

INDEX OF SHEETS

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2	TYPICAL SECTIONS
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UC1-UC4	TRAFFIC CONTROL PLANS
EC1-EC4	EROSION CONTROL SHEETS
X1A	CROSS-SECTION SUMMARY
X1-X2	CROSS-SECTIONS

GENERAL NOTES:

2012 SPECIFICATIONS
 EFFECTIVE: 01-17-12
 REVISED: 11/01/11

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING. 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. THE GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

GRADING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED GRADE. THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT. THE GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RAMPUP 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. 510.01.

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE THIS WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PARTICULAR ITEMS INVOLVED.

UTILITIES:

ALL EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE.

UTILITY OWNERS ON THIS PROJECT ARE AS FOLLOWS:
 BEAUFORT CO. WATER DEPT. (WATER) CONTACT: ERIC JENNINGS 252-402-6547
 BEAUFORT CO. ELECTRIC DEPT. (ELECTRIC) CONTACT: GARY FULCHER 252-532-6335
 PROGRESS ENERGY (POWER) CONTACT: GARY FULCHER 252-532-6335
 TIME WARNER (CATV) CONTACT: MARK SWINDELL 252-223-6426

RIGHT-OF-WAY MARKERS:

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

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards are applied in Roadway Standard Drawings "Highway Design Branch" and by reference hereby are considered a part of these plans:

STANDARD	TITLE
200-02	Method of Clearing - Method 11
225-02	Method of Grading, Supergrade Secondary and Local
225-02	Method of Grading Supergrade - Two Lane Pavement
DIVISION 3	PIPE INSTALLATION - Method 'A'
300-01	Method of Pipe Installation - Method 'A'
DIVISION 8 - INCIDENTALS	
876-02	Guide for Rip Rap or Pipe Outlets

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 _____
- 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 _____

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or UG 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 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 Utility Easement _____
- Proposed Temporary 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 Wheel Chair 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 _____
- UG Power Cable Hand Hole _____
- H-Frame Pole _____
- Recorded UG Power Line _____
- Designated UG Power Line (S.U.E.*) _____

TELEPHONE:

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

WATER:

- Water Manhole _____
- Water Meter _____
- Water Valve _____
- Water Hydrant _____
- Recorded UG Water Line _____
- Designated UG Water Line (S.U.E.*) _____
- Above Ground Water Line _____

TV:

- TV Satellite Dish _____
- TV Pedestal _____
- TV Tower _____
- UG TV Cable Hand Hole _____
- Recorded UG TV Cable _____
- Designated UG TV Cable (S.U.E.*) _____
- Recorded UG Fiber Optic Cable _____
- Designated UG Fiber Optic Cable (S.U.E.*) _____

GAS:

- Gas Valve _____
- Gas Meter _____
- Recorded UG Gas Line _____
- Designated UG Gas Line (S.U.E.*) _____
- Above Ground Gas Line _____

SANITARY SEWER:

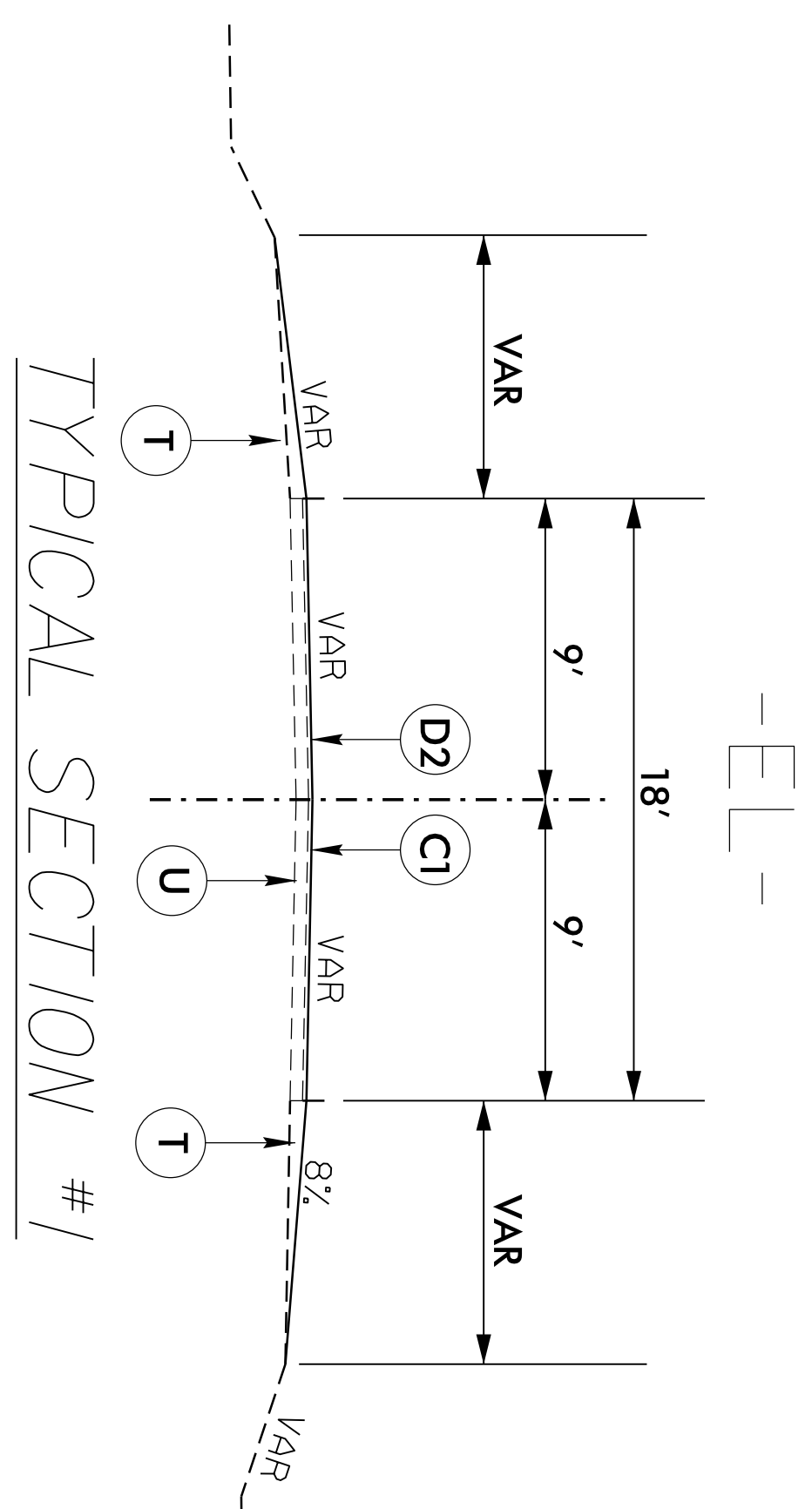
- Sanitary Sewer Manhole _____
- Sanitary Sewer Cleanout _____
- UG Sanitary Sewer Line _____
- Above Ground Sanitary Sewer _____
- Recorded SS Forced Main Line _____
- Designated SS Forced Main Line (S.U.E.*) _____

MISCELLANEOUS:

- Utility Pole _____
- Utility Pole with Base _____
- Utility Located Object _____
- Utility Traffic Signal Box _____
- Utility Unknown UG Line _____
- UG Tank: Water, Gas, Oil _____
- AG Tank: Water, Gas, Oil _____
- UG Test Hole (S.U.E.*) _____
- Abandoned According to Utility Records _____
- End of Information _____

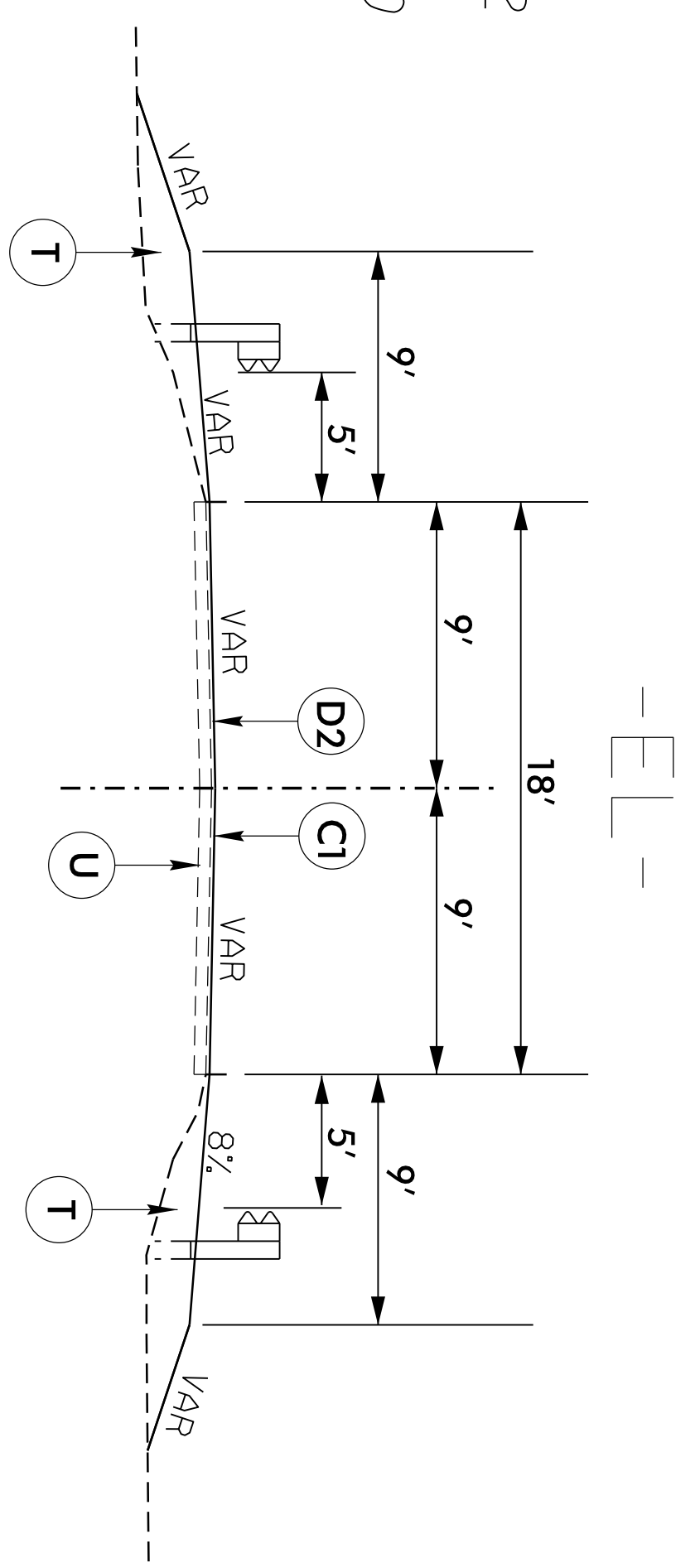
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 119.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. VARIABLE DEPTH WEDGING ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 119.0B.
E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
J	APPROX. 12" AGGREGATE BASE COURSE
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V	FILTER FABRIC
Y	#57 WASHED STONE

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



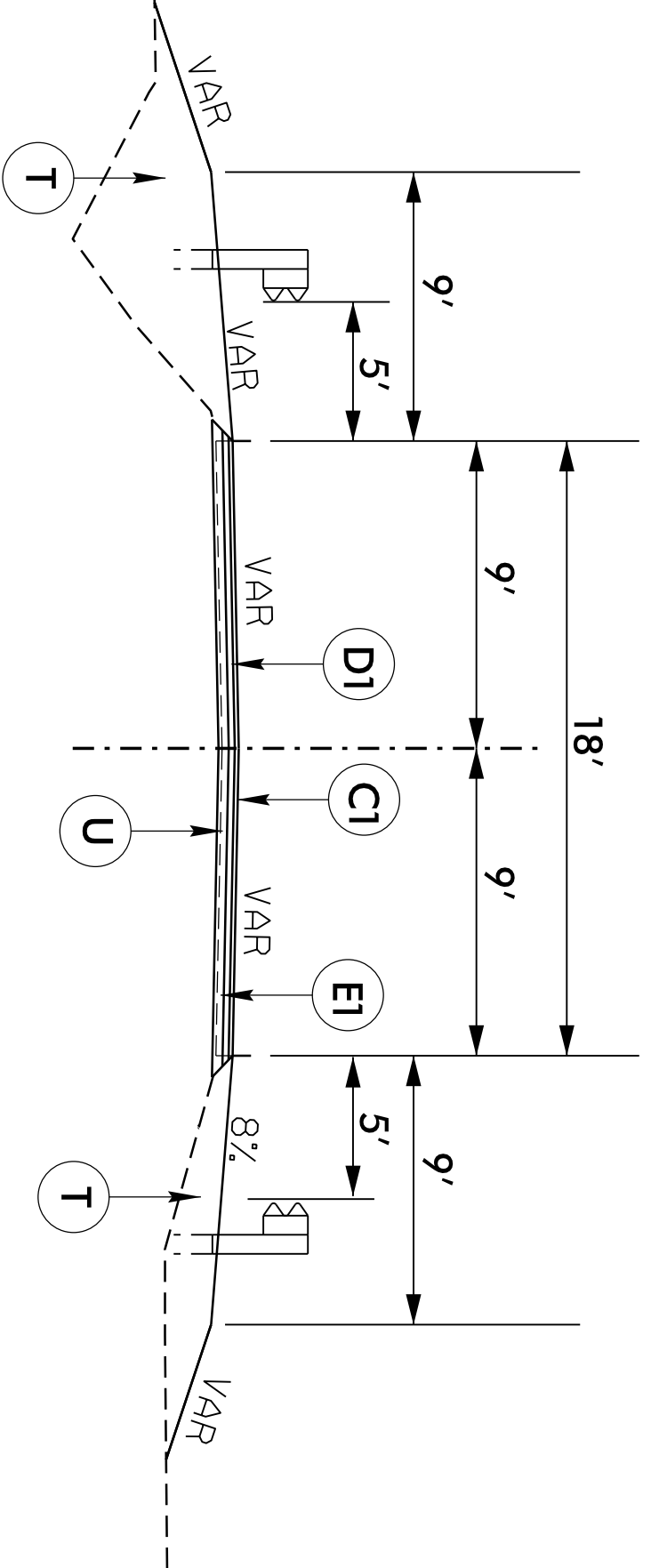
TYPICAL SECTION #1

TRANSITION FROM TYPICAL SECTION #1 TO TYPICAL SECTION #2
 -EL- STATION 10+75.00 - 11+15.00
 -EL- STATION 13+10.00 - 13+50.00



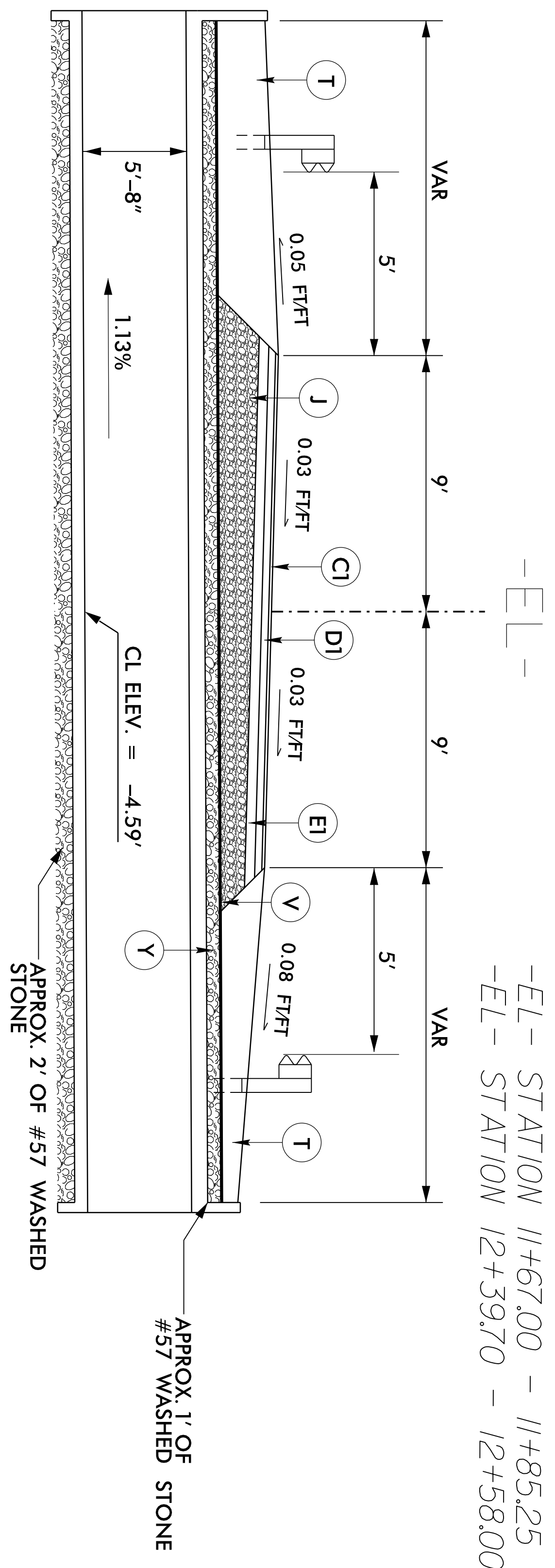
TYPICAL SECTION #2

-EL- STATION 11+15.00 - 11+67.00
 -EL- STATION 12+58.00 - 13+10.00



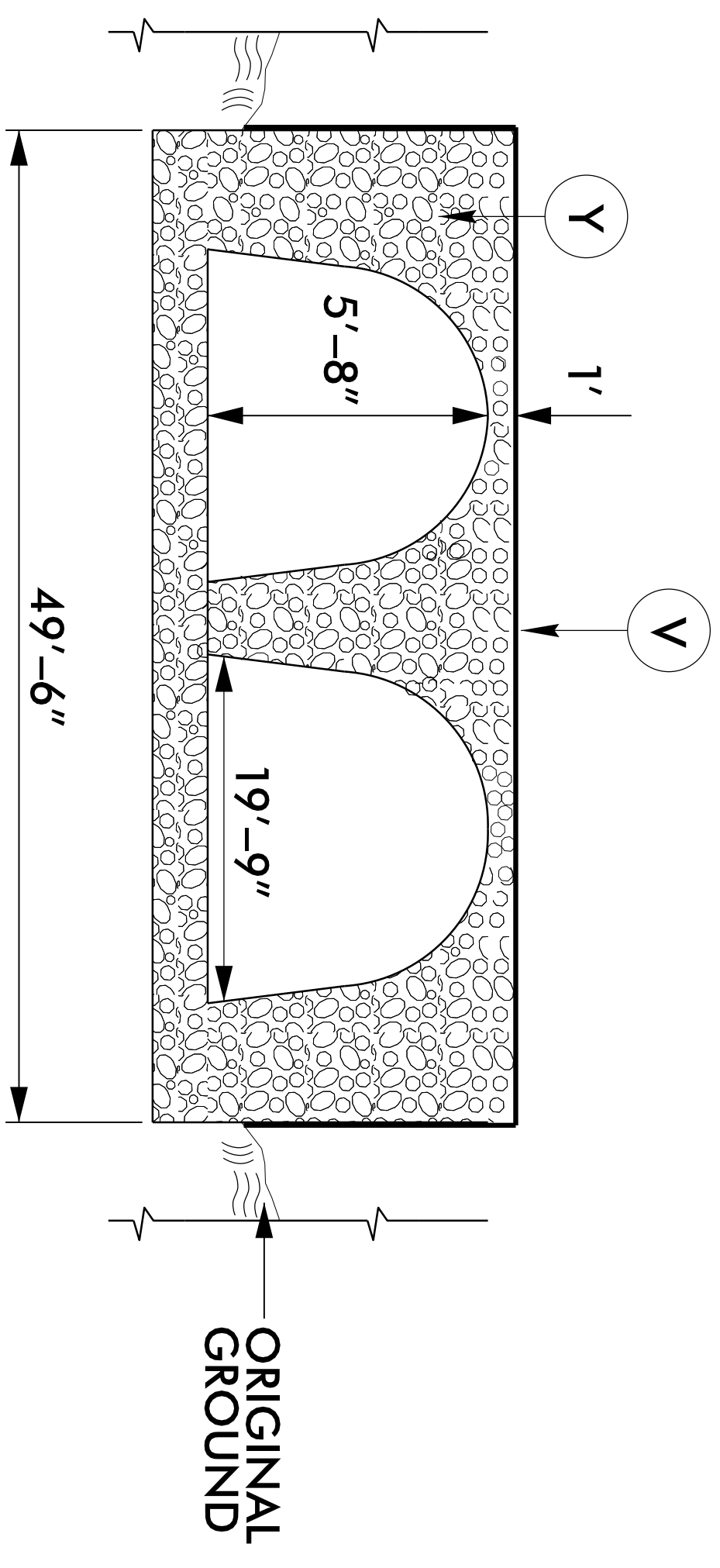
TYPICAL SECTION #3

-EL- STATION 11+67.00 - 11+85.25
 -EL- STATION 12+39.70 - 12+58.00



TYPICAL BOX CULVERT SECTION #4 (NTS)

-EL- STATION 11+85.25 - 12+39.70



END VIEW BOX CULVERT(NTS)

PROJECT REFERENCE NO. 17BP2A12	SHEET NO. 2
ROADWAY DESIGN ENGINEER DANIEL H. ALLEN 16710 01/16/2013	PAVEMENT DESIGN ENGINEER DANIEL H. ALLEN 16710 01/16/2013

REVISIONS

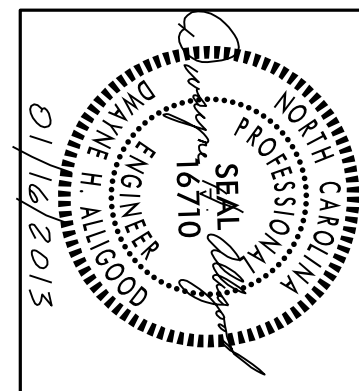
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STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 SUMMARY OF QUANTITIES

SECT	QUANTITY	UNIT	ITEM DESCRIPTION
800	1	LS	MOBILIZATION
801	1	LS	CONSTRUCTION SURVEYING
SP	1	LS	GRADING
SP	100	CY	UNDERCUT EXCAVATION
520	200	TON	AGGREGATE BASE COURSE
610	75	TON	ASPHALT CONCRETE BASE COURSE,TYPE B25.0B
610	80	TON	ASPHALT CONCRETE INTERMEDIATE COURSE,TYPE 119.0B
610	59	TON	ASPHALT CONCRETE SURFACE COURSE,TYPE S95B
620	13	TON	ASPHALT BINDER FOR PLANT MIX,GRADE PG64-22
862	220	LF	STEEL BEAM GUARDRAIL
SP	4	EA	GUARDRAIL ANCHOR UNITS,TYPE 350
876	120	TON	CLASS 1 RIP RAP
876	650	SY	GEOTEXTILE FOR DRAINAGE
1605	600	LF	TEMPORARY SILT FENCE
1610	10	TON	STONE FOR EROSION CONTROL,CLASS B
1610	10	TON	SEDIMENT CONTROL STONE
1615	0.5	ACRE	TEMPORARY MULCHING
1620	20	LB	SEED FOR TEMPORARY SEEDING
1620	01	TON	FERTILIZER FOR TEMPORARY SEEDING
1630	30	CY	SILT EXCAVATION
1631	1000	SY	MATTING FOR EROSION CONTROL
1632	100	LF	1/4" HARDWARE CLOTH
SP	100	LF	WATTLE
1660	1	ACRE	SEEDING AND MULCHING
1661	50	LB	SEED FOR REPAIR SEEDING
1661	0.2	TON	FERTILIZER FOR REPAIR SEEDING
SP	100	LF	TURBIDITY CURTAIN
SP	3	EA	RESPONSE FOR EROSION CONTROL
402	1	LS	REMOVAL OF EXISTING STRUCTURE AT -EL- STATION 12+17.58
SP	1	LS	2 @ 5'-8" X 19'-9" CORRUGATED ALUMINIUM BOX CULVERT WITH HEADWALLS AT -EL- STATION 12+12.50
SP	1	LS	RELOCATE EXISTING 4" WATER MAIN

PROJECT REFERENCE NO. 17BP2R12
 SHEET NO. 3

ROADWAY DESIGN
 ENGINEER



STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

LIST OF PIPES, ENDWALLS, ETC.

STATION	SIZE	THICKNESS OR GAUGE	LOCATION (LT, RT, OR CL)		STRUCTURE NO.		TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, OR PNG)	ALUMINUM BOX CULVERT
			FROM	TO	FROM	TO						
-EL- 12 + 12.50	CL	1						-4.31	-4.87			2 @ 19'-9" X 5'-8" ABC
												49'-6"
TOTALS												49'-6"

NOTE: Invert Elevations are for Bid Purposes only and shall not be used for project construction stakeout.
 See "Standard Specifications For Roads and Structures, Section 300-5".

**SUMMARY OF EARTHWORK
 IN CUBIC YARDS**

LOCATION	UNCLASSIFIED EXCAVATION	STRUCTURE EXCAVATION	UNDERCUT	EMBT + %	BORROW	WASTE
-EL- 10 + 75.00 - 13 + 50.00	30	1,016	0	672	642	1,016
UNDERCUT (CONTINGENCY)	0	0	100	120	120	100
SUB TOTAL	30	1,016	100	792	762	1,116
SAY	30	1,050	100	800	800	1,150

**PAVEMENT REMOVAL SUMMARY
 IN SQUARE YARDS**

LINE	STATION - STATION	LOCATION	REMOVAL (SY)
-EL-	11 + 67.00 - 12 + 58.00	CL	140
TOTAL			140
SAY			150

NOTE:
 APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, UNCLASSIFIED STRUCTURE EXCAVATION, BORROW EXCAVATION, FINE GRADING, CLEARING AND GRUBBING, AND REMOVAL OF EXISTING PAVEMENT WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR "GRADING."

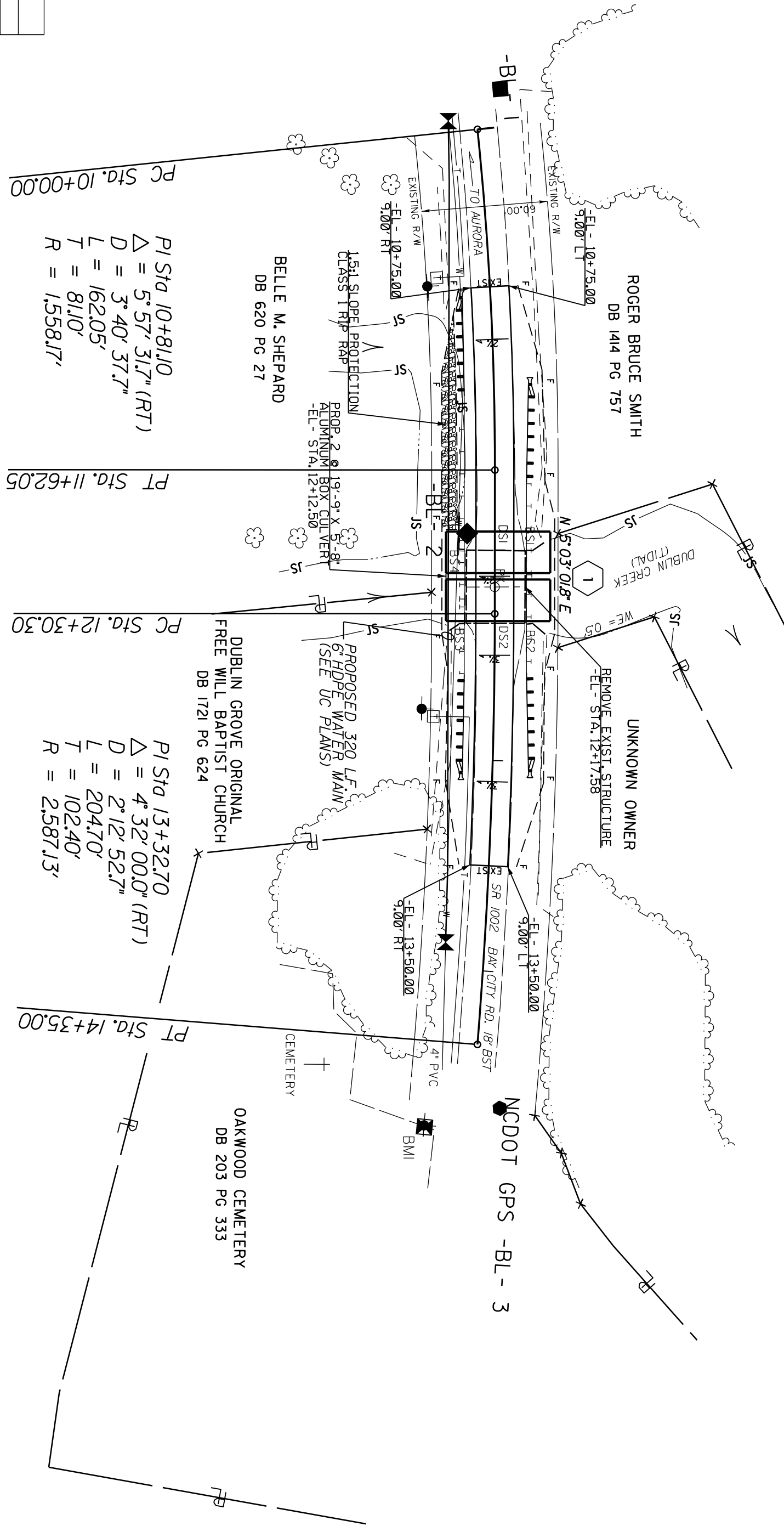
"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
 TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
 FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
 W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
 G = GATING IMPACT ATTENUATOR TYPE 350
 NG = NON-GATING IMPACT ATTENUATOR TYPE 350

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			VARIABLE POINT		"N" DIST. FROM E.O.L.	TOTAL SHOULDER WIDTH	FLARE LENGTH		W		ANCHORS		IMPACT ATTENUATOR TYPE 350 PERMITTED NO. G NG	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	TYPE 350			
-EL-	11 + 18.00	13 + 08.00	LT	90			13 + 08.00		5	9	50	50	1	1				
-EL-	10 + 76.28	13 + 08.00	RT	130			10 + 76.28		5	9	50	50	1	1	2			
TOTAL				220											4			

REVISIONS

Point	North	East	Elevation	Description
BL1	568135.33	2665202.50	3.77	BL-1
BL2	568344.25	2665236.63	2.85	BL-2
BL3	568617.50	2665245.04	4.02	NC DOT GPS BL-3
BMI	568923.20	2665281.35	4.39	RR SPIKE SET IN PP



NAD 83/NSRS 2007
 NC GRID
 Z

PROJECT REFERENCE NO. 17BP2R12
 RW SHEET NO. 4
 SHEET NO. 4

ROADWAY DESIGN ENGINEER
 SEAL
 DATE 01/16/2013

HYDRAULICS ENGINEER
 SEAL
 DATE 01/16/2013

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DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT BL-3 WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 568617.505(+ft) EASTING: 2665245.044(+ft) ELEVATION: 4.02(+ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (ROUND TO GRID) IS: 0.999878480

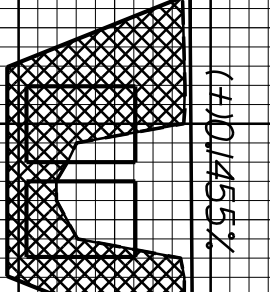
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM BL-3 TO -EL- STATION 10+00.00 IS
 S 03°42' 24.7" W 464.951(+ft)

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

BEGIN GRADE -EL- STATION 10+7500 ELEVATION 379

END GRADE -EL- STATION 13+5000 ELEVATION 419

-EL- PROFILE
 SCALE:
 1" = 50' HORIZ.
 1" = 10' VERT.



HYDRAULIC DATA

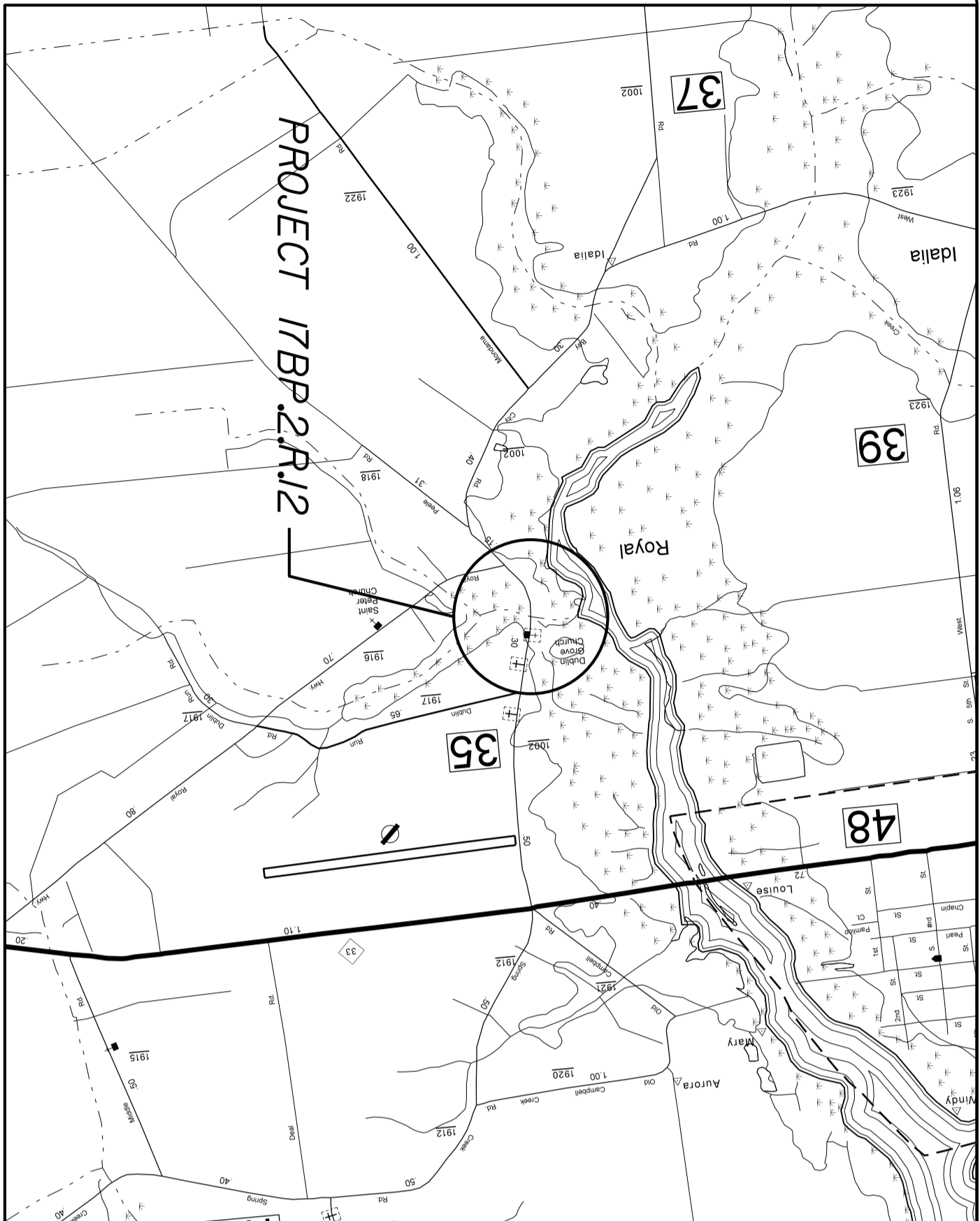
Design:	Discharge	410	c.f.s.	Frequency	50 yr.	Elev.	1.5'
Base Flood:	Discharge	500	c.f.s.	Frequency	100 yr.	Elev.	1.90'
Over-topping:	Discharge	725	c.f.s.	Frequency	500 yr.	Elev.	3.9'

ELEVATIONS TAKEN AT NS 239 423 FROM CENTERLINE
 W/O CONSIDERATION OF BACKWATER FROM SOUTH CREEK

10 11 12 13 14

CONTRACT:

PROJECT: 17BP.2.R.12



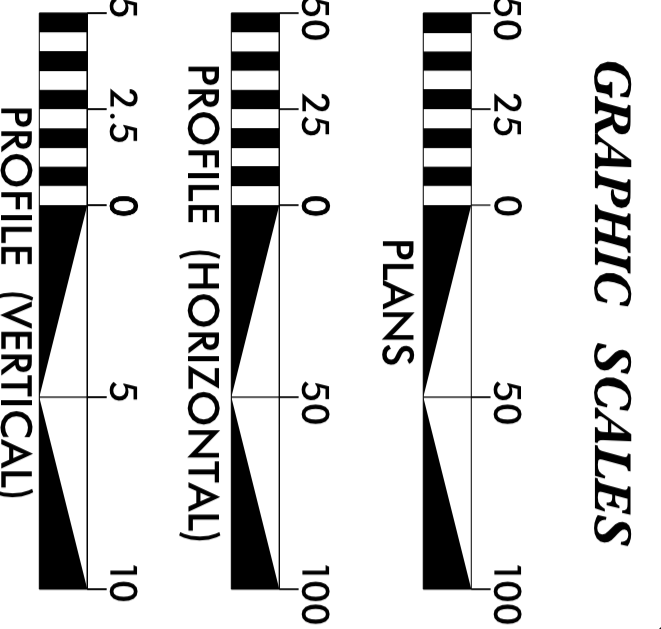
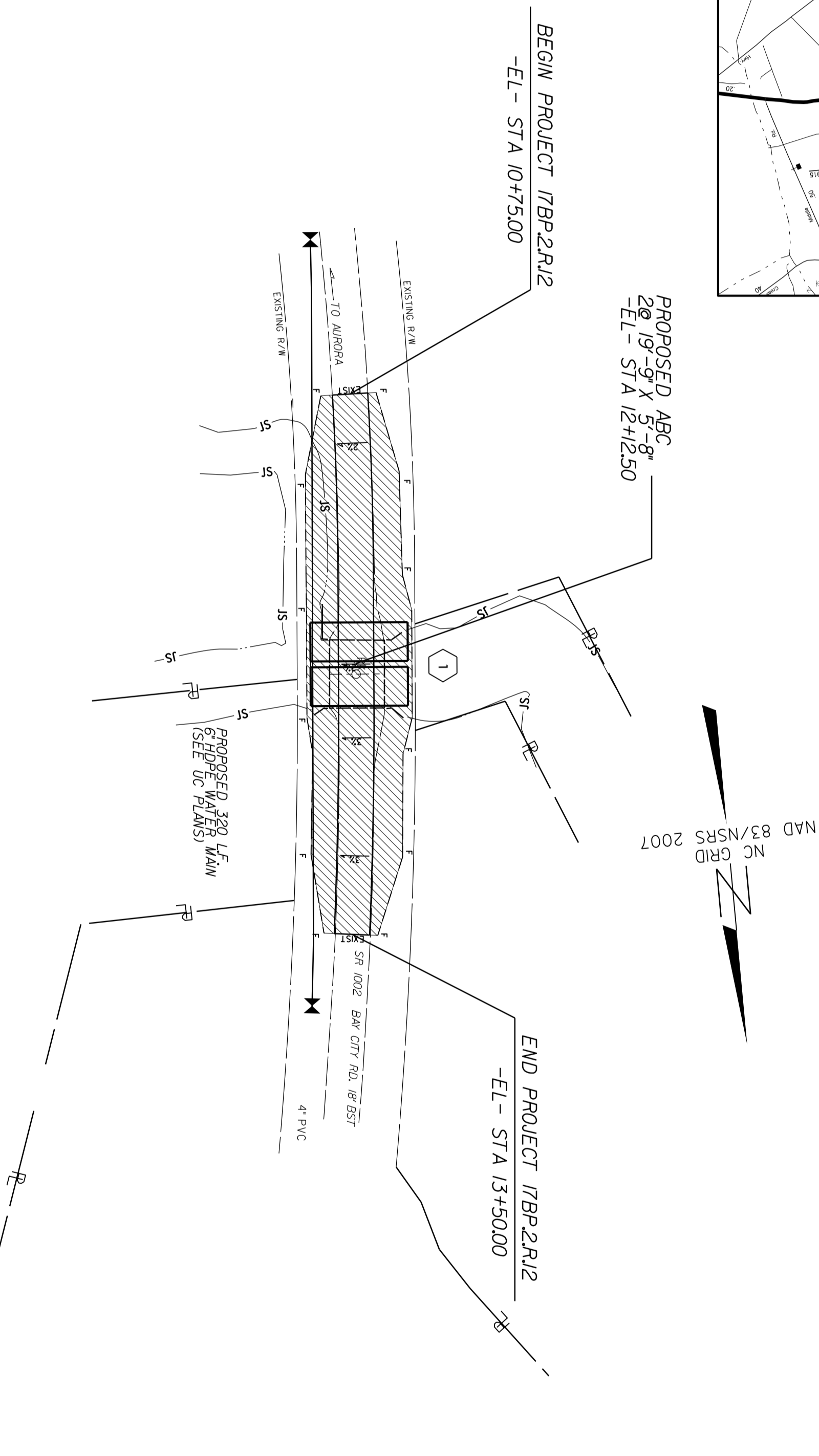
Vicinity Map

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

BEAUFORT COUNTY

**LOCATION: BRIDGE #35 OVER FORK OF SOUTH CREEK
 ON HIGHWAY SR 1002 BETWEEN NC33 AND
 SR 1922.**
**TYPE OF WORK: UTILITY CONSTRUCTION
 WATER MAIN RELOCATION**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP.2.R.12	UC1	4
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	



DESIGN DATA

ADT 2008 =	820
ADT 2035 =	1300
DHV =	10 %
D =	60 %
T =	6 %
V =	60 MPH
* TTST =	4 DUAL 4
FUNC CLASS =	
SUBREGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY PROJECT 17BP.2.R.12 =	0.042 MILES
LENGTH STRUCTURE PROJECT 17BP.2.R.12 =	0.010 MILES
TOTAL LENGTH PROJECT 17BP.2.R.12 =	0.052 MILES

Prepared In the Office of:

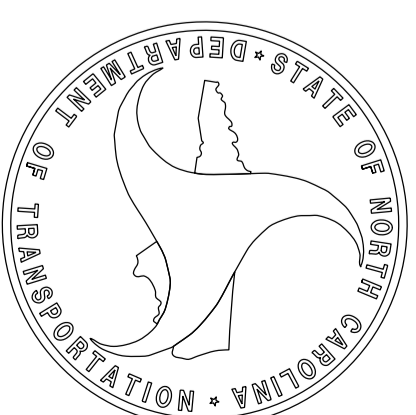
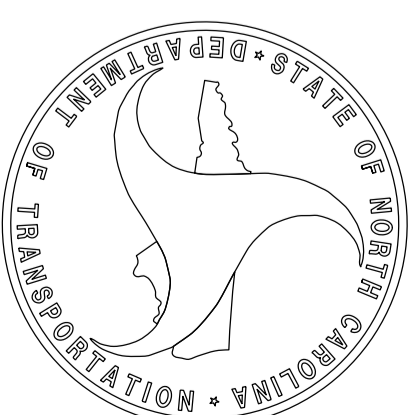
DIVISION OF HIGHWAYS
 1704 N. GREENE ST. GREENVILLE, NC 27834

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	N/A
LETTING DATE:	FEB 2013

UTILITIES ENGINEER

Signature: *Dwayne H. Allgood*
 12/21/2012
 P.E.



REVISIONS

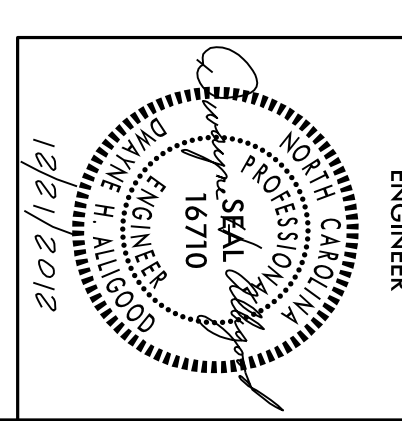
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UTILITY CONSTRUCTION

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS SUMMARY OF QUANTITIES

WATER MAIN	QUANTITY	UNIT	ITEM DESCRIPTION
	40	LF	4" DI PIPE
	320	LF	6" HDPE PIPE DR9 (AMWA C906)
	2	EA	4" GATE VALVE AND VALVE BOX
	2	EA	DI PIPE TO HDPE TRANSITION
	2	EA	CONCRETE THRUST COLLAR
	100	LF	TEMPORARY SILT FENCE
	0.2	ACRES	SEEDING AND MULCHING

PROJECT REFERENCE NO. *17BP2R12* SHEET NO. *UC2*



UTILITIES
ENGINEER

REVISIONS

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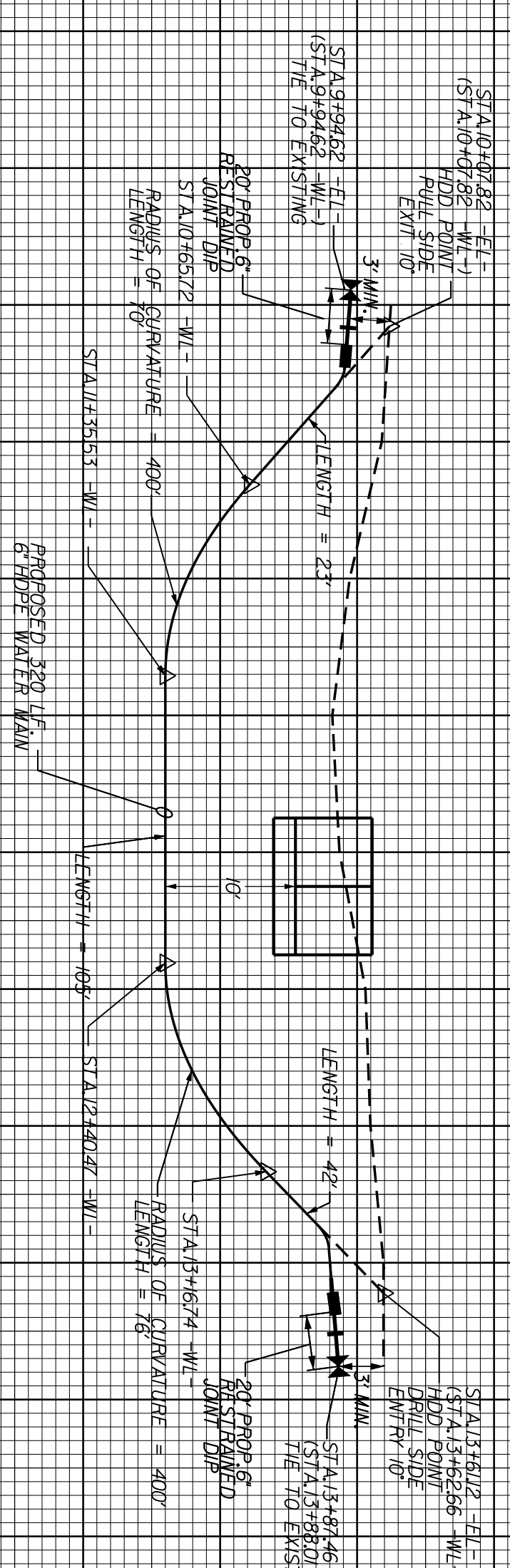
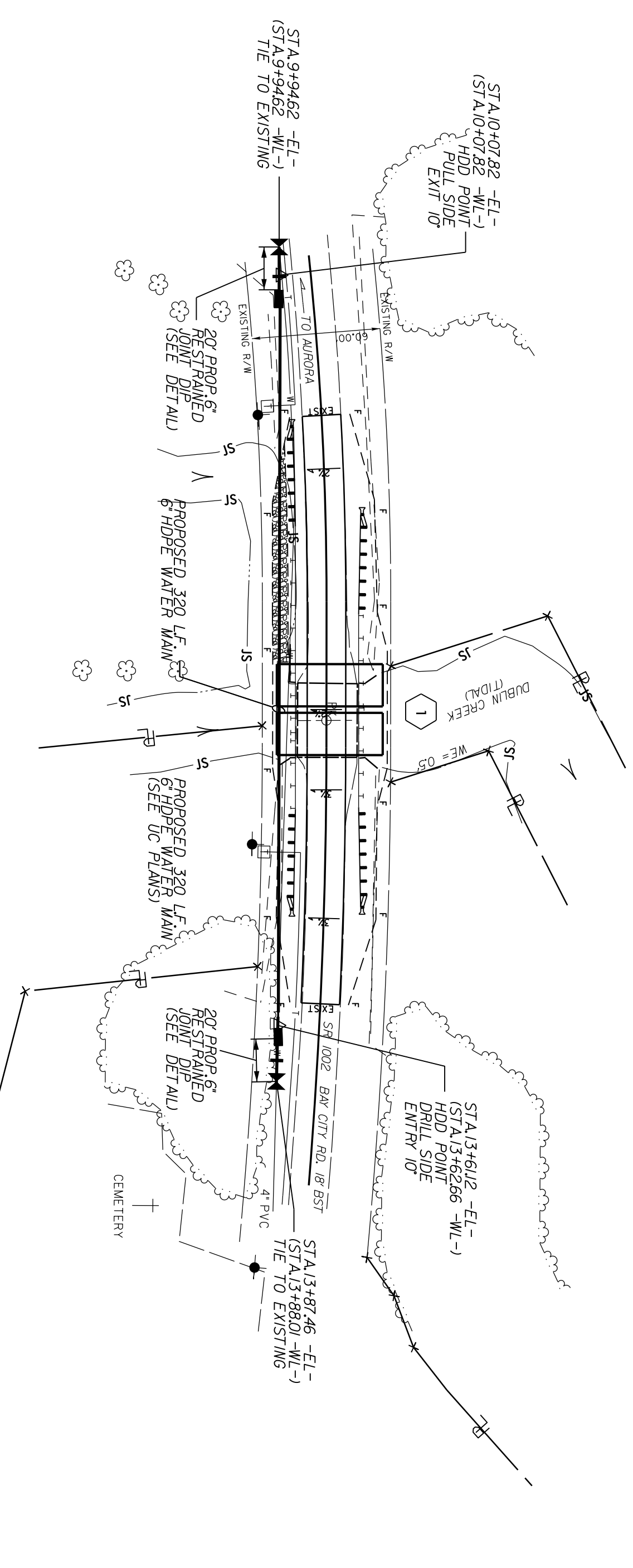
DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "BL-3" WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 568617.505(++) EASTING: 266225.044(++) ELEVATION: 4.02(++)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999878480

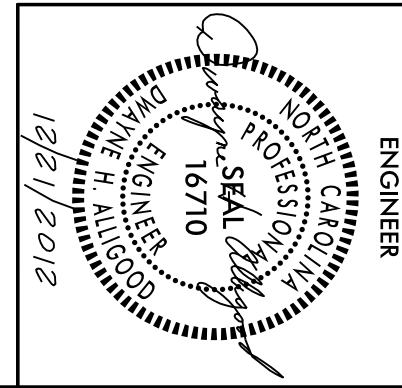
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "BL-3" TO -EL- STATION 10+00.00 IS
 S 03°42'24.7" W 464.951(++)

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



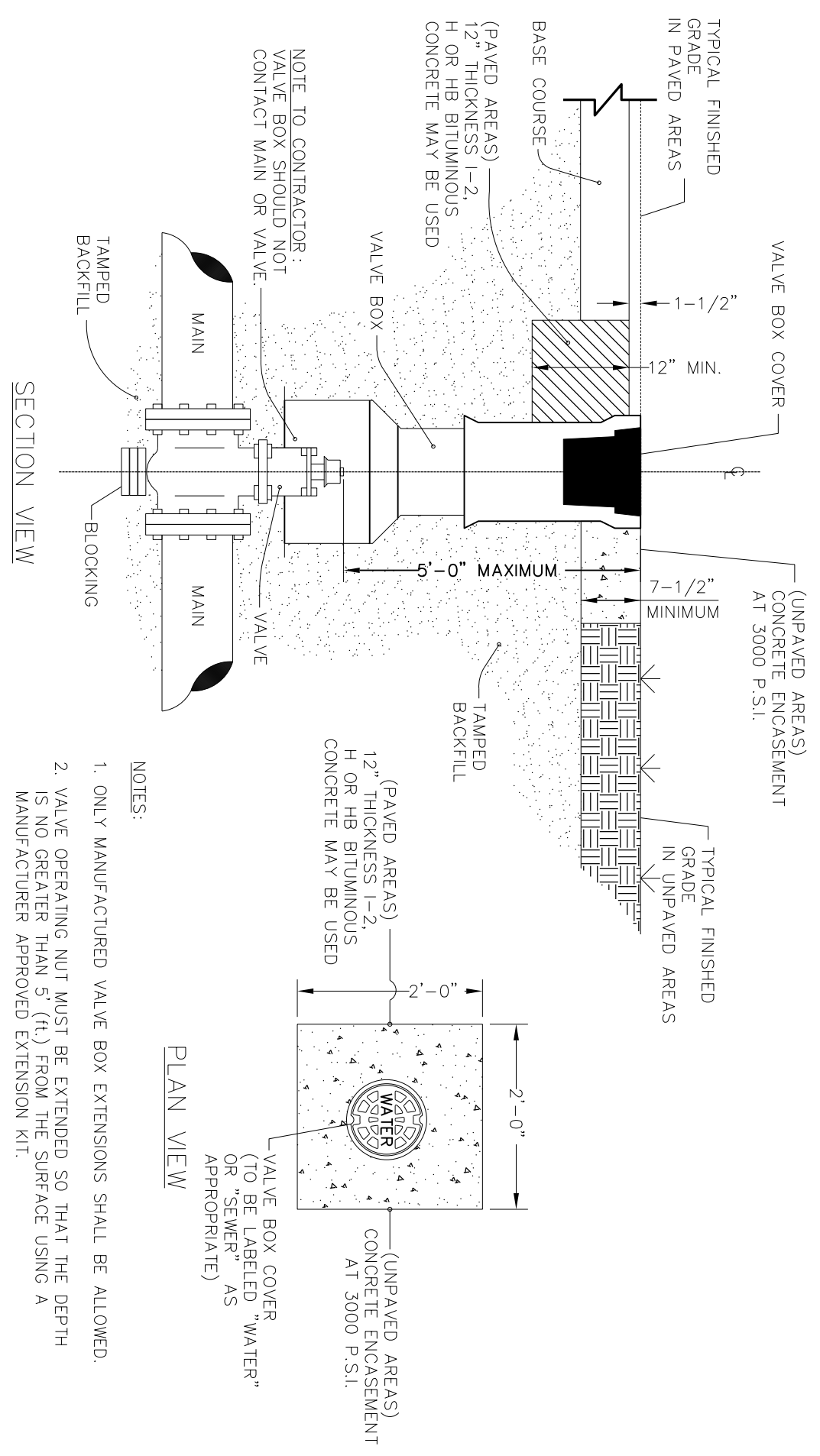
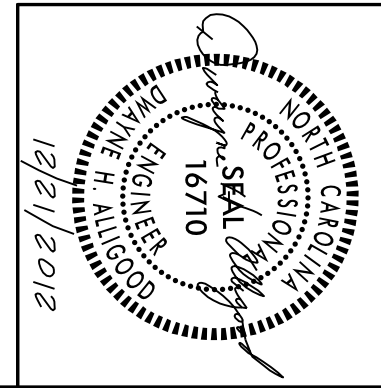
- NOTES:**
1. 8" HOPE WATER MAIN TO CONFORM TO THE FOLLOWING: AWWA C906, PRESSURE CLASS 200, DR9 DUCTILE IRON PIPE SIZE (DIPS) DIMENSIONS, AND MATERIAL DESIGNATION PE 3408 AND NSF APPROVED FOR POTABLE WATER.
 2. THE PROPOSED WATER MAIN RELOCATION DOES NOT IMPACT ANY ENVIRONMENTALLY SENSITIVE AREAS.
 3. LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY CONTRACTOR AND MAINTAIN 18" MINIMUM VERTICAL SEPARATION.

- LEGEND:**
- Gate Valve
 - HDPPE to DIP Transition
 - Thrust Collar



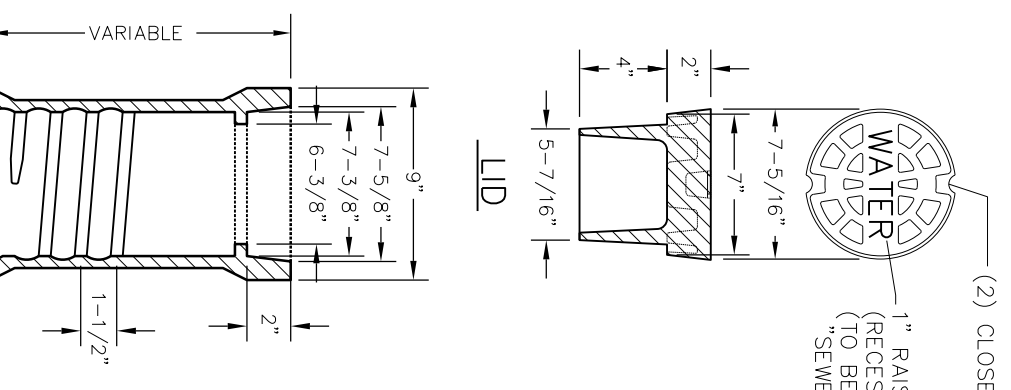
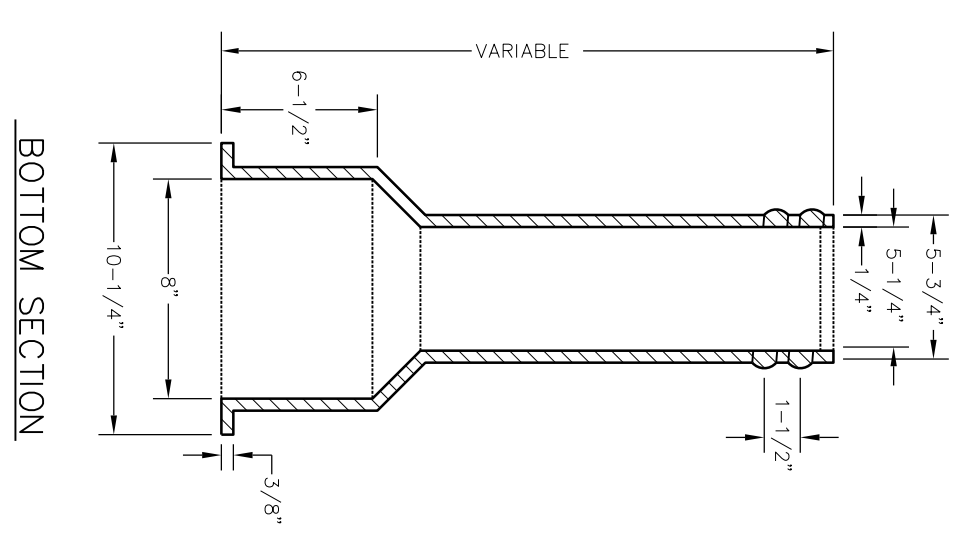
10 11 12 13 14 15

UTILITY CONSTRUCTION DETAIL SHEET



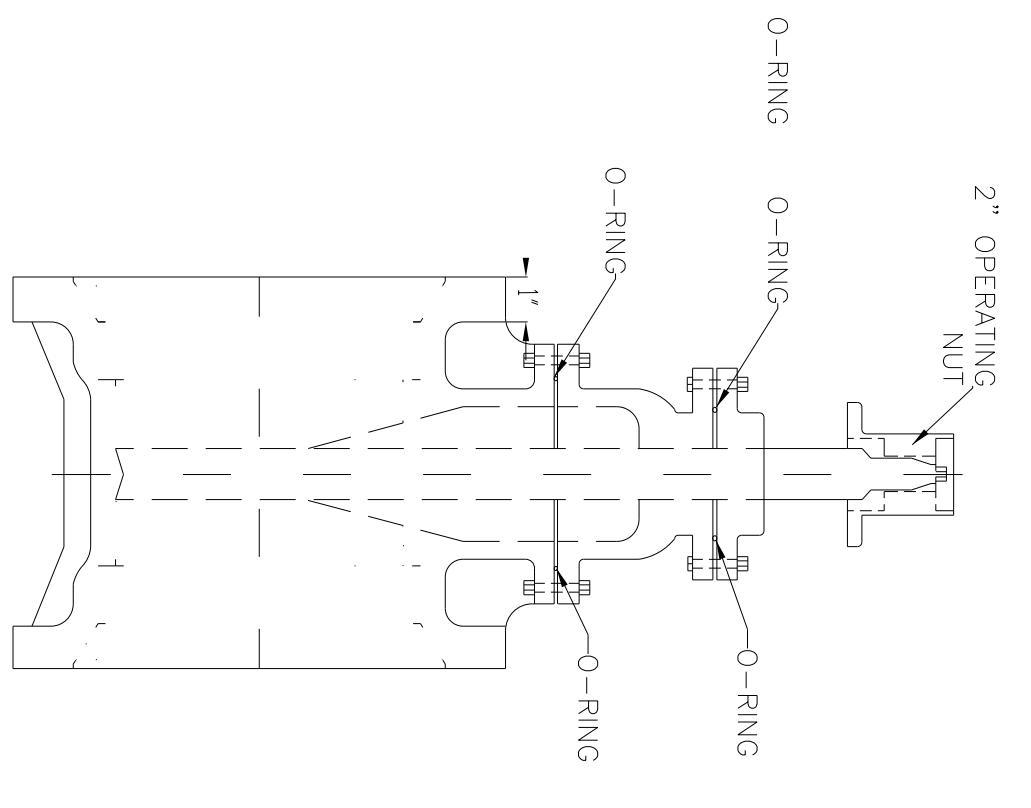
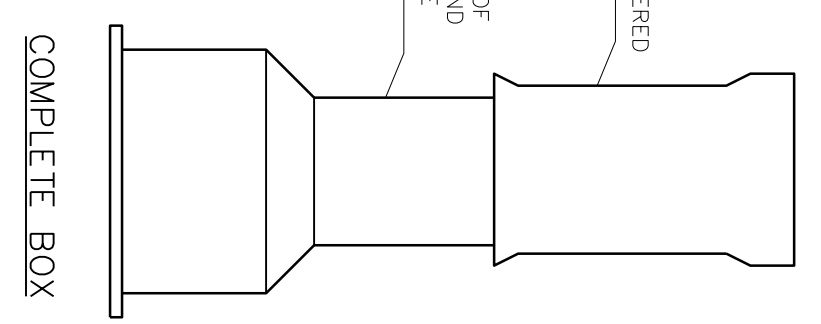
- NOTES:
1. ONLY MANUFACTURED VALVE BOX EXTENSIONS SHALL BE ALLOWED.
 2. VALVE OPERATING NUT MUST BE EXTENDED SO THAT THE DEPTH IS NO GREATER THAN 5" (1) FROM THE SURFACE USING A MANUFACTURER APPROVED EXTENSION KIT.
 3. PRECAST CONCRETE ENCASMENT IS ALLOWED OUTSIDE OF PAVED AREAS.

TYPICAL VALVE BOX
NTS

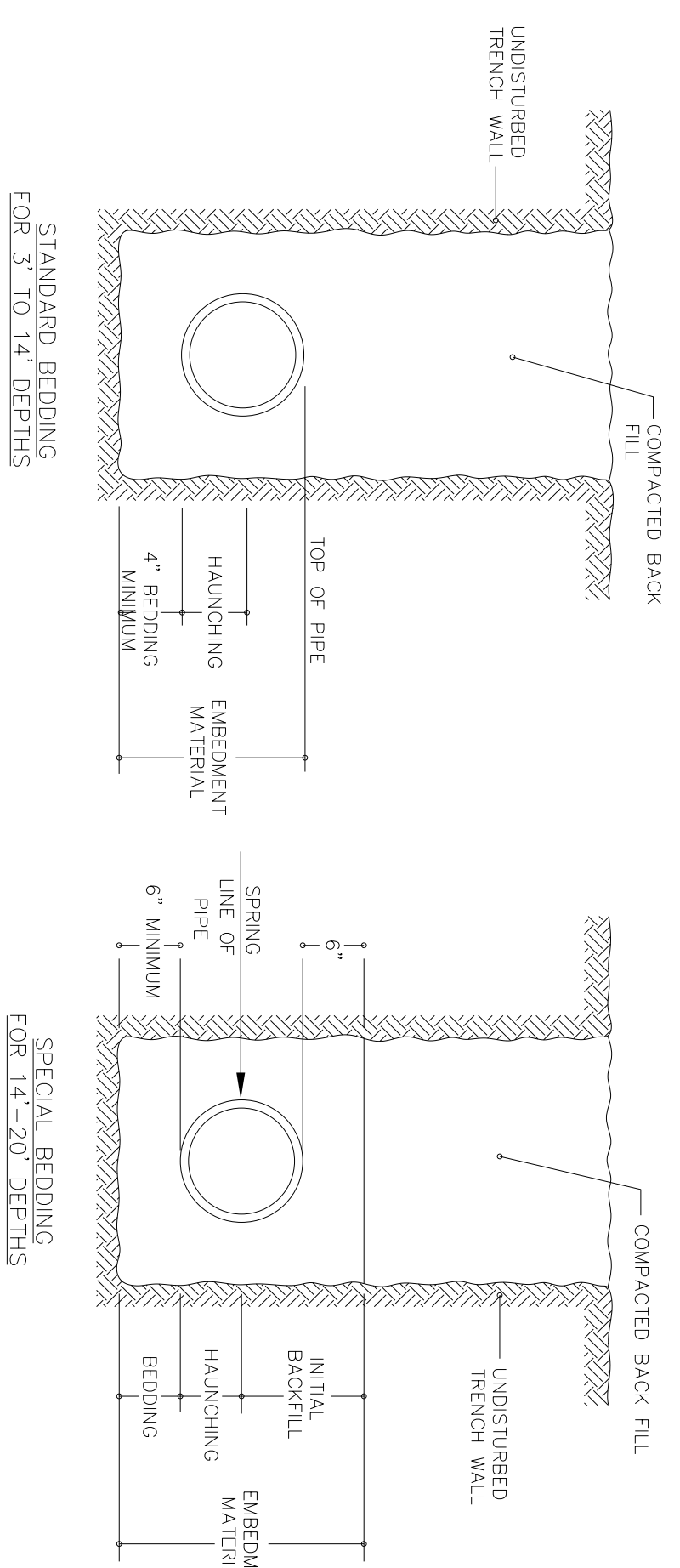


- NOTES:
1. VALVE BOX COVER SHALL WEIGH A MINIMUM 26 lbs.
 2. ENTIRE VALVE BOX ASSEMBLY & COVER SHALL BE CAST FROM CLASS 35 GRAY IRON.
 3. ASSEMBLY SHALL BE DOMESTICALLY MADE AND MANUFACTURED IN THE U.S.A.

TYPICAL VALVE BOX
NTS

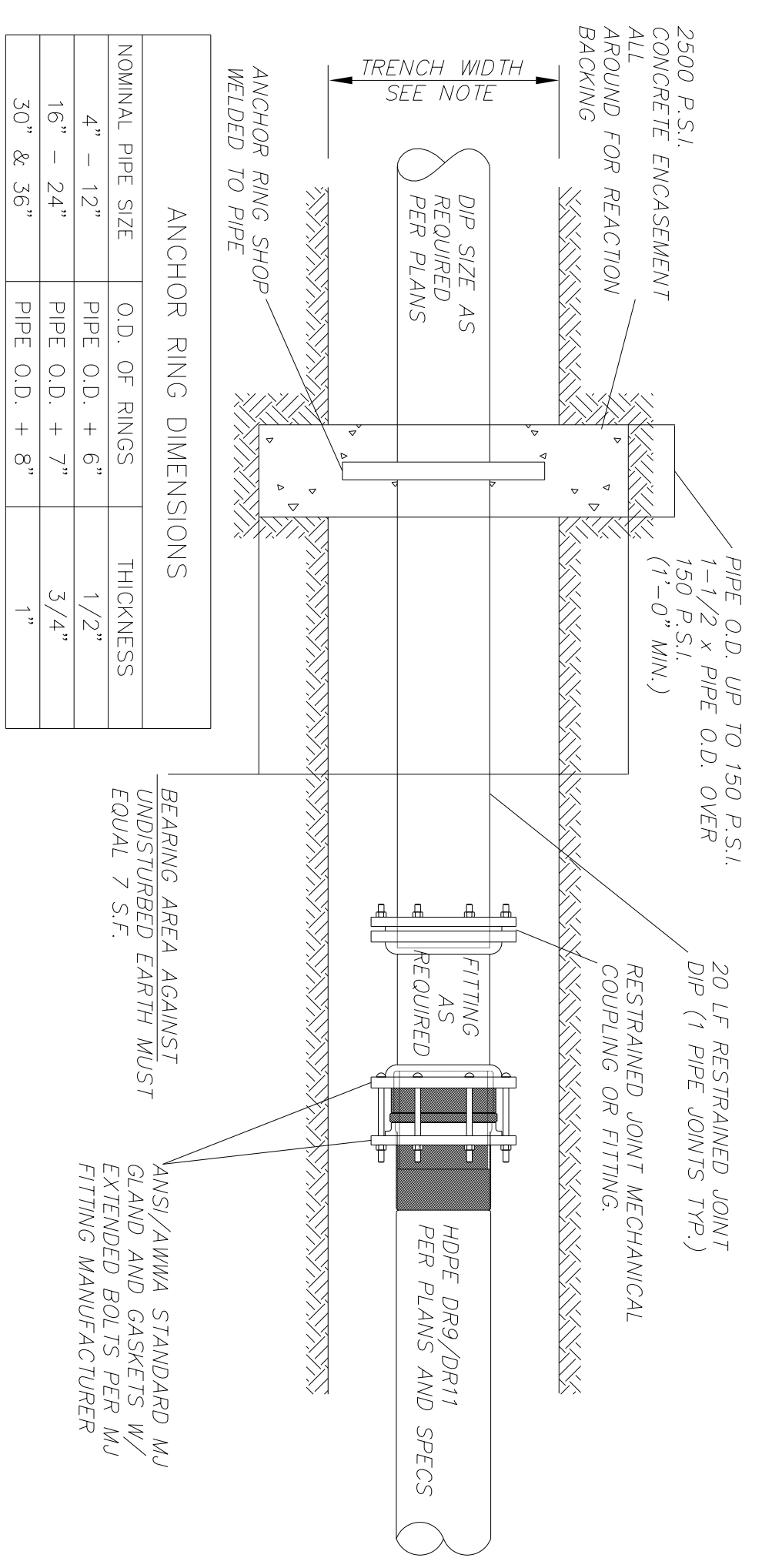


TYPICAL RESILIENT MECHANICAL
JOINT GATE VALVE DETAIL
NTS



- NOTES:
1. EMBEDMENT MATERIAL MUST BE CLASS I (NO. 67 OR NO. 78M WASHED STONE IS TYPICALLY USED).
 2. EMBEDMENT MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY FOR CLASS I MATERIAL.
 3. STANDARD BEDDING SHALL BE UTILIZED FOR ALL CASES WHERE TRENCH BOTTOMS ARE UNSTABLE DUE TO SOIL TYPE, OR INSTABLE CONDITIONS.

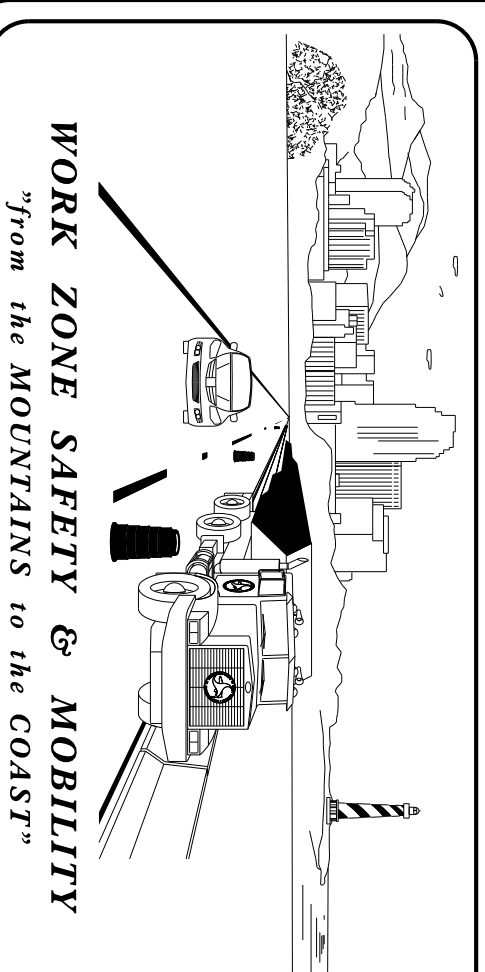
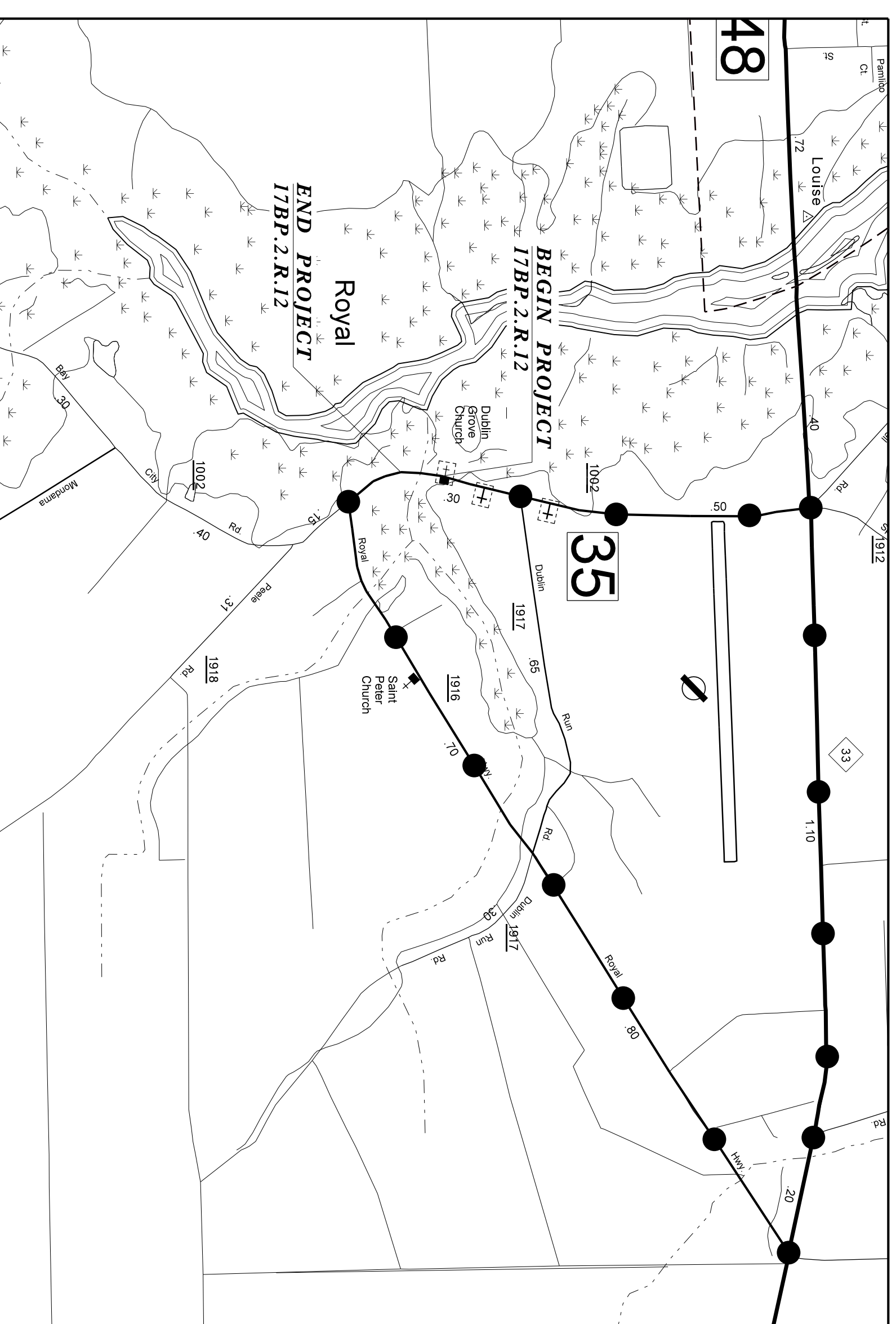
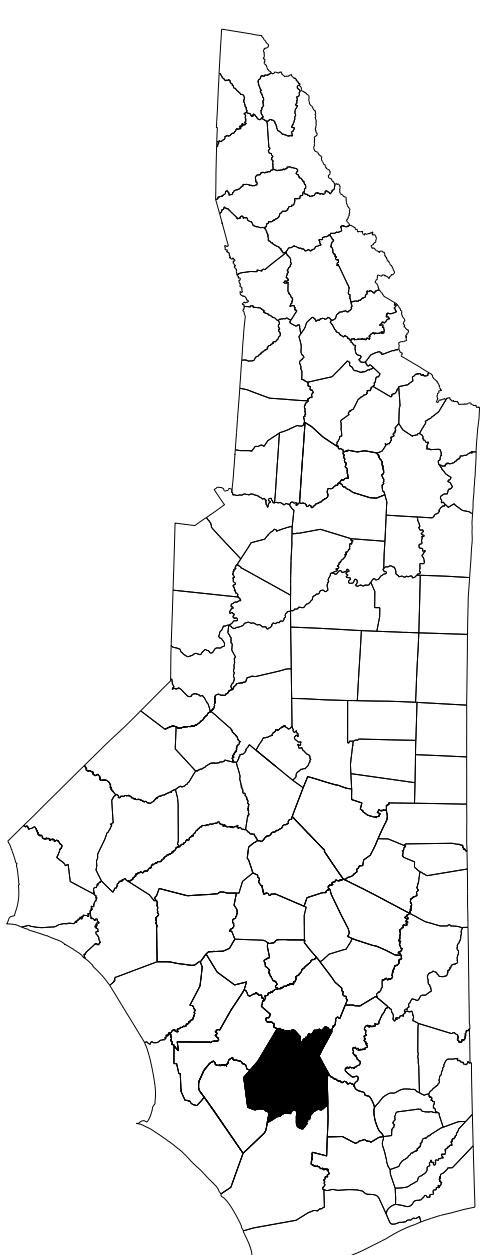
TYPICAL BEDDING FOR FLEXIBLE & SEMI-RIGID PIPE
NTS



TYPICAL DIP TO HDPE TRANSITION DETAIL WITH THRUST COLLAR
NTS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN
BEAUFORT COUNTY



N.C.D.O.T. DIVISION TWO DDC
P.O. BOX 1587
GREENVILLE, NC 27835
PHONE 252-439-2800

DWAYNE ALLIGOOD TRAFFIC CONTROL PROJECT ENGINEER
LANG JONES TRAFFIC CONTROL PROJECT DESIGN ENGINEER
LANG JONES TRAFFIC CONTROL DESIGN ENGINEER

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP & INDEX OF SHEETS; LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS & LEGEND
TMP-2	PROJECT NOTES, DETOUR AND PLANS.

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - 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:

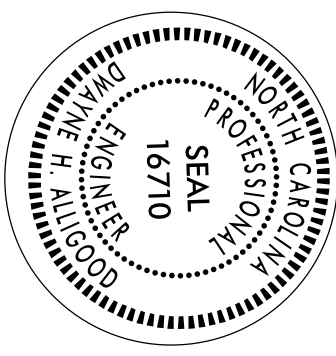
STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUM

LEGEND

- GENERAL**
- DIRECTION OF TRAFFIC FLOW
 - DIRECTION OF PEDESTRIAN TRAFFIC FLOW
 - EXIST. PVMT.
 - NORTH ARROW
 - PROPOSED PVMT.
 - WORK AREA
- TRAFFIC CONTROL DEVICES**
- BARRICADE (TYPE III)
 - CONE
 - DRUM
 - SKINNY DRUM
 - TUBULAR MARKER



APPROVED: *Dwayne H. Allgood*
DATE: 01/16/2013



17BP.2.R.12

TIP PROJECT:

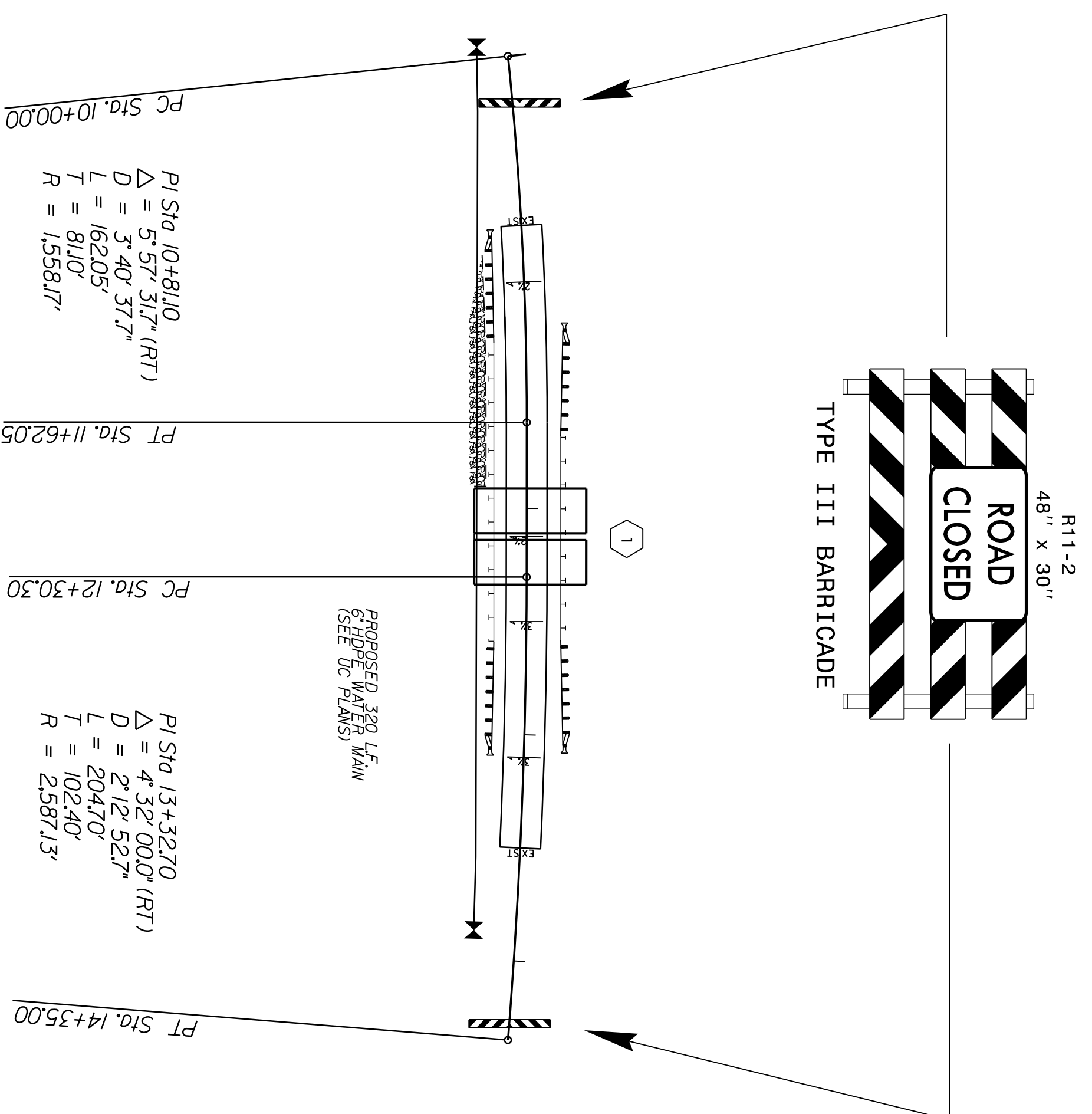
SHEET NO.
TMP-1

GENERAL NOTES

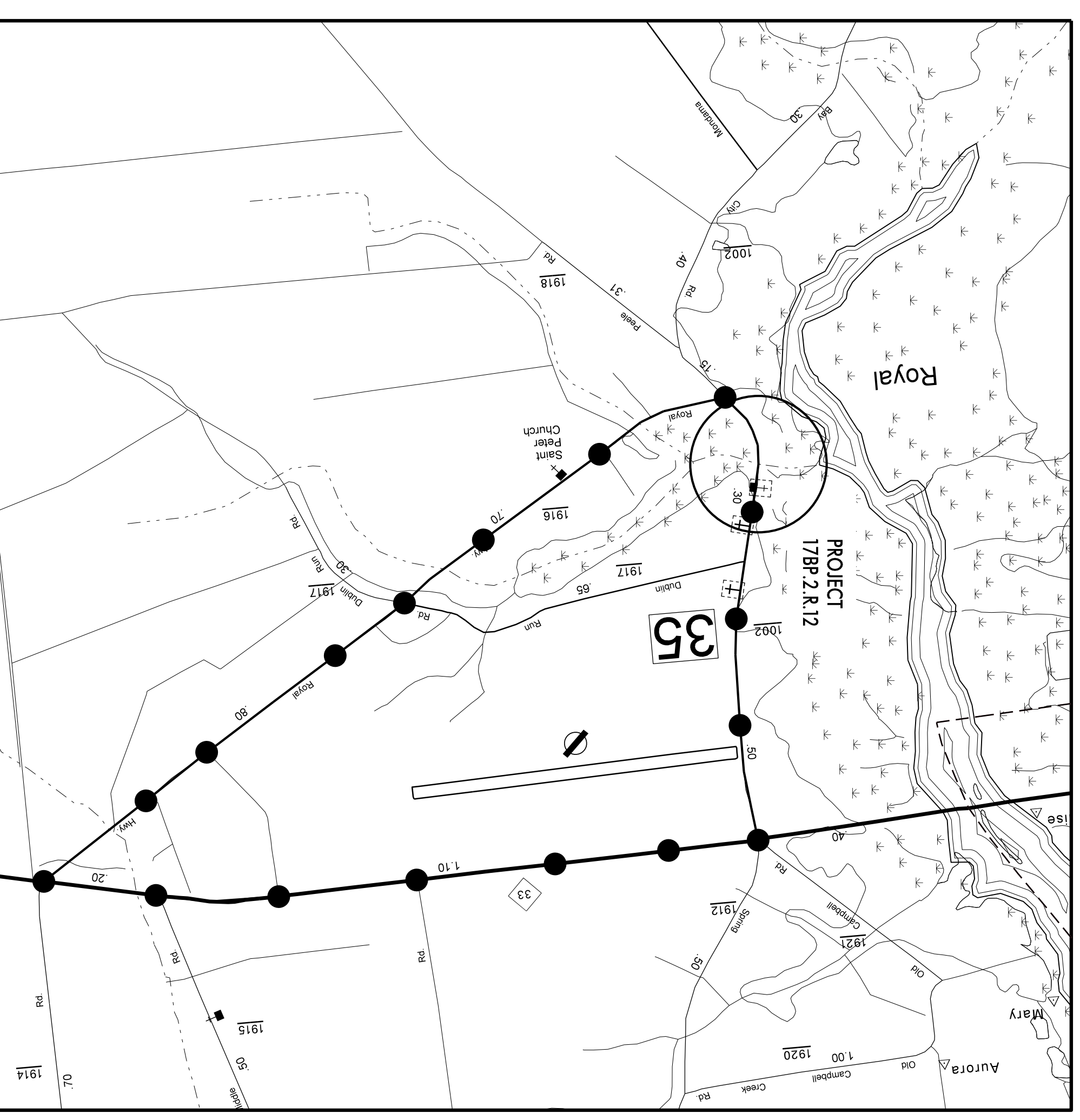
IMPLEMENT TRAFFIC CONTROL IN ACCORDANCE WITH THE ROADWAY STANDARD DRAWINGS LISTED ON TMP-1.

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

STATE FORCES WILL INSTALL AND MAINTAIN THE PROJECT DETOUR AND THE TYPE III BARRICADES AT THE PROJECT LIMITS. STATE FORCES WILL INSTALL PAINT AND MARKERS ON THE FINISHED PROJECT. CALL JIM EVANS AT 252-830-3493 FOR COORDINATION.



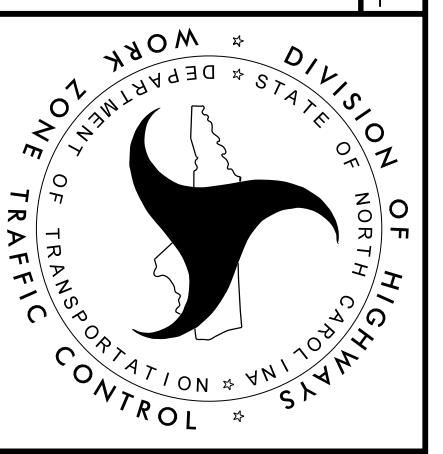
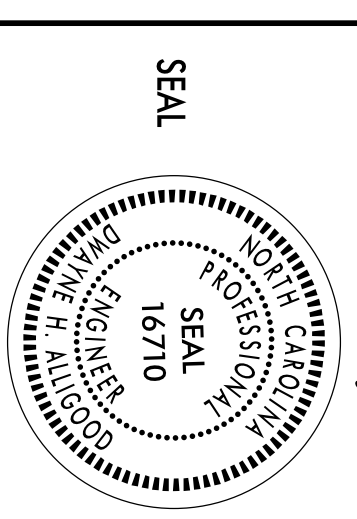
NAD 83/NSRS 2007



DETOUR ROUTE

PROJ. REFERENCE NO. 17BP.2.R.12 SHEET NO. TMP-2

APPROVED: *Quinn H. Williams* DATE: 01/14/2013

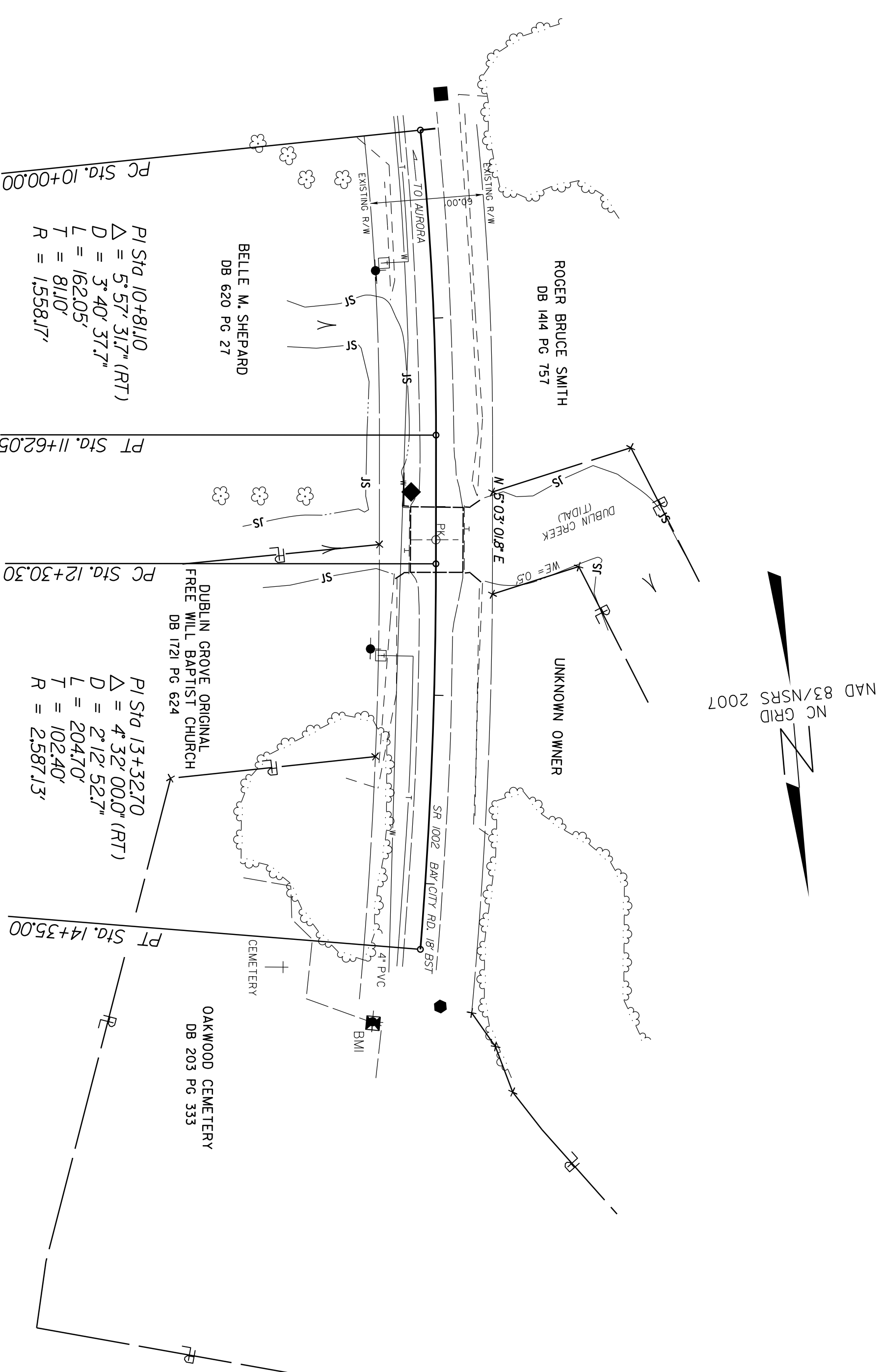


PROJECT: 17BP.2.R.12

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

PLAN FOR PROPOSED HIGHWAY EROSION CONTROL



NAD 83/NSRS 2007
NC GRID

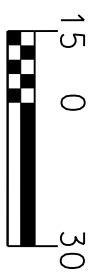
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP2.R.12	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

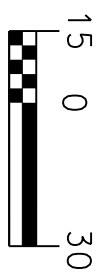
Sid. #	Description	Symbol
1630.05	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
1633.01	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
1633.02	Temporary Rock Silt Check Type-B with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B with Coir Fiber Wattle	
1633.02	Temporary Rock Silt Check Type-B with Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Special Stilling Basin	
1630.06	Rock Inlet Sediment Trap	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

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

GRAPHIC SCALE



PLANS

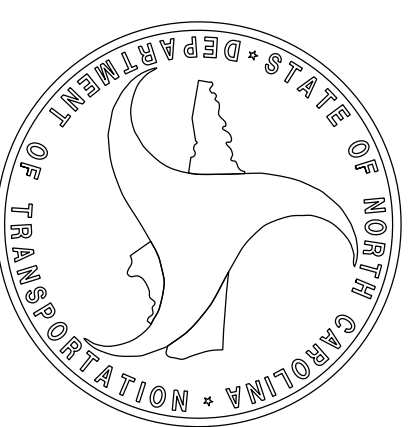


PROFILE (HORIZONTAL)



PROFILE (VERTICAL)

DIVISION TWO DDC UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



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.

2012 STANDARD SPECIFICATIONS

Prepared in the Office of:

DIVISION 2 DDC

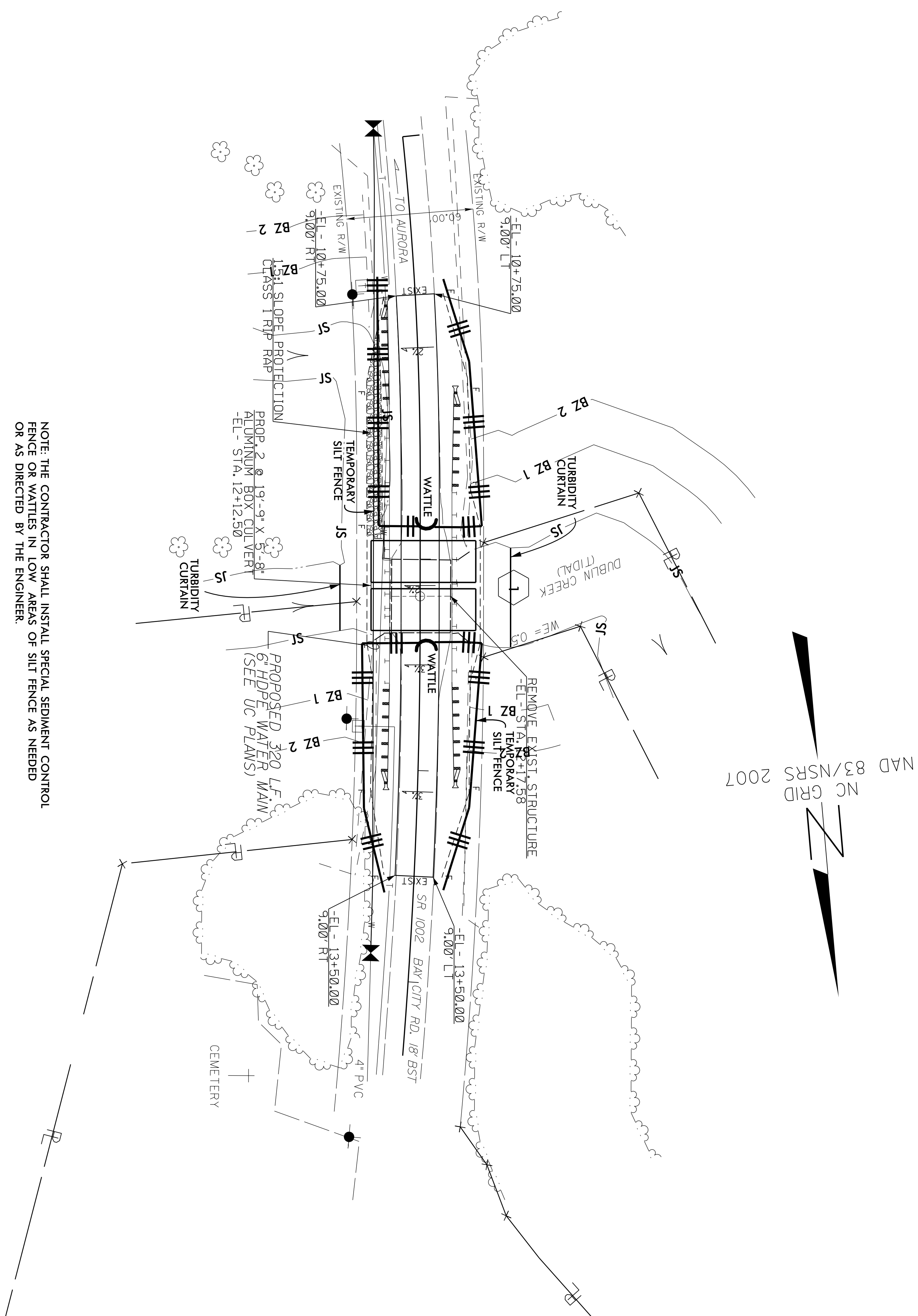
P.O. Box 1587
Greenville, NC 27835

Lang Jones, DDC Engineer
Level IIIA
Certification #274

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 hereto are applicable to this project and by reference hereby are considered a part of these plans.

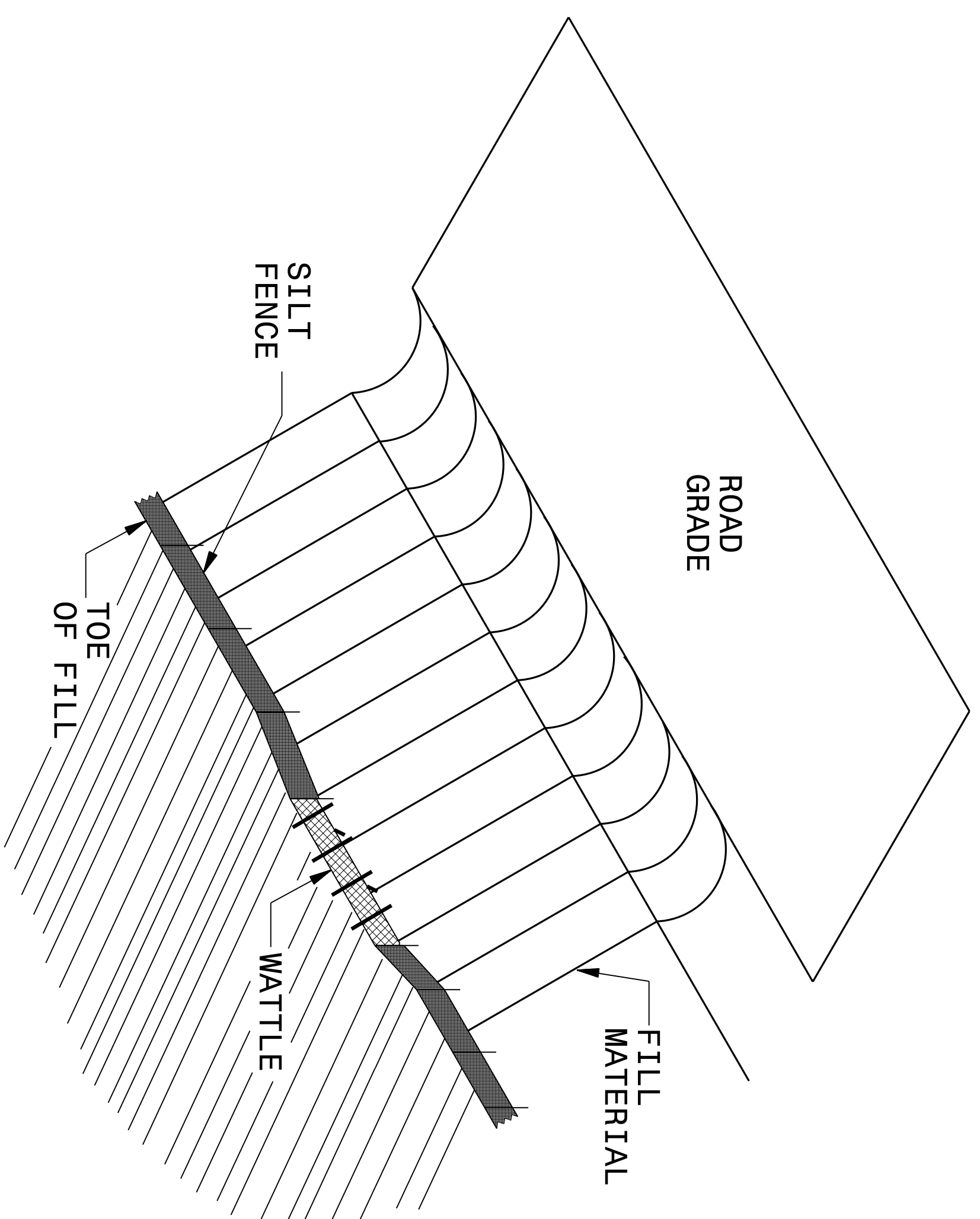
1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type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



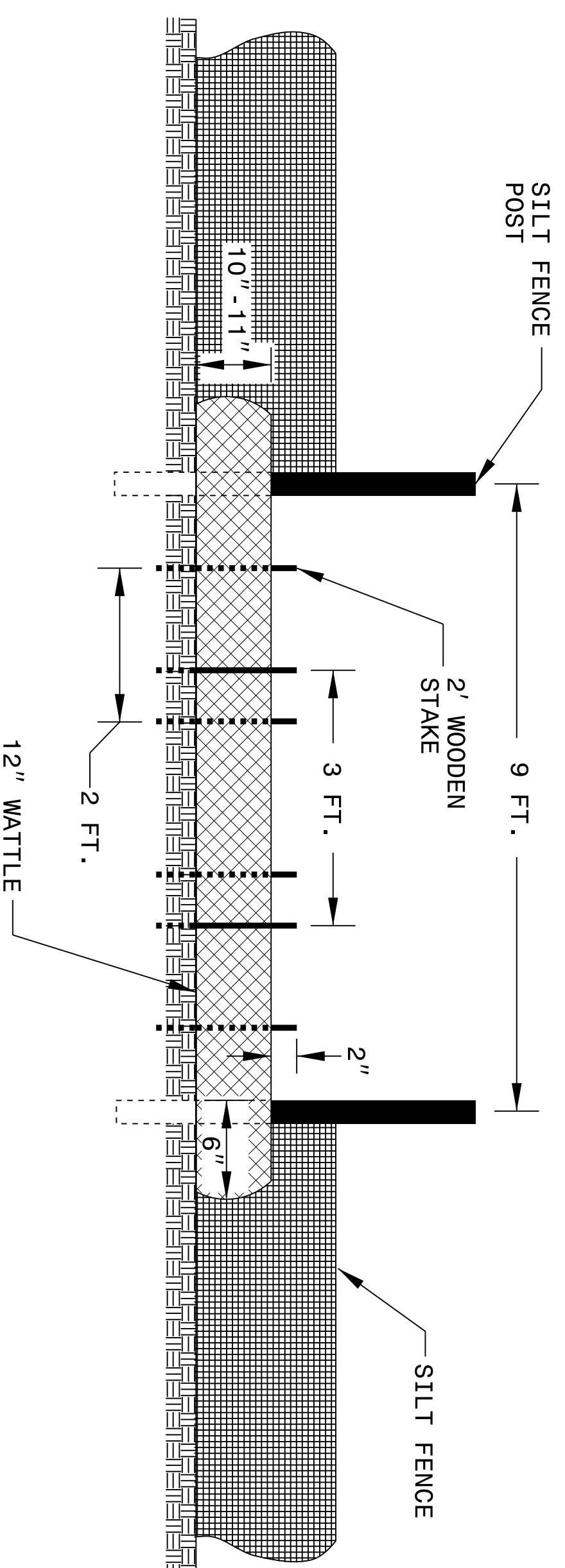
NOTE: THE CONTRACTOR SHALL INSTALL SPECIAL SEDIMENT CONTROL FENCE OR WATTLES IN LOW AREAS OF SILT FENCE AS NEEDED OR AS DIRECTED BY THE ENGINEER.

NC GRID 2007
 NAD 83/NSRS 2007

SILT FENCE COIR FIBER WATTLE BREAK DETAIL



ISOMETRIC VIEW

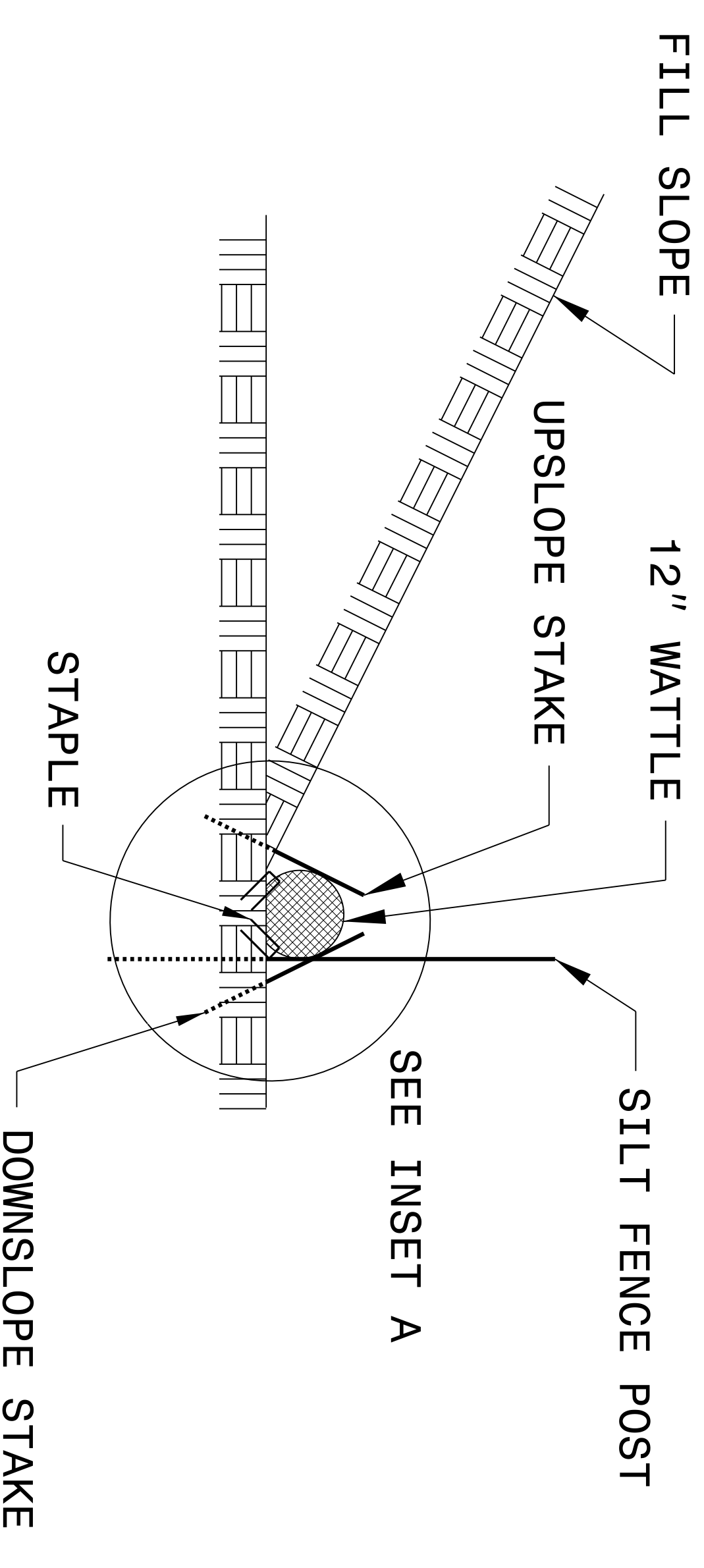
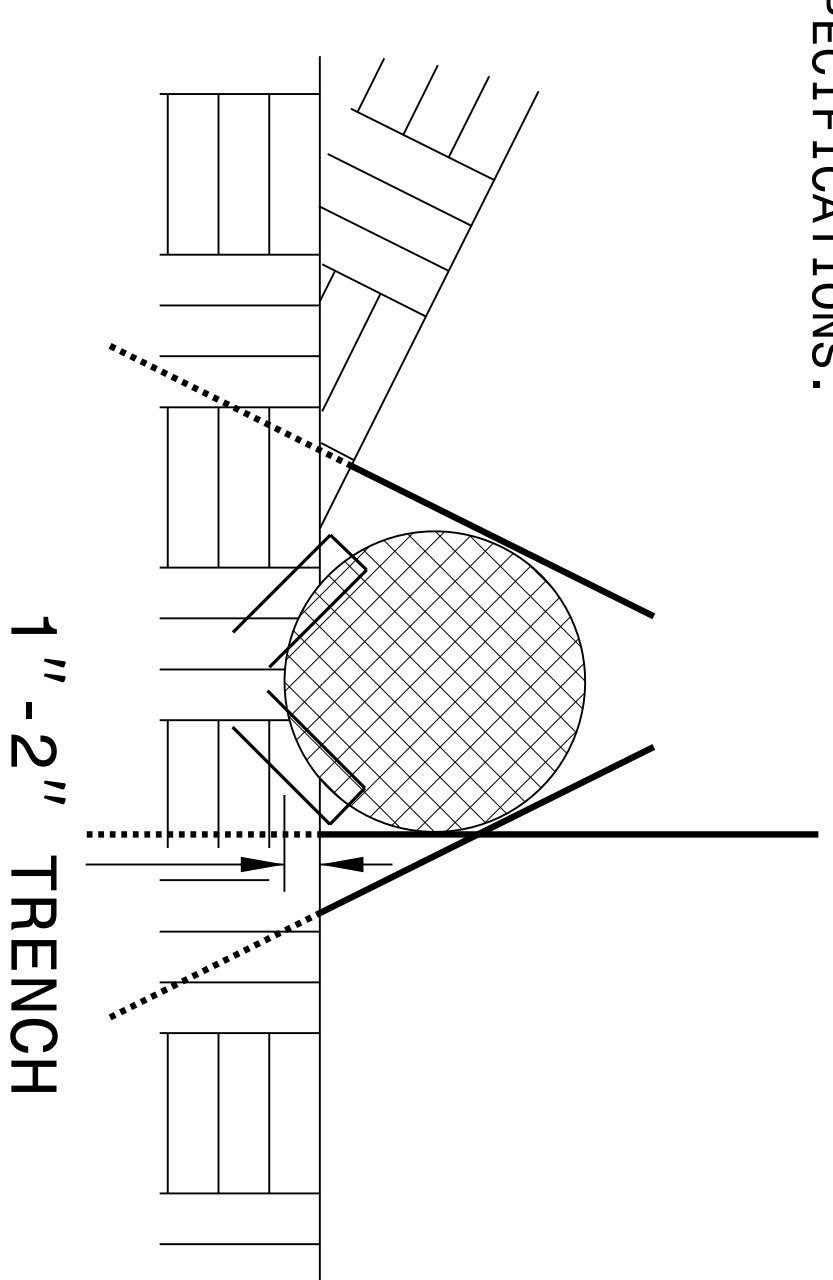


VIEW FROM SLOPE

NOTES:

- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.
- EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.
- DO NOT PLACE WATTLE ON TOE OF SLOPE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.
- 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.
- WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.
- INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

INSET A



SIDE VIEW

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

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

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

CROSS-SECTION SUMMARY
IN CUBIC YARDS

LOCATION (-L-)	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBANKMENT	STRUCTURE EXCAVATION
10+75.00	0	0	0	0
11+15.00	0	0	36	0
11+67.00	7	0	103	0
11+85.25	5	0	37	160
12+12.50	4	0	204	333
12+39.70	4	0	192	348
12+58.00	5	0	19	175
13+10.00	5	0	57	0
13+50.00	0	0	24	0

NOTE: EMBANKMENT COLUMN DOES NOT INCLUDE BACKFILL FOR UNDERCUT.

NOTE:
APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION,
UNCLASSIFIED STRUCTURE EXCAVATION, BORROW EXCAVATION,
FINE GRADING, CLEARING AND GRUBBING AND REMOVAL OF
EXISTING PAVEMENT WILL BE PAID FOR AT THE CONTRACT LUMP
SUM PRICE FOR "GRADING."

