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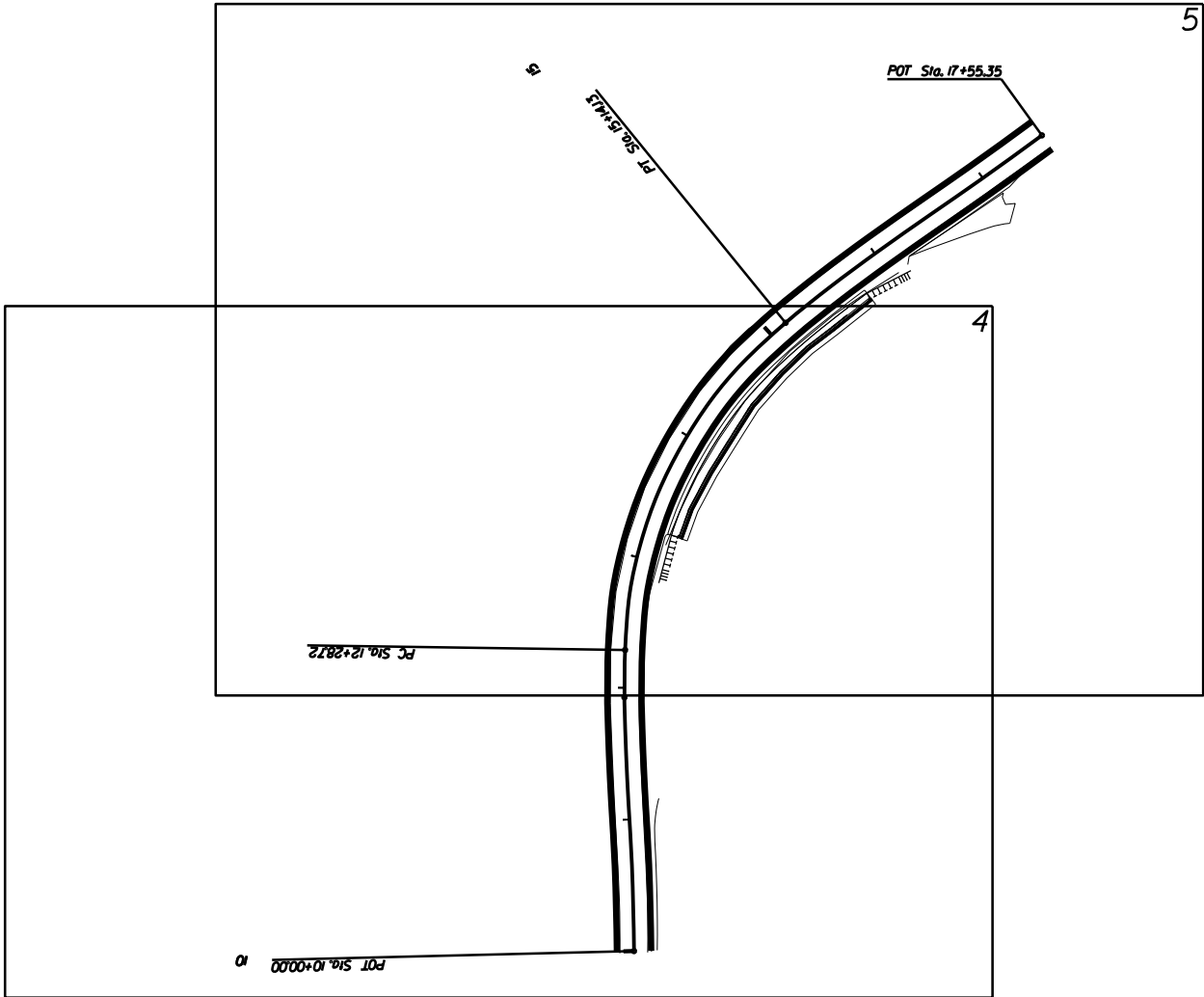
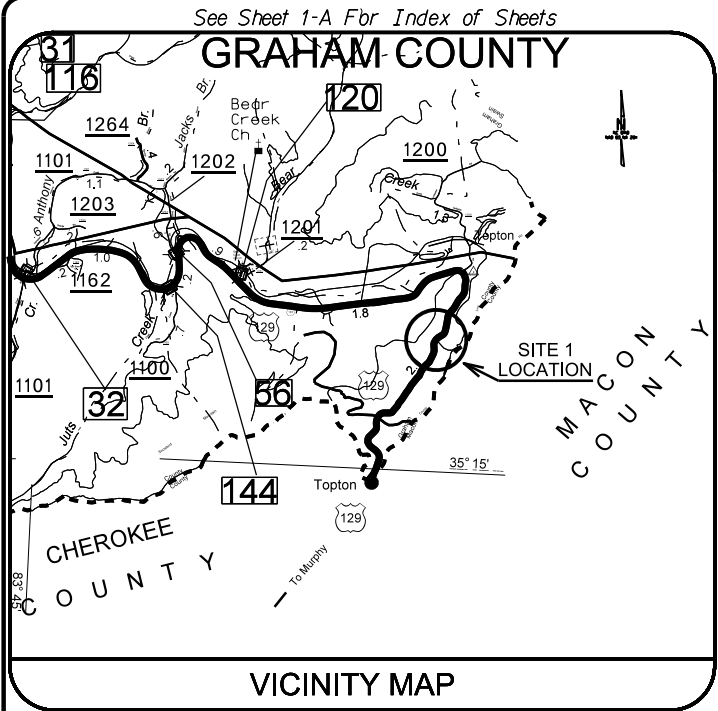
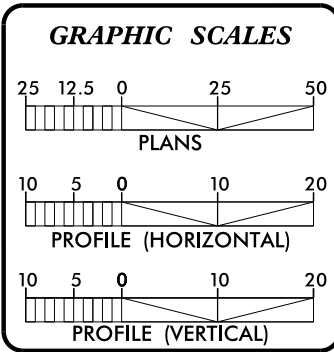
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S:\DIS+3\Graham\DN00615_NCI29_Wall Fail Near Tipton Working\ dgn\NEW YET AGAIN\New folder\129 5TH TRY_Rdy-dsn.dgn 29-NOV-2017 09:52 jechastain AT DIV14-271129

09/08/99

CONTRACT: DN00615

WBS ELEMENT: 41665.10B



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

GRAHAM COUNTY

LOCATION: ALONG US HWY 129 1.4 MILES EAST OF INTERSECTION WITH US HWY 1974

TYPE OF WORK: RETAINING WALL, GRADING, DRAINAGE AND PAVING

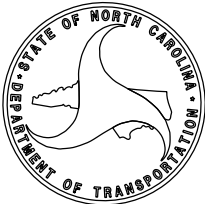
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	WBS: 41665.10B	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

Prepared In the Office of:

DIVISION OF HIGHWAYS

191 Robbinsville Rd., Andrews NC, 28901

2012 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE: ???	ANDY RUSSELL, P.E. PROJECT ENGINEER
LETTING DATE: ???	ALAN R BROWN PROJECT DESIGN ENGINEER



PROJECT LENGTH

0.14 MILES

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

INDEX OF SHEETS

1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES AND LIST OF STANDARDS
1B	CONVENTIONAL SYMBOLS
1C	SUMMARY OF EARTHWORK, GUARDRAIL, DRAINAGE AND GUTTER
2	TYPICAL SECTIONS
4-5	PLAN SHEETS
6	SURVEY CONTROL SHEET
EC1-EC5	EROSION CONTROL PLANS
TMP1-TMP4	TEMPORARY DETOUR SHEETS
PM1-PM3	PAVEMENT MARKING PLANS
X1-X18	CROSS SECTIONS
P1	PROFILE SHEET
W1-W8	RETAINING WALL DETAILS

GENERAL NOTES

GENERAL NOTES:	2018 SPECIFICATIONS EFFECTIVE: 01-16-2018
1	CARE SHALL BE TAKEN TO PREVENT DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO THESE UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
2	THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY.

LIST OF ROADWAY STANDARDS

2018 ROADWAY 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 16, 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.	
STD. NO.	TITLE
DIVISION 2 - EARTHWORK	
225.02	Guide for Grading Subgrade
225.04	Method of Obtaining Superelevation
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction
DIVISION 7 - CONCRETE PAVEMENTS AND SHOULDERS	
700.05	Tying Proposed Pavement to Existing Pavement
DIVISION 8 - INCIDENTALS	
840.17	Concrete Drop Inlet - 12" thru 72" Pipe
840.22	Frames and Wide Slot Sag Grates
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
862.03	Structure Anchor Units
876.02	Guide for Rip Rap at Pipe Outlets
DIVISION 11 - WORK ZONE TRAFFIC CONTROL	
1101.01	Detail Drawing for Two Way Divided Work Zone Warning Signs
1101.02	Temporary Lane Closures
1101.04	Temporary Shoulder Closures
1101.11	Traffic Control Design Tables
1110.01	Stationary Work Zone Signs
1130.01	Drum
1145.01	Barricades - Type III
1160.01	Temporary Crash Cushion - Reflective End Treatment
1145.01	Barricades - Type III
DIVISION 12 - PAVEMENT MARKINGS, MARKERS AND DELINEATION	
1205.01	Line Types and Offsets
1250.01	Pavement Marking Spacing
1253.01	Snowplowable Raised Pavement Markers
1261.01	Guardrail and Barrier Delineator Spacing
1261.02	Guardrail and Barrier Delineator Types
DIVISION 16 - EROSION CONTROL AND ROADSIDE DEVELOPEMENT	
1605.01	Temporary Silt Fence
1606.01	Special Sediment Control Fence
1632.03	Rock Inlet Sediment Trap Type C
1631.01	Matting Installation
1640.01	Coir Fiber Baffle

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	
County Line	
Township Line	
City Line	
Reservation Line	
Property Line	
Existing Iron Pin	
Property Corner	
Property Monument	
Parcel/Sequence Number	
Existing Fence Line	
Proposed Woven Wire Fence	
Proposed Chain Link Fence	
Proposed Barbed Wire Fence	
Existing Wetland Boundary	
Proposed Wetland Boundary	
Existing Endangered Animal Boundary	
Existing Endangered Plant Boundary	
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	
Small Mine	
Foundation	
Area Outline	
Cemetery	
Building	
School	
Church	
Dam	

HYDROLOGY:

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

RAILROADS:

Standard Gauge	
RR Signal Milepost	
Switch	
RR Abandoned	
RR Dismantled	

RIGHT OF WAY:

Baseline Control Point	
Existing Right of Way Marker	
Existing Right of Way Line	
Proposed Right of Way Line	
Proposed Right of Way Line with Iron Pin and Cap Marker	
Proposed Right of Way Line with Concrete or Granite R/W Marker	
Proposed Control of Access Line with Concrete C/A Marker	
Existing Control of Access	
Proposed Control of Access	
Existing Easement Line	
Proposed Temporary Construction Easement	
Proposed Temporary Drainage Easement	
Proposed Permanent Drainage Easement	
Proposed Permanent Drainage / Utility Easement	
Proposed Permanent Utility Easement	
Proposed Temporary Utility Easement	
Proposed Aerial Utility Easement	
Proposed Permanent Easement with Iron Pin and Cap Marker	

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	
Existing Curb	
Proposed Slope Stakes Cut	
Proposed Slope Stakes Fill	
Proposed Curb Ramp	
Existing Metal Guardrail	
Proposed Guardrail	
Existing Cable Guiderail	
Proposed Cable Guiderail	
Equality Symbol	
Pavement Removal	

VEGETATION:

Single Tree	
Single Shrub	
Hedge	
Woods Line	

Orchard	
Vineyard	

EXISTING STRUCTURES:

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

UTILITIES:

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

TELEPHONE:

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

WATER:

Water Manhole	
Water Meter	
Water Valve	
Water Hydrant	
Recorded U/G Water Line	
Designated U/G Water Line (S.U.E.*)	
Above Ground Water Line	

TV:

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

GAS:

Gas Valve	
Gas Meter	
Recorded U/G Gas Line	
Designated U/G Gas Line (S.U.E.*)	
Above Ground Gas Line	

SANITARY SEWER:

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

MISCELLANEOUS:

Utility Pole	
Utility Pole with Base	
Utility Located Object	
Utility Traffic Signal Box	
Utility Unknown U/G Line	
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	
End of Information	

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

SUMMARY OF EARTHWORK

SURVEY LINE	STATION	STATION	UNCL. EXCAV.	EMBANK. + %	BORROW	WASTE
-L-	13 + 00.00	13 + 50.00	28		60	
-L-	13 + 50.00	14 + 00.00	45		390	
-L-	14 + 00.00	14 + 50.00	36		355	
-L-	14 + 50.00	15 + 00.00	413		88	
-L-	15 + 00.00	15 + 50.00	33		61	
-L-	15 + 50.00	16 + 00.00	14		220	
	SUBTOTALS:		569		1174	
-L-	16 + 00.00	16 + 50.00	0		2	
-L-	16 + 50.00	17 + 00.00	0		2	
-L-	17 + 00.00	17 + 50.00	0		2	
	SUBTOTALS:		0		6	
	PROJECT TOTALS:		569		1180	
	GRAND TOTALS:		569		1180	
	SAY:		600		1200	

SHOULDER BERM GUTTER SUMMARY

SURVEY LINE	STATION	STATION	LENGTH
-L- RT	13 + 25.00	15 + 77.00	252
		TOTAL:	252
		SAY:	255

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	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	XI	GRAU 350	M-350	XIII	CAT-1	VI MOD	BIC	AT-1	EA	G	NG								
-L-	12+84.00	16+09.00	RT	325					2	2					2																			
	SUB-TOTAL																																	
			ANCHOR	DEDUCTIONS	-75																													
			TOTAL	250																														

"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.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

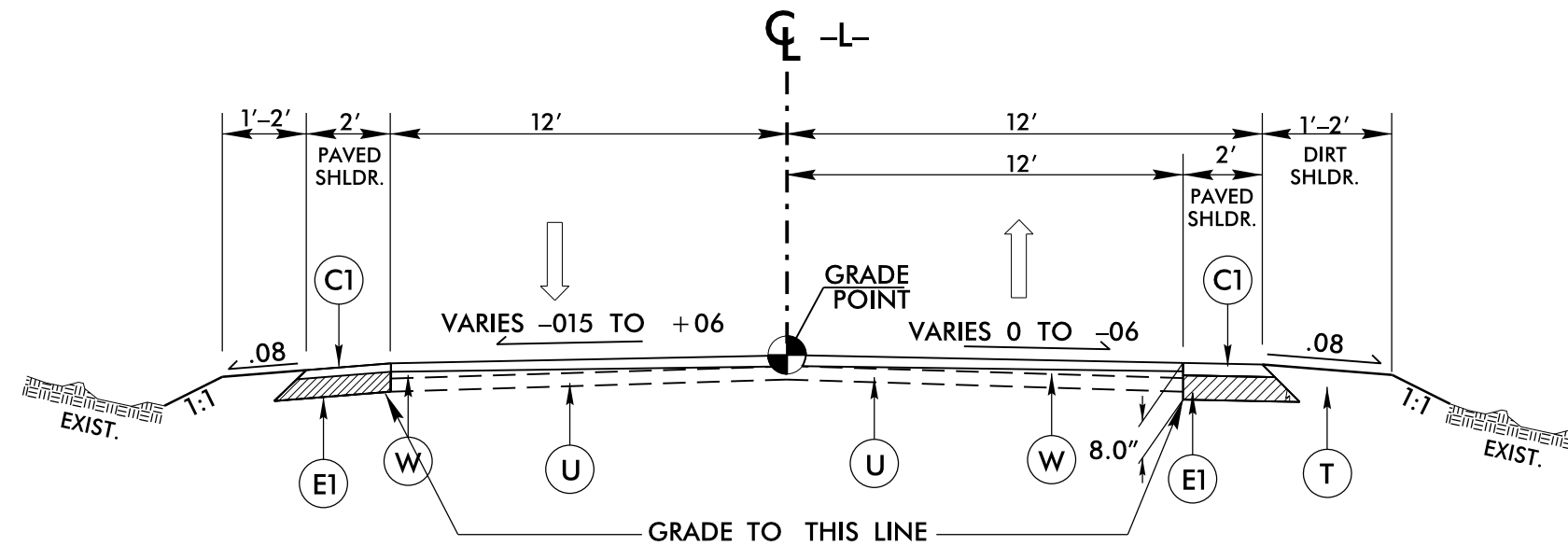
NOTE: Approximate quantities only. Unclassified excavation, shoulder borrow, fine grading, clearing and grubbing and removal of existing pavement will be paid for at the lump sum price of "Grading".

SUMMARY OF EARTHWORK

SHOULDER BERM GUTTER SUMMARY

GUARDRAIL SUMMARY

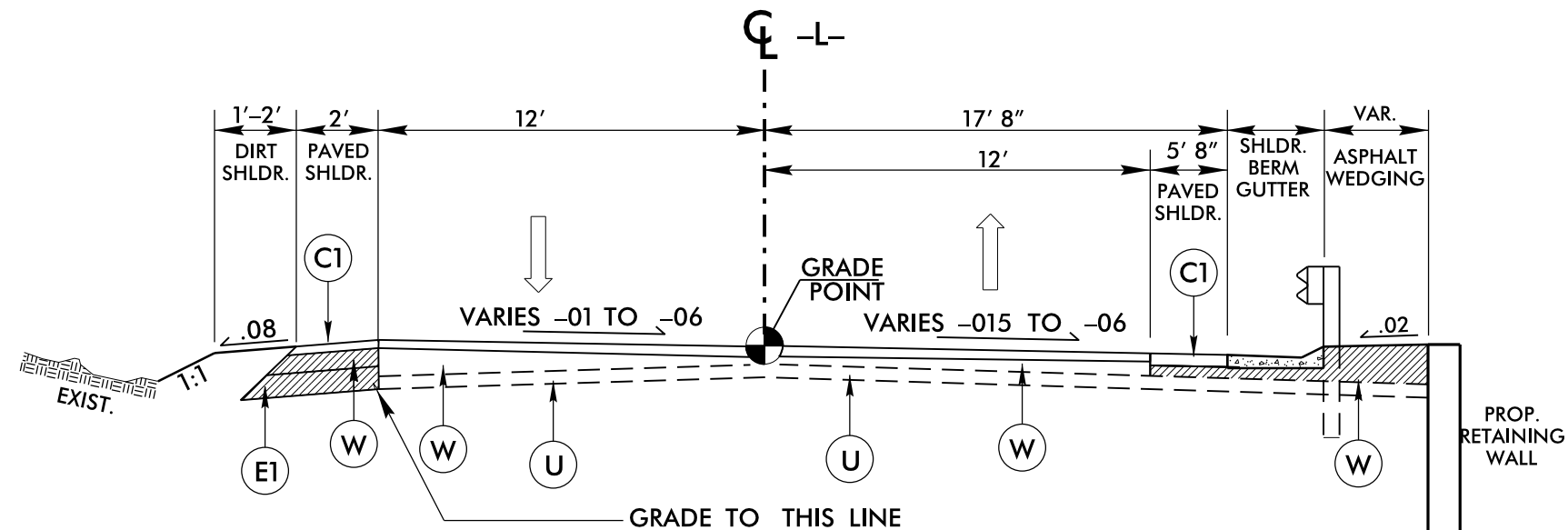
<p>"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL. TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT. FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL. W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL. G = GATING IMPACT ATTENUATOR TYPE 350 NG = NON-GATING IMPACT ATTENUATOR TYPE 350</p>	<p>NOTE: Approximate quantities only. Unclassified excavation, shoulder borrow, fine grading, clearing and grubbing and removal of existing pavement will be paid for at the lump sum price of "Grading".</p>
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TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1

-L- STA. 12+50.00 TO STA. 13+25.00
-L- STA. 15+77.00 TO STA. 17+50.00



TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2

- L - STA. 13+25.00 TO STA. 15+77.00

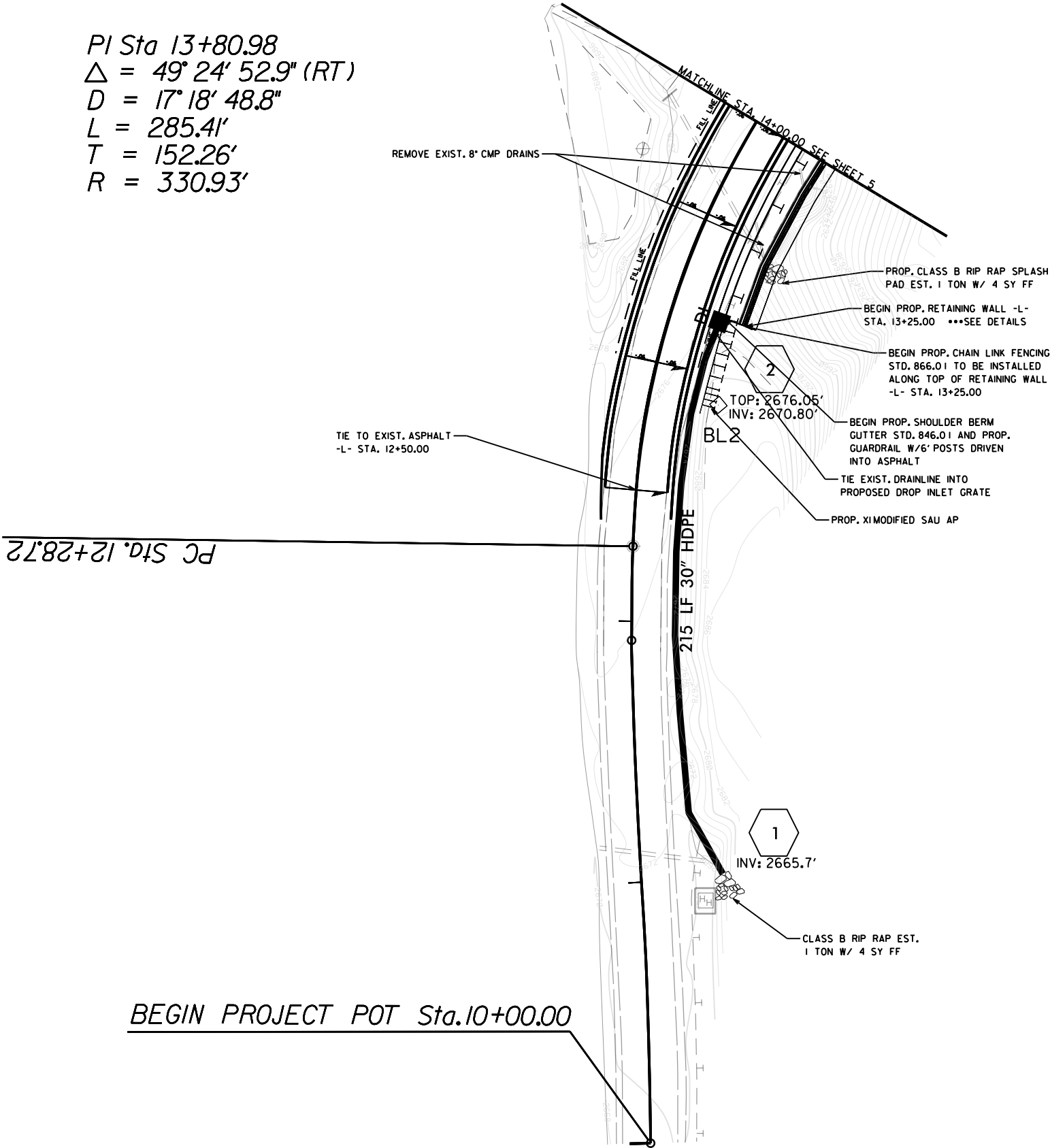
PAVEMENT SCHEDULE	
C1	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1½" IN DEPTH.
E1	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
W	PROP. VAR. DEPTH ASPHALT CONCRETE WEDGING COURSE, TYPE I19 AT AN AVERAGE RATE OF 114 LBS. PER SQ. FT. PER 3" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 3" IN DEPTH.
T	EARTH MATERIAL
U	EXISTING PAVEMENT

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

[illegible]



PI Sta 13+80.98
 $\Delta = 49^\circ 24' 52.9''$ (RT)
 $D = 17^\circ 18' 48.8''$
 $L = 285.41'$
 $T = 152.26'$
 $R = 330.93'$



N
NC GRID
NAD 83 NA 2011

5/

END PROJECT POT Sta. 17+55.35

PT Std. 15+1413

TIE TO EXIST. ASPHALT -
-L- STA. 17+50.00

— PROP. XIMODIFIED SAU TR

— END PROP. SHOULDER BERM
GUTTER STD. 846.01 AND PROP.
GUARDRAIL W/ 6' POSTS DRIVEN
INTO ASPHALT

— END PROP. RETAINING WALL -L-
STA. 15+77.00 **SEE DETAILS

END PROP. CHAIN LINK FENCING
STD. 866.01 INSTALLED ALONG
TOP OF RETAINING WALL -L-
STA. 15+77.00

BL 1

— REMOVE EXIST. 8" CMP DRAINS

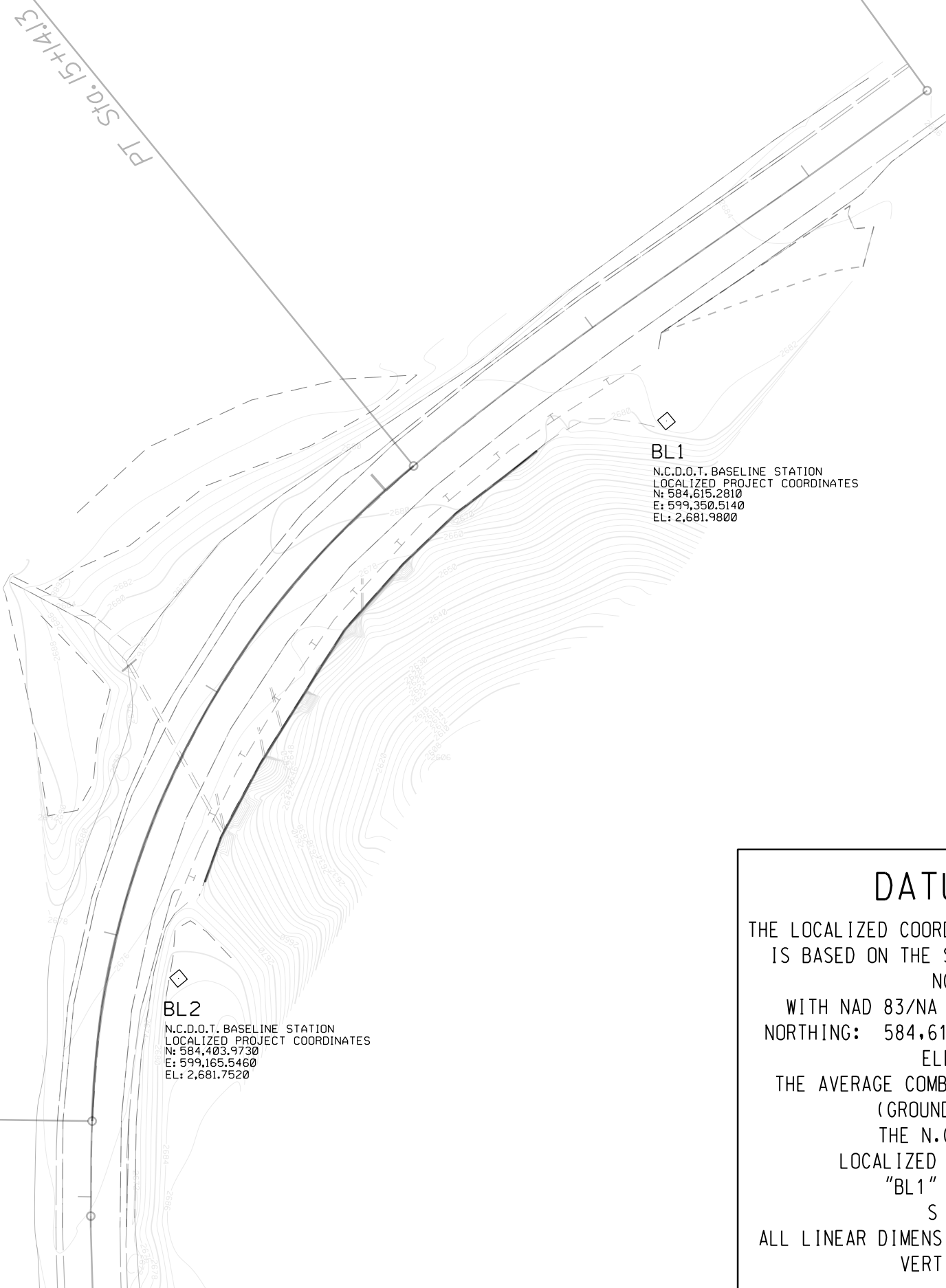


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 $R = 330.93'$

PC Sta. 12+28.72

PT Sta. 15+14.13

POT Sta. 17+55.35



BL1
N.C.D.O.T. BASELINE STATION
LOCALIZED PROJECT COORDINATES
N: 584,615.2810
E: 599,350.5140
EL: 2,681.9800

BL2
N.C.D.O.T. BASELINE STATION
LOCALIZED PROJECT COORDINATES
N: 584,403.9730
E: 599,165.5460
EL: 2,681.7520

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "BL1"

WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF
NORTHING: 584,615.2810(ft) EASTING: 599,350.5140(ft)
ELEVATION: 2,681.9800(ft)

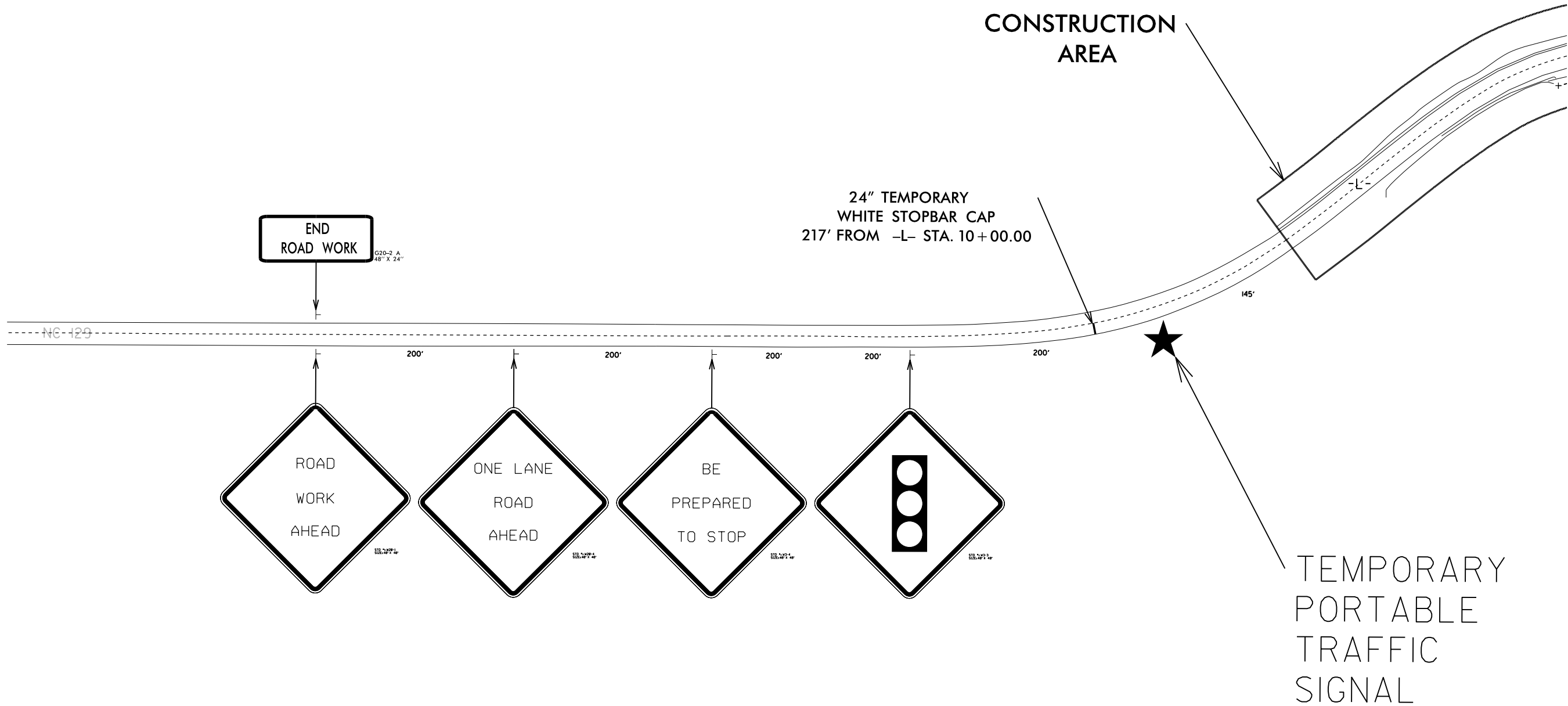
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999806079

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "BL1" TO -L- STATION 16+00.00 IS
S $51^{\circ} 46' 21.00''$ E 45.13'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

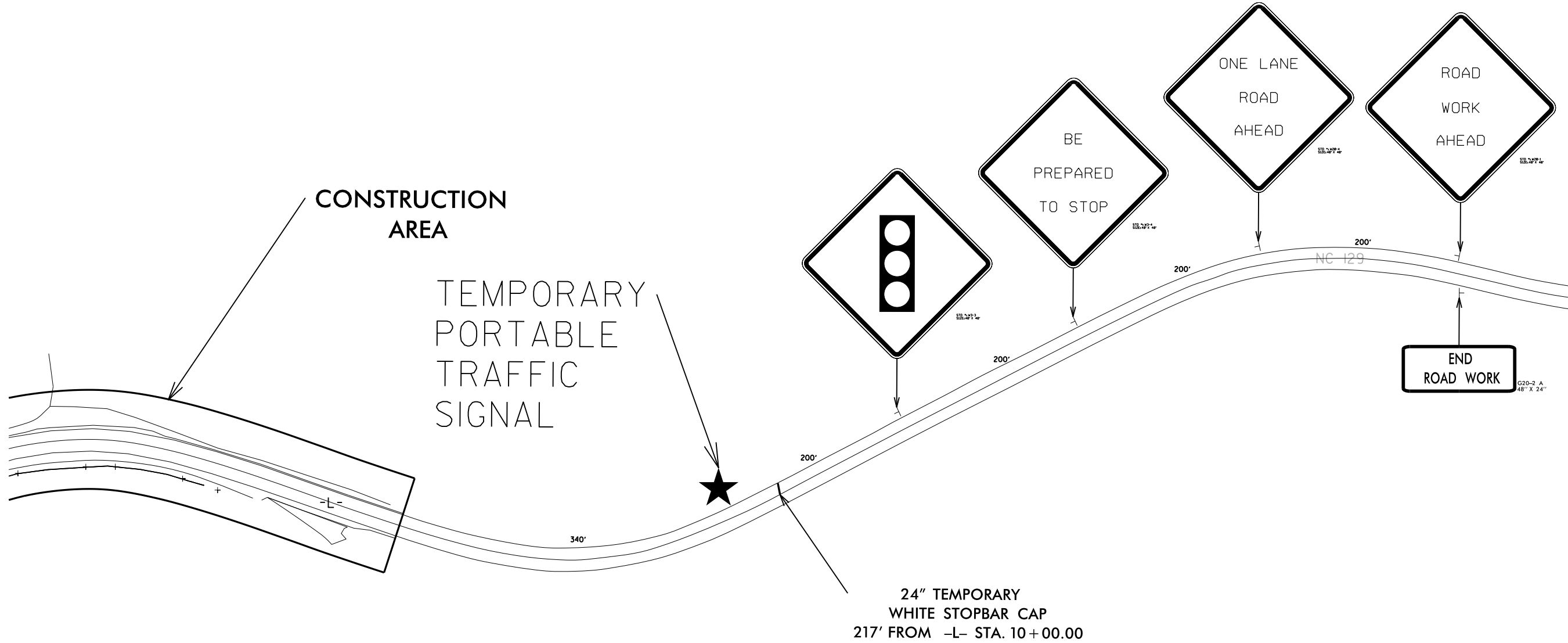
NOTE: PORTABLE MESSAGE BOARD
TO BE USED AND PLACED A
MINIMUM OF 1 MILE OF WORK
ZONE
PER NCDOT STANDARD DRAWINGS

PROJECT REFERENCE NO.	SHEET NO.
WBS: 41665.10B	TMPI
R/W SHEET NO.	



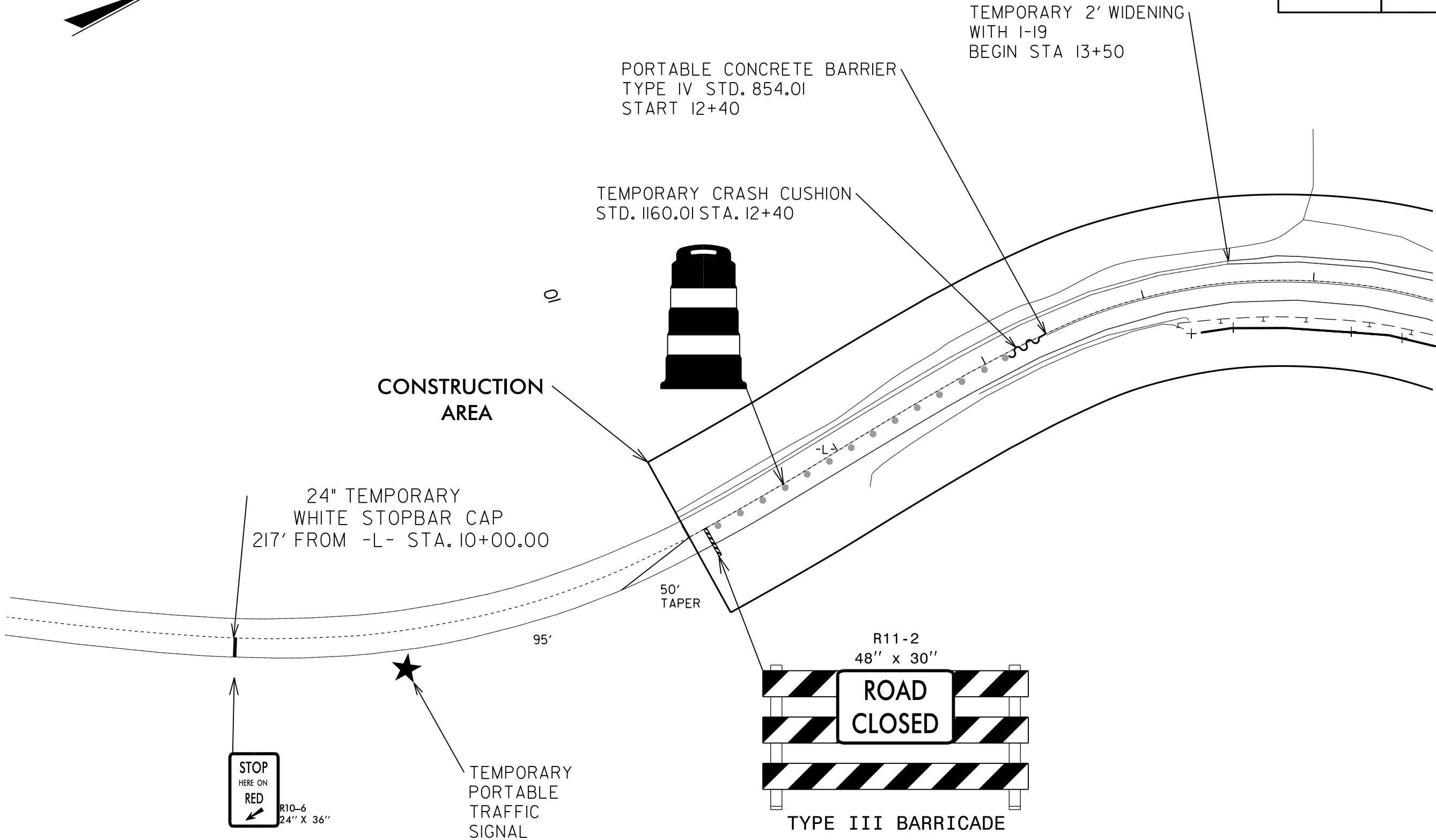
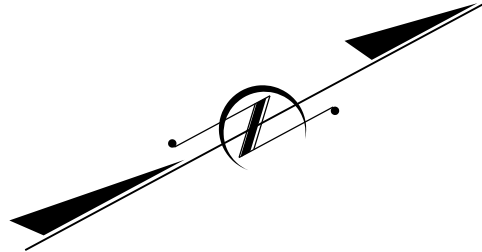
PROJECT REFERENCE NO.	SHEET NO.
WBS: 41665 JOB	TMP2
R/W SHEET NO.	

NOTE: PORTABLE MESSAGE BOARD
TO BE USED AND PLACED A
MINIMUM OF 1 MILE OF WORK
ZONE
PER NCDOT STANDARD DRAWINGS

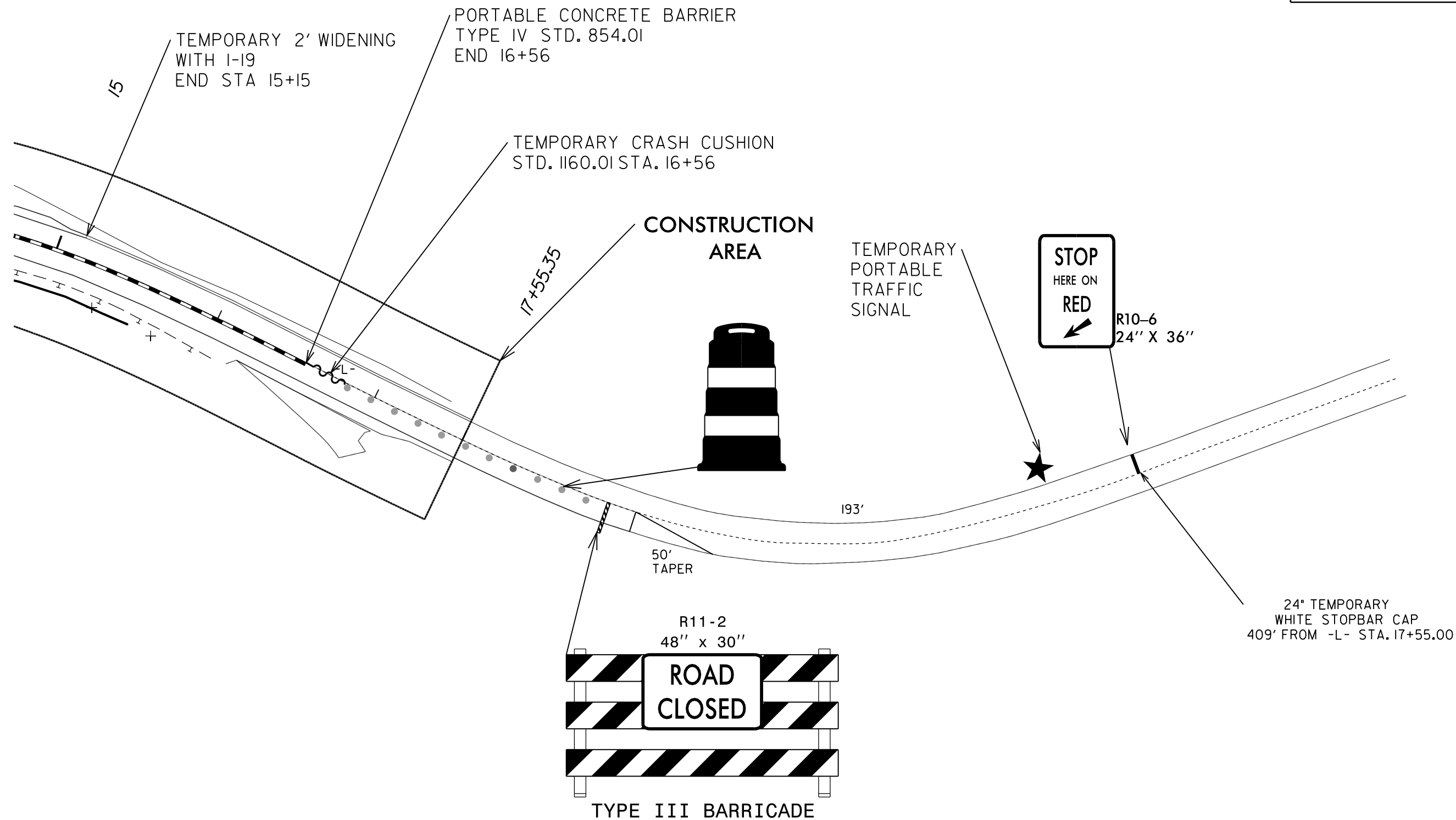


DETAIL FOR
WORK ZONE
SIGNING

PROJECT REFERENCE NO.	SHEET NO.
WBS: 41665.10B	TMP3
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PROJECT REFERENCE NO.	SHEET NO.
WBS: 41665 JOB	TMP4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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09/08/99

CONTRACT: DN00615

WBS ELEMENT:41665.10B

ROADWAY 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 16, 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

STD. NO.	TITLE
1205.01	Pavement Markings - Line Types and Offsets
1253.01	Snowplowable Raised Pavement Markers



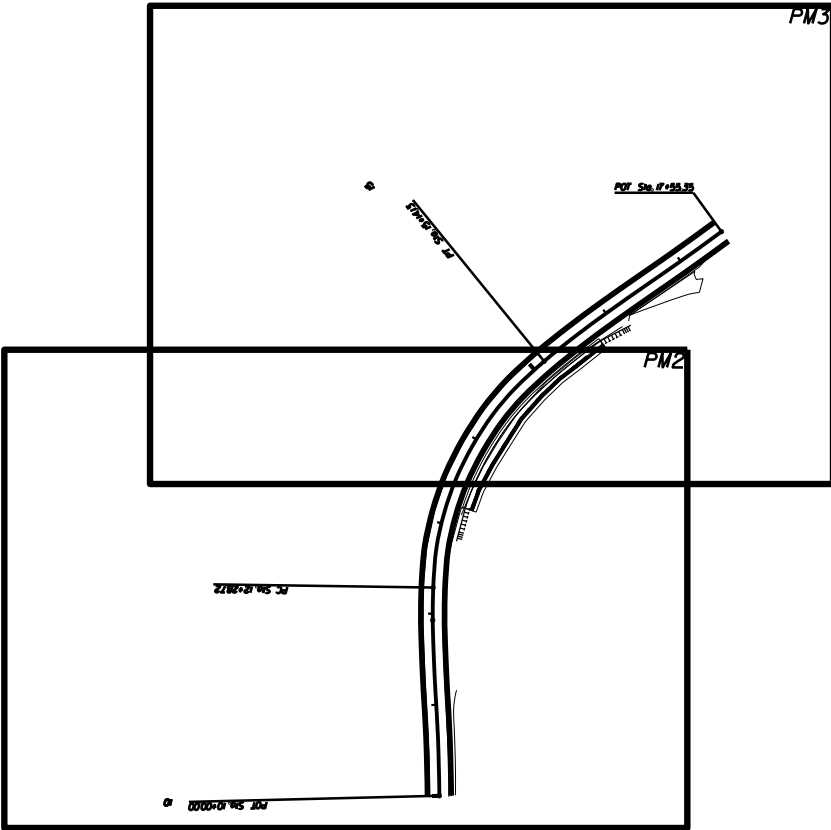
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PAVEMENT MARKING PLAN

GRAHAM COUNTY

LOCATION: ALONG US HWY 129 1.4 MILES EAST OF INTERSECTION WITH US HWY 1974

TYPE OF WORK: RETENTION WALL, GRADING, DRAINAGE AND PAVING



INDEX

PM-I	PAVEMENT MARKING PLAN TITLE SHEET
PM2-PM3	PAVEMENT MARKING DETAILS

PAVEMENT MARKING SCHEDULE

4" WHITE LINE EDGE-	ET1
4" CENTER LINE-	CL1
CRYSTAL/RED PAVEMENT MARKER-	

GENERAL NOTES

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

A) INSTALL PAVEMENT MARKINGS ON THE FINAL SURFACE AS FOLLOWS:			
	ROAD NAME US 129	MARKING THERMOPLASTIC	MARKER SNOWPLOWABLE

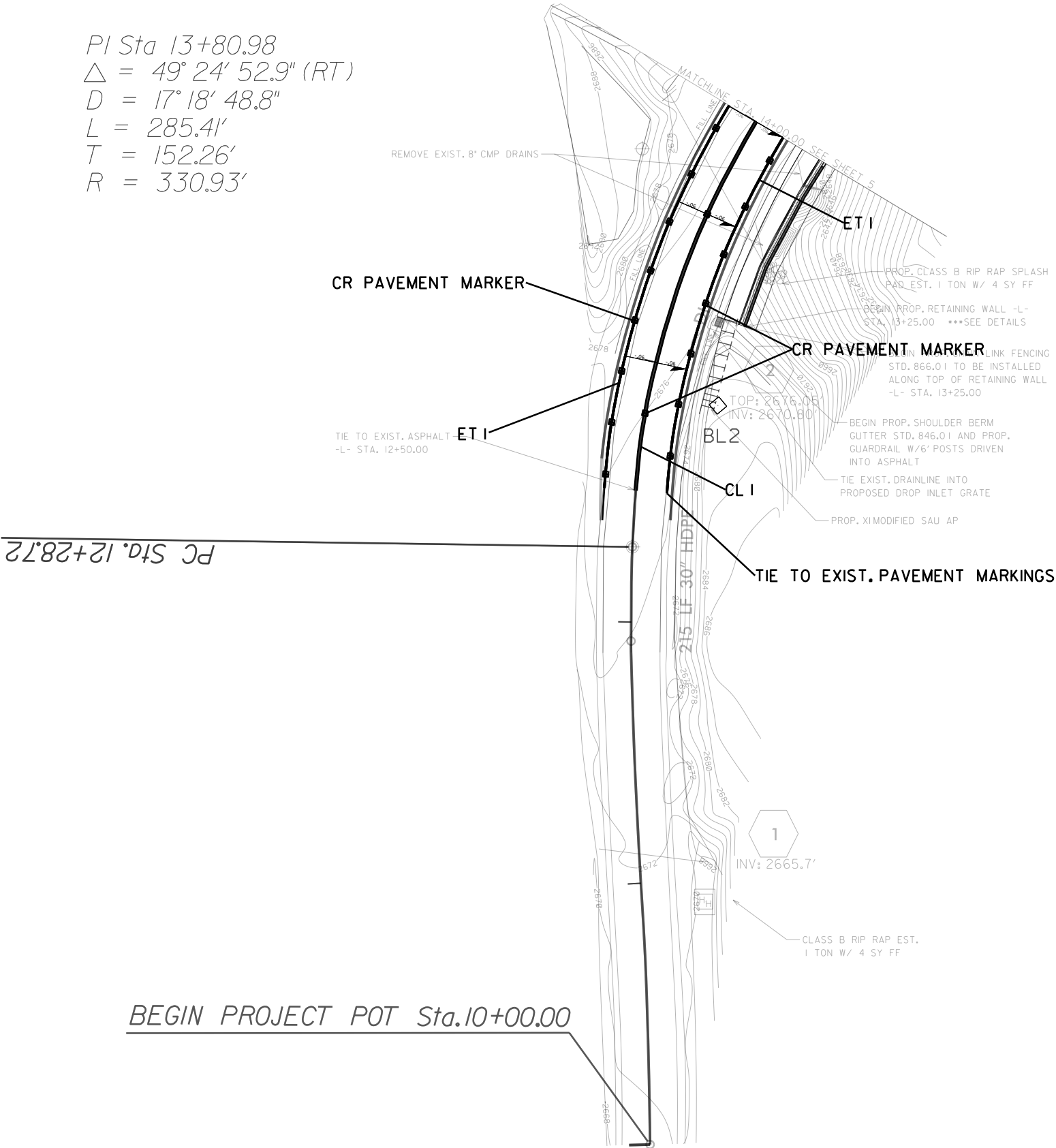
PLACE ONE (1) APPLICATION OF THERMOPLASTIC PAVEMENT MARKINGS ON THE FINAL WEARING SURFACE.

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES

C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.



PI Sta 13+80.98
 $\Delta = 49^{\circ} 24' 52.9''$ (RT)
 $D = 17^{\circ} 18' 48.8''$
 $L = 285.41'$
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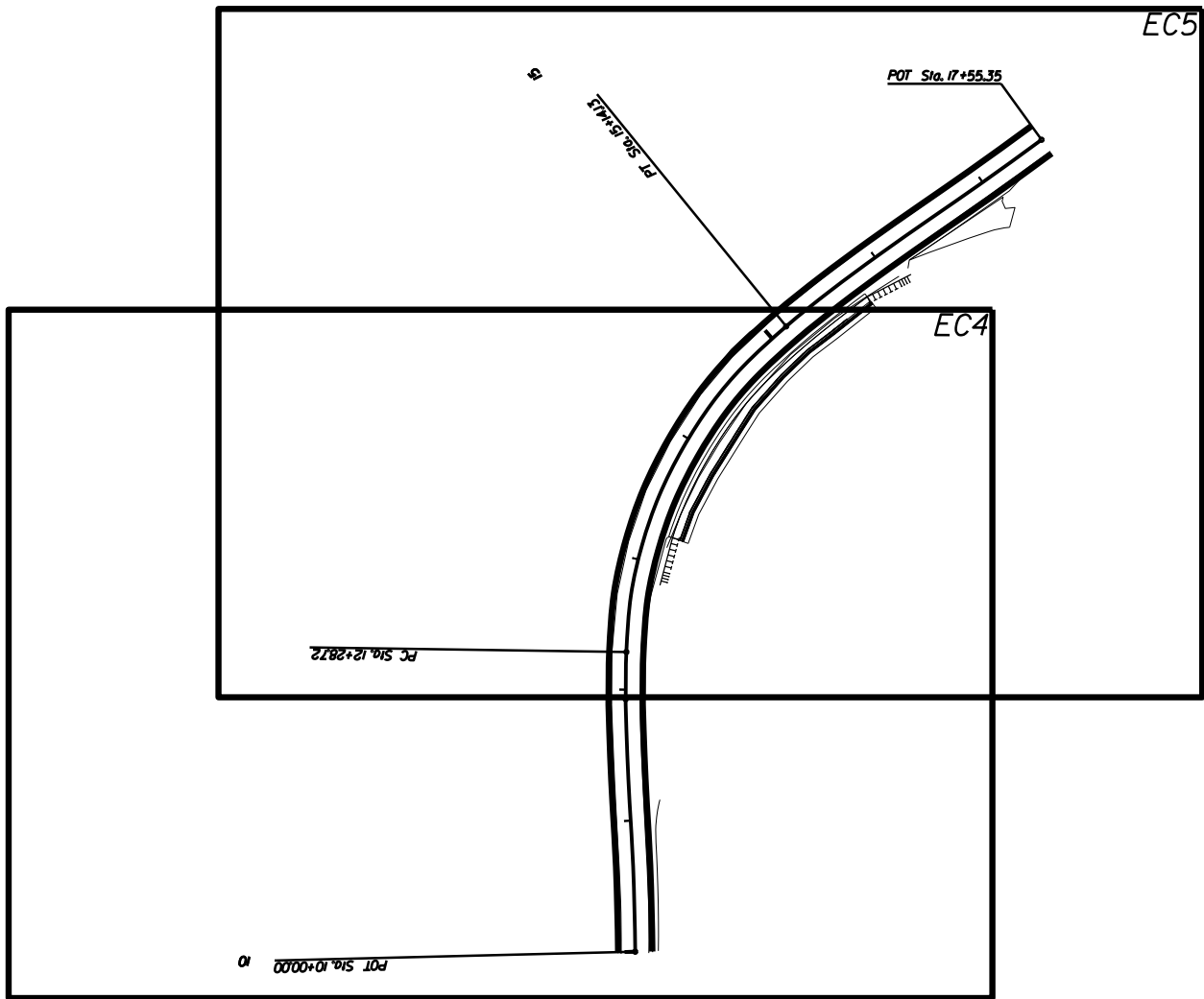
WBS ELEMENT: 41665.10B

CONTRACT: DN00615

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	WBS: 41665.10B	EC1	
STATE PROJ.NO.	F.A.PROJ.NO.	DESCRIPTION	

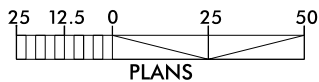
LOCATION: ALONG US HWY 129 1.4 MILES EAST OF INTERSECTION WITH US HWY 1974

TYPE OF WORK: RETENTION WALL, GRADING, DRAINAGE AND PAVING



A.R. BROWN
LEVEL III
377I
LEVEL III CERTIFICATE #

GRAPHIC SCALE



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY
WITH THE REGULATIONS SET FORTH BY THE
NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011
ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES DIVISION OF WATER QUALITY.

Roadway Standard Drawings

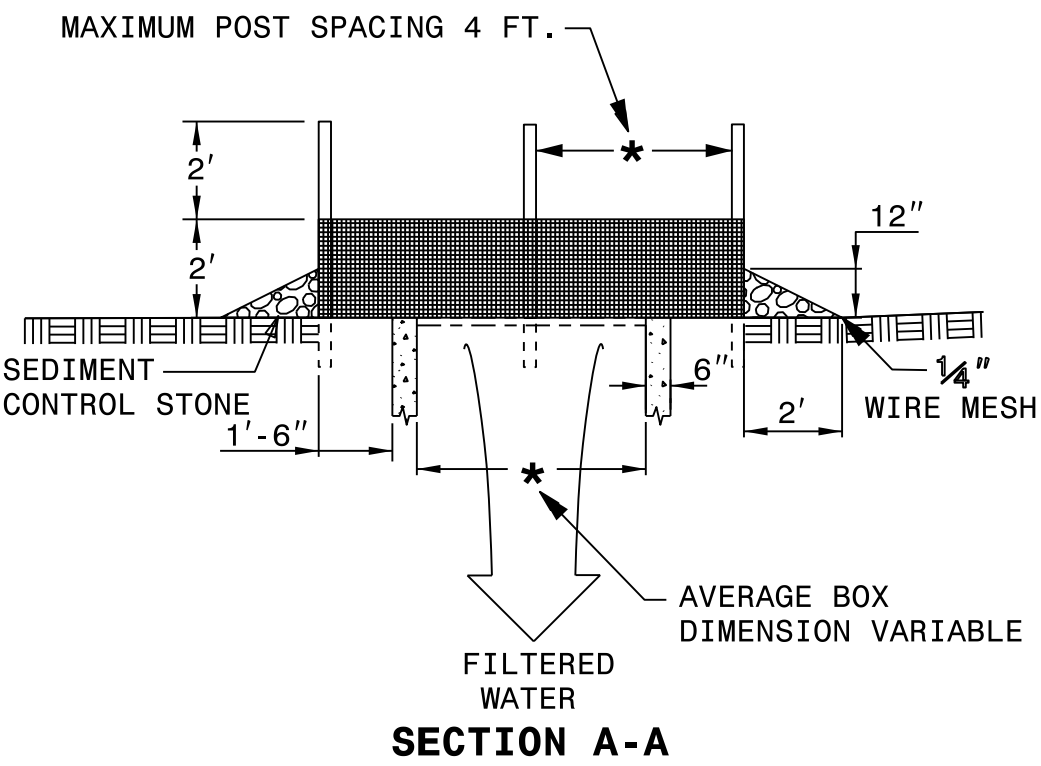
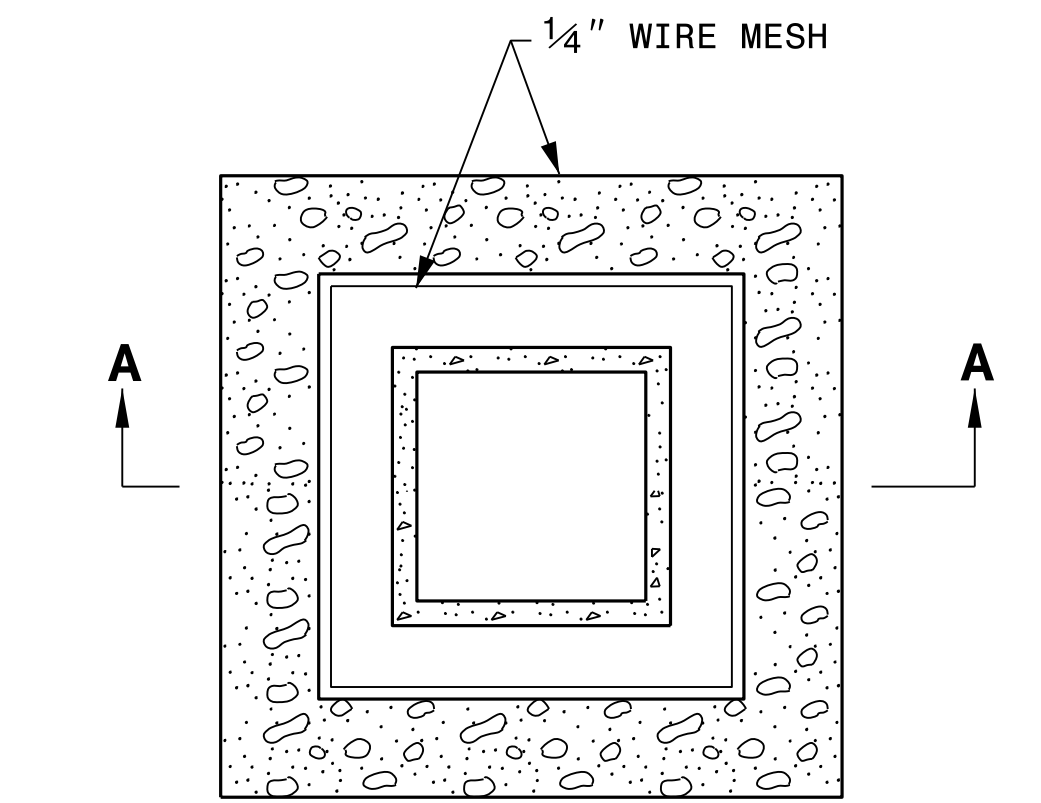
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type J
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary Berms and Slope Drains	1633.02	Temporary Rock Silt Check Type J
1630.01	Riser Basin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt Basin Type J	1634.02	Temporary Rock Sediment Dam Type J
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type J
1630.05	Temporary Diversion	1640.01	Coir Fiber Jaffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

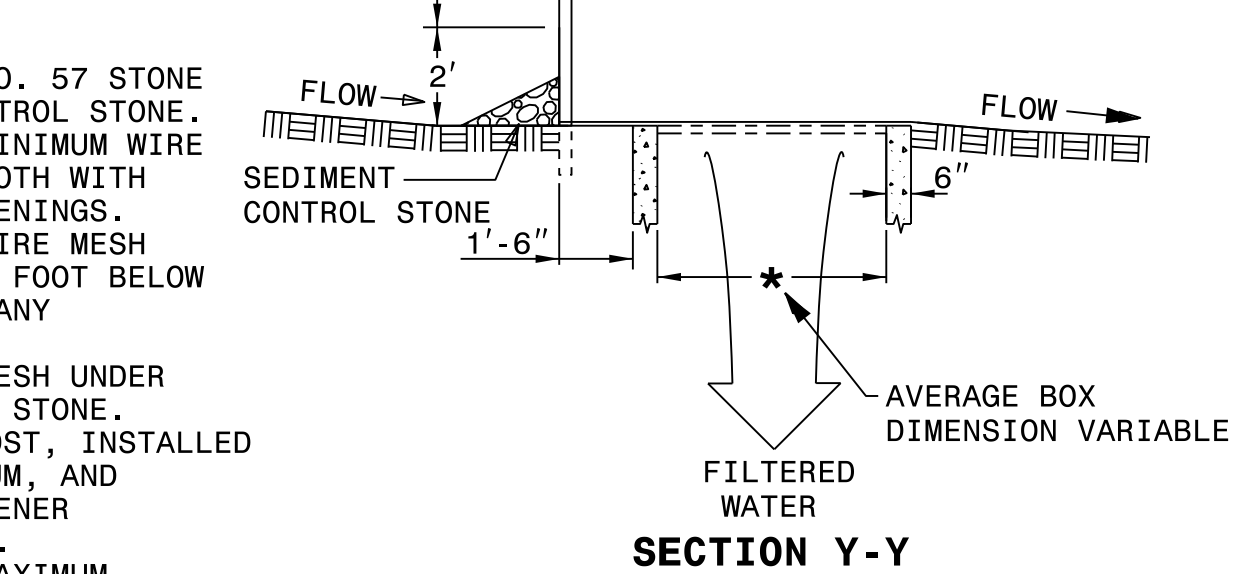
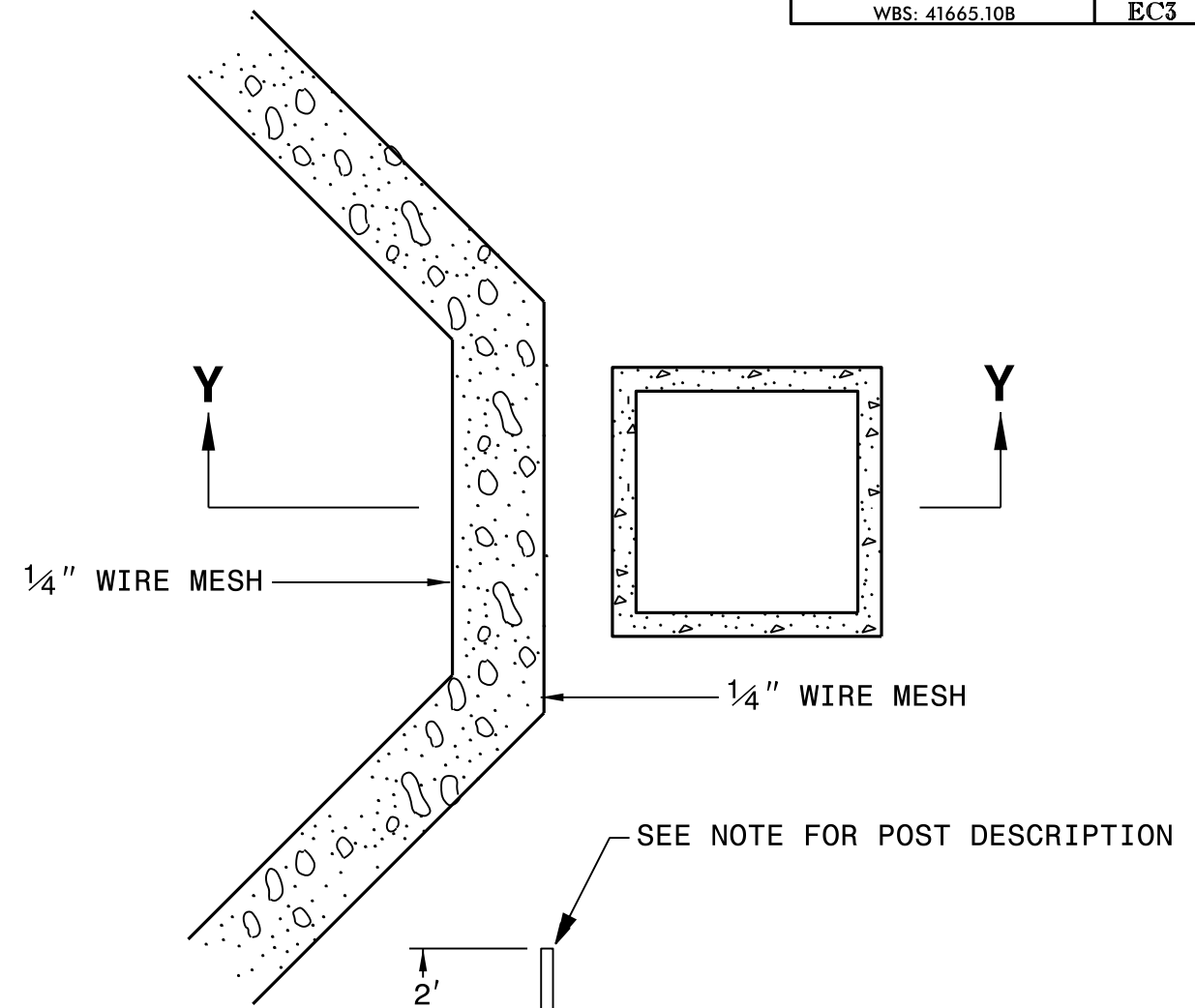
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

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

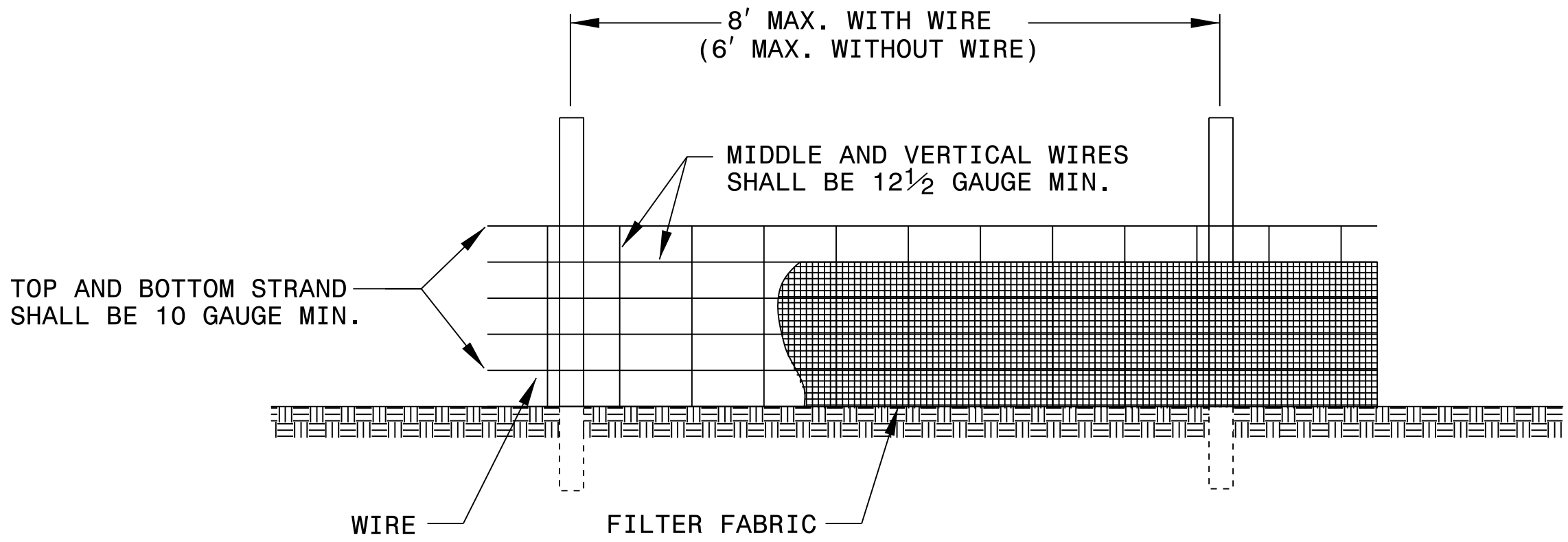


MULTI-DIRECTIONAL FLOW



SINGLE-DIRECTIONAL FLOW

NOTE
USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.
USE 24 GAUGE MINIMUM WIRE MESH HARDWARE CLOTH WITH 1/4 INCH MESH OPENINGS.
PLACE TOP OF WIRE MESH A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
INSTALL WIRE MESH UNDER SEDIMENT CONTROL STONE.
USE 5' STEEL POST, INSTALLED 1.5' DEEP MINIMUM, AND OF THE SELF-FASTENER ANGLE STEEL TYPE.
SPACE POST A MAXIMUM OF 4'.

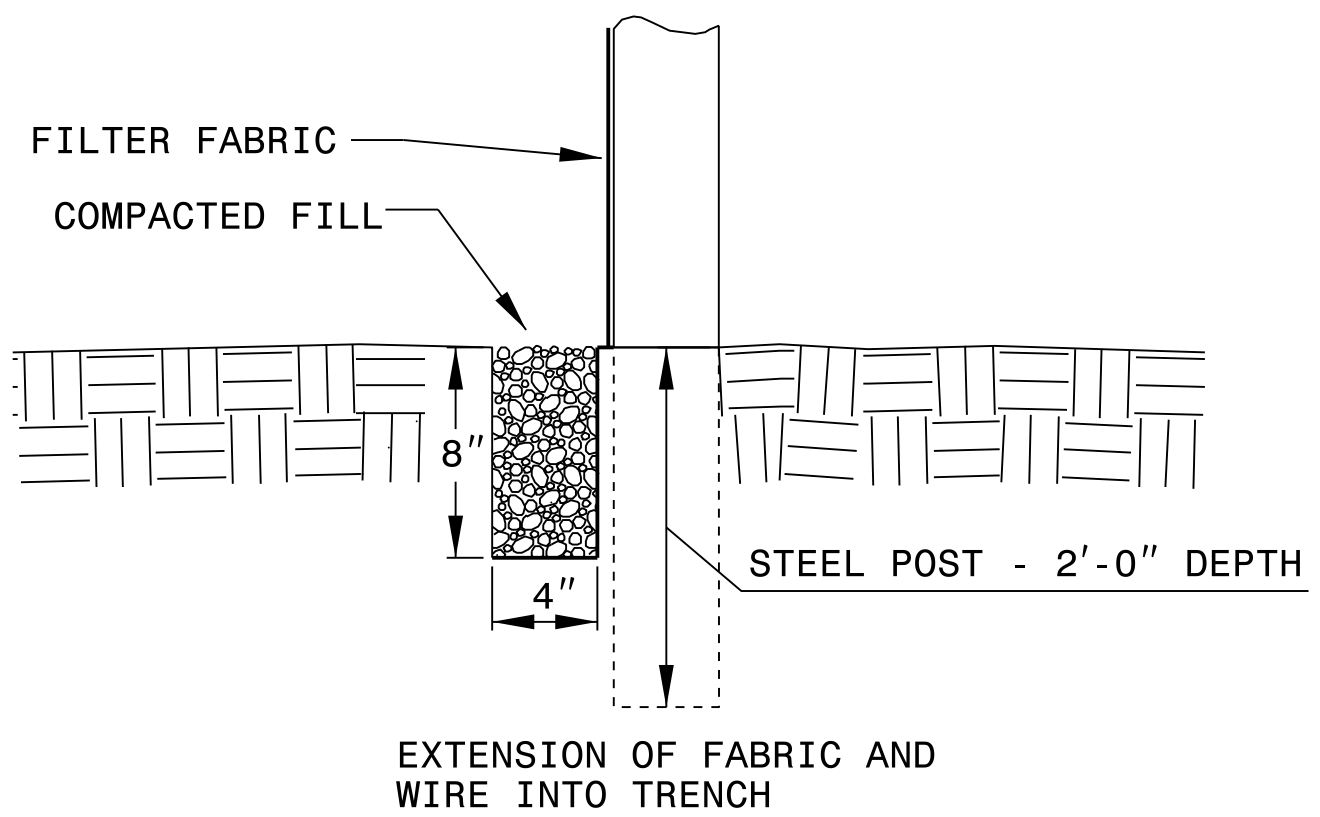


NOTES

USE WIRE A MINIMUM OF 32" IN WIDTH AND WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.

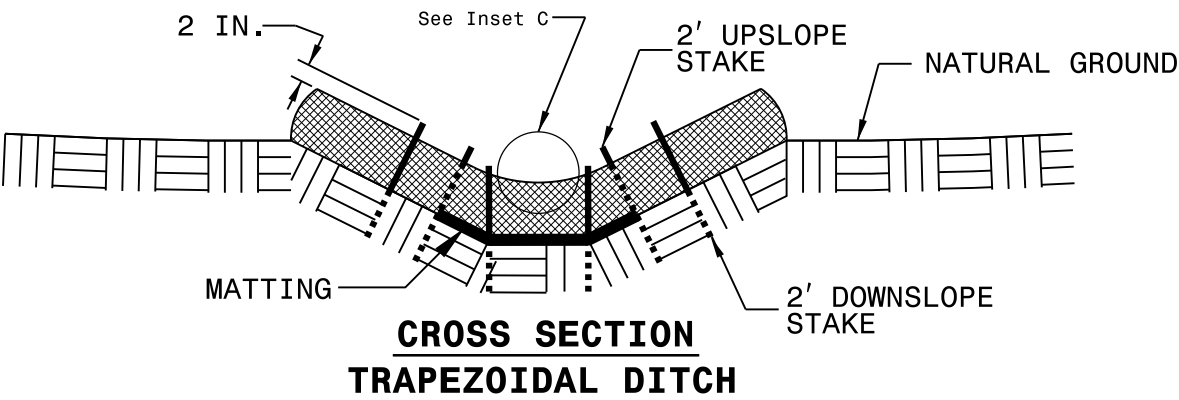
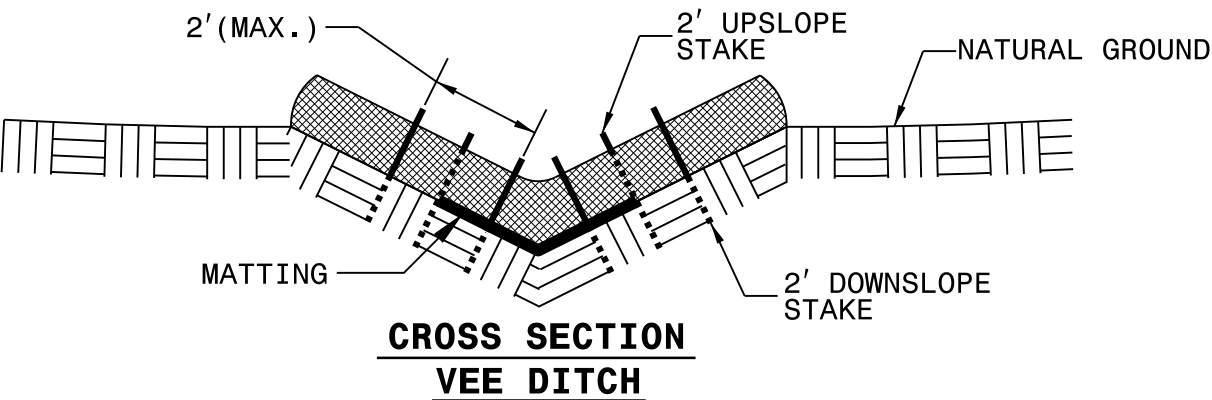
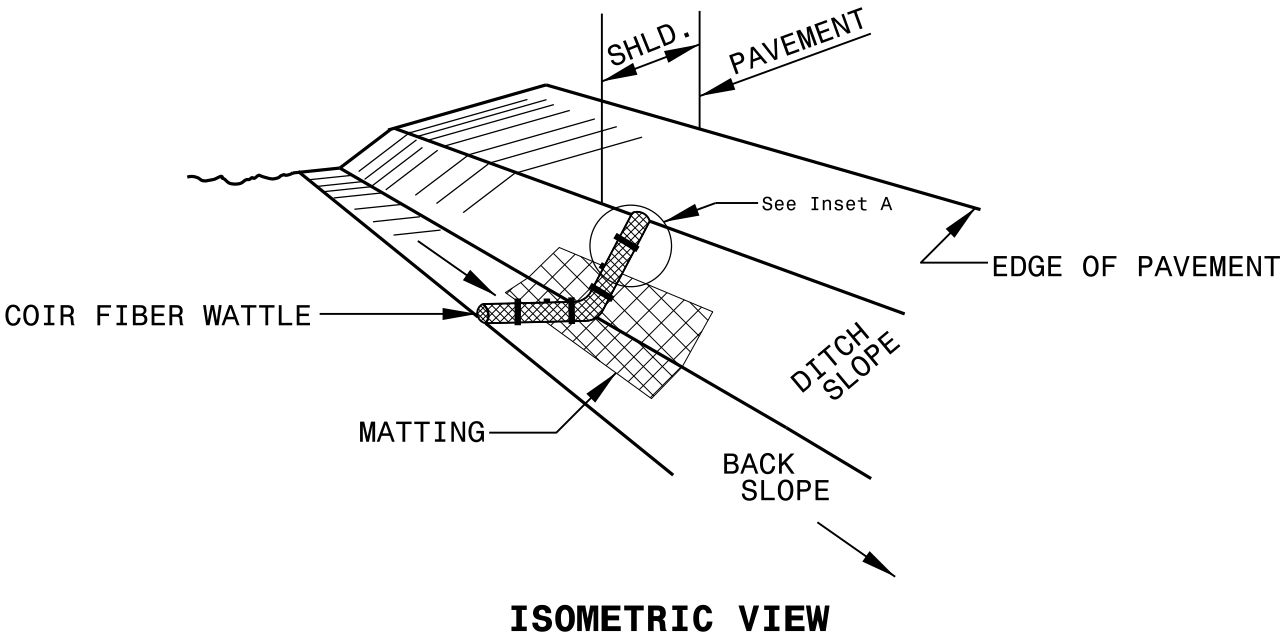
USE FILTER FABRIC A MINIMUM OF 36" IN WIDTH AND FASTEN ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.

PROVIDE 5'-0" STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.



COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

PROJECT REFERENCE NO.	SHEET NO.
WBS: 41665JOB	EC3B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

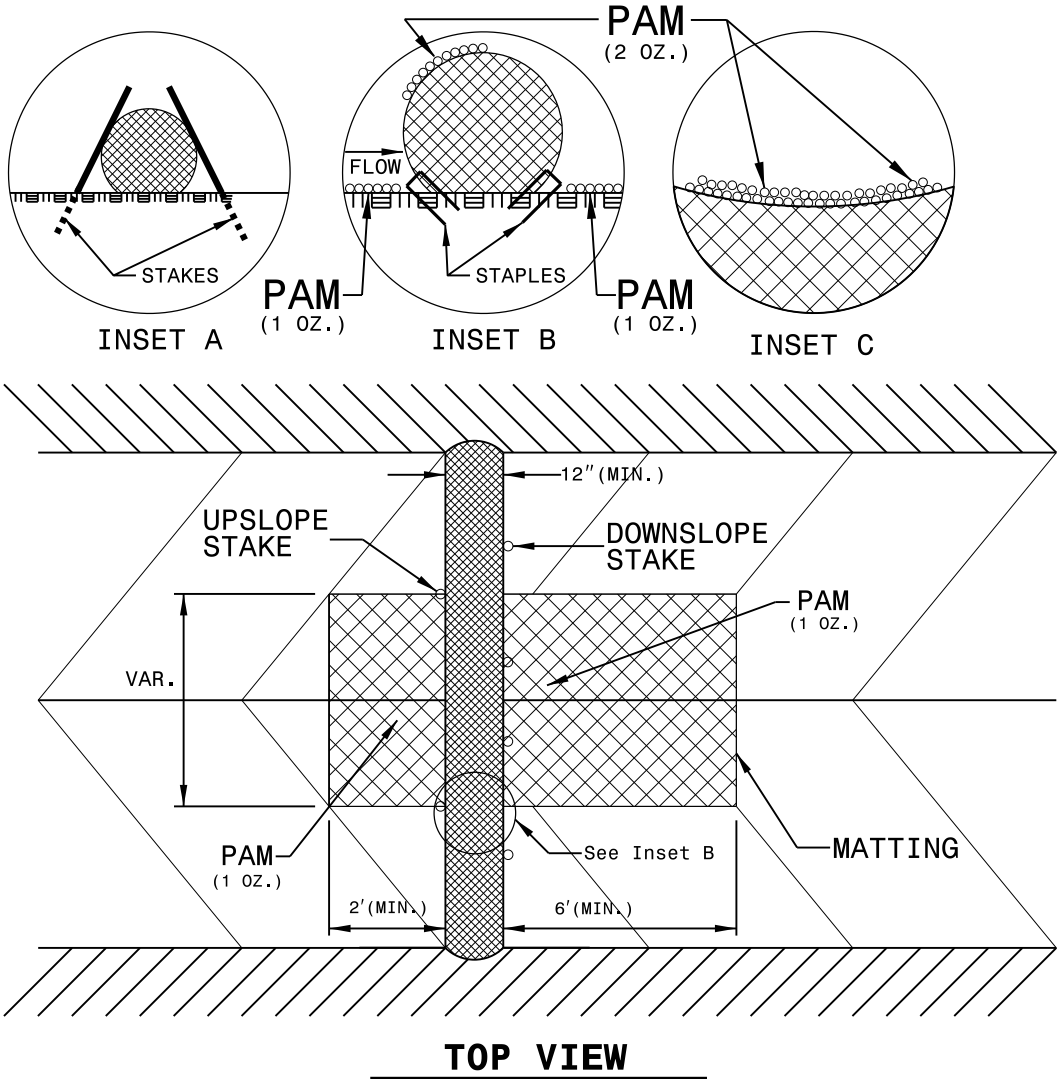
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

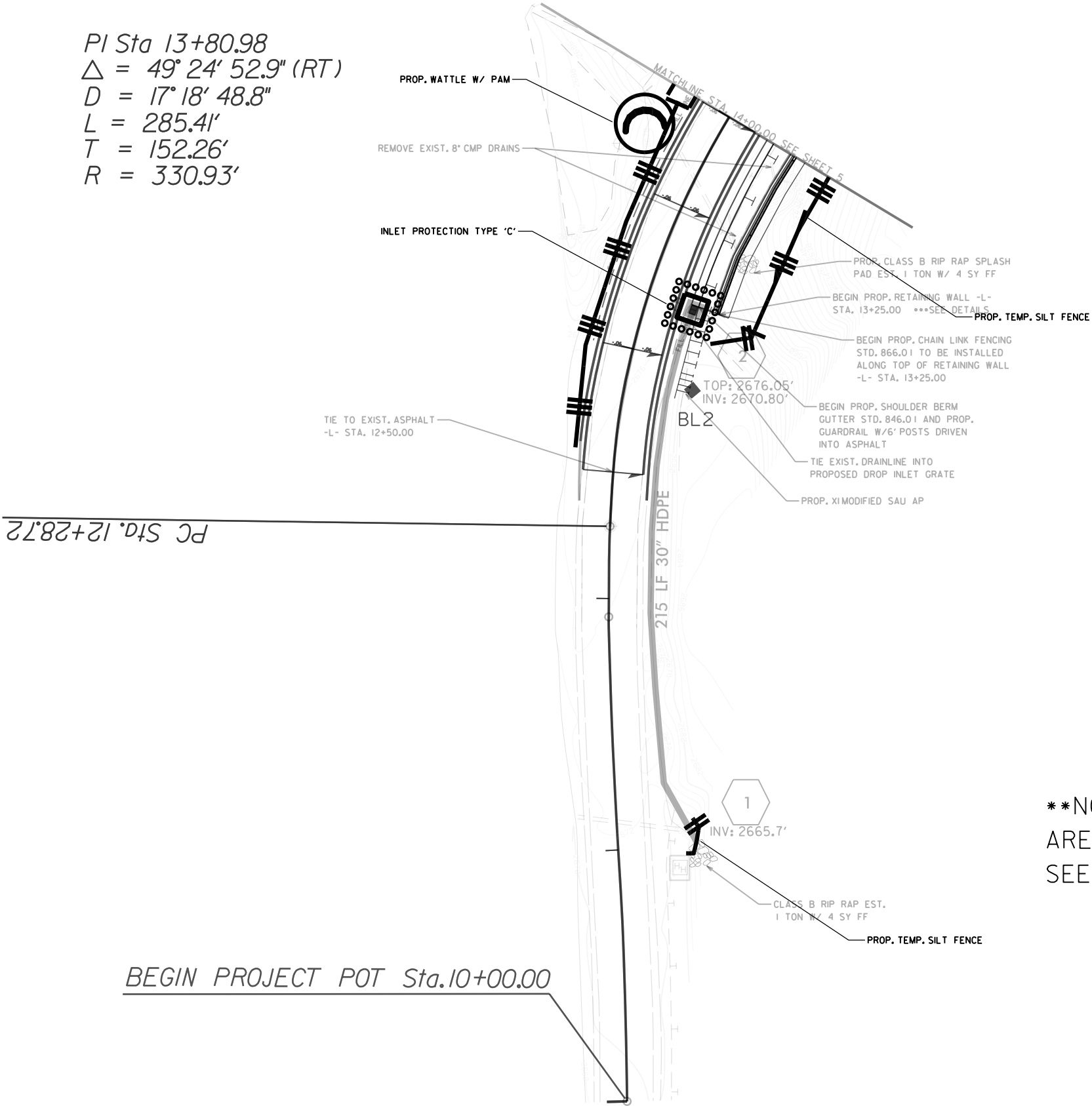
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.





PI Sta 13+80.98
 $\Delta = 49^{\circ} 24' 52.9''$ (RT)
 $D = 17^{\circ} 18' 48.8''$
 $L = 285.41'$
 $T = 152.26'$
 $R = 330.93'$



****NOTE:** ALL EXPOSED
AREAS AND SLOPES WILL BE
SEEDED AND MULCHED

