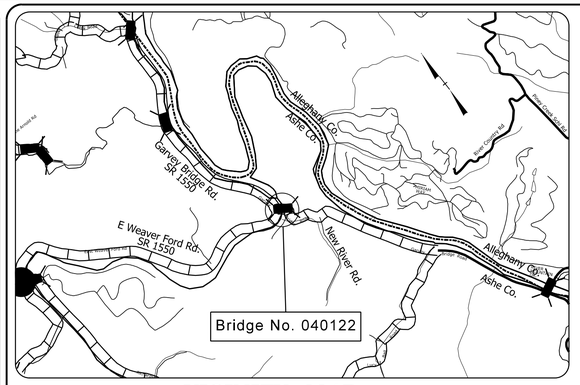
09/08/99

PROJECT: 17BP.11.R.131

CONTRACT: DK00319



VICINITY MAP

SEE SHEET 1-A FOR INDEX OF SHEETS
SEE SHEET 1-B FOR CONVENTIONAL SYMBOLS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ASHE COUNTY

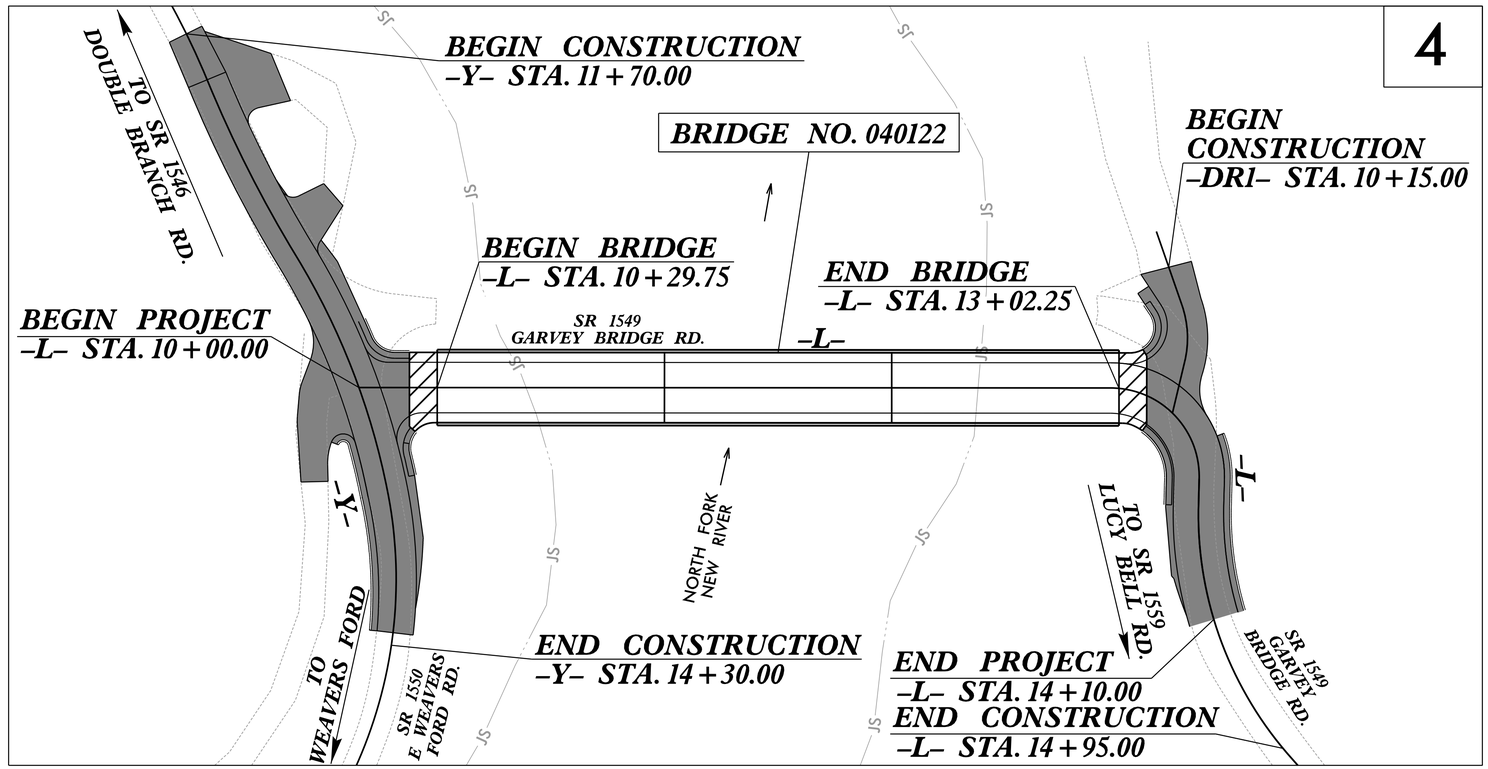
LOCATION: BRIDGE NO. 040122 OVER NORTH FORK NEW RIVER ON SR 1549 (GARVEY BRIDGE RD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

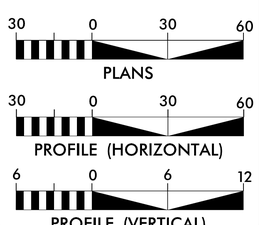
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP.11.R.131	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
17BP.11.PE.131		PE
17BP.11.ROW.131		R / W
17BP.11.R.131		CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



GRAPHIC SCALES



DESIGN DATA

ADT = 110 (2024)
ADT = 165 (2045)
DHV = N/A
D = N/A
T = N/A
V = 20 MPH
FUNC CLASS = LOCAL
SUB RESIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT 17BP.11.R.131.....0.026 mi
LENGTH STRUCTURE TIP PROJECT 17BP.11.R.131.....0.052 mi
TOTAL LENGTH TIP PROJECT 17BP.11.R.131.....0.078 mi

RK&K

RUMMEL, KLEPPER & KAHL, LLP
8601 SIX FORKS ROAD FORUM 1 SUITE 700
RALEIGH, NORTH CAROLINA 27615–3960
NC LICENSE NO. F–0112
919–878–9560

DIVISION OF HIGHWAYS

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: OCTOBER 31, 2022

LETTING DATE: MARCH 7, 2024

Brandon Mcnnis, P.E.
PROJECT ENGINEER

Mary Mays Yahl, P.E.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 46155 ENGINEER ALEXIS S. BURKE P.E.
1/8/2024

DocuSigned by: Alexis Burke 08E52EF5827E423...

SIGNATURE:

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 040878 ENGINEER MARY E. MAYS YAHL P.E.
1/8/2024

DocuSigned by: Mary Mays Yahl 779C6B3796467A7...

SIGNATURE:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

1/8/2024
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PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	1-A

R/W SHEET NO.

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 040878 ENGINEER MARY E. MAYS YAHL 2/26/2024

DocuSigned by:
Mary E. Mays Yahl
779C6B7964674C8...

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INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1-B	CONVENTIONAL SYMBOLS
2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2C-1	TYPE III SC STRUCTURE ANCHOR UNIT
2D-1	DRAINAGE DETAILS
3B-1	ROADWAY SUMMARIES
3D-1	DRAINAGE SUMMARY TABLE
4 THRU 5	PLAN AND PROFILE SHEET
RW01 THRU RW04	SURVEY CONTROL, RIGHT OF WAY SHEETS
TMP-1 THRU TMP-7	TRAFFIC MANAGEMENT PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
UO-1 THRU UO-2	UTILITIES BY OTHERS PLANS
X-1 THRU X-23	CROSS-SECTIONS
S-1 THRU S-24	STRUCTURE PLANS

EFF. 01-16-2024
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Contracts Standards and Development Unit - N. C. Department of Transportation - Raleigh, N. C., Dated January 16, 2024 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
225.06	Method of Grading Sight Distance at Intersections
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.10	Driveway Pipe Construction
DIVISION 4 - MAJOR STRUCTURES	
423.01	Bridge Approach Fills - Type 1 Approach Fill for Bridge Abutment
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 8 - INCIDENTALS	
840.00	Concrete Base Pad for Drainage Structures
840.18	Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.24	Frames and Narrow Slot Sag Grates
840.25	Anchorage for Frames - Brick or Concrete or Precast
840.27	Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.36	Traffic Bearing Grated Drop Inlet - for Steel (840.37) Double Frame and Grates
840.39	Steel Grate and Frame - Bicycle Safe
840.45	Precast Drainage Structure
840.46	Traffic Bearing Precast Drainage Structure
840.66	Drainage Structure Steps
840.71	Concrete and Brick Pipe Plug
846.01	Concrete Curb, Gutter and Curb & Gutter
846.04	Drop Inlet Installation in Shoulder Berm Gutter
848.04	Street Turnout
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units
876.02	Guide for Rip Rap at Pipe Outlets
876.03	Drainage Ditches with Class 'A' Rip Rap

GENERAL NOTES:

2024 SPECIFICATIONS
EFFECTIVE: 01-16-2024
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.

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.

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.

END BENTS:

THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE BLUE RIDGE EMC - POWER.

SKYLINE TELECOMMUNICATIONS - TELEPHONE & FO.

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.

RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
NC License No. F-0112
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

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2/26/2024
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9/10/2021

PROJECT REFERENCE NO.	SHEET NO.
17BPJI.RJ.31	1-B

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP) — EIP
- Computed Property Corner
- Existing Concrete Monument (ECM) — ECM
- Parcel/Sequence Number — 23
- 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:

- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Secondary Horiz and Vert Control Point
- Vertical Benchmark
- Existing Right of Way Monument
- Proposed Right of Way Monument (Rebar and Cap)
- Proposed Right of Way Monument (Concrete)
- Existing Permanent Easement Monument
- Proposed Permanent Easement Monument (Rebar and Cap)
- Existing C/A Monument
- Proposed C/A Monument (Rebar and Cap)
- Proposed C/A Monument (Concrete)
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Existing Control of Access Line — CA
- Proposed Control of Access Line — CA
- Proposed ROW and CA Line — RW 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

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:

** SUE – Subsurface Utility Engineering*
LOS – Level of Service – A,B,C or D (Accuracy)

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhoole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole — HH
- H–Frame Pole
- U/G Power Line Test Hole (SUE – LOS A)*
- U/G Power Line (SUE – LOS B)* — P
- U/G Power Line (SUE – LOS C)* — P
- U/G Power Line (SUE – LOS D)* — 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 Test Hole (SUE – LOS A)*
- U/G Telephone Cable (SUE – LOS B)* — T
- U/G Telephone Cable (SUE – LOS C)* — T
- U/G Telephone Cable (SUE – LOS D)* — T
- U/G Telephone Conduit (SUE – LOS B)* — TC
- U/G Telephone Conduit (SUE – LOS C)* — TC
- U/G Telephone Conduit (SUE – LOS D)* — TC
- U/G Fiber Optics Cable (SUE – LOS B)* — T FO
- U/G Fiber Optics Cable (SUE – LOS C)* — T FO
- U/G Fiber Optics Cable (SUE – LOS D)* — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line Test Hole (SUE – LOS A)*
- U/G Water Line (SUE – LOS B)* — W
- U/G Water Line (SUE – LOS C)* — W
- U/G Water Line (SUE – LOS D)* — W
- Above Ground Water Line — A/G Water

TV:

- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- U/G TV Test Hole (SUE – LOS A)*
- U/G TV Cable (SUE – LOS B)* — TV
- U/G TV Cable (SUE – LOS C)* — TV
- U/G TV Cable (SUE – LOS D)* — TV
- U/G Fiber Optic Cable (SUE – LOS B)* — TV FO
- U/G Fiber Optic Cable (SUE – LOS C)* — TV FO
- U/G Fiber Optic Cable (SUE – LOS D)* — TV FO

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line Test Hole (SUE – LOS A)*
- U/G Gas Line (SUE – LOS B)* — G
- U/G Gas Line (SUE – LOS C)* — G
- U/G Gas Line (SUE – LOS D)* — 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 Force Main Line Test Hole (SUE – LOS A)*
- SS Force Main Line (SUE – LOS B)* — FSS
- SS Force Main Line (SUE – LOS C)* — FSS
- SS Force Main Line (SUE – LOS D)* — FSS

MISCELLANEOUS:

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

PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	2A-1

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 040878 ENGINEER MARY MAYS YATES 1/4/2024

DocuSigned by: Mary Mays Yates 3720E8370646F4F5...

PAVEMENT DESIGN ENGINEER

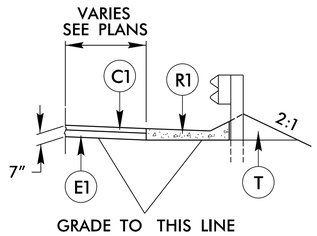
NORTH CAROLINA PROFESSIONAL SEAL 049851 ENGINEER RAMIE A. SHAW 1/4/2024

DocuSigned by: Ramie A. Shaw 1C9CB73D4B7E4DF...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

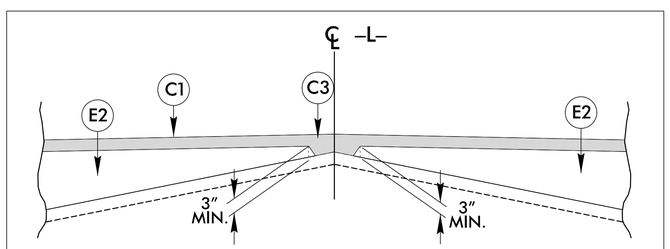
FINAL PAVEMENT SCHEDULE			
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	J1	PROP. 6" AGGREGATE BASE COURSE
C2	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YARD.	R1	SHOULDER BERM GUTTER
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" IN DEPTH.	T	EARTH MATERIAL
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	W	WEDGING
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5.5" IN DEPTH.		

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

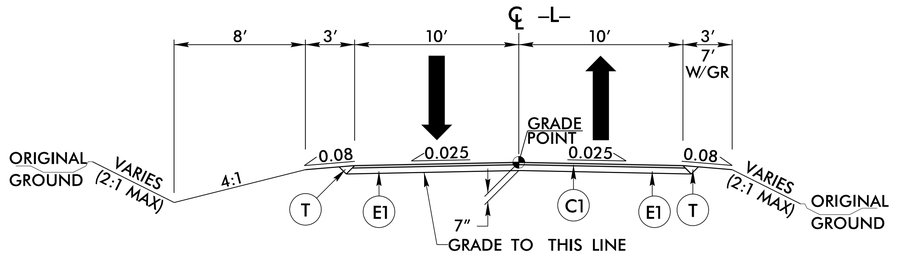


DETAIL SHOWING SHOULDER BERM GUTTER (SBG) ON TOP OF SUBGRADE

–L– STA. 13+18.95 TO –L– STA. 13+64.26 RT.
–L– STA. 13+40.00 TO –L– STA. 14+10.00 LT.
–Y– STA. 13+02.13 TO –Y– STA. 13+22.20 LT.
–Y– STA. 13+46.86 TO –Y– STA. 13+64.70 LT.
–Y– STA. 13+41.76 TO –Y– STA. 14+25.00 RT.
–DR1– STA. 10+25.31 TO –DR1– STA. 10+54.43 RT.

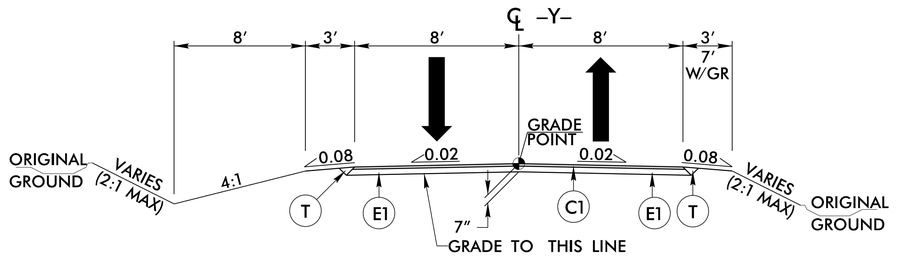


WEDGING DETAIL FOR RESURFACING



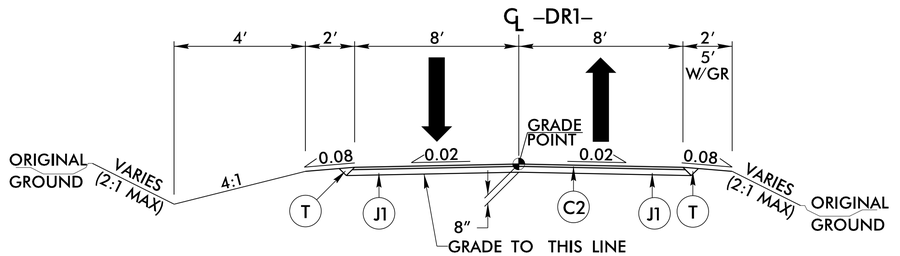
TYPICAL SECTION NO. 1

–L– STA. 10+08.49 TO 10+29.75(BEGIN BRIDGE)
–L– STA. 13+02.25(END BRIDGE) TO 14+10.00



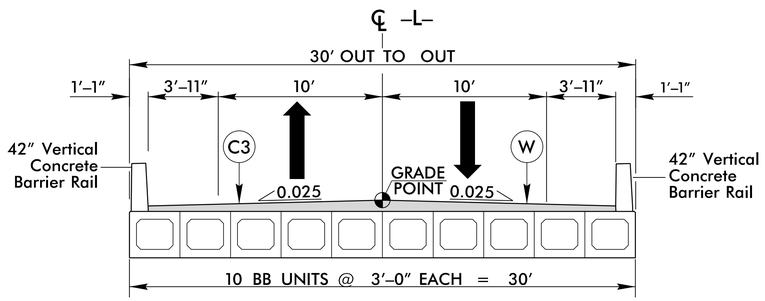
TYPICAL SECTION NO. 2

–Y– STA. 11+70.00 TO 14+25.00



TYPICAL SECTION NO. 3

–DR– STA. 10+15.00 TO 10+63.32



TYPICAL SECTION ON STRUCTURE

–L– STA. 10+29.75(BEGIN BRIDGE) TO 13+02.25(END BRIDGE)

RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
NC License No. F-0112
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	2C-1

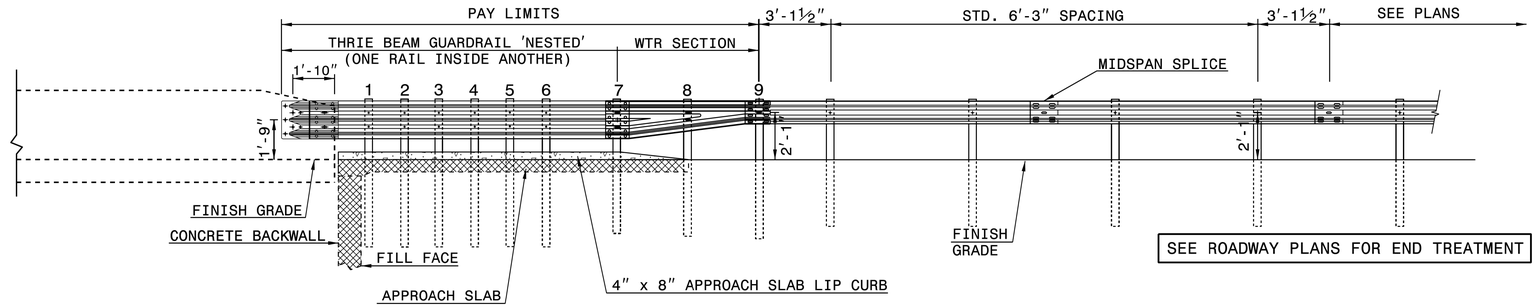
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR

TYPE III - SHOP CURVED STRUCTURE ANCHOR UNIT

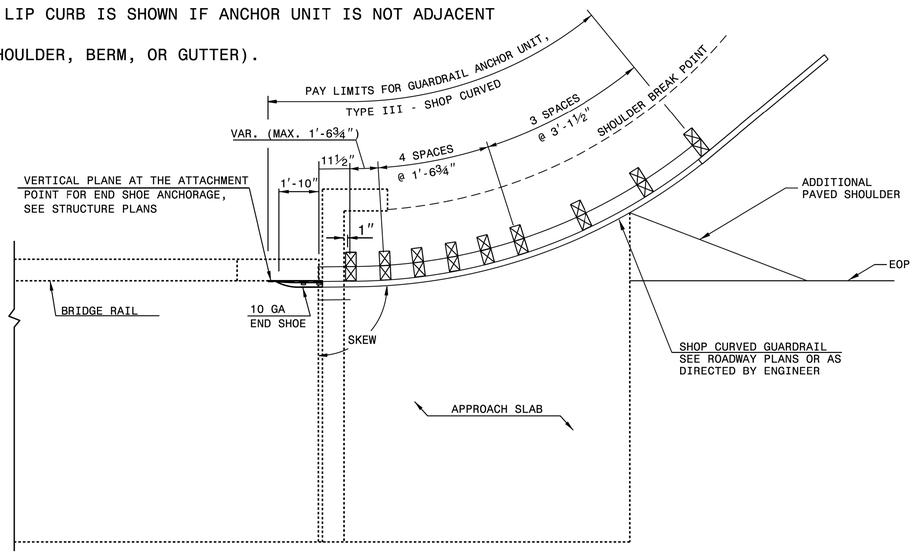
SHEET 1 OF 1

TYPE III SC



ELEVATION

NOTE:
 **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
  *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11½″ IF CONCRETE BACKWALL IS NOT PRESENT.
  -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8″ x 4″ LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.
  -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).
  -USE NO STEEL POSTS WITHIN THE GUARDRAIL ANCHOR UNIT LIMITS.
  -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
  -SEE STANDARD 862.03 SHEET 4 FOR POST SECTIONS 1 THRU 9.



PLAN VIEW

GUARDRAIL ANCHOR UNIT, TYPE III - SHOP CURVED FOR ATTACHMENT TO RAIL ON BRIDGE

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

ENGLISH DETAIL DRAWING FOR

TYPE III - SHOP CURVED STRUCTURE ANCHOR UNIT

SHEET 1 OF 1

TYPE III SC

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER Joel S. Howerton 2021

DocuSigned by: 573F3D17DCDC45F...

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: E.E.Ward DATE: 4-4-02
MODIFIED BY: T.S.Spell DATE: 2-01-18
CHECKED BY: DATE:
FILE SPEC.: \jhowerton\guardrail\3linguardrail\typeiiisc.dgn

01-FEB-2018 09:19
S:\Contracts\Special Details\jhowerton\Guardrail\31 inch Guardrail\type_iii_sc.dgn
jhowerton AT CSD-212395

5/14/99

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	2D-1

HYDRAULIC DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 46155 ENGINEER ALEXIS S BURKE

Document signed by: Alexis Burke

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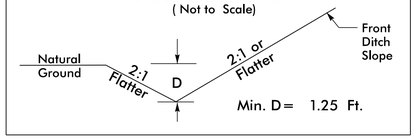
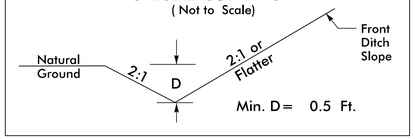
DRAINAGE DETAILS

DETAIL A
SPECIAL CUT DITCH
(Not to Scale)



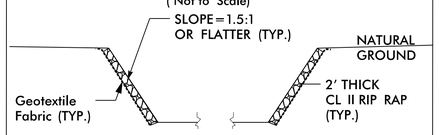
FROM –Y– STA. 11+75 TO STA. 12+00 RT

DETAIL B
SPECIAL CUT DITCH
(Not to Scale)



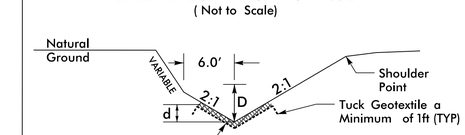
FROM –DR1– STA. 10+25 TO STA. 10+50 LT

DETAIL C
STREAM BANK STABILIZATION
(Not to Scale)



Lt. Bank: 65 tons CL II Rip–Rap, 70 sy Geotextile Fabric
Rt. Bank: 50 tons CL II Rip–Rap, 50 sy Geotextile Fabric

DETAIL D
SPECIAL CUT DITCH w/HINGE
(Not to Scale)



Type of Liner= Class A Rip–Rap, Keyed–In

FROM –Y– STA. 12+00 TO STA. 13+25 RT
33 TONS, 135 SY GEOTEXTILE

12/1/2023
H:\Projects\Proj\040122_rdy_psh\02D-1.dgn
jlinger

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P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

EARTHWORK SUMMARY

IN CUBIC YARDS

CHAIN	BEGINNING STATION	ENDING STATION	UNCL. EXCA. C.Y.	UNDERCUT C.Y.	EMBANK. +% C.Y.	BORROW C.Y.	WASTE C.Y.
SUMMARY 1							
-Y-	11+70.00	14+25.00	112		327	215	
-L-	10+08.49	14+10.00	26		1,117	1,091	
-DR1-	10+15.00	10+63.32	45		2		43
SUBTOTAL			**183**		**1,446**	**1,306**	**43**
SHEET TOTALS			**183**		**1,446**	**1,306**	**43**
EARTH WASTE IN LIEU OF BORROW						**-43**	**-43**
PROJECT TOTAL			**183**		**1,446**	**1,263**	
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT						**63**	
GRAND TOTAL			**183**			**1,326**	
SAY			**190**			**1,330**	

GUARDRAIL SUMMARY

IN LINEAR FEET

ALN.	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL WIDTH	FLARE LENGTH		W		ANCHORS					IMPACT ATTENUATOR TYPE 350		REMOVE EXISTING GR	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPR. END	TRAIL. END			APPROACH END	TRAILING END	APPR. END	TRAIL. END	TYPE-III	TYPE-III SC	GRAU 350	TL-2	AT-1	G	NG		
-Y-/-L-	12+74.83	10+31.00	LT	56.25	12.50										1			1					
-Y-/-L-	13+92.06	10+31.00	LT/RT	37.50	18.75											1		1					
-L-	13+03.08	13+91.72	RT	43.75	31.25											1		1					
-L-/-DR1-	13+03.08	10+56.30	LT/RT	12.50	25.00											1			1				
			SUBTOTAL:	150.00	87.50										1	3	0	3	1			0.0	
			ANCHOR UNIT DEDUCTIONS:																				
			Type-III @ 18.75' Each	-18.75																			
			Type-III, SC @ 18.75' Each		-56.25																		
			TL-2 @ 25' Each	-75.00																			
			AT-1 @ 6.25' Each	-6.25																			
			LESS GUARDRAIL DEDUCTIONS:	50.00	31.25																		
			5 ADDITIONAL GUARDRAIL POSTS																				
			PROJECT TOTAL:	50.00	31.25																		
			SAY:	**50.0**	**37.5**										**1**	**3**	**0**	**3**	**1**			**0**	

SUMMARY OF SHOULDER BERM GUTTER

IN LINEAR FEET

SHOULDER BERM GUTTER

LOCATION	SIDE	BEG. STA.	END STA.	LENGTH
-Y-	RT	13+41.76	14+25.00	88.3
-Y-	LT	13+02.13	13+22.20	27.9
-Y-	LT	13+46.86	13+64.70	20.3
-DR1-	RT	10+25.31	10+54.43	24.7
-L-	RT	13+18.95	13+64.26	34.8
-L-	LT	13+40.00	14+10.00	70.7
			TOTAL	266.7
			SAY	267

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COMPUTED BY: TJC DATE: 1/26/2023
CHECKED BY: ASB (LAST REVISED) DATE: (2/26/2024)

PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	3D-1

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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

SIZE / THICKNESS OR GAUGE

LINE & STATION	OFFSET		STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	% MINIMUM REQUIRED SLOPE
SHEET 4								
- Y- 14+27.00	9	RT	116					
			116	113		2490.3	2487.8	2.7%
- Y- 14+13.22	7	RT	113		2490.9			
			113	114		2487.8	2487.6	0.5%
- Y- 13+58.40	8	RT	114		2491.9			
			114	103		2487.6	2487.5	0.5%
- Y- 13+58.40	12	RT	103		2491.8			
			103	104		2487.5	2481.0	1.8%
- Y- 13+07.60	12	RT	101		2491.2			
			101	123		2488.0	2479.9	1.5%
- DR1- 10+25.00	13	RT	106		2490.3			
			106	105		2487.2	2487.1	0.5%
- DR1- 10+27.82	13	RT	105		2491.2			
			105	122		2487.1	2486.0	0.5%
- L- 13+55.60	13	RT	107		2490.2			
			107	108		2487.1	2484.0	2.8%
- L- 14+10.00	13	RT	111					
			111	109		2489.3	2486.4	1.9%
- L- 13+98.15	10	RT	109		2489.6			
			109	110		2486.4	2485.0	0.5%
PROJECT TOTALS								

DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC)

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, PP, OR PVC
116													
116	113		12							×			×
113													
113	114												
114													
114	103												
103													
103	104		28							×			×
101													
101	123		32							×			×
106													
106	105												
105													
105	122												
107													
107	108		16							×			×
111													
111	109		12							×			×
109													
109	110												
PROJECT TOTALS		0	100	0	0	0	0	0	0				

R.C. PIPE CLASS III / R.C. PIPE CLASS IV

FROM	TO	III 12"	III 15"	III 18"	III 24"	III 30"	III 36"	III 42"	III 48"	IV 12"	IV 15"	IV 18"	IV 24"	IV 30"	IV 36"	IV 42"	IV 48"
116	113																
113	114		52														
114	103										20						
103	104																
101	123																
106	105										24						
105	122		28														
107	108																
111	109																
109	110										44						
PROJECT TOTALS		0	80	0	0	0	0	0	0	0	88	0	0	0	0	0	0

ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. YARDS; QUANTITIES FOR DRAINAGE STRUCTURES; *TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B'); FRAME, GRATES, AND HOOD STANDARD 840.03; CONCRETE TRANSITIONAL SECTION

FROM	TO	R.C.P.	C.S.P.	PER EACH (0' THRU 5.0')	LIN. FT. A 5.0' THRU 10.0'	LIN. FT. B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	TYPE OF GRATE E	F	G	DROP INLET	CATCH BASIN
116												
113				1								
114				1								
103				1								
101				1								
106				1								
105				1								
107				1								
111												
109				1								
PROJECT TOTALS		0	0	8	0	0	0	0	0	0	0	0

FROM	TO	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND 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 TWO FLAT GRATES STD. 840.20	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	G.D.I. (N.S.) FR. WITH TWO FLAT GRATES. STD. 840.29	DRIVEWAY DROP INLET LIN. FT. STD. 840.30	D.I. IN APPROACH SLAB STD. 840.13	J.B. STD. 840.31 OR 840.32	TBJB STD. 840.34	T.B.D.I. STD. 840.36	STEEL GRATE AND FRAME (Bicycle Safe) STD. 840.39	M.H. FRAME AND COVER STD. 840.54	ADJUST MH	ADJUST CB	ADJUST DI	CONV DI TO JBMH	CONV JB TO DI	CONV CB TO JB	BERM DRAINAGE OUTLET	OTCB	FLOWABLE FILL (CY)
116	113																									1.4
113															1	1										
114															1	1										
103															1	1										
101															1	1										
106					1				1																	
105															1	1										
107															1	1										
109															1	1										
PROJECT TOTALS		0	0	0	1	0	0	0	1	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	1.4

FROM	TO	DRAINAGE PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
116	113	2 @ 15"	0.13			
103	104	2 @ 15"				
101	123	2 @ 15"				
107	108	2 @ 15"				
111	109	2 @ 15"				
109	110				32	
PROJECT TOTALS		10 @ 15"	0.13	0	32	

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.)	(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

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P: (919) 878-9560
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PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	04
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER: NORTH CAROLINA PROFESSIONAL SEAL 040878 ENGINEER — 4/3/2024 — DocuSigned by: Mary Mayo Yahl

HYDRAULICS ENGINEER: NORTH CAROLINA PROFESSIONAL SEAL 46155 ENGINEER ALEXIS S. BURKE — DocuSigned by: Alexis Burke

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

8/17/99

NAD 83 (NSRS 2007)

BEGIN CONSTRUCTION -Y- STA.11+70.00

-Y- PRC Sta. 11+90.29

PROP. GRAVEL DRIVE

DO NOT DISTURB TREE

SP. CUT DITCH SEE DETAIL A

-L- +00.00 79.58'

-L- +42.00 80.00', 90.00'

-Y- +27.00 26.00'

+16.00 37.00'

+90.00 37.00'

+70.00 EX.R/W 25.00'

+04.66

-Y- PRC Sta. 12+68.40

+25.00 35.00'

+50.00 25.00'

+70.00 37.27'

+60.00 45.00'

+00.00 EX.R/W

BEGIN PROJECT -L- STA.10+00.00= -Y- POC Sta. 13+26.04

SPECIAL CUT DITCH W/HINGE SEE DETAIL D

LH&E PROPERTIES, LLC DB 436 PG 482 PB 4 PG 305A

PROP. ASPHALT

-Y- PCC Sta. 13+68.99

+80.00 50.00'

+05.00 55.00'

+10.00 30.00'

GRADE TO DRAIN

+45.00 55.00'

+30.00 EX.R/W, 25.00'

WOODS

10' GRAVEL

SR 1549 GARVEY BRIDGE RD.

BL-4

BM1

R=5'

R=20'

10+00

PLUG & WF

15" W/ ELBOWS

EXIST

REMOVE

PUE

GREU TL-2

TB 2GI

RCP-IV

RCP-III

BANK STABILIZATION SEE DETAIL C

CLASS II RIP RAP

1 TONS CL B RIP RAP W/ 5 SY GEOTEXTILE

REMOVE EXIST. BRIDGE

EXISTING R/W

-L- S 51° 52' 42.0" E

-L- PC Sta. 12+97.79

+24.00

+29.00

+08.75

+91.00 20.00'

+15.00 EX.R/W, 20.00'

+20.00 EX.R/W

+93.00 45.00'

-L- +40.00 30.00'

-Y- +70.00 27.58'

+70.00 60.00', 75.00'

+40.00 83.00'

+40.00 60.00'

+85.00 30.00'

+50.00 30.00'

+68.00 31.31'

SKYLINE PED #107-32

BREMC 50-12-055

I22-2

+15.00 70.00'

+30.00 90.00'

+00.00 25.00'

+75.00 25.00'

+85.00 60.00'

+95.00 EX.R/W

-L- PT Sta. 14+72.08

END CONSTRUCTION -L- STA.14+95.00

-L- POT Sta. 15+28.84

END PROJECT -L- STA.14+10.00

+10.00 EX.R/W, 25.00'

S 3° 09' 10.3" E

15+00

-Y- PCC Sta. 15+20.06

-Y- PT Sta. 16+26.56

END CONSTRUCTION -Y- STA 14+30.00

15" CMP RETAIN

WD

10' GRAVEL

SR 1550 E. WEAVERS FORD RD.

145 MILES +/- WEAVERS FORD

BL-3

LH&E PROPERTIES, LLC DB 436 PG 482 PB 4 PG 305A

RICKY A. & JOEVELYN S. ROOP DB 199 PG 2198 PB 4 PG 37

JAY G. D. REID DB 370 PG 178 PB 4 PG 37

N 49°54'42" W 216.89'

N 49°43'44" E 24.84'

N 83°55'27" E 104.68'

INV=2478.45'

WD FOOTBRIDGE

30" CMP

ISFD

NORTH FORK NEW RIVER

RIVER

JS

SI

GRAVEL RV CAMPSITE

STACKED ROCK WALL

SEAT = 2485.00'

BCL

EXISTING R/W

-DRI- POT Sta. 10+00.00

BEGIN CONSTRUCTION -DRI- STA.10+15.00

+15.00 60.00'

+95.00 EX.R/W, 65.00'

S 18° 56' 55.5" W

2GI-NSS

SPECIAL CUT V DITCH SEE DETAIL B

-DRI- PC Sta. 10+30.86

-DRI- PT Sta. 10+53.63

GRADE TO DRAIN S 51° 34' 12.1" W

+35.00 25.00'

-L- POC Sta. 13+24.76= -DRI- POT Sta. 10+74.53

+53.58 25.00'

+64.26 25.00'

-L- PT Sta. 13+53.58 S 39° 27' 04.4" W

-L- PC Sta. 13+64.26

+10.00 EX.R/W, 25.00'

-Y- +86.66

AT-1

RW

4 STUMP FINANCIAL CORPORATION DB 124 PG 1

WOODS

48" WW & ISBW

0.74 MILES +/- TO SR 1559 LUCY BELL RD.

JAMES A. & MARGARET B. CHRISTENBURY DB 305 PG 343 PB 4 PG 37

-L-		-DRI-
PI Sta 13+33.61	PI Sta 14+20.80	PI Sta 10+42.56
Δ = 91° 19' 46.4" (RT)	Δ = 42° 36' 14.7" (LT)	Δ = 32° 37' 16.5" (RT)
D = 163° 42' 08.0"	D = 39° 30' 51.6"	D = 143° 14' 22.0"
L = 55.79'	L = 107.82'	L = 22.77'
T = 35.82'	T = 56.54'	T = 11.70'
R = 35.00'	R = 145.00'	R = 40.00'
SE = NC	SE = NC	
V < 15mph	V = 20mph	

-Y-		
PI Sta 11+18.09	PI Sta 12+29.42	PI Sta 13+19.22
Δ = 28° 09' 26.1" (RT)	Δ = 8° 57' 03.8" (LT)	Δ = 20° 13' 21.2" (RT)
D = 19° 05' 54.9"	D = 11° 27' 33.0"	D = 20° 06' 13.6"
L = 147.43'	L = 78.11'	L = 100.59'
T = 75.24'	T = 39.14'	T = 50.82'
R = 300.00'	R = 500.00'	R = 285.00'

-Y-	
PI Sta 14+49.29	PI Sta 15+73.36
Δ = 48° 05' 11.0" (RT)	Δ = 6° 06' 06.8" (RT)
D = 31° 49' 51.6"	D = 5° 43' 46.5"
L = 151.07'	L = 106.50'
T = 80.30'	T = 53.30'
R = 180.00'	R = 1,000.00'

SHOULDER BERM GUTTER LOCATIONS

DESCRIPTION	ALN	STATION	STATION	LOC
SBG	-L-	13+18.95	13+64.26	RT
SBG	-L-	13+40.00	14+10.00	LT
SBG	-Y-	13+02.13	13+22.20	LT
SBG	-Y-	13+46.86	13+64.70	LT
SBG	-Y-	13+41.76	14+25.00	RT
SBG	-DRI-	10+25.31	10+54.43	RT

FOR PROFILE PLANS, SEE SHEET 05

FOR STRUCTURE PLANS, SEE S-1 TO S-24

BRIDGE/ROADWAY RELATIONSHIP SKETCH

GREU TL-2 — BEGIN BRIDGE -L- Sta.10+29.75 — TYPE III — 10' R — 10' R — .02 — .02

.025 — .025 — 27'-10" CLEAR ROADWAY — -L- — 30' OUT-OUT — 3'-11" — 3'-11" — 20'

BEGIN APPROACH SLAB -L- PC Sta.10+18.88 — TYPE III SC — 10' R — 10' R — 12'

END BRIDGE -L- Sta.13+02.25 — TYPE III SC — AT-1 — 10' R — 16' — 20' R — R=10' — R=24'

END APPROACH SLAB -L- PC Sta.13+12.27

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12/1/2023
H:\Roadway\Proj\040122_Rdy_psh04.dgn

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	05
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 040878 ENGINEER MARY MAYS YAHL 1/26/2024

Mary Mays Yahl

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 46155 ENGINEER ALEXIS S. BURKE 1/26/2024

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–L–

BM #1
–Y– STA.11+74.12 OFFSET = 47.097' LT
RR SPIKE IN 30" SYCAMORE
EL = 2,481.52'

℄ –L– STA. 11+66.00
3 SPANS AT 90'–0"

BEGIN GRADE
–L– Sta.10+08.49=
–Y– Sta.13+28.83 (8.0' LT)
EL = 2,492.22'

BEGIN BRIDGE
–L– Sta.10+29.75
EL = 2,493.11'

PROPOSED GRADE

PI = 12+30.00
EL = 2,494.08'
VC = 75'
K = 21
V = 30MPH

PI = 13+80.00
EL = 2,489.88'
VC = 60'
K = 17
V = 20MPH

END BRIDGE
–L– Sta.13+02.25
EL = 2,491.42'

END GRADE
–L– Sta.14+10.00
EL = 2,490.09'

–L– Sta.13+24.76
–DR1– Sta.10+74.53

(–)1.1779%
(+)10.8412%
(–)12.8000%
(+)10.6893%

100-YR
2,489.4'

NWS
2473.4'

EXISTING GROUND

2510 / 2500 / 2490 / 2480 / 2470 / 2460

10+00 / 11+00 / 12+00 / 13+00 / 14+00 / 15+00

BRIDGE HYDRAULIC DATA

STR #040122 Sta.11+66.0 –L–

DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 21,000	CFS
DESIGN HW ELEVATION	= 2,485.5	FT
100 YEAR DISCHARGE	= 33,000	CFS
100 YEAR FREQUENCY	= 100	YRS
100 YEAR HW ELEVATION	= 2,489.4	FT
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 40,000	CFS
OVERTOPPING ELEVATION	= 2,491.4	FT

NORMAL WATER SURFACE ELEV = 2,473.4 FT
DATE OF SURVEY = 4/14/2016

–Y–

PI = 12+15.00
EL = 2,482.65'
VC = 70'
K = 9
V = 15MPH

PI = 13+20.00
EL = 2,492.88'
VC = 51.65'
K = 4
V = 15MPH

PI = 14+12.00
EL = 2,491.04'
VC = 25'
K = 7
V = 15MPH

BEGIN GRADE
–Y– Sta.11+70.00
EL = 2,481.89'

PROPOSED GRADE

–Y– Sta.13+26.04
–L– Sta.10+00.00

END GRADE
–Y– Sta.14+25.00
EL = 2,491.26'

(+)1.6841%
(+)9.7500%
(–)2.0000%
(+)1.6444%
(+)7.1867%

EXISTING GROUND

END SP.CUT
DITCH W/ HINGE
–Y– STA.13+25 RT
ELEV.2489.62

PI= STA.12+50 RT
ELEV.2484.23

(+) 7.9200%

PI = STA.12+25 RT
ELEV.2482.25

(+) 5.2400%

BEGIN SP.CUT DITCH
–Y– STA.11+75 RT
ELEV.2480.83

(+) 0.4400%

END SP.CUT DITCH
BEGIN SP.CUT DITCH W/ HINGE
–Y– STA.12+00 RT
ELEV.2480.94

2510 / 2500 / 2490 / 2480 / 2470 / 2460

11+00 / 12+00 / 13+00 / 14+00 / 15+00

–DR1–

PI = 10+35.00
EL = 2,492.05'
VC = 20'
K = 2
V = 14MPH

BEGIN GRADE
–DR1– Sta.10+15.00
EL = 2,490.44'

PROPOSED GRADE

(+)8.0315%
(–)2.6218%
(+)1.3000%
(+) 0.7200%

EXISTING GROUND

BEGIN SP.CUT V DITCH
–DR1– STA.10+25 LT
ELEV.2490.34

END SP.CUT V DITCH
–DR1– STA.10+50 LT
ELEV.2490.52

END GRADE
–DR1– Sta.10+63.32
–L– Sta.13+20.30.10' LT
EL = 2,482.29'

2510 / 2500 / 2490 / 2480 / 2470 / 2460

10+00 / 11+00

FOR –L–, –Y–, & DR1 PLANS, SEE SHEET 04

RK&K
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8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
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Engineers | Construction Managers | Planners | Scientists
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Responsive People | Creative Solutions

12/1/2023
H:\Roadway\Proj\040122_Rdy_pf105.dgn
dmiller

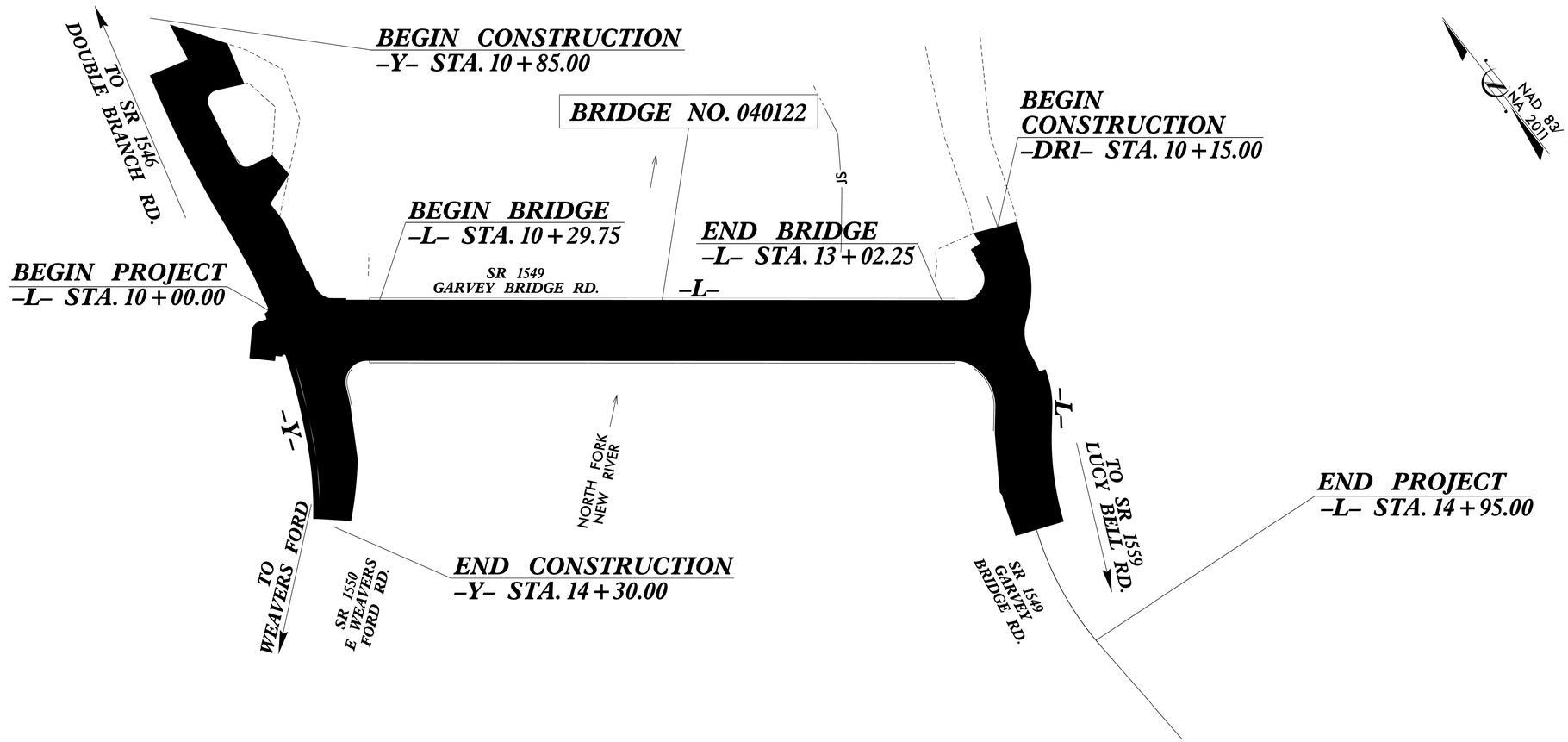
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	04-0122	RW01	04

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURVEY CONTROL, EXISTING CENTERLINES, RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

ASHE COUNTY

TIP PROJECT: 04–0122



GRAPHIC SCALE

50 25 0 50 100

PLANS

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "122-2" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 1024412.848(ft) EASTING: 1308989.684(ft) ELEVATION: 2485.44(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: .999987500156 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "122-2" TO -L- STATION 10+00.00 IS N 22°48'17" W 315.30(ft) ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

Prepared In the Office of:

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	*LETTING DATE:*
JULY 2022	*02 /17/2022*

PROFESSIONAL LAND SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-4301 LAND SURVEYOR R. LANDON WAGONER

DocuSigned by: R. Landon Wagoner 94066137FD3042D...

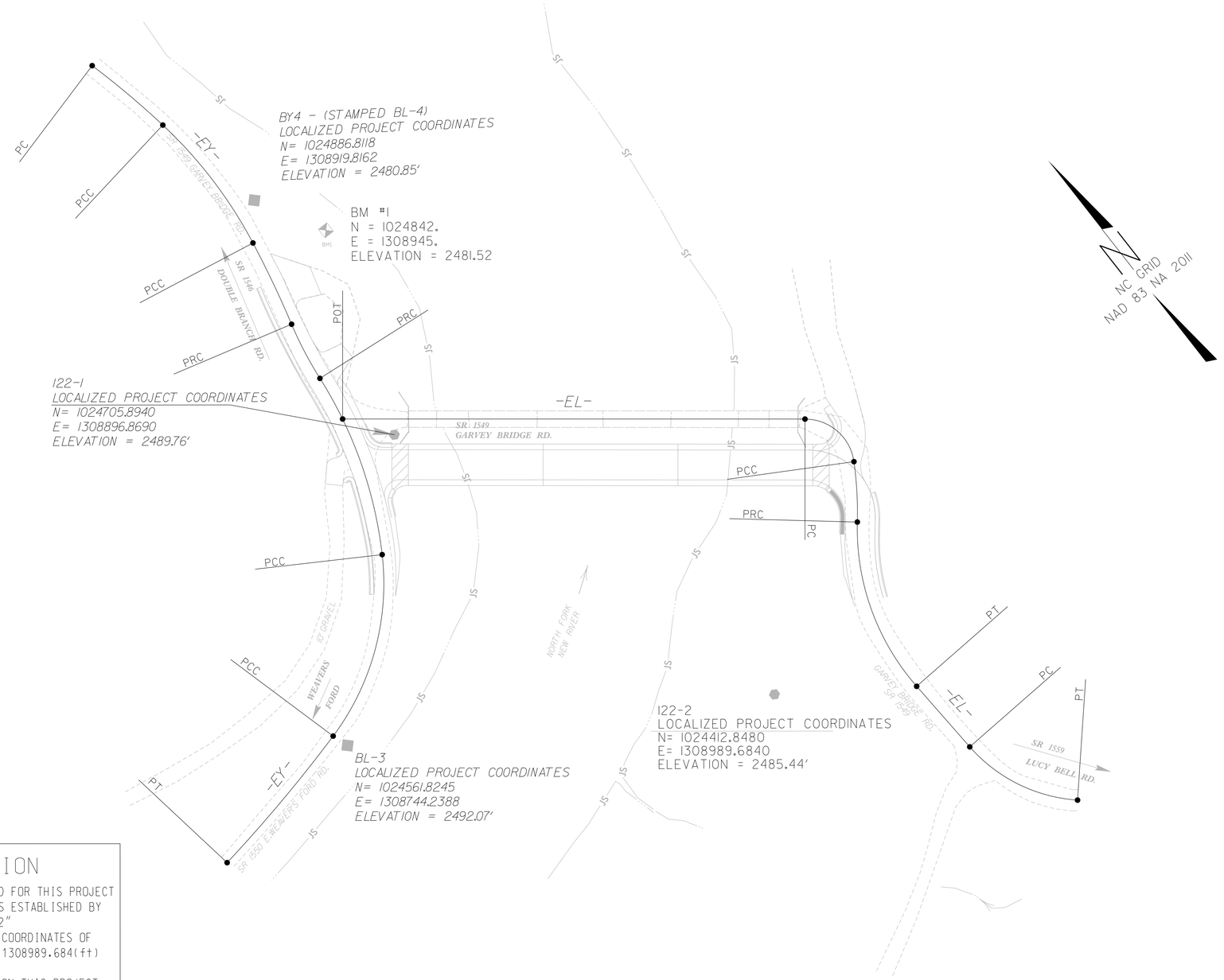
SIGNATURE: *Date:*

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

PROJECT REFERENCE NO.	SHEET NO.
04-0122	1C-1
Location and Surveys	

SURVEY CONTROL SHEET 04-0122

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "122-2"
WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF
NORTHING: 1024412.848(ft) EASTING: 1308989.684(ft)
ELEVATION: 2485.44(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 1.0000125
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "122-2" TO -L- STATION 10+00.00 IS N 22° 48' 16.63" W 315.3042 FT
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

REVISIONS

6/2/99

28 OCT 2021 10:25
csmastin
C:\Users\csmastin\Low Impact 2016\040122\CONTROL SHEET\040122_ls_rwc02-1.dgn
AT LS 300027

PROJECT REFERENCE NO.	SHEET NO.
04-0122	1C-2
Location and Surveys	

SURVEY CONTROL SHEET 04-0122

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BL

POINT	DESC.	NORTH	EAST	ELEVATION
3	BL-3	1024561.8245	1308744.2388	2492.07
1	122-1	1024705.8940	1308896.8690	2489.76
2	122-2	1024412.8480	1308989.6840	2485.44

BY

POINT	DESC.	NORTH	EAST	ELEVATION
BY4	STAMPED BL-4	1024886.8118	1308919.8162	2480.85
BY5	STAMPED 122-1	1024705.8940	1308896.8690	2489.76

EL

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	1024735.473	1308876.161							
LINE			S 51°54'38.9" E	308.70					
PC	1024545.039	1309119.125							
CURVE			S 10°52'55.7" E	43.32	82°03'26.4"(RT)	173°37'24.9"	47.26	28.72	33.00
PCC	1024502.493	1309127.304							
CURVE			S 34°52'31.2" W	40.40	09°27'27.4"(RT)	23°23'09.7"	40.44	20.27	245.00
PCC	1024469.353	1309104.206							
CURVE			S 18°13'32.3" W	116.65	42°45'25.3"(LT)	35°48'35.5"	119.40	62.63	160.00
PT	1024358.556	1309067.723							
LINE			S 03°09'10.3" E	53.77					
PC	1024304.863	1309070.681							
CURVE			S 25°37'33.8" E	80.27	44°56'46.9"(LT)	54°34'02.7"	82.37	43.43	105.00
PT	1024304.863	1309070.681							

EY

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	1025024.373	1308890.106							
CURVE			S 11°51'26.1" E	61.64	06°05'31.4"(RT)	09°52'42.9"	61.67	30.86	580.00
PCC	1024964.048	1308902.772							
CURVE			S 00°41'49.2" W	99.11	19°00'59.2"(RT)	19°05'54.9"	99.57	50.25	300.00
PCC	1024864.942	1308901.566							
CURVE			S 12°39'54.2" W	60.09	04°55'10.8"(RT)	08°11'06.4"	60.11	30.07	700.00
PCC	1024806.317	1308888.392							
CURVE			S 10°26'36.7" W	40.81	09°21'45.7"(LT)	22°55'05.9"	40.85	20.47	250.00
PCC	1024766.186	1308880.995							
CURVE			S 18°38'36.3" W	124.84	25°45'44.8"(RT)	20°27'46.0"	125.90	64.03	280.00
PCC	1024647.896	1308841.086							
CURVE			S 53°11'41.0" W	125.55	43°20'24.8"(RT)	33°42'12.2"	128.59	67.55	170.00
PCC	1024572.679	1308740.562							
CURVE			S 78°01'30.0" W	110.25	06°19'13.2"(RT)	05°43'46.5"	110.31	55.21	1000.00
PT	1024572.679	1308740.562							

****

BM1 ELEVATION = 2481.52'
N 1024842 E 1308945
BL STATION 7+09.89 144.01' LEFT
RR SPIKE IN 30" SYCAMORE

****

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

REVISIONS

6/2/99

PROPOSED ALIGNMENT CONTROL SHEET

PROJECT REFERENCE NO.	SHEET NO.
04-0122	RW02D-1

Location and Surveys

PROJECT SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-4301 LAND SURVEYOR R. LANDON WAGONER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, R. Landon Wagoner, PLS, certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

This 13th day of July, 2022.

DocuSigned by:
R. Landon Wagoner
94066137FD30420...

Professional Land Surveyor L-4301

L

TYPE	STATION	NORTH	EAST
POT	10+00.00	1024703.5055	1308867.4753
PC	12+97.79	1024519.6711	1309101.7455
PT	13+53.58	1024469.8968	1309107.1647
PC	13+64.26	1024461.6469	1309100.3757
PT	14+72.08	1024361.5358	1309067.5593
POT	15+28.84	1024304.8632	1309070.6810

Y

TYPE	STATION	NORTH	EAST
POT	10+00.00	1025023.9463	1308890.1892
PC	10+42.85	1024982.0964	1308899.4149
PRC	11+90.29	1024836.2047	1308895.2206
PRC	12+68.40	1024759.6708	1308879.9973
PCC	13+68.99	1024663.9156	1308850.9309
PCC	15+20.06	1024571.6910	1308736.8799
PT	16+26.56	1024549.8032	1308632.7070

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED _____ TO _____ .

REVISIONS

6/2/99

13-JUL-2022 13:41
Z:\NCDOT\WIP\ES\Dgn Impact 2016\040122\05-11-22 Right of Way\150.003_040122_ls_rw02d-1.dgn
ES_ROADWAY_LS_100113

6/2/99

REVISIONS

RIGHT OF WAY & PERMANENT EASEMENT CONTROL SHEET

PROJECT REFERENCE NO.	SHEET NO.
04-0122	RW03E-1

Location and Surveys

PROJECT SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-4301 LAND SURVEYOR R. LANDON WAGONER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	10+40.00	30.00	1024655.2111	1308880.4234
L	12+85.00	30.00	1024503.9645	1309073.1653
* L	12+90.00	-65.00	1024575.6145	1309135.7455
L	12+90.00	-45.68	1024560.4172	1309123.8200
L	13+15.00	-60.00	1024530.3242	1309167.1257
L	13+35.00	-25.00	1024482.7104	1309139.3938
* L	13+53.58	-25.00	1024454.0113	1309126.4688
* L	13+64.26	-25.00	1024445.7614	1309119.6799
L	13+75.00	25.00	1024467.5242	1309073.4392
L	14+10.00	25.00	1024431.4836	1309054.0383
L	14+10.00	15.08	1024427.8663	1309063.2756
L	14+10.00	-14.93	1024416.9245	1309091.2170
* L	14+10.00	-25.00	1024413.2518	1309100.5957

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y	13+91.00	-20.00	1024633.7777	1308856.3468
Y	14+15.00	-15.06	1024616.0107	1308836.3155
Y	14+15.00	-20.00	1024612.7290	1308840.0063

MARKER EXCEPTIONS:
*** NOT SET**

PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	14+15.00	70.00	1024440.9342	1309009.5500
L	12+40.00	83.00	1024490.0493	1309005.0450
L	13+68.00	31.31	1024477.9926	1309073.3605
L	14+00.00	25.00	1024442.2411	1309058.6833

PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y	10+85.00	15.09	1024939.2850	1308890.5234
Y	10+85.00	25.00	1024938.5279	1308880.6450
Y	11+45.00	25.00	1024883.6347	1308879.3543
Y	12+10.00	25.00	1024822.9499	1308865.9403
Y	12+10.00	14.06	1024820.4027	1308876.5775
Y	12+60.00	45.00	1024774.0599	1308836.4676
Y	13+00.00	14.96	1024731.9577	1308859.9730
Y	13+80.00	50.00	1024679.6419	1308802.5551
Y	14+05.00	55.00	1024667.8801	1308788.4264
Y	14+10.00	30.00	1024649.1048	1308805.3661
Y	14+20.00	-15.14	1024611.9574	1308832.7175
Y	14+30.00	25.00	1024633.3465	1308797.4027
Y	14+30.00	14.73	1024625.9043	1308804.4855

I , R. Landon Wagoner , certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from July 5,2022 to July 8, 2022 , and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 13th day of July, 2022.

Digitally signed by R. Landon Wagoner

Professional Land Surveyor L-4301

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

2. THE PROPOSED ALIGNMENT CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

D:\JUL 2022\JUL 13\RW03E-1.dgn
13-JUL-2022 13:44
rnolen
Project: C:\Projects\Impact 2016\040122\05-11-22 Right of Way\150.006_040122_1s_rw03e-1.dgn

PROJECT REFERENCE NO.	SHEET NO.
04-0122	RW04

Location and Surveys

PROJECT SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-4301 LAND SURVEYOR R. LANDON WAGONER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I , R. Landon Wagoner , certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from July 5, 2022 to July 8, 2022, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

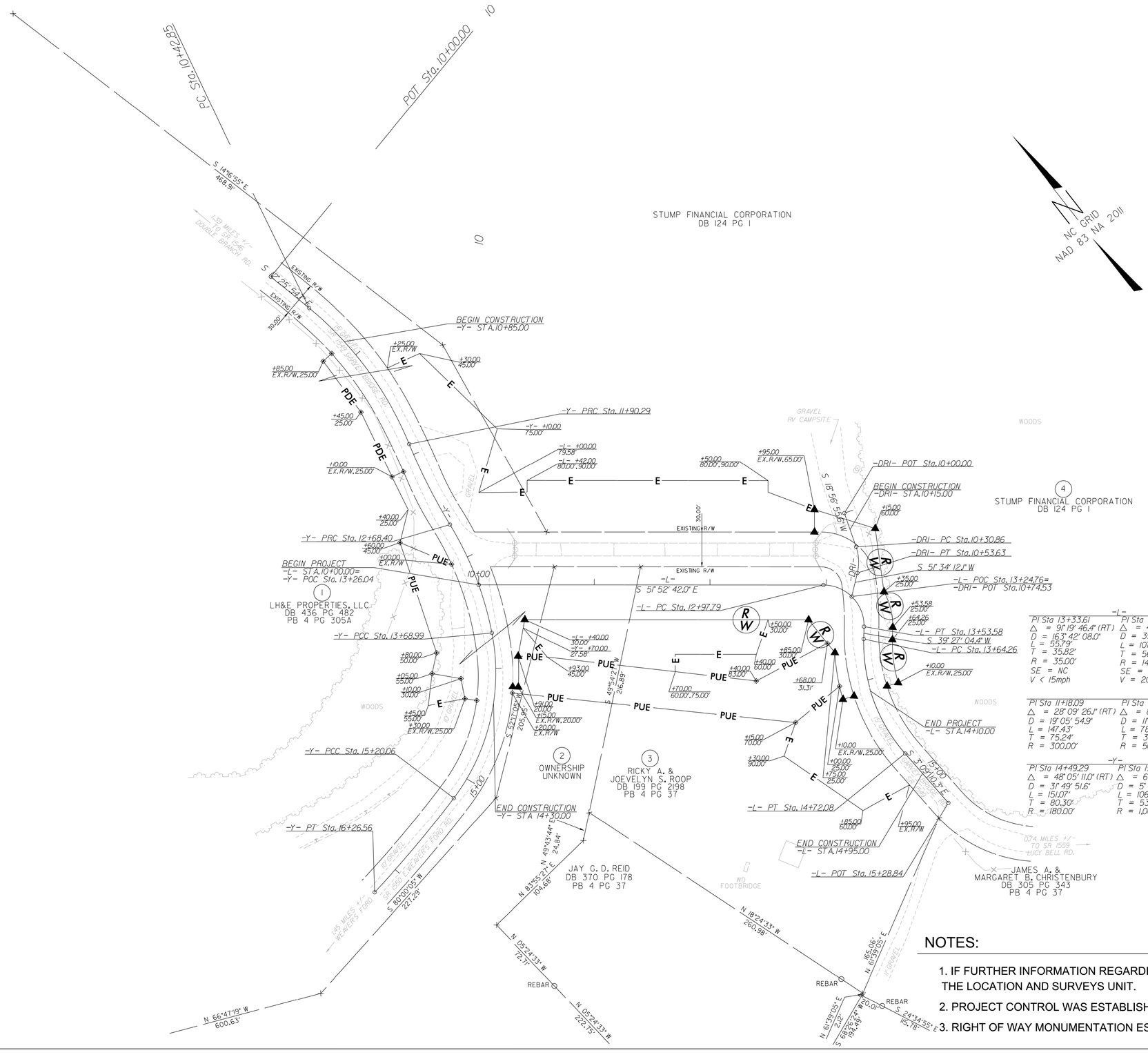
This 13th day of July, 2022.

Docusigned by: R. Landon Wagoner

Professional Land Surveyor L-4301

REVISIONS

6/2/99



-L-		
PI Sta 13+33.61	PI Sta 14+20.80	PI Sta 10+42.56
Δ = 91° 19' 46.4" (RT)	Δ = 42° 36' 14.7" (LT)	Δ = 32° 37' 16.5" (RT)
D = 16.3° 42' 08.0"	D = 39° 30' 51.6"	D = 143° 14' 22.0"
L = 55.79'	L = 107.82'	L = 22.77'
T = 35.82'	T = 56.54'	T = 11.70'
R = 35.00'	R = 145.00'	R = 40.00'
SE = NC	SE = NC	
V < 15mph	V = 20mph	

-Y-		
PI Sta 11+18.09	PI Sta 12+29.42	PI Sta 13+19.22
Δ = 28° 09' 26.1" (RT)	Δ = 8° 57' 03.8" (LT)	Δ = 20° 13' 21.2" (RT)
D = 19° 05' 54.9"	D = 11° 27' 33.0"	D = 20° 06' 13.6"
L = 147.43'	L = 78.11'	L = 100.59'
T = 75.24'	T = 39.14'	T = 50.82'
R = 300.00'	R = 500.00'	R = 285.00'

-Y-	
PI Sta 14+49.29	PI Sta 15+73.36
Δ = 48° 05' 11.0" (RT)	Δ = 6° 06' 06.8" (RT)
D = 31° 49' 51.6"	D = 5° 43' 46.5"
L = 151.07'	L = 106.50'
T = 80.30'	T = 53.30'
R = 180.00'	R = 1,000.00'

-DRI-	
PI Sta 10+42.56	
Δ = 32° 37' 16.5" (RT)	
D = 143° 14' 22.0"	
L = 22.77'	
T = 11.70'	
R = 40.00'	

NOTES:

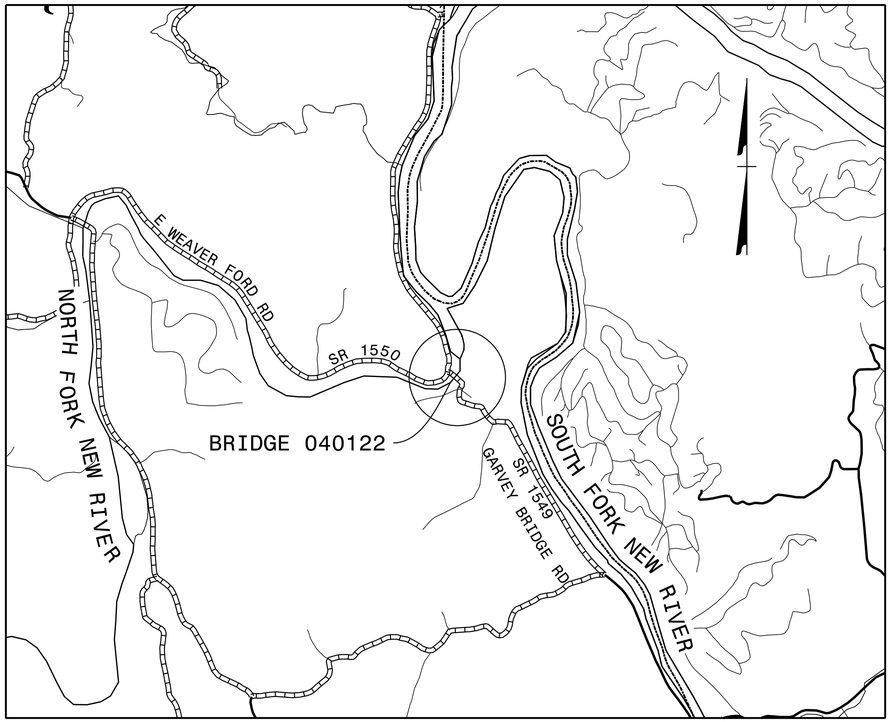
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED _____ TO _____ .

13-JUL-2022 07:05
Z:\SUP\DWG\ROW\Plan Set\Impact 2016\040122_05-11-22 Right of Way\150_009_040122_ls_rw04.dgn
Landon Wagoner
Level: 63, Color: 1, Style: 0

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

ASHE COUNTY



INDEX OF SHEETS

SHEET NO.
TMP-1

17BP.11.R.131

PROJECT:

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

PLANS PREPARED BY:

B. HOLDEN, PE
PROJECT MANAGER

K. BISBY, PE
SENIOR PROJECT ENGINEER

NCDOT CONTACTS:

ROB N. WEISZ, PE
DIVISION BRIDGE PROGRAM MANAGER

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

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RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
NC License No. F-0112
Engineers | Construction Managers | Planners | Scientists
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Responsive People | Creative Solutions

APPROVED: DocuSigned by: Kevin Bisby BDD8D2628912474...

DATE: 1/2/2024

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 21047 ENGINEER KEVIN W. BISBY

12/21/2023
040122_TMP_PSH01.dgn
kbisby

PROJ. REFERENCE NO.	SHEET NO.
17BP.11.R.131	TMP-1A

RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
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ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 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
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	SHOULDER 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
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
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.
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA
- REMOVAL

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN
- PORTABLE CONCRETE BARRIER
- PORTABLE CONCRETE BARRIER (EXISTING)
- SHORING
- PORTABLE CONCRETE BARRIER (SECTION VIEW)
- DRUM (SECTION VIEW)

APPROVED: DocuSigned by: Kevin Bisby BDD8D2628912474...

DATE: 1/2/2024

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 21047 ENGINEER KEVIN W. BISBY

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

ROADWAY STANDARD DRAWINGS & LEGEND

12/21/2023
04022_TMP_PSH01A.dgn
KBisby

PROJ. REFERENCE NO.	SHEET NO.
17BP.11.R.131	TMP-1B

RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
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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, 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.

LANE AND SHOULDER CLOSURE REQUIREMENTS

A) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

B) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

E) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

F) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

G) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING “UNEVEN LANES" SIGNS (W8-11) (LENGTH) IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

H) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

I) 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.

J) 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.

K) 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.

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

TRAFFIC CONTROL DEVICES

M) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS) AND 1135 (CONES) FOR ADDITIONAL REQUIREMENTS.

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

APPROVED: DocuSigned by: Kevin Bisley BDD8D2628912474...
DATE: 1/2/2024
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 21047 ENGINEER KEVIN W. BISBY

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

TRANSPORTATION OPERATIONS PLAN

GENERALNOTES

12/21/2023
04022_TMP_PSHOIB.dgn
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PROJ. REFERENCE NO.	SHEET NO.
17BP.11.R.131	TMP-2

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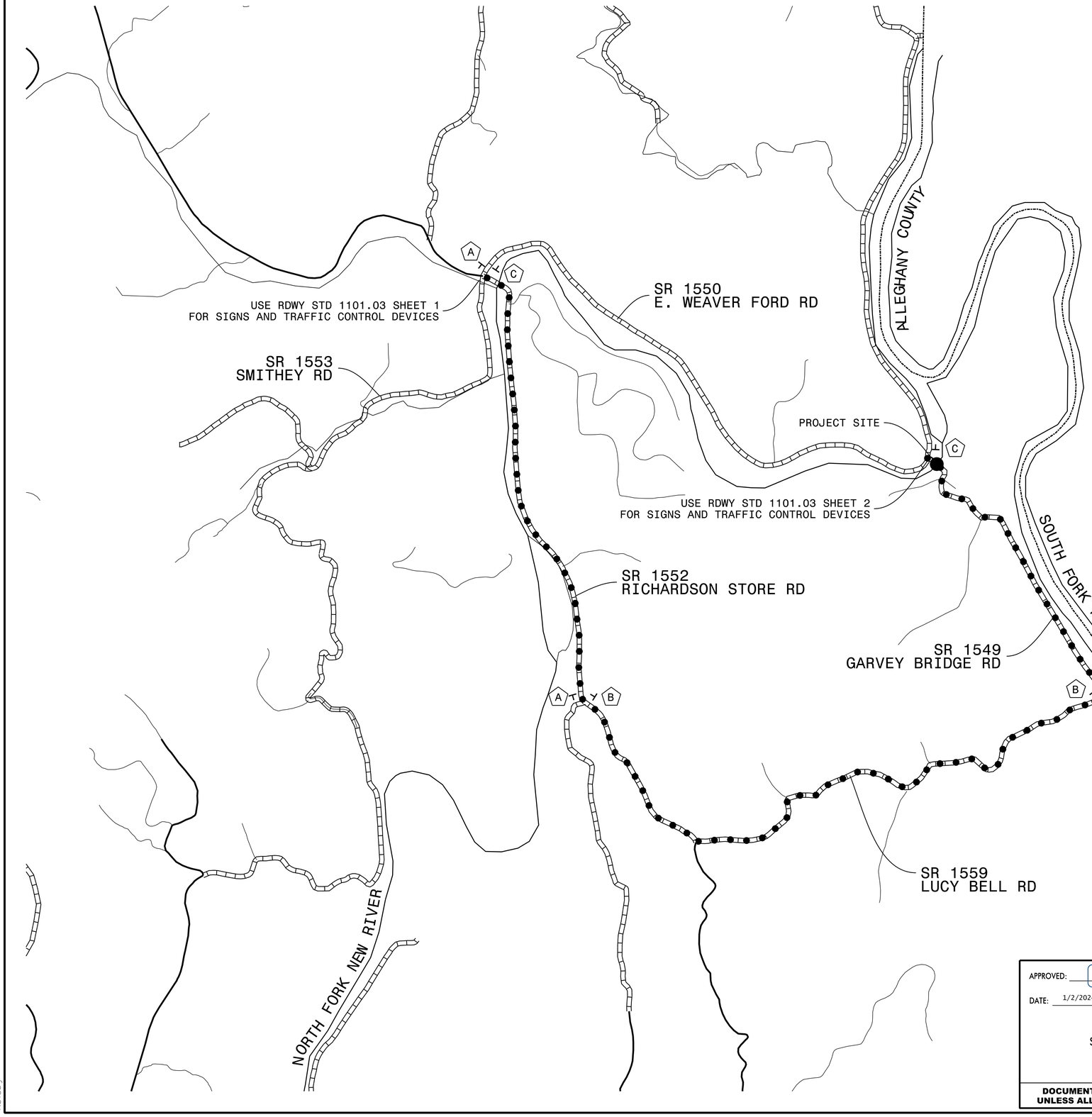

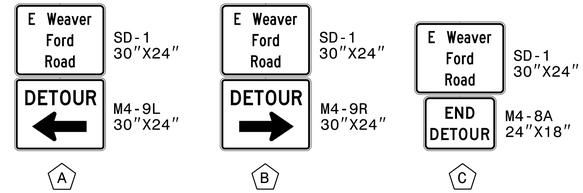

SEE TMP-2B FOR SIGN DESIGN

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DATE: 1/2/2024

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E. WEAVER FORD RD OFFSITE DETOUR

12/21/2023
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17BP.11.R.131	TMP-2A

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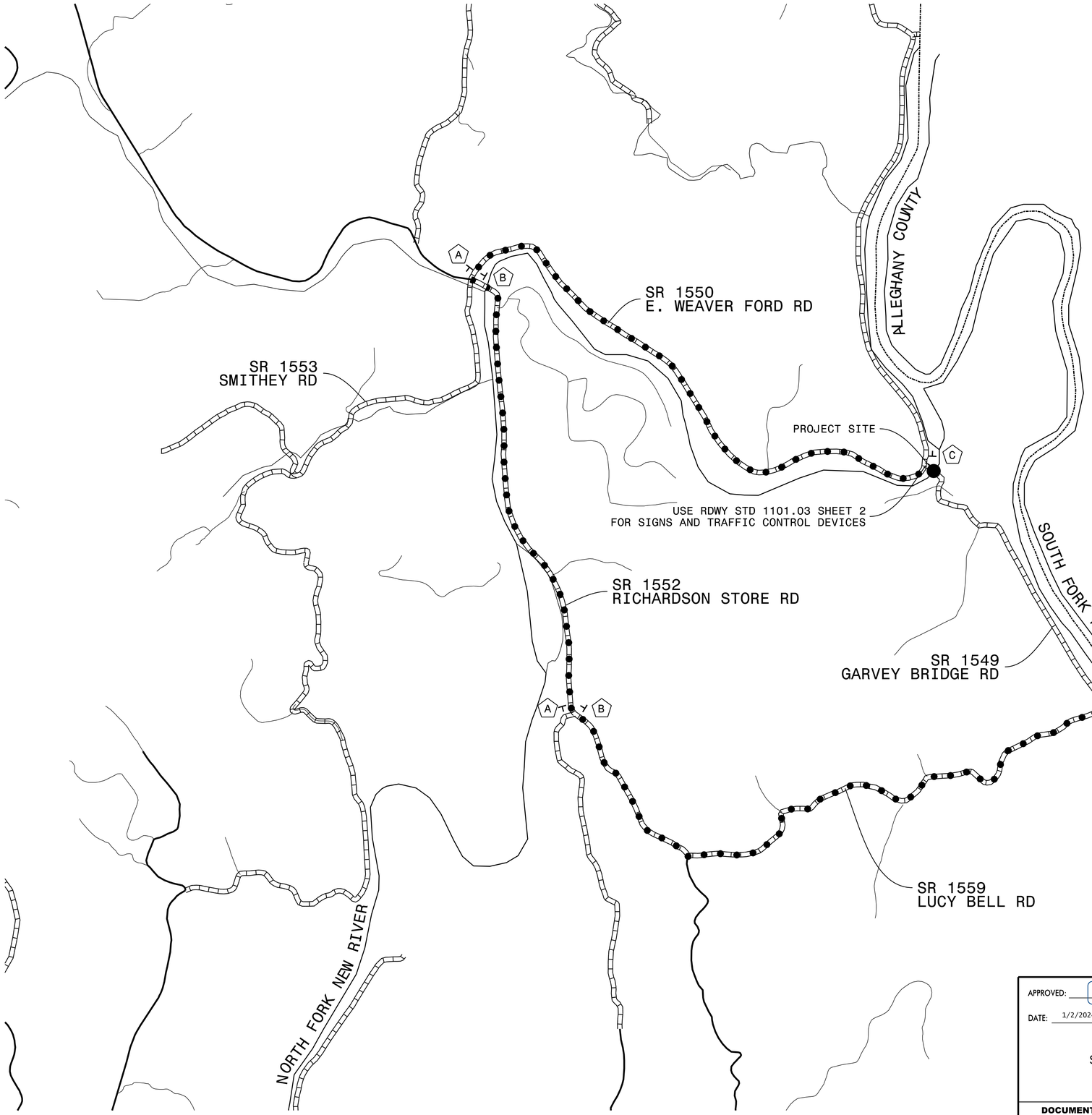

Garvey Bridge Road	Garvey Bridge Road	Garvey Bridge Road
DETOUR	DETOUR	END DETOUR
SD-2 24″X24″	SD-2 24″X24″	SD-2 24″X24″
M4-9L 30″X24″	M4-9R 30″X24″	M4-8A 24″X18″
A	B	C

SEE TMP-2B FOR SIGN DESIGN

APPROVED: DocuSigned by: Lewis Bixby BDD6D2628912474...
DATE: 1/2/2024
SEAL

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GARVEY BRIDGE RD OFFSITE DETOUR

12/21/2023
04012-TMP_PSH02A.dgn
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17BP.11.R.131	TMP-2B

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SIGN NUMBER: SD-1
TYPE: STATIONARY
QUANTITY: SEE PLANS

SIGN WIDTH: 2′-6″
HEIGHT: 2′-0″
TOTAL AREA: 5.0 Sq.Ft.

BORDER TYPE: INSET
RECESS: 0.38″
WIDTH: 0.63″
RADII: 1.5″

NO. Z BARS:
LENGTH:

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

SYMBOL	X	Y	WID	HT

MAT'L: 0.080″ (2.0 mm) ALUMINUM

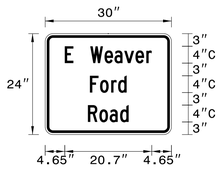
USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

DESIGN BY: K. Bisby
PROJECT ID: 040122

CHECKED BY: B. Holden
LOCATION: SEE PLAN

Dec 11, 2023
DIV: 11



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

																												Series/Size Text Length
		E		W	e	a	v	e	r																			C 2000
	4.7	2	4	3.4	2.4	2.3	2.7	2.6	1.3	4.7																		20.7
		F	o	r	d																							C 2000
	10.6	2.4	2.6	1.6	2	10.6																						8.7
		R	o	a	d																							C 2000
	10.2	2.7	2.4	2.5	2	10.2																						9.7

FILENAME: Ashe_040122_tmp_SIGN DESIGNS

NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: SD-2
TYPE: STATIONARY
QUANTITY: SEE PLANS

SIGN WIDTH: 2′-0″
HEIGHT: 2′-0″
TOTAL AREA: 4.0 Sq.Ft.

BORDER TYPE: INSET
RECESS: 0.38″
WIDTH: 0.63″
RADII: 1.5″

NO. Z BARS:
LENGTH:

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

SYMBOL	X	Y	WID	HT

MAT'L: 0.080″ (2.0 mm) ALUMINUM

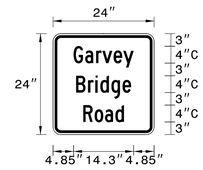
USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

DESIGN BY: K. Bisby
PROJECT ID: 040122

CHECKED BY: B. Holden
LOCATION: SEE PLAN

Dec 11, 2023
DIV: 11



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

																												Series/Size Text Length
		G	a	r	v	e	y																					C 2000
	4.9	2.8	2.6	1.5	2.7	2.3	2.5	4.9																				14.3
		B	r	i	d	g	e																					C 2000
	5.5	2.8	1.8	1.2	2.6	2.6	2	5.5																				13.1
		R	o	a	d																							C 2000
	7.2	2.7	2.4	2.5	2	7.2																						9.7

FILENAME: Ashe_040122_tmp_SIGN DESIGNS

NORTH CAROLINA D.O.T. SIGN DETAIL

APPROVED: DocuSigned by: Kevin Bisby BDD8D2628912474...

DATE: 1/2/2024

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 21047 ENGINEER KEVIN W. BISBY

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SIGN DESIGNS

12/1/2023
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17BP.11.R.131	TMP-3

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TRAFFIC CONTROL PHASING

PHASE I

STEP 1:
ERECT WORK ZONE ADVANCE WARNING SIGNS ON -L- SR 1549 (GARVEY BRIDGE RD) AND -Y- SR 1550 (E. WEAVERS FORD RD) IN ACCORDANCE WITH RDWY STD 1101.01.

STEP 2:
USING RDWY STD 1101.02 (SHEET 1) AND AWAY FROM TRAFFIC, CONSTRUCT SPAN 2 OF THE NEW BRIDGE. (SEE TMP-4)

NOTE:
THE CONTRACTOR SHALL COMPLETE PHASE II WITHIN 45 CALENDAR DAYS. SEE SPECIAL PROVISIONS FOR INTERMEDIATE CONTRACT TIME.

PHASE II

USING RDWY STD 1101.02 AND 1101.03, CLOSE SR 1550 (E. WEAVER FORD RD) AND CONSTRUCT SPAN 1 OF THE NEW BRIDGE. (SEE TMP-2 AND 5). UPON COMPLETION, REMOVE/COVER TRAFFIC CONTROL DEVICES AND OPEN TO TRAFFIC.

NOTE:
THE CONTRACTOR SHALL COMPLETE PHASE III STEPS 1 AND 2 WITHIN 45 CALENDAR DAYS. SEE SPECIAL PROVISIONS FOR INTERMEDIATE CONTRACT TIME.

PHASE III

STEP 1:
USING RDWY STD 1101.02 AND 1101.03, CLOSE SR 1549 (GARVEY BRIDGE RD) AND CONSTRUCT SPAN 3 OF THE NEW BRIDGE AND PAVE THE SURFACE COURSE. (SEE TMP-6)

STEP 2:
USING FLAGGERS AND SIGNS W20-7A, DIRECT TRAFFIC ONTO THE NEW BRIDGE IN A ONE LANE, TWO-WAY PATTERN. (SEE TMP-7) REMOVE OFFSITE DETOUR SIGNING AND DEVICES.

PHASE IV

STEP 1:
USING RDWY STD 1101.02, CONSTRUCT EXCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TMP-7)

- -Y- STA 11+70± TO STA 14+25±
- -DR1- STA 10+16± TO -L- STA 14+10±

STEP 2:
USING RDWY STD 1101.02 (SHEET 1), PAVE THE FINAL LAYER OF SURFACE COURSE ON -L- SR 1549 (GARVEY BRIDGE RD) AND -Y- SR 1550 (E. WEAVERS FORD RD), REMOVE ANY REMAINING TRAFFIC CONTROL DEVICES AND OPEN ALL LANES TO TRAFFIC.

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DATE: 1/2/2024
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TEMPORARY
TRAFFIC CONTROL PHASING

12/1/2023
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PROJ. REFERENCE NO.	SHEET NO.
17BP.11.R.131	TMP-4

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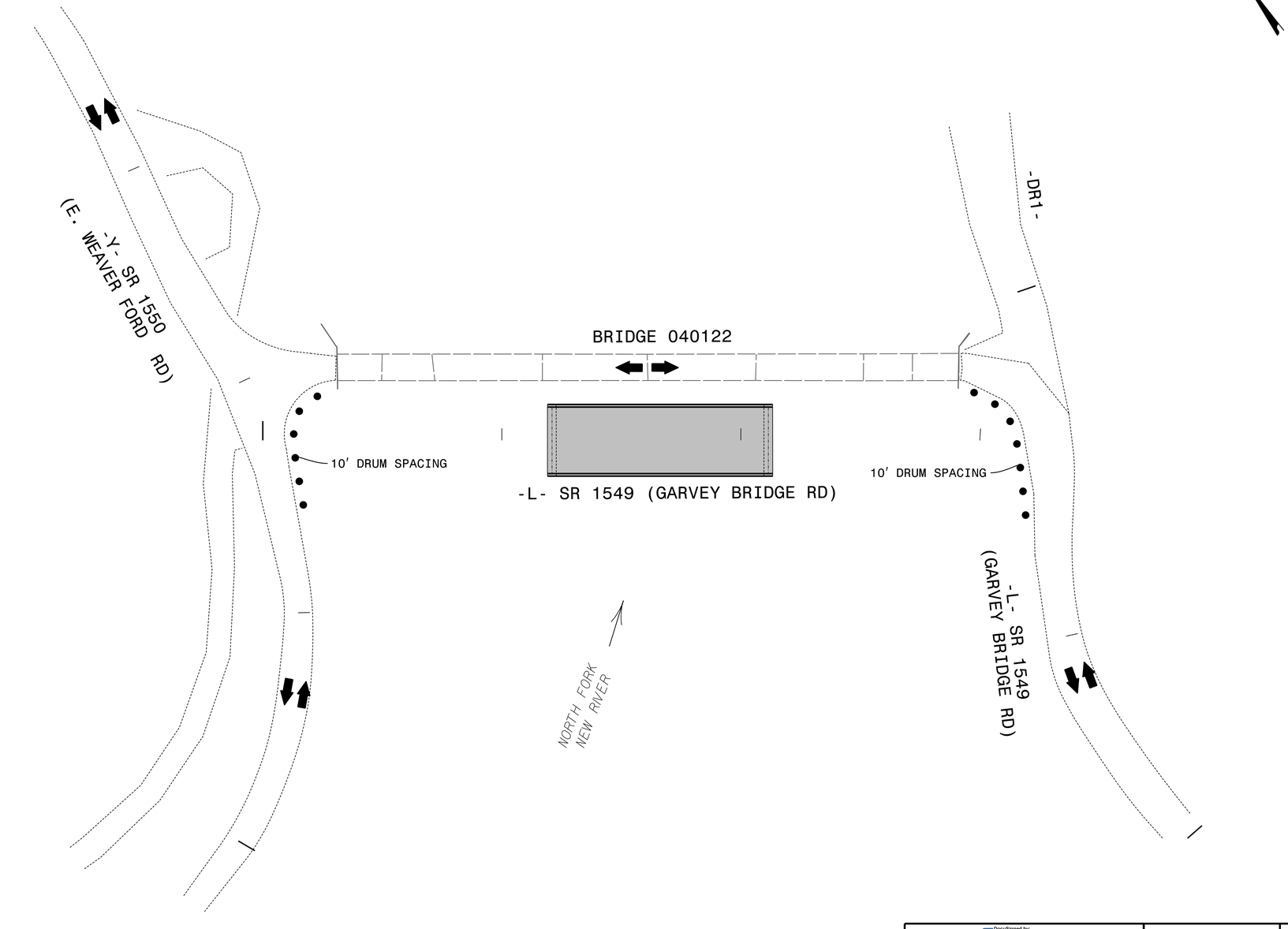

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DATE: 1/2/2024

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PHASE I DETAIL

12/21/2023
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PROJ. REFERENCE NO.	SHEET NO.
17BP.11.R.131	TMP-5

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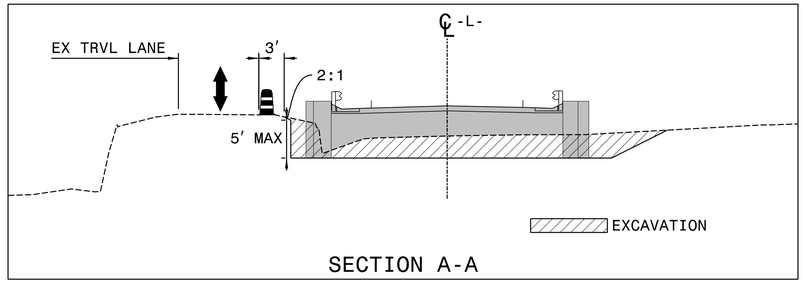
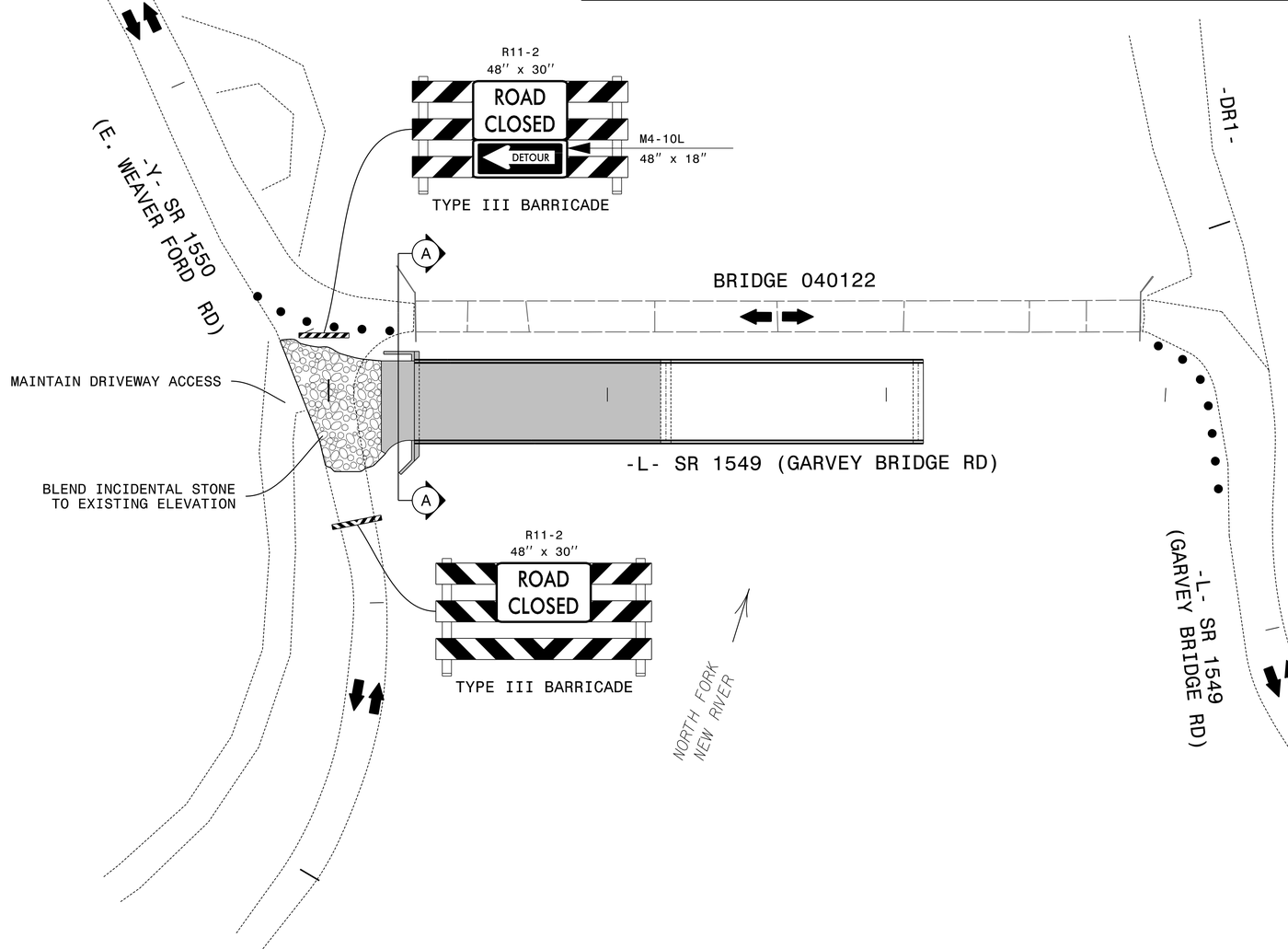


SECTION A-A



SEE TMP-2 FOR OFFSITE DETOUR

APPROVED: DocuSigned by: Kevin Bisby BDD8D2628912477...

DATE: 1/2/2024

SEAL

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

PHASE II DETAIL

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PROJ. REFERENCE NO.	SHEET NO.
17BP.11.R.131	TMP-6

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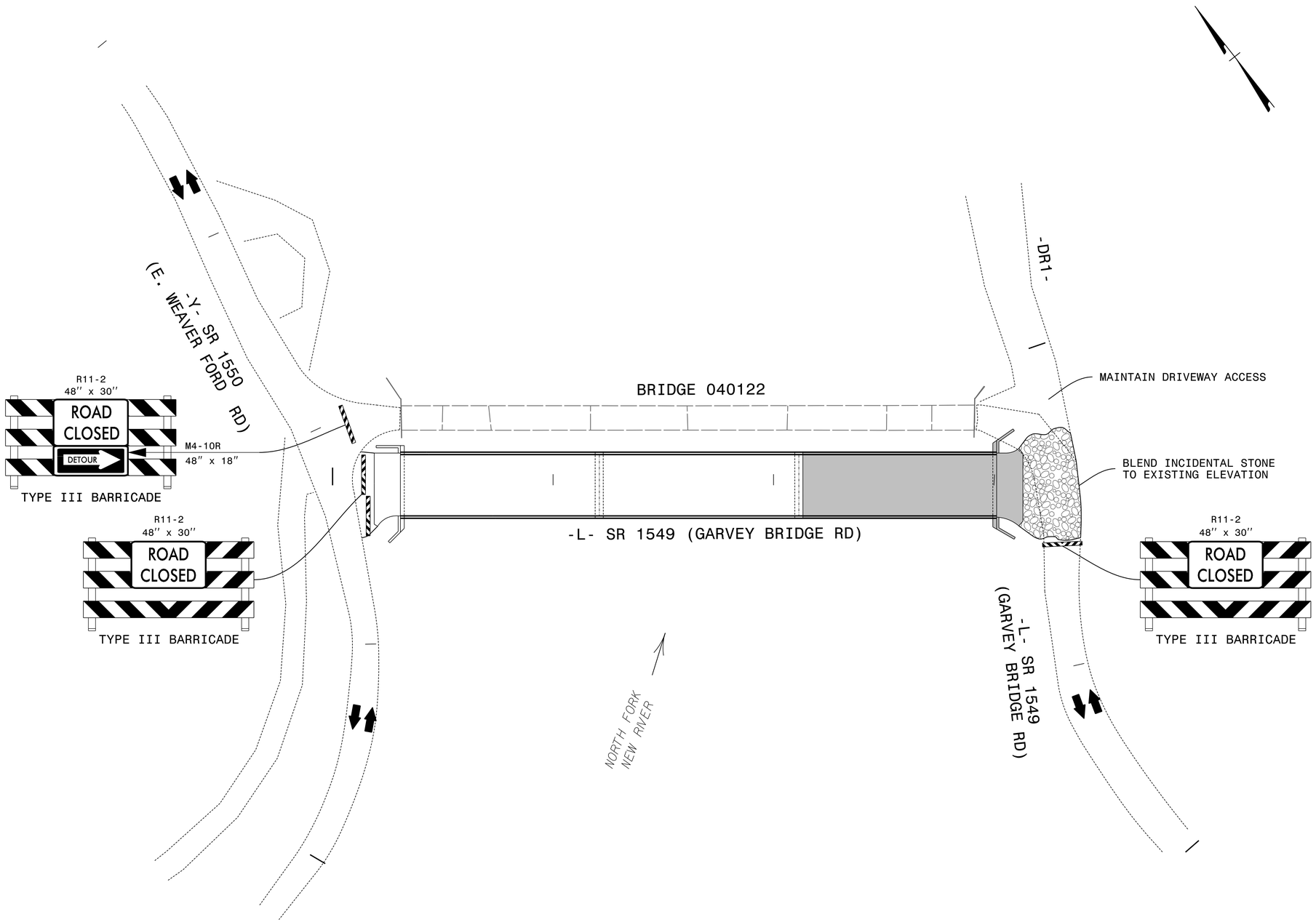

SEE TMP-2A FOR OFFSITE DETOUR

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DATE: 1/2/2024

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PHASE III DETAIL

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PROJ. REFERENCE NO.	SHEET NO.
17BP.11.R.131	TMP-7

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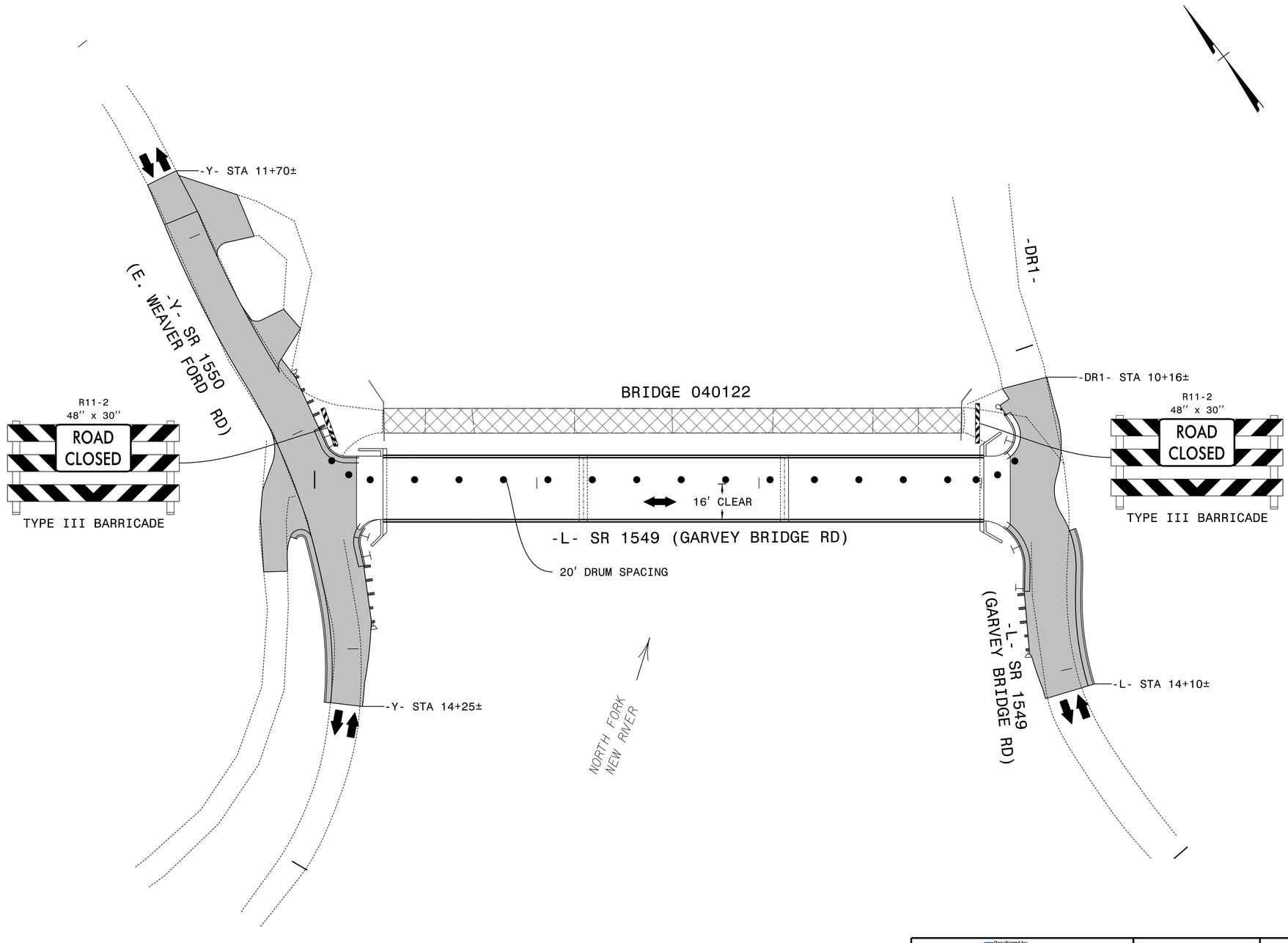

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DATE: 1/2/2024

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PHASE IV DETAIL

12/1/2023
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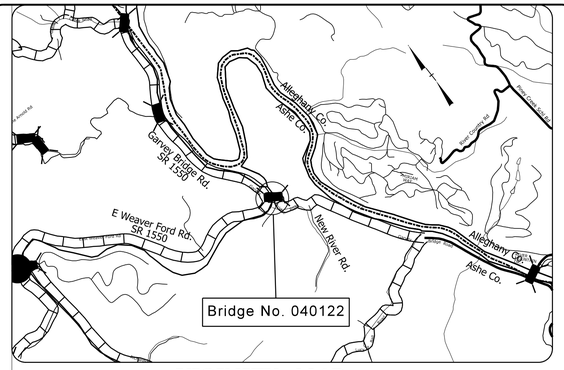
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP.11.R.131	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
17BP.11.PE.131		PE
17BP.11.ROW.131		R / W
17BP.11.R.131		CONSTRUCTION

TIP PROJECT: 17BP.11.R.131



VICINITY MAP

VICINITY MAP
NOT TO SCALE

Clearing and Grubbing Phase

Final Phase

Both Phases

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

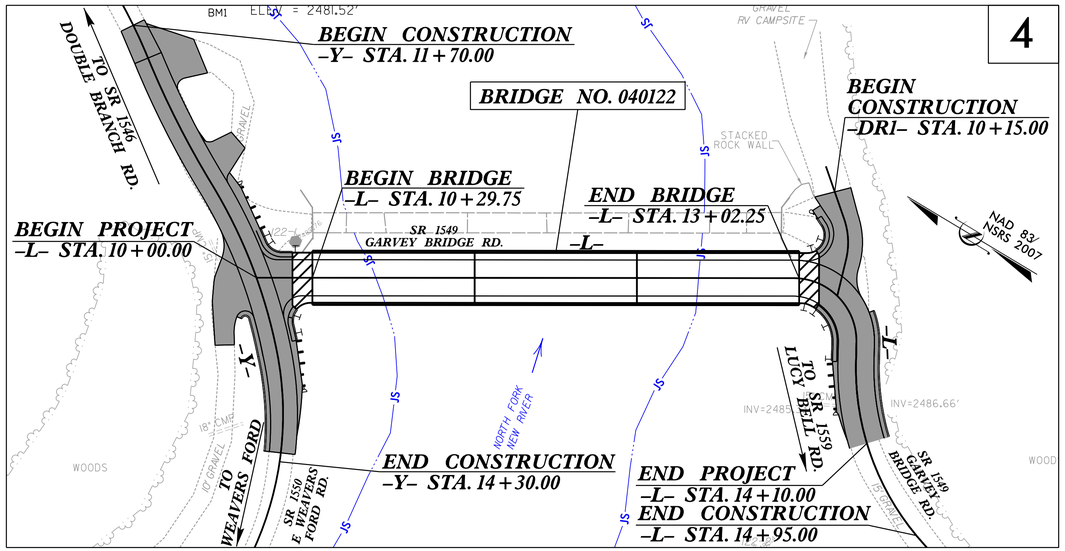
PLAN FOR PROPOSED

HIGHWAY EROSION CONTROL

ASHE COUNTY

LOCATION: BRIDGE NO. 040122 OVER NORTH FORK NEW RIVER ON SR 1549 (GARVEY BRIDGE RD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE



THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

HIGH QUALITY WATER(S) EXIST ON THIS PROJECT

High Quality Water Zone(s) Exist
From Sta. -L- 10+00, -Y- 10+91
to Sta. -L- 14+10, -Y- 14+20
Refer To E. C. Special Provisions for Special Considerations.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

Refer To E. C. Special Provisions for Special Considerations.

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

GRAPHIC SCALE

30 15 0 30 60

PLANS

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.

Prepared In the Office of:

ROADSIDE ENVIRONMENTAL UNIT

1 South Wilmington St.
Raleigh, NC 27611

2024 STANDARD SPECIFICATIONS

Designed by:

Alexis Burke, PE — *NAME*

3413 — *LEVEL III CERTIFICATION NO.*

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1/8/2024
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dgn_full

PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	EC-1A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

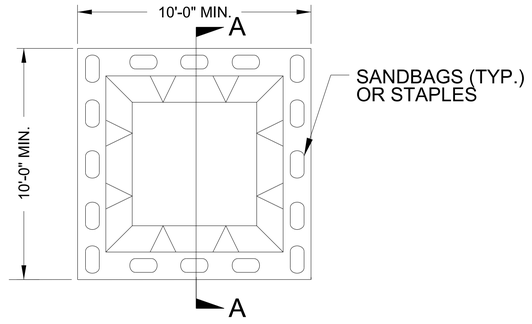
EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.04	Stilling Basin	
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C

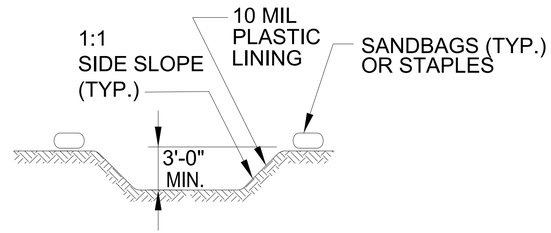
Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	A
1635.02	Rock Pipe Inlet Sediment Trap Type B	B
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	EW
	Silt Fence Coir Fiber Wattle Break	CFW
1636.03	Excelsior Wattle Barrier	EW EW EW
1636.03	Coir Fiber Wattle Barrier	CFW CFW CFW

PROJECT REFERENCE NO.	SHEET NO.
17BPJI.RJ31	EC-02
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



PLAN



SECTION A-A

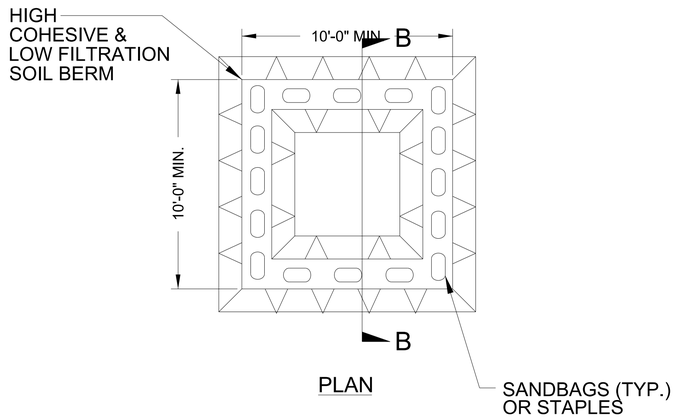
NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

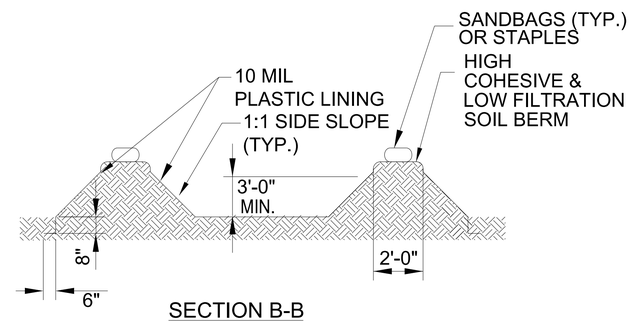
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE

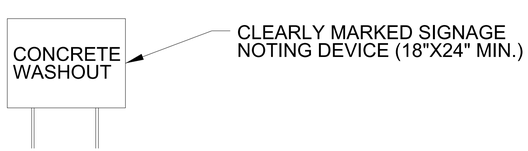
NOT TO SCALE



PLAN



SECTION B-B



NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE

12/4/2023
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aburke

PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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)
4	-Y-	11+75	12+00	RT	15
				SUBTOTAL	15
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					1,000
				TOTAL	1,015
				SAY	1,015

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-Y-	12+00	12+25	RT	20
4	-Y-	12+25	12+50	RT	15
4	-Y-	12+50	13+25	RT	45
				SUBTOTAL	80
		ADDITIONAL PSRM TO BE INSTALLED			0
				TOTAL	80
				SAY	80

COIR FIBER MATTING ON APPROACH SLOPES

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	10+43	10+65	CL	55
4	-L-	12+58	12+93	CL	125
				SUBTOTAL	180
	ADDITIONAL COIR FIBER MATTING TO BE INSTALLED				90
				TOTAL	270
				SAY	270

PROJECT REFERENCE NO.	SHEET NO.
17BPJ1.RJ31	EC-3A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (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

EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	EC-4/CONST.04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE

30 0 30 60

PLANS

NOTE: FOLLOW NCDOT BMP MANUAL FOR CONSTRUCTION ACTIVITIES FOR THE BRIDGE DEMOLITION AND CONSTRUCTION.

NOTE: REFERENCE PERMIT DRAWINGS AND IMPACTS OF WORK DUE TO WORK PADS & CAUSEWAYS. UTLIIZE IMPERVIOUS DIKES AND TURBIDITY CURTAINS AS NECESSARY IN WORK AREA.

BEGIN CONSTRUCTION
-Y- STA.11+70.00

STANDARD V DITCH
SEE DETAIL A

SP. CUT DITCH
SEE DETAIL A

-Y- PRC Sta. 11+90.29

PROP. GRAVEL
DO NOT DISTURB TREE

UTILIZE SPECIAL STILLING BASIN(S) FOR DRILLED PIERS

UTILIZE SAFETY FENCE AROUND 'DO NOT DISTURB' TREE

BANK STABILIZATION
SEE DETAIL C

CLASS II RIP RAP

REMOVE EXIST. BRIDGE

1 TONS CL B RIP RAP W/ 5 SY GEOTEXTILE
INV=2479.9

-Y- PRC Sta. 12+68.40

BEGIN PROJECT
-L- STA.10+00.00=
-Y- POC Sta. 13+26.04

SPECIAL CUT DITCH W/HINGE
SEE DETAIL D

PROP. ASPHALT
-Y- PCC Sta. 13+68.99

S 51° 52' 42.0" E

-L- PC Sta. 12+97.79

INV=2481.0

1 TONS CL B RIP RAP W/ 5 SY GEOTEXTILE

GRADE TO DRAIN

INV=2490.3

WOODS

RETAIN

END CONSTRUCTION
-Y- STA 14+30.00

-Y- PT Sta. 16+26.56

145 MILES +/-
WEAVERS FORD

N 49°43'44" E
24.84'

N 83°55'27" E
104.68'

N 05°24'33" W
72.11'

REBAR

GRAVEL
RV CAMPSITE

NORTH FORK NEW RIVER

STACKED WALL

-DRI- POT Sta.10+00.00

BEGIN CONSTRUCTION
-DRI- STA.10+15.00

S 18° 56' 52.5" W

1 TON CL B RIP RAP W/ 5 SY GEOTEXTILE
INV=2486.0

2GI-NSS

SPECIAL CUT V DITCH
SEE DETAIL B

-DRI- PC Sta.10+30.86

-DRI- PT Sta.10+53.63

S 51° 34' 12.1" W

-L- POC Sta. 13+24.76=
-DRI- POT Sta.10+74.53

-L- PT Sta. 13+53.58

S 39° 27' 04.4" W

-L- PC Sta. 13+64.26

1 TON CL B RIP RAP W/ 5 SY GEOTEXTILE
INV=2484.0

REMOVE

INV=2489.3

END PROJECT
-L- STA.14+10.00

S 30°11'03.3" E

-L- PT Sta. 14+72.08

END CONSTRUCTION
-L- STA.14+95.00

-L- POT Sta. 15+28.84

INV=2478.45

FOOTBRIDGE

30" CMP

N 18°24'33" W
260.98'

N 61°59'05" E
165.06'

GRAVEL

INV=2484.67

0.7± MILES +/-
TO SR 1559
LUCY BELL RD.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

NC GRID
NAD 83 NA 2011

RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
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EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	EC-5/CONST.04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: FOLLOW NCDOT BMP MANUAL FOR CONSTRUCTION ACTIVITIES FOR THE BRIDGE DEMOLITION AND CONSTRUCTION.

NOTE: REFERENCE PERMIT DRAWINGS AND IMPACTS OF WORK DUE TO WORK PADS & CAUSEWAYS. UTLIIZE IMPERVIOUS DIKES AND TURBIDITY CURTAINS AS NECESSARY IN WORK AREA.

GRAPHIC SCALE

30 0 30 60

PLANS

Coir Fiber Matting

BEGIN CONSTRUCTION -Y- STA.11+70.00

-Y- PRC Sta. 11+90.29

PROP. GRAVEL DO NOT DISTURB TREE

UTILIZE SAFETY FENCE AROUND 'DO NOT DISTURB' TREE

MAT SLOPES AS WORK ALLOWS

SP. CUT DITCH SEE DETAIL A

-Y- PRC Sta. 12+68.40

BEGIN PROJECT -L- STA.10+00.00= -Y- POC Sta. 13+26.04

SPECIAL CUT DITCH W/HINGE SEE DETAIL D

PROP. ASPHALT -Y- PCC Sta. 13+68.99

BANK STABILIZATION SEE DETAIL C

CLASS II RIP RAP

REMOVE EXIST. BRIDGE

1 TONS CL B RIP RAP W/ 5 SY GEOTEXTILE INV=2479.9

INV=2481.0

-L- PC Sta. 12+97.79

S 51° 52' 42.0" E

COIR FIBER MATTING

GRADE TO DRAIN

B ELBOWS INV=2490.3

END CONSTRUCTION -Y- STA 14+30.00

-Y- PT Sta. 16+26.56

1.45 MILES +/- WEAVERS FORD

SR 1550 E.WEAVER'S FORD RD.

10' GRAVEL

RETAIN

WOODS

WD

NORTH FORK NEW RIVER

PROP O/H POW & (FO) COMMUN LINES

GRAVEL RV CAMPSITE

STACKED ROCK WALL

-DRI- POT Sta.10+00.00

BEGIN CONSTRUCTION -DRI- STA.10+15.00

SPECIAL CUT V DITCH SEE DETAIL B

-DRI- PC Sta.10+30.86

-DRI- PT Sta.10+53.63

GRADE TO DRAIN S 51° 34' 12.1" W

-L- POC Sta. 13+24.76= -DRI- POT Sta.10+74.53

-L- PT Sta. 13+53.58

S 39° 27' 04.4" W

-L- PC Sta. 13+64.26

1 TON CL B RIP RAP W/ 5 SY GEOTEXTILE INV=2484.0

INV=2485.1

INV=2489.3

SR1549 (UNPAVED) #107-35

DUKE REMC 50-12-055

-L- PT Sta. 14+72.08

END CONSTRUCTION -L- STA.14+95.00

-L- POT Sta. 15+28.84

END PROJECT -L- STA.14+10.00

S 3.09'10.3" E

0.74 MILES +/- TO SR 1559 LUCY BELL RD.

15' GRAVEL

GRAVEL DRIVE SR 1549

WD FOOTBRIDGE

48" WW & ISBW

15' R

N 83°55'27" E 104.68'

N 49°43'44" E 24.84'

N 18°24'33" W 260.98'

N 05°24'33" W 72.11'

N 61°39'05" E 165.06'

REBAR

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P: (919) 878-9560
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1/2/2024
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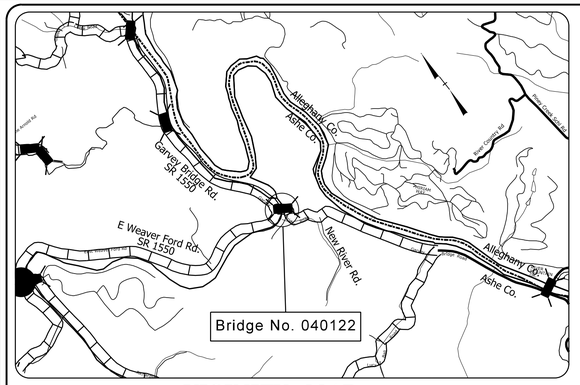
PROJECT: 17BP.11.R.131

BRIDGE NO. 040122



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

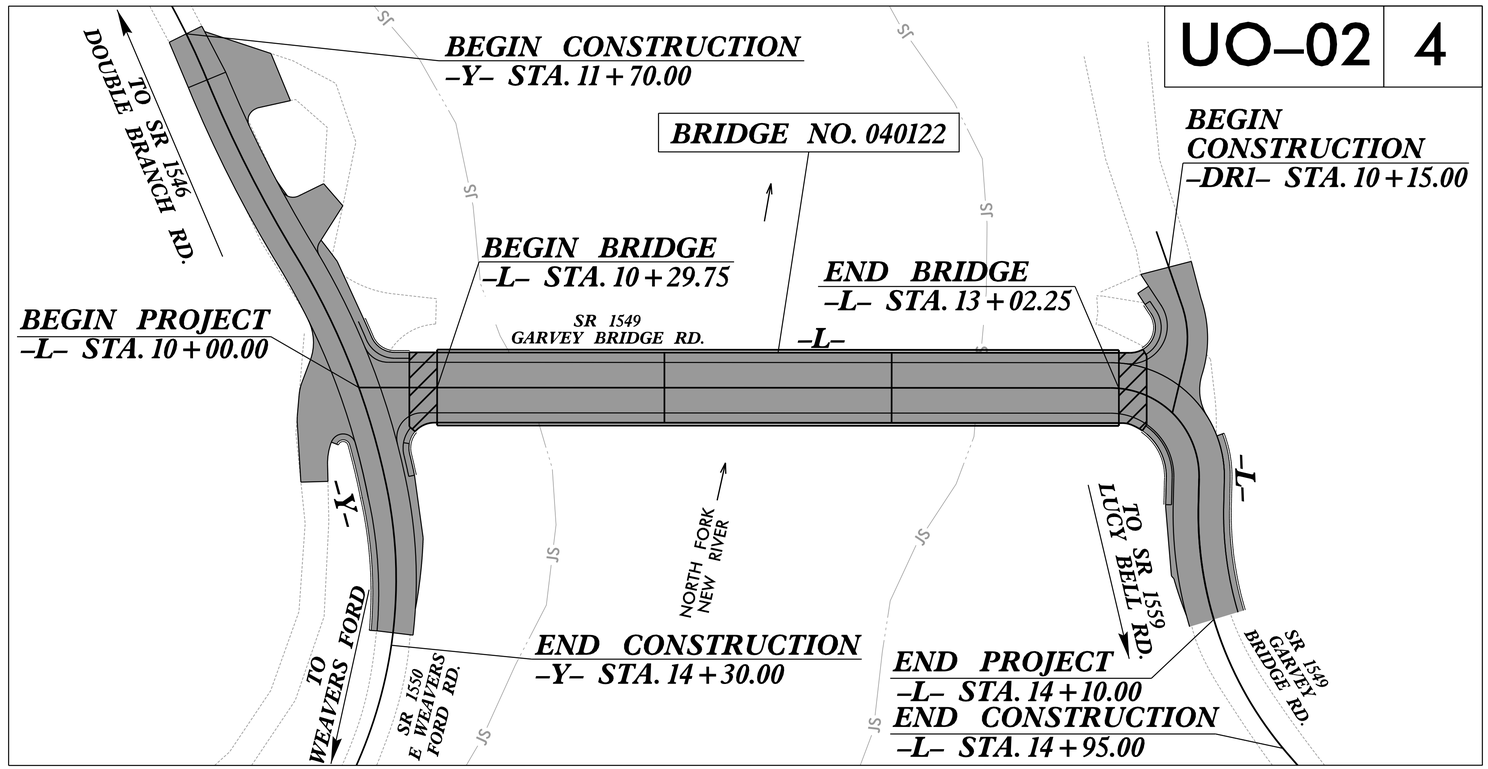
UTILITIES BY OTHERS PLANS
ASHE COUNTY

PROECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	UO–1

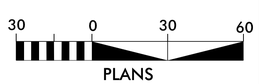
NOTE:
ALL UTILITY WORK SHOWN ON THIS SHEET IS DONE BY OTHERS.
NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.

LOCATION: BRIDGE NO. 040122 OVER NORTH FORK NEW RIVER ON SR 1549 (GARVEY BRIDGE RD)

TYPE OF WORK: AERIAL POWER AND TELECOMMUNICATIONS



GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UO–1	TITLE SHEET
UO–2	UBO PLAN SHEET

UTILITY OWNERS WITH CONFLICTS

(A) BLUE RIDGE EMC – POWER (DIST)
(B) SKYLINE TELECOMMUNICATIONS – TELEPHONE, F/O

PREPARED IN THE OFFICE OF:

RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
NC License No. F-0112
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RICHY NARRON	UTILITY PROJECT MANAGER
MARK LAWSON	PROJECT UTILITY COORDINATOR
MARK LAWSON	PROJECT UTILITY CADD

DIVISION OF HIGHWAYS
DIVISION 11
801 STATESVILLE ROAD
NORTH WILKESBORO, NC 28659

BRANDON GREER	DIVISION CONTACT #1
SUSAN O. HUFFMAN	DIVISION CONTACT #2
ROB N. WEISZ, PE	DIVISION CONTACT #3
	DIVISION CONTACT #4

1/8/2024
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default

8/17/99

DIV11 – BRIDGE 040122 – ASHE COUNTY

PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.131	UO-2
THIS SHEET CORRESPONDS TO RDY-04	

UTILITIES BY OTHERS

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.

GRAPHIC SCALES

30 0 30 60

PLANS

NAD 83 (NSRS 2007)

EXISTING POLE TO REMAIN

STANDARD V DITCH SEE DETAIL A

NEW

NEW AERIAL BLUE RIDGE EMC POWER AND SKYLINE TELECOMMUNICATIONS

NEW BLUE RIDGE EMC GUY INTO SIDE OF SLOPE NO CLEARANCE ISSUE FOR DRIVEWAY ENTRANCE

NEW

NEW AERIAL BLUE RIDGE EMC POWER AND SKYLINE TELECOMMUNICATIONS

EXISTING POLE TO REMAIN

NEW AERIAL BLUE RIDGE EMC POWER AND SKYLINE TELECOMMUNICATIONS

EXISTING POLE TO REMAIN

EXISTING POLE TO REMAIN

EXISTING POLE TO REMAIN

EXISTING POLE TO REMAIN

SPECIAL CUT V DITCH SEE DETAIL B

SPECIAL CUT DITCH W/HINGE SEE DETAIL D

NEW

NOTE:

1. ALL EXISTING AERIAL POWER AND UNDERGROUND TELECOMMUNICATIONS ROUTING/CONNECTIVITY PROVIDED BY; BLUE RIDGE EMC, SKYLINE AND GOOGLE EARTH

UTILITY OWNERS ON THIS SHEET

BLUE RIDGE EMC – POWER (DIST)
SKYLINE TELEPHONE – TELEPHONE /FIBER OPTIC

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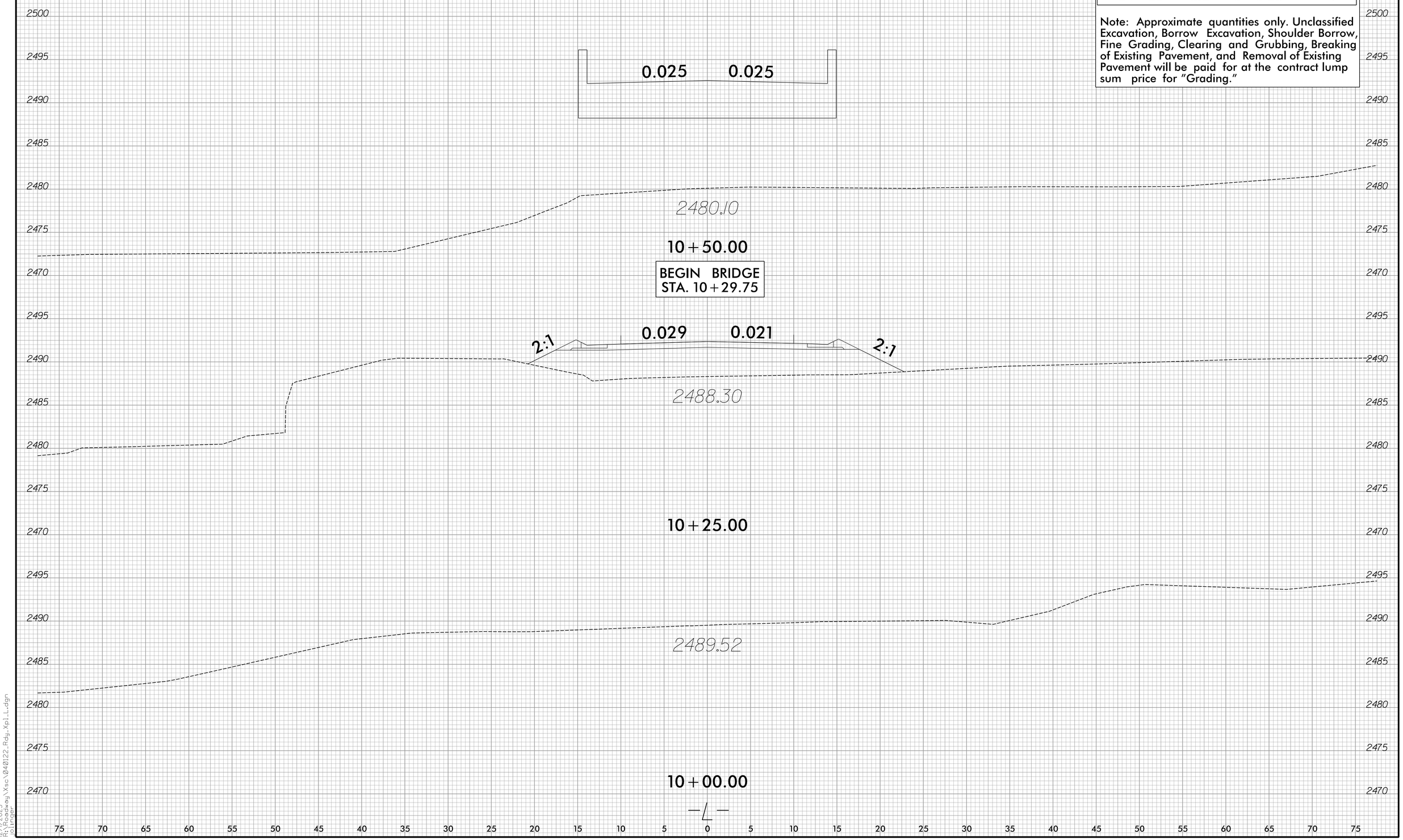
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-1

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Shoulder Borrow, Fine Grading, Clearing and Grubbing, Breaking of Existing Pavement, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."



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8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-2

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2500
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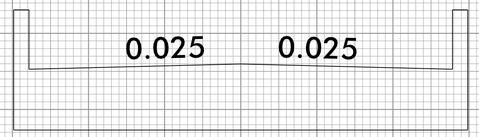
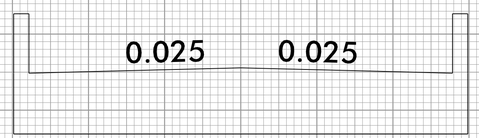


2470.74

11+00.00



2471.96

10+75.00

—L—

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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-3

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2500
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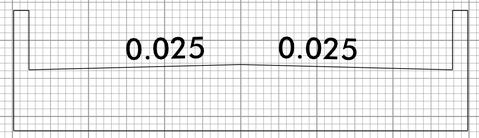
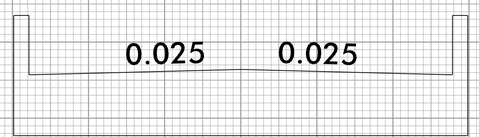


2469.01

11+50.00



2470.50

11+25.00

—L—

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jlonger

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-4

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2500
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0.025 0.025

2470.99

12+00.00

2500
2495
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2475
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0.025 0.025

2469.25

11+75.00

-L-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

12/1/2023
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jlonger

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-5

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2500 2495 2490 2485 2480 2475

0.025 0.025

2480.36

12+75.00

0.025 0.025

2475.93

12+50.00

0.025 0.025

2471.22

12+25.00

—L—

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-6

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2545 2540 2535 2530 2525 2520 2515 2510 2505 2500 2495 2490 2485 2480 2475 2470 2495 2490 2485 2480

4:1

0.025 0.025

2490.38

2:1

END BRIDGE
STA. 13+02.25

13+25.00

0.025 0.025

2486.52

13+00.00

—℄—

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-7

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0.025

2:1

2490.01

13+50.00

—℄—

12/1/2023
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75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-8

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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2:1 0.025 0.025 2:1

2489.81

13+75.00

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12/1/2023
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tlinger

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-9

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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2:1 0.041 0.019 2:1

2489.99

14+00.00

—L—

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-10

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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2490.34

14+25.00

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6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-11

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2505
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2481.21

11+25.00

2480.90

11+00.00

-Y-

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ISUtopia

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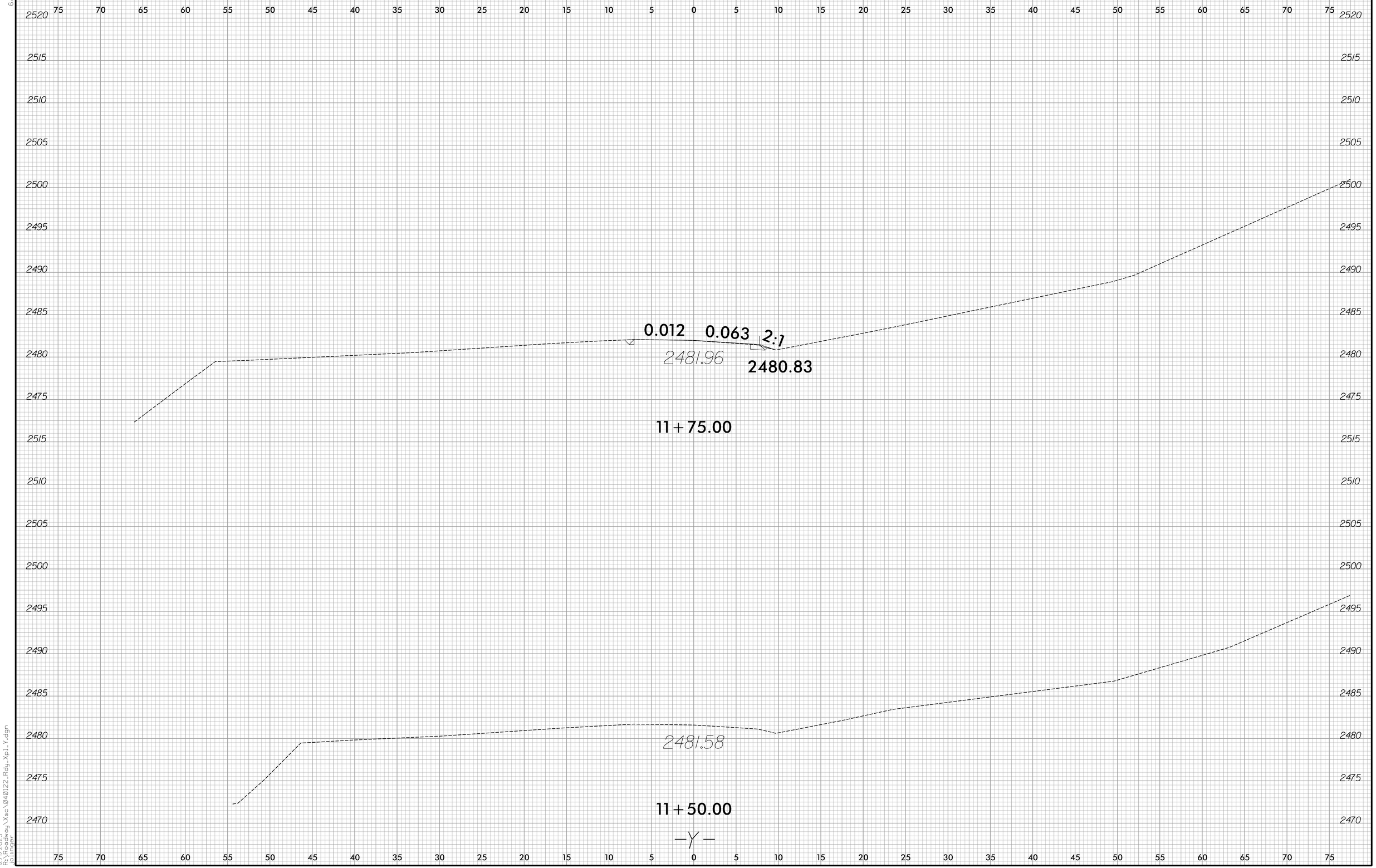
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-12



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tlinger

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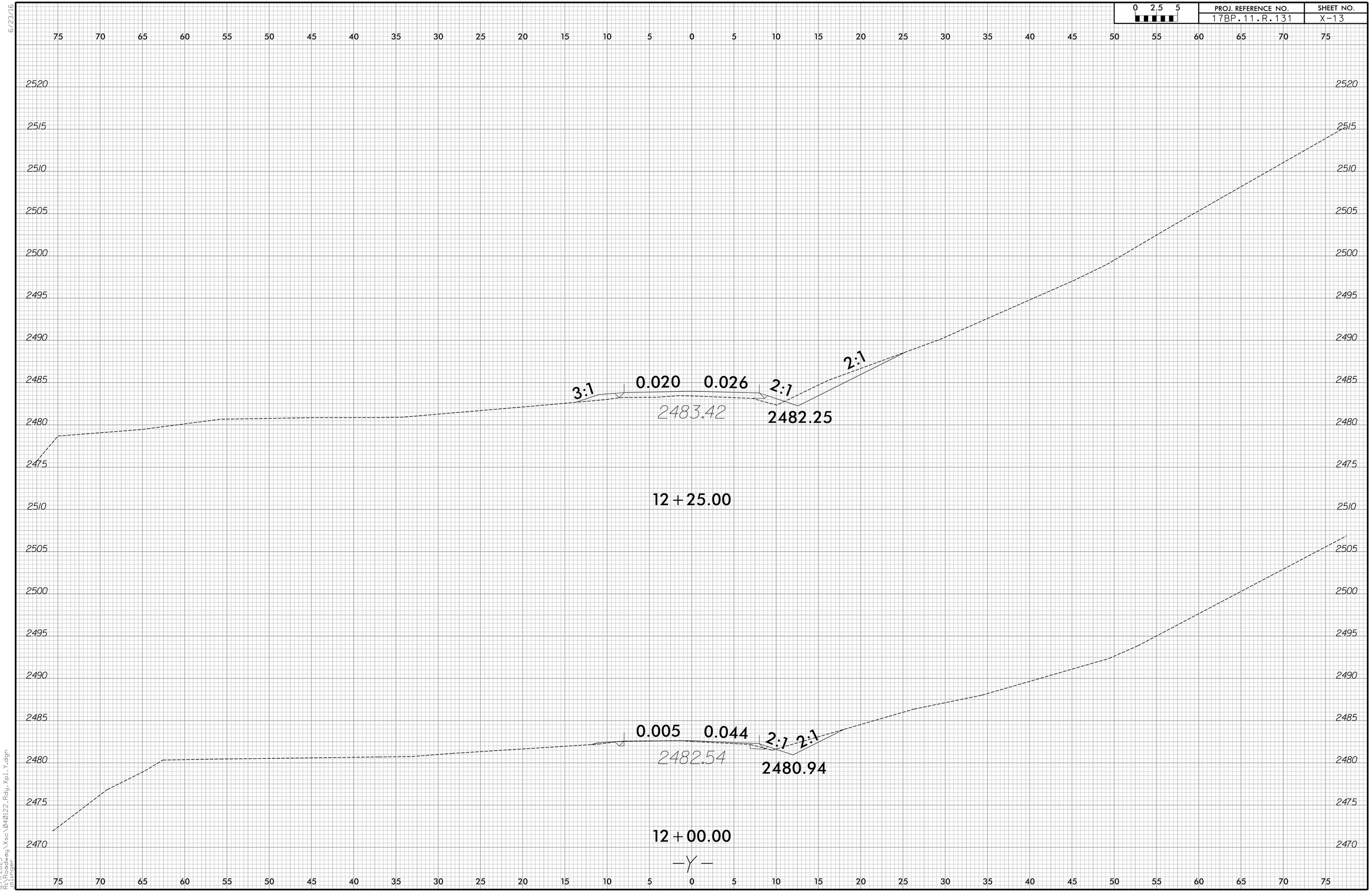
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-13



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hilmar

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-14

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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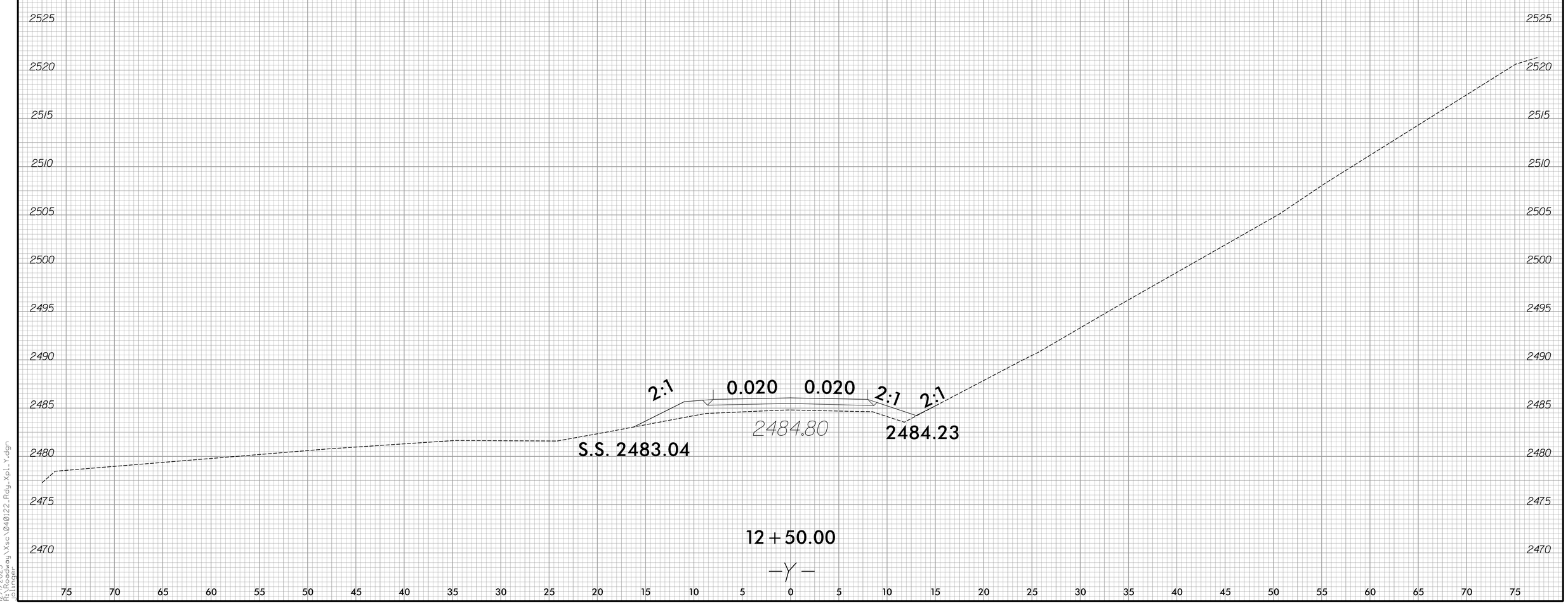

12+50.00

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Hillmer

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-15

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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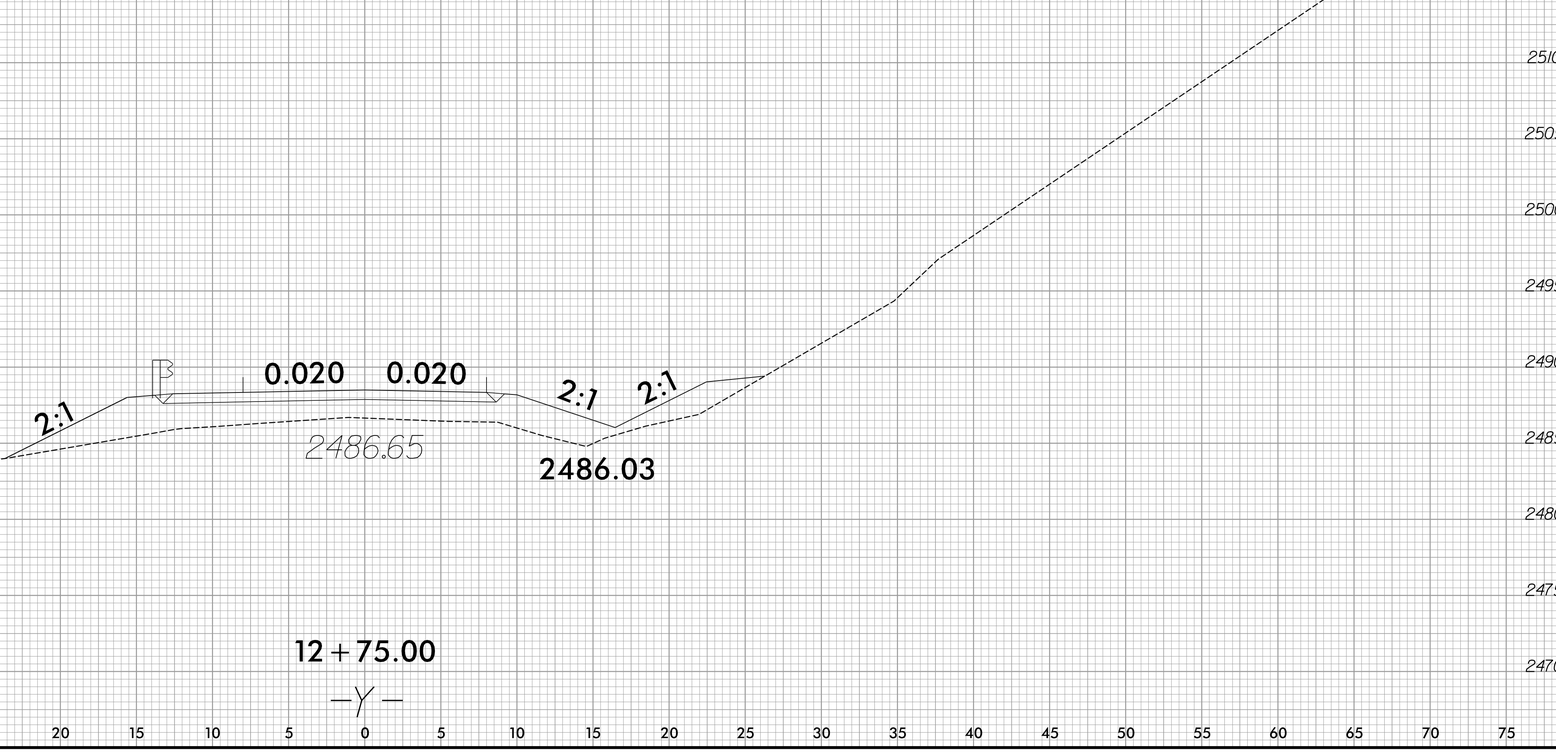

12+75.00

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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-16

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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0.020 0.020
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2:1
2:1
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0.1 FT/FT
2488.41
2487.82

13+00.00
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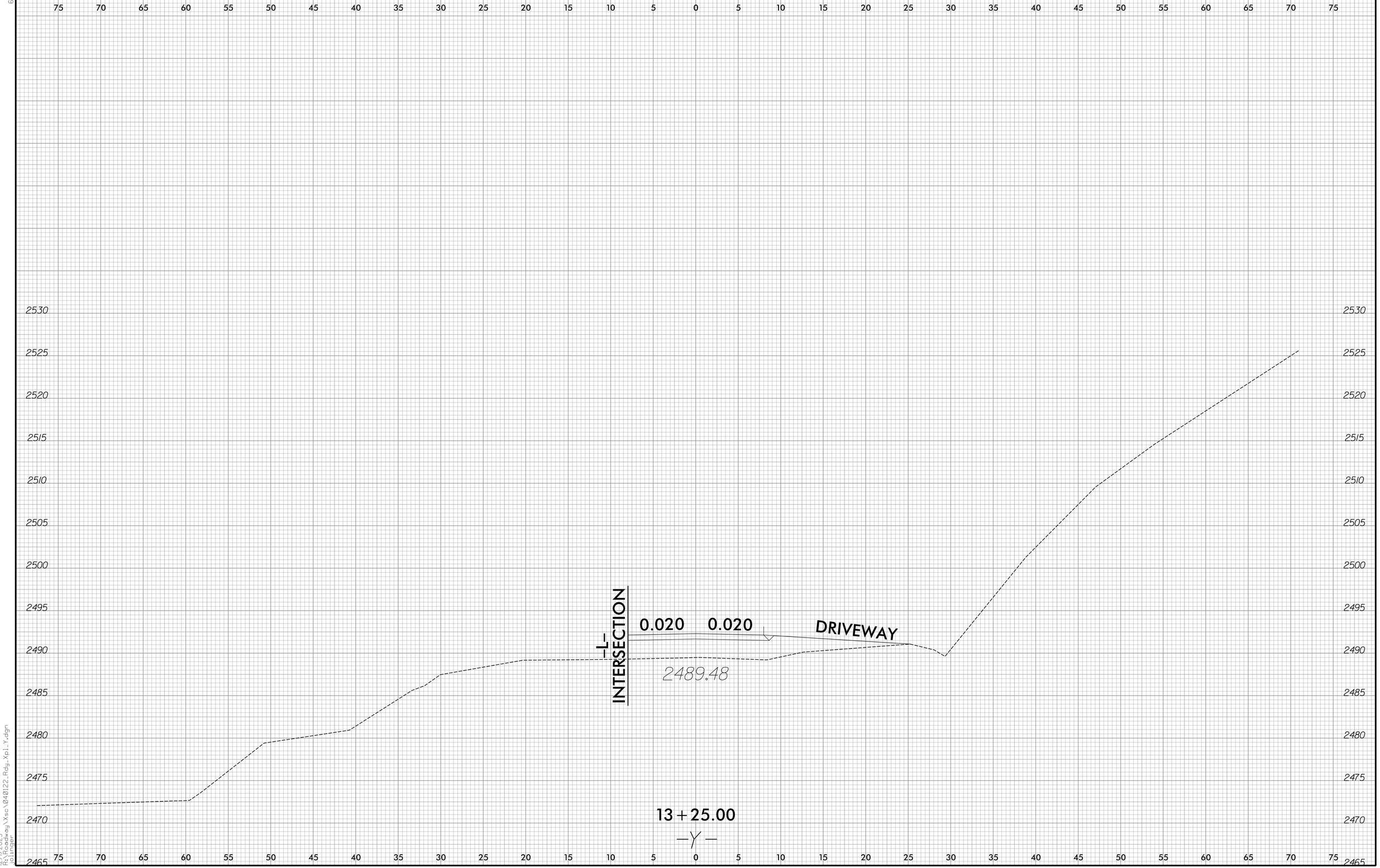
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-17



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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-18

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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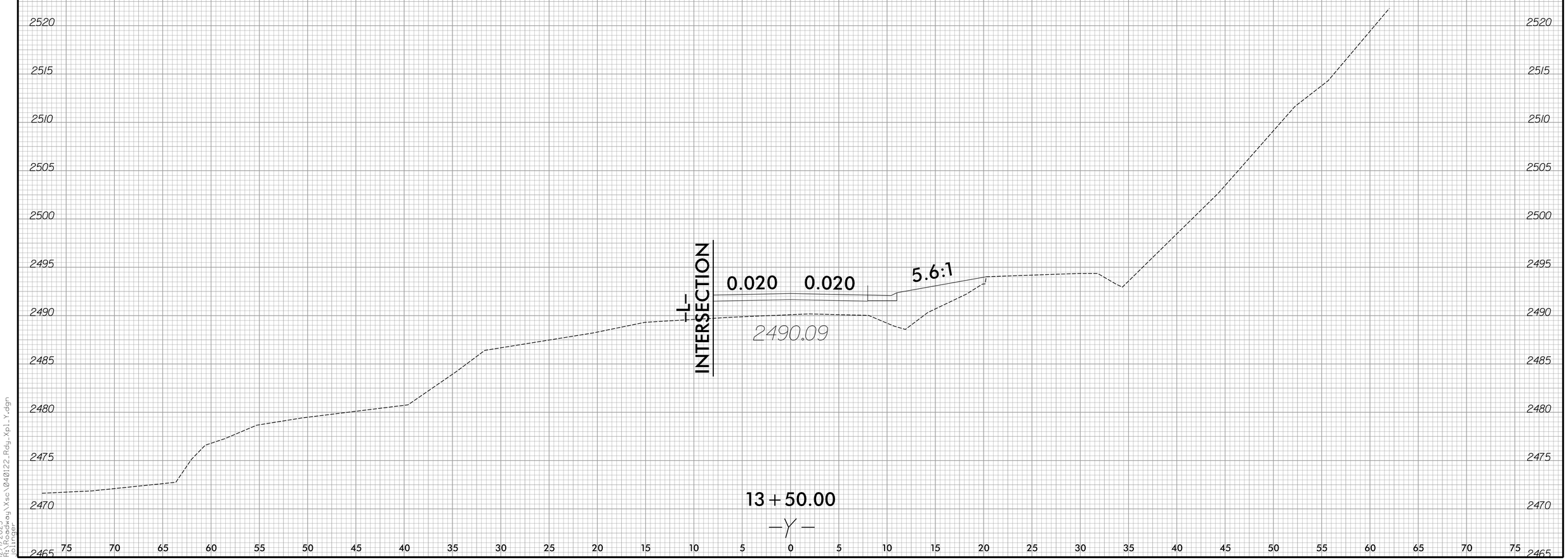

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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-19

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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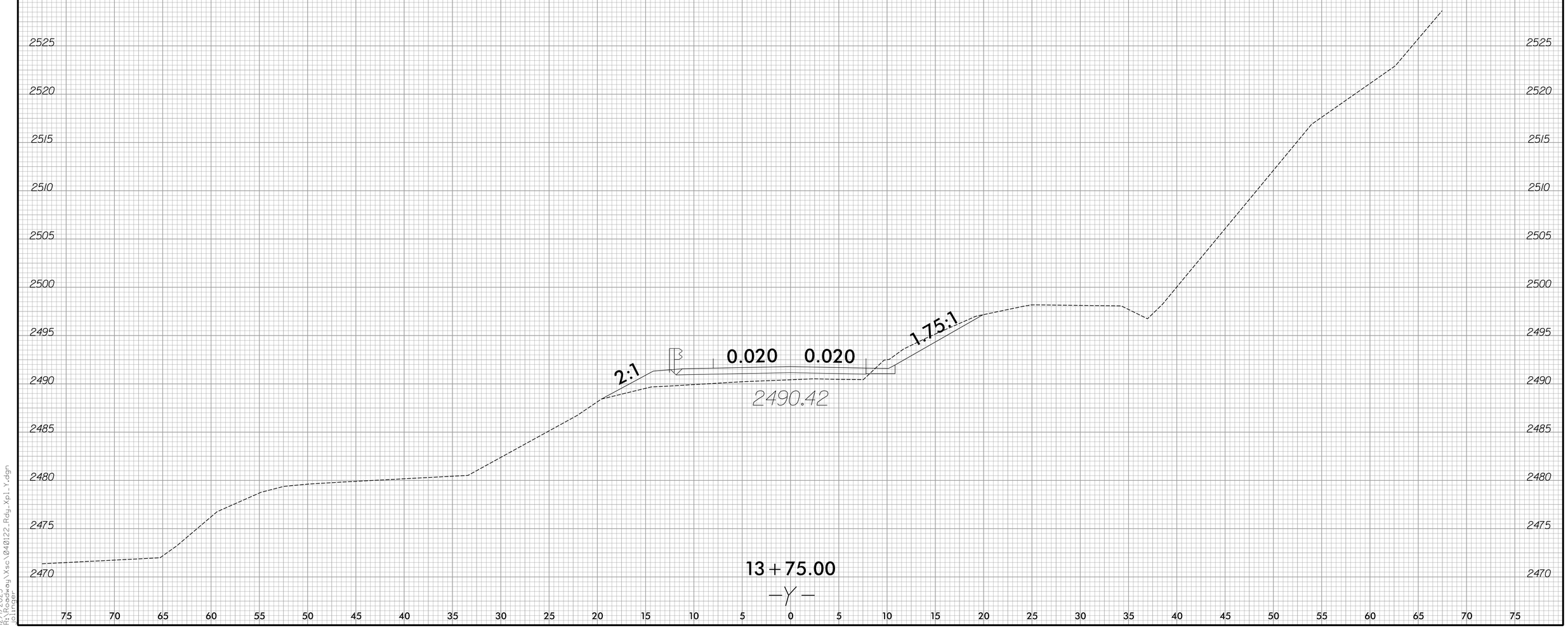

13+75.00

-Y-

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-20

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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2490.83

14+00.00

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75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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hilmarz

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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-21

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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2491.26

14+25.00

—Y—

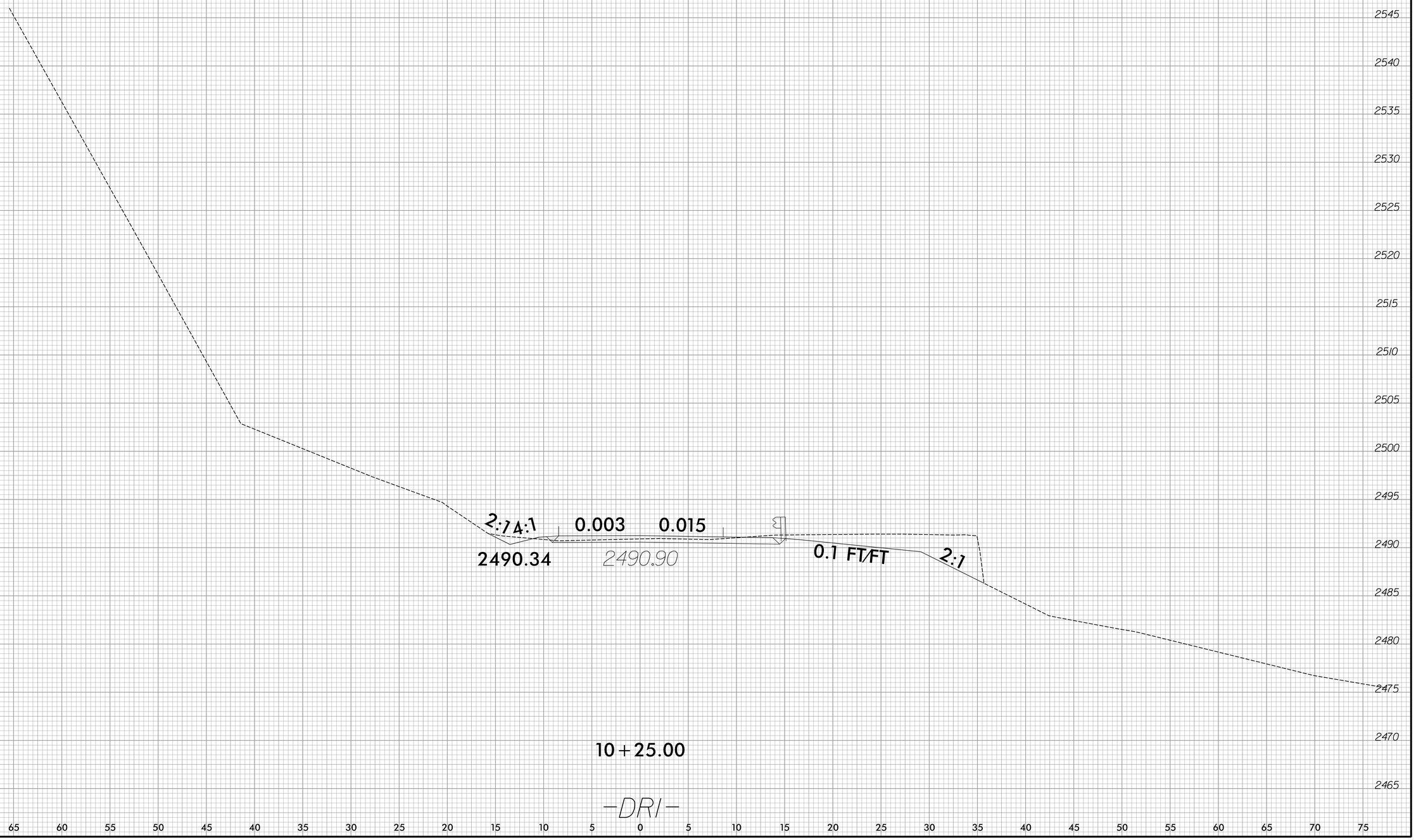
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	17BP.11.R.131	X-22

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

2550 2545 2540 2535 2530 2525 2520 2515 2510 2505 2500 2495 2490 2485 2480 2475 2470 2465



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0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
17BP.11.R.131	X-23

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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2490.52

2491.14

0.1 FT/FT 2:1

10+50.00

-DRI-

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