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09/08/99

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols
See Sheet 1C-1 For Survey Control Sheet

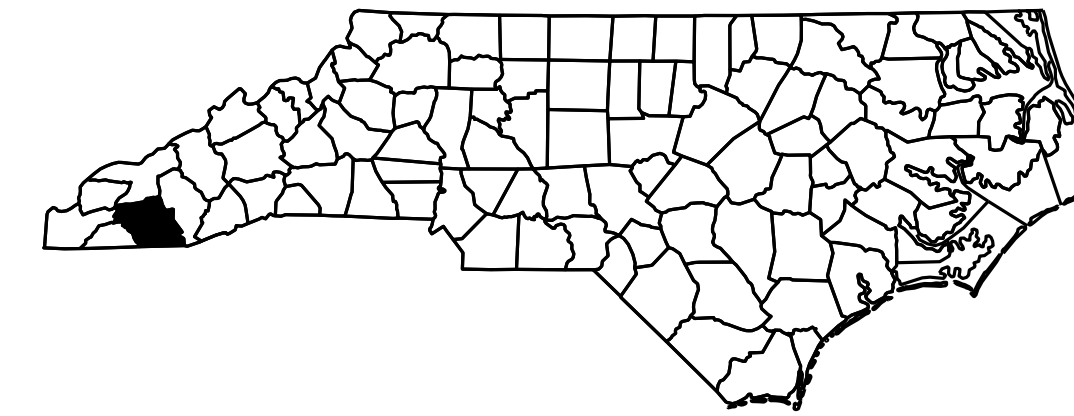
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MACON COUNTY

LOCATION: BRIDGE No. 172 OVER LITTLE
TENNESSEE RIVER ON SR 1456

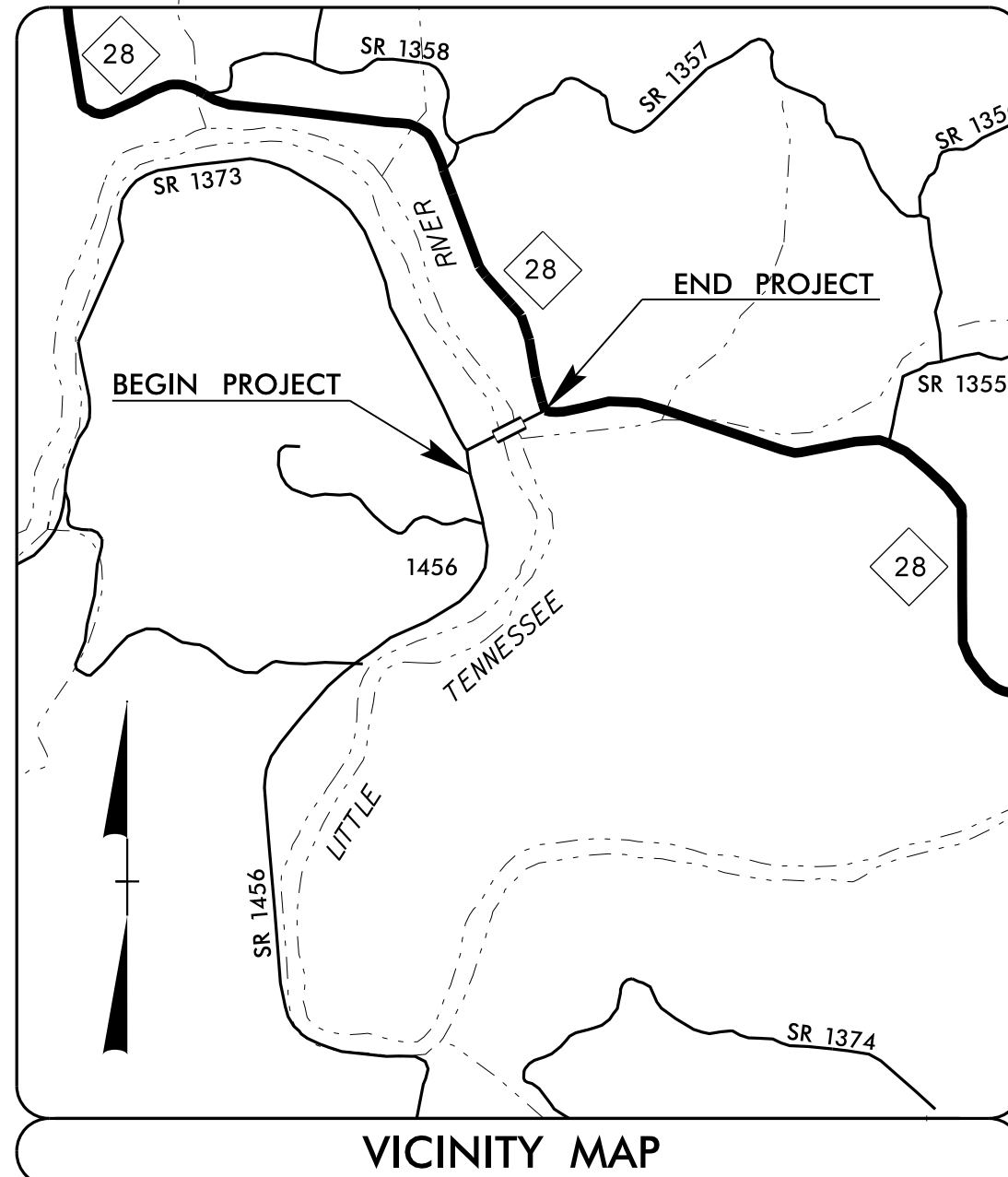
TYPE OF WORK: DRAINAGE, GRADING, STRUCTURE, AND PAVING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3868	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33313.1.1	BRZ-1456(6)	P.E.	
33313.2.FD2	BRZ-1456(6)	R/W, UTILITY	
33313.3.FD1	BRZ-1456(6)	CONSTRUCTION	

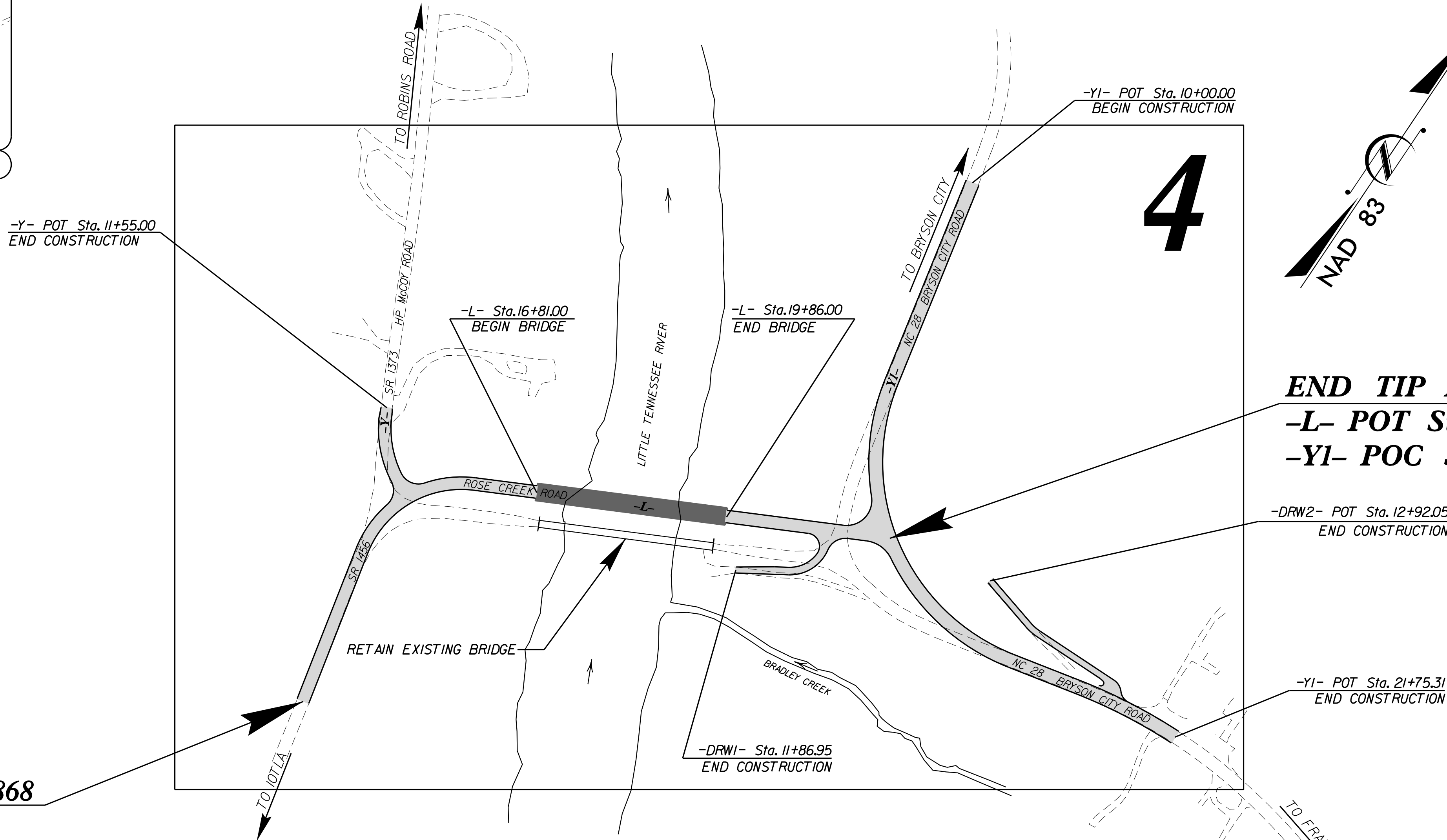


TIP PROJECT: B-3868

CONTRACT: C203656



VICINITY MAP
SEE TMP-11 FOR OFF-SITE DETOUR

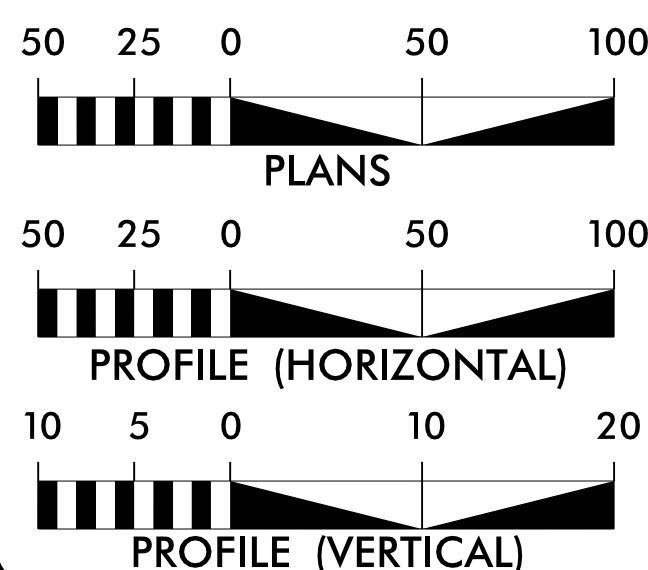


BEGIN TIP PROJECT B-3868
-L- POT Sta. 11+00.00

END TIP PROJECT B-3868
-L- POT Sta. 22+48.22 =
-YI- POC Sta. 15+96.49

THIS IS NOT A CONTROL OF ACCESS PROJECT

GRAPHIC SCALES



DESIGN DATA

ADT 2013 = 330
ADT 2035 = 500
DHV = 10 %
D = 65 %
T = 7 % *
V = 25 MPH
* TTST = 1% DUAL 6%
FUNC CLASS = LOCAL
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY T.I.P. PROJECT B-3868 = 0.159 MI
LENGTH STRUCTURE T.I.P. PROJECT B-3868 = 0.058 MI
TOTAL LENGTH OF T.I.P. PROJECT B-3868 = 0.217 MI

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

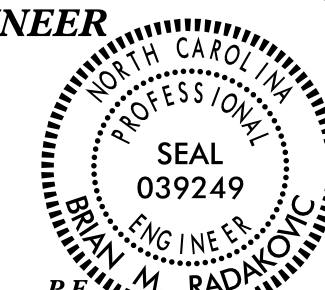
RIGHT OF WAY DATE:
NOVEMBER 26, 2013

LETTING DATE:
DECEMBER 15, 2015

KEVIN E. MOORE, PE
PROJECT ENGINEER

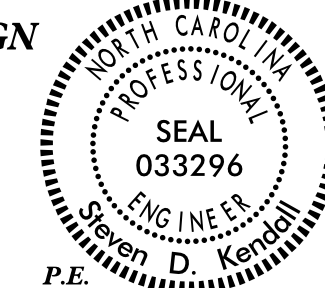
STEVEN D. KENDALL, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

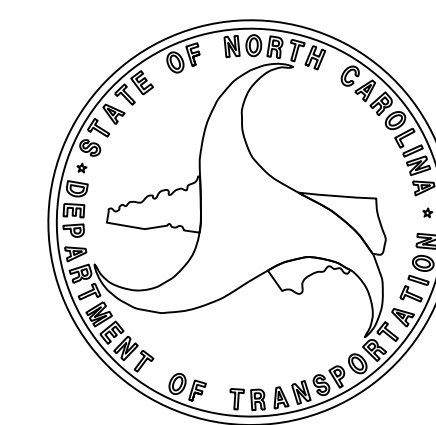


DocuSigned by:
Brian M. Radakovic
SIGNATURE: 11/19/2015

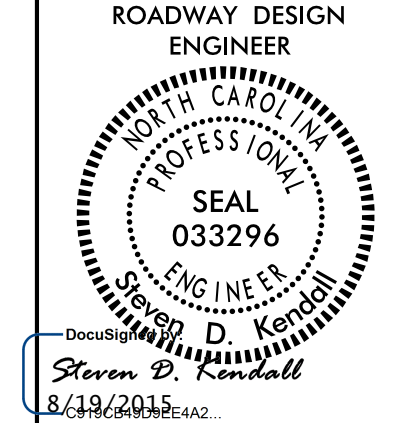
ROADWAY DESIGN ENGINEER



DocuSigned by:
Steven D. Kendall
SIGNATURE: 11/19/2015



19-NOV-2015 07:36
R:\Roadway\Proj\B-3868_Rdy_Tsh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$



8/17/09

18_AUG-2015 10:02 AM B-3868.Rdlj-tsh.dgn

SHEET NUMBER	INDEX OF SHEETS SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
1C-1	SURVEY CONTROL SHEETS
2A-1 THRU 2A-3	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1	ROADWAY DETAILS
2C-1	DETAIL OF STRUCTURE ANCHOR UNIT
2C-2	DETAIL OF TIMBER BOLLARDS
3B-1	SUMMARY OF EARTHWORK, SUMMARY OF GUARDRAIL, EXPRESSWAY GUTTER SUMMARY, SHOULDER BERM GUTTER SUMMARY & PAVEMENT REMOVAL SUMMARY
3D-1	DRAINAGE SUMMARY
3G-1	GEO TECHNICAL SUMMARY
4	PLAN SHEET
5 AND 6	PROFILE SHEETS
TMP-1 THRU TMP-11	TRAFFIC MANAGEMENT PLANS
PMP-1 AND PMP-2	PAVEMENT MARKING PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
RF-1	REFORESTATION PLANS
SIGN-1 THRU SIGN-3	SIGNING PLANS
UO-1 AND UO-2	UTILITIES BY OTHERS PLANS
X-1	CROSS-SECTION SUMMARY SHEET
X-2 THRU X-64	CROSS-SECTIONS
S-1 THRU S-39	STRUCTURE PLANS

GENERAL NOTES:

2012 SPECIFICATIONS
EFFECTIVE: 01-17-2012
REVISED: 10-31-2014

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

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

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

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.

UNDERDRAINS:
UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.

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

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

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 FRONTIER (AERIAL TELEPHONE) AND DUKE ENERGY (POWER).

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

ROCK:
ROCK IS ANTICIPATED BETWEEN -Y1- STA. 10+00.00 TO 17+50.00. BLASTING MAY BE REQUIRED FOR EXCAVATION ON THE PROJECT. SEE SECTION 220 OF THE STANDARD SPECIFICATIONS AND IF APPLICABLE, ROCK BLASTING PROVISION.

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Super-elevation - Two Lane Pavement
240.01	Guide for Berm Ditch Construction
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 4 - MAJOR STRUCTURES	
422.11	Reinforced Bridge Approach Fills - Sub Regional Tier
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Super-elevated Curve - Method I
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
815.03	Pipe Underdrain and Blind Drain
840.14	Concrete Drop Inlet - 12" thru 30" Pipe
840.15	Brick Drop Inlet - 12" thru 30" Pipe
840.16	Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
840.18	Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.27	Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.33	Angled Vane Grates and Frames
840.45	Precast Drainage Structure
840.66	Drainage Structure Steps
846.02	Drop Inlet Installation in Expressway Gutter
846.04	Drop Inlet Installation in Shoulder Berm Gutter
850.10	Guide for Berm Drainage Outlet - 15" and 18" Pipe
862.01	Guardrail Placement
862.02	Guardrail Installation
876.01	Rip Rap in Channels
876.02	Guide for Rip Rap at Pipe Outlets
876.04	Drainage Ditches with Class 'B' Rip Rap

EFF. 01-17-2012
REV. 10-30-2012

04/16/11

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ EP
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	--- NLB ---
Proposed Wetland Boundary	--- NLB ---
Existing Endangered Animal Boundary	--- EAB ---
Existing Endangered Plant Boundary	--- EPB ---
Known Soil Contamination: Area or Site	☠ ☠
Potential Soil Contamination: Area or Site	☠ ? ☠ ?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
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	← FLOW
False Sump	◇

RAILROADS:

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

RIGHT OF WAY:

Baseline Control Point	◆
Existing Right of Way Marker	△
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Proposed Right of Way Line with Iron Pin and Cap Marker	○ R/W ▲
Proposed Right of Way Line with Concrete or Granite R/W Marker	○ R/W ▲
Proposed Control of Access Line with Concrete CA Marker	○ C/A
Existing Control of Access	○ C/A
Proposed Control of Access	○ C/A
Existing Easement Line	--- E ---
Proposed Temporary Construction Easement	--- E ---
Proposed Temporary Drainage Easement	--- TDE ---
Proposed Permanent Drainage Easement	--- PDE ---
Proposed Permanent Drainage / Utility Easement	--- DUE ---
Proposed Permanent Utility Easement	--- PUE ---
Proposed Temporary Utility Easement	--- TUE ---
Proposed Aerial Utility Easement	--- AUE ---
Proposed Permanent Easement with Iron Pin and Cap Marker	◆

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	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	□

VEGETATION:

Single Tree	☼
Single Shrub	☼
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	○
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	⊗
H-Frame Pole	● ●
Recorded U/G Power Line	--- P ---
Designated U/G Power Line (S.U.E.*)	--- P ---

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Booth	□
Telephone Pedestal	⊕
Telephone Cell Tower	⊕
U/G Telephone Cable Hand Hole	□
Recorded U/G Telephone Cable	--- T ---
Designated U/G Telephone Cable (S.U.E.*)	--- T ---
Recorded U/G Telephone Conduit	--- TC ---
Designated U/G Telephone Conduit (S.U.E.*)	--- TC ---
Recorded U/G Fiber Optics Cable	--- T FO ---
Designated U/G Fiber Optics Cable (S.U.E.*)	--- T FO ---

WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
Recorded U/G Water Line	--- W ---
Designated U/G Water Line (S.U.E.*)	--- W ---
Above Ground Water Line	--- A/G Water ---

TV:

TV Satellite Dish	☼
TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	□
Recorded U/G TV Cable	--- TV ---
Designated U/G TV Cable (S.U.E.*)	--- TV ---
Recorded U/G Fiber Optic Cable	--- TV FO ---
Designated U/G Fiber Optic Cable (S.U.E.*)	--- TV FO ---

GAS:

Gas Valve	◇
Gas Meter	⊕
Recorded U/G Gas Line	--- G ---
Designated U/G Gas Line (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 ---
Recorded SS Forced Main Line	--- FSS ---
Designated SS Forced Main Line (S.U.E.*)	--- FSS ---

MISCELLANEOUS:

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

SURVEY CONTROL SHEET B-3868

-FINAL-

PROJECT REFERENCE NO.	SHEET NO.
B-3868	1C-1
Location and Surveys	

BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
11	BL-2	583022.8170	674824.5940	1942.65	10+23.90	12.27 RT
3	BL-3	583393.6210	674762.7980	1940.01	14+07.54	25.61 RT
4	BL-4	583513.2610	674981.0320	1929.48	17+07.36	85.85 RT
5	BL-5	583661.3850	675214.2060	1941.19	19+82.14	57.48 RT
6	BL-6	583731.6650	675410.9730	1942.19	21+89.58	82.49 RT

BY POINT	DESC.	NORTH	EAST	ELEVATION	Y STATION	OFFSET
8	BY-8	584100.7580	674383.2220	1941.44	OUTSIDE PROJECT LIMITS	
9	BY-9	583795.0850	674543.5470	1946.59	OUTSIDE PROJECT LIMITS	
20	BL-3	583393.6210	674762.7980	1940.01	OUTSIDE PROJECT LIMITS	

BY1 POINT	DESC.	NORTH	EAST	ELEVATION	Y1 STATION	OFFSET
13	BY1-13	584427.6090	675194.1310	1944.35	OUTSIDE PROJECT LIMITS	
14	BY1-14	584056.4520	675271.9490	1952.81	13+21.99	15.20 RT
21	BL-6	583731.6650	675410.9730	1942.19	16+32.14	92.88 RT
16	BY1-16	583786.4350	675809.7860	1948.04	19+92.95	14.55 RT

-FINAL- ROW MARKER IRON PIN AND CAP-E					
ALIGN	STATION	OFFSET	NORTH	EAST	
L	15+10.00	-55.00	583524.0235	674732.1267	
L	15+80.00	-80.00	583604.2585	674792.0479	
L	16+90.00	-75.00	583649.4227	674893.6566	
L	17+50.00	-75.00	583676.2229	674947.3385	
L	19+15.00	-75.00	583749.9233	675094.9639	
L	20+00.00	-85.00	583796.8372	675166.5466	
L	21+30.00	-70.00	583841.4837	675289.5575	
L	21+85.00	135.00	583682.6372	675430.3332	
L	21+75.00	74.73	583732.0940	675394.4654	
L	17+50.00	80.00	583537.5445	675016.5723	
L	17+50.00	108.00	583512.4929	675029.0790	
L	14+10.00	40.95	583394.2570	674778.2547	

-FINAL- ROW MARKER IRON PIN AND CAP-E					
ALIGN	STATION	OFFSET	NORTH	EAST	
Y1	13+42.73	55.00	584028.0312	675237.2167	
Y1	10+00.00	55.00	584363.5663	675167.3593	
Y1	10+00.00	14.44	584371.8338	675207.0693	
Y1	10+00.00	-15.56	584377.9550	675236.4705	
Y1	10+00.00	-65.00	584388.0254	675284.8402	
Y1	10+50.00	-95.00	584345.1898	675324.4017	
Y1	13+42.73	-95.00	584058.6045	675384.0679	
Y1	16+90.00	-95.00	583877.9082	675541.2622	
Y1	17+75.00	-120.00	583889.5163	675603.2420	
Y1	18+00.73	-95.00	583869.2776	675676.6272	
Y1	20+50.00	-70.00	583880.4138	675852.0161	
Y1	20+95.00	-35.00	583851.7515	675903.8326	
Y1	21+14.56	-35.00	583853.5590	675924.1147	
Y1	21+13.86	-15.08	583833.6427	675924.9439	
Y1	21+65.00	14.78	583806.2943	675977.4644	
Y1	21+65.00	40.00	583781.0755	675977.9193	
Y1	19+96.04	40.00	583762.2436	675818.2820	
Y1	19+00.00	50.00	583731.8183	675726.6415	
Y1	18+80.77	50.00	583727.6817	675707.8617	
Y1	18+00.00	55.00	583713.6260	675615.7796	

-FINAL- ROW MARKER IRON PIN AND CAP-E					
ALIGN	STATION	OFFSET	NORTH	EAST	
Y	11+60.00	-25.27	583563.2481	674671.1051	

-FINAL- ROW MARKER PERMANENT EASEMENT-E					
ALIGN	STATION	OFFSET	NORTH	EAST	
L	21+85.00	145.00	583673.6902	675434.7999	
L	22+07.00	150.00	583679.0435	675456.7166	
L	22+10.00	142.66	583686.9506	675456.1222	

-FINAL- ROW MARKER PERMANENT EASEMENT-E					
ALIGN	STATION	OFFSET	NORTH	EAST	
Y1	10+50.00	-110.00	584348.2472	675339.0868	
Y1	13+42.73	-110.00	584061.6625	675398.7529	
Y1	15+70.00	-95.00	583920.6975	675466.6368	

.....
 BM1 ELEVATION = 1939.86
 N 583335 E 674776
 BL STATION 8+16.00 4 RIGHT
 RAILROAD SPIKE SET IN 12" SYCAMORE TREE

 BM2 ELEVATION = 1930.33
 N 583614 E 675193
 BL STATION 13+57.00 29 RIGHT
 RAILROAD SPIKE IN 8" BIRCH TREE

 BM3 ELEVATION = 1940.22
 N 583715 E 675410
 BL STATION 16+04.00 15 RIGHT
 RAILROAD SPIKE SET IN 8" WALNUT TREE

 BM4 ELEVATION = 1943.65
 N 584129 E 674325
 BY STATION 5+00.00
 N 63°40'16.70" W DIST 64.39
 RAILROAD SPIKE SET IN 8" WALNUT TREE

 BM5 ELEVATION = 1949.87
 N 582867 E 674819
 BL STATION 5+00.00
 S 01°53'26.03" W DIST 156.29'
 RAILROAD SPIKE SET IN 6" LOCUST TREE

 BM6 ELEVATION = 1942.54
 N 584563 E 675175
 BY1 STATION 16+35.00
 N 07°53'34.13" W DIST 136.90
 TACK IN HOLE IN HEADWALL

 BM7 ELEVATION = 1942.78
 N 583794 E 675904
 BY1 STATION 16+35.00
 N 85°27'39.39" E DIST 94.43
 RAILROAD SPIKE SET IN 24" WALNUT TREE

-L- FINAL

TYPE	STATION	NORTH	EAST
POT	10+00.00	582996.8340	674817.7700
PC	13+57.01	583345.4342	674740.7369
PT	15+82.30	583534.2144	674830.7985
POT	22+48.22	583831.6617	675426.5991

-Y- FINAL

TYPE	STATION	NORTH	EAST
POT	10+00.00	583695.4279	674577.4737
PC	11+66.29	583546.3980	674651.2549
PT	12+78.61	583468.7778	674729.5997
POT	13+05.81	583456.9383	674754.0838

-Y1- FINAL

TYPE	STATION	NORTH	EAST
POT	10+00.00	584374.7767	675221.2047
PC	13+42.73	584039.2411	675291.0622
PT	18+80.73	583776.5016	675697.0629
PC	19+96.04	583801.3080	675809.6813
PT	21+69.44	583821.1374	675981.6356
POT	21+75.31	583821.2126	675987.5021

DATUM DESCRIPTION

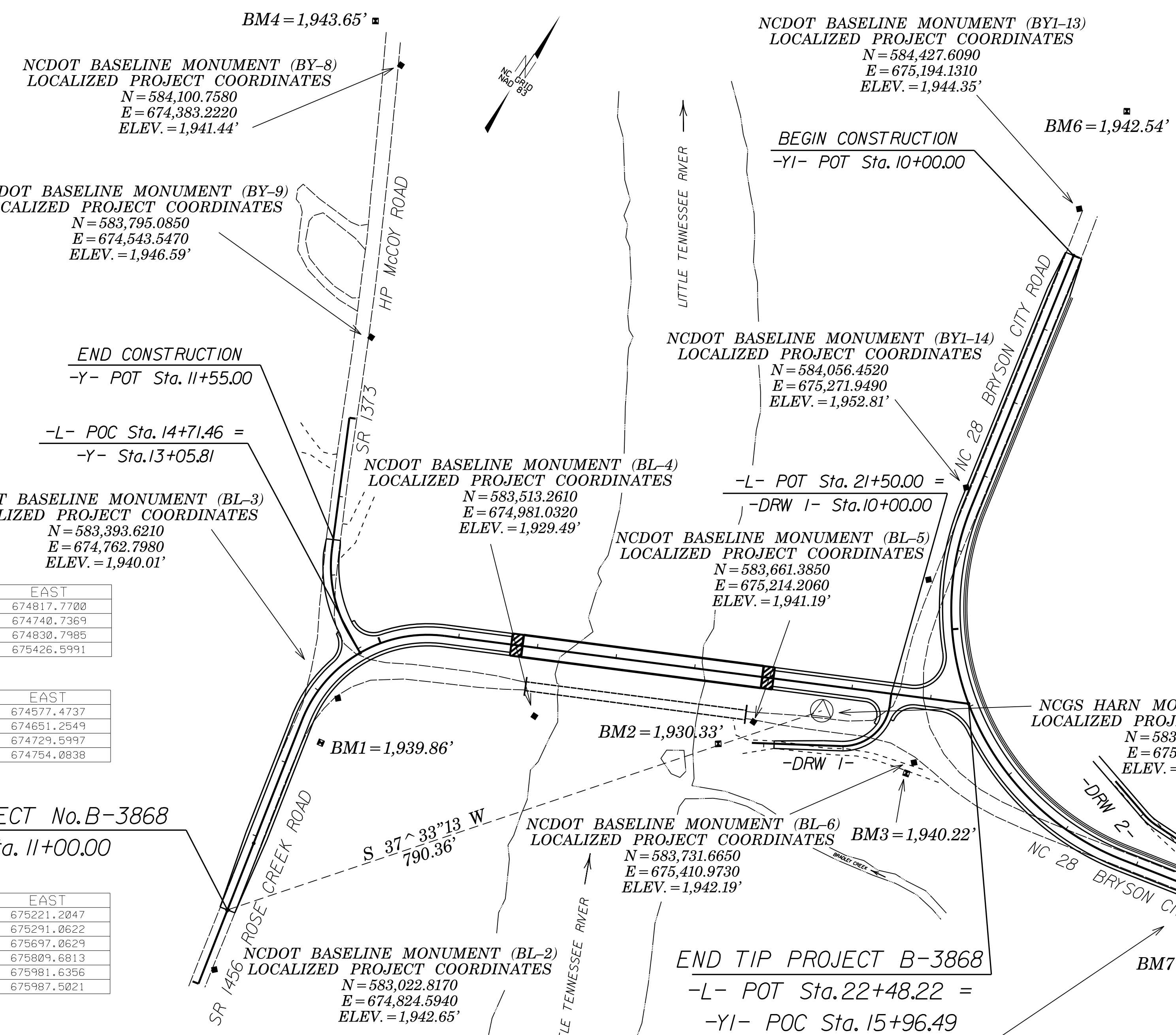
THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "McCoy"

WITH NAD 83 STATE PLANE GRID COORDINATES OF
 NORTHING: 583721.0635(±) EASTING: 675277.9211(±)
 ELEVATION: 1940.58(±)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99979853

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "McCoy" TO -L- STATION 11+00.00 IS
 S 37°33'13" W 790.36'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NGVD 29



NOTES:

- THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTPS://CONNECT.NCDOT.GOV/RESOURCES/LOCATION](https://connect.ncdot.gov/resources/location)

THE FILES TO BE FOUND ARE AS FOLLOWS:
 B-3868_LS_CONTROL.TXT

SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

⊕ INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
 PROJECT CONTROL ESTABLISHED USING EXISTING HARN MONUMENTS.

NOTE: DRAWING NOT TO SCALE

6/2/09 19-NOV-2015 07:45 G:\3868-1s-1c-1.dgn

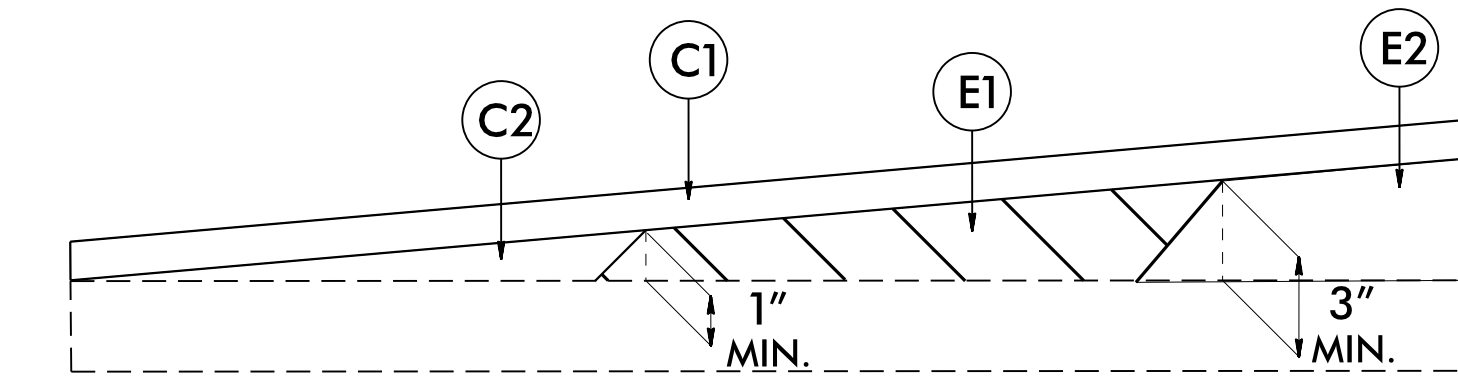
PAVEMENT SCHEDULE

FINAL PAVEMENT DESIGN

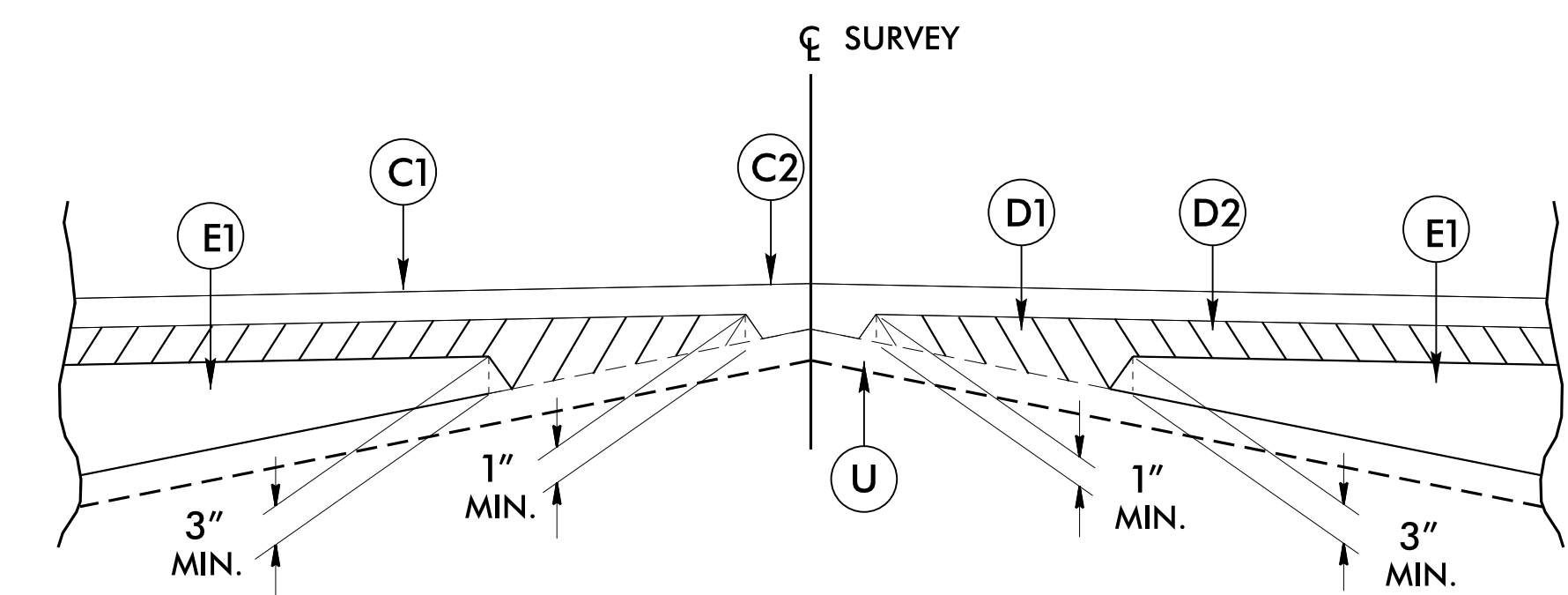
6/2/09

C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	P	PRIME COAT AT THE RATE OF 0.35 GALLONS PER SQUARE YARD.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.	R1	SHOULDER BERM GUTTER.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	R2	CONCRETE EXPRESSWAY GUTTER.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.	T	EARTH MATERIAL.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	U	EXISTING PAVEMENT.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.	W1	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)
J1	8" AGGREGATE BASE COURSE.	W2	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)

PROJECT REFERENCE NO. <i>B-3868</i>	SHEET NO. <i>2A-1</i>
ROADWAY DESIGN ENGINEER SEAL 033296 Steven D. Kendall 8/20/2015	PAVEMENT DESIGN ENGINEER SEAL 039819 LaTonya J. Heyward 8/19/2015

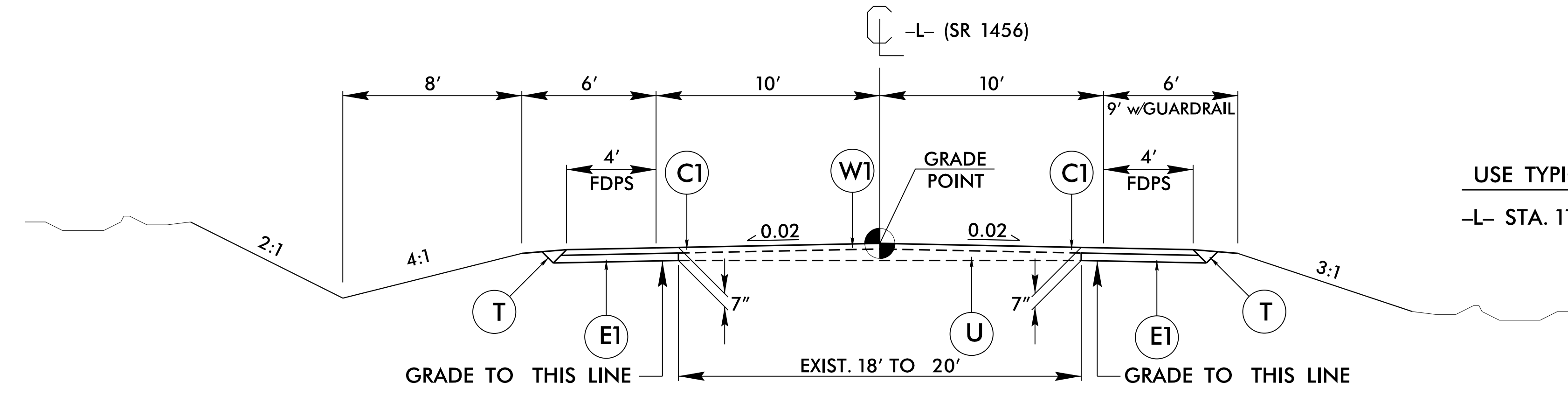


Wedging Detail (W1)



Wedging Detail (W2)

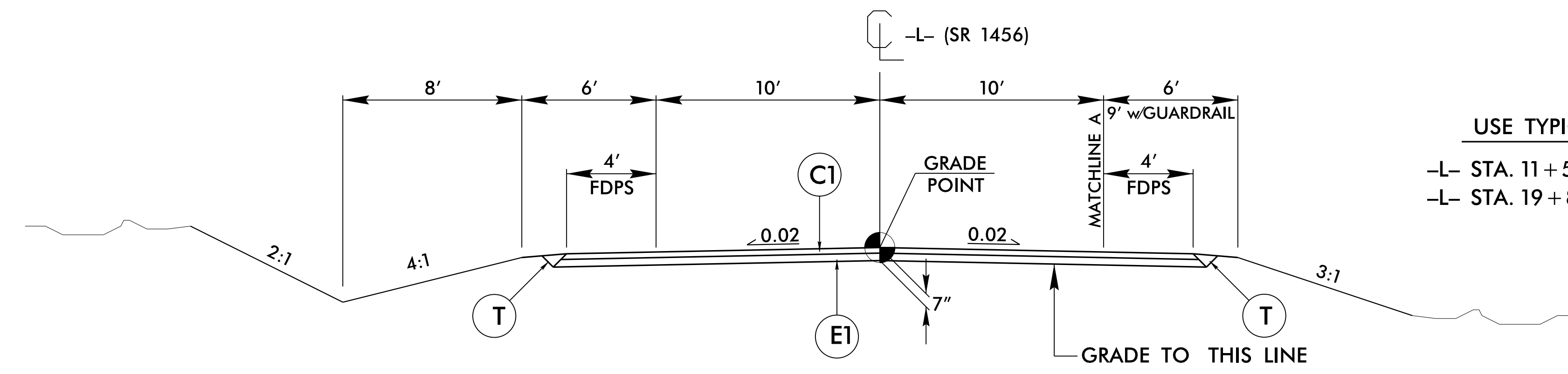
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1

-L- STA. 11+00.00 TO 11+50.00



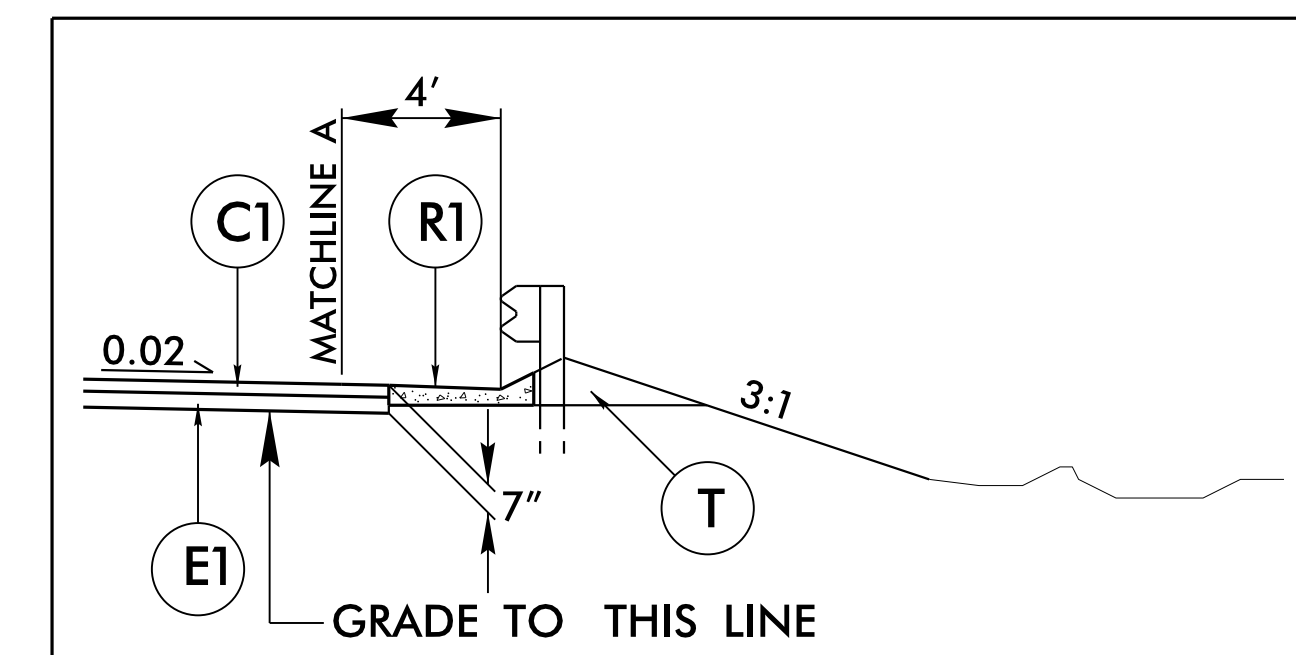
TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2

-L- STA. 11+50.00 TO 16+81.00 (BRIDGE)

-L- STA. 19+86.00 (BRIDGE) TO 22+35.82

INSET A

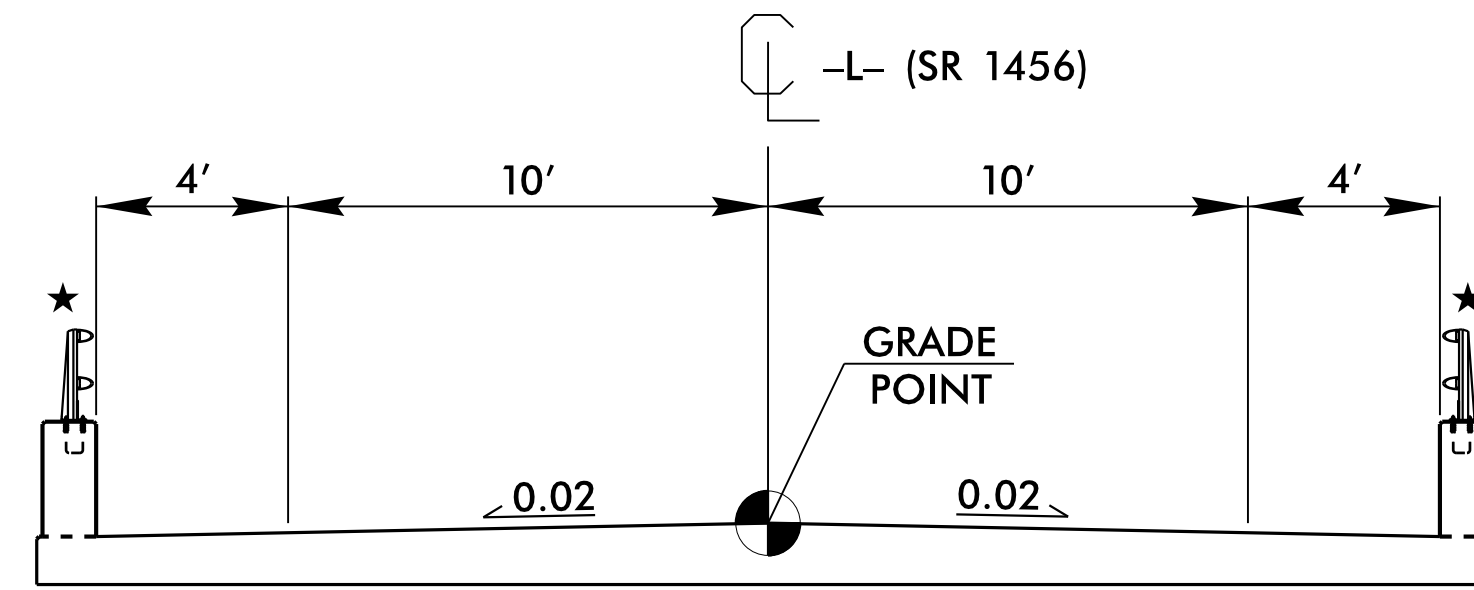


USE INSET A IN CONJUNCTION WITH TYPICAL SECTION No. 2

SEE PLANS FOR LOCATIONS

18-AUG-2015 10:02 AM B-3868_Pd.dwg - tjp.dgn

6/2/09

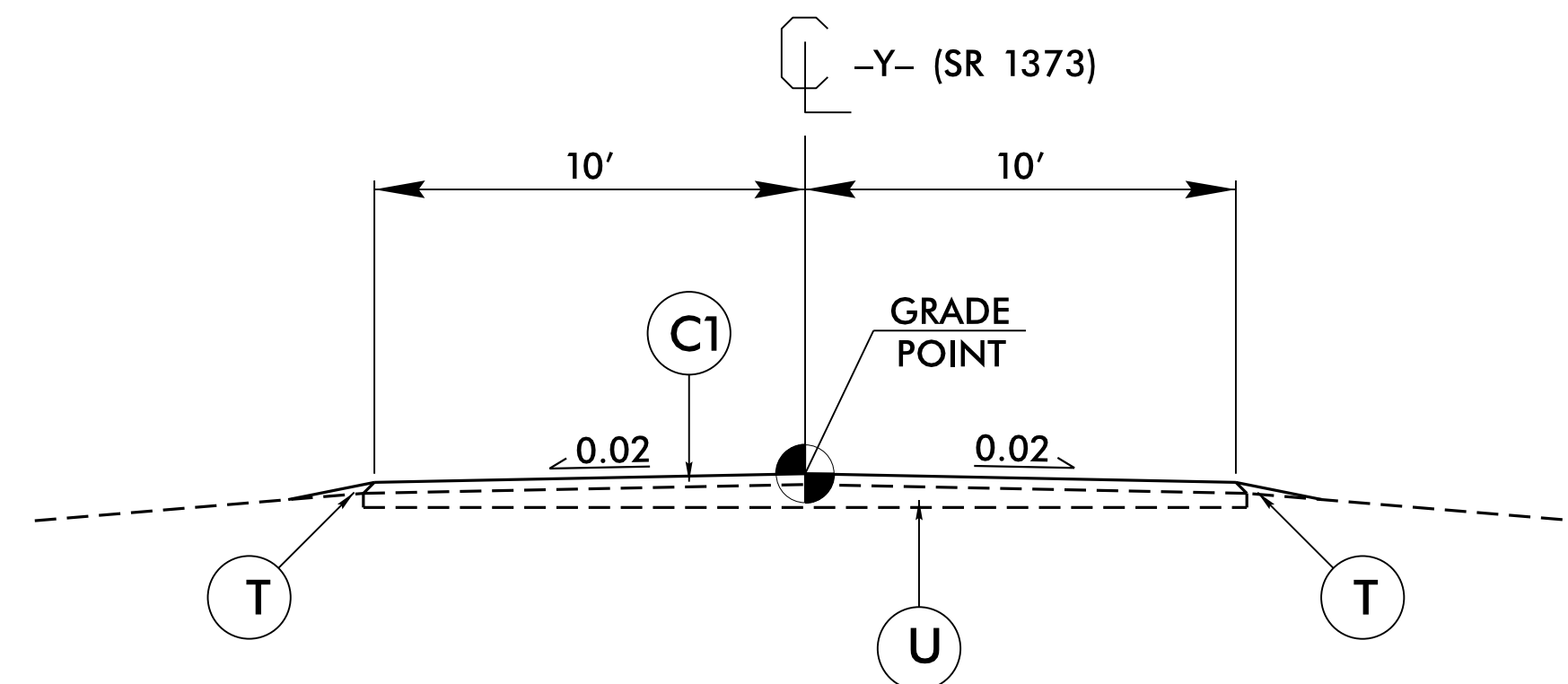


TYPICAL SECTION ON STRUCTURE

★ 2-BAR BRIDGE RAIL SEE STRUCTURE PLANS.

USE TYPICAL SECTION ON STRUCTURE

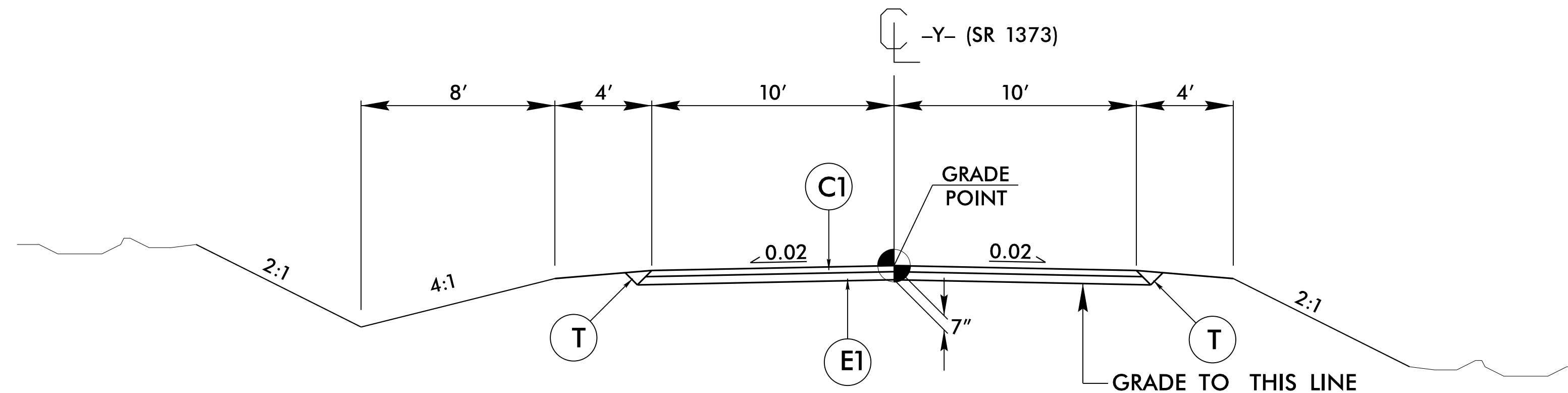
-L- STA. 16+81.00 TO 19+86.00



TYPICAL SECTION NO. 3

USE TYPICAL SECTION NO. 3

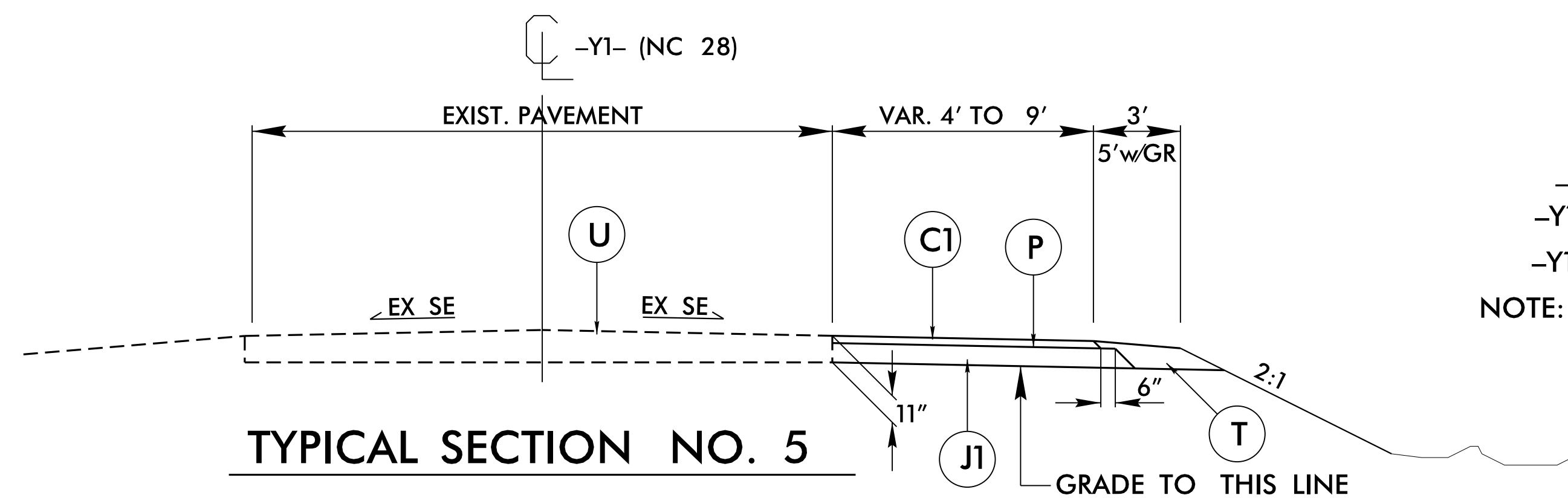
-Y- STA. 11+55.00 TO 12+00.00



TYPICAL SECTION NO. 4

USE TYPICAL SECTION NO. 4

-Y- STA. 12+00.00 TO 12+95.81



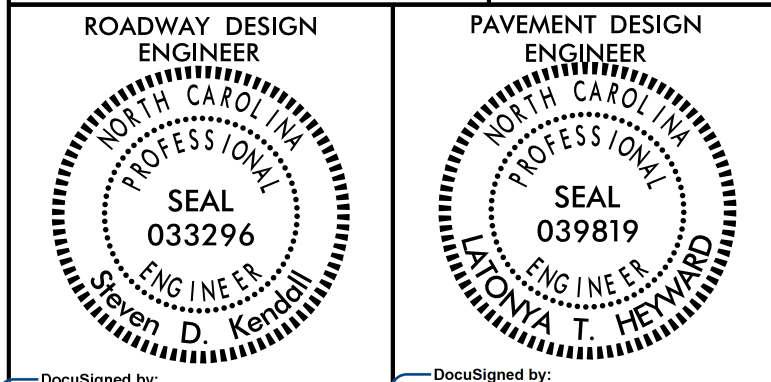
TYPICAL SECTION NO. 5

USE TYPICAL SECTION NO. 5

-Y1- STA. 10+00.00 TO 14+50.00 (9')

-Y1- STA. 18+00.00 TO 20+00.00 (4')

NOTE: TEMPORARY PAVEMENT. SEE SHEET 2B-1.

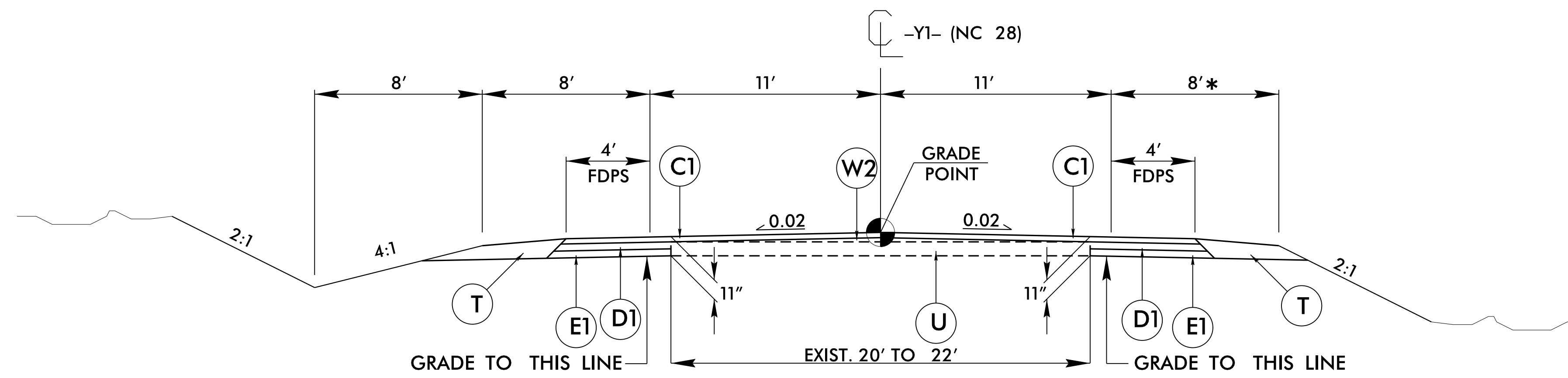


DocuSigned by: Steven D. Kendall, LaTonya J. Hayward

PAVEMENT SCHEDULE

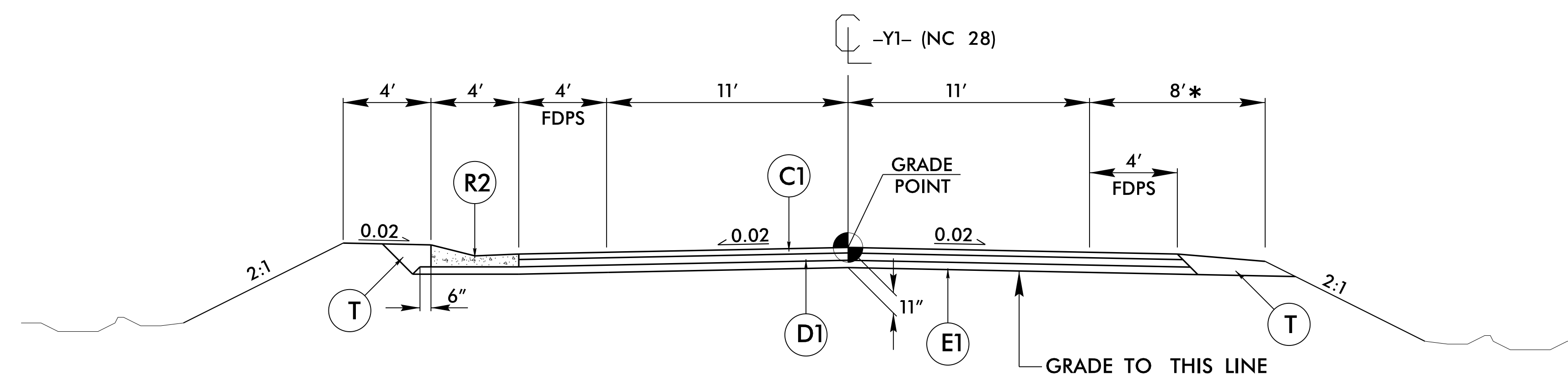
C1	3" S9.5B
C2	VAR. S9.5B
D1	4" I19.5B
D2	VAR. I19.0B
E1	4" B25.0B
E2	VAR. B25.0B
J1	8" ABC
P	.35 PRIME COAT
R1	SBG
R2	EXPWY GUTTER
T	EARTH MATERIAL
U	EXIST. PAVEMENT
W1	WEDGING
W2	WEDGING

18-AUG-2015 10:02 AM B-3868_Pd.dwg - tjp.dgn



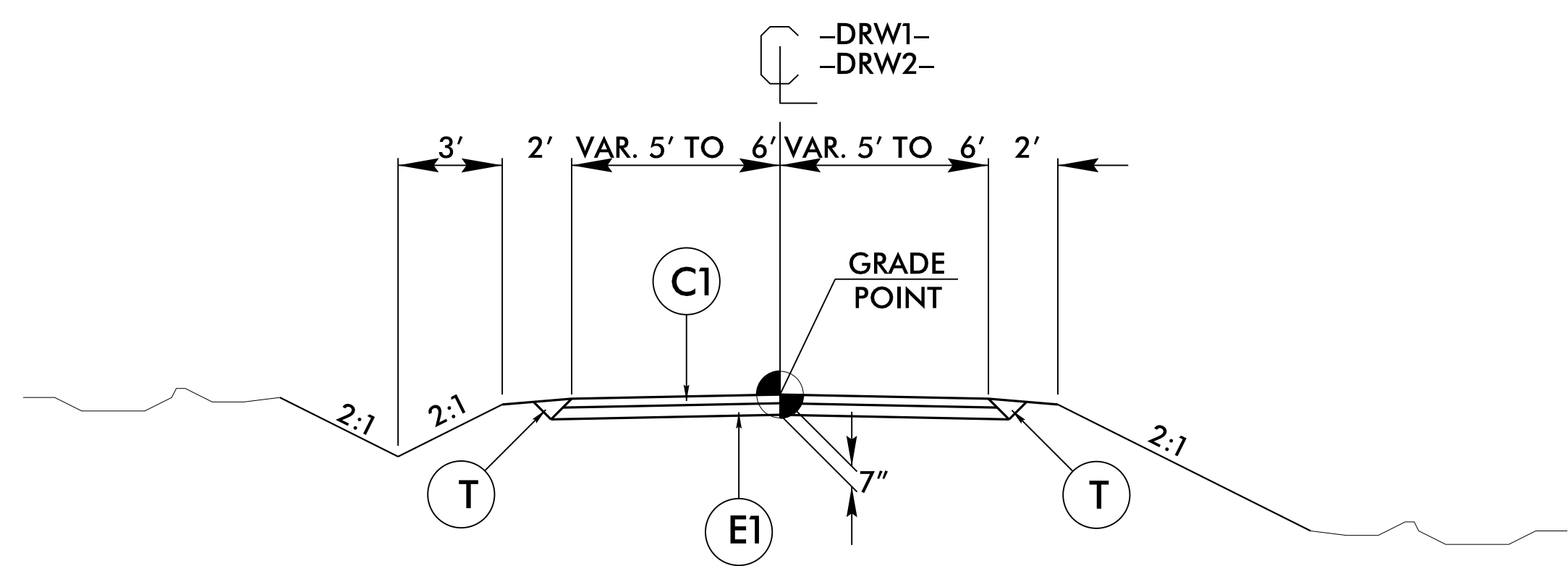
TYPICAL SECTION NO. 6

USE TYPICAL SECTION NO. 6
 -Y1- STA. 10+00.00 TO 10+50.00
 -Y1- STA. 18+25.00 TO 21+75.31
 * -Y1- STA. 10+00.00 TO 14+50.00
 SHOULDER WIDTH VARIES.
 SEE CROSS SECTIONS



TYPICAL SECTION NO. 7

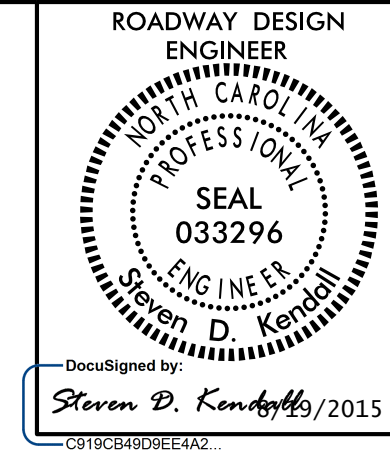
USE TYPICAL SECTION NO. 7
 -Y1- STA. 10+50.00 TO 18+25.00
 * -Y1- STA. 10+00.00 TO 14+50.00
 SHOULDER WIDTH VARIES.
 SEE CROSS SECTIONS

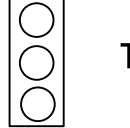

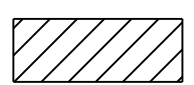


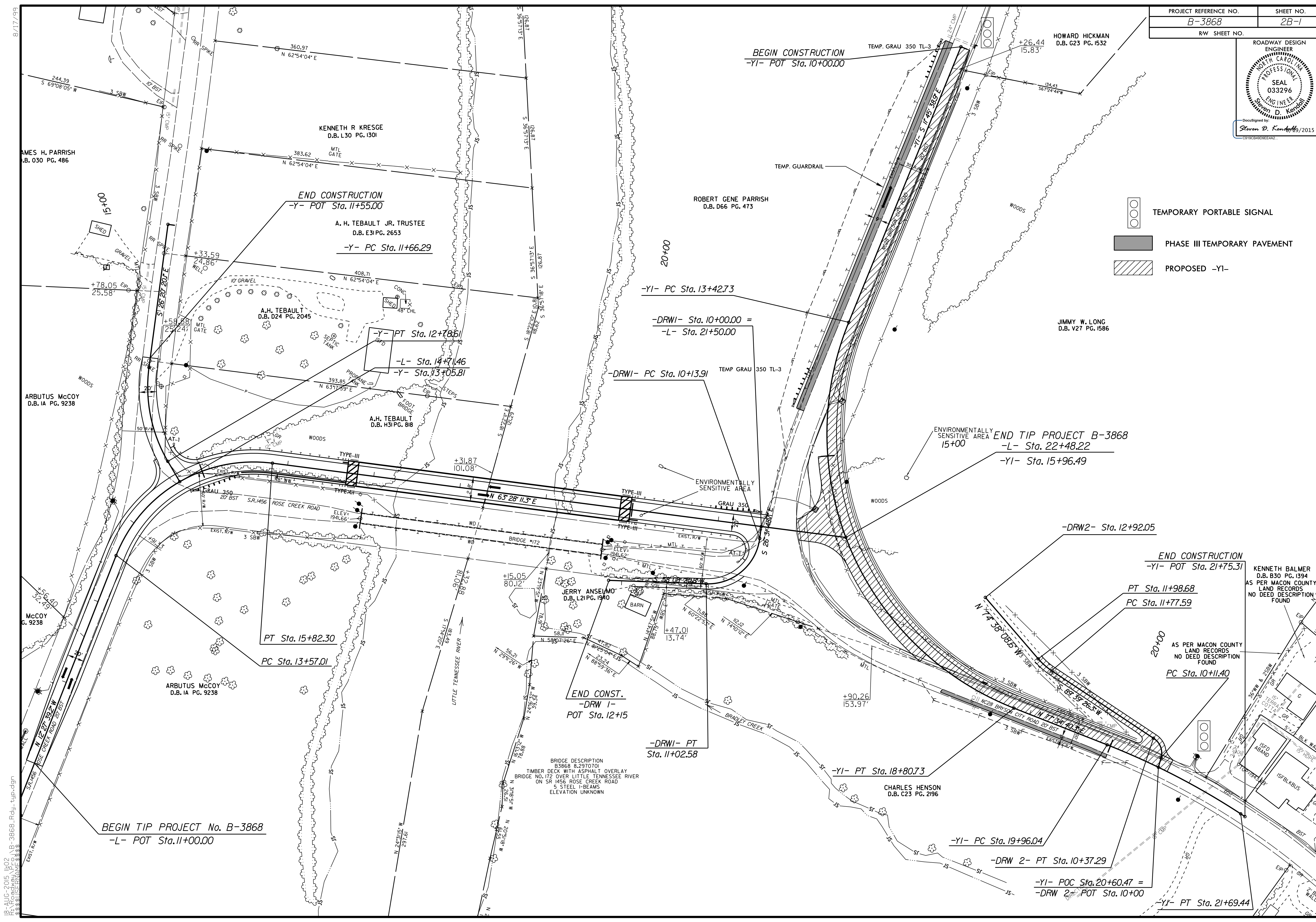
TYPICAL SECTION NO. 8

USE TYPICAL SECTION NO. 8
 -DRW1- STA. 10+10.00 TO 12+15.00
 -DRW2- STA. 10+11.17 TO 12+92.05

PROJECT REFERENCE NO.		SHEET NO.	
B-3868		2A-3	
ROADWAY DESIGN ENGINEER SEAL 033296 Steven D. Kendall		PAVEMENT DESIGN ENGINEER SEAL 039819 L. J. Hayward	
PAVEMENT SCHEDULE			
C1	3" S9.5B		
C2	VAR. S9.5B		
D1	4" I19.5B		
D2	VAR. I19.0B		
E1	4" B25.0B		
E2	VAR. B25.0B		
J1	8" ABC		
P	.35 PRIME COAT		
R1	SBG		
R2	EXPWY GUTTER		
T	EARTH MATERIAL		
U	EXIST. PAVEMENT		
W1	WEDGING		
W2	WEDGING		



-  TEMPORARY PORTABLE SIGNAL
-  PHASE III TEMPORARY PAVEMENT
-  PROPOSED -YI-

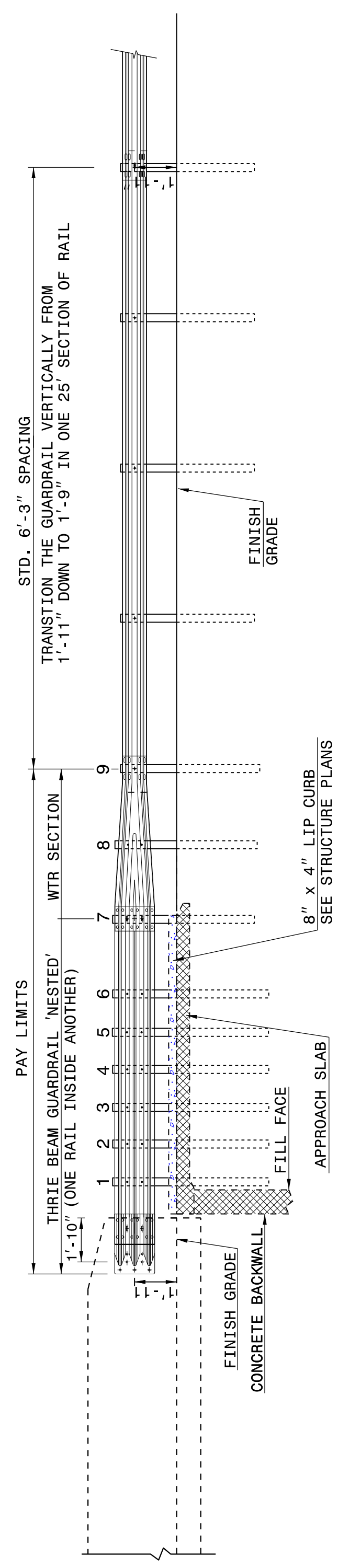


B:\10-2015\102\102\B-3868-FedJ-tyfb.dgn
 8/17/19

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

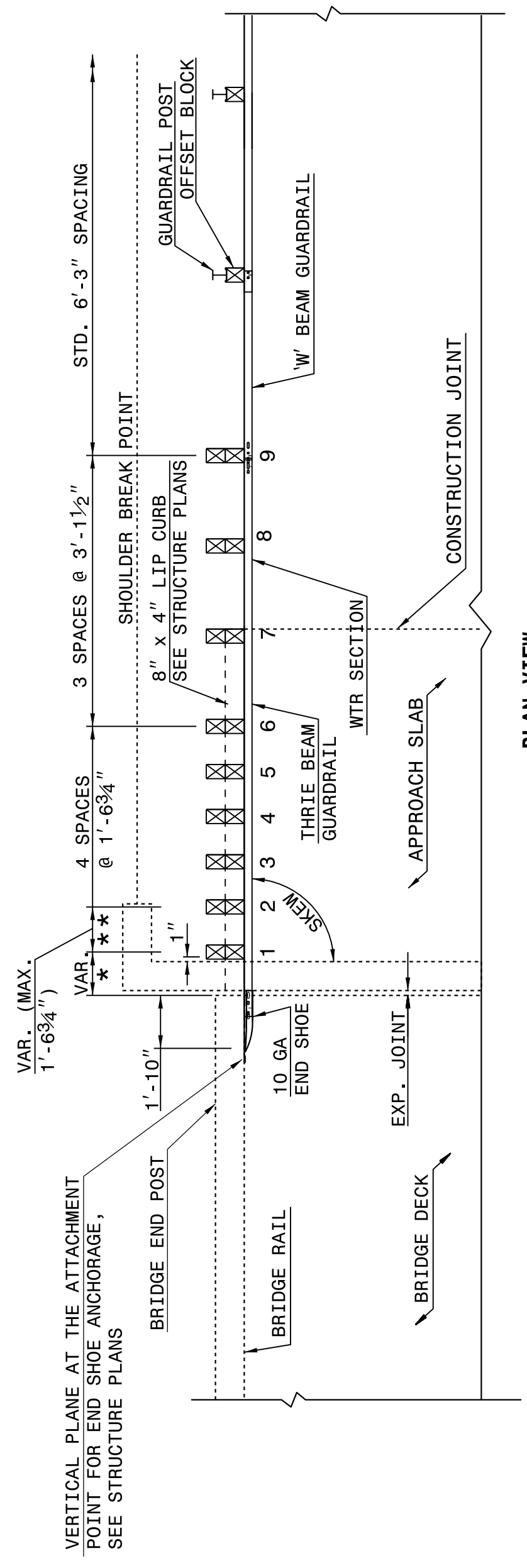
ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE - SUB REGIONAL TIER

SHEET 2 OF 7
862d03



NOTE:
 **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11½". IF CONCRETE BACKWALL IS NOT PRESENT.
 -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" x 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.
 -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).
 -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
 -SEE SHEET 5 FOR POST SECTIONS 1 THRU 9.

ELEVATION



PLAN VIEW

**GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE - SUB REGIONAL TIER**

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

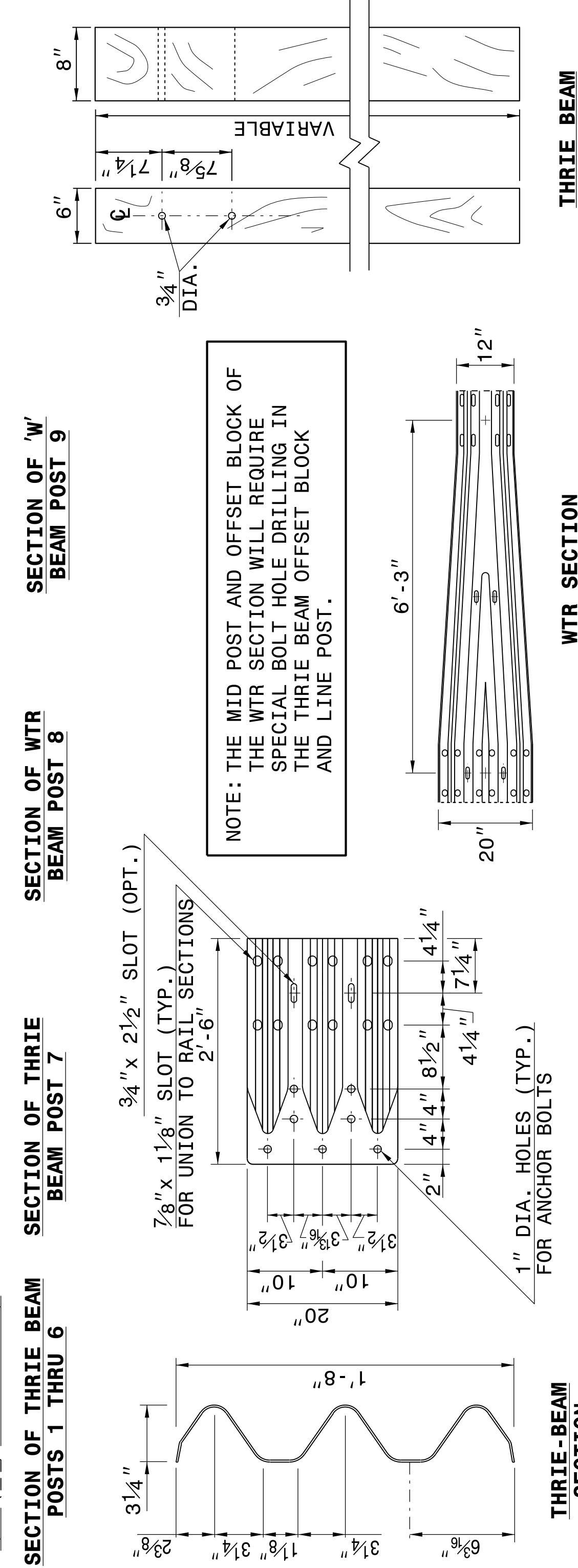
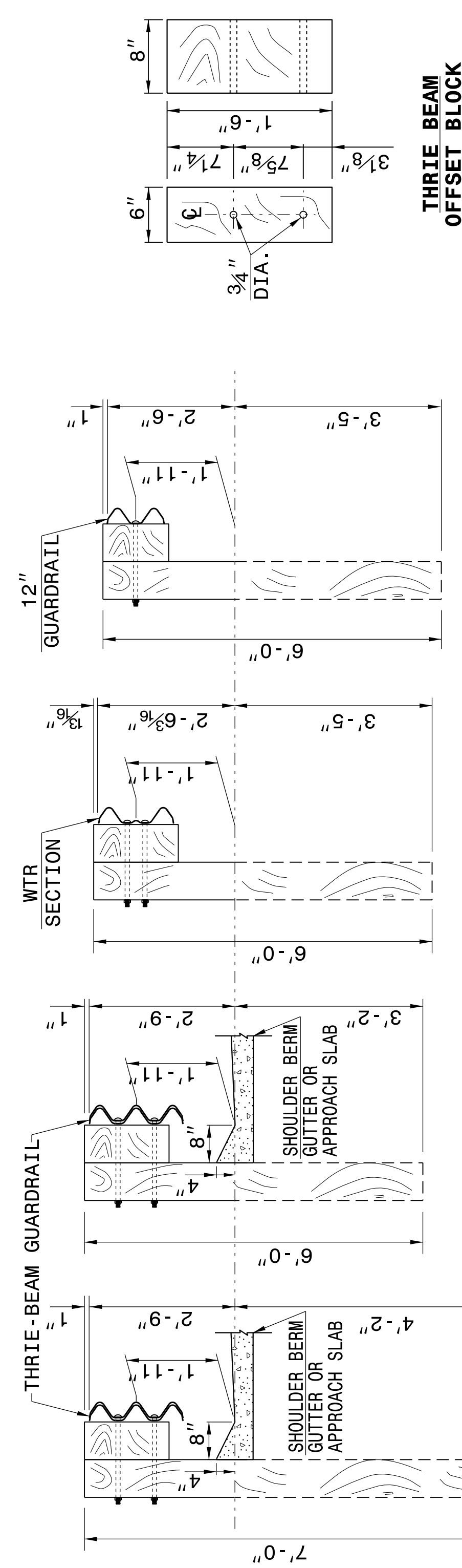
ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE - SUB REGIONAL TIER

SHEET 2 OF 7
862d03

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

ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III

SHEET 3 OF 7
862d03

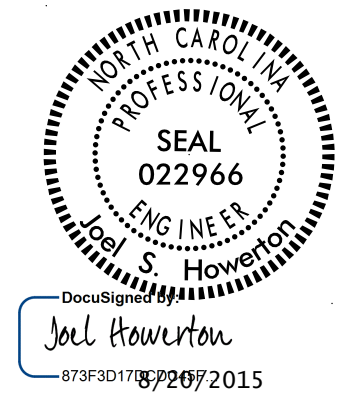


STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III

SHEET 3 OF 7
862d03

\$\$\$\$\$
DATE PLOTTED: 08/22/2015 10:58:58 AM
\$\$\$\$\$



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

SEE TITLE BLOCK

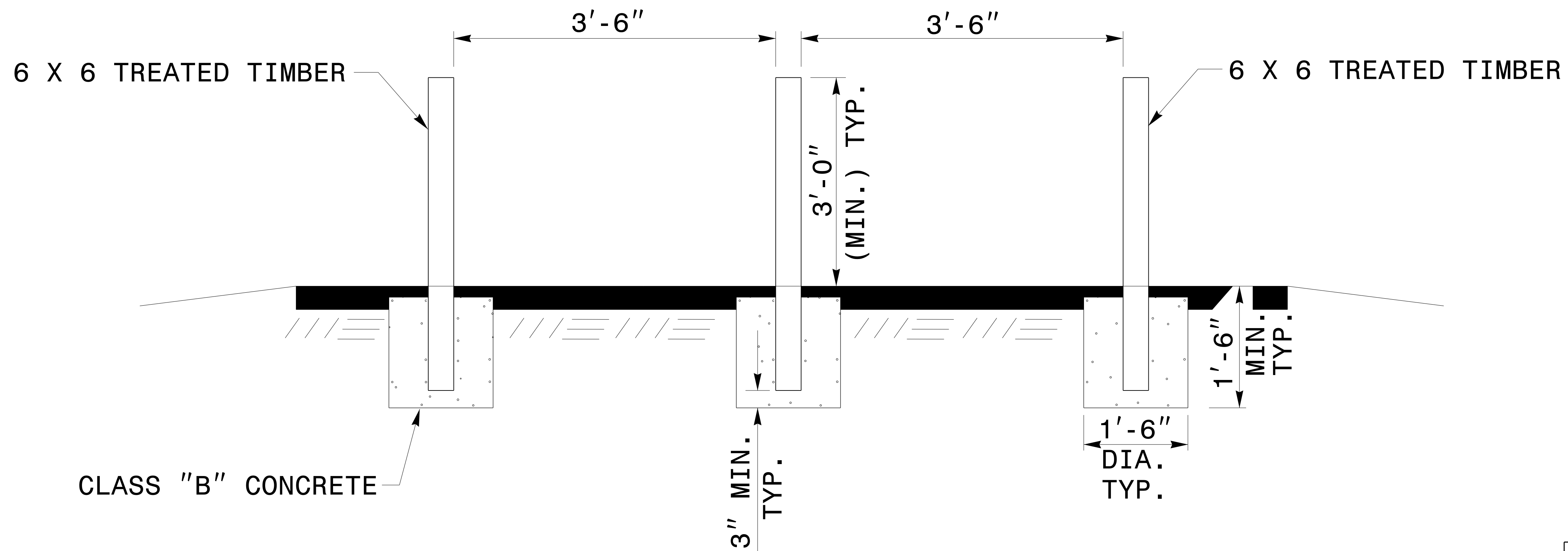
ORIGINAL BY: J. HOWERTON DATE: 06-22-12
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC.:

NOTES:

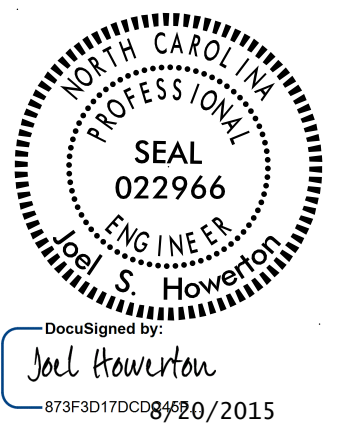
PLACE BOLLARDS TO PROHIBIT ENTRY OF UNAUTHORIZED VEHICLES AS SHOWN ON ROADWAY PLANS.

PLACE BOLLARDS AS SHOWN IN PLANS OR AS DIRECTED BY THE ENGINEER.

PROVIDE TIMBER BOLLARDS THAT MEET SECTION 1082-3 OF STANDARD SPECIFICATIONS.



SECTION



CONTRACT STANDARDS AND DEVELOPEMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
TIMBER BOLLARD	
ORIGINAL BY:	DATE:
MODIFIED BY: tspell	DATE: 08-17-10
CHECKED BY:	DATE:
FILE SPEC.: details/jhowerton/timber_bollard.dgn	

\$\$\$\$\$ TIME\$\$\$\$\$
\$\$\$\$\$ USERNAME\$\$\$\$\$
\$\$\$\$\$ USER\$\$\$\$\$
\$\$\$\$\$

EXPRESSWAY GUTTER SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	LENGTH FT
-Y1-	10+50.00	20+25.00	LT	948
TOTAL				948
SAY				950

SHOULDER BERM GUTTER SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	LENGTH FT
-L-	16+62.50	16+66.83	LT	4.33
-L-	15+44.90	16+66.83	RT	121.93
-L-	20+00.17	20+02.50	LT	2.33
-L-	20+00.17	20+08.00	RT	7.83
TOTAL				136.42
SAY				137

REMOVAL OF EXISTING ASPHALT PAVEMENT SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	SQUARE YARD
-L-	11+50.00	16+81.00	CL	1,602.77
-Y1-	10+50.00	18+25.00	CL	2,465.23
-Y1- TEMP PAVT	10+00.00	14+50.00	CL	450.00
-Y1- TEMP PAVT	18+00.00	20+00.00	CL	88.89
TOTAL				4,606.89
SAY				4,700

SUMMARY OF EARTHWORK

SURVEY LINE	STATION	STATION	UNCL. EXCAV.	EMBANK. +15%	BORROW	WASTE
-L-	10+50.00	17+00.00	0	8,670	8,670	
-Y-	11+00.00	13+00.00	2	370	368	
SUBTOTAL NO. 1			2	9,040	9,038	
-L-	19+50.00	22+00.00	0	6,341	6,341	
-Y1- PHASE I	10+00.00	21+50.00	14,734	138		14,596
-DRW1-	10+00.00	12+00.00	59	501	442	
SUBTOTAL NO. 2			14,793	6,980	6,783	14,596
-DRW2-	10+00.00	12+00.00	1,240	76		1,164
-Y1- PHASE II	10+00.00	21+50.00	2,185	585		1,600
-DRW2- on -Y1-	20+00.00		273			273
SUBTOTAL NO. 3			3,698	661		3,037
-Y1- TEMP.	10+00.00	14+50.00	72	1,249	1,177	
-Y1- TEMP.	18+00.00	20+00.00	33	28		5
SUBTOTAL NO. 4			105	1,277	1,177	5
PROJECT SUBTOTALS			18,598	17,958	16,998	17,638
LOSS DUE TO CLEARING & GRUBBING			-100		100	
WASTE IN LIEU OF BORROW					-7,983	-7,983
ADJUST FOR ROCK WASTE SWELL						1,931
ADJUST FOR UNCOMPACTED ROCK WASTE						1,738
PROJECT TOTALS			18,498	17,958	9,115	13,324
REPLACE TOPSOIL IN BORROW PIT					456	
GRAND TOTALS			18,498	17,958	9,571	13,324
SAY			18,500		9,600	

DRAINAGE DITCH EXCAVATION = 300 CU YD
UNDERCUT EXCAVATION = 200 CU YD
SHALLOW UNDERCUT EXCAVATION = 100 CU YD
CLASS IV SUBGRADE STABILATION = 160 TONS
SELECT GRANULAR MATERIAL = 200 CU YD

Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

NOTE: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Fine Grading, Clearing & Grubbing, Removal of Existing Pavement will be paid for at the lump sum price for "Grading".

W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS								IMPACT ATTENUATOR TYPE 350			REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	TEMPORARY GUARDRAIL	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	TEMP. GRAU 350	TEMP. CAT-1	M-350	AT-1	CAT-1	GRAU 350	TL-2	TYPE III	B-77	EA	G			
-L-	14+77.18	16+81.00	RT	190.51			16+81.00		4'	9'	50'																	
-L-/-DRW1-	19+86.00	10+51.80	RT	133.32	35.9				4'	9'																		
-Y-/-L-	12+65.21	16+81.00	LT	183.47	35.3				4'	9'																		
-L-	19+86.00	21+48.56	LT	158.77			16+81.05		4'	9'	50'																	
-Y1-	10+42.64	14+12.95	RT	373.82																								
-Y1- TEMP PAVT	10+00.00	14+50.00	RT			450.00																						
PROJECT SUBTOTALS				1,039.89	71.2		TEMPORARY GUARDRAIL SUBTOTALS:	450.00																				
DEDUCTIONS FOR GUARDRAIL ANCHORS				-287.50			DEDUCTIONS FOR TEMPORARY ANCHORS:	-100.00																				
PROJECT TOTALS				752.39	71.2		PROJECT TOTALS	350.00																				
SAY				762.50	75.00		SAY	350.00																				
ADDITIONAL GUARDRAIL POSTS =				5																								

COMPUTED BY: DMM DATE: 2.3.14
 CHECKED BY: JCK DATE: 2.3.14

(1.3.14)

PROJECT NO. SHEET NO.
 B-3868 3G-1

**STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS**

SUMMARY OF SUBSURFACE DRAINAGE

LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
CONTINGENCY				SD	500
				TOTAL LF:	500

*UD = Underdrain
 *BD = Blind Drain
 *SD = Subsurface Drain

**SUMMARY OF
 BRIDGE WAITING PERIODS**

Bridge Description	End Bent/ Bent No.	MONTHS

**SUMMARY OF
 SETTLEMENT GAUGES**

Gauge No.	LINE	Approx. Station	Approx. Offset
TOTAL GAUGES (EACH):			

SUMMARY OF ROCK PLATING

LINE	Beginning Slope	Approx. Station	Ending Slope	Approx. Station	Location LT/RT	Rock Plating Detail No. 1/2/3/4	Riprap Class* 1/2/B	SY
							TOTAL SY:	0

*Use Class 1, 2 or B riprap if riprap class is not shown for rock plating location.

**SUMMARY OF
 EMBANKMENT WAITING PERIODS**

LINE	Station	Station	MONTHS

**SUMMARY OF SURCHARGES
 AND SURCHARGE WAITING PERIODS**

LINE	Station	Station	Surcharge Height FT	MONTHS

SUMMARY OF REINFORCED SOIL SLOPES (RSS)

LINE	Beginning Slope	Approx. Station	Ending Slope	Approx. Station	Location LT/RT	SY
					TOTAL SY:	0

**SUMMARY OF GEOTEXTILE
 FOR PAVEMENT STABILIZATION**

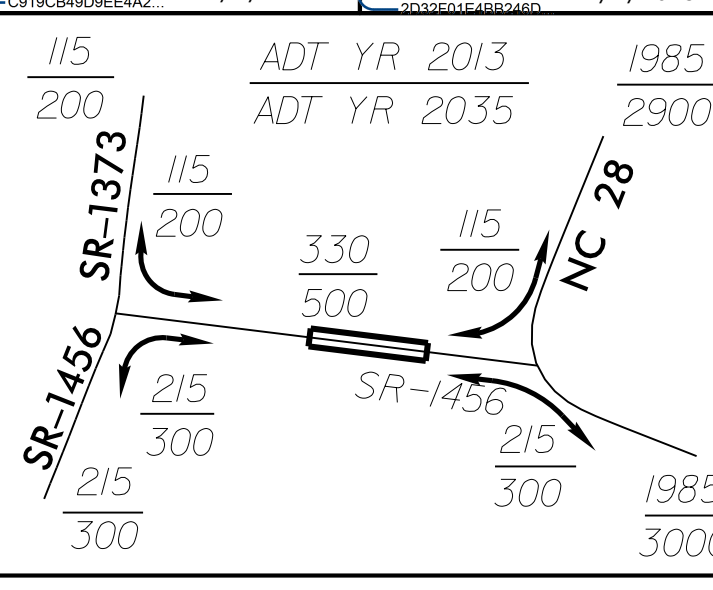
LINE	Station	Station	SY
CONTINGENCY			
TOTAL SY:			0

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

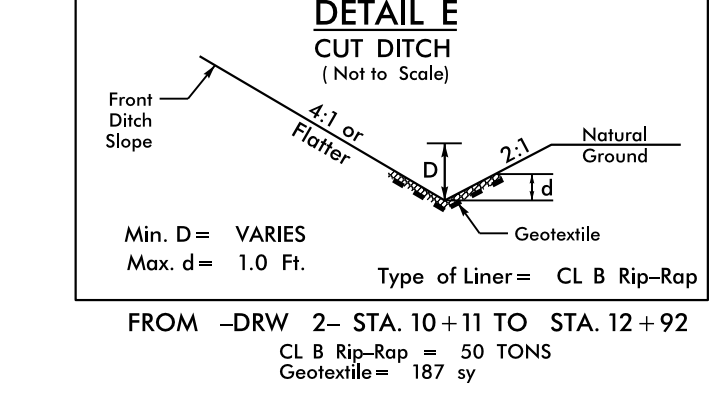
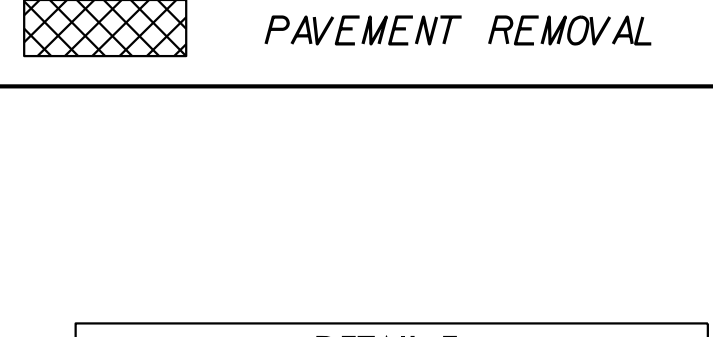
LINE	Station	Station	Aggregate Type* ASU/AST	Aggregate Thickness INCHES	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
CONTINGENCY					100	160	100		
TOTAL CY/TONS/SY:					100	160	100	0	0

*ASU = Aggregate Subgrade
 *AST = Aggregate Stabilization

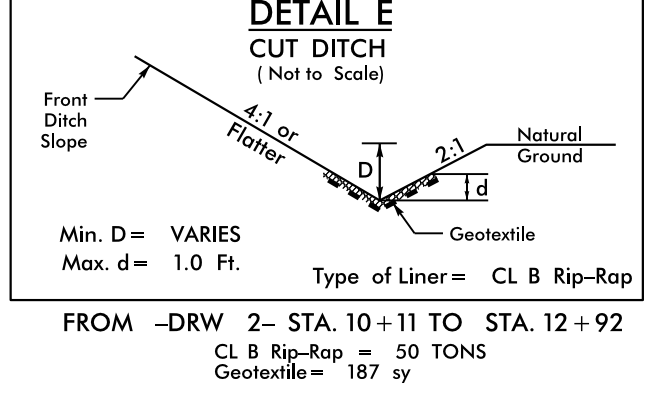
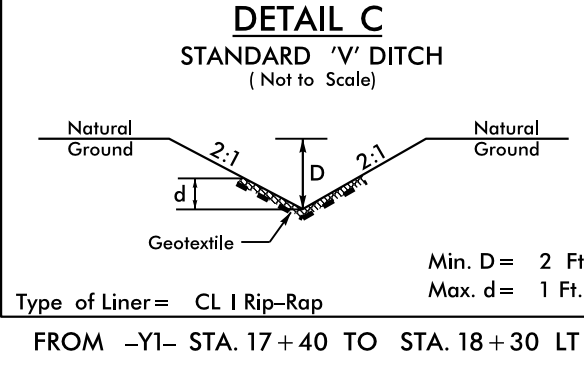
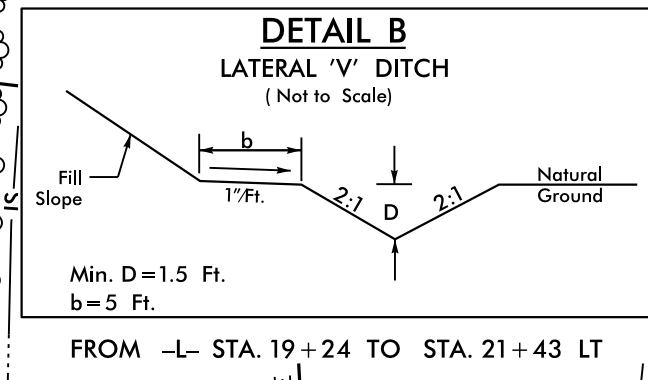
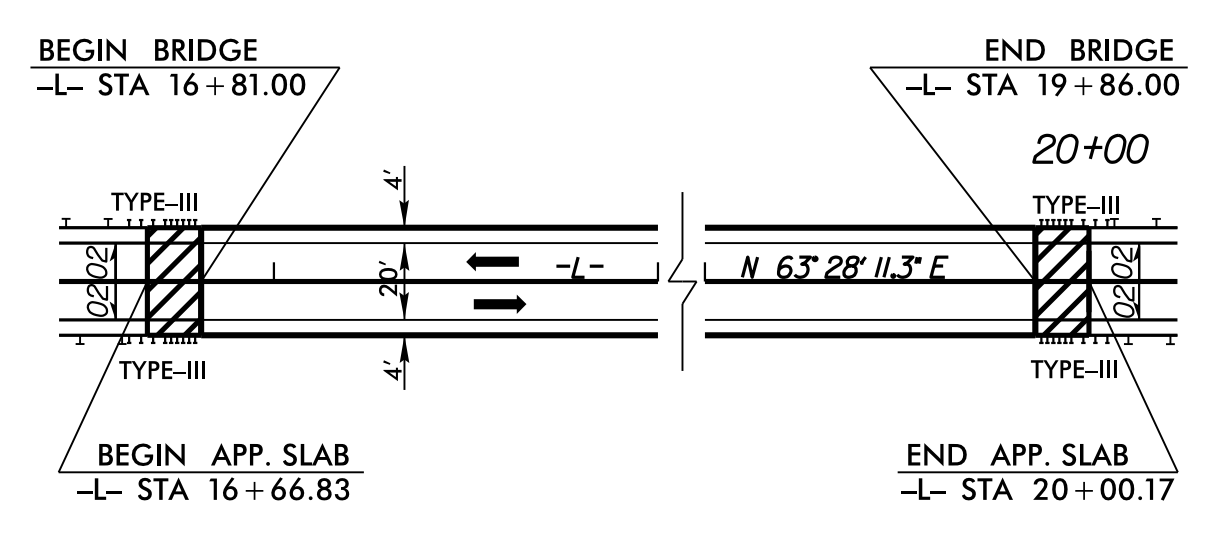
*Total square yards of Geotextile for Soil Stabilization is only the estimated quantity for ASU/AST and may only represent a portion of the geotextile quantity shown in the Item Sheets of the Proposal.



SEE SHEET No. 5 FOR
-L- & -YI- PROFILES.
SEE SHEET No. 6 FOR -Y-,
-DRW 1- & -DRW 2- PROFILES.
SEE SHT. No. S-1 to S-39 FOR
BRIDGE STRUCTURE PLANS.



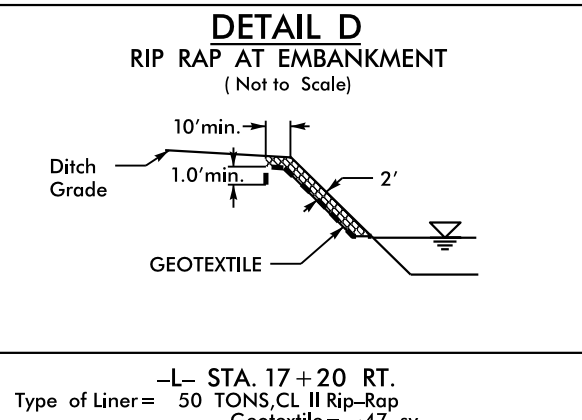
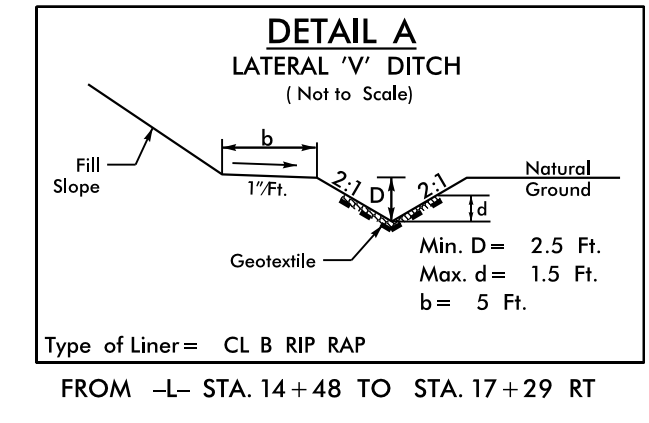
SKETCH SHOWING BRIDGEROADWAY RELATIONSHIP



END TIP PROJECT B-3868
-L- Sta. 22+48.22
-YI- Sta. 15+96.49

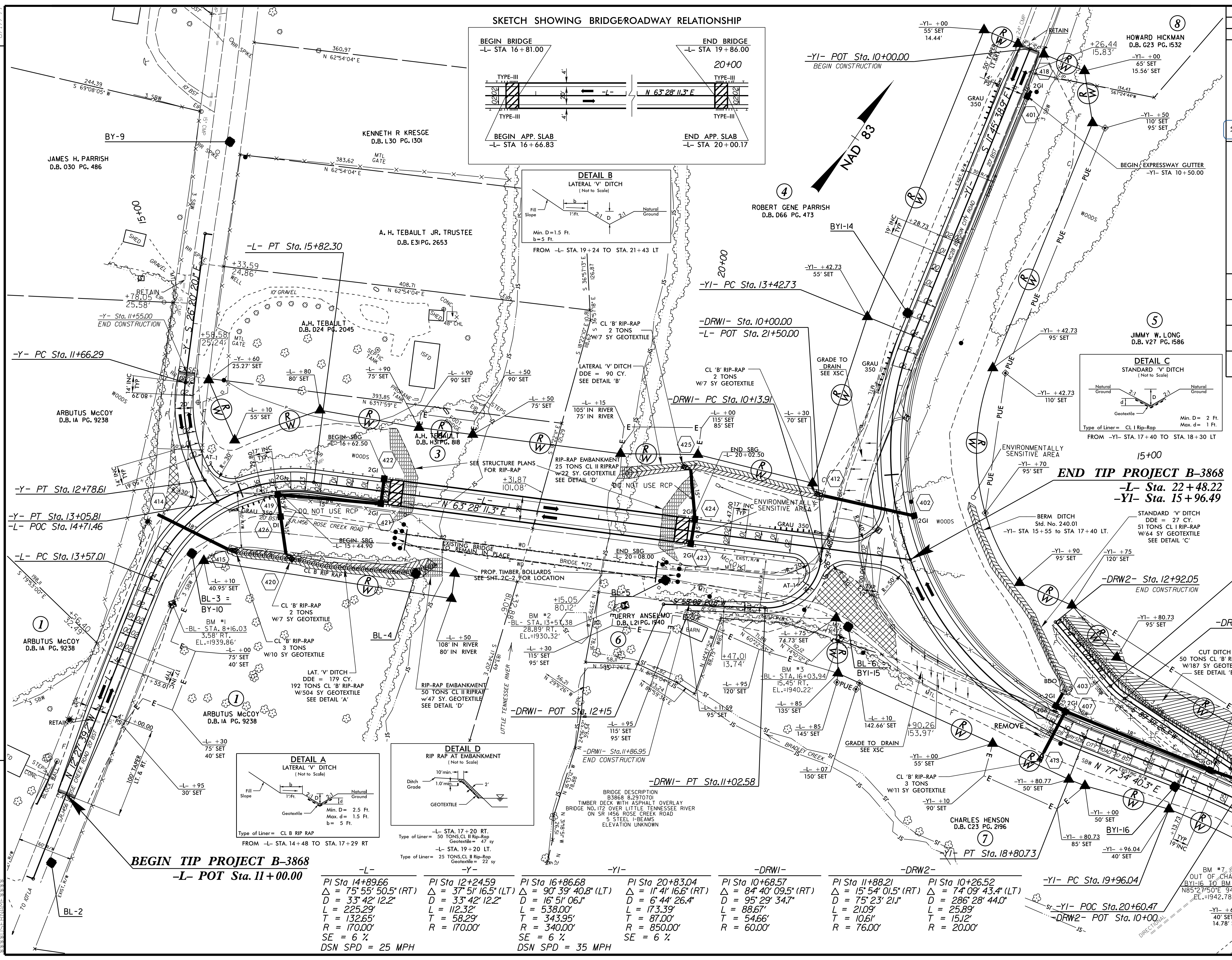
BEGIN TIP PROJECT B-3868
-L- POT Sta. 11+00.00

-L-	-Y-	-YI-	-DRW1-	-DRW2-
PI Sta. 14+89.66 Δ = 75° 55' 50.5" (RT) D = 33' 42" 12.2" L = 225.29' T = 132.65' R = 170.00' SE = 6 % DSN SPD = 25 MPH	PI Sta. 12+24.59 Δ = 37° 51' 16.5" (LT) D = 33' 42" 12.2" L = 112.32' T = 58.29' R = 170.00'	PI Sta. 16+86.68 Δ = 90° 39' 40.8" (LT) D = 16' 51" 06.1" L = 538.00' T = 343.95' R = 340.00' SE = 6 % DSN SPD = 35 MPH	PI Sta. 20+83.04 Δ = 11° 41' 16.6" (RT) D = 6' 44" 26.4" L = 173.39' T = 87.00' R = 850.00' SE = 6 %	PI Sta. 10+68.57 Δ = 84° 40' 09.5" (RT) D = 95' 29' 34.7" L = 88.67' T = 54.66' R = 60.00'
PI Sta. 11+88.21 Δ = 15° 54' 01.5" (RT) D = 75' 23' 21.1" L = 21.09' T = 10.61' R = 76.00'	PI Sta. 10+26.52 Δ = 74° 09' 43.4" (LT) D = 286' 28' 44.0" L = 25.89' T = 15.2' R = 20.00'	PI Sta. 19+96.04 Δ = 11° 41' 16.6" (RT) D = 6' 44" 26.4" L = 173.39' T = 87.00' R = 850.00'	PI Sta. 20+60.47 Δ = 11° 41' 16.6" (RT) D = 6' 44" 26.4" L = 173.39' T = 87.00' R = 850.00'	PI Sta. 21+69.44 Δ = 11° 41' 16.6" (RT) D = 6' 44" 26.4" L = 173.39' T = 87.00' R = 850.00'



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REVISIONS

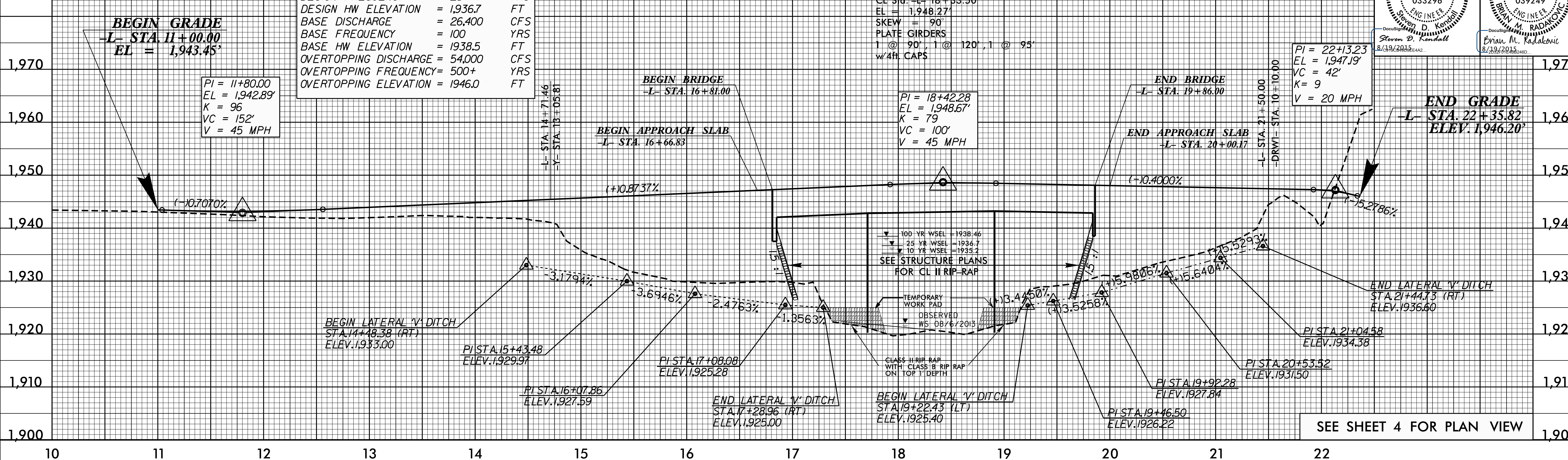


-L- (SR 1456)

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 23,800	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 1,936.7	FT
BASE DISCHARGE	= 26,400	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 1,938.5	FT
OVERTOPPING DISCHARGE	= 54,000	CFS
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING ELEVATION	= 1,946.0	FT

CL Sta. -L- 18+83.50
EL = 1,948.27'
SKEW = 90°
PLATE GIRDERS
1 @ 90°, 1 @ 120°, 1 @ 95°
w/4ft. CAPS



PI = 11+80.00
EL = 1,942.89'
K = 96
VC = 152'
V = 45 MPH

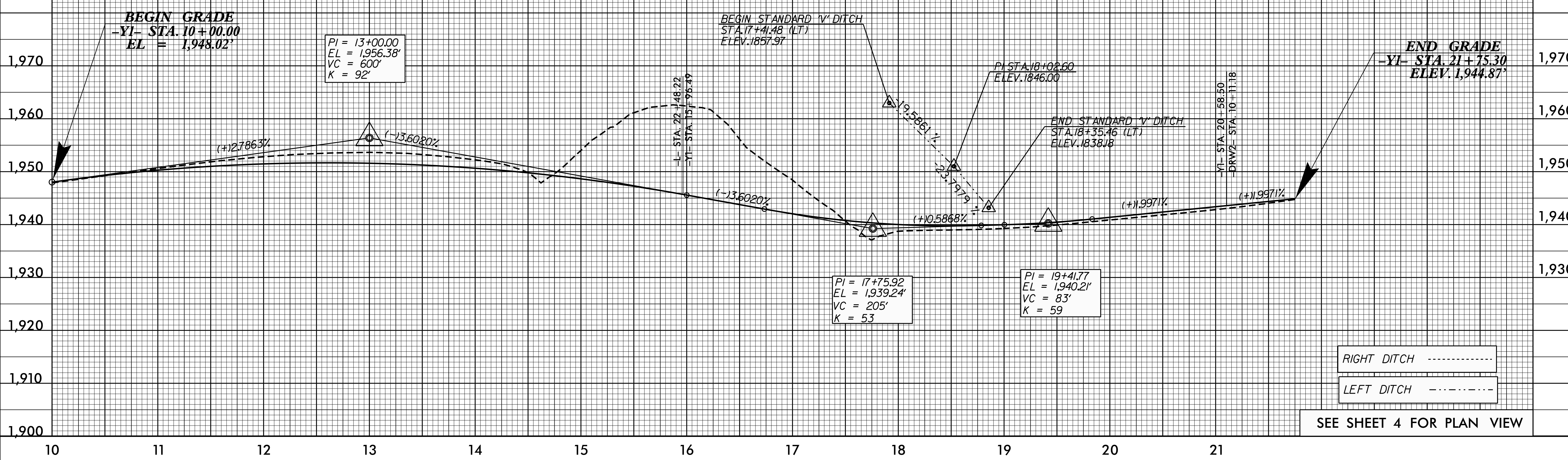
PI = 18+42.28
EL = 1,948.67'
K = 79
VC = 100'
V = 45 MPH

PI = 22+13.23
EL = 1,947.19'
VC = 42'
K = 9
V = 20 MPH

REVISIONS

SEE SHEET 4 FOR PLAN VIEW

-YI- (NC 28)



PI = 13+00.00
EL = 1,956.38'
VC = 600'
K = 92

PI = 17+75.92
EL = 1,939.24'
VC = 205'
K = 53

PI = 19+41.77
EL = 1,940.21'
VC = 83'
K = 59

RIGHT DITCH - - - - -
LEFT DITCH - - - - -

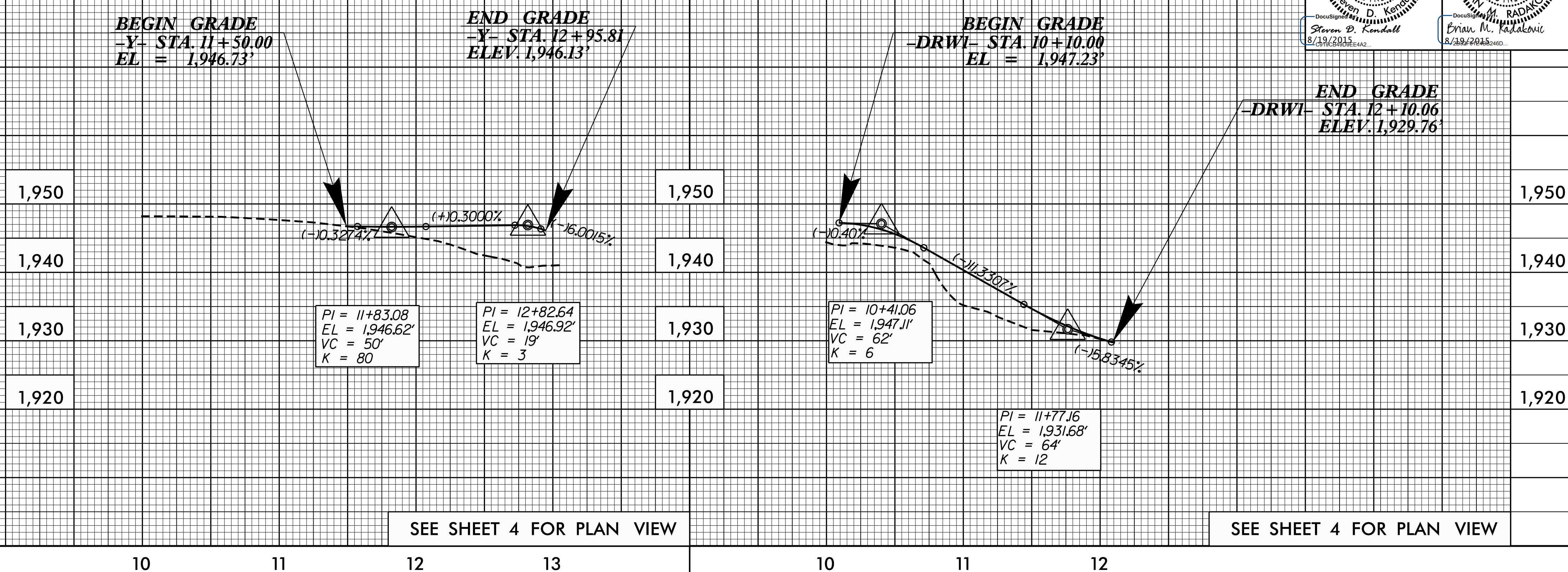
SEE SHEET 4 FOR PLAN VIEW

5/28/99

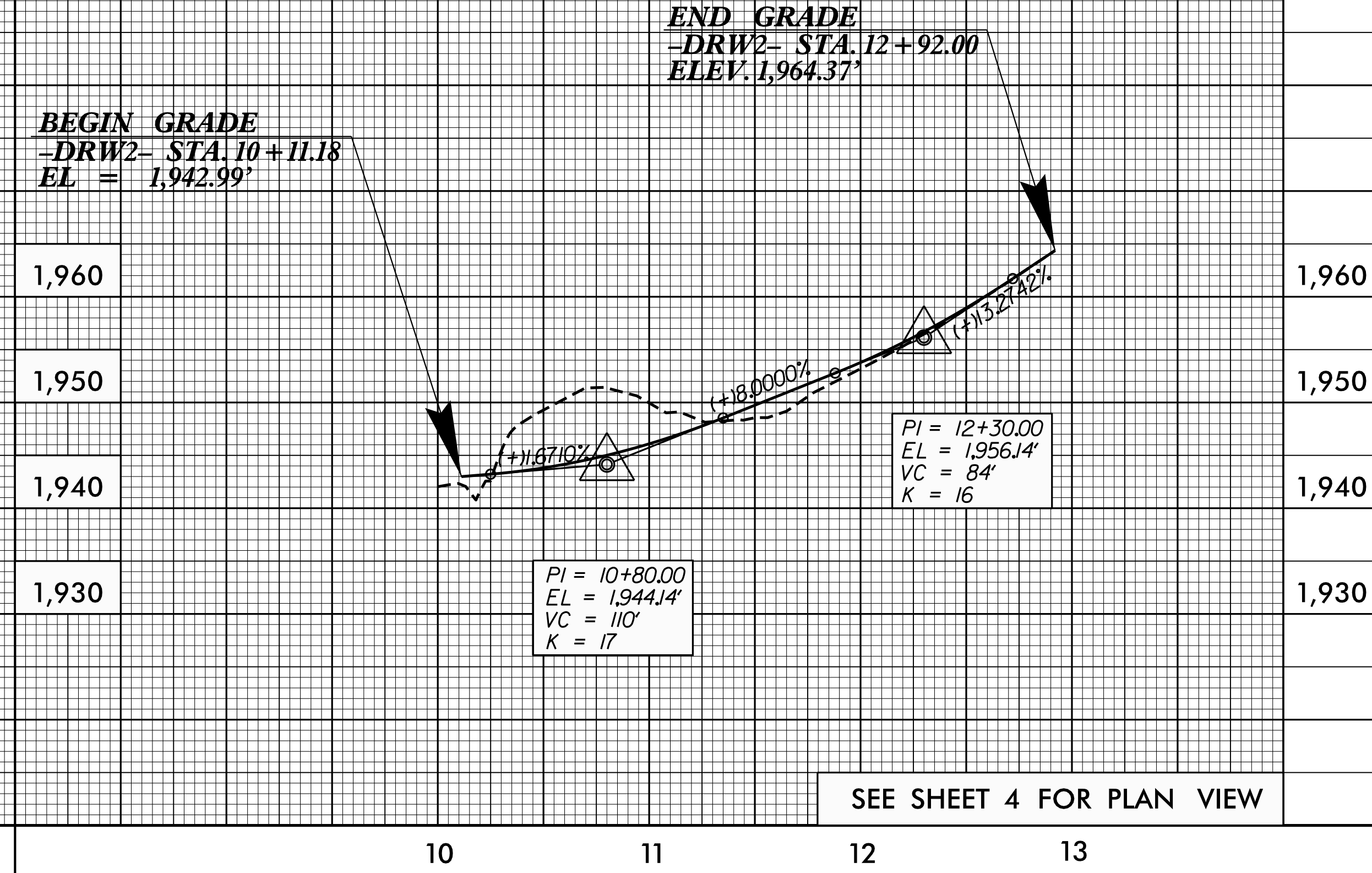
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-Y-

-DRW1-



-DRW2-



REVISIONS

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