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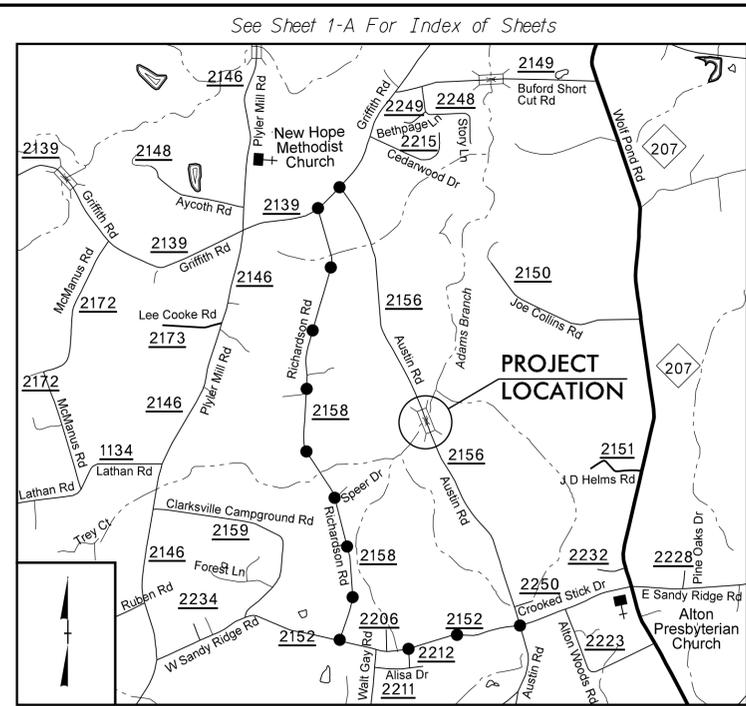
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09, 08, / 19

STATE PROJECT: 17BP.10.R.66

CONTRACT: DJ00201



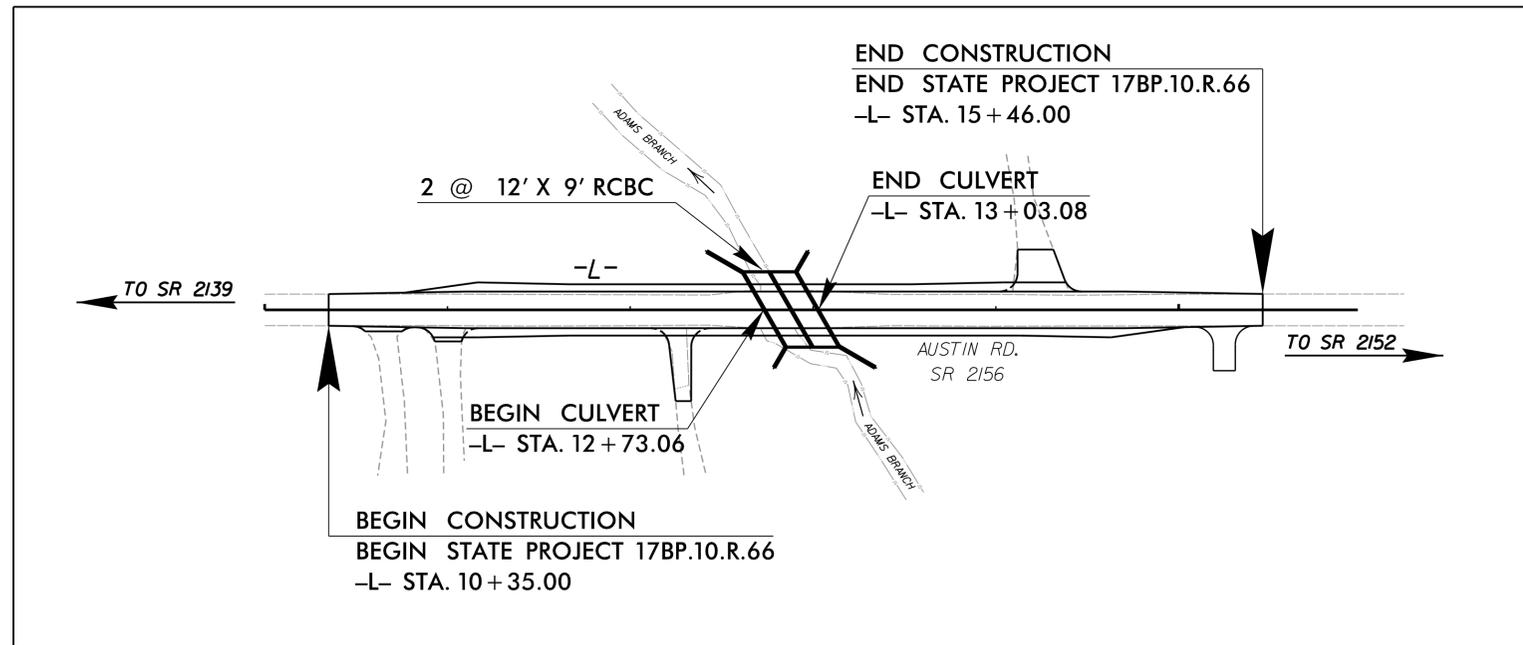
DETOUR ROUTE VICINITY MAP (NOT TO SCALE)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
UNION COUNTY

**LOCATION: BRIDGE NO. 152 ON SR 2156 OVER ADAMS BRANCH
BETWEEN SR 2139 AND SR 2152**

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

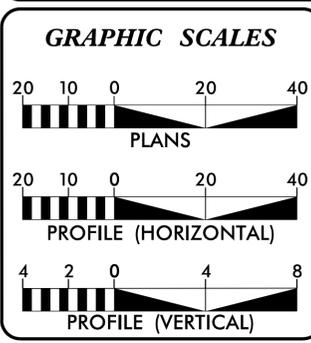
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP.10.R.66	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
17BP.10.R.66		P.E., R/W, CONSTR.	



LOCATION SKETCH

HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

DOCUMENT NOT CONSIDERED FINAL
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DESIGN DATA

ADT 2012 =	740
ADT 2025 =	1480
DHV =	%
D =	%
T =	6 %
V =	55 MPH
FUNC CLASS =	LOCAL RURAL SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY STATE PROJECT 17BP.10.R.66 =	0.091 MILES
LENGTH STRUCTURES STATE PROJECT 17BP.10.R.66 =	0.006 MILES
TOTAL LENGTH STATE PROJECT 17BP.10.R.66 =	0.097 MILES

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

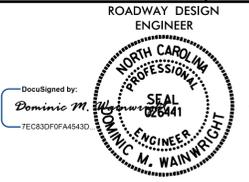
2012 STANDARD SPECIFICATIONS	RIGHT OF WAY DATE:	DOMINIC M. WAINWRIGHT, P.E.
	MAY 22, 2015	PROJECT ENGINEER
	LETTING DATE: <th>JAMES R. RICE, P.E.</th>	JAMES R. RICE, P.E.
	SEPTEMBER 7, 2016	PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
7/14/2016
DocuSigned by: *[Signature]*
SIGNATURE: JAMES R. RICE, P.E.

ROADWAY DESIGN ENGINEER
7/13/2016
DocuSigned by: *[Signature]*
SIGNATURE: DOMINIC M. WAINWRIGHT, P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

LOUIS MITCHELL P.E.
DIVISION ENGINEER

PROJECT REFERENCE NO. <i>17BPJOR.66</i>	SHEET NO. <i>1-A</i>
ROADWAY DESIGN ENGINEER	
	
7/13/2016	
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 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	

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 AND TYPICAL SECTIONS
2-A	MULTI-BARREL LOW FLOW CHANNEL AND FLOOD PLAN SILL DETAIL
3	RIGHT-OF-WAY AREA DATA, SUMMARY OF DRAINAGE QUANTITIES, SUMMARY OF GUARDRAIL
4	PLAN AND PROFILE SHEET
TMP-1 THRU TMP-2	TRAFFIC MANAGEMENT PLAN
SD-01	DETOUR SIGN DESIGN
EC-1 THRU EC-6	EROSION CONTROL PLANS
UC-1 THRU UC-2	UTILITY CONSTRUCTION PLANS
UO-1 THRU UO-2	UTILITIES BY OTHERS PLANS
X-1 THRU X-6	CROSS-SECTIONS
S-1 THRU S-7	STRUCTURE PLANS
S-8	STRUCTURE STANDARD NOTES

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

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.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

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

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 10' RADII OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS 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.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE DUKE ENERGY, FRONTIER, TIME WARNER CABLE, AND UNION COUNTY PUBLIC WORKS.

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:

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

EFF. 01-17-2012
REV. 10-30-2012

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, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.10	Driveway Pipe Construction
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 8 - INCIDENTALS	
848.02	Driveway Turnout - Radius Type
862.01	Guardrail Placement
862.02	Guardrail Installation
876.01	Rip Rap in Channels
876.04	Drainage Ditches with Class 'B' Rip Rap

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ _{EP}
Property Corner	-----
Property Monument	□ _{ECM}
Parcel/Sequence Number	①23
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	----- _{WLB}
Proposed Wetland Boundary	----- _{WLB}
Existing Endangered Animal Boundary	----- _{EAB}
Existing Endangered Plant Boundary	----- _{EPB}
Known Soil Contamination: Boundary or Site	☠
Potential Soil Contamination: Boundary or Site	?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
Well	○ _W
Small Mine	✕
Foundation	▭
Area Outline	▭
Cemetery	†
Building	▭
School	▭
Church	▭
Dam	▭

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	▭
Jurisdictional Stream	----- _{JS}
Buffer Zone 1	----- _{BZ 1}
Buffer Zone 2	----- _{BZ 2}
Flow Arrow	←
Disappearing Stream	-----
Spring	○
Wetland	-----
Proposed Lateral, Tail, Head Ditch	-----
False Sump	▽

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ _{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	-----
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 Drainage / Utility Easement	-----
Proposed Permanent Utility Easement	-----
Proposed Temporary Utility Easement	-----
Proposed Aerial Utility Easement	-----
Proposed Permanent Easement with Iron Pin and Cap Marker	◆

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	----- _C
Proposed Slope Stakes Fill	----- _F
Proposed Curb Ramp	○ _{CR}
Curb Cut Future Ramp	○ _{CCFR}
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	□ _{CB}
Paved Ditch Gutter	-----
Storm Sewer Manhole	○
Storm Sewer	-----

UTILITIES:

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

TELEPHONE:

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

WATER:

Water Manhole	○
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
Recorded U/G Water Line	-----
Designated U/G Water Line (S.U.E.*)	-----
Above Ground Water Line	----- _{A/G Water}

TV:

TV Satellite Dish	☞
TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	□
Recorded U/G TV Cable	----- _{TV}
Designated U/G TV Cable (S.U.E.*)	----- _{TV}
Recorded U/G Fiber Optic Cable	----- _{TV FO}
Designated U/G Fiber Optic Cable (S.U.E.*)	----- _{TV FO}

GAS:

Gas Valve	◇
Gas Meter	⊕
Recorded U/G Gas Line	----- _G
Designated U/G Gas Line (S.U.E.*)	----- _G
Above Ground Gas Line	----- _{A/G Gas}

SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	----- _{SS}
Above Ground Sanitary Sewer	----- _{A/G Sanitary Sewer}
Recorded SS Forced Main Line	----- _{FSS}
Designated SS Forced Main Line (S.U.E.*)	----- _{FSS}

MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	□
Utility Unknown U/G Line	----- _{UTIL}
U/G Tank; Water, Gas, Oil	▭
Underground Storage Tank, Approx. Loc.	⊕ _{UST}
A/G Tank; Water, Gas, Oil	▭
Geoenvironmental Boring	⊗
U/G Test Hole (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

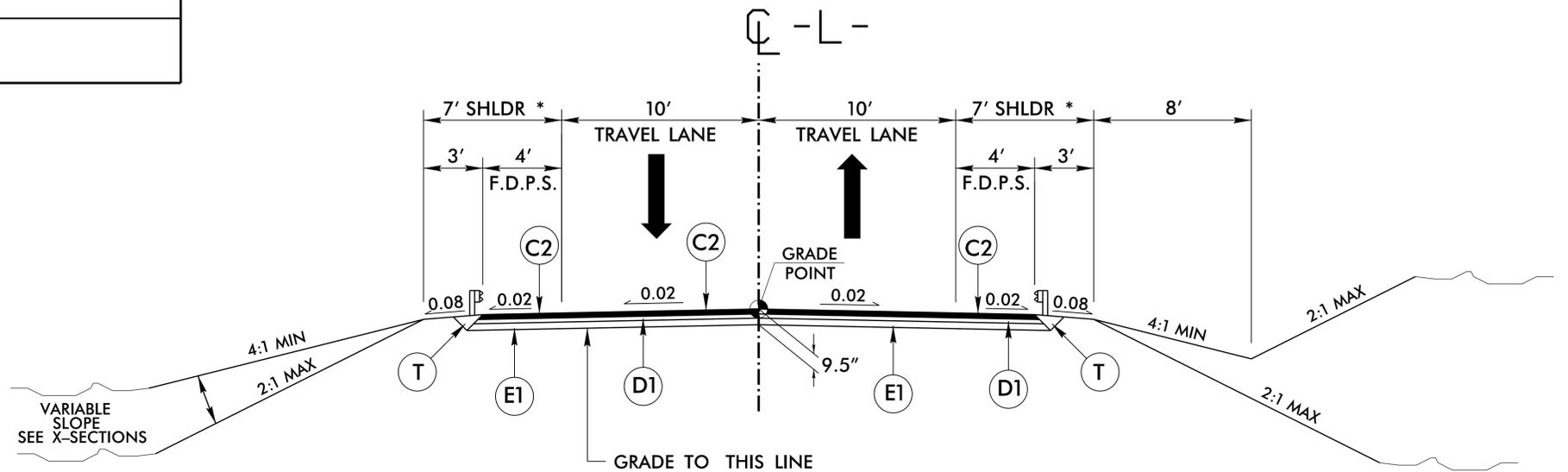
8/17/99

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 Lbs PER SQUARE YARD
C2	PROP. APPROX. 3.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 Lbs PER SQUARE YARD IN EACH OF TWO LAYERS.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 Lbs PER SQUARE YARD.
E1	PROP. APPROX. 4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 Lbs PER SQUARE YARD.
T	EARTH MATERIAL
V	8" INCIDENTAL STONE BASE

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

PROJECT REFERENCE NO. 17BP.10.R.66	SHEET NO. 2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	



F.D.P.S. = FULL DEPTH PAVED SHOULDER
 * USE 4' TOTAL TURF SHOULDER WIDTH WITHOUT GUARDRAIL

TYPICAL SECTION NO. 1

LINE	FROM STATION	TO STATION
-L-	10 + 35.00	15 + 46.00

NOTE: PAVE DRIVEWAYS 10+65 RT AND 11+00 RT WITH FULL DEPTH PAVEMENT.

NOTE: PAVE DRIVEWAY AT -L- STA. 12+25 RT WITH (V) BASE AND (C1) SURFACE COURSE BEYOND FULL DEPTH PAVED SHOULDER LIMITS.

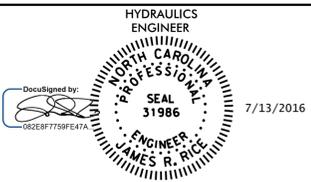
NOTE: CONSTRUCT DRIVEWAY 14+25 LT WITH (V) BEYOND FULL DEPTH PAVED SHOULDER LIMITS.

NOTE: PAVE DRIVEWAY 15+25 RT WITH (V)

REVISIONS

4/15/2016 7BP-10R66.RDY_TYP.DGN

8.17.19

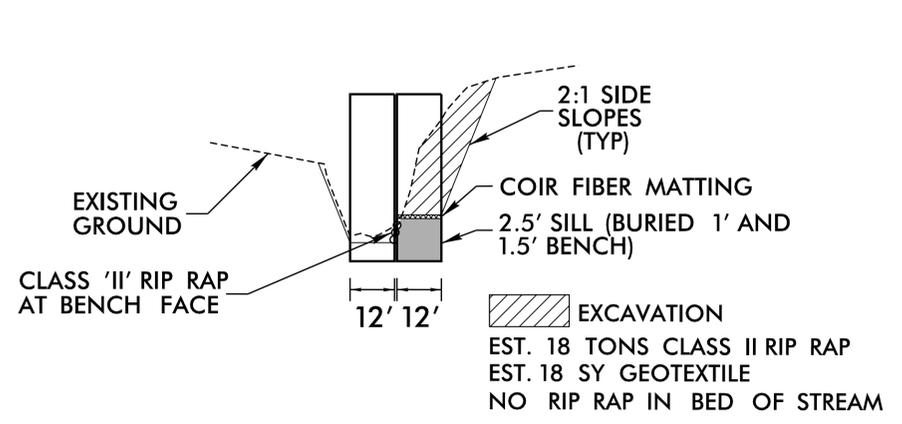
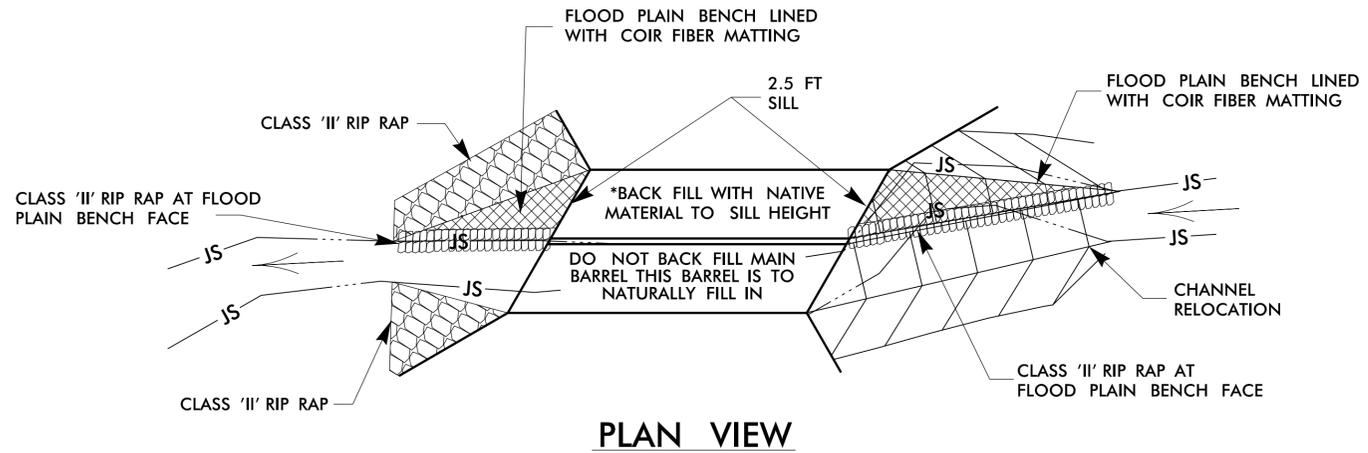
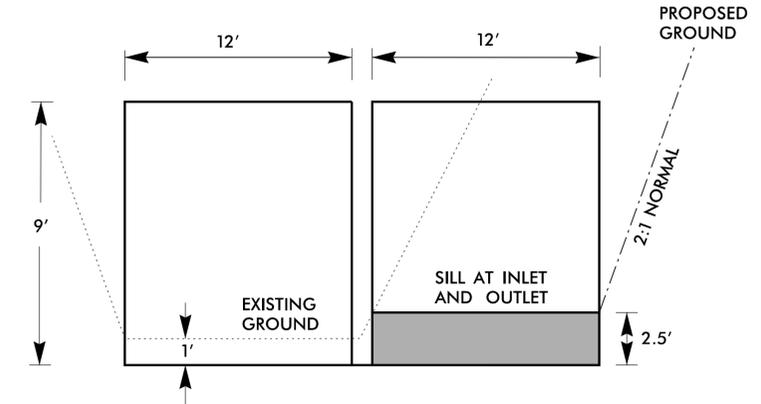
PROJECT REFERENCE NO. 17BP.10.R.66	SHEET NO. 2-A
RW SHEET NO.	
HYDRAULICS ENGINEER	
	
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*NATIVE MATERIAL CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE STREAM BED OR FLOODPLAIN AT THE PROJECT SITE DURING CULVERT INSTALLATION. RIP RAP MAY BE USED TO SUPPLEMENT THE NATIVE MATERIAL IN THE HIGH FLOW CULVERT BARREL(S). IF RIP RAP IS USED TO LINE THE HIGH FLOW CULVERT BARREL(S), NATIVE MATERIAL SHOULD BE PLACED ON TOP TO FILL VOIDS AND PROVIDE A FLAT SURFACE FOR ANIMAL PASSAGE. NATIVE MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT CONDITIONS.

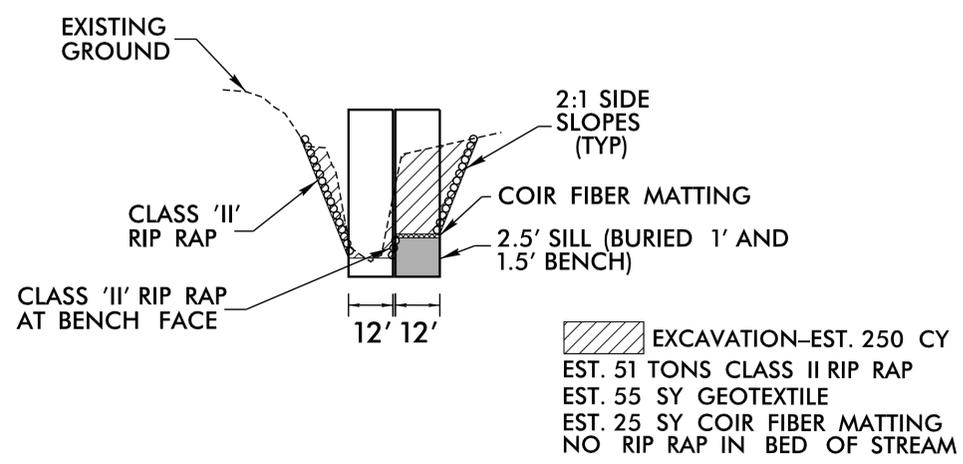
DETAIL
*NOT TO SCALE
**MULTI-BARREL – GENERAL
DETAIL LOW FLOW CHANNEL
AND FLOOD PLAIN SILL**

***NOTES:**

- 1) FLOOD PLAIN BENCH SHOULD BE CONSTRUCTED WITH NATIVE BED MATERIAL. CONSTRUCT BENCH TO THE TOP OF THE SILL AND LINE BENCH WITH COIR FIBER MATTING.
- 2) PLACE CLASS 'II' RIP RAP ON FACE OF FLOOD PLAIN BENCH AND CHANNEL SIDE SLOPES.



UPSTREAM AT CULVERT OUTLET (NTS)



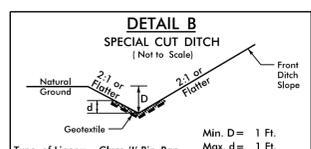
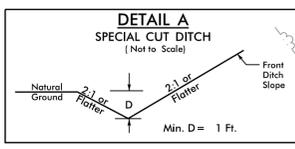
DOWNSTREAM AT CULVERT OUTLET (NTS)

REVISIONS

4/15/2016 7BP-10R66.RDY_TYP.DGN

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCOS FOR MONUMENT "GPS 152-2" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 419776.881(ft) EASTING: 1532079.229(ft) ELEVATION: 602.46(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99992734 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS 152-2" TO -L- STATION 10+35.00 IS N 23° 34' 36.41" W 284.28' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

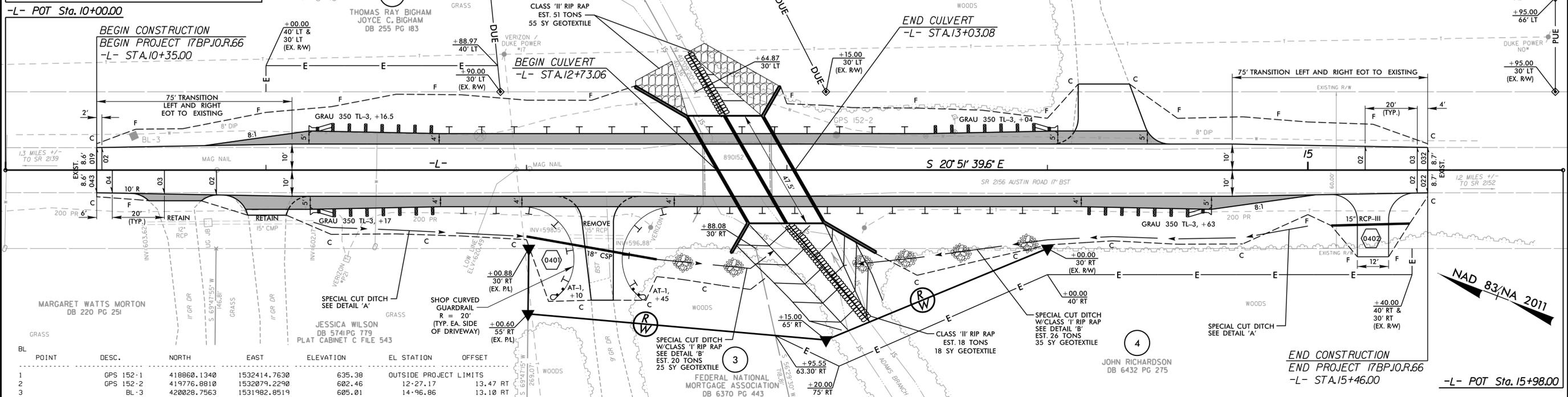


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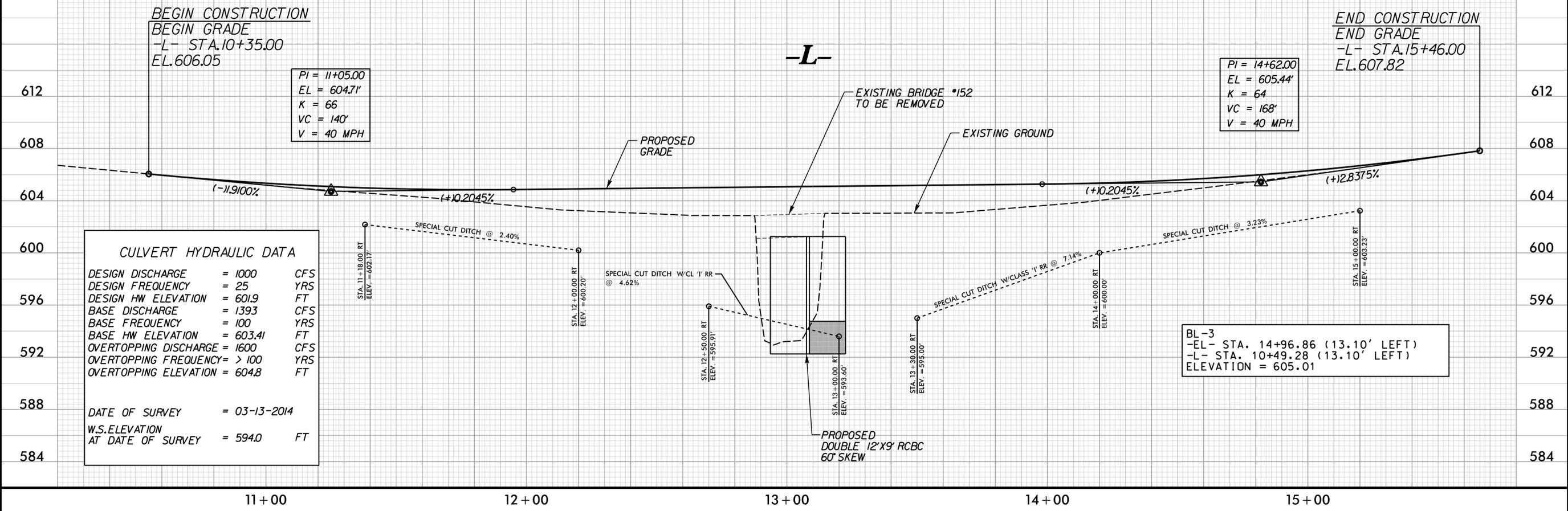
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- NOTES:
- INCIDENTAL MILL APPROXIMATELY 25' AT EACH TIE IN AT BEGIN AND END PROJECT LIMITS TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING ASPHALT PAVEMENT.
 - ALL DRIVEWAYS HAVE 10' TURNOUT RADII.

PROJECT REFERENCE NO. 17BP.10.R.66	SHEET NO. 4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



BL POINT	DESC.	NORTH	EAST	ELEVATION	EL STATION	OFFSET
1	GPS 152-1	418860.1340	1532414.7630	635.38	OUTSIDE PROJECT LIMITS	
2	GPS 152-2	419776.8810	1532079.2290	602.46	12+27.17	13.47 RT
3	BL-3	420028.7563	1531982.8519	605.01	14+96.86	13.10 RT



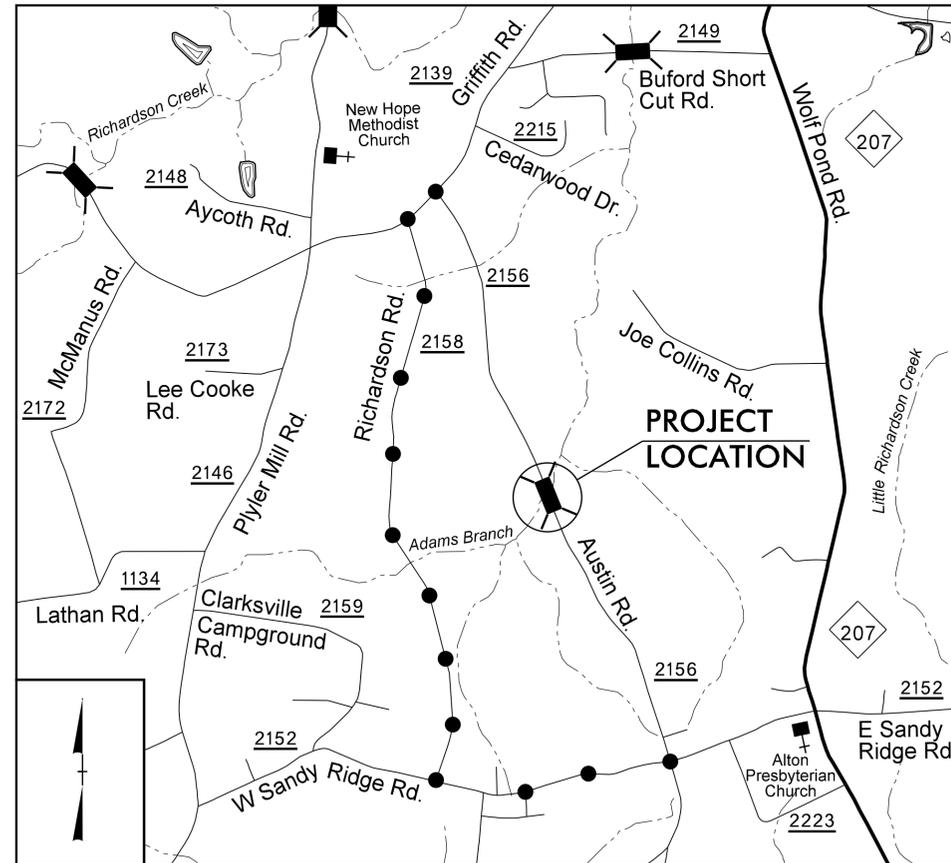
REVISIONS

4/15/2016 17BP-10R66-RDY_PSH-DGN

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

UNION COUNTY



VICINITY MAP
(NOT TO SCALE)

● — ●
DETOUR ROUTE

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-1B	GENERAL NOTES AND PHASING
TMP-2	OFFSITE DETOUR PLAN - AUSTIN ROAD (SR 2156)
SD-01	SIGN DESIGN - AUSTIN ROAD

SHEET NO.
TMP-1

17BP.10.R.66

STATE PROJECT:

PLOT DRIVER: NCDOT_paf_color_eng_50.plt
 USER: dwohwr1
 FILE: dw\WPAPP\PA01\SouthEast_Tampa_Documents\000166\CON082236\0000000021869\06.00_TIP_Folder_Structure\17BP.10.R.66\TrafficControl\TCP\17BP.10R66.TCP.DSN.dgn
 PENTABLE: NCDOT_tcp.tbl
 DATE: 4/18/2016
 TIME: 9:25:25 AM



N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
 1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
 750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
 PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER
 DOMINIC WAINWRIGHT, P.E. ROADWAY PROJECT ENGINEER
 MICHELLE WARD, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER
 T. N. BEDENBAUGH, E.I. TRAFFIC CONTROL DESIGN ENGINEER



PLAN PREPARED BY:
 HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St, Suite 900, Raleigh, N.C. 27601
 N.C.B.E.L.S. License Number: F-0116

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APPROVED:
 DATE: 7/13/2016



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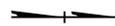
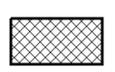
ROADWAY STANDARD DRAWINGS

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
1101.03	TEMPORARY ROAD CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1145.01	BARRICADES
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

LEGEND

GENERAL

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

TRAFFIC CONTROL DEVICES

-  BARRICADE (TYPE III)
-  CONE
-  DRUM  SKINNY DRUM  TUBULAR MARKER
-  TEMPORARY CRASH CUSHION
-  FLASHING ARROW PANEL (TYPE C)
-  FLAGGER
-  LAW ENFORCEMENT
-  TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
-  CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

-  PORTABLE SIGN
-  STATIONARY SIGN
-  STATIONARY OR PORTABLE SIGN

SIGNALS

-  EXISTING
-  PROPOSED
-  TEMPORARY

PAVEMENT MARKINGS

-  EXISTING LINES
-  TEMPORARY LINES

PAVEMENT MARKERS

-  CRYSTAL/CRYSTAL
-  CRYSTAL/RED
-  YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

-  PAVEMENT MARKING SYMBOLS

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 TIME: 9:25:26 AM
 DATE: 4/18/2016

APPROVED: <i>Michelle Ward</i> DATE: 7/13/2016 SEAL 		ROADWAY STANDARD DRAWINGS & LEGEND
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

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 OR 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) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- C) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFFSITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

- D) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN THE ROAD CLOSURE IS NOT IN OPERATION.
COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFFSITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.
- E) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

- F) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

- G) STATE FORCES WILL INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE.

PHASING

TRAFFIC CONTROL PHASING

NOTE: COORDINATE WITH THE ENGINEER FOR INSTALLATION AND REMOVAL OF ALL SIGNING AND TRAFFIC CONTROL DEVICES.

NOTE: MAINTAIN ACCESS TO DRIVEWAYS WITHIN PROJECT LIMITS AT ALL TIMES.

STEP 1: USING RSD 1101.01, SHEET 3 OF 3, INSTALL ADVANCE WORK ZONE WARNING SIGNS ON AUSTIN ROAD (SR 2156).

STEP 2: USING RSD 1101.03, SHEET 1 OF 9 AND SHEET TMP-2, INSTALL DETOUR SIGNS AND BARRICADES AND CLOSE AUSTIN ROAD (SR 2156).

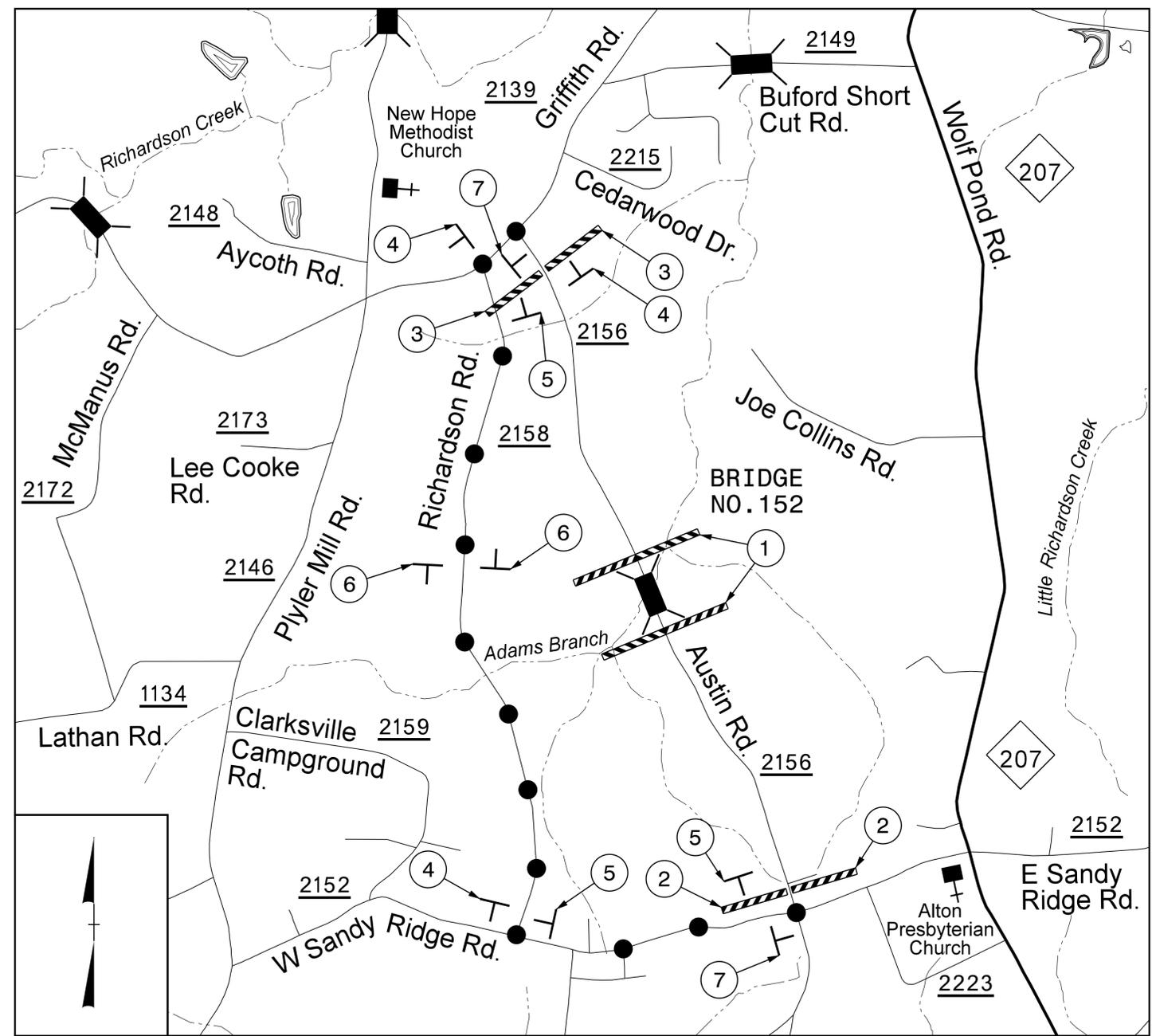
STEP 3: REMOVE EXISTING BRIDGE NO. 152 AND CONSTRUCT PROPOSED BRIDGE AND ROADWAY, UP TO AND INCLUDING THE FINAL LAYER OF SURFACE COURSE. (NOTE: COORDINATE WITH STATE FORCES TO INSTALL FINAL PAVEMENT MARKINGS AND MARKERS ONCE CONSTRUCTION IS COMPLETE.)

STEP 4: REMOVE ALL ADVANCE WORK ZONE DETOUR SIGNS, AND TRAFFIC CONTROL DEVICES AND OPEN AUSTIN ROAD (SR 2156) TO TRAFFIC.

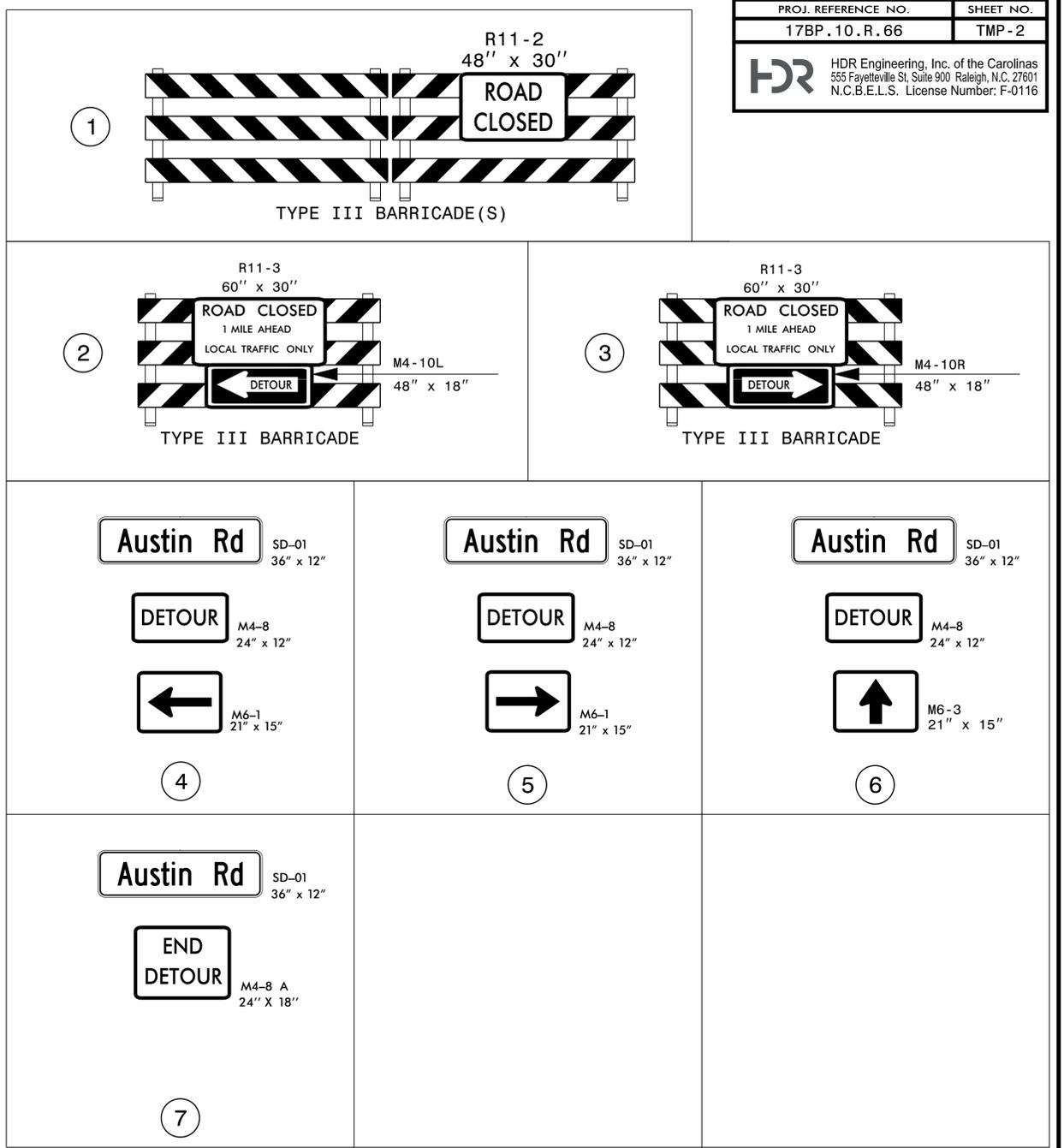
PROJ. REFERENCE NO.	SHEET NO.
17BP.10.R.66	TMP-1B
 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	

PLOT DRIVER: NCDOT_paf_color_eng_50.ppt PENTABLE: NCDOT_tcp.tbl
 USER: dwohwr1 DATE: 4/18/2016 TIME: 9:25:28 AM
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APPROVED:  DATE: 7/13/2016 SEAL 		GENERAL NOTES AND PHASING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

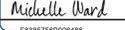


REFER TO RSD 1101.03 SHEET 1 OF 9 FOR
ADDITIONAL SIGN AND BARRICADE PLACEMENT



SEE SHEET SD-01 FOR SPECIAL SIGN DESIGN DETAIL

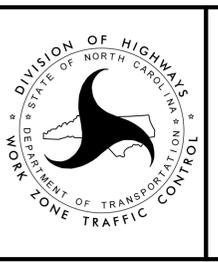
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 USER: dwohwr1 FILE: pwa\pwappt\PA01\SouthEast_Tampa_Documents\000166\CON082236\0000000021869\06.00_TIP_Folder_Structure\17BP.10.R.66\TrafficControl\TCP\17BP-10R66_TCP_DSN.dgn
 PENTABLE: NCDOT_tcp.tbl TIME: 9:25:29 AM

APPROVED:  DATE: 7/13/2016

SEAL



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



OFFSITE DETOUR PLAN
AUSTIN ROAD
(SR 2156)

STATE PROJECT: 17BP.10.R.66

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

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.

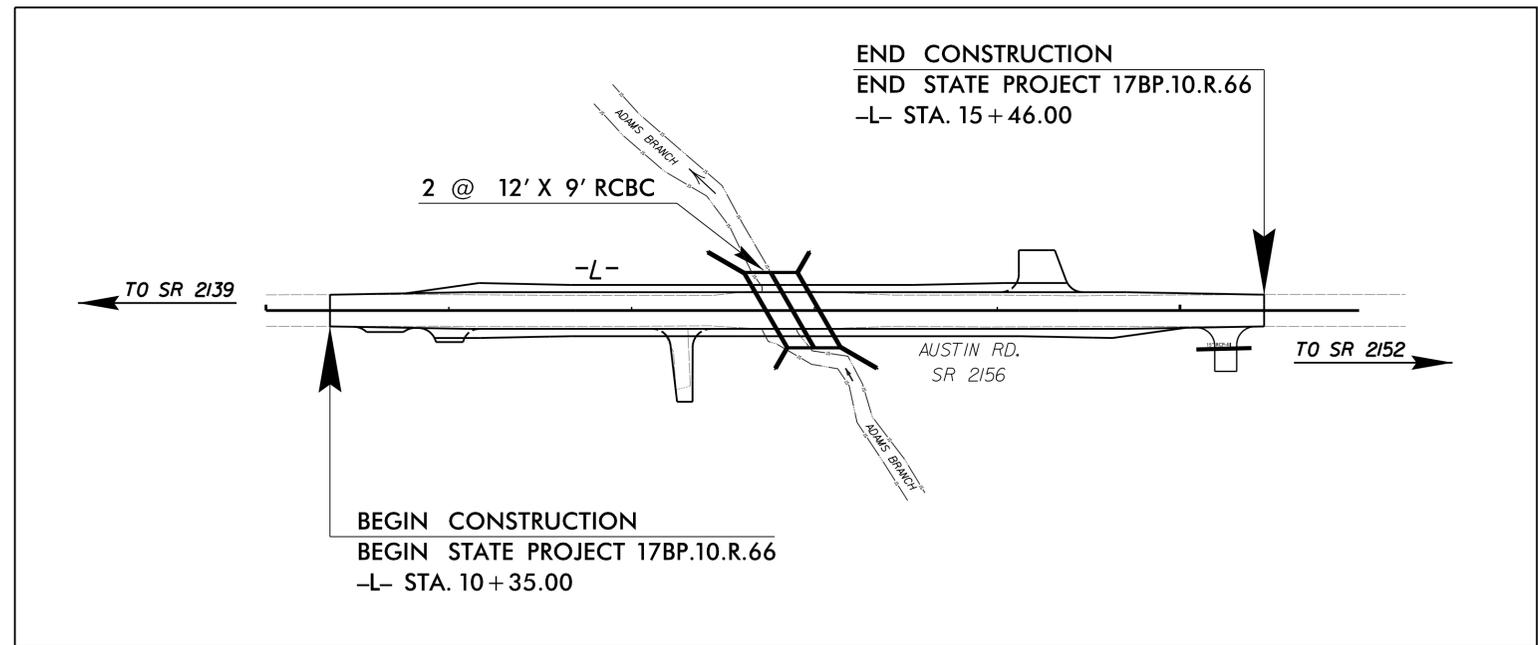
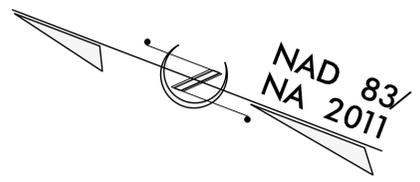
JOSHUA MASSROCK
LEVEL IIIA NAME

3573
LEVEL IIIA CERTIFICATION NO.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
UNION COUNTY

LOCATION: BRIDGE NO. 152 ON SR 2156 OVER ADAMS BRANCH BETWEEN SR 2139 AND SR 2152

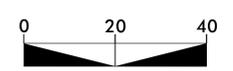
TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE



LOCATION SKETCH
LOCATION SKETCH

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

GRAPHIC SCALE



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 AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared in the Office of:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611
2012 STANDARD SPECIFICATIONS

Highway Standard Drawings

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

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP.10.R.66	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
17BP.10.R.66		P.E., R/W, CONSTR.	

EROSION AND SEDIMENT CONTROL MEASURES

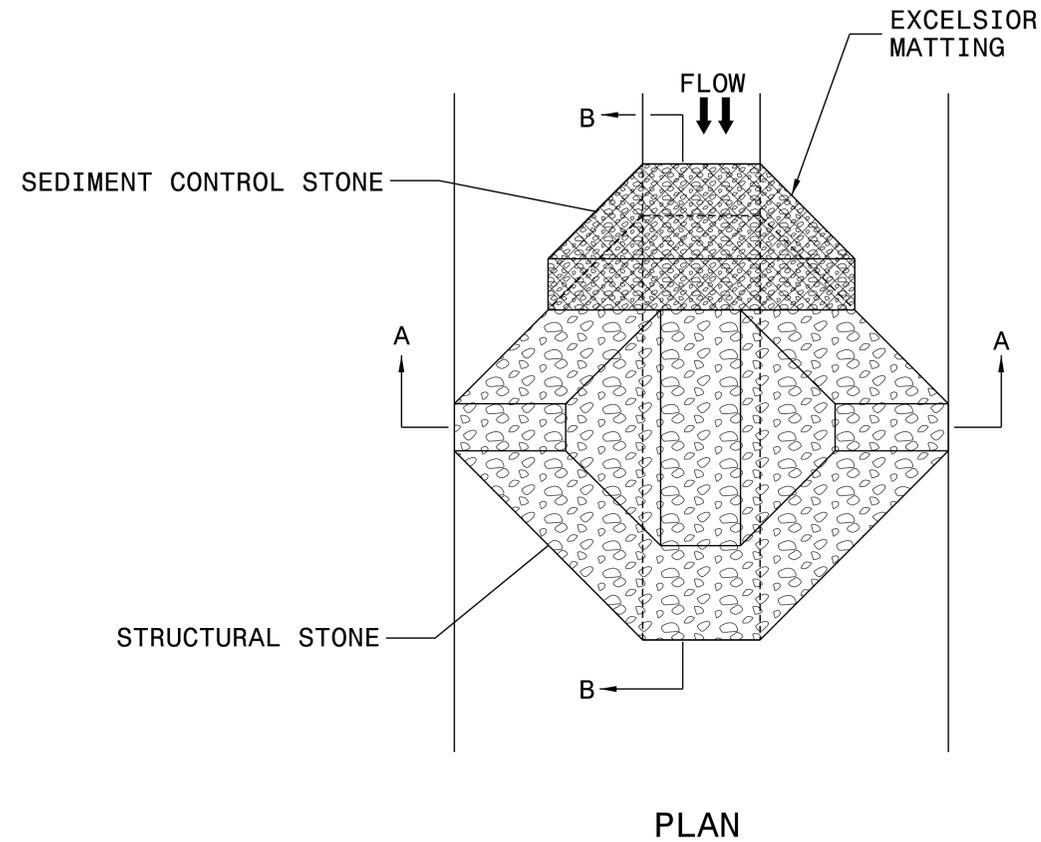
Std. #	Description	Symbol
1630.05	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	III III III
1622.01	Temporary Berms and Slope Drains	T
1630.02	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	RS
	Temporary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

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

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.

TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM) DETAIL

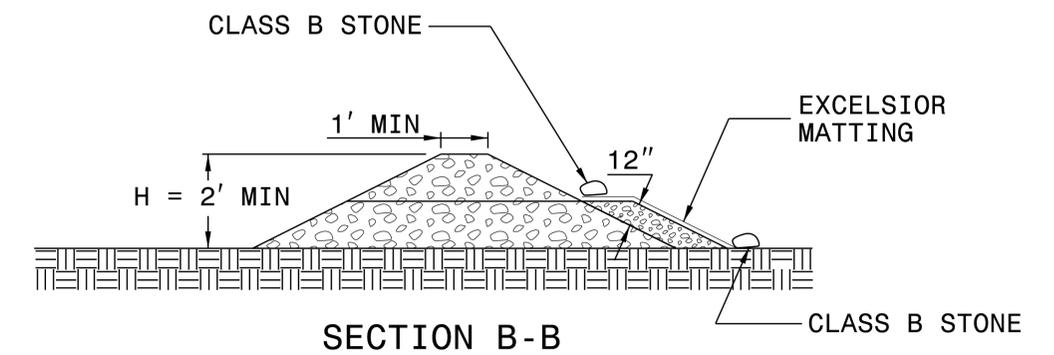
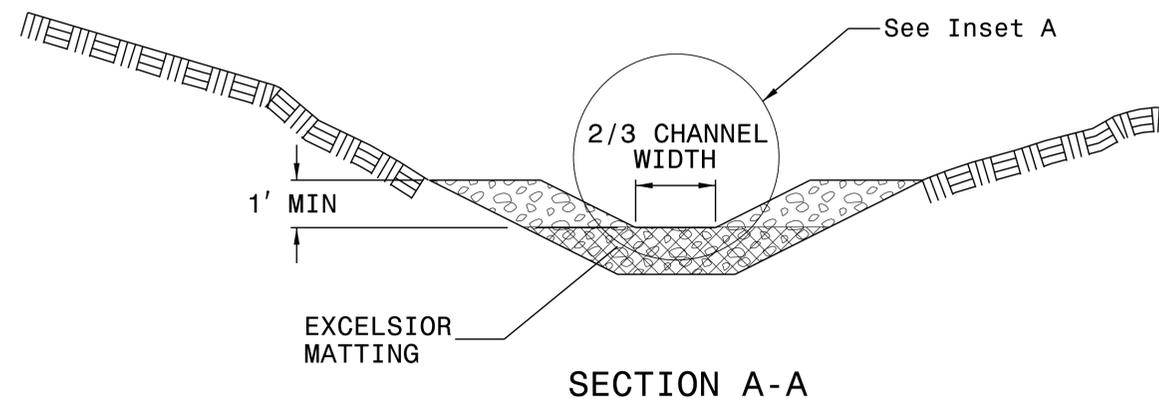
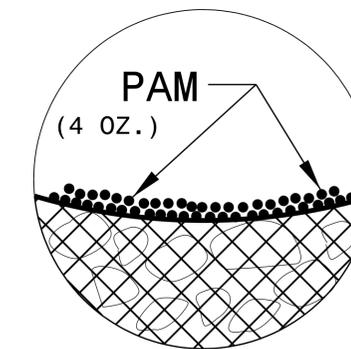


NOTES

USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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

INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



NOT TO SCALE

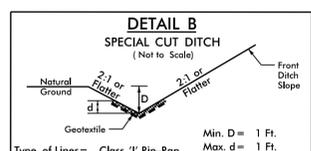
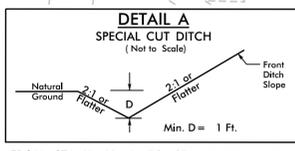
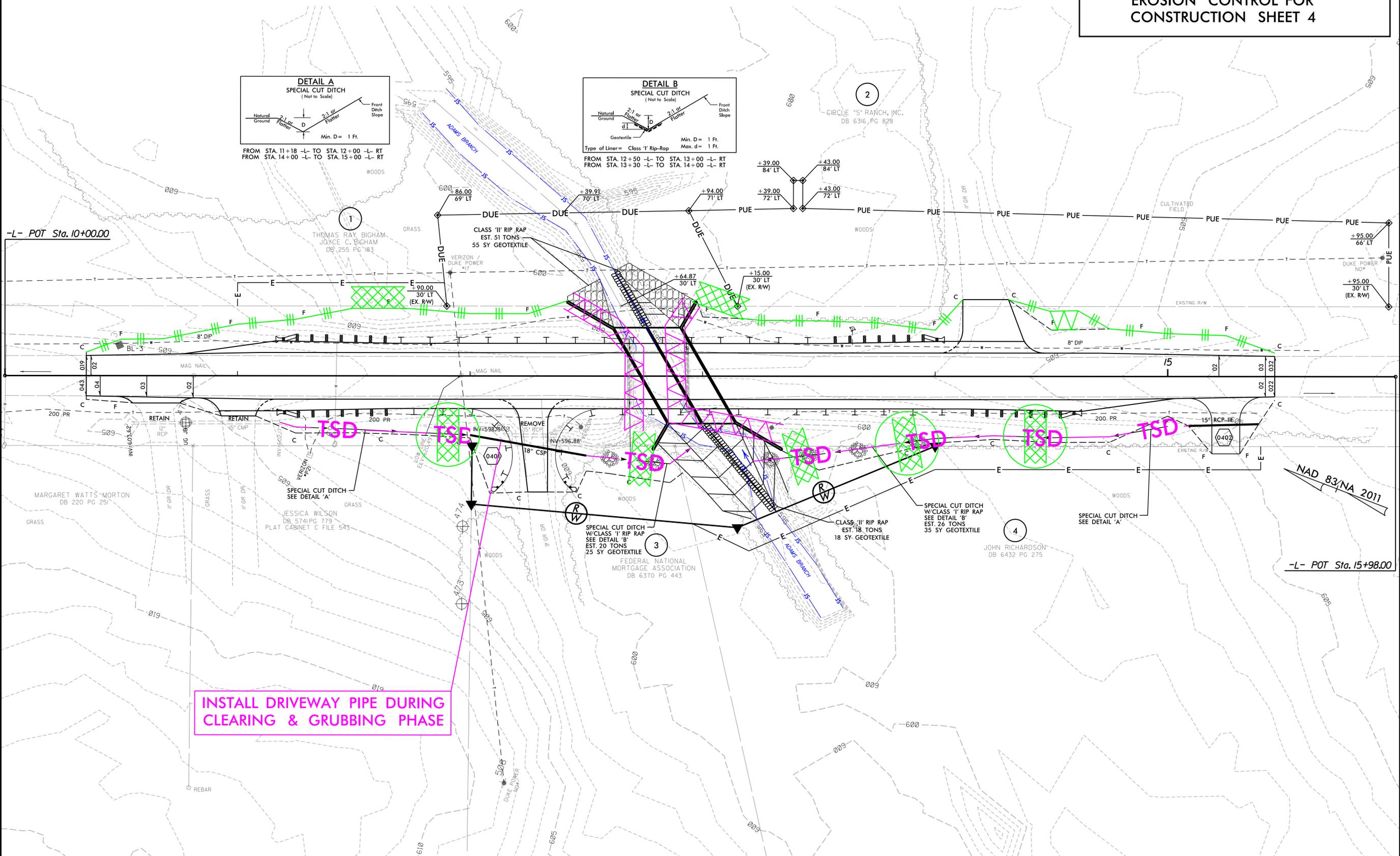
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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.

USE BEST MANAGEMENT PRACTICES TO CONTAIN ANY ERODABLE MATERIAL DURING INSTALLATION OF WATER LINE THROUGH JURISDICTIONAL AREA.

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 4



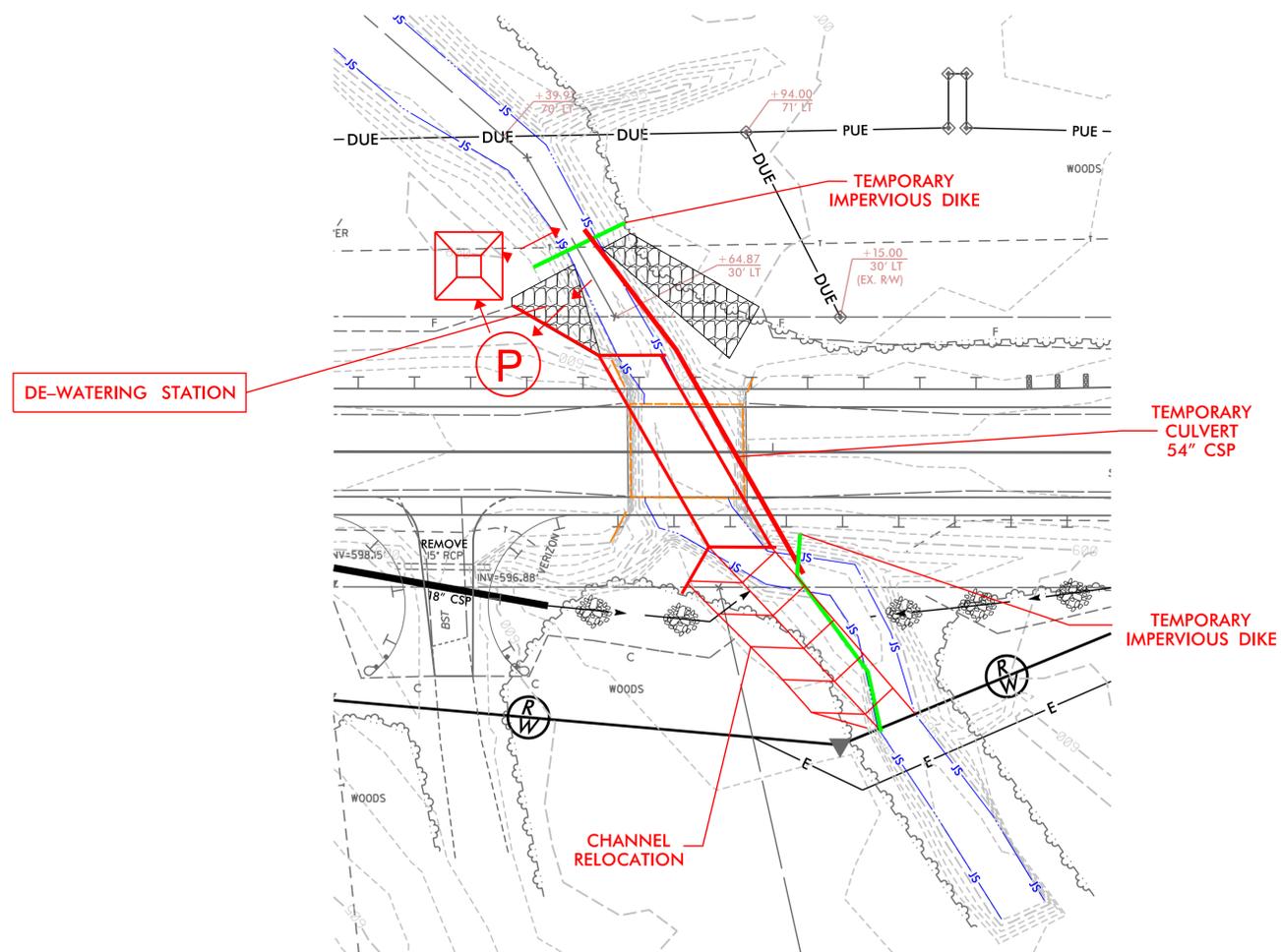
INSTALL DRIVEWAY PIPE DURING
 CLEARING & GRUBBING PHASE

-L- POT Sta. 15+98.00

DOUBLE 12' X 9' RCBC CULVERT CONSTRUCTION SEQUENCE

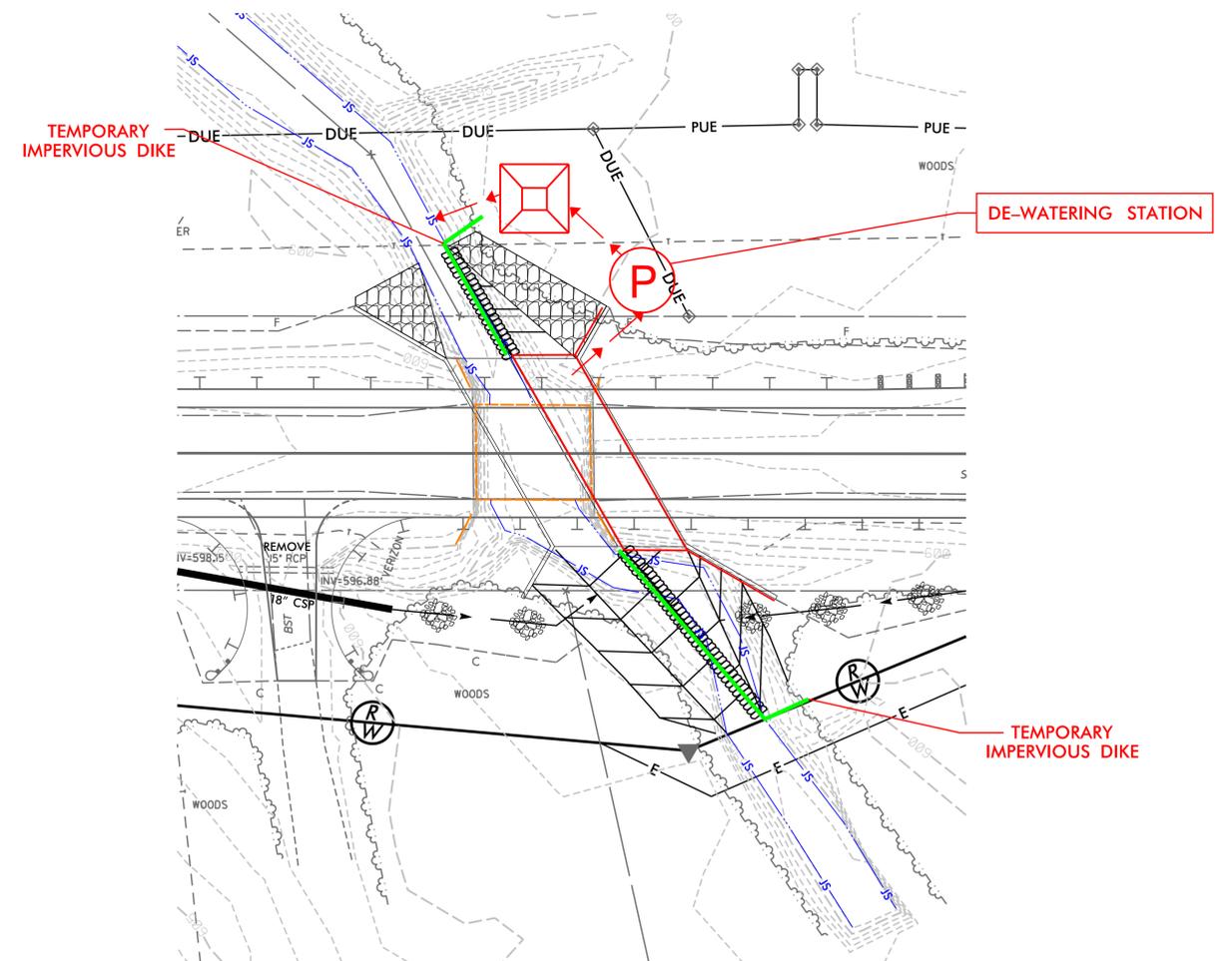
PHASE I

1. INSTALL IMPERVIOUS DIKES UPSTREAM AND DOWNSTREAM OF THE PROPOSED CULVERT.
2. INSTALL 54" CSP TO CARRY CLEAN WATER AROUND THE WORK AREA AND ALLOW BARREL 1 (LOW FLOW BARREL) TO BE CONSTRUCTED.
3. PROVIDE PUMP AND SPECIAL STILLING BASIN FOR DEWATERING THE WORK ZONE.
4. CONSTRUCT BARREL 1 ALONG WITH ASSOCIATED WING WALLS.
5. RELOCATE STREAM CHANNEL INTO BARREL 1 AND STABILIZE BARREL OUTLET WITH CLASS 'II' RIP RAP.



PHASE II

1. REMOVE TEMP. 54" CSP AND INSTALL TEMPORARY IMPERVIOUS DIKES AS SHOWN TO DIVERT STREAM INTO BARREL 1.
2. PROVIDE PUMP AND SPECIAL STILLING BASIN FOR DEWATERING THE WORK ZONE FOR THE CONSTRUCTION OF BARREL 2 (HIGH FLOW BARREL).
3. CONSTRUCT BARREL 2 INCLUDING ASSOCIATED WINGWALLS AND CHANNEL IMPROVEMENTS.
4. CONSTRUCT FLOODPLAIN BENCH FOR BARREL 2 WITH NATIVE BED MATERIAL AND STABILIZE BENCH FACE WITH CLASS 'II' RIP RAP.
5. PLACE REMAINING CLASS 'II' RIP RAP OUTLET PROTECTION.
6. REMOVE IMPERVIOUS DIKES AND DEWATERING STATION.
7. REMOVE EROSION CONTROL DEVICES AND BEGIN ROADWAY IMPROVEMENTS.



09/08/14

STATE PROJECT: 17BP.10.R.66

CONTRACT: -

T.I.P. NO.	SHEET NO.
17BP.10.R.66	UC-1

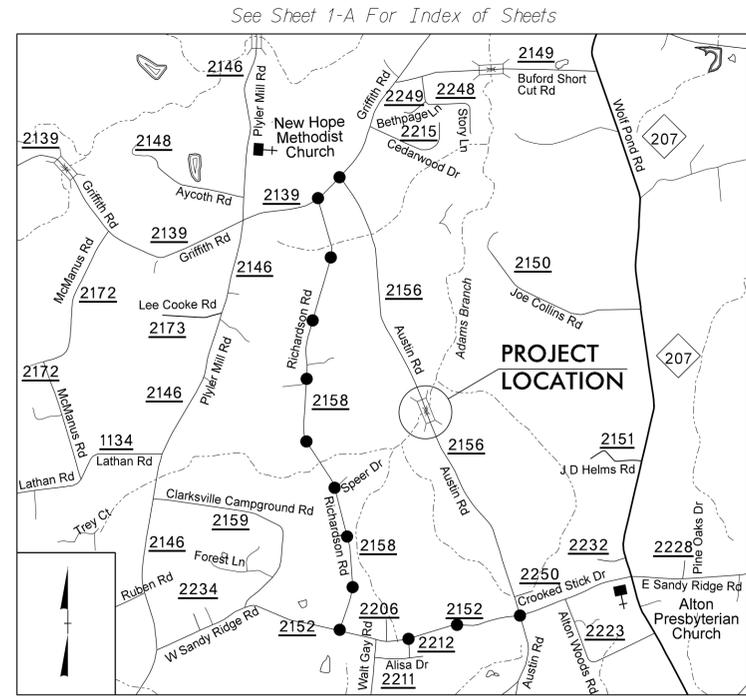
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

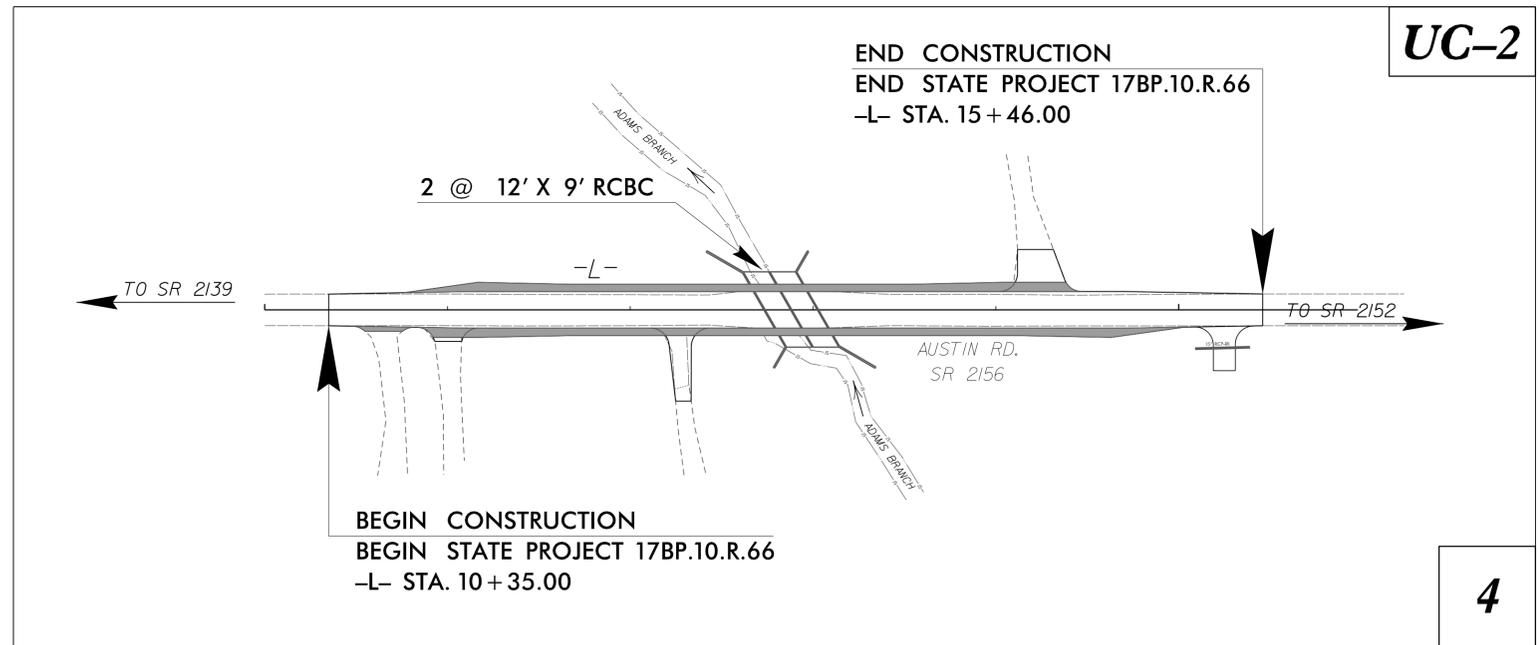
UTILITY CONSTRUCTION PLANS UNION COUNTY

LOCATION: BRIDGE NO. 152 ON SR 2156 OVER ADAMS BRANCH
BETWEEN SR 2139 AND SR 2152

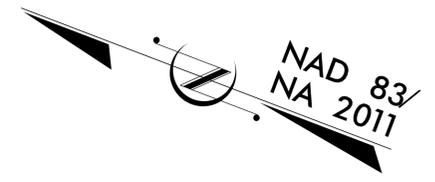
TYPE OF WORK: UTILITY CONSTRUCTION



DETOUR ROUTE
VICINITY MAP
(NOT TO SCALE)



LOCATION SKETCH



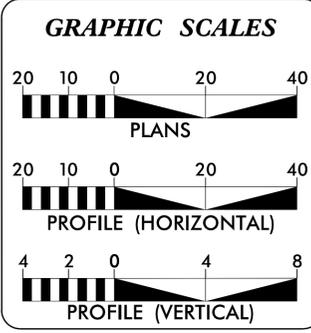
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

HDR HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116



Michael V. Zaccardo
Michael V. Zaccardo (Feb 3, 2016)

RELEASE FOR CONSTRUCTION
DATE: 01/29/16



SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	PLAN & PROFILE
UC-3	UTILITY CONSTRUCTION DETAILS

WATER AND SEWER OWNERS ON PROJECT
(1) WATER - UNION COUNTY PUBLIC WORKS

Prepared for Dane Construction Inc.
in the Office of:
559 JONES FRANKLIN ROAD
SUITE 164
RALEIGH, N.C. 27606
License No. F-02077
Bus: 919 851 8077
Fax: 919 851 8107

ETHERILL ENGINEERING

2012 STANDARD SPECIFICATIONS
RIGHT OF WAY DATE: DOMINIC M. WAINWRIGHT, P.E.
PROJECT ENGINEER

LETTING DATE: JANUARY 21, 2015
JAMES R. RICE, P.E.
PROJECT DESIGN ENGINEER

NCDOT CONTACT: MICHAEL V. ZACCARDO, PE
UTILITY DESIGN ENGINEER

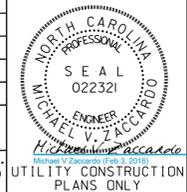
PRIORITY PROJECT OFFICE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

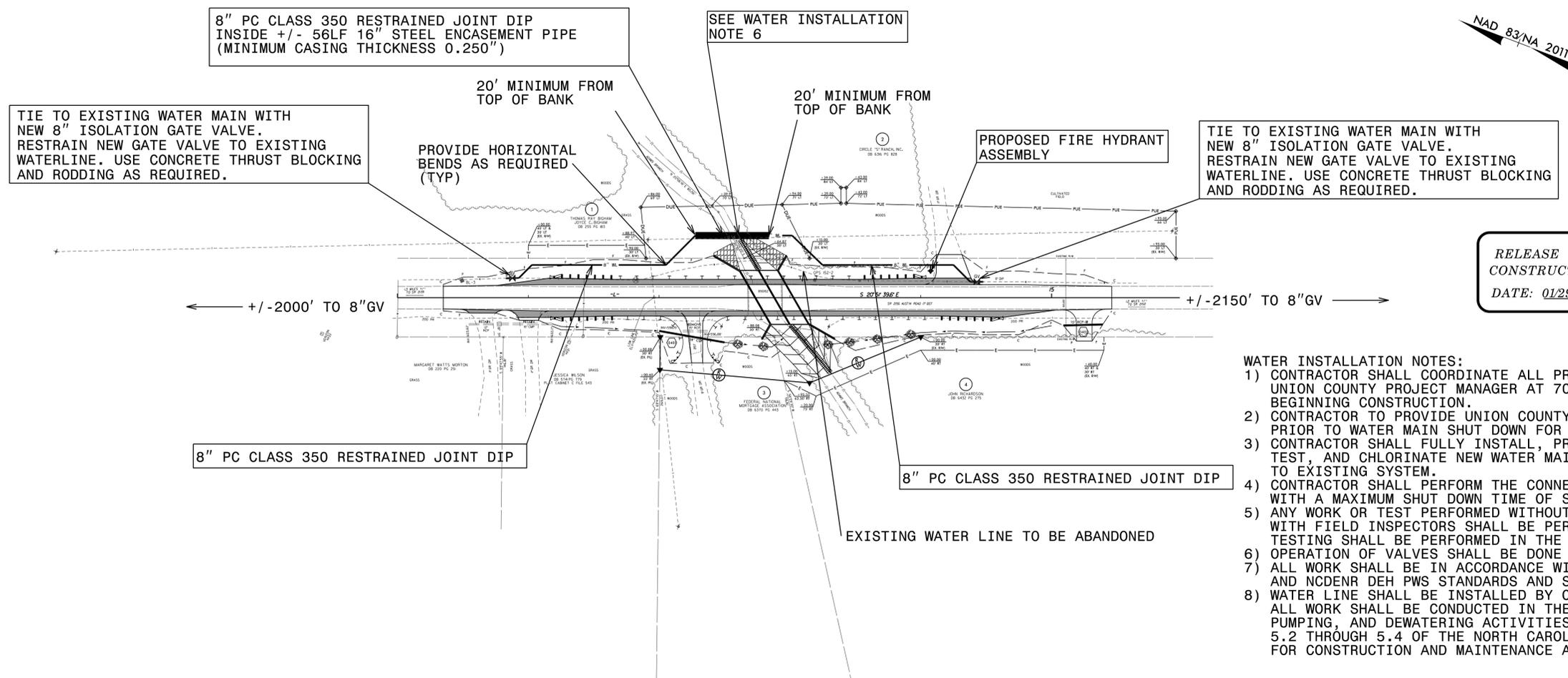
LOUIS MITCHELL P.E.
DIVISION ENGINEER

\$\$\$\$\$ SYSTEM \$\$\$\$\$\$
\$\$\$\$\$ USER \$\$\$\$\$\$

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
17BP.10.R.66	UC-2
DESIGNED BY: MVZ	
DRAWN BY: JDS	
CHECKED BY: MVZ	
APPROVED BY: MVZ	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	

NAD 83/NA 2011



UTILITY CONSTRUCTION

RELEASE FOR CONSTRUCTION
DATE: 01/29/16



559 Jones Franklin Rd. Suite 164
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

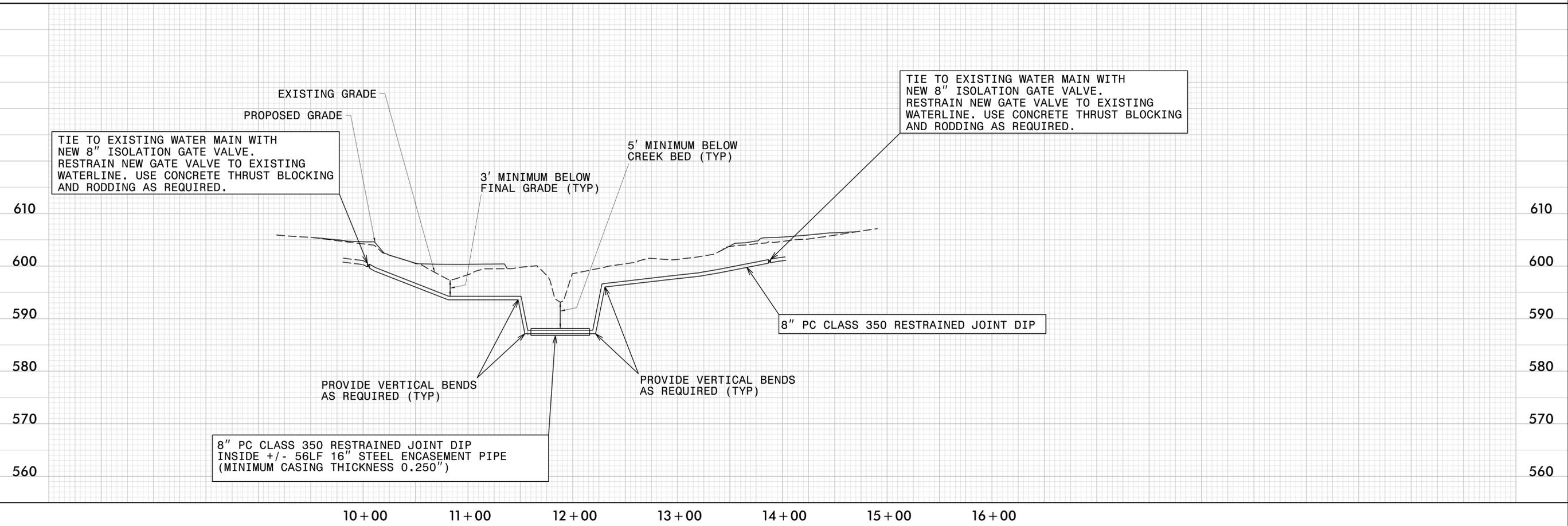
HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

- WATER INSTALLATION NOTES:**
- 1) CONTRACTOR SHALL COORDINATE ALL PROPOSED WORK WITH UNION COUNTY PROJECT MANAGER AT 704-296-4293 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
 - 2) CONTRACTOR TO PROVIDE UNION COUNTY A MINIMUM OF 72 HOURS NOTICE PRIOR TO WATER MAIN SHUT DOWN FOR TIE-INS.
 - 3) CONTRACTOR SHALL FULLY INSTALL, PRESSURE & LEAKAGE TEST, AND CHLORINATE NEW WATER MAIN PRIOR TO CONNECTION TO EXISTING SYSTEM.
 - 4) CONTRACTOR SHALL PERFORM THE CONNECTION DURING OFF PEAK HOURS WITH A MAXIMUM SHUT DOWN TIME OF SIX HOURS.
 - 5) ANY WORK OR TEST PERFORMED WITHOUT NOTIFICATION AND CONTACT WITH FIELD INSPECTORS SHALL BE PERFORMED AT THE CONTRACTOR'S RISK. TESTING SHALL BE PERFORMED IN THE PRESENCE OF UNION COUNTY PERSONNEL.
 - 6) OPERATION OF VALVES SHALL BE DONE BY UNION COUNTY OPERATIONS STAFF.
 - 7) ALL WORK SHALL BE IN ACCORDANCE WITH UNION COUNTY PUBLIC WORKS, NCDOT, AND NCDENR DEH PWS STANDARDS AND SPECIFICATIONS.
 - 8) WATER LINE SHALL BE INSTALLED BY OPEN CUT THROUGH THE STREAM CHANNEL. ALL WORK SHALL BE CONDUCTED IN THE DRY. IMPERVIOUS DIKES, BYPASS PUMPING, AND DEWATERING ACTIVITIES SHALL BE IN ACCORDANCE TO SECTIONS 5.2 THROUGH 5.4 OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BMP FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES. (DATED 8/2003)

REVISIONS

8:55:21 AM 8/25/16 4:41 PM 23-Jan-16



09.08.1999

STATE PROJECT: 17BP.10.R.66

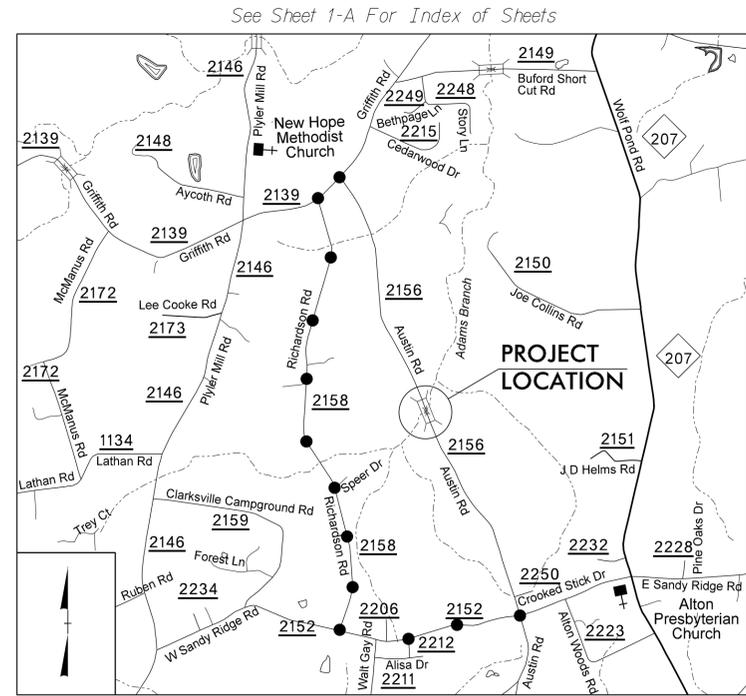
T.I.P. NO.	SHEET NO.
17BP.10.R.66	UO-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

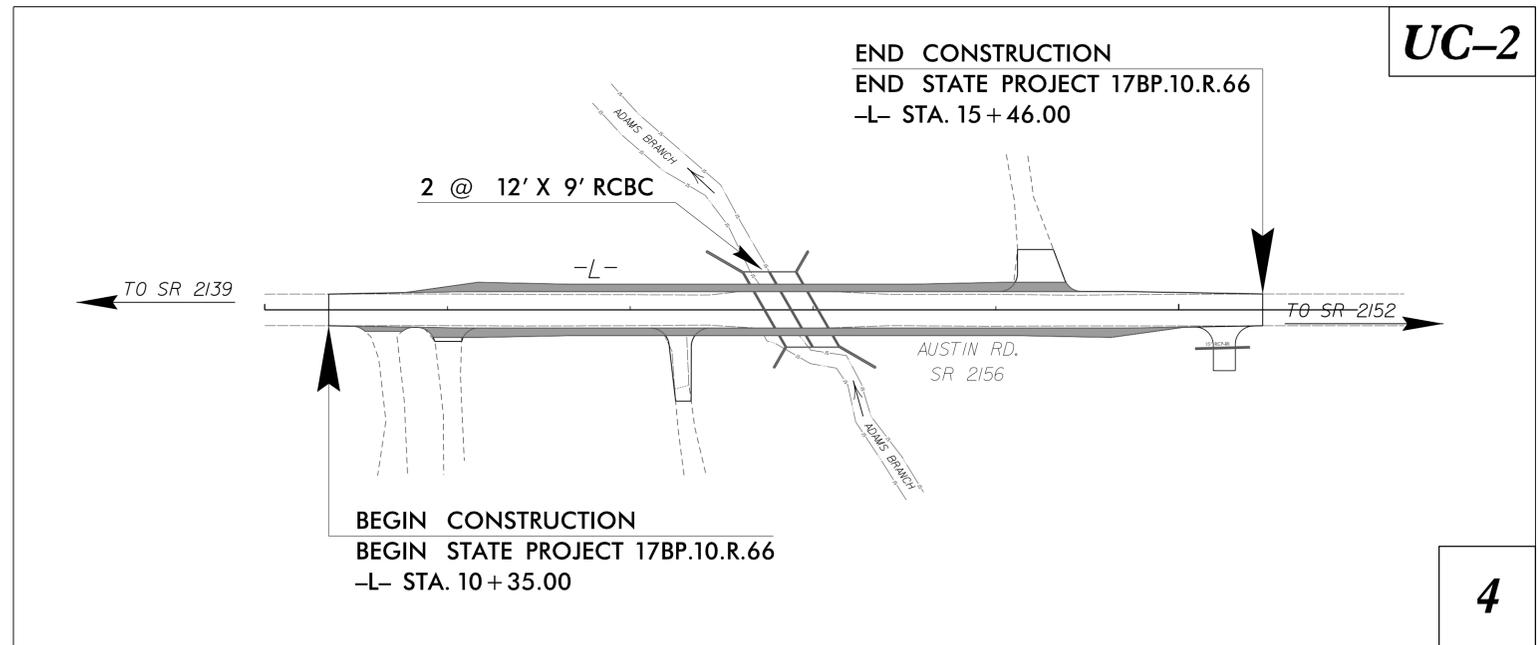
**UTILITIES BY OTHERS PLANS
UNION COUNTY**

**LOCATION: BRIDGE NO. 152 ON SR 2156 OVER ADAMS BRANCH
BETWEEN SR 2139 AND SR 2152**

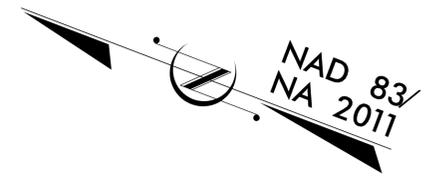
TYPE OF WORK: UTILITY RELOCATION



DETOUR ROUTE
VICINITY MAP
(NOT TO SCALE)



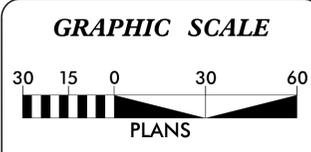
LOCATION SKETCH



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

HDR HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116

RELEASE FOR CONSTRUCTION
DATE: 01/29/16



SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2	UTILITY BY OTHERS PLAN SHEET

- UTILITY OWNERS ON PROJECT**
- (A) POWER- DUKE ENERGY
 - (B) PHONE- FRONTIER
 - (C) CATV- TIME WARNER CABLE

ETHERILL ENGINEERING
Prepared for Dane Construction Inc. in the Office of:
559 JONES FRANKLIN ROAD
SUITE 164
RALEIGH, N.C. 27606
License No. F-0227
Bus: 919 851 8077
Fax: 919 851 8107

2012 STANDARD SPECIFICATIONS
RIGHT OF WAY DATE: DOMINIC M. WAINWRIGHT, P.E.
PROJECT ENGINEER

LETTING DATE: JANUARY 21, 2015
JAMES R. RICE, P.E.
PROJECT DESIGN ENGINEER

NCDOT CONTACT: JOHN D. SCHRINER, PLS
UTILITY COORDINATOR

PRIORITY PROJECT OFFICE

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

LOUIS MITCHELL P.E.
DIVISION ENGINEER

\$\$\$\$\$ SYSTEM \$\$\$\$\$\$
\$\$\$\$\$ USER \$\$\$\$\$\$

CONTRACT: -

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR PROPOSED UTILITY WORK SHOWN ON THIS SHEET.

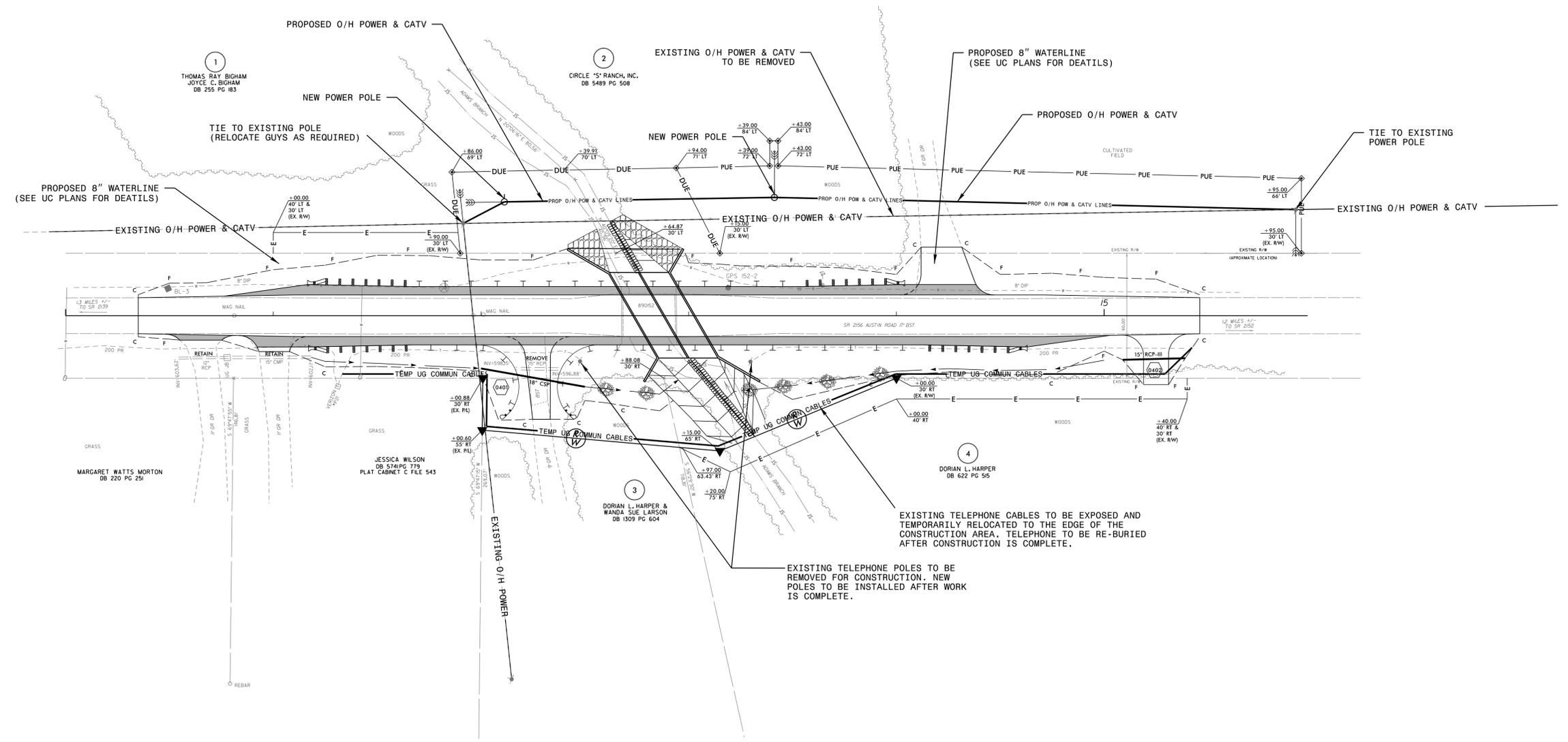
HDR HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116

WETHERILL ENGINEERING
559 Jones Franklin Rd. Suite 164
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION



NAD 83/NA 2011

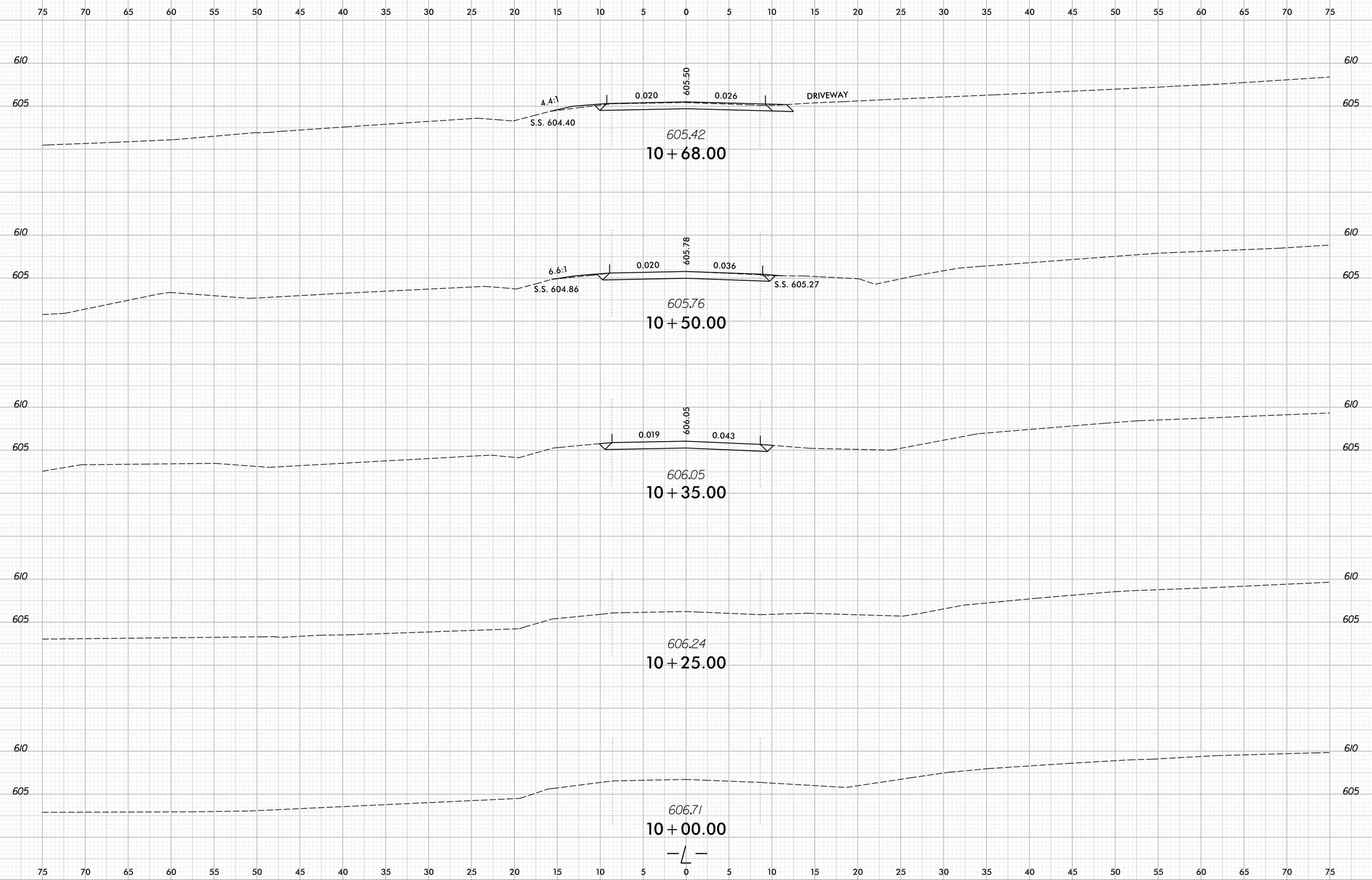


RELEASE FOR
CONSTRUCTION
DATE: 01/29/16

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 5/14/99

8/23/99

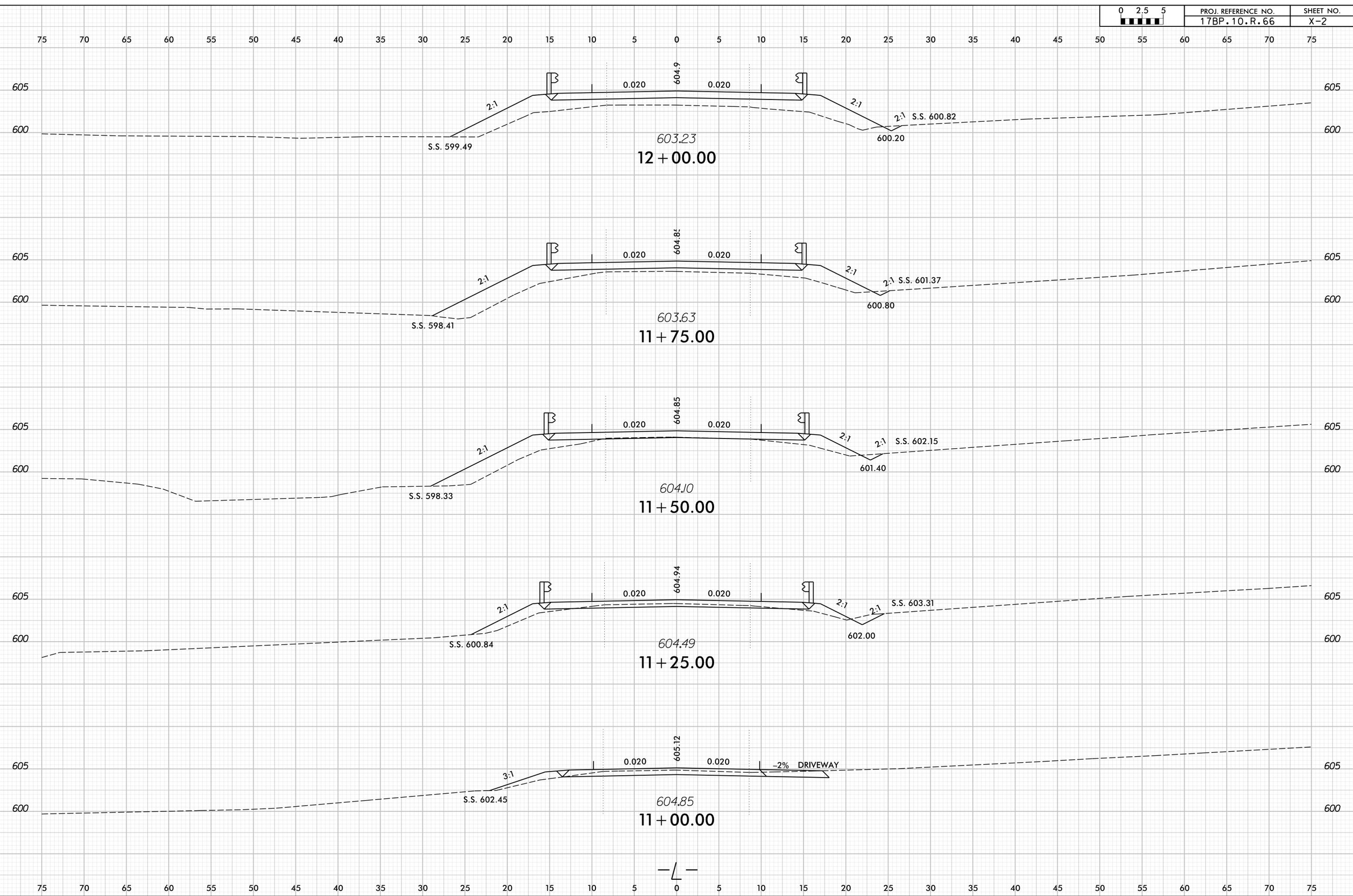
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8/23/99

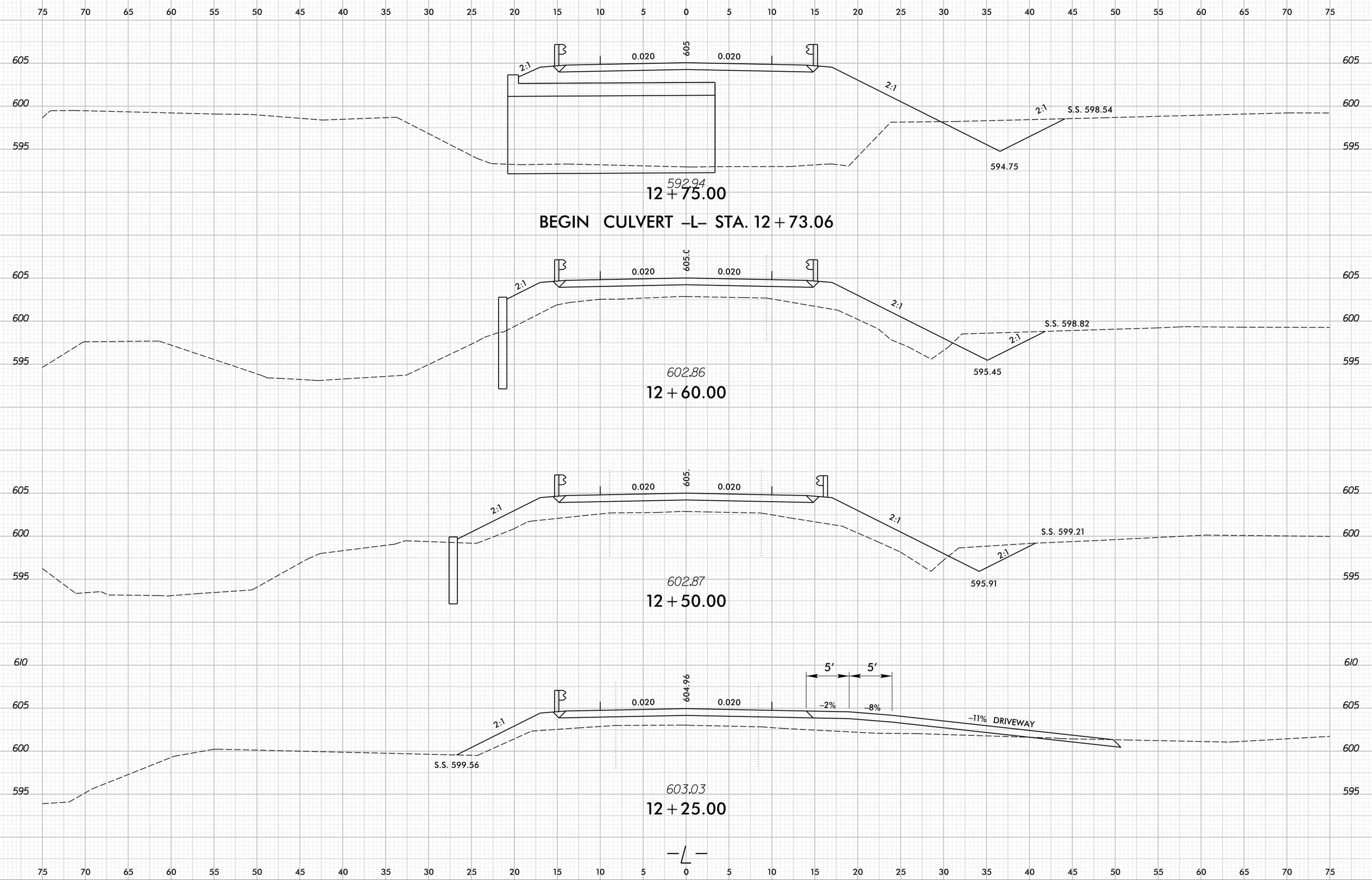
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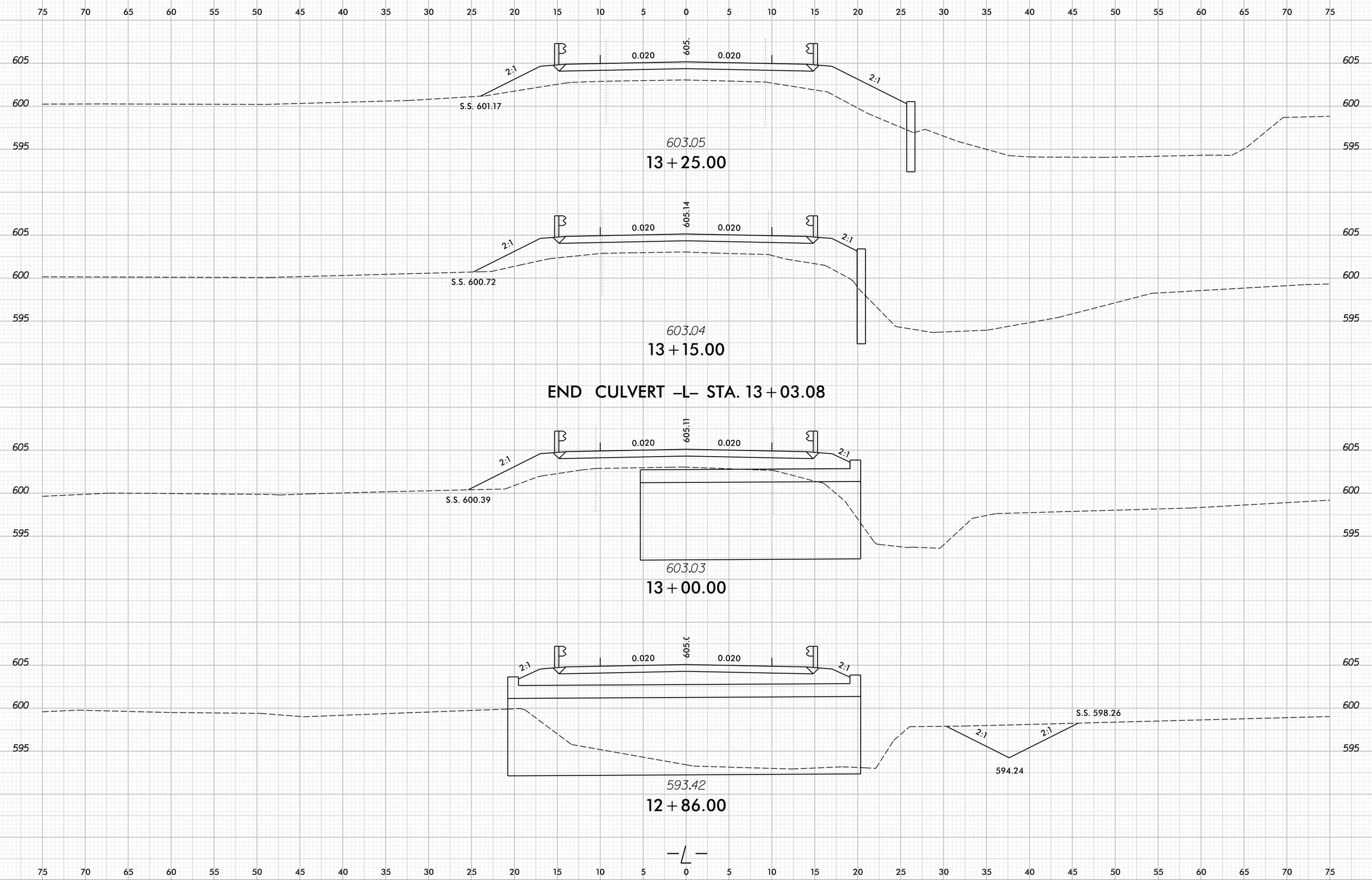
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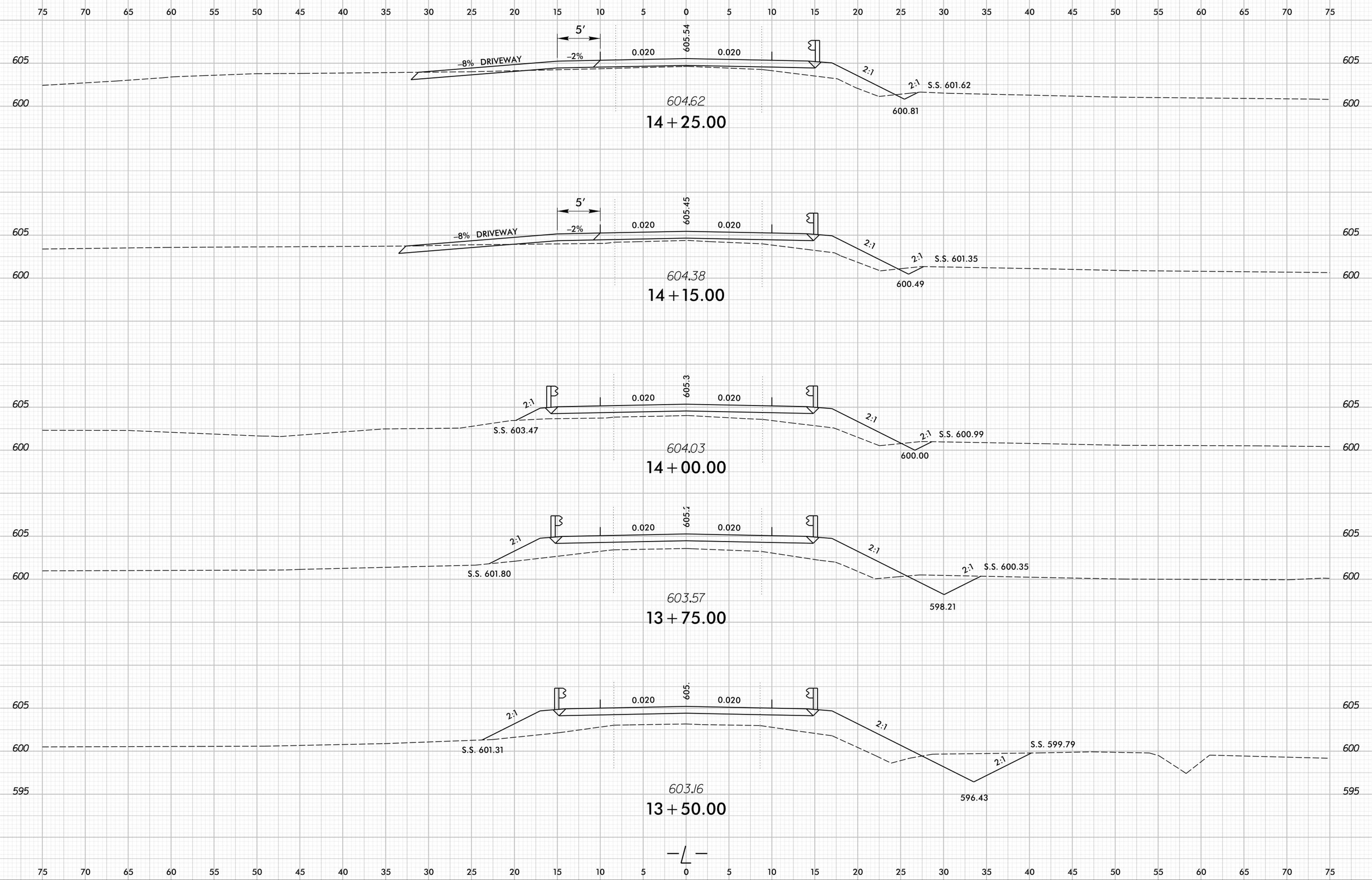
8/23/99



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8/23/99

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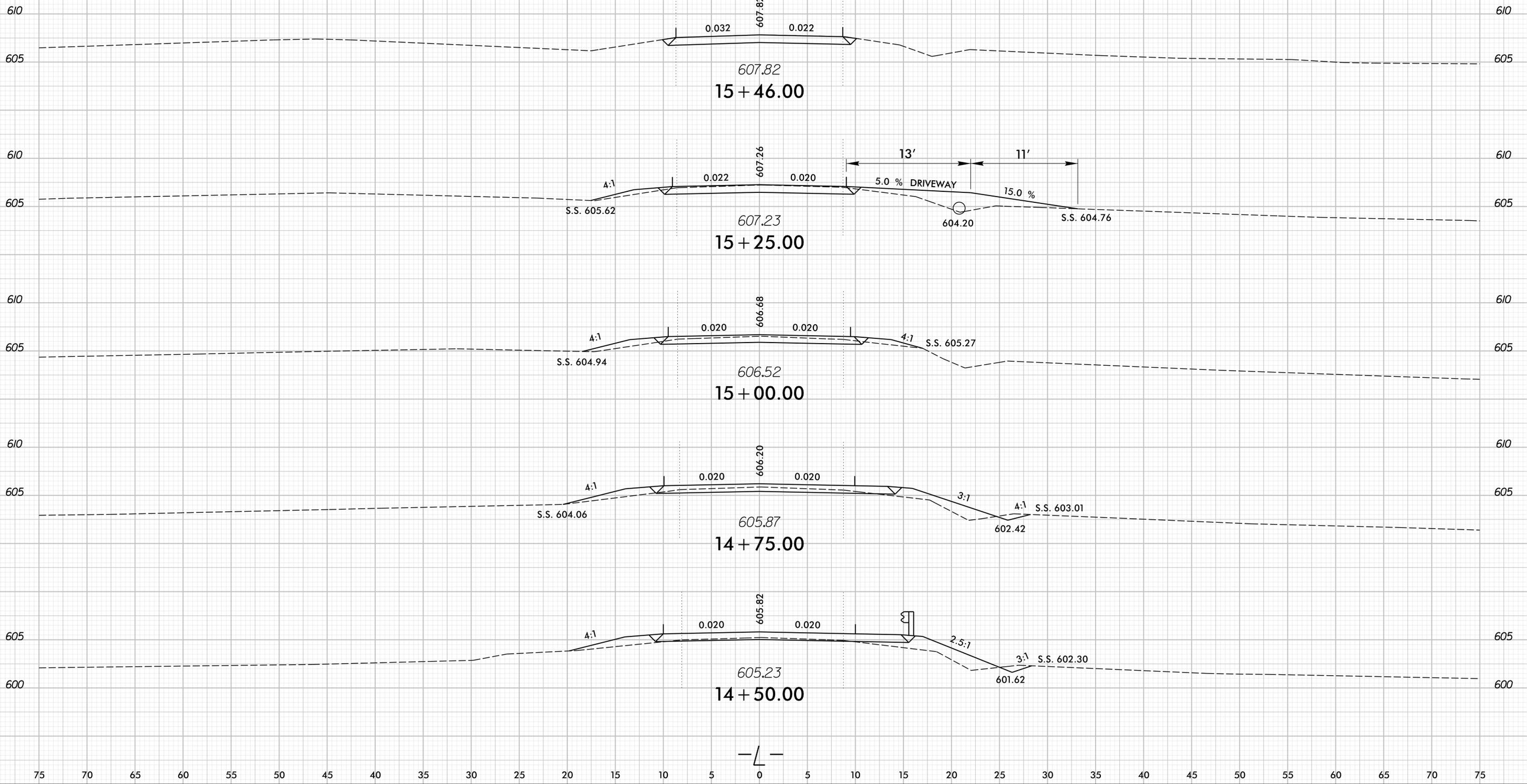


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8/23/99

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