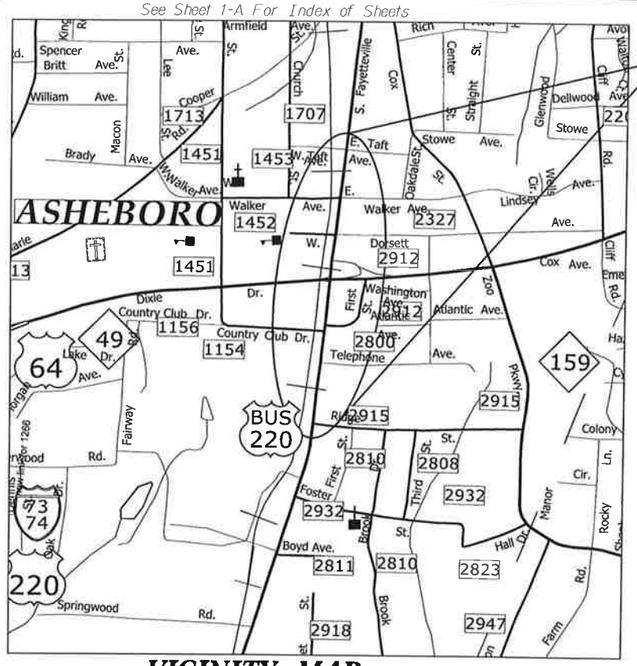
TIP PROJECT: U-6007 PROJECT: US 220 BUS.

See Sheet 1-A For Index of Sheets



VICINITY MAP

PROJECT LOCATION

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

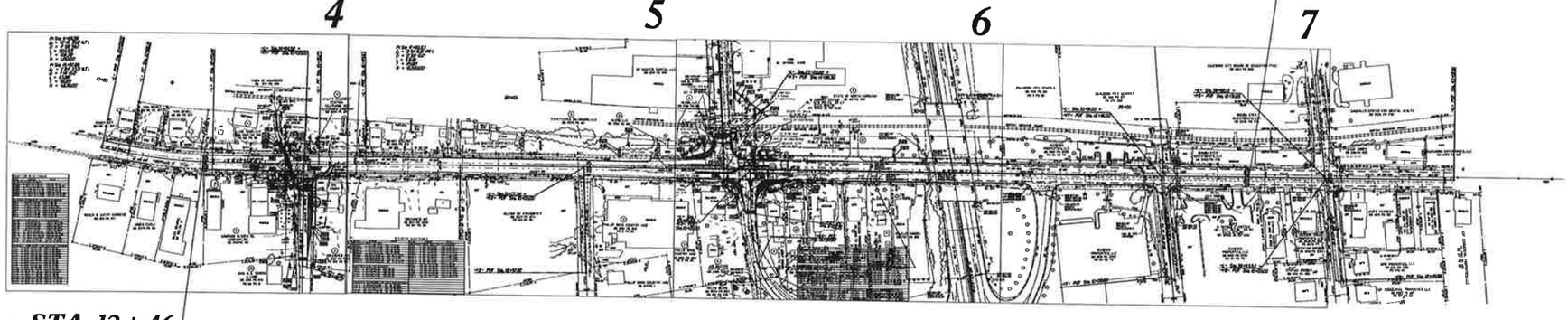
RANDOLPH COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6007	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
47142.1.1		PE
47142.2.1		RW
47142.3.1		CONST

LOCATION: US 220 BUS. (FAYETTEVILLE ST) FROM SR 2915 (RIDGE RD) TO WALKER AVE.

TYPE OF WORK: GRADING, PAVING, AND THERMOPLASTIC MARKINGS & MARKERS



–L– STA. 38+03
END PROJECT U-6007

–L– STA. 12+46
BEGIN PROJECT U-6007

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

30 0 30 60
PLANS

DESIGN DATA

ADT 2022	=	16483
ADT 2045	=	20083
K	=	9 %
D	=	55 %
T	=	3 % *
V	=	40 MPH

* (TTST 1 + 2)

FUNC CLASS =
OTHER PRINCIPAL ARTERIAL

Prepared In the Office of:
DIVISION OF HIGHWAYS
DIVISION 8 DESIGN & CONSTRUCT UNIT
121 DOT DRIVE
CARTHAGE NC 28327
PLANS PREPARED BY: MRT

PROJECT LENGTH
ROADWAY: 0.64 MILES
STRUCTURE: ____ MILES
TOTAL: 0.64 MILES

DIVISION OF HIGHWAYS

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: APRIL 5, 2019

LETTING DATE: MAY 28, 2024

HYDRAULICS ENGINEER
Docu Signed by: Galen Cail 02/23/2024
GALEN CAIL, P.E.
SIGNATURE:

DIVISION PROJECT ENGINEER
Docu Signed by: Greg S. Davis 02/23/2024
GREG S. DAVIS, P.E.
SIGNATURE:

DIVISION 8

23-FEB-2024 09:32
z:\rdy\randolph\U-6007_220bus\psh\U-6007_220bus_tsh.dgn
gsdavis AT DIV08-3300721

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-6007	1-A

DocuSigned by: Greg Davis 3300750F0F4A8...

SEAL 26930 ENGINEER GREG L. DAVIS

01/29/2024

DIVISION PROJECT ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INDEX OF SHEETS

GENERAL NOTES

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE THE PROPER TIE-IN.

CLEARING

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

SHOULDER CONSTRUCTION:

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

UTILITIES

ANY RELOCATION OF EXISTING UTILITIES, NOT INCLUDED IN UTILITY CONSTRUCTION PLANS WILL BE ACCOMPLISHED BY OTHERS PRIOR TO THE DATE OF AVAILABILITY.

2024 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 16, 2024 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
200.03	Method of Clearing – Method III
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
560.01	Method of Shoulder Construction – High Side of Superelevated Curve – Method I
560.02	Method of Shoulder Construction – High Side of Superelevated Curve – Method II
654.01	Pavement Repairs
840.02	Concrete Catch Basin – 12" thru 54" Pipe
840.03	Frames, Grate and Hood – for Use on Standard Catch Basin
840.25	Anchorage for Frames – Brick, Concrete, or Precast
840.34	Traffic Bearing Junction Box – for Use with Pipes 42" and Under
840.54	Manhole Frame and Cover
840.72	Pipe Collar
846.01	Concrete Curb, Gutter and Curb & Gutter

29-JAN-2024 15:25
d:\d-d\jcarpenter\u-6007_220bus\psh\indexofshts_psh.dgn
$$USER: JCARPENTER

9/10/2021

PROJECT REFERENCE NO.	SHEET NO.
U-6007	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)
- Computed Property Corner
- Existing Concrete Monument (ECM)
- Parcel/Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Existing Historic Property Boundary
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

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

RAILROADS:

- Standard Gauge
- RR Signal Milepost
- Switch
- RR Abandoned
- RR Dismantled

RIGHT OF WAY & 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
- Existing Control of Access Line
- Proposed Control of Access Line
- Proposed ROW and CA Line
- 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

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut
- Proposed Slope Stakes Fill
- Proposed Curb Ramp
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert
- Bridge Wing Wall, Head Wall and End Wall

MINOR:

- Head and End Wall
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB
- Paved Ditch Gutter
- Storm Sewer Manhole
- Storm Sewer

UTILITIES:

** 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 Manhole
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- U/G Power Line Test Hole (SUE – LOS A)*
- U/G Power Line (SUE – LOS B)*
- U/G Power Line (SUE – LOS C)*
- U/G Power Line (SUE – LOS D)*

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole
- Telephone Pedestal
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole
- U/G Telephone Test Hole (SUE – LOS A)*
- U/G Telephone Cable (SUE – LOS B)*
- U/G Telephone Cable (SUE – LOS C)*
- U/G Telephone Cable (SUE – LOS D)*
- U/G Telephone Conduit (SUE – LOS B)*
- U/G Telephone Conduit (SUE – LOS C)*
- U/G Telephone Conduit (SUE – LOS D)*
- U/G Fiber Optics Cable (SUE – LOS B)*
- U/G Fiber Optics Cable (SUE – LOS C)*
- U/G Fiber Optics Cable (SUE – LOS D)*

WATER:

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

TV:

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

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line Test Hole (SUE – LOS A)*
- U/G Gas Line (SUE – LOS B)*
- U/G Gas Line (SUE – LOS C)*
- U/G Gas Line (SUE – LOS D)*
- Above Ground Gas Line

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line
- Above Ground Sanitary Sewer
- SS Force Main Line Test Hole (SUE – LOS A)*
- SS Force Main Line (SUE – LOS B)*
- SS Force Main Line (SUE – LOS C)*
- SS Force Main Line (SUE – LOS D)*

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box
- Utility Unknown U/G Line (SUE – LOS B)*
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc.
- 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.
U-6007	2
R/W SHEET NO.	

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

Docusigned by: Greg Davis 5307A705F0784A8...

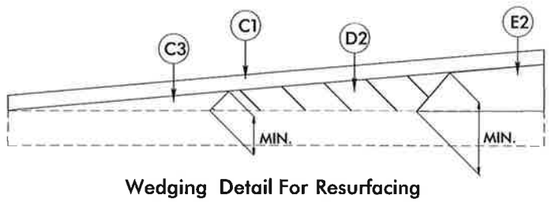
01/29/2024

DIVISION PROJECT ENGINEER

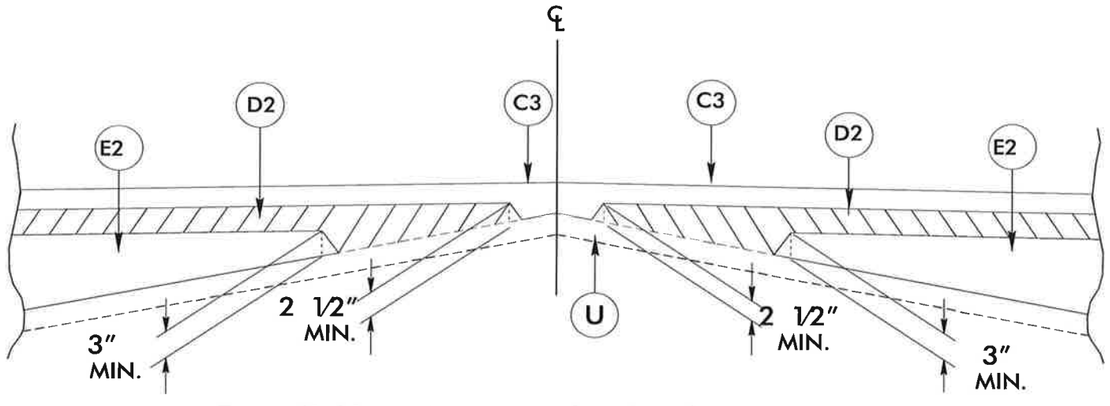
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	R1	5" MONOLITHIC CONCRETE ISLAND. (KEYED IN)
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. PER 11#2" DEPTH. TO BE PLACED IN TWO LAYERS.	R2	2'-6" CONCRETE CURB AND GUTTER
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1½" IN DEPTH.	T	EARTH MATERIAL.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	U	EXISTING PAVEMENT.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2¼" IN DEPTH OR GREATER THAN 4" IN DEPTH.	V1	MILLING BITUMINOUS PAVEMENT. 1½" DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	V2	MILLING BITUMINOUS PAVEMENT. 1½" TO 3" IN DEPTH.
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 51#2" IN DEPTH.	W	WEDGING OF EXISTING PAVEMENT (SEE WEDGING DETAIL)

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



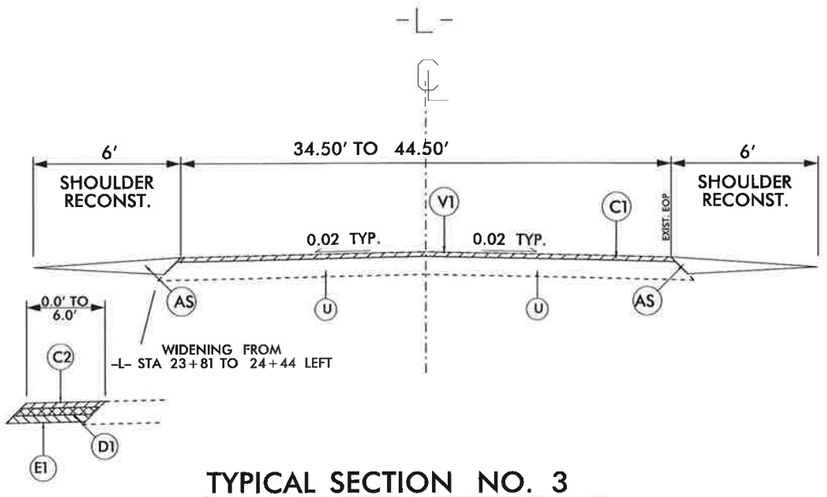
Wedging Detail For Resurfacing



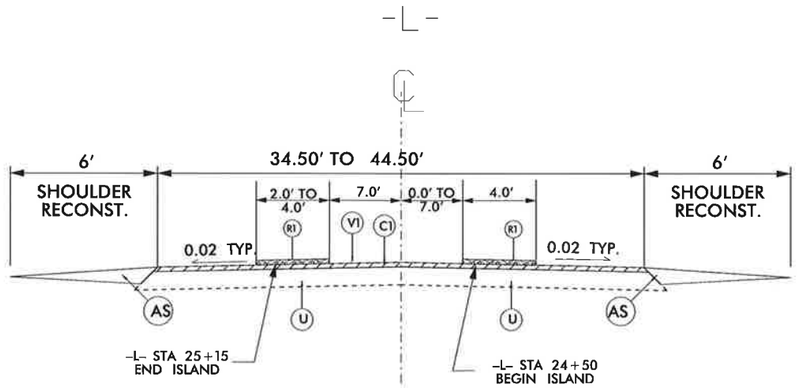
Detail Showing Method of Wedging

8/17/99

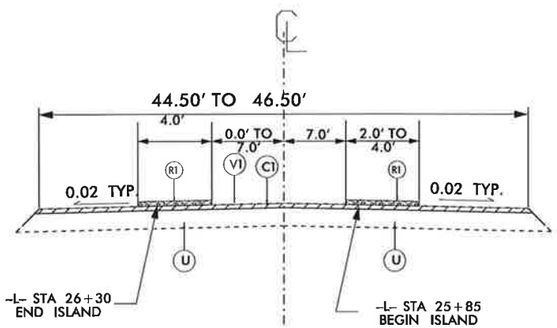
TYPICAL SECTION NO. 1
–L– STA. 12+46 TO 23+85.64



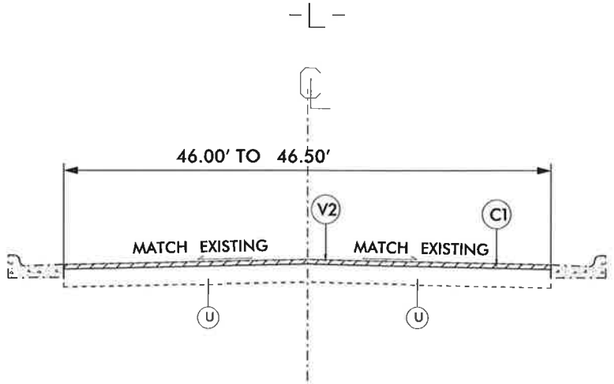
TYPICAL SECTION NO. 2
–L– STA. 23+85.64 TO 25+51.19



TYPICAL SECTION NO. 3
–L– STA. 25+51.19 TO 26+70.97



TYPICAL SECTION NO. 4
–L– STA. 26+70.97 TO 38+03



NOTE: CONTRACTOR SHALL MILL 1.5" BELOW THE GUTTER AND RESURFACE FLUSH.

PROJECT REFERENCE NO.	SHEET NO.
U-6007	2-A
R/W SHEET NO.	

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

Digitally Signed by: Greg Davis

01/29/2024

DIVISION PROJECT ENGINEER

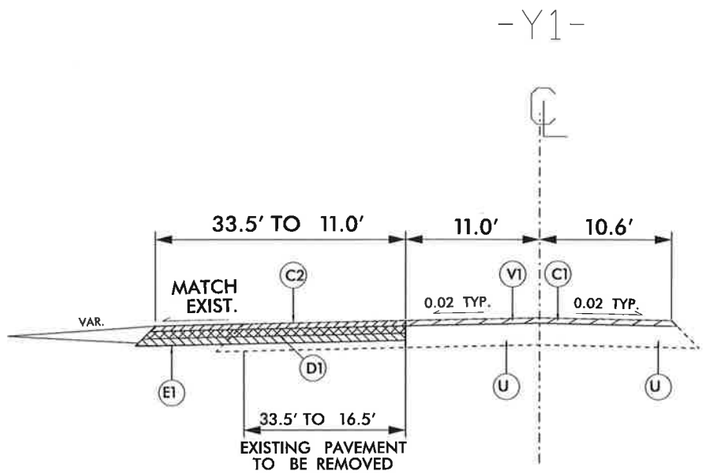
PAVEMENT SCHEDULE

C1	1½" S9.5C
C2	3" S9.5C
C3	VAR. S9.5C
D1	4" I19.0C
D2	VAR. I19.0C
E1	4" B25.0C
E2	VAR. B25.0C
R1	5" MCI (KI)
R2	2'-6" C & G
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1½" MILLING
V2	1½" TO 3" MILLING
W	VAR. WEDGING

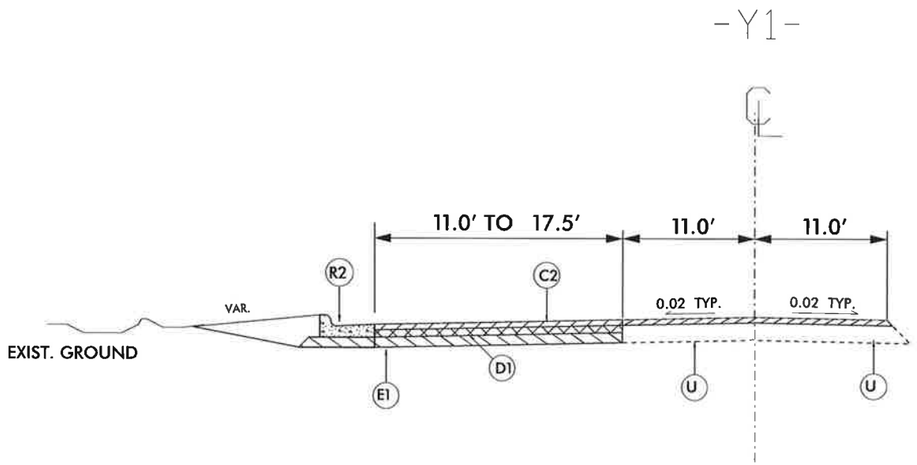
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

8/17/99

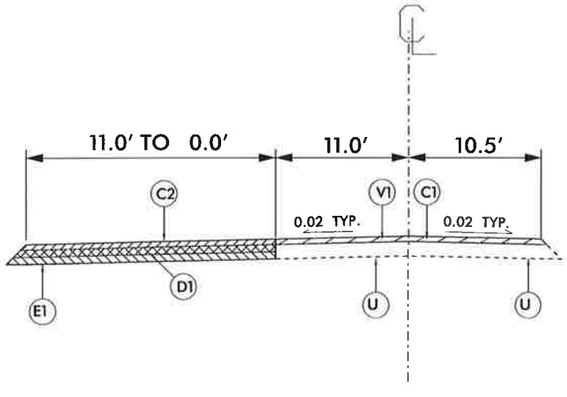
TYPICAL SECTION NO. 5
–Y1– STA. 10+20 TO 10+71.10



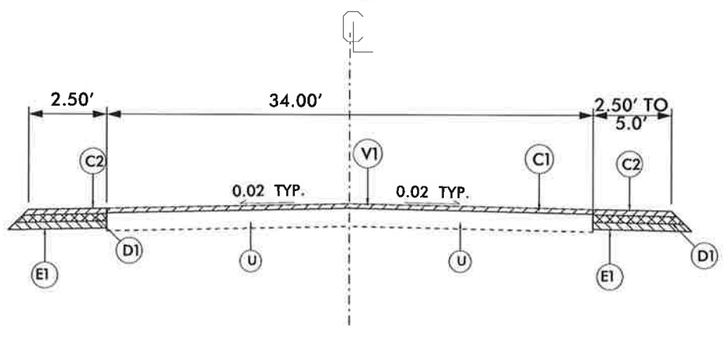
TYPICAL SECTION NO. 6
–Y1– STA. 10+71.10 TO 11+17.76



TYPICAL SECTION NO. 7
–Y1– STA. 11+17.76 TO 12+35



TYPICAL SECTION NO. 8
–Y3– STA. 14+10 TO 14+22 LEFT
–Y3– STA. 14+10 TO 14+17.55 RIGHT



PROJECT REFERENCE NO.	SHEET NO.
U-6007	2-B
R/W SHEET NO.	

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

Docusigned by: Greg Davis

01/29/2024

DIVISION PROJECT ENGINEER

PAVEMENT SCHEDULE

C1	1½" S9.5C
C2	3" S9.5C
C3	VAR. S9.5C
D1	4" I19.0C
D2	VAR. I19.0C
E1	4" B25.0C
E2	VAR. B25.0C
R1	5" MCI (KI)
R2	2'-6" C & G
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1½" MILLING
W	VAR. WEDGING

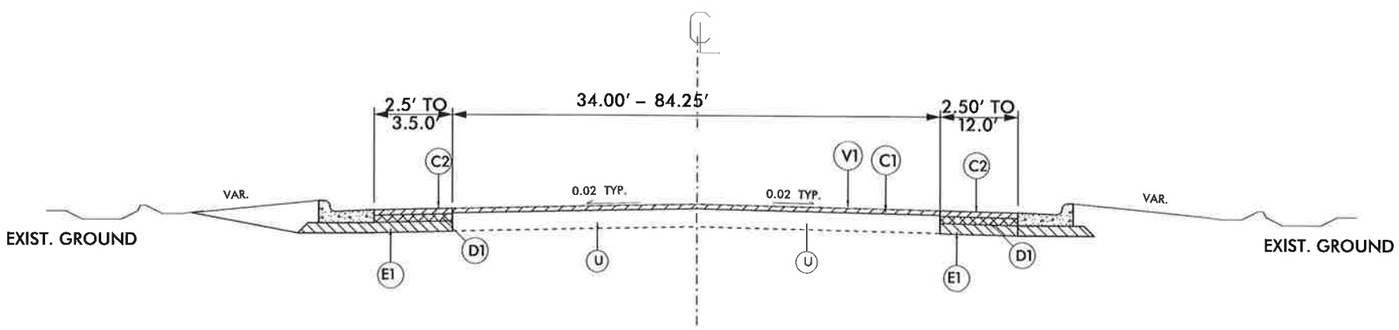
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

8/17/99

VAR.

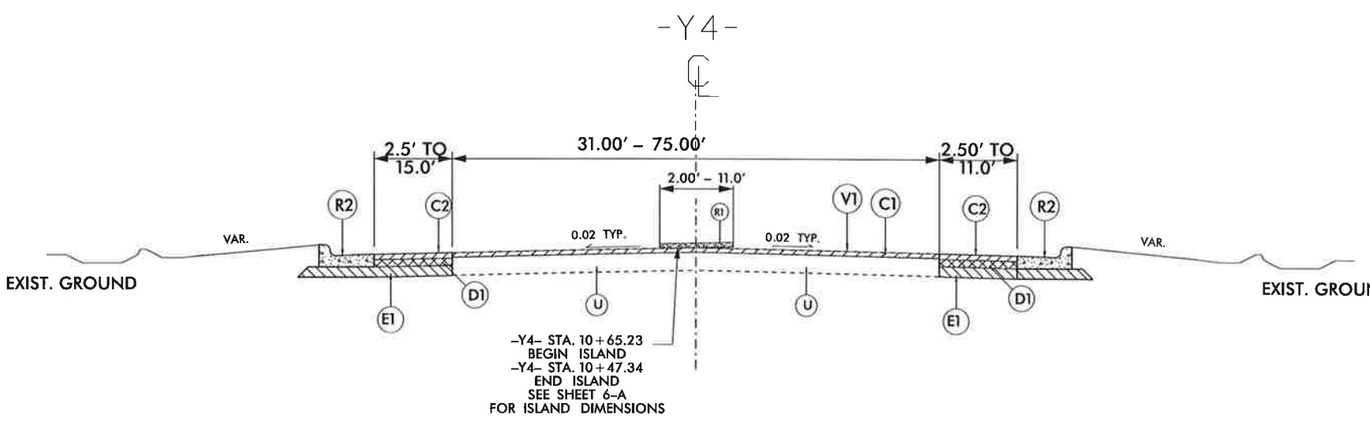
TYPICAL SECTION NO. 9

–Y3– STA. 14+22 TO 14+75.26 LEFT
–Y3– STA. 14+17.55 TO 14+62.77 RIGHT



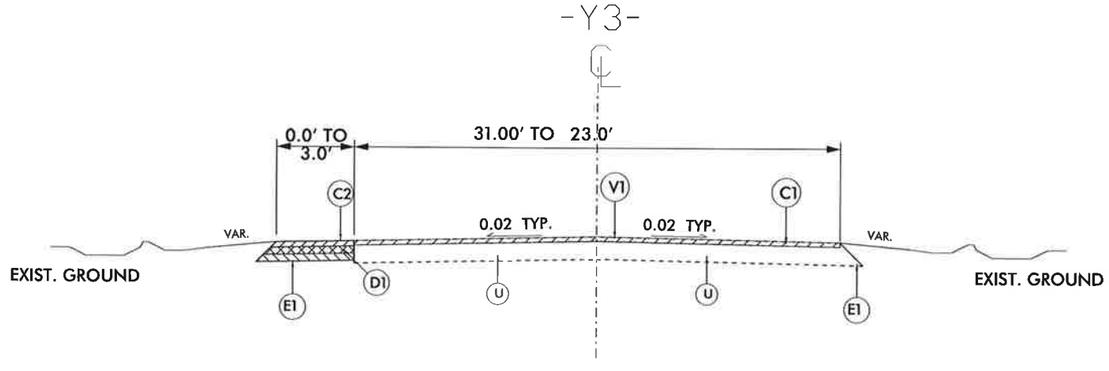
TYPICAL SECTION NO. 10

–Y4– STA. 10+23 TO 10+80 LEFT
–Y4– STA. 10+23 TO 14+65 RIGHT



TYPICAL SECTION NO. 11

–Y4– STA. 10+80 TO 11+07.15 LEFT
–Y4– STA. 14+65 TO 11+07.15 RIGHT



PROJECT REFERENCE NO.	SHEET NO.
U-6007	2-C
R/W SHEET NO.	

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

Docusigned by: Greg Davis

01/29/2024

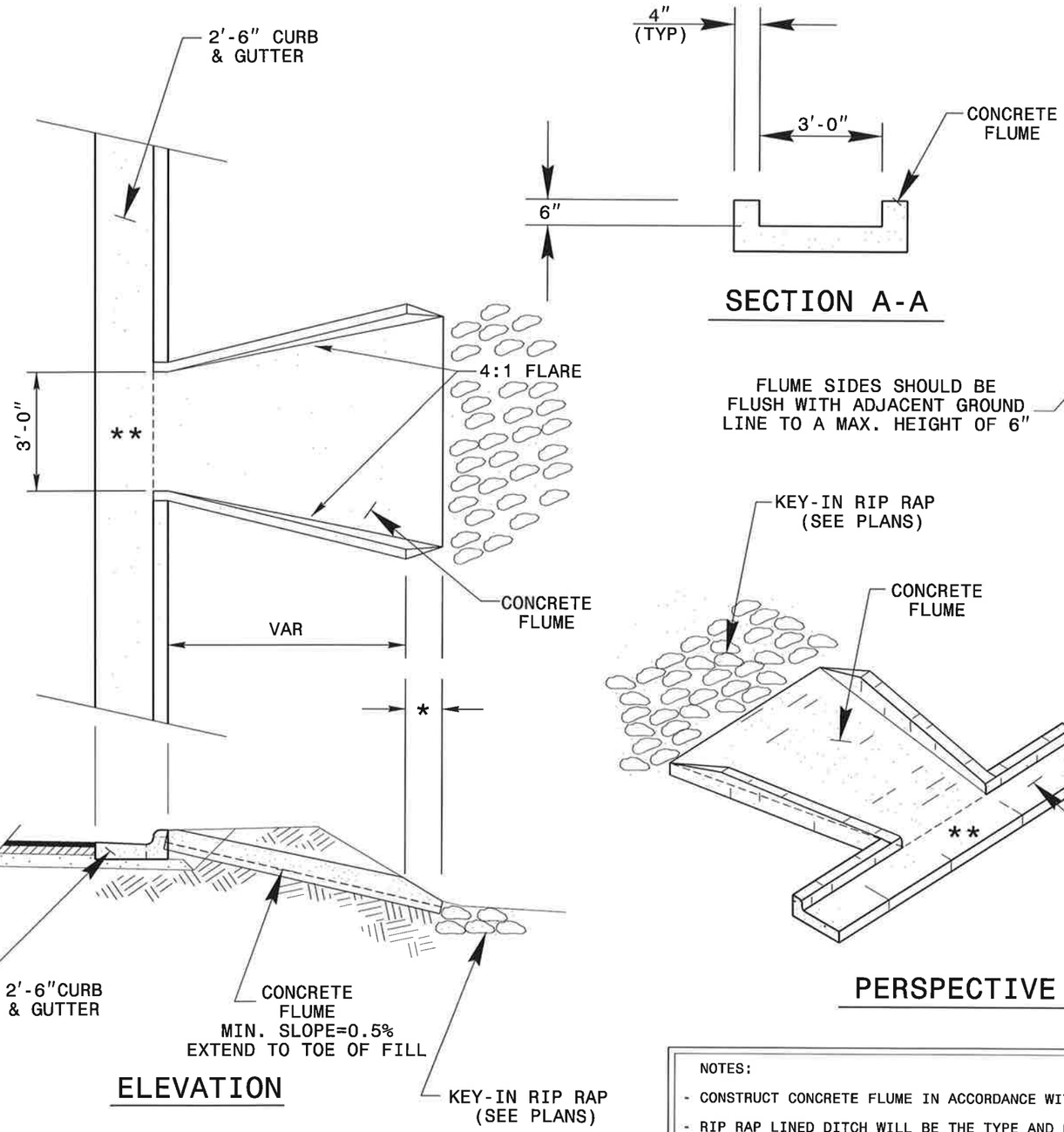
DIVISION PROJECT ENGINEER

PAVEMENT SCHEDULE

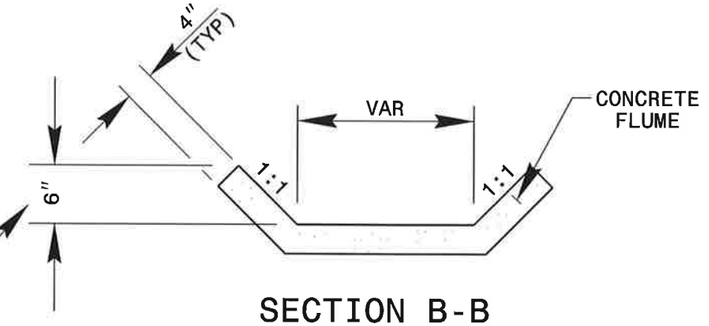
C1	1½" S9.5C
C2	3" S9.5C
C3	VAR. S9.5C
D1	4" I19.0C
D2	VAR. I19.0C
E1	4" B25.0C
E2	VAR. B25.0C
R1	5" MCI (KI)
R2	2'-6" C & G
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1½" MILLING
W	VAR. WEDGING

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

PROJECT REFERENCE NO.	SHEET NO.
U-6027	2-D



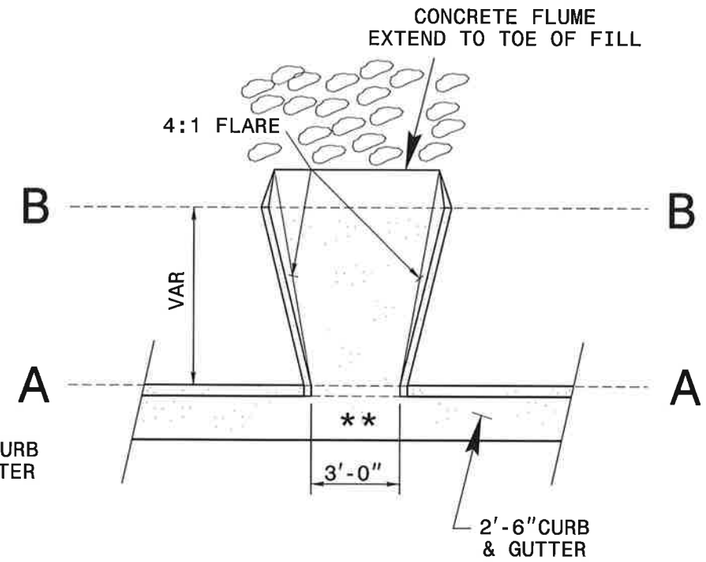
SECTION A-A



FLUME SIDES SHOULD BE FLUSH WITH ADJACENT GROUND LINE TO A MAX. HEIGHT OF 6"

SECTION B-B

PERSPECTIVE



PLAN

ELEVATION

* LENGTH VARIABLE WITH DITCH SLOPE

** DEPRESS THE GUTTER IN THIS AREA TO PREVENT BYPASS

NOTES:

- CONSTRUCT CONCRETE FLUME IN ACCORDANCE WITH THIS DETAIL.
- RIP RAP LINED DITCH WILL BE THE TYPE AND LENGTH SPECIFIED BY THE ROADWAY PLANS. PLACE RIP-RAP AT THE END OF THE DITCH AS INDICATED BY STD. DWG. 876.02 FOR AN 18" PIPE.
- MODIFICATIONS MAY BE MADE AS DIRECTED BY THE ENGINEER.

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

CONCRETE FLUME IN 2'-6" C&G

ORIGINAL BY:		DATE:	
MODIFIED BY:	nbritt	DATE:	05-11-04
CHECKED BY:		DATE:	
FILE SPEC.:	details\nbritt\metric\r220tmodifiedflume.dgn		

24-NOV-2023 16:26 U-6027 220bus\psh\Special modified conc flumes.dgn
gracia DIV06-3306721

PROJECT NO.	SHEET NO.	TOTAL NO.
47142.3.1 (U-6007)	3	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	0043000000-N GRADING	0057000000-E UNDERCUT EXCAVATION	0196000000-E GEOTEXTILE FOR SOIL STABILIZATION	0318000000-E FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	0320000000-E FOUNDATION CONDITIONING GEOTEXTILE	0448000000-E 48" RC PIPE CULVERTS, CLASS IV	0448200000-E 15" RC PIPE CULVERT, CLASS IV	0448300000-E 18" RC PIPE CULVERT, CLASS IV	0995000000-E PIPE REMOVAL	1220000000-E INCIDENTAL STONE BASE	1297000000-E 1.5" MILLING	1308000000-E 1.5" TO 3" MILLING	1491000000-E BASE COURSE, B25.0C	1503000000-E INTERMEDIATE COURSE, I19.0C	1523000000-E SURFACE COURSE, S9.5C	1575000000-E ASPHALT BINDER FOR PLANT MIX	1693000000-E AC PLANT MIX (REPAIR)	2000000000-N RIGHT OF WAY MARKERS	2253000000-E PIPE COLLAR	2286000000-N MASONRY DRAINAGE STRUCTURE	2308000000-E MASONRY DRAINAGE STRUCTURE (LF)
										MI	FT	LS	CY	SY	TON	SY	LF	LF	LF	LF	TONS	SY	SY	TONS	TONS	TONS	TONS	TONS	EA	CY	EA	LF
47142.3.1 (U-6007)	Randolph	1	US 220 BUS. (FAYETTEVILLE ST)	FROM SR 1640 (RIDGE ST) TO CONSTRUCTION JOINT SOUTH OF WALKER AVE.	1-11	2	MU	NO	NO	1.5	36	1	200	500	30	80	68	60	32	124	100	7,570	5,930	215	155	1,375	100	160	14	0.45	7	4.80
TOTAL FOR MAP NO. 1										1.5		1	200	500	30	80	68	60	32	124	100	7,570	5,930	215	155	1,375	100	160	14	0.45	7	4.80
TOTAL FOR PROJ NO. 47142.3.1 (U-6007)										1.5		1	200	500	30	80	68	60	32	124	100	7,570	5,930	215	155	1,375	100	160	14	0.45	7	4.80
GRAND TOTAL										1.5		1	200	500	30	80	68	60	32	124	100	7,570	5,930	215	155	1,375	100	160	14	0.45	7	4.80

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	2367000000-N FRAME WITH TWO GRATES, STD 840.29	2374000000-N FRAME WITH GRATE & HOOD, STD 840.03, TYPE "E"	2374000000-N FRAME WITH GRATE & HOOD, STD 840.03, TYPE "G"	2549000000-E 2'-6" CURB & GUTTER	2570000000-N MODIFIED CONCRETE FLUME	2655000000-E 5" MONOLITHIC CONCRETE ISLANDS(KEYED IN)	3628000000-E RIP RAP, CLASS I	3649000000-E RIP RAP, CLASS B	3656000000-E GEOTEXTILE FOR DRAINAGE	5325800000-E 8" WATER LINE	5329000000-E DUCTILE IRON WATER PIPE FITTINGS	5672000000-N RELOCATE FIRE HYDRANT	5673000000-E FIRE HYDRANT LEG	5691300000-E 8" SANITARY GRAVITY SEWER	5771000000-E GENERIC UTILITY ITEM - CONCRETE CRADLE	5912000000-N GENERIC UTILITY ITEM - SEWER BYPASS PUMPING	6000000000-E TEMPORARY SILT FENCE	6006000000-E EROSION CONTROL STONE, CLASS A	6009000000-E EROSION CONTROL STONE, CLASS B	6012000000-E SEDIMENT CONTROL STONE	6015000000-E TEMPORARY MULCHING
										MI	FT	EA	EA	EA	LF	EA	SY	TON	TON	SY	LF	LB	EA	LF	LF	LF	LS	LF	TON	TON	TON	ACR
47142.3.1 (U-6007)	Randolph	1	US 220 BUS. (FAYETTEVILLE ST)	FROM SR 1640 (RIDGE ST) TO CONSTRUCTION JOINT SOUTH OF WALKER AVE.	1-11	2	MU	NO	NO	1.5	36	3	2	2	548	3	150	10	10	295	40	340	1	5	40	20	1	330	75	35	150	0.50
TOTAL FOR MAP NO. 1										1.5		3	2	2	548	3	150	10	10	295	40	340	1	5	40	20	1	330	75	35	150	0.50
TOTAL FOR PROJ NO. 47142.3.1 (U-6007)										1.5		3	4 2	2	548	3	150	10	10	295	40	340	1	5	40	20	1	330	75	35	150	0.50
GRAND TOTAL										1.5		3	4 2	2	548	3	150	10	10	295	40	340	1	5	40	20	1	330	75	35	150	0.50

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	6018000000-E SEED FOR TEMPORARY SEEDING	6021000000-E FERTILIZER FOR TEMPORARY SEEDING	6024000000-E TEMPORARY SLOPE DRAINS	6029000000-E SAFETY FENCE	6030000000-E SILT EXCAVATION	6036000000-E MATTING (EROSION CONTROL)	6038000000-E PERMANENT SOIL REINFORCEMENT MAT	6042000000-E 1/4" HARDWARE CLOTH	6070000000-N SPECIAL STILLING BASIN	6071002000-E FLOCCULANT	6071012000-E COIR FIBER WATTLE	6084000000-E SEED & MULCHING	6087000000-E MOWING	6090000000-E SEED FOR REPAIR SEEDING	6093000000-E FERTILIZER FOR REPAIR SEEDING	6096000000-E SEED FOR SUPPLEMENTAL SEEDING	6108000000-E FERTILIZER TOPDRESSING	6114500000-N SPECIALIZED HAND MOWING	6114800000-N MANUAL LITTER REMOVAL	6114900000-E LITTER DISPOSAL
										MI	FT	LB	TON	LF	LF	CY	SY	SY	LF	EA	LB	LF	AC	ACR	LB	TON	LB	TON	MHR	MHR	TON
47142.3.1 (U-6007)	Randolph	1	US 220 BUS. (FAYETTEVILLE ST)	FROM SR 1640 (RIDGE ST) TO CONSTRUCTION JOINT SOUTH OF WALKER AVE.	1-11	2	MU	NO	NO	1.5	36	100	0.50	200	120	50	6,260	5	570	1	15	90	0.50	0.50	50	0.25	50	0.25	10	1	1
TOTAL FOR MAP NO. 1										1.5		100	0.50	200	120	50	6,260	5	570	1	15	90	0.50	0.50	50	0.25	50	0.25	10	1	1
TOTAL FOR PROJ NO. 47142.3.1 (U-6007)										1.5		100	0.50	200	120	50	6,260	5	570	1	15	90	0.50	0.50	50	0.25	50	0.25	10	1	1
GRAND TOTAL										1.5		100	0.50	200	120	50	6,260	5	570	1	15	90	0.50	0.50	50	0.25	50	0.25	10	1	1

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	6117000000-N RESPONSE FOR EROSION CONTROL	6117500000-N CONCRETE WASHOUT STRUCTURE	6132000000-N GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION DEVICE	6132000000-N GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION DEVICE CLEANOUT	7060000000-E SIGNAL CABLE	7120000000-E VEHICLE SIGNAL HEAD (12", 3 SECTION)	7132000000-E VEHICLE SIGNAL HEAD (12", 4 SECTION)	7264000000-E MESSENGER CABLE (3/8")	7300000000-E UNPAVED TRENCHING (1 CONDUIT, 2")	7324000000-N JUNCTION BOX (STANDARD SIZE)	7360000000-N WOOD POLE	7372000000-N GUY ASSEMBLY	7408000000-E 1" RISER WITH WEATHERHEAD	7420000000-E 2" RISER WITH WEATHERHEAD	7444000000-E INDUCTIVE LOOP SAWCUT	7456000000-E LEAD-IN CABLE (14-2 PAIR)	7696000000-N CONTROLLER WITH CABINET (TYPE 2070LX, BASE MOUNTED)	7744000000-N DETECTOR CARD (TYPE 170)
										MI	FT	EA	EA	EA	EA	LF	EA	EA	LF	LF	EA	EA	EA	EA	EA	LF	LF	EA	EA
47142.3.1 (U-6007)	Randolph	1	US 220 BUS. (FAYETTEVILLE ST)	FROM SR 1640 (RIDGE ST) TO CONSTRUCTION JOINT SOUTH OF WALKER AVE.	1-11	2	MU	NO	NO	1.5	36	13	2	18	54	850	7	1	200	25	1	2	4	1	4	300	75	1	4
TOTAL FOR MAP NO. 1										1.5		13	2	18	54	850	7	1	200	25	1	2	4	1	4	300	75	1	4
TOTAL FOR PROJ NO. 47142.3.1 (U-6007)										1.5		13	2	18	54	850	7	1	200	25	1	2	4	1	4	300	75	1	4
GRAND TOTAL										1.5		13	2	18	54	850	7	1	200	25	1	2	4	1	4	300	75	1	4

PROJECT NO.	SHEET NO.	TOTAL NO.
47142.3.1 (U-6007)	3-A	

THERMOPLASTIC AND PAINT QUANTITIES

									4400000000-E	4405000000-E	4410000000-E	4415000000-N	4420000000-N	4422000000-N	4430000000-N	4435000000-N	4445000000-E	4455000000-N	4480000000-N	4510000000-N	4516000000-N	4685000000-E		4695000000-E		4704000000-N	4709000000-N
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	WORK ZONE SIGNS (STATIONARY)	WORK ZONE SIGNS (PORTABLE)	BARRICADE MOUNTED WORK ZONE SIGN	FLASHING ARROW BOARD	PORTABLE CHANGEABLE MESSAGE SIGN	PORTABLE CHANGEABLE MESSAGE SIGN (SHORT TERM)	DRUMS	CONES	BARRICADES (TYPE III)	FLAGGER	TMA	LAW ENFORCEMENT	SKINNY DRUM	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	8" X 90 M WHITE THERMO	8" X 90 M YELLOW THERMO	16" X 90 M WHITE THERMO	24" X 90 M WHITE THERMO
								MI	FT	SF	SF	SF	EA	EA	DAY	EA	EA	LF	HR	EA	EA	EA	LF	LF	LF	LF	LF	LF
47142.3.1 (U-6007)	Randolph	1	US 220 BUS. (FAYETTEVILLE ST)	FROM SR 1640 (RIDGE ST) TO CONSTRUCTION JOINT SOUTH OF WALKER AVE.	1-11	2	MU	1.5	36	880	496	99	2	2	24	125	25	112	240	2	10	25	9,545	7,950	405	215	50	134
TOTAL FOR MAP NO. 1								**1.5**		**880**	**496**	**99**	**2**	**2**	**24**	**125**	**25**	**112**	**240**	**2**	**10**	**25**	**9,545**	**7,950**	**405**	**215**	**50**	**134**
TOTAL FOR PROJ NO. 47142.3.1 (U-6007)								**1.5**		**880**	**496**	**99**	**2**	**2**	**24**	**125**	**25**	**112**	**240**	**2**	**10**	**25**	**9,545**	**7,950**	**405**	**215**	**50**	**134**
																							17,495		**620**			
GRAND TOTAL								**1.5**		**880**	**496**	**99**	**2**	**2**	**24**	**125**	**25**	**112**	**240**	**2**	**10**	**25**	**9,545**	**7,950**	**405**	**215**	**50**	**134**
																							17,495		**620**			

									4720000000-E	4725000000-E				4810000000-E		4820000000-E		4830000000-E	4835000000-E	4840000000-N	4845000000-N				4905100000-N	
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	THERMO RXR 90 M	THERMO LT ARROW 90 M	THERMO STR ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR & RT ARROW 90 M	4" WHITE PAINT	4" YELLOW PAINT	8" WHITE PAINT	8" YELLOW PAINT	16" WHITE PAINT	24" WHITE PAINT	PAINT MSG RXR	PAINT LT ARROW	PAINT STR ARROW	PAINT RT ARROW	PAINT STR & RT ARROW	NON-CAST SNOW PLOWABLE MARKERS C & R MARKERS	NON-CAST SNOW PLOWABLE MARKERS Y & Y MARKERS
								MI	FT	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA
47142.3.1 (U-6007)	Randolph	1	US 220 BUS. (FAYETTEVILLE ST)	FROM SR 1640 (RIDGE ST) TO CONSTRUCTION JOINT SOUTH OF WALKER AVE.	1-11	2	MU	1.5	36	2	20	4	3	2	9,545	7,950	405	215	50	134	2	20	4	3	2	8	114
TOTAL FOR MAP NO. 1								**1.5**		**2**	**20**	**4**	**3**	**2**	**9,545**	**7,950**	**405**	**215**	**50**	**134**	**2**	**20**	**4**	**3**	**2**	**8**	**114**
TOTAL FOR PROJ NO. 47142.3.1 (U-6007)								**1.5**		**2**	**20**	**4**	**3**	**2**	**9,545**	**7,950**	**405**	**215**	**50**	**134**	**2**	**20**	**4**	**3**	**2**	**8**	**114**
											29				**17,495**		**620**					**29**				**122**	
GRAND TOTAL								**1.5**		**2**	**20**	**4**	**3**	**2**	**9,545**	**7,950**	**405**	**215**	**50**	**134**	**2**	**20**	**4**	**3**	**2**	**8**	**114**
											29				**17,495**		**620**					**29**				**122**	

COMPUTED BY: DDC DATE: 7-16-20
CHECKED BY: GSD DATE: 6-9-2023

PROJECT NO.	SHEET NO.
U-6007	3-B

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

Station	Station	Uncl. Excav.	Embank. +%	Borrow	Waste
-L- 24+00	-L- 25+00	42	0		42
-L- 25+40	-L- 27+00	76	3		73
-Y1- 10+20	-Y1- 12+20	89			89
-Y3- 14+20	-Y3- 14+63.81	30	1		29
-Y4- 10+29.17	-Y4- 11+00	45	2		43
SUBTOTAL		237	4	0	233
GRAND TOTALS:		237	4	0	233
SAY:		240	5		235

Contingency Undercut = 400 CY

CONCRETE REMOVAL SUMMARY

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	CONCRETE REMOVAL
-Y3-	14+09	14+71	RT	23.62
-Y3-	14+11	-L- 26+46 LT	LT	45.07
-Y4-	10+21	10+56	RT	15.51
-Y4-	10+52	-L- 27+08 RT	LT	32.89
		TOTAL:		117.09
			SAY	120

PAVEMENT REMOVAL SUMMARY

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	PAVEMENT REMOVAL
-Y1-	10+77	11+07	LT	102.32
-L-	23+78	27+09	CL	154.08
-L-	30+14	34+30	CL	175.4
-Y3-	14+62	14+69	CL	11.84
-Y4-	10+27	10+47	CL	14.38
		TOTAL:		458.02
			SAY:	460

COMPUTED BY: DDC DATE: 4/2/2020

CHECKED BY: GSD/WGC DATE: 4/17/2023

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
U-6007	3-C

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.

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

STATION	LOCATION (LT, RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) SIZE	DRAINAGE PIPE THICKNESS OR GAUGE	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	R.C. PIPE CLASS V SIZE	R.C. PIPE CLASS V THICKNESS OR GAUGE	R.C. PIPE CLASS III SIZE	R.C. PIPE CLASS III THICKNESS OR GAUGE	R.C. PIPE CLASS IV SIZE	R.C. PIPE CLASS IV THICKNESS OR GAUGE	** R.C. PIPE (CLASS V)	**** RC PIPE CULVERTS, CONTRACTOR DESIGN	**** RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES *TOTAL L.F. FOR PAY QUANTITY SHALL BE COL 'A' + (1.3 X COL 'B') LIN. FT. (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	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME WITH TWO GRATES 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 2 GRATES STD. 840.20	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. FRAME WITH GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	TP-J.B. STD. 840.34 OR STD. 840.46	G.D.I. FRAME (N.S. FLAT) W/2 GRATES STD. 840.29	T.B.D.I. STD. 840.35	MANHOLE FRAME AND COVER, STD. 840.54	STEEL FRAME AND 2 GRATES, STD. 840.37	CONCRETE FLUME	SIDE DRAIN 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
-L-																																																					
14+46	LT	410		834	EXIST															68						1	3																										
		411	410		827	EXIST																																															
14+70	RT	411		833.8	827																					1	1.8																										
		412	411		830.9	829.5														12																																
14+71	RT	412		833.9	830.9																					1																										
25+70	LT	613																																																	
26+17	LT	614		853.4																						1																										
		614	615		848.2	848														12																																
26+48	LT	616		853.7																						1																										
		616	614		850.7	848.2														32																																
26+60	RT	617		853.8	851																					1																										
		617	618		851	850.8														28																																
26+32	RT	618		853.3	850.8																					1																										
26+30	RT	619																		8																																
		618	619		850.8	850.7																																															
-Y3-																																																			
14+21	RT	610			850.6																																															
14+28	LT	611			850.7																																															
SHEET TOTALS																				60	32				68						7	4.8		2		2	2													3	3	0	0	3			0.447	124	

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

PI Sta 11+68.59
△ = 10° 10' 30.8" (LT)
D = 4° 58' 56.1"
L = 204.23'
T = 102.38'
R = 1,150.00'

PI Sta 15+87.69
△ = 1° 24' 33.5" (LT)
D = 1° 14' 15.0"
L = 113.89'
T = 56.95'
R = 4,630.00'

PROJECT REFERENCE NO.	SHEET NO.
U-6007	4
R/W SHEET NO.	

DIVISION PROJECT ENGINEER — SEAL 26930 — Greg S. Davis — 11/17/2023

HYDRAULICS ENGINEER — SEAL 022000 — Galen Cail — 11/15/2023

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS 8/17/99

-L- POT Sta. 10+00.00

-L- PC Sta. 10+66.21

-L- PT Sta. 12+70.44

-L- PC Sta. 15+30.75

-L- Sta.14+94.58 =
-Y1- POT Sta. 10+00.00

10+00

15+00

-L- STA.12+46
BEGIN PROJECT
U-6007

-Y1- STA.12+35
END PROJECT
U-6007

-L- 16+00
SEE SHEET 4

MATCH LINE -L- 10+00
SEE SHEET 4

NC GRID NAD 83 NA 2011

N 16°34'24.0" E

N 6°23'53.2" E

S 83°55'19.9" E

S 11°26'42" W
95.27'

-Y1- POT
Sta.12+48.37

RANDY KEY
WB 15E PG 214

VAN MCGILL
WB 15E PG 347

VAN MCGILL
WB 15E PG 347

LOG SHOP, LLC
DB 2527 PG 758
PB 150 PG 58

TOWN OF ASHEBORO
DB 376 PG 599

NORFOLK SOUTHERN RR

EXISTING RR R/W

UTILITY EASEMENT
CENTRAL
TELEPHONE AND
TELEGRAPH COMPANY
DB 1504 PG 1241

POSSIBLE DRAINAGE
JUNCTION BOX
NO ACCESS

ROGER & KATHY CHRISCOE
DB 1159 PG 147

JAMES CAGLE
DB 2379 PG 84

WILDA KEARNS
DB 932 PG 41

SAMPSON BLADEN OIL
COMPANY, INC
DB 2441PG 714

GREENVIEW, INC
DB 1837 PG 2942
PB 120 PG 90

JOHN A. & SANDRA
S. LOWE
DB 1693 PG 843
PB 68 PG 12

US 220 BUS FAYETTEVILLE ST 34' BST

U6007-100 W/LT S

INV=832.61'

INV=839.43'

TB 2GI-A w/NS

REMOVE 72' – 36" RCP
REPLACE WITH 48" RCP

RCP-IV

TB 2GI-A

TB 2GI-B

RETAIN

REMOVE PUE

0410

0411

0412

RIPRAP

42" CMP

BLK WALL

MTL CANOPY

U/G TANKS

RIDGE ST (SR1640) 25' BST

72" CHL & BSBW EIR

42" RCP

48" RCP

72" WD

PUE

EXISTING R/W

60.00'

RIGHT OF WAY TABLE		
Point	Station	Offset
PROPOSED RIGHT OF WAY		
ROW1	-L- Sta= 10 + 29.72	Off= RT 49.75
ROW4	-L- Sta= 10 + 30.11	Off= RT LT 30.00
ROW2	-Y1- Sta= 10 + 57.00	Off= RT 37.00
ROW3	-Y1- Sta= 10 + 57.00	Off= RT 20.00
ROW5	-Y1- Sta= 11 + 53.00	Off= RT LT 30.00
ROW6	-Y1- Sta= 11 + 53.00	Off= RT LT 20.00
PROPOSED PERMANENT DRAINAGE EASEMENT		
PDE1	-L- Sta=14 + 35.00	Off= LT 30.00
PDE2	-L- Sta=14 + 35.00	Off= LT 40.00
PDE3	-L- Sta=14 + 20.05	Off= LT 82.8785
PDE4	-L- Sta=14 + 17.05	Off= LT 118.8125
PDE5	-L- Sta=14 + 32.16	Off= LT 118.0835
PDE7	-L- Sta=14 + 56.00	Off= LT 40.00
PDE8	-L- Sta=14 + 56.00	Off= LT 30.00
PROPOSED PERMANENT UTILITY EASEMENT		
PUE18	-L- Sta=15+02.25	Off= LT 48.7706
PUE19	-L- Sta=15+04.10	Off=LT 62.8110
PUE20	-L- Sta=15+23.93	Off=LT 60.2012
PUE21	-L-Sta=15+22.39	Off=LT 48.4604
PUE15	-Y1- Sta= 12+24.28	Off= RT 29.54
PUE16	-Y1- Sta= 12 + 51.23	Off= RT 33.2396
PUE17	-Y1- Sta= 12 + 53.05	Off= RT 20.00
PUE26	-Y1- Sta= 14+20.91	Off=RT 30.0000
PUE27	-Y1- Sta= 14+57.90	Off=RT 57.2059
PROPOSED TEMPORARY CONSTRUCTION EASEMENT		
TCE1	-L- Sta= 14 + 25.00	Off= LT 30.00
TCE2	-L- Sta= 14 + 25.00	Off= LT 49.9956
TCE3	-L- Sta= 14 + 31.51	Off= LT 49.9985
TCE4	-L- Sta= 14 + 50.49	Off= LT 50.0069
TCE5	-L- Sta= 14 + 66.00	Off= LT 50.0138
TCE6	-L- Sta= 14 + 66.00	Off= LT 30.00
TCE7	-L- Sta= 13 + 71.43	Off= RT 30.00
TCE8	-L- Sta= 13 + 71.43	Off= RT 35.00
TCE9	-L- Sta= 14 + 05.00	Off= RT 35.00
TCE10	-L- Sta= 14 + 50.00	Off= RT 60.00
TCE10	-Y1- Sta= 10 + 59.75	Off= RT 44.9158
TCE11	-Y1- Sta= 11 + 00.00	Off= RT 30.00
TCE12	-Y1- Sta= 11 + 00.00	Off= RT 20.00
TCE13	-Y1- Sta= 11 + 53.00	Off= RT LT 25.00
TCE14	-Y1- Sta= 12 + 44.96	Off= RT LT 25.00
TCE15	-Y1- Sta= 12 + 45.01	Off= RT LT 20.00

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PROJECT REFERENCE NO.	SHEET NO.
U-6007	5
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

DocuSigned by: Greg S. Davis 11/17/2023

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

8/17/99

REVISIONS

PI Sta 17+60.23
△ = 0° 51' 16.6" (RT)
D = 0° 22' 10.7"
L = 231.19'
T = 115.60'
R = 15,500.00'

NC GRID NAD 83 NA 2011

-L- PRC Sta. 16+44.63

20+00

N 01°40'01" E
210.00'

N 88°14'59" W
17.18'

SP MASTER
DB 2214

ISBKBUS

EXISTING RR R/W

5 FAYETTEVILE BILLBOARD, LLC
DB 2373 PG 152

6 HLIDBI, LLC
DB 2310 PG 126

NORFOLK SOUTHERN RR

SSMH

BST

ISMTLBUS

ISMTL BUS

ISFBUS

INV= 829.23'

BENNY COLLINS
DB 1305 PG 323

36" CMP

30" CMP

DI

24" RCP

15" RCP

12" RCP

8"DIP

8"CLAY

ISBLK BUS

JHS MASTER CAPITAL, LLC
DB 2287 PG 1684

S 83°23'24" E
51.28'

PUE

ASPH. ISLAND TO BE REMOVED

CONC

ELEV=828.69'
FM CUT FROM PK ON ROAD

US 220 BUS

FAYETTEVILLE ST

38' BST

24" RCP

10+00

U6007-99

ASPH CURB

36" RCP

CONC TOP DI

GR

SOIL

INV=834.91'

CONC CURB

PKF

INV=837.54'

INV=841.57'

36" WD
INV=845.15'

6"DIP

-L- Sta.21+77.54 =
-Y2- POT Sta. 10+00.00

-L- PT Sta. 18+75.83

S 86°43'15" E
280.80'

S 86°04'56" E
23' BST

TELEPHONE

IGLESIA DE AVIVAMIENTO
DB 2577 PG 974
PB 154 PG 40

GREENVIEW, INC
DB 1837 PG 2942
PB 120 PG 90

7 ISBKBUS

PHILLIP BROS COUNTRY HAM
DB 1056 PG 858
PB 2 PG 33

PHILLIP BROS COUNTRY HAM
DB 1071 PG 1

INV= 837.59'

INV= 839.38'

N 04°24'38" W
179.67'

N 88°23'59" E
89.70'

-Y2- POT Sta. 12+57.87

S 05°51'47" E
268.60'

EXISTING R/W

40.00'

188.11'

S 84°10'05" E
123.73'

MATCH LINE -L- 16+00
SEE SHEET 4

MATCH LINE -L- 24+00
SEE SHEET 6

RIGHT OF WAY TABLE

Point	Station	Offset
PROPOSED RIGHT OF WAY		
ROW7	-L- Sta=24+16.01	Off= LT 30.00
ROW10	-L- Sta=25+90.88	Off= LT 30.00
ROW11	-L- Sta=25+15.53	Off= RT 30.00
ROW14	-L- Sta=26+99.79	Off= RT 30.00
ROW8	-Y3- Sta=14+30.32	Off= RT 52.5542
ROW9	-Y3- Sta=14+30.10	Off= LT 30.00
ROW12	-Y4- Sta=10+65.06	Off= RT 34.1249
ROW13	-Y4- Sta=10+59.45	Off= LT 32.3219
PROPOSED DUAL USE EASEMENT		
DUE1	-L- Sta=26+03.00	Off=-30.00
DUE2	-L- Sta=26+03.00	Off=-45.00
DUE3	-L- Sta=26+23.00	Off=-45.00
DUE4	-L- Sta=26+23.00	Off=-30.00
PROPOSED TEMPORARY CONSTRUCTION EASEMENT		
TCE17	-L- Sta=24+43.60	Off= RT 40.000
TCE18	-L- Sta=25+15.21	Off= RT 40.0000
TCE19	-Y4- Sta=10+77.25	Off= RT 36.3862
TCE20	-Y4- Sta=11+06.78	Off= RT 27.1705

Point	Station	Offset
PROPOSED PERMANENT UTILITY EASEMENT		
PUE1	-L- Sta=22+59.82	Off= LT 30.00
PUE2	-L- Sta=22+59.82	Off= LT 42.6771
PUE3	-L- Sta=22+81.64	Off= LT 55.6601
PUE4	-L- Sta=24+53.14	Off= LT 55.7107
PUE11	-L- Sta=25+93.99	Off= LT 80.9302
PUE12	-L- Sta=25+95.13	Off= LT 55.7483
PUE13	-L- Sta=29+33.60	Off= LT 55.6409
PUE14	-L- Sta=29+33.59	Off= LT 30.00
PUE5	-Y3- Sta=13+24.03	Off= LT 30.00
PUE6	-Y3- Sta=13+34.60	Off= LT 39.5937
PUE7	-Y3- Sta=13+34.83	Off= LT 57.0291
PUE8	-Y3- Sta=13+54.83	Off= LT 56.7692
PUE9	-Y3- Sta=13+55.09	Off= LT 76.7676
PUE10	-Y3- Sta=13+71.64	Off= LT 76.5524

30' 0 30' 60'

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dsmith
DIVISION 8

PROJECT REFERENCE NO.	SHEET NO.
U-6007	6
R/W SHEET NO.	

DIVISION PROJECT ENGINEER: NORTH CAROLINA PE(1)SS.(ONE) SEAL 26930 ENGINEER GREG S. DAVIS — DocuSigned by: Greg S. Davis 11/17/2023

HYDRAULICS ENGINEER: NORTH CAROLINA PE(1)SS.(ONE) SEAL 022000 ENGINEER GALEN CAIL — DocuSigned by: Galen Cail 11/15/2023

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REVISIONS 8/17/23

MATCH LINE -L- 24+00 SEE SHEET 5

MATCH LINE -L- 32+00 SEE SHEET 7

-L- Sta.25+22.68 = -Y3- POT Sta.14+98.30

-L- Sta. 25+84.82 = -Y4- POT Sta.10+00.00

-Y4- PC Sta. 11+07.15

-Y4- PCC Sta. 12+30.92

BM#1 N 705941E 1175541 -BL- STA 20+73 22 LT ELEV. 853.78' RR SPIKE IN 36" GUM

N 5°50'36.2" E

S 87°29'46" E

S 85°30'23.9" E

S 85°52'13.0" W

N 04°09'28" W 80.00'

S 89°04'06" W 257.28'

N 86°58'48" W 178.53'

N 86°43'28" W 180.08'

S 87°01'07" E 182.65'

S 86°30'49" E 193.32'

S 86°30'49" E 183.96'

S 02°57'28" E 48.11'

INV=849.55'

INV=850.19'

INV= 850.35'

CLASS I RIP RAP EST 5 TONS EST 10 SY GEOTEXTILE

GRADE TO DRAIN CL B RIP RAP EST 3 TONS EST 10 SY GEOTEXTILE

CONC FLUME SEE DETAIL

CL B RIP RAP EST 3 TONS EST 10 SY GEOTEXTILE

REMOVE 12 FT OF 18" RCP

3 FT CONC FLUME

REMOVE CB & 28'-15" RCP COLLAR AND EXTEND 18" RCP IV

ASPH. ISLAND TO BE REMOVED

RAILROAD SIGNAL EQUIPMENT NOT TO BE DISTURBED DURING CONSTRUCTION

POSSIBLE JUNCTION BOX BST

END OF 12" PIPE UNKNOWN

PSRM EST. 3 SY

2SBK NC NATIONAL GUARD

HLIDBI, LLC DB 2310 PG 126

STATE OF NORTH CAROLINA DB 618 PG 462

NORFOLK SOUTHERN RAILWAY DB 363 PG 370

STATE HIGHWAY AND PUBLIC WORKS COMMISSION DB 351 PG 201

PHILLIP BROS COUNTRY HAM DB 1056 PG 858 PB 2 PG 33

JHS MASTER CAPITAL, LLC DB 2285 PG537

HELEN BEANE DB 2544 PG 1854 PB 128 PG 548

JIMMY BROWN DB 1248 PG 268

CHARLES KEMP DB 1731 PG 3075

BEASON PROPERTIES DB 2450 PG

DAVID B. DB 1782 PG

ROJELIO RANGEL DB 1707 PG 888

US 64 EBL 29' BST 30" C&G

US 64 WBL 36' BST 30" C&G

US 220 BUS 46.3' BST

US 64 EBL 38' BST 15" RCP

US 64 WBL 41.3' BST 15" RCP

RIGHT OF WAY TABLE

Point	Station	Offset
PROPOSED RIGHT OF WAY		
ROW7	-L- Sta=24+16.01	Off= LT 30.00
ROW11	-L- Sta=25+15.53	Off= RT 30.00
ROW14	-L- Sta=26+99.79	Off= RT 30.00
ROW8	-Y3- Sta=14+30.32	Off= RT 52.5542
ROW12	-Y4- Sta=10+65.06	Off= RT 34.1249
ROW13	-Y4- Sta=10+59.45	Off= LT 32.3219
PROPOSED DUAL UTILITY EASEMENT		
DUE9	-L- Sta=26+03.00	Off=LT 34.96
DUE10	-L- Sta=26+03.00	Off=LT 45.00
DUE11	-L- Sta=26+23.00	Off=LT 45.00
DUE12	-L- Sta=26+23.00	Off=LT 34.96
PROPOSED TEMPORARY CONSTRUCTION EASEMENT		
TCE17	-L- Sta=24+43.60	Off= RT 40.000
TCE18	-L- Sta=25+15.21	Off= RT 40.0000
TCE19	-Y4- Sta=10+77.25	Off= RT 36.3862
TCE20	-Y4- Sta=11+06.78	Off= RT 27.1705

Point	Station	Offset
PROPOSED PERMANENT UTILITY EASEMENT		
PUE1	-L- Sta=22+59.82	Off= LT 30.00
PUE2	-L- Sta=22+59.82	Off= LT 42.6771
PUE3	-L- Sta=22+81.64	Off= LT 55.6601
PUE4	-L- Sta=24+53.14	Off= LT 55.7107
PUE11	-L- Sta=25+93.96	Off= LT 81.5114
PUE12	-L- Sta=25+95.13	Off= LT 55.7483
PUE13	-L- Sta=29+33.60	Off= LT 55.6409
PUE14	-L- Sta=29+33.59	Off= LT 35.02
PUE5	-Y3- Sta=13+24.03	Off= LT 30.00
PUE6	-Y3- Sta=13+34.60	Off= LT 39.5937
PUE7	-Y3- Sta=13+34.83	Off= LT 57.0291
PUE8	-Y3- Sta=13+54.83	Off= LT 56.7692
PUE9	-Y3- Sta=13+55.09	Off= LT 76.7676
PUE10	-Y3- Sta=13+71.05	Off= LT 76.5600
PROPOSED TEMPORARY DRAINAGE EASEMENT		
TDE1	-Y1- Sta=14+31.72	Off= LT 30.0000
TDE2	-Y1- Sta=13+95.00	Off= LT 45.0000
TDE3	-Y1- Sta=13+99.00	Off= LT 57.0000
TDE4	-Y1- Sta=14+19.50	Off= LT 40.4875

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PROJECT REFERENCE NO.	SHEET NO.
U-6007	6-A
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER CRAIG T. DAVIS

02/23/2024

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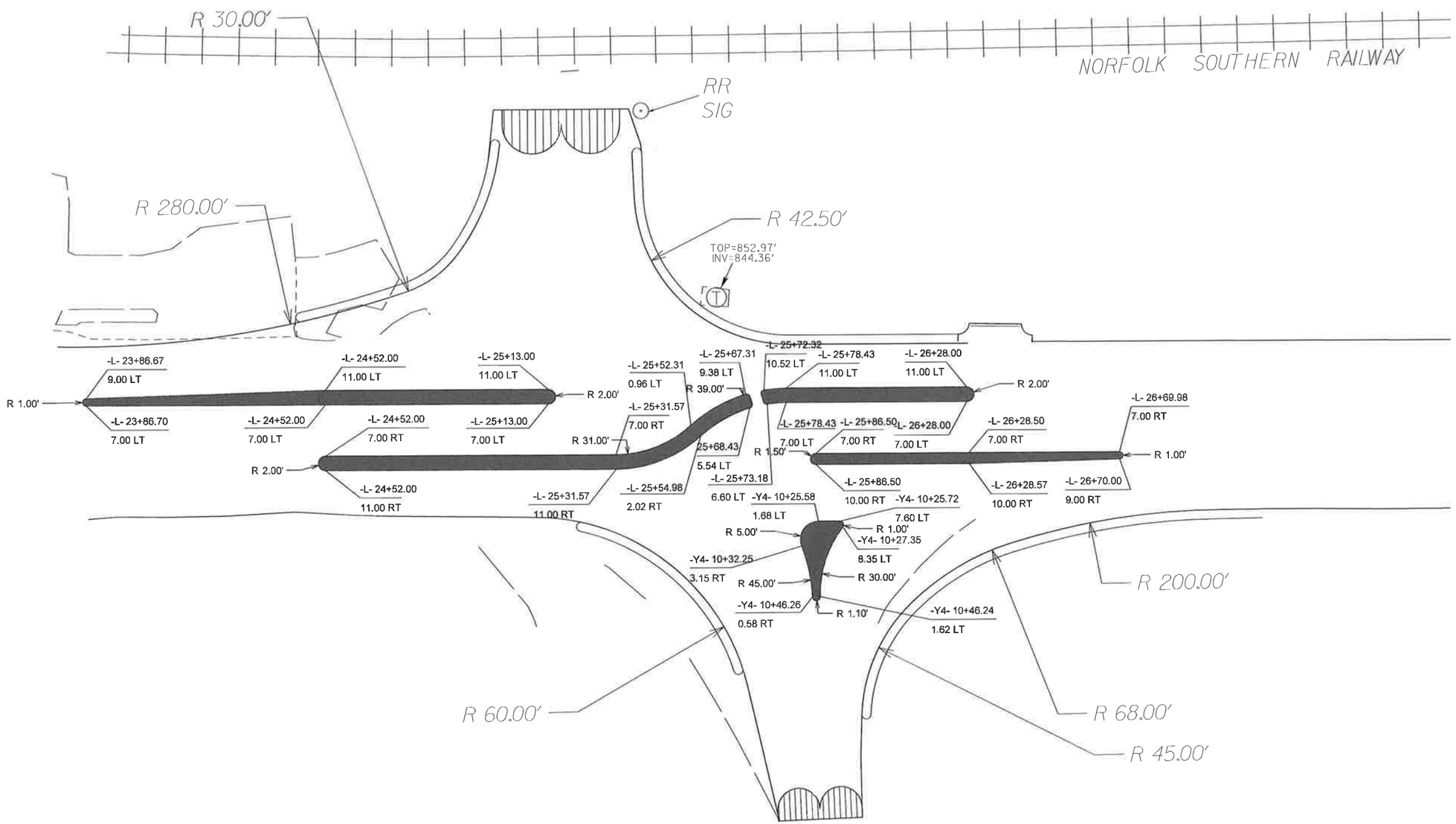
8/17/99

REVISIONS



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User:rdolph
U:\U-6007_220bus\psh\dgn\US220_bus_dgn_6.dgn

PROJECT REFERENCE NO.	SHEET NO.
U-6007	7
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 26930 ORIGINAL GREG S. DAVIS

DocuSigned by: Greg S. Davis 11/17/2023

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REVISIONS

MATCH LINE -L- 32+00
SEE SHEET 6

ASHEBORO CITY SCHOOLS
DB 400 PG 134
PB 4 PG 92

ASHEBORO CITY SCHOOLS
DB 400 PG 227
PB 1PG 350

ASHEBORO CITY BOARD OF EDUCATION (THE)
DB 1964 PG 2126

-L- Sta. 35+91.00 =
-Y7- POT Sta. 12+46.00

35+00

-L- Sta. 39+92.13 =
-Y8- POT Sta. 12+51.65

-L- STA. 38+03
END PROJECT U-6007

BROWN EYES INVESTMENTS, LLC
DB 2346 PG 778

40+00

NORFOLK SOUTHERN RAILWAY

SCHWARZ PROPERTIES, LLC
DB 1902 PG 2293
PB 94 PG 79

US 220 BUS FAYETTEVILLE ST

ASPH. ISLAND TO BE REMOVED

ASSUMED PIPE LOCATION PER NCDOT PLANS 8.1584701

END OF PIPE UNKNOWN

-Y7- POT Sta. 10+00.00

00+00

-L- Sta. 39+93.53 =
-Y9- POT Sta. 10+00.00

BM#2
N 707069 E 1757753
-BL- STA 32+36 53 RT
ELEV. 870.25'
RR SPIKE IN 32" OAK

JACKSON CREEK PROPERTIES, LLC
DB 2543 PG 1315
PB 151 PG 77

CYNTHIA BROWER
DB 1938 PG 539

CYNTHIA BROWER
DB 970 PG 406

ISBKD CYNTHIA BROWER DB 1696 PG 2052

2SBKBUS

ISBKBUS

ISROCKBUS

2SFD

STANLEY F &

30' 0 30' 60'

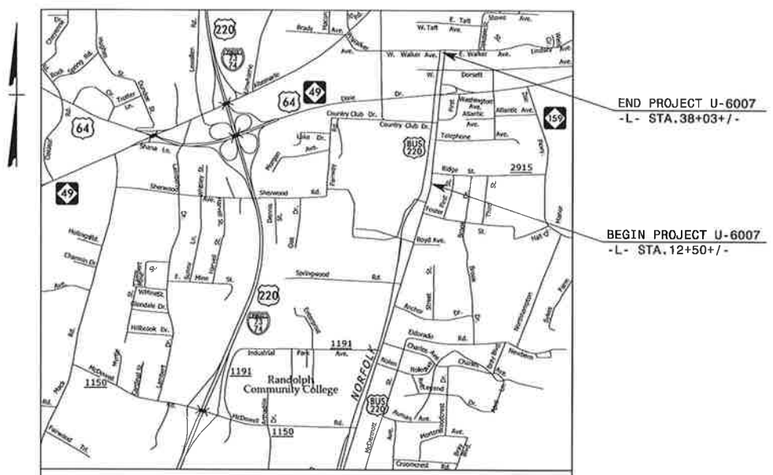
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

RANDOLPH COUNTY

LOCATIONS: US 220 BUS (FAYTTEVILLE ST) FROM SR 2915 (RIDGE RD) TO WALKER AVE

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND THERMOPLASTIC MARKINGS & MARKERS



VICINITY MAP

INDEX OF SHEETS

SHEET NO.
TMP-1

U-6007

TIP PROJECT:

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

PLANS PREPARED BY:

ALLA LYUDMIRSKAYA

KENNETH THORNEWELL, PE

NCDOT CONTACTS:

KENNETH THORNEWELL, PE
PROJECT ENGINEER

ALLA LYUDMIRSKAYA
PROJECT DESIGN ENGINEER

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

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APPROVED: Docusigned by: Kenneth Thornewell

DATE: 01/18/2023

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 044089 KENNETH C. THORNEWELL

6/8/2021
P:\TIPProjects\U6007\Traffic\TrafficControl\TCP\U-6007_TC_TMP_TMP-1Title Sheet.dgn
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PROJ. REFERENCE NO.	SHEET NO.
U-6007	TMP-1A

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 WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY 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
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1165.01	TRUCK MOUNTED ATTENUATOR
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)

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
- USER DEFINED (IF NEEDED)
- USER DEFINED (IF NEEDED)

SIGNALS

EXISTING PROPOSED TEMPORARY (TEMP)

PAVEMENT MARKINGS

——EXISTING LINES
——TEMPORARY LINES

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

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING LINES AND SYMBOLS

P1	WHITE EDGELINE (4")
P2	WHITE SOLID LANE LINE (4")
P3	10 FT. WHITE SKIP (4")
P11	YELLOW SINGLE CENTER LINE (4")
P12	10 FT. YELLOW SKIP (4")
P13	YELLOW DOUBLE CENTER (4")
P23	3FT.-9FT./SP WHITE MINI SKIP (6")
P24	2FT.-6FT./SP WHITE MINI SKIP (6")
P52	YELLOW DIAGONAL (12")
P61	WHITE STOPBAR (24")
P70	LEFT TURN ARROW
P71	RIGHT TURN ARROW
P72	STRAIGHT ARROW
P74	COMBO STRAIGHT/RIGHT ARROW
P100	ALPHANUMERIC CHAR.

TEMPORARY PAVEMENT MARKERS

MH	YELLOW & YELLOW, TEMPORARY RAISED

APPROVED: Kenneth Thornewell
DATE: 01/23/2024
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 044089 ENGINEER KENNETH G. THORNEWELL, JR.

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

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ROADWAY STANDARD DRAWINGS & LEGEND

1/23/2024
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User:mdabrew

PROJ. REFERENCE NO.	SHEET NO.
U-6007	TMP-2

GENERAL NOTES

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

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

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 220 BUS (-L-)	MONDAY THRU FIDAY FROM 7:00 AM TO 9:00 AM AND FROM 4:00 PM TO 7:00 PM

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME

US 220 BUS (-L-)

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 A.M. DECEMBER 31st TO 7:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

C) 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.

D) 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.

E) 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.

F) 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.

G) 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.

H) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON US 220 BUS.

I) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

PAVEMENT EDGE DROP OFF REQUIREMENTS

J) 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.

K) 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) 350 FT. IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

M) 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.

N) 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.

O) 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.

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

TRAFFIC CONTROL DEVICES

Q) 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), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

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

S) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 350 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

T) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
US 220 BUS (-L-)	PAINT	TEMPORARY RAISED
RIDGE ST (-Y1-)	PAINT	N/A
TELEPHONE AVE (-Y2-)	PAINT	N/A
COUNTRY CLUB DR (-Y3-)	PAINT	N/A
ATLANTIC AVE (-Y4-)	PAINT	N/A

U) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

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

X) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

V) TRACE THE PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE CONES TO DELINEATE ANY PROPOSED MONOLITHIC ISLANDS BEFORE INSTALLATION.

LOCAL NOTES

W) INSTALL PORTABLE CHANGEABLE MESSAGE SIGNS ON US 220 BUS SEVEN (7) DAYS PRIOR CLOSURE OF US 220 BUS. REVISE MESSAGES ON PCMSs, ONCE THE ROAD IS CLOSED.

APPROVED: Ben Thornwell
DATE: 01/18/2023

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 044089 KENNETH C. THORNWELL

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TRANSPORTATION OPERATIONS PLAN

6/8/2021
P:\TIP\Projects-UU\6007\Traffic\TrafficControl\TCP\U-6007_TC_TMP_TMP-2 GenNotes.dgn
User:cjy.cml

PROJ. REFERENCE NO.	SHEET NO.
U-6007	TMP-3

PHASING

STEP 1:
USING SHEETS TMP-4 & TMP-5, AND RSD 1101.03, SHEET 1 OF 9,
INSTALL AND COVER TEMPORARY DETOUR SIGNS.

COMPLETE THE WORK REQUIRED OF STEP 2 IN FIVE (5) CONSECUTIVE CALENDAR DAYS (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

STEP 2 (REFER TO SHEET TMP-4):
- ACTIVATE PORTABLE CMSs IN ADVANCE OF THE TEMPORARY OFF-SITE DETOUR ROUTE.
- MODIFY EXISTING TRAFFIC SIGNAL AT INTERSECTION OF US 220 BUS AND RIDGE ST, AND ACTIVATE IN TEMPORARY MODE.
- UNCOVER DETOUR SIGNS, INSTALLED IN STEP 1, CLOSE US 220 BUS, AND DETOUR TRAFFIC OFF SITE.
- AWAY FROM TRAFFIC PERFORM REPLACEMENT OF THE EXISTING 36" PIPE.
- COMPLETE THE ROAD CONSTRUCTION AT PIPE REPLACEMENT AREA ON US 220 BUS, AND PLACE TEMPORARY PAVEMENT MARKINGS.
- RESTORE AND ACTIVATE EXISTING TIMING MODE OF TRAFFIC SIGNAL AT INTERSECTION OF US 220 BUS AND RIDGE ST
- REMOVE WORK ZONE TEMPORARY TRAFFIC CONTROL DEVICES, AND PLACE ALL TRAFFIC IN THE EXISTING PATTERNS.

STEP 3:
USING RSD 1101.01, SHEET 3 OF 3, INSTALL WZ ADVANCE WARNING SIGNS ON US 220 BUS (-L-), RIDGE ST (-Y1), TELEPHONE AVE (-Y2), COUNTRY CLUB DR (-Y3), AND ATLANTIC AVE (-Y4-).

STEP 4:
USING RSD 1101.02, SHEETS 1 AND 2 OF 19, AND RSD 1101.01.04, SHEET 1 OF 2,
BEGIN CONSTRUCTION OF THE FOLLOWINGS (REFER TO THE ROADWAY PLANS):
- PROPOSED WIDENING OF -Y1-, -Y3-, AND -Y4-
- REMOVE THE EXISTING ASPHALT ISLANDS ON -L-, -Y3-, AND -Y4-, AND TEMPORARY DELINEATE WITH DRUMS OR SKINNY DRUMS.

STEP 5:
USING RSD 1101.02, SHEETS 1 AND 2 OF 19, AND RSD 1101.01.04, SHEET 1 OF 2,
COMPLETE CONSTRUCTION OF THE FOLLOWINGS:
- PROPOSED WIDENING, MILLING AND RESURFACING ON -L-, -Y1, Y3-, AND -Y4.
- PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS IN THE FINAL PATTERN ON -L-, -Y1, Y3-, AND -Y4
- DELINEATE THE PROPOSED CONCRETE ISLANDS WITH DRUMS OR SKINNY DRUMS.

STEP 6:
USING RSD 1101.02, SHEETS 1 AND 2 OF 19, AND RSD 1101.01.04, SHEET 1 OF 2,
PERFORM THE FOLLOWINGS:
- CONSTRUCT PROPOSED CONCRETE ISLANDS ON -L-, -Y3-, AND Y4-
- PLACE TRAFFIC IN THE FINAL PATTERN ON -L-.

STEP 7:
USING RSD 1101.02, SHEETS 1 AND 2 OF 19, AND RSD 1101.01.04, SHEET 1 OF 2,
INSTALL FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS AND MARKERS ON -L-,-Y1-, -Y2-,-Y3-, AND Y4.

STEP 8:
REMOVE ALL WORK ZONE TEMPORARY TRAFFIC CONTROL DEVICES IN THE PEOJECT LIMITS.

MANAGEMENT STRATEGIES

US 220 BUS (-L-):

USE OFF-SITE DETOUR TO REPLACE THE EXISTING 36" PIPE ACROSS US 220 BUS.
DURING A PIPE REPLACEMENT, TRAFFIC WILL UTILIZE THE FOLLOWING DETOUR ROUTE:
- NB - MCDOWELL RD TO US 220 TO NC 64 TO S PARK ST TO COUNTRY CLUB DR BACK TO NC 220 BUS
- SB - COUNTRY CLUB DR TO S PARK ST TO NC 64 TO NC 220 TO MCDOWELL RD BACK TO NC 220 BUS.

US 220 BUS (-L-), RIDGE ST (-Y1), TELEPHONE AVE (-Y2), COUNTRY CLUB DR (-Y3), AND ATLANTIC AVE (-Y4-):

USE LANE AND SHOULDER CLOSURES TO COMPLETE PROPOSED DRAINAGE WORK, WIDENING, MILLING AND RESURFACING

APPROVED: Kenneth Thornwell
DATE: 01/23/2024
SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 044089 KENNETH THORNWELL JR.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

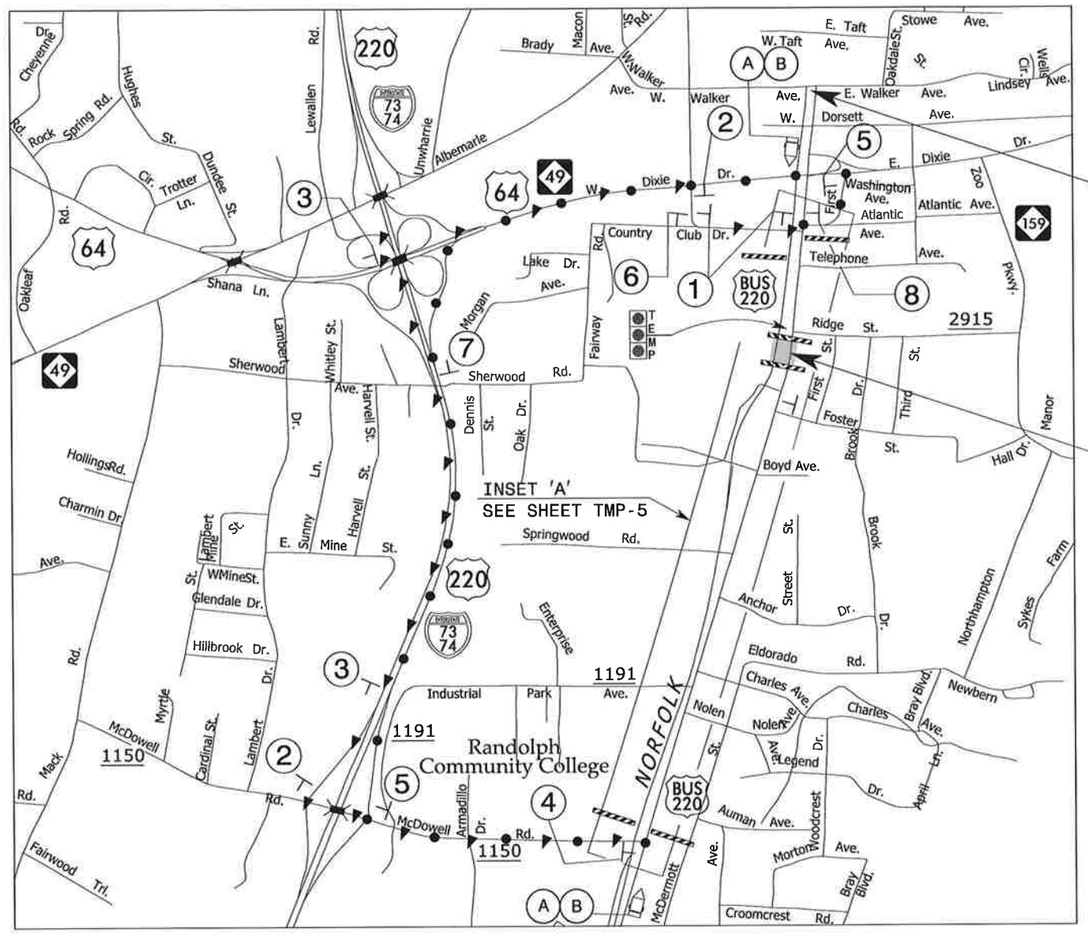
DIVISION OF HIGHWAYS * STATE OF NORTH CAROLINA * DEPARTMENT OF TRANSPORTATION * WORK ZONE TRAFFIC CONTROL

PHASING AND MANAGEMENT STRATEGIES

1/23/2024
P:\Proj\TIPProjects-U\U6007\Traffic\TrafficControl\TCP\U-6007_TC_TMP_TMP-3 Phasing_UPDATED.dgn
User:wmdebrew

PROJ. REFERENCE NO.	SHEET NO.
U-6007	TMP-4

VICINITY MAP: RANDOLPH COUNTY



OFF-SITE DETOUR:

NB

SB

END PROJECT U-6007
-L- STA.38+03+/-

BEGIN PROJECT U-6007
-L- STA.12+50+/-

A

TO BE INSTALLED 7 DAYS PRIOR ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
220 BUS TO CLOSE AT RIDGE	STARTING (DAY)

CHANGEABLE MESSAGE SIGN

B

TO BE UTILIZED WITH ROAD CLOSURE AND DETOUR SIGNS

MESSAGE NO. 1	MESSAGE NO. 2
220 BUS CLOSED AHEAD	FOLLOW DETOUR SIGNS

CHANGEABLE MESSAGE SIGN

C

R11-2
48" X 30"

ROAD CLOSED

TYPE III BARRICADE

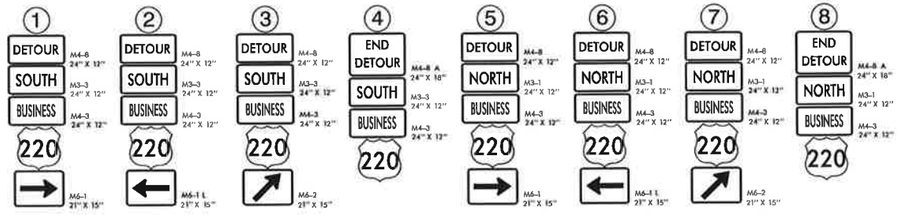
D

R11-3
60" X 30"

ROAD CLOSED
1 MILE AHEAD
LOCAL TRAFFIC ONLY
DETOUR

M4-10L
48" X 18"

TYPE III BARRICADE



NOTES:
1. ALL DETOUR SIGN AND PCMS LOCATIONS ARE APPROXIMATE.
2. INSTALL PORTABLE CHANGEABLE MESSAGE SIGNS ON US 220 BUS SEVEN (7) DAYS PRIOR CLOSURE OF US 220 BUS. REVISE MESSAGES ON PCMSs, ONCE THE ROAD IS CLOSED.
3. REFER TO SHEET TMP-5 FOR INSET 'A'.

Developed by

APPROVED: Ken Thornwell

DATE: 01/18/2023

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 044089 KENNETH LEE THORNWELL

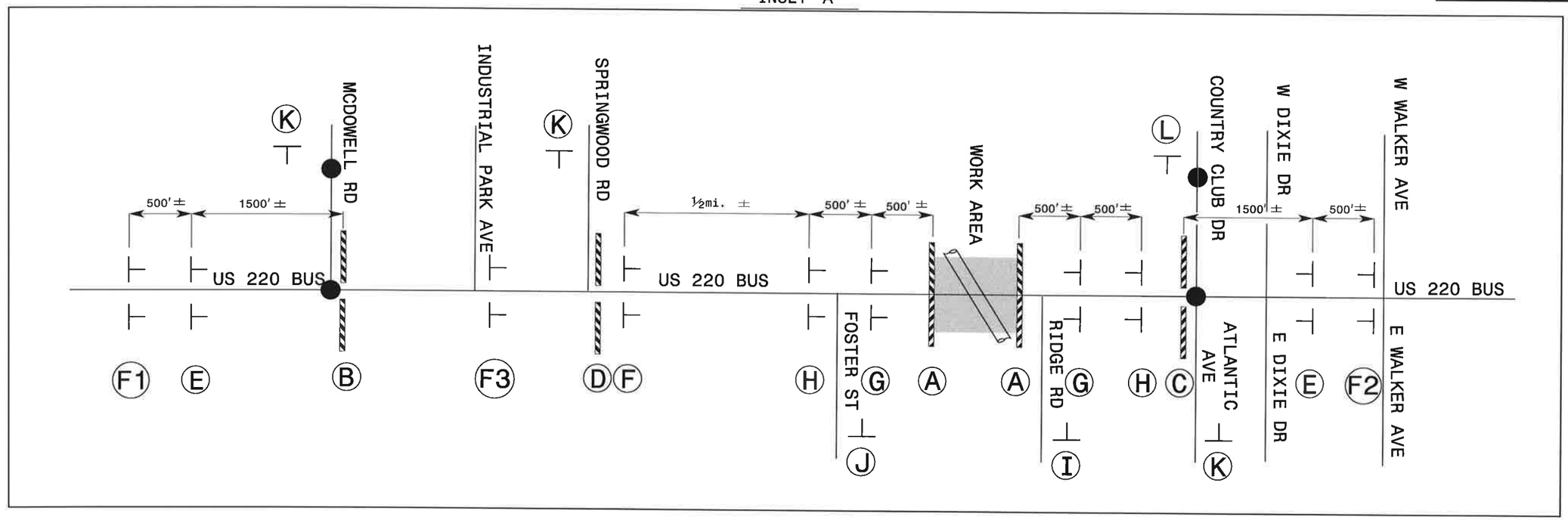
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

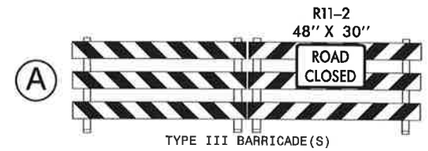
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

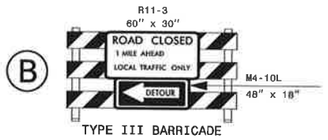
OFF-SITE DETOUR FOR US 220 BUS

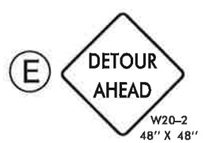
PROJ. REFERENCE NO.	SHEET NO.
U-6007	TMP-5

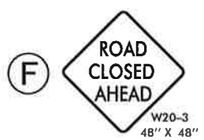
INSET 'A'

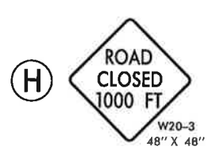


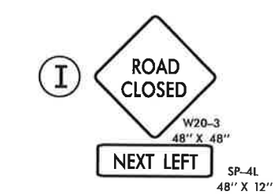


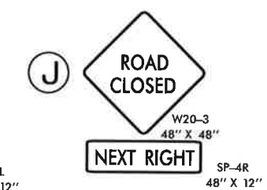


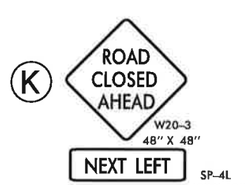


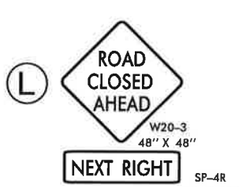












NOTES:
1. REFER TO RSD 1101.03, SHEET 1 OF 9, FOR APPLICABLE NOTES.
2. REFER TO SHEET TMP-4 FOR OFF-SITE DETOUR ROUTE.

APPROVED: Kenneth Thornewell
DATE: 01/23/2024
SEAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

OFF-SITE DETOUR
(INSET 'A')

1/23/2024
P:\Projects\TIPProjects-UU\6007\Traffic\TrafficControl\TCP\U-6007_TC_TMP_TMP-5 Inset A_UPDATED.dgn
User:wmdebrew

PROJECT REFERENCE NO.	SHEET NO.
U-6007	PM-1
R/W SHEET NO.	

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG I. DAVIS

DocuSigned by: Greg Davis

01/29/2024

DIVISION PROJECT ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT MARKING LINES

T2 - THERMOPLASTIC (24"	WHITE,	90 MILS)	STOP BAR
T8 - THERMOPLASTIC (4"	WHITE,	90 MILS)	2' X 6' (SPACE) MINISKIP
T9 - THERMOPLASTIC (4"	YELLOW,	90 MILS)	2' X 6' (SPACE) MINISKIP
TA - THERMOPLASTIC (4"	WHITE,	90 MILS)	EDGE LINE
TD - THERMOPLASTIC (4"	WHITE,	90 MILS)	3' X 9' SP MINISKIP
TE - THERMOPLASTIC (4"	WHITE,	90 MILS)	SOLID LANE LINE
TF - THERMOPLASTIC (4"	YELLOW,	90 MILS)	10' SKIP
TH - THERMOPLASTIC (4"	YELLOW,	90 MILS)	SINGLE CENTER LINE
TI - THERMOPLASTIC (4"	YELLOW,	90 MILS)	DOUBLE CENTER LINE
TN - THERMOPLASTIC (8"	WHITE,	90 MILS)	GORELINE
TO - THERMOPLASTIC (8"	WHITE,	90 MILS)	DIAGONAL
TP - THERMOPLASTIC (8"	YELLOW,	90 MILS)	DIAGONAL

PAVEMENT MARKING SYMBOLS

UA - THERMOPLASTIC		(LEFT TURN ARROW, 90 MILS)
UB - THERMOPLASTIC		(RIGHT TURN ARROW, 90 MILS)
UC - THERMOPLASTIC		(STRAIGHT ARROW, 90 MILS)
UE - THERMOPLASTIC		(STRAIGHT/RIGHT ARROW, 90 MILS)

PAVEMENT MARKING LEGEND

- ···CRYSTAL / RED PAVEMENT MARKER
- ···YELLOW / YELLOW PAVEMENT MARKER
- ···CRYSTAL / CRYSTAL PAVEMENT MARKER

10+00

15+00

BEGIN U-6007
-L- 12+47 +/-
TIE TO EXISTING

US 220 BUS FAYETTEVILLE ST 34' BST

-L- 14+03 +/-

TH TI TE TA TF TP T2 UA UB UC UE

10.5' 10.5' 10.5'

11' 11' 10' 10'

-L- 15+21 +/-

-Y1- 10+34 +/-

-Y1- 11+34 +/-

-Y1- 12+35 +/-
TIE TO EXISTING

RIDGE ST (SR1640) 21.5' BST

MATCH LINE -L- 16+00
SEE PM-2

50' 0 50' 100'

29-JAN-2024 14:16
Z:\rdy\rangplan\u-6007_220bus\psh\pmp\US220_bus_PM-1.dgn
psheis

8/17/99

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
U-6007	PM-2
R/W SHEET NO.	

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG I DAVIS

Digitally signed by Greg Davis

01/29/2024

DIVISION PROJECT ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT MARKING LEGEND

- ---CRYSTAL / RED PAVEMENT MARKER
- ---YELLOW / YELLOW PAVEMENT MARKER
- ---CRYSTAL / CRYSTAL PAVEMENT MARKER

PAVEMENT MARKING LINES

T2 -	THERMOPLASTIC (24"	WHITE, 90 MILS)	STOP BAR
T8 -	THERMOPLASTIC (4"	WHITE, 90 MILS)	2' X 6' (SPACE) MINISKIP
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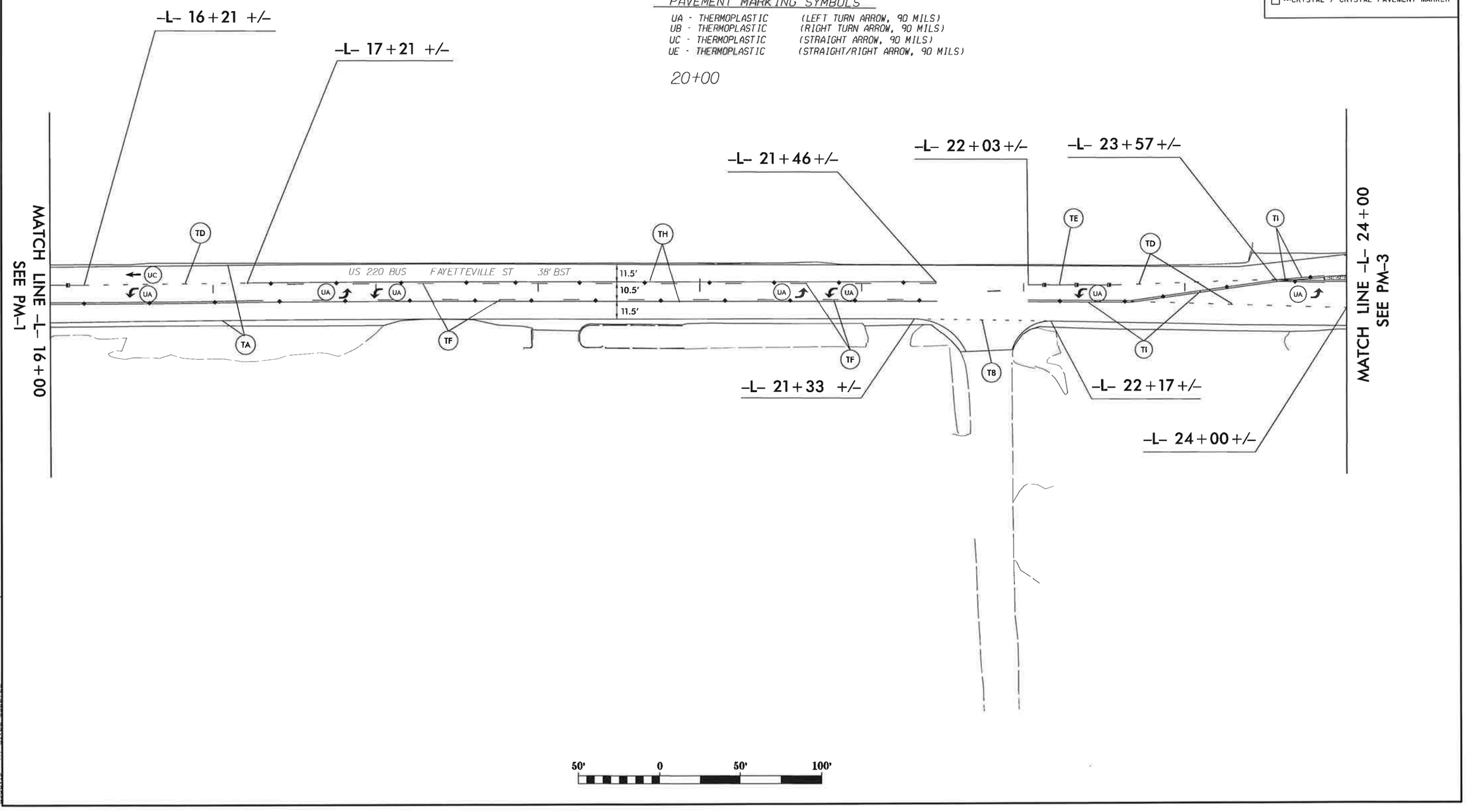
TI -	THERMOPLASTIC (4"	YELLOW, 90 MILS)	DOUBLE CENTER LINE
TN -	THERMOPLASTIC (8"	WHITE, 90 MILS)	GORE LINE
TO -	THERMOPLASTIC (8"	WHITE, 90 MILS)	DIAGONAL
TP -	THERMOPLASTIC (8"	YELLOW, 90 MILS)	DIAGONAL

PAVEMENT MARKING SYMBOLS

UA -	THERMOPLASTIC	(LEFT TURN ARROW, 90 MILS)
UB -	THERMOPLASTIC	(RIGHT TURN ARROW, 90 MILS)
UC -	THERMOPLASTIC	(STRAIGHT ARROW, 90 MILS)
UE -	THERMOPLASTIC	(STRAIGHT/RIGHT ARROW, 90 MILS)

20+00



8/17/95

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
U-6007	PM-3
R/W SHEET NO.	

SEAL 26930 ENGINEER GREG S. DAVIS

Described by: Greg Davis 33047SW DTW 44A

01/29/2024

DIVISION PROJECT ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT MARKING LINES

T2 - THERMOPLASTIC (24"	WHITE,	90 MILS)	STOP BAR
T8 - THERMOPLASTIC (4"	WHITE,	90 MILS)	2' X 6' (SPACE) MINISKIP
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TD - THERMOPLASTIC (4"	WHITE,	90 MILS)	3' X 9' SP MINISKIP
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TO - THERMOPLASTIC (8"	WHITE,	90 MILS)	DIAGONAL
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UA - THERMOPLASTIC	(LEFT TURN ARROW, 90 MILS)
UB - THERMOPLASTIC	(RIGHT TURN ARROW, 90 MILS)
UC - THERMOPLASTIC	(STRAIGHT ARROW, 90 MILS)
UE - THERMOPLASTIC	(STRAIGHT/RIGHT ARROW, 90 MILS)

PAVEMENT MARKING LEGEND

- ···CRYSTAL / RED PAVEMENT MARKER
- ···YELLOW / YELLOW PAVEMENT MARKER
- ···CRYSTAL / CRYSTAL PAVEMENT MARKER

MATCH LINE –L– 24+00
SEE PM-2

–Y3– 14+10 +/–
–L– 25+00 +/–
25+00
–Y3– 14+32 +/–
–L– 24+45 +/–
–L– 25+20 +/–
–L– 25+76 +/–
–L– 26+28 +/–
–L– 27+30 +/–
–L– 28+30 +/–
30+00
–L– 26+01 +/–
–L– 25+86 +/–
–L– 25+20 +/–
–Y4– 10+48 +/–
–L– 24+50 +/–
–Y4– 10+66 +/–
–Y4– 10+79 +/–
–Y4– 11+07 +/–
–L– 27+30 +/–
–L– 26+98 +/–

US 64 EBL 29' BST
US 64 WBL 36' BST
US 220 BUS 46.3' BST
ATLANTIC AVE (SR 2800) 23.4' BST
US 64 EBL 38' BST
US 64 WBL 41.3' BST

MATCH LINE –L– 32+00
SEE PM-4

50' 0 50' 100'

28-JAN-2024 14:16
\\Jobs\6007_220bus\pshcma\US220bus_PM-3.dgn

8/17/99

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
U-6007	PM-4
RW SHEET NO.	

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

DocuSigned by: Greg Davis

01/29/2024

DIVISION PROJECT ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT MARKING LEGEND

---CRYSTAL / RED PAVEMENT MARKER

---YELLOW / YELLOW PAVEMENT MARKER

---CRYSTAL / CRYSTAL PAVEMENT MARKER

PAVEMENT MARKING LINES

T2 - THERMOPLASTIC (24"	WHITE,	90 MILS)	STOP BAR
T8 - THERMOPLASTIC (4"	WHITE,	90 MILS)	2' X 6' (SPACE) MINISKIP
T9 - THERMOPLASTIC (4"	YELLOW,	90 MILS)	2' X 6' (SPACE) MINISKIP
TA - THERMOPLASTIC (4"	WHITE,	90 MILS)	EDGE LINE
TD - THERMOPLASTIC (4"	WHITE,	90 MILS)	3' X 9' SP MINISKIP
TE - THERMOPLASTIC (4"	WHITE,	90 MILS)	SOLID LANE LINE
TF - THERMOPLASTIC (4"	YELLOW,	90 MILS)	10' SKIP
TH - THERMOPLASTIC (4"	YELLOW,	90 MILS)	SINGLE CENTER LINE
TI - THERMOPLASTIC (4"	YELLOW,	90 MILS)	DOUBLE CENTER LINE
TN - THERMOPLASTIC (8"	WHITE,	90 MILS)	GORELINE
TO - THERMOPLASTIC (8"	WHITE,	90 MILS)	DIAGONAL
TP - THERMOPLASTIC (8"	YELLOW,	90 MILS)	DIAGONAL

PAVEMENT MARKING SYMBOLS

UA - THERMOPLASTIC	(LEFT TURN ARROW, 90 MILS)
UB - THERMOPLASTIC	(RIGHT TURN ARROW, 90 MILS)
UC - THERMOPLASTIC	(STRAIGHT ARROW, 90 MILS)
UE - THERMOPLASTIC	(STRAIGHT/RIGHT ARROW, 90 MILS)

35+00

40+00

END U-6007
-L- 38+04 +/-
TIE TO EXISTING

MATCH LINE -L- 32+00
SEE PM-3

US 220 BUS FAYETTEVILLE ST 46' BST

17'
12'
17'

DORSETT AVE ISR 1452 26' BST

-L- 37+03 +/-

50' 0 50' 100'

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STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6007	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

PLAN FOR PROPOSED

HIGHWAY EROSION CONTROL

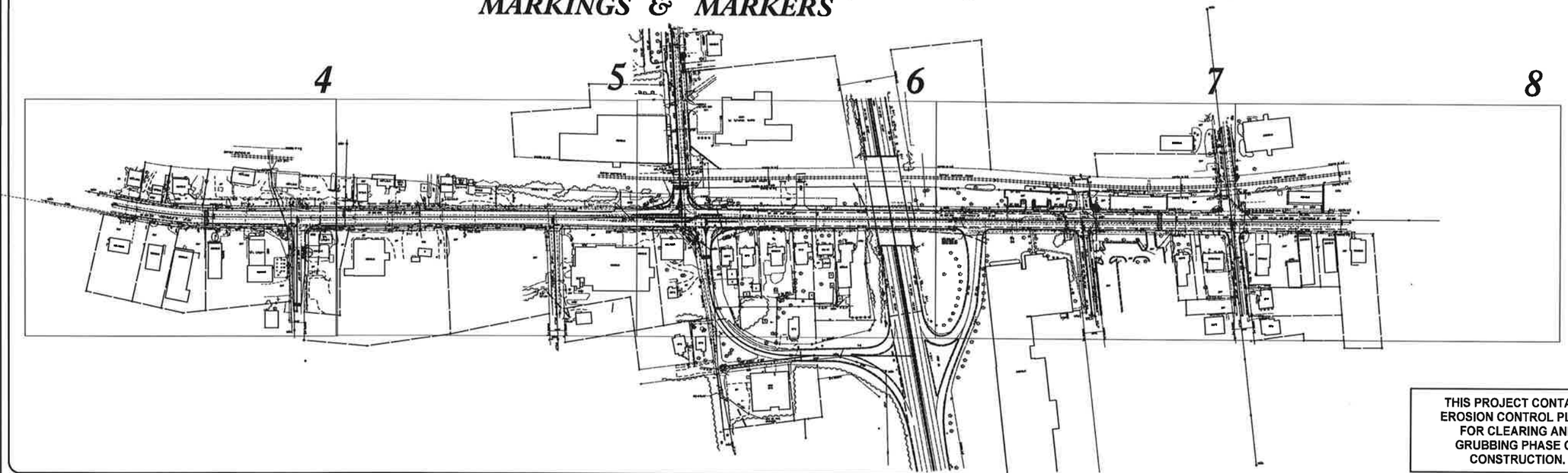
RANDOLPH COUNTY

LOCATION: US 220 BUS. (FAYETTEVILLE ST) FROM SR 2915 (RIDGE RD) TO WALKER AVE.

TYPE OF WORK: GRADING, PAVING, AND THERMOPLASTIC MARKINGS & MARKERS

PROJECT: U-6007

TIP P



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

GRAPHIC SCALE

50 25 0 50 100

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:

Noelle Ring — *NAME*

3456 — *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.

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PROJECT REFERENCE NO.	SHEET NO.
U-6007	EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

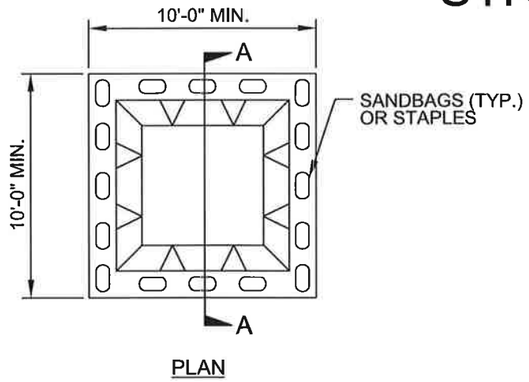
EROSION & SEDIMENT CONTROL LEGEND

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

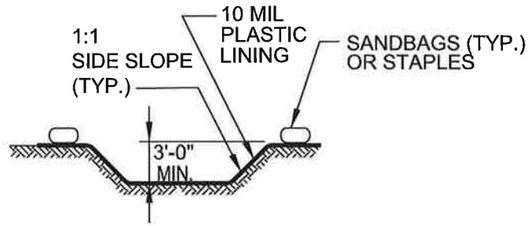
Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet 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.
U-6007	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

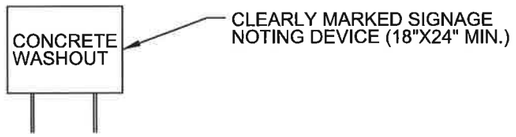
ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



PLAN



SECTION A-A



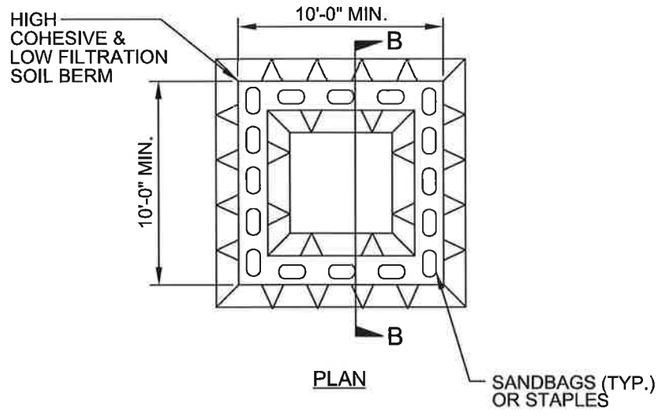
NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

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.

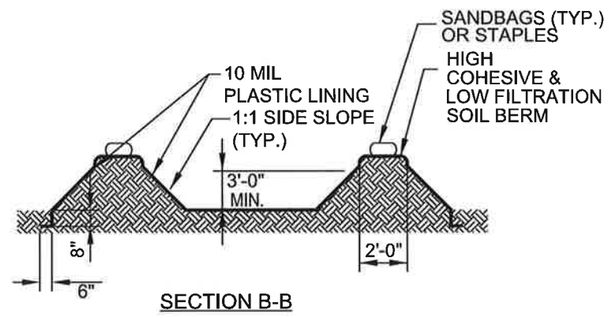
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE

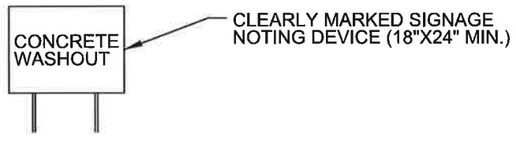
NOT TO SCALE



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

PROJECT REFERENCE NO.	SHEET NO.
U-6007	EC-3
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 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

PROJECT REFERENCE NO.	SHEET NO.
U-6007	EC-4/CONST.4
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED BY ENGINEER INLIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO PREVENT IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

-L- POT Sta. 10+00.00

-L- PC Sta. 10+66.21

-L- PT Sta. 12+70.44

-L- Sta.14+94.58 =
-Y1- POT Sta. 10+00.00

-L- PC Sta. 15+30.75

10+00

15+00

TOWN OF ASHEBORO
DB 376 PG 599

EXISTING RR R/W

NORFOLK SOUTHERN RR

RIPRAP

BLK WALL

4
UTILITY EASEMENT
CENTRAL
TELEPHONE AND
TELEGRAPH COMPANY
DB 1504 PG 1241

VAN MCGILL
WB 15E PG 347

VAN MCGILL
WB 15E PG 347

RANDY KEY
WB 15E PG 214

ISMTLBUS

ISBUS

ISBKBUS

CONC

GR

W/LT

PKF

RRS

EIP

72" CHL & 3SBW

LOG SHOP, LLC
DB 2527 PG 758
PB 150 PG 58

1

POSSIBLE DRAINAGE
JUNCTION BOX
NO ACCESS

U/G PROPANE

42" RCP

72" CHL & 3SBW EIP MTL

N 16°34'24.0" E

N 6°23'53.2" E

US 220 BUS

FAYETTEVILLE ST

34' BST

TB 2GI-A
w/NS

48" RCP-N

REMOVE

0411

0410

RETAIN
W/RCP END
UNKNOWN

15" RCP

INV=832.61'

TB 2GI-A

18"
RCP-IV

TB 2GI-B

RETAIN

0412

PUE

BST

ISBLKBUS

ISBKBUS

MTL CANOPY

U/G TANKS

RIDGE ST (SR1640) 21.5' BST

S 83°55'19" E

123.73'

ROGER & KATHY CHRISCOE
DB 1159 PG 147

JAMES CAGLE
DB 2379 PG 84

WILDA KEARNS
DB 932 PG 41

2
SAMPSON BLADEN OIL
COMPANY, INC
DB 2441PG 714

3
GREENVIEW, INC
DB 1837 PG 2942
PB 120 PG 90

13
JOHN A. & SANDRA
S. LOWE
DB 1693 PG 843
PB 68 PG 12

N 71°21'16" W 209.02'

N 71°21'16" W 213.39'

N 71°21'16" W 222.08'

N 80°30'00" W 219.51'

S 18°29'57" W 125.00'

S 18°29'57" W 80.00'

S 18°29'57" W 60.03'

S 00°09'53" E 60.35'

S 00°16'00" E 224.26'

S 11°26'42" W 95.27'

-Y1- POT
Sta.12+48.37

40.00'

INV=839.43'

EXISTING R/W

MATCH LINE -L- 16+00
SEE SHEET 4

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

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PROJECT REFERENCE NO.	SHEET NO.
U-6007	EC-5/CONST.5
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

PI Sta 17+60.23
△ = 0° 51' 16.6" (RT)
D = 0° 22' 10.7"
L = 231.19'
T = 115.60'
R = 15,500.00'

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED BY ENGINEER INLIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO PREVENT IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

20+00

N 01°40'01" E
210.00'

N 88°14'59" W
217.18'

SP MASTER
DB 2214

ISBKBUS

EXISTING RR R/W

-L- PRC Sta. 16+44.63

SSMH

BST

ISMTLBUS

ISMTL BUS

ISFBUS

INV= 829.23'

BENNY COLLINS
DB 1305 PG 323

36" CMP

30" CMP

24" RCP

15" RCP

ISBLK BUS

JHS MASTER CAPITAL, LLC
DB 2287 PG 1684

12" RCP

5 FAYETTEVILE BILLBOARD, LLC
DB 2373 PG 152

6 HLIDBI, LLC
DB 2310 PG 126

NORFOLK SOUTHERN RR

PUE

ASPH. ISLAND TO BE REMOVED

CONC

ELEV=828.69'
FM CUT FROM PK ON ROAD

US 220 BUS

FAYETTEVILLE ST

38' BST

U6007-99

ASPH CURB

36" WD
INV=845.15'

CONC TOP DI

INV=834.91'

CONC CURB

INV=837.54'

PKF

INV=841.57'

-L- Sta. 21+77.54 =
-Y2- POT Sta. 10+00.00

-L- PT Sta. 18+75.83

IGLESIA DE AVIVAMIENTO
DB 2577 PG 974
PB 154 PG 40

GREENVIEW, INC
DB 1837 PG 2942
PB 120 PG 90

7 PHILLIP BROS COUNTRY HAM
DB 1056 PG 858
PB 2 PG 33

TELEPHONE AVE

INV= 837.58'

INV= 839.38'

PHILLIP BROS COUNTRY HAM
DB 1071 PG 1

-Y2- POT Sta. 12+57.87

EXISTING R/W

40.00'

S 86°43'15" E
280.80'

S 84°10'05" E
123.73'

S 05°51'47" E
268.60'

S 86°04'56" E
1110.94'

N 04°24'38" W
179.67'

N 88°29'59" E
89.70'

MATCH LINE -L- 16+00
SEE SHEET 4

MATCH LINE -L- 24+00
SEE SHEET 6

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

REVISIONS

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-6007	EC-6/CONST.6
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 6

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

MATCH LINE –L– 24+00 SEE SHEET 5

MATCH LINE –L– 32+00 SEE SHEET 7

-L- Sta. 25+22.68 = -Y3- POT Sta. 14+98.30

-L- Sta. 25+84.82 = -Y4- POT Sta. 10+00.00

-Y4- PC Sta. 11+07.15

-Y4- POT Sta. 12+30.92

BM#1
N 705941E 1757541
-BL- STA 20+73 22 LT
ELEV. 853.78'
RR SPIKE IN 36" GUM

RAILROAD SIGNAL EQUIPMENT NOT TO BE DISTURBED DURING CONSTRUCTION

POSSIBLE JUNCTION BOX BST

END OF 12" PIPE UNKNOWN

CLASS I RIP RAP EST 5 TONS

CLASS I RIP RAP EST 5 TONS

GRADE TO DRAIN CL B RIP RAP EST 3 TONS EST 10 SY GEOTEXTILE

CONC FLUME SEE SPECIAL DETAIL

GRADE TO DRAIN CL B RIP RAP EST 3 TONS EST 10 SY GEOTEXTILE

CL B RIP RAP EST 3 TONS EST 10 SY GEOTEXTILE

REMOVE 12 FT OF 18" RCP

REMOVE CB

COLLAR AND EXTEND 15" RCP IV TO NEW CB

3 FT CONC FLUME

RETAIN

PSRM EST 3 SY

ASPH. ISLAND TO BE REMOVED

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED BY ENGINEER INLIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO PREVENT IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

NORFOLK SOUTHERN RAILWAY

EXISTING RR R/W

US 64 EBL 29' BST

US 64 WBL 36' BST

US 220 BUS 46.3' BST

ATLANTIC S&WL (SR 2800) 23.4' BST

2SBK NC NATIONAL GUARD

ISBLKBUS

ISBKBUS

ISBKD

ISFD

ISROCKD

ISMBUS

2SFD

ISBLKD

CANOPY

S 89°04'06" W 257.26'

S 85°30'23" E 85.30'

S 86°58'48" W 178.53'

N 86°43'28" W 190.08'

S 87°01'07" E 182.65'

S 86°30'49" E 193.32'

S 86°30'49" E 183.96'

N 5°50'36.2" E

S 85°42'13" W

N 04°09'28" W 80.00'

S 02°57'28" E 70.00'

INV=849.55'
INV=850.19'

INV=850.35'

R 6900'

R 200' X 200' PROP SD

150' X 100' PROP SD

BST

ASPH CURB

GRADE TO DRAIN

SOIL

PSRM EST 3 SY

GR

CONC

PKF

EIP

EIR

MTL

W/LT

T FO

SSMH

RR SIG BOX

12" RCP

18" RCP

24" RCP

15" RCP-IV

15" RCP

30" C&G

0610 0611 0612 0613 0614 0615 0616 0617 0618

DUE10 DUE11 DUE12

25+00 30+00 32+00

REVISIONS 8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-6007	EC-7/CONST.7
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

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

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 7

ASHEBORO CITY SCHOOLS
DB 400 PG 134
PB 4 PG 92

ASHEBORO CITY SCHOOLS
DB 400 PG 227
PB 1 PG 350

ASHEBORO CITY BOARD OF EDUCATION (THE)
DB 1964 PG 2126

-L- Sta. 35+91.00 =
-Y7- POT Sta. 12+46.00

35+00

-L- Sta. 39+92.13 =
-Y8- POT Sta. 12+51.65

-L- STA. 38+03
END PROJECT U-6007

40+00

BROWN EYES INVESTMENTS, LLC
DB 2346 PG 778

SCHWARZ PROPERTIES, LLC
DB 1902 PG 2293
PB 94 PG 79

MATCH LINE -L- 32+00
SEE SHEET 6

REVISIONS

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$$$$USERNAME$$$$

-Y7- POT Sta. 10+00.00

-L- Sta. 39+93.53 =
-Y9- POT Sta. 10+00.00

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED BY ENGINEER INLIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO PREVENT IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

BM#2
N 707069 E 1757753
-BL- STA 32+36 53 RT
ELEV. 870.25'
RR SPIKE IN 32" OAK

CYNTHIA BROWER
DB 1696 PG 2052

JACKSON CREEK PROPERTIES, LLC
DB 2543 PG 1315
PB 151 PG 77

CYNTHIA BROWER
DB 1938 PG 539

CYNTHIA BROWER
DB 970 PG 406

STANLEY F &

PROJECT REFERENCE NO.	SHEET NO.
U-6007	EC-B/CONST.A
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED BY ENGINEER INLIEU OF ROCK
INLET SEDIMENT TRAP TYPE C TO PREVENT IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

-L- POT Sta. 10+00.00
10+00
-L- PC Sta. 10+66.21
-L- PT Sta. 12+70.44
-L- Sta. 14+94.58 =
-Y1- POT Sta. 10+00.00
-L- PC Sta. 15+30.75
15+00
10+00

TOWN OF ASHEBORO
DB 376 PG 599
EXISTING RR R/W
NORFOLK SOUTHERN RR
42" CMP
BLK WALL
RIPRAP
4 UTILITY EASEMENT CENTRAL TELEPHONE AND TELEGRAPH COMPANY DB 1504 PG 1241

VAN MCGILL
WB 15E PG 347
VAN MCGILL
WB 15E PG 347
RANDY KEY
WB 15E PG 214
ISMTLBUS
ISFBUS
ISBKBUS
ISMTLBUS
1
LOG SHOP, LLC
DB 2527 PG 758
PB 150 PG 58
POSSIBLE DRAINAGE JUNCTION BOX NO ACCESS
ISMTLBUS
EXISTING RR R/W
U/G PROPANE
72" CMP & 3SBW
72" CMP & 3SBW EIR
MTL
42" RCP
16" 34' 24.0"
N 6°23'53.2" E
TB 2GB w/NS
TB 2GB
RETAIN
*RCP END UNKNOWN
REMOVE
0411
0412
0410
US 220 BUS FAYETTEVILLE ST
34' BST
15" RCP
INV=832.61'
BST
ISBLKBUS
ISBKBUS
ISBKBUS
ROGER & KATHY CHRISCOE
DB 1159 PG 147
JAMES CAGLE
DB 2379 PG 84
WILDA KEARNS
DB 932 PG 41
S 18°29'57" W
125.00'
S 18°29'57" W
80.00'
S 18°29'57" W
60.03'
S 00°53'53" E
60.35'
N 71°21'16" W
213.31'
N 71°16'49" W
209.20'
N 80°22'08" W
215.00'
N 84°00'03" W
215.00'
2
SAMPSON BLADEN OIL COMPANY, INC
DB 2441 PG 714
ISBKBUS
MTL CANOPY
CONC
U/G TANKS
RIDGE ST (SR1640) 25' BST
S 83°55'19" E
224.26'
S 00°16'00" E
13
JOHN A. & SANDRA S. LOWE
DB 1693 PG 843
PB 68 PG 12
INV=839.43'
60.00'
EXISTING R/W
PUE
3
GREENVIEW, INC
DB 1837 PG 2942
PB 120 PG 90
S 11°26'42" W
95.27'
123.73'
-Y1- POT Sta. 12+48.37
CONC
MTL CANOPY
ISBKBUS
18" RCP
72" WD
W/L
GR

MATCH LINE -L- 16+00
SEE SHEET 4

REVISIONS
8/17/99

RT-MAR-2022 15:04
R:\Projects\U-6007\Design\US220_bus_EC.dgn_4.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
U-6007	EC-9/CONST.5
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

PI Sta 17+60.23
△ = 0° 51' 16.6" (RT)
D = 0° 22' 10.7"
L = 231.19'
T = 115.60'
R = 15,500.00'

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED BY ENGINEER INLIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO PREVENT IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

20+00

-L- PRC Sta. 16+44.63

MATCH LINE -L- 16+00 SEE SHEET 4

MATCH LINE -L- 24+00 SEE SHEET 6

N 01°40'01" E 210.00'

N 88°14'59" W 211.18'

SP MASTER DB 2214

ISBKBUS

EXISTING RR R/W

5 FAYETTEVILE BILLBOARD, LLC DB 2373 PG 152

6 HLIDBI, LLC DB 2310 PG 126

NORFOLK SOUTHERN RR

SSMH

BST

ISMTLBUS

ISMTL BUS

ISFBUS

INV= 829.23'

BENNY COLLINS DB 1305 PG 323

S 82°42'00" E 76.43'

12" CMP & 3SSMH

36" CMP

DI

30" CMP

24" RCP

15" RCP

12" RCP

WD

ISBLK BUS

JHS MASTER CAPITAL, LLC DB 2287 PG 1684

S 83°23'24" E 51.28'

PUE

ASPH. ISLAND TO BE REMOVED

S 86°00'53" E 38.13'

CONC

ASPH CURB

ELEV=828.69' FM CUT FROM PK ON ROAD

US 220 BUS

FAYETTEVILLE ST

38' BST

24" RCP

U6007-99

10+00

36" RCP

W/LT

T FO

SS

FSS

G

EIR

GR

INV=834.91'

CONC CURB

INV=837.54'

PKF

INV=841.57'

36" WD INV=845.15'

CONC TOP DI

SOIL

-L- Sta. 21+77.54 =
-Y2- POT Sta. 10+00.00

-L- PT Sta. 18+75.83

S 86°43'15" E 280.80'

S 71°49'49" E 109.13'

S 84°10'05" E 123.73'

IGLESIA DE AVIVAMIENTO DB 2577 PG 974 PB 154 PG 40

GREENVIEW, INC DB 1837 PG 2942 PB 120 PG 90

23' BST

TELEPHONE AVE

S 86°40'59" E 272.57'

7 PHILLIP BROS COUNTRY HAM DB 1056 PG 858 PB 2 PG 33

INV= 837.59'

30" RCP

N 04°24'38" W 179.67'

10" RCP

INV= 839.38'

PHILLIP BROS COUNTRY HAM DB 1071 PG 1

N 88°29'59" E 69.70'

S 05°51'47" E 268.60'

EXISTING R/W

40.00'

188.11'

PROJECT REFERENCE NO.	SHEET NO.
U-6007	EC-10/CONST.6
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

MATCH LINE -L- 24+00
SEE SHEET 5

MATCH LINE -L- 32+00
SEE SHEET 7

-L- Sta.25+22.68 =
-Y3- POT Sta.14+98.30

BM#1
N 705941E 1175741
-BL- STA 20+73 22 LT
ELEV. 853.78'
RR SPIKE IN 36" GUM

-L- Sta. 25+84.82 =
-Y4- POT Sta.10+00.00

-Y4- PC Sta. 11+07.15

-Y4- POC Sta. 12+30.92

CLASS I RIP RAP
EST 5 TONS

GRADE TO DRAIN
CL B RIP RAP
EST 3 TONS
EST 10 SY GEOTEXTILE

CONC FLUME
SEE SPECIAL
DETAIL

REMOVE 12 FT
OF 18" RCP

REMOVE GB
COLLAR AND EXTEND
15" RCP IV TO
NEW CB

3 FT CONC
FLUME

PSRM
EST 3 SY

ASPH. ISLAND
TO BE REMOVED

RAILROAD SIGNAL EQUIPMENT
NOT TO BE DISTURBED
DURING CONSTRUCTION

POSSIBLE
JUNCTION BOX
BST

2SBK
NC NATIONAL GUARD

END OF 12" PIPE
UNKNOWN

NORFOLK SOUTHERN RAILWAY

EXISTING RR R/W

US 220 BUS 46.3' BST

US 64 EBL 29' BST

US 64 WBL 36' BST

30' C&G

ISBLKBUS
ISBKBUS
ISBKD
ISFD
ISROCKD
ISBLKD
ISMBUS
2SFD
CANOPY

ATLANTIC SEE (SR 2800) 23.4' BST

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED BY ENGINEER INLIEU OF ROCK
INLET SEDIMENT TRAP TYPE C TO PREVENT IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

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PROJECT REFERENCE NO.	SHEET NO.
U-6007	EC-11/CONST.7
R/W SHEET NO.	
DIVISION PROJECT ENGINEER	HYDRAULICS ENGINEER

REVISIONS

MATCH LINE -L- 32+00
SEE SHEET 6

ASHEBORO CITY SCHOOLS
DB 400 PG 134
PB 4 PG 92

ASHEBORO CITY SCHOOLS
DB 400 PG 227
PB 1PG 350

ASHEBORO CITY BOARD OF EDUCATION (THE)
DB 1964 PG 2126

S 8°38'53" W
345.63'

-L- Sta. 35+91.00 =
-Y7- POT Sta. 12+46.00

35+00

-L- Sta. 39+92.13 =
-Y8- POT Sta. 12+51.65

N 05°40'38" E
321.51'

S 88°50'04" W
62.11'

-L- STA. 38+03
END PROJECT U-6007

40+00

BROWN EYES INVESTMENTS, LLC
DB 2346 PG 778

SCHWARZ PROPERTIES, LLC
DB 1902 PG 2293
PB 94 PG 79

BROWN EYES INVESTMENTS, LLC
DB 2346 PG 778

CYNTHIA BROWER
DB 1696 PG 2052

JACKSON CREEK PROPERTIES, LLC
DB 2543 PG 1315
PB 151PG 77

CYNTHIA BROWER
DB 1938 PG 539

CYNTHIA BROWER
DB 970 PG 406

SCHWARZ PROPERTIES, LLC
DB 1902 PG 2293
PB 94 PG 79

NORFOLK SOUTHERN RAILWAY

EXISTING RR R/W

END OF PIPE UNKNOWN

END OF 18"RCP UNKNOWN

ASPH. ISLAND TO BE REMOVED

ASPH. ISLAND TO BE REMOVED

US 220 BUS

FAYETTEVILLE ST

ASPH CURB

46' BST

BST ISL

ASSUMED PIPE
LOCATION
NCDOT INV=862.00
8.158470I

BM#2
N 707069 E 1757753
-BL- STA 32+36 53 RT
ELEV. 870.25'
RR SPIKE IN 32" OAK

-L- Sta. 39+93.53 =
-Y9- POT Sta. 10+00.00

-Y7- POT Sta. 10+00.00

S 89°25'11.2" W
S 89°25'11.2" W

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED BY ENGINEER INLIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO PREVENT IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

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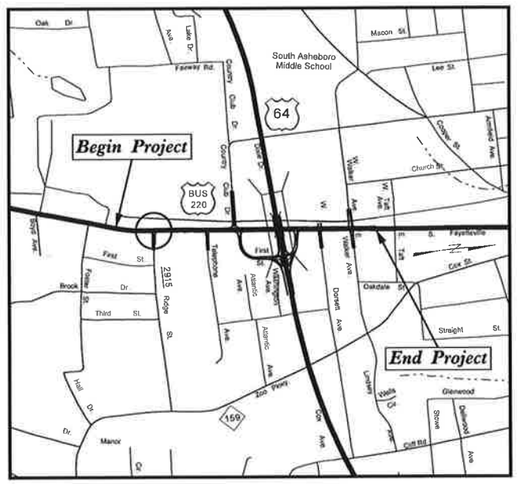
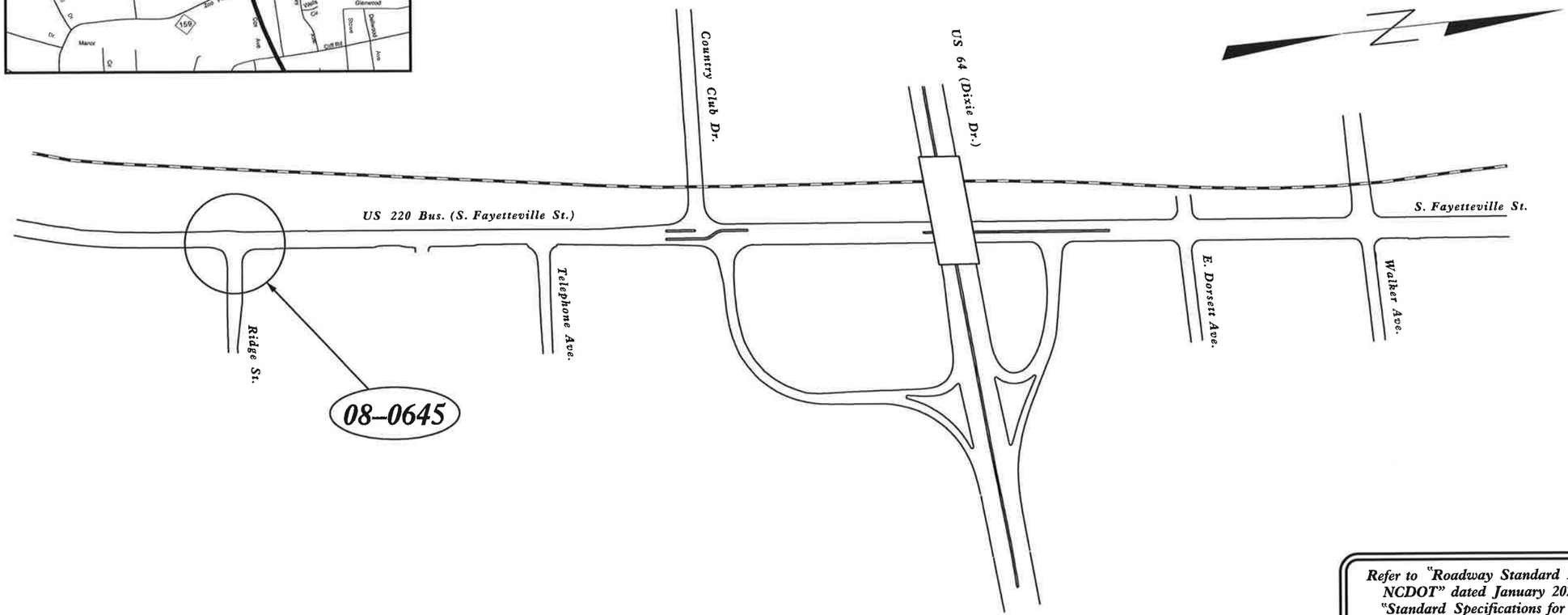
Project No.	Sheet No.
U-6007	Sig. 1.0

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

Project: U-6007

Vicinity





LOCATION: US 220 BUSINESS (SOUTH FAYETTEVILLE STREET)
FROM SR 2915 (RIDGE STREET) TO SR 1453 (WALKER AVENUE)

TYPE OF WORK: TRAFFIC SIGNALS

Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.

Index of Plans

Sheet #	Reference #	Location/Description
Sig. 1.0		Title Sheet
Sig. 2.0–2.1	08–0645	US 220 Business (South Fayetteville Street) at SR 2915 (Ridge Street)

INTELLIGENT TRANSPORTATION AND SIGNALS UNIT

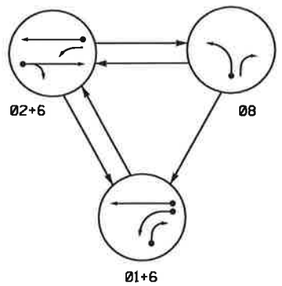
Contacts:

Robert J. Ziemba, PE – Central Region Signals Engineer
Todd D. Joyce, PE – Signal Equipment Design Engineer

Prepared in the Office of:
DIVISION OF HIGHWAYS
TRANSPORTATION MOBILITY AND SAFETY DIVISION
ITS and Signals Unit
750 N. Greenfield Parkway, Garner, NC 27529

PROJECT REFERENCE NO.	SHEET NO.
U-6007	Sig 2.0

PHASING DIAGRAM



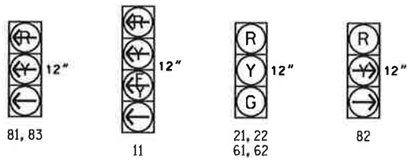
PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION				
SIGNAL FACE	PHASE 01+6	PHASE 02+6	PHASE 08	FLASH
11	~~→~~	~~Y~~	~~R~~	~~Y~~
21, 22	R	G	R	Y
61, 62	G	G	R	Y
81, 83	~~R~~	~~R~~	~~←~~	~~R~~
82	~~→~~	R	~~→~~	R

SIGNAL FACE I.D.

All Heads L.E.D.

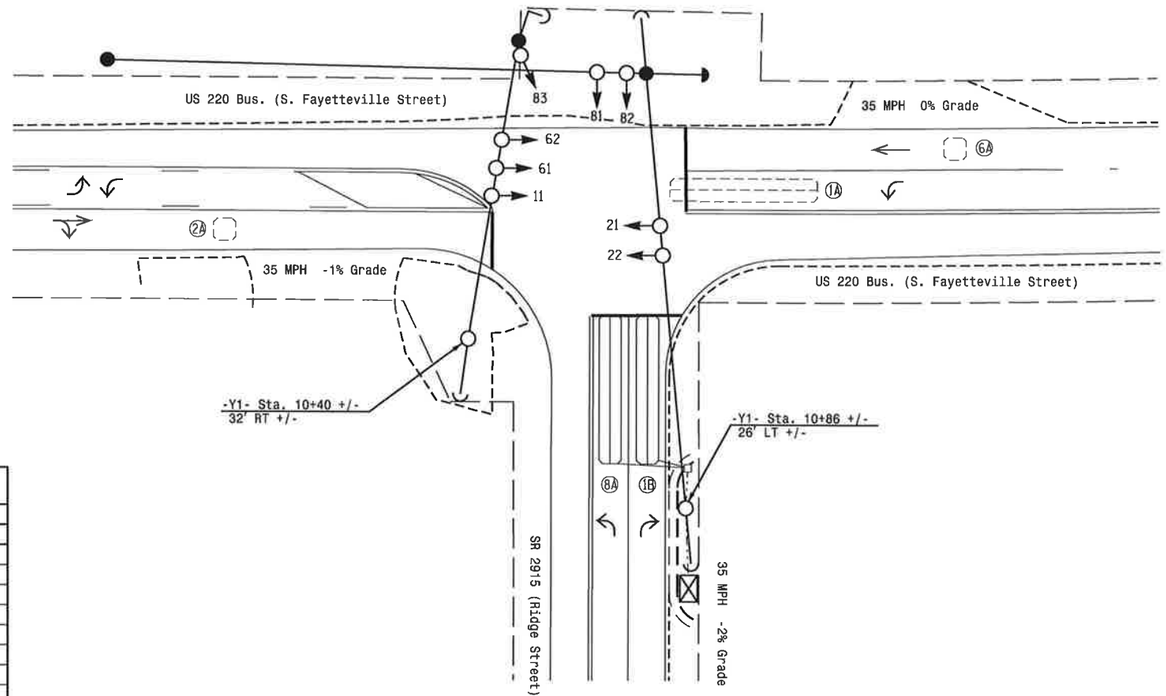


MAXTIME DETECTOR INSTALLATION CHART												
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	+5	2-4-2	-	1	15	-	X	-	X	-	X
1B	6X40	0	2-4-2	X	1	15	-	X	-	X	-	X
2A	6X6	70	EXIST	-	2	-	-	X	-	X	-	X
6A	6X6	70	EXIST	-	6	-	-	X	-	X	-	X
8A	6X40	0	2-4-2	X	8	3	-	X	-	X	-	X

3 Phase
Fully Actuated
(Isolated)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. See PMP for stop line locations.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	

MAXTIME TIMING CHART				
FEATURE	PHASE 1	PHASE 2	PHASE 6	PHASE 8
Walk *	-	-	-	-
Ped Clear *	-	-	-	-
Min Green *	7	12	12	7
Passage *	2.0	3.0	3.0	2.0
Max 1 *	20	60	60	30
Yellow Change	3.0	3.9	3.9	3.0
Red Clear	1.2	1.1	1.1	1.9
Added Initial *	-	-	-	-
Maximum Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Advance Walk	-	-	-	-
Non Lock Detector	X	-	-	X
Vehicle Recall	-	MIN RECALL	MIN RECALL	-
Dual Entry	-	-	-	-

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Traffic Engineering Branch
Signal Design Section
1730 N. Greenfield Pkwy. Garner, NC 27529

US 220 Bus.
(S. Fayetteville Street)
at
SR 2915 (Ridge Street)

Division 8 Randolph County Asheboro

PLAN DATE:	October 2023	REVIEWED BY:	
PREPARED BY:	J.A. Lohr	REVIEWED BY:	

SCALE 0 20 1"=20'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA
Documents not considered final unless signed and sealed
11/29/2023
SIGNATURE DATE

SIG. INVENTORY No. 08-0645

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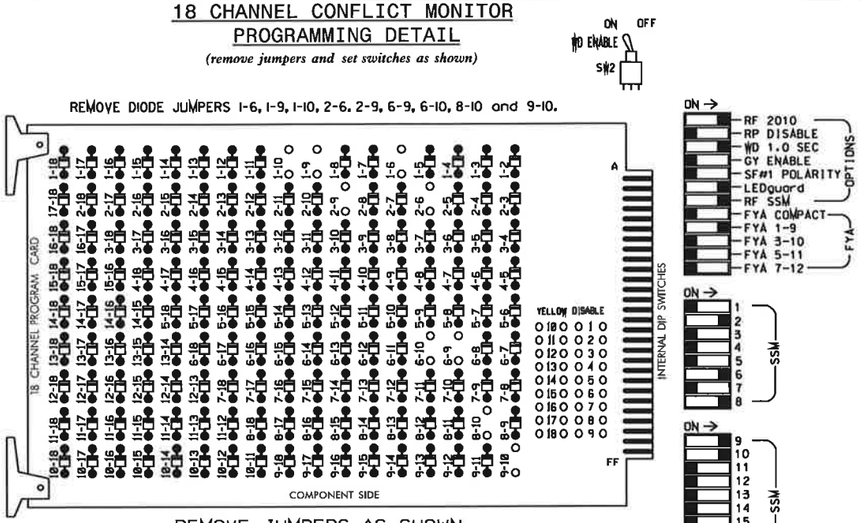
PROJECT REFERENCE NO.	SHEET NO.
U-6007	Sig. 2.1

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



REMOVE JUMPERS AS SHOWN

NOTES:

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that Red Enable is active at all times during normal operation.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

■ = DENOTES POSITION OF SWITCH

NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
2. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
3. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

EQUIPMENT INFORMATION

Controller.....2070LX
Cabinet.....332 w/ Aux
Software.....Q-Free MAXTIME
Cabinet Mount.....Base
Output File Positions.....18 With Aux. Output File
Load Switches Used.....S1, S2, S8, S11, AUX S1, AUX S2
Phases Used.....1, 2, 6, 8
Overlap "1".....*
Overlap "2".....*
Overlap "3".....Not Used
Overlap "4".....Not Used

*See overlap programming detail on this sheet

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11*	21,22	NU	NU	NU	NU	NU	61,62	NU	NU	81,83	NU	11*	82*	NU	NU	NU	NU
RED		128						134						A124				
YELLOW	*	129						135										
GREEN		130						136										
RED ARROW											107		A121					
YELLOW ARROW											108		A122	A125				
FLASHING YELLOW ARROW													A123					
GREEN ARROW	127										109			A126				

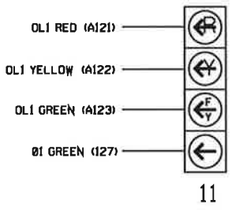
NU = Not Used

*Denotes install load resistor. See load resistor installation detail this sheet.

*See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal head as shown)



INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	Ø1 1A	Ø2 2A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	FS DC ISOLATOR
	L	NOT USED	NOT USED												ST DC ISOLATOR
FILE "J"	U	SLOT EMPTY	Ø6 6A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	Ø8 8A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L		NOT USED				Ø1 1B								

EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
1A	TB2-1,2	I1U	56	18	1	1	15		X		X	
1B	TB5-11,12	J6L	46	8	23	1	15		X		X	
2A	TB2-5,6	I2U	39	1	2	2			X		X	
6A	TB3-5,6	J2U	40	2	16	6			X		X	
8A	TB5-9,10	J6U	42	4	22	8	3		X		X	

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

1. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
2. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
3. REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)

OVERLAP PROGRAMMING

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
Home >Controller >Overlap Configuration >Overlaps

Overlap Plan 1

Overlap	1	2
Type	FYA 4 - Section	Normal
Included Phases	2	1,8
Modifier Phases	1	-
Modifier Overlaps	-	-
Trail Green	0	0
Trail Yellow	0.0	0.0
Trail Red	0.0	0.0

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 08-0645
DESIGNED: October 2023
SEALED: 11/29/2023
REVISED: N/A

Electrical Detail

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:

Transportation Mobility and Safety Division
Traffic Engineering Branch
Traffic Signal Management Section

750 N. Greenfield Pkwy, Garner, NC 27529

US 220 Bus.
(S. Fayetteville Street)
at
SR 2915 (Ridge Street)

Division 8 | Randolph County | Asheboro

PLAN DATE: November 2023 | REVIEWED BY:
PREPARED BY: Zarrar Zafar | REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 031001 ENGINEER D. TODD JOYCE

D. Todd Joyce 11/30/2023
SIG. INVENTORY NO. 08-0645

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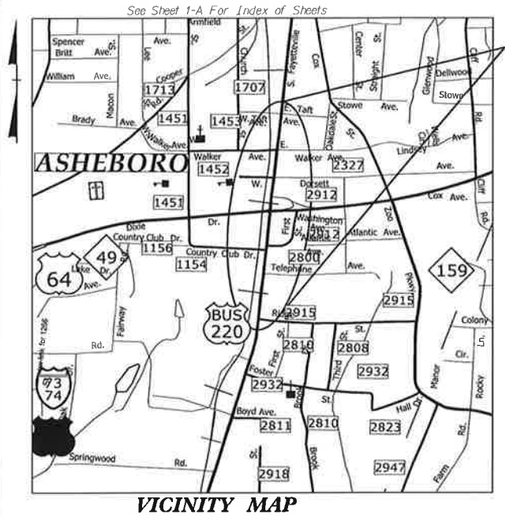
09/28/99

TIP PROJECT: U-6007

WBS 47142.3.1



VICINITY MAP

PROJECT LOCATION

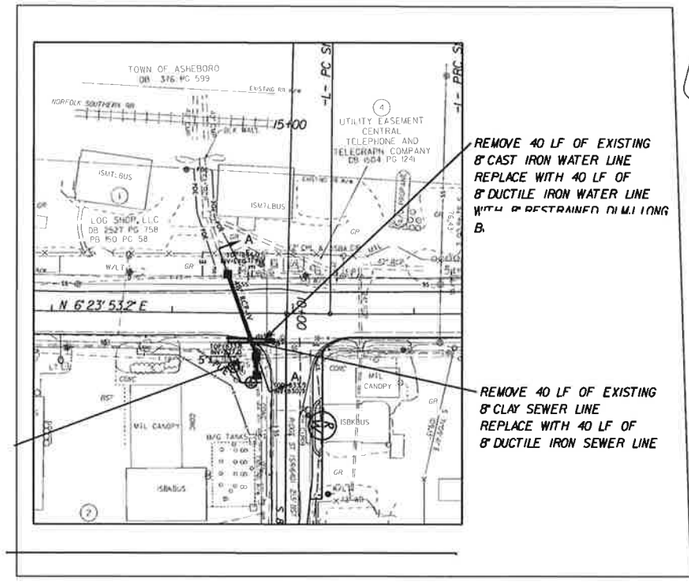
T.I.P. NO.	SHEET NO.
U-6007	UC-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITY CONSTRUCTION PLANS
RANDOLPH COUNTY

LOCATION: AT THE INTERSECTION OF US 220 BUS. (FAYETTEVILLE ST) & SR 2915 (RIDGE ST) IN ASHEBORO

TYPE OF WORK: WATER LINE & SEWER LINE RELOCATIONS



UC-4

COST BREAKDOWN

75% NCDOT
25% CITY OF ASHEBORO

DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

INDEX OF SHEETS

SHEET NO.:	*DESCRIPTION:*
UC-1	*TITLE SHEET*
UC-2	*UTILITY SYMBOLOGY*
UC-3 THRU UC-3B	*NOTES & DETAILS*
UC-4	*UTILITY CONSTRUCTION SHEET*

WATER AND SEWER OWNERS ON PROJECT

(A) WATER (CITY OF ASHEBORO)
(B) SEWER (CITY OF ASHEBORO)

PREPARED IN THE OFFICE OF
DIVISION DESIGN /CONSTRUCT UNIT
121 DOT DRIVE
CARTHAGE NC 28327
910-773-8000

GREG S. DAVIS, PE *DIVISION PROJECT ENGINEER*

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS
DocuSigned by: Greg S. Davis 02/23/2024

DIVISION OF HIGHWAYS
UTILITIES UNIT
1555 MAIL SERVICES CENTER
RALEIGH NC 27699-1555
PHONE (919) 707-6690
FAX (919) 250-4151

_____ *UTILITIES REGIONAL ENGINEER*
_____ *UTILITIES ENGINEER*
_____ *UTILITIES AREA COORDINATOR*
_____ *UTILITIES COORDINATOR*

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PROJECT REFERENCE NO.	SHEET NO.
U-6007	UC-2

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

- Water Line (Sized as Shown) — 12" WL
- 11¼ Degree Bend
- 22½ Degree Bend
- 45 Degree Bend
- 90 Degree Bend
- Plug
- Tee
- Cross
- Reducer
- Gate Valve — GV
- Butterfly Valve — BV
- Tapping Valve — TGV
- Line Stop — LS
- Line Stop with Bypass — LS/BP
- Blow Off — BO
- Fire Hydrant — PFH
- Relocate Fire Hydrant — REH
- Remove Fire Hydrant — REM FH
- Water Meter — PWM
- Relocate Water Meter — RWM
- Remove Water Meter — REM WM
- Water Pump Station — PS(W)
- RPZ Backflow Preventer — PRPZ
- DCV Backflow Preventer — PDFP
- Relocate RPZ Backflow Preventer — RRPZ
- Relocate DCV Backflow Preventer — RDFP

PROPOSED SEWER SYMBOLS

- Gravity Sewer Line (Sized as Shown) — 12" SS
- Force Main Sewer Line (Sized as Shown) — 12" FSS
- Manhole (Sized per Note)
- Sewer Pump Station — PS(SS)

PROPOSED MISCELLANOUS UTILITIES SYMBOLS

- Power Pole
- Telephone Pole
- Joint Use Pole
- Telephone Pedestal — TEL PED
- Utility Line by Others (Type as Shown) — PROP O/H POW LINES
- Trenchless Installation — 12" TL INSTALL
- Encasement by Open Cut — 24" ENCAS BY OC
- Encasement — 24" ENCASEMENT
- Thrust Block
- Air Release Valve — AR
- Utility Vault — UV
- Concrete Pier — CP
- Steel Pier — SP
- Plan Note — NOTE
- Pay Item Note — PAY ITEM

EXISTING UTILITIES SYMBOLS

- Power Pole
- Telephone Pole
- Joint Use Pole
- Utility Pole
- Utility Pole with Base
- H-Frame Pole
- Power Transmission Line Tower
- Water Manhole
- Power Manhole
- Telephone Manhole
- Sanitary Sewer Manhole
- Hand Hole for Cable
- Power Transformer
- Telephone Pedestal — T
- CATV Pedestal — C
- Gas Valve
- Gas Meter
- Located Miscellaneous Utility Object
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.
- *Underground Power Line — P
- *Underground Telephone Cable — T
- *Underground Telephone Conduit — TC
- *Underground Fiber Optics Telephone Cable — T FO
- *Underground TV Cable — TV
- *Underground Fiber Optics TV Cable — TV FO
- *Underground Gas Pipeline — G
- Aboveground Gas Pipeline — A/G Gas
- *Underground Water Line — W
- Aboveground Water Line — A/G Water
- *Underground Gravity Sanitary Sewer Line — SS
- Aboveground Gravity Sanitary Sewer Line — A/G Sanitary Sewer
- *Underground SS Forced Main Line — FSS
- Underground Unknown Utility Line — ?UTL
- SUE Test Hole
- Water Meter
- Water Valve
- Fire Hydrant
- Sanitary Sewer Cleanout

*For Existing Utilities

- Utility Line Drawn from Record (Type as Shown)
- Designated Utility Line (Type as Shown)

REV: 2/1/2012

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PROJECT REFERENCE NO.	SHEET NO.
U-6007	UC-3
DESIGNED BY: GSD	
DRAWN BY: MRT	
CHECKED BY: GSD	
APPROVED BY: GSD	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151	UTILITY CONSTRUCTION PLANS ONLY

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

Greg S. Davis 02/23/2024

UTILITY CONSTRUCTION

GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2024.

2. THE EXISTING UTILITIES BELONG TO THE CITY OF ASHEBORO (COA).

CONTACT: MICHAEL RHONEY (WATER)
PHONE: 336-626-1201 EXT. 258

CONTACT: MICHAEL LEONARD (SEWER)
PHONE: 336-626-1201 EXT. 228

3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT QUALITY, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.

4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.

5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.

7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.

8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.

9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

PROJECT SPECIFIC NOTES:

1. CONTRACTOR'S ATTENTION IS DIRECTED TO THE UTILITY CONSTRUCTION SPECIAL PROVISIONS PROVIDED ALONG WITH THIS PLAN SET.

2. IF THERE ARE EXISTING WATER LINES WITHIN THIS PROJECT CORRIDOR THAT ARE OF ASBESTOS CEMENT (AC) MATERIAL. THESE WATER LINES ARE TO BE REMOVED ONCE THE NEW WATER LINES ARE PLACED INTO SERVICE. ALL WORKERS SHALL BE ADEQUATELY TRAINED TO WORK WITH ASBESTOS CEMENT PIPE AND WEAR PROPER PPE AT ALL TIMES WHEN WORKING WITH AC PIPE. ALL REMOVED AC PIPE SHALL BE BAGGED/WRAPPED IN PLASTIC COVERING AND PLACED IN A SEPARATE DUMPSTER SPECIFICALLY FOR AC PIPE ONLY. THE DUMPSTER SHALL BE TRANSPORTED TO A LOCAL HAZARDOUS WASTE LANDFILL THAT ACCEPTS AC PIPE. CONTRACTOR SHALL PROVIDE HAULING TICKETS TO THE RESIDENT ENGINEER CERTIFYING THAT THE AC PIPE WAS DISPOSED OF AT THE APPROPRIATE LANDFILL. THIS WORK SHALL BE CONDUCTED IN ACCORDANCE WITH ALL INDUSTRY, LOCAL, STATE, AND FEDERAL REQUIREMENTS.

3. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE BORE DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.

4. WATER LINE 4-INCHES AND LARGER SHALL BE DUCTILE IRON PIPE AND BE EITHER THICKNESS CLASS 50 OR PRESSURE CLASS 350.

5. 5-INCH AND 2-INCH WATER LINE SHALL BE PVC PIPE, CLASS 315 SDR-13.5 WITH ELASTOMERIC GASKET COUPLINGS. PIPE AND FITTINGS SHALL BE PRODUCED BY THE SAME MANUFACTURER. PIPE SHALL BE NSF CERTIFIED AND BEAR THE NSF LOGO

6. VALVES ON WATER LINE 4-INCH THROUGH 12-INCH SHALL BE GATE VALVES.

7. VALVES ON 1.5-INCH AND 2-INCH WATER LINE SHALL BE BRASS BALL TYPE CURB VALVES.

8. PVC PIPE MANUFACTURED MORE THAN 12 MONTHS BEFORE INSTALLATION DATE WILL NOT BE ACCEPTED.

9. ALL PVC PIPE INSTALLED ON THE PROJECT SHALL BE INSTALLED WITH A CONTINUOUS TRACER WIRE FOR LOCATION PURPOSES BY MEANS OF AN ELECTONIC TRACING DEVICE.

10. ALL FORCE MAIN PIPE INSTALLED ON THE PROJECT SHALL BE OF THE SAME SIZE AND PIPE MATERIAL AS THE EXISTING PIPE. CONTRACTOR SHALL CONFIRM SIZE AND PIPE MATERIAL BEFORE STARTING ANY WORK.

11. GRAVITY SEWER 4-INCHES AND LARGER SHALL BE DUCTILE IRON PIPE AND BE EITHER THICKNESS CLASS 50 OR PRESSURE CLASS 350, OR PVC SDR-35.

12. GRAVITY SEWER SERVICE LINES 4-INCH AND 6-INCH SHALL BE SCHEDULE 40 PVC-DWV. SERVICE LINES SHALL BE INSTALLED WITH AT LEAST THE FOLLOWING MINIMUM SLOPES: 2% SLOPE FOR 4-INCH PIPE; 1 % SLOPE FOR 6-INCH PIPE.

13. EXISTING PVC FORCE MAIN SEWERS SHALL BE EXCAVATED AND FIELD BENT AS NEEDED TO PROVIDE FOR HORIZONTAL AND/OR VERTICAL TRANSITION AND TIE-IN TO PROPOSED PIPE, AS DIRECTED BY THE RESIDENT ENGINEER.

14. ALL WATER LINE FITTINGS 4-INCH THROUGH 24-INCH DIAMETER SHALL BE DUCTILE IRON WITH MECHANICAL JOINTS OR RESTRAINED JOINTS AND HAVE A MINIMUM PRESSURE RATING OF 350 PSI.

15. ALL PROPOSED FITTINGS (BENDS, TEES, CROSSES, REDUCERS, PLUGS, ETC.) SHALL BE ADEQUATELY RESTRAINED BY THE USE OF RESTRAINED JOINT CONSTRUCTION AND/OR CAST IN PLACE CONCRETE THRUST RESTRAINTS AS DETAILED ON THESE DRAWINGS, OR AS DIRECTED BY THE RESIDENT ENGINEER.

16. ALL PROPOSED WATER LINE AND SANITARY SEWER PIPE SHALL BE DUCTILE IRON PIPE WHERE INSTALLED WITH: LESS THAN 3 FEET OF COVER; OR GREATER THAN 20 FEET OF COVER; OR LESS THAN 2 FEET OF SEPARATION FROM A BOX CULVERT.

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED

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UTILITY CONSTRUCTION

PROJECT SPECIFIC NOTES:

17. DUCTILE IRON PIPE SHALL BE EITHER PUSH-ON JOINT, MECHANICAL JOINT, OR RESTRAINED JOINT CONSTRUCTION.

18. CARRIER PIPE INSIDE OF STEEL ENCASEMENT PIPES SHALL BE DUCTILE IRON PIPE WITH RESTRAINED JOINT CONSTRUCTION.

19. ALL PROPOSED WATER LINE AND SANITARY SEWER PIPE SHALL BE INSTALLED WITH A MINIMUM OF 3 FEET OF COVER, UNLESS OTHERWISE SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.

20. FLEXIBLE COUPLINGS SHALL NOT BE USED AS TRANSITION COUPLINGS BETWEEN DIFFERENT PIPE TYPES.

21. CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER AND ALL PROPERTY OWNERS TO DETERMINE THE LOCATION OF ALL EXISTING WATER SERVICE LINES AND SEWER SERVICE LINES BEFORE STARTING CONSTRUCTION.

22. IN THE EVENT THAT EXCESSIVE GROUNDWATER OR SPRINGS ARE ENCOUNTERED DURING PIPE CONSTRUCTION, THE CONTRACTOR SHALL EMPLOY ALL METHODS NECESSARY TO KEEP THE TRENCHES DRY, AS DIRECTED BY THE RESIDENT ENGINEER.

23. WATER SERVICE LINES SHALL BE SEAMLESS COPPER TYPE K AS SPECIFIED BY ASTM 888.

24. ALL STAINLESS STEEL FASTENERS SHALL BE OF GRADE 316.

25. EXISTING WATER METERS TO REMAIN SHALL BE RECONNECTED TO THE EXISTING /PROPOSED WATER LINE WITH NEW WATER SERVICE LINES.

26. NEW AND RELOCATED WATER METERS SHALL BE CONNECTED TO THE EXISTING /PROPOSED WATER LINE WITH NEW WATER SERVICE LINES.

27. NEW AND RELOCATED WATER METERS SHALL BE INSTALLED WITH THE BACK OF THE METER BOX (CUSTOMER SIDE) AT THE RIGHT-OF-WAY LINE OR PUE LINE, UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER.

28. WATER METER BOXES SHALL NOT BE INSTALLED WITHIN A PAVED AREA, DRIVEWAY, OR SIDEWALK, UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER AND APPROVED BY THE UTILITY OWNER.

29. CONTRACTOR SHALL RECONNECT CUSTOMER SIDE WATER SERVICE LINE TO THE NEW OR RELOCATED WATER METER. THIS WORK IS INCIDENTAL TO THE PAY ITEM.
ALL WORK SHALL BE CONDUCTED WITH LIKE PIPE MATERIALS AS THE EXISTING PIPES UNLESS THE EXISTING MATERIALS ARE FOUND TO BE UNSUITABLE (I.E. GALVANIZED OR LEAD), THEN CONTRACTOR SHALL USE WATER SERVICE PIPE AND TUBING AS NOTED ABOVE.

30. EXISTING WATER SERVICE LINES TO BE ABANDONED SHALL BE DONE IN ACCORDANCE WITH SECTION 1530 OF THE NCDOT SPECIFICATIONS OR AS DIRECTED BY THE RESIDENT ENGINEER.

31. ALL HYDRANTS, PROPOSED OR RELOCATED, SHALL BE INSTALLED 2 FEET BEHIND THE SIDEWALK, OR WITHIN ONE FOOT OF THE R/W LINE, OR AS DIRECTED BY THE RESIDENT ENGINEER.

32. HYDRANTS AND WATER METERS LABELLED TO BE REMOVED SHALL NOT BE USED AS NEW MATERIALS IN THE PROPOSED CONSTRUCTION UNLESS APPROVED BY THE UTILITY OWNER.

33. EXISTING HYDRANTS AND WATER METERS TO BE REMOVED AND/OR RELOCATED SHALL BE RETURNED TO THE UTILITY OWNER FOR INSPECTION. CONTRACTOR SHALL DELIVER THESE UTILITY ITEMS TO A MUTUALLY AGREED UPON LOCATION. ALL OTHER PARTS, PIPING, AND METER BOXES REMOVED FROM THE SYSTEM SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AND BE PROPERLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

34. PROPOSED SANITARY CLEAN OUTS SHALL BE INSTALLED AT THE RIGHT-OF-WAY LINE, UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER.

35. EXISTING SANITARY SEWER CLEANOUTS TO REMAIN SHALL BE RECONNECTED TO THE PROPOSED SANITARY SEWER PIPE WITH NEW SEWER SERVICE LINES.

36. CONTRACTOR SHALL RECONNECT THE EXISTING CUSTOMER SIDE SEWER SERVICE LINE TO THE NEW SANITARY SEWER CLEAN OUT. THIS WORK IS INCIDENTAL TO THE PAY ITEM. ALL WORK SHALL BE CONDUCTED WITH LIKE PIPE MATERIALS AS THE EXISTING PIPE.

37. EXISTING SEWER SERVICE LINES TO BE ABANDONED SHALL BE DONE IN ACCORDANCE WITH SECTION 1530 OF THE NCDOT SPECIFICATIONS OR AS DIRECTED BY THE RESIDENT ENGINEER.

38. EXISTING SEWER SERVICE LINES ARE ASSUMED TO BE 4-INCH DIAMETER PIPE.

39. WHERE A NEW MANHOLE IS INSTALLED ALONG A RUN OF EXISTING VITRIFIED CLAY PIPE (VCP) GRAVITY SEWER MAIN, THE EXISTING VCP SHALL BE REPLACED WITH EITHER PVC PIPE OR D.I. PIPE FOR A MINIMUM OF 10 LF FROM THE MANHOLE.

40. SANITARY MANHOLES SHALL BE PRECAST REINFORCED CONCRETE WITH A MONOLITHIC BASE AND 5-INCH THICK WALLS.

41. ALL NEW SANITARY MANHOLES SHALL BE VACUUM TESTED FOR LEAKAGE IN THE PRESENCE OF A CITY INSPECTOR.

42. FORCE MAIN SEWER PIPE TIE-IN WORK SHALL BE DONE AT PERIODS OF LOW FLOW. CONTRACTOR SHALL COORDINATE SHUT DOWN OF THE AFFECTED PUMP STATION WITH THE PARCEL OWNER. CONTRACTOR SHALL OBTAIN A PUMP AND HAUL PERMIT AND HAVE OPERATION PLAN IN PLACE TO PUMP OUT THE WET WELL AND HAUL FLOW TO THE DOWNSTREAM MANHOLE AND REINTRODUCE THE FLOW INTO THE GRAVITY SYSTEM.

43. GRAVITY SEWER PIPE TIE-IN WORK SHALL BE DONE AT PERIODS OF LOW FLOW. CONTRACTOR SHALL COORDINATE TIMING OF THE WORK WITH THE CITY OF ASHEBORO. CONTRACTOR SHALL OBTAIN A PUMP AND HAUL PERMIT AND HAVE OPERATION PLAN IN PLACE TO PUMP OUT FLOW FROM A MANHOLE UPSTREAM OF THE TIE-IN WORK AND HAUL FLOW TO A MANHOLE DOWNSTREAM OF THE TIE-IN WORK AND REINTRODUCE THE FLOW INTO THE GRAVITY SYSTEM.

44. CONTRACTOR SHALL NOT OPERATE ANY VALVES ON THE EXISTING UTILITY SYSTEMS. CONTRACTOR SHALL CONTACT THE UTILITY OWNER TO CONDUCT STRATEGIC OPERATION OF VALVES FOR SERVICE INTERRUPTION IN ORDER TO PERFORM SPECIFIC WORK.

45. CONTRACTOR SHALL CONTACT THE UTILITY OWNER PRIOR TO PERFORMING SYSTEM FLUSHING OR BLOW-OFF OPERATIONS.

PROJECT REFERENCE NO.	SHEET NO.
U-6007	UC-3A
DESIGNED BY: GSD	
DRAWN BY: MRT	
CHECKED BY: GSD	
APPROVED BY: GSD	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151	UTILITY CONSTRUCTION PLANS ONLY

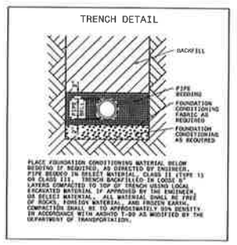
NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

Greg S. Davis 02/23/2024

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED

PROJECT TYPICAL DETAILS

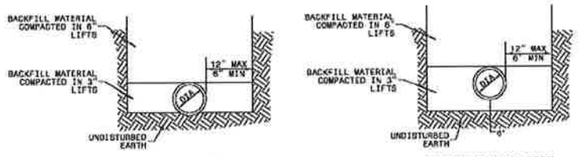


MAXIMUM TRENCH WIDTH AT TOP OF PIPE

NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28	20	44
6	30	24	48
8	32	30	54
10	34	36	60
12	36	42	66
14	36	48	72
16	40	54	78
18	42		

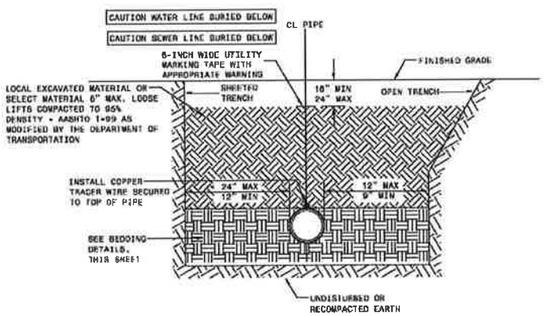
5/14/99

UTILITY DETAILS



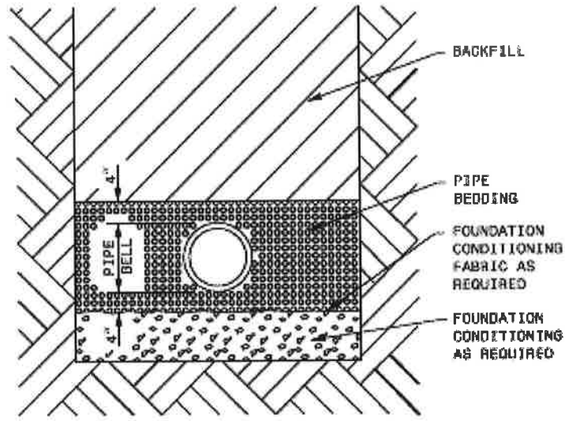
NOTES:
1. CONSTRUCTION OF TRENCHES SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY AND HEALTH REGULATIONS WHICH HAVE JURISDICTION AT THE PROJECT SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE APPLICABLE REGULATIONS AND FOLLOW THEM ACCORDINGLY.
2. CLASS I EMBEDMENT SHALL BE NCDOT STANDARD # 67 STONE OR APPROVED EQUAL. FOUNDATION STONE SHALL BE NCDOT STANDARD # 57 OR # 67 STONE OR APPROVED EQUAL.

UTILITY PIPE TRENCH DETAILS



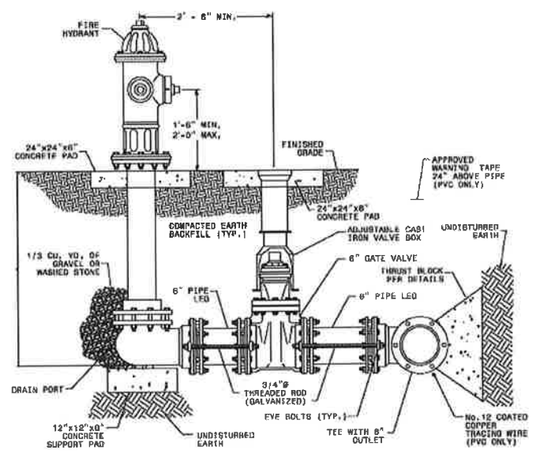
NOTES:
1. ALL SHORING & TRENCHING SHALL COMPLY WITH OSHA SAFETY STANDARDS FOR THE CONSTRUCTION INDUSTRY.
2. BELL HOLES NOT SHOWN.
3. ALL BACKFILL MATERIAL SHALL BE FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH.

GENERAL TRENCH DETAIL



NOTES:
1. PLACE FOUNDATION CONDITIONING MATERIAL BELOW BEDDING IF REQUIRED, AS DIRECTED BY ENGINEER.
2. PIPE BEDDED IN NCDOT #57 STONE.
3. TRENCH BACKFILLED IN LOOSE 6" LAYERS COMPACTED TO TOP OF TRENCH USING LOCAL EXCAVATED MATERIAL IF APPROVED BY THE ENGINEER, OR SELECT MATERIAL. ALL MATERIAL SHALL BE FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH.
4. COMPACTION SHALL BE TO APPROXIMATELY 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE DEPARTMENT OF TRANSPORTATION.

BEDDING DETAIL FOR POLYVINYL CHLORIDE (PVC) PIPE



TYPICAL FIRE HYDRANT ASSEMBLY DETAIL

PROJECT REFERENCE NO.	SHEET NO.
U-6007	UC-3B
DESIGNED BY: GSD	
DRAWN BY: MRT	
CHECKED BY: GSD	
APPROVED BY: GSD	
REVISED:	

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SEC.
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FAX: (919)250-4151

Greg S. Davis 02/23/2024

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

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PROJECT REFERENCE NO.	SHEET NO.
U-6007	UC-4
DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	
REVISED:	

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
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NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER CRAIG S. DAVIS

Craig S. Davis 02/23/2024

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

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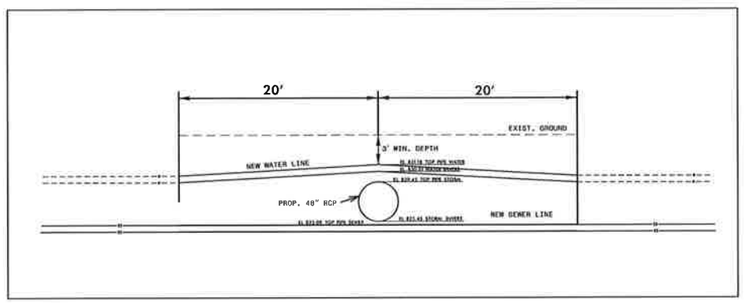
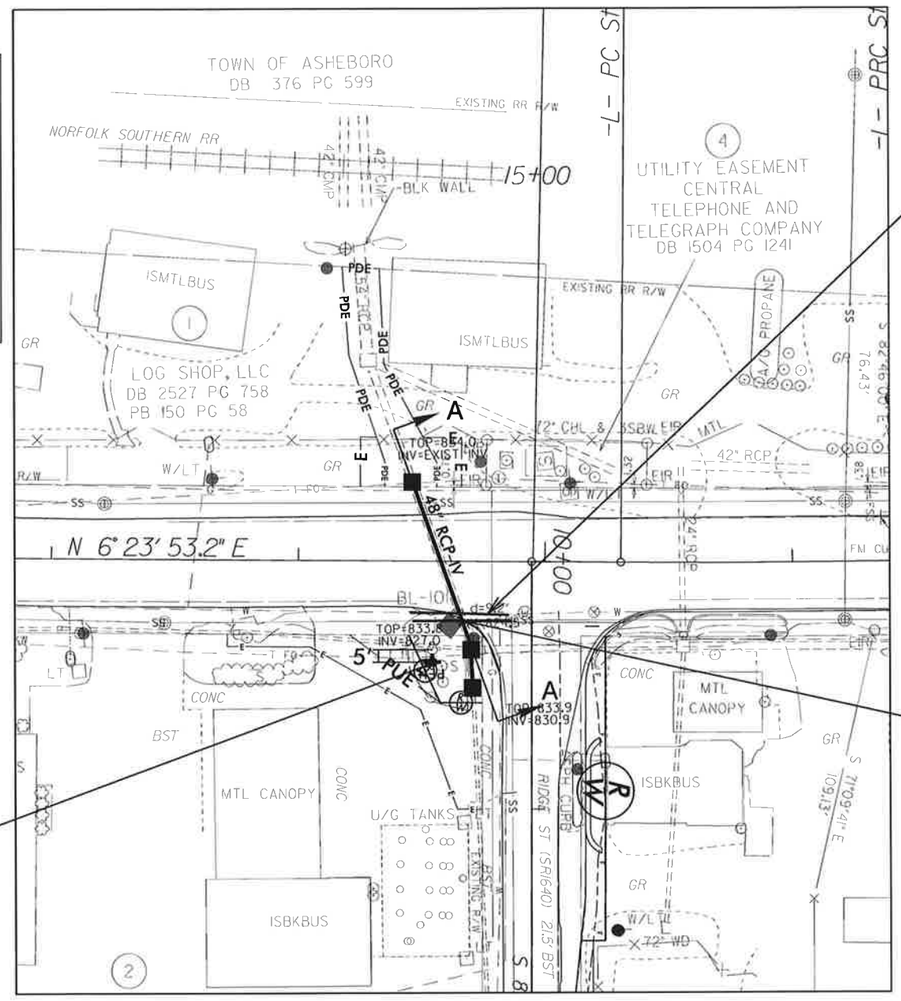


SECTION A-A



REMOVE 40 LF OF EXISTING 8" CAST IRON WATER LINE REPLACE WITH 40 LF OF 8" DUCTILE IRON WATER LINE WITH 8" RESTRAINED DI MJ LONG BODY SOLID SLEEVES.

REMOVE 40 LF OF EXISTING 8" CLAY SEWER LINE REPLACE WITH 40 LF OF 8" DUCTILE IRON SEWER LINE

RELOCATE FIRE HYDRANT 5 LF 6" FIRE HYDRANT LEG

NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON FITTINGS ON THIS PLAN SHEET IS 340 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-A

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CROSS-SECTION SUMMARY

NOTE: EMBANKMENT COLUMN DOES NOT INCLUDE BACKFILL FOR UNDERCUT

Station -L-	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
24+00.00	0	0
24+20.00	1	0
24+40.00	3	0
24+60.00	10	0
24+80.00	18	0
25+00.00	10	0

Station -L-	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
25+40.00	0	0
25+60.00	16	0
25+80.00	11	0
26+00.00	3	1
26+10.75	2	0
26+20.00	6	1
26+40.00	20	1
26+60.00	11	0
26+80.00	4	0
27+00.00	3	0

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 lump sum price for "Grading".

Station -Y1-	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
10+20.00	0	0
10+40.00	20	0
10+60.00	10	0
10+80.00	11	0
11+00.00	12	0
11+20.00	11	0
11+40.00	8	0
11+60.00	6	0
11+80.00	5	0
12+00.00	4	0
12+20.00	2	0

Station -Y3-	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
14+20.00	0	0
14+40.00	10	1
14+60.00	17	0
14+63.81	3	0

Station -Y4-	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
10+29.17	0	0
10+40.00	10	0
10+60.00	22	0
10+80.00	9	1
11+00.00	4	1

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-1

14 + 00.00

834.10 / 22.43 — 834.04 / 17.44 — 2.76 — 2.75 — 834.52 / 0.00 — 3.52 — 3.53 — 833.86 / 18.74 — 834.30 / 23.74

13 + 80.00

834.11 / 22.17 — 834.07 / 17.17 — 2.62 — 2.60 — 834.52 / 0.00 — 2.49 — 2.47 — 834.05 / 19.07 — 333.87 / 24.07

13 + 60.00

834.19 / 21.78 — 834.23 / 16.78 — 1.93 — 834.56 / 0.00 — 2.08 — 2.12 — 834.16 / 19.19 — 834.07 / 24.19

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	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

845 840 835 830 825

833.99
19.03
2.80
2.82
834.53
0.00
2.09
2.10
834.10
20.64
834.04
20.03
834.27
21.64

14+60.00

834.06
18.20
2.60
2.55
834.53
0.00
2.34
2.38
834.09
18.54
834.04
23.20
834.34
23.54

14+40.00

834.06
17.84
2.56
2.55
834.52
0.00
2.89
2.88
833.98
18.55
834.11
22.84
834.23
23.55

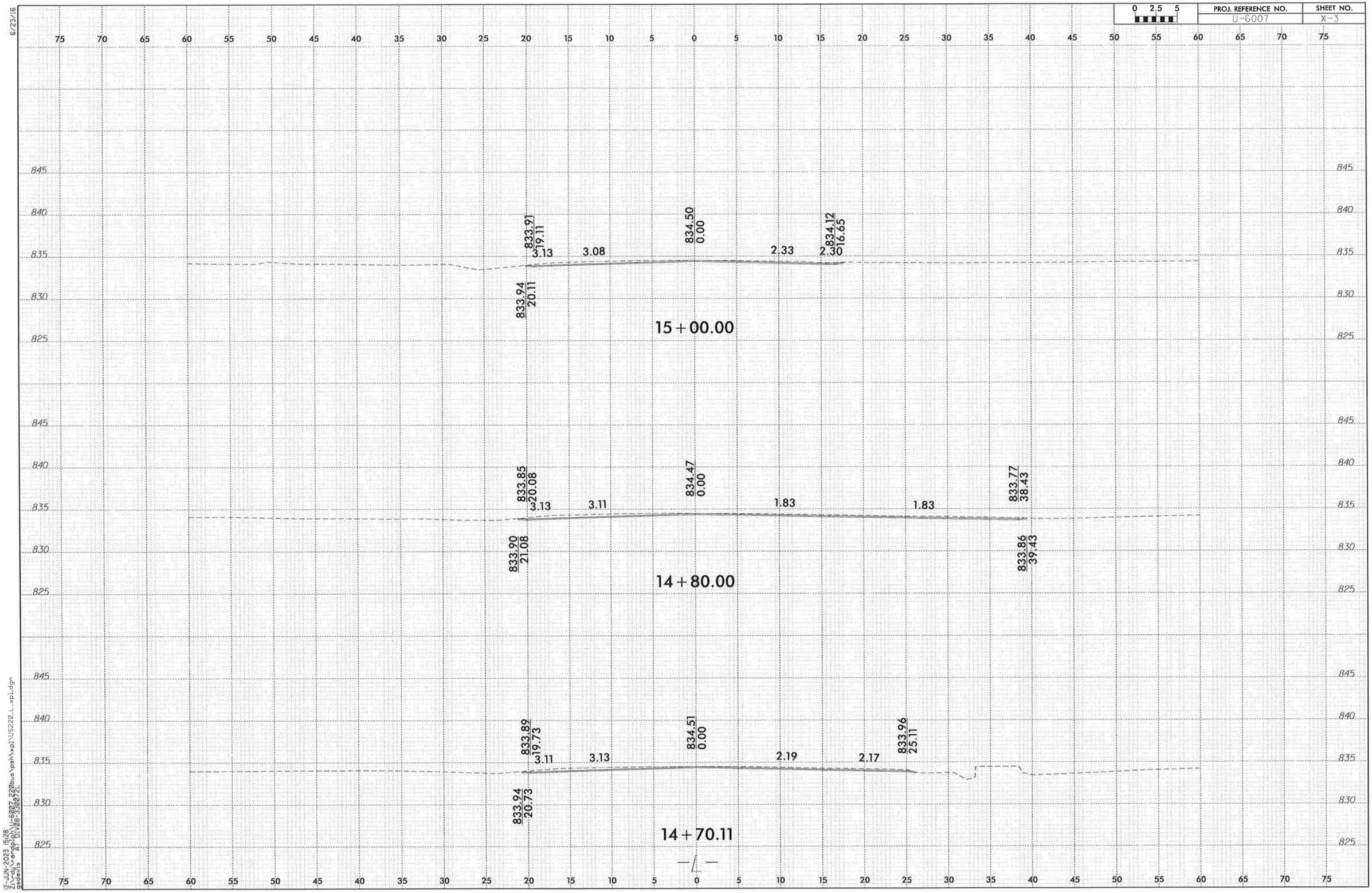
14+20.00

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

845 840 835 830 825

6/23/15

0 2,5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-3



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gadavis
D1128_330712L

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	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

845 840 835 830 825

833.69
23.22

834.02
18.22

2.35 2.30

834.44
0.00

3.60 3.6

833.75
19.00

833.51
24.00

15+55.97

833.94
18.85

834.05
17.85

2.24 2.19

834.44
0.00

3.45 3.44

833.75
20.03

833.82
21.03

15+40.00

834.09
17.33

834.06
17.78

2.23 2.36

834.48
0.00

2.34 2.34

833.69
33.65

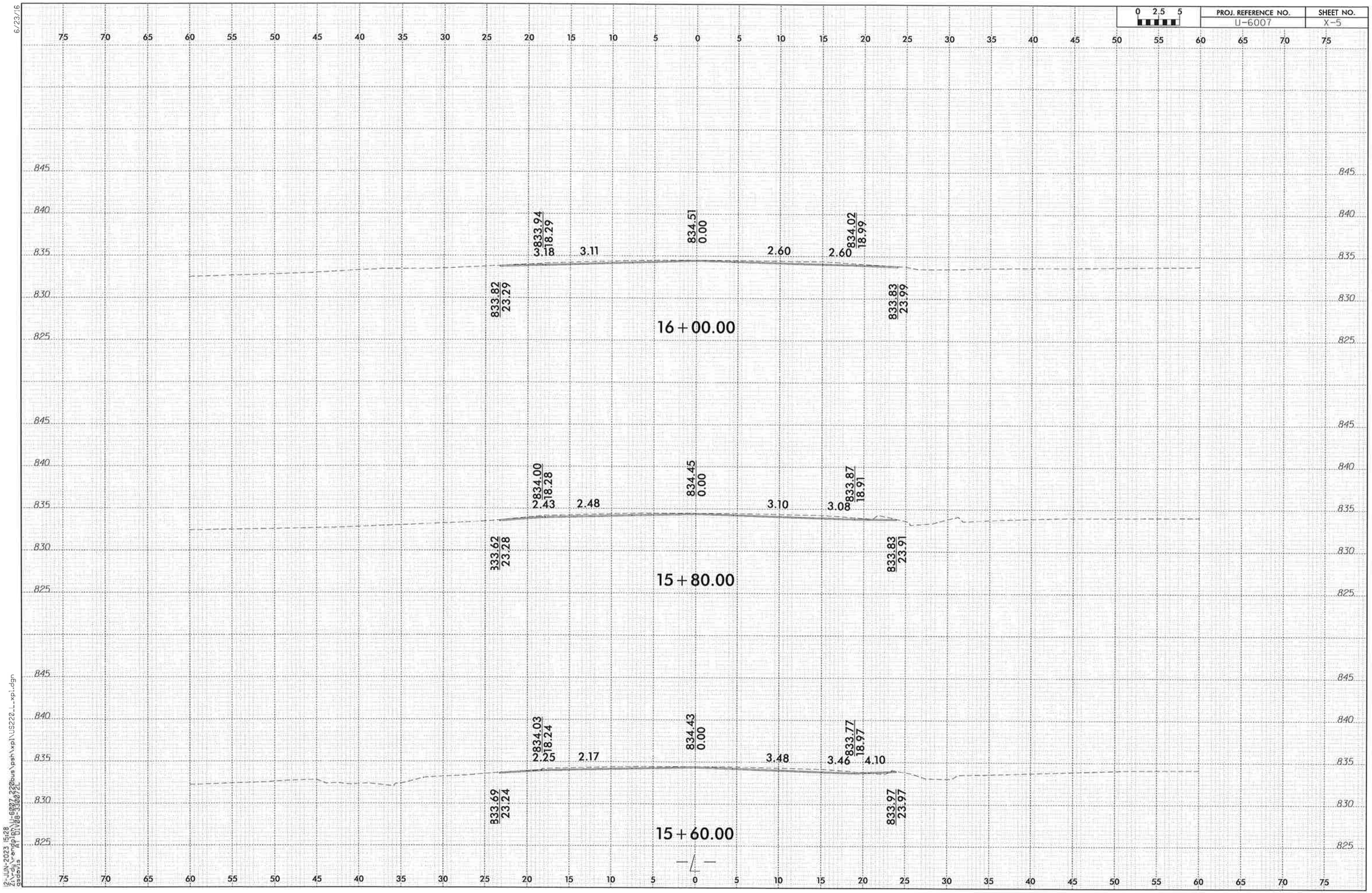
833.86
34.64

15+20.00

—/—

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-5



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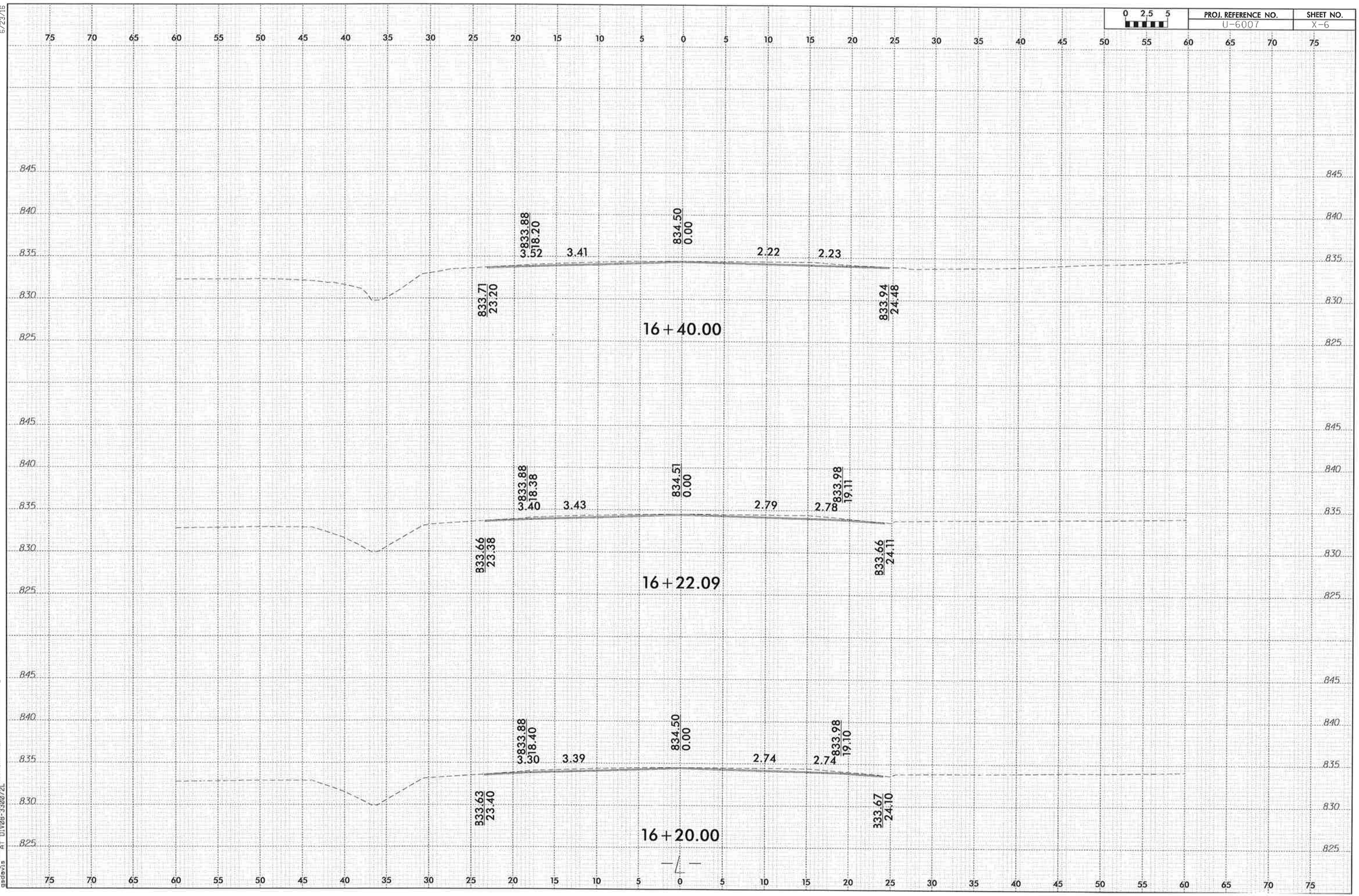
gsdavis
PT DIV/08-3300720

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-6



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gadavis
DIV/08-3300/2L

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-7

0 2.5 5

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

845 840 835 830 825

833.93
23.37

834.04
18.37

2.91 2.89

834.57
0.00

1.97 1.98

834.17
20.22

833.92
25.22

17+00.00

833.81
23.60

833.94
18.60

3.24 3.21

834.54
0.00

1.98 1.98

834.14
20.10

833.91
25.10

16+80.00

833.74
23.77

833.87
18.77

3.51 3.46

834.52
0.00

2.05

833.95
24.86

16+60.00

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AT DIV08-330072C
gaddavis

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-8

0 2.5 5

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

845 840 835 830 825

834.33 / 17.85

3.53 3.53

834.96 / 0.00

3.29 3.29

834.28 / 20.84

1.58

834.28 / 22.85

834.20 / 25.84

17+60.00

834.14 / 18.00

3.72 3.66

834.80 / 0.00

2.60 2.59

834.26 / 20.71

3.78

834.01 / 23.00

834.07 / 25.71

17+40.00

834.11 / 18.17

3.09 3.06

834.66 / 0.00

2.12 2.12

834.23 / 20.51

834.00 / 23.17

834.05 / 25.51

17+20.00

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-9

0 2.5 5

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

845 840 835 830 825

835.36
17.56
3.15
3.12
835.91
0.00
835.33
17.56
3.31
3.45
4.20
835.21
22.55
835.12
22.56

18+20.00

834.95
17.63
3.11
3.10
835.50
0.00
4.26
4.23
834.79
22.63
834.29
25.83

18+00.00

834.58
17.72
3.41
3.45
835.19
0.00
3.69
3.71
834.42
20.86
4.36
834.47
22.72
834.20
25.86

17+80.00

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	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

845 840 835 830 825

836.36 / 17.49
3.09
3.04
836.89 / 0.00
3.11
836.35 / 17.38
3.21
836.16 / 22.49
335.96 / 22.38

18+60.00

835.78 / 17.51
3.43
3.47
836.38 / 0.00
3.36
835.81 / 17.09
3.62
25.36
335.57 / 22.51
335.54 / 22.09

18+40.00

835.63 / 17.52
3.64
3.65
836.27 / 0.00
3.28
835.71 / 17.05
3.20
8.97
335.33 / 22.52
335.26 / 22.05

18+35.58

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gaddavis
AT DIV08-3360726

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-11

0 2.5 5

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

845 840 835 830

337.56 / 22.52

837.93 / 17.52

4.14 4.15

838.66 / 0.00

3.38 3.39

837.91 / 22.06

2.08

838.02 / 27.06

19+20.00

837.12 / 22.51

837.43 / 17.51

3.53 3.58

838.05 / 0.00

3.04 3.03

837.37 / 22.45

1.26

837.43 / 27.45

19+00.00

336.49 / 22.49

836.84 / 17.49

3.46 3.53

837.46 / 0.00

2.93 2.93

836.85 / 20.86

18+80.00

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-12

0 2.5 5

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

850 845 840 835 830

19+80.00

38.99 / 22.54

839.91 / 17.54 — 3.54

3.47

840.52 / 0.00

2.34

2.34

840.05 / 20.30

19+60.00

38.48 / 22.51

839.22 / 17.51 — 3.90

3.94

839.91 / 0.00

2.63

2.65

839.38 / 20.08 — 9.56

839.86 / 25.08

19+40.00

37.70 / 22.46

838.56 / 17.46 — 4.07

4.07

839.27 / 0.00

2.51

2.52

838.76 / 20.01 — 6.06

838.61 / 16.16

838.84 / 16.96

838.46 / 25.01

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-13

0 2.5 5

20+60.00

842.20 / 22.91 — 4.42 — 842.35 / 17.91 — 4.44 — 843.14 / 0.00 — 2.95 — 2.96 — 842.56 / 19.81 — 9.92 — 842.06 / 24.81

20+40.00

841.23 / 22.43 — 3.90 — 841.79 / 17.43 — 3.92 — 842.47 / 0.00 — 2.94 — 2.94 — 841.89 / 19.71

20+20.00

840.62 / 22.15 — 4.00 — 841.14 / 17.15 — 3.99 — 841.82 / 0.00 — 2.84 — 2.89 — 841.27 / 19.62

20+00.00

839.87 / 22.41 — 3.82 — 840.51 / 17.41 — 3.78 — 841.17 / 0.00 — 2.65 — 2.67 — 840.65 / 19.56

—/—

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6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	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

855 850 845 840 835

844.16 / 21.55

844.83 / 16.5

3.76 3.71

845 / 0.0

2.83

844.98 / 19.9

2.87 0.20

844.57 / 24.99

21+20.00

855 850 845 840 835

843.83 / 16.67

3.80 3.89

844.47 / 0.00

2.51

843.98 / 19.59

2.52

843.37 / 21.67

21+00.00

855 850 845 840 835

843.07 / 17.47

4.14 4.15

843.79 / 0.00

2.73

843.25 / 19.75

2.73 10.16

842.78 / 22.47

842.75 / 24.75

20+80.00

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-15

21+76.89

846.35 / 21.56 — 2.22 — 846.46 / 16.5 — 2.26 — 2.28 — 846.46 / 0.01 — 1.12 — 1.11 — 1.12 — 846.46 / 21.11 — 4.25 — 846.92 / 26.10

21+60.00

845.49 / 21.52 — 2.63 — 845.46 / 16.5 — 2.62 — 846.46 / 0.01 — 2.02 — 2.02 — 845.46 / 20.7 — 3.92 — 846.15 / 25.78

21+40.00

844.82 / 21.43 — 3.68 — 845.15 / 16.43 — 3.64 — 845.7 / 0.00 — 2.87 — 2.87 — 845.16 / 20.40 — 0.64 — 845.13 / 25.40

855 850 845 840 835

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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gadavis
Div08-336072C

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	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

855 850 845 840

847.92
21.39

847.
16.3
2.40

2.43

848
0.01

2.80

847.
22.12

22+20.00

847.22
21.59

84
2.09

2.16

84
0.

1.92

1.92

84
21.

22+00.00

846.46
21.56

846.
16.5
2.33

2.26

847
0.01

1.35

1.33

846
21.1

4.74

847.00
26.15

21+80.00

—/ —

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-17

0 2.5 5

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

860 855 850 845 840

849.74 / 21.16

84 / 2.40 — 2.44 — 8 / 0. — 2.19 — 849 / 8.40 — 849 / 23.

22 + 80.00

849.13 / 21.10

84 / 2.53 — 2.55 — 8 / 0. — 1.95 — 9.5 — 848 / 23.3

848.81 / 19.06

22 + 60.00

848.37 / 21.22

84 / 2.45 — 2.41 — 8 / 0. — 2.67 — 84 / 22

22 + 40.00

860 855 850 845 840

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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gsebris

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	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

860 855 850 845 840

851 / 22.7

1.20

851 / 0.0

1.21

2.93

13.62

850.4 / 24.52

851.54 / 27.20

851.39 / 14.37

850.96 / 20.71

23 + 40.00

85 / 16.

2.64

2.65

8 / 0.

2.40

850 / 24.

850.79 / 21.72

850.61 / 20.31

23 + 20.00

85 / 16.

2.84

2.84

8 / 0.

2.11

850.30 / 21.25

850.21 / 14.70

850.21 / 19.85

23 + 00.00

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	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

860 855 850 845 840

851.1 / 23.3

2.17

851.92 / 24.31

2.19

852.01 / 14.02

852 / 0.01

3.22

851.4 / 24.52

23 + 80.00

1.06

851.64 / 28.41

1.07

851.76 / 14.19

2.60

851.36 / 21.01

23 + 60.00

0.99

851.61 / 28.56

0.99

851.46 / 14.35

851 / 0.0

2.96

12.3

850.99 / 20.73

23 + 41.78

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

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-20

0 2.5 5

24+60.00

852.8 44.00 | 2.58 | 852.6 36.00 | 852.5 23.39 | 2.41 | 2.42 | 853.1 0.00 | 3.08 | 11.00 | 3.08 | 852.4 23.21

852.24 33.50 | 11.00 | 7.00 | 7.00

24+40.00

852.4 28.70 | 2.06 | 2.06 | 853.0 0.00 | 3.00 | 3.03 | 3.03 | 852.3 22.46

852.53 33.70 | 10.63 | 7.00

24+20.00

852.2 25.41 | 2.40 | 2.40 | 852.5 0.00 | 2.75

852.38 30.41 | 852.50 13.82

24+00.00

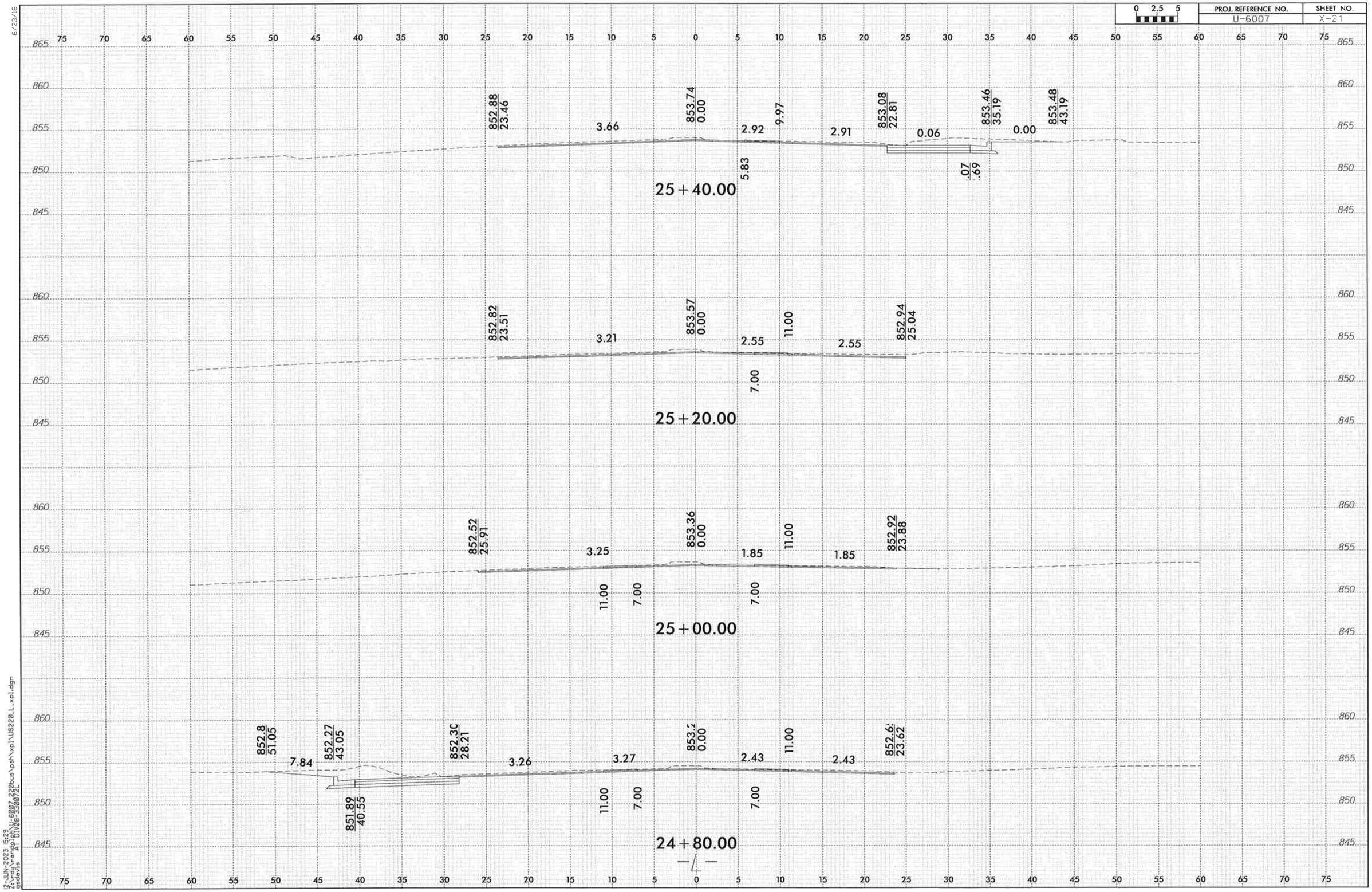
852. 23.5 | 2.58 | 2.59 | 852 0.0 | 3.26 | 851.8 23.4

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

860 855 850 845

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-21



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ARTDIV08-3300725
gadavis

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	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

865 860 855 850 845

852.50 / 33.50

6.9:1

853.66 / 25.50

853.33 / 22.00

4.07

853.29 / 23.00

4.07

11.00

7.00

854.23 / 0.00

1.24

7.00

10.00

853.95 / 22.90

26+00.00

852.77 / 35.74

0.09

853.51 / 27.74

853.21 / 23.19

3.69

853.14 / 25.24

3.68

11.00

7.00

854.07 / 0.00

0.99

853.84 / 22.78

25+80.00

852.40 / 45.67

0.04

852.74 / 37.67

37 / 17

852.84 / 24.42

4.36

6.37

4.35

853.90 / 0.00

1.74

SEE X-SECTION
-Y4- 10+40 RIGHT

53.31 / 4.01

53.19 / 3.60

25+60.00

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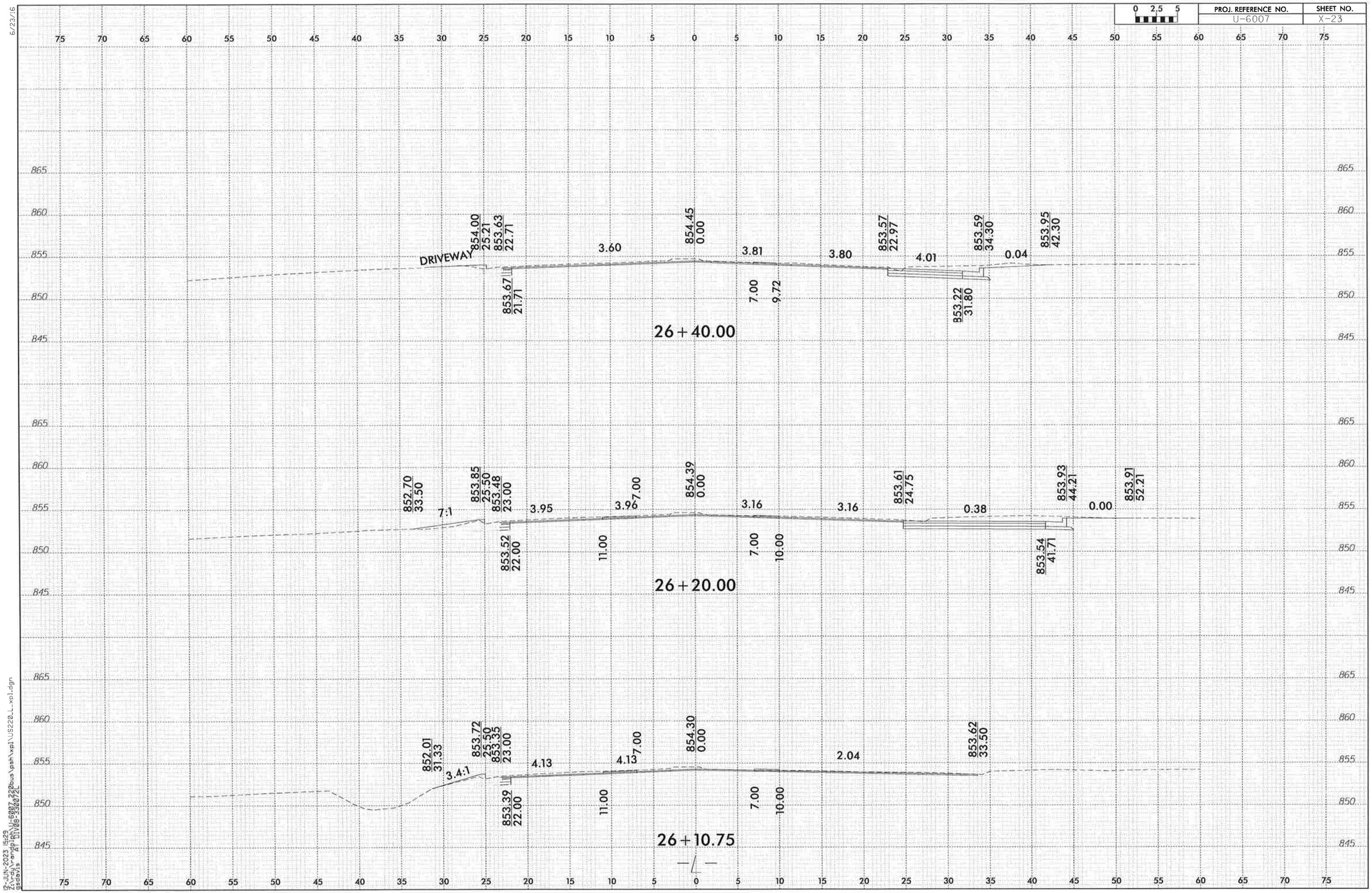
gasavis

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-23



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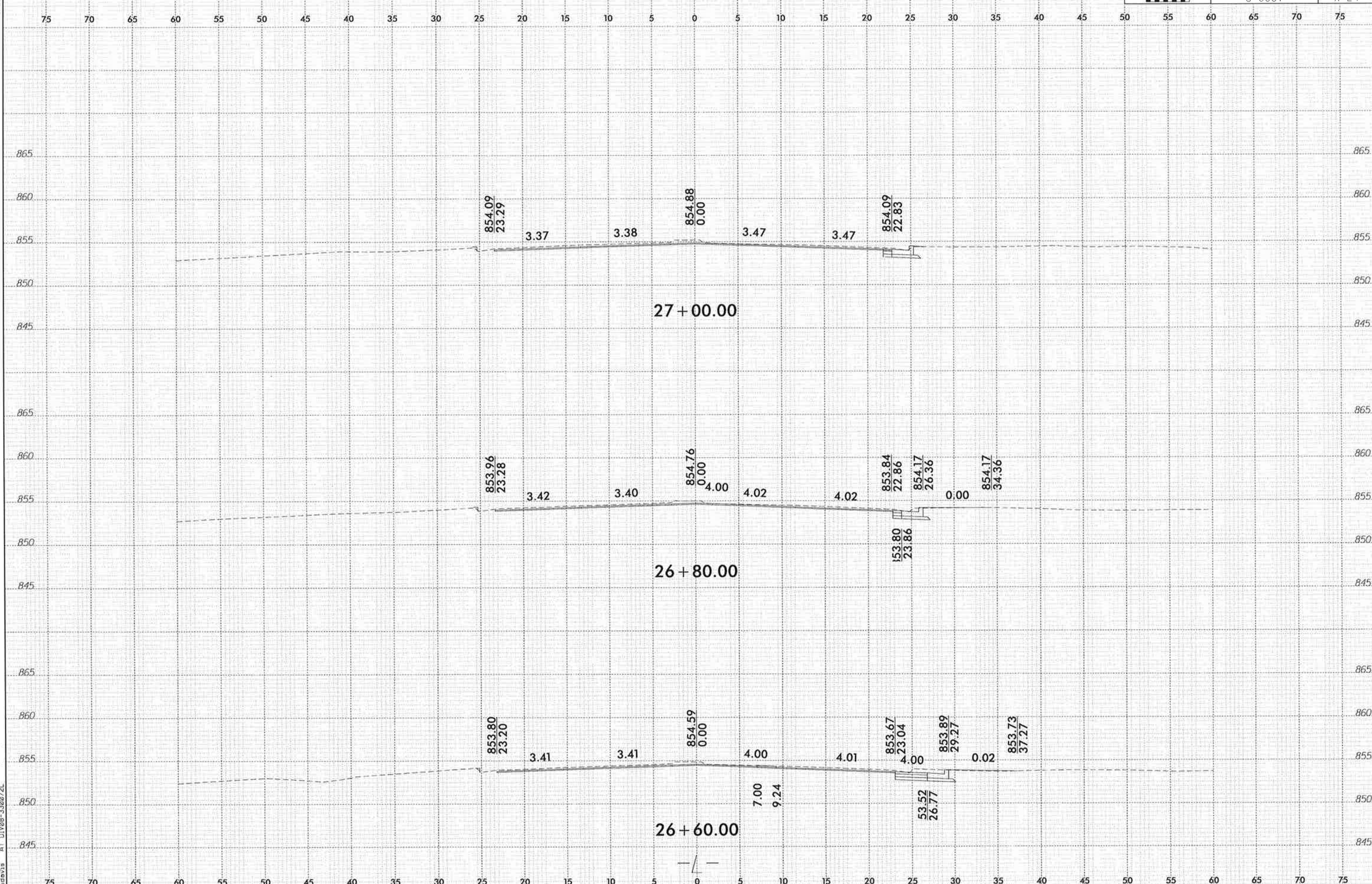
Design File (Model) 3D

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-24



6/23/16

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gsdavis AT DIV08-3300072L

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-25

0 2.5 5

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

865 860 855 850 845

854.69
23.22

2.96 2.96 3.61 3.60

855.38
0.00

854.55
23.00

27+60.00

854.50
23.18

2.89 2.90 3.49 3.49

855.18
0.00

854.37
23.08

27+40.00

854.25
23.29

3.33 3.33 3.33

855.02
0.00

854.26
22.89

27+20.00

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-26

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

865 860 855 850 845

855.91
0.00

2.81 3.87 3.87

855.02
23.00

28+20.00

855.09
23.19

2.80 2.81

855.74
0.00

3.50

854.94
22.44

28+00.00

854.87
23.31

2.93 2.93

855.56
0.00

3.45 3.45

854.77
22.76

27+80.00

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

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stocvis
21.18.08.02.22c

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-27

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

865 860 855 850 845

855.73
23.25

3.09 3.09

856.45
0.00

3.26

855.70
22.82

28+80.00

855.62
23.09

2.67

856.23
0.00

3.39

855.45
23.02

28+60.00

856.05
0.00

2.87 3.64 3.65

855.21
22.99

28+40.00

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gastvis

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-28

29+60.00

857.14 / 23.20 — 2.49 — 2.48 — 857.72 / 0.00 — 2.74 — 2.74 — 857.09 / 22.83

29+40.00

856.72 / 23.25 — 2.64 — 2.64 — 857.33 / 0.00 — 2.70 — 2.69 — 856.72 / 22.88

29+20.00

856.39 / 23.23 — 2.72 — 2.72 — 857.03 / 0.00 — 3.09 — 3.08 — 856.31 / 23.03

29+00.00

856.03 / 23.24 — 3.03 — 3.03 — 856.73 / 0.00 — 3.41 — 3.41 — 855.94 / 23.19

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-29

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

870 865 860 855 850

858.55
23.15

3.16

3.16

859.28
0.00

3.39

3.40

858.51
22.64

30+20.00

858.04
23.17

2.57

2.58

858.64
0.00

2.55

858.06
22.82

30+00.00

857.58
23.20

2.48

2.47

858.15
0.00

2.75

2.75

857.52
22.75

29+80.00

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

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-30

0 2.5 5

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

880 875 870 865 860 855 850

859.67
23.16

3.15 3.15 3.82 3.81

860.40
0.00

859.54
22.58

30+60.00

859.11
23.15

3.10 3.09 3.42 3.41

859.83
0.00

859.06
22.53

30+40.00

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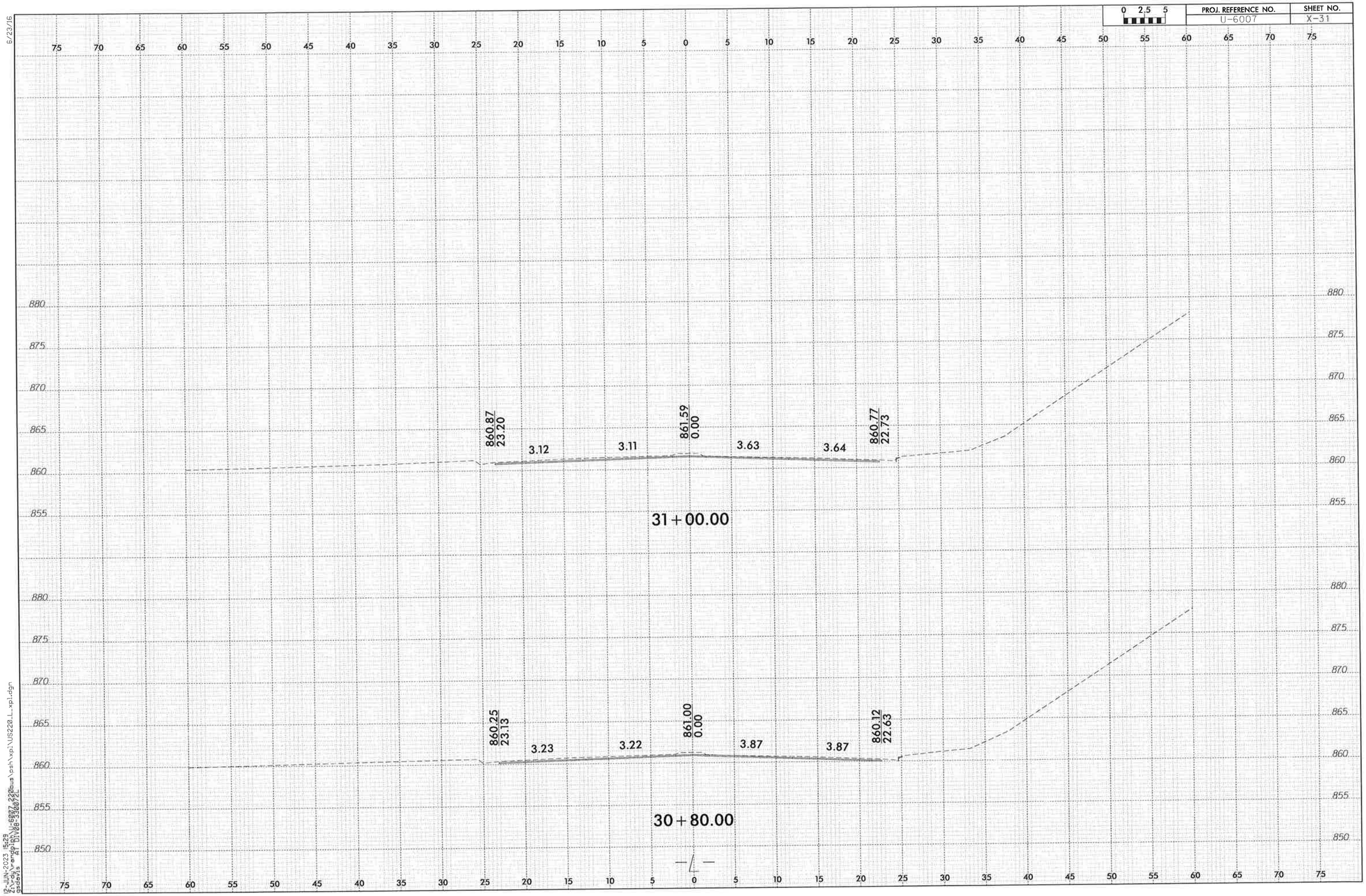
gadavis DIV/08-3380726

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-31



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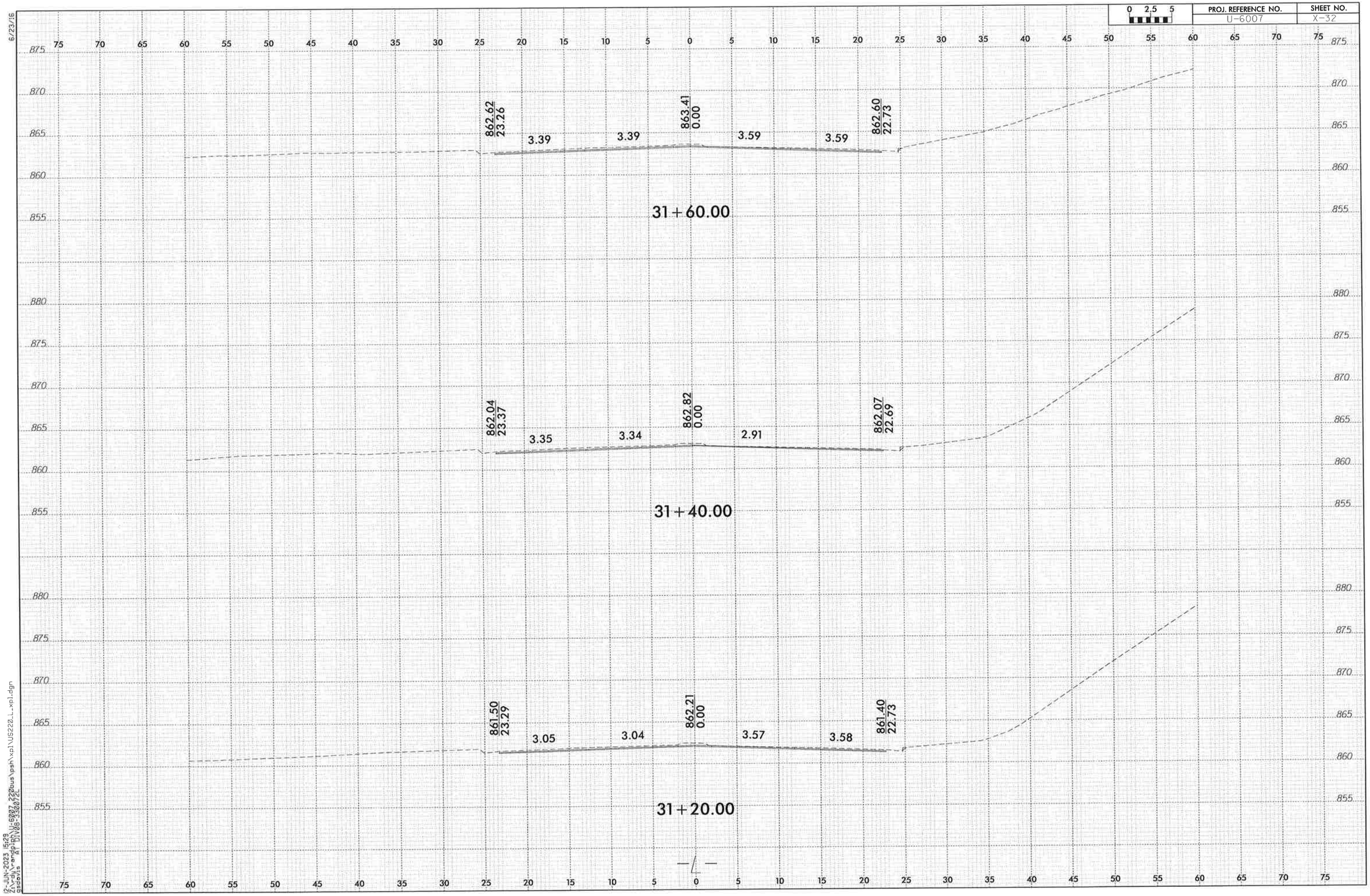
gadavis
PT DIV08-3300722

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-32



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stevis
47 D1:\08-SEP-2022

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-33

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

875 870 865 860 855

32+14.42

864.33		865.03		864.12					
23.17	3.03	3.03	0.00	3.98	22.79				

32+00.00

863.89		864.62		863.68					
23.28	3.14	3.13	0.00	4.10	22.64				

31+80.00

863.23		864.01			863.09				
23.20	3.35	3.34	0.00	4.02	4.03	22.68			

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design file DIVISION-3300\25

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-34

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

875 870 865 860 855

865.70
23.21

2.82

2.83

866.36
0.00

3.94

865.41
22.82

32 + 60.00

865.12
23.17

2.92

2.92

865.79
0.00

4.08

4.08

864.86
22.71

32 + 40.00

864.50
23.17

2.97

2.98

865.19
0.00

3.97

3.96

864.28
22.79

32 + 20.00

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-35

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

875 870 865 860

867.52 / 23.17 — 2.61 — 2.60 — 868.12 / 0.00 — 3.14 — 867.34 / 22.82

33+40.00

867.22 / 23.13 — 2.46 — 2.46 — 867.79 / 0.00 — 2.28 — 867.27 / 22.70 — 2.98 — 867.42 / 27.70

33+20.00

866.82 / 23.07 — 2.42 — 2.43 — 867.38 / 0.00 — 2.20 — 866.88 / 22.70 — 3.78 — 867.07 / 27.70

33+00.00

866.32 / 23.18 — 2.51 — 2.50 — 866.90 / 0.00 — 2.76 — 866.28 / 22.69 — 3.14 — 866.43 / 27.69

32+80.00

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-36

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

880 875 870 865 860

868.01
23.33

3.37

3.35

868.79
0.00

2.84

868.14
22.82

34+00.00

875 870 865 860

867.93
23.29

2.99

2.99

868.62
0.00

3.19

3.18

867.89
22.96

33+80.00

875 870 865 860

867.75
23.24

2.85

2.86

868.41
0.00

3.57

3.56

867.59
22.88

33+60.00

—/—

875 870 865 860

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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gadavis
div08-3302072

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-37

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

880 875 870 865 860

868.10
22.82

3.07

868.81
0.00

2.65

2.66

868.20
22.74

34+60.00

880 875 870 865 860

3.08

868.85
0.00

2.75

2.75

868.23
22.73

34+40.00

880 875 870 865 860

868.07
23.25

3.35

3.35

868.85
0.00

2.66

2.67

868.24
22.77

34+20.00

880 875 870 865 860

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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gsavis
DIV/GD: 32.8722

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-38

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

875 870 865 860

867.16
23.30

3.63 3.63

868.00
0.00

2.22 2.23

867.50
22.76

35+40.00

867.43
23.36

3.65 3.66

868.29
0.00

2.36 2.36

867.75
22.72

35+20.00

867.75
23.24

3.44 3.45

868.55
0.00

2.56 2.55

867.97
22.78

35+00.00

867.97
23.18

3.24 3.26

868.72
0.00

2.70 2.71

868.10
22.77

34+80.00

12-JUN-2023 15:23
21-day verification
geotech

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-39

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

875 870 865 860

867.13 / 0.00 — 0.55 — 867.01 / 22.60 — 5.28 — 867.27 / 27.60

36 + 00.00

875 870 865 860

867.43 / 0.00 — 0.35 — 867.35 / 22.55 — 3.88 — 867.54 / 27.55

35 + 80.00

875 870 865 860

866.84 / 23.38 — 3.87 — 3.86 — 867.74 / 0.00 — 1.65 — 867.37 / 22.82

35 + 60.00

875 870 865 860

867.09 / 23.17 — 3.57 — 3.58 — 867.92 / 0.00 — 2.11 — 2.11 — 867.44 / 22.62

35 + 46.52 —/— —

875 870 865 860

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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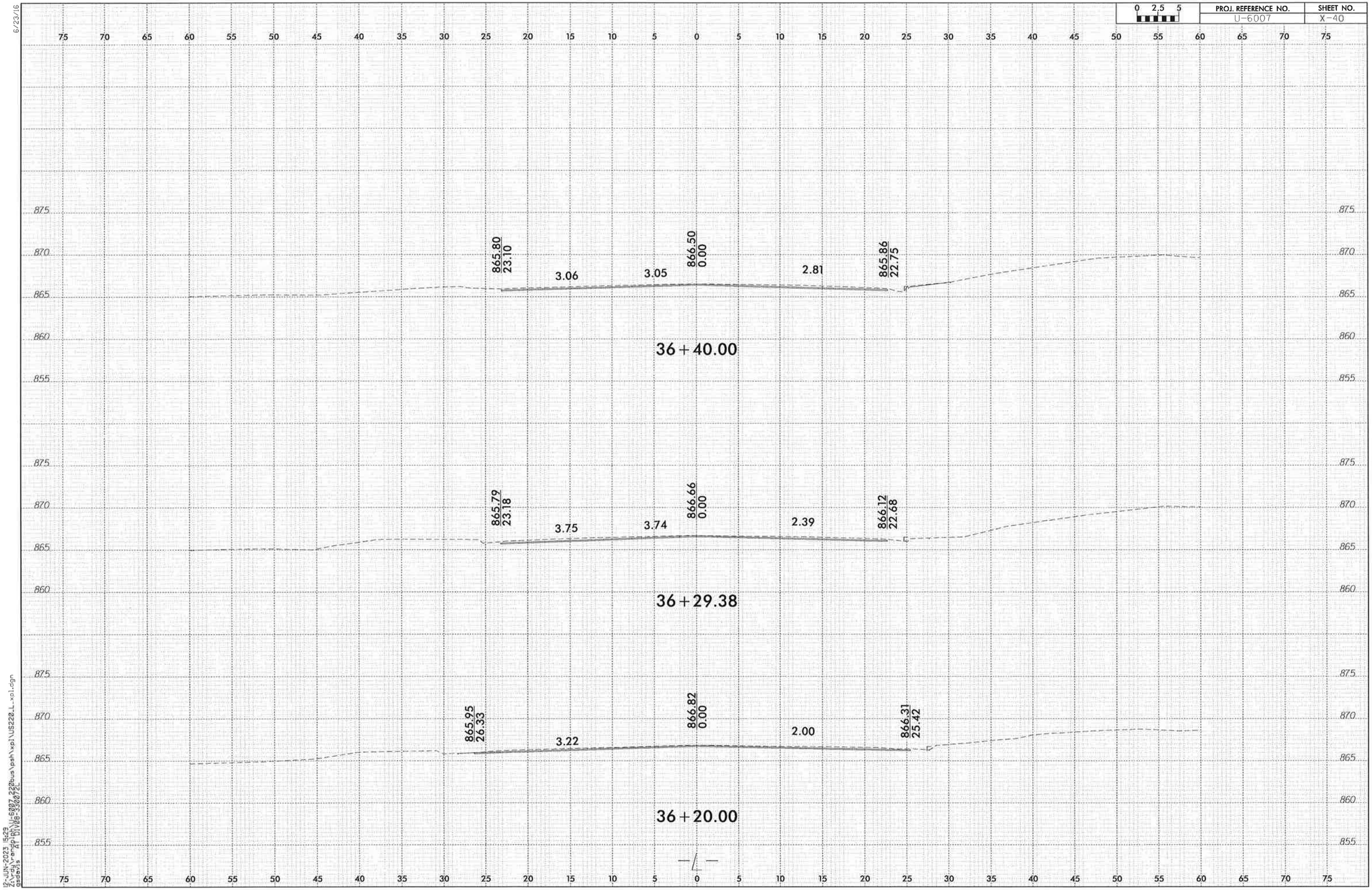
asdavis

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-40



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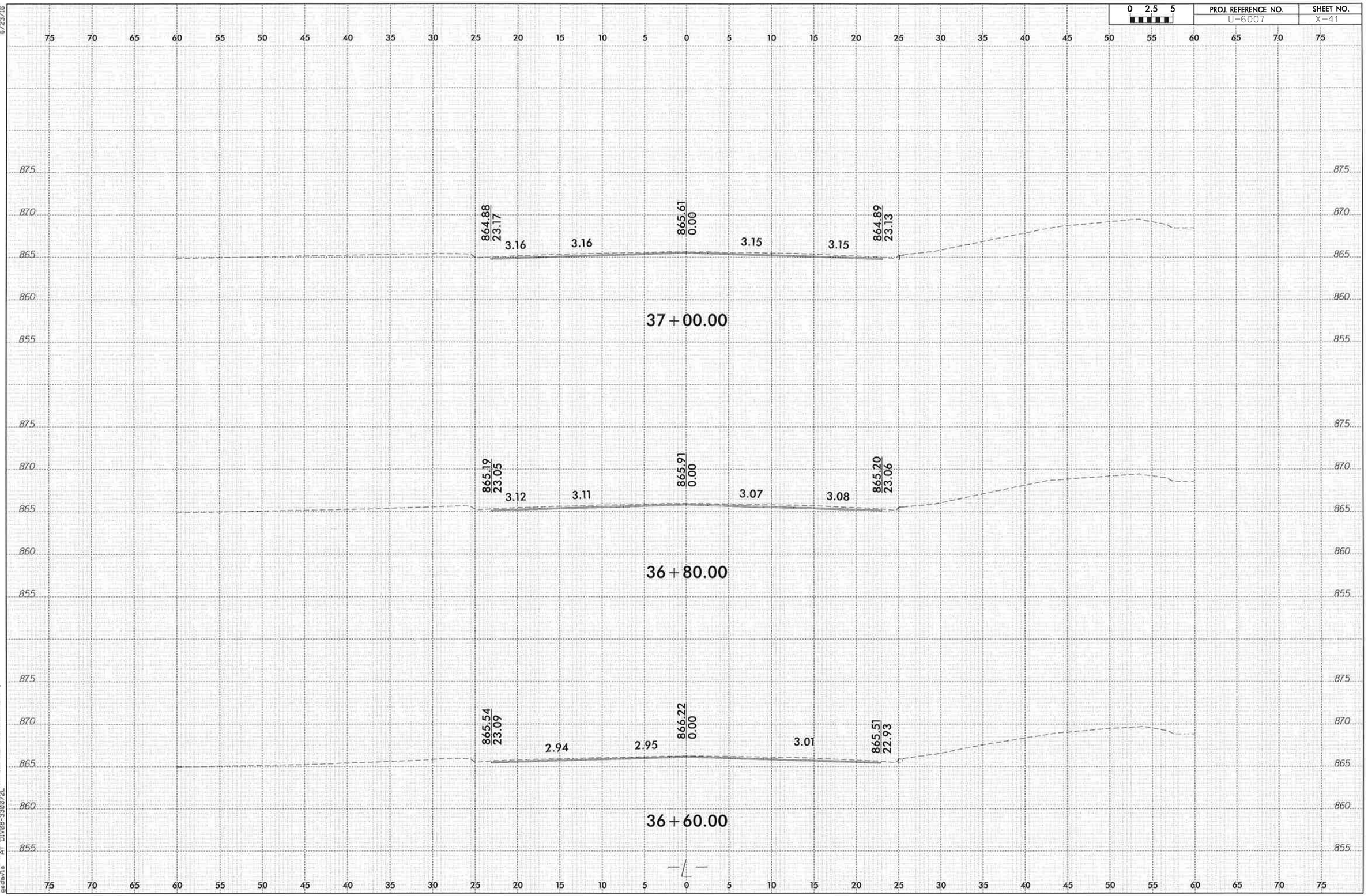
gadavis
AT DIV08-3308072E

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-41



6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-42

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

875 870 865 860 855

863.95
23.19

2.98 2.99

864.65
0.00

2.60

864.05
23.07

37+60.00

875 870 865 860 855

864.28
23.22

2.93 2.93

864.96
0.00

2.66 2.66

864.35
22.95

37+40.00

875 870 865 860 855

864.82
23.19

3.01 3.01

865.29
0.00

864.60
23.01

37+20.00

875 870 865 860 855

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

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-43

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

870 865 860 855

863.27
30.49

863.66
0.00

2.83

2.83

863.01
22.76

38+20.00

863.29
12.88

875 870 865 860 855

863.36
22.97

2.80

2.79

864.00
0.00

2.74

2.73

863.38
22.81

38+00.00

875 870 865 860 855

863.66
23.12

2.99

3.01

864.35
0.00

2.61

863.75
22.83

DRIVEWAY

37+80.00

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

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gadavis

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-44

0 2.5 5

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

845 840 835 830 825

833.64
22.03
2.44
2.44
2.44
834.18
0.00
2.51
833.83
14.05
5.67
833.63
22.56
833.55
19.05

10+40.00

833.76
47.12
0.85
834.16
0.00
0.15
834.23
45.17
0.65
834.26
50.17

10+20.00

834.38
5.00
834.38
0.00
834.38
5.00
2.36
2.36
834.50
10.00
834.49
10.00

10+00.00

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gadavis
RT DIV08-3300720

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-45

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

845 840 835 830 825

834.72
30.26

834.89
24.50

834.71
10.69

834.90
0.00

834.74
10.54

834.75
15.54

834.51
22.00

1.77 1.77 1.77 1.47 0.13

11+00.00

834.68
26.01

834.68
23.51

834.43
11.58

834.61
0.00

834.48
10.29

834.40
15.29

834.27
22.00

1.56 1.56 1.56 1.30 1.57

10+80.00

834.04
27.00

834.05
11.58

834.38
0.00

834.24
10.34

834.17
15.34

833.76
22.00

5.57 2.79 2.79 2.79 1.31 1.43

10+60.00

-Y/-

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-46

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

845 840 835 830 825

835.37
24.34
4.00
2.24
835.76
10.76
2.24
2.24
836.00
0.00
1.96
835.79
10.77
2.44
835.57
19.34
835.91
15.77

11+60.00

834.56
26.47
8.12
2.55
835.25
10.63
2.55
2.55
835.52
0.00
1.63
835.34
10.79
3.30
834.97
21.47
835.51
15.79

11+40.00

834.71
27.00
0.52
2.24
834.94
10.60
2.24
2.24
835.18
0.00
1.66
835.00
10.66
3.36
834.68
22.00
835.17
15.66

11+20.00

-Y1-

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gadavis
PROJECT REFERENCE NO. U-6007_220BUS
DIVISION 8

6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-47

12+40.00

837.49 / 17.94 — 8.85 — 1.74 — 837.97 / 11.09 — 1.74 — 838.16 / 0.00 — 4.13 — 837.74 / 10.28 — 5.85 — 837.44 / 15.28

837.94 / 12.94

12+20.00

836.48 / 20.08 — 10.73 — 2.24 — 837.11 / 11.05 — 2.24 — 2.24 — 837.36 / 0.00 — 4.59 — 836.87 / 10.64 — 1.30 — 836.93 / 15.64

837.02 / 15.08

12+00.00

835.62 / 22.21 — 10.63 — 2.62 — 836.32 / 10.87 — 2.62 — 2.62 — 836.60 / 0.00 — 3.20 — 836.24 / 11.20 — 1.67 — 836.33 / 16.20

836.15 / 17.21

11+80.00

-Y1-

12-JUN-2023 16:32
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Default

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-48

14+20.00

849.90
26.26

4.59

2.98

850.31
15.73

850.17
20.41

2.98

850.78
0.00

0.41

850.70
18.10

851.09
20.60

5.8:1

852.66
29.76

850.71
17.10

14+00.00

13+80.00

13+60.00

-Y3-

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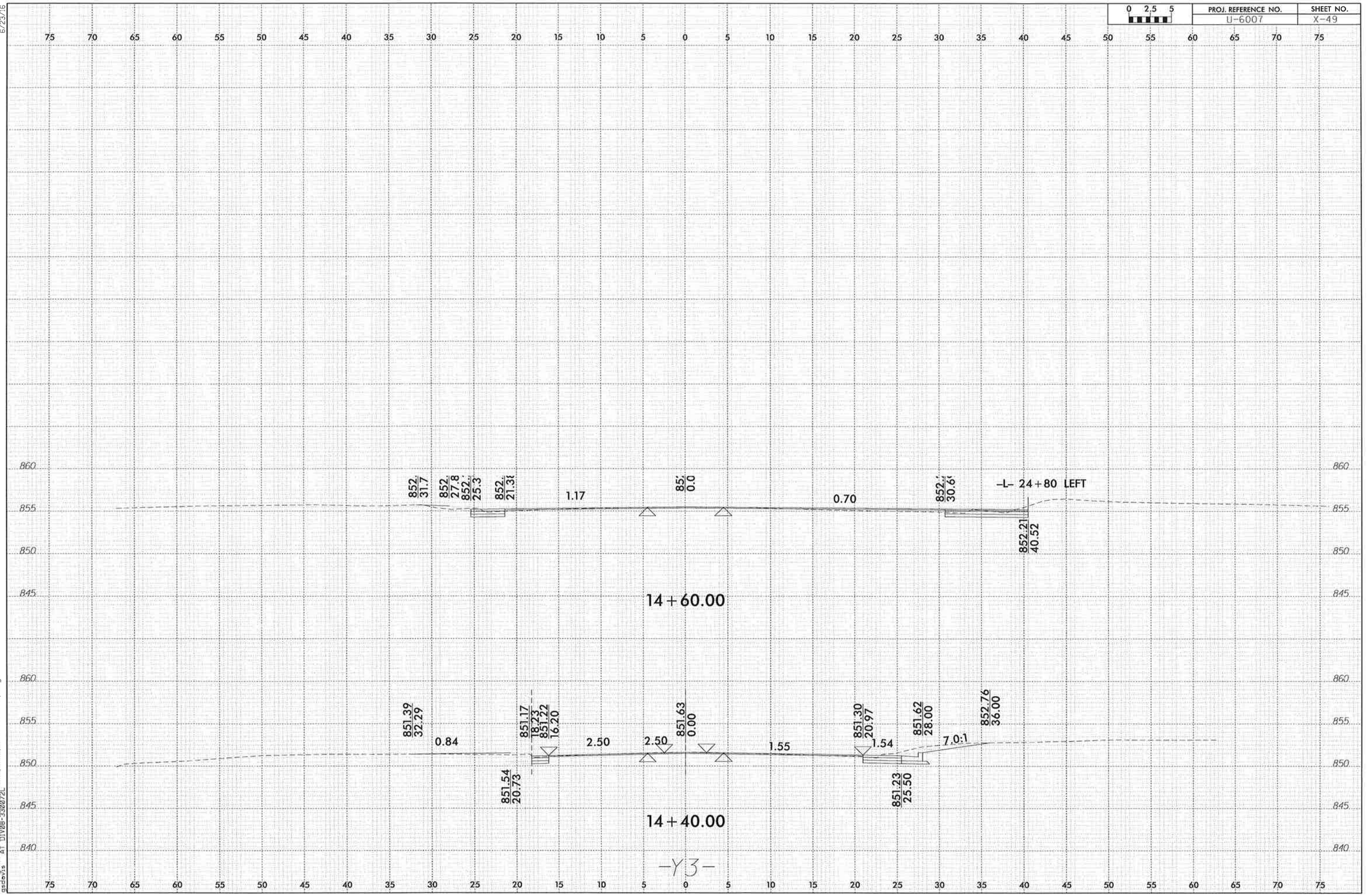
gadavis
DIV/08-330072L

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-49



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gsdavis

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	U-6007	X-50

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

865 860 855 850 845

853.98 28.09 — 4.24 — 854.02 14.64 — 2.54 — 2.53 — 2.55 — 854.39 0.00 — 3.29 — 853.80 18.10 — 3.28 — 854.04 24.64 — 1.01 — 853.96 32.64

854.32 20.09 853.95 17.59 | 854.28 4.50 | 854.25 4.50 | 853.67 22.14 854.04 24.64

10+60.00

SEE X-SECTION -L- 26+20 RIGHT

853.84 18.20 — 2.02 — 2.03 — 854.20 0.00 — 853.62 22.27 — 2.61 — 853.65 37.72 — 0.95 — 853.58 45.72

2.28 | 1.16 | 853.28 35.22 853.65 37.72

10+40.00

SEE X-SECTION -L- 26+20 RIGHT

853.79 21.50 — 1.26 — 854.06 0.00 — 2.58 — SEE X-SE -L- 25+

6.98 | 3.23

10+25.00

-Y4-

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6/23/16

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
U-6007	X-51

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

865 860 855 850 845

853.56
19.31

11+20.00

853.5±
15.97

853.96
11.44

854.04
0.00

853.81
12.12

853.82
20.96

0.70 1.82 0.20

853.80
12.96

11+00.00

854.27
22.49

2.66

854.10
10.99

1.19 1.20

854.23
0.00

853.84
24.03

2.79 1.47

853.87
25.08

854.49
14.49

854.09
11.99

854.18
4.50

853.76
17.08

10+80.00

-Y4-