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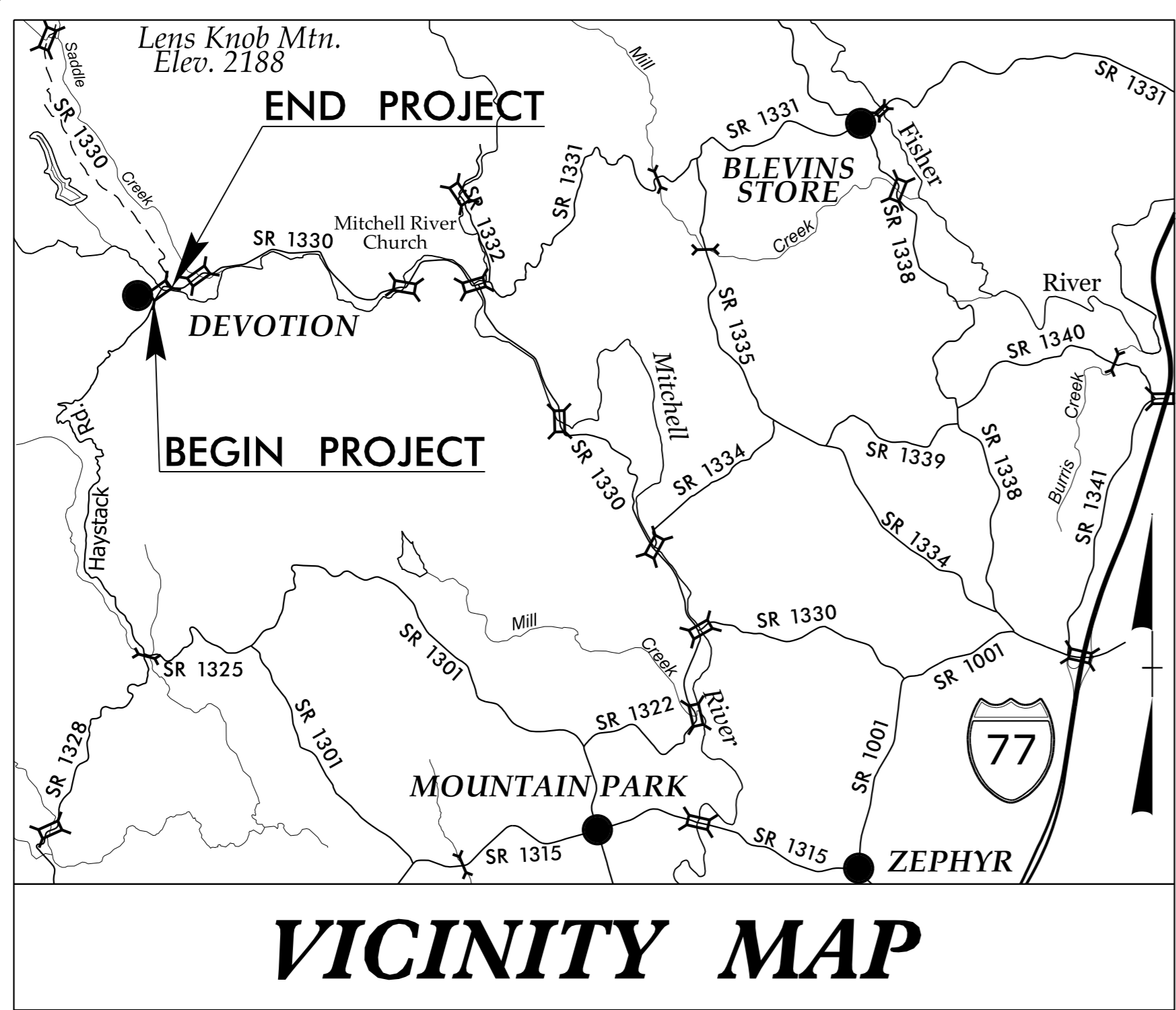
**This file or an individual page
shall not be considered a certified document.**

09/08/99

TIP PROJECT: B-5173

CONTRACT: C203668

24-NOV-2015 14:37
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\$\$\$\$\$USERNAME\$\$\$\$\$



VICINITY MAP

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

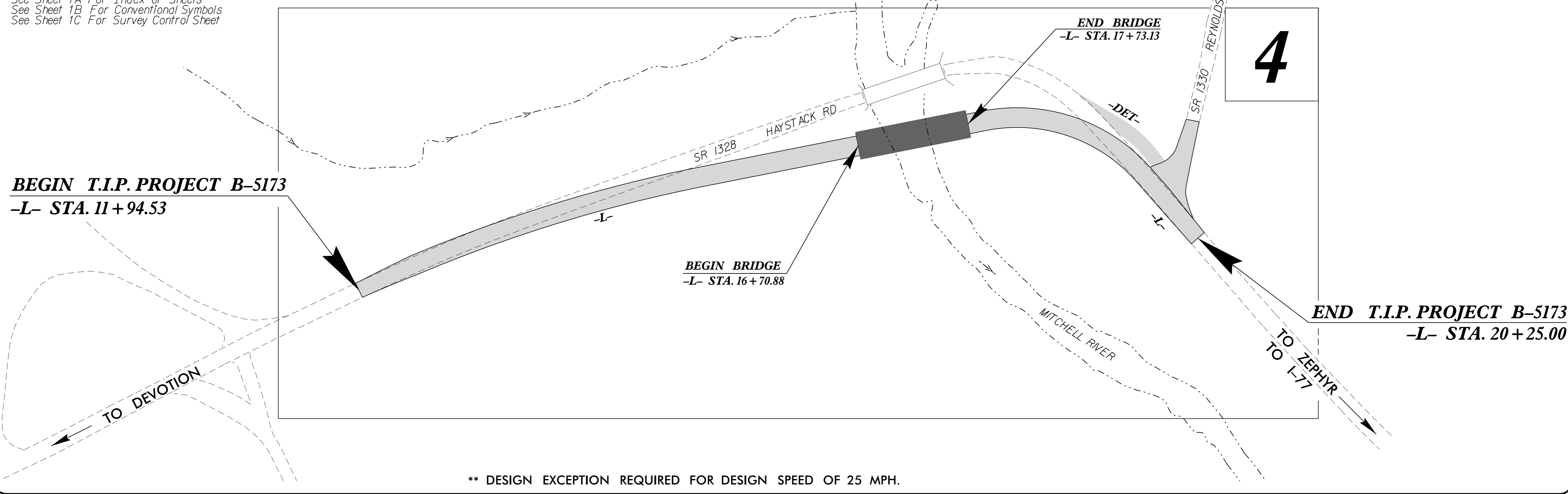
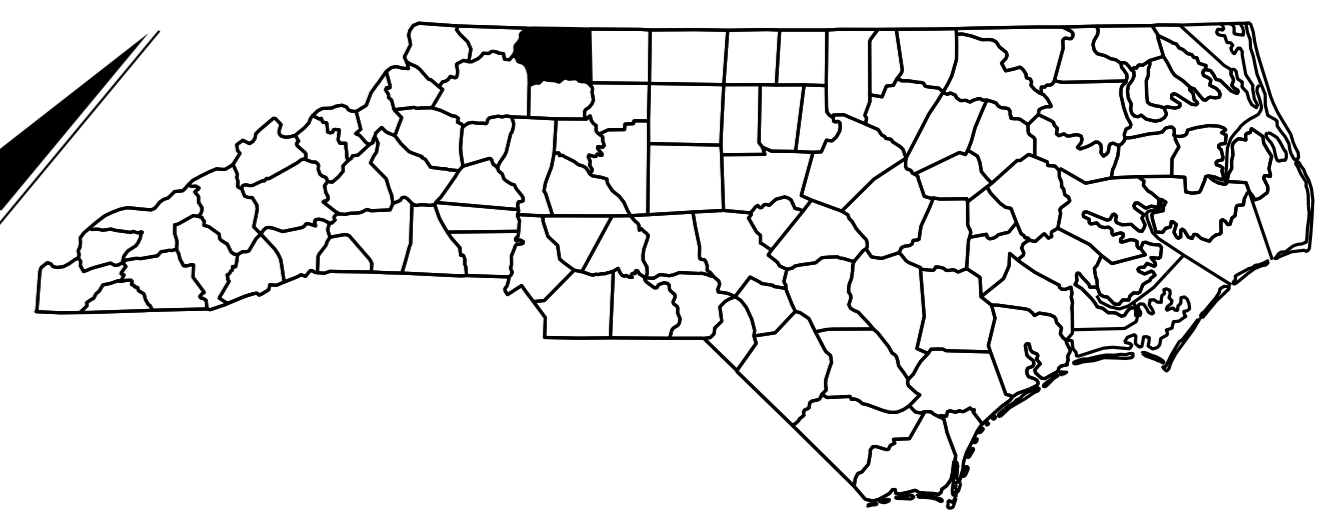
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

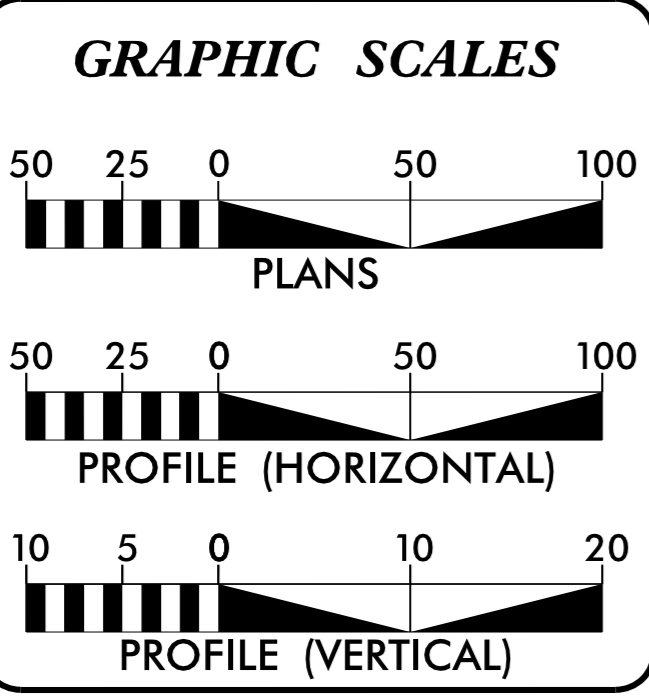
LOCATION: BRIDGE No. 39 ON SR 1328 (HAYSTACK RD) OVER MITCHELL RIVER

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5173	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42330.1.1	BRZ-1328(6)	PE	
42330.2.FD1	BRZ-1328(6)	R/W	
42330.2.FDU1	BRZ-1328(6)	UTIL	
42330.3.FD1	BRZ-1328(6)	CONST	



** DESIGN EXCEPTION REQUIRED FOR DESIGN SPEED OF 25 MPH.



DESIGN DATA

ADT 2016 =	174
ADT 2036 =	254
DHV =	10 %
D =	60 %
T =	5 % *
** V =	55 MPH
* TTST =	2% DUAL 3%
FUNC CLASS =	RURAL LOCAL
SUB REGIONAL TIER	

PROJECT LENGTH

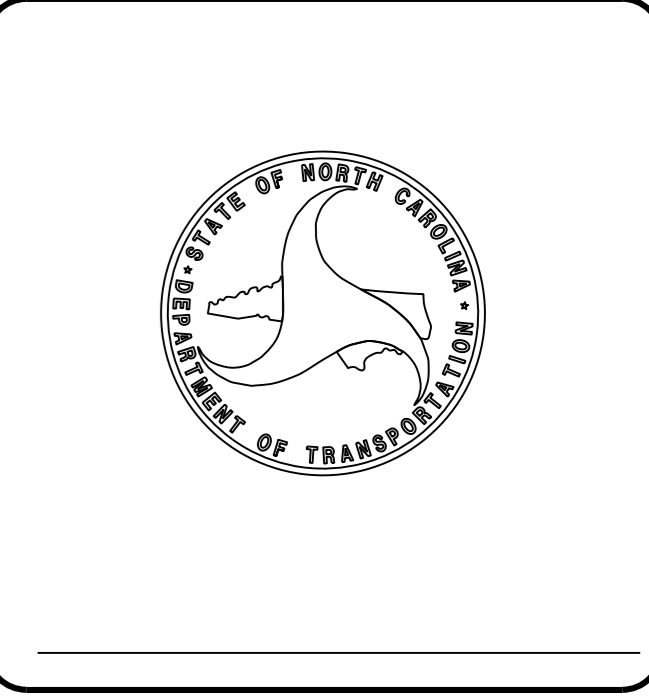
LENGTH ROADWAY T.I.P. PROJECT B-5173 =	0.138 MI
LENGTH STRUCTURE T.I.P. PROJECT B-5173 =	0.019 MI
TOTAL LENGTH OF T.I.P. PROJECT B-5173 =	0.157 MI

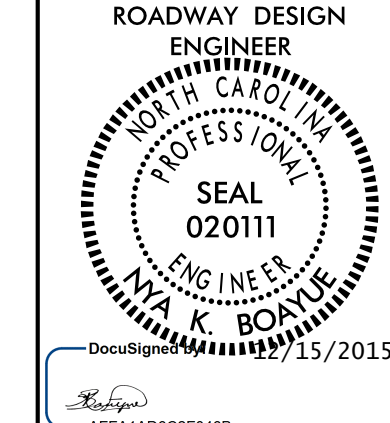
Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS	RIGHT OF WAY DATE:	JASON MOORE, PE PROJECT ENGINEER
	FEBRUARY 27, 2015	
	LETTING DATE:	NYA K. BOAYUE, PE PROJECT DESIGN ENGINEER
	FEBRUARY 16, 2016	

HYDRAULICS ENGINEER
12/15/2015
DocuSigned by:
W. Galen Cail, PE
SIGNATURE: [Signature]

ROADWAY DESIGN ENGINEER
12/15/2015
DocuSigned by:
NYA K. BOAYUE
SIGNATURE: [Signature]





SHEET NUMBER	SHEETS
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
1C	SURVEY CONTROL SHEET
1D	CENTERLINE COORDINATE LIST
2A-1	PAVEMENT SCHEDULE, TYPICAL SECTIONS, AND WEDGING DETAIL
2C-1	DETAIL OF WOVEN WIRE FENCE W/3 STRAND BARBED WIRE
2C-2	DETAIL OF STRUCTURE ANCHOR UNITS
3B	SUMMARY OF WOVEN WIRE FENCE, 72" FABRIC, PAVEMENT REMOVAL SUMMARY, SUMMARY OF EARTHWORK, DRAINAGE SUMMARY AND GUARDRAIL SUMMARY
3G	GEOTECHNICAL SUMMARIES
4	PLAN SHEET
5	DETOUR PLAN SHEET
6	PROFILE SHEET
TMP-1 THRU TMP-6	TRAFFIC MANAGEMENT PLANS
PM-1	PAVEMENT MARKING PLAN
EC-1 THRU EC-6	EROSION CONTROL PLANS
RF-1	REFORESTATION PLAN
UO-1 THRU UO-2	UTILITIES BY OTHERS PLANS
X-1	CROSS-SECTION SUMMARY SHEET
X-2 THRU X-14	CROSS-SECTIONS
S-1 THRU S-18	STRUCTURE PLANS

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

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 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.

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

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.

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.

TEMPORARY SHORING:
 SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

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 SURRY - YADKIN EMC - POWER
 SURRY TELEPHONE MEMBERSHIP CORPORATION
 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 OTHERS.

2012 ROADWAY ENGLISH STANDARD DRAWINGS
 EFF. 01-17-2012
 REV. 10-30-2012

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 Superelevation - Two Lane Pavement
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 Superelevated Curve - Method I
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
815.03	Pipe Underdrain and Blind Drain
840.00	Concrete Base Pad for Drainage Structures
840.25	Anchorage for Frames - Brick or Concrete or Precast
840.29	Frames and Narrow Slot Flat Grates
840.35	Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates
840.46	Traffic Bearing Precast Drainage Structure
840.66	Drainage Structure Steps
846.01	Concrete Curb, Gutter and Curb & Gutter
846.04	Drop Inlet Installation in Shoulder Berm Gutter
862.01	Guardrail Placement
862.02	Guardrail Installation
876.01	Rip Rap in Channels
876.02	Guide for Rip Rap at Pipe Outlets

04/16/11

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

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	----- MLB
Proposed Wetland Boundary	----- MLB
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	○ 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	○ 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	----- RW
Proposed Right of Way Line with Iron Pin and Cap Marker	----- RW ▲
Proposed Right of Way Line with Concrete or Granite RW Marker	----- RW ●
Proposed Control of Access Line with Concrete CA Marker	----- CA
Existing Control of Access	----- CA
Proposed Control of Access	----- CA
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	-----

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	⊗
U/G Power Cable Hand Hole	□
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

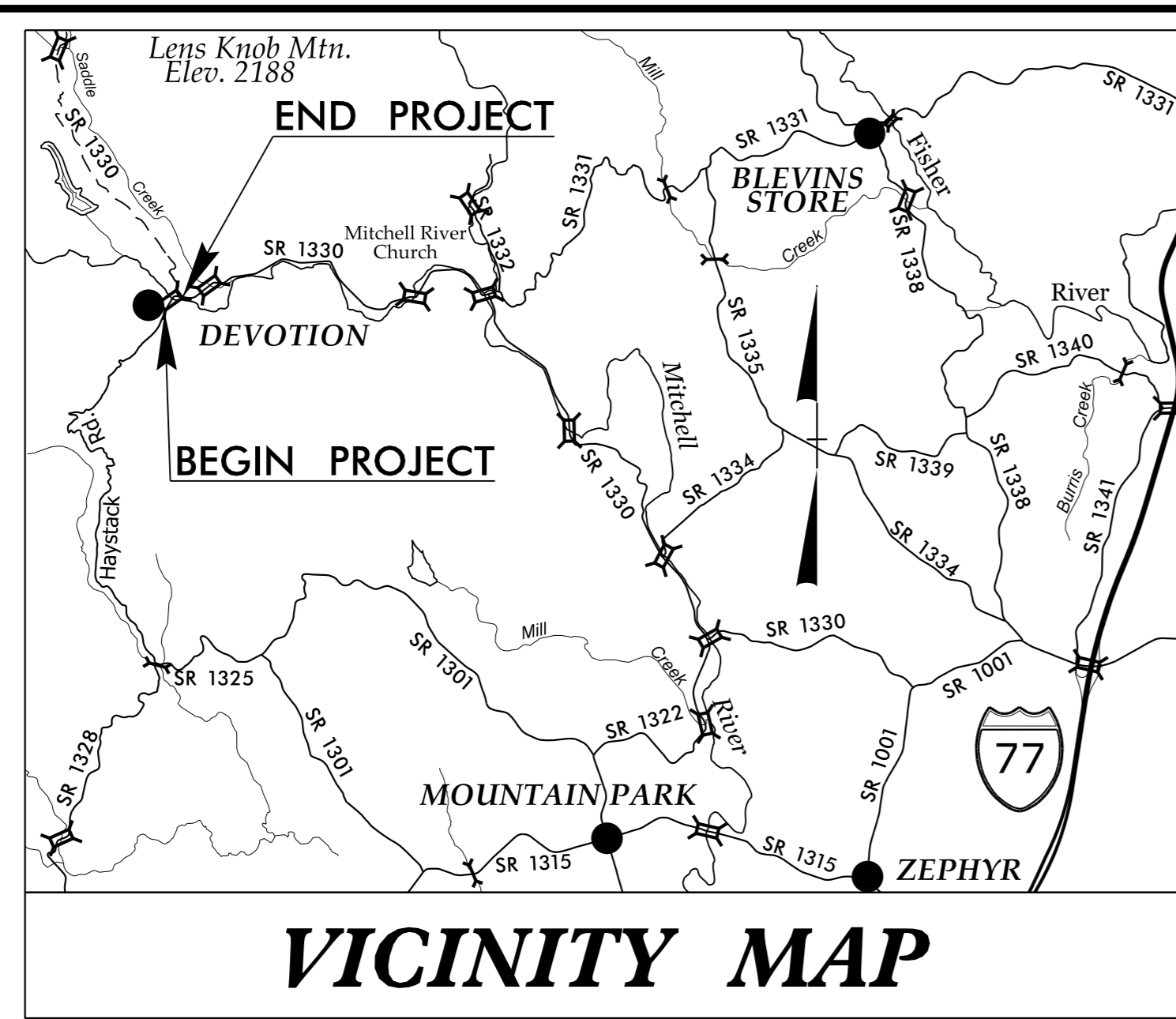
SANITARY SEWER:

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-5173



BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
BL4	(BL-4)	981747.0533	1435840.7144	1363.38		OUTSIDE PROJECT LIMITS
BL5	(BL-5)	982442.5894	1436220.7860	1355.34	17+83.59	61.83 LT
BL6	(BL-6)	982407.7715	1436692.1013	1352.19		OUTSIDE PROJECT LIMITS

.....
 BM*1 ELEVATION = 1355.13'
 N 982359. E 1436167.
 L STATION 16+85.00 50' LEFT
 DISK IN HEADWALL 145 HLZ 1969

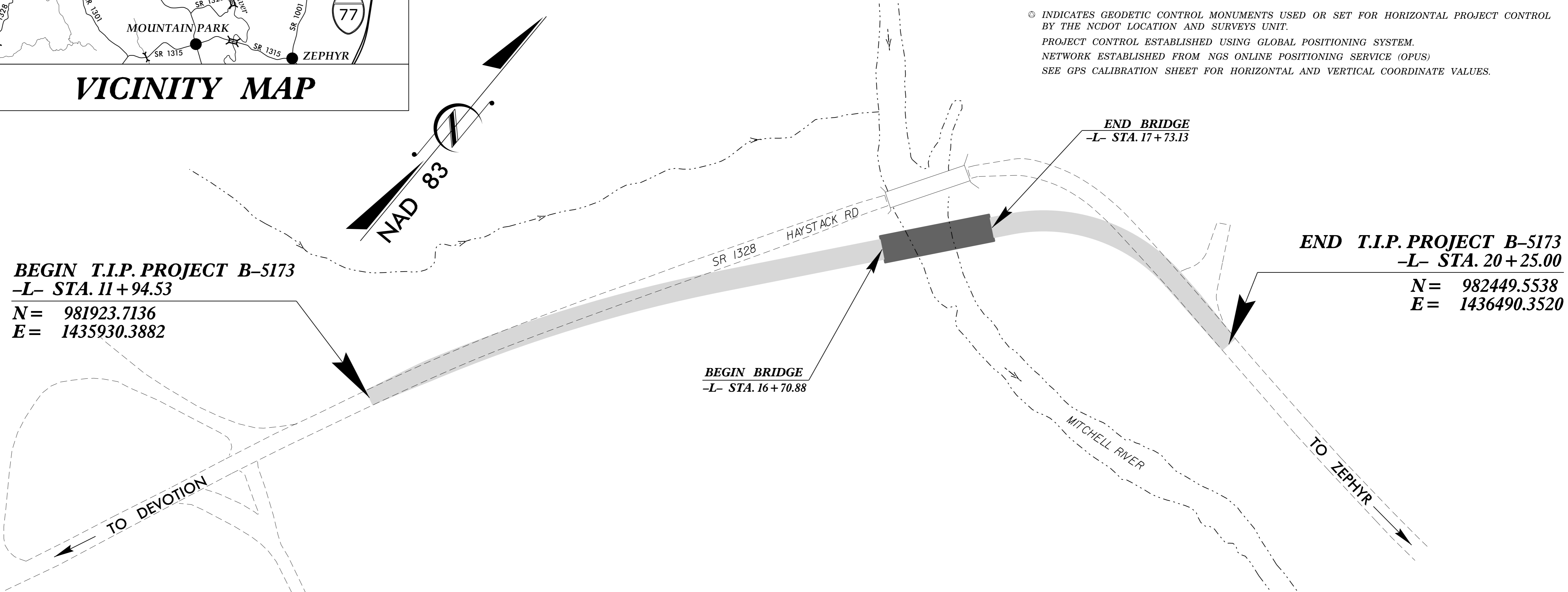
NOTES:

1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.ORG/DOH/PRECONSTRUCTHIGHWAYLOCATIONPROJECT/](http://www.ncdot.org/doh/preconstructhighwaylocationproject/)

THE FILES TO BE FOUND ARE AS FOLLOWS:
 B5173_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 GLOBAL POSITIONING SYSTEM.
 NETWORK ESTABLISHED FROM NGS ONLINE POSITIONING SERVICE (OPUS)
 SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.



BEGIN T.I.P. PROJECT B-5173
 -L- STA. 11+94.53
 N = 981923.7136
 E = 1435930.3882

BEGIN BRIDGE
 -L- STA. 16+70.88

END BRIDGE
 -L- STA. 17+73.13

END T.I.P. PROJECT B-5173
 -L- STA. 20+25.00
 N = 982449.5538
 E = 1436490.3520

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B3911-2"

WITH NAD 83 STATE PLANE GRID COORDINATES OF
 NORTHING: 983048.524(±) EASTING: 1437903.644(±)
 ELEVATION: 1331.092 (±)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99997301

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B3911-2" TO -L- STATION 11+94.53 IS
 S 60°18'56" W 2271.33'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD88

NC DOT GPS STATION B3911-1
LOCALIZED PROJECT COORDINATES
 N = 982398.7585
 E = 1437063.7887

NC DOT GPS STATION B3911-2
LOCALIZED PROJECT COORDINATES
 N = 983048.5240
 E = 1437903.6440

NOTE: DRAWING NOT TO SCALE

6/2/99
 24 NOV 2015 15:34
 RA: P:\Roadwork\B5173.LS.LC.dgn
 B5173.LS.LC.dgn

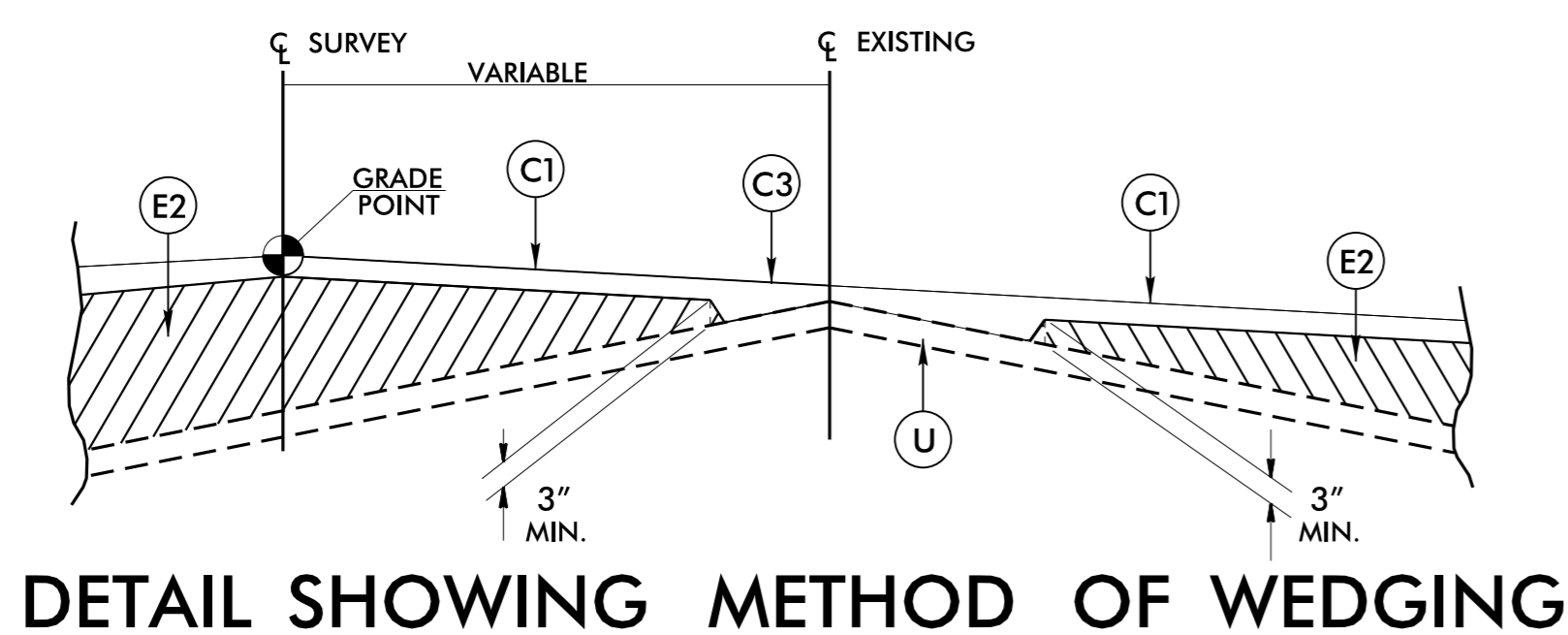
6/2/09

PAVEMENT SCHEDULE

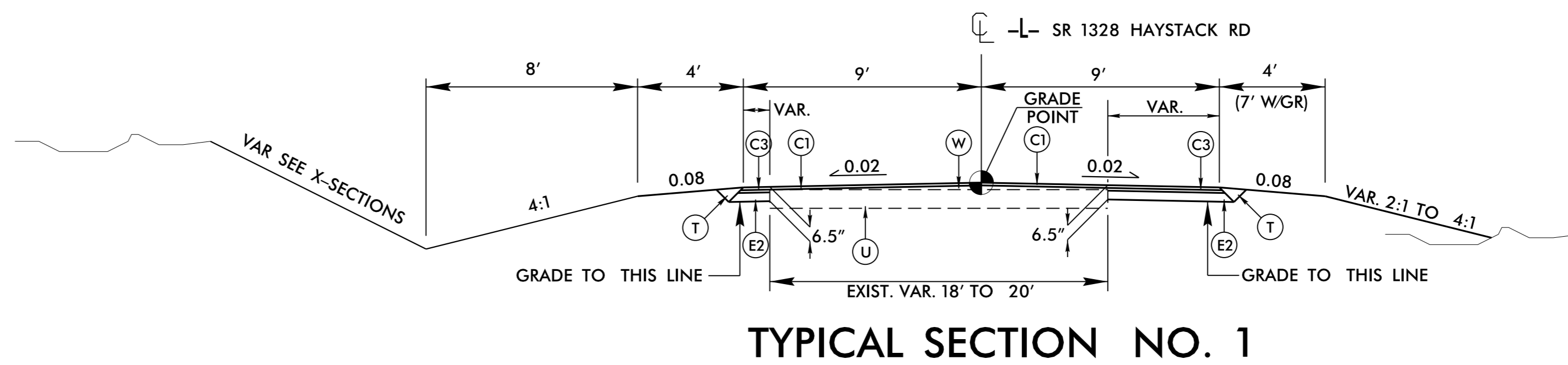
FINAL PAVEMENT DESIGN

C1	PROP. APPROX. 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137 1/2 LBS. PER SQ. YD.	E3	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 5 1/2" IN DEPTH.
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	R	CONCRETE SHOULDER BERM GUTTER.
C3	PROP. APPROX. 2 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	T	EARTH MATERIAL.
C4	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1 1/2" IN DEPTH.	U	EXISTING PAVEMENT.
E1	PROP. APPROX. 3" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.	W	WEDGING (SEE DETAIL)
E2	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.		

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



DETAIL SHOWING METHOD OF WEDGING



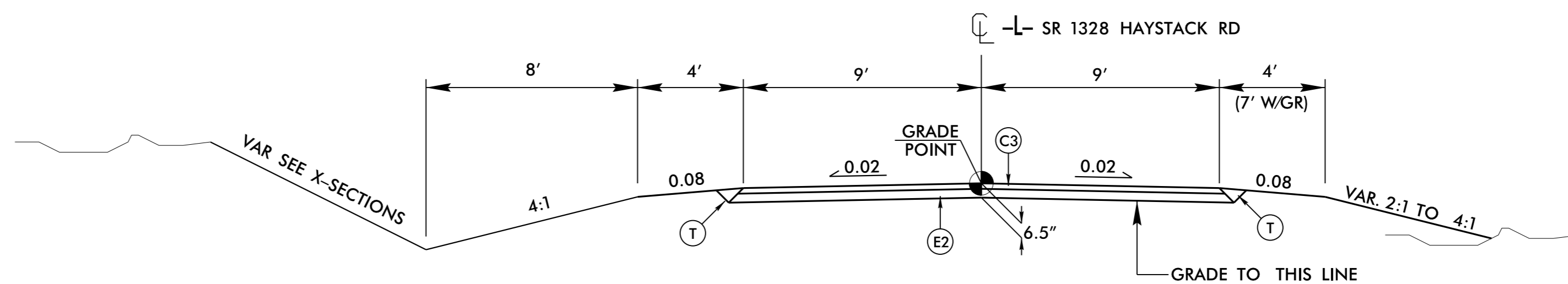
TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1

-L- STA. 11+94.53 TO 14+50.00
-L- STA. 19+37.00 TO 20+25.00

NOTE: USE DITCH DETAIL A IN CONJUNCTION WITH

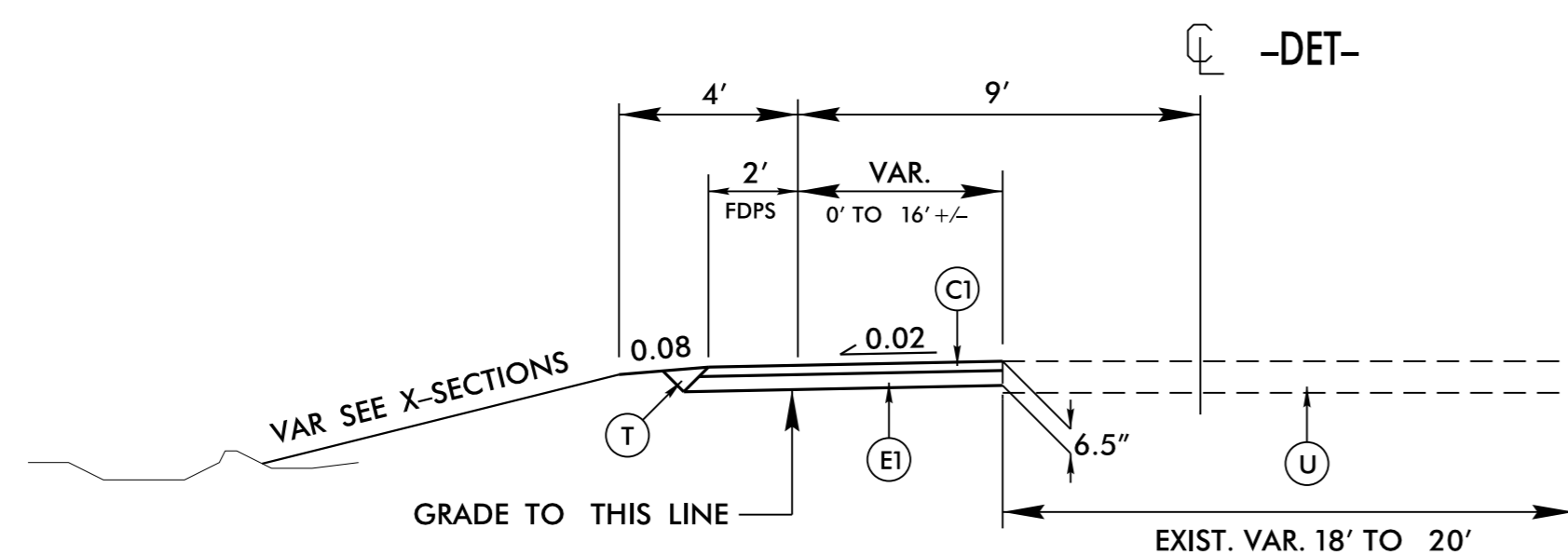
T.S. # 1 -L- STA. 12+00.00 TO 14+00.00 (RIGHT)
T.S. # 2 -L- STA. 14+00.00 TO 16+00.00 (RIGHT)
T.S. # 2 -L- STA. 19+00.00 TO 19+41.00 (LEFT)



TYPICAL SECTION NO. 2

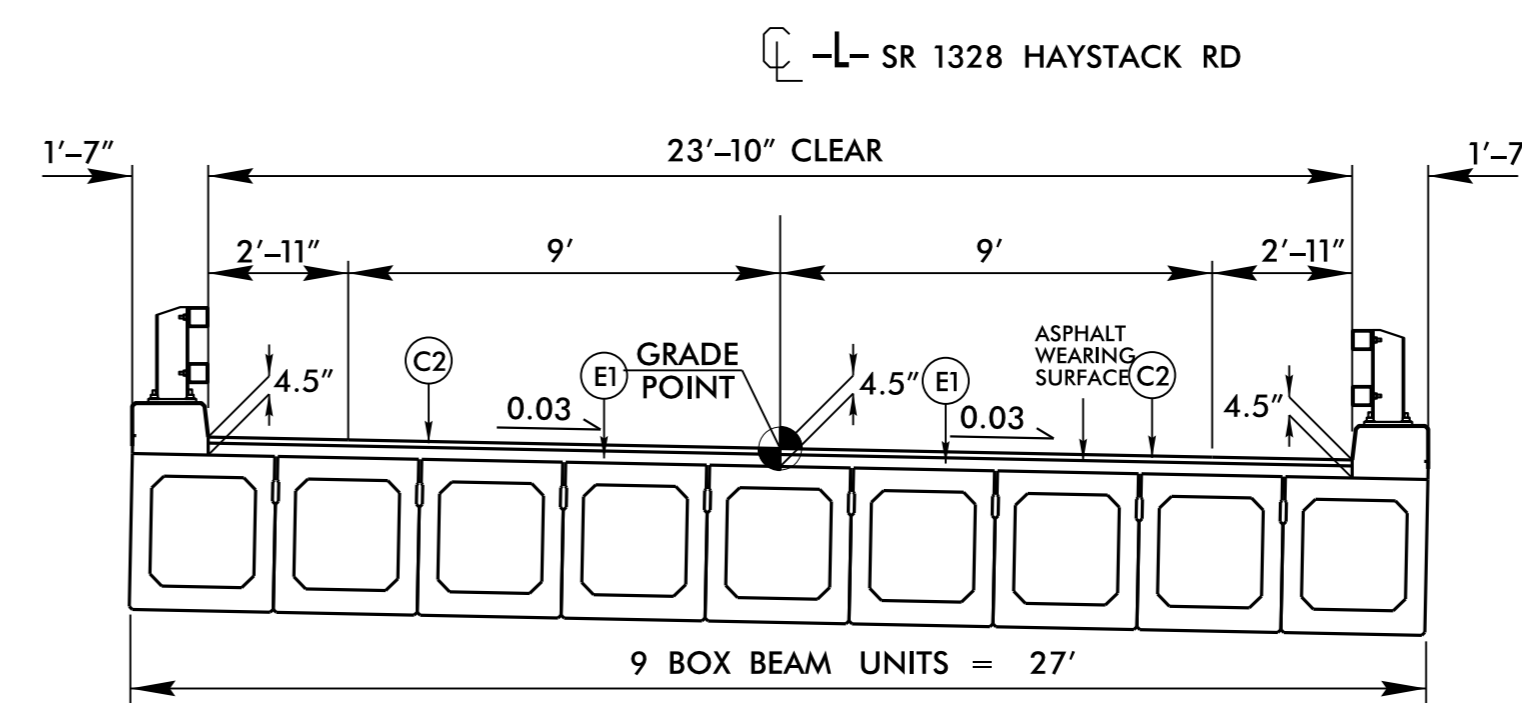
USE TYPICAL SECTION NO. 2

-L- STA. 14+50.00 TO 16+70.88 (BRIDGE)
17+73.13 (BRIDGE) TO -L- STA. 19+37.00



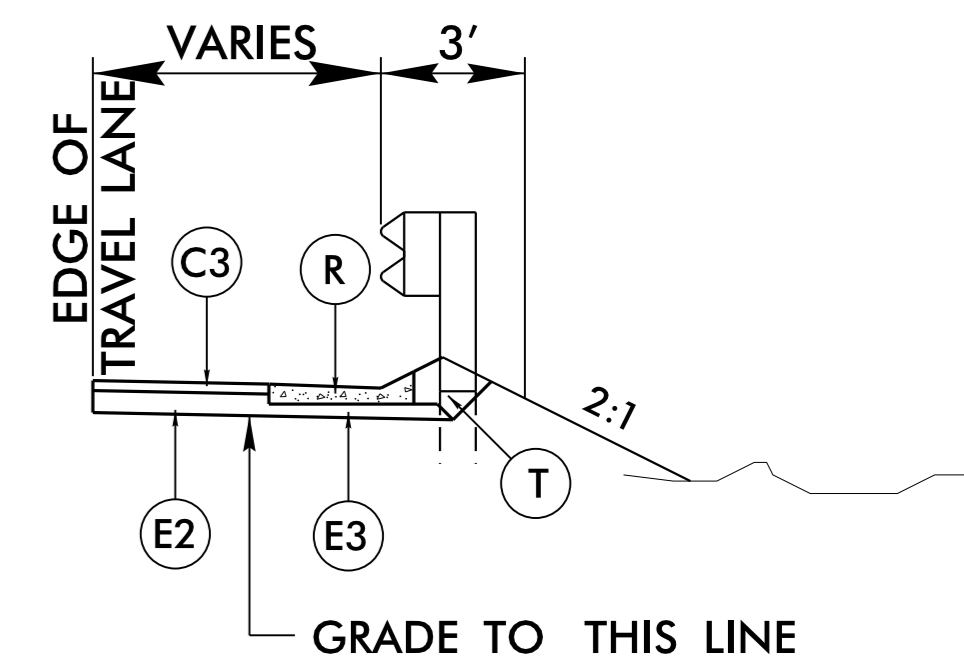
TYPICAL SECTION NO. 3

USE TYPICAL SECTION NO. 3
-DET- STA. 18+30.14 TO 19+47.71



TYPICAL SECTION ON STRUCTURE

BEG. BRIDGE -L- STA. 16+70.88 TO END BRIDGE -L- STA. 17+73.13



TYPICAL SECTION NO. 2B

IN CONJUNCTION WITH T.S. # 2

USE TYPICAL SECTION NO. 2B

-L- STA. 17+84.13 TO 17+95.00 RT.

PROJECT REFERENCE NO. B-5173	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER NORTH CAROLINA SEAL 020111 K. BOYKUS	PAVEMENT DESIGN ENGINEER NORTH CAROLINA SEAL 039819 T. HOWARD
DocuSign 12/15/2015	DocuSign 12/17/2015

15-DEC-2015 09:48 B-5173-RdJ-tyj.pdg

COMPUTED BY: SCC DATE: 11-12-15
 CHECKED BY: SCC DATE: 11-12-15

PROJECT NO.
 B-5173

SHEET NO.
 3G

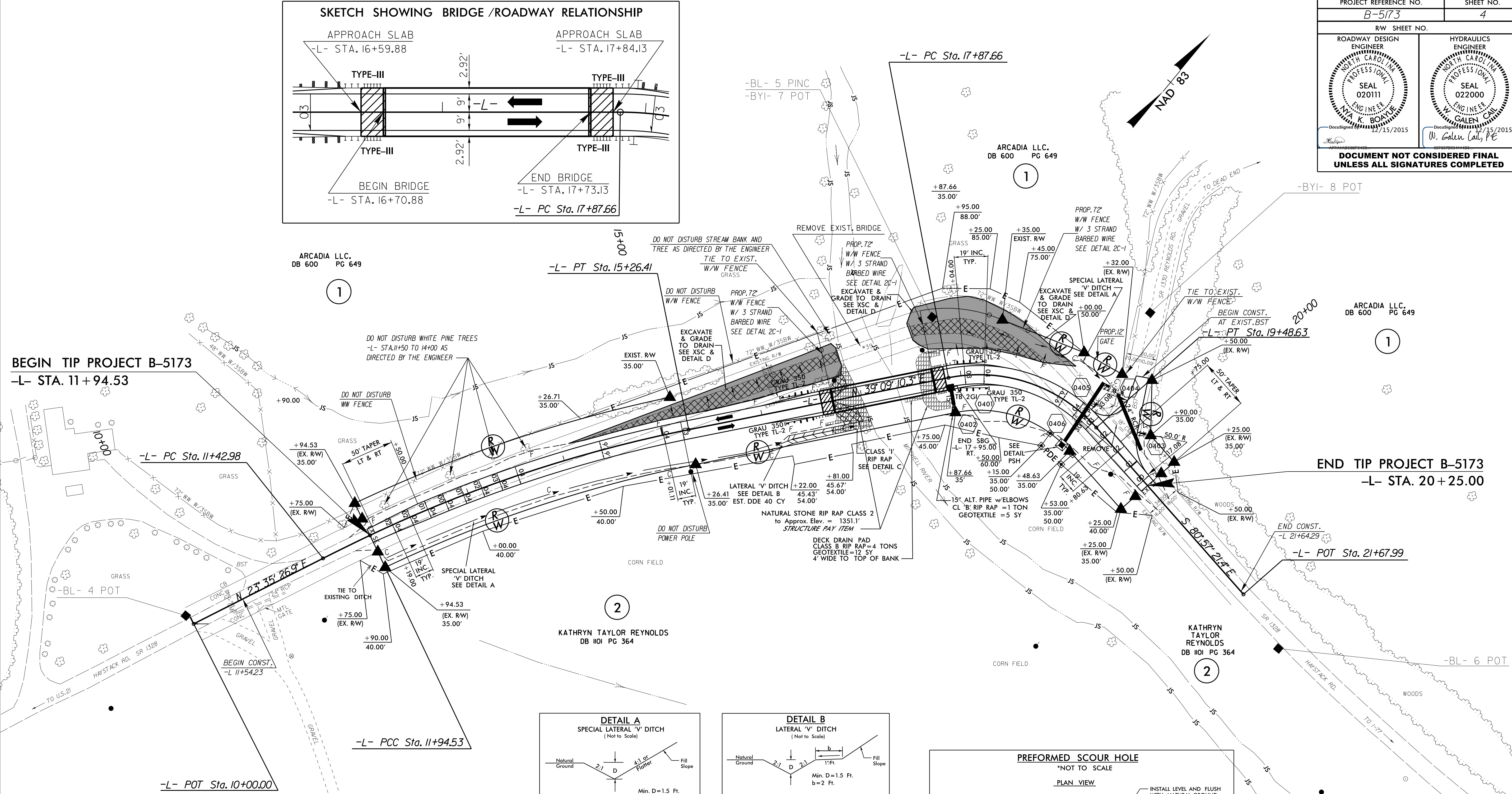
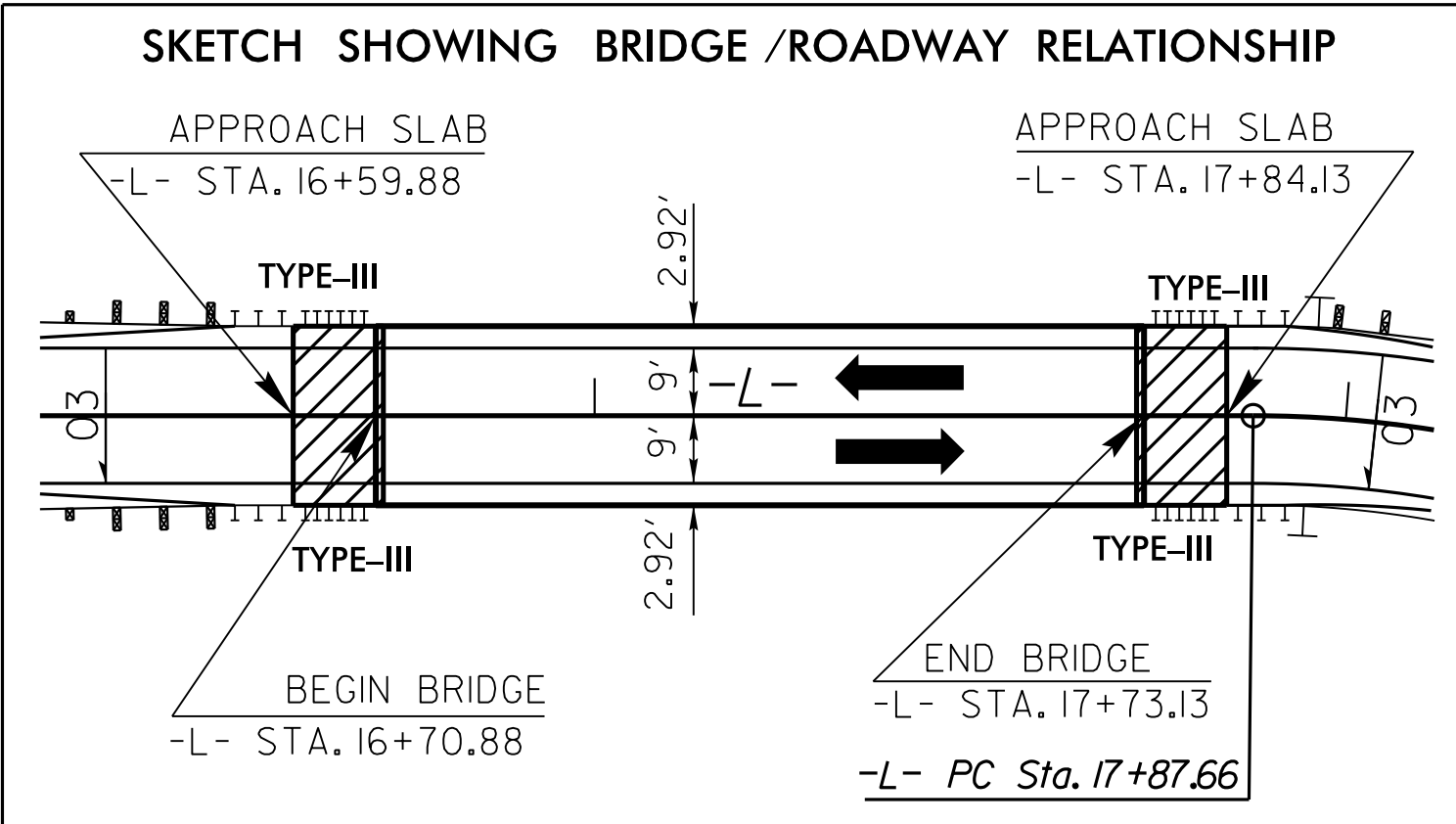
**STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS**

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
			ASU		50		150		
			TOTAL CY/TONS/SY:		50		150*		

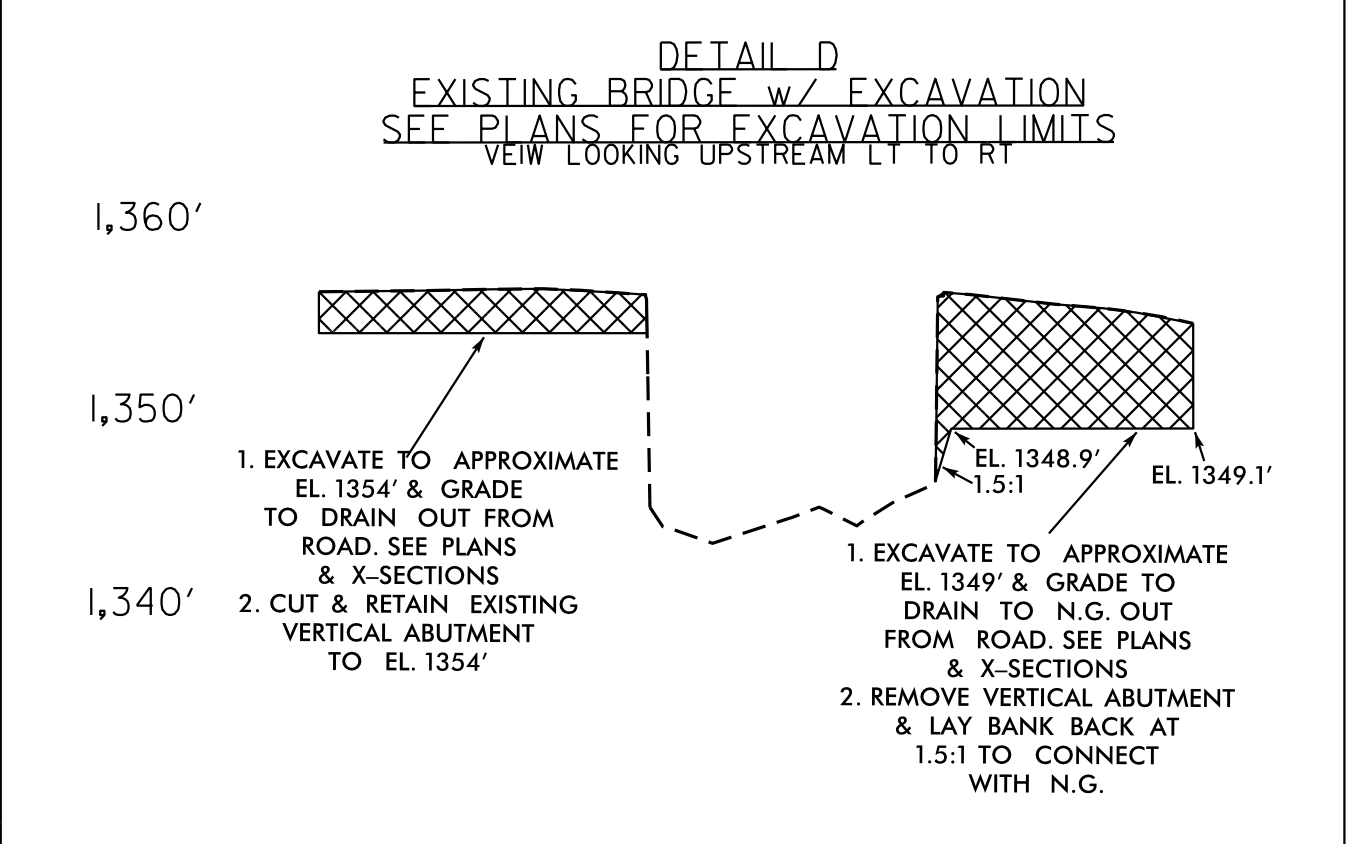
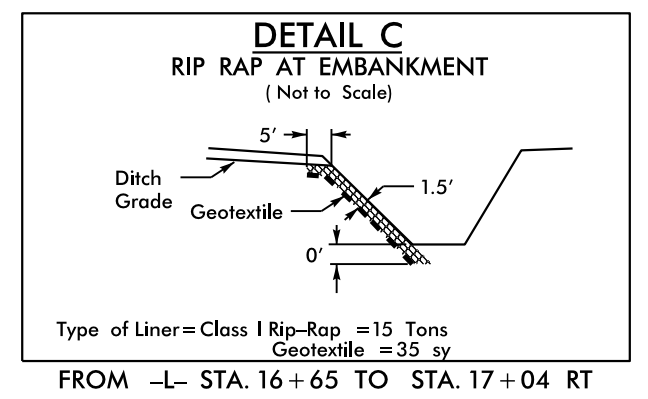
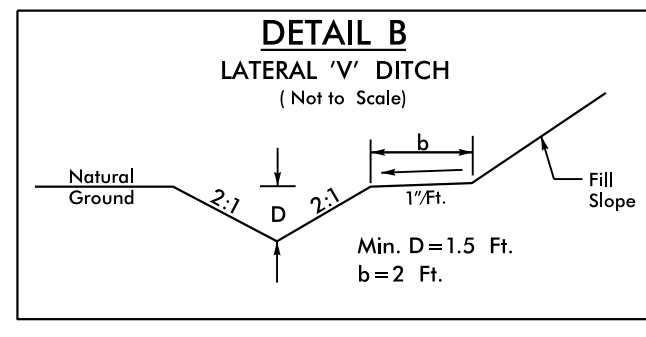
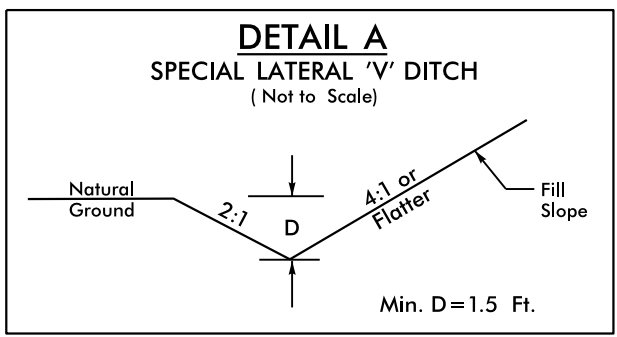
ASU = Aggregate Subgrade, AST = Aggregate Stabilization

*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.

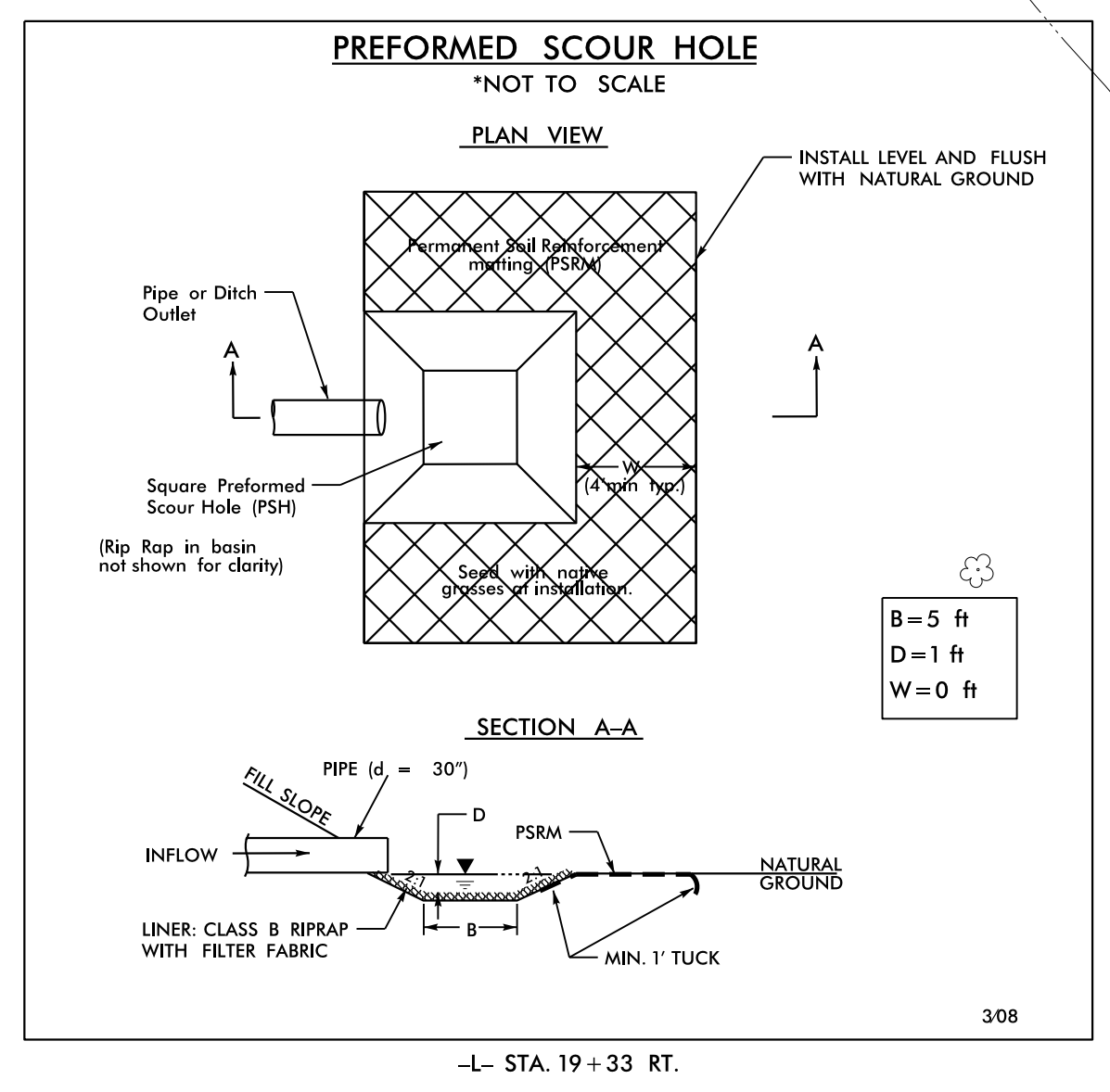


BEGIN TIP PROJECT B-5173
-L- STA. 11+94.53

END TIP PROJECT B-5173
-L- STA. 20+25.00



-L-		
PI Sta 11+68.76 Δ = 1° 28' 35.8" (RT) D = 2° 51' 53.2" L = 51.54' T = 25.77' R = 2,000.00' V _d = 50 MPH	PI Sta 13+61.31 Δ = 14° 05' 07.6" (RT) D = 4° 14' 38.9" L = 331.88' T = 166.78' R = 1,350.00' V _d = 50 MPH	PI Sta 18+76.37 Δ = 59° 53' 28.3" (RT) D = 37° 12' 18.2" L = 160.98' T = 88.72' R = 154.00' V _d = 25 MPH



HYDRAULICS PROPOSED GRADING LIMITS

PAVEMENT REMOVAL

SEE SHEET 6 FOR PROFILE
SEE SHEETS S-1 TO S-18 FOR STRUCTURE PLANS

REVISIONS

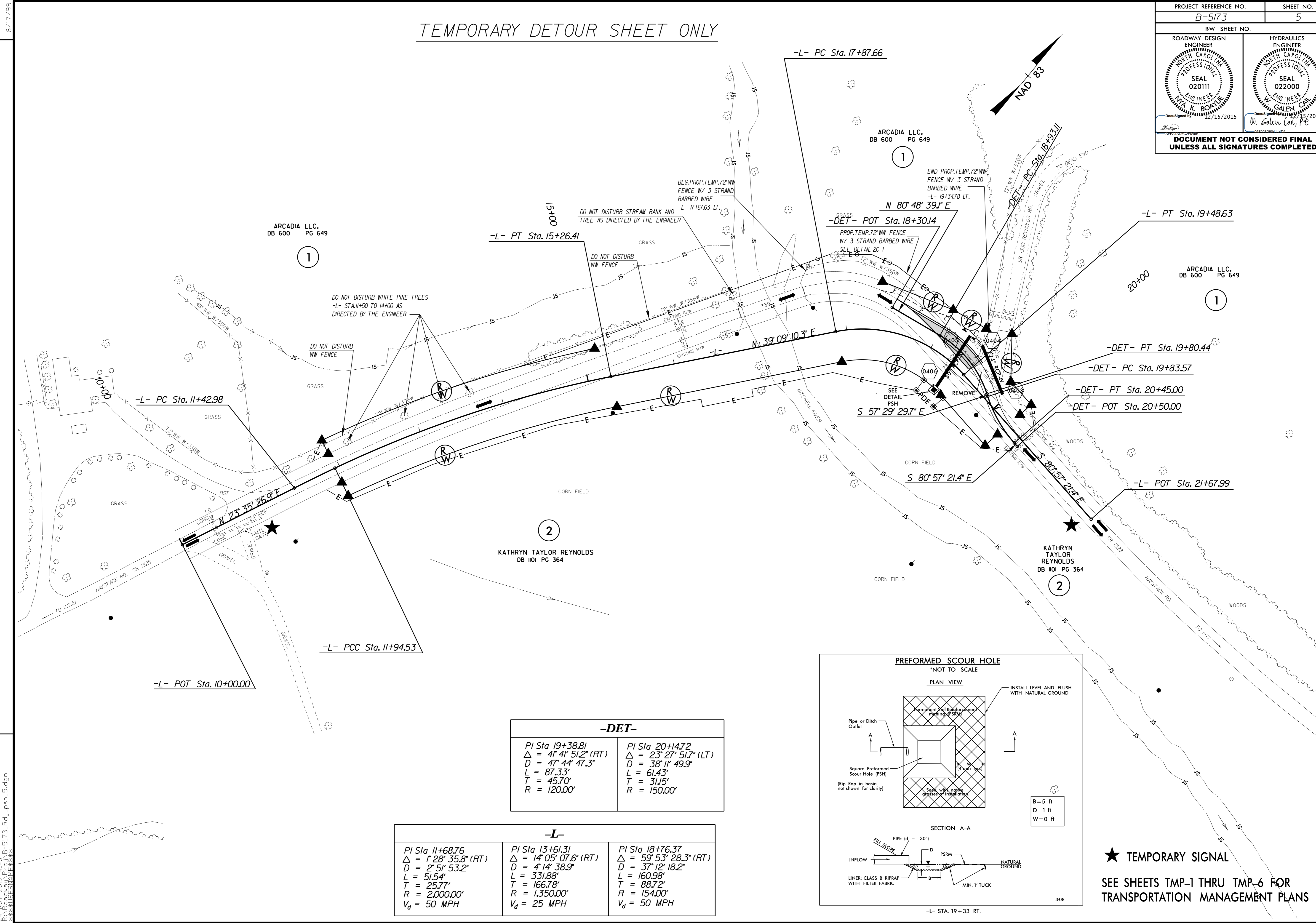
8/17/99

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TEMPORARY DETOUR SHEET ONLY

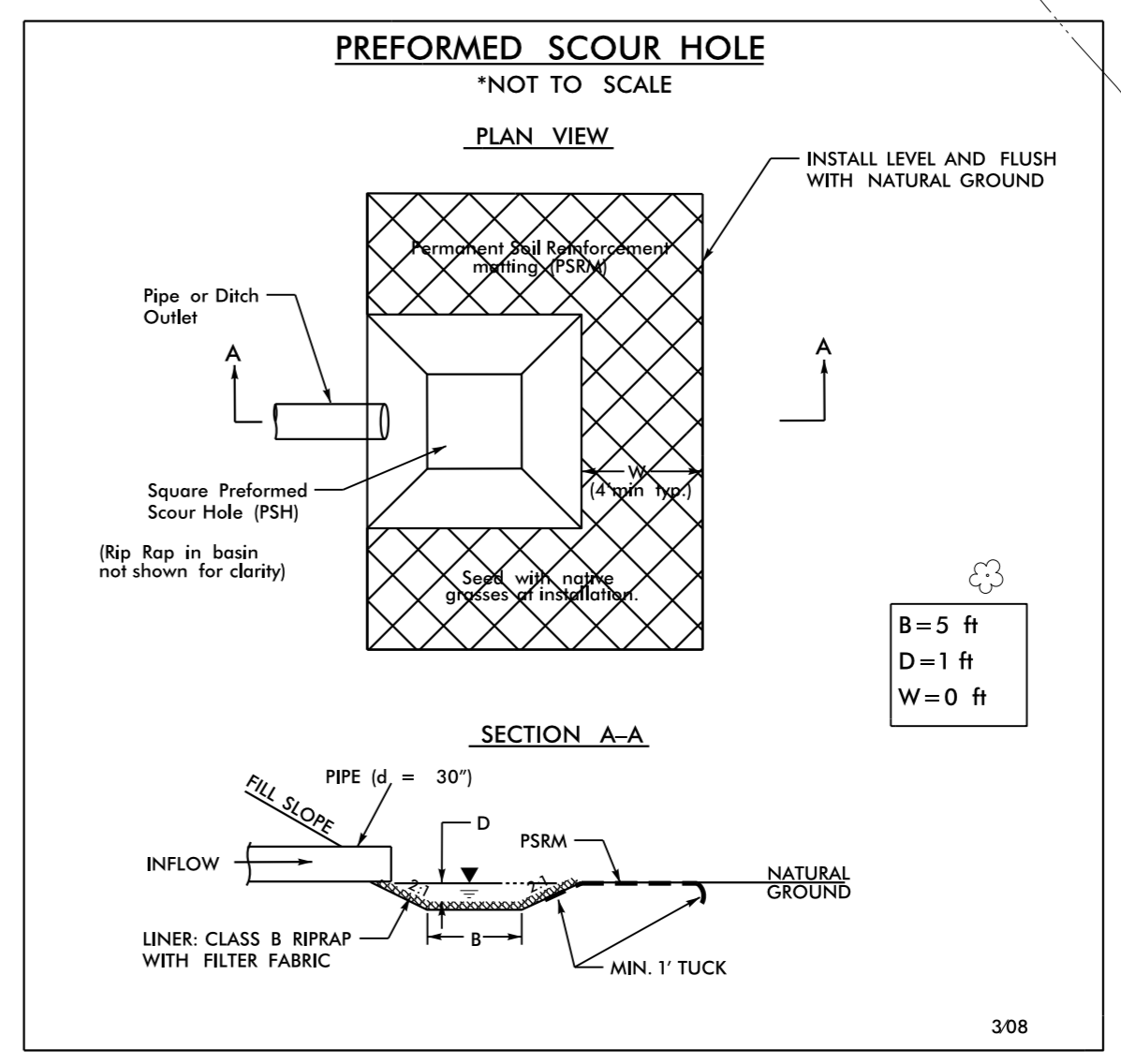
PROJECT REFERENCE NO. B-5173	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER KATHRYN TAYLOR REYNOLDS SEAL 020111 NORTH CAROLINA PROFESSIONAL ENGINEER	HYDRAULICS ENGINEER W. GALEN SEAL 022000 NORTH CAROLINA PROFESSIONAL ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS



-DET-	
PI Sta 19+38.81 Δ = 41° 41' 51.2" (RT) D = 47° 44' 47.3" L = 87.33' T = 45.70' R = 120.00'	PI Sta 20+14.72 Δ = 23° 27' 51.7" (LT) D = 38° 11' 49.9" L = 61.43' T = 31.15' R = 150.00'

-L-		
PI Sta 11+68.76 Δ = 1° 28' 35.8" (RT) D = 2° 51' 53.2" L = 51.54' T = 25.77' R = 2,000.00' V _d = 50 MPH	PI Sta 13+61.31 Δ = 14° 05' 07.6" (RT) D = 4° 14' 38.9" L = 331.88' T = 166.78' R = 1,350.00' V _d = 25 MPH	PI Sta 18+76.37 Δ = 59° 53' 28.3" (RT) D = 37° 12' 18.2" L = 160.98' T = 88.72' R = 154.00' V _d = 50 MPH



★ TEMPORARY SIGNAL

SEE SHEETS TMP-1 THRU TMP-6 FOR TRANSPORTATION MANAGEMENT PLANS

8/17/99

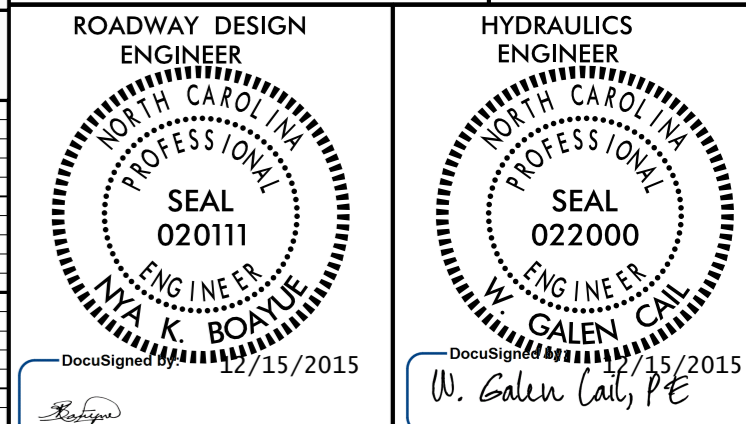
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-L- SR 1328 HAYSTACK RD.

***DESIGN EXCEPTION REQUIRED FOR VERTICAL CURVE K-VALUES AND ASSOCIATED SSD.**

PROJECT REFERENCE NO. **B-5173** SHEET NO. **6**

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

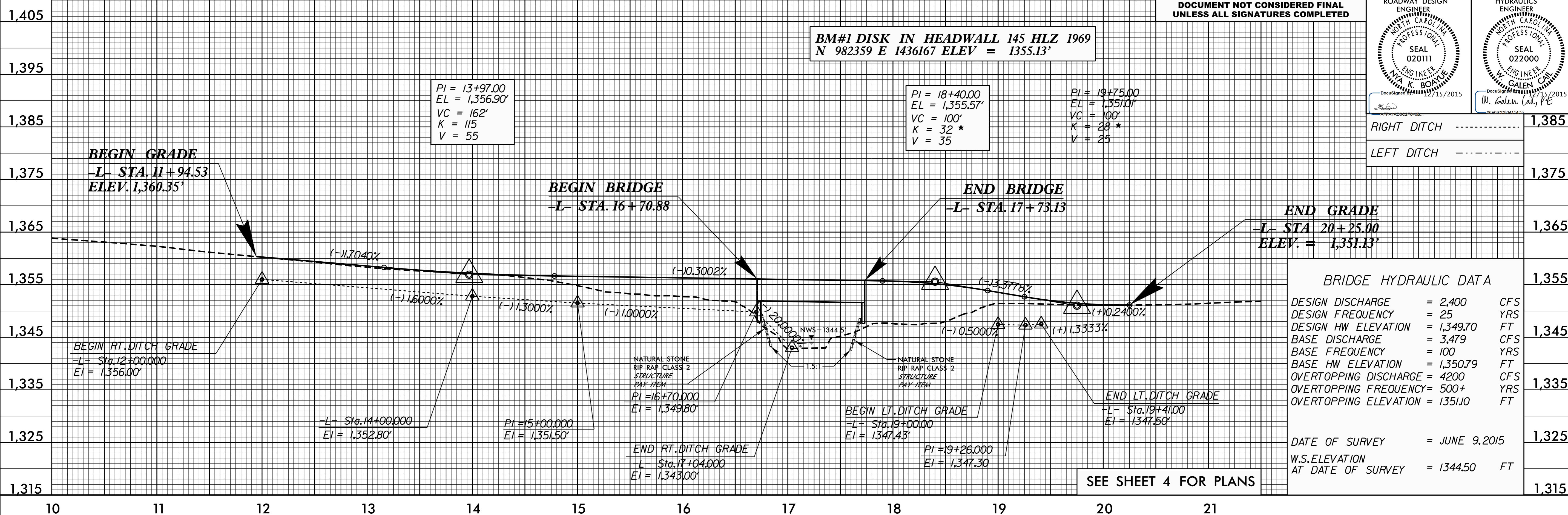


**BM#1 DISK IN HEADWALL 145 HLZ 1969
N 982359 E 1436167 ELEV = 1355.13'**

PI = 13+97.00
EL = 1,356.90'
VC = 162'
K = 115
V = 55

PI = 18+40.00
EL = 1,355.57'
VC = 100'
K = 32 *
V = 35

PI = 19+75.00
EL = 1,351.01'
VC = 100'
K = 28 *
V = 25



5/28/99

30-NOV-2015 12:19 \\B-5173-Rd1-pf1.6.dgn