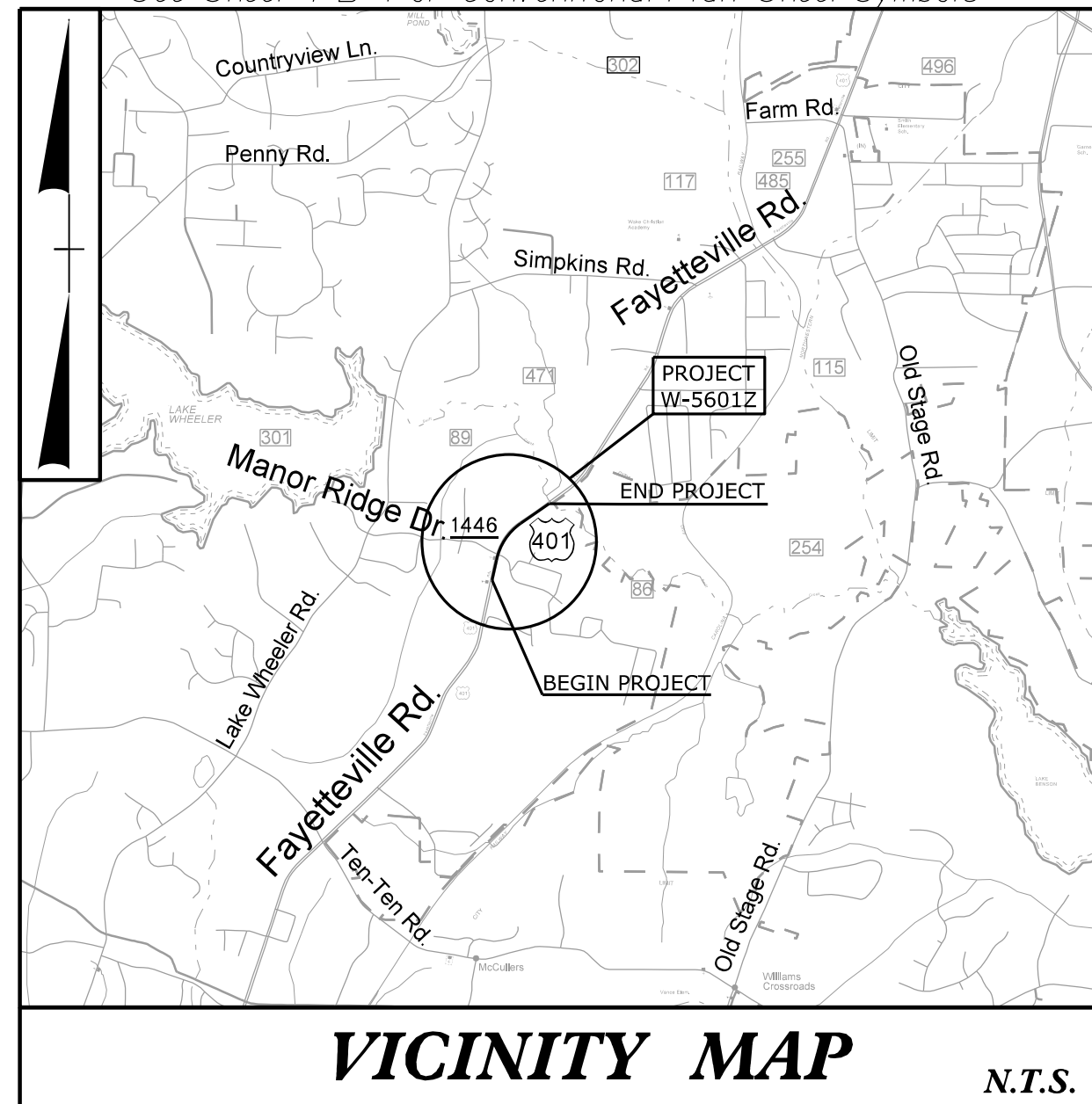


See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Plan Sheet Symbols



VICINITY MAP

N.T.S.

RFC PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE COUNTY

LOCATION: US 401 (FAYETTEVILLE ROAD) FROM SOUTH OF SR 1446 (MANOR RIDGE DRIVE) TO NORTH OF SWIFT CREEK CROSSING

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5601Z	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
50138.1.FR27	HSIP-0401 (265)	PE	
50138.3.27	HSIP-0401 (265)	CONST	

TIP PROJECT: W-5601Z

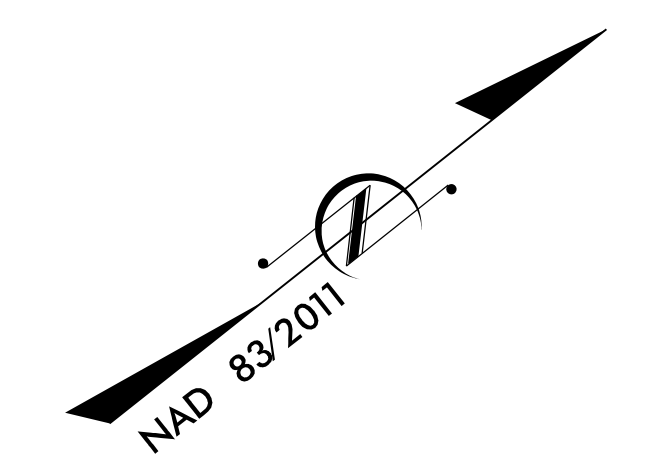
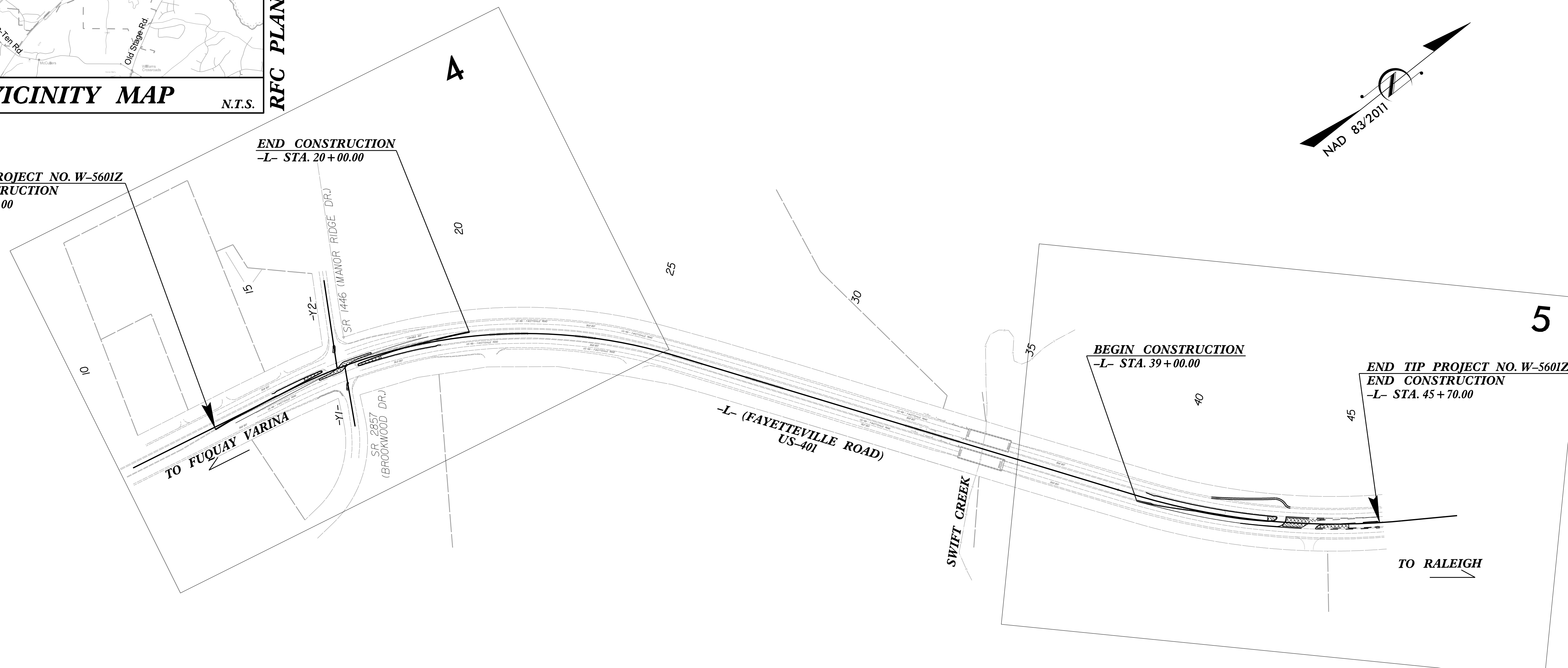
CONTRACT: DE00169

BEGIN TIP PROJECT NO. W-5601Z
BEGIN CONSTRUCTION
-L- STA. 12+50.00

END CONSTRUCTION
-L- STA. 20+00.00

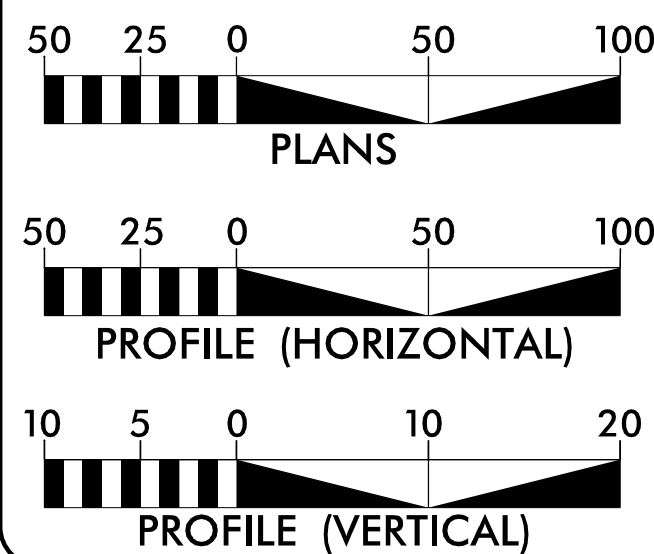
BEGIN CONSTRUCTION
-L- STA. 39+00.00

END TIP PROJECT NO. W-5601Z
END CONSTRUCTION
-L- STA. 45+70.00



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2013 = 32,000
V = 50 MPH
FUNC CLASS = MAJOR ARTERIAL

PROJECT LENGTH

LENGTH OF ROADWAY T.I.P. PROJECT W-5601Z = 0.629 MI.
TOTAL LENGTH OF T.I.P. PROJECT W-5601Z = 0.629 MI

PREPARED IN THE OFFICE OF:

Stantec STANTEC CONSULTING
801 Jones Franklin Road, Suite 300 Raleigh NC 27606
Tel: (919) 851-6866 Fax: (919) 851-7924 www.Stantec.com
License No. E-0672

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2012 STANDARD SPECIFICATIONS

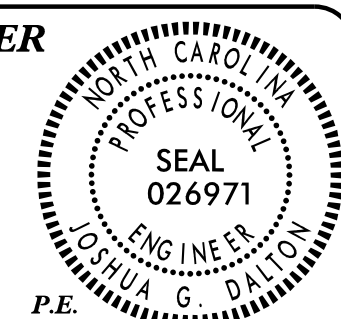
RIGHT OF WAY DATE: N/A
LETTING DATE: N/A

MIKE LINDGREN, PE
PROJECT MANAGER
MIKE LITTLEFIELD, PE
PROJECT DESIGN ENGINEER

NCDOT CONTACT: BEN UPSHAW, PE
PROJECT ENGINEER

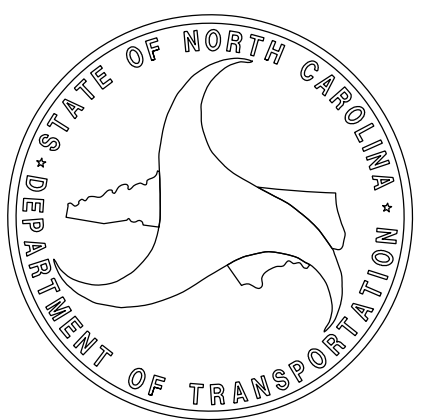
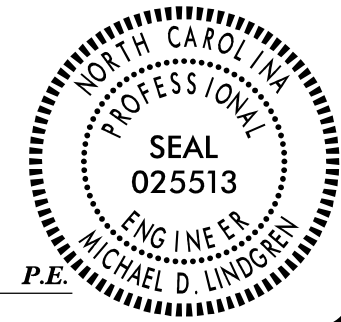
HYDRAULICS ENGINEER

DocuSigned by:
Joshua G Dalton 5/11/2017
SIGNATURE: JOSHUA G. DALTON



ROADWAY DESIGN ENGINEER

DocuSigned by:
Mike Lindgren 5/11/2017
SIGNATURE: MIKE LINDGREN



PROJECT REFERENCE NO.	SHEET NO.
W-5601Z	1A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



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INDEX OF SHEETS

SHEET NUMBER	SHEET	EFF. 01-17-2012 REV. 02-29-2016
1	TITLE SHEET	2012 ROADWAY ENGLISH STANDARD DRAWINGS
1A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS	The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:
1B	CONVENTIONAL SYMBOLS	
1C-1	SURVEY CONTROL SHEET	STD.NO. TITLE
2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS	DIVISION 2 - EARTHWORK 225.02 Guide for Grading Subgrade - Secondary and Local
2C-1	DETAIL TO CONVERT EXISTING TRAFFIC BEARING DROP INLET OR CATCH BASIN TO TRAFFIC BEARING JUNCTION BOX (MANHOLE OPTIONAL)	DIVISION 3 - PIPE CULVERTS 300.01 Method of Pipe Installation DIVISION 5 - SUBGRADE, BASES AND SHOULDERS 560.01 Method of Shoulder Construction - High Side of Superelevated Curve - Method I
2C-2	DETAIL FOR CONVERSION OF DROP INLET OR JUNCTION BOX TO CATCH BASIN	DIVISION 8 - INCIDENTALS 840.01 Brick Catch Basin - 12" thru 54" Pipe 840.02 Concrete Catch Basin - 12" thru 54" Pipe 840.03 Frame, Grates and Hood - for Use on Standard Catch Basin 840.14 Concrete Drop Inlet - 12" thru 30" Pipe 840.15 Brick Drop Inlet - 12" thru 30" Pipe 840.16 Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15 840.18 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe 840.20 Frames and Wide Slot Flat Grates 840.22 Frames and Wide Slot Sag Grates 840.27 Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe 840.32 Brick Junction Box - 12" thru 66" Pipe 840.34 Traffic Bearing Junction Box - for Use with Pipes 42" and Under 840.53 Precast Manhole with Masonry Base - 12" thru 42" Pipe 840.54 Manhole Frame and Cover 846.01 Concrete Curb, Gutter and Curb & Gutter 852.01 Concrete Islands 852.04 Method for Placement of Drop Inlets in Grassed Median - Using 1'-6" Curb and Gutter 852.05 Median Curb for Catch Basin - for Use with 1'-6" Curb and Gutter 852.06 Method for Placement of Drop Inlets in Concrete Islands
3B-1	SUMMARY OF EARTHWORK, PAVEMENT REMOVAL SUMMARY	
3D-1	DRAINAGE SUMMARY	
4-5	PLAN SHEETS	
6	PROFILE SHEET	
TMP-1 THRU TMP-7	TRANSPORTATION MANAGEMENT PLANS	
PMP-1 THRU PMP-3	PAVEMENT MARKING PLANS	
EC-4/CONST.4 THRU EC-5/CONST.5	EROSION CONTROL PLANS	
SIGN-1 THRU SIGN-4	SIGNING PLANS	
X-A	CROSS-SECTION INDEX	
X-1A	CROSS SECTION SUMMARY SHEET	
X-1 THRU X-10	CROSS-SECTIONS	

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

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

CLEARING:
 CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD 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:
 UTILITY OWNERS ON THIS PROJECT ARE AT&T, CITY OF RALEIGH, DUKE ENERGY, TIME WARNER CABLE
 ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

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

12/02/16

BOUNDARIES AND PROPERTY:

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

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

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

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ MILEPOST 35
Switch	□ SWITCH
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY:

Baseline Control Point	◆
Existing Right of Way Marker	△
Existing Right of Way Line	-----
Proposed Right of Way Line	○ RW
Proposed Right of Way Line with Iron Pin and Cap Marker	○ RW ▲
Proposed Right of Way Line with Concrete or Granite RW Marker	▲ RW
Proposed Control of Access Line with Concrete C/A Marker	▲ C/A
Existing Control of Access	○ C/A
Proposed Control of Access	○ C/A
Existing Easement Line	-E-
Proposed Temporary Construction Easement	-E-
Proposed Temporary Drainage Easement	-TDE-
Proposed Permanent Drainage Easement	-PDE-
Proposed Permanent Drainage / Utility Easement	-DUE-
Proposed Permanent Utility Easement	-PUE-
Proposed Temporary Utility Easement	-TUE-
Proposed Aerial Utility Easement	-AUE-
Proposed Permanent Easement with Iron Pin and Cap Marker	◆

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-C-
Proposed Slope Stakes Fill	-F-
Proposed Curb Ramp	○ CR
Existing Metal Guardrail	-T-T-T-
Proposed Guardrail	-T-T-T-
Existing Cable Guiderail	-□-□-□-
Proposed Cable Guiderail	-□-□-□-
Equality Symbol	⊕
Pavement Removal	▨

VEGETATION:

Single Tree	☀
Single Shrub	☀
Hedge	~~~~~
Woods Line	~~~~~

Orchard	☀ ☀ ☀ ☀
Vineyard	▭ Vineyard

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	▭ CONC
Bridge Wing Wall, Head Wall and End Wall	▭ CONC WW
MINOR:	
Head and End Wall	▭ CONC HW
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	○ S
Storm Sewer	-S-

UTILITIES:

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

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	○ T
Telephone Pedestal	▭
Telephone Cell Tower	▭
U/G Telephone Cable Hand Hole	○ TH
U/G Telephone Cable LOS B (S.U.E.*)	-----T-----
U/G Telephone Cable LOS C (S.U.E.*)	-----T-----
U/G Telephone Cable LOS D (S.U.E.*)	-----T-----
U/G Telephone Conduit LOS B (S.U.E.*)	-----TC-----
U/G Telephone Conduit LOS C (S.U.E.*)	-----TC-----
U/G Telephone Conduit LOS D (S.U.E.*)	-----TC-----
U/G Fiber Optics Cable LOS B (S.U.E.*)	-----TFD-----
U/G Fiber Optics Cable LOS C (S.U.E.*)	-----TFD-----
U/G Fiber Optics Cable LOS D (S.U.E.*)	-----TFD-----

WATER:

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

TV:

TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	○ TH
U/G TV Cable LOS B (S.U.E.*)	-----TV-----
U/G TV Cable LOS C (S.U.E.*)	-----TV-----
U/G TV Cable LOS D (S.U.E.*)	-----TV-----
U/G Fiber Optic Cable LOS B (S.U.E.*)	-----TV FO-----
U/G Fiber Optic Cable LOS C (S.U.E.*)	-----TV FO-----
U/G Fiber Optic Cable LOS D (S.U.E.*)	-----TV FO-----

GAS:

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

SANITARY SEWER:

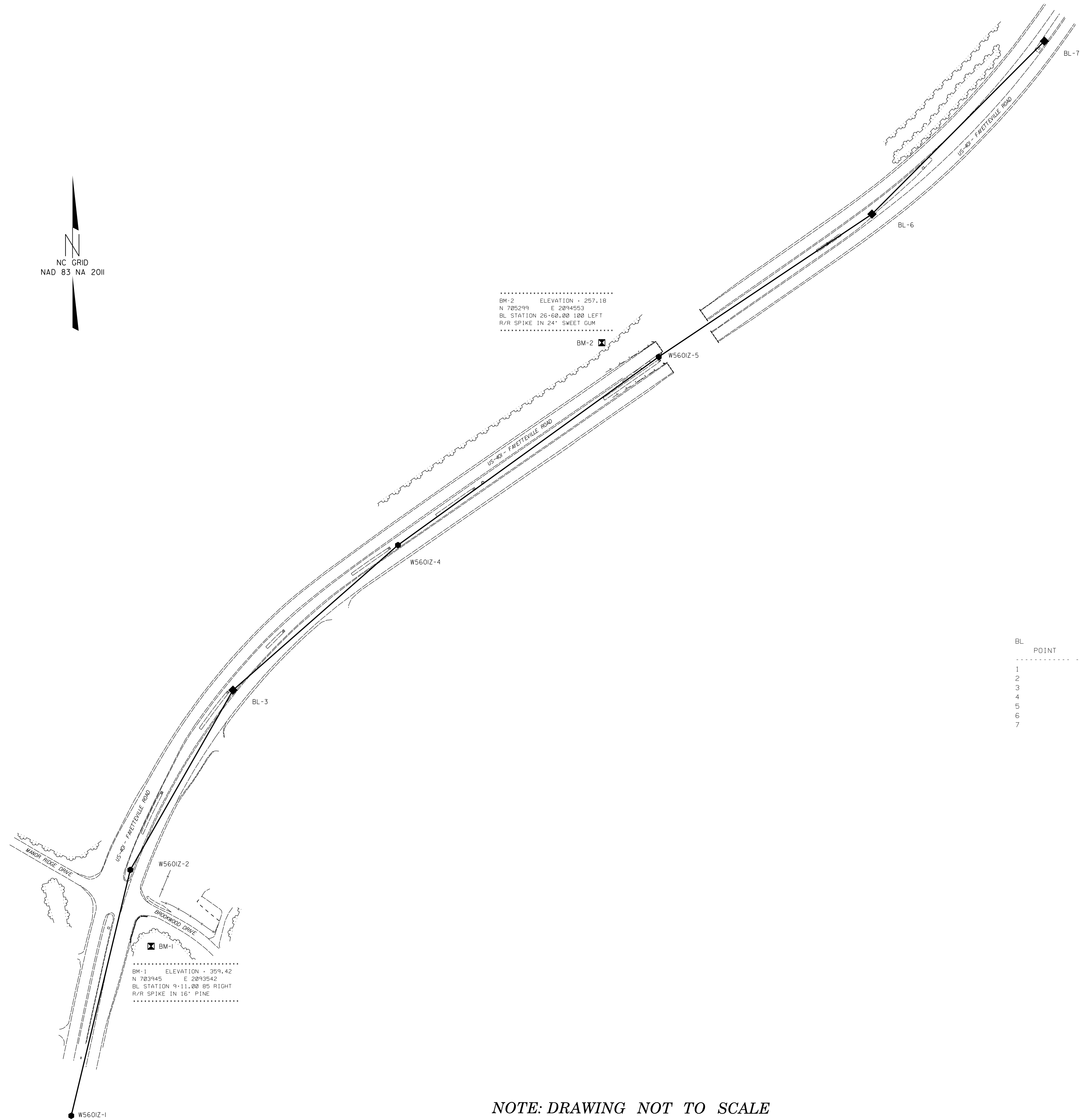
Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	-----SS-----
Above Ground Sanitary Sewer	-----A/G Sanitary Sewer-----
SS Forced Main Line LOS B (S.U.E.*)	-----FSS-----
SS Forced Main Line LOS C (S.U.E.*)	-----FSS-----
SS Forced Main Line LOS D (S.U.E.*)	-----FSS-----

MISCELLANEOUS:

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

SURVEY CONTROL SHEET

PROJECT REFERENCE NO.	SHEET NO.
W-5601Z	IC-1
Location and Surveys	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



BM-3 ELEVATION = 261.68
 N 785981 E 2095657
 BL STATION 5+00.00
 N 43°30'54.04" E DIST 3331.68
 R/R SPIKE IN 25" OAK

BM-2 ELEVATION = 257.18
 N 705299 E 2094553
 BL STATION 26+60.00 100 LEFT
 R/R SPIKE IN 24" SWEET GUM

BM-1 ELEVATION = 359.42
 N 703945 E 2093542
 BL STATION 9+11.00 85 RIGHT
 R/R SPIKE IN 16" PINE

BL POINT	DESC.	NORTH	EAST	ELEVATION	BL STATION
1	W5601Z-1	703565.1183	2093362.7135	365.46	5+00.00
2	W5601Z-2	704116.3900	2093495.0130	345.59	10+66.92
3	BL-3	704519.5800	2093725.2950	319.27	15+31.24
4	W5601Z-4	704844.8580	2094095.5510	288.34	20+24.09
5	W5601Z-5	705267.0905	2094680.2822	259.57	27+45.33
6	BL-6	705587.2040	2095158.5620	257.52	33+20.85
7	BL-7	705975.1420	2095545.1500	261.49	38+68.52

EXISTING CONDITIONS SURVEY

SITE COORDINATE CONTROL AND EXISTING CONDITIONS FOR PROJECT ARE FROM A TOPOGRAPHIC SURVEY PERFORMED IN MAY 2015 BY:
 STANTEC CONSULTING
 801 JONES FRANKLIN ROAD
 RALEIGH, NC 27606

DATUM DESCRIPTION

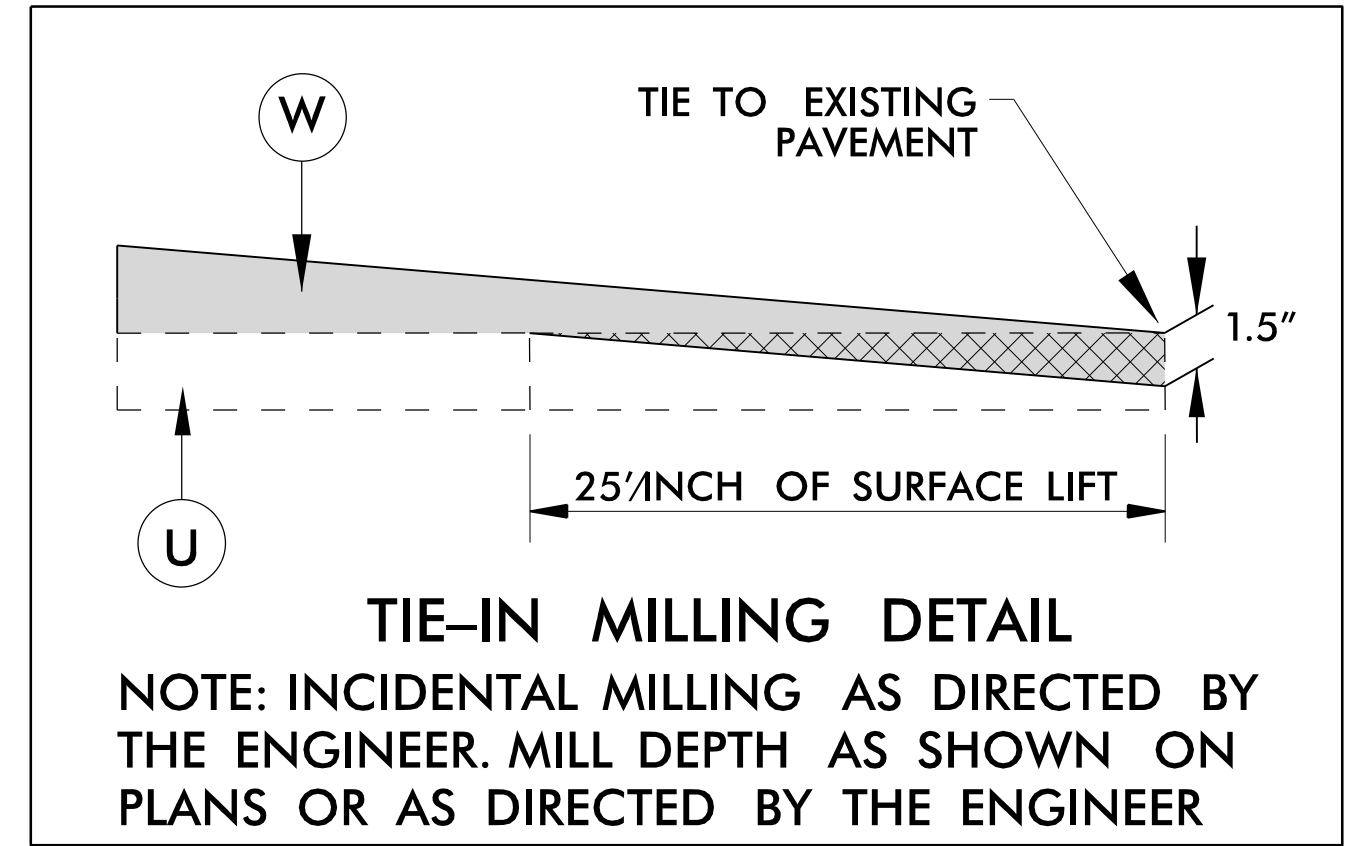
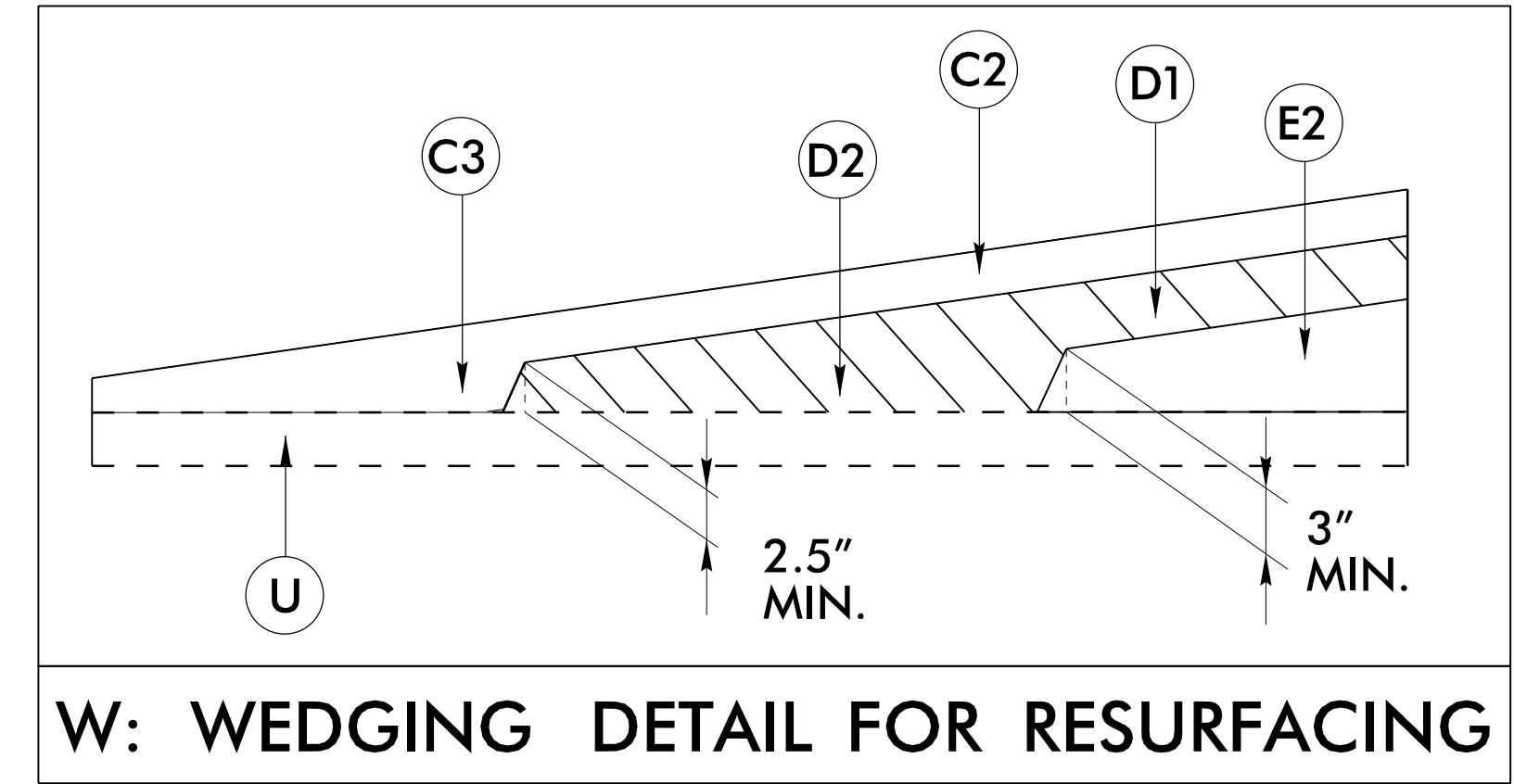
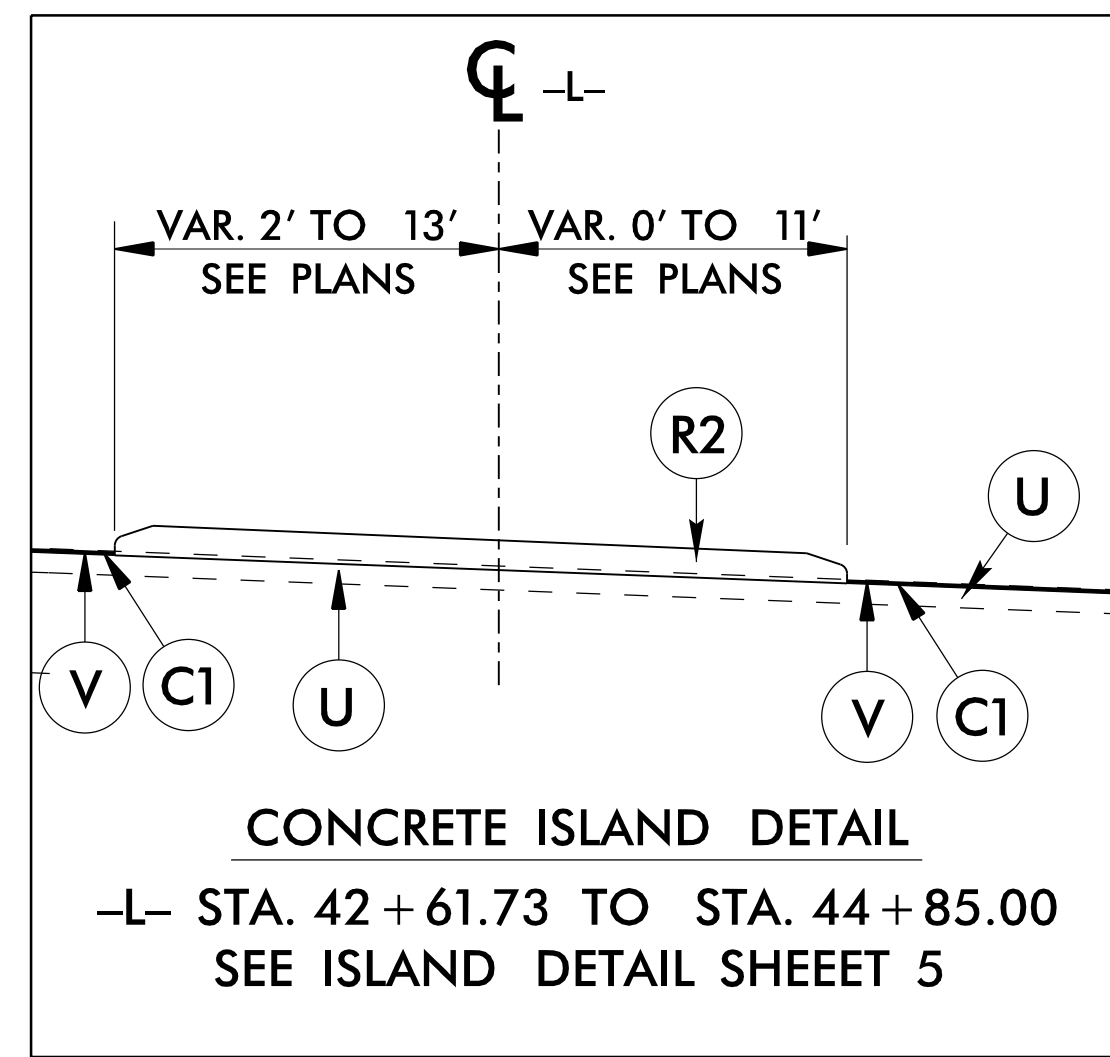
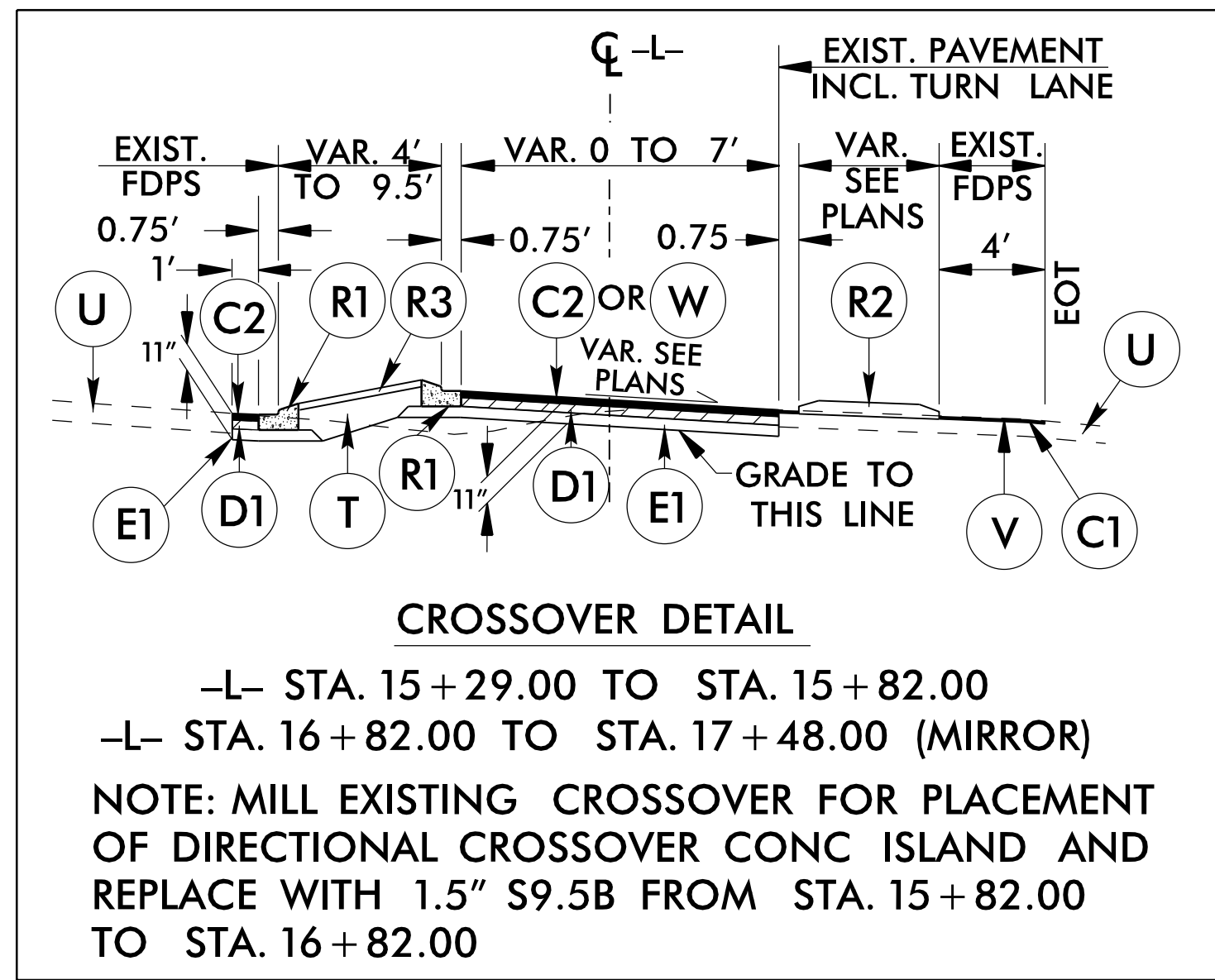
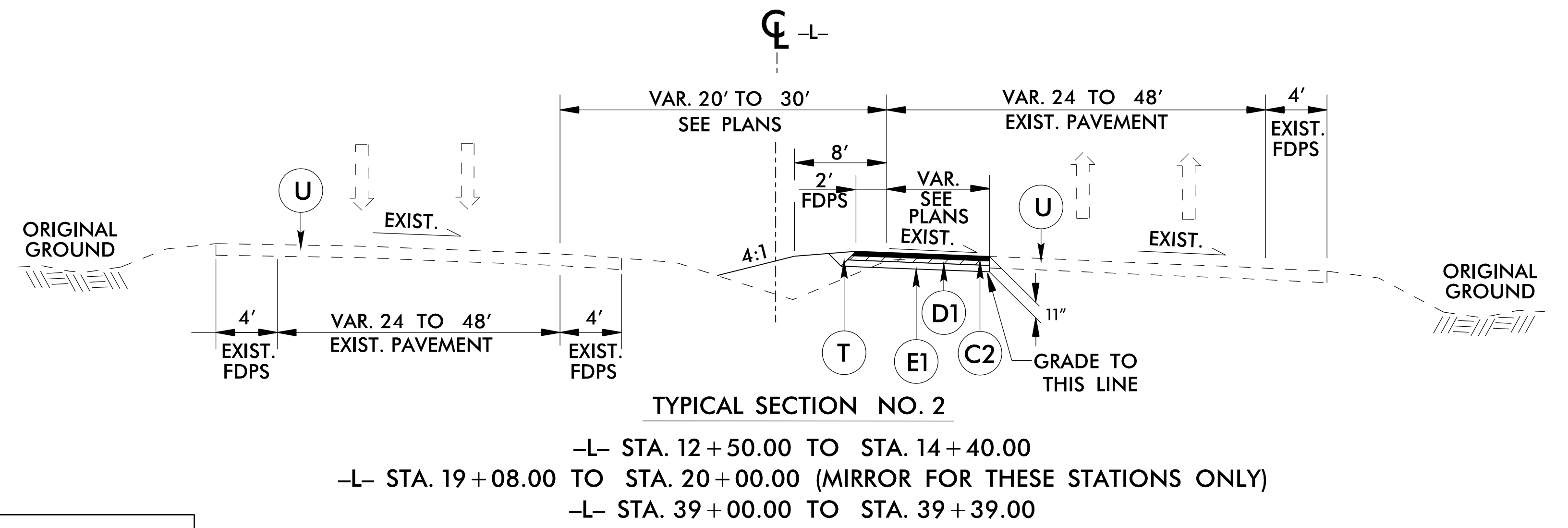
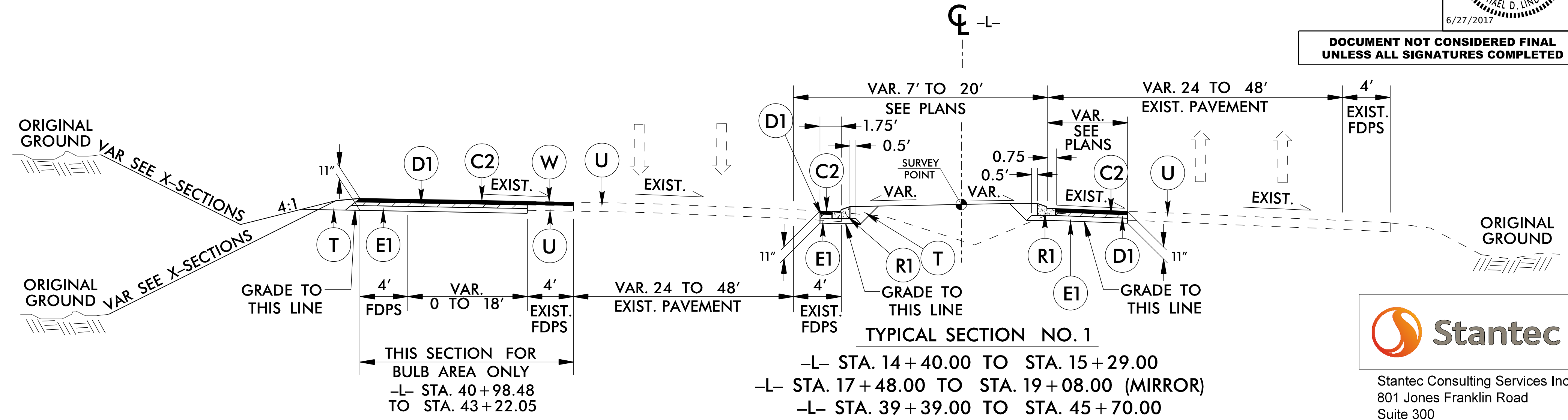
THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "W5601Z-4"
 WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF
 NORTHING: 704844.858(ft) EASTING: 2094095.551(ft)
 ELEVATION: 288.34(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999892639
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "W5601Z-4" TO -L- STATION IS
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

NOTE: DRAWING NOT TO SCALE

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

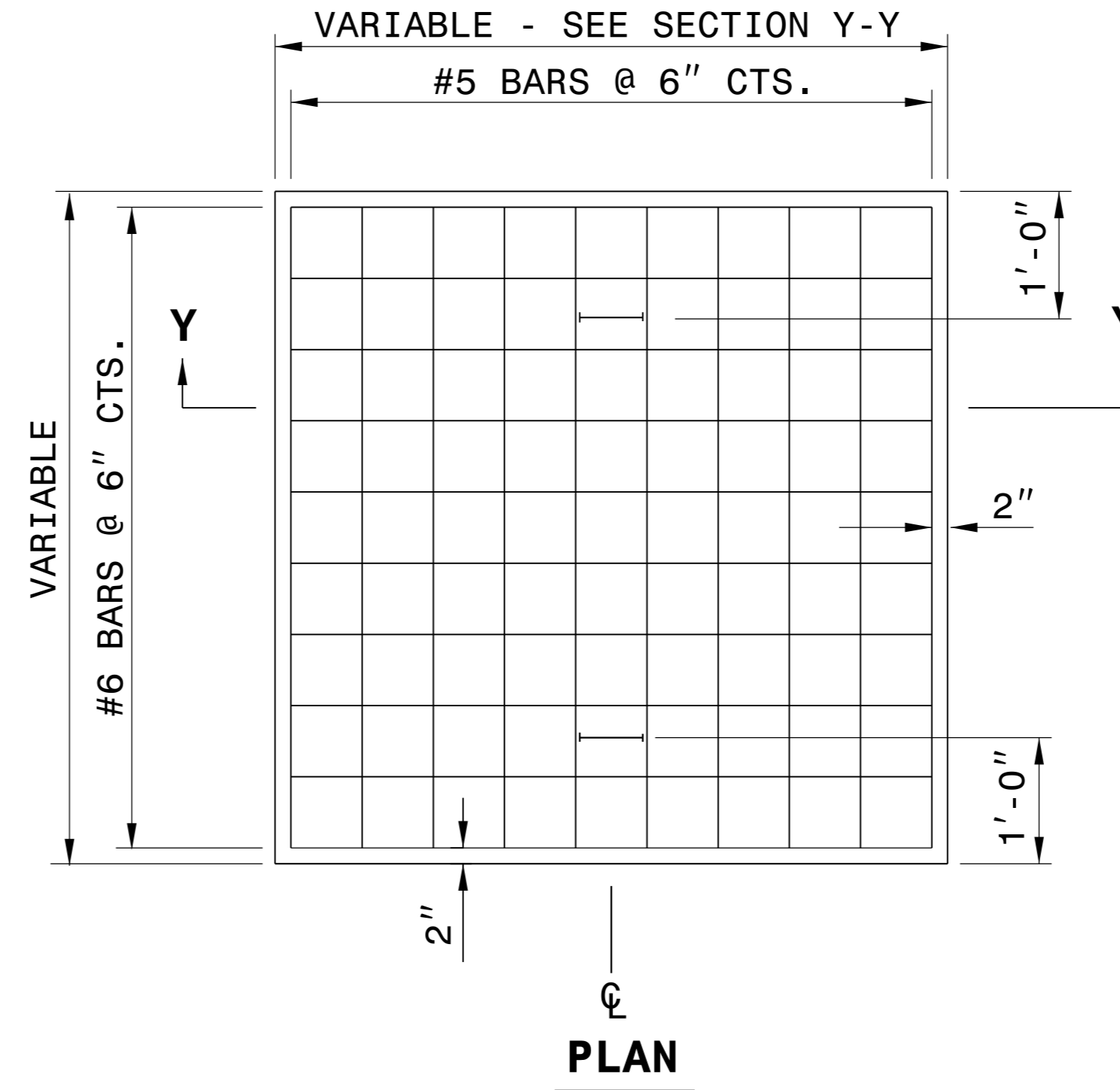
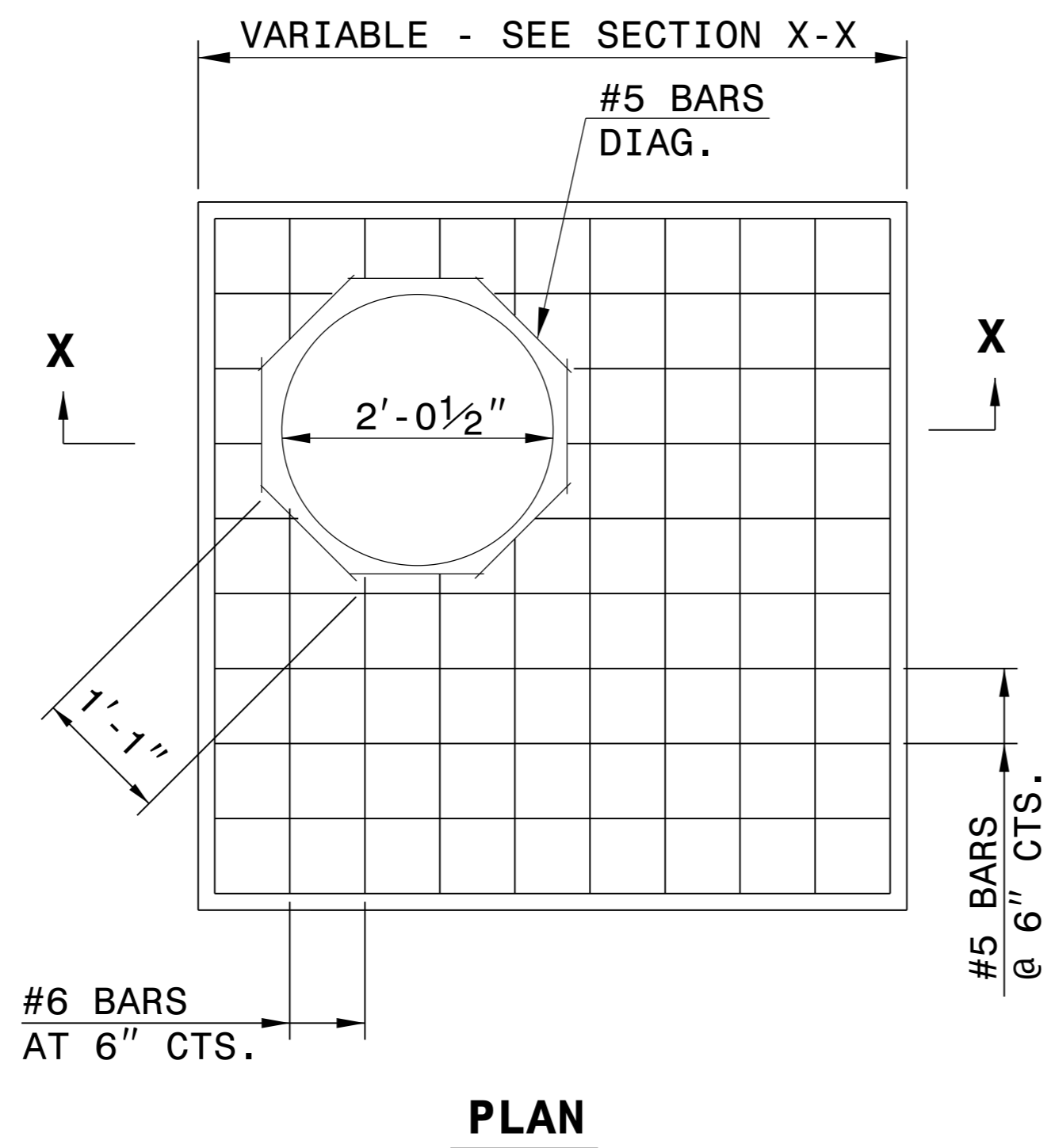
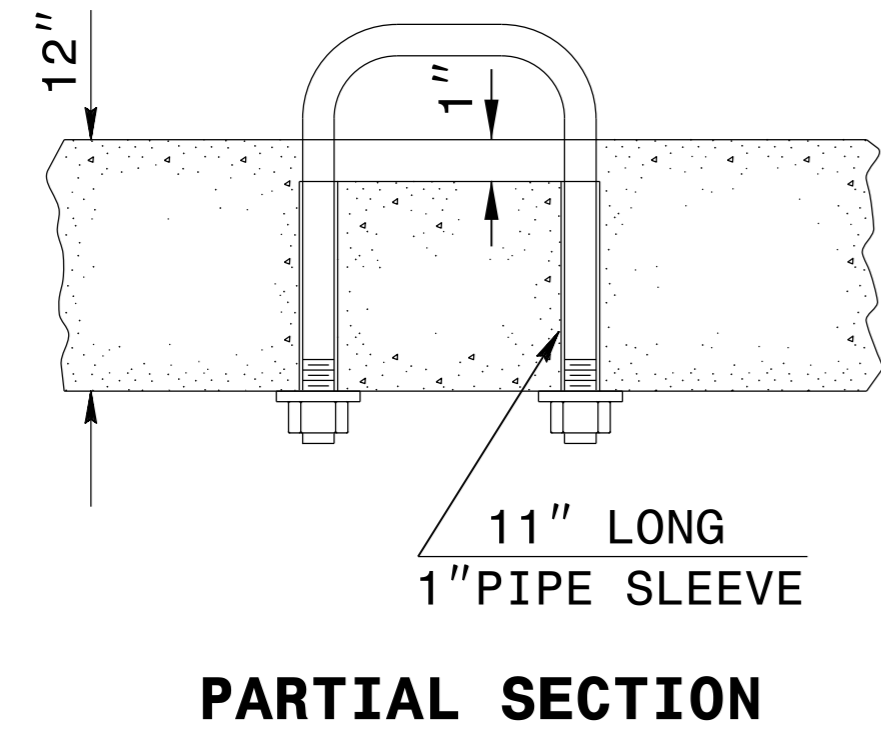
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2.5" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2.5" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5 1/2" IN DEPTH.
R1	1'-6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC CONCRETE ISLAND (KEYED IN).
R3	4" MONOLITHIC CONCRETE ISLAND COVER.
T	COMPACTED EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING 1.5" IN DEPTH
W	WEDGING. SEE DETAIL THIS SHEET

NOTE: ALL PAVEMENT SLOPES ARE 1:1 UNLESS OTHERWISE SPECIFIED.



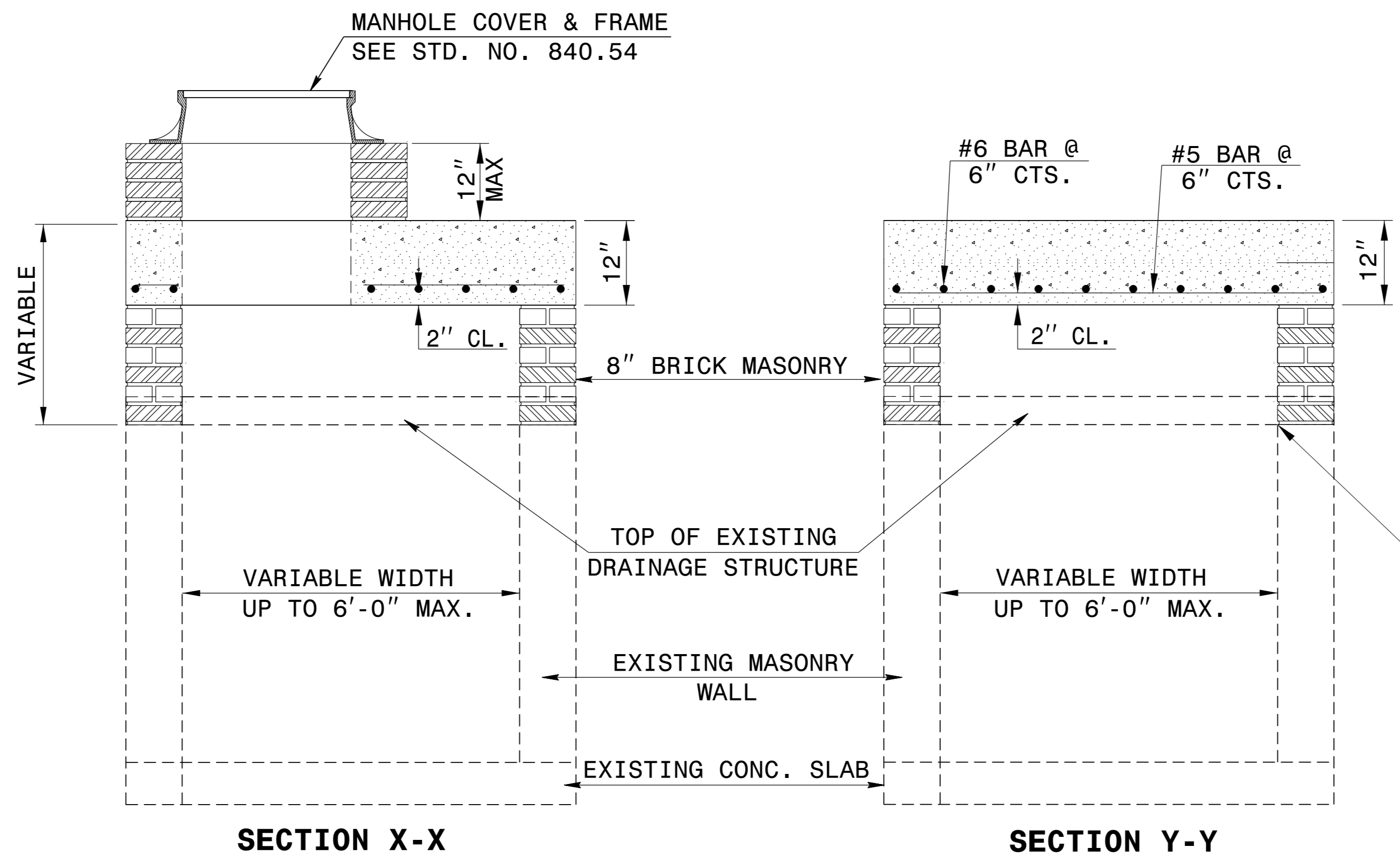
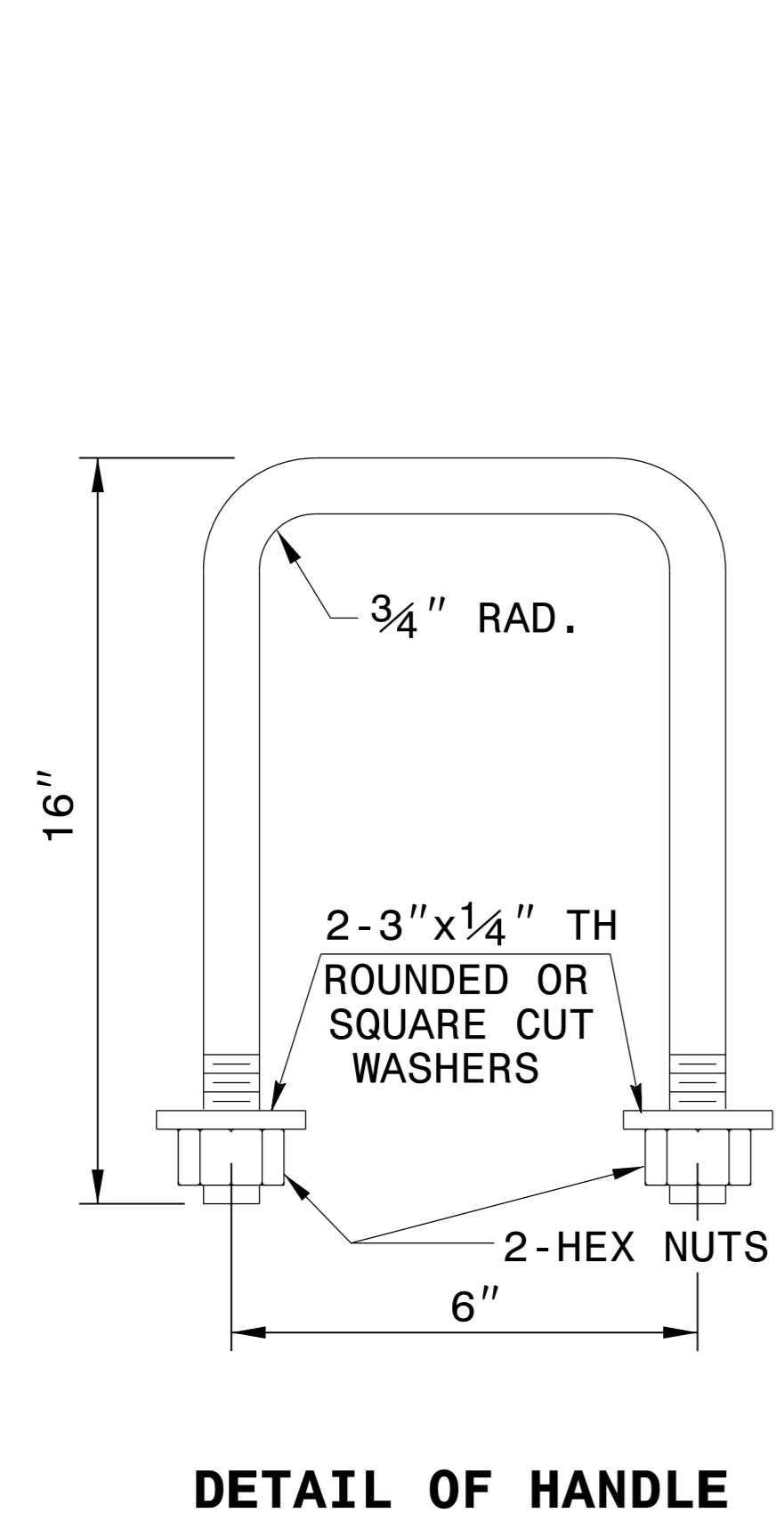
Stantec
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 Suite 300
 Raleigh, NC 27606
 Tel. (919) 851-6866
 Fax. (919) 851-7024
 www.stantec.com
 License No. F-0672

6/27/2017
 U:\Roadway\Projects\W5601Z_rdy_tjpb.dgn



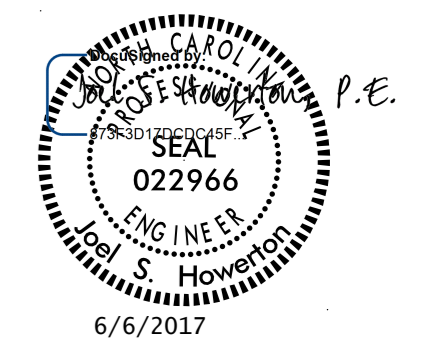
GENERAL NOTES:
 CONSTRUCT IN ACCORDANCE WITH SECTION 859 OF THE STANDARD SPECIFICATIONS.
 FIELD VERIFY THE DIMENSIONS FOR THE EXISTING BOXES.

BILL OF MATERIALS			
MASONRY			
TOP SLAB CONCRETE CLASS "A"		.037YDS ³	PER FT ²
BRICK MASONRY		.025YDS ³	PER FT ²
REINFORCING STEEL		7.64LBS PER FT ²	
MANHOLE OPTION QUANTITIES			
SIZE	QTY.	LENGTH	REINF. STEEL LBS.
#5 DIAG.	8	1'-1"	9.04



NOTE:
 CONCRETE AND REINFORCING STEEL QUANTITIES BASED ON SQUARE FOOT AREA OF THE PROPOSED TOP SLAB FOR THE EXISTING DRAINAGE STRUCTURE.
 BRICK MASONRY QUANTITY IS BASED ON THE TOTAL SQUARE FOOTAGE OF EXTERIOR WALL SURFACE AREA TO BE CONSTRUCTED.

ALIGN PROPOSED BRICK VERTICAL ADJUSTMENT TO INNER FACE OF WALL



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

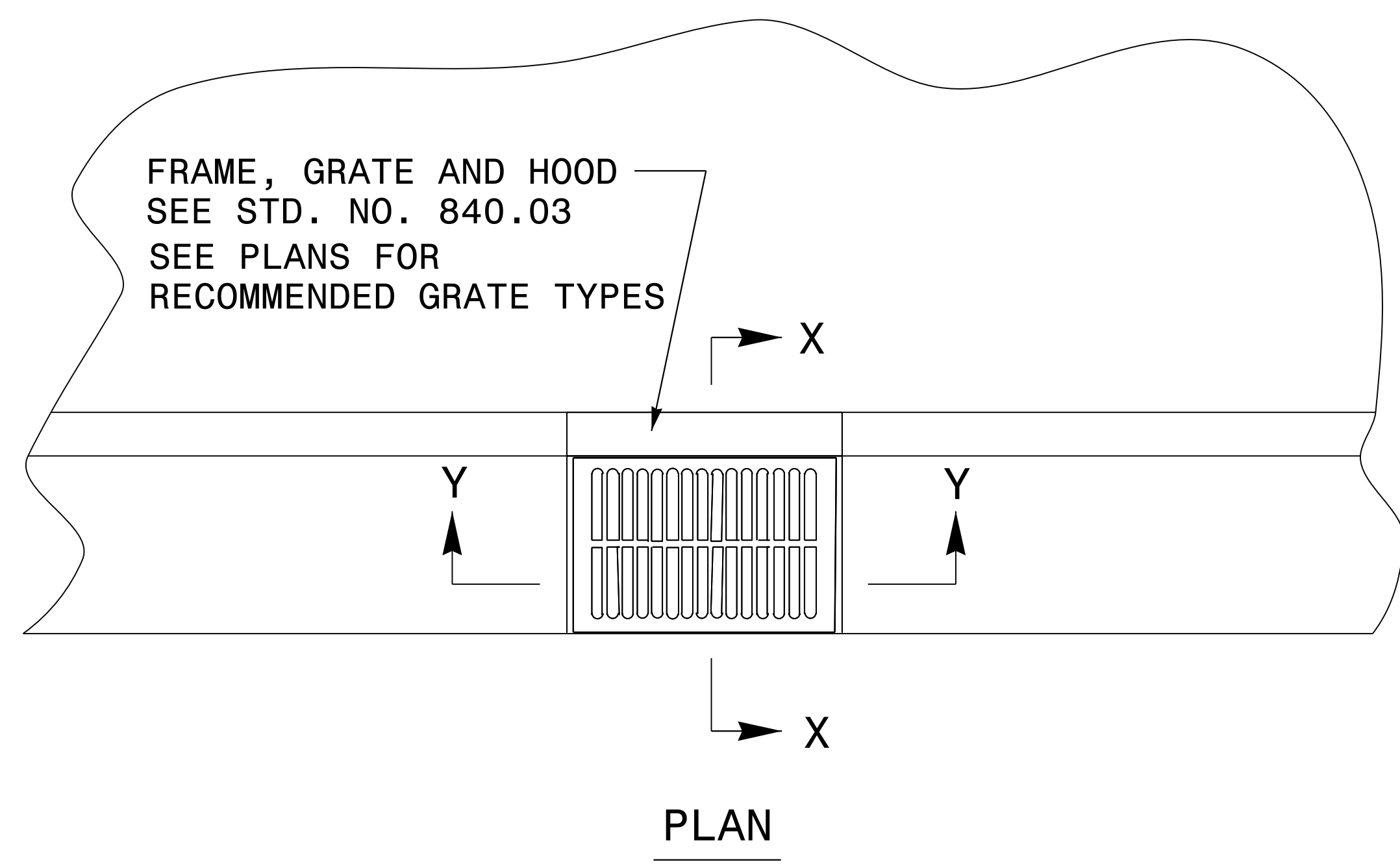
DETAIL TO CONVERT EXISTING TRAFFIC BEARING DROP INLET OR CATCH BASIN TO TRAFFIC BEARING JUNCTION BOX (MANHOLE OPTIONAL)

ORIGINAL BY: T.S.S. DATE: FEB. 2000
 MODIFIED BY: E.E.W. DATE: NOV. 2001
 CHECKED BY: DATE:
 FILE SPEC.: w:ericward/usr/details/stand/boxtotbjbe.dgn

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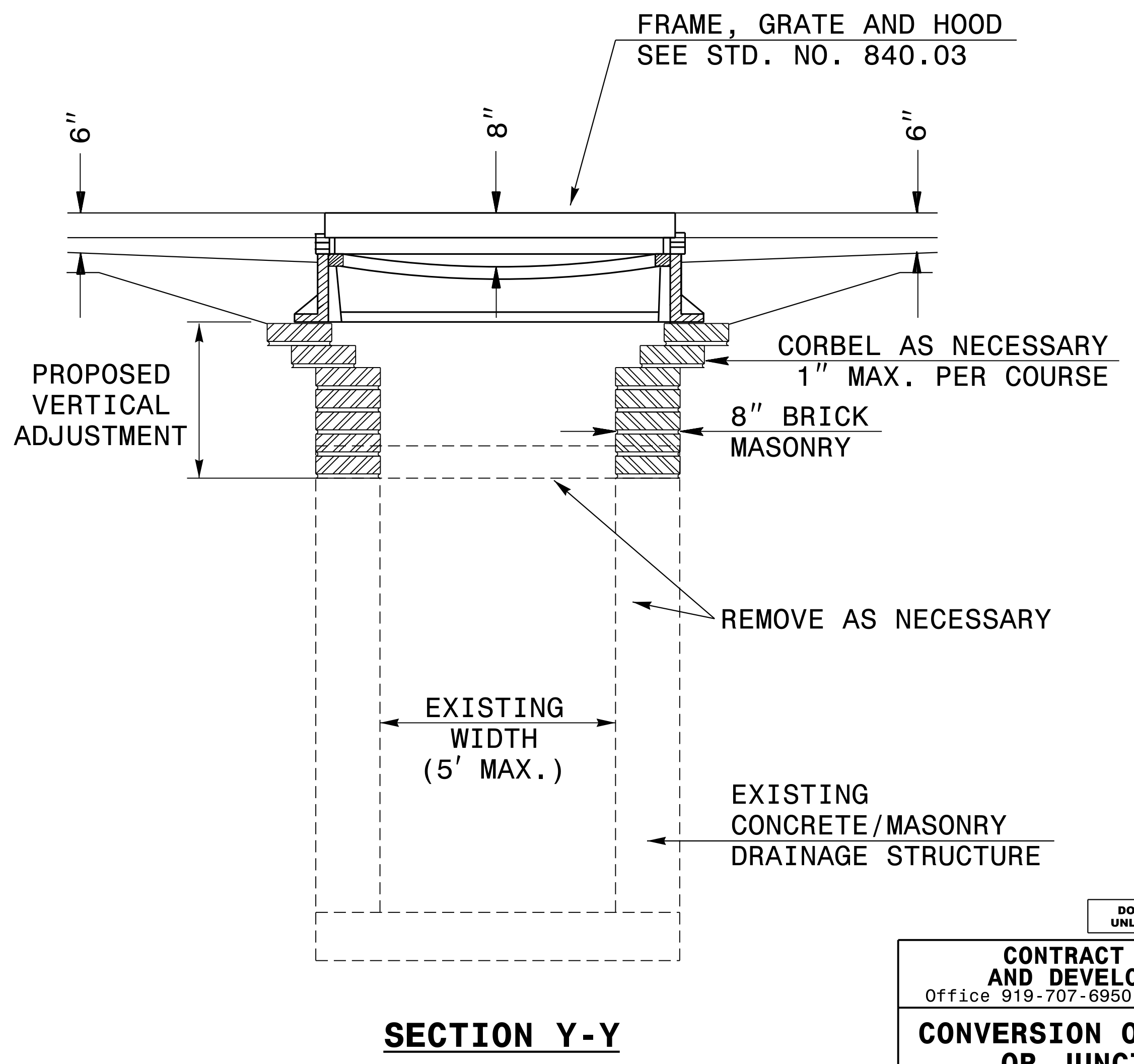
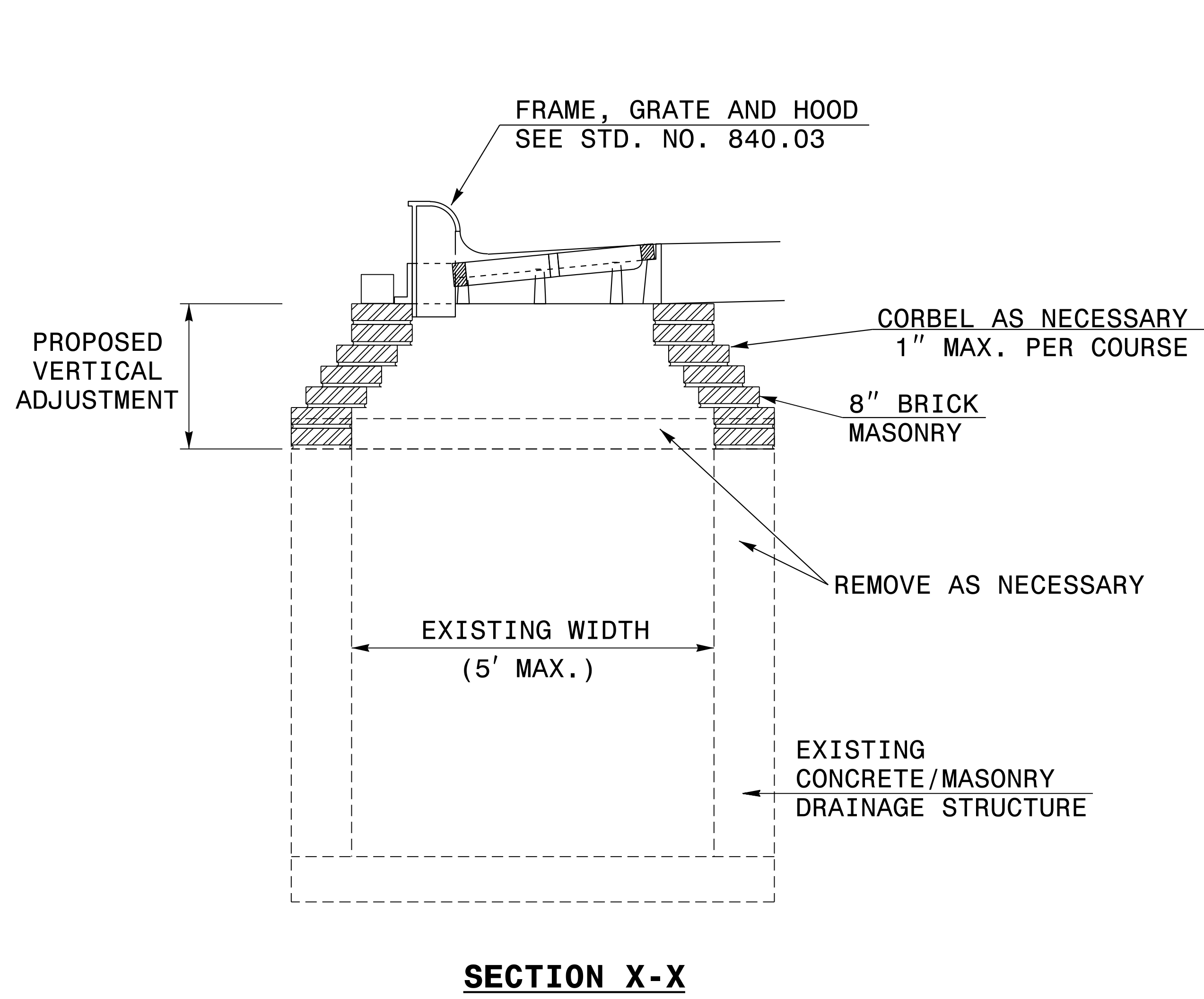
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 TIME: 5/14/99 10:00 AM
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5/14/99

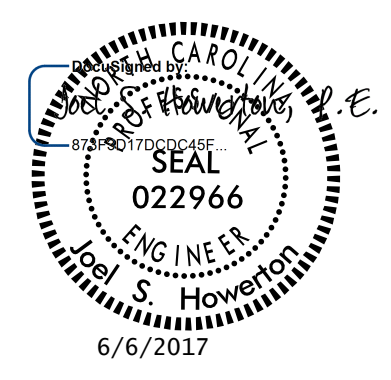


GENERAL NOTES:

- THE ROADWAY PLANS INDICATE STRUCTURES TO BE CONVERTED.
- AFTER REMOVAL, STORE GRATES AND FRAMES AS DIRECTED BY THE ENGINEER.
- 4" SOLID CLAY BRICK, JUMBO BRICK, CONCRETE, OR 4" SOLID CONCRETE BLOCK MAY BE USED FOR VERTICAL ADJUSTMENT OF THE STRUCTURE.
- CONVERT IN ACCORDANCE WITH SECTION 859 OF THE STANDARD SPECIFICATIONS.



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Howerton AT USD-252595



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

**CONVERSION OF DROP INLET
OR JUNCTION BOX
TO CATCH BASIN**

ORIGINAL BY: E.E. WARD DATE: 11-97
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: DS37:usr\details\stand\jbtocb.dgn

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LV/RT/CL	YD ²
L	14+40.00	15+83.38	CL	27.78
L	16+80.00	19+09.49	CL	43.89
L	39+00.00	45+70.00	CL	906.32
TOTAL:				977.99 SY
SAY:				980 SY

EARTHWORK SUMMARY (CY)

STATION	STATION	UNCLASSIFIED EXCAVATION	EMBT + %	BORROW	WASTE
-L- STA. 12 + 50 TO -L- STA. 20 + 00		100	133	33	-
-L- STA. 39 + 00 TO -L- STA. 45 + 70		87	245	158	-
SUBTOTAL SUMMARY		186	378	191	-
PROJECT TOTAL		186	378	191	-
ESTIMATE 5% FOR TOPSOIL ON BORROW PITS				10	
GRAND TOTAL		186	378	200	
SAY		200		200	

CONTINGENCY ITEMS:
 SHALLOW UNDERCUT - 100 CY
 CLASS IV SUBGRADE STABILIZATION - 200 TONS

NOTE:

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

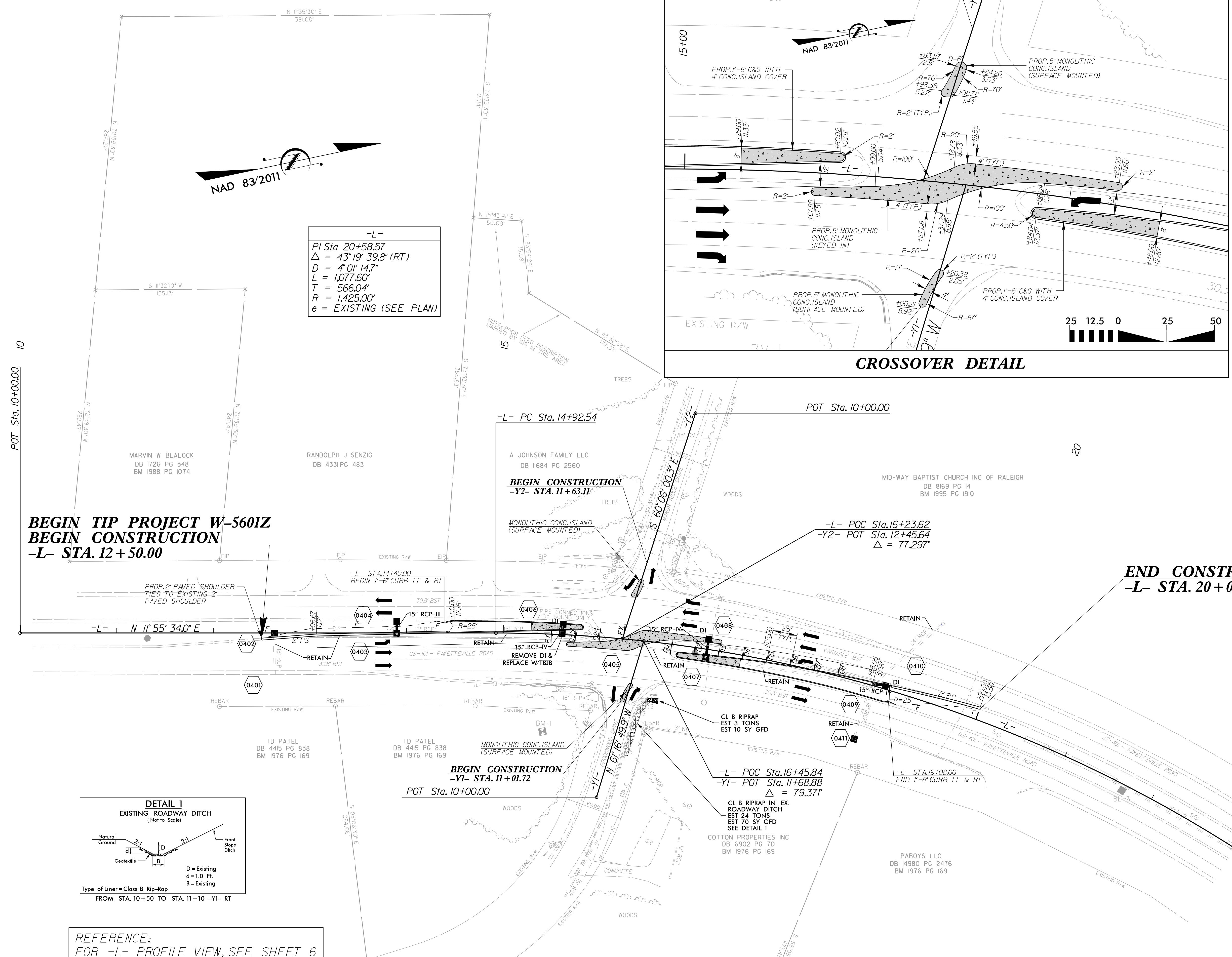
PROJECT REFERENCE NO. W-5601Z	SHEET NO. 4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
NOT A CERTIFIED DOCUMENT AS TO THE ORIGINAL DOCUMENT BUT ONLY AS TO THE REVISIONS.	
THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY:	
STEVEN M. BONDOR	
12786 ON 8 /15 /16	
THIS DOCUMENT IS ONLY CERTIFIED AS TO THE REVISIONS.	
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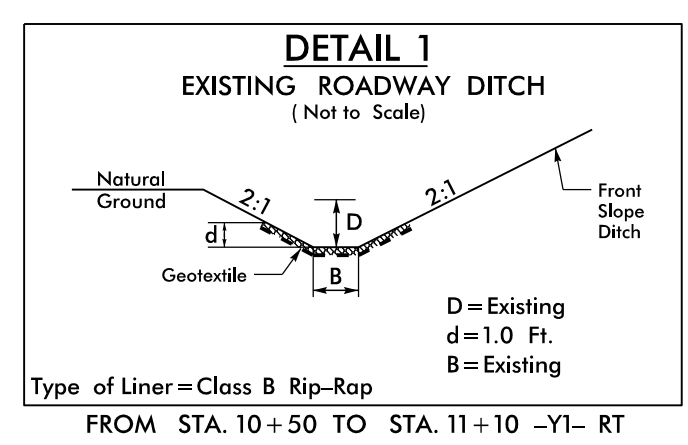
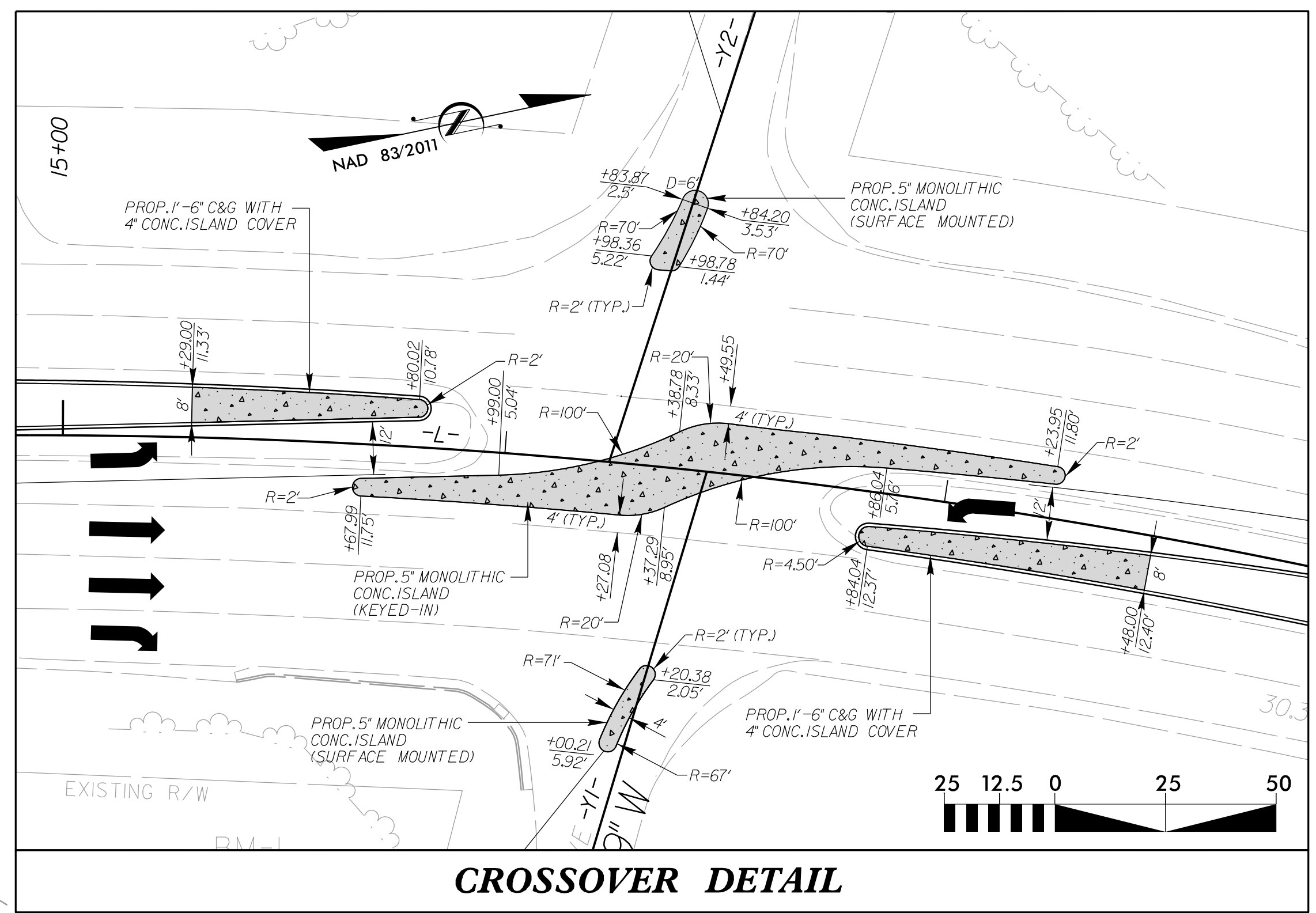
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Tel: (919) 851-8866
Fax: (919) 851-7024
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REVISIONS AS NOTED BELOW
1. REVISED LABEL FOR STRUCTURE 0405
2. ADDED RIP-RAP DITCH STABILIZATION



-L-	
PI Sta. 20+58.57	
$\Delta = 43^{\circ}19'39.8''$ (RT)	
D = 4'01"14.7"	
L = 1,077.60'	
T = 566.04'	
R = 1,425.00'	
e = EXISTING (SEE PLAN)	



REFERENCE:
FOR -L- PROFILE VIEW, SEE SHEET 6

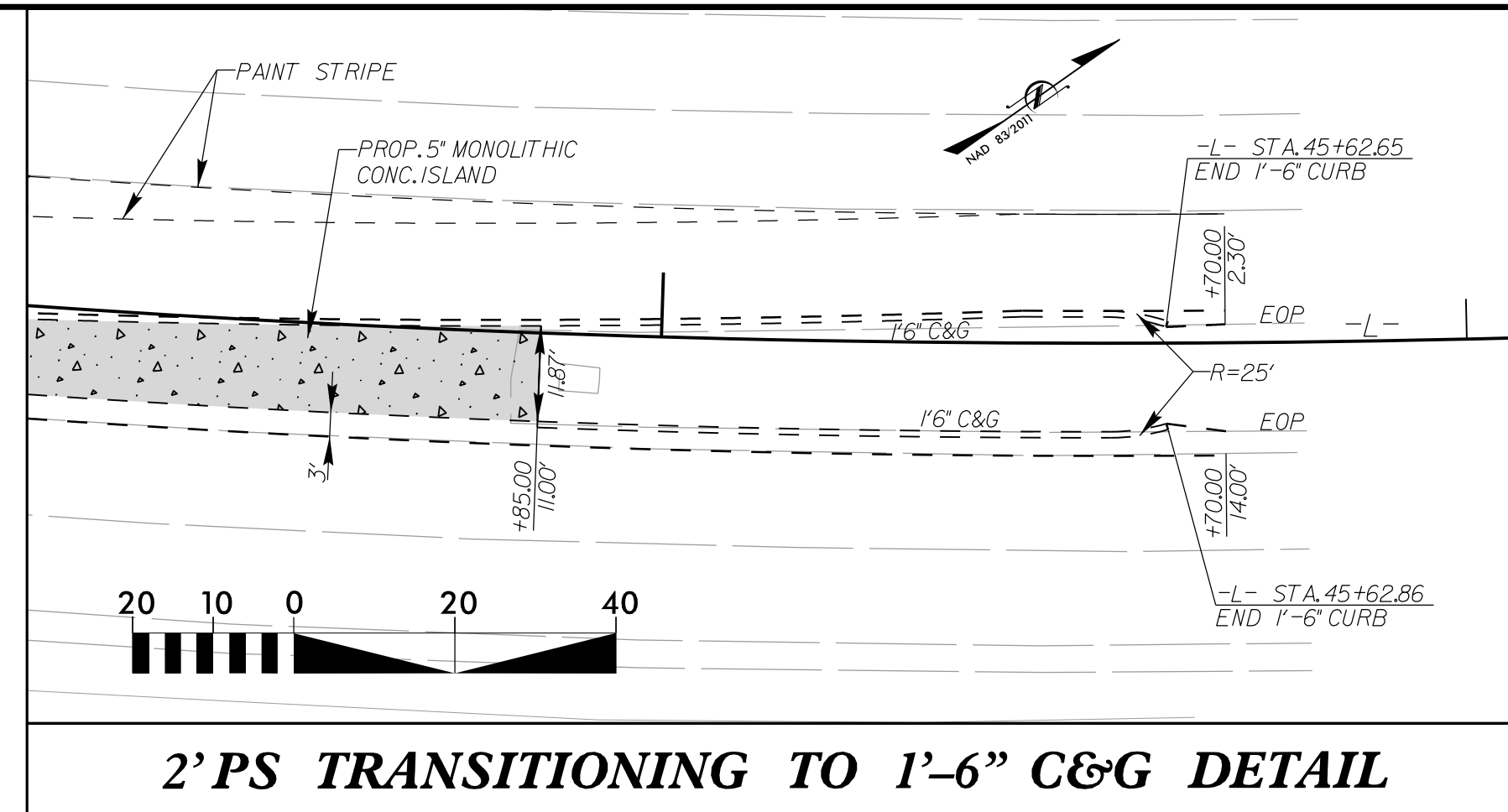
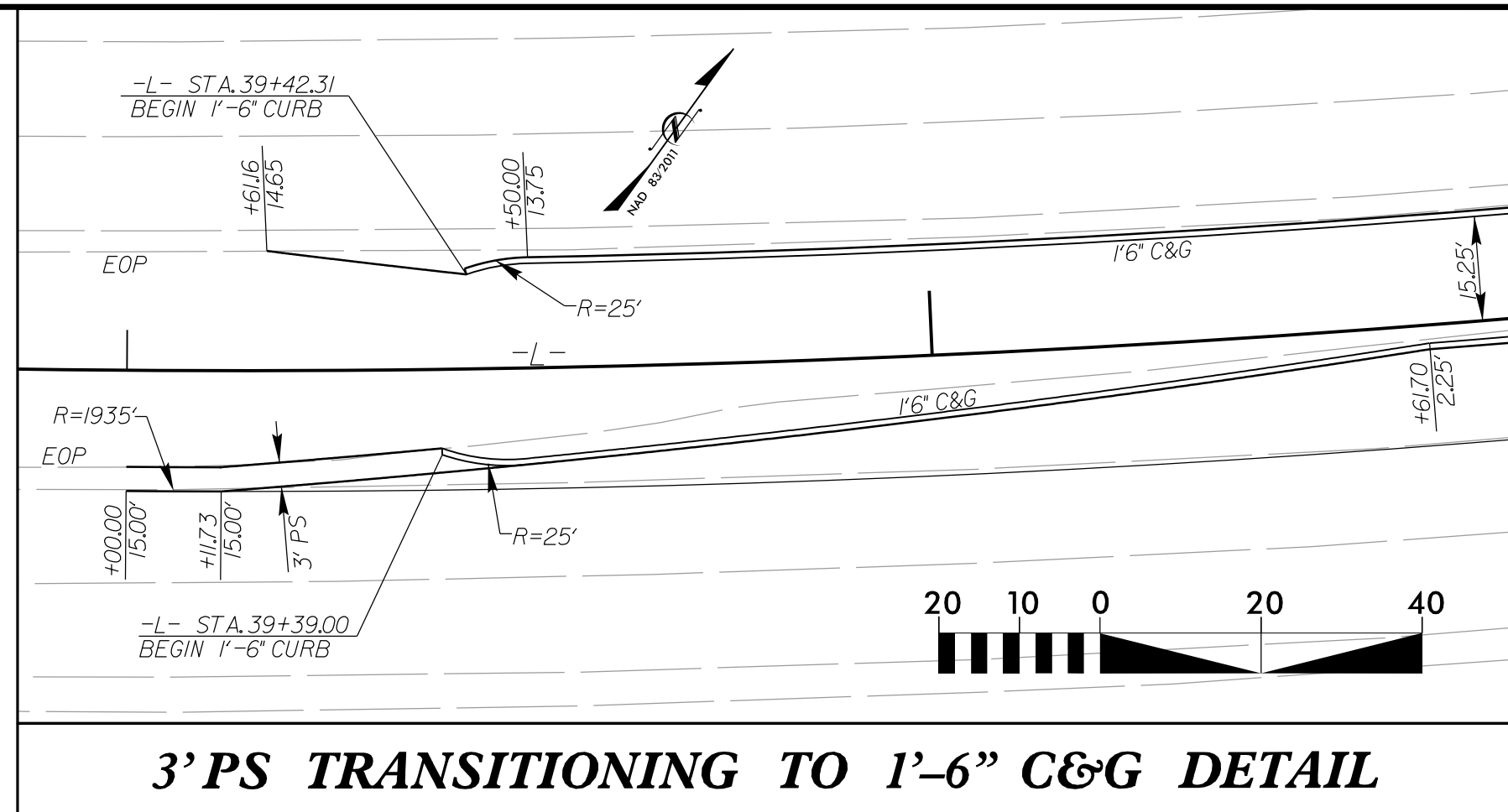
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mlt

PROJECT REFERENCE NO. W-5601Z	SHEET NO. 5
ROADWAY DESIGN ENGINEER MICHAEL D. LINDGREN SEAL 025513 5/11/2017	HYDRAULICS ENGINEER JOHNSON G. DALTON SEAL 026971 5/11/2017

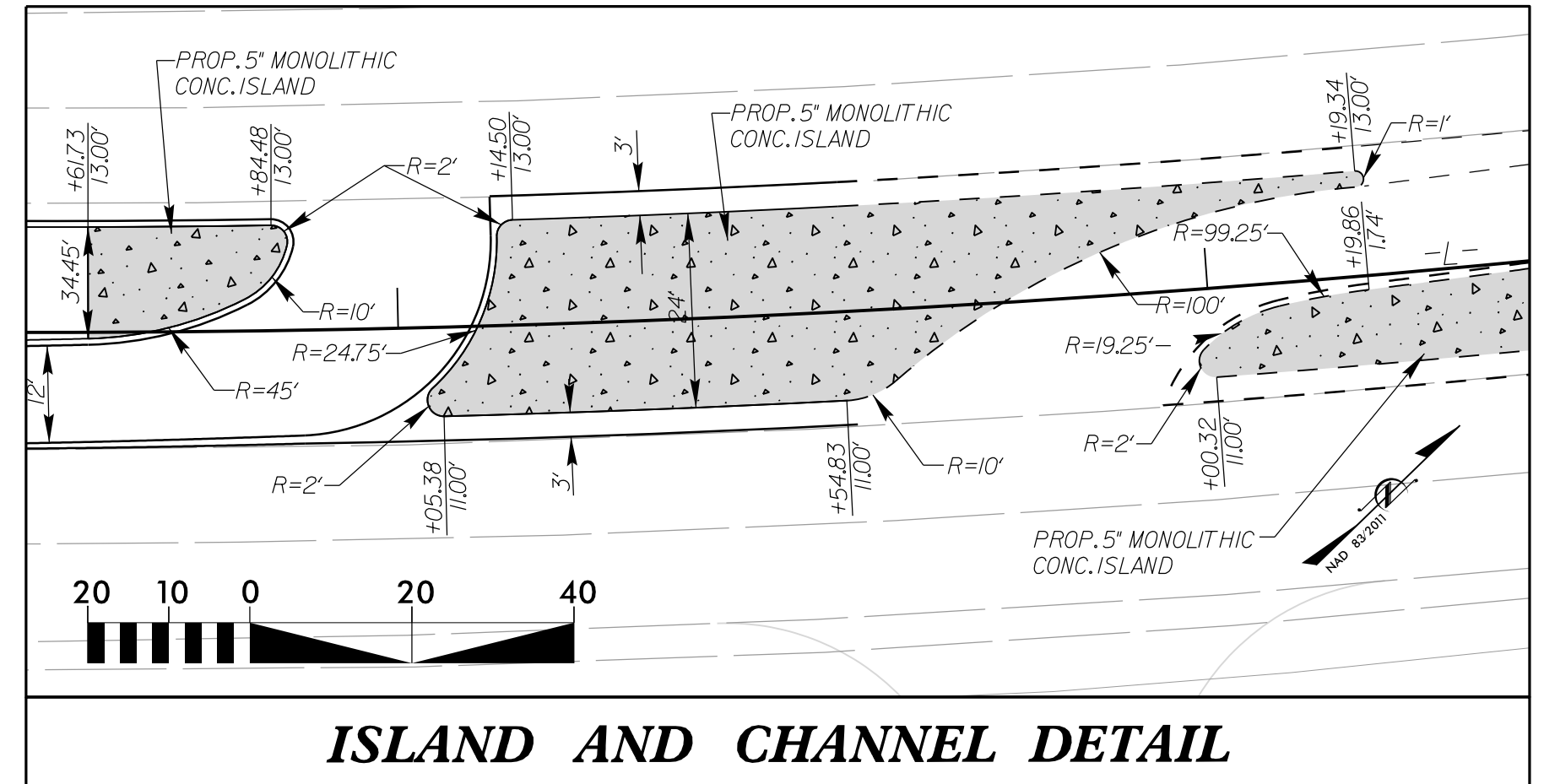
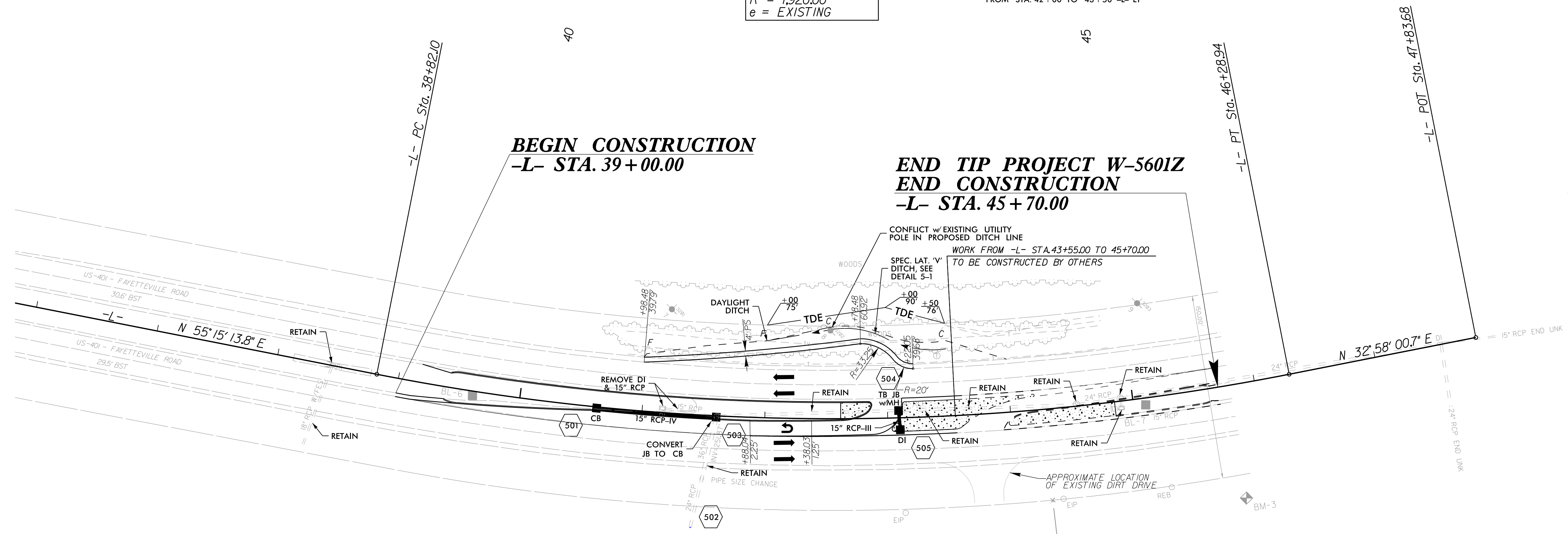
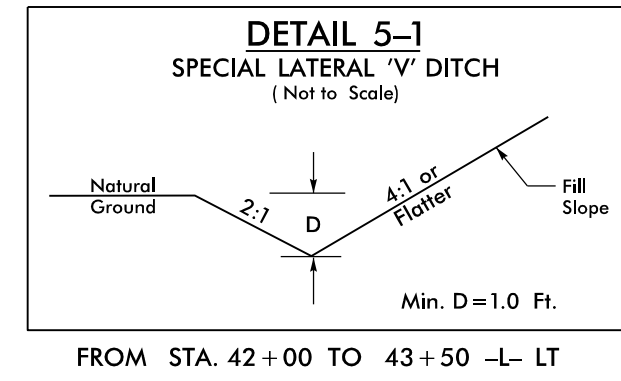
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-L-
PI Sta 42+60.30
$\Delta = 22^\circ 17' 13.1''$ (LT)
$D = 2' 59' 03.0''$
$L = 746.84'$
$T = 378.20'$
$R = 1,920.00'$
e = EXISTING



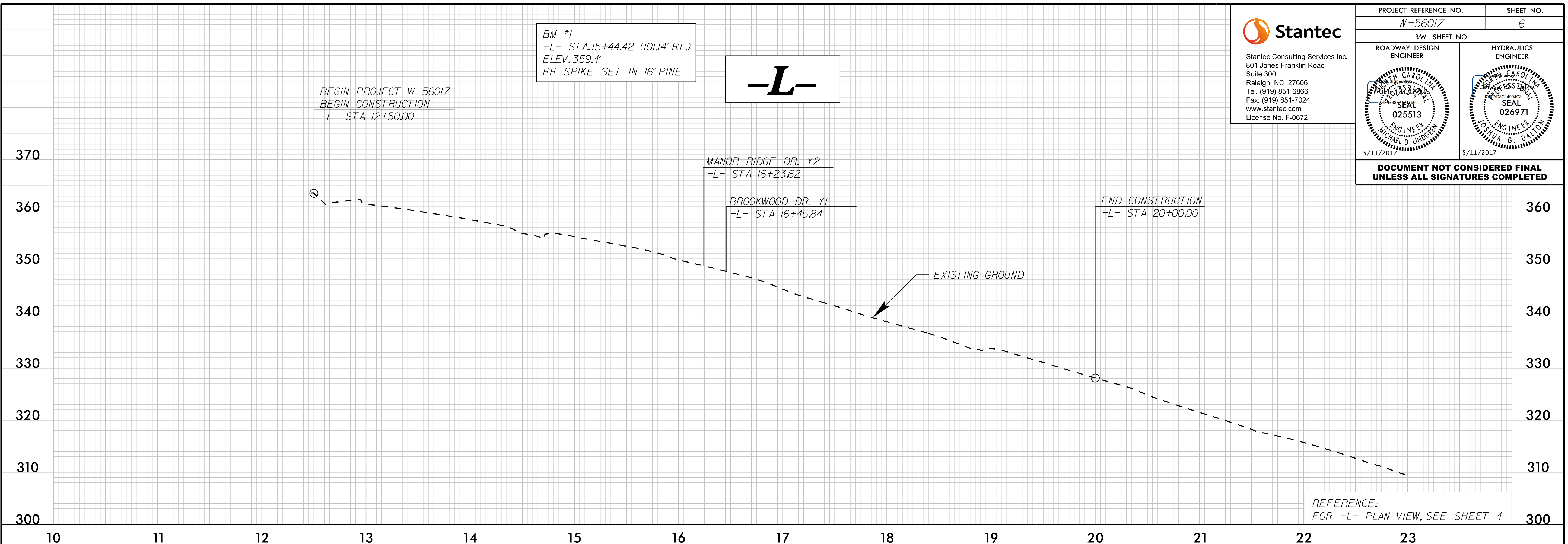
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m.lindgren

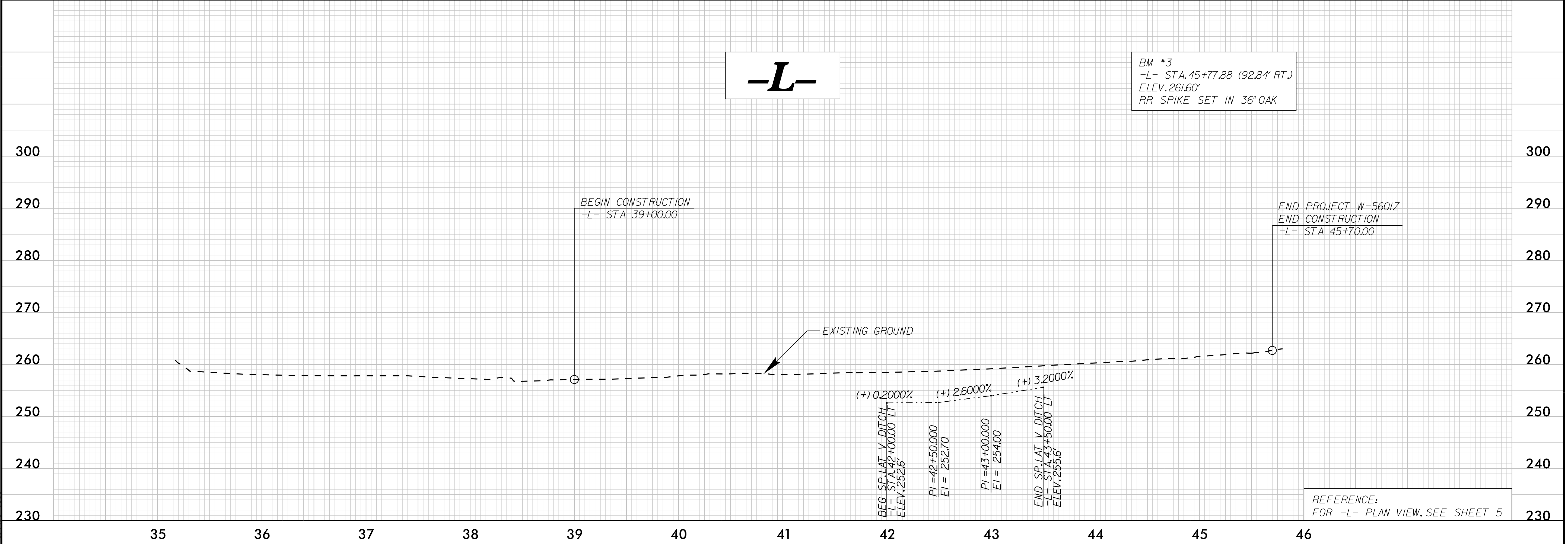


PROJECT REFERENCE NO. W-5601Z	SHEET NO. 6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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REFERENCE:
FOR -L- PLAN VIEW, SEE SHEET 4



REFERENCE:
FOR -L- PLAN VIEW, SEE SHEET 5

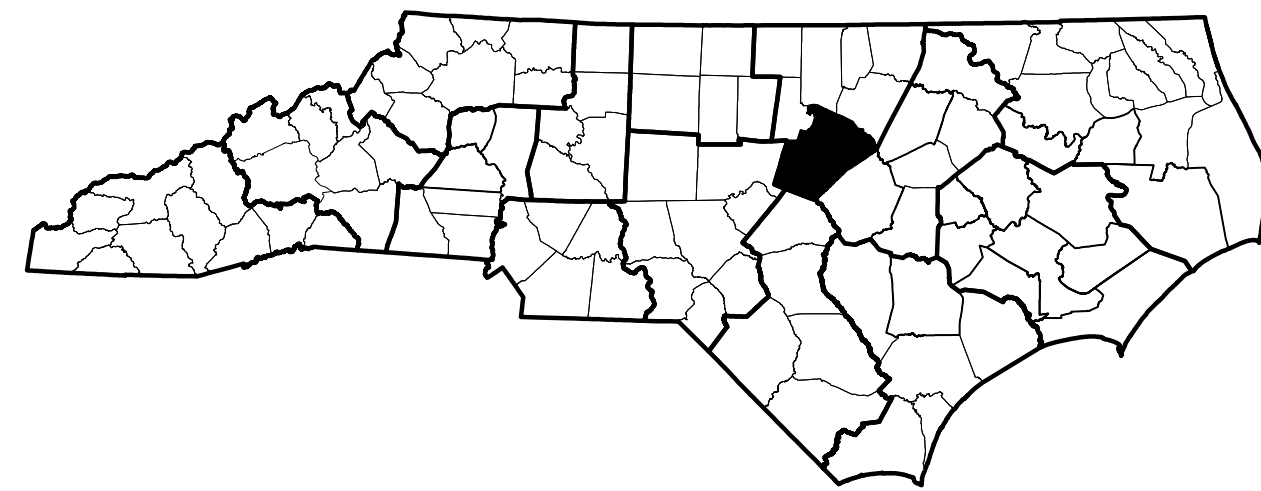
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

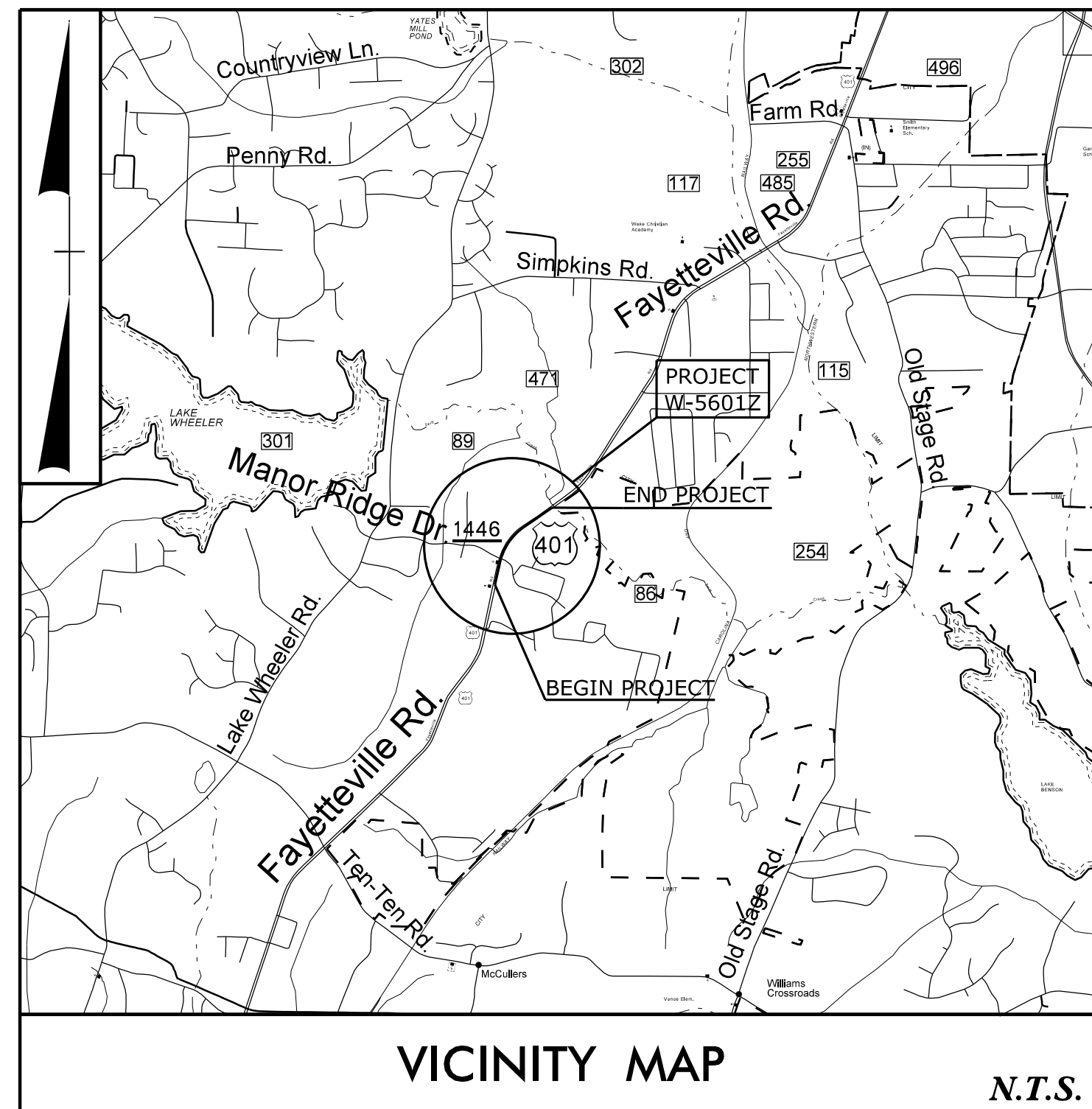
TRANSPORTATION MANAGEMENT PLAN

WAKE COUNTY

DIVISION 5



US 401 (FAYETTEVILLE ROAD) FROM SOUTH OF SR 1446 (MANOR RIDGE DRIVE) TO NORTH OF SWIFT CREEK CROSSING



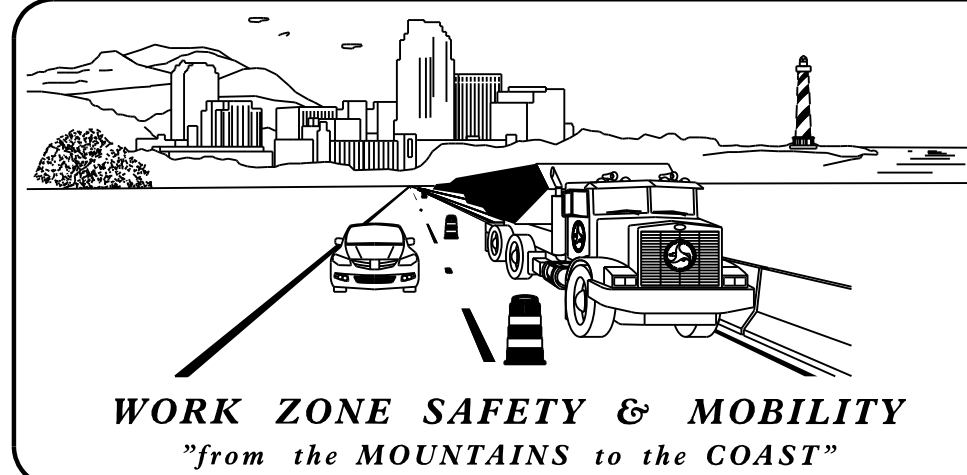
SHEET NO.
TMP-1

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, PAVEMENT MARKING LEGEND, AND LEGEND
TMP-2	GENERAL NOTES
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP 4-5	US 401 -L- PHASE I
TMP 6-7	US 401 -L- PHASE II

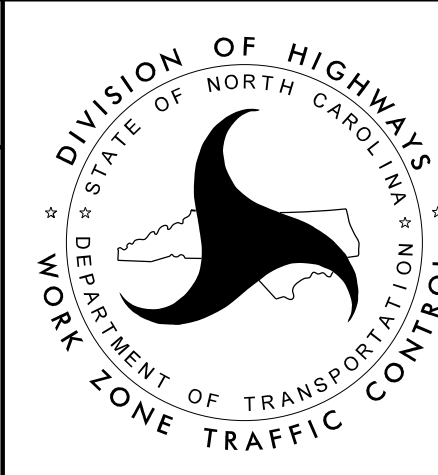
TIP PROJECT: W-5601Z

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N.C.D.O.T. CONTACT: DIVISION 5 PROJECT MANAGEMENT

BEN UPSHAW, PE PROJECT ENGINEER



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REGINA M. MUNCEY, PE
TRANSPORTATION ENGINEER
JAY WOOLARD, PE
SENIOR TRANSPORTATION ENGINEER
DEAN HARRIS
SENIOR TRANSPORTATION DESIGNER



APPROVED: *Regina M. Muncey*
DATE: 4/14/2017

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	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
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
	<u>PAINT PAVEMENT MARKING LINES (4")</u>
(PB)	2 FT. - 6 FT./SP WHITE MINISKIP
(P9)	2 FT. - 6 FT./SP YELLOW MINISKIP
(PD)	3 FT. - 9 FT./SP WHITE MINISKIP
(PE)	WHITE SOLID LANE LINE
(PA)	WHITE EDGELINE
(PB)	YELLOW EDGELINE
	<u>PAINT PAVEMENT MARKING SYMBOLS</u>
(QT)	U-TURN ARROW

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- EXIST. PVMT.
- PROPOSED PVMT.
- NORTH ARROW
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA
- PAVEMENT REMOVAL

PAVEMENT MARKINGS

- EXISTING LINES
- WHITE EDGE LINE
- YELLOW EDGE LINE
- BROKEN LANE LINES
- MINISKIP LANE LINES
- DOUBLE YELLOW LINES
- GORELINE
- STOP BAR

PAVEMENT MARKING SYMBOLS

- EXISTING PAVEMENT MARKING SYMBOLS (HOLLOW)
- PAVEMENT MARKING SYMBOLS
- PAVEMENT MARKING ALPHANUMERIC CHARACTERS

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

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

4/14/2017 W-5601Z-TMP_01A_RDWYSTDSLEGEND.dgn User:rmuncey

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<p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. 919.851.6866 Fax. 919.851.7024 www.stantec.com License No. F-0672</p>	<p>APPROVED: <i>Regina M. Muncey</i> DATE: 4/14/2017</p>		TRANSPORTATION MANAGEMENT PLANS
			ROADWAY STANDARD DRAWINGS, AND LEGEND

GENERAL NOTES

PROJ. REFERENCE NO.	SHEET NO.
W-5601Z	TMP-2

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
ALL ROADS	6:00 A.M.-9:00 A.M. MONDAY THRU FRIDAY 4:00 P.M.-7:00 P.M. MONDAY THRU FRIDAY

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

ROAD NAME
ALL ROADS

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 6:00 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 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 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 6:00 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 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 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 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 TRANSPORTATION MANAGEMENT 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) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

TRAFFIC CONTROL DEVICES

- I) 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.
 - J) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- SIGNING
- K) 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.
 - L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
 - M) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	NONE

O) 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.

- P) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- Q) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

PAVEMENT EDGE DROP OFF REQUIREMENTS

R) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPEN TRAVEL LANE THAT HAS A 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.

S) 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) 500 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS



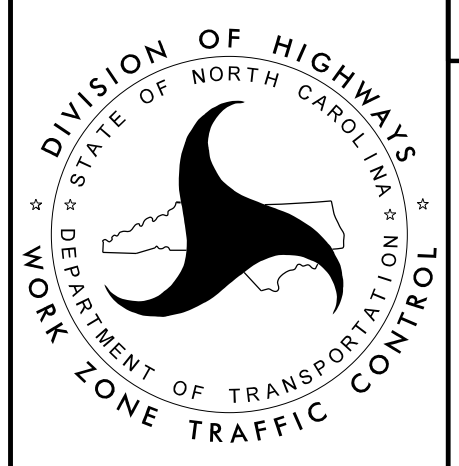
T) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATIONS.

MISCELLANEOUS

- U) MAINTAIN VEHICULAR ACCESS TO ALL DRIVEWAYS DURING THE LIFE OF THE CONTRACT, UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER. USE INCIDENTAL STONE WHEN NECESSARY.
- V) ALL DIMENSIONS AND STATIONS IN THE TRANSPORTATION MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- W) COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.
- X) MAINTAIN ALL EXISTING SIGNING ON PROJECT (WARNING, REGULATORY AND GUIDE SIGNS). WHERE CONSTRUCTION AFFECTS THE LOCATION OF A SIGN, RELOCATE AS NECESSARY, OR INSTALL REPLACEMENT SUCH THAT THE FUNCTION OF THE SIGN IS MAINTAINED AT ALL TIMES. DURING RELOCATION OF STOP SIGNS PROVIDE FLAGGERS WITH "FLAGGER AHEAD" (W20-7a) AND "BE PREPARED TO STOP" (W3-4) SIGNS AS NECESSARY TO MAINTAIN INTERSECTION TRAFFIC.
- Y) DRAINAGE CONSTRUCTION SHOWN IN THE TRANSPORTATION MANAGEMENT PLAN IS A GENERAL REPRESENTATION OF WORK TO BE PERFORMED DURING A PARTICULAR PHASE OF CONSTRUCTION. REFER TO THE ROADWAY PLANS FOR DRAINAGE ITEMS. IN THE EVENT THERE IS A DISCREPANCY BETWEEN WHAT IS SHOWN IN THE TRANSPORTATION MANAGEMENT PLAN AND THE ROADWAY PLAN, THE ROADWAY PLAN SHALL GOVERN OVER THE TRANSPORTATION MANAGEMENT PLAN.

4/14/2017
W-5601Z-TMP-02-GENERALNOTES.dgn
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			GENERAL NOTES

PHASE I (TMP 4-5)

STEP 1:

PRIOR TO ANY WORK OPERATIONS, INSTALL WORK ZONE ADVANCE WARNING SIGNS ON -L- (NC 401), -Y1- (BROOKWOOD DR), AND -Y2- (MANOR RIDGE RD) PER ROADWAY STANDARD DRAWING 1101.01, SHEET 2 AND 3 OF 3.

STEP 2:

CONSTRUCT US 401 MEDIAN (EXCLUDING CENTER "S" ISLAND AT MANOR RIDGE ROAD INTERSECTION), U-TURN BULB, OUTSIDE WIDENING AND DRAINAGE STRUCTURES IN MEDIAN AND OUTSIDE OF TRAVELWAY USING LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 15. WHEN LANE CLOSURES ARE NOT IN EFFECT, KEEP WORK AREAS DRUMMED OFF AS SHOWN ON SHEETS TMP-4 AND 5.

INSTALL PERMANENT SIGNING AWAY FROM TRAFFIC AND COVER SIGNS UNTIL PHASE II.

STEP 3:

PLACE TEMPORARY PAVEMENT MARKINGS IN THEIR FINAL PATTERN AT THE NEW U-TURN BULB. REFER TO PAVEMENT MARKING PLANS AND TMP-7. MAINTAIN BULB CLOSED WITH DRUMS UNTIL READY TO OPEN IN PHASE II.

PHASE II (TMP 6-7)

STEP 1:

UPON COMPLETION OF U-TURN PAVEMENT MARKINGS AND IN ONE CONTINUOUS WORK PERIOD:

- OPEN U-TURN BULB AND UNCOVER RELATED SIGNING
- CLOSE THE MEDIAN AT US 401 AND MANOR RIDGE RD/BROOKWOOD DR INTERSECTION

STEP 2:

WITH TRAFFIC IN PHASE II TRAFFIC PATTERN, COMPLETE CONSTRUCTION OF MEDIAN TURN LANE AREAS AND CONCRETE ISLANDS AT US 401 AND MANOR RIDGE RD/BROOKWOOD DR INTERSECTION.

COMPLETE INSTALLATION OF REMAINING SIGNS AND MAINTAIN COVERED AS NEEDED.

STEP 3:

UPON COMPLETION OF ALL OTHER OPERATIONS, PLACE FINAL PAVEMENT MARKINGS AND MARKERS ON THE FINAL PAVEMENT SURFACE.

UNCOVER PERMANENT SIGNING, REMOVE TRAFFIC CONTROL DEVICES AND OPEN TO FINAL PATTERN.

PROJ. REFERENCE NO.	SHEET NO.
W-5601Z	TMP-3

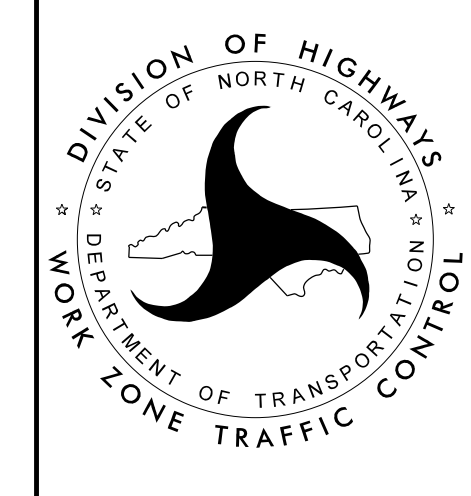
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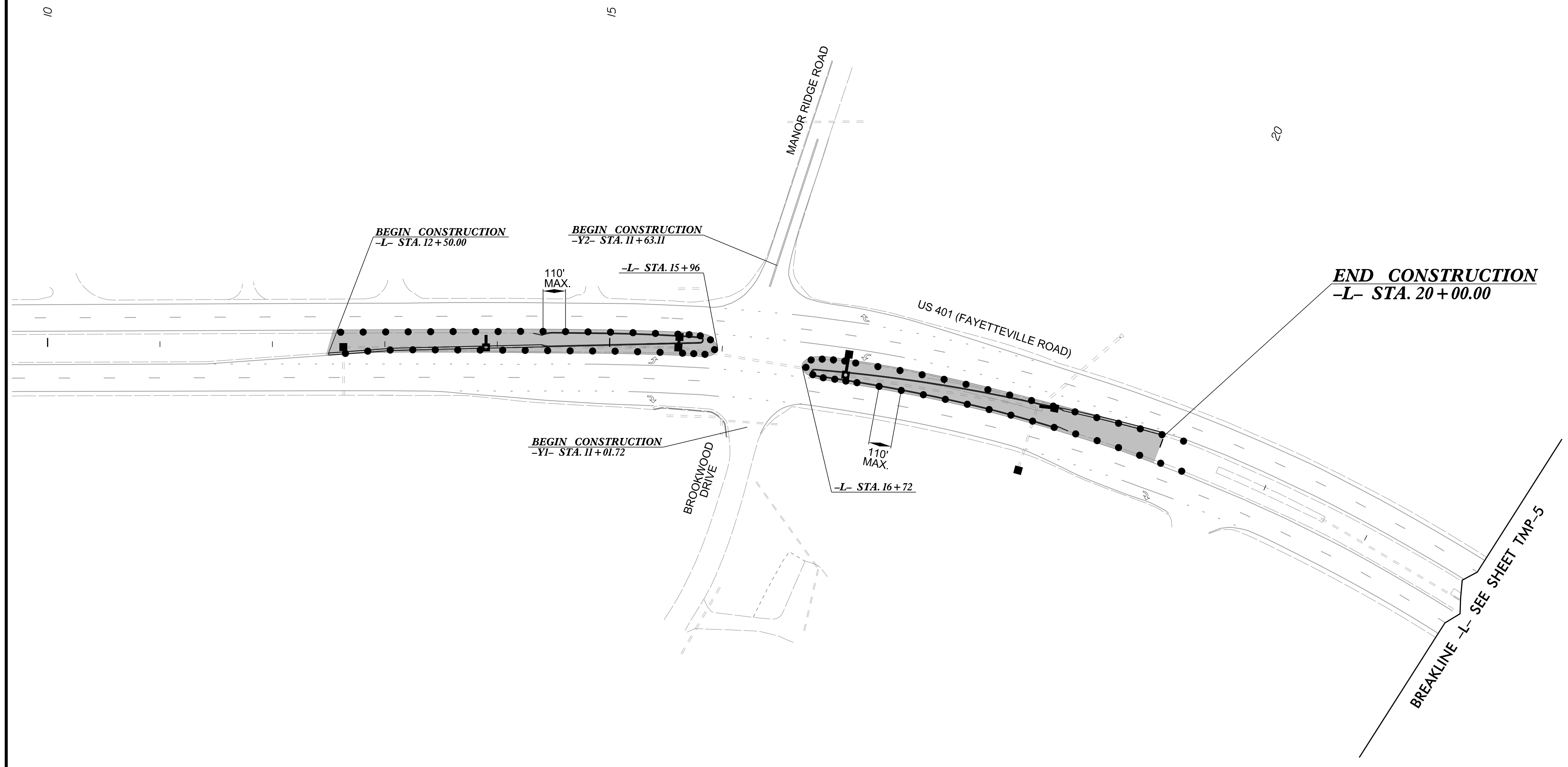
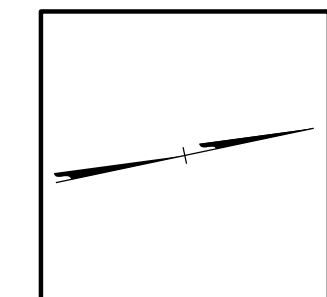
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801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. 919.851.6866
Fax. 919.851.7024
www.stantec.com
License No. F-0672



APPROVED: *Regina M. Muncy*
DATE: 4/14/2017



TRANSPORTATION MANAGEMENT PLANS
PHASING



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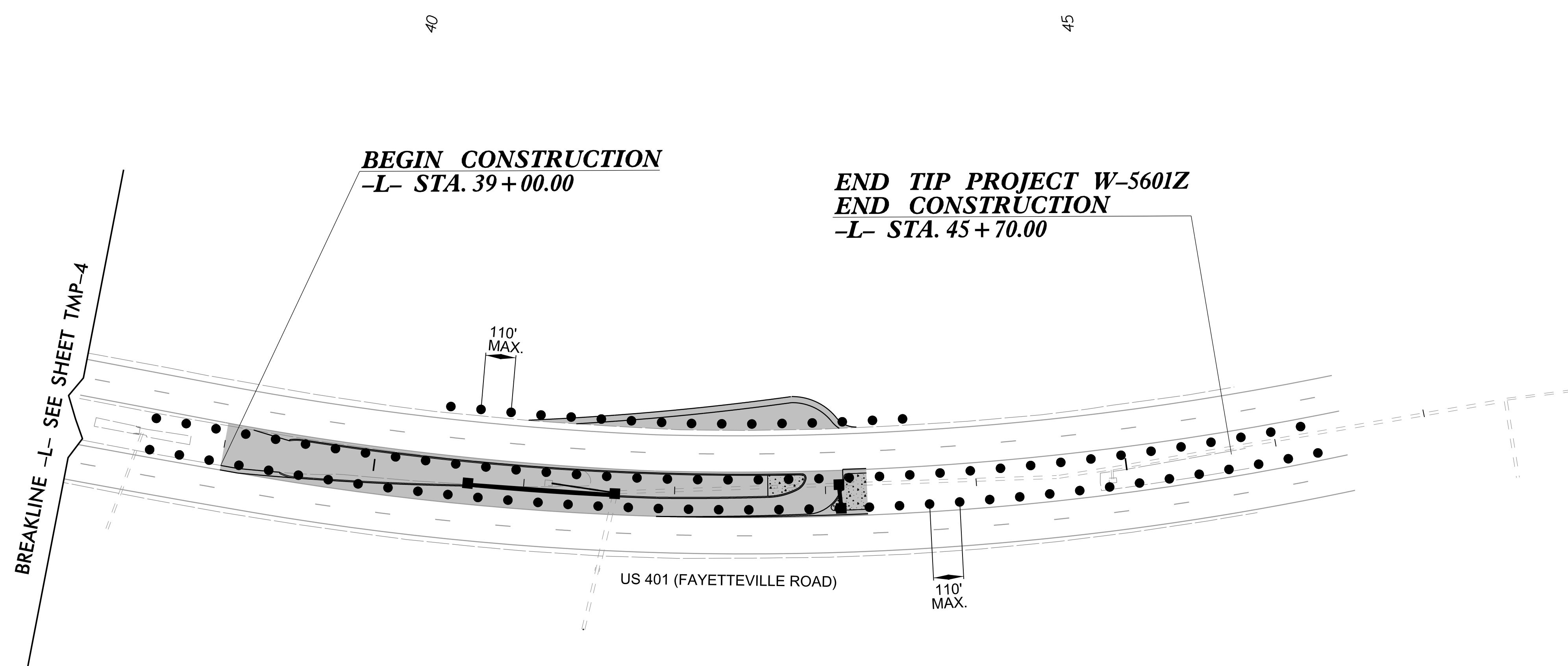
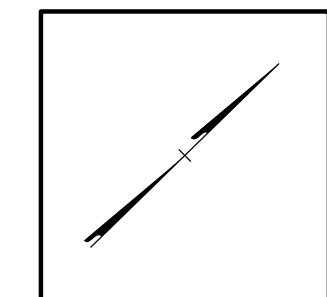
APPROVED: *Regina M. Muncy*
DATE: 4/14/2017

TRANSPORTATION MANAGEMENT PLANS

**US 401 -L-
PHASE I**

4/14/2017
 W-5601Z-TMP-04-PHASE I.dgn
 User:rmuncey

PROJ. REFERENCE NO.	SHEET NO.
W-5601Z	TMP-5



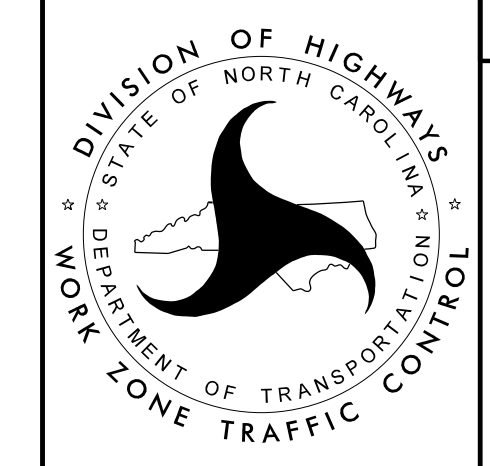
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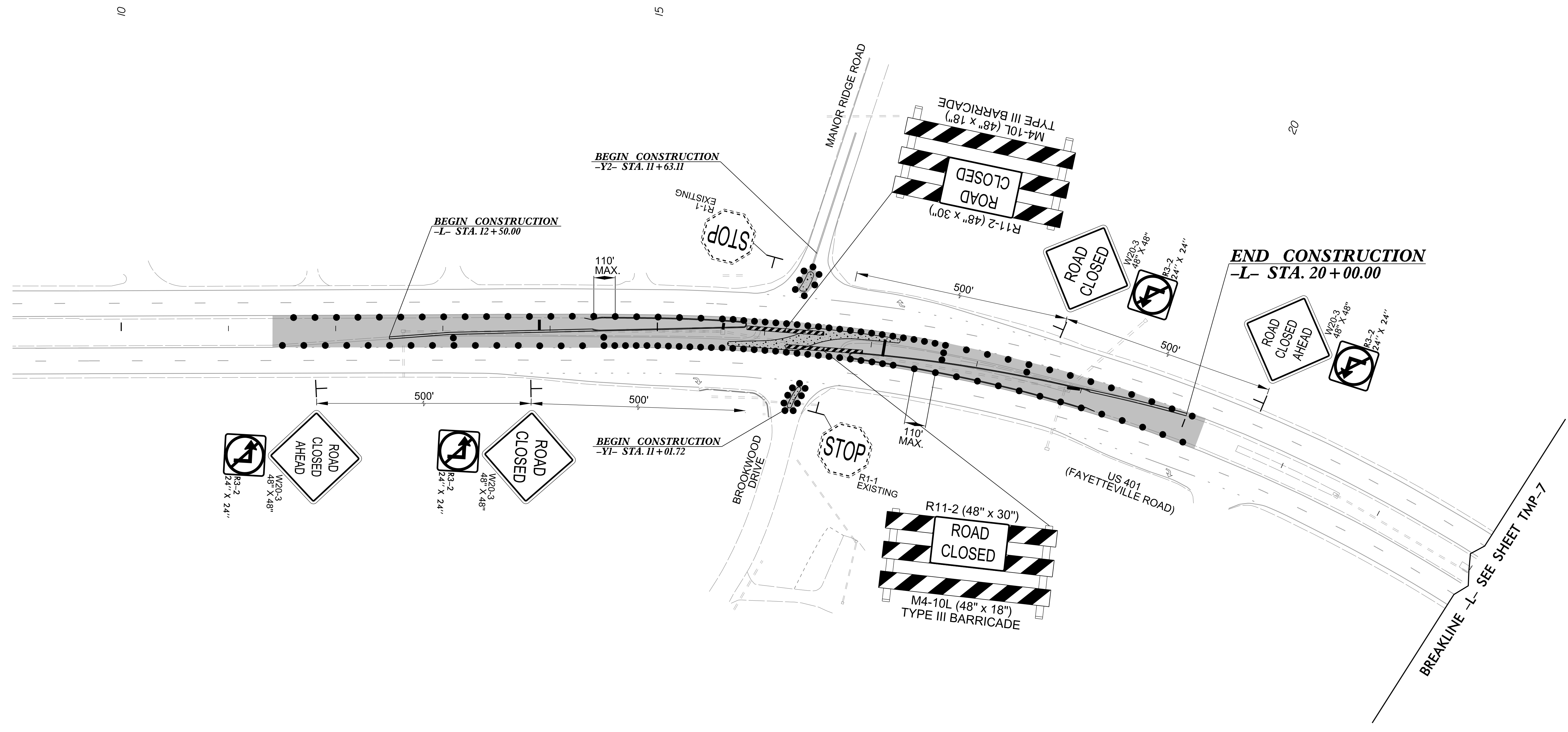
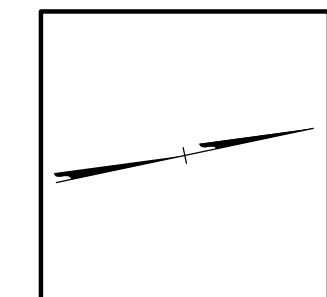
APPROVED: *Regina M. Muncy*
DATE: 4/14/2017



TRANSPORTATION MANAGEMENT PLANS

US 401 -L-
PHASE I

4/14/2017
W-5601Z-TMP-05-PHASE I.dgn
User: rrmuncey

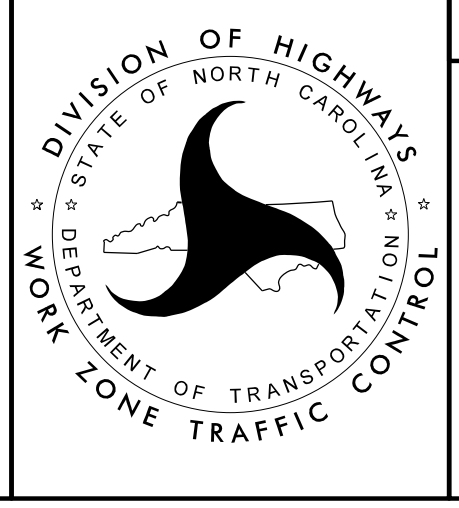


4/14/2017
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 User: rrmuncey

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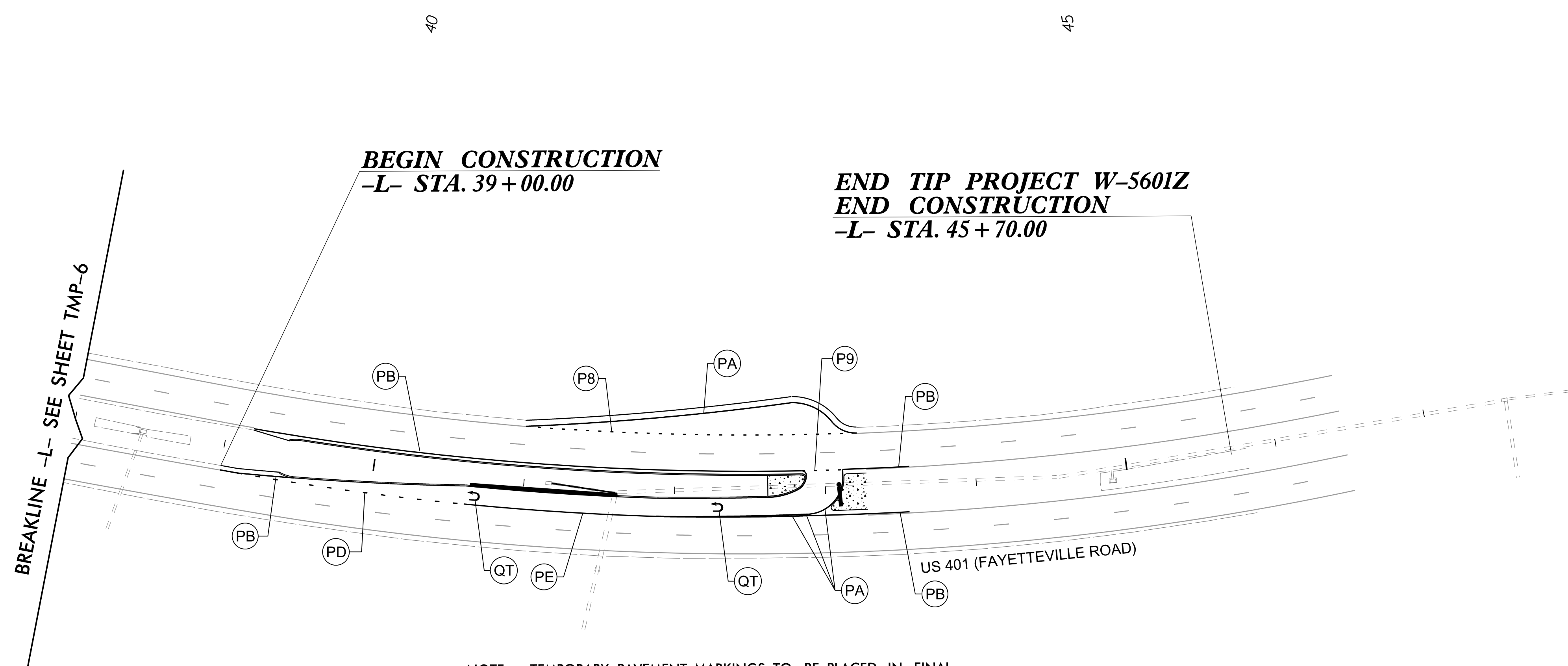
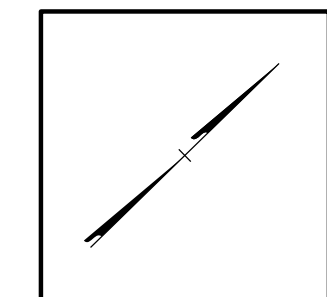
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APPROVED: *Regina M. Muncy*
 DATE: 4/14/2017



TRANSPORTATION MANAGEMENT PLANS

**US 401 -L-
PHASE II**



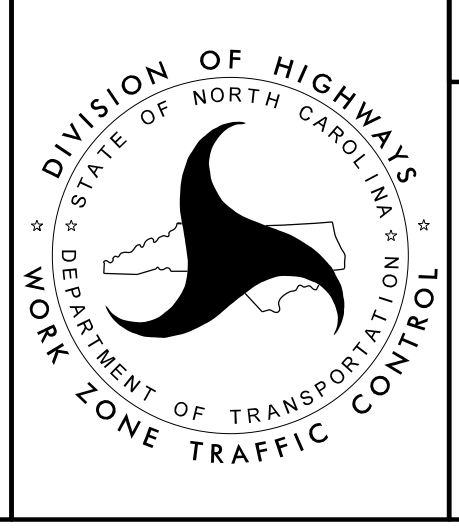
NOTE: TEMPORARY PAVEMENT MARKINGS TO BE PLACED IN FINAL LOCATION USING PAINT. SEE PAVEMENT MARKING PLAN FOR LOCATIONS.

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4/14/2017
W-5601Z-TMP_07_PHASE 2.dgn
User: rrmuncey

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APPROVED: *Regina M. Muncey*
DATE: 4/14/2017



TRANSPORTATION MANAGEMENT PLANS

**US 401 -L-
PHASE II**


3/6/2017 1:56:10 PM I:\Projects\2017\W5601Z\Plan Sheets\W5601Z_Title_Sheet_PMP-1.dgn
 User: jhambricht

T.I.P.: W-5601Z

CONTRACT: DE00169

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN
WAKE COUNTY**

TIP NO. W-5601Z	SHEET NO. PMP - 1
Approved by: <u>Betsy L. Watson</u> <small>REGISTERED PROFESSIONAL ENGINEER</small>	
DATE: 4/5/2017	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

INDEX

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN TITLE AND SCHEDULE SHEET
PMP-2-3	PAVEMENT MARKING DETAIL

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
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
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1253.01	RAISED PAVEMENT MARKERS - SNOWPLOWABLE
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

GENERAL NOTES

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.

- A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
(-L-) US 401 (FAYETTEVILLE RD)	THERMOPLASTIC	SNOWPLOWABLE
ALL -Y- LINES	THERMOPLASTIC	SNOWPLOWABLE

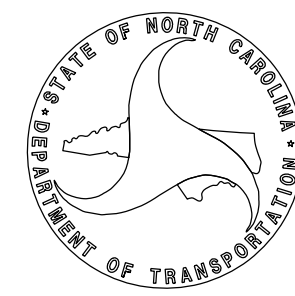
- B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.
- D) STOP BAR LOCATION AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.
- E) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS. IF HEATED-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM.

FINAL PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
	<u>THERMOPLASTIC (4", 120 MILS)</u>
T8	2 FT. - 6 FT./SP WHITE MINISKIP
T9	2 FT. - 6 FT./SP YELLOW MINISKIP
TD	3 FT. - 9 FT./SP WHITE MINISKIP
TE	WHITE SOLID LANE LINE
	<u>THERMOPLASTIC (4", 90 MILS)</u>
TA	WHITE EDGELINE
TB	YELLOW EDGELINE
	<u>THERMOPLASTIC (8", 90 MILS)</u>
TN	WHITE GORELINE
	<u>THERMOPLASTIC (12", 90 MILS)</u>
TS	WHITE DIAGONAL
	<u>THERMOPLASTIC PAVEMENT MARKING SYMBOLS (90 MILS)</u>
UA	LEFT TURN ARROW
UT	U-TURN ARROW
	<u>SNOWPLOWABLE MARKERS</u>
MF	CRYSTAL & RED

N.C.D.O.T. CONTACT: DIVISION 5 PROJECT MANAGEMENT

Ben Upshaw, PE PROJECT ENGINEER



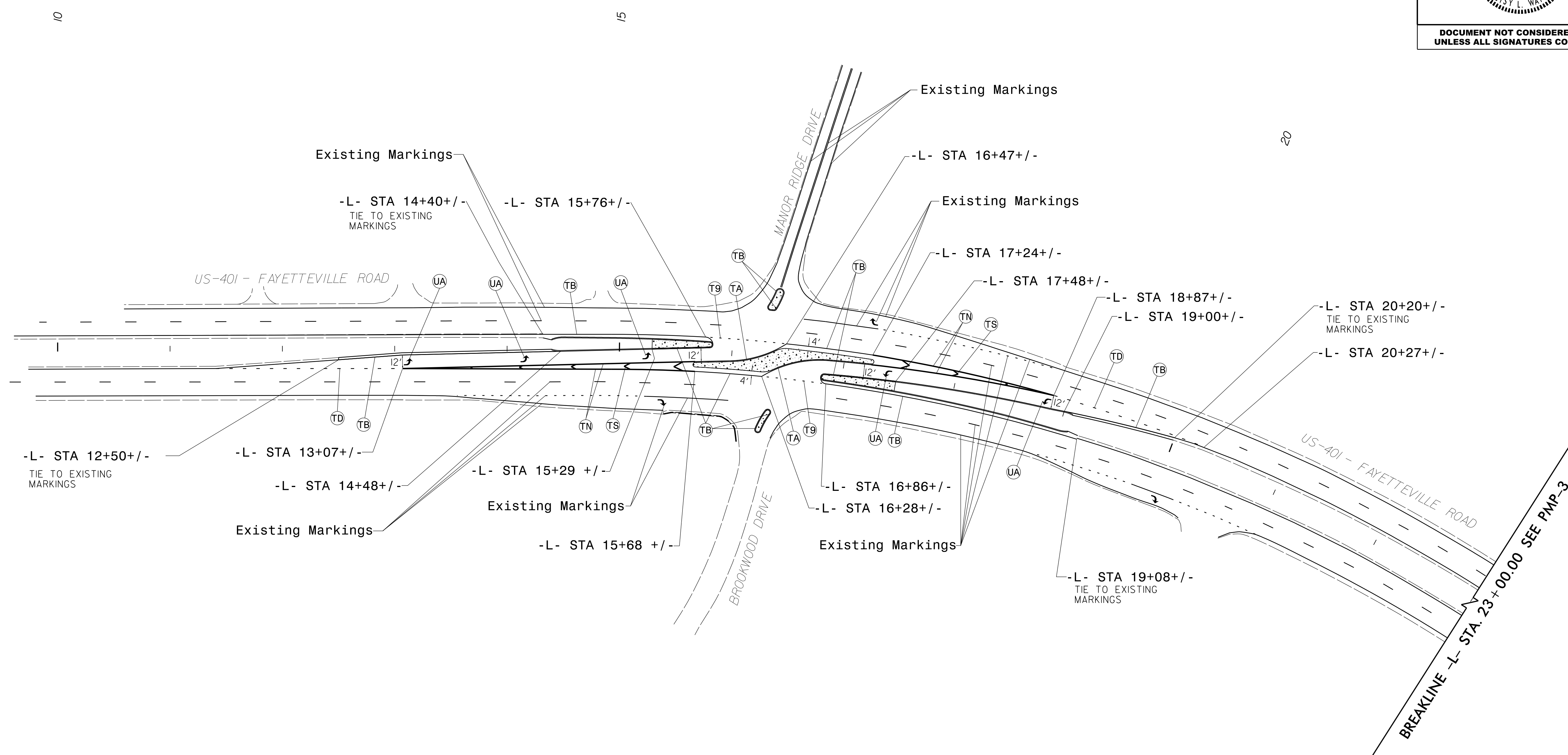
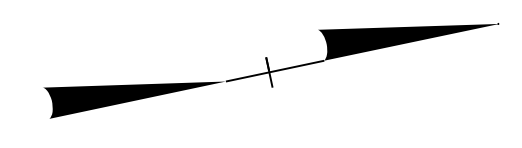
PLAN PREPARED BY: Stantec Consulting Services, Inc.

Betsy L. Watson, PE Senior Transportation Engineer
Dean Harris Senior Transportation Designer
James Hambright Senior Transportation Technician



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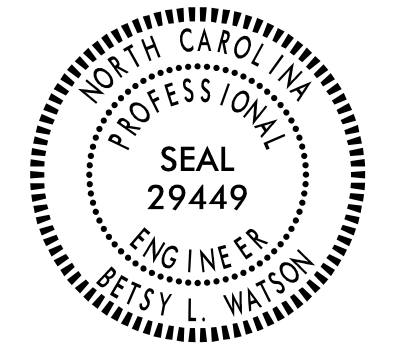
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W-5601Z	PMP-2
APPROVED: <i>Betsy L. Watson</i>	
DATE: 4/5/2017	
SEAL	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

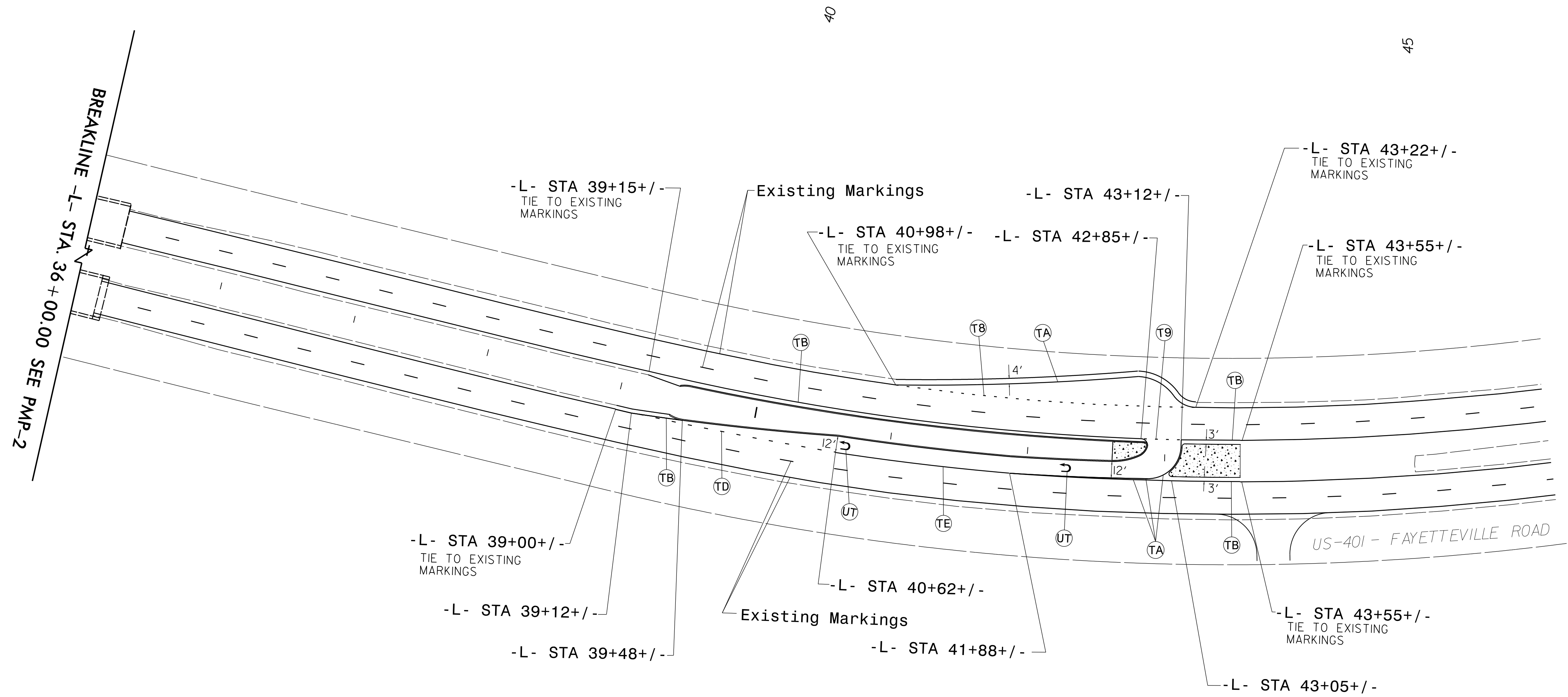


4/4/2017
UsTraffic\Signing\CADD\Pavement+ Marking\Plan Sheets\W5601Z_PMP-2.dgn
jhambright

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PAVEMENT MARKING DETAIL

TIP NO. W-5601Z	SHEET NO. PMP-3
APPROVED: <i>Betsy L. Watson</i> <small>REGISTERED PROFESSIONAL ENGINEER</small>	
DATE: 4/5/2017	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



4/4/2017
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jhambright

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PAVEMENT MARKING DETAIL

EROSION CONTROL PLAN

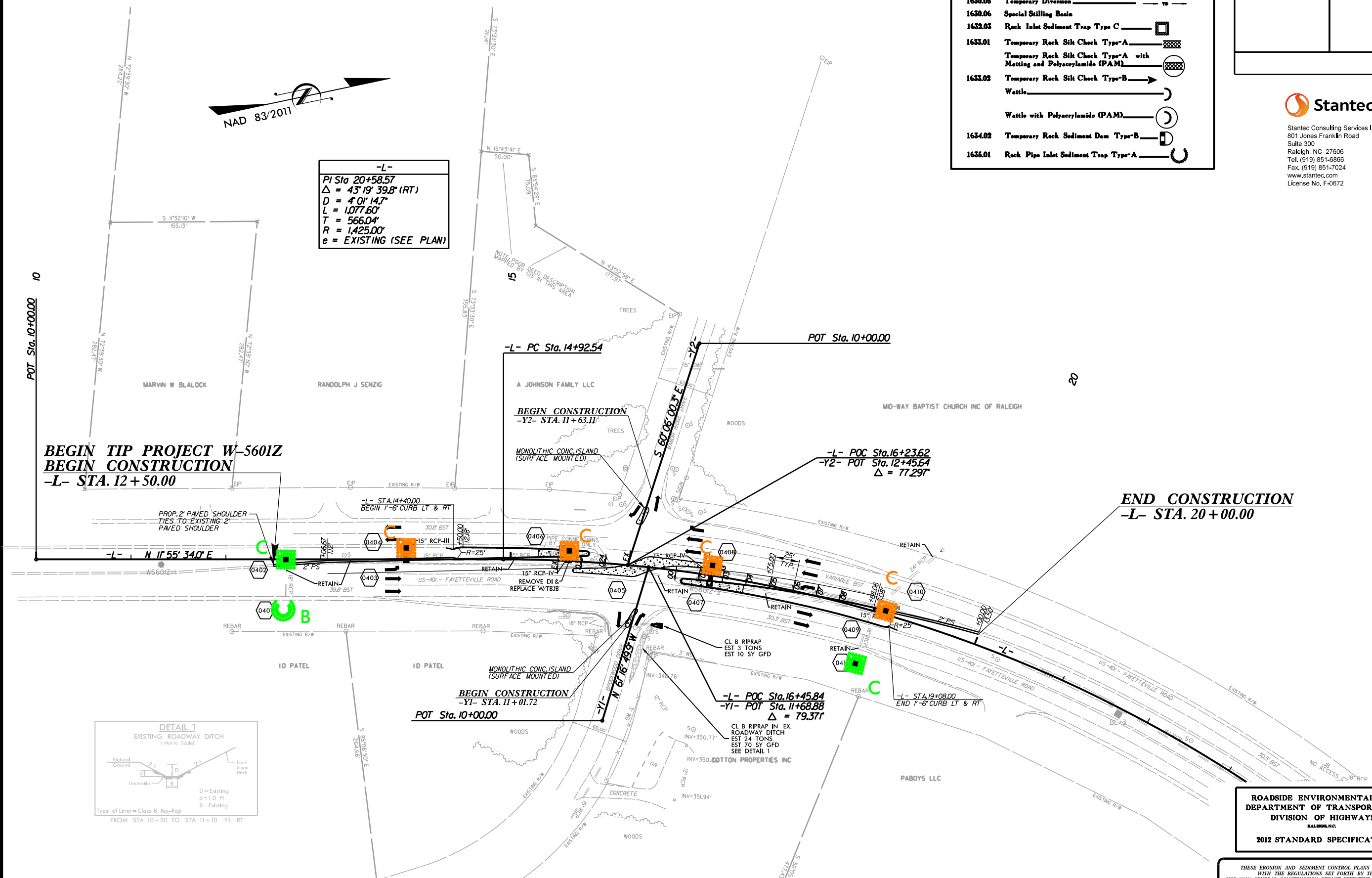
Sta. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1632.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1630.06	Special Stilling Basin	
1632.05	Rock Inlet Sediment Trap Type C	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	

PROJECT REFERENCE NO. W-5601Z	SHEET NO. EC-04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 Fax. (919) 851-7024
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 License No. F-0672



-L-
 PI Sta 20+58.57
 $\Delta = 43' 19" 39.8" (RT)$
 $D = 4' 0" 14.7"$
 $L = 1,077.60'$
 $T = 566.04'$
 $R = 1,425.00'$
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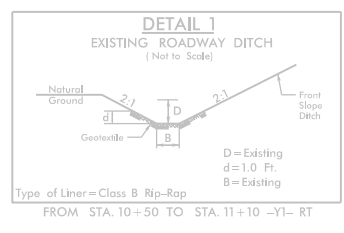


BEGIN TIP PROJECT W-5601Z
BEGIN CONSTRUCTION
-L- STA. 12 + 50.00

-L- PC Sta. 14+92.54

POT Sta. 10+00.00

END CONSTRUCTION
-L- STA. 20 + 00.00



ROADSIDE ENVIRONMENTAL UNIT
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
 RALEIGH, NC
2012 STANDARD SPECIFICATIONS

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-01000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 1, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

REVISIONS

8/17/99

6/26/2017
 U:\projects\p01315\W5601Z.ec-psh04.dgn

5/14/99

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

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

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

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

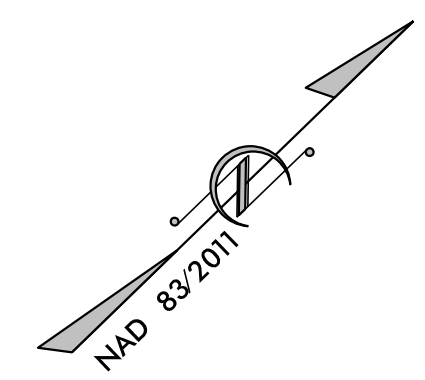
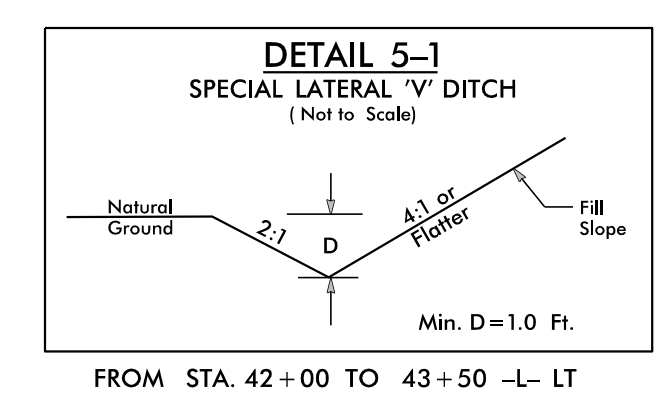
THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE GENERAL PERMIT-NCG 010000 EFFECTIVE AUGUST 1, 2016 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT QUALITY, DIVISION OF ENERGY, MINERAL AND LAND RESOURCES.

EROSION CONTROL PLAN

RIST TYPE-C INLET PROTECTION EROSION CONTROL MEASURES MAY BE SUBSTITUTED WITH FABRIC INSERT INLET PROTECTION DEVICES ON CATCH BASINS AT THE DISCRETION OF THE ENGINEER.

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE. STA. 42+00 TO 43+50 -L- LT EST. 105 SY

-L-
 PI Sta 42+60.30
 $\Delta = 22^{\circ}17'13.1''$ (LT)
 $D = 2^{\circ}59'03.0''$
 $L = 746.84'$
 $T = 378.20'$
 $R = 1,920.00'$
 $e = \text{EXISTING}$



PROJECT REFERENCE NO. W-5601Z	SHEET NO. EC-05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Randal C. Howard, EI
 LEVEL III NAME

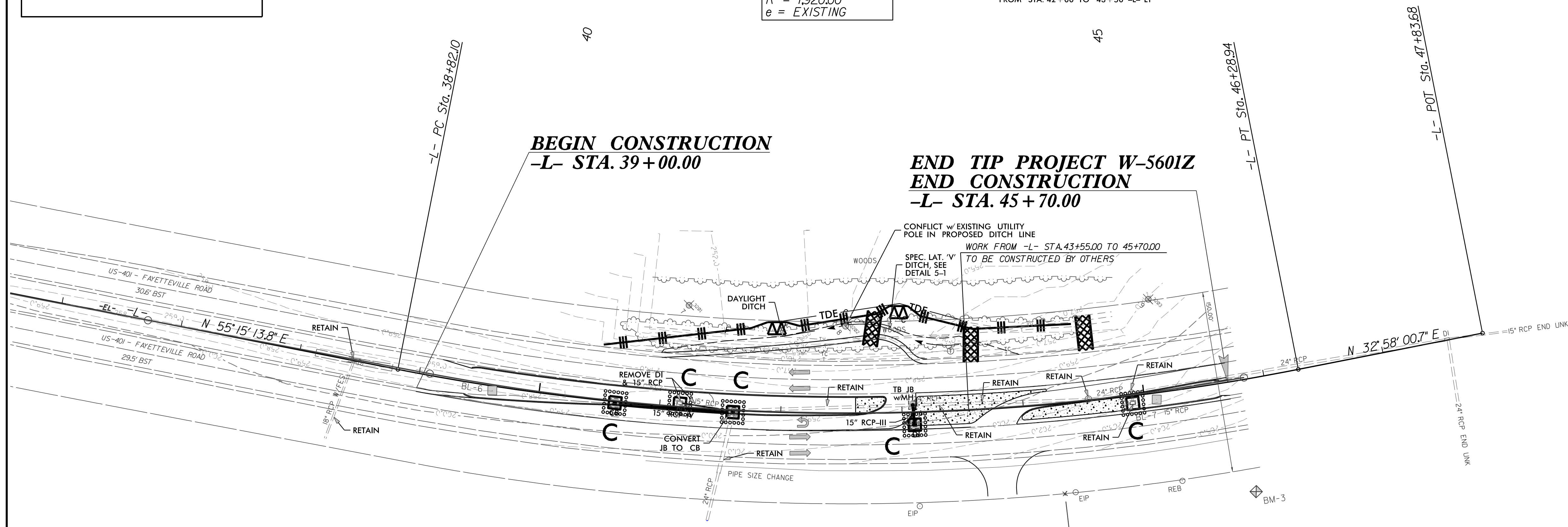
3491
 LEVEL III CERTIFICATION NO.

SUNGATE DESIGN GROUP, P.A.
 905 JONES FRANKLIN ROAD
 RALEIGH, NORTH CAROLINA 27606
 NC COA No. C-0890

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

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




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

SOIL STABILIZATION TIMEFRAMES		
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES.

2012 STANDARD DRAWINGS			
1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary Berms and Slope Drains	1633.02	Temporary Rock Silt Check Type B
1630.01	Riser Basin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt Basin Type 3	1634.02	Temporary Rock Sediment Dam Type B
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion	1640.01	Coir Fiber Jaffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

6/23/2017 EC.dwg - psh_05.dgn

TIP NO. W-5601Z	SHEET NO. SIGN-1
APPROVED: <u>Betsy L. Watson</u> <small>DocuSigned by: Betsy L. Watson</small> <small>SECRETARY</small>	
DATE: 4/5/2017	
	
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**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
WAKE COUNTY**

**LOCATION: US 401 (FAYETTEVILLE ROAD) FROM SOUTH OF SR 1446 (MANOR RIDGE DRIVE)
ENTRANCE TO SOUTH OF SWIFT CREEK CROSSING**

T.I.P.: W-5601Z

CONTRACT: DE00169

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
901.50	ARROWS AND SHIELDS
901.70	SIGN STRINGER AND SUPPORT SPACING
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF "D", "E", AND "F" SIGNS ON "U" CHANNEL POSTS

GENERAL NOTES

- . SIGNS FURNISHED BY STATE
- . CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE, THE ACTUAL DATE THE DEPARTMENT FURNISHED SIGNS WILL BE REQUIRED.
- . IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- . WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- . ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- . WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- . THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.
- . SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.

SUMMARY OF QUANTITIES

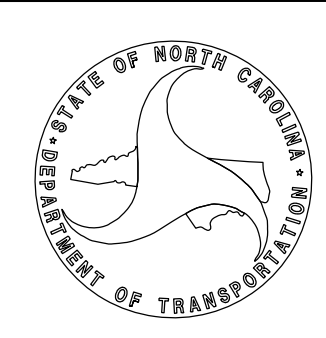
ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4026000000	902	DEPARTMENT FURNISHED, TYPE E SIGN	126	S.F.
4026000000	902	DEPARTMENT FURNISHED, TYPE F SIGN	54	S.F.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	338	L.F.
4102000000	904	SIGN ERECTION, TYPE E	20	EA.
4108000000	904	SIGN ERECTION, TYPE F	4	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	4	EA.

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2	SIGN DESIGN
SIGN-3	E AND F SIGNS
SIGN-4 & 5	SIGN DETAIL SHEET

N.C.D.O.T. CONTACT: DIVISION 5 PROJECT MANAGMENT

Ben Upshaw, PE PROJECT ENGINEER




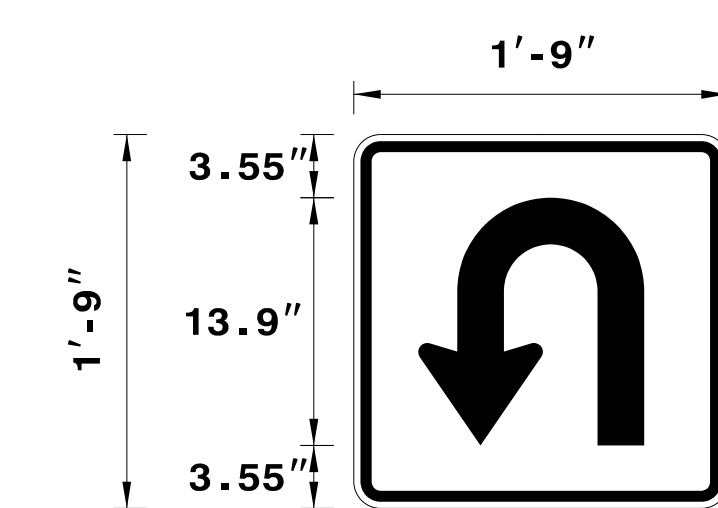
PLAN PREPARED BY: Stantec Consulting Services, Inc.

Betsy L. Watson, PE Senior Transportation Engineer
Dean Harris Senior Transportation Designer
James Hambricht Senior Transportation Technician



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 License No. F-0672

TIP NO. W-5601Z	SHEET NO. SIGN-2
APPROVED: <i>Betsy L. Watson</i> <small>35678849743F</small>	
DATE: 4/5/2017	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

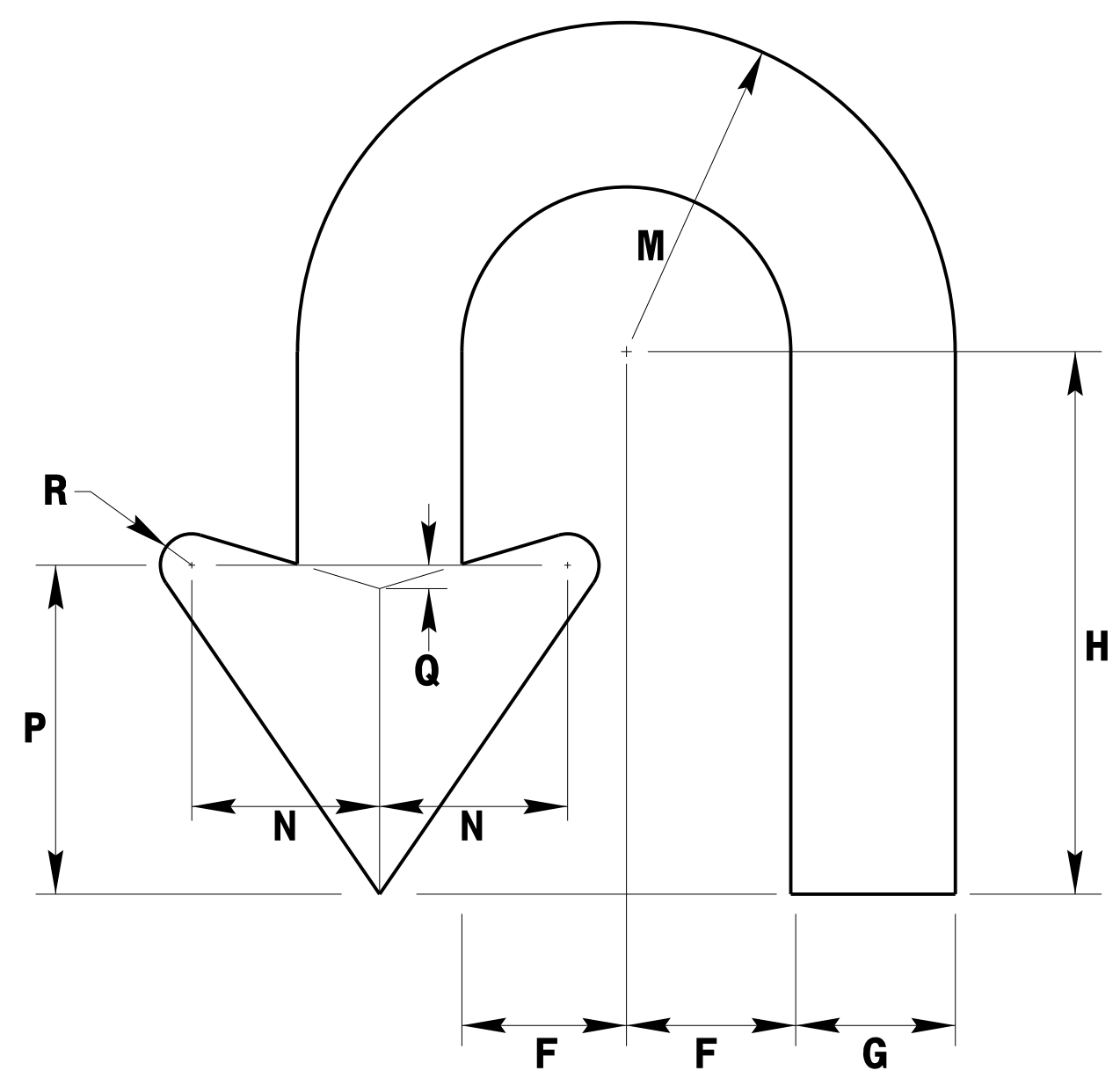
SIGN NUMBER: U-Turn	BACKG COLOR: White COPY COLOR: Black	DESIGN BY: J. Hambricht PROJECT ID: W-5601Z DESCRIPTION: U-Turn Arrow sign for Type "F" assembly #502 & #503 (21" X 21")	CHECKED BY: Dean Harris DATE: Jun 06, 2016 DIV: 5																																																						
TYPE: F QUANTITY: 1 SIGN WIDTH: 1'-9" HEIGHT: 1'-9" TOTAL AREA: 3.1 Sq.Ft.	<table border="1"> <thead> <tr> <th>SYMBOL</th> <th>X</th> <th>Y</th> <th>WID</th> <th>HT</th> </tr> </thead> <tbody> <tr> <td>uturn</td> <td>3.6</td> <td>3.5</td> <td>12.7</td> <td>13.9</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	SYMBOL	X	Y	WID	HT	uturn	3.6	3.5	12.7	13.9																																														 <p>BORDER R=1.5" TH=0.625" IN=0.375"</p> <p>Panel Style: regulatory.ssi M.U.T.C.D.: 2009 Edition</p>
SYMBOL	X	Y	WID	HT																																																					
uturn	3.6	3.5	12.7	13.9																																																					
BORDER TYPE: RECESSED RECESS: 0.375" WIDTH: 0.625" RADII: 1.5"	MAT'L: 0.125" (3.2 mm) ALUMINUM	Spacing Factor is 1 unless specified otherwise																																																							
NO. Z BARS: LENGTH:	NOTES: 1. Legend and border shall be direct applied, non-reflective sheeting. 2. Background shall be Grade C reflective sheeting.																																																								

LETTER POSITIONS

Letter locations are panel edge to lower left corner

												Series/Size Text Length

FILENAME: Guidesign_English_8-2-13 NORTH CAROLINA D.O.T. SIGN DETAIL

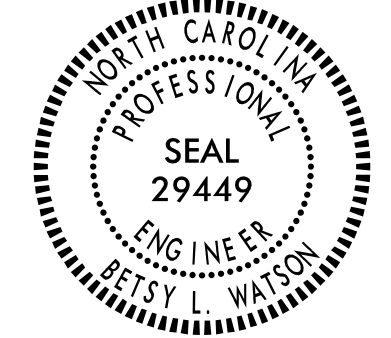


ARROW DIMENSIONS (INCHES)	F	G	H	M	N	P	Q	R
	2.625	2.625	8.659	5.25	3	5.25	0.375	0.5


SIGN DESIGN

3/5/2017 Us\Tr\otf\c\Signing\CADD\Signing\Plan Sheets\W5601Z_SIGN-2.dgn jhambricht

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TIP NO. W-5601Z	SHEET NO. SIGN-3
APPROVED: <i>Betsy L. Watson</i> <small>—35678548743F—</small>	
DATE: 4/5/2017	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

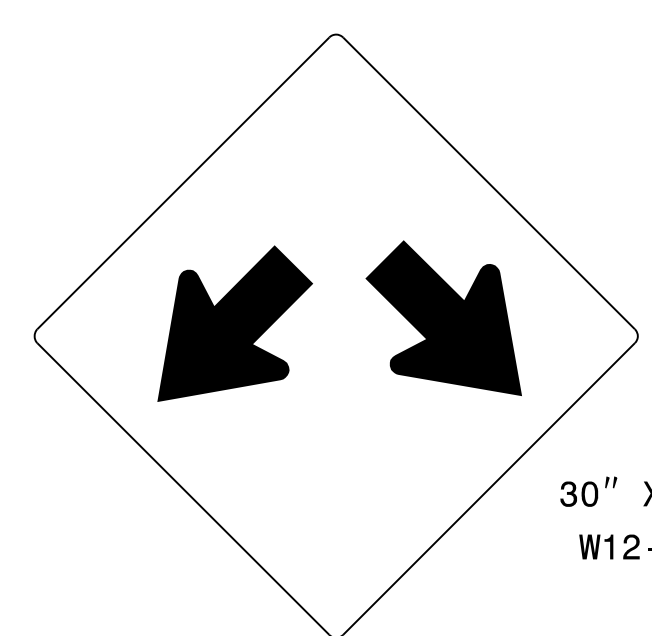
401 QUANTITY REQ'D 3



42" X 30"
R5-1a

ONE "U" POST PER SIGN

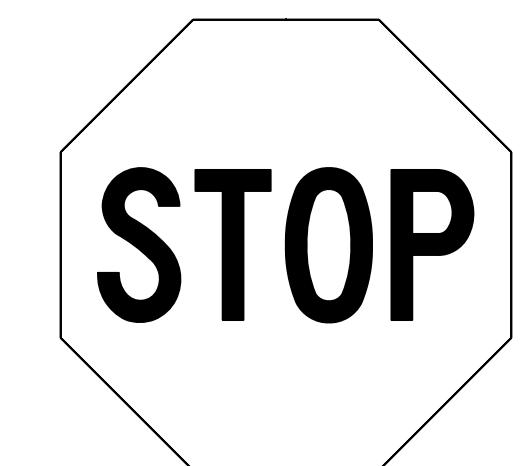
402 QUANTITY REQ'D 3



30" X 30"
W12-1

ONE "U" POST PER SIGN

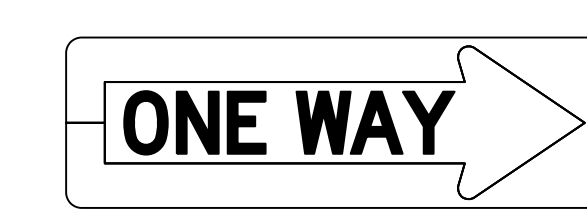
403 QUANTITY REQ'D 2



36" X 36"
R1-1

TWO "U" POSTS PER SIGN

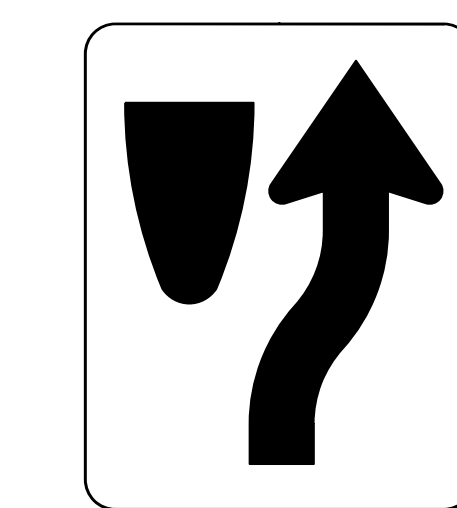
404 QUANTITY REQ'D 2



54" X 18"
R6-1

MOUNT ABOVE SIGN #403


405 QUANTITY REQ'D 4



24" X 30"
R4-7

ONE "U" POST PER SIGN


406 QUANTITY REQ'D 1



54" X 18"
R6-1

ONE "U" POST PER SIGN

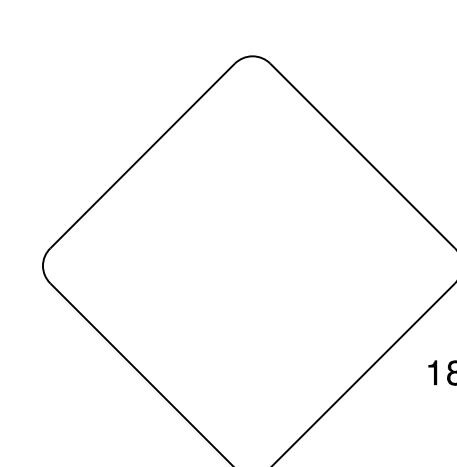
407 QUANTITY REQ'D 1



36" X 36"
R5-1

ONE "U" POST PER SIGN

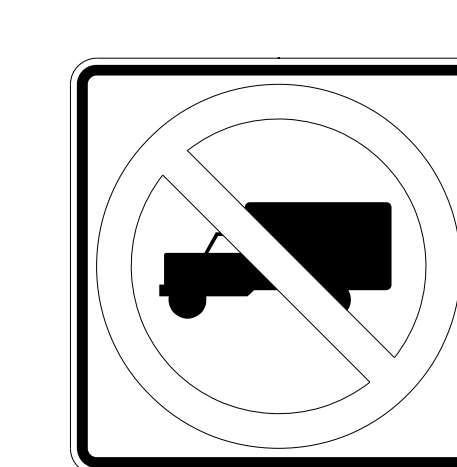
408 QUANTITY REQ'D 4



18" X 18"
OM1-3

MOUNT BELOW SIGN #405

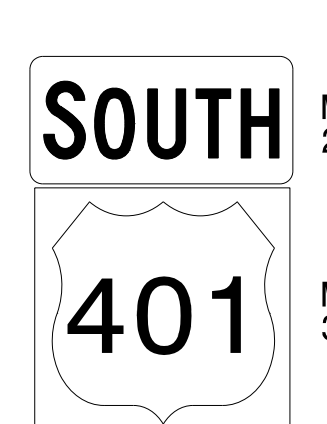
409 QUANTITY REQ'D 1



24" X 24"
R5-2

MOUNT IN "F" ASSEMBLY
#502 AS SHOWN BELOW

501 QUANTITY REQ'D 1

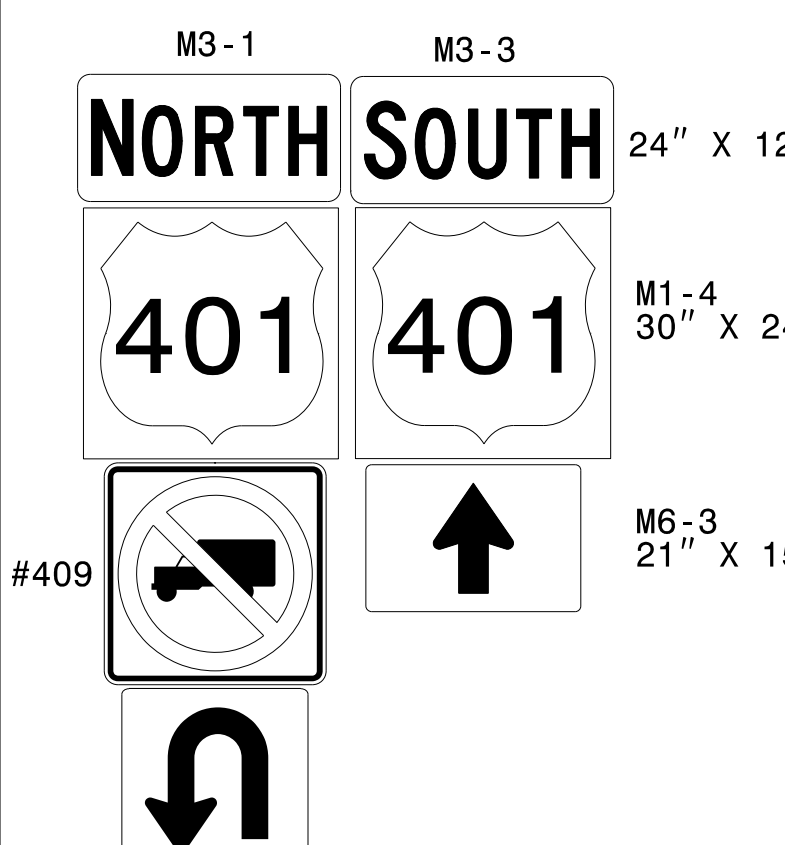


M3-3
24" X 12"

M1-4
30" X 24"

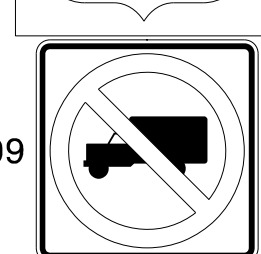
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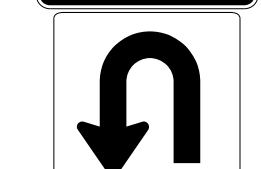
502 QUANTITY REQ'D 1



M3-1 NORTH M3-3 SOUTH 24" X 12"

M1-4 401 M1-4 401 30" X 24"

#409  M6-3 21" X 15"

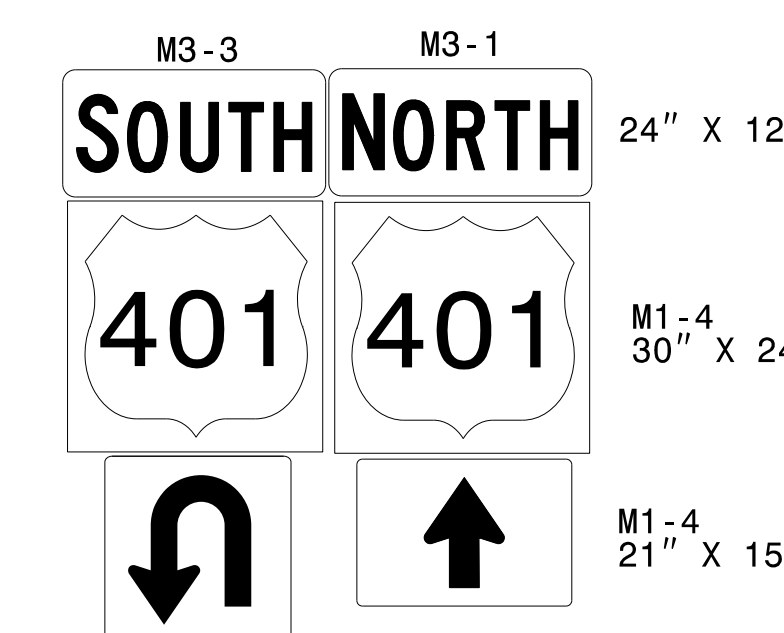


*SEE NOTE
21" X 21"

TWO "U" POSTS PER ASSEMBLY

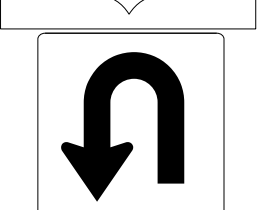
* NOTE:
SEE SHEET SIGN-2 FOR U-TURN
SIGN DESIGN

503 QUANTITY REQ'D 1



M3-3 SOUTH M3-1 NORTH 24" X 12"

M1-4 401 M1-4 401 30" X 24"


M1-4  M1-4 21" X 15"

*SEE NOTE
21" X 21"

TWO "U" POSTS PER ASSEMBLY

* NOTE:
SEE SHEET SIGN-2 FOR U-TURN
SIGN DESIGN

504 QUANTITY REQ'D 1



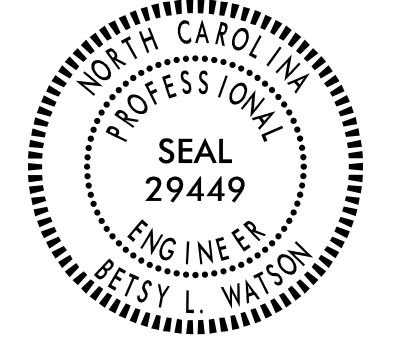
M3-1
24" X 12"

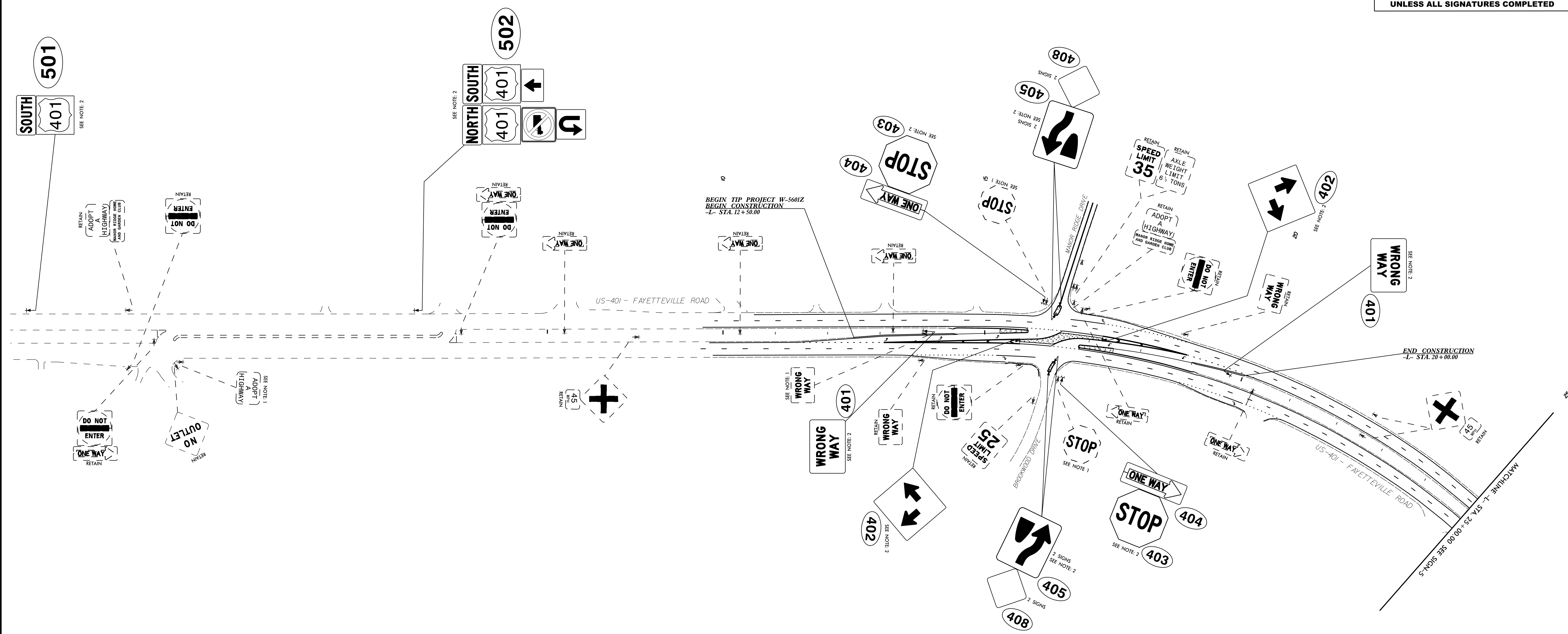
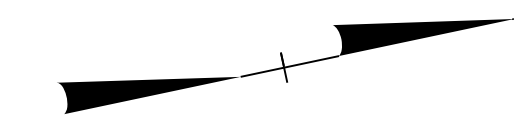
M1-4
30" X 24"

ONE "U" POST PER SIGN

TYPE "E" & "F" SIGNS

4/4/2017 U:\Projects\Signing\CADD\Signing\Plan Sheets\W5601Z_SIGN-1 and 3.dgn

TIP NO. W-5601Z	SHEET NO. SIGN-4
APPROVED: <i>Betsy L. Watson</i> DATE: 4/5/2017	
SEAL 	
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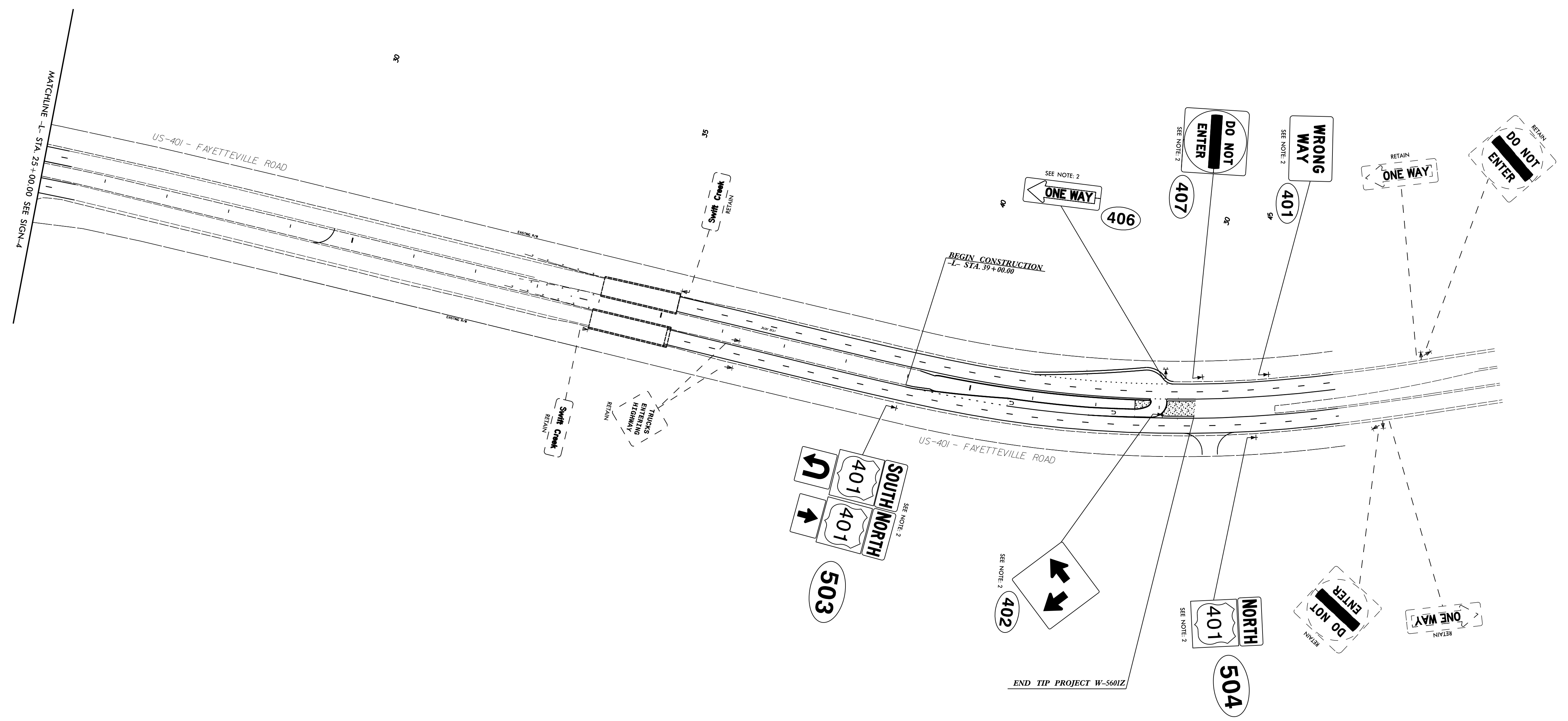
PROJECT NOTES

- DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- SIGN ERECTION, TYPE D, E, AND F

EXISTING AND PROPOSED SIGNING

4/4/2017
 Us:\Traffic\Signing\CADD\Signing\Plan Sheets\W5601Z_SIGN-4.dgn
 jhambright

TIP NO. W-5601Z	SHEET NO. SIGN-5
APPROVED: <i>Betsy L. Watson</i> <small>REGISTERED PROFESSIONAL ENGINEER</small>	
DATE: 4/5/2017	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



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License No. F-0672

PROJECT NOTES

- DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- SIGN ERECTION, TYPE D, E, AND F

EXISTING AND PROPOSED SIGNING

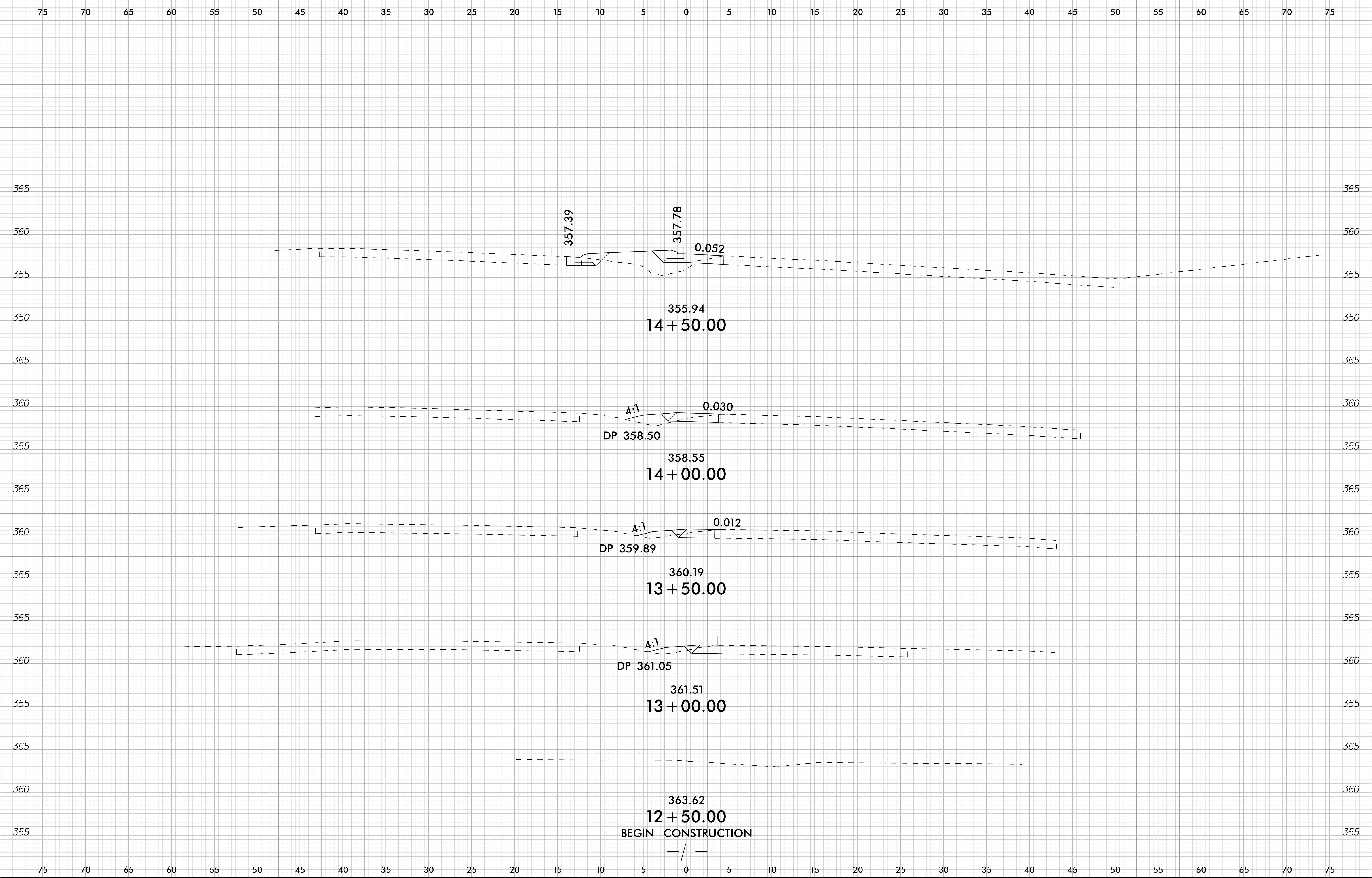
4/4/2017
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jhambricht

CROSS SECTION INDEX

<u>ROADWAY</u>	<u>STATION</u>	<u>TO</u>	<u>STATION</u>	<u>SHEET NO.</u>
CROSS SECTION INDEX				X-A
CROSS SECTION SUMMARY				X-1A
-L- (US-401 - FAYETTEVILLE ROAD)	12 + 50.00		45 + 70.00	X-1 TO X-10

8/23/99

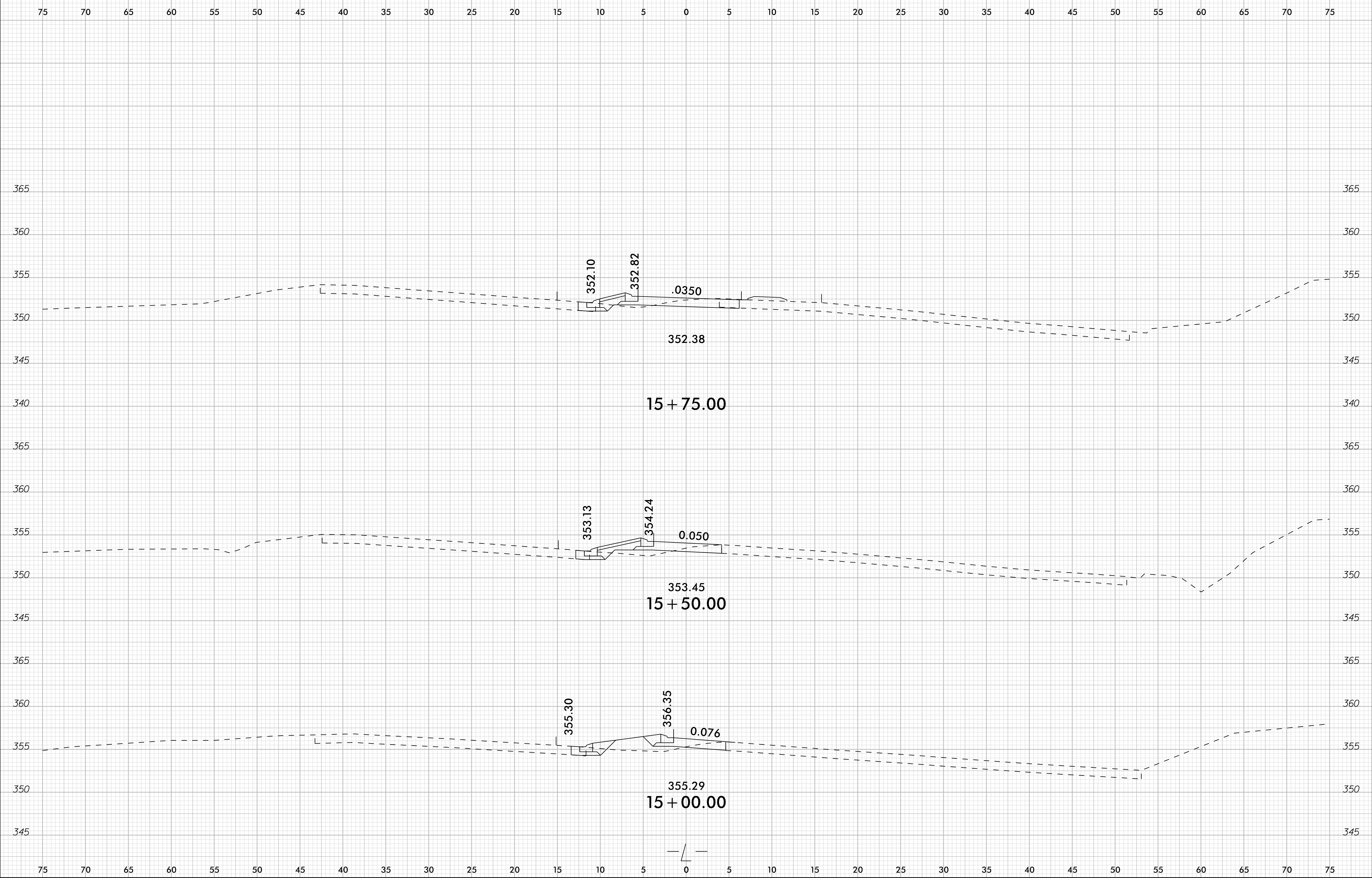
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	W-5601Z	X-1



4/11/2017
U:\Roadway\XSC\W5601Z_rdy_xpl.dgn
mbergison

8/23/99

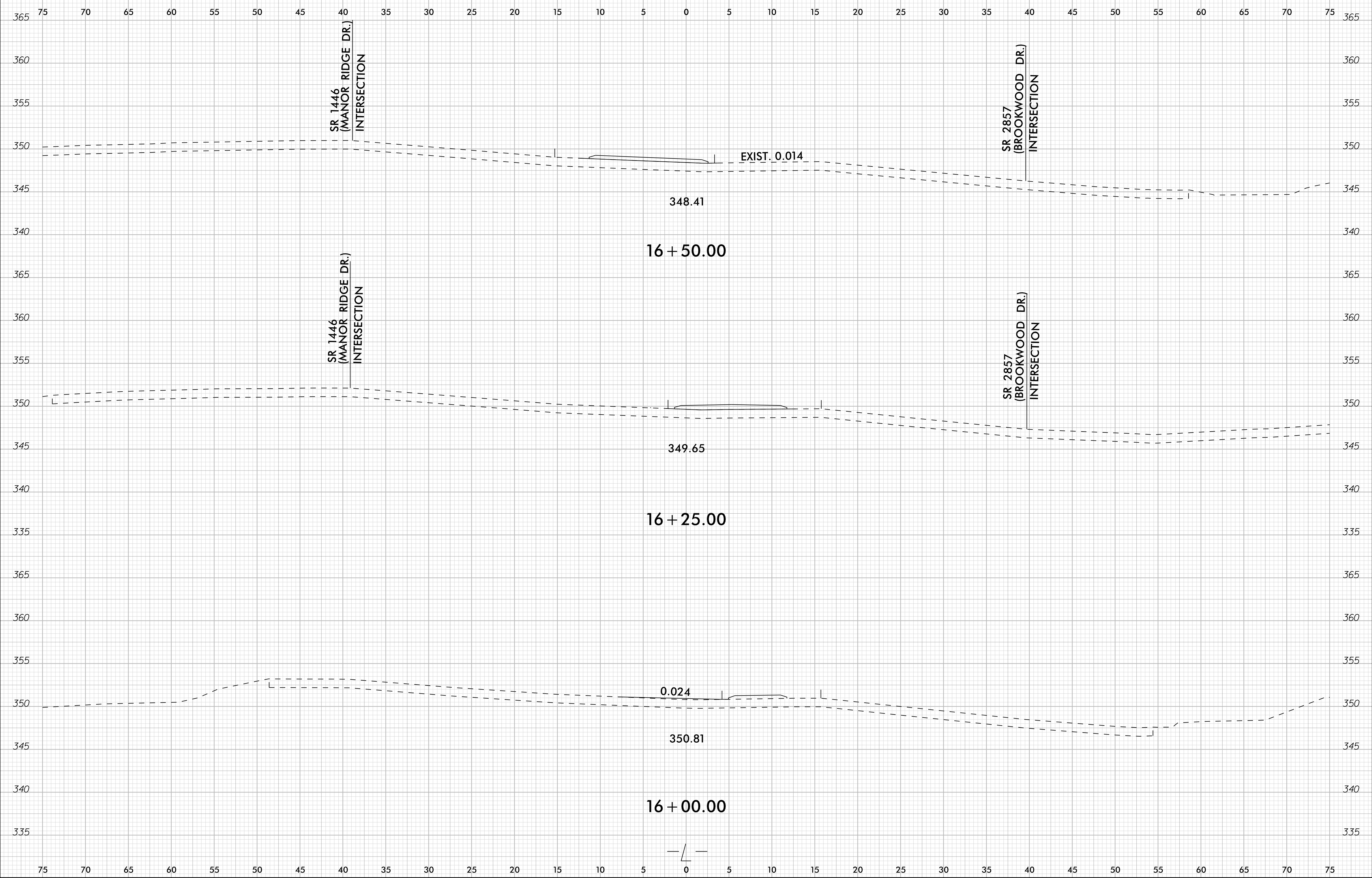
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	W-5601Z	X-2



4/11/2017
UpRoadway\XSC\W5601Z_rdy_xpl.dgn
mbergson

8/23/99

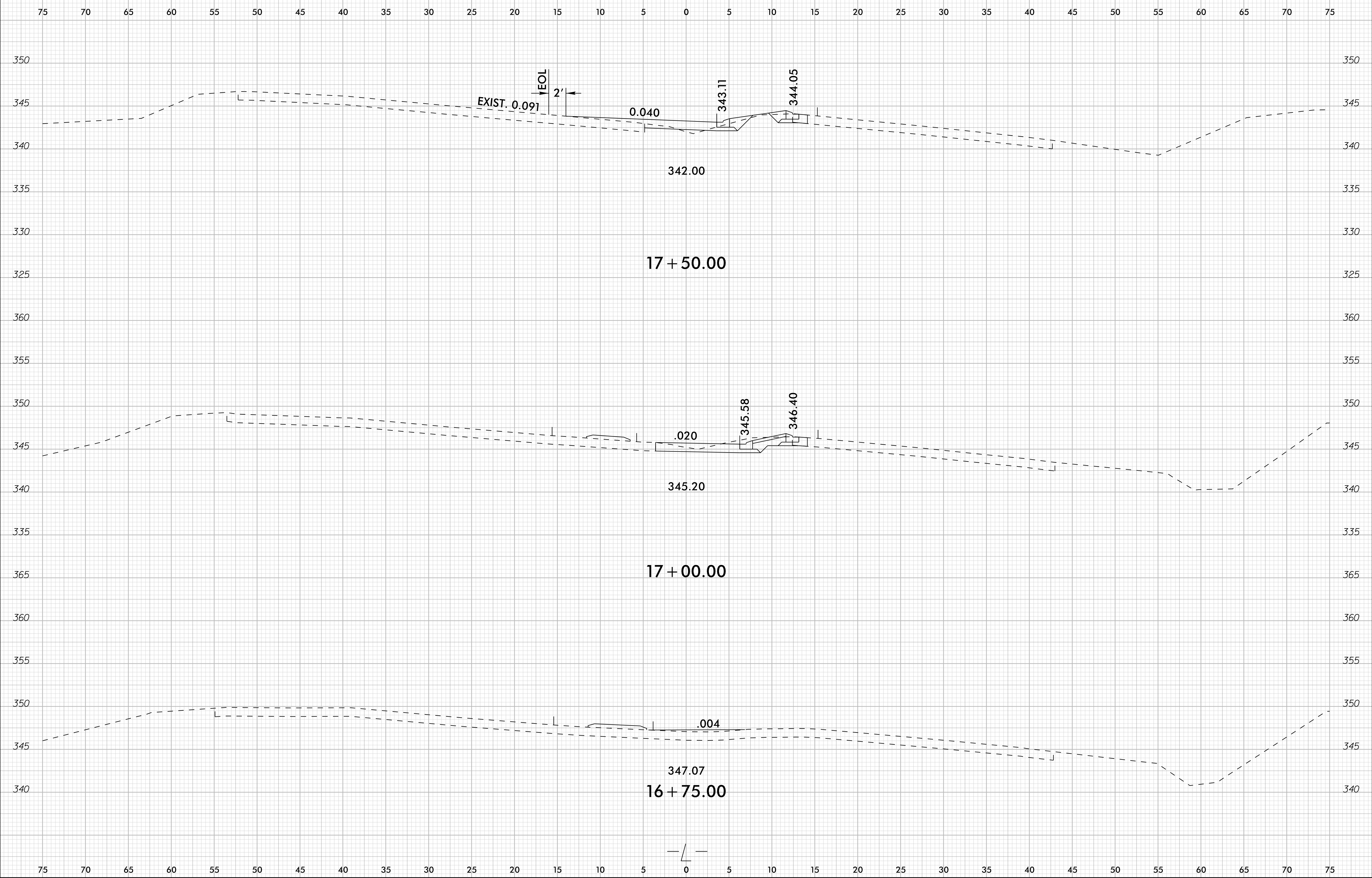
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Up:\Roadway\XSC\W5601Z_rdy_xpl.dgn
mbergson

8/23/99

0 2.5 5	PROJ. REFERENCE NO. W-5601Z	SHEET NO. X-4
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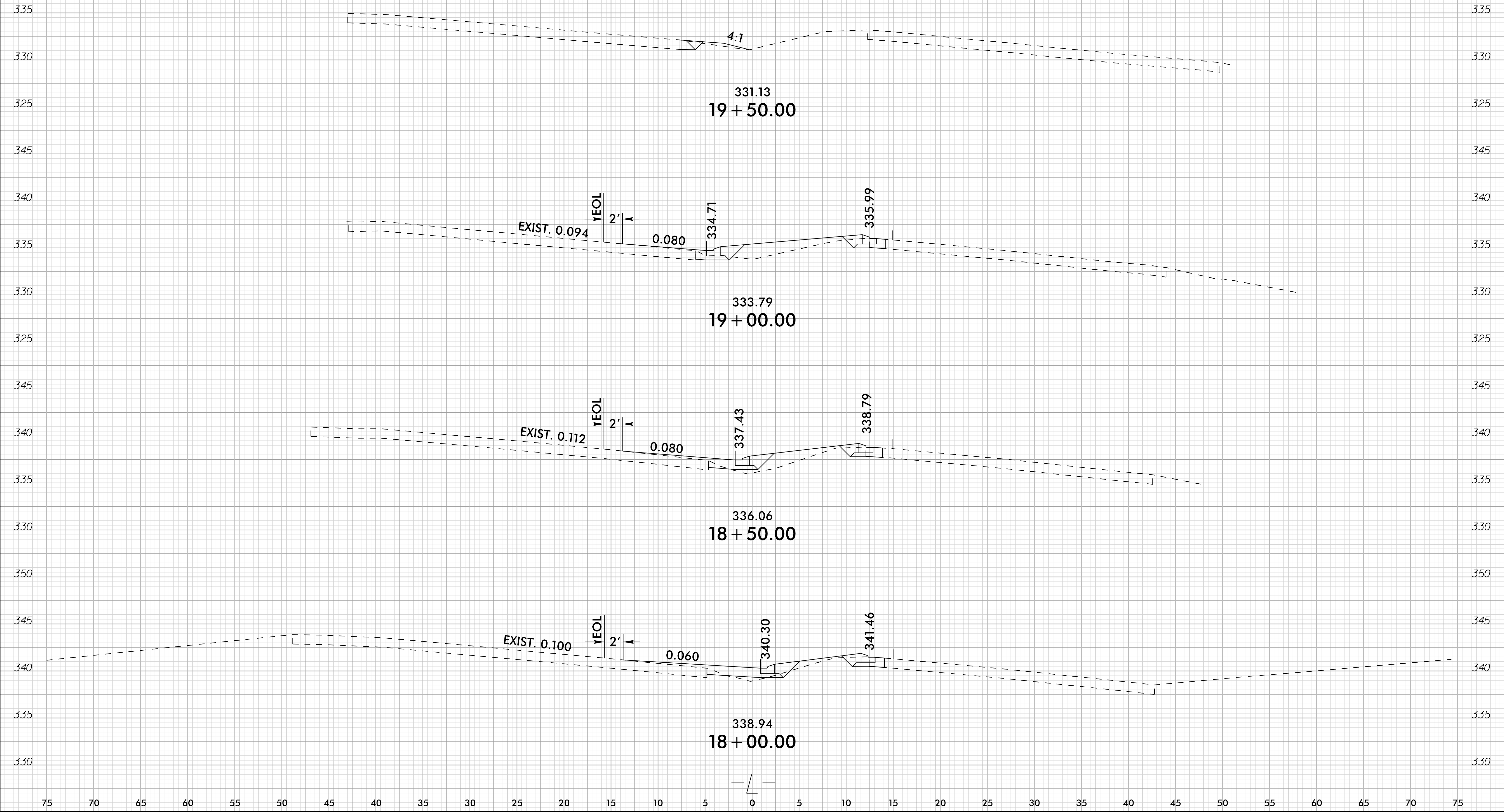


4/11/2017
User: Roadway\XSC\W5601Z_rdy_xpl.dgn
mberguson

8/23/99

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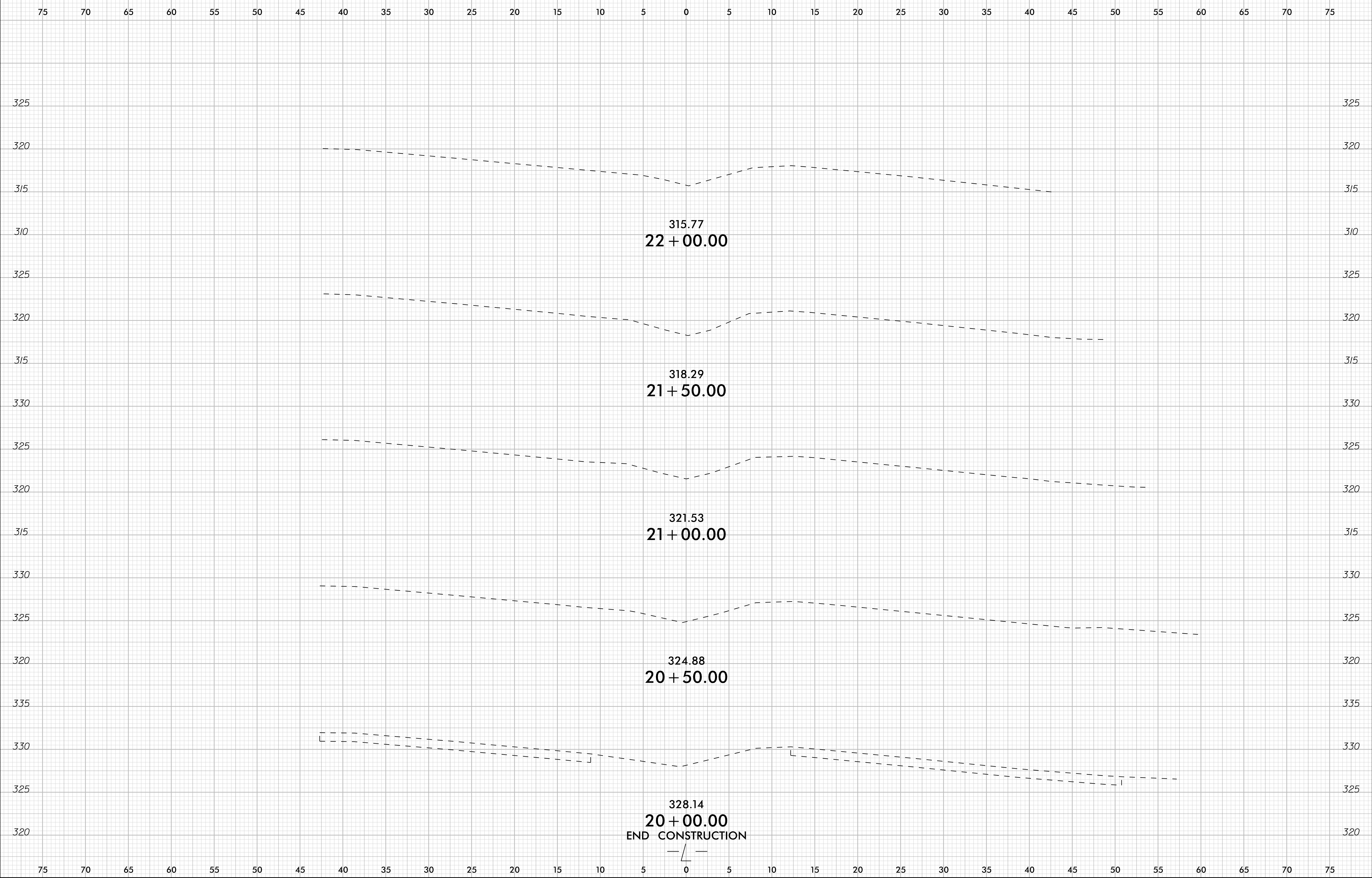


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Up:\Roadway\XSC\W5601Z_rdy_xpl.dgn
mberguson

8/23/99

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	W-5601Z	X-6



4/11/2017
Us:\Roadway\XSC\W5601Z_r.dwg_xpl.dgn
mrlgison

328.14
20 + 00.00
 END CONSTRUCTION

315.77
22 + 00.00

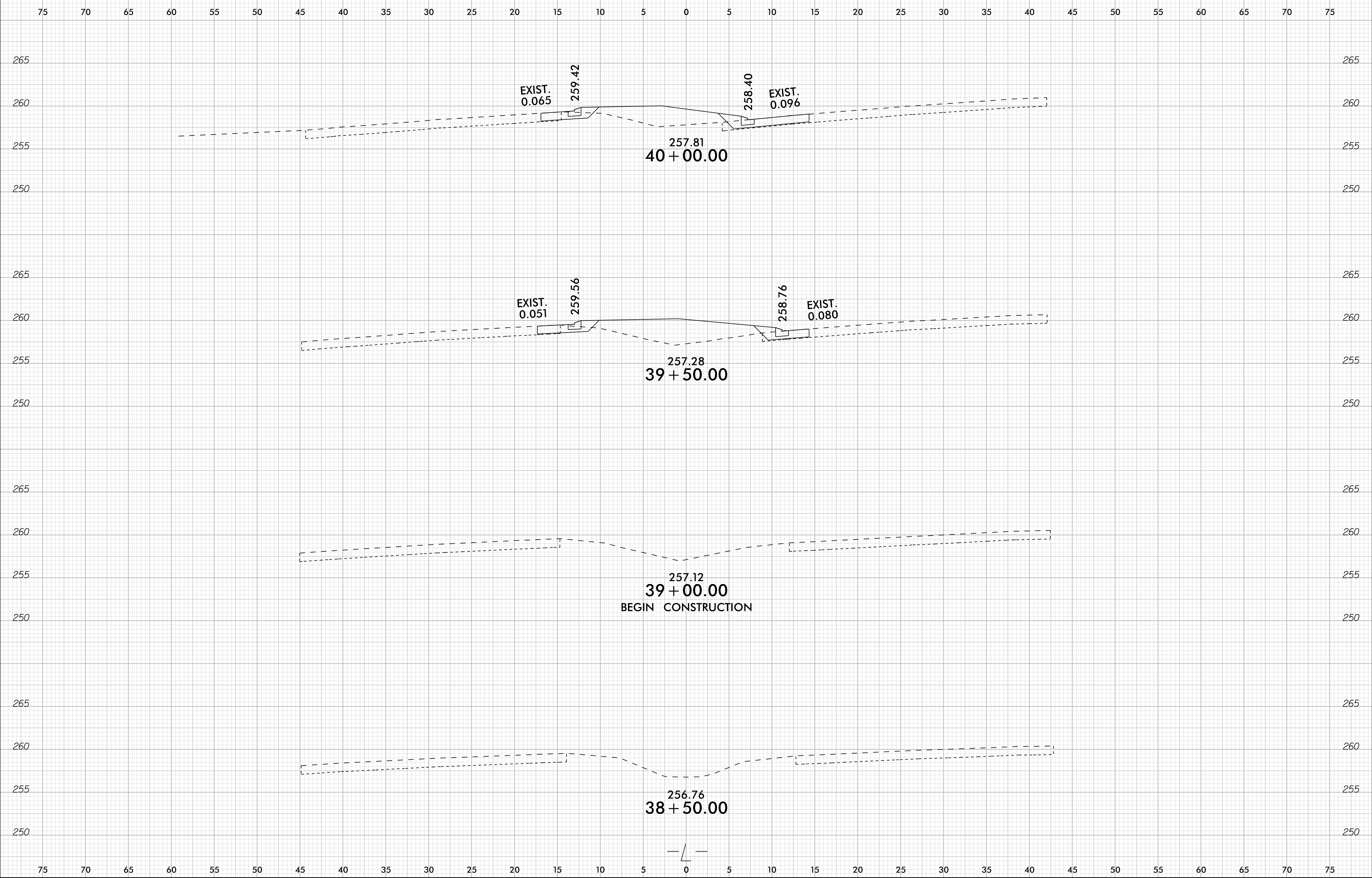
318.29
21 + 50.00

321.53
21 + 00.00

324.88
20 + 50.00

6/23/16

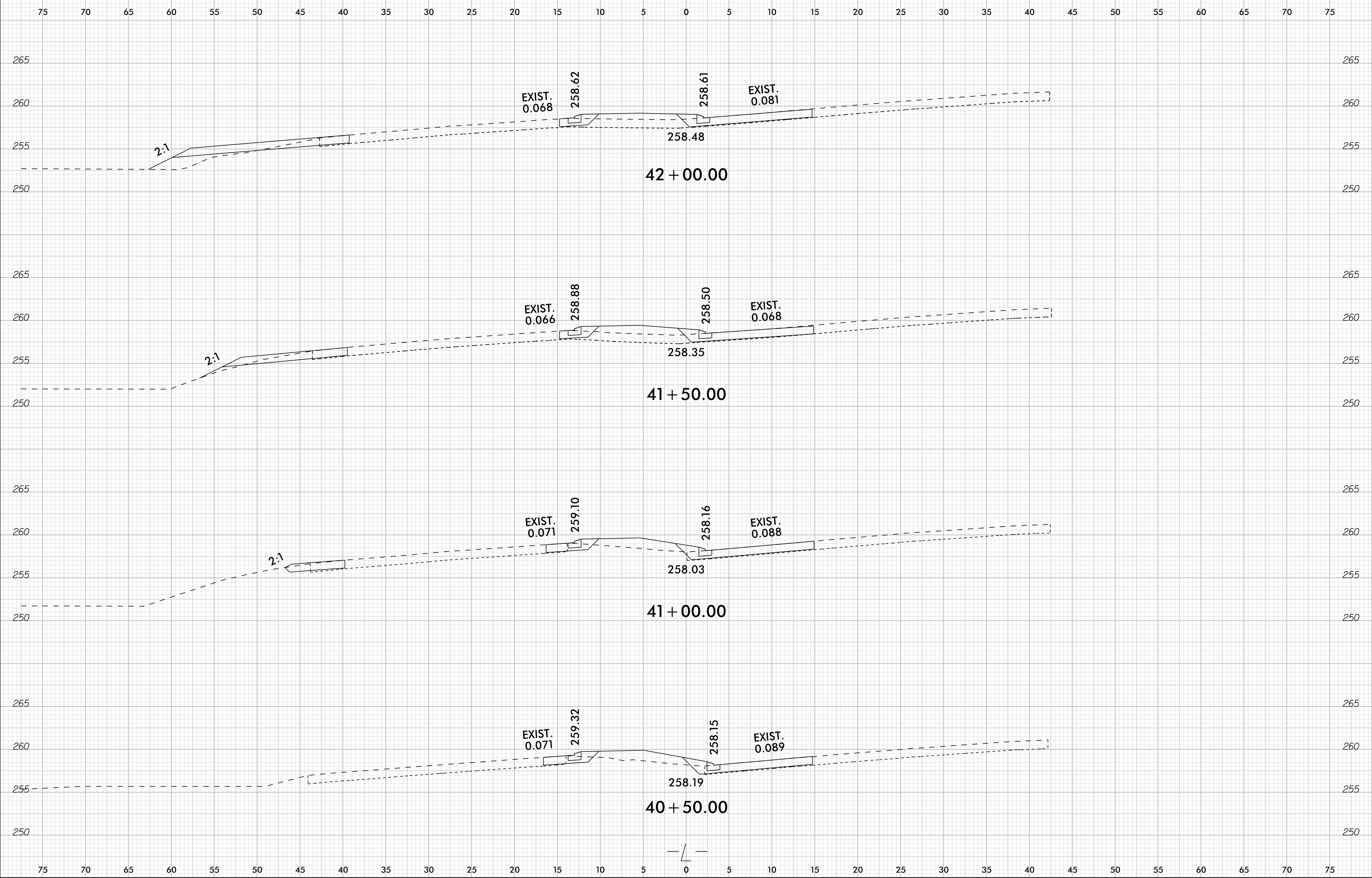
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Us:\Roadway\CorridorModeling\W5601Z_rdy_xpl.L.dgn
mberguson

6/23/16

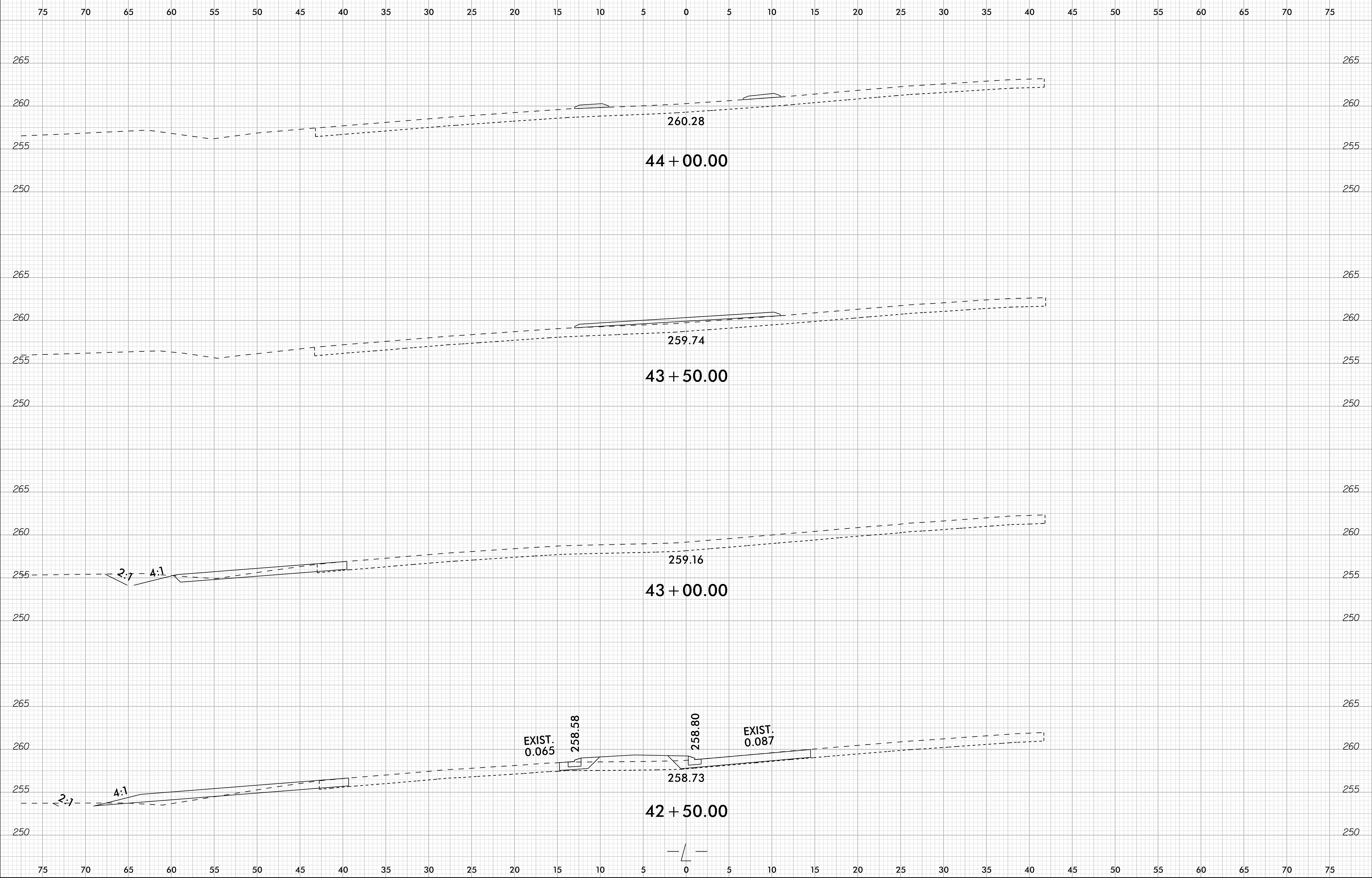
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mberguson

6/23/16

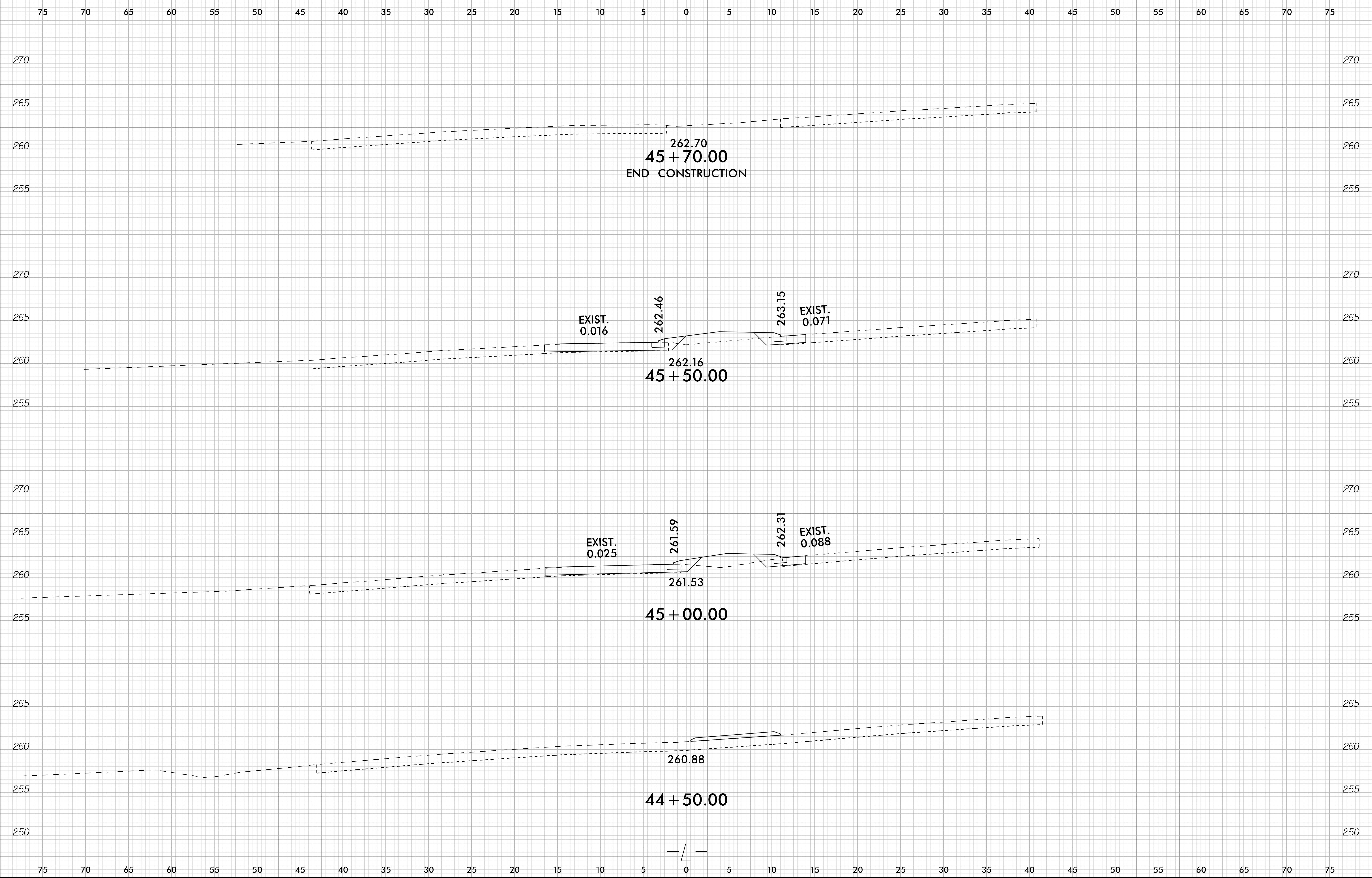
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	W-5601Z	X-9



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User: Roadway_Corridor_Modeling_W5601Z_rdy_xpl.L.dgn
m.l.gilguson

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	W-5601Z	X-10



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mberguson