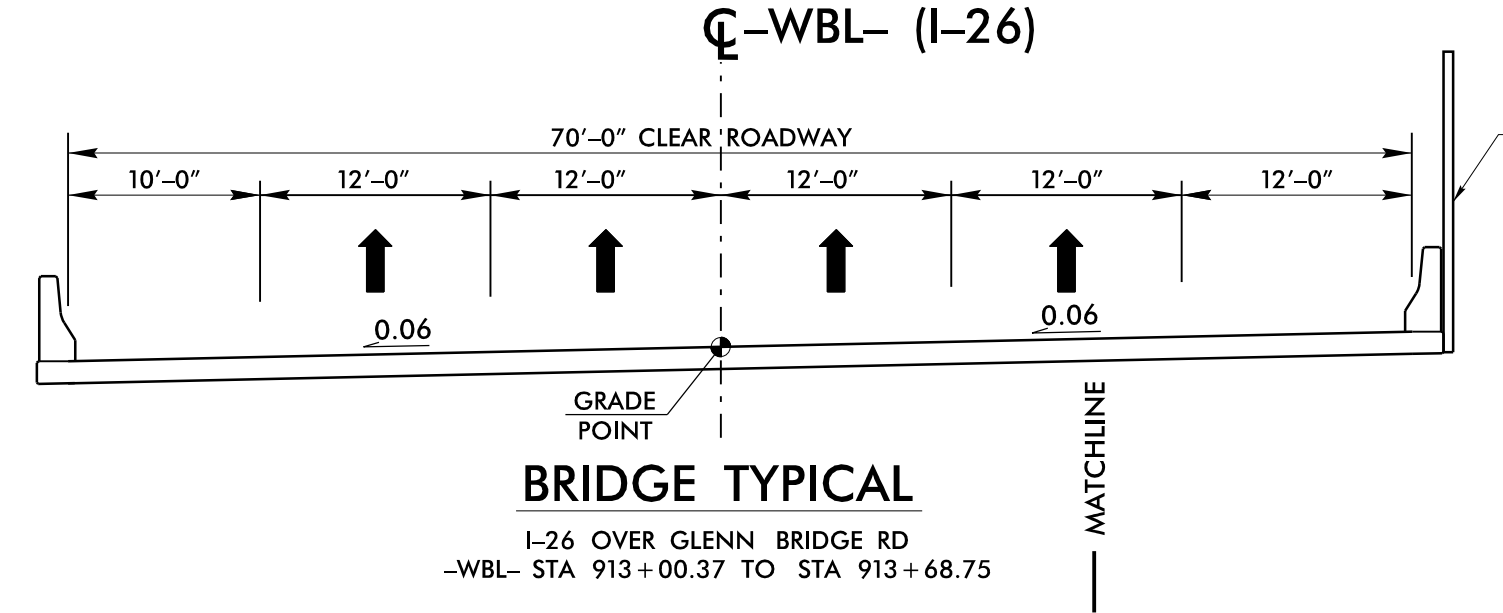
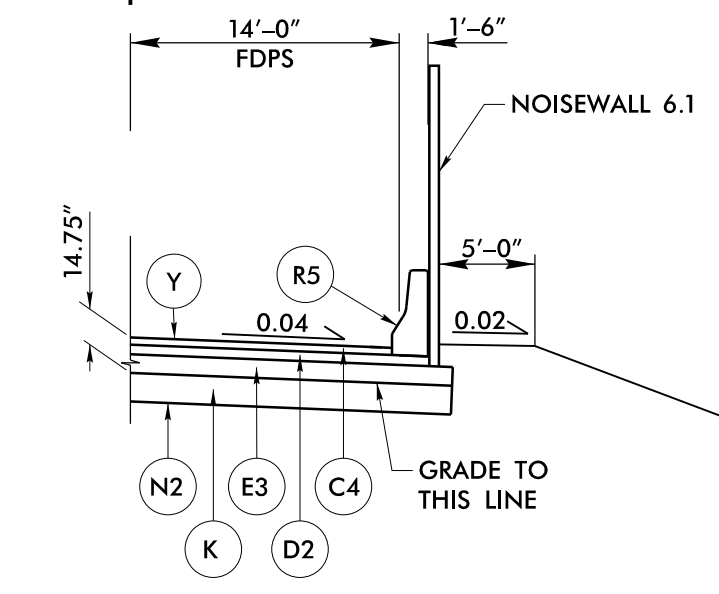
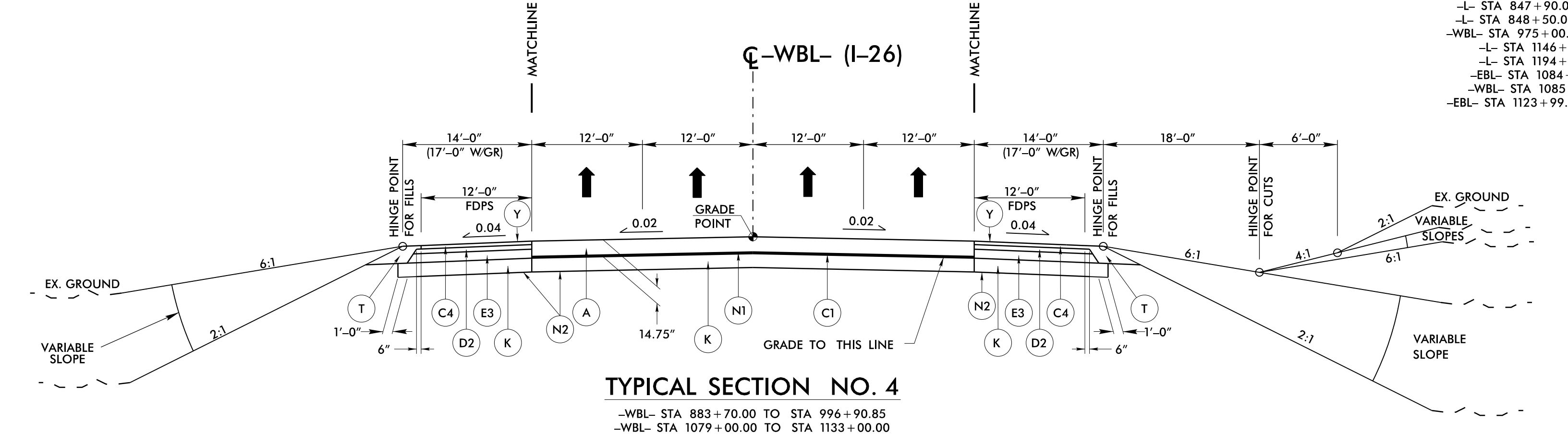
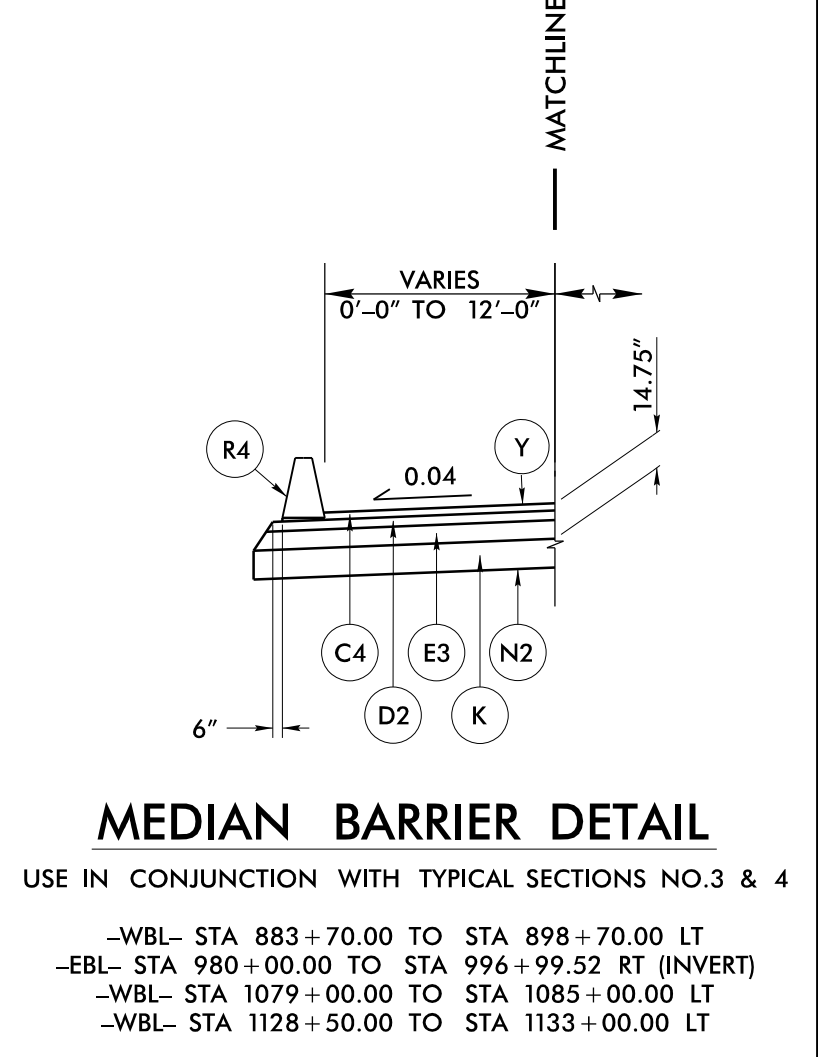
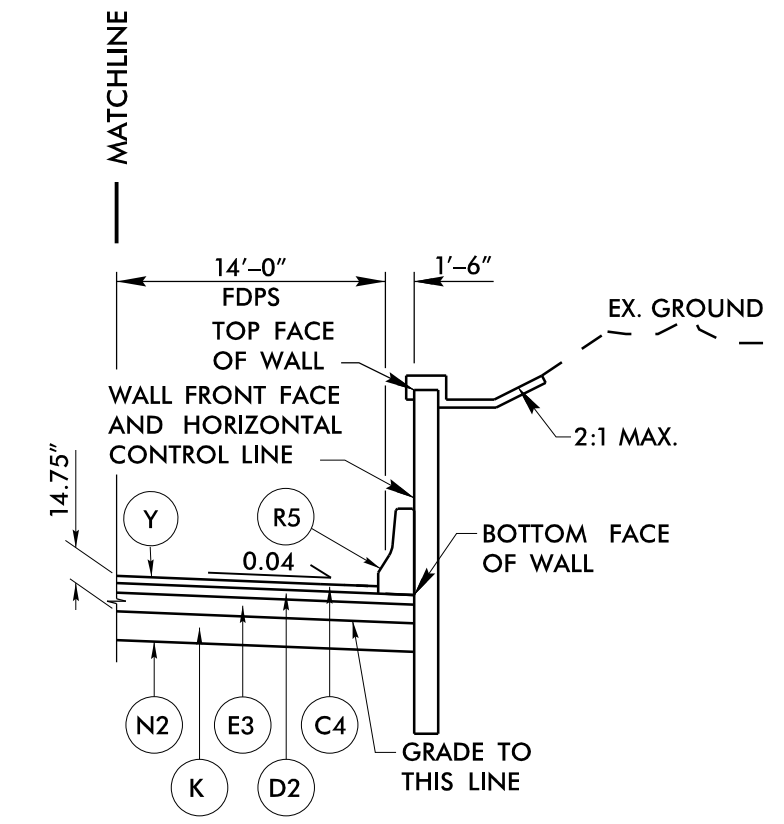
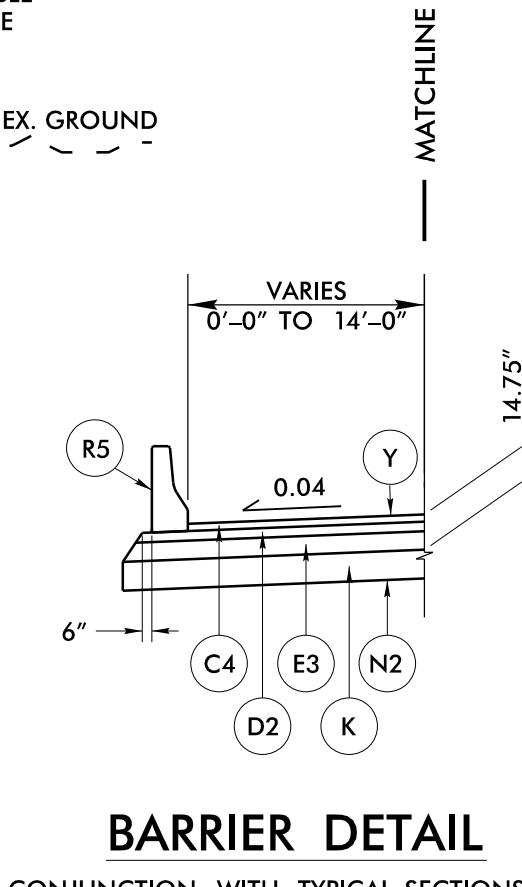
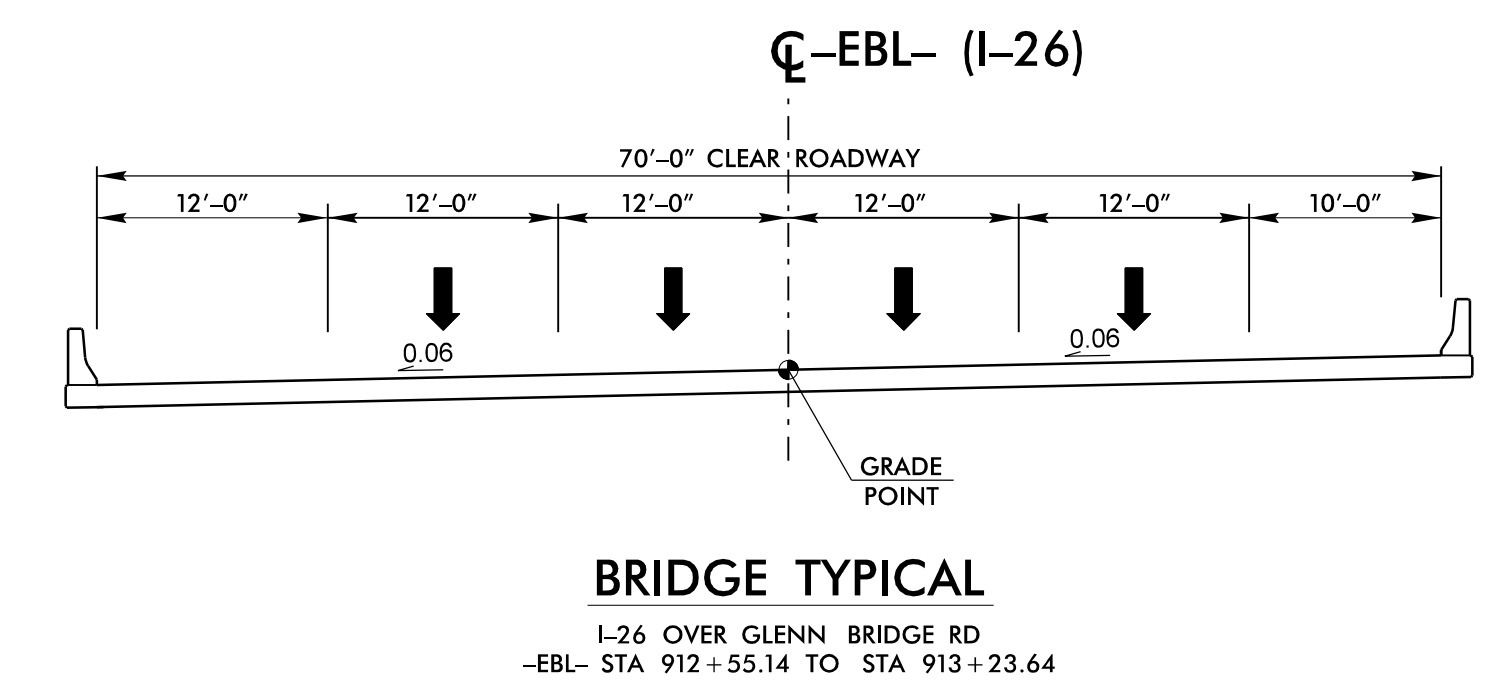
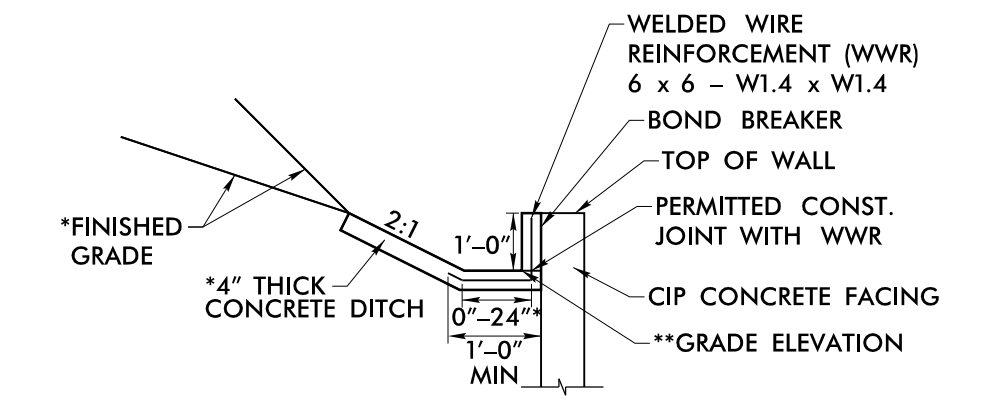
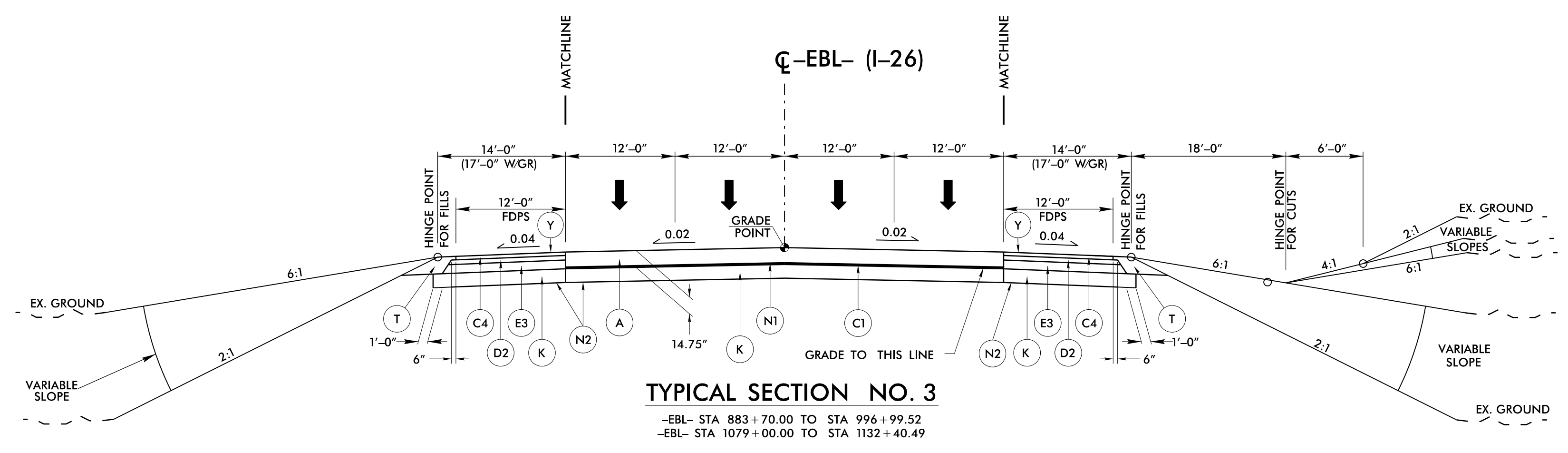
A	13.5" PCCP
C1	1.25" S9.5B
C2	2.5" S9.5B
C3	3" S9.5B
C4	3" S9.5C
C5	1.5" S9.5B
C6	1.5" S9.5C
C7	VARIABLE S9.5D
C8	3" S9.5D
D1	2.5" I19.0C
D2	4" I19.0C
E1	4" B25.0C
E2	4.5" B25.0C
E3	6.5" OR 7.75" B25.0C* *SEE SHOULDER DRAIN DETAIL SHEET 2A-1
E4	5" B25.0C
K	12" CLASS IV SUBGRADE STABILIZATION
N1	NONWOVEN GEOTEXTILE INTERLAYER
N2	GEOTEXTILE FOR SOIL STABILIZATION
R1	2'-6" C & G
R2	CONC. SHOULDER BERM GUTTER
R3	5" MONO CONC. ISLAND (SURFACE MOUNTED)
R4	SINGLE SLOPE CONC. BARRIER
R5	PRECAST REINFORCED CONC. BARRIER
R6	CONCRETE BARRIER RAIL W/MOMENT SLAB
R7	EXPRESSWAY GUTTER
S	CONC. SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V	MILLING 1.5" DEPTH
Y	MILLED RUMBLE STRIP
PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE	

NOTE: SEE PLANS FOR SUPERELEVATIONS, TURN LANES, MONOLITHIC ISLANDS, CURB AND GUTTER, AND LANE TAPER LOCATIONS.

REVISIONS

6/2/2019

PROJECT REFERENCE NO. 1-4700	SHEET NO. 2A-5
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



A	13.5" PCCP
C1	1.25" S9.5B
C2	2.5" S9.5B
C3	3" S9.5B
C4	3" S9.5C
C5	1.5" S9.5B
C6	1.5" S9.5C
C7	VARIABLE S9.5D
C8	3" S9.5D
D1	2.5" I19.0C
D2	4" I19.0C
E1	4" B25.0C
E2	4.5" B25.0C
E3	6.5" OR 7.75" B25.0C* *SEE SHOULDER DRAIN DETAIL SHEET 2A-1
E4	5" B25.0C
K	12" CLASS IV SUBGRADE STABILIZATION
N1	NONWOVEN GEOTEXTILE INTERLAYER
N2	GEOTEXTILE FOR SOIL STABILIZATION
R1	2'-6" C & G
R2	CONC. SHOULDER BERM GUTTER
R3	5" MONO CONC. ISLAND (SURFACE MOUNTED)
R4	SINGLE SLOPE CONC. BARRIER
R5	PRECAST REINFORCED CONC. BARRIER
R6	CONCRETE BARRIER RAIL W/MOMENT SLAB
R7	EXPRESSWAY GUTTER
S	CONC. SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V	MILLING 1.5" DEPTH
Y	MILLED RUMBLE STRIP
	PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE

NOTE: SEE PLANS FOR SUPERELEVATIONS, TURN LANES, MONOLITHIC ISLANDS, CURB AND GUTTER, AND LANE TAPER LOCATIONS.

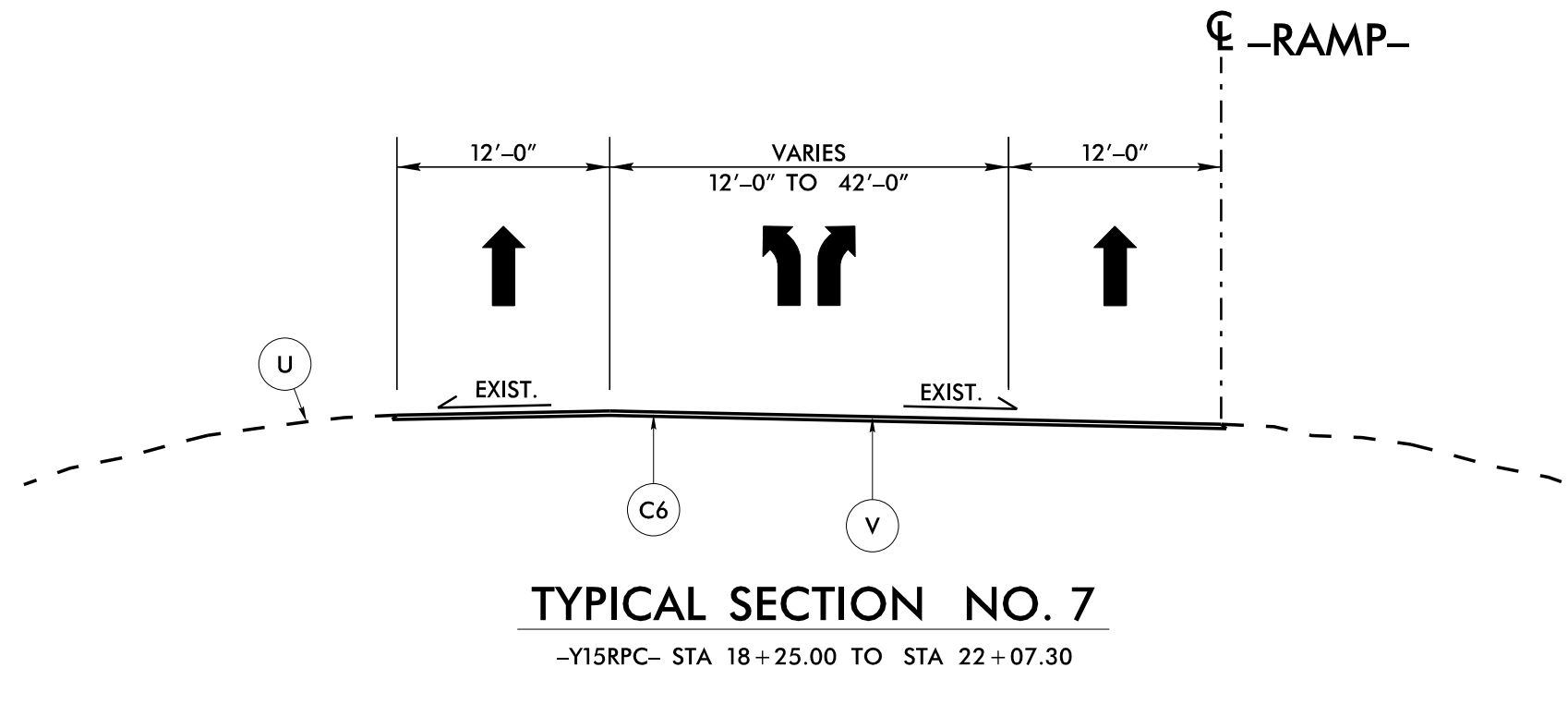
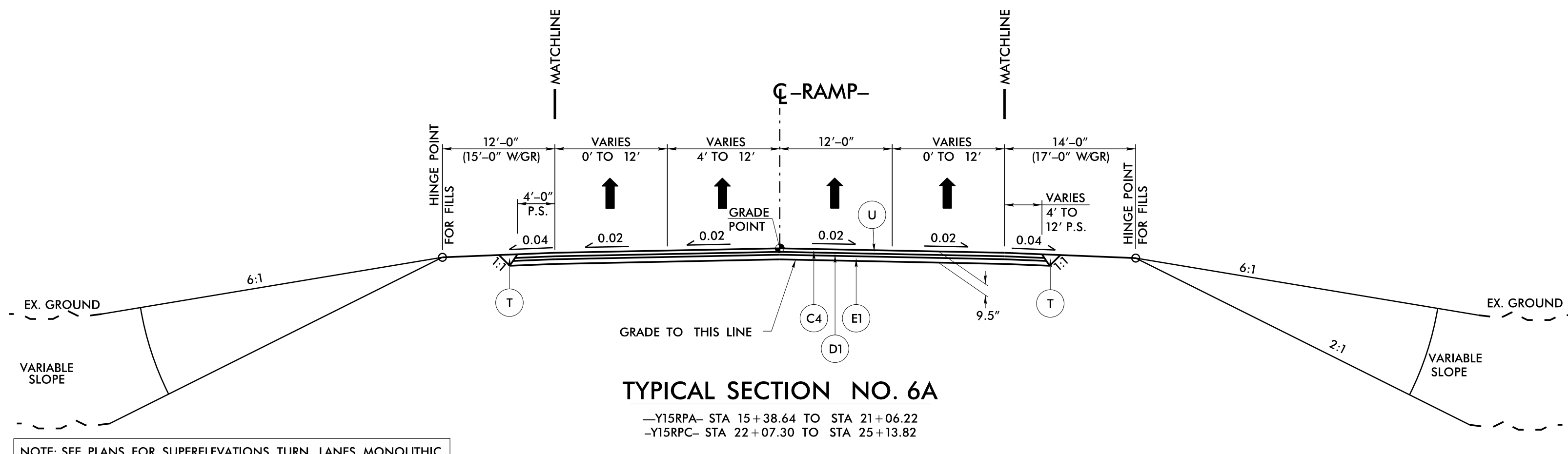
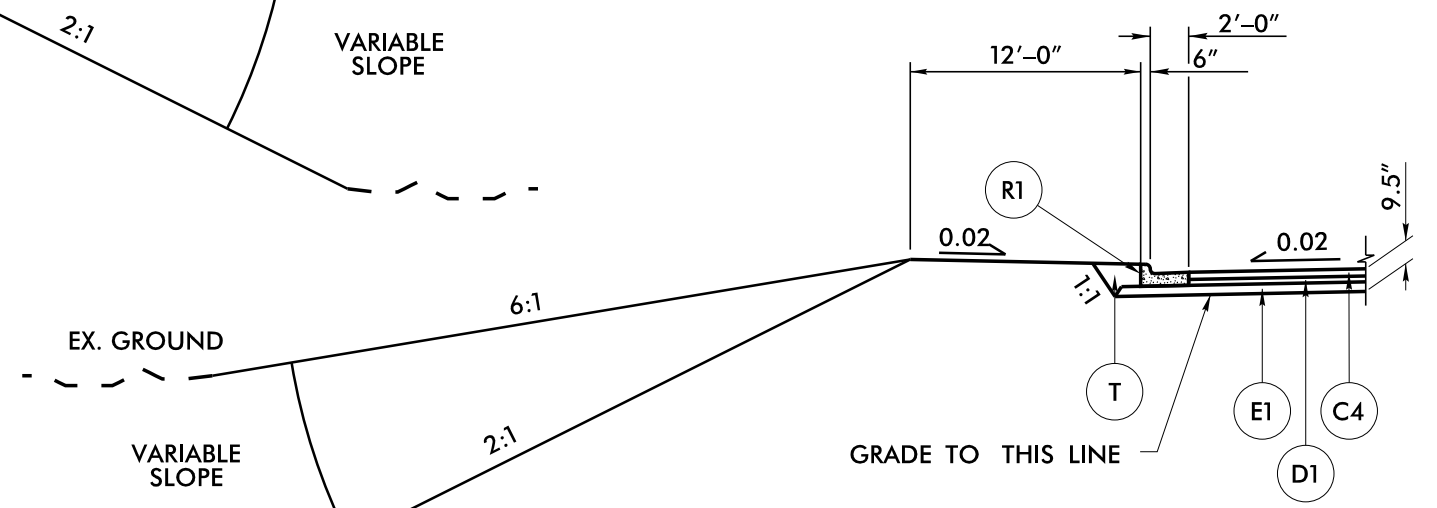
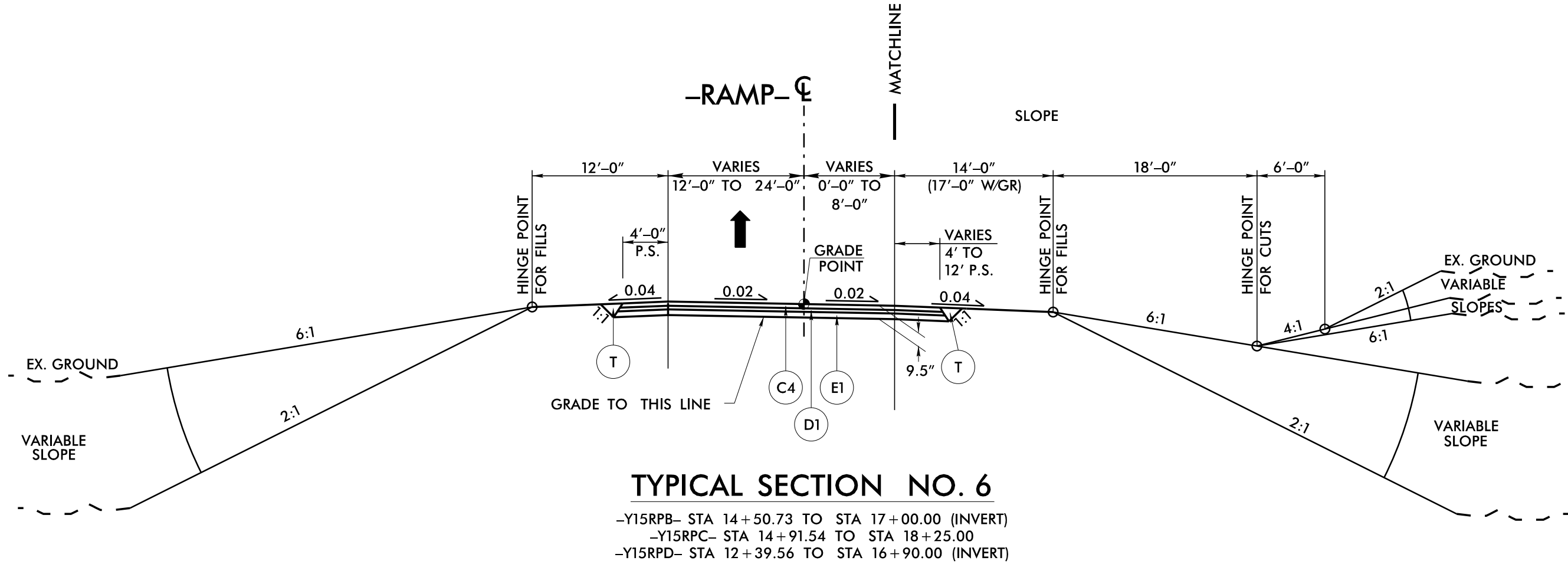
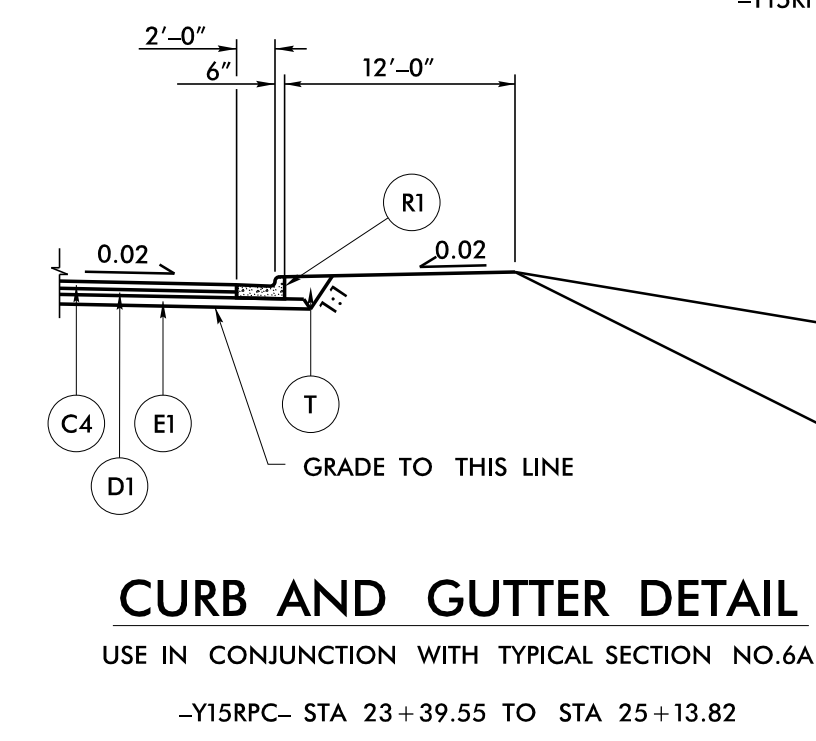
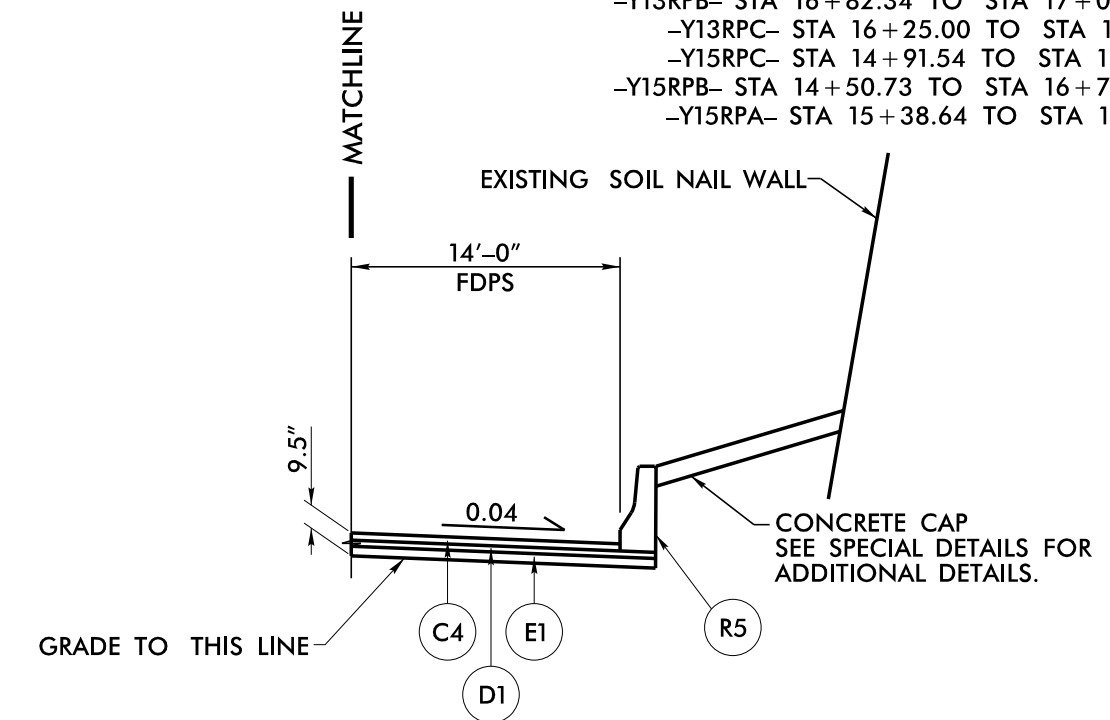
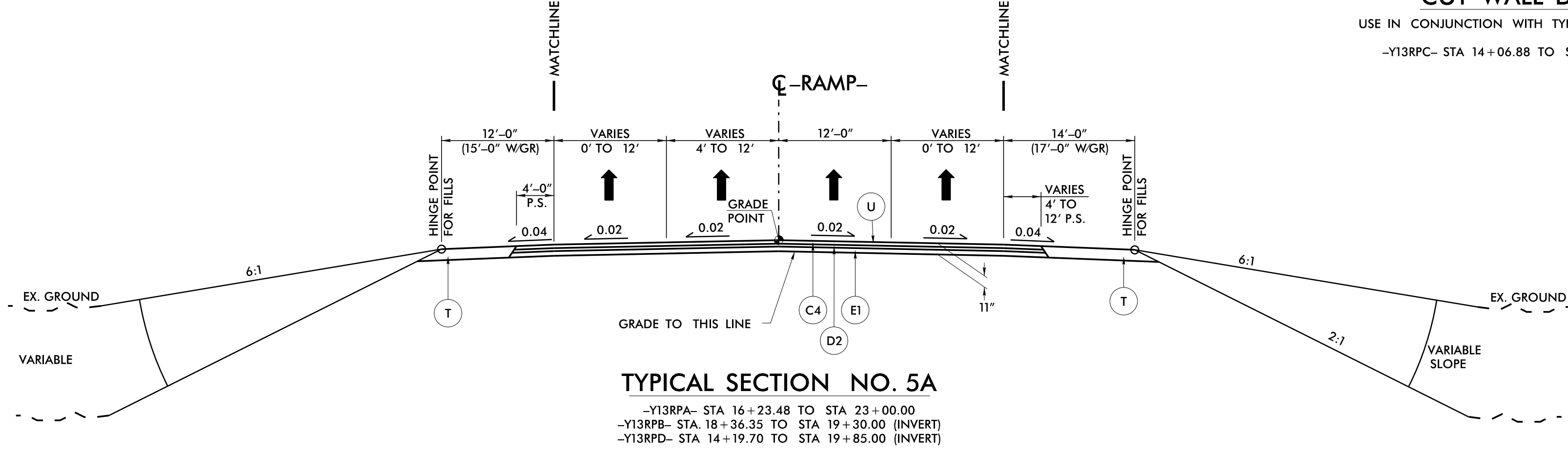
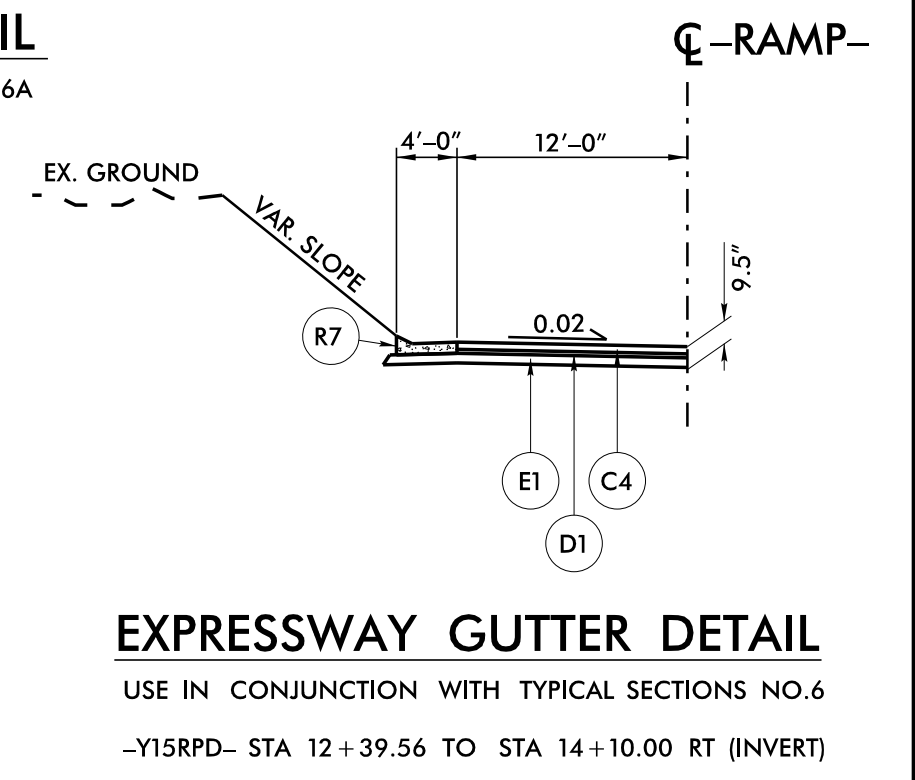
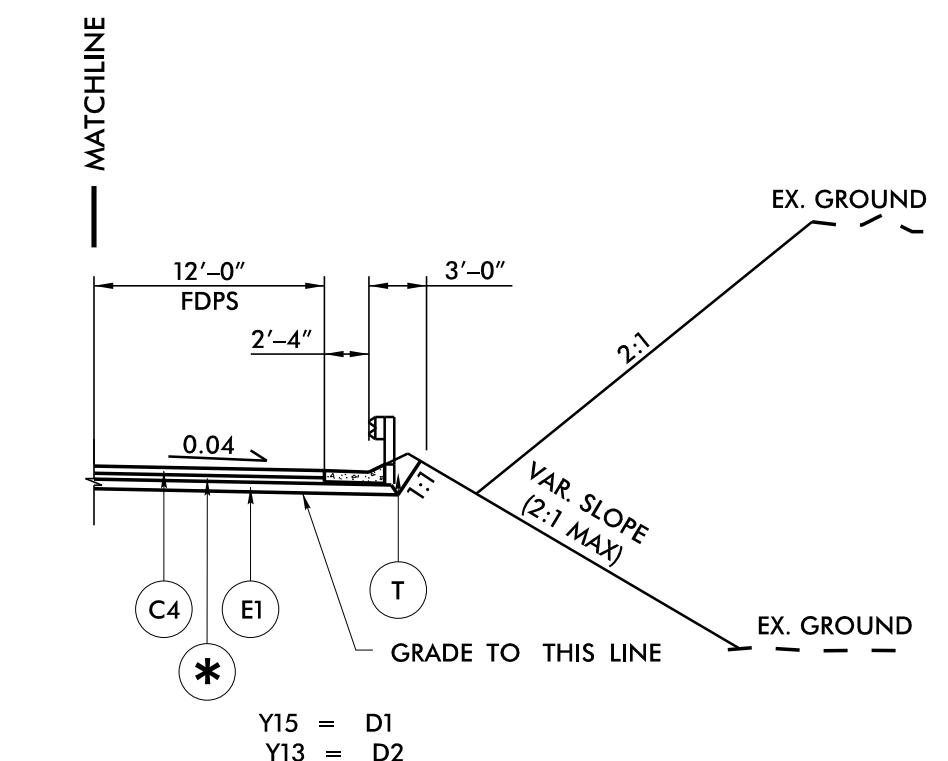
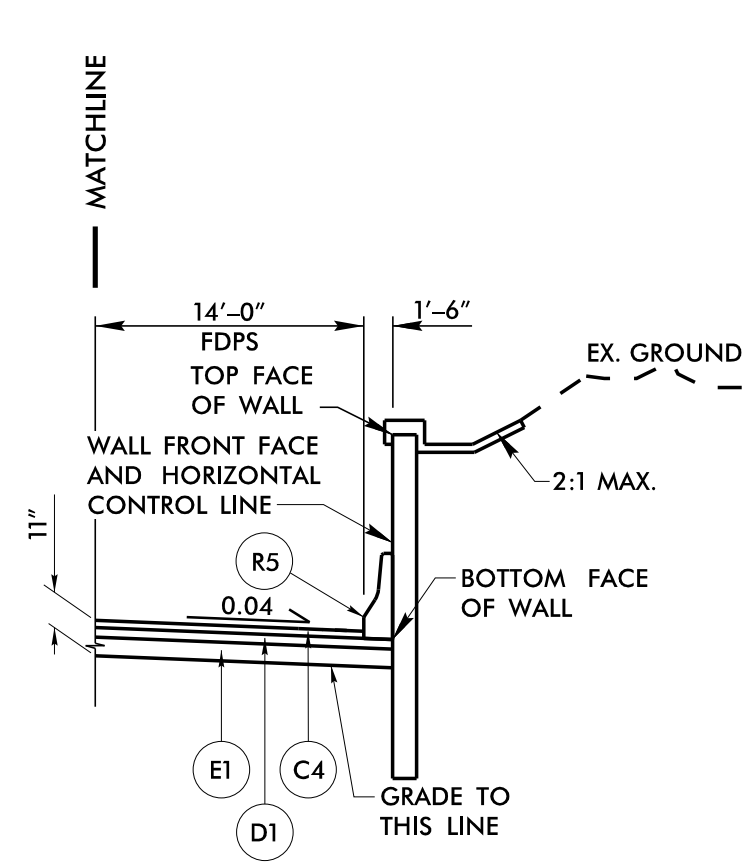
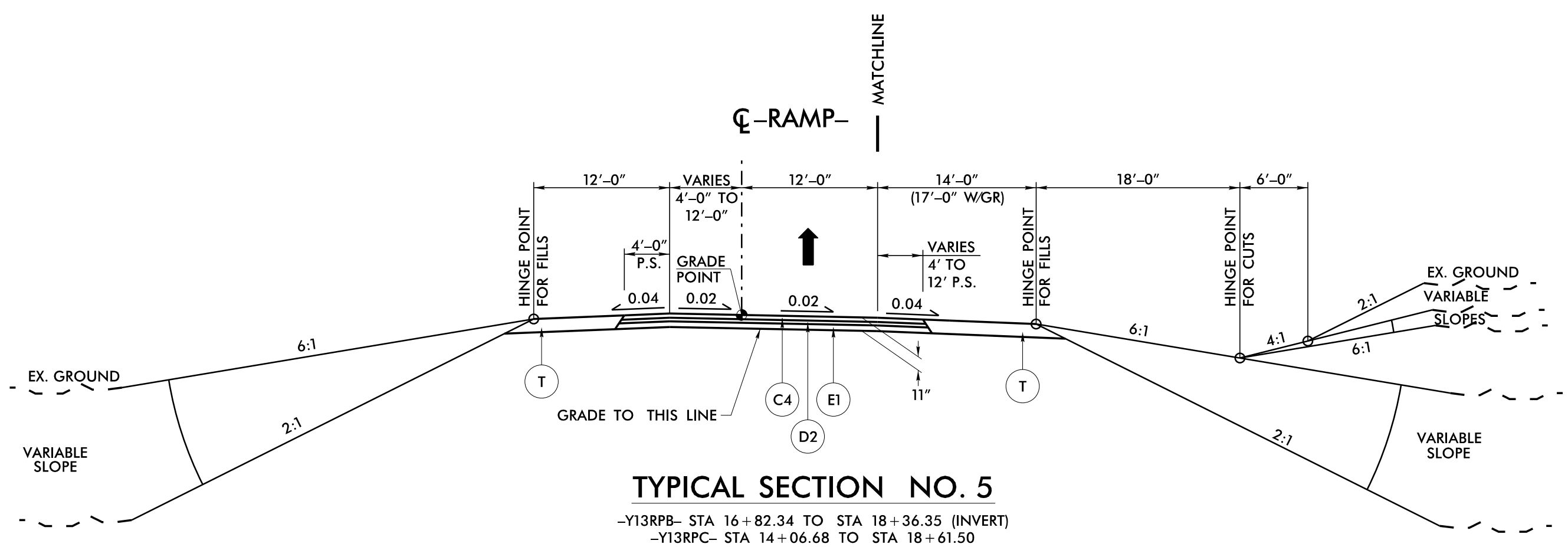
REVISIONS

6 MAY 2019 10:48
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6/2/2019

PROJECT REFERENCE NO. 1-4700	SHEET NO. 2A-6
ROADWAY DESIGN ENGINEER SEAL 046784 MARC A. WHITMORE 5/16/2019	PAVEMENT DESIGN ENGINEER SEAL 024964 JOSEPH HOLLAND 5/16/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



A	13.5" PCCP
C1	1.25" S9.5B
C2	2.5" S9.5B
C3	3" S9.5B
C4	3" S9.5C
C5	1.5" S9.5B
C6	1.5" S9.5C
C7	VARIABLE S9.5D
C8	3" S9.5D
D1	2.5" I19.0C
D2	4" I19.0C
E1	4" B25.0C
E2	4.5" B25.0C
E3	6.5" OR 7.75" B25.0C* *SEE SHOULDER DRAIN DETAIL SHEET 2A-1
E4	5" B25.0C
K	12" CLASS IV SUBGRADE STABILIZATION
N1	NONWOVEN GEOTEXTILE INTERLAYER
N2	GEOTEXTILE FOR SOIL STABILIZATION
R1	2'-6" C & G
R2	CONC. SHOULDER BERM GUTTER
R3	5" MONO CONC. ISLAND (SURFACE MOUNTED)
R4	SINGLE SLOPE CONC. BARRIER
R5	PRECAST REINFORCED CONC. BARRIER
R6	CONCRETE BARRIER RAIL W/MOMENT SLAB
R7	EXPRESSWAY GUTTER
S	CONC. SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V	MILLING 1.5" DEPTH
Y	MILLED RUMBLE STRIP
PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE	

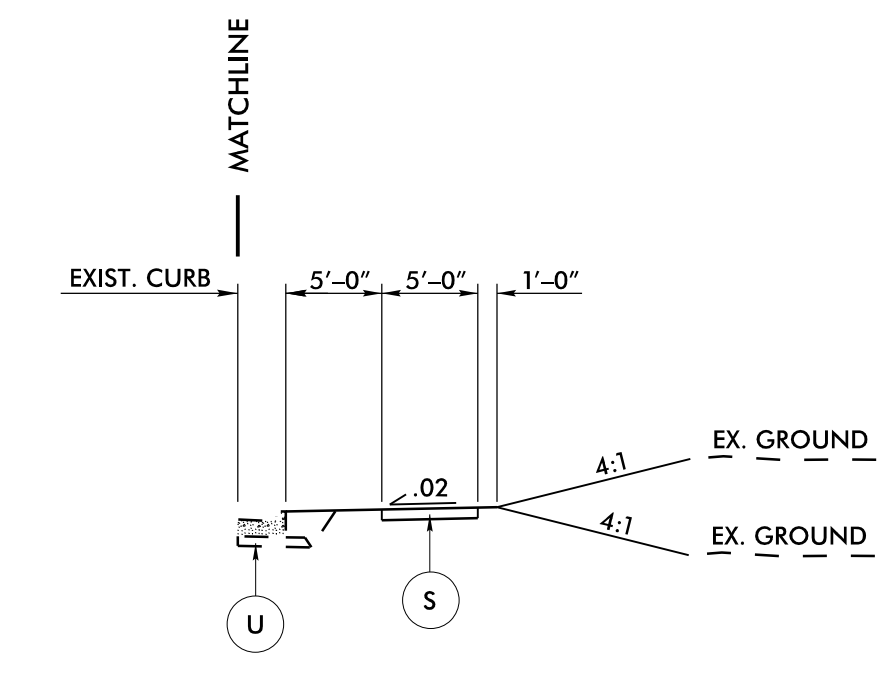
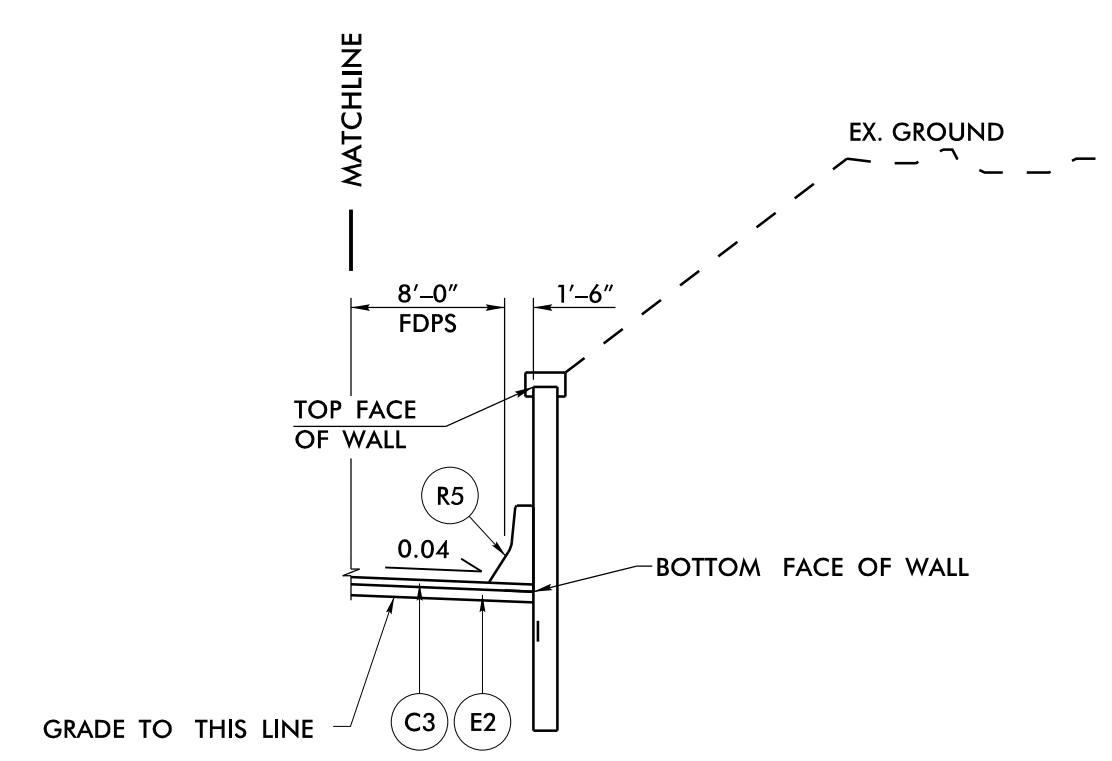
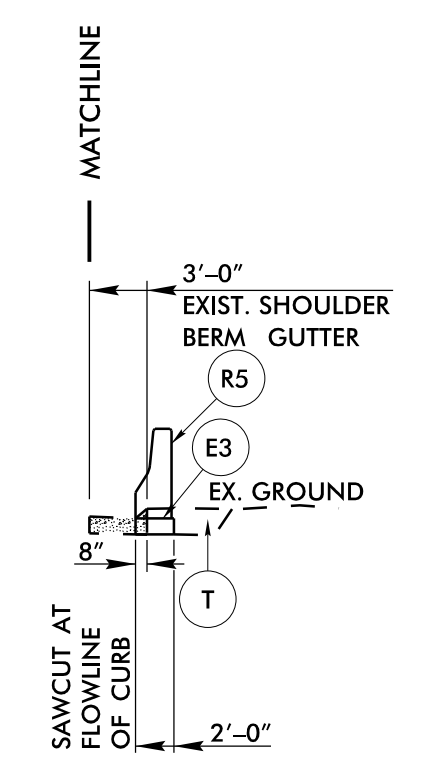
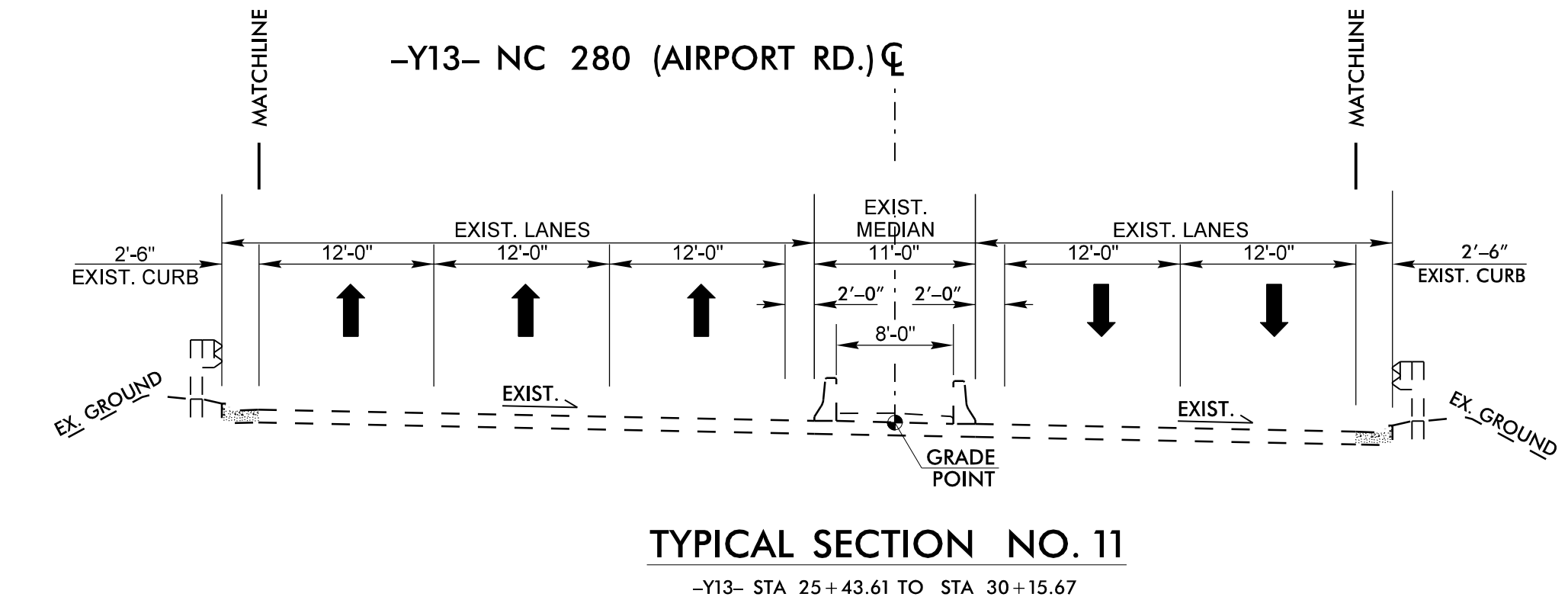
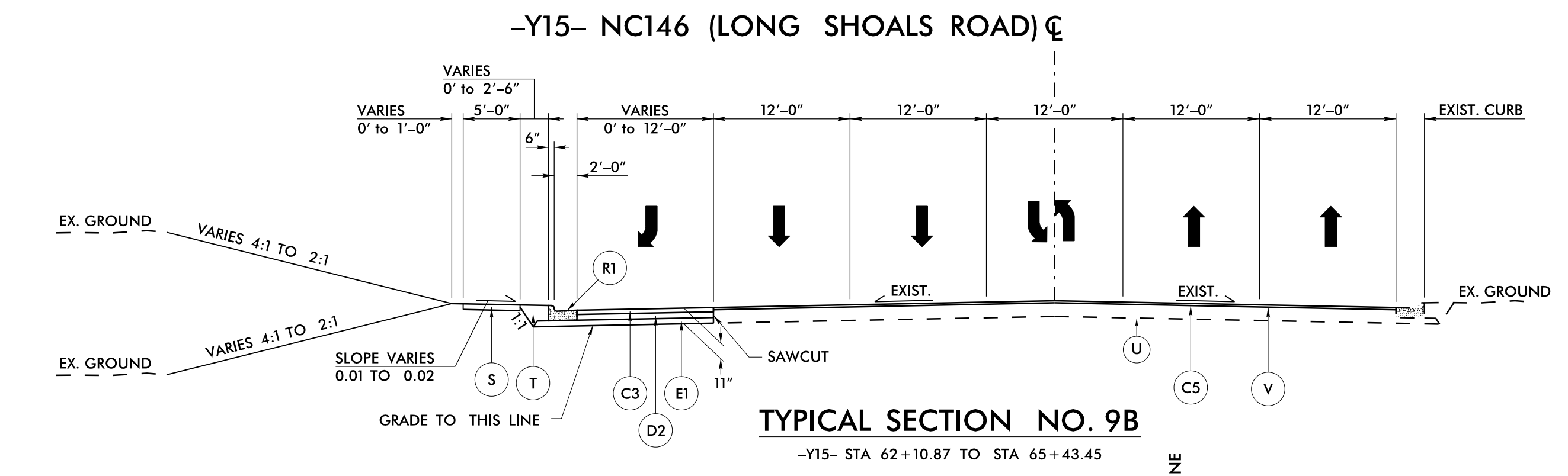
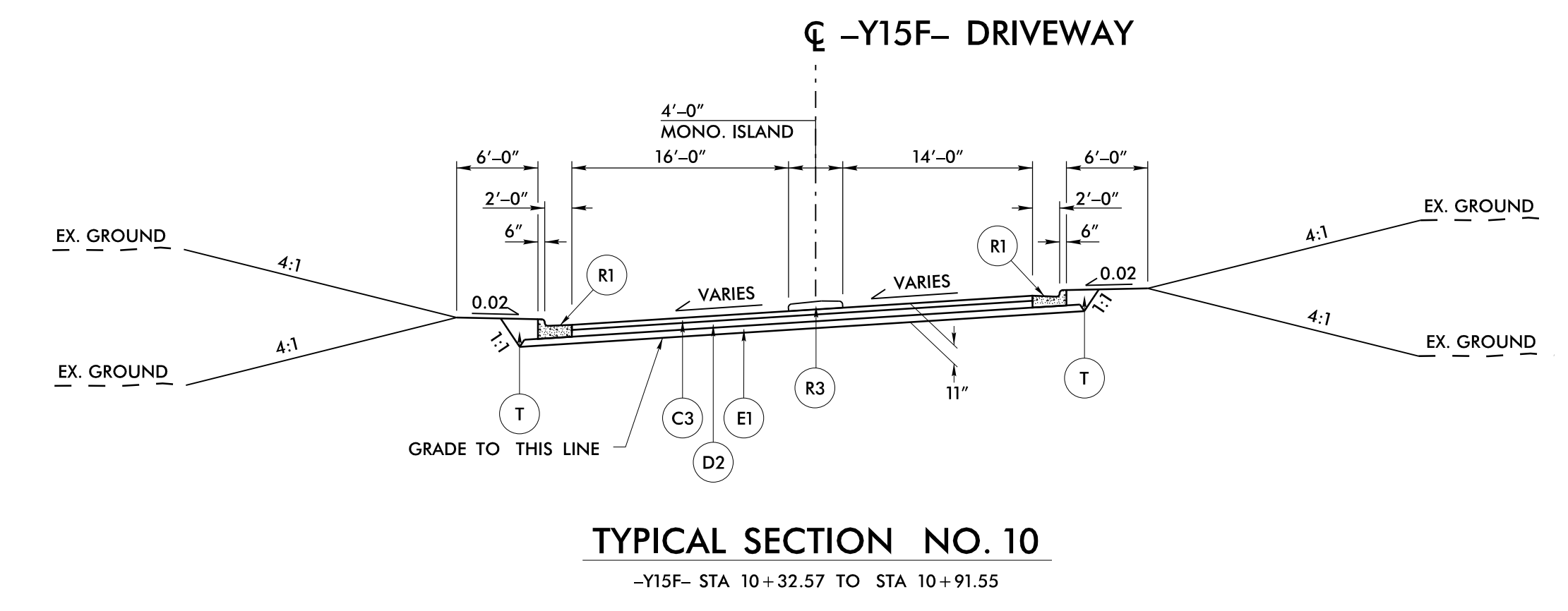
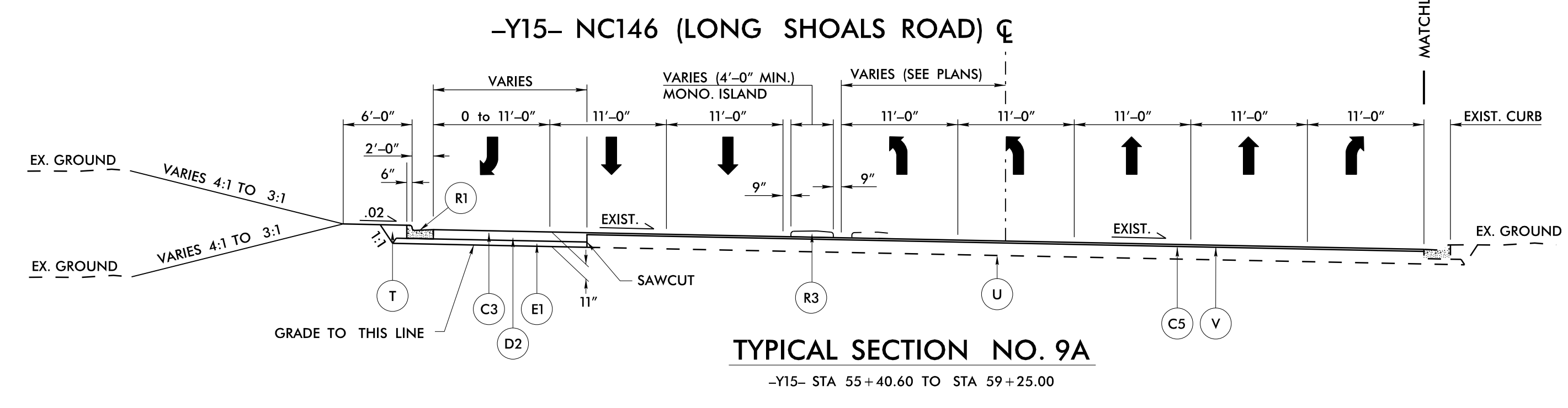
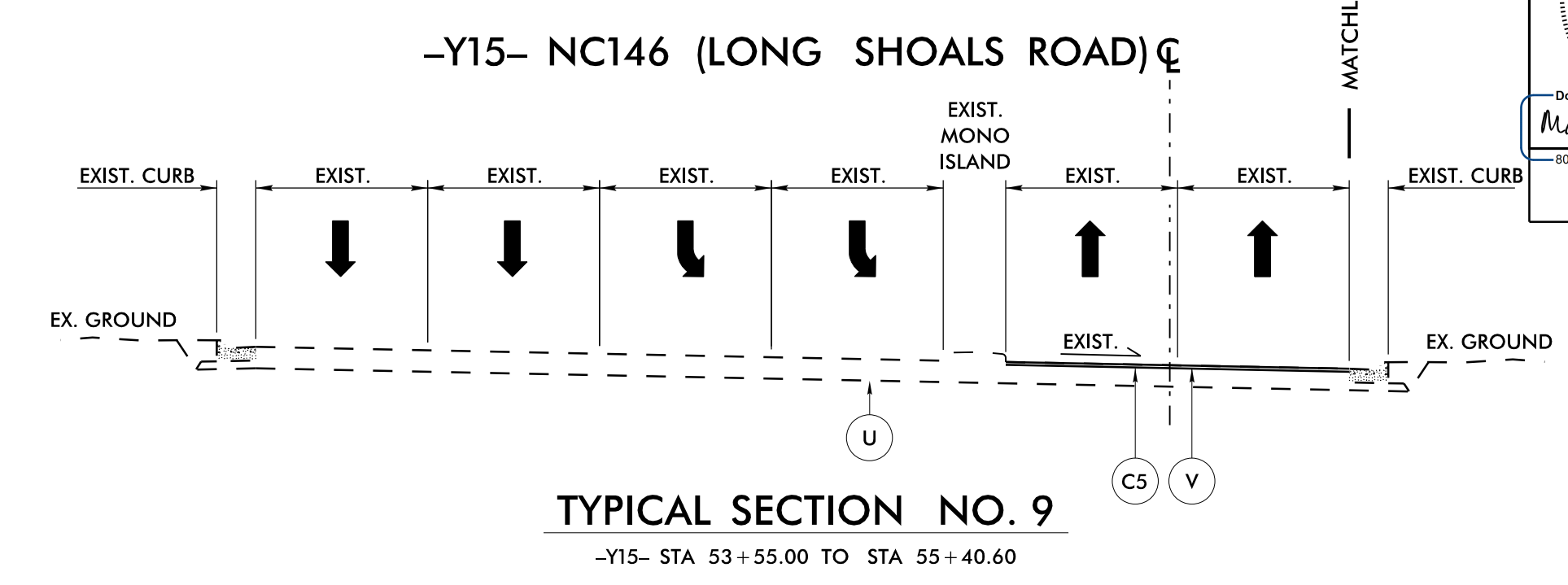
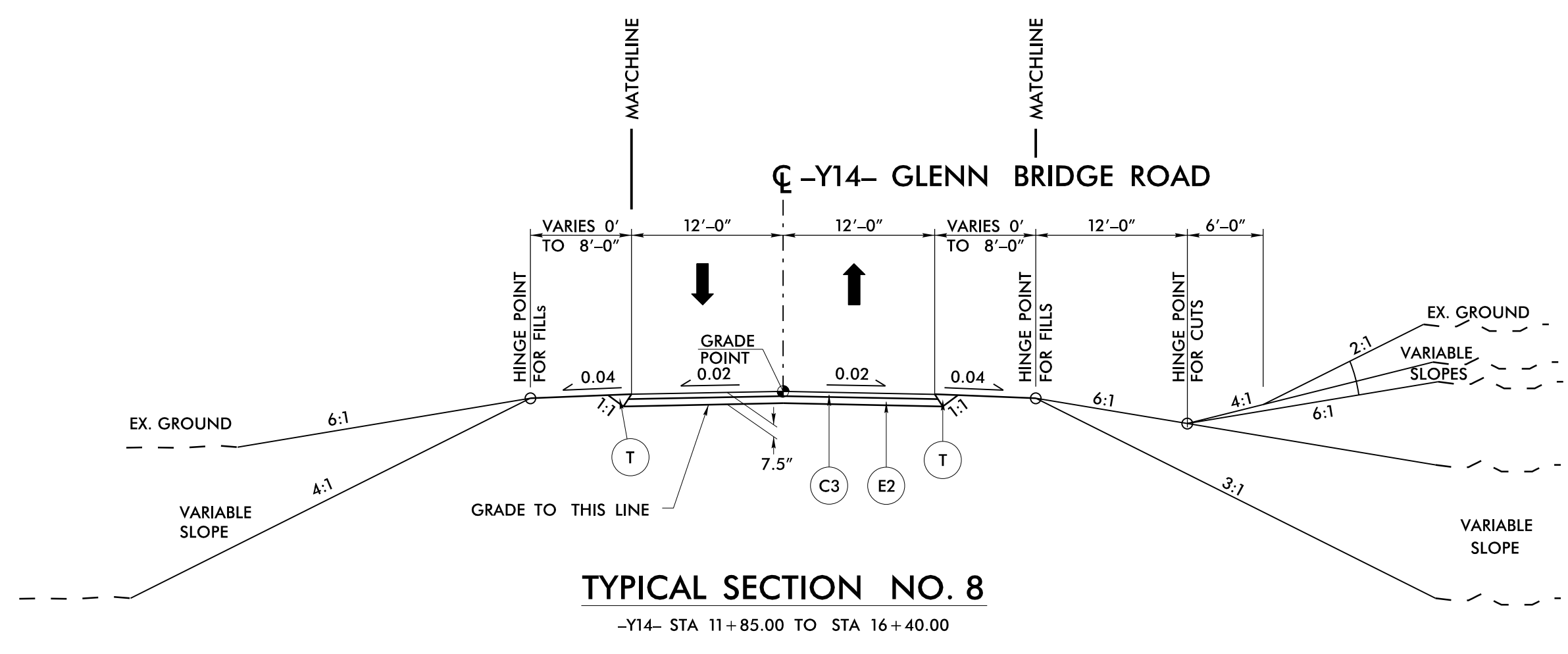
NOTE: SEE PLANS FOR SUPERELEVATIONS, TURN LANES, MONOLITHIC ISLANDS, CURB AND GUTTER, AND LANE TAPER LOCATIONS.

REVISIONS

15-MAY-2019 10:48 AM
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6/2/2019

PROJECT REFERENCE NO. 1-4700	SHEET NO. 2A-7
ROADWAY DESIGN ENGINEER MARCO WHITMORE	PAVEMENT DESIGN ENGINEER JOSEPH HOLLAND
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



A	13.5" PCCP
C1	1.25" S9.5B
C2	2.5" S9.5B
C3	3" S9.5B
C4	3" S9.5C
C5	1.5" S9.5B
C6	1.5" S9.5C
C7	VARIABLE S9.5D
C8	3" S9.5D
D1	2.5" I19.0C
D2	4" I19.0C
E1	4" B25.0C
E2	4.5" B25.0C
E3	6.5" OR 7.75" B25.0C* *SEE SHOULDER DRAIN DETAIL SHEET 2A-1
E4	5" B25.0C
K	12" CLASS IV SUBGRADE STABILIZATION
N1	NONWOVEN GEOTEXTILE INTERLAYER
N2	GEOTEXTILE FOR SOIL STABILIZATION
R1	2'-6" C & G
R2	CONC. SHOULDER BERM GUTTER
R3	5" MONO CONC. ISLAND (SURFACE MOUNTED)
R4	SINGLE SLOPE CONC. BARRIER
R5	PRECAST REINFORCED CONC. BARRIER
R6	CONCRETE BARRIER RAIL W/MOMENT SLAB
R7	EXPRESSWAY GUTTER
S	CONC. SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V	MILLING 1.5" DEPTH
Y	MILLED RUMBLE STRIP
PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE	

NOTE: SEE PLANS FOR SUPERELEVATIONS, TURN LANES, MONOLITHIC ISLANDS, CURB AND GUTTER, AND LANE TAPER LOCATIONS.

USE IN CONJUNCTION WITH TYPICAL SECTIONS NO.11
-Y13- STA 26+22.70 TO STA 26+37.78 LT (INVERT)
-Y13RPA_SPUR_LT- STA 11+85.78 TO STA 12+78.31 LT (INVERT)
-Y13- STA 28+72.94 TO STA 29+58.59 RT
-Y13RPC_SPUR_LT- STA 11+66.31 TO STA 12+46.21 LT (INVERT)

USE IN CONJUNCTION WITH TYPICAL SECTION NO.8
-Y14- STA 12+50.00 TO STA 15+80.00 RT
-Y14- STA 12+90.00 TO STA 16+00.00 LT (INVERT)

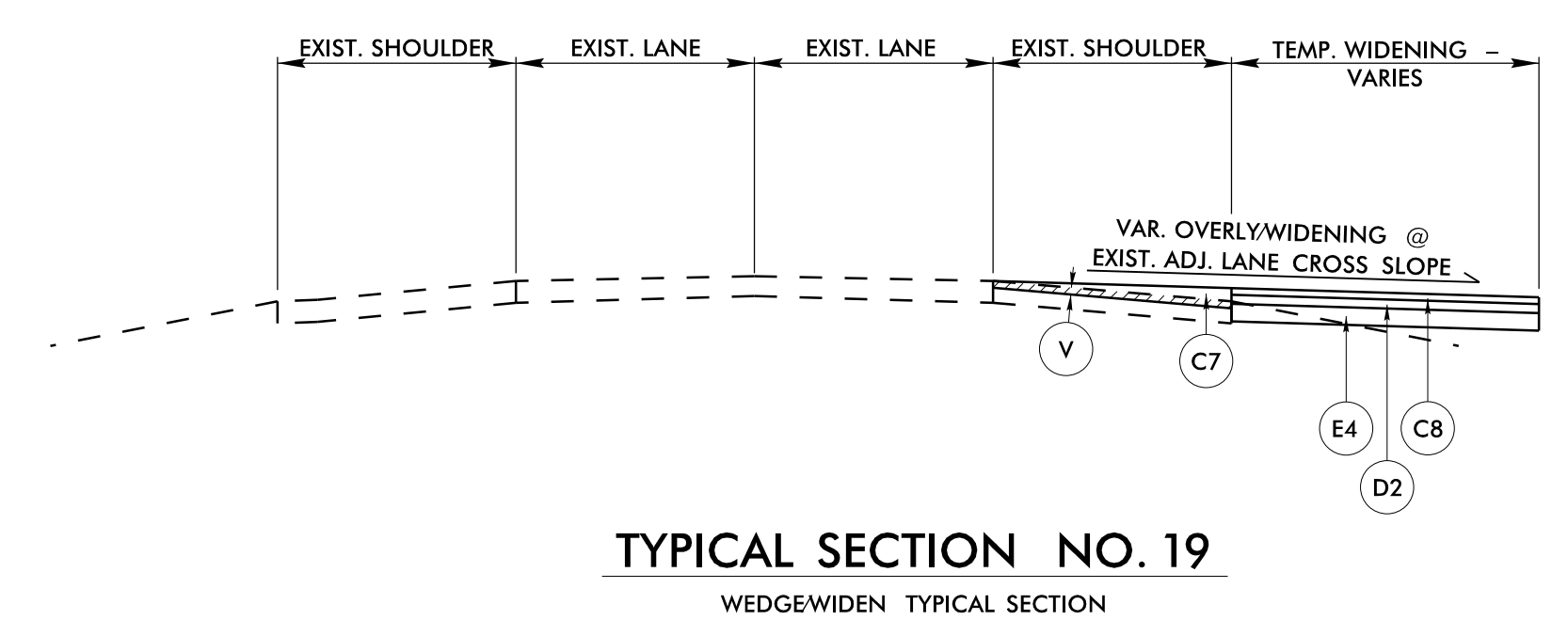
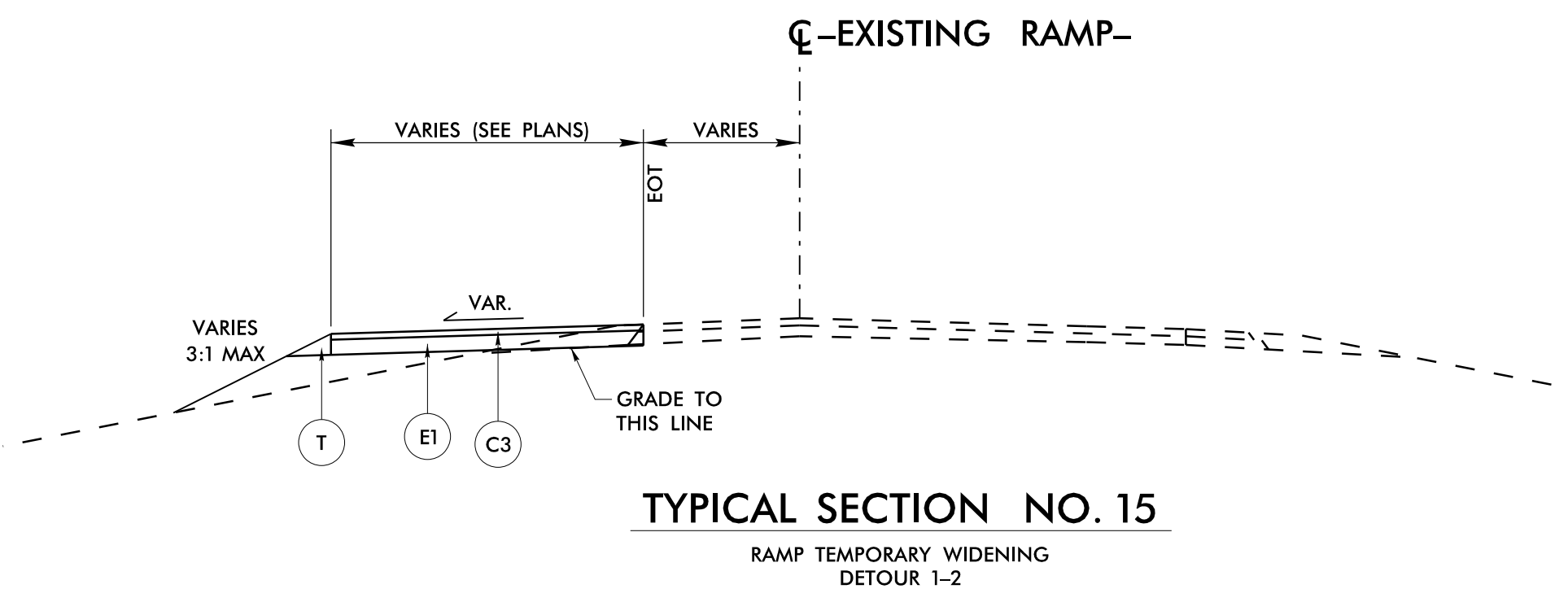
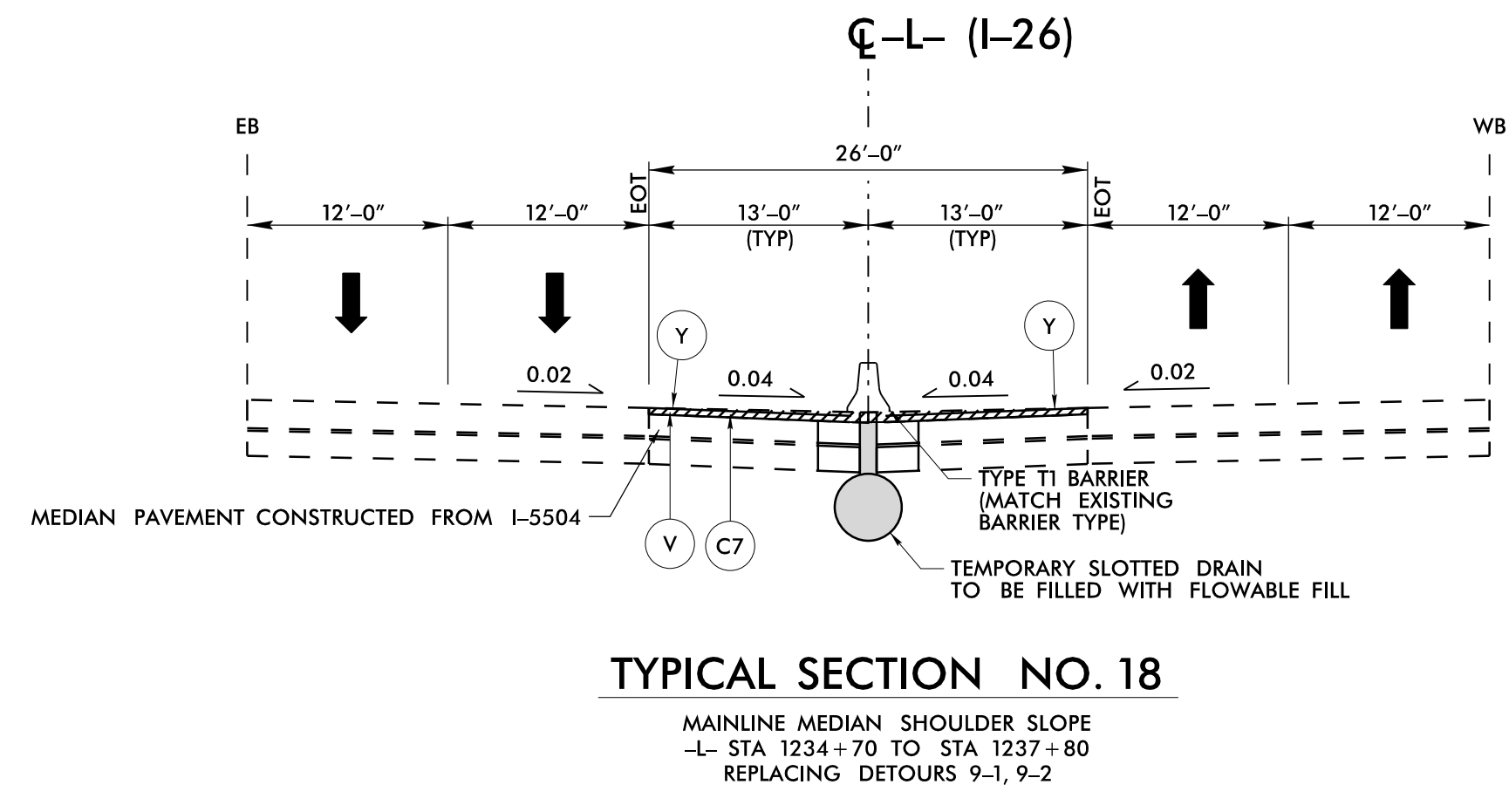
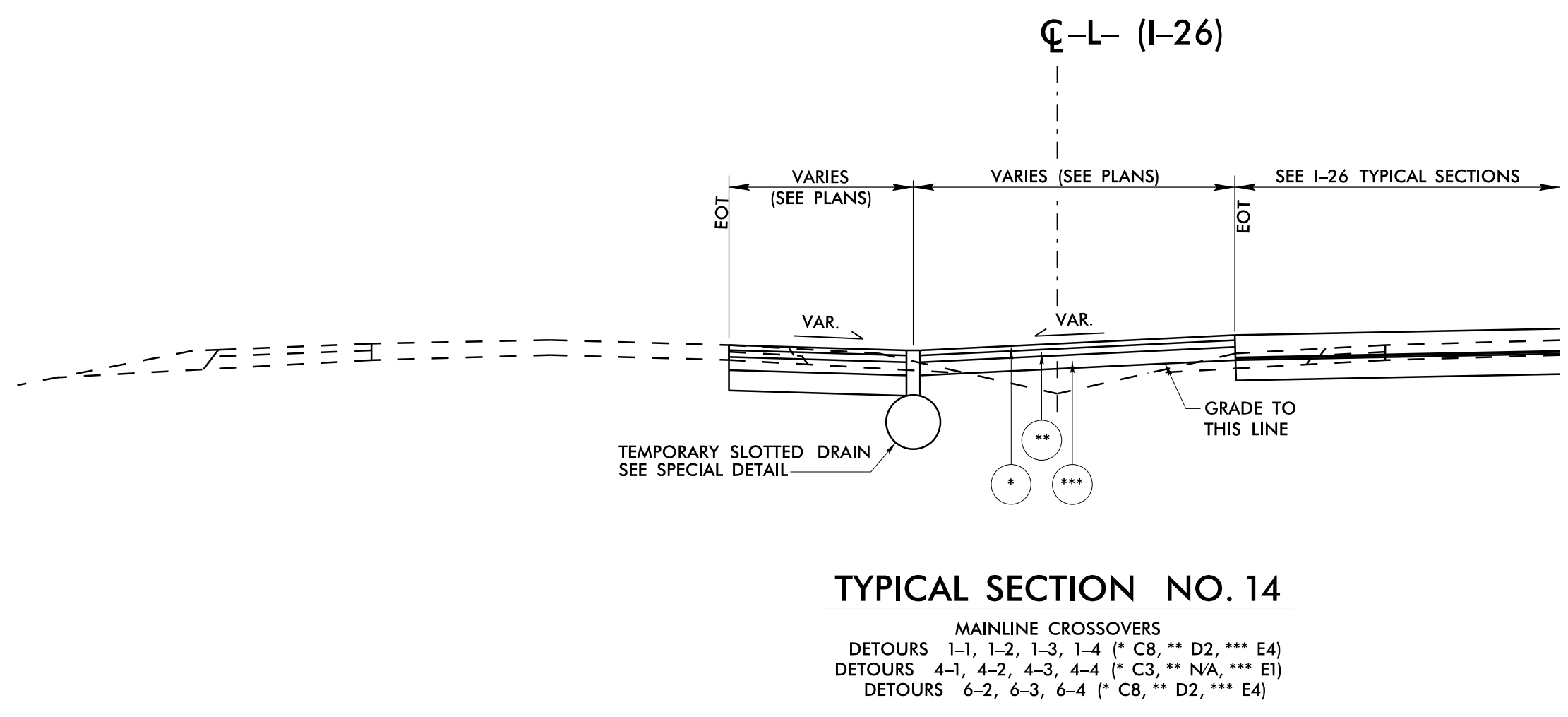
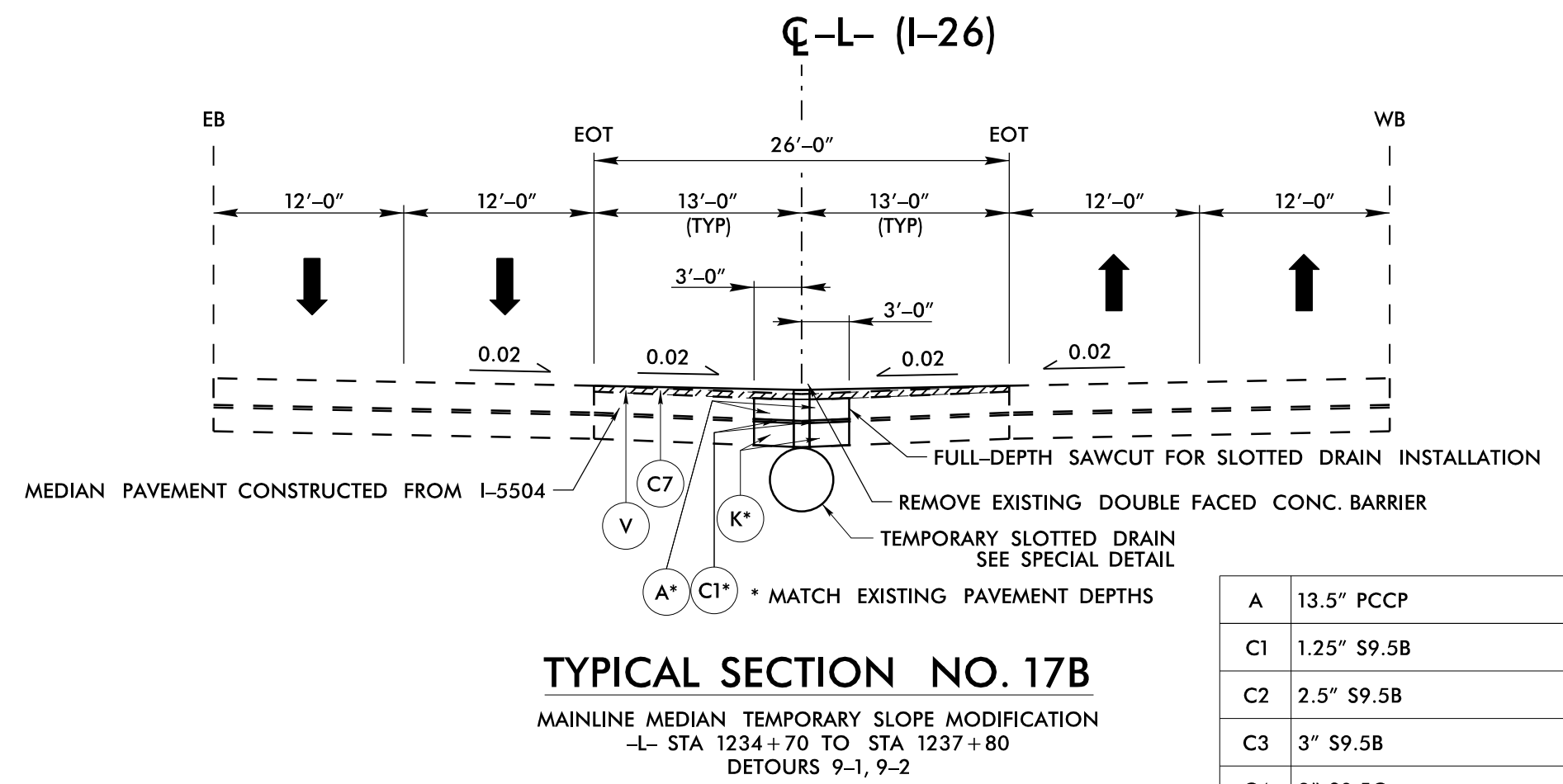
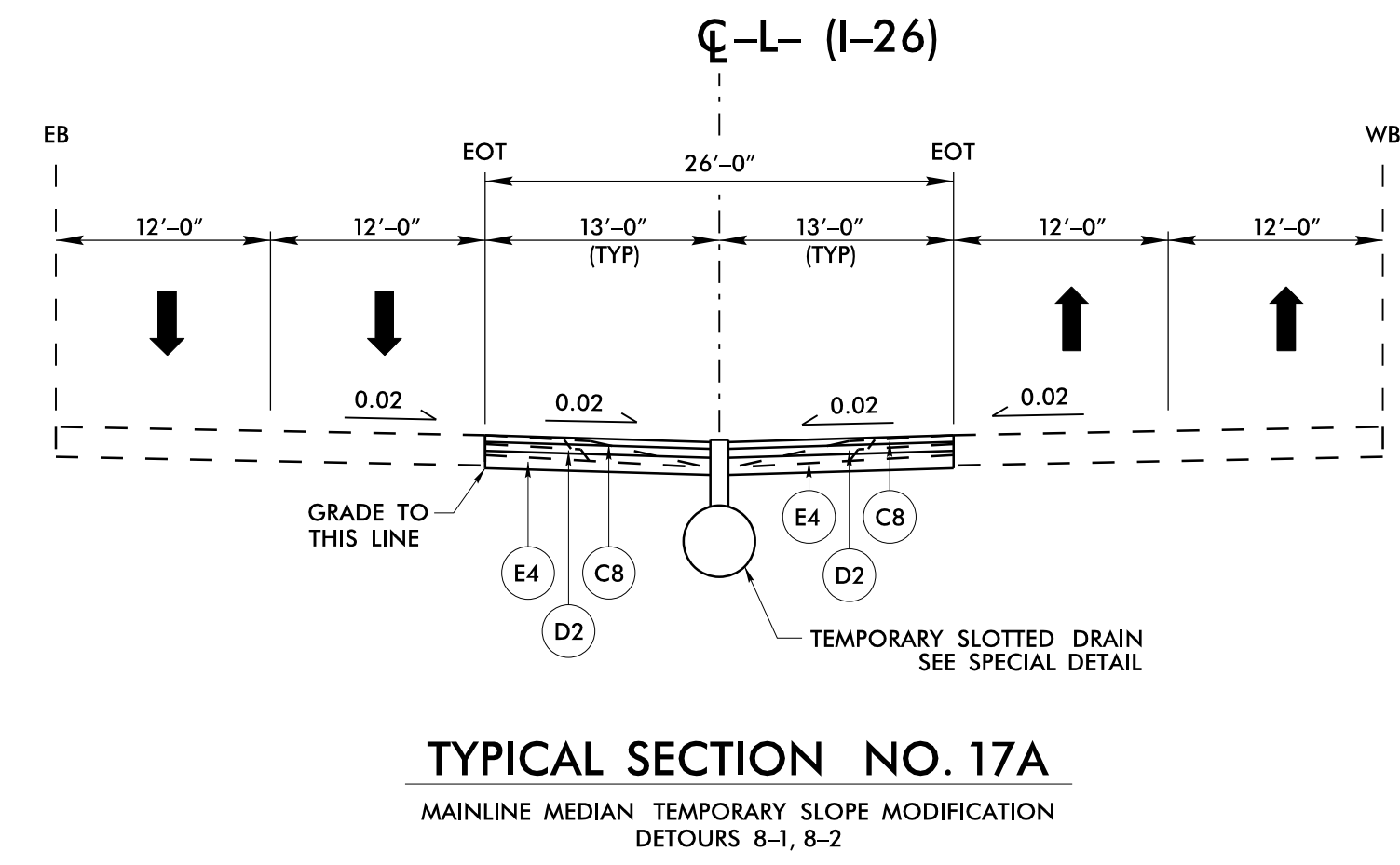
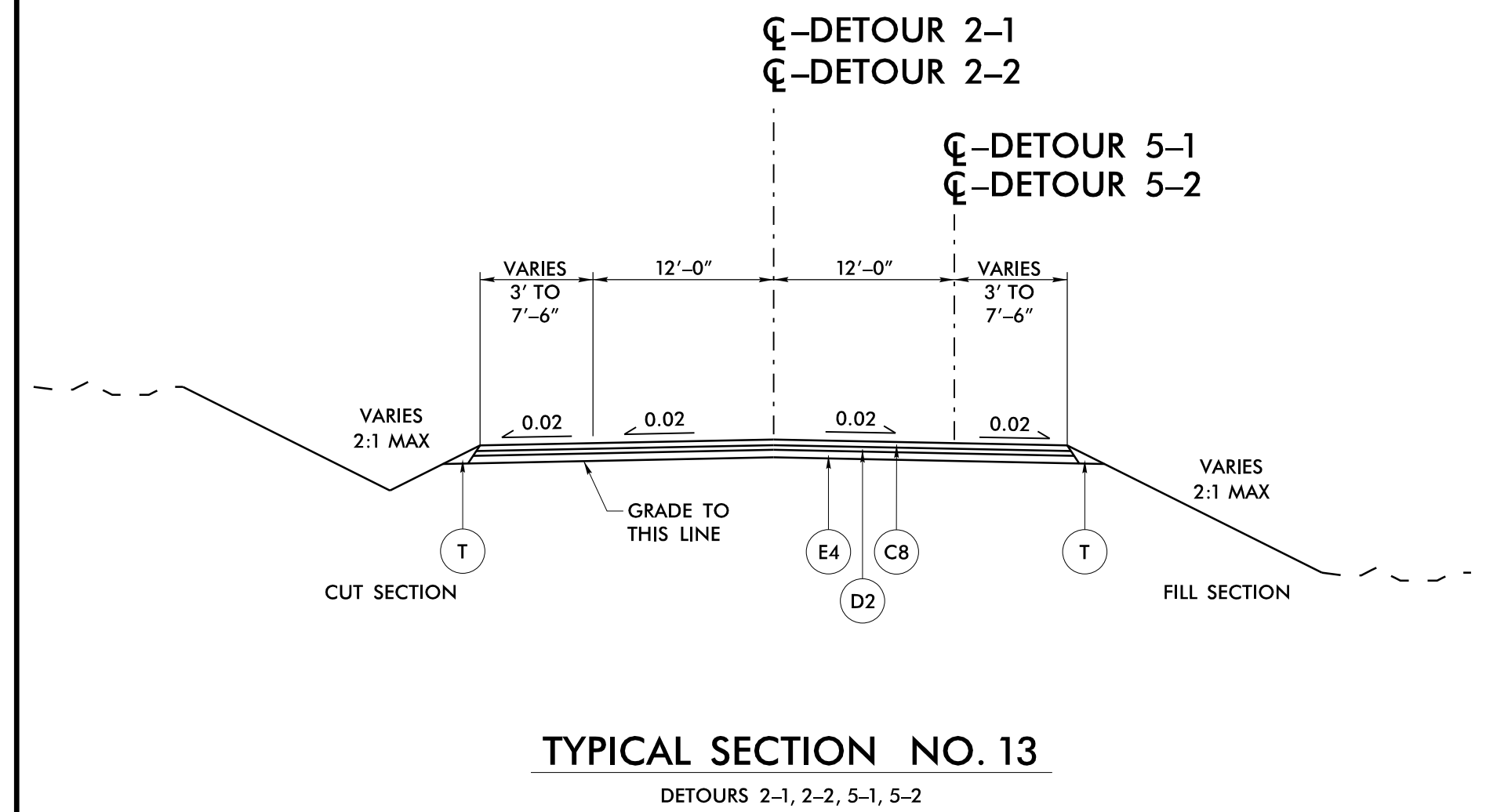
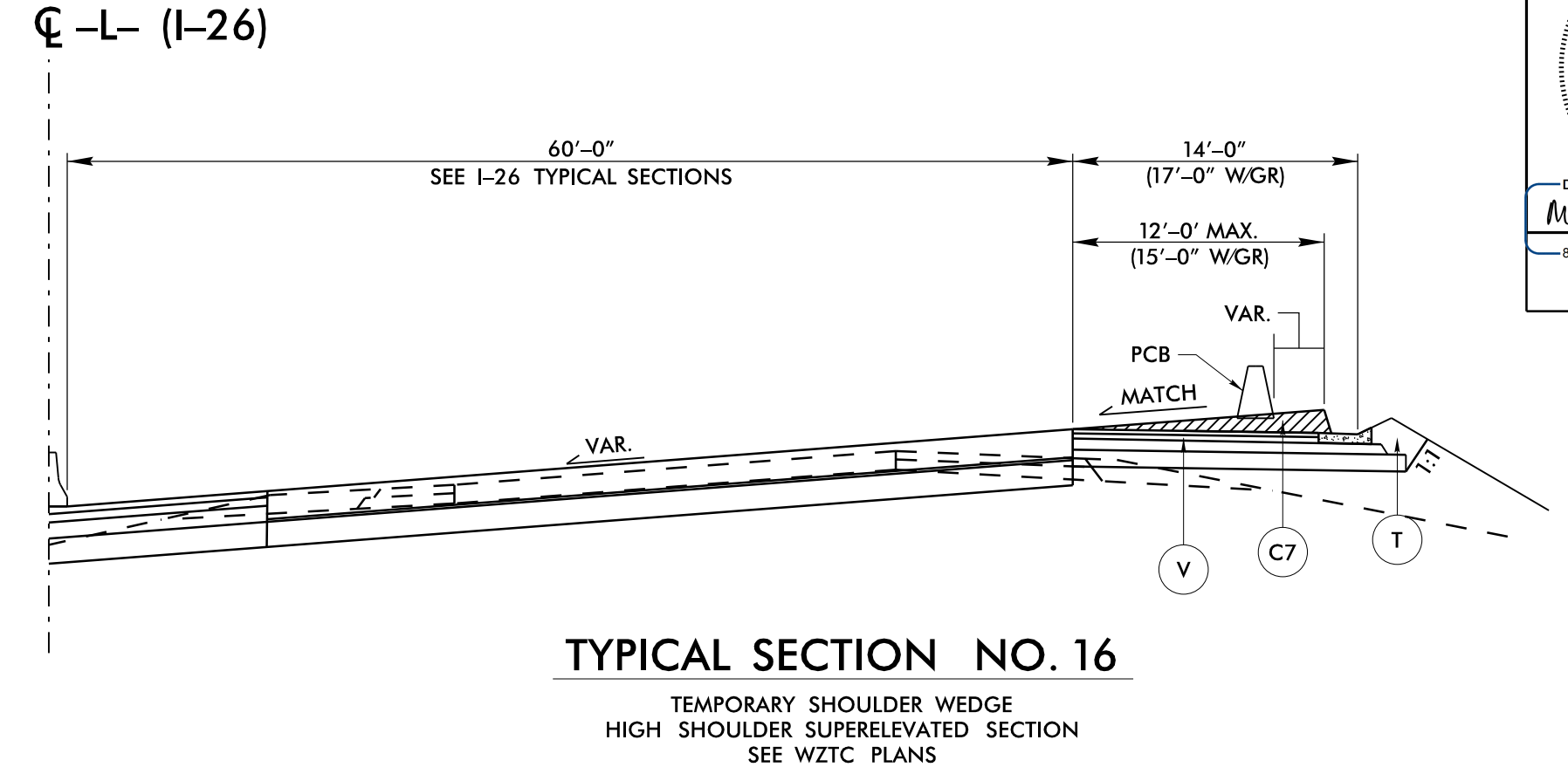
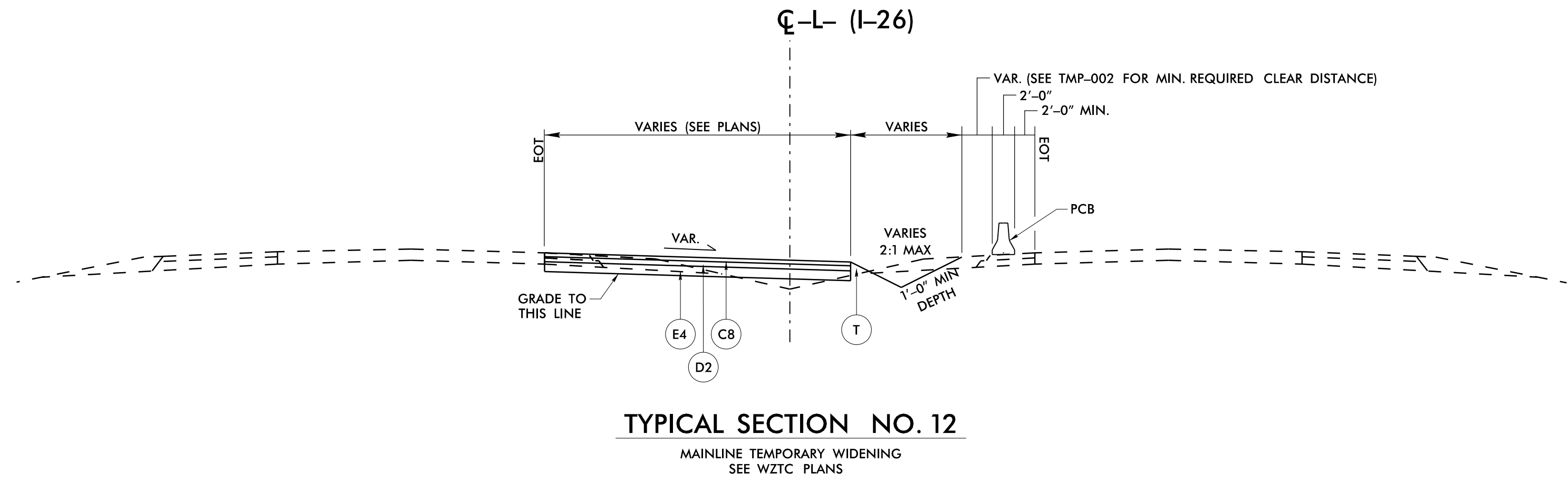
USE IN CONJUNCTION WITH TYPICAL SECTIONS NO. 9 & 9A
-Y15- STA 47+58.00 TO STA 48+38.39 RT
-Y15- STA 48+73.03 TO STA 49+42.84 RT
-Y15- STA 50+95.17 TO STA 53+47.11 RT
-Y15- STA 53+96.42 TO STA 57+37.58 RT

REVISIONS

12/11/2019 1:16:21 PM
14780101-08

6/2/2019

PROJECT REFERENCE NO. 1-4700	SHEET NO. 2A-8
ROADWAY DESIGN ENGINEER MARC A. WHITMORE	PAVEMENT DESIGN ENGINEER JOSEPH HOLLAND
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



A	13.5" PCCP
C1	1.25" S9.5B
C2	2.5" S9.5B
C3	3" S9.5B
C4	3" S9.5C
C5	1.5" S9.5B
C6	1.5" S9.5C
C7	VARIABLE S9.5D
C8	3" S9.5D
D1	2.5" I19.0C
D2	4" I19.0C
E1	4" B25.0C
E2	4.5" B25.0C
E3	6.5" OR 7.75" B25.0C* *SEE SHOULDER DRAIN DETAIL SHEET 2A-1
E4	5" B25.0C
K	12" CLASS IV SUBGRADE STABILIZATION
N1	NONWOVEN GEOTEXTILE INTERLAYER
N2	GEOTEXTILE FOR SOIL STABILIZATION
R1	2'-6" C & G
R2	CONC. SHOULDER BERM GUTTER
R3	5" MONO. CONC. ISLAND (SURFACE MOUNTED)
R4	SINGLE SLOPE CONC. BARRIER
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R7	EXPRESSWAY GUTTER
S	CONC. SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V	MILLING 1.5" DEPTH
Y	MILLED RUMBLE STRIP
PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE	

NOTE: SEE ROADWAY AND WZTC PLANS FOR CROSS SLOPES, PAVEMENT WIDTHS, AND LOCATIONS OF LANES, PORTABLE CONCRETE BARRIER (PCB), AND TRENCH DRAINS.

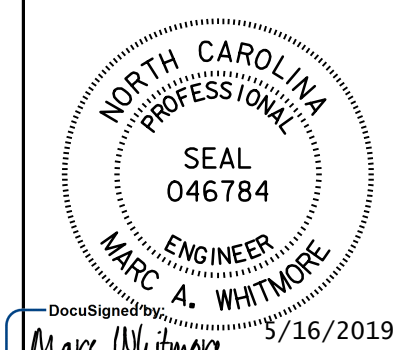
REVISIONS

15-MAY-2019 10:48
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8/17/19

RW SHEET NO.

ROADWAY DESIGN ENGINEER



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CURVE DATA

- L -

<i>PIs STA. 856+41.70</i> $\theta_s = 0^\circ 58' 48.0"$ $L_s = 196.00'$ $LT = 130.67'$ $ST = 65.34'$	<i>PI STA. 860+21.71</i> $\Delta = 6^\circ 17' 14.0" (RT)$ $D = 1^\circ 00' 00.0"$ $L = 628.72'$ $T = 314.68'$ $R = 5,729.58'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 864+01.09</i> $\theta_s = 0^\circ 58' 48.0"$ $L_s = 196.00'$ $LT = 130.67'$ $ST = 65.34'$
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- WBL -

<i>PIs STA. 890+02.79</i> $\theta_s = 3^\circ 40' 30.0"$ $L_s = 294.00'$ $LT = 196.04'$ $ST = 98.04'$	<i>PI STA. 894+04.90</i> $\Delta = 15^\circ 07' 09.6" (RT)$ $D = 2^\circ 30' 00.0"$ $L = 604.77'$ $T = 304.15'$ $R = 2,291.83'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 898+03.56</i> $\theta_s = 3^\circ 40' 30.0"$ $L_s = 294.00'$ $LT = 196.04'$ $ST = 98.04'$	<i>PIs STA. 910+28.73</i> $\theta_s = 2^\circ 31' 12.0"$ $L_s = 252.00'$ $LT = 168.02'$ $ST = 84.02'$	<i>PI STA. 918+08.01</i> $\Delta = 27^\circ 17' 04.1" (LT)$ $D = 2^\circ 00' 00.0"$ $L = 1,364.22'$ $T = 695.30'$ $R = 2,864.79'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 925+60.95</i> $\theta_s = 2^\circ 31' 12.0"$ $L_s = 252.00'$ $LT = 168.02'$ $ST = 84.02'$	<i>PI STA. 958+08.69</i> $\Delta = 9^\circ 43' 03.7" (RT)$ $D = 0^\circ 26' 39.0"$ $L = 2,187.91'$ $T = 1,096.59'$ $R = 12,900.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 975+60.54</i> $\Delta = 2^\circ 10' 05.0" (LT)$ $D = 0^\circ 26' 39.0"$ $L = 488.13'$ $T = 244.10'$ $R = 12,900.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 981+88.49</i> $\theta_s = 0^\circ 44' 06.0"$ $L_s = 147.00'$ $LT = 98.00'$ $ST = 49.00'$	<i>PI STA. 988+17.37</i> $\Delta = 11^\circ 33' 29.2" (RT)$ $D = 1^\circ 00' 00.0"$ $L = 1,155.81'$ $T = 579.87'$ $R = 5,729.58'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 994+42.30</i> $\theta_s = 0^\circ 44' 06.0"$ $L_s = 147.00'$ $LT = 98.00'$ $ST = 49.00'$
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- EBL -

<i>PIs STA. 890+25.55</i> $\theta_s = 3^\circ 04' 01.2"$ $L_s = 273.00'$ $LT = 182.03'$ $ST = 91.02'$	<i>PI STA. 894+82.52</i> $\Delta = 16^\circ 20' 07.1" (RT)$ $D = 2^\circ 14' 48.8"$ $L = 727.02'$ $T = 365.99'$ $R = 2,550.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 899+34.57</i> $\theta_s = 3^\circ 04' 01.2"$ $L_s = 273.00'$ $LT = 182.03'$ $ST = 91.02'$	<i>PIs STA. 910+16.49</i> $\theta_s = 2^\circ 43' 27.3"$ $L_s = 252.00'$ $LT = 168.02'$ $ST = 84.02'$	<i>PI STA. 917+33.57</i> $\Delta = 26^\circ 52' 21.7" (LT)$ $D = 2^\circ 09' 43.6"$ $L = 1,242.90'$ $T = 633.10'$ $R = 2,650.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 924+27.39</i> $\theta_s = 2^\circ 43' 27.3"$ $L_s = 252.00'$ $LT = 168.02'$ $ST = 84.02'$	<i>PIs STA. 953+25.31</i> $\theta_s = 0^\circ 44' 06.0"$ $L_s = 147.00'$ $LT = 98.00'$ $ST = 49.00'$	<i>PI STA. 958+28.85</i> $\Delta = 9^\circ 04' 18.5" (RT)$ $D = 1^\circ 00' 00.0"$ $L = 907.18'$ $T = 454.54'$ $R = 5,729.58'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 963+30.49</i> $\theta_s = 0^\circ 44' 06.0"$ $L_s = 147.00'$ $LT = 98.00'$ $ST = 49.00'$	<i>PIs STA. 984+39.92</i> $\theta_s = 0^\circ 44' 06.0"$ $L_s = 147.00'$ $LT = 98.00'$ $ST = 49.00'$	<i>PIs STA. 989+17.85</i> $\Delta = 8^\circ 33' 45.5" (RT)$ $D = 1^\circ 00' 00.0"$ $L = 856.27'$ $T = 428.93'$ $R = 5,729.58'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 993+94.18</i> $\theta_s = 0^\circ 44' 06.0"$ $L_s = 147.00'$ $LT = 98.00'$ $ST = 49.00'$
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- L -

<i>PI Sta 1000+18.61</i> $\Delta = 1^\circ 57' 10.7" (RT)$ $D = 0^\circ 26' 32.8"$ $L = 441.41'$ $T = 220.73'$ $R = 12,950.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs Sta 1005+41.66</i> $\theta_s = 4^\circ 56' 33.7"$ $L_s = 402.00'$ $LT = 268.10'$ $ST = 134.10'$	<i>PI STA. 1012+15.36</i> $\Delta = 26^\circ 05' 15.6" (LT)$ $D = 2^\circ 27' 32.6"$ $L = 1,060.89'$ $T = 539.80'$ $R = 2,330.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs Sta 1018+70.54</i> $\theta_s = 4^\circ 56' 33.7"$ $L_s = 402.00'$ $LT = 268.10'$ $ST = 134.10'$	<i>PIs Sta 1032+35.08</i> $\theta_s = 6^\circ 37' 17.2"$ $L_s = 490.00'$ $LT = 326.90'$ $ST = 163.54'$	<i>PI STA. 1038+72.75</i> $\Delta = 25^\circ 14' 08.5" (RT)$ $D = 2^\circ 42' 09.5"$ $L = 933.75'$ $T = 474.57'$ $R = 2,120.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 1044+95.47</i> $\theta_s = 6^\circ 37' 17.2"$ $L_s = 490.00'$ $LT = 326.90'$ $ST = 163.54'$
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- WBL -

<i>PIs STA 1080+72.93</i> $\theta_s = 0^\circ 34' 39.1"$ $L_s = 126.00'$ $LT = 84.00'$ $ST = 42.00'$	<i>PI STA 1093+37.38</i> $\Delta = 22^\circ 08' 01.6" (RT)$ $D = 0^\circ 55' 00.2"$ $L = 2,414.42'$ $T = 1,222.45'$ $R = 6,250.00'$ SE = SEE PLANS RO = SEE PLANS	<i>PIs STA 1105+71.35</i> $\theta_s = 0^\circ 34' 39.1"$ $L_s = 126.00'$ $LT = 84.00'$ $ST = 42.00'$	<i>PIs STA 1111+67.20</i> $\theta_s = 5^\circ 02' 24.0"$ $L_s = 336.00'$ $LT = 224.09'$ $ST = 112.08'$	<i>PI STA 1119+62.01</i> $\Delta = 39^\circ 21' 03.6" (LT)$ $D = 3^\circ 00' 00.0"$ $L = 1,311.70'$ $T = 682.91'$ $R = 1,909.86'$ SE = SEE PLANS RO = SEE PLANS	<i>PIs STA 1127+02.89</i> $\theta_s = 5^\circ 02' 24.0"$ $L_s = 336.00'$ $LT = 224.09'$ $ST = 112.08'$
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- EBL -

<i>PIs STA 1095+87.72</i> $\theta_s = 2^\circ 31' 12.0"$ $L_s = 252.00'$ $LT = 168.02'$ $ST = 84.02'$	<i>PI STA 1102+31.30</i> $\Delta = 22^\circ 06' 19.8" (RT)$ $D = 2^\circ 00' 00.0"$ $L = 1,105.28'$ $T = 559.60'$ $R = 2,864.79'$ SE = SEE PLANS RO = SEE PLANS	<i>PIs STA 1108+61.00</i> $\theta_s = 2^\circ 31' 12.0"$ $L_s = 252.00'$ $LT = 168.02'$ $ST = 84.02'$	<i>PIs STA 1114+87.85</i> $\theta_s = 5^\circ 52' 48.0"$ $L_s = 336.00'$ $LT = 224.12'$ $ST = 112.11'$	<i>PI STA 1122+20.39</i> $\Delta = 41^\circ 31' 39.4" (LT)$ $D = 3^\circ 30' 00.0"$ $L = 1,186.50'$ $T = 620.66'$ $R = 1,637.02'$ SE = SEE PLANS RO = SEE PLANS	<i>PIs STA 1128+98.34</i> $\theta_s = 5^\circ 52' 48.0"$ $L_s = 336.00'$ $LT = 224.12'$ $ST = 112.11'$
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- L -

<i>PIs STA 1062+42.17</i> $\theta_s = 3^\circ 58' 22.3"$ $L_s = 294.00'$ $LT = 196.05'$ $ST = 98.04'$	<i>PI STA 1067+50.63</i> $\Delta = 2^\circ 55' 04.2" (LT)$ $D = 2^\circ 42' 09.5"$ $L = 810.98'$ $T = 410.51'$ $R = 2,120.00'$ SE = SEE PLANS RO = SEE PLANS	<i>PIs STA 1072+49.15</i> $\theta_s = 3^\circ 58' 22.3"$ $L_s = 294.00'$ $LT = 196.05'$ $ST = 98.04'$	<i>PIs STA 1169+17.84</i> $\theta_s = 3^\circ 41' 38.7"$ $L_s = 294.00'$ $LT = 196.04'$ $ST = 98.04'$	<i>PI STA 1176+57.63</i> $\Delta = 31^\circ 26' 39.5" (RT)$ $D = 2^\circ 30' 46.7"$ $L = 1,251.28'$ $T = 641.83'$ $R = 2,280.00'$ SE = SEE PLANS RO = SEE PLANS	<i>PIs STA 1183+65.12</i> $\theta_s = 3^\circ 41' 38.7"$ $L_s = 294.00'$ $LT = 196.04'$ $ST = 98.04'$	<i>PIs STA 1190+74.63</i> $\theta_s = 2^\circ 31' 12.0"$ $L_s = 252.00'$ $LT = 168.02'$ $ST = 84.02'$	<i>PI STA 1194+72.21</i> $\Delta = 12^\circ 29' 38.2" (LT)$ $D = 2^\circ 00' 00.0"$ $L = 624.70'$ $T = 313.59'$ $R = 2,864.79'$ SE = SEE PLANS RO = SEE PLANS	<i>PIs STA 1198+67.33</i> $\theta_s = 2^\circ 31' 12.0"$ $L_s = 252.00'$ $LT = 168.02'$ $ST = 84.02'$	<i>PIs STA 1209+57.40</i> $\theta_s = 1^\circ 34' 30.0"$ $L_s = 210.00'$ $LT = 140.01'$ $ST = 70.01'$	<i>PI STA 1214+81.74</i> $\Delta = 13^\circ 34' 00.3" (RT)$ $D = 1^\circ 30' 00.0"$ $L = 904.45'$ $T = 454.35'$ $R = 3,819.72'$ SE = SEE PLANS RO = SEE PLANS	<i>PIs STA 1220+01.85</i> $\theta_s = 1^\circ 34' 30.0"$ $L_s = 210.00'$ $LT = 140.01'$ $ST = 70.01'$
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REVISIONS

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Roadway Design Engineer seal for A. Whitmore, License No. 046784, dated 5/16/2019. Includes text: 'DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED'.

CURVE DATA

- Y13 -

<i>PI STA. 13+51.71</i> $\Delta = 20' 52'' 07.4''$ (RT) $D = 3' 00'' 01.2''$ $L = 695.54'$ $T = 351.71'$ $R = 1,909.86'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 19+95.33</i> $\Delta = 18' 54'' 40.6''$ (RT) $D = 3' 11'' 00.6''$ $L = 594.04'$ $T = 299.78'$ $R = 1,800.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 33+48.26</i> $\Delta = 1' 58'' 23.8''$ (LT) $D = 1' 08'' 45.4''$ $L = 172.20'$ $T = 86.11'$ $R = 5,000.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 35+20.46</i> $\Delta = 1' 58'' 23.8''$ (RT) $D = 1' 08'' 45.4''$ $L = 172.20'$ $T = 86.11'$ $R = 5,000.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 40+96.26</i> $\Delta = 5' 59'' 11.0''$ (RT) $D = 1' 00'' 00.0''$ $L = 598.63'$ $T = 299.59'$ $R = 5,729.58'$ RO = SEE PLANS SE = SEE PLANS
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- Y13RPA -

<i>PIs STA. 15+29.39</i> $\Theta_s = 0' 21'' 42.7''$ $L_s = 60.00'$ $LT = 40.00'$ $ST = 20.00'$	<i>PI STA. 18+90.58</i> $\Delta = 8' 13'' 01.0''$ (RT) $D = 1' 12'' 22.4''$ $L = 681.21'$ $T = 341.19'$ $R = 4,750.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 22+50.60</i> $\Theta_s = 0' 21'' 42.7''$ $L_s = 60.00'$ $LT = 40.00'$ $ST = 20.00'$
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- Y13RPA SPURLT -

<i>PI STA. 13+48.47</i> $\Delta = 144' 57'' 43.9''$ (LT) $D = 52' 05'' 13.5''$ $L = 278.31'$ $T = 348.47'$ $R = 110.00'$ RO = SEE PLANS SE = SEE PLANS

- Y13RPB -

<i>PIs STA. 10+40.00</i> $\Theta_s = 0' 20'' 37.6''$ $L_s = 60.00'$ $LT = 40.00'$ $ST = 20.00'$	<i>PI STA. 11+90.64</i> $\Delta = 2' 59'' 35.8''$ (LT) $D = 1' 08'' 45.3''$ $L = 261.21'$ $T = 130.64'$ $R = 5,000.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 13+41.21</i> $\Theta_s = 0' 20'' 37.6''$ $L_s = 60.00'$ $LT = 40.00'$ $ST = 20.00'$	<i>PIs STA. 17+35.48</i> $\Theta_s = 6' 56'' 08.9''$ $L_s = 184.00'$ $LT = 122.76'$ $ST = 61.42'$	<i>PI STA. 19+34.77</i> $\Delta = 20' 35'' 25.9''$ (LT) $D = 7' 32'' 20.1''$ $L = 273.12'$ $T = 138.05'$ $R = 760.00'$ RO = SEE PLANS SE = SEE PLANS
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- Y13RPC -

<i>PIs STA. 10+96.01</i> $\Theta_s = 2' 45'' 00.7''$ $L_s = 144.00'$ $LT = 96.01'$ $ST = 48.01'$	<i>PI STA. 13+76.68</i> $\Delta = 17' 38'' 06.6''$ (RT) $D = 3' 49'' 11.0''$ $L = 461.69'$ $T = 232.68'$ $R = 1,500.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 16+53.70</i> $\Theta_s = 2' 45'' 00.7''$ $L_s = 144.00'$ $LT = 96.01'$ $ST = 48.01'$	<i>PIs STA. 19+44.84</i> $\Theta_s = 2' 44'' 00.9''$ $L_s = 125.00'$ $LT = 83.34'$ $ST = 41.68'$	<i>PI STA. 20+52.80</i> $\Delta = 5' 47'' 40.2''$ (LT) $D = 4' 22'' 25.4''$ $L = 132.48'$ $T = 66.30'$ $R = 1,310.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 21+60.66</i> $\Theta_s = 2' 44'' 00.9''$ $L_s = 125.00'$ $LT = 83.34'$ $ST = 41.68'$
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-Y13RPC SPURLT-

<i>PI STA. 12+82.91</i> $\Delta = 141' 03'' 57.0''$ (LT) $D = 57' 17'' 44.8''$ $L = 246.21'$ $T = 282.91'$ $R = 100.00'$ RO = SEE PLANS SE = SEE PLANS

- Y13RPD -

<i>PIs STA. 11+12.03</i> $\Theta_s = 4' 00'' 38.5''$ $L_s = 168.00'$ $LT = 112.03'$ $ST = 56.03'$	<i>PI STA. 12+52.96</i> $\Delta = 8' 05'' 56.9''$ (LT) $D = 4' 46'' 28.7''$ $L = 169.63'$ $T = 84.96'$ $R = 1,200.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 13+93.65</i> $\Theta_s = 4' 00'' 38.5''$ $L_s = 168.00'$ $LT = 112.03'$ $ST = 56.03'$	<i>PIs STA. 17+09.24</i> $\Theta_s = 3' 34'' 51.6''$ $L_s = 95.00'$ $LT = 63.35'$ $ST = 31.68'$	<i>PI STA. 18+82.45</i> $\Delta = 21' 06'' 06.8''$ (LT) $D = 7' 32'' 20.1''$ $L = 279.91'$ $T = 141.56'$ $R = 760.00'$ RO = SEE PLANS SE = SEE PLANS
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- Y14 -

<i>PI STA. 11+25.31</i> $\Delta = 4' 29'' 05.7''$ (RT) $D = 1' 47'' 25.8''$ $L = 250.48'$ $T = 125.31'$ $R = 3,200.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 13+88.68</i> $\Delta = 2' 10'' 08.8''$ (RT) $D = 0' 47'' 05.5''$ $L = 276.36'$ $T = 138.20'$ $R = 7,300.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 15+84.33</i> $\Delta = 3' 49'' 42.2''$ (RT) $D = 3' 19'' 52.1''$ $L = 114.93'$ $T = 57.48'$ $R = 1,720.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 17+10.39</i> $\Delta = 40' 41'' 53.5''$ (RT) $D = 30' 58'' 14.6''$ $L = 131.41'$ $T = 68.61'$ $R = 185.00'$ RO = SEE PLANS SE = SEE PLANS
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-Y15-

<i>PI STA. 53+14.71</i> $\Delta = 23' 16'' 38.7''$ (RT) $D = 4' 52'' 34.5''$ $L = 477.36'$ $T = 242.02'$ $R = 1,175.00'$ RO = SEE PLANS SE = SEE PLANS

-Y15RPA-

<i>PIs STA. 11+30.68</i> $\Theta_s = 2' 33'' 08.2''$ $L_s = 196.00'$ $LT = 130.68'$ $ST = 65.35'$	<i>PI STA. 12+50.42</i> $\Delta = 2' 50'' 01.8''$ (RT) $D = 2' 36'' 15.7''$ $L = 108.81'$ $T = 54.42'$ $R = 2,200.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 13+70.16</i> $\Theta_s = 2' 33'' 08.2''$ $L_s = 196.00'$ $LT = 130.68'$ $ST = 65.35'$	<i>PIs STA. 20+50.34</i> $\Theta_s = 8' 12'' 47.0''$ $L_s = 168.00'$ $LT = 112.12'$ $ST = 56.11'$	<i>PI STA. 22+33.15</i> $\Delta = 24' 26'' 36.9''$ (LT) $D = 9' 46'' 38.8''$ $L = 250.00'$ $T = 126.93'$ $R = 586.00'$ RO = SEE PLANS SE = SEE PLANS
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- Y15RPB -

<i>PIs STA. 10+96.01</i> $\Theta_s = 2' 38'' 39.9''$ $L_s = 144.00'$ $LT = 96.01'$ $ST = 48.01'$	<i>PI STA. 13+08.02</i> $\Delta = 12' 00'' 14.1''$ (LT) $D = 3' 40'' 22.1''$ $L = 326.83'$ $T = 164.02'$ $R = 1,560.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 15+34.86</i> $\Theta_s = 3' 31'' 33.2''$ $L_s = 192.00'$ $LT = 128.03'$ $ST = 64.02'$
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- Y15RPC -

<i>PIs STA. 10+80.00</i> $\Theta_s = 1' 43'' 07.9''$ $L_s = 120.00'$ $LT = 80.00'$ $ST = 40.00'$	<i>PI STA. 12+34.53</i> $\Delta = 6' 33'' 17.0''$ (RT) $D = 2' 51'' 53.2''$ $L = 228.80'$ $T = 114.53'$ $R = 2,000.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 14+02.14</i> $\Theta_s = 2' 17'' 30.6''$ $L_s = 160.00'$ $LT = 106.68'$ $ST = 53.34'$	<i>PI STA. 19+58.50</i> $\Delta = 17' 02'' 59.5''$ (LT) $D = 9' 32'' 57.5''$ $L = 178.55'$ $T = 89.94'$ $R = 600.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 24+81.02</i> $\Delta = 114' 10'' 19.7''$ (RT) $D = 65' 06'' 31.8''$ $L = 175.36'$ $T = 135.95'$ $R = 88.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 25+50.37</i> $\Delta = 3' 00'' 54.6''$ (RT) $D = 5' 02'' 05.2''$ $L = 59.89'$ $T = 29.95'$ $R = 1,138.00'$ RO = SEE PLANS SE = SEE PLANS
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- Y15RPD -

<i>PIs STA. 10+96.01</i> $\Theta_s = 2' 45'' 00.7''$ $L_s = 144.00'$ $LT = 96.01'$ $ST = 48.01'$	<i>PI STA. 13+30.16</i> $\Delta = 14' 08'' 58.2''$ (LT) $D = 3' 49'' 11.0''$ $L = 370.43'$ $T = 186.16'$ $R = 1,500.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PIs STA. 15+56.44</i> $\Theta_s = 2' 24'' 23.1''$ $L_s = 126.00'$ $LT = 84.01'$ $ST = 42.01'$	<i>PI STA. 19+20.84</i> $\Delta = 95' 14'' 09.6''$ (RT) $D = 27' 17'' 01.3''$ $L = 349.06'$ $T = 230.12'$ $R = 210.00'$ RO = SEE PLANS SE = SEE PLANS
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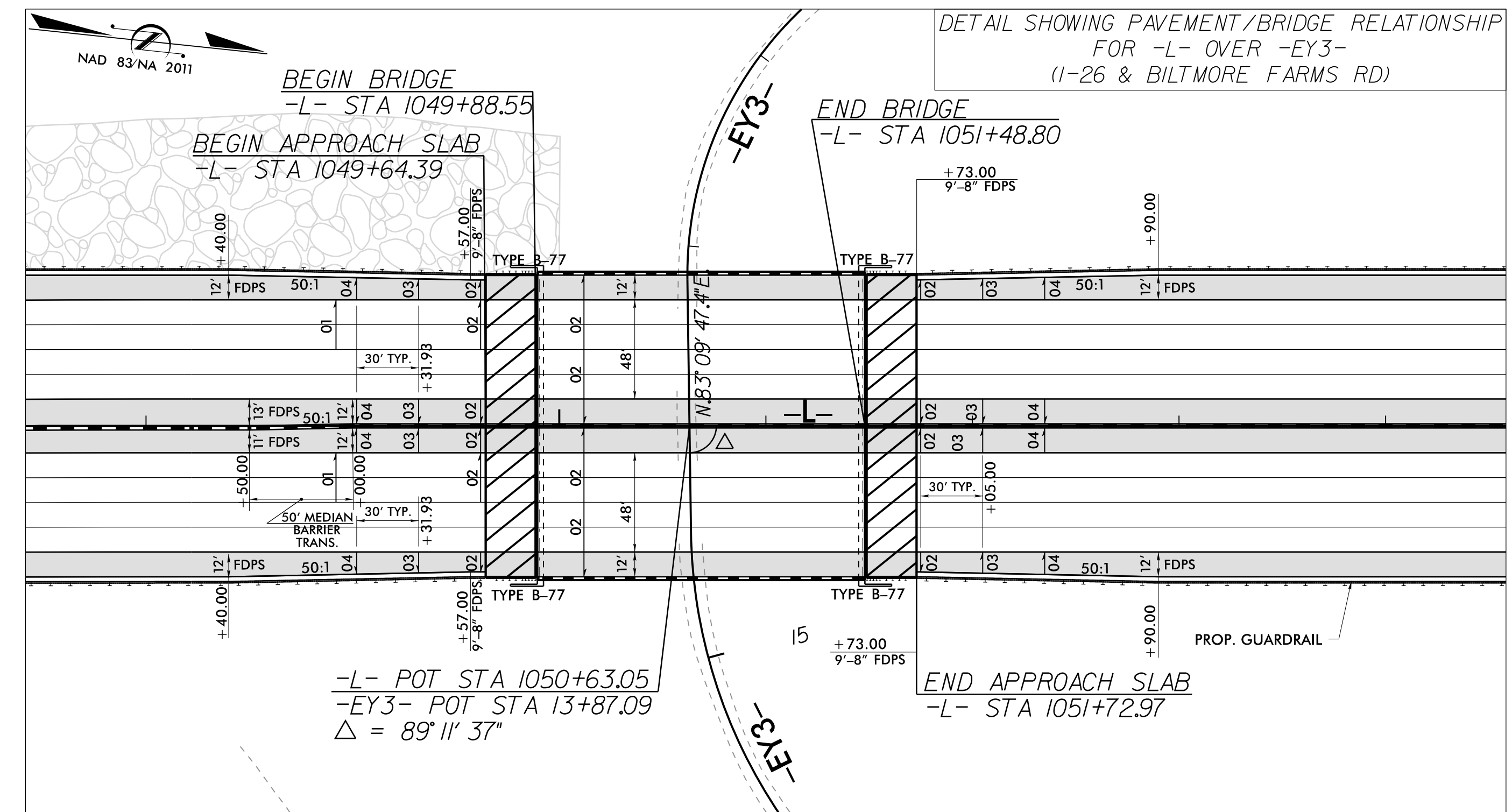
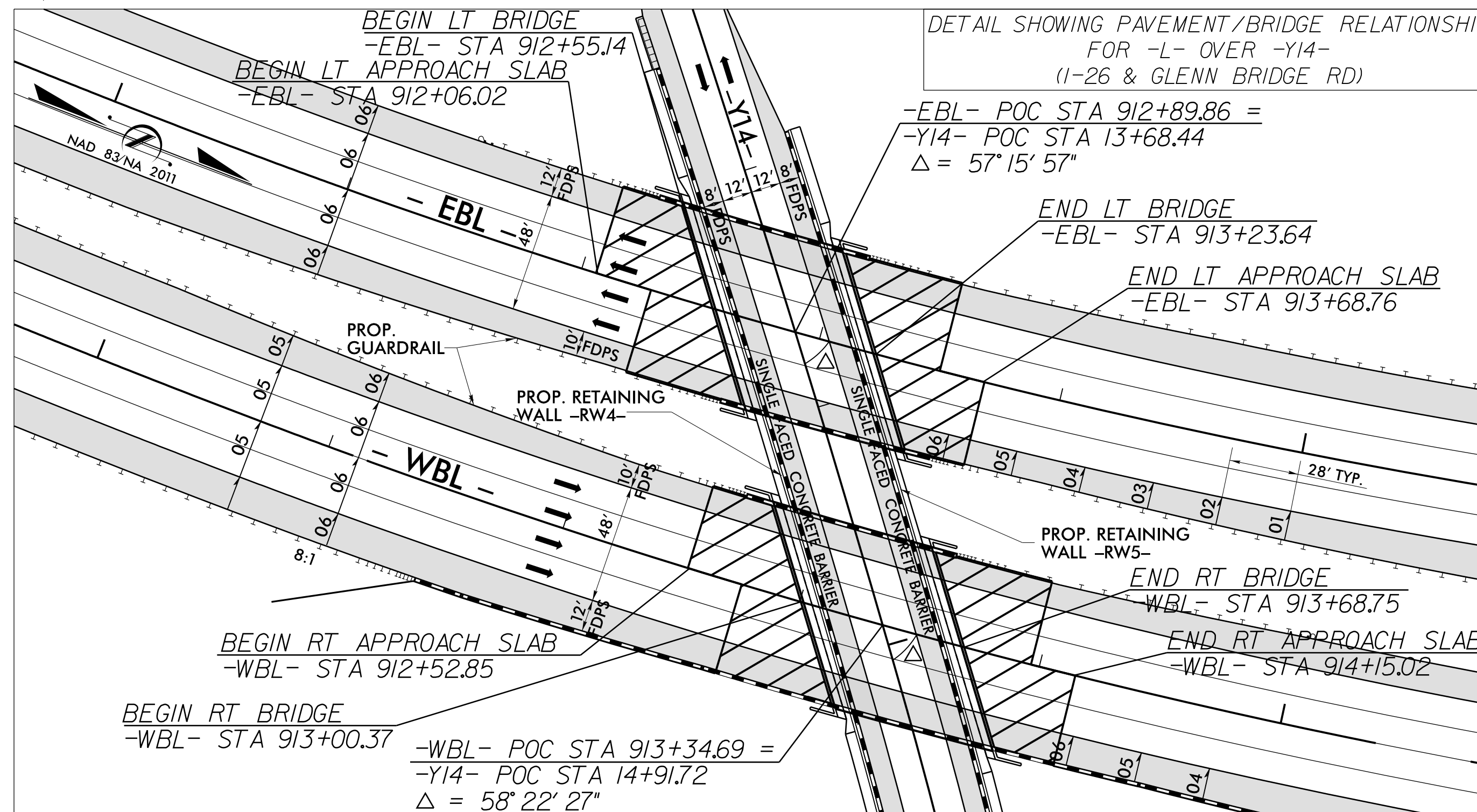
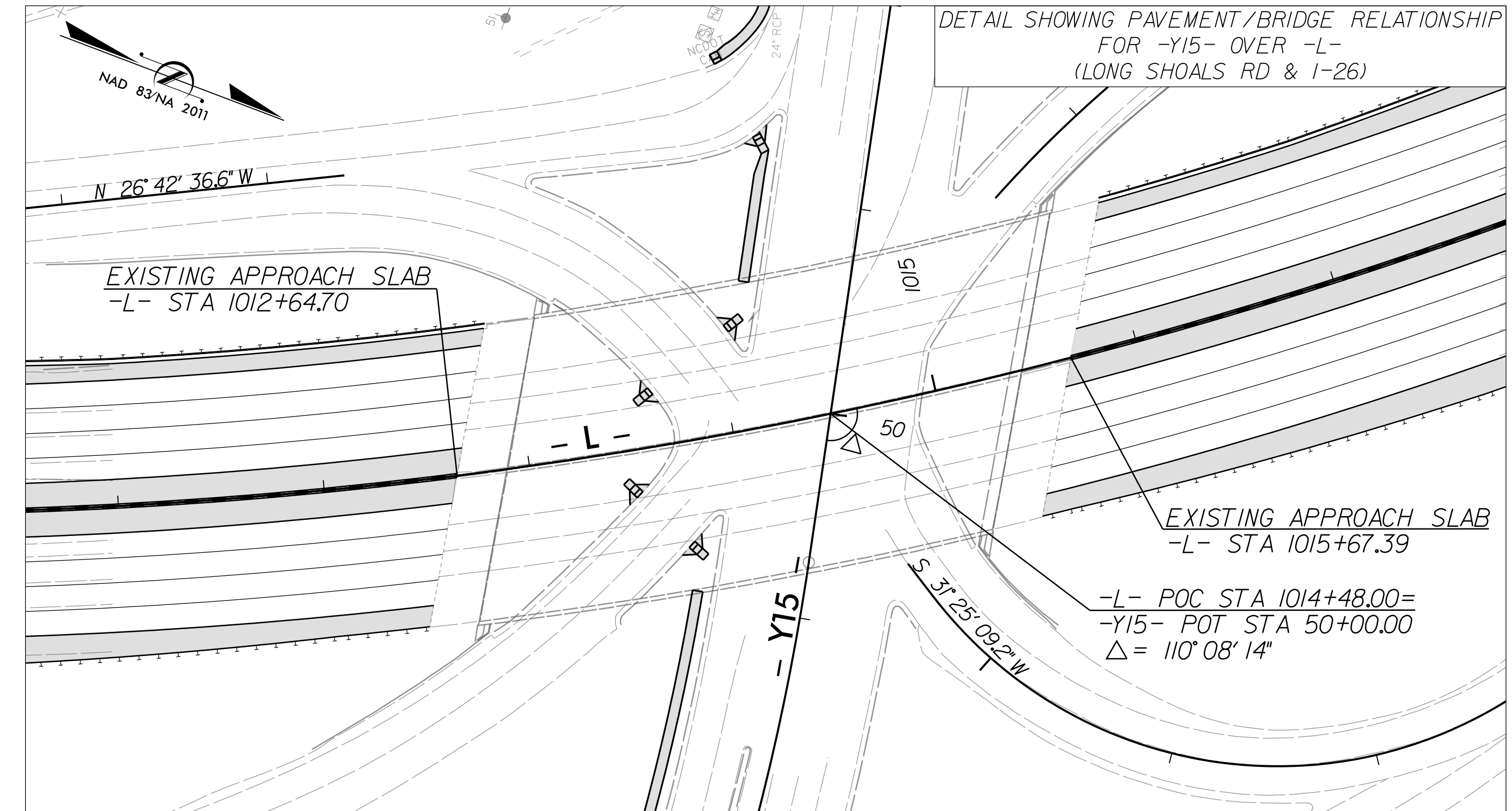
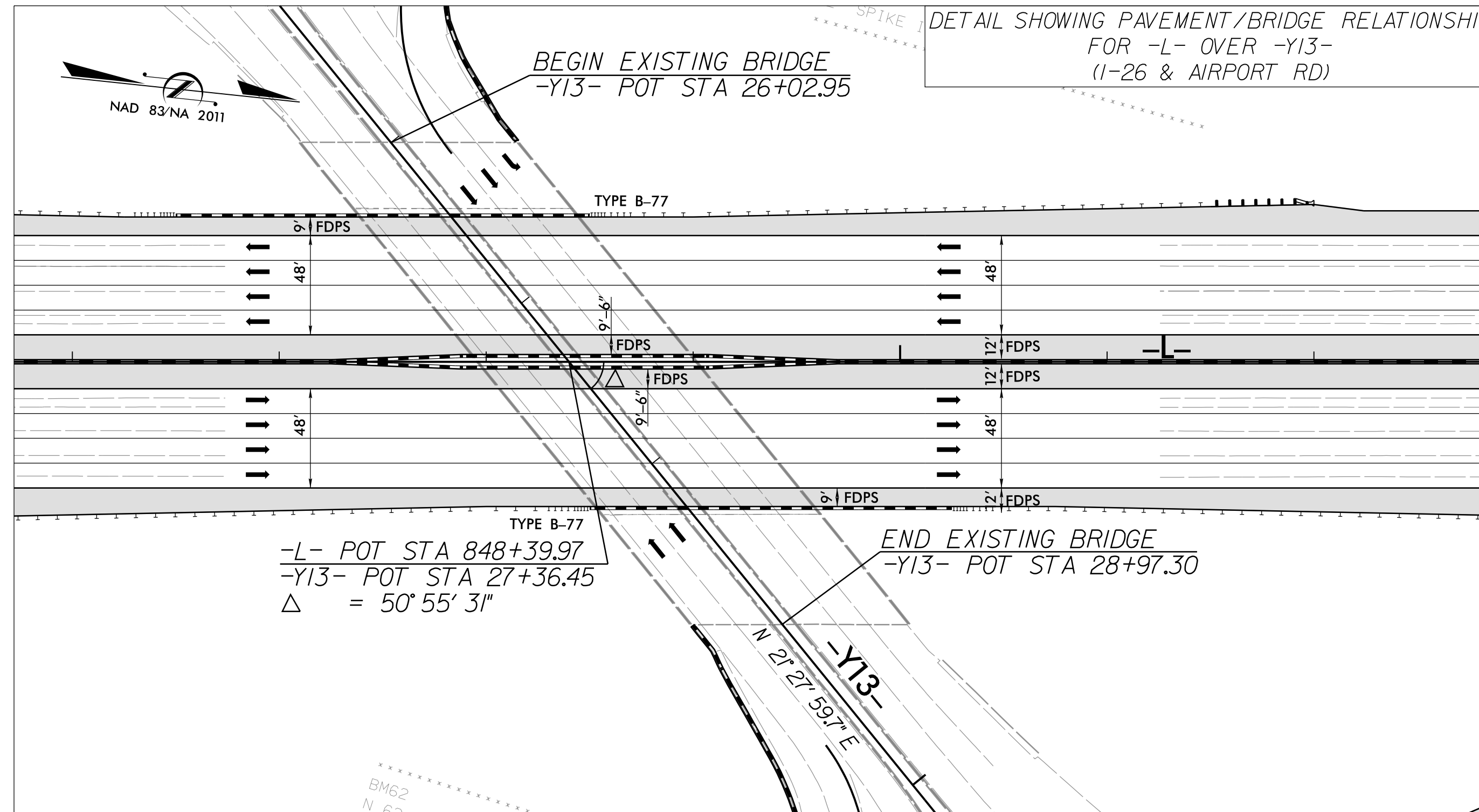
- EY3 -

<i>PI STA. 12+32.08</i> $\Delta = 61' 06'' 11.9''$ (LT) $D = 32' 22'' 13.8''$ $L = 188.76'$ $T = 104.48'$ $R = 177.00'$ RO = SEE PLANS SE = SEE PLANS	<i>PI STA. 15+34.38</i> $\Delta = 41' 59'' 18.5''$ (LT) $D = 22' 55'' 05.9''$ $L = 183.21'$ $T = 95.94'$ $R = 250.00'$ RO = SEE PLANS SE = SEE PLANS
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REVISIONS

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PAVEMENT / BRIDGE RELATIONSHIP SKETCHES



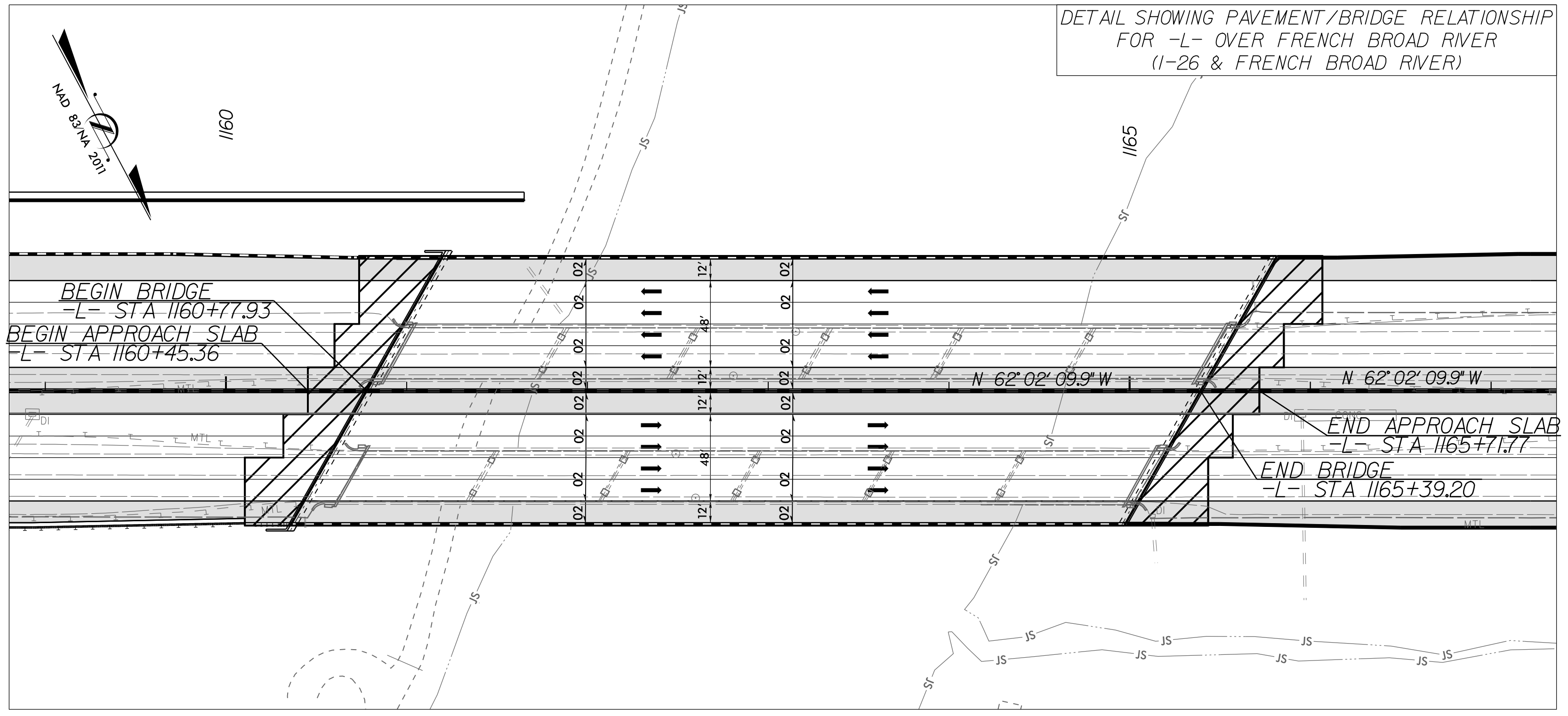
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PAVEMENT / BRIDGE RELATIONSHIP SKETCHES



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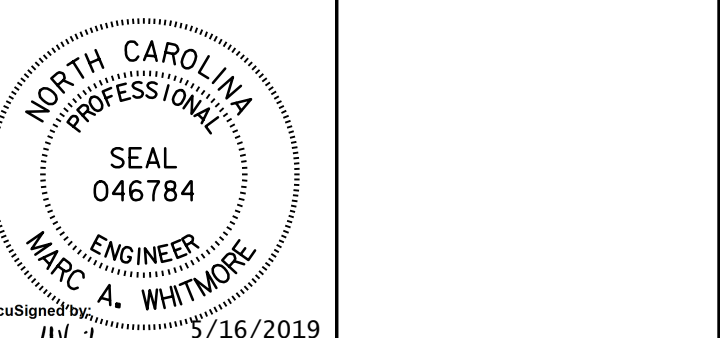
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345 E. 5th Street, Suite 200
Raleigh, North Carolina 27609
NC License No. C-1554

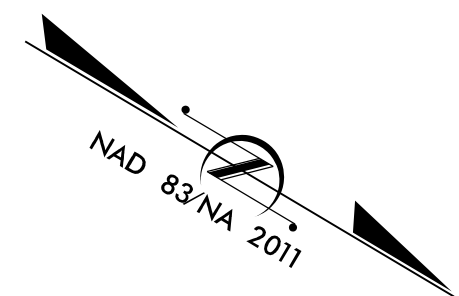
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RW SHEET NO.

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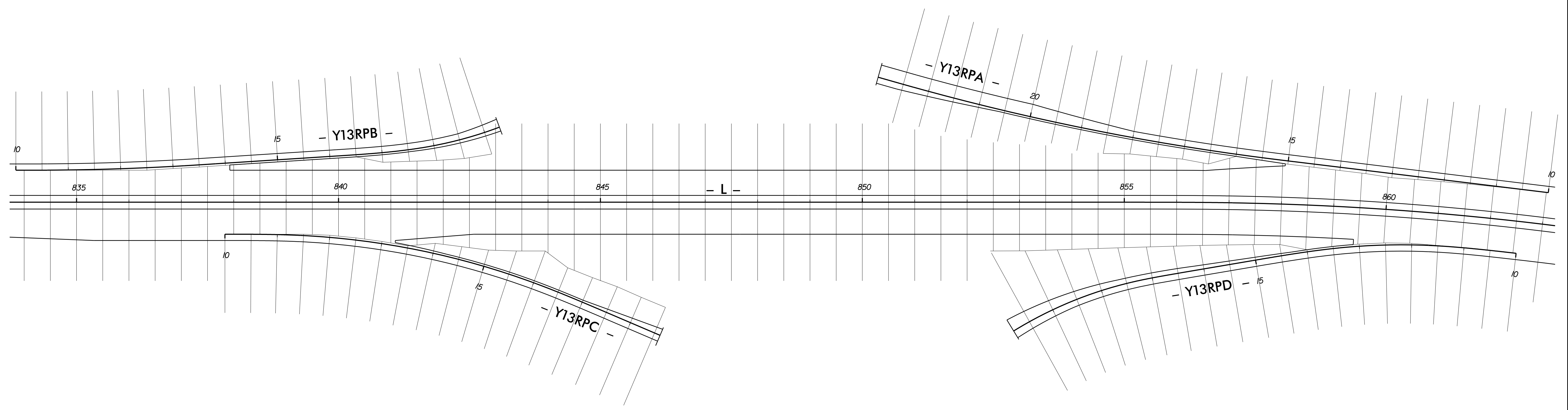


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CROSS SECTION LAYOUT

REVISIONS



16 MAY 2019 12:13
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HNTB

-L- /-Y13- INTERCHANGE AREA

8/17/99

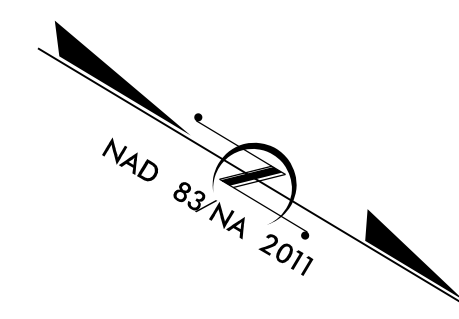
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HNTB NORTH CAROLINA, P.C.
345 E. 5th Street, Suite 200
Raleigh, North Carolina 27609
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SHEET NO. 2B-6

RW SHEET NO.

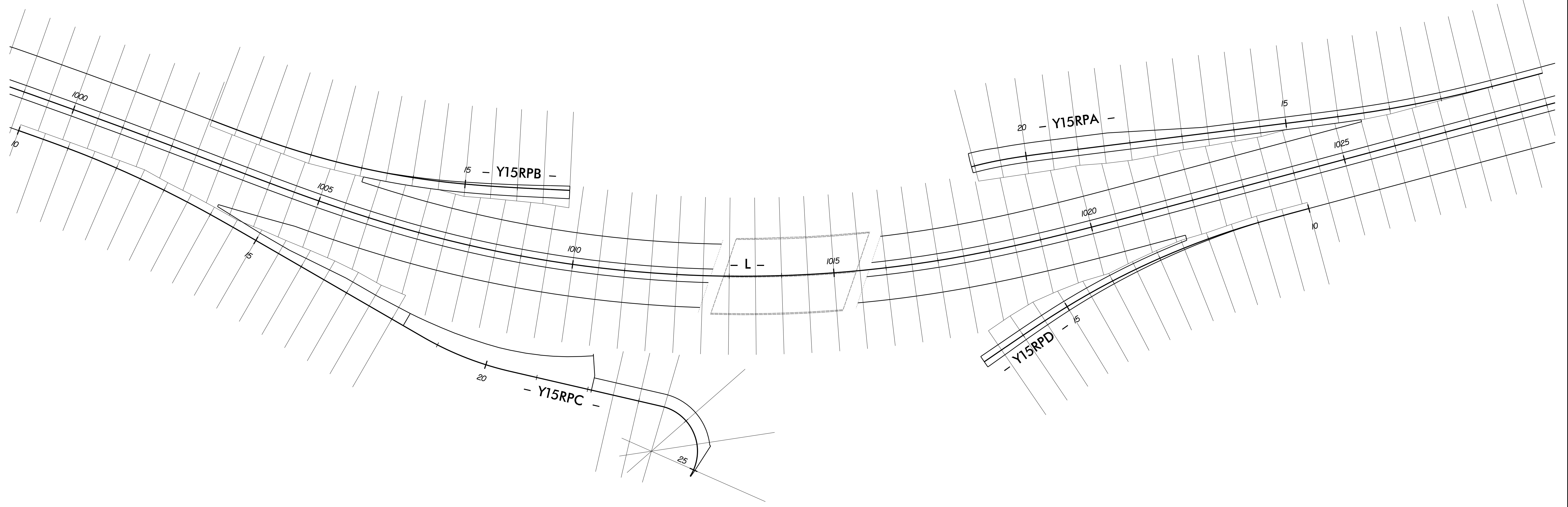
ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL
SEAL 046784
ENGINEER
MARC A. WHITMORE
5/16/2019



CROSS SECTION LAYOUT

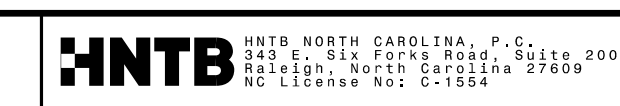
REVISIONS



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-L- /-Y15- INTERCHANGE AREA

8/17/99



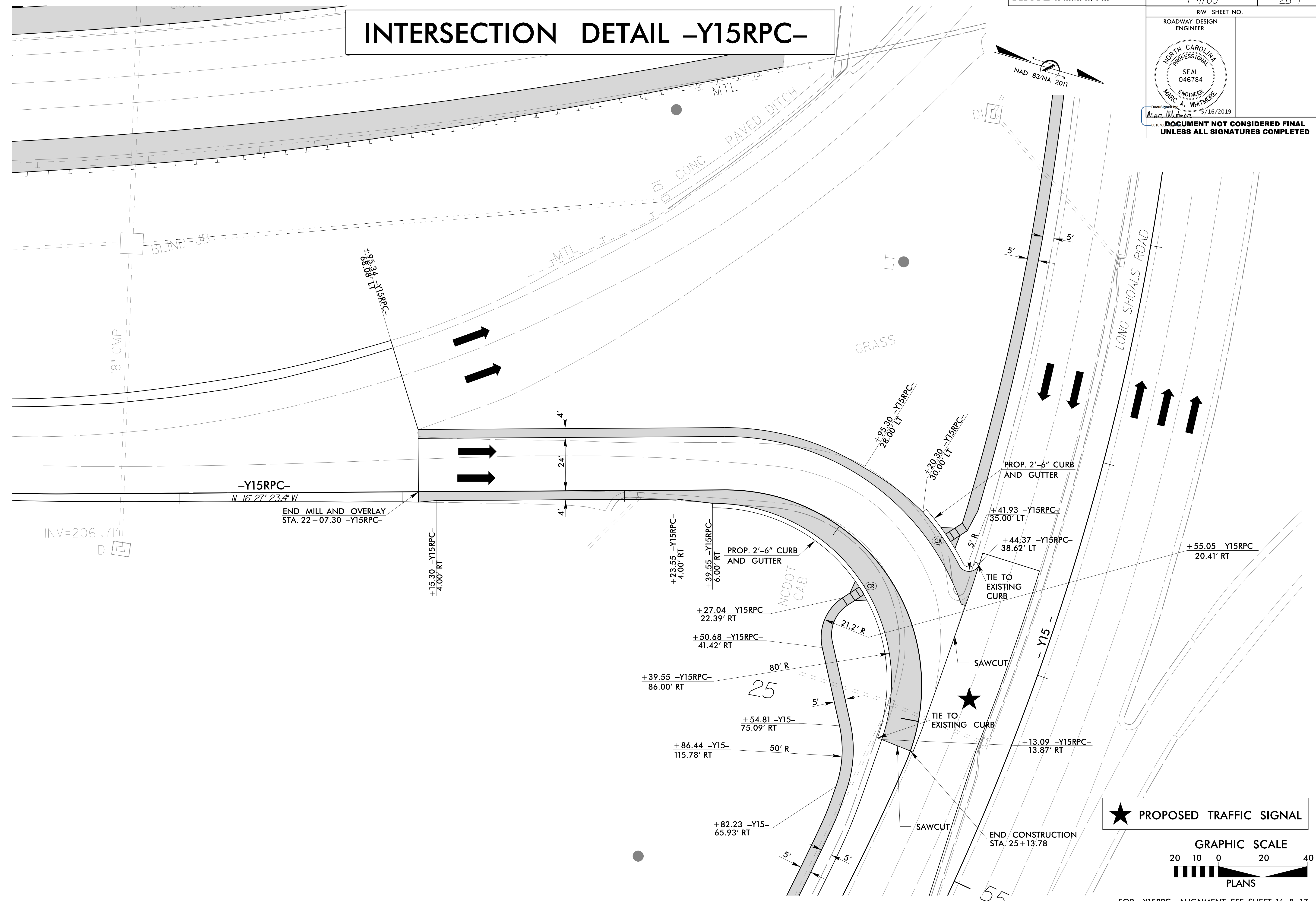
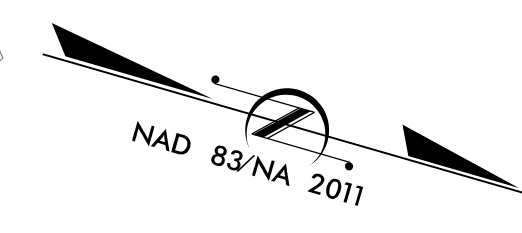
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RW SHEET NO.	

ROADWAY DESIGN ENGINEER

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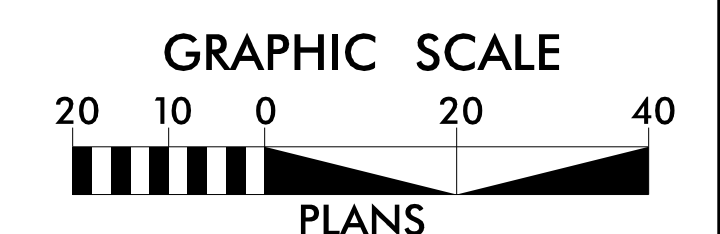
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INTERSECTION DETAIL -Y15RPC-



REVISIONS

★ PROPOSED TRAFFIC SIGNAL

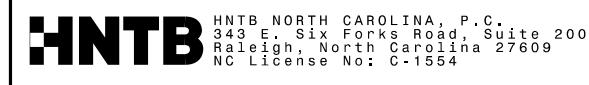


FOR -Y15RPC- ALIGNMENT, SEE SHEET 16 & 17
 FOR -Y15RPC- PROFILE, SEE SHEET 67

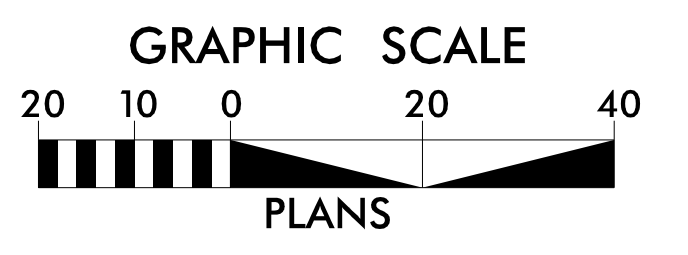
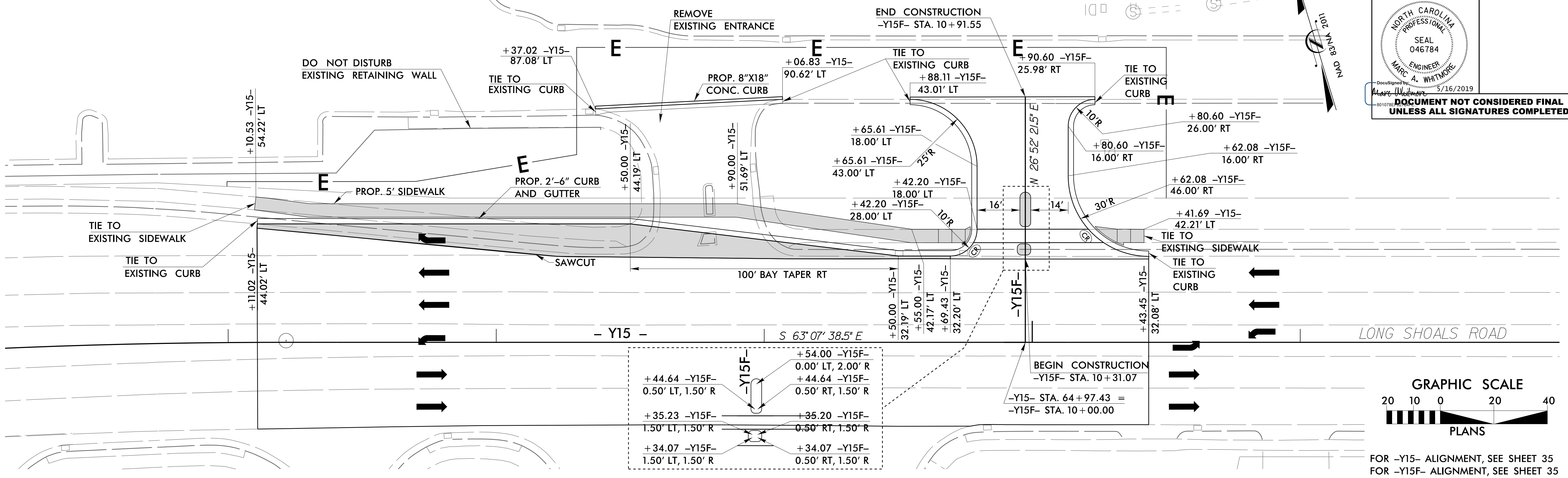
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8.17.19

INTERSECTION DETAIL -Y15- AND -Y15F-



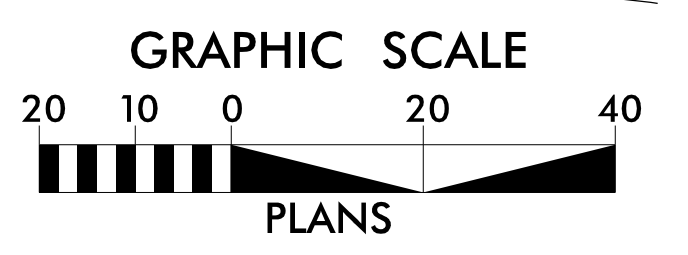
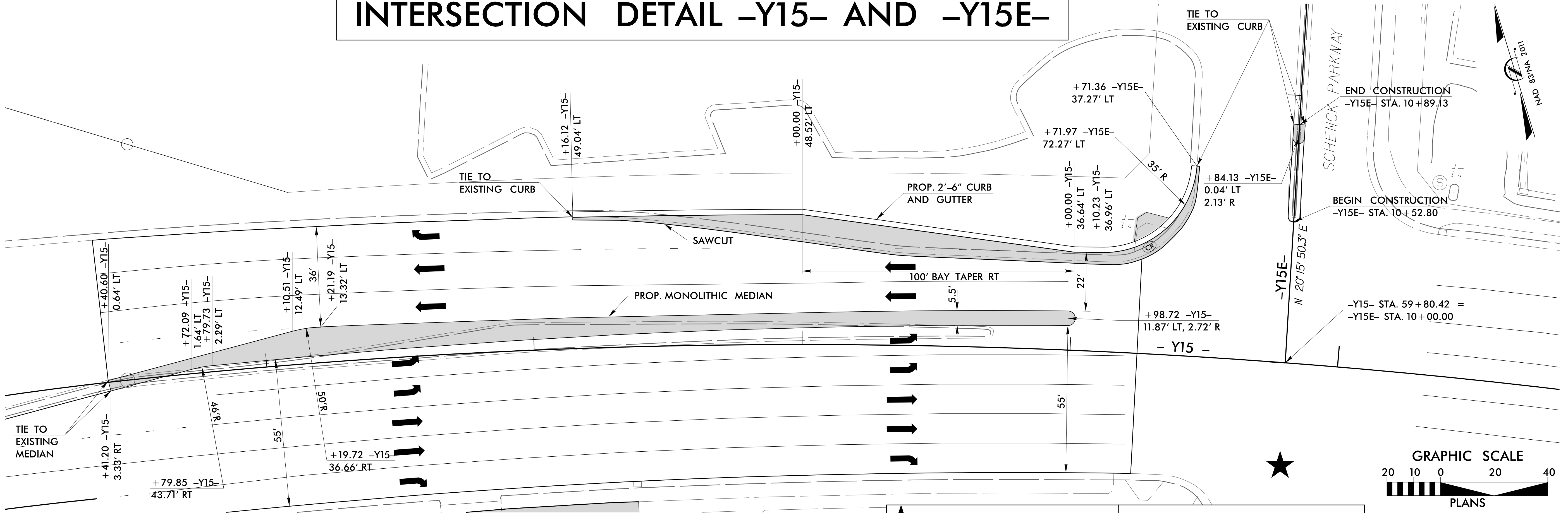
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<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	



FOR -Y15- ALIGNMENT, SEE SHEET 35
 FOR -Y15F- ALIGNMENT, SEE SHEET 35
 FOR -Y15F- PROFILE, SEE SHEET 68

REVISIONS

INTERSECTION DETAIL -Y15- AND -Y15E-



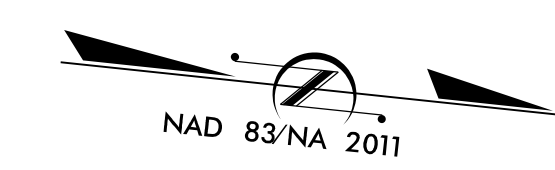
FOR -Y15- ALIGNMENT, SEE SHEET 35

★ PROPOSED TRAFFIC SIGNAL ☆ EXISTING TRAFFIC SIGNAL

15-MAY-2019 12:13
C:\p\dw\25114700.RD\2B08.DTL02.dgn

TRAFFIC VOLUME DIAGRAMS

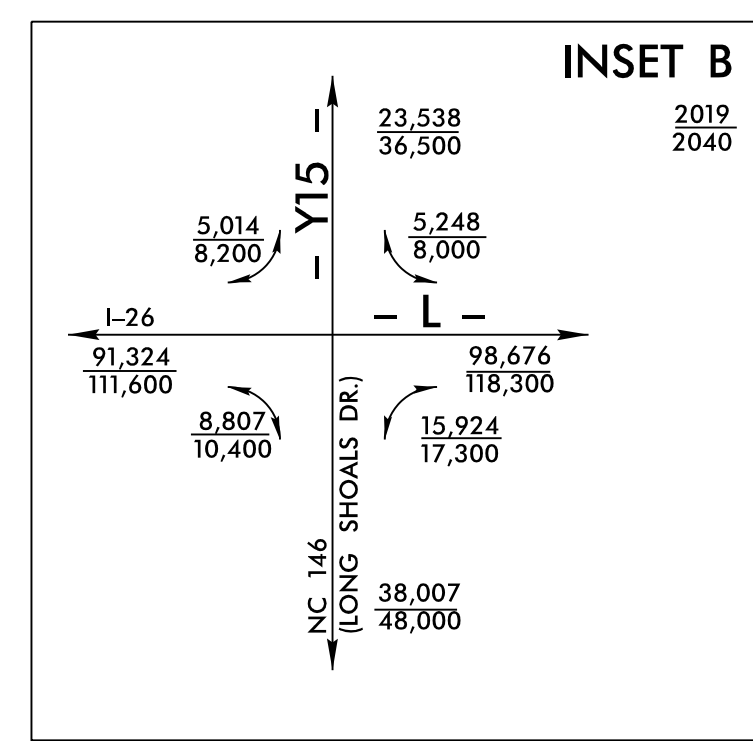
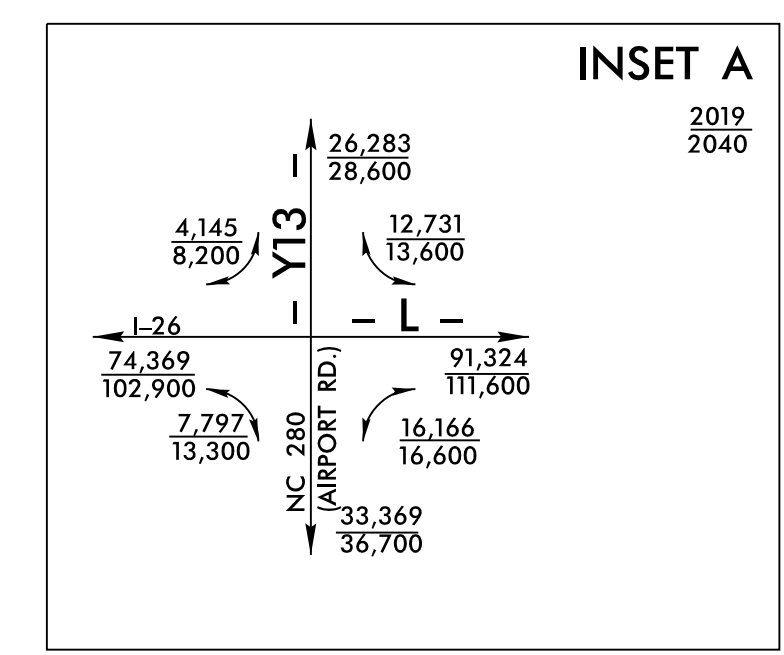
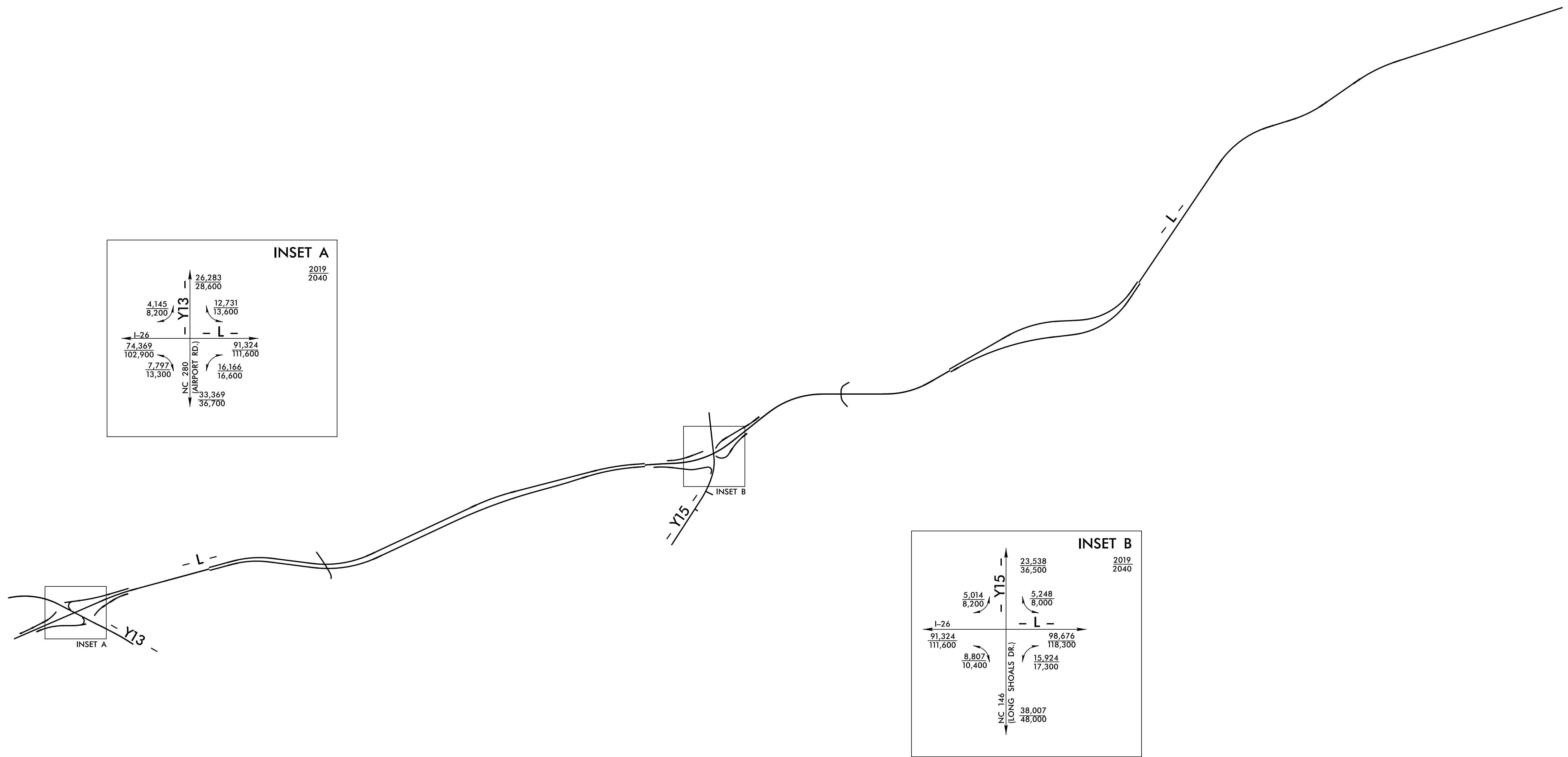
No. OF VEHICLES PER DAY (VPD)



REVISIONS

8/17/99

16-MAY-2019 12:13
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HNTB

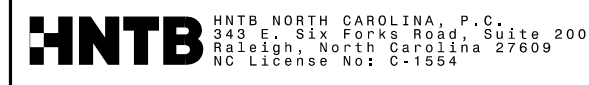


8/17/19

SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

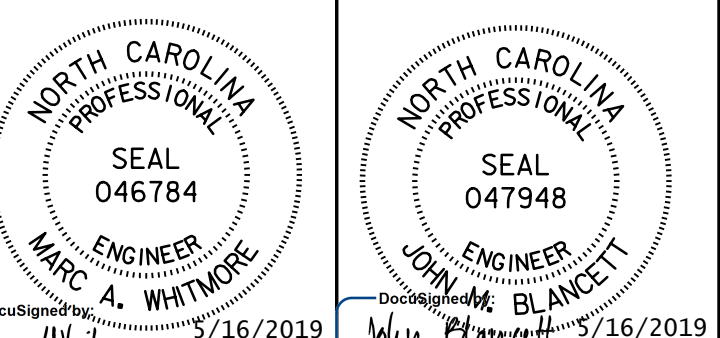
SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT

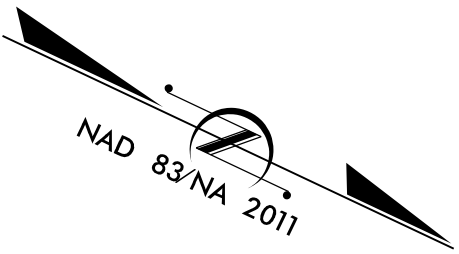


PROJECT REFERENCE NO. 1-4700 SHEET NO. 2B-10

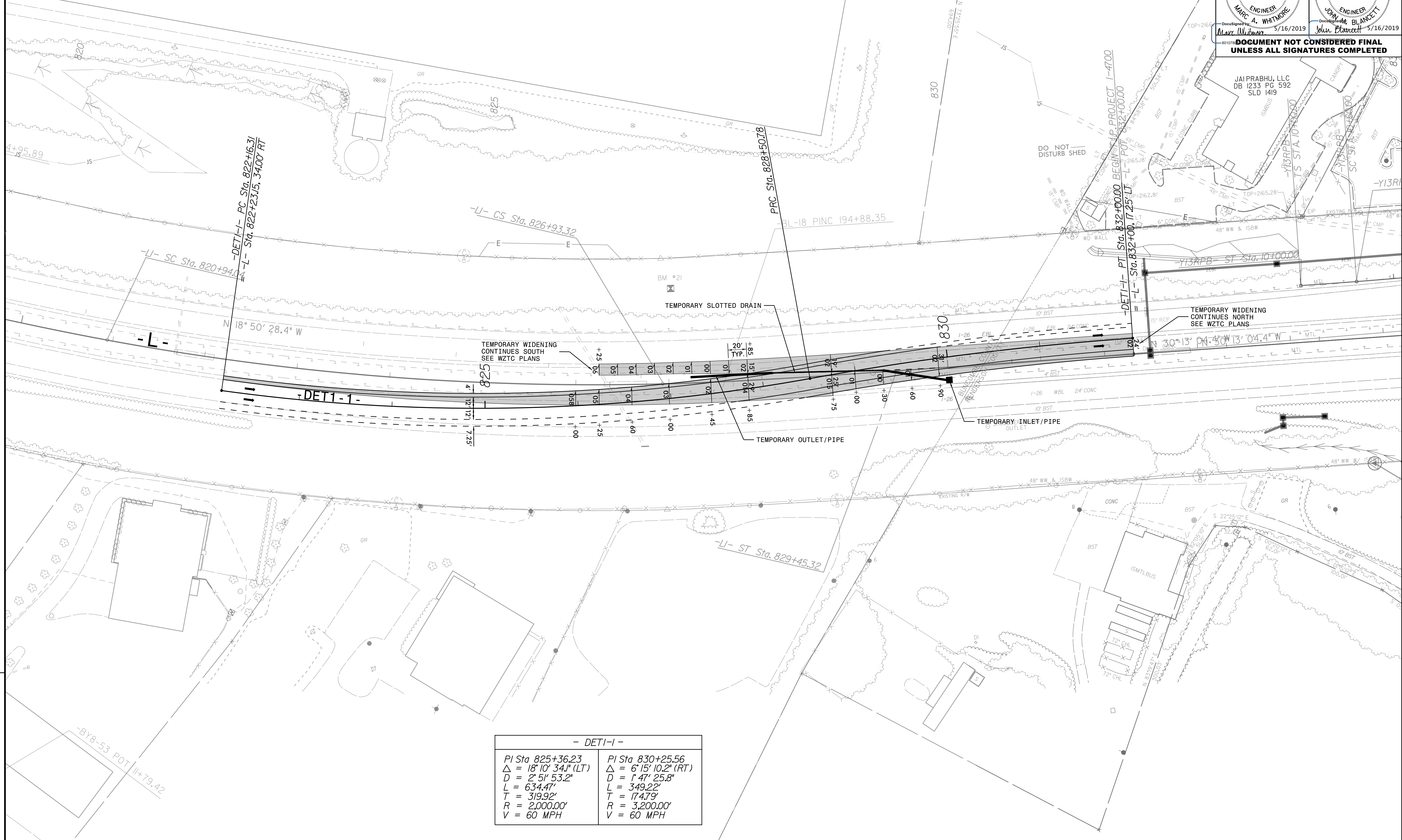
RW SHEET NO. ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



REVISIONS



- DET1-1 -	
PI Sta 825+36.23	PI Sta 830+25.56
$\Delta = 18^{\circ} 10' 34.1''$ (LT)	$\Delta = 6^{\circ} 15' 10.2''$ (RT)
$D = 2^{\circ} 51' 53.2''$	$D = 1^{\circ} 47' 25.8''$
$L = 634.47'$	$L = 349.22'$
$T = 319.92'$	$T = 174.79'$
$R = 2,000.00'$	$R = 3,200.00'$
$V = 60$ MPH	$V = 60$ MPH

MODEL: DETOUR 1-1
DATE: 8/17/19
DRAWN: J. BLANCK
CHECKED: M. WATSON
DATE: 8/17/19

SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

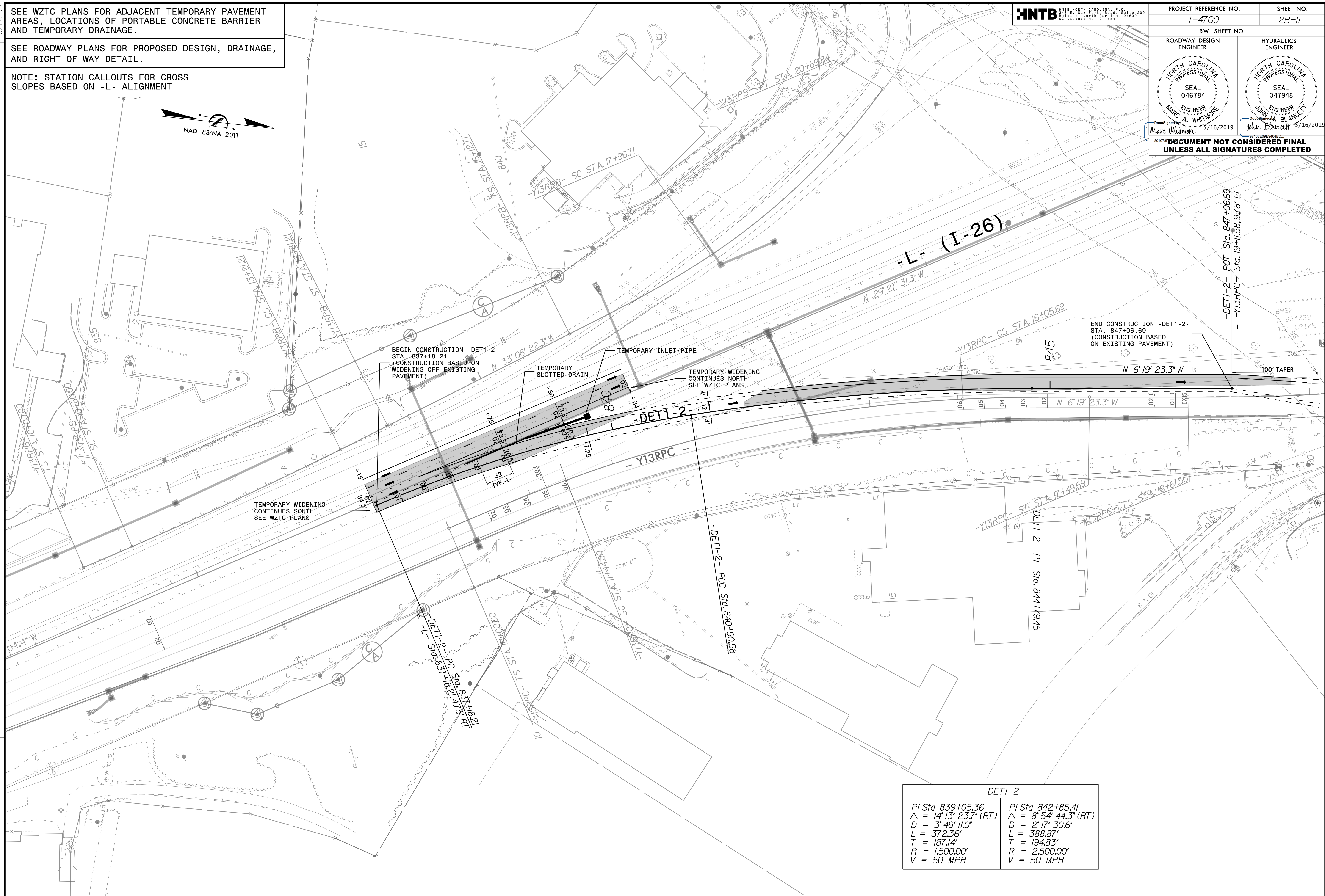
SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT



PROJECT REFERENCE NO.	SHEET NO.
1-4700	2B-11
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

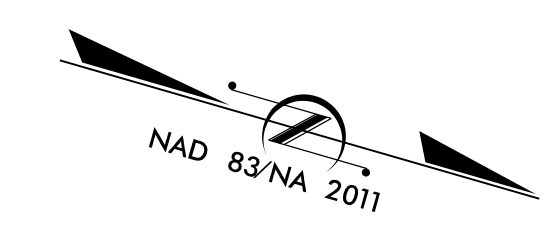
REVISIONS



- DET1-2 -	
PI Sta 839+05.36	PI Sta 842+85.41
$\Delta = 14' 13' 23.7''$ (RT)	$\Delta = 8' 54' 44.3''$ (RT)
$D = 3' 49' 11.0''$	$D = 2' 17' 30.6''$
$L = 372.36'$	$L = 388.87'$
$T = 187.14'$	$T = 194.83'$
$R = 1,500.00'$	$R = 2,500.00'$
$V = 50$ MPH	$V = 50$ MPH

MODEL: DETOUR I-2
 (S:\MA\14025\14700.RD\2810-2B24_Detour.dgn
 DATE

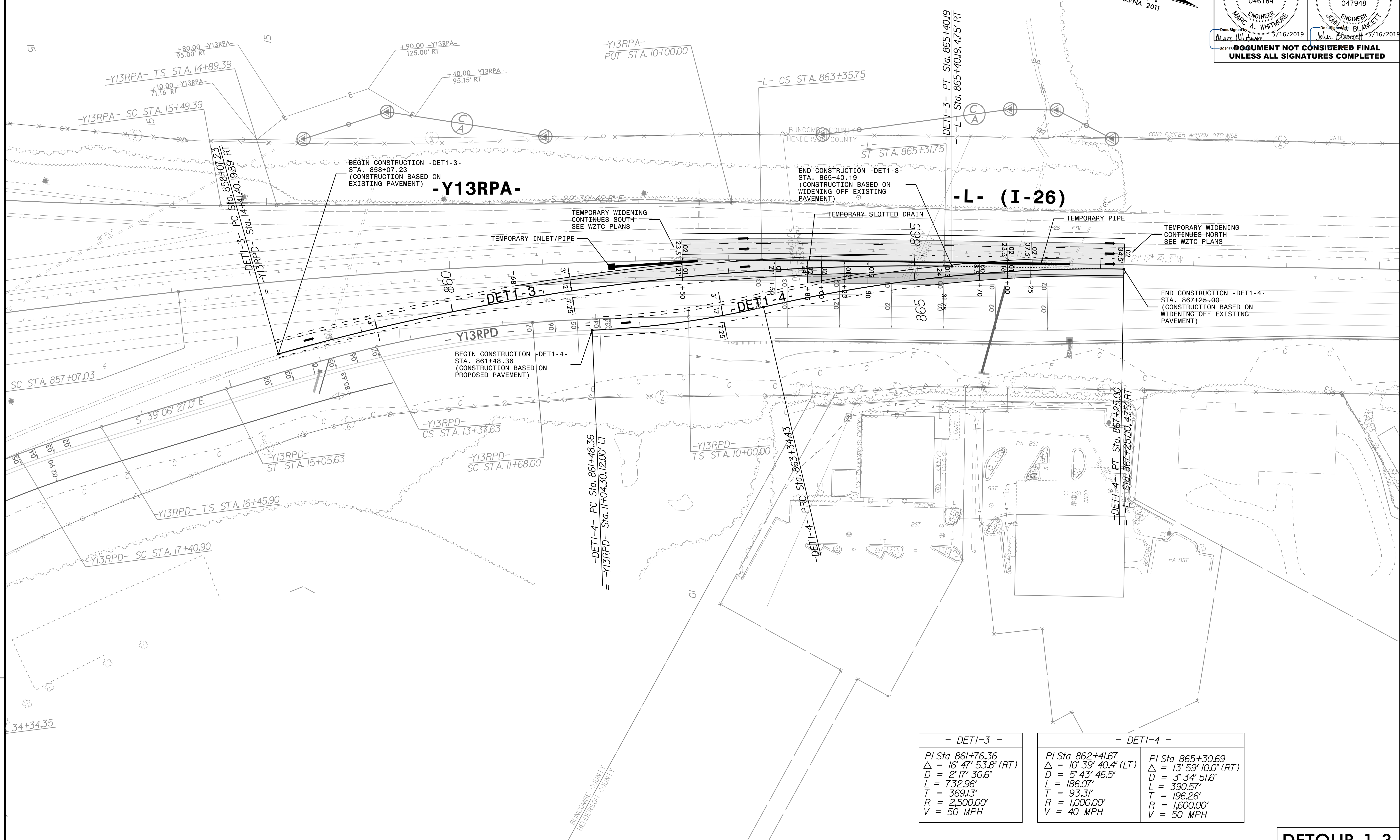
PROJECT REFERENCE NO. 1-4700		SHEET NO. 2B-12	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
DocuSigned by: <i>Marc Whitmore</i> 5/16/2019 DocuSigned by: <i>John Blawie</i> 5/16/2019		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT



REVISIONS

MODEL: DETOUR 1-3-1-4
 (S:\MA\14700\14700.RDY_2B10-2B24_Detour.dgn
 DATE: 5/16/2019 11:25:11 AM
 USER: JBL

- DET1-3 -	
PI Sta 861+76.36	
$\Delta = 16' 47" 53.8" (RT)$	
$D = 2' 17" 30.6"$	
$L = 732.96'$	
$T = 369.13'$	
$R = 2,500.00'$	
$V = 50 MPH$	

- DET1-4 -	
PI Sta 862+41.67	
$\Delta = 10' 39' 40.4" (LT)$	
$D = 5' 43' 46.5"$	
$L = 186.07'$	
$T = 93.31'$	
$R = 1,000.00'$	
$V = 40 MPH$	

- DET1-4 -	
PI Sta 865+30.69	
$\Delta = 13' 59' 10.0" (RT)$	
$D = 3' 34' 51.6"$	
$L = 390.57'$	
$T = 196.26'$	
$R = 1,600.00'$	
$V = 50 MPH$	

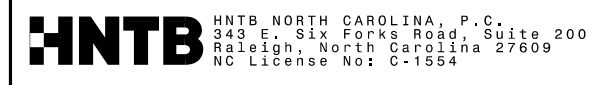
DETOUR 1-3
DETOUR 1-4

8/17/99

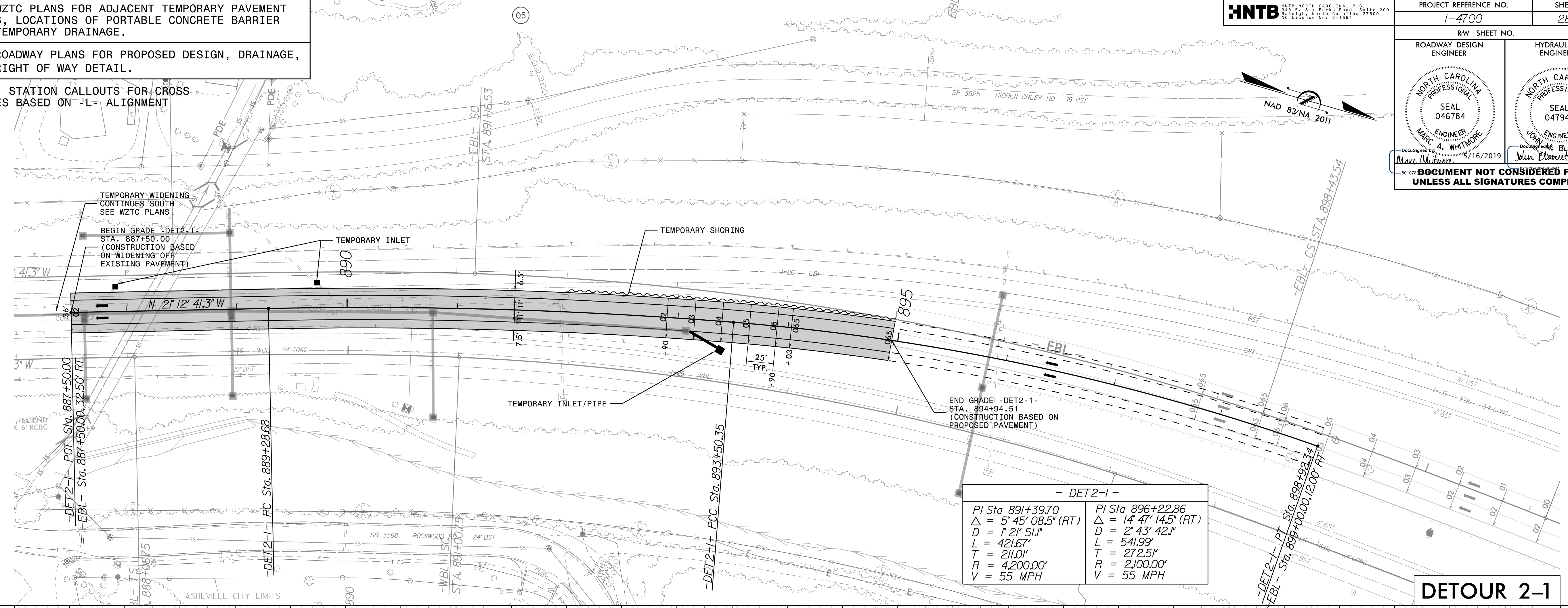
SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT



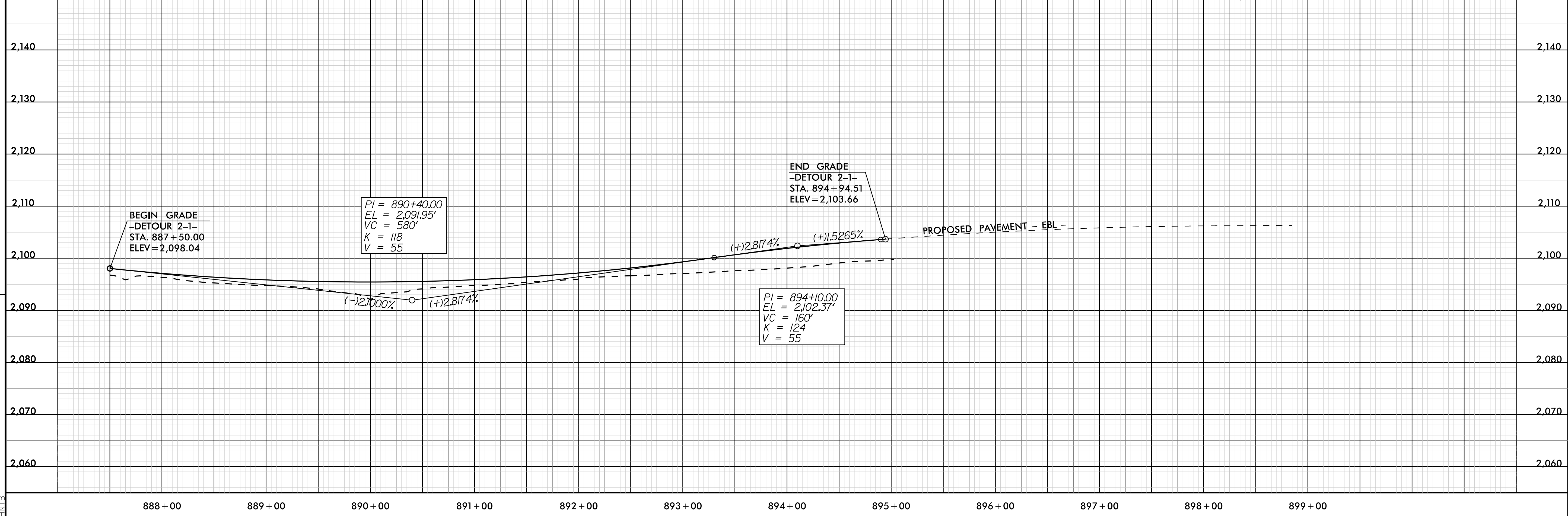
PROJECT REFERENCE NO. 1-4700	SHEET NO. 28-13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



- DET2-1 -	
PI Sta 891+39.70	PI Sta 896+22.86
$\Delta = 5^{\circ} 45' 08.5" (RT)$	$\Delta = 14^{\circ} 47' 14.5" (RT)$
$D = 1^{\circ} 21' 51.1"$	$D = 2^{\circ} 43' 42.1"$
$L = 421.67'$	$L = 541.99'$
$T = 211.01'$	$T = 272.51'$
$R = 4,200.00'$	$R = 2,100.00'$
$V = 55 \text{ MPH}$	$V = 55 \text{ MPH}$

DETOUR 2-1

REVISIONS



MODEL: DETOUR 2-1
 (S:\MA\14700\14700_R0Y_2810-2824_Detour.dgn)
 DATE: 8/17/99

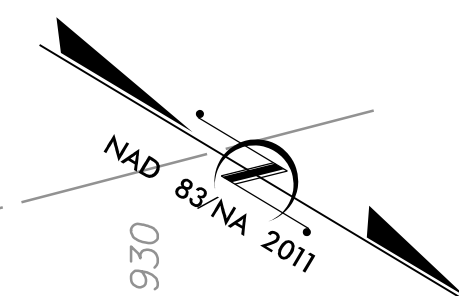
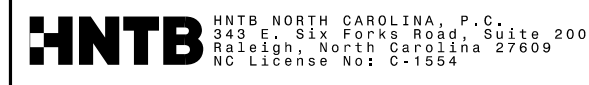
SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

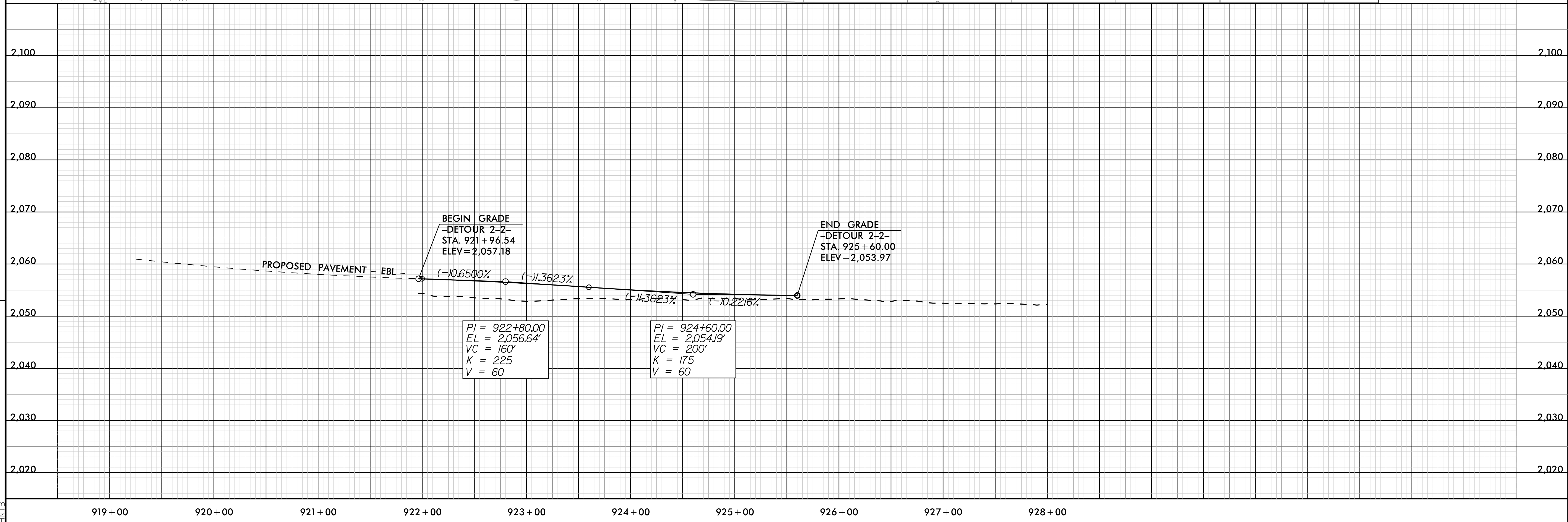
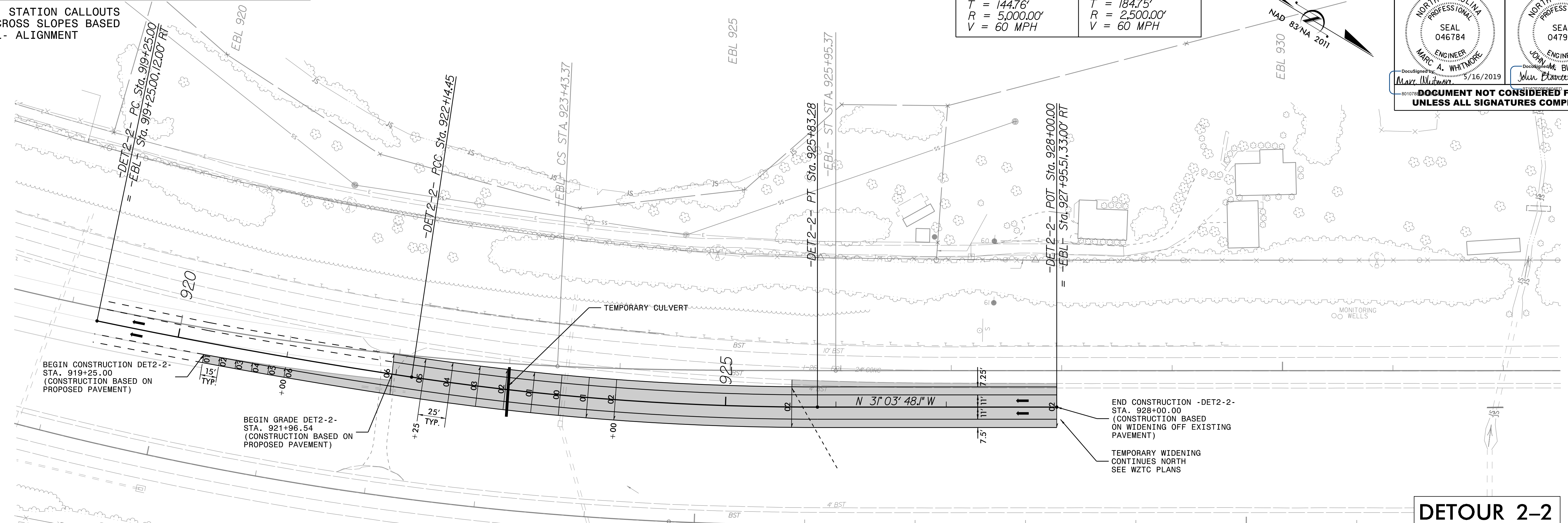
NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT

- DET2-2 -

PI Sta 920+69.76 $\Delta = 3' 19' 00.5" (LT)$ $D = 1' 08' 45.3"$ $L = 289.45'$ $T = 144.76'$ $R = 5,000.00'$ $V = 60 \text{ MPH}$	PI Sta 923+99.20 $\Delta = 8' 27' 10.7" (LT)$ $D = 2' 17' 30.6"$ $L = 368.83'$ $T = 184.75'$ $R = 2,500.00'$ $V = 60 \text{ MPH}$
---	---



PROJECT REFERENCE NO. 1-4700	SHEET NO. 2B-14
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



DETOUR 2-2

REVISIONS

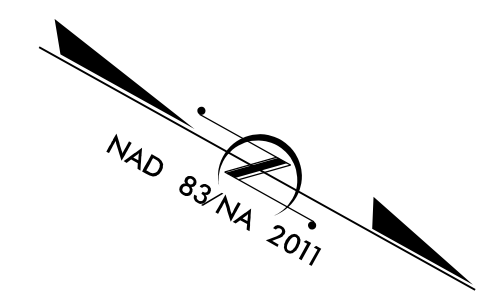
MODEL: DETOUR 2-2
 (S:\MA\14700\14700_R0Y_2B10-2B24_Detour.dgn)
 DATE: 5/16/2019 10:59:14 AM

8/17/19

SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

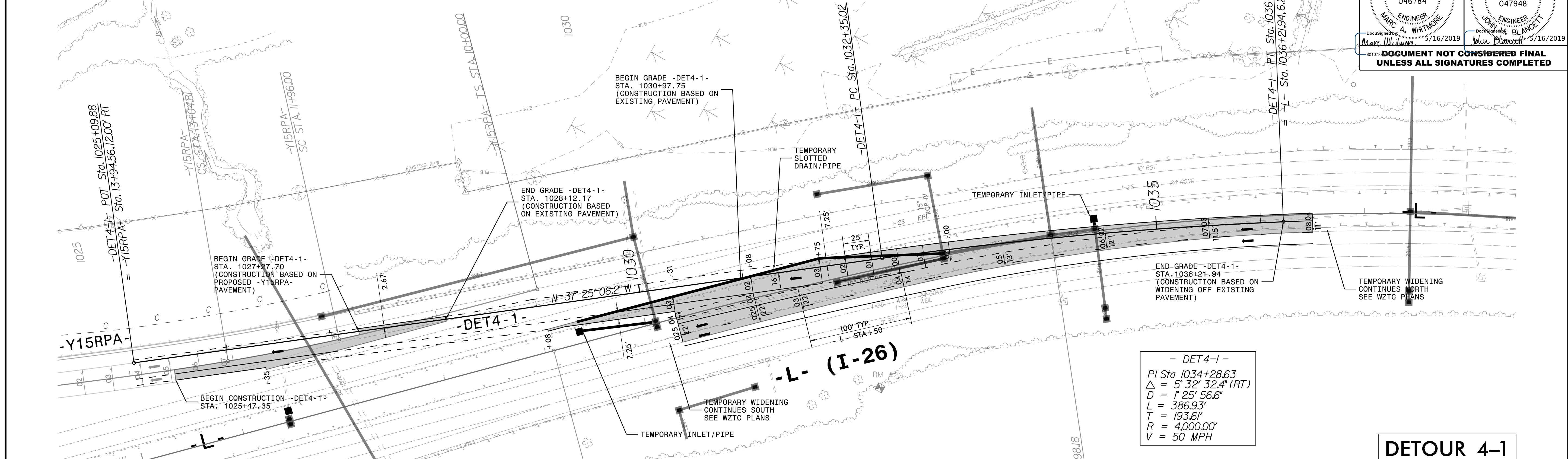
SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT



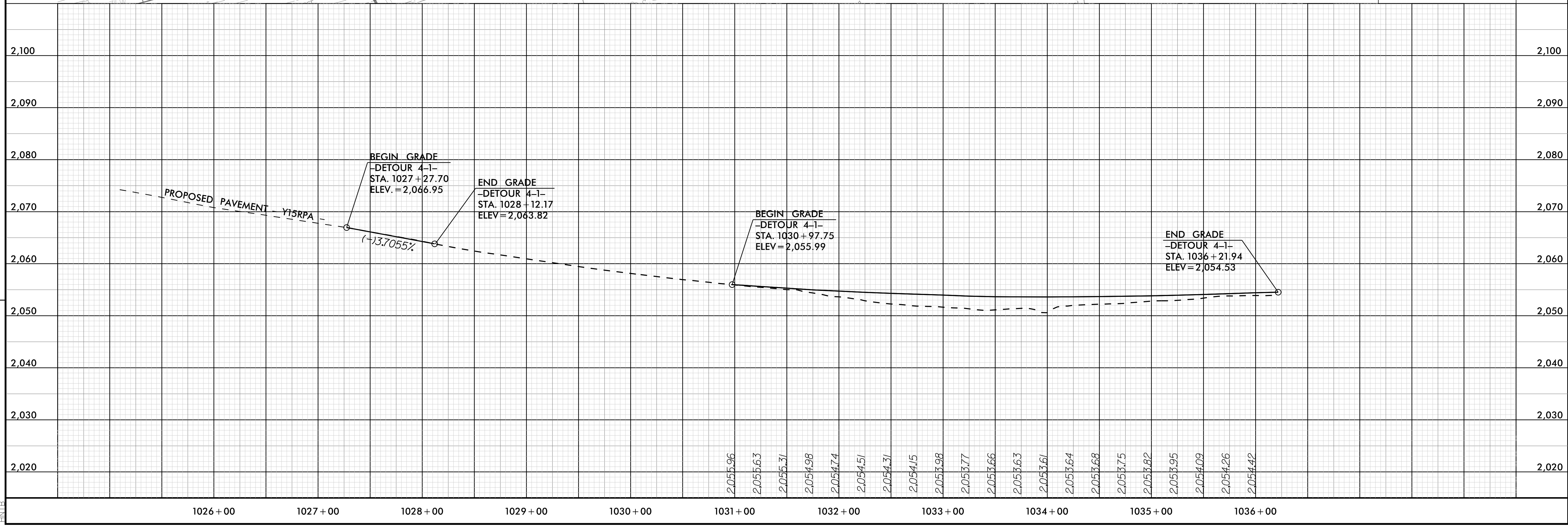
HNTB HNTB NORTH CAROLINA, P.C.
 1000 WEST PARKWAY, SUITE 200
 RALEIGH, NORTH CAROLINA 27609
 NC LICENSE NO. 2-1354

PROJECT REFERENCE NO. 1-4700	SHEET NO. 2B-15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



- DET4-1 -
 PI Sta 1034+28.63
 $\Delta = 5^\circ 32' 32.4''$ (RT)
 $D = 1^\circ 25' 56.6''$
 $L = 386.93'$
 $T = 193.61'$
 $R = 4,000.00'$
 $V = 50$ MPH

DETOUR 4-1



REVISIONS

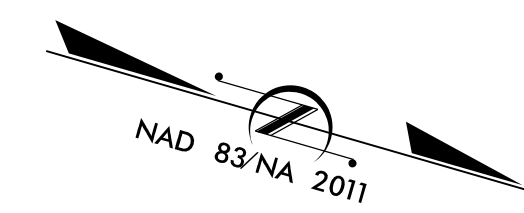
MODEL: DETOUR 4-1
 (6:30 AM 8/17/19 14:700 RDY_2B10-2B24_Detour.dgn
 HNTB

8/17/19

SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

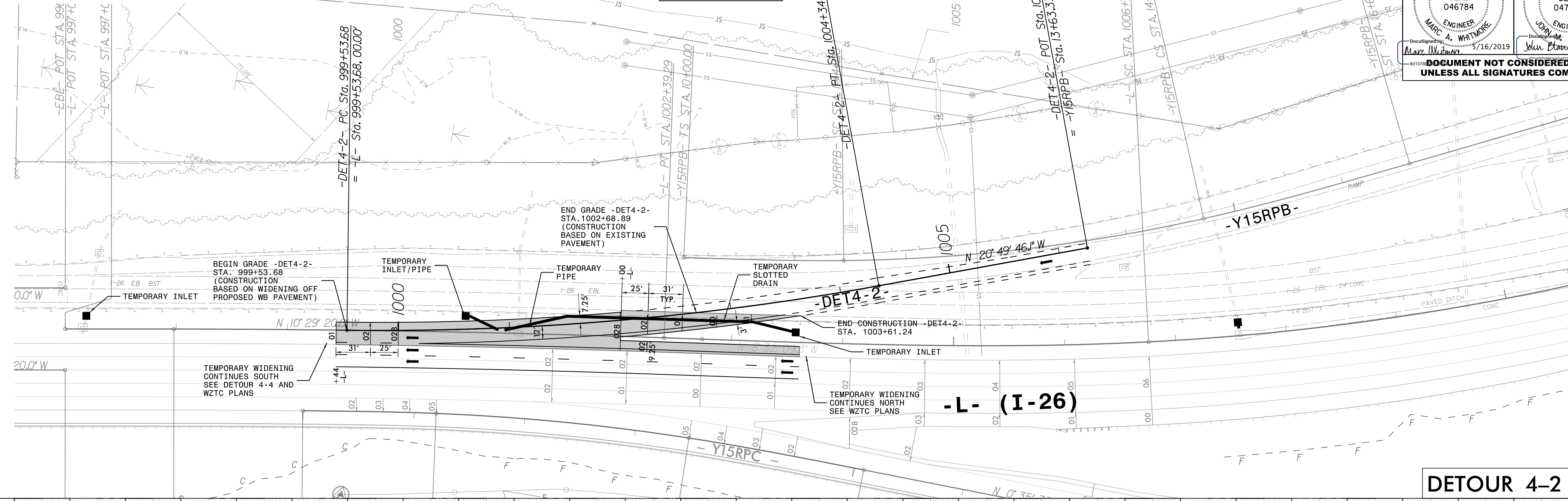
SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT

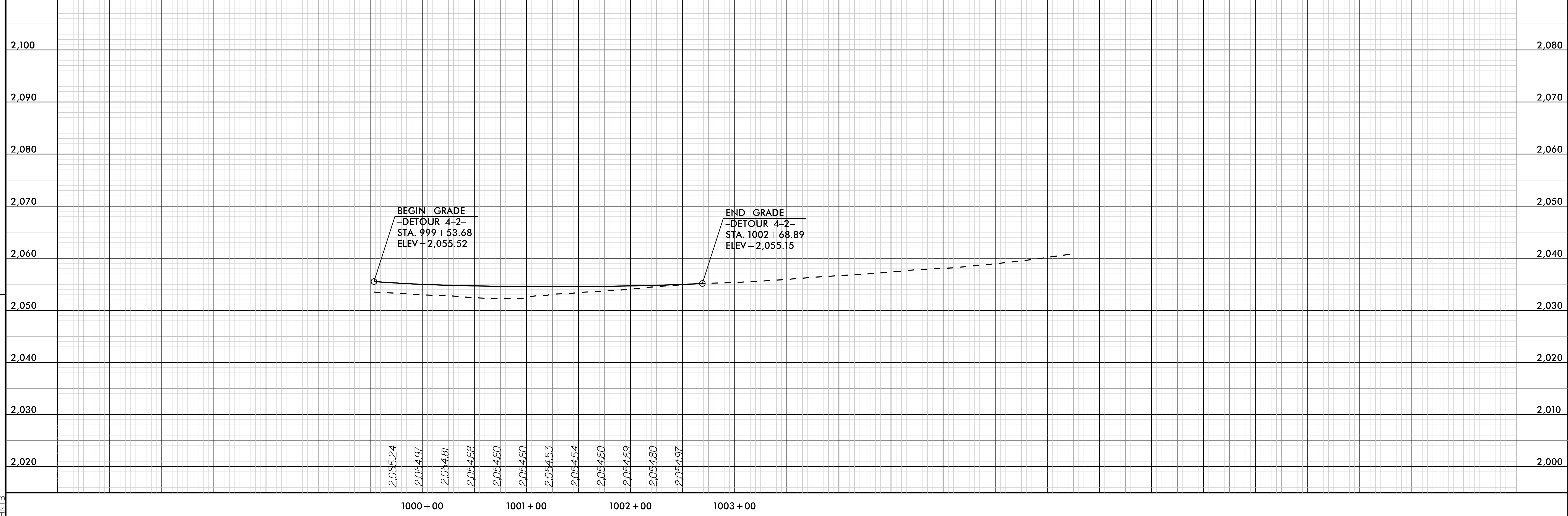


- DET 4-2 -
 PI Sta 1001+95.06
 $\Delta = 11' 01" 47.6" (LT)$
 $D = 2' 17" 30.6"$
 $L = 481.27'$
 $T = 241.38'$
 $R = 2,500.00'$
 $V = 50 \text{ MPH}$

PROJECT REFERENCE NO. I-4700		SHEET NO. 2B-16	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



DETOUR 4-2



REVISIONS

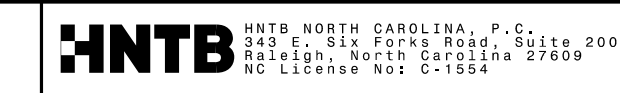
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 (S:\MA\1905\14700\RDY_2B10-2B24_Detour.dgn)
 DATE

8/17/99

SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT

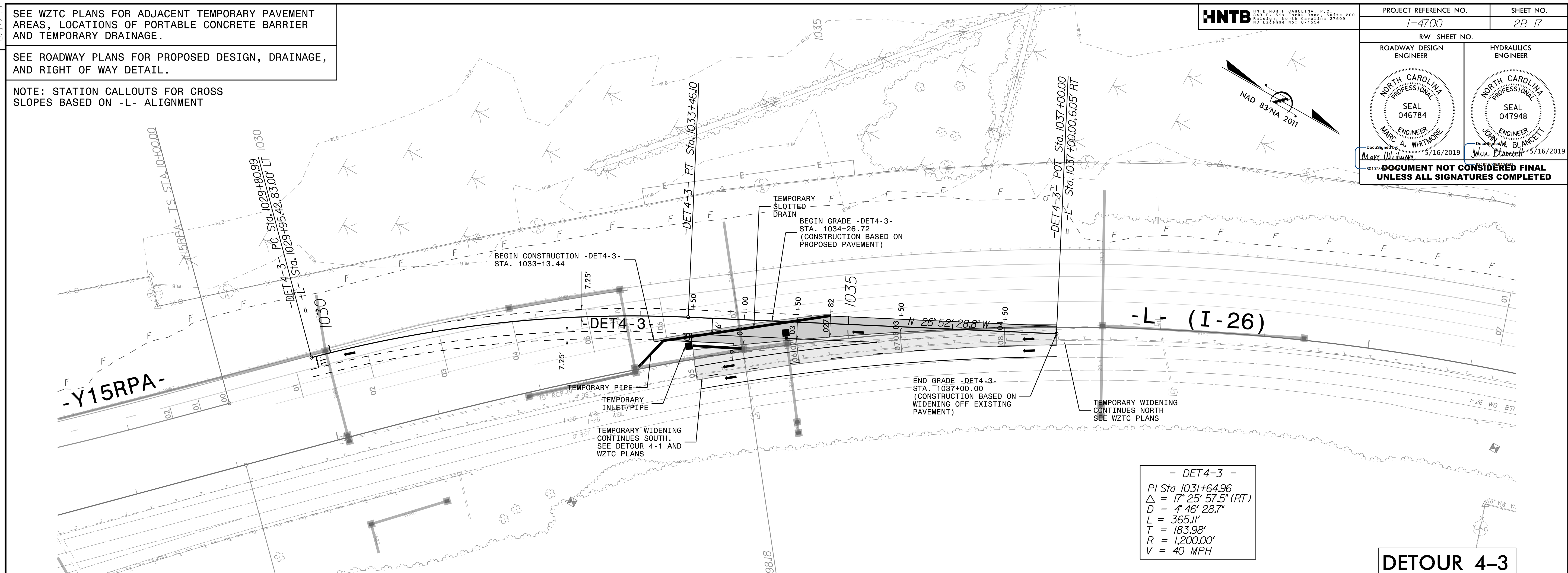


PROJECT REFERENCE NO. 1-4700 SHEET NO. 2B-17

RW SHEET NO.

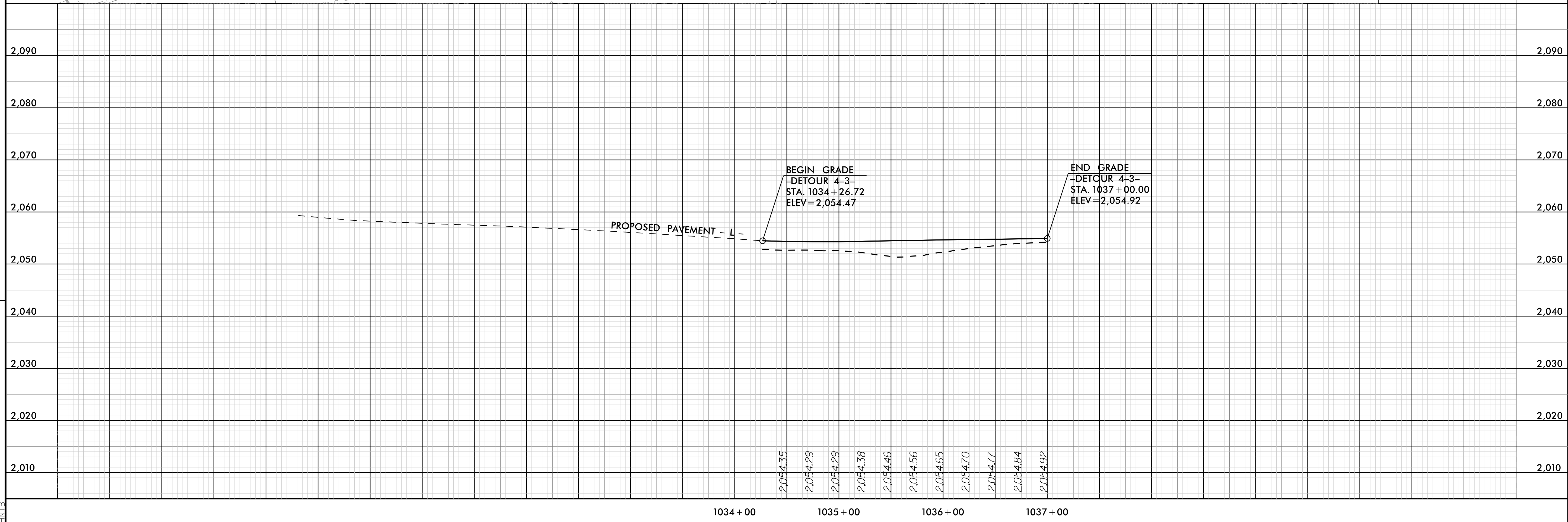
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



- DET4-3 -
 PI Sta 1031+64.96
 $\Delta = 17^{\circ} 25' 57.5''$ (RT)
 $D = 4' 46' 28.7''$
 $L = 365.11'$
 $T = 183.98'$
 $R = 1,200.00'$
 $V = 40$ MPH

DETOUR 4-3



REVISIONS

MODEL: DETOUR 1-2
 (S:\MA\14700\14700.RDY_2B10-2B24_Detour.dgn)
 DATE

8/17/99

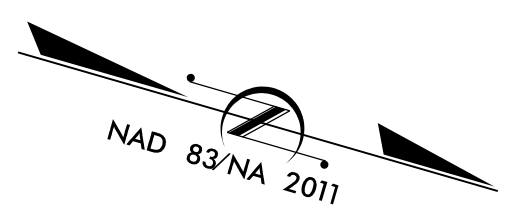
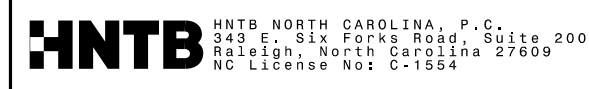
SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

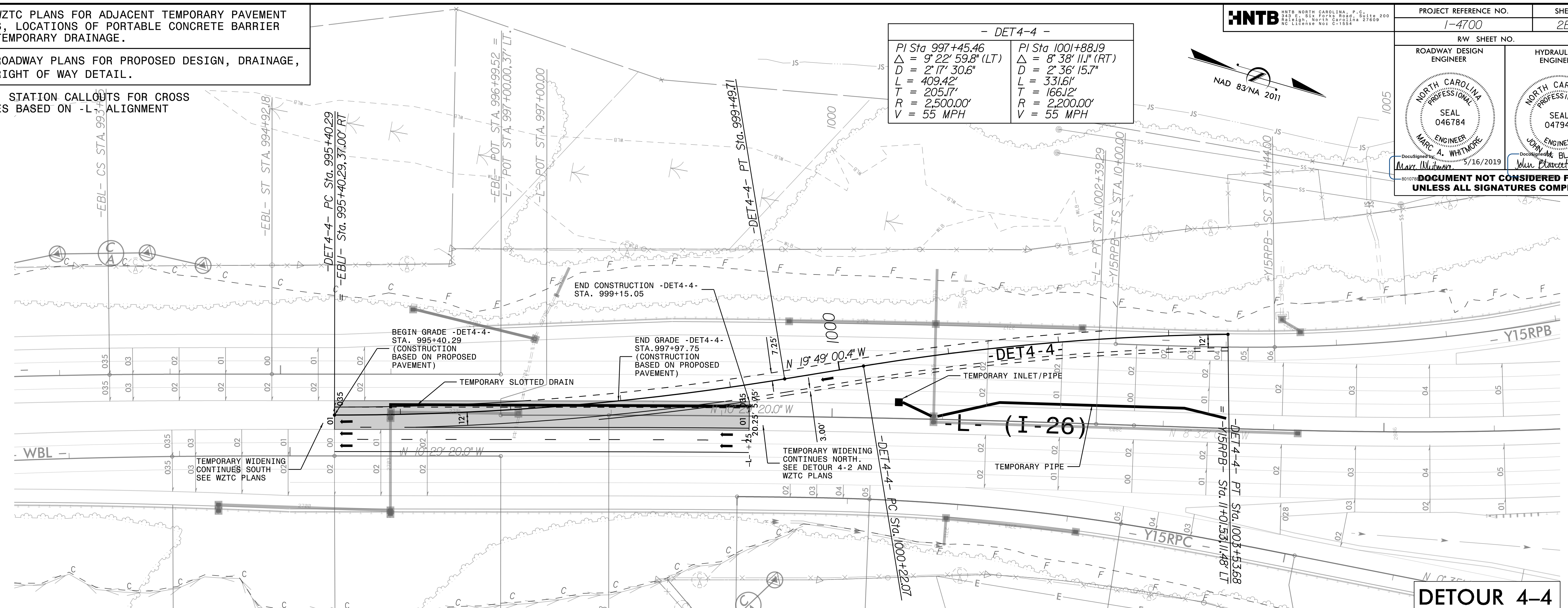
NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT

- DET4-4 -

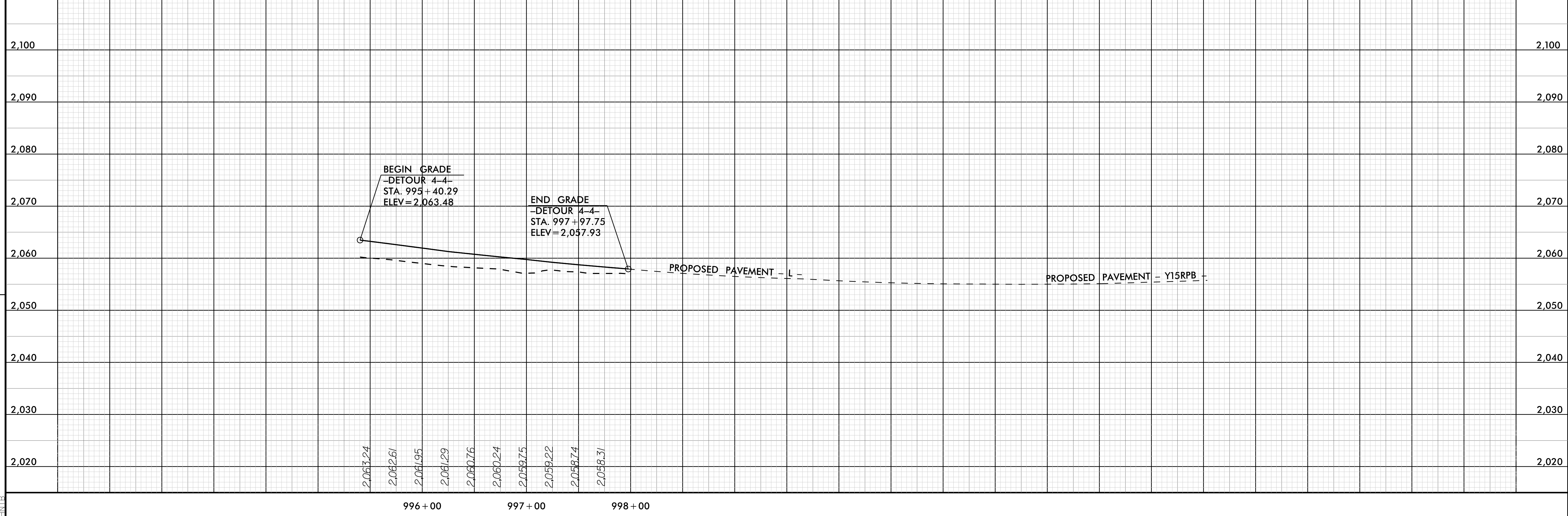
PI Sta 997+45.46 Δ = 9° 22' 59.8" (LT) D = 2° 17' 30.6" L = 409.42' R = 205.17' V = 55 MPH	PI Sta 1001+88.19 Δ = 8° 38' 11.1" (RT) D = 2° 36' 15.7" L = 331.61' R = 166.12' V = 55 MPH
---	--



PROJECT REFERENCE NO. 1-4700	SHEET NO. 2B-18
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	



DETOUR 4-4



REVISIONS

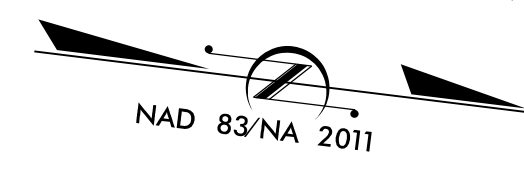
MODEL: DETOUR 4-4
DATE: 8/17/99
DRAWN BY: [Name]
CHECKED BY: [Name]
SCALE: 1/4" = 1'-0"
NITE

8/17/19

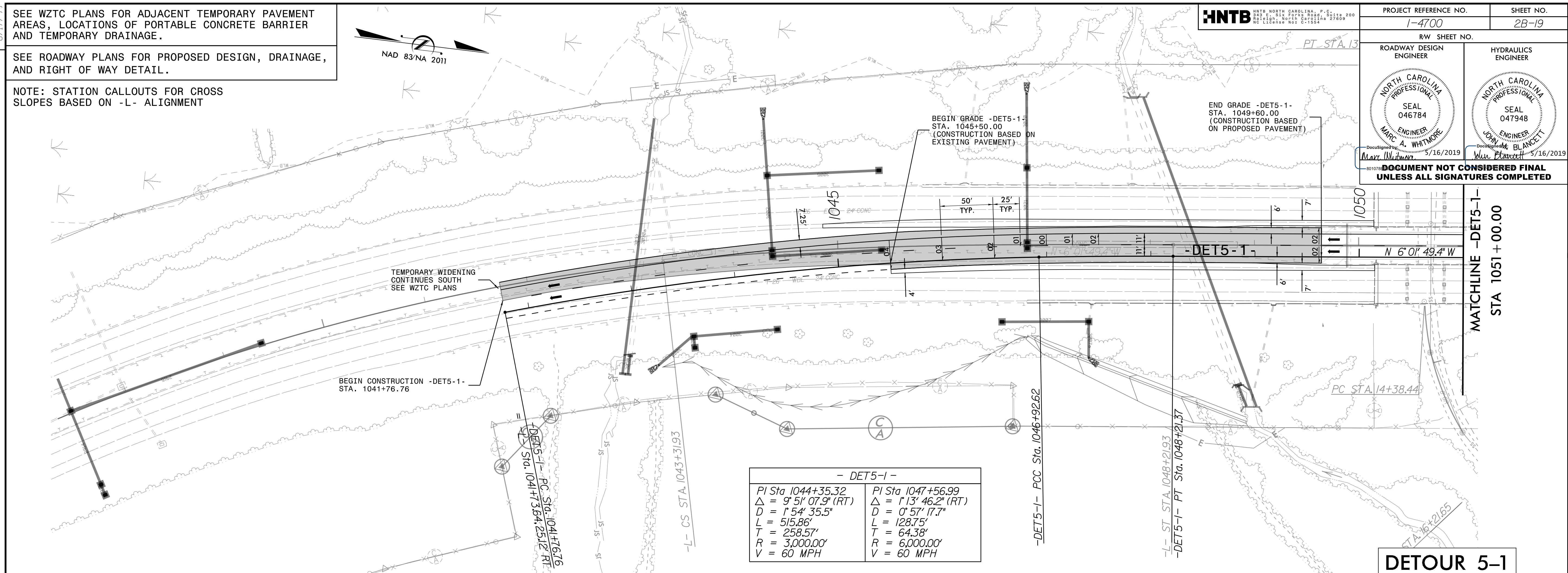
SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT

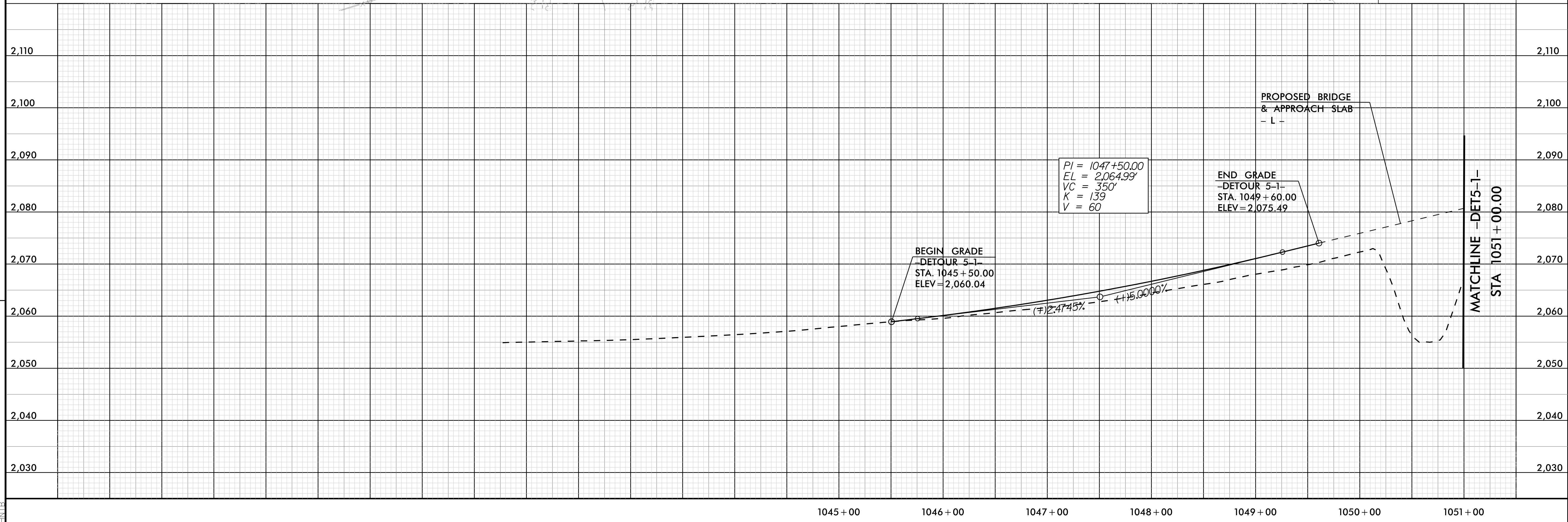


PROJECT REFERENCE NO. I-4700		SHEET NO. 2B-19	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



- DET5-1 -	
PI Sta 1044+35.32	PI Sta 1047+56.99
$\Delta = 9' 51'' 07.9''$ (RT)	$\Delta = 1' 13'' 46.2''$ (RT)
$D = 1' 54'' 35.5''$	$D = 0' 57'' 17.7''$
$L = 515.86'$	$L = 128.75'$
$T = 258.57'$	$T = 64.38'$
$R = 3,000.00'$	$R = 6,000.00'$
$V = 60$ MPH	$V = 60$ MPH

DETOUR 5-1



REVISIONS

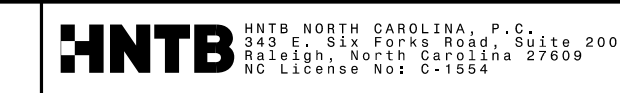
MODEL: DETOUR 5-1
 (S:\MA\1919\14700.RD\2B10-2B24_Detour.dgn)
 DATE

8/17/99

SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT



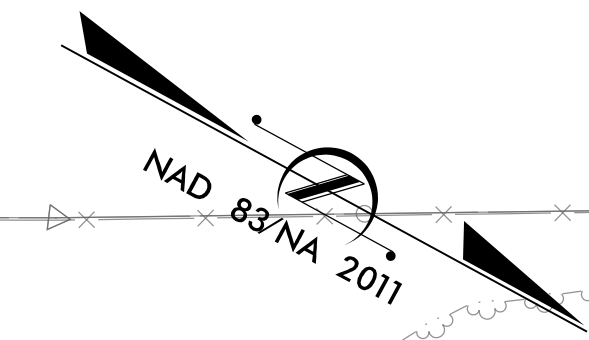
PROJECT REFERENCE NO. 1-4700 SHEET NO. 2B-20

RW SHEET NO.

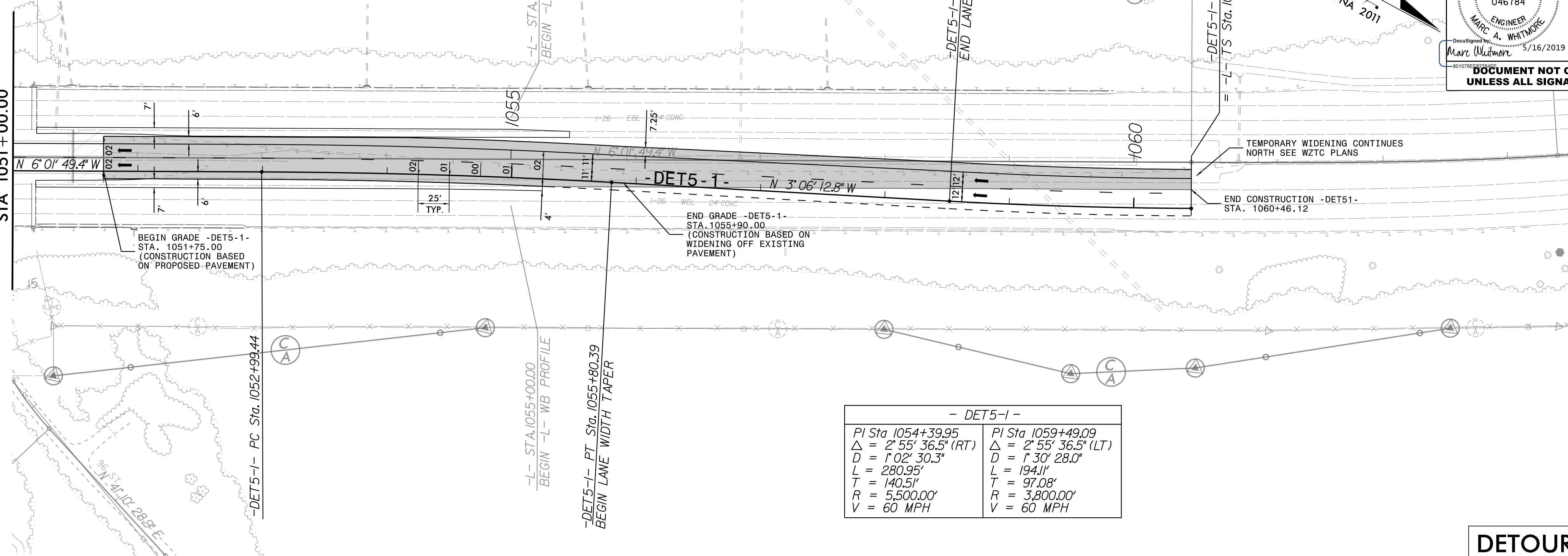
ROADWAY DESIGN ENGINEER: MARIO A. WHITMORE, SEAL 046784, dated 5/16/2019.

HYDRAULICS ENGINEER: JOHN BLANCETT, SEAL 047948, dated 5/16/2019.

Documented by: Marc Whitmore, dated 5/16/2019.

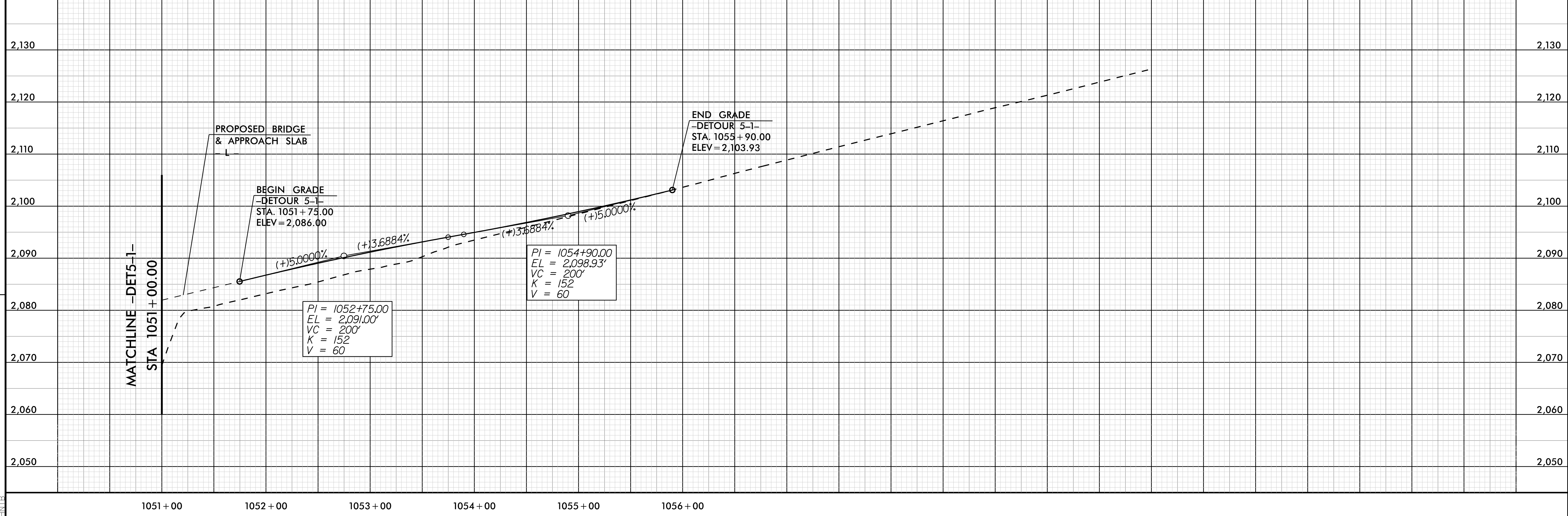


MATCHLINE -DET5-1- STA 1051+00.00



- DET5-1 -	
PI Sta 1054+39.95	PI Sta 1059+49.09
$\Delta = 2^{\circ} 55' 36.5''$ (RT)	$\Delta = 2^{\circ} 55' 36.5''$ (LT)
$D = 1^{\circ} 02' 30.3''$	$D = 1^{\circ} 30' 28.0''$
$L = 280.95'$	$L = 194.1'$
$T = 140.5'$	$T = 97.08'$
$R = 5,500.00'$	$R = 3,800.00'$
$V = 60$ MPH	$V = 60$ MPH

DETOUR 5-1



REVISIONS

MODEL: DETOUR 5-1.2
 (S:\MA\14700\14700_RDY_2B10-2B24_Detour.dgn)
 DATE

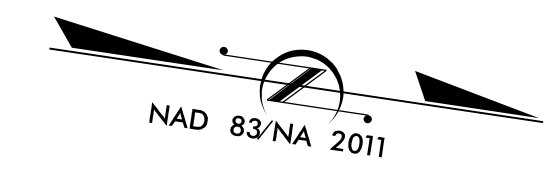
HNTB HNTB NORTH CAROLINA, P.C.
 200 S. 10TH STREET, SUITE 200
 RALEIGH, NORTH CAROLINA 27609
 NC LICENSE NO. C-1554

PROJECT REFERENCE NO. 1-4700	SHEET NO. 2B-21
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

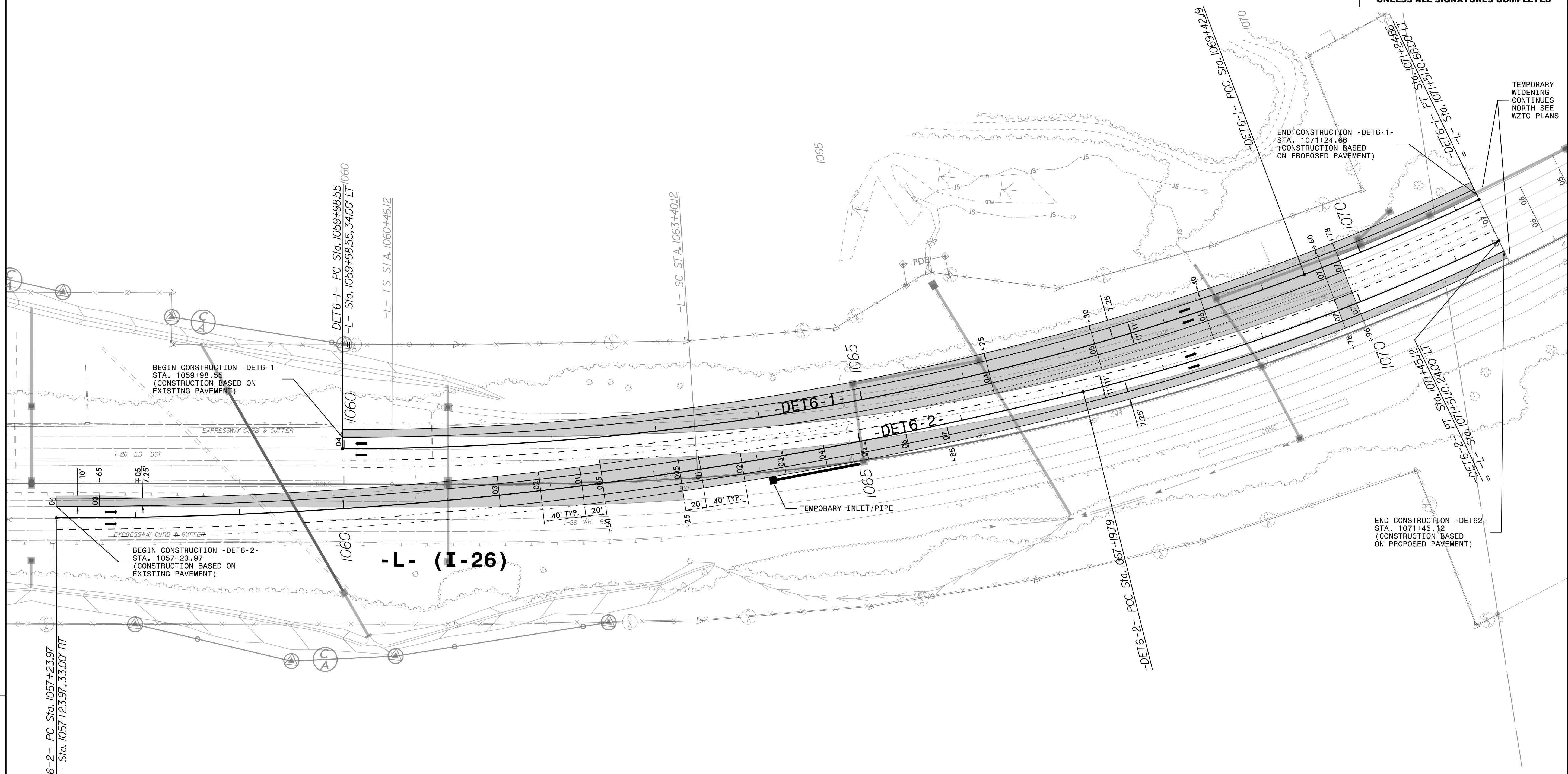
SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT



REVISIONS



-DET6-2- PC Sta. 1057+23.97
 = -L- Sta. 1057+23.97, 33.00' RT

BEGIN CONSTRUCTION -DET6-1-
 STA. 1059+98.55
 (CONSTRUCTION BASED ON
 EXISTING PAVEMENT)

BEGIN CONSTRUCTION -DET6-2-
 STA. 1057+23.97
 (CONSTRUCTION BASED ON
 EXISTING PAVEMENT)

END CONSTRUCTION -DET6-1-
 STA. 1071+24.66
 (CONSTRUCTION BASED
 ON PROPOSED PAVEMENT)

END CONSTRUCTION -DET6-2-
 STA. 1071+45.12
 (CONSTRUCTION BASED
 ON PROPOSED PAVEMENT)

TEMPORARY
 WIDENING
 CONTINUES
 NORTH SEE
 WZTC PLANS

- DET6-1 -	
PI Sta 1064+75.62	PI Sta 1070+33.49
$\Delta = 20^\circ 47' 42.0''$ (LT)	$\Delta = 5^\circ 05' 41.3''$ (LT)
$D = 2^\circ 12' 13.3''$	$D = 2^\circ 47' 31.9''$
$L = 943.65'$	$L = 182.47'$
$T = 477.07'$	$T = 91.29'$
$R = 2,600.00'$	$R = 2,052.00'$
$V = 60$ MPH	$V = 60$ MPH

- DET6-2 -	
PI Sta 1062+24.47	PI Sta 1069+33.18
$\Delta = 14^\circ 15' 50.2''$ (LT)	$\Delta = 11^\circ 37' 36.3''$ (LT)
$D = 1^\circ 25' 56.6''$	$D = 2^\circ 44' 00.9''$
$L = 995.81'$	$L = 425.33'$
$T = 500.49'$	$T = 213.40'$
$R = 4,000.00'$	$R = 2,096.00'$
$V = 60$ MPH	$V = 60$ MPH

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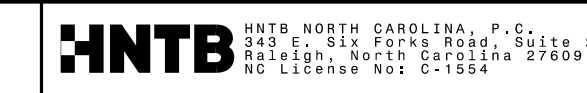
DETOUR 6-1
DETOUR 6-2

8/17/99

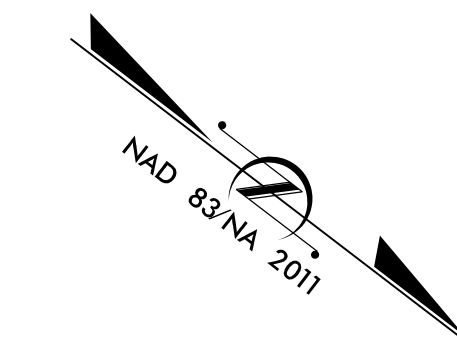
SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

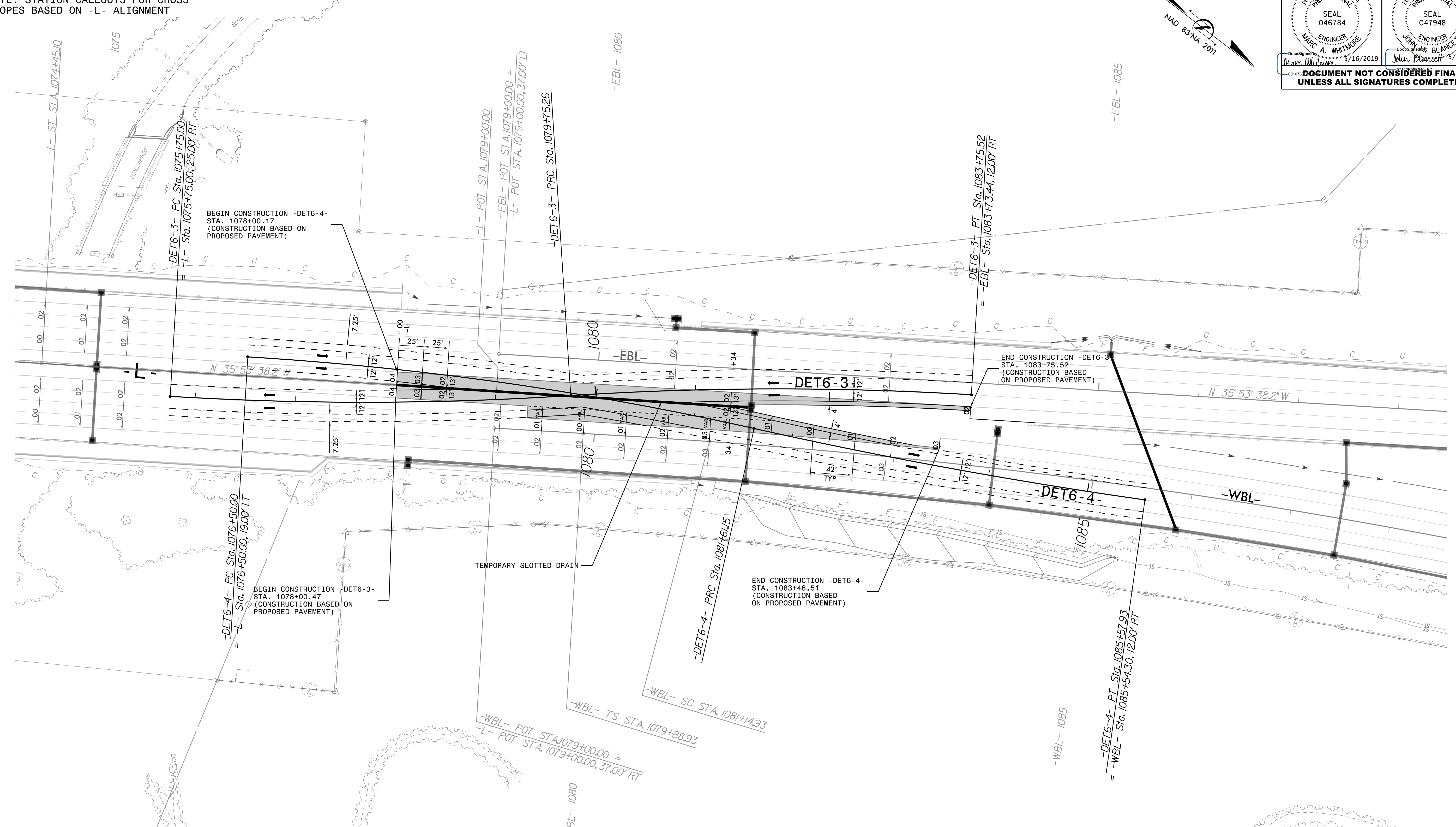
NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT



PROJECT REFERENCE NO. 1-4700	SHEET NO. 2B-22
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	



REVISIONS



BEGIN CONSTRUCTION -DET6-4- STA. 1078+00.17 (CONSTRUCTION BASED ON PROPOSED PAVEMENT)

BEGIN CONSTRUCTION -DET6-3- STA. 1078+00.47 (CONSTRUCTION BASED ON PROPOSED PAVEMENT)

END CONSTRUCTION -DET6-4- STA. 1083+46.51 (CONSTRUCTION BASED ON PROPOSED PAVEMENT)

END CONSTRUCTION -DET6-3- STA. 1083+75.52 (CONSTRUCTION BASED ON PROPOSED PAVEMENT)

- DET6-3 -	
PI Sta 1077+75.39	PI Sta 1081+75.65
$\Delta = 7^{\circ} 09' 59.9" (LT)$	$\Delta = 7^{\circ} 09' 59.9" (RT)$
$D = 1' 47' 25.8"$	$D = 1' 47' 25.8"$
$L = 400.26'$	$L = 400.26'$
$T = 200.39'$	$T = 200.39'$
$R = 3,200.00'$	$R = 3,200.00'$
$V = 60 \text{ MPH}$	$V = 60 \text{ MPH}$

- DET6-4 -	
PI Sta 1079+06.12	PI Sta 1083+59.64
$\Delta = 9^{\circ} 09' 07.7" (RT)$	$\Delta = 4^{\circ} 32' 48.2" (LT)$
$D = 1' 47' 25.8"$	$D = 1' 08' 45.3"$
$L = 511.5'$	$L = 396.78'$
$T = 256.12'$	$T = 198.49'$
$R = 3,200.00'$	$R = 5,000.00'$
$V = 60 \text{ MPH}$	$V = 60 \text{ MPH}$

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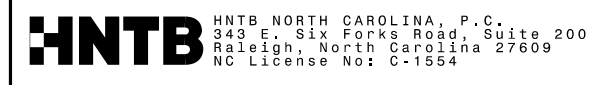
DETOUR 6-3
DETOUR 6-4

8/17/99

SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT



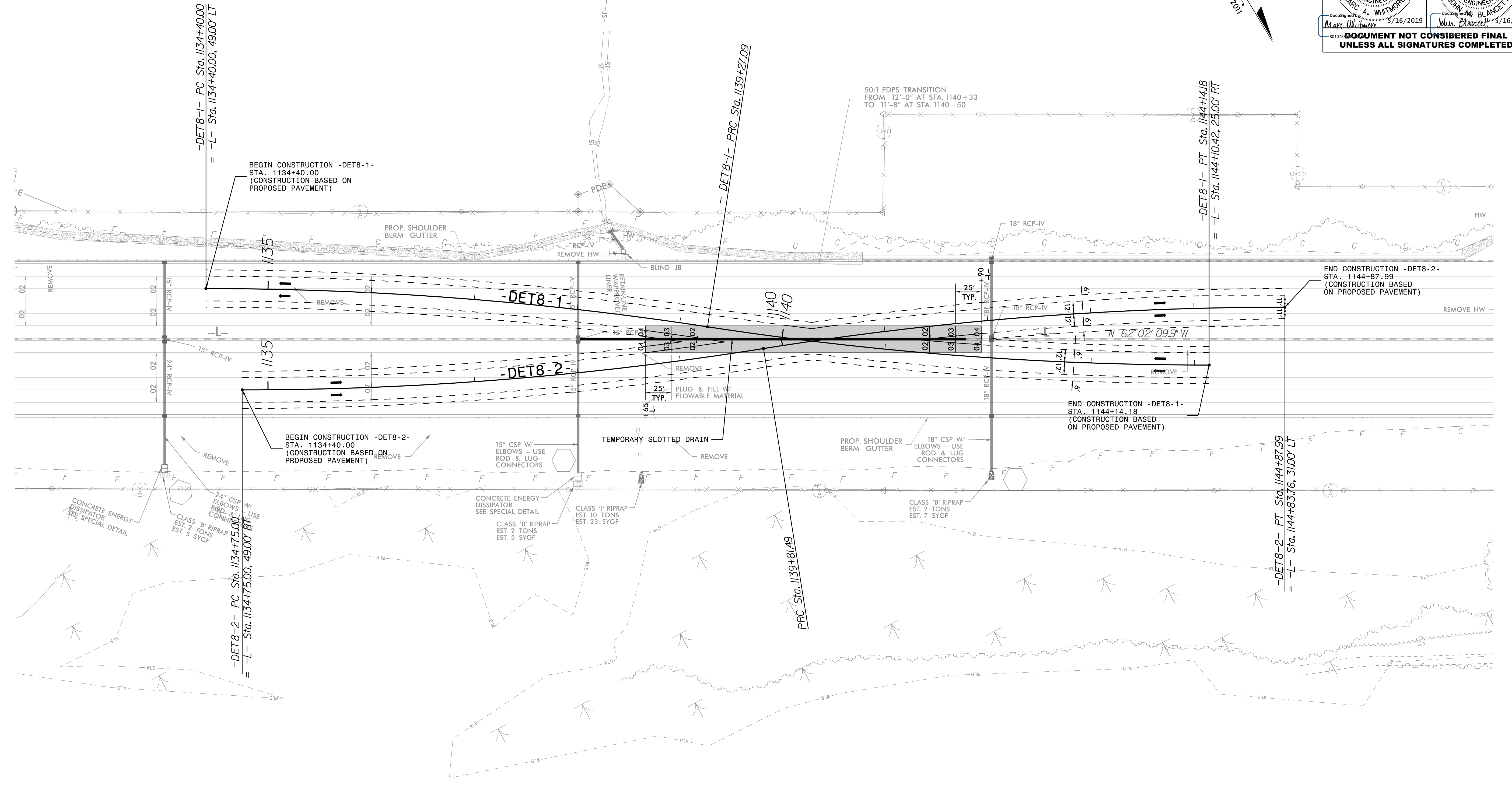
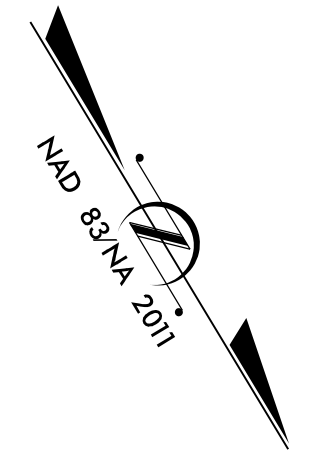
PROJECT REFERENCE NO. 1-4700 SHEET NO. 2B-23

RW SHEET NO.

ROADWAY DESIGN ENGINEER
 HYDRAULICS ENGINEER

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 DocuSign Envelope ID: 5/16/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



REVISIONS

- DETOUR 8-1 -	
PI Sta 1136+84.02	PI Sta 1141+71.11
$\Delta = 8' 43' 16.8''$ (RT)	$\Delta = 8' 43' 16.8''$ (LT)
$D = 1' 47' 25.8''$	$D = 1' 47' 25.8''$
$L = 487.09'$	$L = 487.09'$
$T = 244.02'$	$T = 244.02'$
$R = 3,200.00'$	$R = 3,200.00'$
$V = 60$ MPH	$V = 60$ MPH

- DETOUR 8-2 -	
PI Sta 1137+28.78	PI Sta 1142+35.27
$\Delta = 9' 04' 07.4''$ (LT)	$\Delta = 9' 04' 07.4''$ (RT)
$D = 1' 47' 25.8''$	$D = 1' 47' 25.8''$
$L = 506.49'$	$L = 506.49'$
$T = 253.78'$	$T = 253.78'$
$R = 3,200.00'$	$R = 3,200.00'$
$V = 60$ MPH	$V = 60$ MPH

MODEL: DETOUR 8-1-8-2
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 DATE

DETOUR 8-1
 DETOUR 8-2

8/17/19

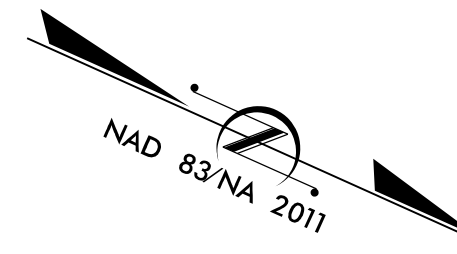
SEE WZTC PLANS FOR ADJACENT TEMPORARY PAVEMENT AREAS, LOCATIONS OF PORTABLE CONCRETE BARRIER AND TEMPORARY DRAINAGE.

SEE ROADWAY PLANS FOR PROPOSED DESIGN, DRAINAGE, AND RIGHT OF WAY DETAIL.

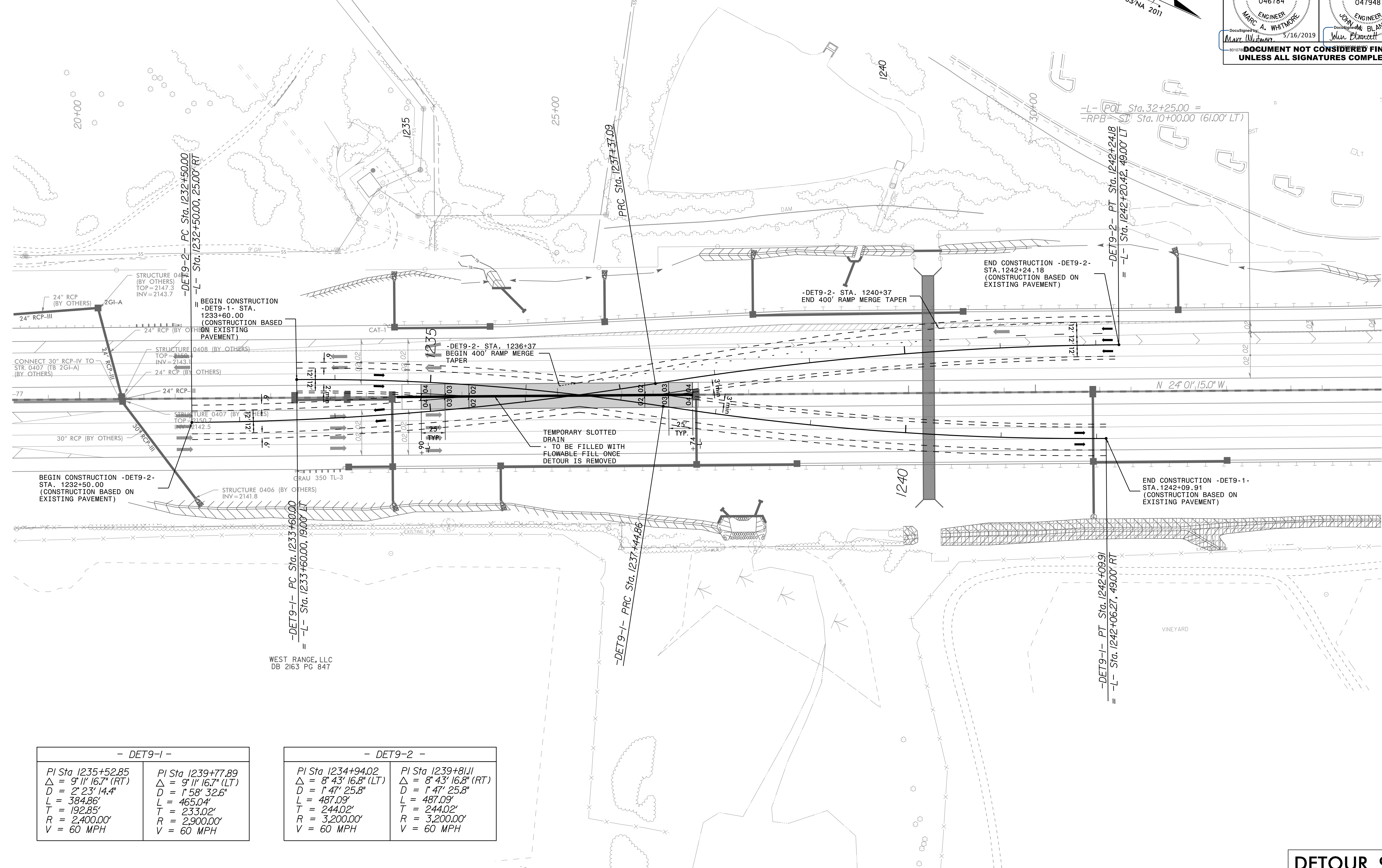
NOTE: STATION CALLOUTS FOR CROSS SLOPES BASED ON -L- ALIGNMENT

HNTB HNTB NORTH CAROLINA, P.C.
 1000 W. 10TH STREET, SUITE 200
 RALEIGH, NORTH CAROLINA 27609
 NC LICENSE NO. 2-1354

PROJECT REFERENCE NO. 1-4700	SHEET NO. 2B-24
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS



- DET9-1 -	
PI Sta 1235+52.85	PI Sta 1239+77.89
$\Delta = 9' 11'' 16.7''$ (RT)	$\Delta = 9' 11'' 16.7''$ (LT)
$D = 2' 23' 14.4''$	$D = 1' 58' 32.6''$
$L = 384.86'$	$L = 465.04'$
$T = 192.85'$	$T = 233.02'$
$R = 2,400.00'$	$R = 2,900.00'$
$V = 60$ MPH	$V = 60$ MPH

- DET9-2 -	
PI Sta 1234+94.02	PI Sta 1239+81.11
$\Delta = 8' 43' 16.8''$ (LT)	$\Delta = 8' 43' 16.8''$ (RT)
$D = 1' 47' 25.8''$	$D = 1' 47' 25.8''$
$L = 487.09'$	$L = 487.09'$
$T = 244.02'$	$T = 244.02'$
$R = 3,200.00'$	$R = 3,200.00'$
$V = 60$ MPH	$V = 60$ MPH

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 DATE

WEST RANGE, LLC
 DB 2163 PG 847

DETOUR 9-1
 DETOUR 9-2

01-MAR-2018 07:39
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STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
CONCRETE MEDIAN DROP INLET TYPE 'A'
EXTRA DEPTH OVER 12' TO 25'
12" THRU 72" PIPE

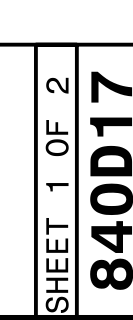
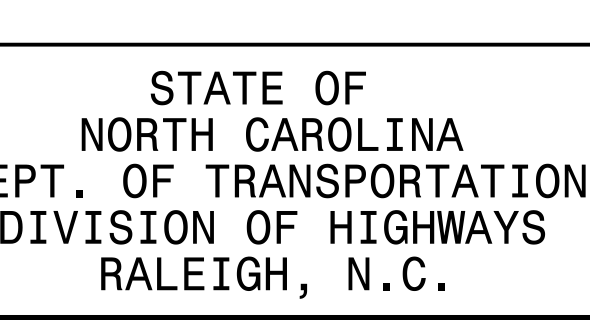
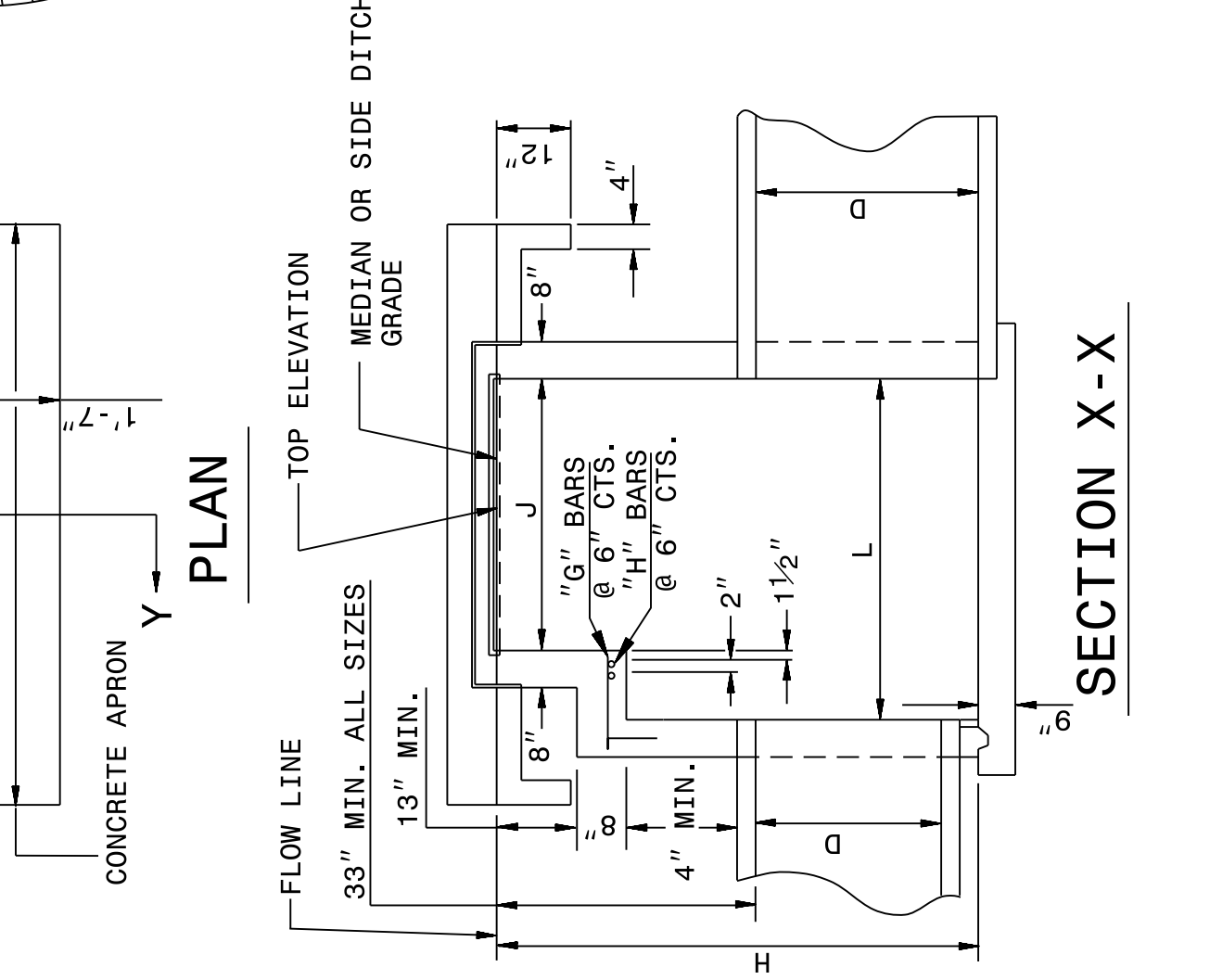
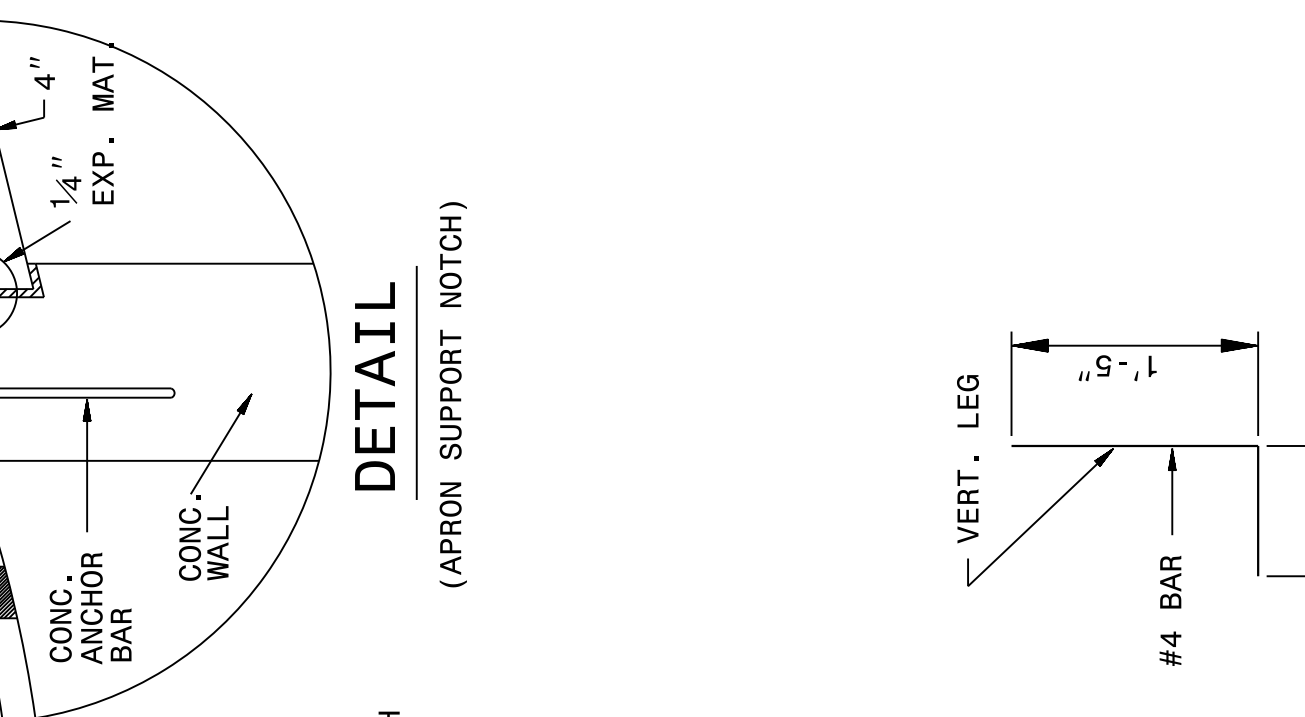
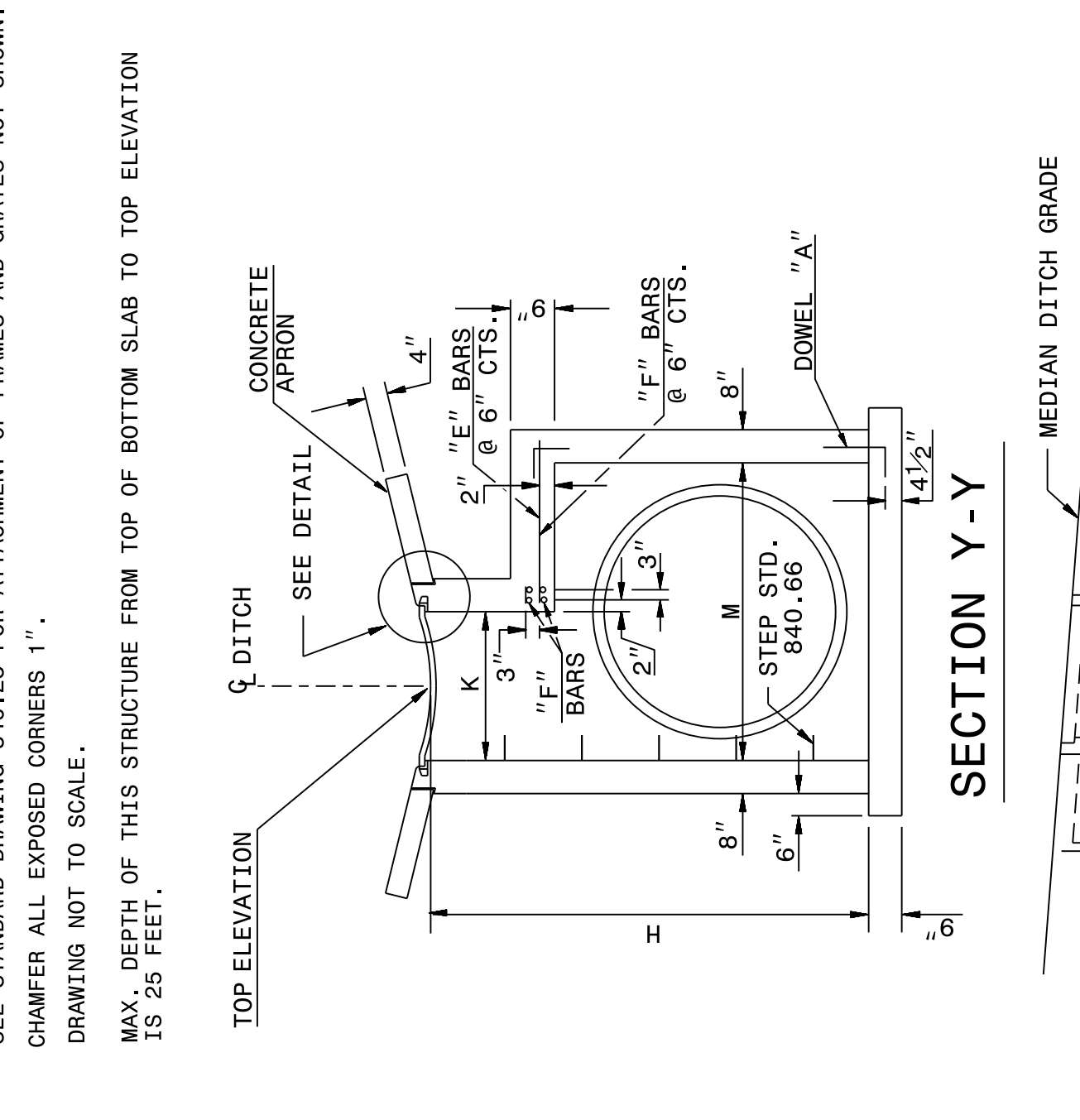
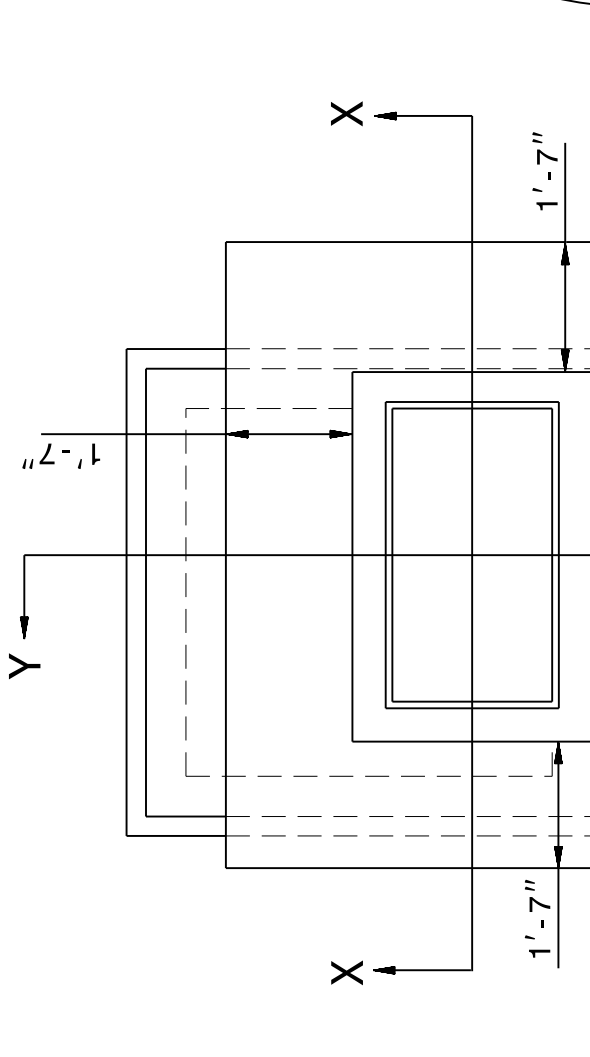
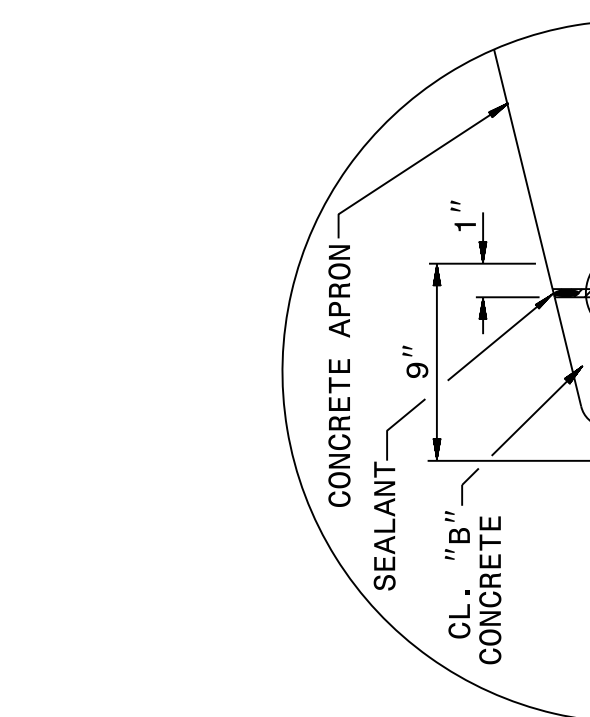
SHEET 1 OF 2
840D17

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

ENGLISH DETAIL DRAWING FOR
CONCRETE MEDIAN DROP INLET TYPE 'A'
EXTRA DEPTH OVER 12' TO 25'
12" THRU 72" PIPE

SHEET 1 OF 2
840D17

GENERAL NOTES:
 USE CLASS "B" CONCRETE THROUGHOUT.
 PROVIDE DROP INLETS WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
 OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
 USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
 IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
 WHEN PAYMENT FOR THE DROP INLET IS MADE ON A PER EACH BASIS, THE CONCRETE APRON WILL BE CONSIDERED PART OF THE DROP INLET.
 CONSTRUCT WITH PIPE CROWNS MATCHING.
 USE STANDARD FRAMES AND GRATES 840.22 (SHOWN), 840.24 (SHOWN), 840.20, 840.29, AND 840.33.
 SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.
 CHAMFER ALL EXPOSED CORNERS 1".
 DRAWING NOT TO SCALE.
 MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 25 FEET.



STATE OF
NORTH CAROLINA
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RALEIGH, N.C.

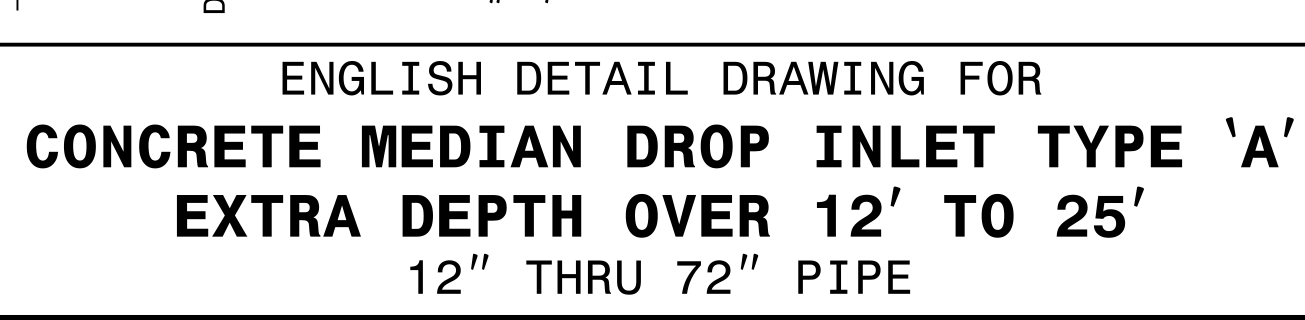
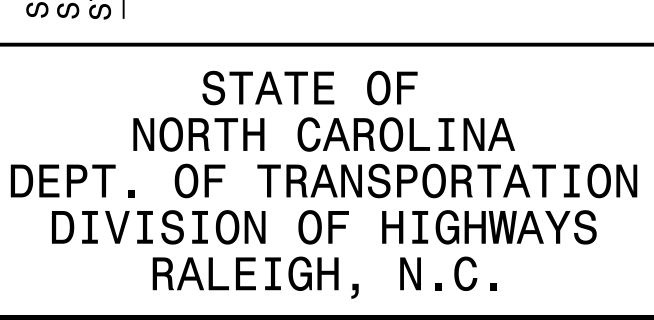
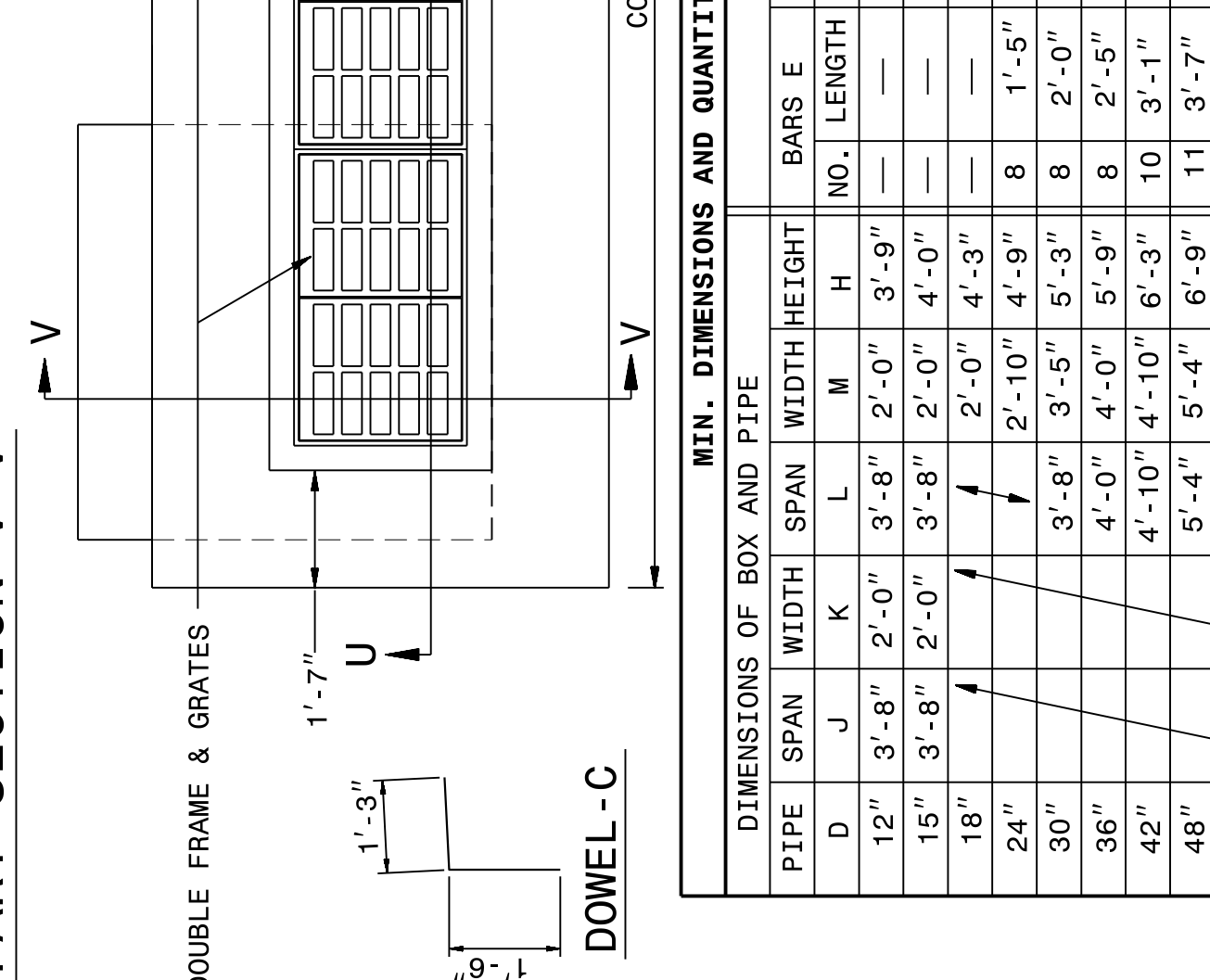
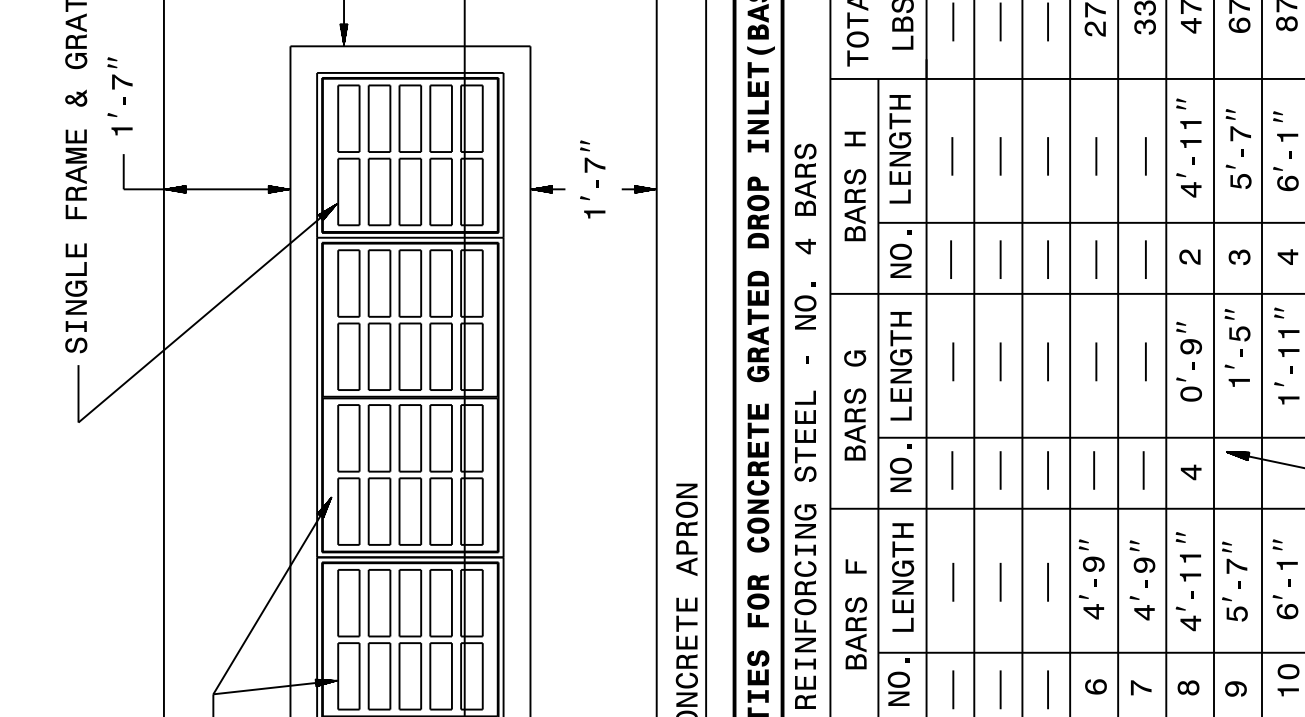
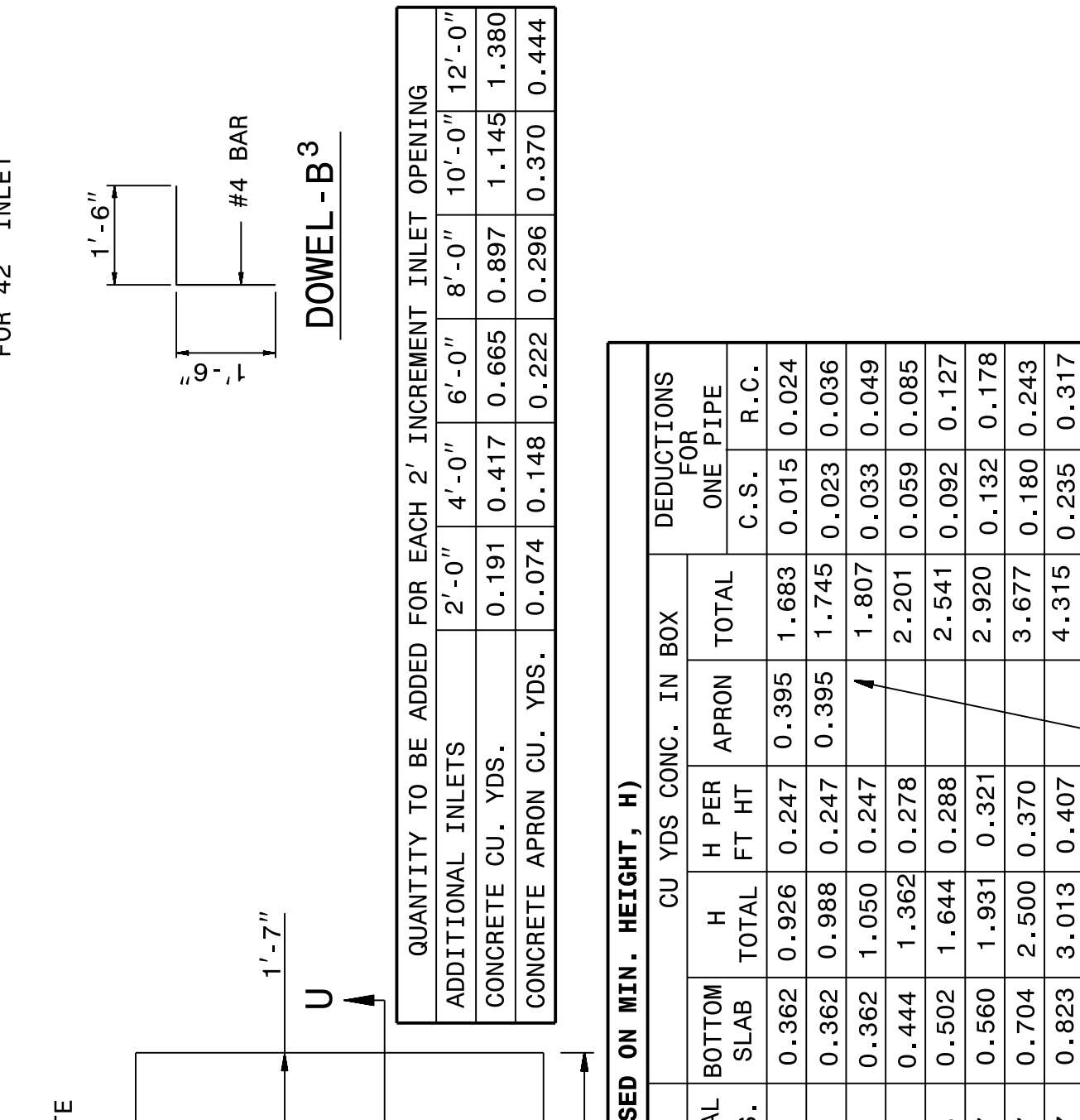
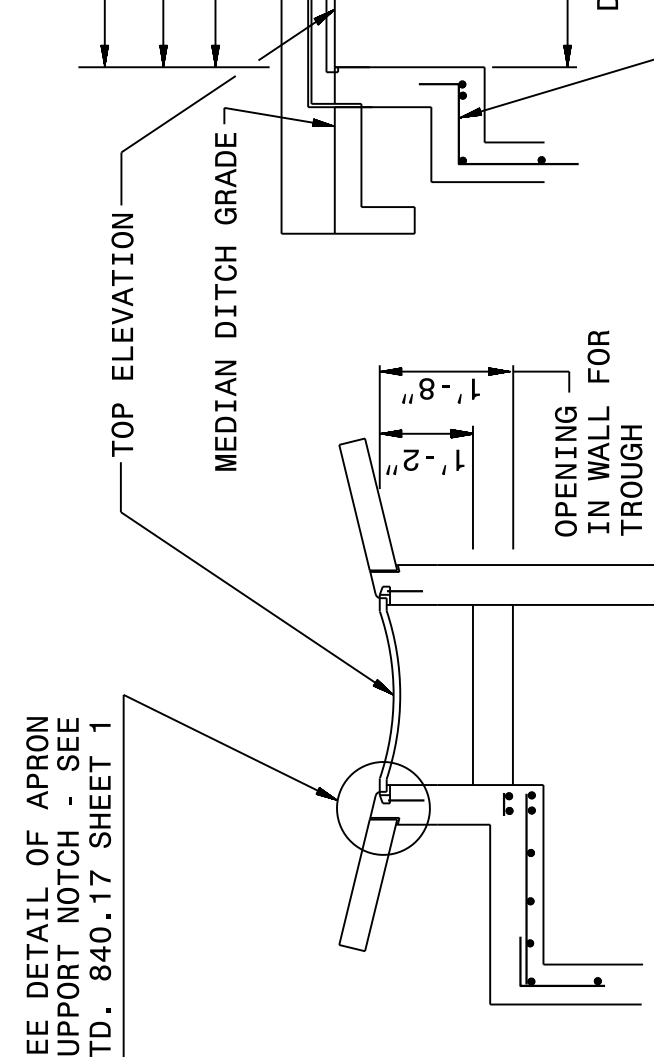
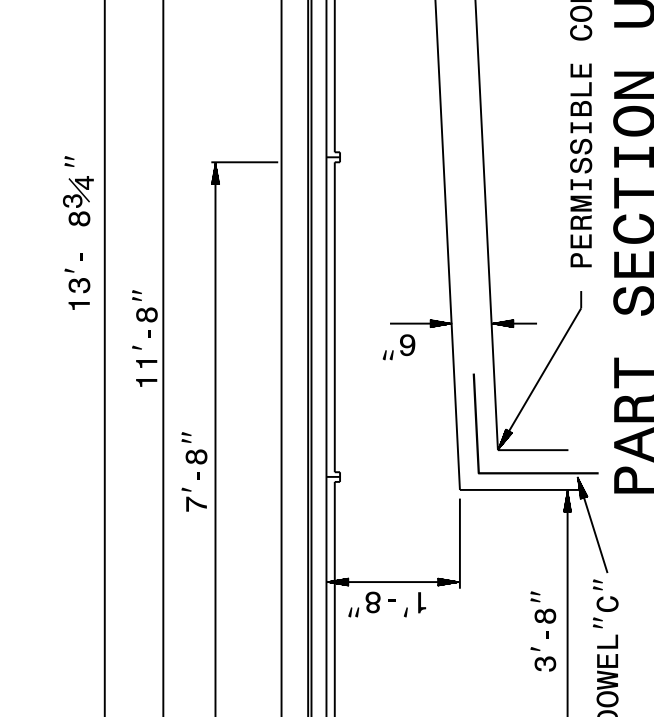
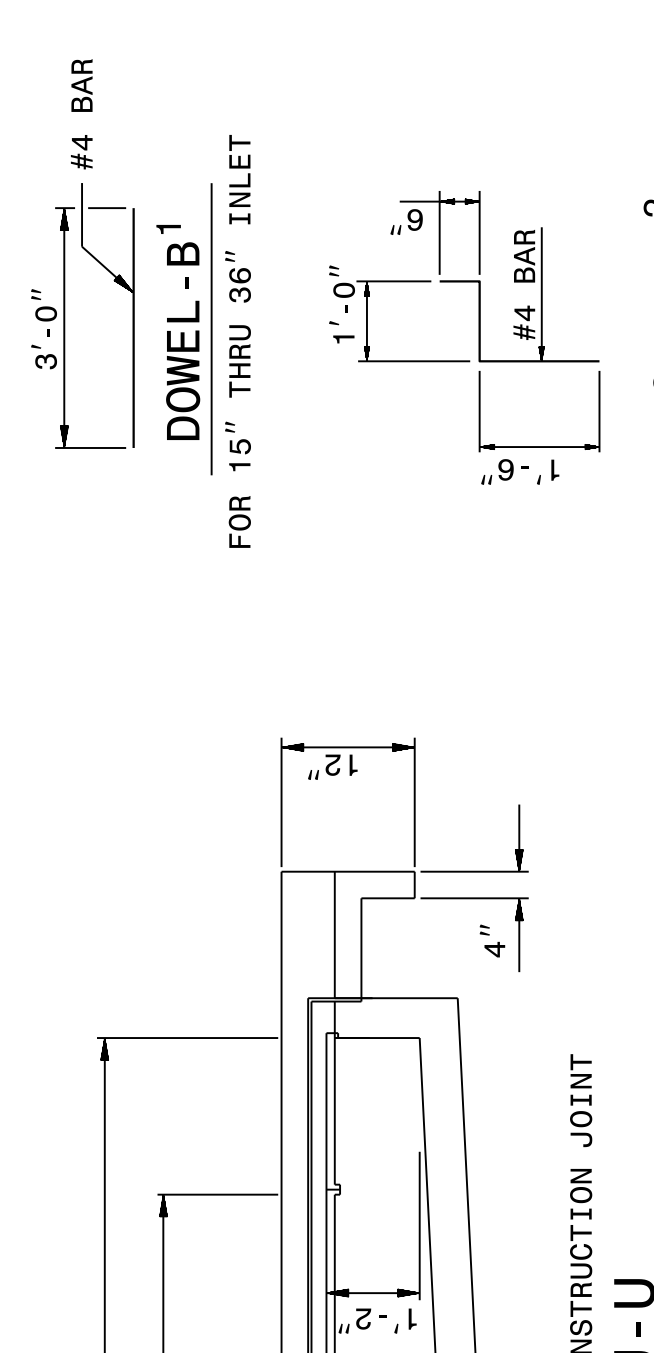
ENGLISH DETAIL DRAWING FOR
CONCRETE MEDIAN DROP INLET TYPE 'A'
EXTRA DEPTH OVER 12' TO 25'
12" THRU 72" PIPE

SHEET 2 OF 2
840D17

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

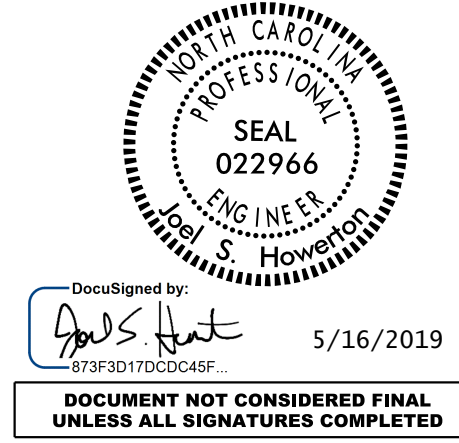
ENGLISH DETAIL DRAWING FOR
CONCRETE MEDIAN DROP INLET TYPE 'A'
EXTRA DEPTH OVER 12' TO 25'
12" THRU 72" PIPE

SHEET 2 OF 2
840D17



QUANTITY TO BE ADDED FOR EACH 2' INCREMENT INLET OPENING	
ADDITIONAL INLETS	2'-0" 4'-0" 6'-0" 8'-0" 10'-0" 12'-0"
CONCRETE CU. YDS.	0.191 0.417 0.665 0.897 1.145 1.380
CONCRETE APRON CU. YDS.	0.074 0.148 0.222 0.296 0.370 0.444

MIN. DIMENSIONS AND QUANTITIES FOR CONCRETE GRATED DROP INLET (BASED ON MIN. HEIGHT, H)																	
DIMENSIONS OF BOX AND PIPE		REINFORCING STEEL - NO. 4 BARS				CU YDS CONC. IN BOX				DEDUCTIONS FOR ONE PIPE							
PIPE	SPAN	WIDTH	SPAN	WIDTH	HEIGHT	BARS E	BARS F	BARS G	BARS H	TOTAL	H PER	H PER	TOTAL	CU. Y.	R.C.		
D	J	K	L	M	H	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	FT	FT		
12"	3'-8"	2'-0"	3'-8"	2'-0"	3'-9"	—	—	—	—	—	0.362	0.926	0.247	0.395	1.683	0.015	0.024
15"	3'-8"	2'-0"	3'-8"	2'-0"	4'-0"	—	—	—	—	—	0.362	0.988	0.247	0.395	1.745	0.023	0.036
18"	—	—	—	—	4'-3"	—	—	—	—	—	0.362	1.050	0.247	—	1.807	0.033	0.049
24"	—	—	—	—	4'-9"	8	1'-5"	6	4'-9"	—	0.444	1.362	0.278	—	2.201	0.059	0.085
30"	—	—	—	—	5'-3"	8	2'-0"	7	4'-9"	—	0.502	1.644	0.288	—	2.541	0.092	0.127
36"	—	—	—	—	5'-9"	8	2'-5"	8	4'-11"	4	0'-9"	1.931	0.321	—	2.920	0.132	0.178
42"	—	—	—	—	6'-3"	10	3'-1"	9	5'-7"	3	1'-5"	2.500	0.370	—	3.677	0.180	0.243
48"	—	—	—	—	6'-9"	11	3'-7"	10	6'-1"	4	1'-11"	3.013	0.407	—	4.315	0.235	0.317
54"	—	—	—	—	7'-3"	12	4'-1"	11	6'-7"	5	2'-5"	3.589	0.444	—	5.072	0.297	0.401
60"	—	—	—	—	7'-9"	13	4'-9"	12	7'-3"	6	3'-1"	4.539	0.494	—	6.170	0.367	0.495
66"	—	—	—	—	8'-3"	14	5'-4"	14	7'-10"	7	3'-7"	5.061	0.537	—	6.901	0.444	0.599
72"	—	—	—	—	8'-9"	15	5'-11"	15	8'-5"	8	4'-3"	5.860	0.560	—	7.868	0.528	0.713



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

SEE PLATE FOR TITLE

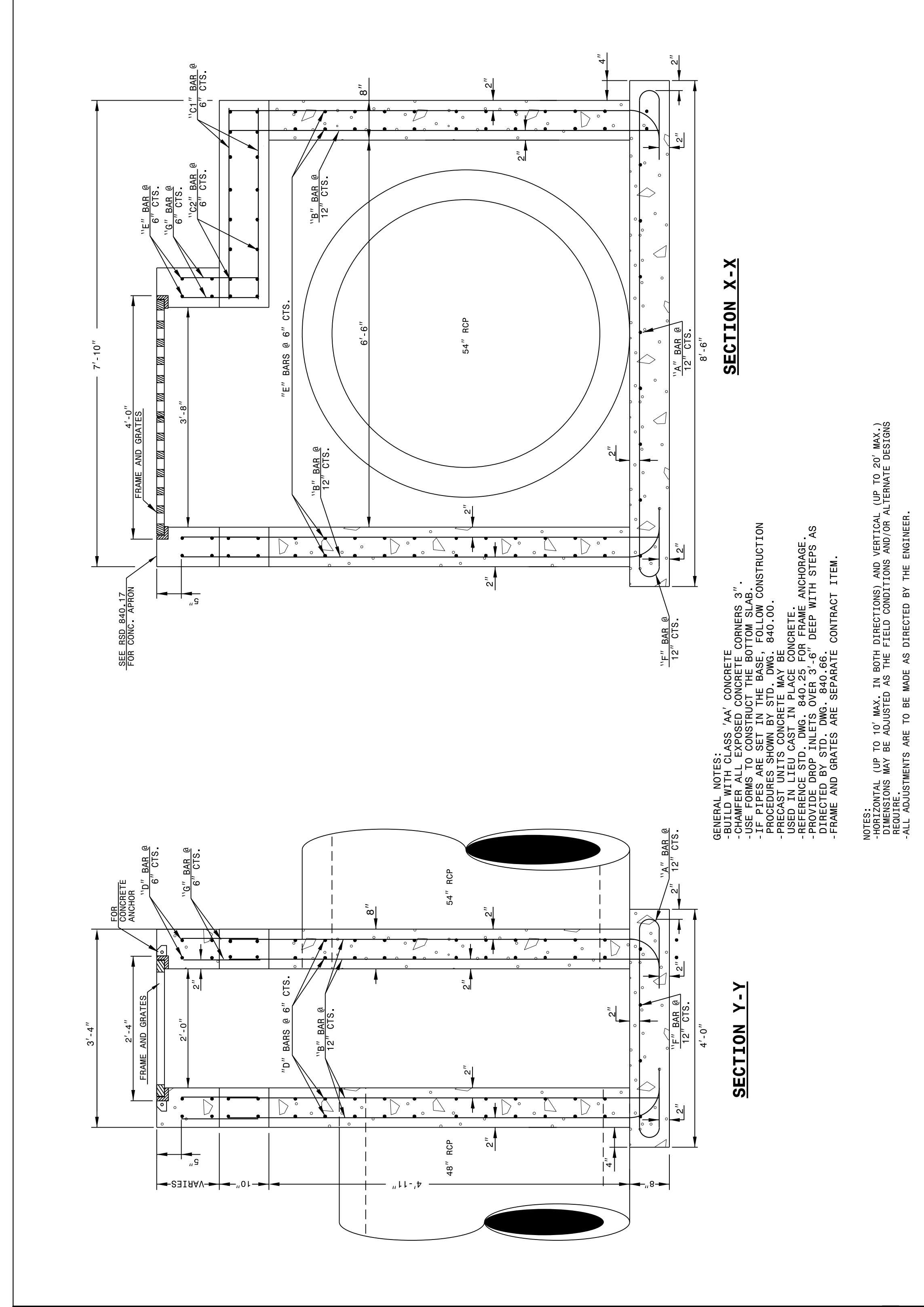
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STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR TRAFFIC BEARING GRATED INLET FOR PIPES UP TO 54"

SHEET 1 OF 2
840D35



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

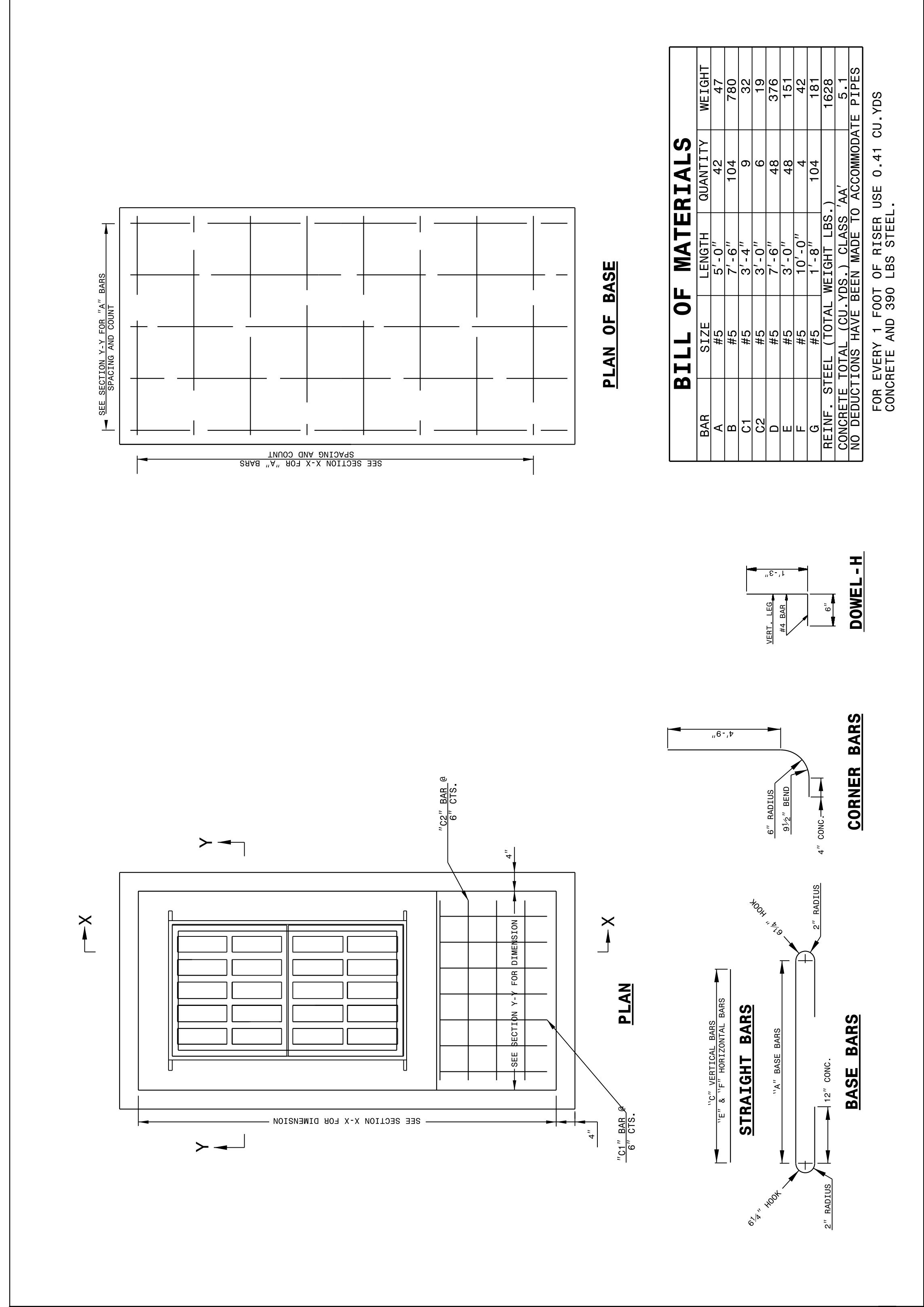
ENGLISH DETAIL DRAWING FOR TRAFFIC BEARING GRATED INLET FOR PIPES UP TO 54"

SHEET 1 OF 2
840D35

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

ENGLISH DETAIL DRAWING FOR TRAFFIC BEARING GRATED INLET FOR PIPES UP TO 54"

SHEET 2 OF 2
840D35



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

ENGLISH DETAIL DRAWING FOR TRAFFIC BEARING GRATED INLET FOR PIPES UP TO 54"

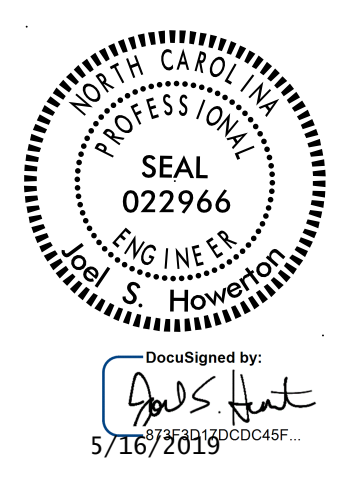
SHEET 2 OF 2
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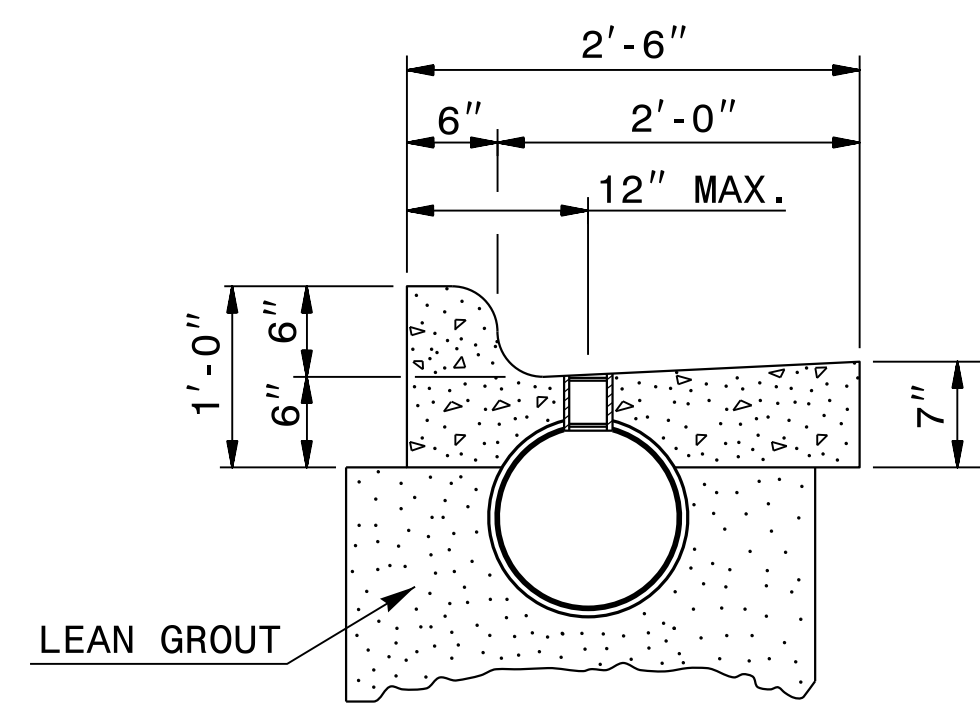
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CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

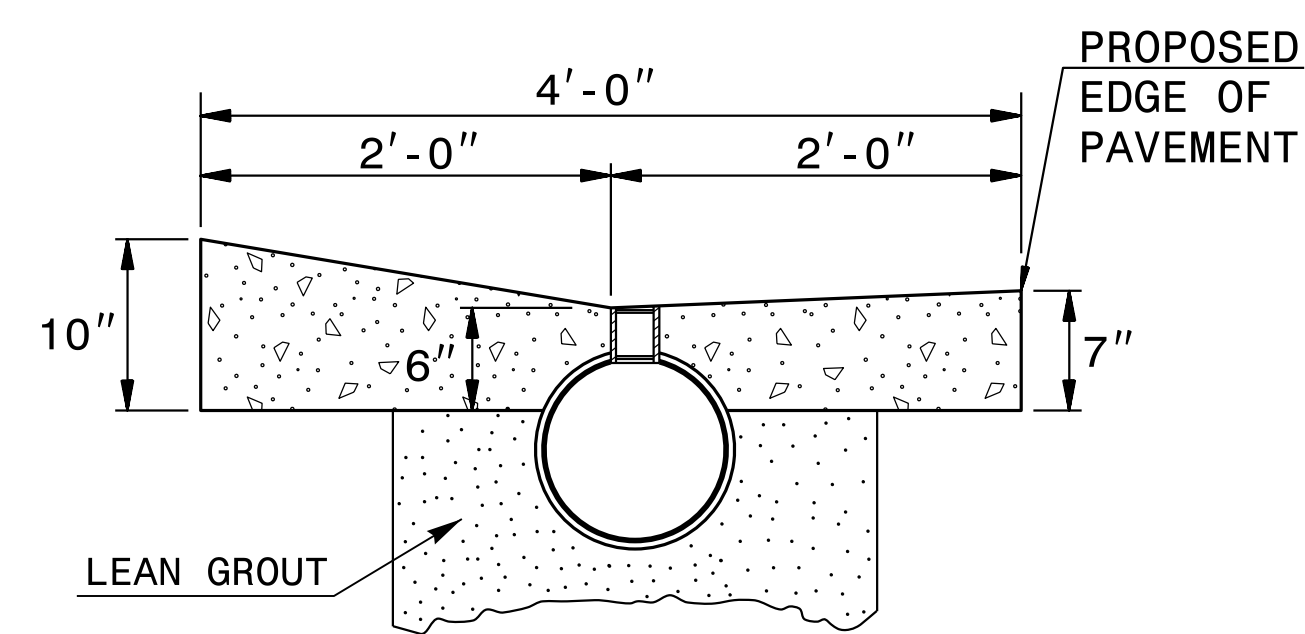
SEE PLATE FOR TITLE

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 CHECKED BY: DATE:
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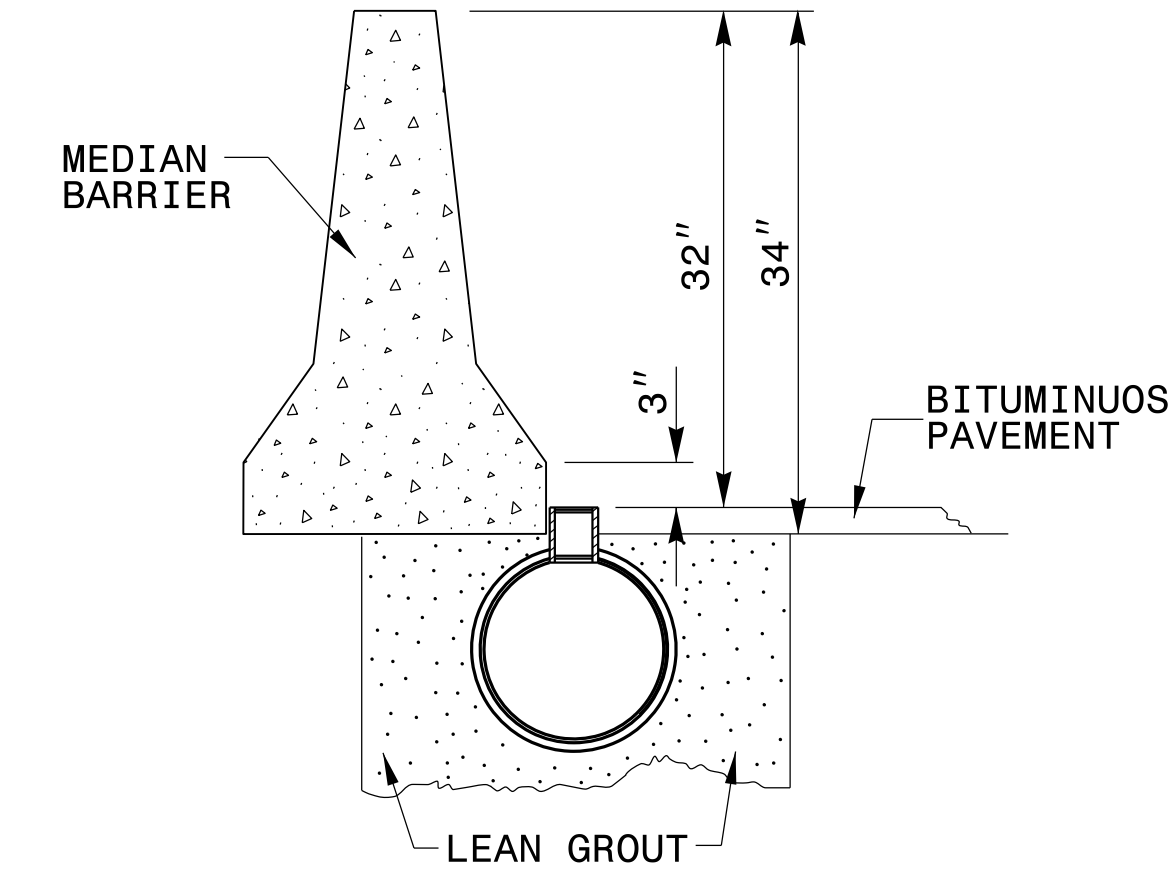




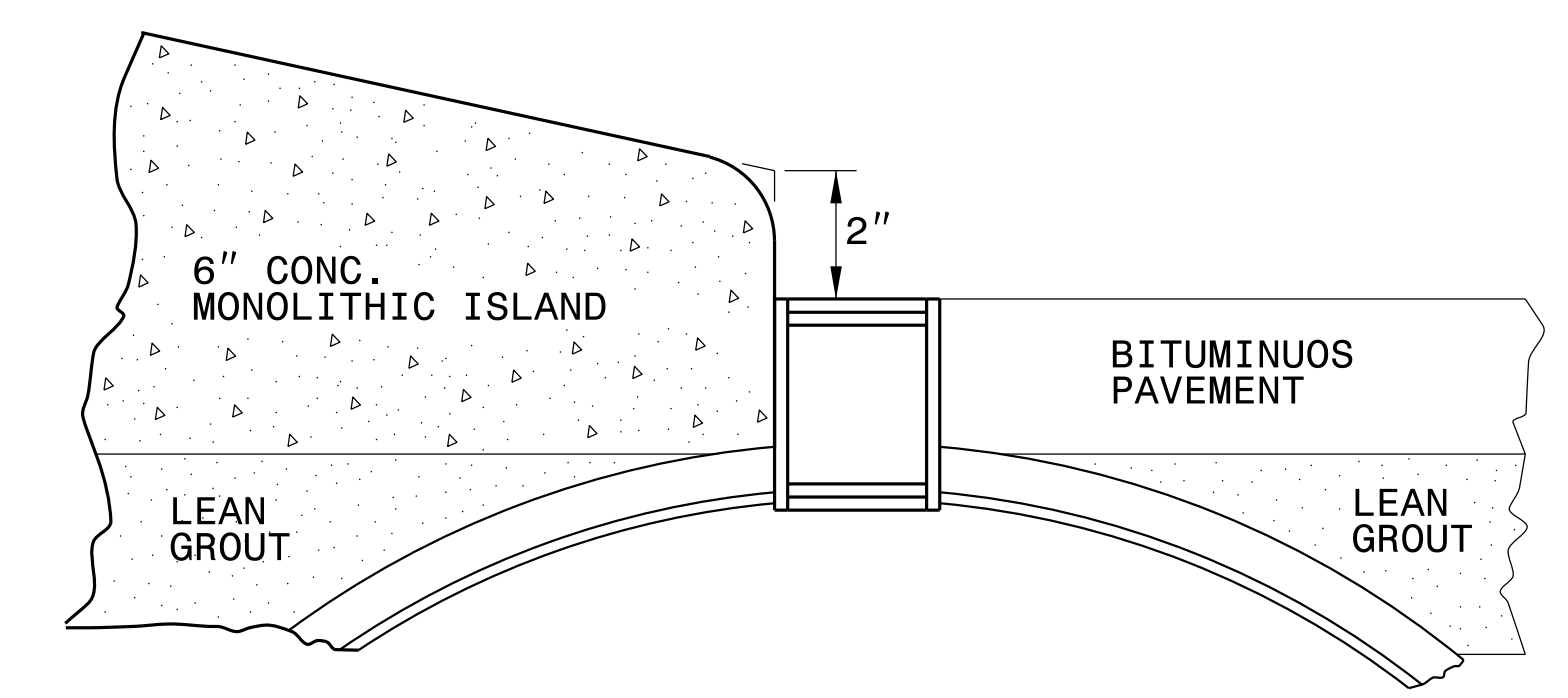
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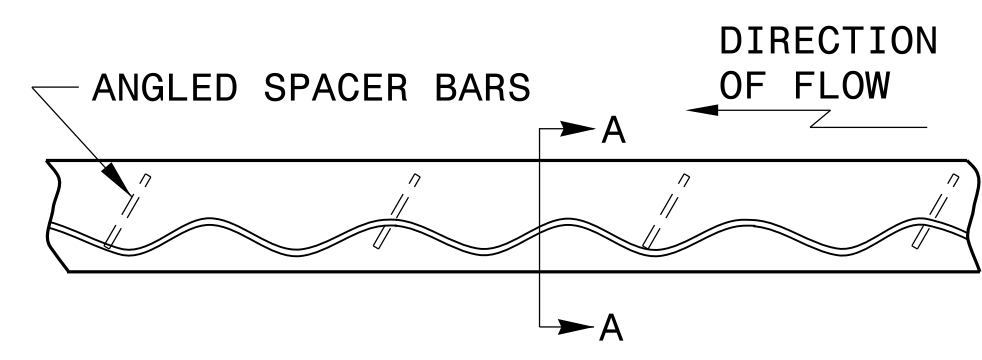
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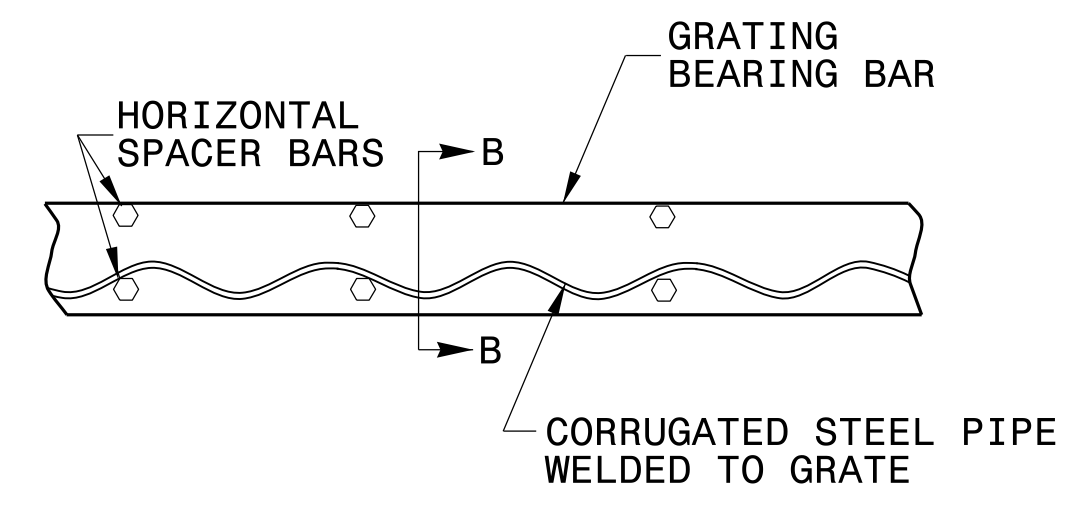
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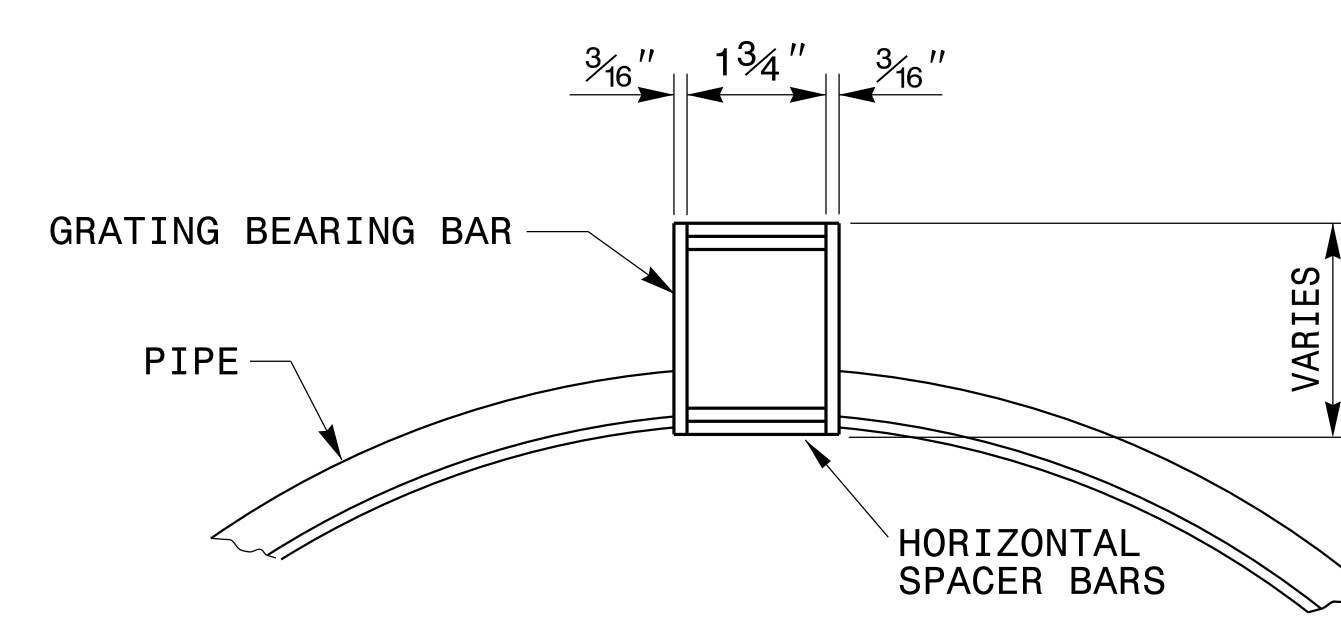
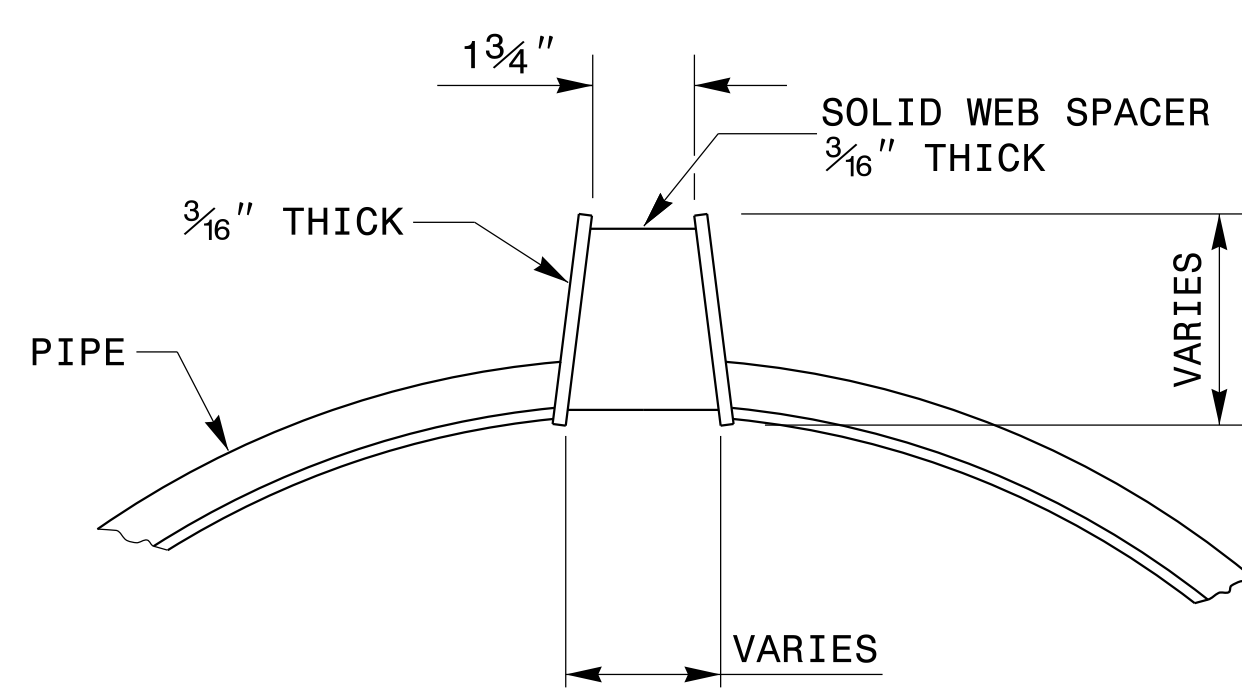
ALTERNATE NO. 4



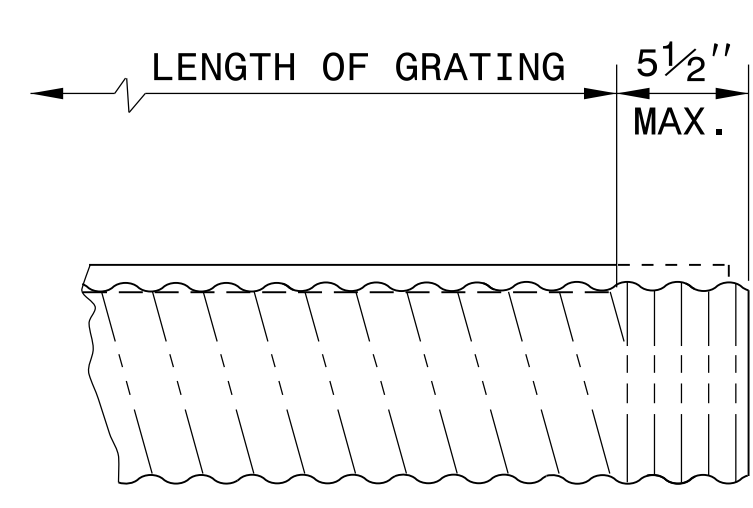
SECTION A-A



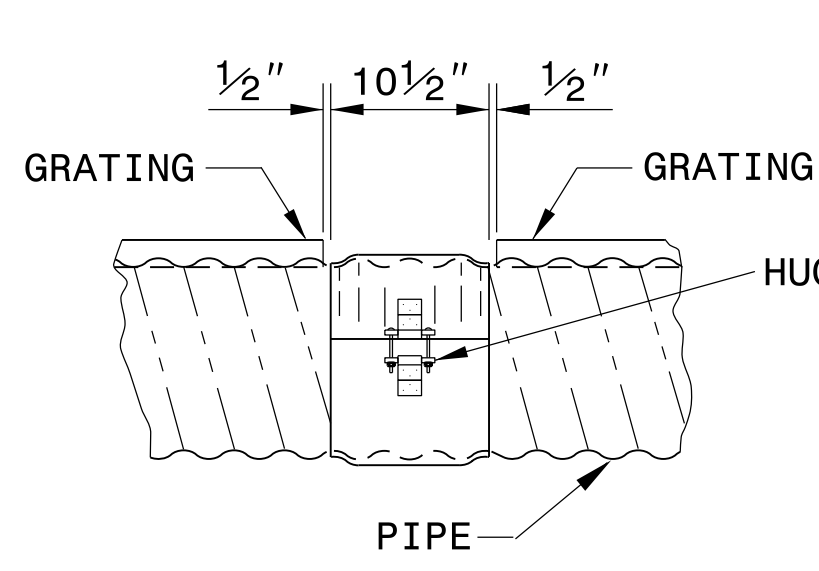
SECTION B-B



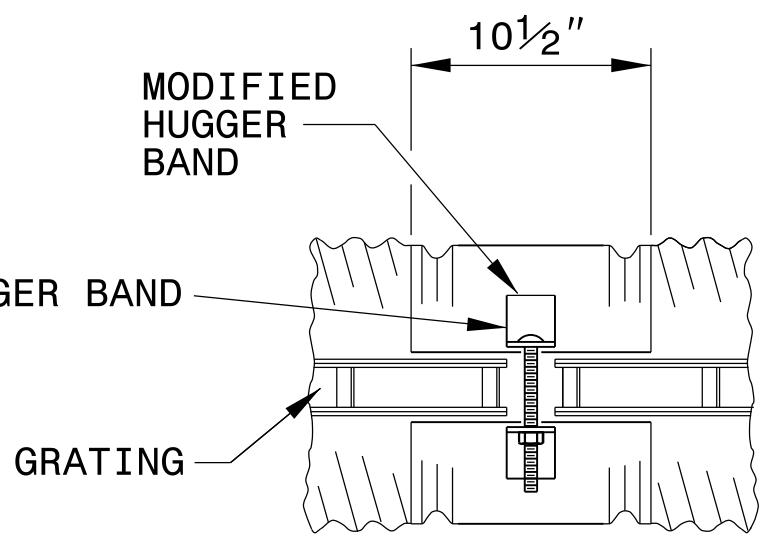
TYPICAL GRATE DETAILS



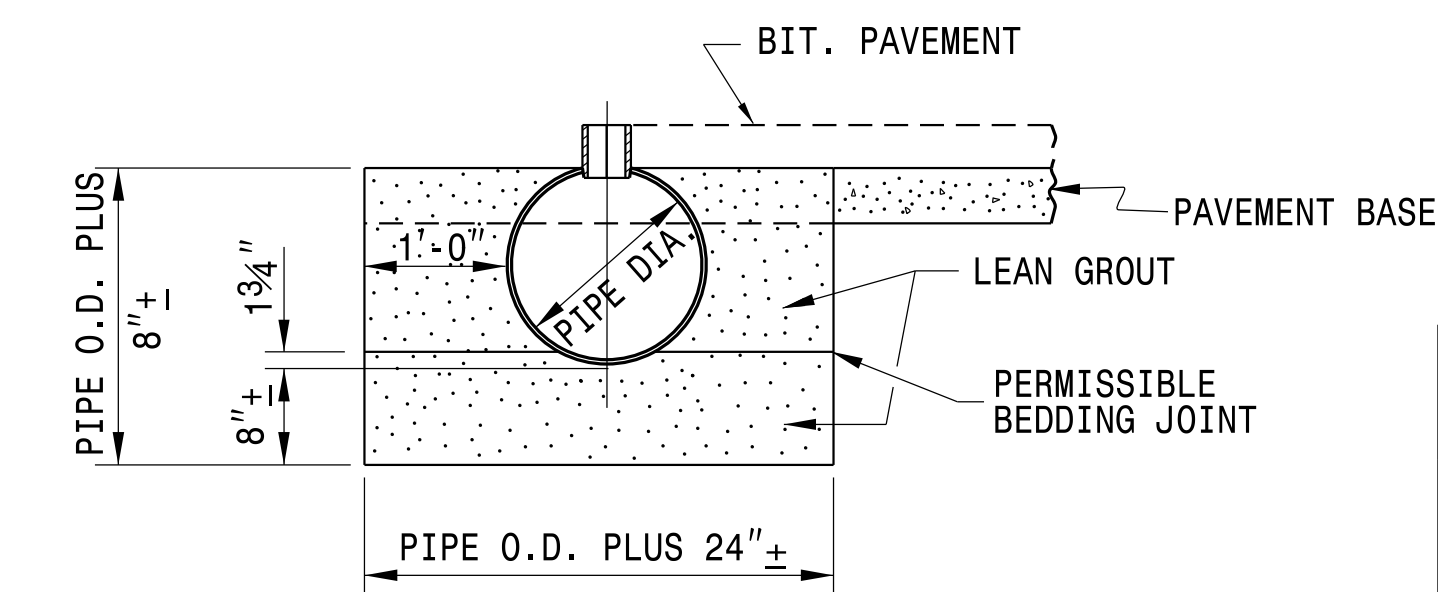
DETAIL AT END OF PIPE



TYPICAL COUPLING BAND



MODIFIED COUPLING BAND



SLOTTED DRAIN PIPE INSTALLATION

NOTES:

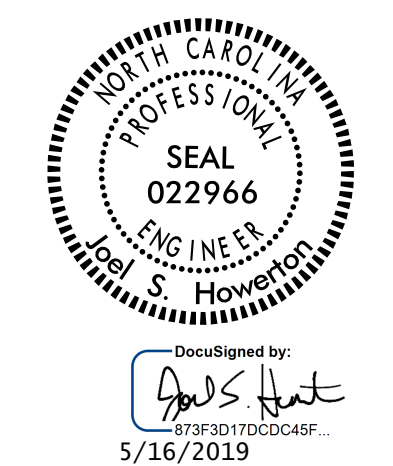
USE GRATE ASSEMBLIES FABRICATED FROM STRUCTURAL STEEL MEETING THE REQUIREMENTS OF ASTM A 570, GRADE 36 OR ASTM A 36.

HOT-DIP GALVANIZE GRATES AFTER FABRICATION TO MEET ASTM A123.

USE SLOTTED DRAIN PIPE THAT IS ADEQUATE FOR AASHTO H20 LOADING WHEN INSTALLED AS SHOWN.

USE SLOTTED DRAIN PIPE FABRICATED FROM ALUMINIZED CORRUGATED STEEL PIPE MEETING THE REQUIREMENTS OF AASHTO M274 TYPE 2.

NCDOT ALLOWS THE USE OF SIMILAR GRATE CONFIGURATIONS MEETING THE REQUIREMENTS OF THIS DETAIL, THE REQUIREMENTS OF THE SPECIAL PROVISIONS, AND THE APPROVAL OF THE ENGINEER.



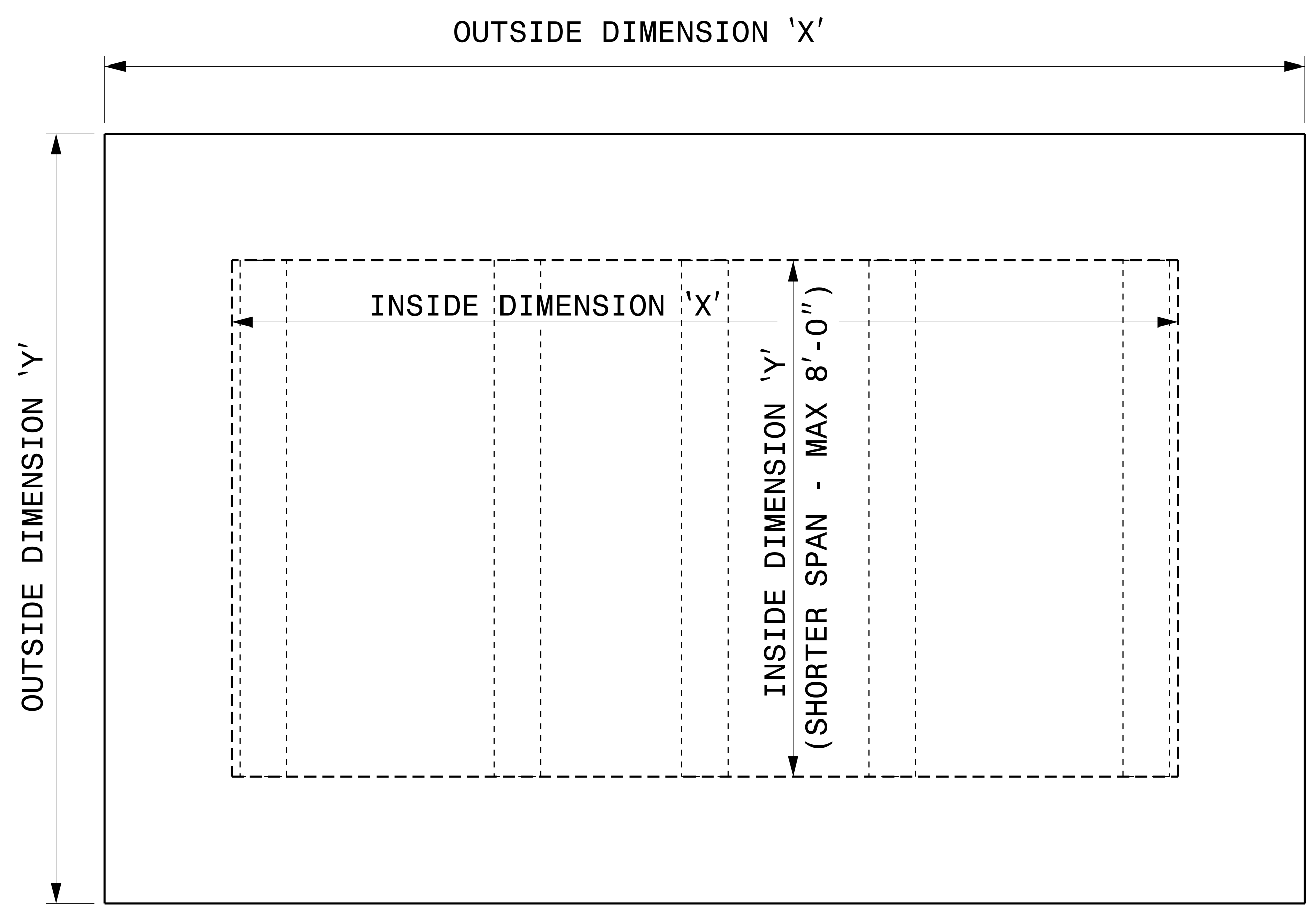
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

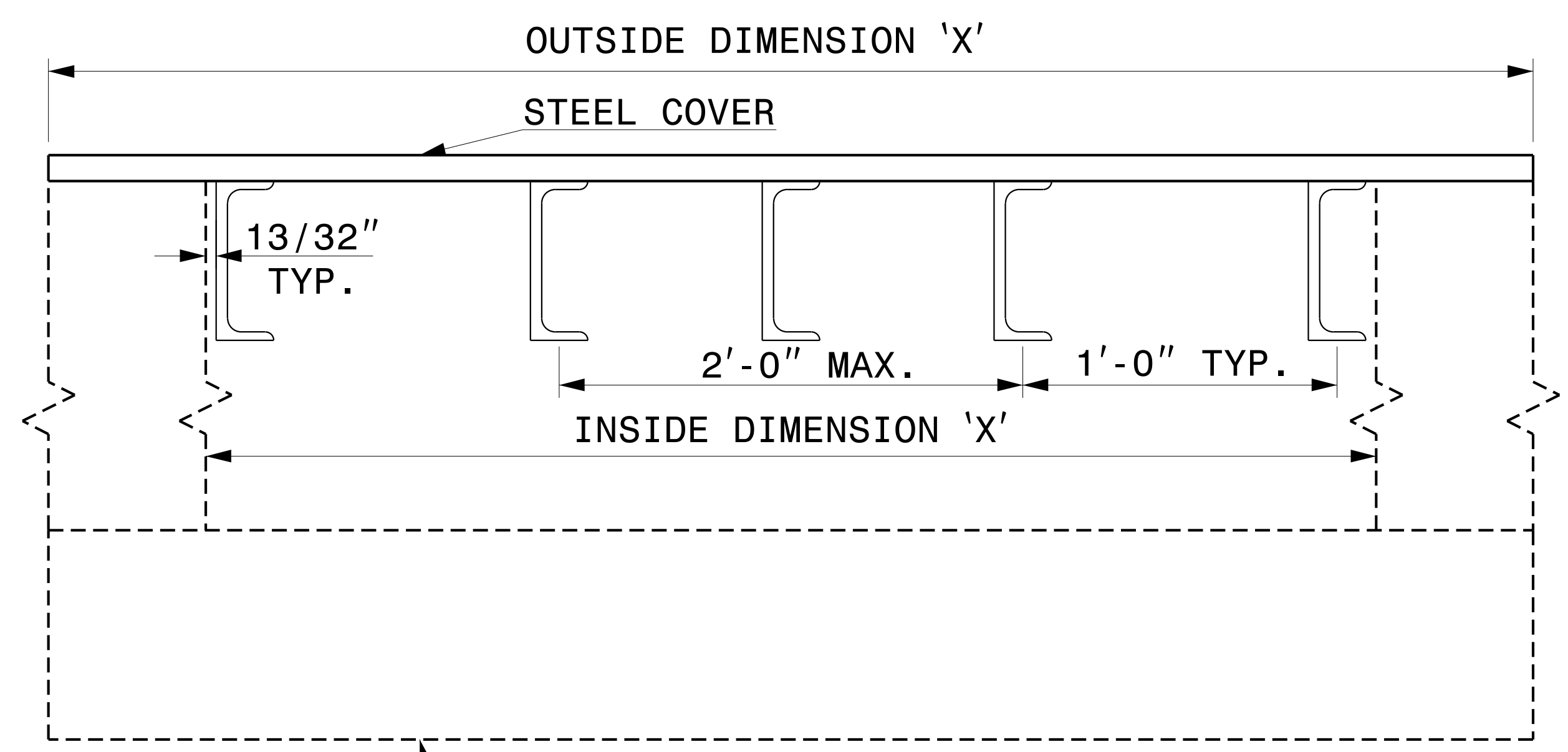
DETAILS OF SLOTTED DRAIN 12" THRU 36" DIAMETER PIPE

ORIGINAL BY: I. Spell DATE: 5-21-99
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: s:\usr\details\stand\slottedrain.dgn

I:\JUL-2018 07140 S:\Contracts\Contract\Special Details\tspeil\stand\slottedrain.dgn J:\power\ton AT_CSD-292595



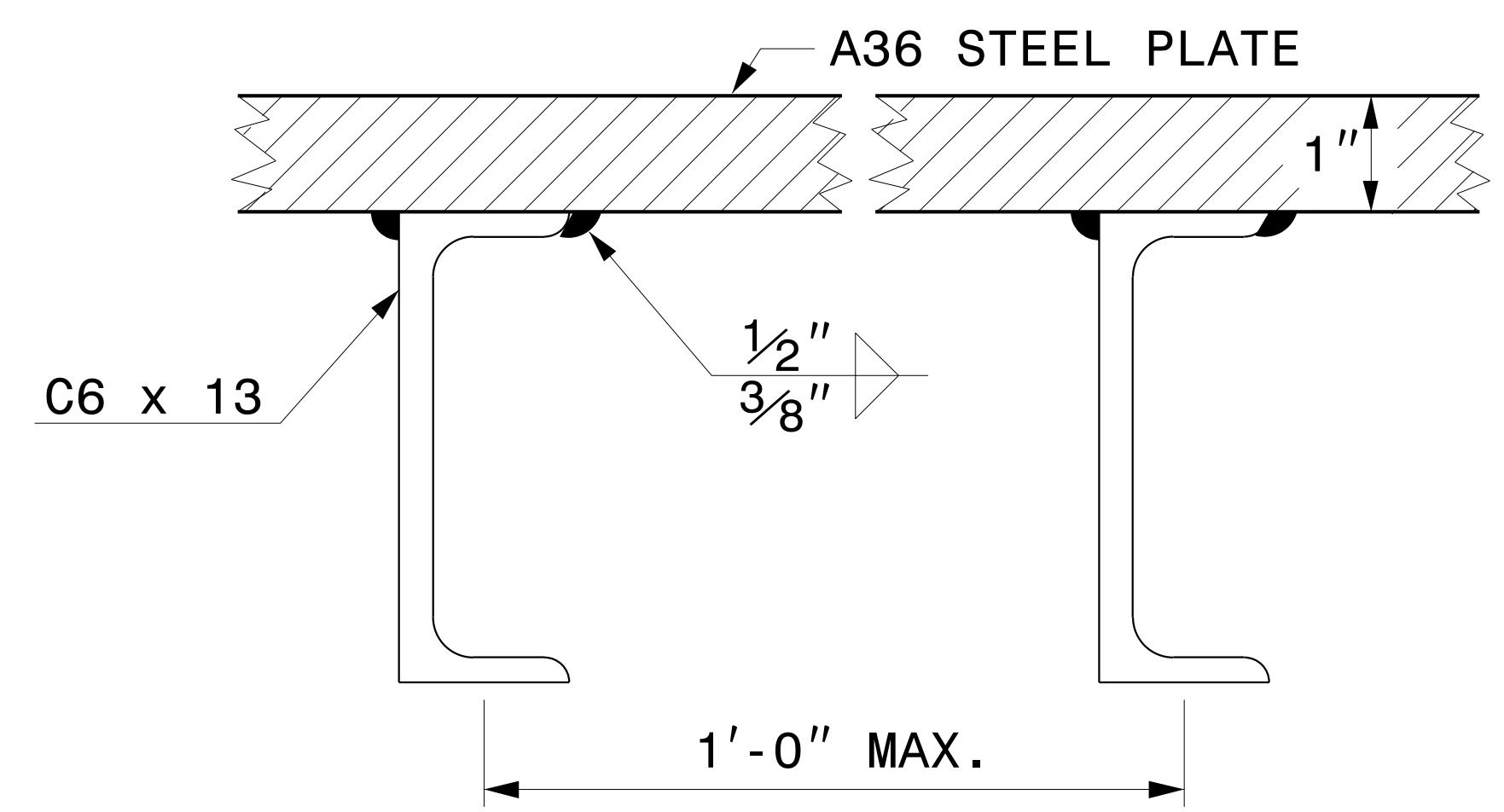
PLAN VIEWS



ELEVATION VIEWS

GENERAL NOTES:

- STEEL COVERS ARE FOR TEMPORARY USE TO SUPPORT TRAFFIC DURING PHASE CONSTRUCTION.
- PLACE PAVEMENT OR FILL DIRECTLY OVER THE STEEL PLATES.
- SEE ROADWAY PLANS AND PROVISIONS FOR LOCATIONS
- QUANTITIES TO BE PAID FOR AT THE UNIT PRICE BID PER EACH.



SECTION VIEW OF STEEL TOP PLATE

WELDS SHALL BE AS SPECIFIED BY AWS



DocuSigned by:
Michael S. Howerton
5/16/2019

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STANDARDS AND SPECIAL DESIGN
Office 919-707-6950 FAX 919-250-4119

DETAIL OF TRAFFIC BEARING STEEL COVER

ORIGINAL BY: _____ DATE: _____
 MODIFIED BY: rnbritt DATE: 04-29-04
 CHECKED BY: _____ DATE: _____
 FILE SPEC.: details/nbritt/english/misc/steelcover.dgn