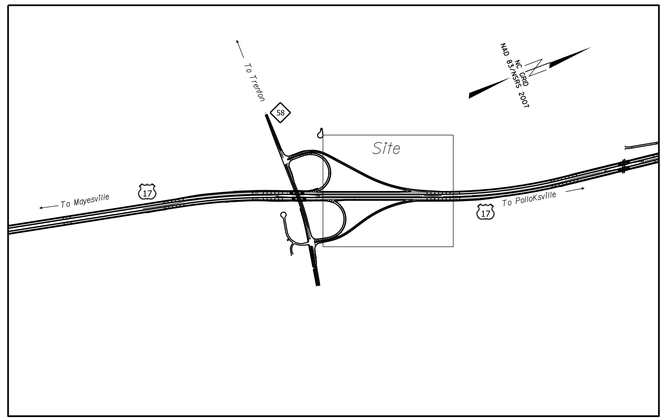
09/08/99

TIP PROJECT: R-2514D

CONTRACT: DB00528



See Sheet 1A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

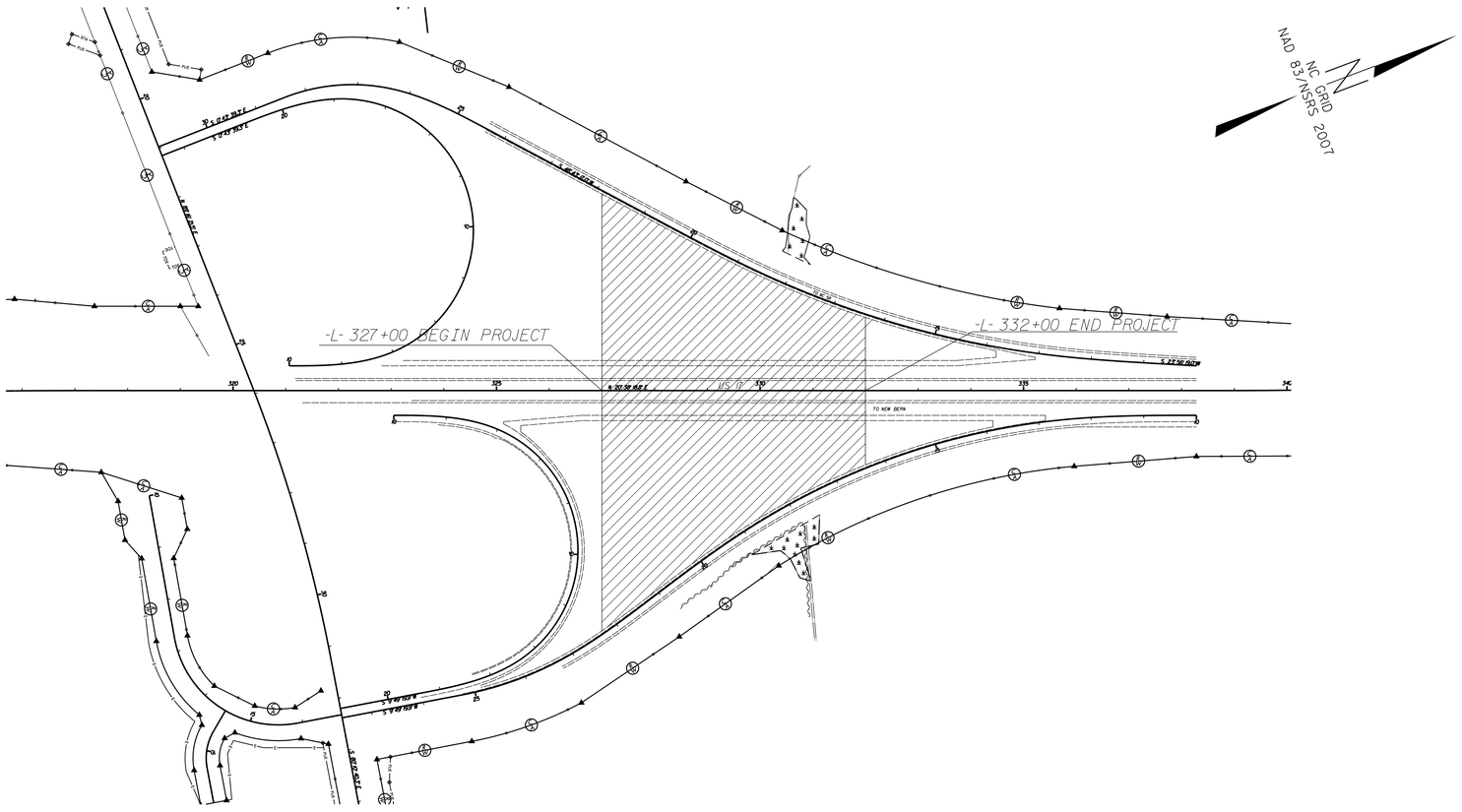
JONES COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2514D	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
34442.1.5		PE
34442.2.S5		R/W
34442.2.SU5		UTILITIES
34442.3.S6		CONST.

LOCATION: INTERSECTION OF NC 58 AND US 17

TYPE OF WORK: GRADING AND DRAINAGE



GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

50 25 0 50 100
PROFILE (VERTICAL)

DESIGN DATA

ADT 2015 = 10600
ADT 2035 = 15700
K = 7 %
D = 65 %
T = 7 % *
V = 70 MPH
* TTST = 4 DUAL 3
FUNC CLASS = FREEWAY
STATEWIDE TIER

PROJECT LENGTH

ROADWAY PROJECT LENGTH = 0.095 MILES

NOTE: -L- USED TO DETERMINE LENGTH OF PROJECT

Prepared In the Office of:

DIVISION OF HIGHWAYS

1037 W.H. SMITH BLVD., GREENVILLE, NC 27858

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: N/A

LETTING DATE: JANUARY 2022

JEFF CABANNIS
PROJECT ENGINEER

LANG JONES
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034398 ENGINEER JEFFREY D. CABANISS

DocuSigned by: Jeff Cabanniss F0380589C4F54DD...

SIGNATURE: ***P.E.*** Dec 21, 2021

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034398 ENGINEER JEFFREY D. CABANISS

DocuSigned by: Jeff Cabanniss F0380589C4F54DD...

SIGNATURE: ***P.E.*** Dec 21, 2021

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

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PROJECT REFERENCE NO.	SHEET NO.
R-2514D	1A

8/17/99

REVISIONS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

INDEX OF SHEETS:

GENERAL NOTES:

2018 SPECIFICATIONS
EFFECTIVE: 01-16-2018
REVISED:

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.

UTILITIES

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.

EFF. 01-16-2018
REV.

2018 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, 2018 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
DIVISION 3 - PIPE CULVERTS	
300.01	Pipe Instillation
DIVISION 8 - INCIDENTALS	
838.01	Concrete Endwall For Single and Double Pipe Culverts
876.02	Guide for Rip Rap at Pipe Outlets

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12/2/2016

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	1B

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

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

BOUNDARIES AND PROPERTY:

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

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

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

RAILROADS:

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

RIGHT OF WAY & PROJECT CONTROL:

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

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- 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 — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H–Frame Pole
- U/G Power Line LOS B (S.U.E.*) — P
- U/G Power Line LOS C (S.U.E.*) — P
- U/G Power Line LOS D (S.U.E.*) — P

TELEPHONE:

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

WATER:

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

TV:

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

GAS:

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

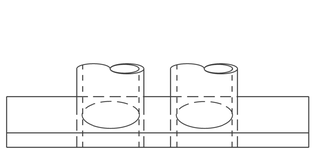
SANITARY SEWER:

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

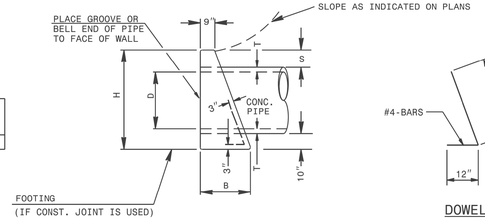
MISCELLANEOUS:

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

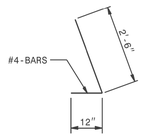
STANDARD DRAWINGS



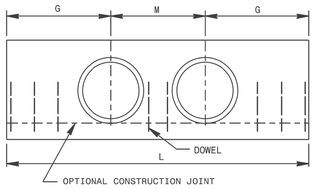
PLAN



END ELEVATION



DOWEL
BAR-"X"



ELEVATION

DOWELS IN ENDWALL WITH REINFORCED CONCRETE PIPE

LOC.	PIPE	SINGLE PIPE									DOUBLE PIPE									
	DIA.	15"	18"	24"	30"	36"	42"		48"		15"	18"	24"	30"	36"	42"		48"		
	BARS	"X"	"X"	"X"	"X"	"X"	"X"	Y*	"X"	Y*	"X"	"X"	"X"	"X"	"X"	"X"	Y*	"X"	Y*	
G	QTY.	2	2	3	3	4	4		5		2	2	3	3	4	4		5		
M	QTY.	-	-	-	-	-	-	2	-	2	1	1	2	2	2	2	2	3	2	
G	QTY.	2	2	3	3	4	4		5		2	2	3	3	4	4		5		
TOTAL LBS.		9	9	14	14	19	55		65		12	12	19	19	23	77		92		

DIMENSIONS AND CONCRETE QUANTITIES

USING CONCRETE PIPE

	COMMON DIMENSIONS						SINGLE PIPE		DOUBLE PIPE		
D	H	B	G	T	S		L	YD^3	M	L	YD^3
15"	3'-3"	1'-8"	2'-9"	2¼"	9½"		5'-6"	0.7	2'-2"	7'-8"	1.0
18"	3'-7"	1'-10"	3'-2"	2½"	10"		6'-4"	1.0	2'-7"	8'-11"	1.3
24"	4'-2"	2'-1"	4'-0"	3"	10"		8'-0"	1.5	3'-5"	11'-5"	2.0
30"	5'-0"	2'-6"	4'-7"	4¼"	11½"		9'-2"	2.3	4'-3"	13'-5"	3.1
36"	5'-8"	2'-8"	5'-6"	4¾"	11½"		11'-0"	3.4	5'-0"	16'-0"	4.5
42"	6'-2"	3'-1"	6'-4"	5¼"	11½"		12'-8"	4.5	5'-10"	18'-6"	6.0
48"	6'-9"	3'-5"	7'-2"	5¾"	11½"		14'-4"	5.0	6'-8"	21'-0"	8.0

*SEE SHEET 3

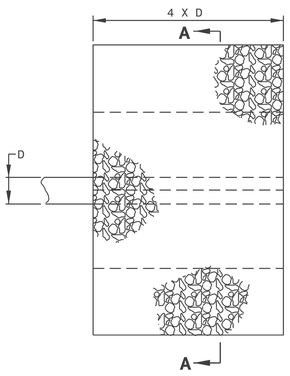
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-18

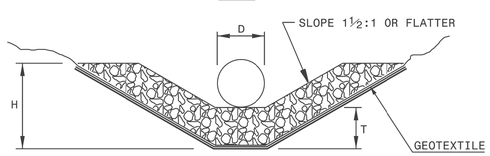
ROADWAY STANDARD DRAWING FOR
CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS
15" THRU 48" PIPE - 90° SKEW

SHEET 1 OF 3

838.01



PLAN



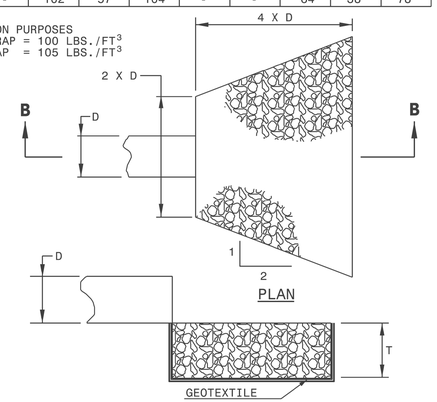
SECTION A-A

PIPE OUTLET WITH DITCH

H= RIP RAP TO TOP OF PIPE (MAX. H = D + T)
T= 15" CLASS I RIP RAP, UNLESS OTHERWISE SHOWN ON PLANS
T= 12" CLASS 'B' RIP RAP, UNLESS OTHERWISE SHOWN ON PLANS

D	OUTLET W/DITCH					OUTLET W/O DITCH				
	CLASS 'B' RIP RAP		CLASS I RIP RAP			CLASS 'B' RIP RAP		CLASS I RIP RAP		
	TONS	REQ'D TEXTILE (S.Y.)	S.Y.	TONS	REQ'D TEXTILE (S.Y.)	TONS	REQ'D TEXTILE (S.Y.)	S.Y.	TONS	REQ'D TEXTILE (S.Y.)
12"	2	5	5	2	5	1	4	2	1	4
15"	2	7	7	3	7	1	5	3	2	6
18"	3	10	9	4	10	2	7	4	2	8
24"	5	14	15	7	15	3	11	7	4	12
30"	8	21	21	11	22	5	16	11	7	17
36"	11	28	29	15	30	7	22	16	10	23
42"	15	37	39	20	39	10	28	22	13	30
48"	-	-	49	26	50	-	-	28	17	38
54"	-	-	60	33	62	-	-	36	21	47
60"	-	-	73	40	75	-	-	44	26	56
66"	-	-	87	48	89	-	-	54	32	67
72"	-	-	102	57	104	-	-	64	38	78

NOTE:
FOR CALCULATION PURPOSES
CLASS 'B' RIP RAP = 100 LBS./FT^3
CLASS I RIP RAP = 105 LBS./FT^3



PLAN

SECTION B-B

PIPE OUTLET WITHOUT DITCH

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

1-18

ROADWAY STANDARD DRAWING FOR
GUIDE FOR RIP RAP AT PIPE OUTLETS

SHEET 1 OF 1

876.02

REVISIONS

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
R-2514D	3

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF QUANTITIES

	SECT	QUANTITY	UNIT	ITEM DESCRIPTION
M 0000100000-N	800	1	LS	MOBILIZATION
D 0134000000-E	240	2,790	CY	DRAINAGE DITCH EXCAVATION
D 0973100000-E	330	240	LF	48" WELDED STEEL PIPE, 0.625" THICK, GRADE B IN SOIL
G 0995000000-E	340	260	LF	PIPE REMOVAL
D 2220000000-E	838	9.4	CY	REINFORCED ENDWALLS
G 3628000000-E	876	120	TON	RIP RAP, CLASS I
D 3656000000-E	876	750	SY	GEOTEXTILE FOR DRAINAGE
L 6000000000-E	1605	800	LF	TEMPORARY SILT FENCE
L 6006000000-E	1610	20	TON	STONE FOR EROSION CONTROL, CLASS A
L 6012000000-E	1610	20	TON	SEDIMENT CONTROL STONE
L 6084000000-E	1660	1.0	ACRE	SEEDING AND MULCHING
L 6090000000-E	1661	50	LB	SEED FOR REPAIR SEEDING
L 6093000000-E	1661	0.2	TON	FERTILIZER FOR REPAIR SEEDING
L 6117000000-N	SP	3	EA	RESPONSE FOR EROSION CONTROL
L 6117500000-N	SP	1	EA	CONCRETE WASHOUT STRUCTURE

REVISIONS

8/17/99

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COMPUTED BY: LJ DATE: 11/03/21
CHECKED BY: RG DATE: 12/02/21

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	3A

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I. (N.S.)	GRATED DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

STATION	LOCATION (LT,RT, OR CL)	STRUCTURE NO.		TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE)								WELDED STEEL PIPE								CLASS III R.C. PIPE OR ALUMINIZED C.S. PIPE, TYPE IR OR HDPE PIPE, TYPE S OR D								15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS.		QUANTITIES FOR DRAINAGE STRUCTURES * TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B')			C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES AND HOOD STANDARD 840.03					D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME & GRATE STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	G.D.I. FRAME WITH GRATE STD. 840.22	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	J.B. STD. 840.31 OR 840.32							CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS CL. "B" C.Y. STD 840.72	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN.FT.	REMARKS
SIZE		FROM	TO					12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"	30"	36"	42"	48"				R.C.P.	W.S.P.	PER EACH (0' THRU 5.0')	LIN. *FT. A 5.0' THRU 10.0'	LIN. *FT. B 10.0' AND ABOVE		TYPE OF GRATE E	F	G																							
THICKNESS OR GAUGE																							0.625"																																													
-L- 328+00.00	RT	672			23.00																															6.0																														
-L- 328+00.00	CL	672	673		23.00	23.00	0.0%																240.0																																											
-L- 330+59.38	LT	674																																		3.4																														REMOVE EXISTING DI
-L- 330+77.24	RT	675																																																																REMOVE EXISTING DI
-L- 330+68.90	CL	674	675																																																													260.0	PIPE TO BE FILLED WITH FLOWABLE FILL AND PAID FOR AS PIPE REMOVAL L.F. AS DIRECTED BY SECTION 340.
TOTALS																							240.0													9.4																													260.0	


PROJECT REFERENCE NO.
R-2514D
SHEET NO.
4
RW SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034398 ENGINEER JEFFREY D. CABANISS
Dec 2, 2021
NORTH CAROLINA PROFESSIONAL SEAL 034398 ENGINEER JEFFREY D. CABANISS
Dec 2, 2021
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
REVISIONS
8/17/99
NC GRID NAD 83 NA 2011
-Y3RPA- ST Sta. 20+58.13
+58.13 -Y3RPA- 90.00' (RT.)
-Y3RPA- CS Sta. 18+48.13
+48.13 -Y3RPA- 90.00' (RT.)
S 48° 43' 17.0" W
CHORD
-L- POT Sta. 338+28.00=
-Y3RPA- POT Sta. 10+00.00
-Y3RPA- SC Sta. 12+70.90
+70.90 -Y3RPA- 90.00' (RT.)
-Y3RPA- TS Sta. 10+60.90
+60.90 -Y3RPA- 90.00' (RT.)
-L- TS Sta. 338+28.06
S 23° 56' 19.0" W
DDE TO BE WASTED IN GORE AREA AND GRADED TO DRAIN
4' STANDARD BASE DITCH GRASS LINED SEE DETAIL 'M' APPROX. 1,270 CY DDE
4' STANDARD BASE DITCH RIP RAP LINED SEE DETAIL 'MM' EST. 50 TONS RIP RAP EST. 350 SY GEOTEXTILE
0674 HW
REMOVE DI
RETAIN EXISTING 36" RCP TO DI
TO NC 58
0673
240' - 48" WELDED STEEL TRENCHLESS INSTALLATION
RETAIN 15" RCP
EXISTING 36" RCP FROM 0674 TO 0675 TO BE PLUGGED AND FILLED WITH FLOWABLE FILL AND PAID FOR AS PIPE REMOVAL L.F. AS DIRECTED BY SECTION 340
15" RCP
325
N 20° 38' 18.8" E
US 17
330
335
36" RCP
TO NEW BERN
Sta. 323+05.05=
ST Sta. 10+00.00
LPD- SC Sta. 12+00.00
0672 HW
4' STANDARD BASE DITCH RIP RAP LINED SEE DETAIL 'MM' EST. 50 TONS RIP RAP EST. 350 SY GEOTEXTILE
REMOVE DI
0675 CL 'I' RIP RAP EST. 20 TONS EST. 50 SY GEOTEXTILE
RETAIN EXISTING 36" RCP TO DI
4' STANDARD BASE DITCH GRASS LINED SEE DETAIL 'M' APPROX. 1,520 CY DDE
CHORD
+28.00 -L- 125.00' (RT.)
+40.00 -Y3RPD- 90.00' (LT.)
-Y3RPD- SC Sta. 12+40.00
-L- POT Sta. 338+28.00=
-Y3RPD- ST Sta. 10+00.00
DDE TO BE WASTED IN GORE AREA AND GRADED TO DRAIN
OT Sta. 32+20.00=
POT Sta. 20+92.14
-Y3LPD- CS Sta. 17+38.20
+79.45 -Y3RPD- 90.00' (LT.)
-Y3RPD- CS Sta. 18+79.45
PD- ST Sta. 19+38.20
+19.45 -Y3RPD- 90.00' (LT.)
DETAIL 'M'
STANDARD BASE DITCH
(Not to Scale)
Natural Ground
Min. D= 1.5 Ft.
B= 4 Ft.
DETAIL 'MM'
RIP RAP AT EMBANKMENT
(Not to Scale)
Natural Ground
Geotextile
Type of Liner= Class 'I' Rip-Rap
02-DEC-2021 11:18
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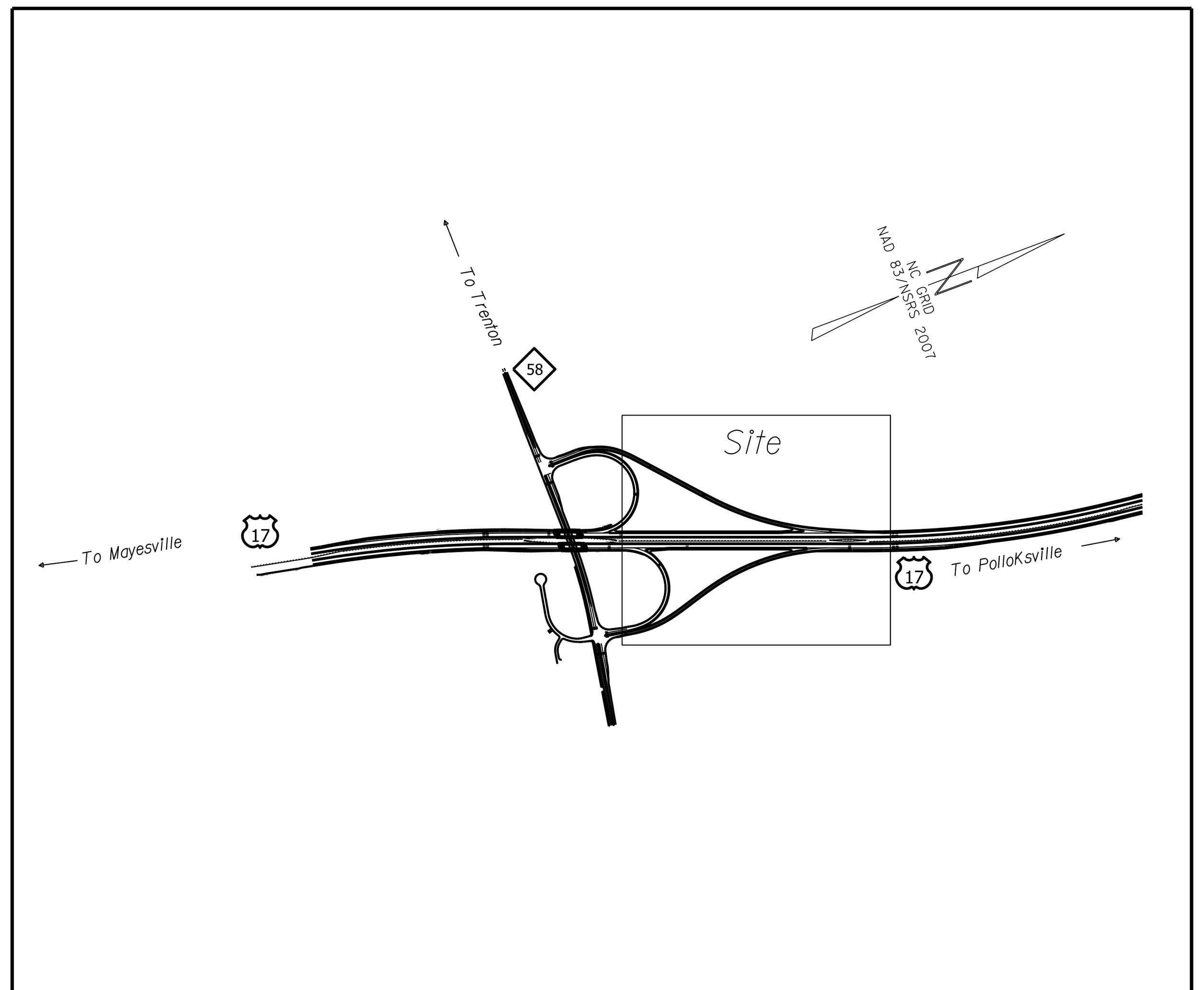
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

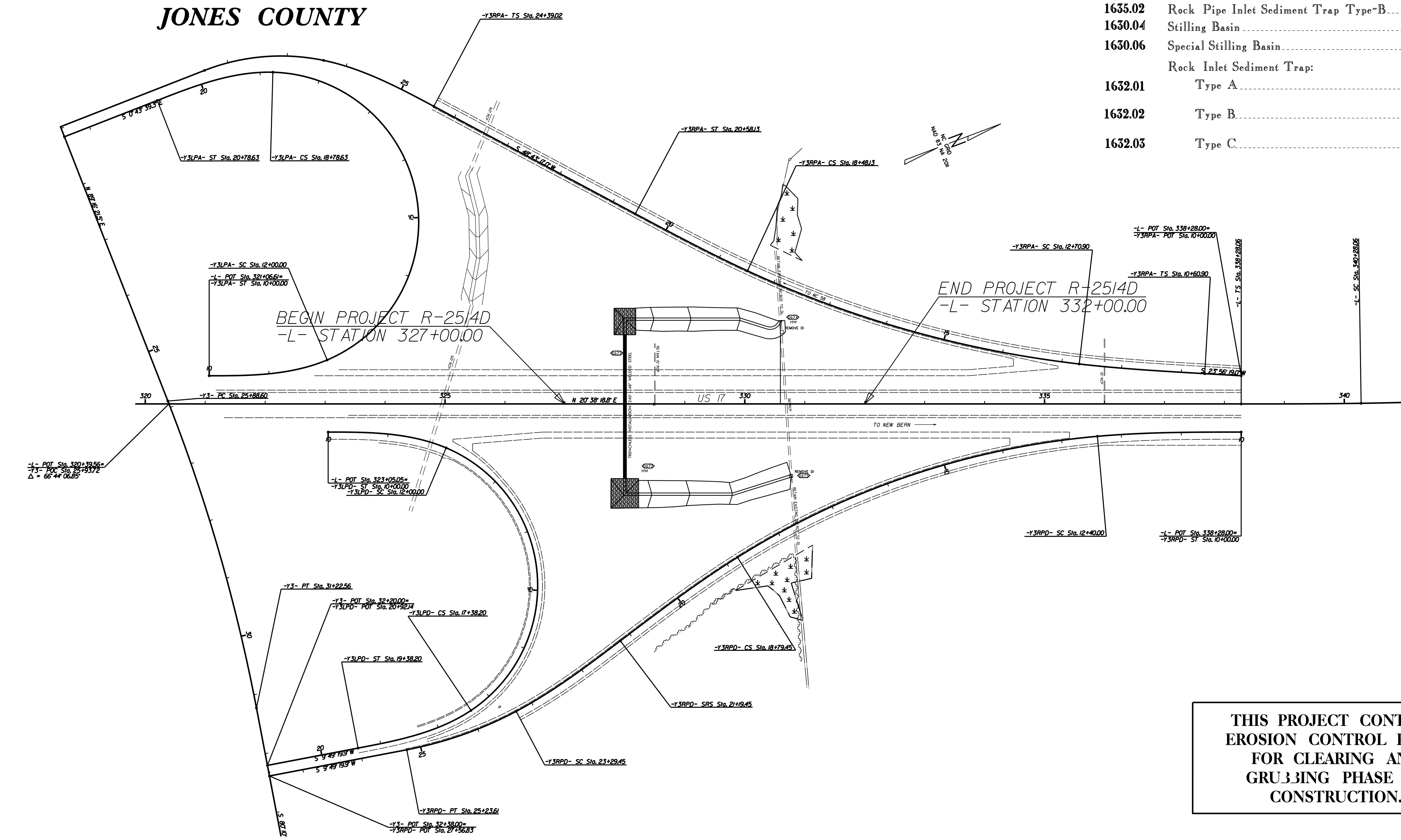
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

LOCATION: INTERSECTION OF NC 58 AND US 17
JONES COUNTY



VICINITY MAP

See Sheet 1A For Index of Sheets



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
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	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	EW / CFW
	Wattle / 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	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C

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

GRAPHIC SCALE

25 0 50

PLANS

ROADSIDE ENVIRONMENTAL 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 APRIL 1, 2019 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

2018 STANDARD SPECIFICATIONS

Prepared In the Office of:

DIVISION OF HIGHWAYS
1037 WH SMITH BLVD
GREENVILLE, NC 27834

Timothy C Pinkham
Level III
Certification #3510

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

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

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC2

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
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.

8/17/99

REVISIONS

NAD 83 NC GRID NA 2011

-Y3RPA- ST Sta. 20+58.13

+58.13 -Y3RPA- 90.00' (RT.)

-Y3RPA- CS Sta. 18+48.13

+48.13 -Y3RPA- 90.00' (RT.)

S 48° 43' 17.0" W

CHORD

TEMPORARY SILT FENCE

DDE TO BE WASTED IN GORE AREA AND GRADED TO DRAIN

RECEIVING PIT

4' STANDARD BASE DITCH RIP RAP LINED SEE DETAIL 'MM' EST. 50 TONS RIP RAP EST. 350 SY GEOTEXTILE

4' STANDARD BASE DITCH GRASS LINED SEE DETAIL 'M' APPROX. 1,270 CY DDE

RETAIN EXISTING 36" RCP TO DI

TO NC 58

0674 HW REMOVE DI

ROCK PIPE INLET SEDIMENT TRAP

EXISTING 36" RCP FROM 0674 TO 0675 TO BE PLUGGED AND FILLED WITH FLOWABLE FILL AND PAID FOR AS PIPE REMOVAL L.F. AS DIRECTED BY SECTION 340

0673

48" WELDED STEEL

TRENCHLESS INSTALLATION

RETAIN EXISTING 36" RCP

-L- POT Sta. 338+28.00= -Y3RPA- POT Sta. 10+00.00

-Y3RPA- SC Sta. 12+70.90

+70.90 -Y3RPA- 90.00' (RT.)

-Y3RPA- TS Sta. 10+60.90

+60.90 -Y3RPA- 90.00' (RT.)

-L- TS Sta. 338+28.06

S 23° 56' 19.0" W

N 20° 38' 18.8" E

US 17

TO NEW BERN

Sta. 323+05.05= -Y3LPD- ST Sta. 10+00.00 -Y3LPD- SC Sta. 12+00.00

0677 HW

ROCK PIPE INLET SEDIMENT TRAP

4' STANDARD BASE DITCH RIP RAP LINED SEE DETAIL 'MM' EST. 50 TONS RIP RAP EST. 350 SY GEOTEXTILE

REMOVE DI 0675 CL 'I' RIP RAP EST. 20 TONS EST. 50 SY GEOTEXTILE

4' STANDARD BASE DITCH GRASS LINED SEE DETAIL 'M' APPROX. 1,520 CY DDE

BORING PIT

DDE TO BE WASTED IN GORE AREA AND GRADED TO DRAIN

+40.00 -Y3RPD- 90.00' (LT.)

-Y3RPD- SC Sta. 12+40.00

+28.00 -L- 125.00' (RT.)

-L- POT Sta. 338+28.00= -Y3RPD- ST Sta. 10+00.00

POT Sta. 32+20.00= -Y3LPD- POT Sta. 20+92.14

-Y3LPD- CS Sta. 17+38.20

-Y3LPD- ST Sta. 19+38.20

TEMPORARY SILT FENCE

+79.45 -Y3RPD- 90.00' (LT.)

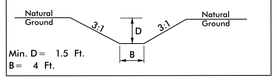
CHORD -Y3RPD- CS Sta. 18+79.45

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

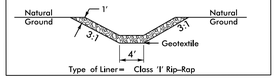
CONTRACTOR SHALL INSTALL SPECIAL SEDIMENT CONTROL FENCE OR WATTLES IN LOW AREAS OF SILT FENCE AS NEEDED OR DIRECTED BY THE ENGINEER.

DETAIL 'M'
STANDARD BASE DITCH
(Not to Scale)



Min. D = 1.5 Ft.
B = 4 Ft.

DETAIL 'MM'
RIP RAP AT EMBANKMENT
(Not to Scale)



Type of Liner = Class 'I' Rip-Rap

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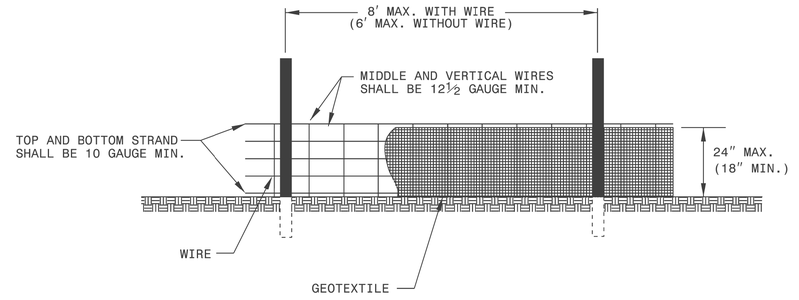
8/17/99

REVISIONS



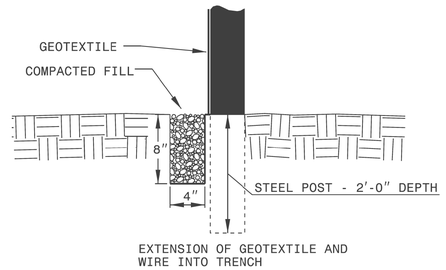
NOTES

USE GEOTEXTILE A MINIMUM OF 36″ IN WIDTH AND FASTEN ADEQUATELY TO THE POSTS AND WIRE AS DIRECTED.

USE WIRE A MINIMUM OF 32″ IN WIDTH AND WITH A MINIMUM OF 5 LINE WIRES WITH 12″ VERTICAL SPACING.

PROVIDE 5′-0″ STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.

FOR MECHANICAL SLICING METHOD INSTALLATION, GEOTEXTILE SHALL BE A MAXIMUM OF 18″ ABOVE GROUND SURFACE.



EXTENSION OF GEOTEXTILE AND WIRE INTO TRENCH

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

1-18

ROADWAY STANDARD DRAWING FOR

TEMPORARY SILT FENCE

SHEET 1 OF 1

1605.01

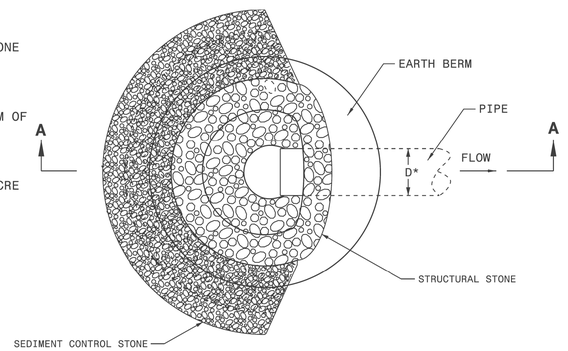
NOTES

USE CLASS A EROSION CONTROL STONE FOR STRUCTURAL STONE.

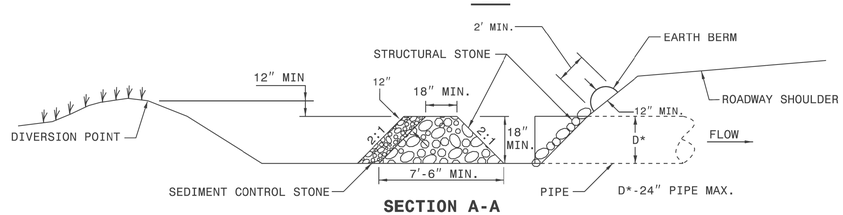
USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

CONSTRUCT TOP OF BERM A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR DIVERSION POINT.

PROVIDE A TOTAL SEDIMENT TRAP VOLUME OF 3600± CUBIC FEET PER ACRE OF DISTURBED AREA. SOME OF THE REQUIRED VOLUME MAY BE PROVIDED BY UP OR DOWNSTREAM CONTROLS.



PLAN



SECTION A-A

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

1-18

ROADWAY STANDARD DRAWING FOR

ROCK PIPE INLET SEDIMENT TRAP TYPE B

SHEET 1 OF 1

1635.02

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