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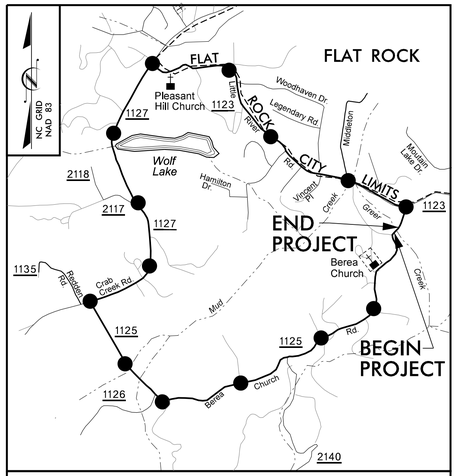
09/08/99

PROJECT: 14SP.20451.1

CONTRACT: DN00129

See Sheet 1-A For Index of Sheets



VICINITY MAP

DETOUR ROUTE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HENDERSON COUNTY

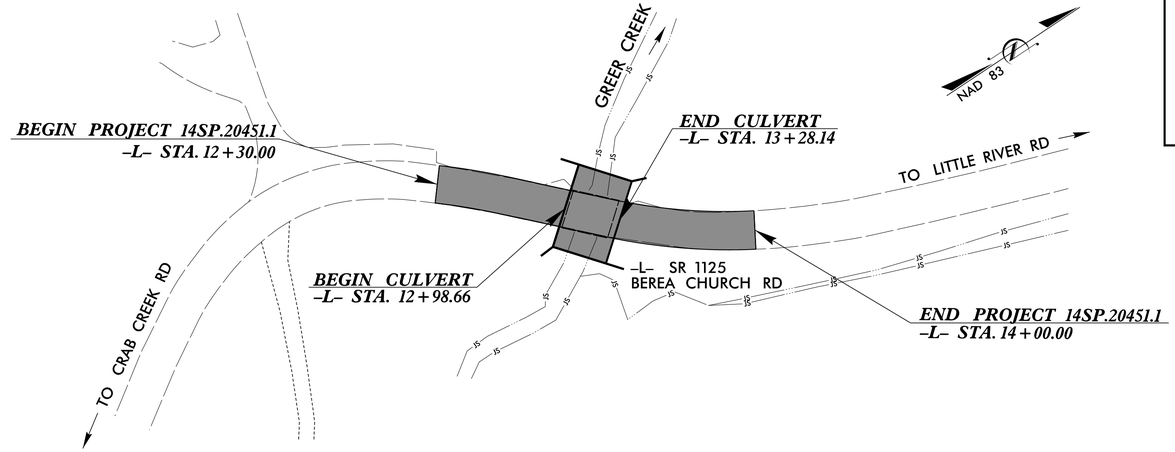
LOCATION: BRIDGE NO. 73 OVER GREER CREEK ON SR 1125 (BEREA CHURCH RD)

TYPE OF WORK: GRADING, PAVING, AND STRUCTURES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	14SP.20451.1	1	

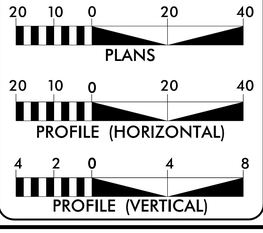
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
14SP.20451.1		PE
14SP.20451.1		R/W,UTL.
14SP.20451.1		CONST.

Vaughn & Melton
Consulting Engineers
Asheville, North Carolina 828 253 2796
Charlotte, North Carolina 704-357-0488
Tri-Cities, Tennessee 423 467 8401
Knoxville, Tennessee 865 546-5800
Middlesboro, Kentucky 606-248-6600
Spartanburg, South Carolina 864-574-4775



4

GRAPHIC SCALES



DESIGN DATA

ADT 2010 = 850
ADT 2031 = 1200

V = 25 MPH

FUNC CLASS = COLLECTOR
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT 14SP.20381.1 = 0.026 MI.

LENGTH STRUCTURE TIP PROJECT 14SP.20381.1 = 0.006 MI.

TOTAL LENGTH TIP PROJECT 14SP.20381.1 = 0.032 MI.

Prepared In the Office of:
VAUGHN & MELTON
1318-F PATTON AVE.
ASHEVILLE NC, 28806
FOR THE NORTH CAROLINA DIVISION OF HIGHWAYS

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

REECE SCHULER, PE
PROJECT ENGINEER

CHASE CARVER, PE
PROJECT DESIGN ENGINEER

NCDOT CONTACT:
JOSH DEYTON, PE
DIVISION 14 – BRIDGE MANAGER

HYDRAULICS ENGINEER

9/15/2016

DocuSigned by: Paul Fisher E3434BA5B99A4FE...

NORTH CAROLINA PROFESSIONAL SEAL 12575 ENGINEER PAUL FISHER

P.E.

SIGNATURE:

ROADWAY DESIGN ENGINEER

9/15/2016

DocuSigned by: Reece M. Schuler 16634024C7824FC...

NORTH CAROLINA PROFESSIONAL SEAL 26960 ENGINEER REECE M. SCHULER

P.E.

SIGNATURE:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

$$$$SYSTIME$$$$
$$$$USERNAME$$$$
$$$$EDGN$$$$

PROJECT REFERENCE NO.	SHEET NO.
14SP.20451.1	1-A

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26960

9/15/2016

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1-B	CONVENTIONAL SYMBOLS
2	PAVEMENT SCHEDULE, TYPICAL SECTIONS, AND WEDGING DETAILS
3-A	SUMMARY OF DRAINAGE QUANTITIES, SUMMARY OF GUARDRAIL, AND ASPHALT PAVEMENT REMOVAL SUMMARY
3-B	EARTHWORK SUMMARY
4	PLAN AND PROFILE SHEET
TMP-1 THRU TMP-2	TRAFFIC CONTROL PLANS
PM-1	PAVEMENT MARKING PLAN
SD-1	SPECIAL SIGN DESIGN
EC-1 THRU EC-3	EROSION CONTROL PLANS
UO-1 THRU UO-2	UTILITIES BY OTHERS PLAN
X-0	CROSS-SECTION SUMMARY
X-1 THRU X-4	CROSS-SECTIONS
S-1 THRU S-4	STRUCTURE PLANS

GENERAL NOTES:

2012 SPECIFICATIONS
EFFECTIVE: 01-17-12

GRADE LINE:
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.

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.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE: DUKE ENERGY AND AT&T

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT IN ACCORDANCE WITH SECTION 801 OF THE 2012 NORTH CAROLINA STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January 17, 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 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 8 - INCIDENTALS	
815.03	Pipe Underdrain and Blind Drain
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units
876.01	Rip Rap in Channels

9/9/2016
S:\transportation\31236-06 MTC 14SP.20451.1 Henderson 73\Roadway\Proj\Henderson 73_Rdy_sum_1a.dgn

04/06/15

PROJECT REFERENCE NO.	SHEET NO.
14SP.2045IJ	1-B

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
- 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
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- 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:

- 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 R/W Marker — RW
- Proposed Control of Access Line with Concrete C/A 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 — 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

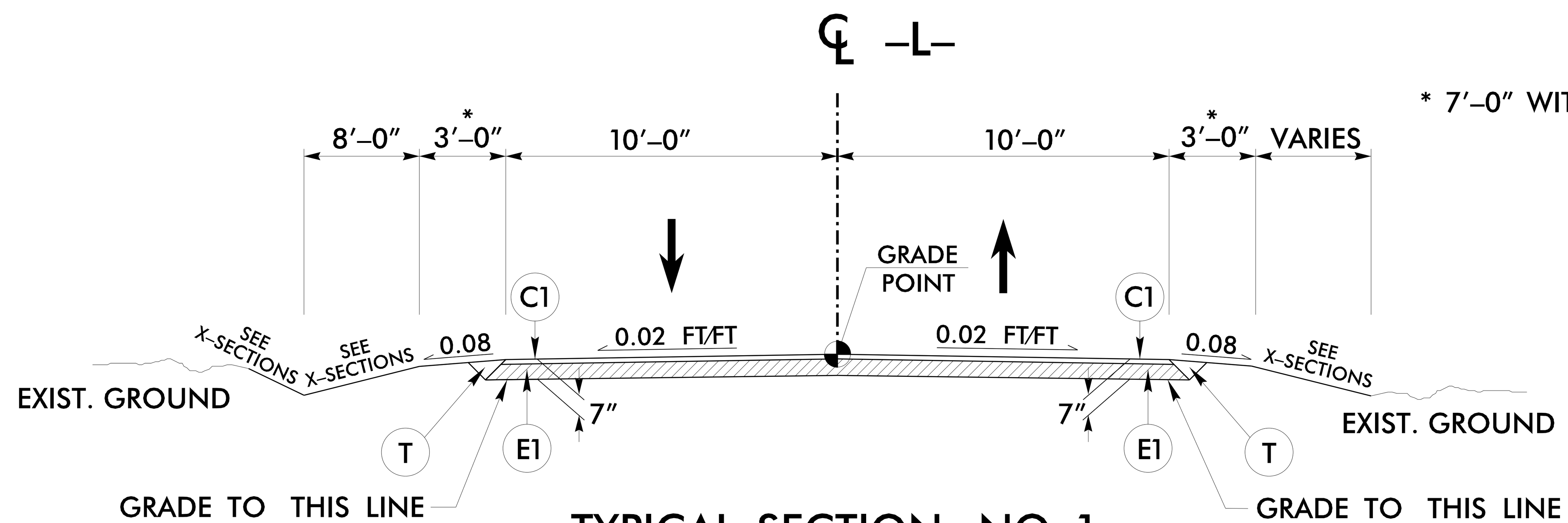
SANITARY SEWER:

- 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.

PROJECT REFERENCE NO.	SHEET NO.
14SP.20451.1	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
9/15/2016	9/16/2016

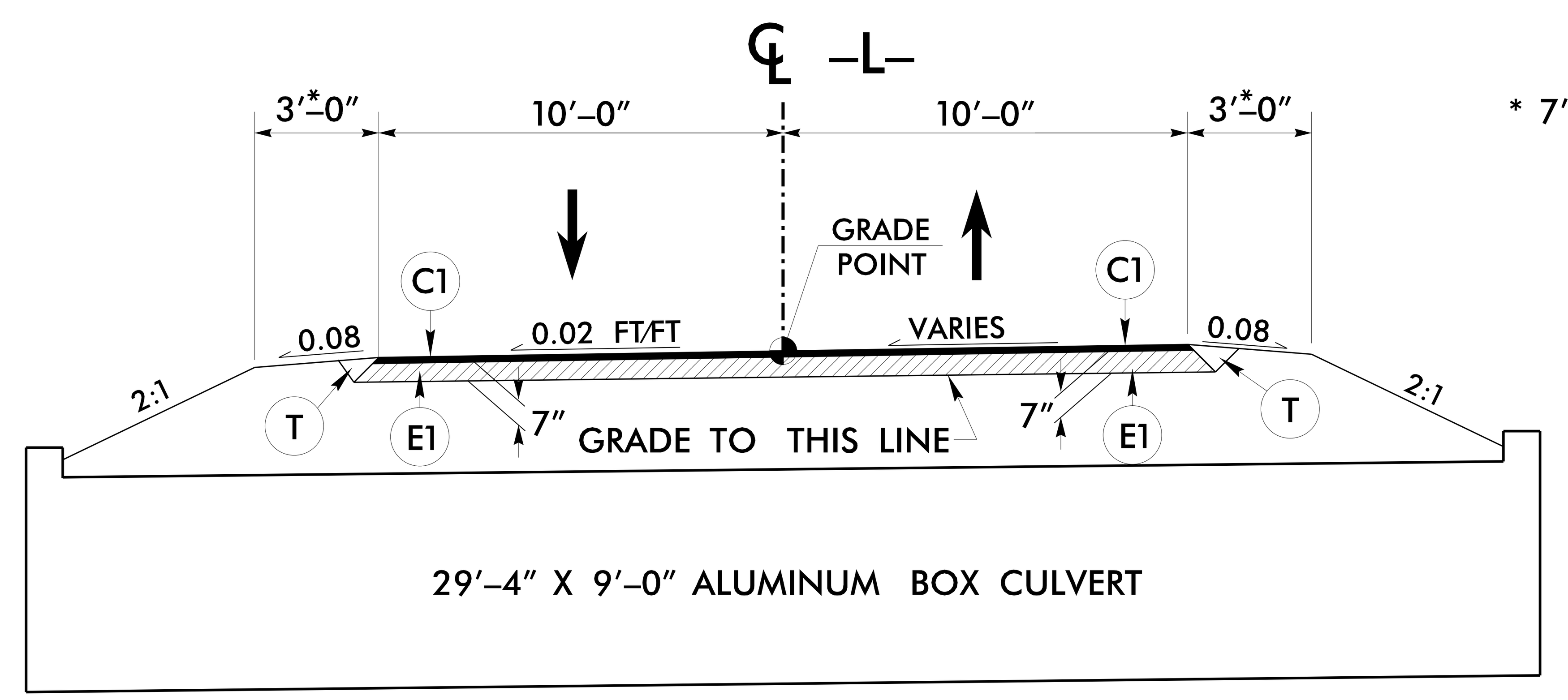


* 7'-0" WITH GUARDRAIL

TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1

-L- STA. 12+30.00 TO -L- STA. 12+98.66 (BEG. CULVERT)
-L- STA. 13+28.13 (END CULVERT) TO -L- STA. 14+00.00



* 7'-0" WITH GUARDRAIL

USE TYPICAL SECTION NO. 2

-L- STA. 12+98.66 (BEG. CULVERT) TO -L- STA. 13+28.13 (END CULVERT)

TYPICAL SECTION NO. 2

	PAVEMENT SCHEDULE
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
T	EARTH MATERIAL

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

COMPUTED BY: NVA DATE: 04-17-13
CHECKED BY: RMS DATE: 04-17-13

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
14SP.20451.1	3-A

PAVEMENT REMOVAL SUMMARY

IN SQUARE YARDS

LINE	LOCATION	ASPHALT REMOVAL	ASPHALT BREAK-UP	CONCRETE REMOVAL	CONCRETE REMOVAL
-L-	12+30 TO 13+00.08 (EXISTING BRIDGE)	155.56			
-L-	13+25 (EXISTING BRIDGE) TO 14+00	166.67			
	TOTAL	322.22			
	SAY	330			

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

STATION	LOCATION (LT,RT, OR CL)	STRUCTURE NO.		TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC)												C.S. PIPE							R.C. PIPE (CLASS III)							R.C. PIPE (CLASS IV)								**" R. C. PIPE (CLASS V)	**" R. C. PIPE CULVERTS, CONTRACTOR DESIGN PIPE	**" R. C. PIPE CULVERTS, CONTRACTOR DESIGN PIPE	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE)		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				CONCRETE TRANSITIONAL SECTION		G.D.I. TYPE "D" STD. 840.19 OR 840.28	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	MODIFIED CONCRETE FLUME				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"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	12"	15"	18"	24"	36"	42"	48"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"	30"	36"	42"	48"						CU. YDS. R.C.P.	C.S.P.	PER EACH (0' THRU 5.0')	LIN. *FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE		TYPE OF GRATE E	F	G		CATCH BASIN	DROP INLET											
THICKNESS OR GAUGE																				.064	.064	.064	.064	.079	.109	.109																																											

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

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".

"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		TEMPORARY	WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS									TEMP ANCHORS	IMPACT ATTENUATOR TYPE 350			SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	STRAIGHT	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	XI	GRAU 350	GRAU 350 TL-2	TYPE III	TYPE III SHOP CURVED	B-77	BIC	AT-1		EA	G	NG				
-L-	12+47.17	13+85.83	LT	137.5			13+29	13+00	4	7	25	25	0.5	0.5				2													
-L-	12+43.07	13+77.67	RT	137.5			12+97	13+26	4	7	25	25	0.5	0.5				2													
		SUBTOTAL		275														4													
		LESS DEDUCTIONS FOR ANCHORS																													
		GRAU-350 TL-2 4 @ 25'=		-100																											
		PROJECT TOTALS:		175																											

ADDITIONAL GUARDRAIL POSTS=5 EA.

6/21/00

9/9/2016
S:\transportation\31236-06 MTC 14SP.20451.1 Henderson 73\Roadway\Proj\Henderson 73_Rdy_sum.dgn
User:cimartell

COMPUTED BY: KTB DATE: 09-22-2015
CHECKED BY: _____ DATE: _____

PROJECT REFERENCE NO.	SHEET NO.
14SP.2045IJ	3-B

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SUMMARY OF EARTHWORK

IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT + %	BORROW	WASTE
SUMMARY NO. 1					
–L– STA. 12 + 30 TO STA. 14 + 00	70		340	270	
SUBTOTAL SUMMARY NO. 1	70		340	270	
PROJECT SUBTOTAL	70		340	270	
EST. 5% FOR REPLACING TOP SOIL ON BORROW PITS				14	
GRAND TOTAL	70		340	284	
SAY	75			290	

CONTINGENCY ITEMS:

INCIDENTAL STONE = 30 TONS

UNDERCUT EXCAVATION = 50 CY

SELECT GRANULAR MATERIAL = 50 CY

CLASS IV SUBGRADE STABILIZATION = 50 TONS

GEOTEXTILE FOR SOIL STABILIZATION = 50 SY

DDE = 7 CY

Approximate quantities only. Unclassified 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".

PROJECT REFERENCE NO.	SHEET NO.
14SP.20451.1	4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER — SEAL 26960 — Reece M. Schuler — 9/14/2016

HYDRAULICS ENGINEER — SEAL 12575 — Paul Fisher — 9/15/2016

-L- CURVE DATA

PI Sta 11+74.59	PI Sta 12+31.37	PI Sta 13+84.74
Δ = 28° 08' 05.6" (RT)	Δ = 11° 05' 26.9" (RT)	Δ = 23° 52' 47.1" (LT)
D = 58° 23' 17.1"	D = 16° 45' 52.3"	D = 19° 14' 49.3"
L = 48.19'	L = 66.16'	L = 124.07'
T = 24.59'	T = 33.18'	T = 62.95'
R = 98.13'	R = 341.77'	R = 297.69'
	SE = 0.04	SE = 0.03
	RO = 60.00'	RO = 45.00'

DETAIL 1
LATERAL 'V' DITCH (Not to Scale)

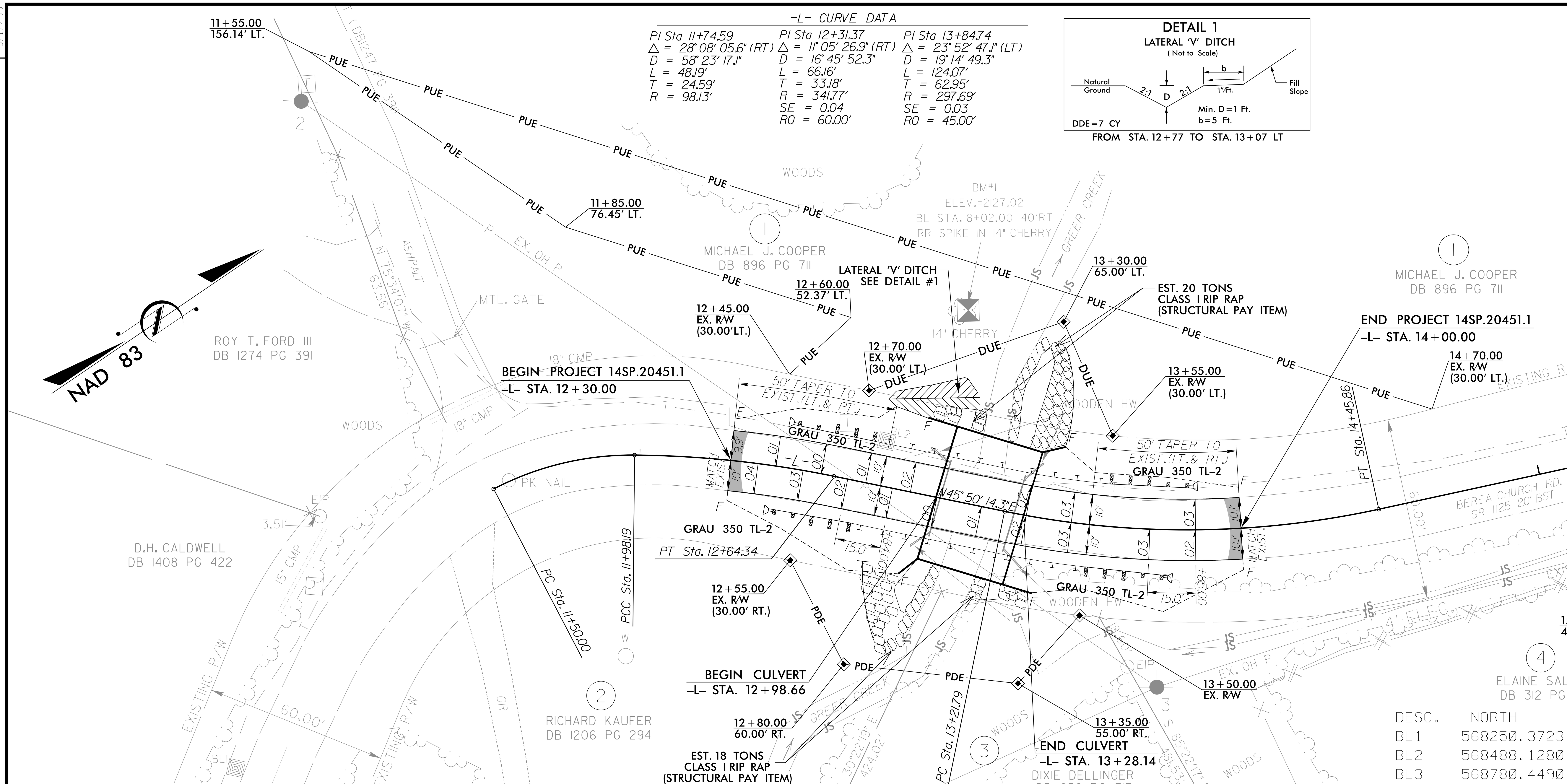
DDE=7 CY

FROM STA. 12+77 TO STA. 13+07 LT

DATUM DESCRIPTION

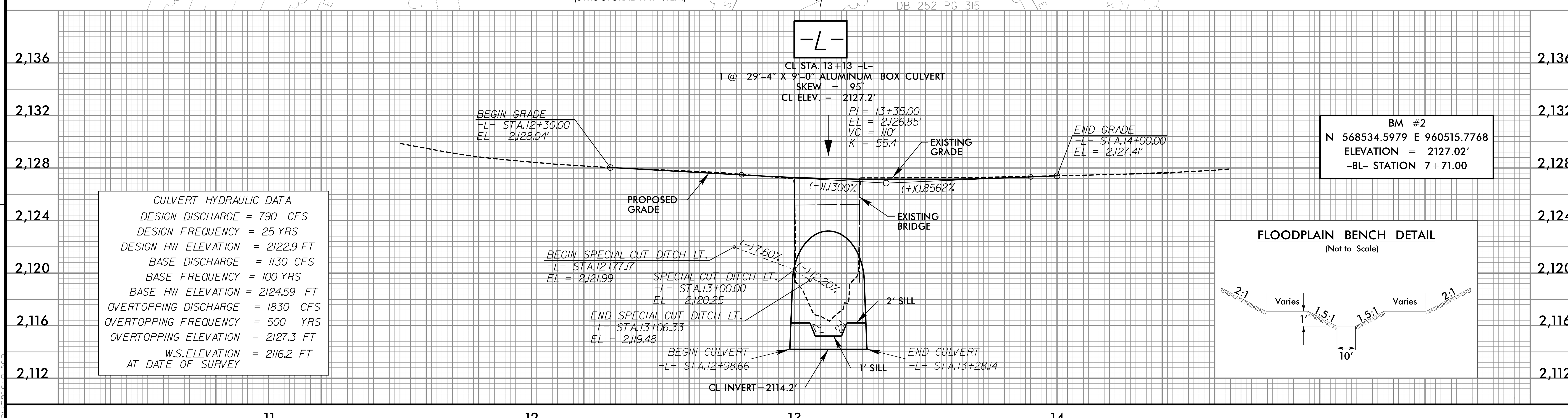
THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "440073 BL-2" WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 568488.128(ft) EASTING: 960536.269(ft) ELEVATION: 2127.27(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999775575
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "440073 BL-2" TO -L- STATION IS 51.63' AT S27°10'19"W
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

Vaughn & Melton Consulting Engineers — Asheville, North Carolina 828-253-2796



SEE SHEETS S-1 THRU S-4 FOR STRUCTURE PLANS

DESC.	NORTH	EAST	ELEVATION
BL1	568250.3723	960504.7291	2137.13
BL2	568488.1280	960536.2686	2127.27
BL3	568780.4490	960695.7120	2130.99



BM #2
N 568534.5979 E 960515.7768
ELEVATION = 2127.02'
-BL- STATION 7+71.00

CULVERT HYDRAULIC DATA

DESIGN DISCHARGE	= 790 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 2122.9 FT
BASE DISCHARGE	= 1130 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 2124.59 FT
OVERTOPPING DISCHARGE	= 1830 CFS
OVERTOPPING FREQUENCY	= 500 YRS
OVERTOPPING ELEVATION	= 2127.3 FT
W.S. ELEVATION AT DATE OF SURVEY	= 2116.2 FT

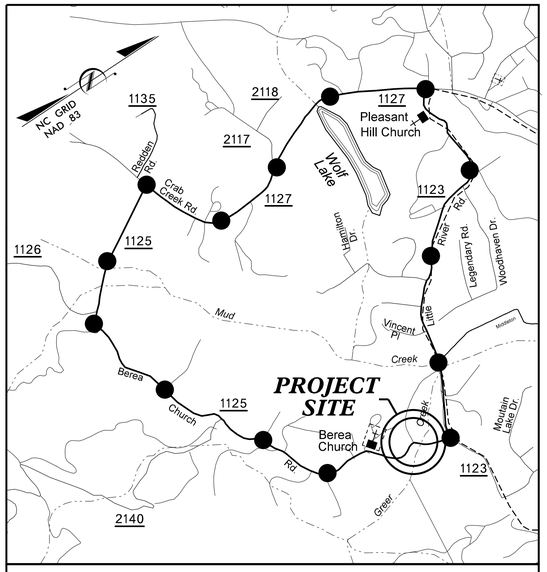
FLOODPLAIN BENCH DETAIL
(Not to Scale)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

HENDERSON COUNTY

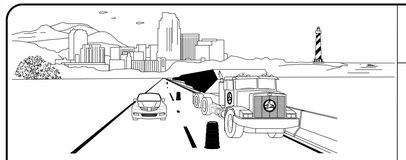
DIVISION 14



VICINITY MAP

DETOUR ROUTE

LOCATION: BRIDGE NO. 73 OVER GREER CREEK ON SR 1125 (BEREA CHURCH RD)



WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1580 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1580
1020 BIRCH RIDGE DRIVE, RALEIGH, NC 27610 (DELIVERY)
PHONE: (919) 250-4094 FAX: (919) 250-4098

J. S. BOURNE, P.E. — *STATE TRAFFIC MANAGEMENT ENGINEER*
L. DeWAYNE BROWN, P.E. — *TRAFFIC CONTROL PROJECT ENGINEER*
REECE SCHULER, P.E. — *TRAFFIC CONTROL PROJECT DESIGN ENGINEER*
REECE SCHULER, P.E. — *TRAFFIC CONTROL DESIGN ENGINEER*

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

INDEX OF SHEETS

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- WORK AREA

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)

TEMPORARY SIGNING

- STATIONARY SIGN

V&M Vaughn & Melton
Consulting Engineers
Asheville, North Carolina 828-253-2796
Charlotte, North Carolina 704-357-0488
Boone, North Carolina 828-355-9933

PROJECT ENGINEER L. DeWAYNE BROWN, PE, PLS
DESIGN ENGINEER REECE SCHULER, PE, PLS

APPROVED: Digitally signed by Lloyd DeWayne Brown
DATE: 9/15/2016

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 20119 LLOYD D. BROWN

SHEET NO.
TMP-1

14SP.20451.1

PROJECT:

9/15/2016
S:\Transportation\3236-06 MTC 14SP.20451\Henderson 73\Traffic\TrafficControlTCP\Henderson 73_psh_tmp-1.dgn
User:rmschuler

PROJ. REFERENCE NO.	SHEET NO.
14SP.20451.1	TMP-1A

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 ADVANCE WARNING SIGNS
1101.03	TEMPORARY ROAD CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1145.01	BARRICADES
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

TRANSPORTATION OPERATIONS

CONSTRUCTION

REMOVE AND REPLACE EXISTING STRUCTURE WITH BOX CULVERT ALONG THE EXISTING ROADWAY ALIGNMENT AS SHOWN IN THE CONSTRUCTION PLANS.

TMP DESIGN PARAMETERS

TRAFFIC WILL BE DETOURED OFF-SITE DURING THE CONSTRUCTION PERIOD.

THE OFF-SITE DETOUR WILL INCLUDE SR 1125, SR 1123 AND SR 1127 (SEE SHEET TMP-2).

GENERAL NOTES

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 UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER.

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

TRAFFIC PATTERN ALTERATIONS

A) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

B) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

C) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

D) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

E) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R-11-2 ATTACHED OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS

F) INSTALL PAVEMENT MARKINGS (PAINT) ON THE FINAL SURFACE OF THE ENTIRE PROJECT.

G) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

LOCAL NOTES

1. NOTIFY HENDERSON COUNTY EMERGENCY SERVICES AND PUBLIC SCHOOLS AT LEAST ONE MONTH PRIOR TO ROAD CLOSURE.

V&M Vaughn & Melton
Consulting Engineers
Asheville, North Carolina 828-253-2796
Charlotte, NC 704-357-0488 · Boone, NC 828-355-9933
Tri-Cities, TN 423-467-8401 · Knoxville, TN 865-546-5800 · Spartanburg, SC 864-574-4775 · Charleston, SC 843-974-5650 · Middlesboro, KY 606-248-6600 · Atlanta, GA 770-627-3509

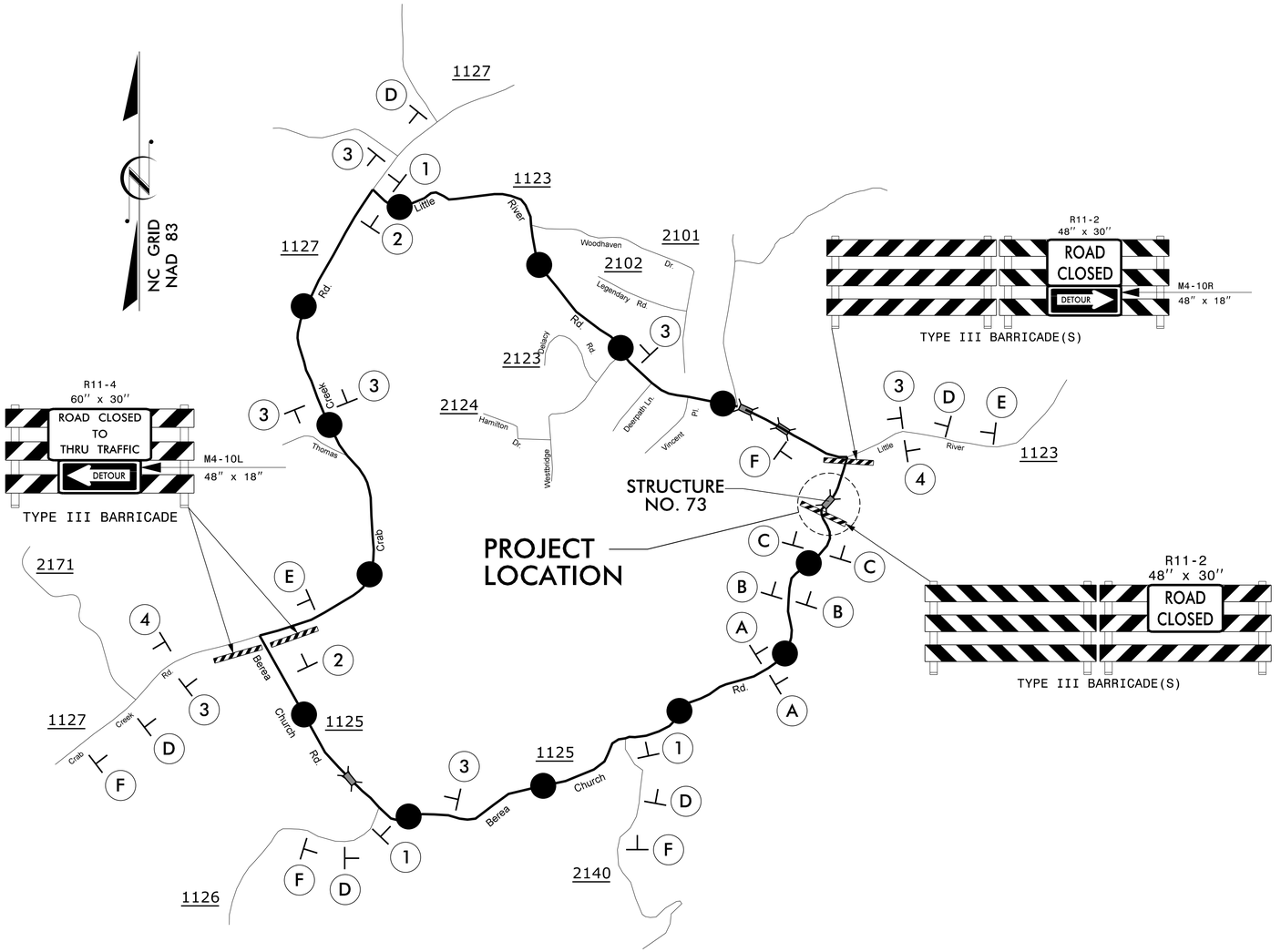
APPROVED DocuSigned by: Lloyd DeWayne Brown DATE 9/15/2016

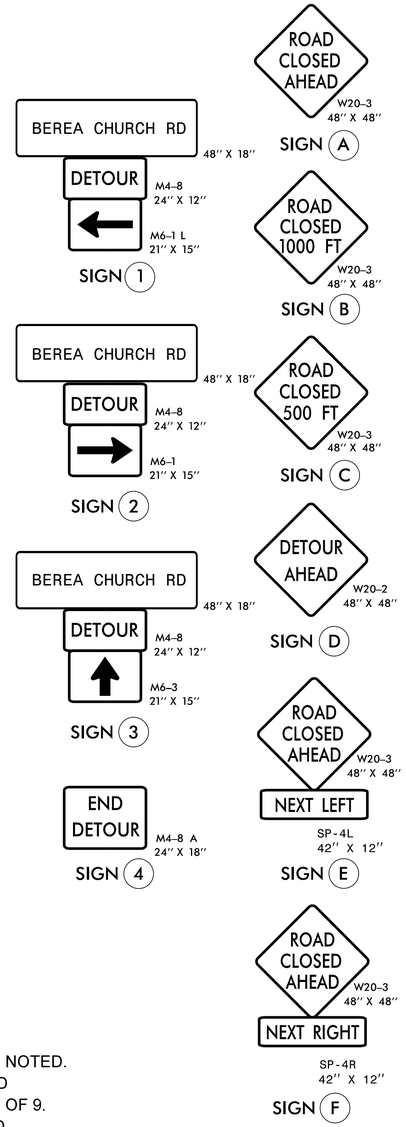
SEAL — NORTH CAROLINA PROFESSIONAL SEAL 20119 ENGINEER LLOYD D. BROWN

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

ROADWAY STANDARD DRAWINGS
GENERAL NOTES &
TRANSPORTATION OPERATIONS

PROJ. REFERENCE NO.	SHEET NO.
14SP.20451.1	TMP-2





PHASING

STEP 1: - INSTALL OFF-SITE DETOUR ROUTE SIGN ASSEMBLIES FOR THE CLOSING OF SR 1125 (BEREA CHURCH ROAD, -L-).

- USING ROADWAY STANDARD DRAWING NO. 1101.03, SHEETS 1 OF 9 AND 2 OF 9, CLOSE SR 1125 (BEREA CHURCH ROAD, -L-) TO THRU TRAFFIC.

STEP 2: - REMOVE THE EXISTING STRUCTURE AND CONSTRUCT THE PROPOSED BOX CULVERT AND ROADWAY, INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM STATION 12+30+/- -L- TO STATION 14+00 +/- -L- (SEE CONSTRUCTION PLANS).

STEP 3: - REMOVE ALL TRAFFIC CONTROL DEVICES, SIGNING AND DETOUR ROUTE SIGNING.

STEP 4: - OPEN TO FINAL TRAFFIC PATTERN.

NOTES:
- ALL DETOUR SIGN LOCATIONS ARE APPROXIMATE.
- ALL DETOUR SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE NOTED.
- TRAFFIC CONTROL DEVICES (A) THROUGH (F) SHALL BE INSTALLED ACCORDING TO ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9.
- TRAFFIC CONTROL DEVICES (1) THROUGH (4) SHALL BE INSTALLED AS PER ENGINEER'S INSTRUCTIONS, AND AS SHOWN HEREON.
- * SEE ROADWAY STANDARD DRAWING NO. 1101.03, SHEET 1 OF 9 AND 2 OF 9, FOR ADDITIONAL WORK ZONE SIGNS.

Vaughn & Melton
Consulting Engineers
Asheville, North Carolina
828-253-2796
Tri-Cities, TN 423-467-8401
Knoxville, TN 865-546-5800
Spartanburg, SC 864-574-4775
Charleston, SC 843-974-5650
Middlesboro, KY 606-248-6600
Charlotte, NC 704-357-0488
Boone, NC 828-355-9933
Atlanta, GA 770-627-3509

APPROVED Lloyd Wayne Brown DATE 9/15/2016

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 20119 ENGINEER LLOYD D. BROWN

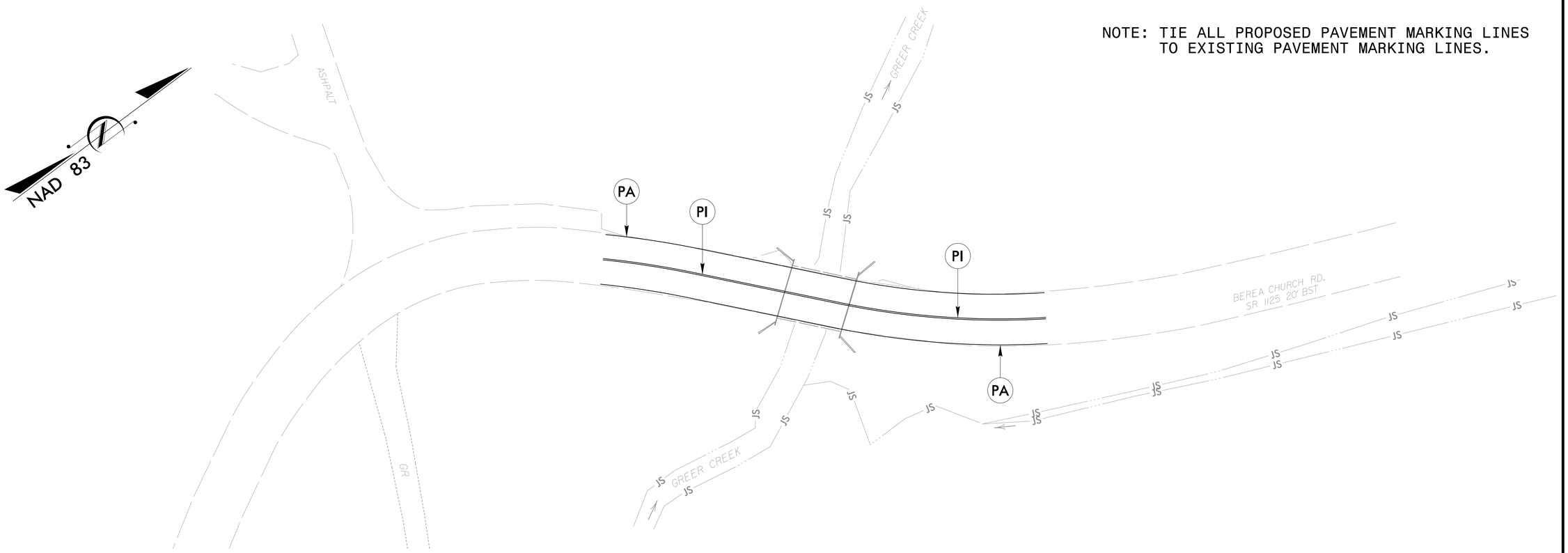
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL DETAIL, PHASING NOTES, OFF-SITE DETOUR SIGNING AND ROAD CLOSURE

9/9/2016
S:\Transportation\3236-06 MTC 14SP.2045J\Henderson 73\Traffic\TrafficControl\TCP\Henderson 73_psh_tmp-2.dgn
User:cjmcfell

PROJ. REFERENCE NO.	SHEET NO.
14SP.20451.1	PM-1

NOTE: TIE ALL PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.



FINAL PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	QUANTITY BREAKDOWN	PAY ITEM	TOTAL QUANTITY
		PAVEMENT MARKING LINES		
PA	WHITE SOLID EDGE LINE	340 FT	PAINT (4")	680 FT
PI	YELLOW DOUBLE CENTER LINE	340 FT	PAINT (4")	680 FT

V&M
Vaughn & Melton
Consulting Engineers
Asheville, North Carolina
828-253-2796
Charlotte, NC 704-357-0488
Boone, NC 828-355-9933
Tri-Cities, TN 423-467-8401
Knoxville, TN 865-546-5800
Spartanburg, SC 864-574-4775
Charleston, SC 843-974-5650
Middlesboro, KY 606-248-6600
Atlanta, GA 770-627-3509

APPROVED: DocuSigned by: Lloyd Delwayne Brown 539540F17F57488... DATE: 9/15/2016

SEAL — NORTH CAROLINA PROFESSIONAL SEAL 20119 ENGINEER LLOYD D. BROWN

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

SCALE: 1" = 20'

PAVEMENT MARKING PLAN

9/9/2016
S:\Transportation\3\236-06 MTC #SP.20451.1\Henderson 73\Traffic\TrafficControl\TCP\Henderson 73_psh_pm-1.dgn
User:cmartell

PROJ. REFERENCE NO.	SHEET NO.
14SP.20451.1	SD-1

SIGN NUMR: BEREA CHURCH RD
TYPE: D Ground
QUANTITY: 7

BACKG. COLOR: Orange
COPY COLOR: Black

DESIGN BY: JDS
PROJECT ID: 14SP.20451.1

CHK BY: DAB
DIV: 14

STD #: STD
DATE: September 2, 2015

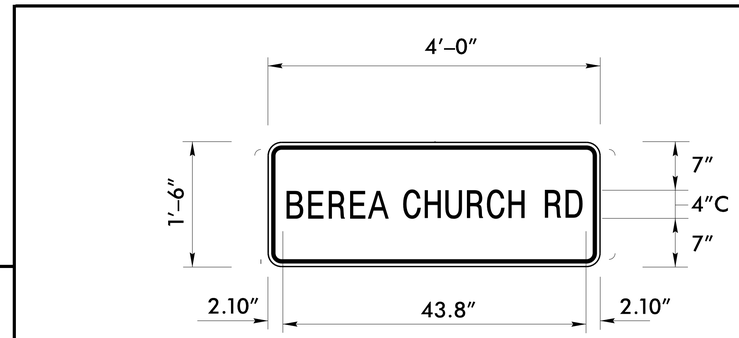
SIGN WIDTH: 4′-0″
HEIGHT: 1′-6″
TOTAL AREA: 6.0 Sq.Ft.

MAT′L: 0.063 in.(1.6 mm) ALUMINUM

BORDER TYPE: FLUSH
RECESS: 0.47″
WIDTH: 0.63″
RADII: 1.5″

NO. Z BARS:
LENGTH: in.

SYMBOL	X	Y	WID	HT



BORDER
R=1.5″
TH=0.63″
IN=0.47″

Panel Style: construction_guide.ssi
M.U.T.C.D.: 2009 Edition

USE NOTES: 1,3,4,6

1. Legend and border shall be direct applied encapsulated lens reflective sheeting.
2. Legend and border shall be direct applied enclosed lens reflective sheeting.
3. Shields shall be encapsulated lens reflective sheeting on 0.8mm aluminum and demountable.
4. Background shall be encapsulated lens reflective sheeting.
5. Background shall be enclosed lens reflective sheeting.
6. Center arrows vertically on sign.

LETTER POSITIONS

Letter spacings are to start of next letter

		B	E	R	E	A		C	H	U	R	C	H		R	D											Series/Size
	2.1	2.8	2.7	2.7	2.7	3.1	4	3	2.8	2.4	2.7	3	2.8	4	2.9	2.2	2.1										C 2000/4.5
																											Text Length
																											43.8

Spacing Factor is 1 unless specified otherwise

FILENAME: GS40_ENGL

APPROVED: DocuSigned by: Lloyd DeWayne Brown DATE: 9/15/2016

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 20119 ENGINEER LLOYD D. BROWN

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

SPECIAL SIGN DESIGN

EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
14SP.20451.1	EC-1/CONS-4

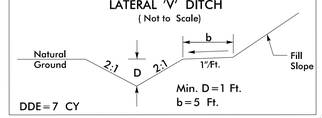
Vaughn & Melton
Consulting Engineers
Asheville, North Carolina 828-253-2796
Charlotte, North Carolina 704-357-0488
Tri-Cities, Tennessee 423-467-8400
Knoxville, Tennessee 865-546-5800
Middlesboro, Kentucky 606-248-6600
Spartanburg, South Carolina 864-574-4775

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.

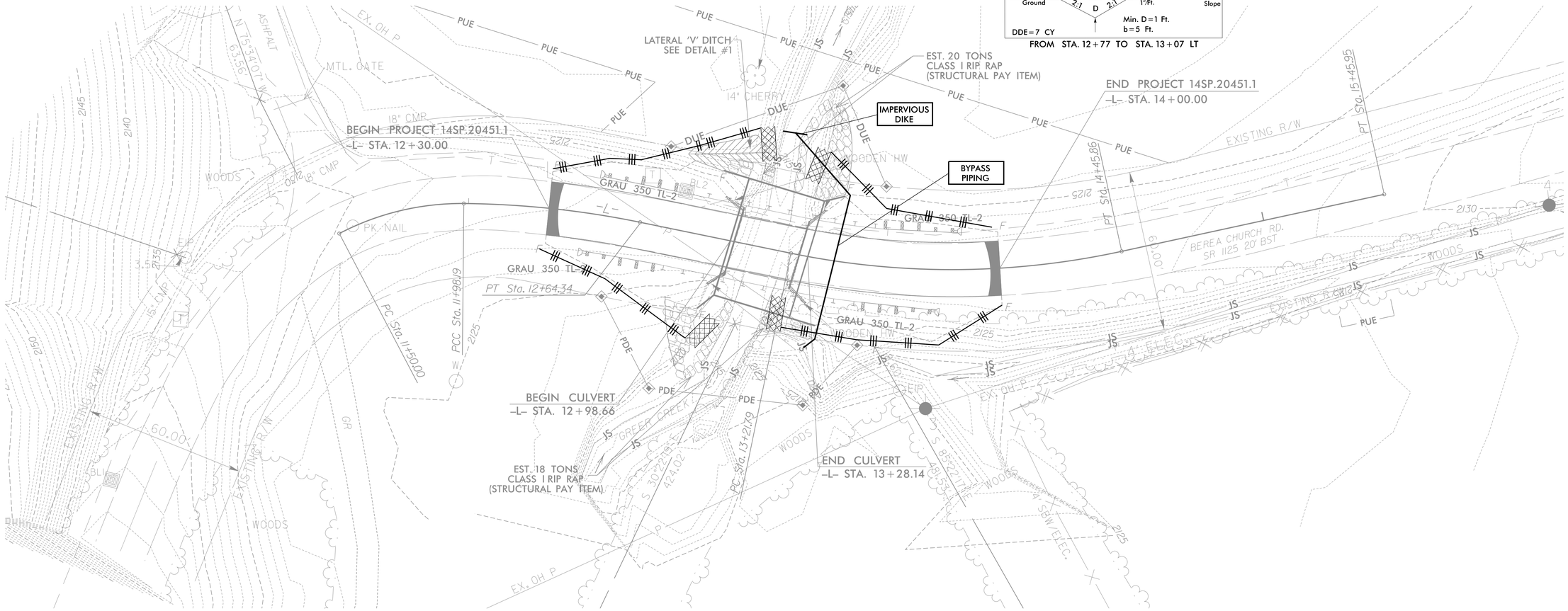
Level III–A: Designer of Erosion and Sediment Control Plans

MICHAEL CLARK
Date Issued: June 5, 2013
Date Expires: December 31, 2016
Certification Number: 3376

DETAIL 1
LATERAL 'V' DITCH
(Not to Scale)



DDE=7 CY
FROM STA. 12+77 TO STA. 13+07 LT



Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1632.03	Rock Inlet Sediment TrapType C	
1633.01	Temporary Rock Silt Check Type-A	

NOTES:

1) ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

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

3) AN ONSITE CONCRETE WASHOUT STRUCTURE IS REQUIRED. THE LOCATION WILL BE DETERMINED IN THE FIELD.

ROADSIDE ENVIRONMENTAL UNIT
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

2012 STANDARD SPECIFICATIONS

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

2012 STANDARD DRAWINGS

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	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion	1640.01	Coir Fiber Baffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

PROJECT NO: 14SP.20451.1
COUNTY: HENDERSON
STATION: 13+63.04 -L-
REPLACES BRIDGE NO. 073

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STRUCTURE #073 ON SR 1125 OVER GREER CREEK

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	EC-1
1			3			TOTAL SHEETS
2			4			

PROJECT REFERENCE NO.	SHEET NO.
14SP.2045111	EC-2

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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.

PROJECT REFERENCE NO.	SHEET NO.
14SP.20451J	EC-3

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
				SUBTOTAL	
				MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER	450
				TOTAL	450**
				SAY	
	**EROSION CONTROL MATTING TO BE PLACED ON ALL				
	DISTURBED SLOPES				

PERMANENT SOIL REINFORCEMENT MAT

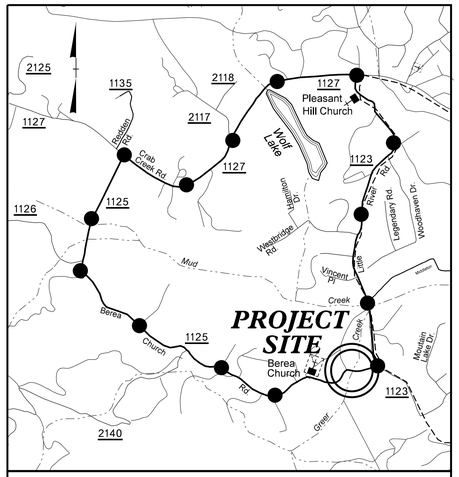
CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
				SUBTOTAL	
				ADDITIONAL PSRM TO BE INSTALLED	
				TOTAL	
				SAY	

5/2/16

TIP PROJECT: 14SP.20451.1

CONTRACT: DN00129

V&M PROJECT #3I236-06
TRANSPORTATION\3I236-06\UTILITIES\UO-1.DGN



VICINITY MAP

DETOUR ROUTE

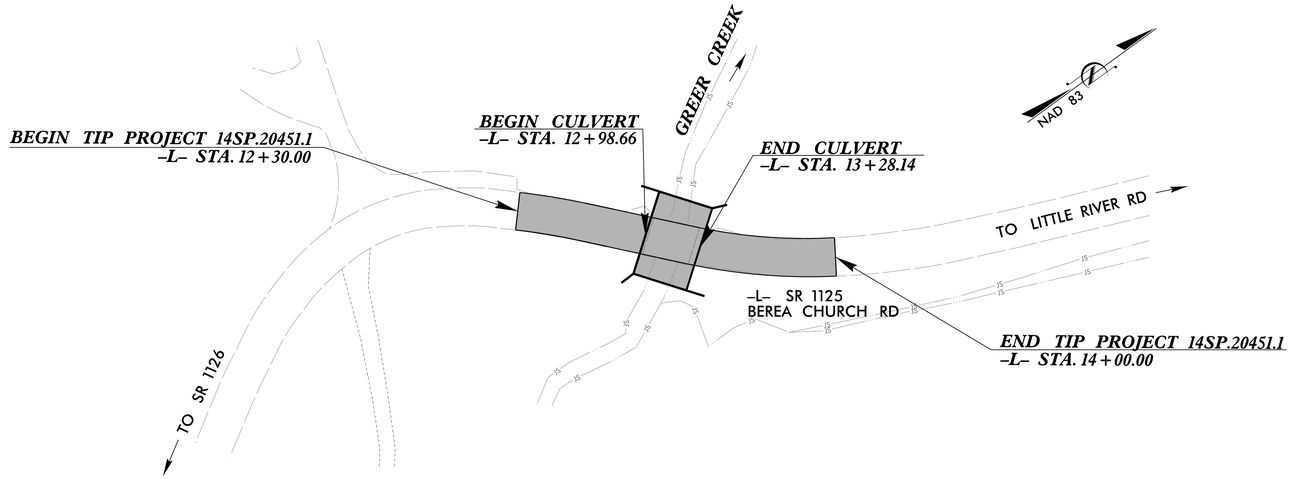
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

T.I.P. NO.	SHEET NO.
14SP.20451.1	UO–1

UTILITIES BY OTHERS
HENDERSON COUNTY

LOCATION: BRIDGE NO. 73 OVER GREER CREEK ON SR 1125 (BEREA CHURCH ROAD)

TYPE OF WORK: AERIAL POWER AND TELEPHONE, UNDERGROUND TELEPHONE



V&M Vaughn & Melton
Consulting Engineers
Asheville, North Carolina 828-253-2796
Charlotte, North Carolina 704-357-0488
Tri-Cities, Tennessee 423-467-8401
Knoxville, Tennessee 865-546-5800
Middlesboro, Kentucky 606-248-6600
Spartanburg, South Carolina 864-574-4775

GRAPHIC SCALES

20 10 0 20 40
PLANS

INDEX OF SHEETS

UTILITY OWNERS ON PROJECT

(1) POWER – DUKE ENERGY

(2) TELEPHONE – AT&T

PLANS PREPARED BY:

V&M Vaughn & Melton
Consulting Engineers
1318-F Patton Ave.
Asheville, NC 28806
828-253-2796

PREPARED FOR THE OFFICE OF:

DIVISION OF HIGHWAYS
UTILITIES ENGINEERING SECTION

1591 MAIL SERVICES CENTER
RALEIGH NC 27699–1591
PHONE (919) 250–4128
FAX (919) 250–4119

Roger Worthington, P.E. — *UTILITIES SECTION ENGINEER*

Lynn Mann, P.G. — *UTILITIES PROJECT DESIGNER*

5/2/16

TIP PROJECT: 14SP.20451.1

CONTRACT: DN00129

Vaughn & Melton
Consulting Engineers
Asheville, North Carolina 828-253-2796
Charlotte, North Carolina 704-357-0488
Tri-Cities, Tennessee 423-467-8400
Knoxville, Tennessee 865-546-5800
Middlesboro, Kentucky 606-248-6600
Spartanburg, South Carolina 864-574-4775

PROJECT REFERENCE NO.	SHEET NO.
14SP.20451.1	U0-2

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

LEGEND

E — EXISTING APPARENT UTILITY EASEMENTS 30' DUKE ENERGY

NC GRID NAD 83/NSRS 2007

20.00' JE EASEMENT (DB247 PG 30)

MICHAEL J. COOPER
DB 896 PG 711

RELOCATE DUKE ENERGY ANCHOR

PROP O/H POW & TEL LINES

NEW PERMANENT DUKE ENERGY JOINT USE POLES

EXIST. TELEPHONE-MAIN CABLE BORED UNDER CREEK, BARE SECONDARY CABLE ATTACHED TO BRIDGE

MICHAEL J. COOPER
DB 896 PG 711

ROY T. FORD III
DB 1274 PG 391

PROP U/G TEL CABLES

PROP O/H POW & TEL LINES

NEW BURIED TELEPHONE CABLE

AT&T PROPOSED PRIVATE ROAD BORE, NEW BURIED CABLE FROM EX. PEDESTAL TO NEW JOINT USE POLE

PROP U/G TEL CAB

PROP O/H POW LINES

D.H. CALDWELL
DB 1408 PG 422

PROP U/G TEL

BEGIN PROJECT 14SP.20451.1
-L- STA. 12+30.00

REMOVE EXIST. PEDESTAL, REMOVE OR ABANDON BURIED CABLE

REMOVE AERIAL POWER LINES

BEGIN CULVERT
-L- STA. 12+98.66

NEW PERMANENT POWER POLE & ANCHOR

END PROJECT 14SP.20451.1
-L- STA. 14+00.00

RELOCATE DUKE ENERGY ANCHOR

END CULVERT
-L- STA. 13+28.14

2 RICHARD KAUFER
DB 1206 PG 294

3 DIXIE DELLINGER
DB 252 PG 315

4 ELAINE SALTZ
DB 312 PG 111

WOODS · ASHPALT · MTL. GATE · 18" CMP · 15" CMP · 14" CHERRY · GREER CREEK · EXISTING R/W · 60.00' · BEREA CHURCH RD. SR 1125 20' PVMT · GRAU 350 TL-2 · EX. OH P · LOC. APPROX. · 4" SBW/ELEC.

V&M PROJECT #3|236-06
TRANSPORTATION\3|236-06\UTILITIES\HEND73_U0-2.DGN