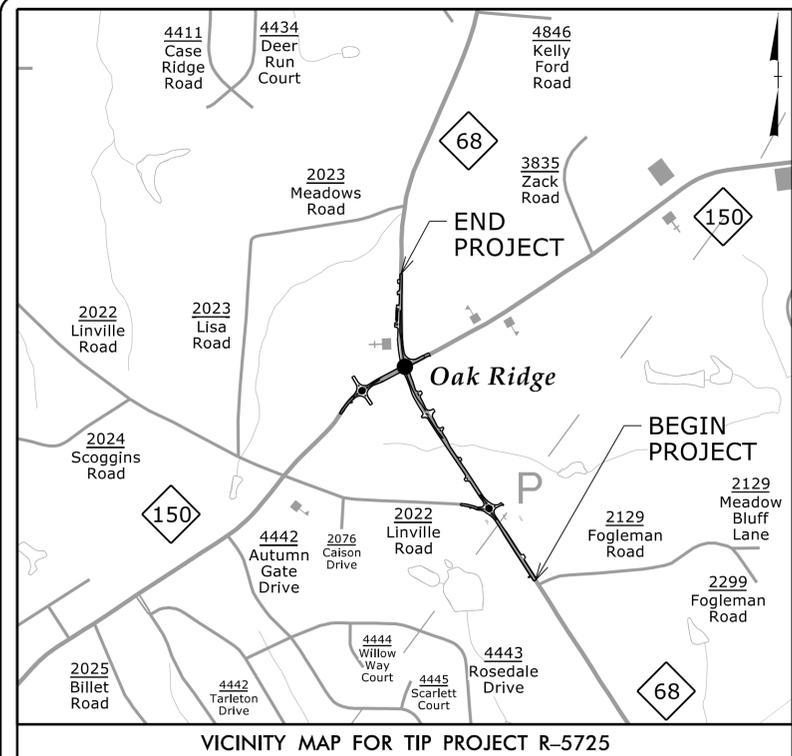


09/08/99

CONTRACT: C204771

5/3/2023
U:\Roadway\Proj\NR5725_Rdy_tsh.dgn
USFRzmickenzie

TIP PROJECT: R-5725



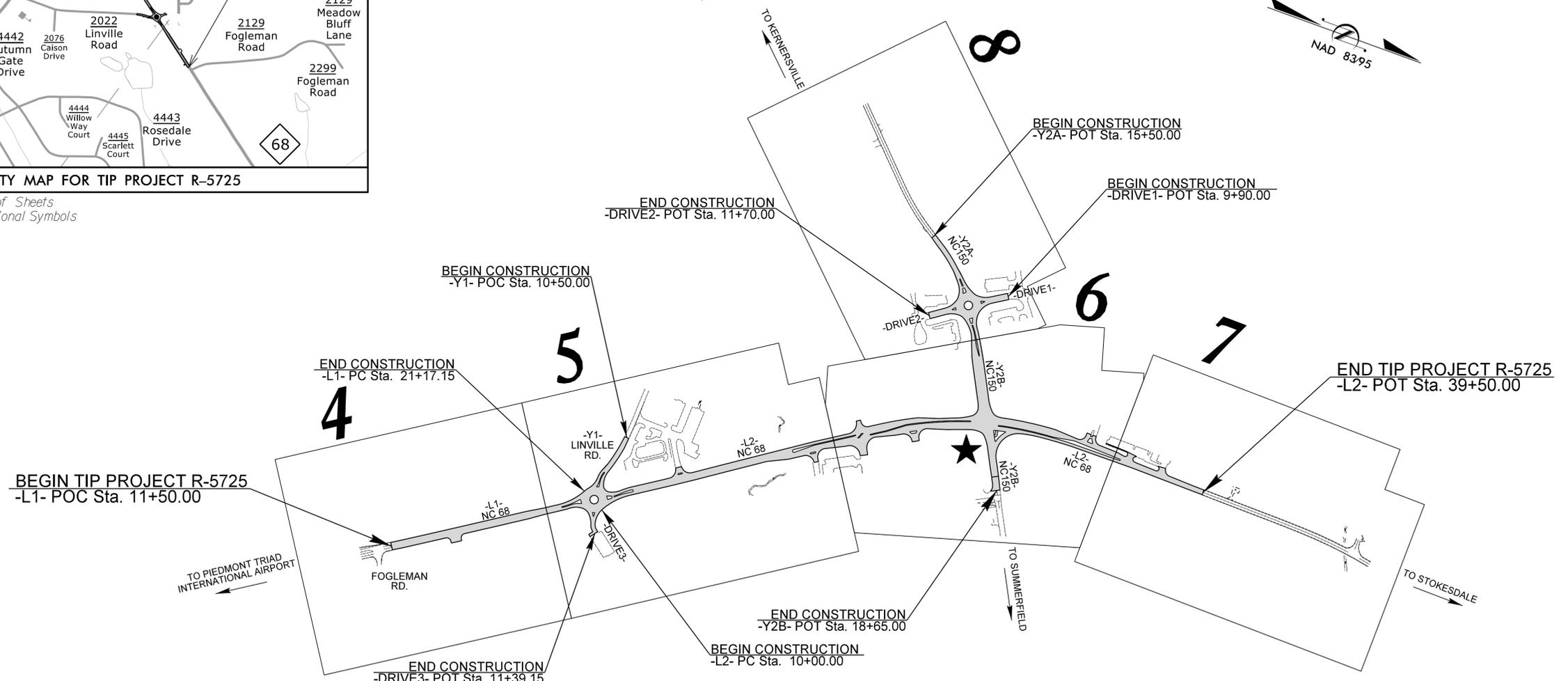
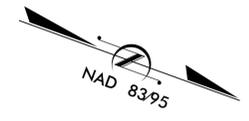
VICINITY MAP FOR TIP PROJECT R-5725
See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
GUILFORD COUNTY

LOCATION: INTERSECTION IMPROVEMENTS ALONG NC 68 AND NC 150 IN OAK RIDGE.

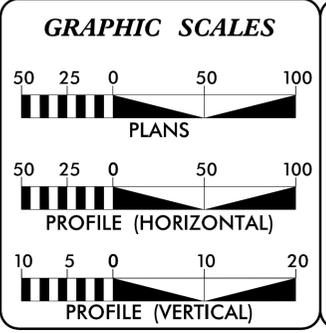
TYPE OF WORK: DRAINAGE, GRADING, PAVING, RETAINING WALL, AND SIGNALS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5725	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50474.1.1	N/A	P.E.	
50474.2.1	N/A	RIGHT-OF-WAY	
50474.2.2	N/A	UTILITIES	
50474.3.1	N/A	CONSTRUCTION	



★ SIGNAL MODIFICATION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DESIGN DATA

ADT 2023 =	21,287
ADT 2043 =	30,832
K =	9 %
D =	65%
T =	4 % *
V =	40 MPH
* TTST =	2% DUAL 2%
FUNC CLASS =	PRINCIPAL ARTERIAL REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-5725	=	0.742 mi.
TOTAL LENGTH TIP PROJECT R-5725	=	0.742 mi.

Prepared in the Offices of:

STEWART
233 S. WEST ST. STE 1100
RALEIGH, NC 27601
919.386.8750

vhb VHB Engineering NC, P.C. (C-3705)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
OCTOBER 13, 2022

LETTING DATE:
JUNE 20, 2023

ANDY YOUNG, PE
PROJECT ENGINEER

MICHAEL BURNS, PE
PROJECT DESIGN ENGINEER

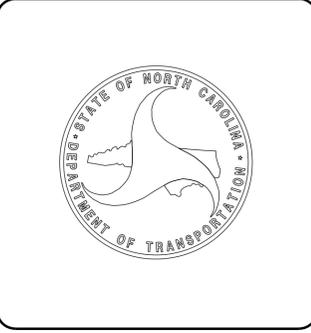
BRIAN KETNER, PE
NCDOT CONTACT

HYDRAULICS ENGINEER
5/4/2023

DocuSigned by:
Rick B. Rebel
SEAL 043870
ENGINEER
EXPIRES 8/30/2024
P.E.

ROADWAY DESIGN ENGINEER
5/3/2023

DocuSigned by:
Michael S. Burns, Jr.
SEAL 045230
ENGINEER
MICHAEL S. BURNS
P.E.



ROADWAY DESIGN
5/3/2023 ENGINEER

Michael S. Burns, Jr.
045230

STEWART

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

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
2A-1 THRU 2A-2	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1 THRU 2B-7	ROADWAY DETAIL SHEETS
2C-1	ROCK PLATING DETAIL
2C-2	TEMPORARY STEEL PLATE DETAIL
2C-3	CONVERT EXISTING DI, CB, OTCB, OR GI TO JUNCTION BOX DETAIL
2C-4	REINFORCED CONCRETE ENDWALL FOR SINGLE 72" DIAMETER PIPE - 60°SKEW DETAIL
2C-5 THRU 2C-7	ALTERNATIVE CURB RAMP DESIGN DETAILS
3B-1	ROADWAY SUMMARIES
3D-1 THRU 3D-5	DRAINAGE SUMMARIES
3G-1	GEOTECHNICAL SUMMARIES
3P-1	PARCEL INDEX SHEET
4 THRU 8	PLAN SHEETS
9 THRU 13	PROFILE SHEETS
RW-01 THRU RW-08	SURVEY CONTROL, EXISTING CENTERLINES, RIGHT OF WAY, EASEMENT, AND PROPERTY TIES
TMP-1 THRU TMP-30	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-7	PAVEMENT MARKING PLANS
EC-1 THRU EC-13	EROSION CONTROL PLANS
RF-1	REFORESTATION PLANS
SIGN-1 THRU SIGN-6D	SIGNING PLANS
SIG-1 THRU SIG-7.1	SIGNAL PLANS
UC-1 THRU UC-7	UTILITY CONSTRUCTION PLANS
UO-1 THRU UO-6	UTILITIES BY OTHER PLANS
X-1	CROSS SECTION INDEX
X-1A	CROSS SECTION SUMMARY SHEET
X-2 THRU X-32	CROSS-SECTIONS
W-1	RETAINING WALL NO. 1 PLAN VIEW AND WALL ENVELOPE
W-2	STANDARD SEGMENTED GRAVITY WALL DETAIL

2018 ROADWAY ENGLISH STANDARD DRAWINGS	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method 11
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superlevation - Two Lane Pavement
240.01	Guide for Berm Ditch Construction
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 1
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
815.02	Subsurface Drain
838.45	Notes for Reinforced Concrete Endwall - Std. Dwg 838.21 thru 838.40
838.75	Notes for Reinforced Brick Endwall - Std. Dwg 838.51 thru 838.70
840.00	Concrete Base Pad for Drainage Structures
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
840.19	Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
840.24	Frames and Narrow Slot Sag Grates
840.25	Anchorage for Frames - Brick or Concrete or Precast
840.27	Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.28	Brick Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
840.31	Concrete Junction Box - 12" thru 66" Pipe
840.32	Brick Junction Box - 12" thru 66" Pipe
840.45	Precast Drainage Structure
840.54	Manhole Frame and Cover
840.66	Drainage Structure Steps
846.01	Concrete Curb, Gutter and Curb & Gutter
848.01	Concrete Sidewalk
848.02	Driveway Turnout - Radius Type
848.04	Street Turnout
848.05	Curb Ramp - Proposed Curb & Gutter
850.11	Guide for Berm Drainage Outlet - 24" and 30" Pipe
852.01	Concrete Islands
852.06	Method for Placement of Drop Inlets in Concrete Islands
876.01	Rip Rap in Channels
876.02	Guide for Rip Rap at Pipe Outlets
876.04	Drainage Ditches with Class 'B' Rip Rap

EFF. 01-16-2018
REV.

GENERAL NOTES: 2018 SPECIFICATIONS
EFFECTIVE: 01-16-2018
REVISED:

GRADE LINE:
GRADING AND SURFACING:
THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD 11.

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

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

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

BERM DITCHES:
BERM DITCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 240.01 AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

SUBSURFACE DRAINS:
SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

DRIVEWAYS:
DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADIUS OR RADIUS AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

STREET TURNOUT:
STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADIUS NOTED ON PLANS.

TEMPORARY SHORING:
SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

UTILITIES:
UTILITY OWNERS ON THIS PROJECT ARE
AT&T (Telecommunications)
Duke Energy (Power)
Piedmont (Gas)
ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

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

CURB RAMPS
CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS.
CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.05 and/or 848.06.

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	(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	-S-S-
Potential Contamination Area: Soil	-S-S-
Known Contamination Area: Water	-W-W-
Potential Contamination Area: Water	-W-W-
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	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	○
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	-----
End of Information	-----

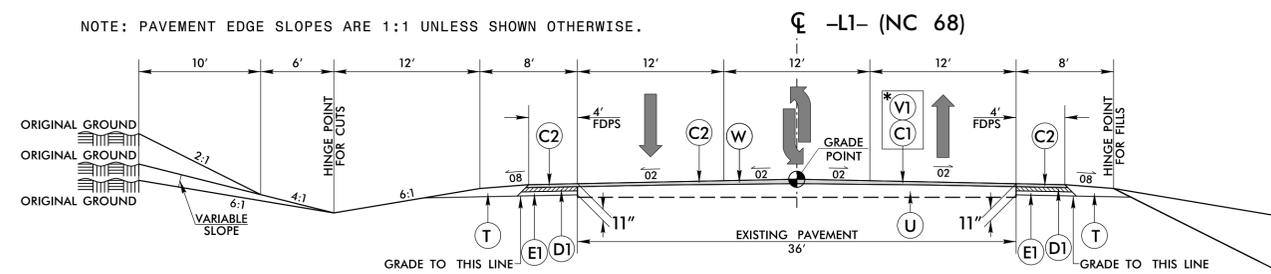
5/14/23

PAVEMENT SCHEDULE

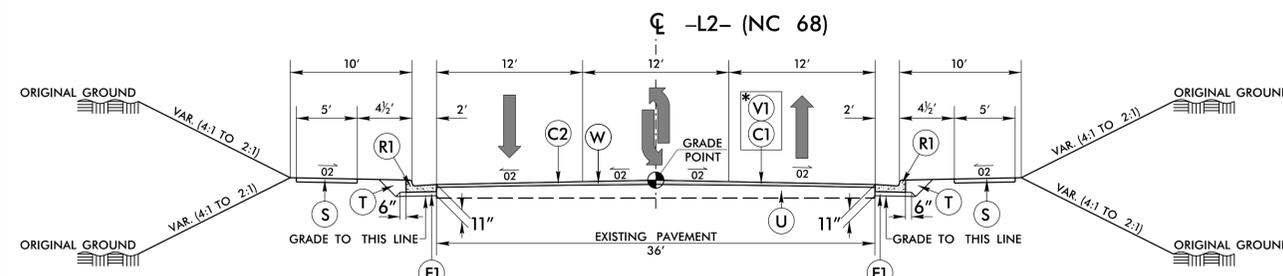
(FINAL PAVEMENT DESIGN)

A	STAMPED TINTED CONCRETE TRUCK APRON	R1	2'-6" CONCRETE CURB AND GUTTER.
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	R2	5" CONCRETE MONOLITHIC ISLAND (KEYED-IN).
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	R3	EXPRESSWAY 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 2" IN DEPTH.	S	4" CONCRETE SIDEWALK.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	T	EARTH MATERIAL.
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 2 1/2" IN DEPTH OR GREATER THAN 4" IN DEPTH.	U	EXISTING PAVEMENT.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	V1	1 1/2" MILLING OF EXISTING ASPHALT PAVEMENT
E2	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL).
E3	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 4" IN DEPTH OR GREATER THAN 5 1/2" IN DEPTH.		

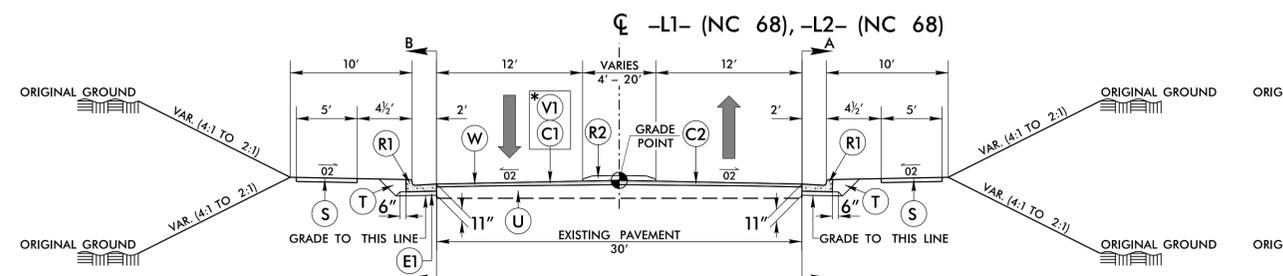
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



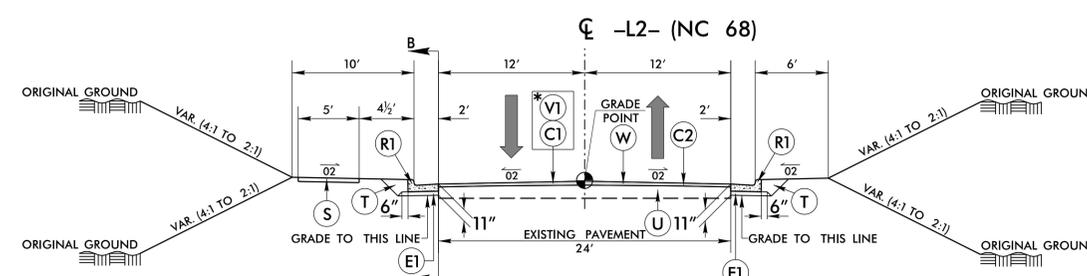
TYPICAL SECTION NO. 1
-L1- STA. 11+50.00 TO STA. 18+08.32



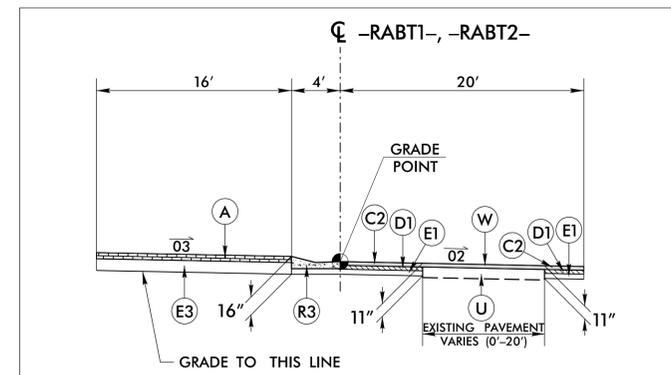
TYPICAL SECTION NO. 2
-L2- STA. 10+42.04 TO STA. 19+56.82



TYPICAL SECTION NO. 3
-L1- STA. 18+08.32 TO STA. 20+75.11
-L2- STA. 19+56.82 TO STA. 35+27.81

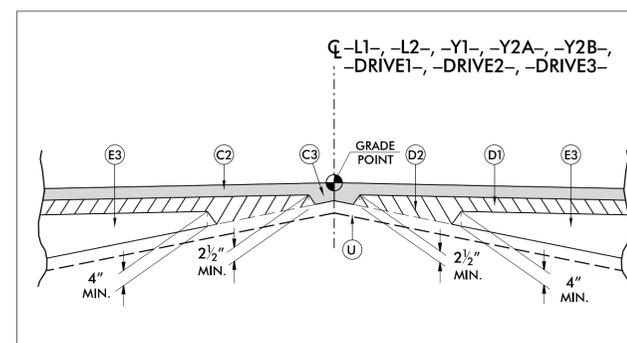


TYPICAL SECTION NO. 4
-L2- STA. 35+27.81 TO STA. 39+50.00

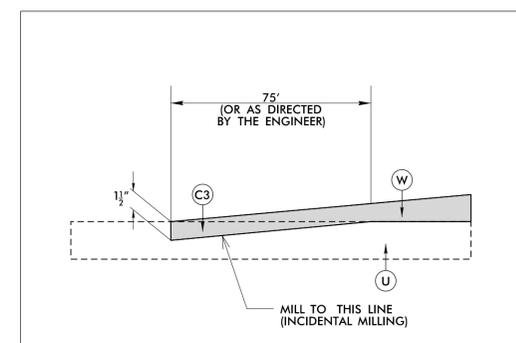


DETAIL SHOWING ROUNDABOUT TRUCK APRON

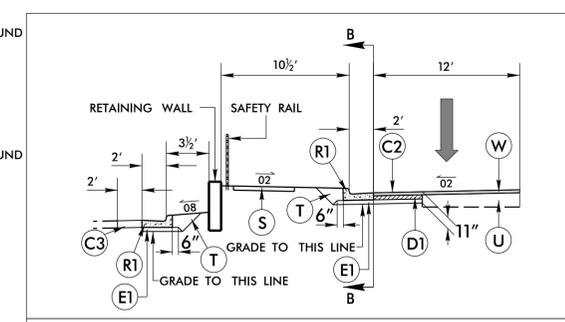
-RABT1- STA. 10+00.00 TO -RABT1- STA. 12+51.33
-RABT2- STA. 10+00.00 TO -RABT2- STA. 12+51.33



DETAIL SHOWING METHOD OF WEDGING

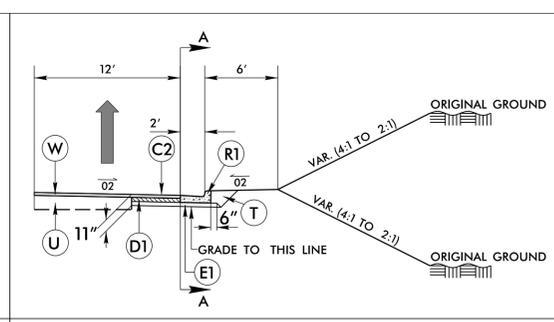


DETAIL SHOWING MILLED PAVEMENT PROFILE TIE-IN



DETAIL B

USE 'DETAIL B' AT THE FOLLOWING LOCATIONS:
-L2- STA. 34+00.00 LT TO -L2- STA. 35+35.00 LT



DETAIL A

USE 'DETAIL A' AT THE FOLLOWING LOCATIONS:
-L2- STA. 29+39.87 RT TO -L2- STA. 35+27.81 RT

*MILL 1.5" ASPHALT AND REPLACE WITH 1.5" SURFACE COURSE (SEE PAVEMENT SCHEDULE)

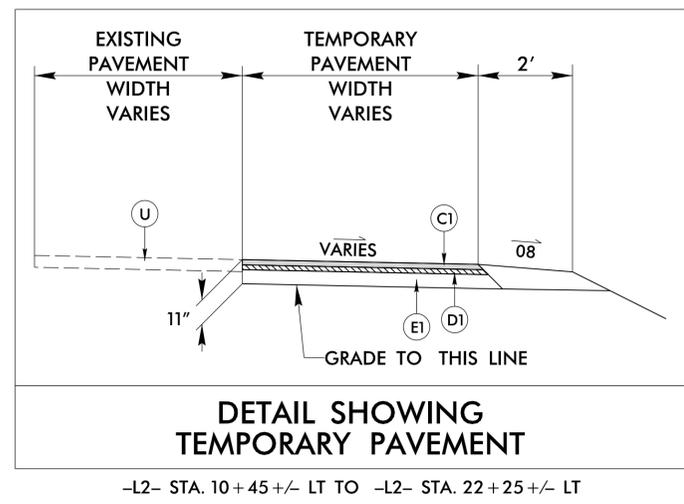
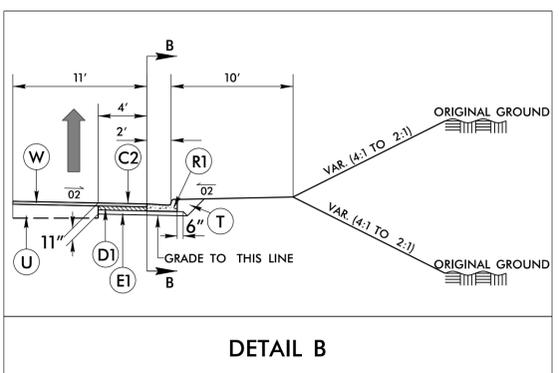
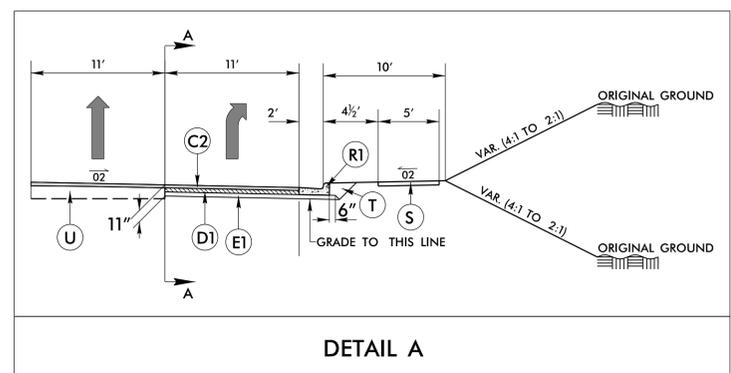
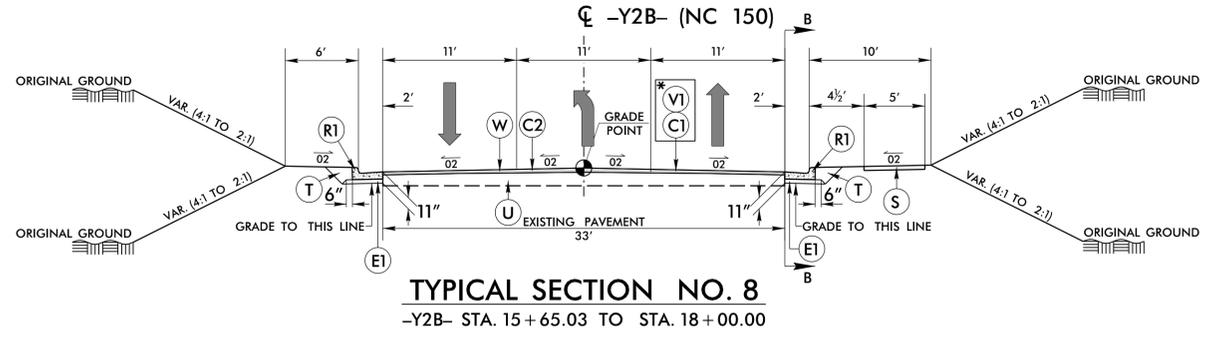
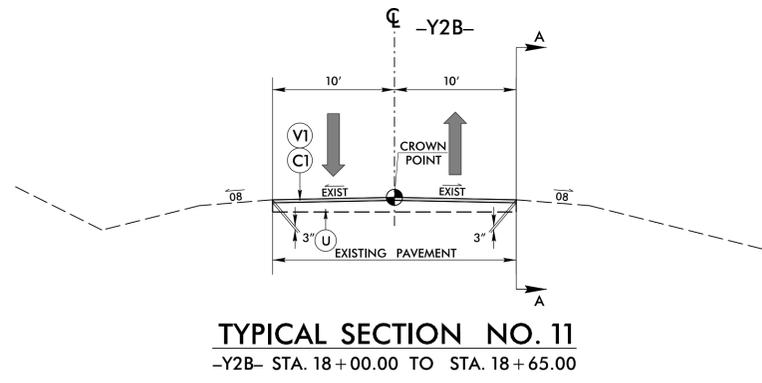
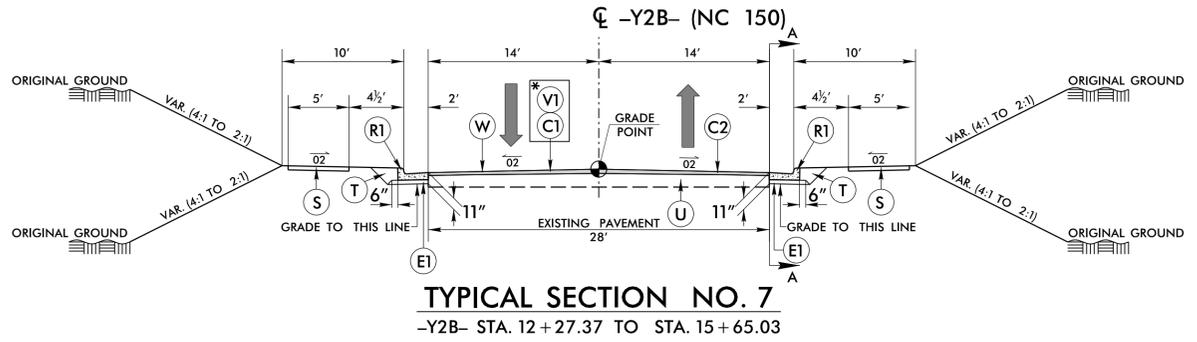
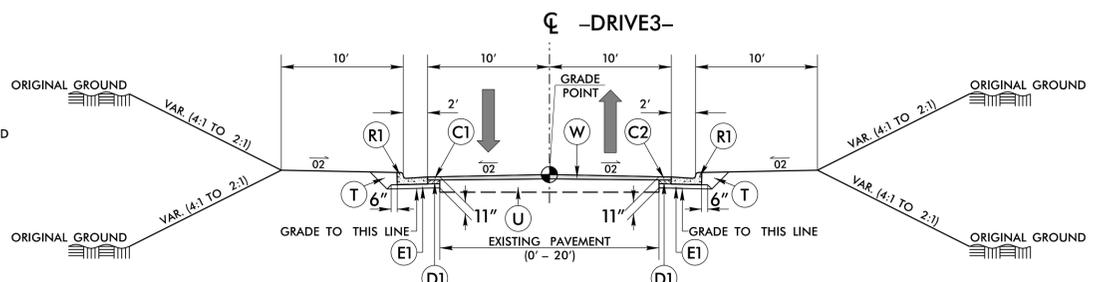
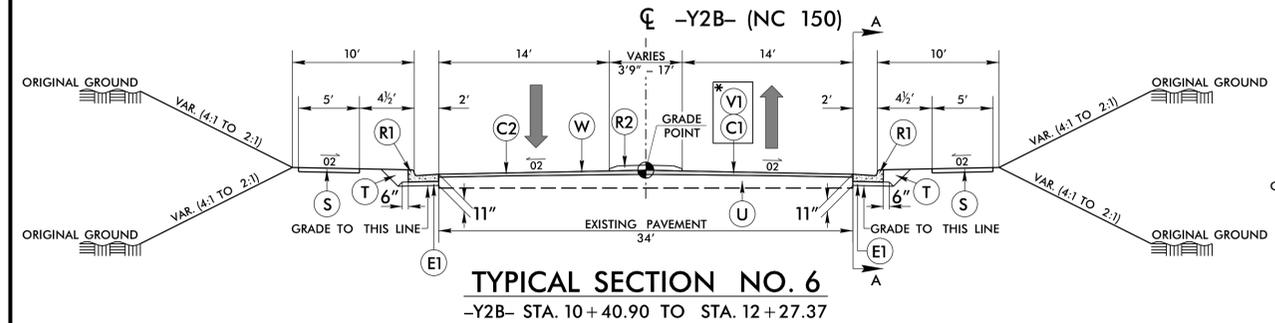
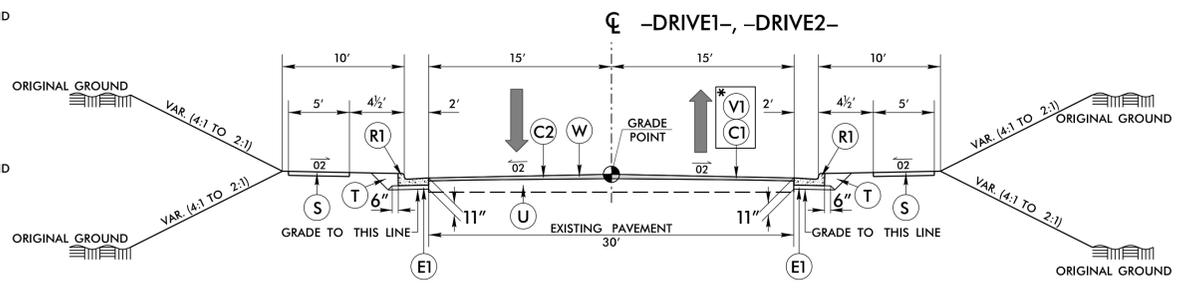
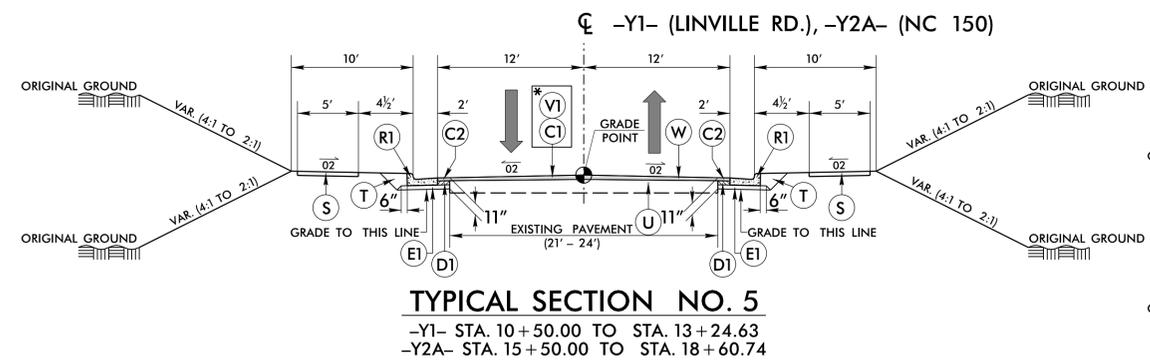
- L1- STA. 17+95 (RT) TO STA. 20+50 (RT)
- L1- STA. 18+57 (LT) TO STA. 20+20 (LT)
- L2- STA. 10+66 (LT) TO STA. 13+97 (LT)
- L2- STA. 11+10 (RT) TO STA. 16+30 (RT)
- L2- STA. 14+25 (LT) TO STA. 20+04 (LT)
- L2- STA. 21+61 (LT) TO STA. 22+52 (LT)
- L2- STA. 16+52 (RT) TO STA. 19+17 (RT)
- L2- STA. 19+36 (RT) TO STA. 20+40 (RT)
- L2- STA. 20+56 (RT) TO STA. 22+39 (RT)
- L2- STA. 22+90 (RT) TO STA. 25+05 (RT)
- L2- STA. 25+49 (RT) TO STA. 28+09 (RT)
- L2- STA. 26+51 (LT) TO STA. 29+92 (LT)
- L2- STA. 27+28 (LT) TO STA. 29+74 (LT)
- L2- STA. 30+27 (RT) TO STA. 38+75 (RT)
- L2- STA. 33+11 (LT) TO STA. 33+42 (LT)
- L2- STA. 33+84 (LT) TO STA. 34+03 (LT)
- L2- STA. 34+41 (LT) TO STA. 35+56 (LT)
- L2- STA. 35+83 (LT) TO STA. 37+18 (LT)
- L2- STA. 37+43 (LT) TO STA. 38+40 (LT)
- RABT1- STA. 10+65 TO STA. 11+06
- RABT1- STA. 11+51 TO STA. 11+67
- RABT1- STA. 11+56 TO STA. 10+26
- RABT2- STA. 11+21 TO STA. 10+49
- RABT2- STA. 10+62 TO STA. 11+14

5/17/2023 10:51:14 AM N:\Projects\15725-Relu_tup.dgn

PROJECT REFERENCE NO. R-5725	SHEET NO. 2A-1
ROADWAY DESIGN 5/3/2023 ENGINEER Michael S. Burns, Jr.	PAVEMENT DESIGN 5/4/2023 ENGINEER Brian Kötner
STEWART	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

5/14/23

PROJECT REFERENCE NO. R-5725	SHEET NO. 2A-2
ROADWAY DESIGN ENGINEER 5/3/2023	PAVEMENT DESIGN ENGINEER 5/4/2023
 STEWART DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



PAVEMENT SCHEDULE (FINAL PAVEMENT DESIGN)	
A	STAMPED TINTED CONCRETE TRUCK APRON
C1	1 1/2" S9.5C
C2	3" S9.5C
C3	VAR. S9.5C
D1	4" I19.0C
D2	VAR. I19.0C
E1	4" B25.0C
E2	5" B25.0C
E3	VAR. B25.0C
R1	2'-6" C & G
R2	5" CONCRETE MONOLITHIC ISLAND
R3	EXPRESSWAY GUTTER
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1 1/2" MILLING
W	WEDGING

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

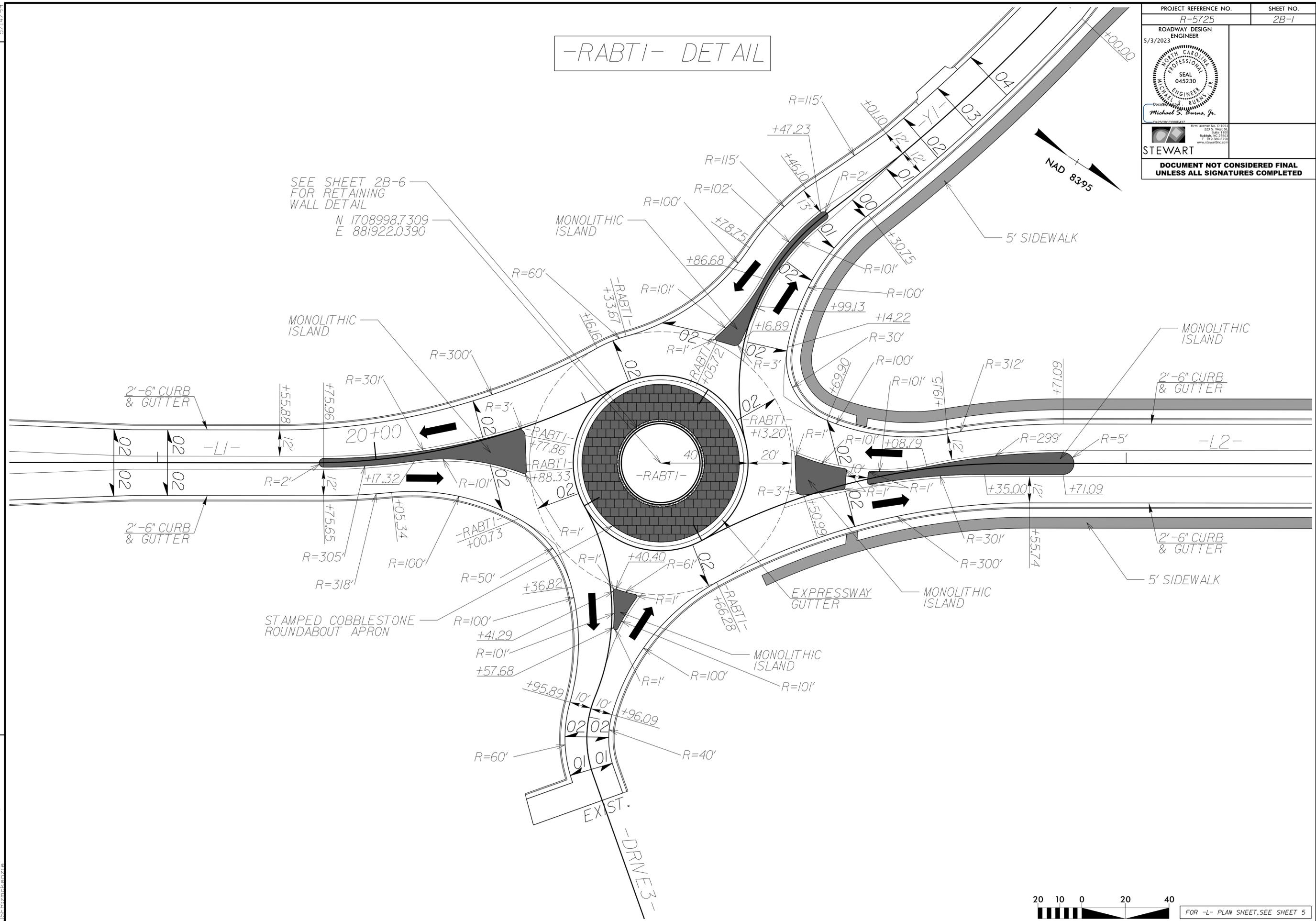
***MILL 1 1/2" ASPHALT AND REPLACE WITH 1 1/2" SURFACE COURSE (SEE PVMT. SCHEDULE)**

- Y1- STA. 11+25 (RT) TO STA. 12+43 (RT)
- Y1- STA. 11+25 (LT) TO STA. 12+62 (LT)
- Y1- STA. 12+61 (RT) TO STA. 13+10 (RT)
- Y2A- STA. 16+25 (LT) TO STA. 18+41 (LT)
- Y2A- STA. 16+25 (RT) TO STA. 18+28 (RT)
- Y2B- STA. 10+50 (LT) TO STA. 14+90 (LT)
- Y2B- STA. 10+79 (RT) TO STA. 14+58 (RT)
- Y2B- STA. 15+90 (RT) TO STA. 17+25 (RT)
- DRIVE1- STA. 10+75 TO STA. 11+26

5/17/2023 10:51:10 AM \\P:\Projects\5725_Rdwy_Typ.dgn

-RABTI- DETAIL

PROJECT REFERENCE NO. R-5725	SHEET NO. 2B-1
ROADWAY DESIGN ENGINEER	
5/3/2023	
STEWART <small>Firm License No. C-2511 223 S. West St. Raleigh, NC 27603 P. 919.386.8799 www.stewartinc.com</small>	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

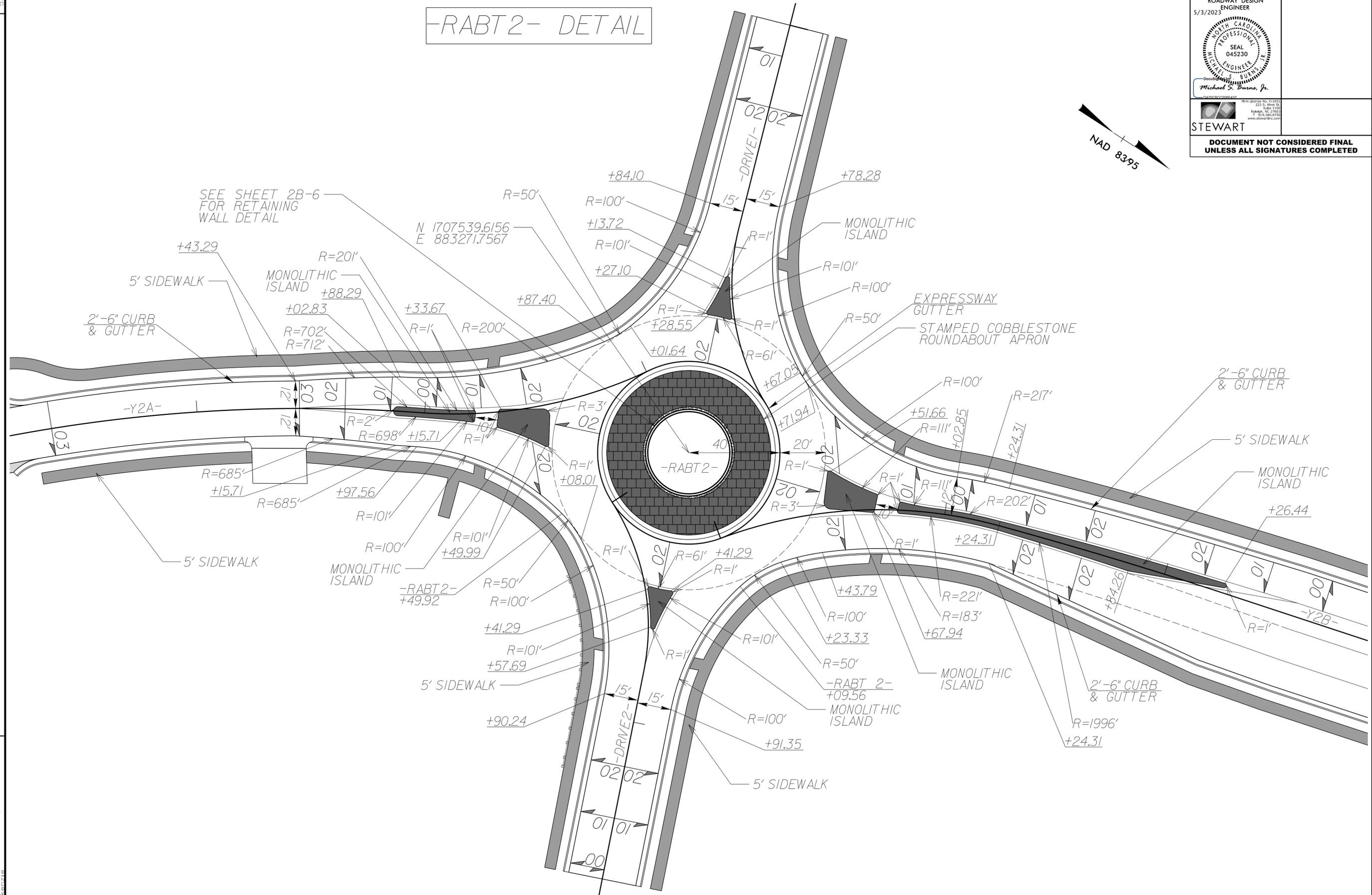
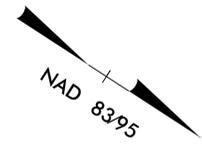


REVISIONS

5/14/99
 5/3/2023 R5725_RdJ_esh2B-1.dgn
 IJSEB@stewartinc.com

-RABT2- DETAIL

PROJECT REFERENCE NO. R-5725	SHEET NO. 2B-2
ROADWAY DESIGN ENGINEER 5/3/2023	
	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



SEE SHEET 2B-6
FOR RETAINING
WALL DETAIL

N 1707539.6156
E 883271.7567

REVISIONS



FOR -L- PLAN SHEET, SEE SHEET 8

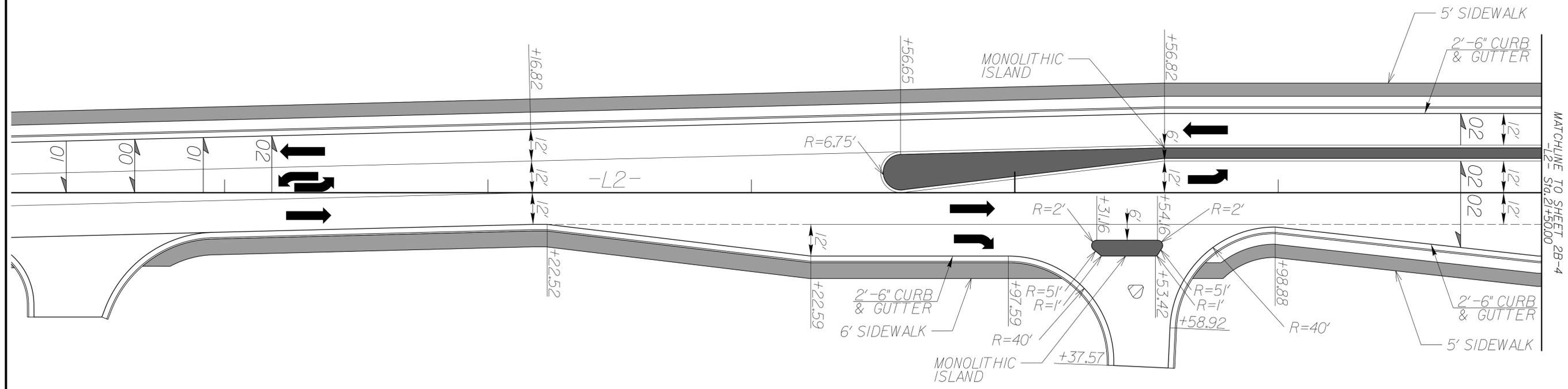
5/14/99 5/3/2023 R5725_RdJ_esh2B-2.dgn

-L2- INTERSECTION DETAIL 1

PROJECT REFERENCE NO. <i>R-5725</i>	SHEET NO. <i>2B-3</i>
ROADWAY DESIGN ENGINEER 5/3/2023	
	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS



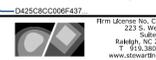
MATCHLINE TO SHEET 2B-4
-L2- Sta. 21+50.00

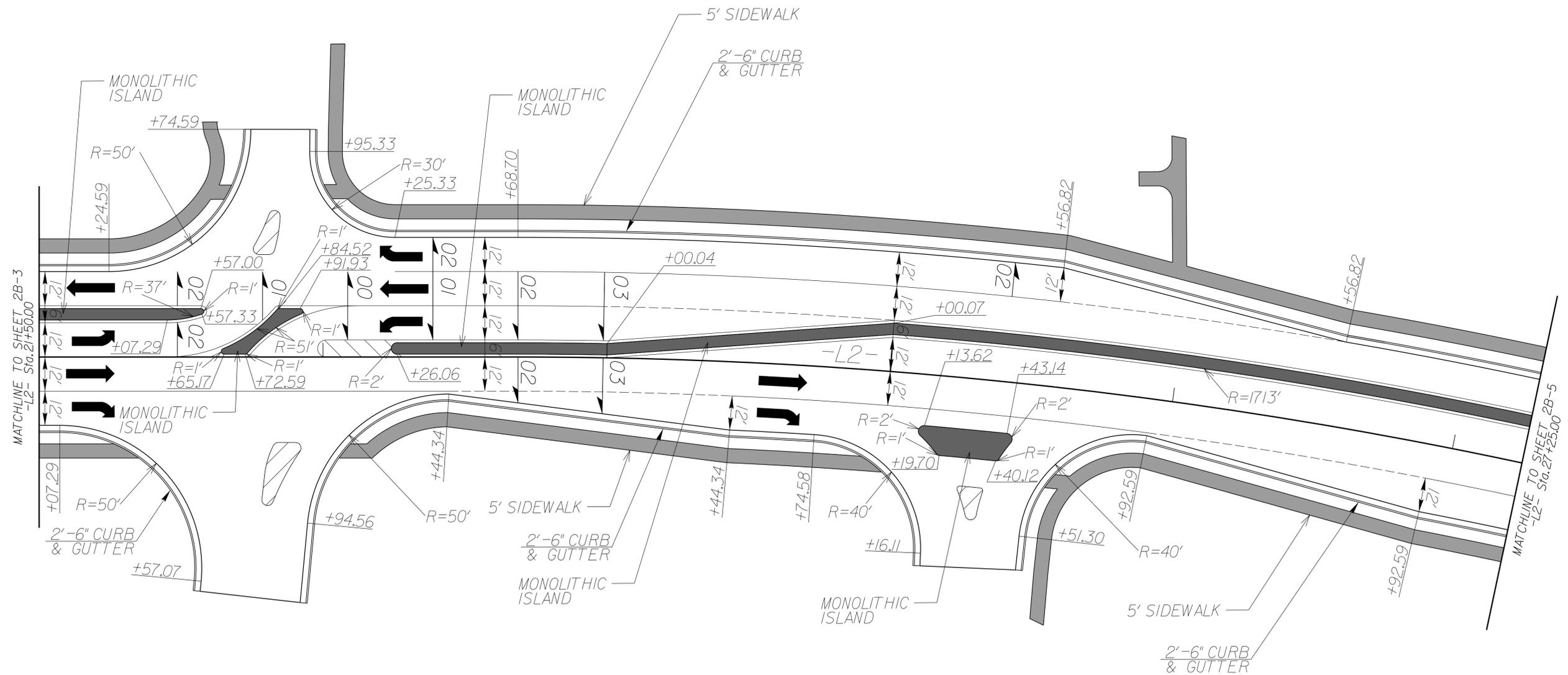


FOR -L- PLAN SHEET, SEE SHEETS 5 & 6

5/3/2023 R5725_RdL_psh2B-3.dgn
USER: mkenzie

-L2- INTERSECTION DETAIL 2

PROJECT REFERENCE NO. <i>R-5725</i>	SHEET NO. <i>2B-4</i>
ROADWAY DESIGN 5/3/2023 ENGINEER	
	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



FOR -L- PLAN SHEET, SEE SHEET 6

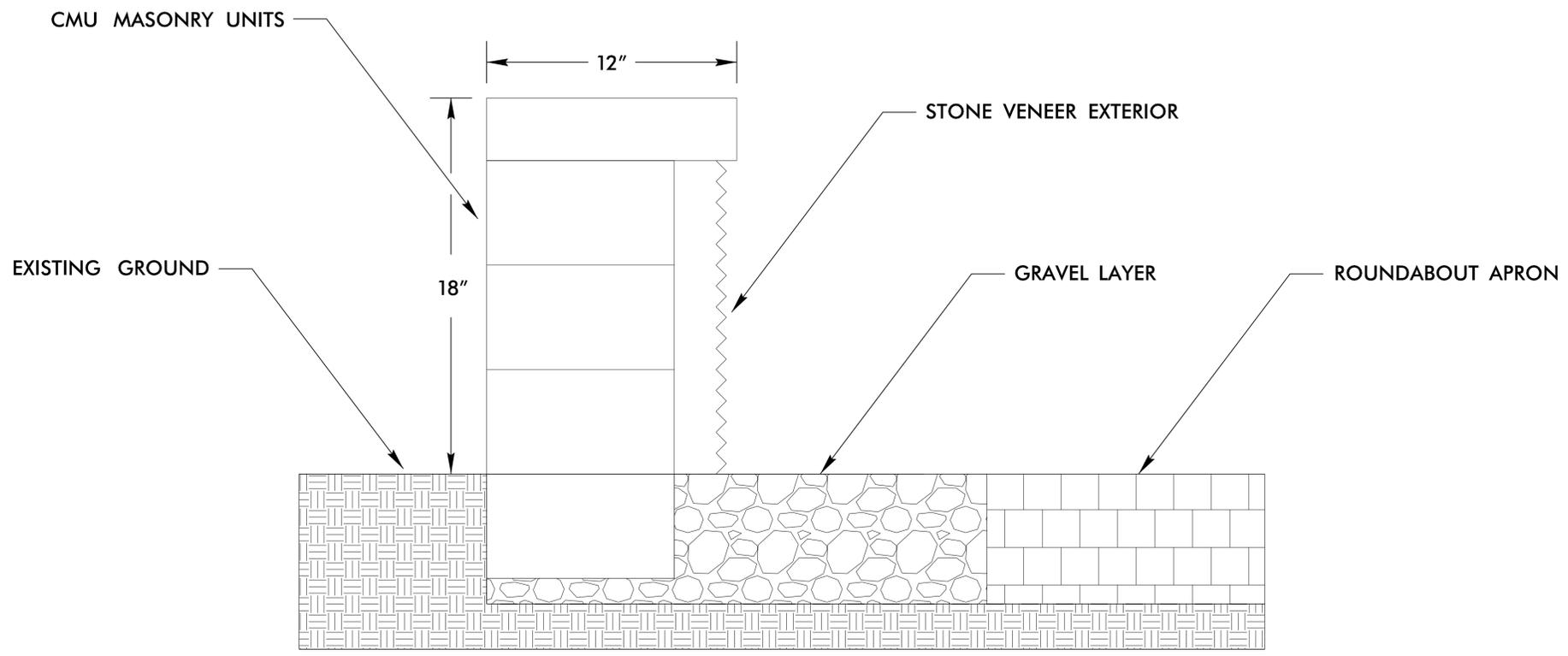
5/14/99

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JUS:tkk:zlp

PROJECT REFERENCE NO. <i>R-5725</i>	SHEET NO. <i>2B-6</i>
ROADWAY DESIGN 5/3/2023 ENGINEER	
 Michael S. Burns, Jr. <small>Professional Engineer License No. 045230 State of North Carolina</small>	
 STEWART <small>Firm License No. C-12123 223 S. West St. Raleigh, NC 27603 P: 919-386-0194 www.stewartinc.com</small>	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS

5/14/99



RETAINING WALL DETAIL

-RABT1- STA. 10 + 00.00 TO -RABT1- STA. 12 + 51.33
 -RABT2- STA. 10 + 00.00 TO -RABT2- STA. 12 + 51.33

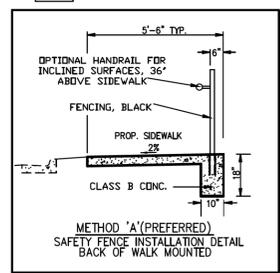
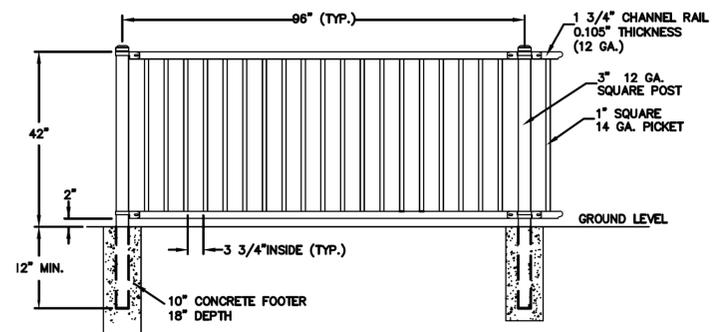
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USF:cmk/ezie

5/14/99

REVISIONS

5/3/2023 R5725_Rdu_esh2B-7.dgn
USF:shk:ezie

PROJECT REFERENCE NO. <i>R-5725</i>	SHEET NO. <i>2B-7</i>
ROADWAY DESIGN ENGINEER 5/3/2023	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



- SAFETY FENCE NOTES:**
2. BOTTOM OF POSTS TO BE EMBEDDED IN CONCRETE SHOULD FIRST BE PROTECTED WITH TWO-PART EPOXY DIPPING OR ZINC CHROMATE COATING TO PREVENT CORROSION.
 3. ONLY NON-METALLIC, NON-SHRINK GROUT IS TO BE USED FOR SECURING POSTS IN CONCRETE.
 4. THE HANDRAIL FOR INCLINED SURFACES IS REQUIRED WHEN THE RUNNING SLOPE IS 5% OR GREATER AND SHALL MEET ALL THE APPLICABLE REQUIREMENTS AND PROVISIONS OF SECTION R408 OF THE ADA ACCESSIBILITY GUIDELINES FOR PUBLIC RIGHTS-OF-WAY.
 5. THERE ARE TO BE NO EXPOSED WELDS AND ERECTED FENCE IS TO HAVE THE SAME APPEARANCE ON BOTH SIDES.
 6. VERTICAL PICKETS SHALL NOT EXTEND BEYOND THE TOP OR BOTTOM RAILS.

1 4" CONCRETE SIDEWALK WITH SAFETY RAIL & FOUNDATION

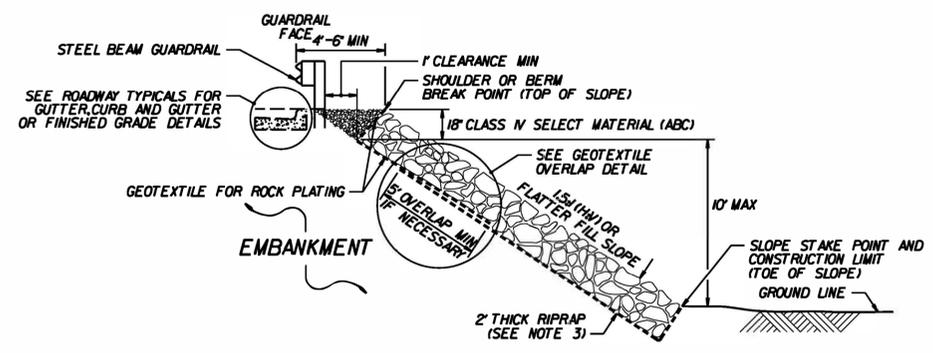
NOT TO SCALE

STEWART (03/27/2023)

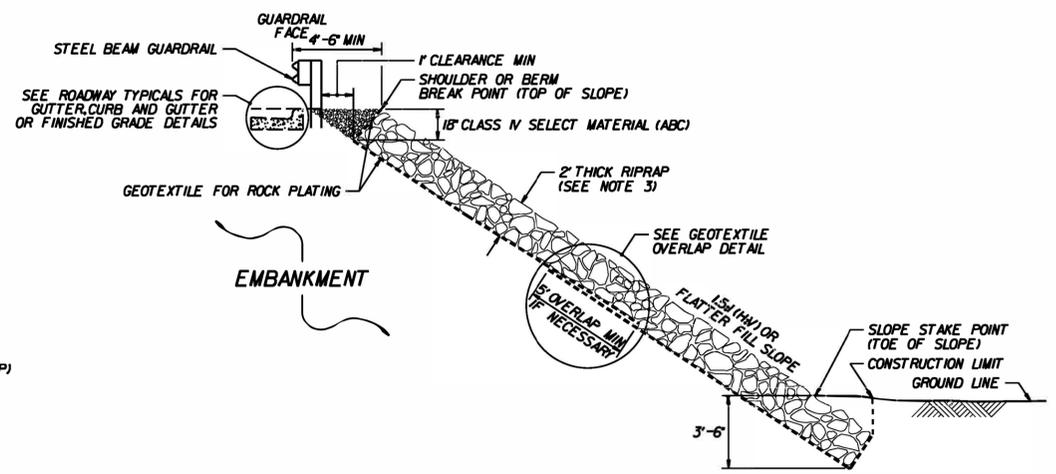
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
ROCK PLATING

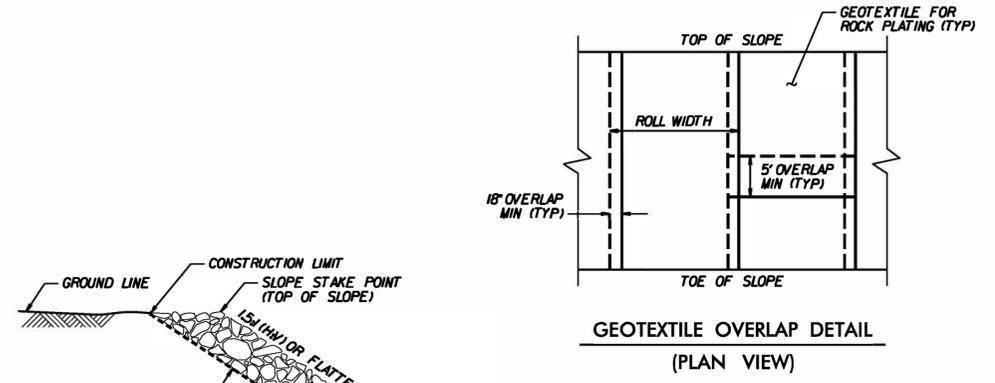
SHEET 1 OF 1
275D01



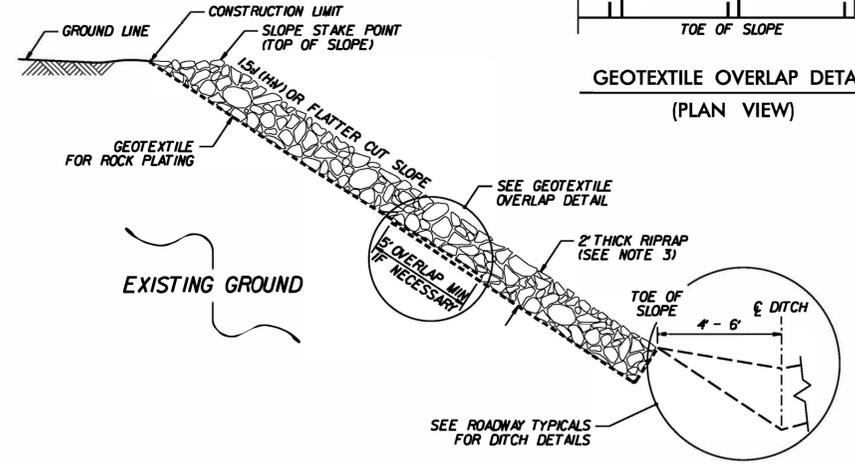
ROCK PLATING DETAIL NO. 1 - TYPICAL SECTION



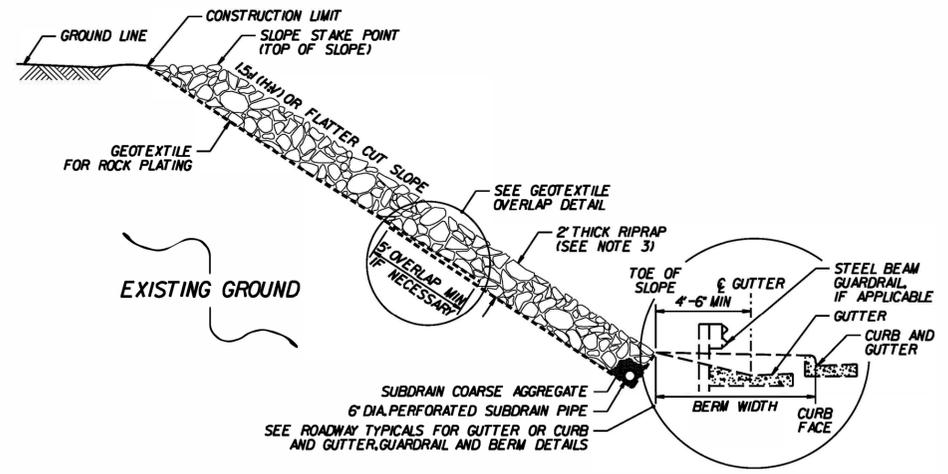
ROCK PLATING DETAIL NO. 2 - TYPICAL SECTION



GEOTEXTILE OVERLAP DETAIL (PLAN VIEW)



ROCK PLATING DETAIL NO. 3 - TYPICAL SECTION



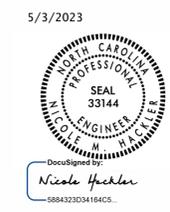
ROCK PLATING DETAIL NO. 4 - TYPICAL SECTION

- NOTES:**
1. SEE ROADWAY PLANS AND SUMMARY SHEETS FOR ROCK PLATING LOCATIONS.
 2. FOR ROCK PLATING, SEE SECTION 275 OF THE STANDARD SPECIFICATIONS.
 3. USE CLASS I, 2 OR B RIPRAP UNLESS REQUIRED OTHERWISE IN THE ROADWAY SUMMARY SHEETS.

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

ROADWAY DETAIL DRAWING FOR
ROCK PLATING

SHEET 1 OF 1
275D01

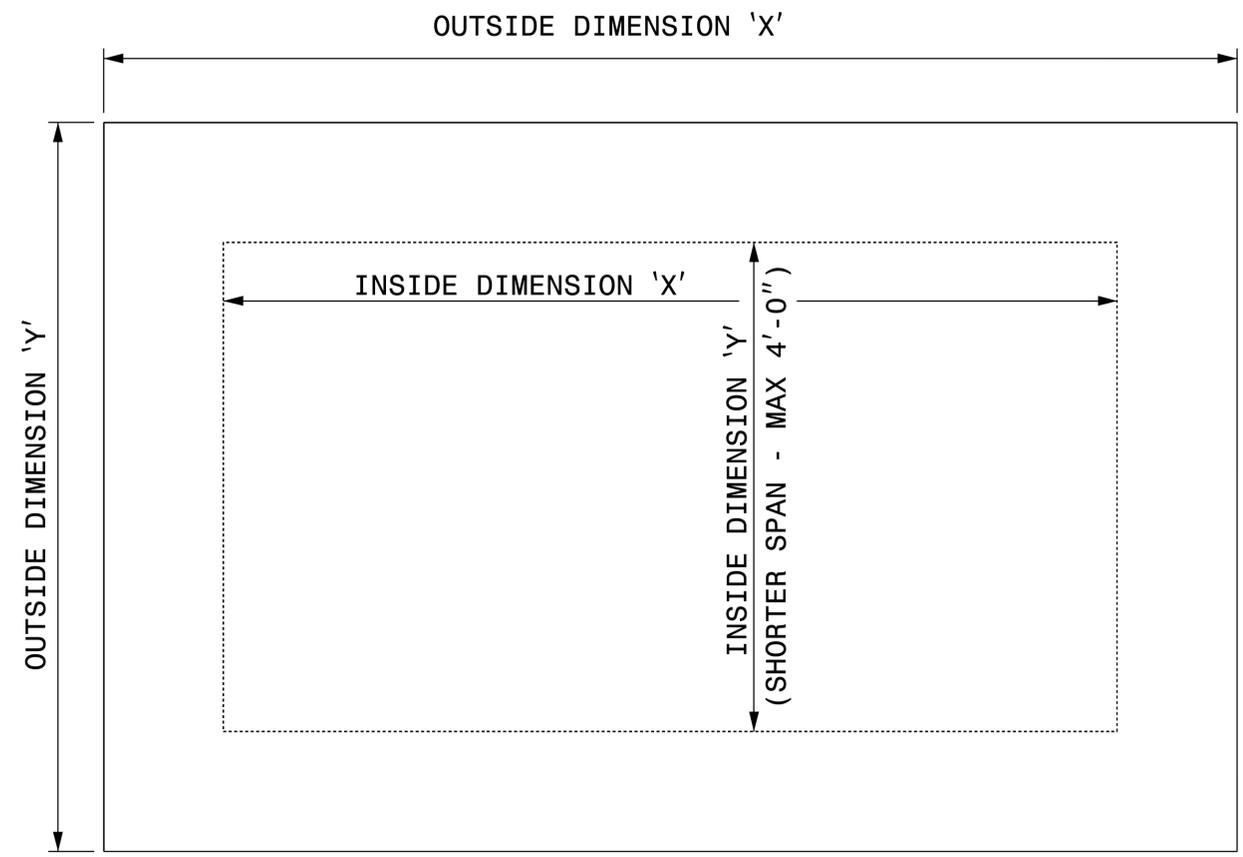


CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6900 FAX 919-250-4119

SEE TITLE BLOCK

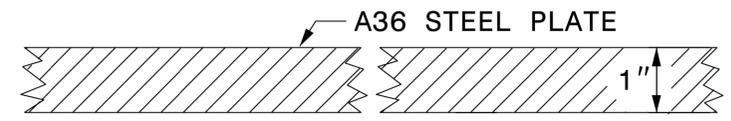
ORIGINAL BY: S. HIDDEN DATE: 03-11-22
 MODIFIED BY: DATE: _____
 CHECKED BY: DATE: _____
 FILE SPEC.: _____

SYSTEMS DESIGN USER NAME



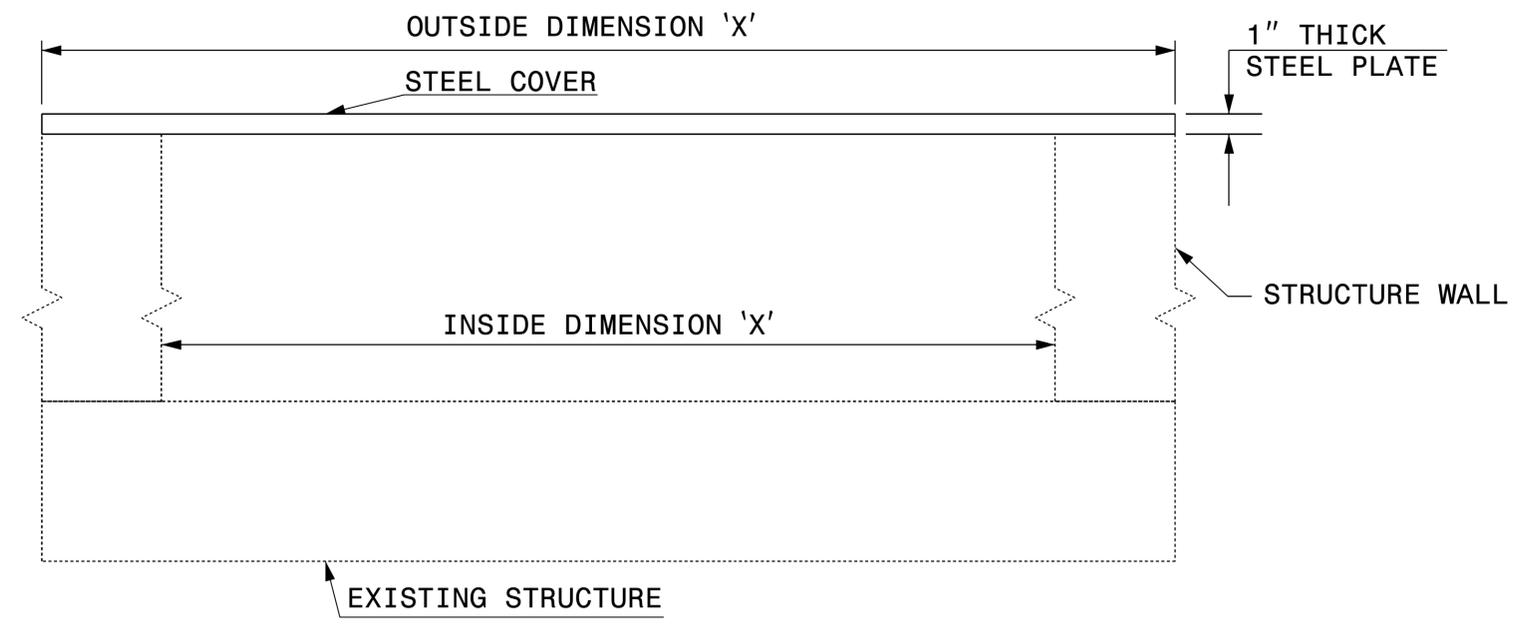
GENERAL NOTES:

- USE GRADE A36 STEEL
- STEEL COVERS ARE FOR TEMPORARY USE DURING PHASE CONSTRUCTION.
- FILL SHALL BE PLACED DIRECTLY OVER THE STEEL PLATES.
- SEE ROADWAY PLANS AND PROVISIONS FOR LOCATIONS
- QUANTITIES TO BE PAID FOR AT THE UNIT PRICE BID PER EACH.



SECTION VIEW OF STEEL TOP PLATE

PLAN VIEWS



ELEVATION VIEWS

5/3/2023



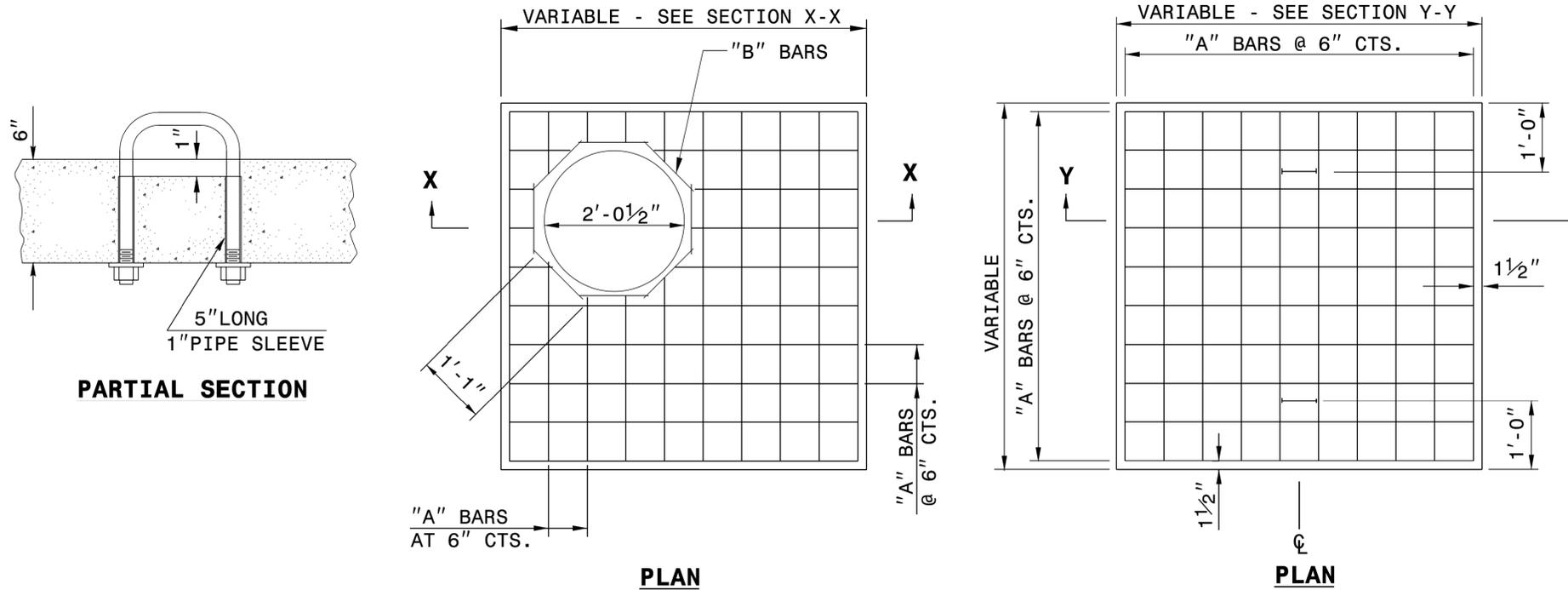
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

**DETAIL OF TEMPORARY
1" STEEL COVER**

ORIGINAL BY: E.E. WARD DATE: 2-2-98
 MODIFIED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____
 FILE SPEC.: eric:/usr/details/metric/stand/stlcvr2.dgn

07-DEC-2018 09:57
 S:\Contracts\Special Details\Jhower-ton\Steel Cover.dgn
 Jhower-ton AT CSD-292595

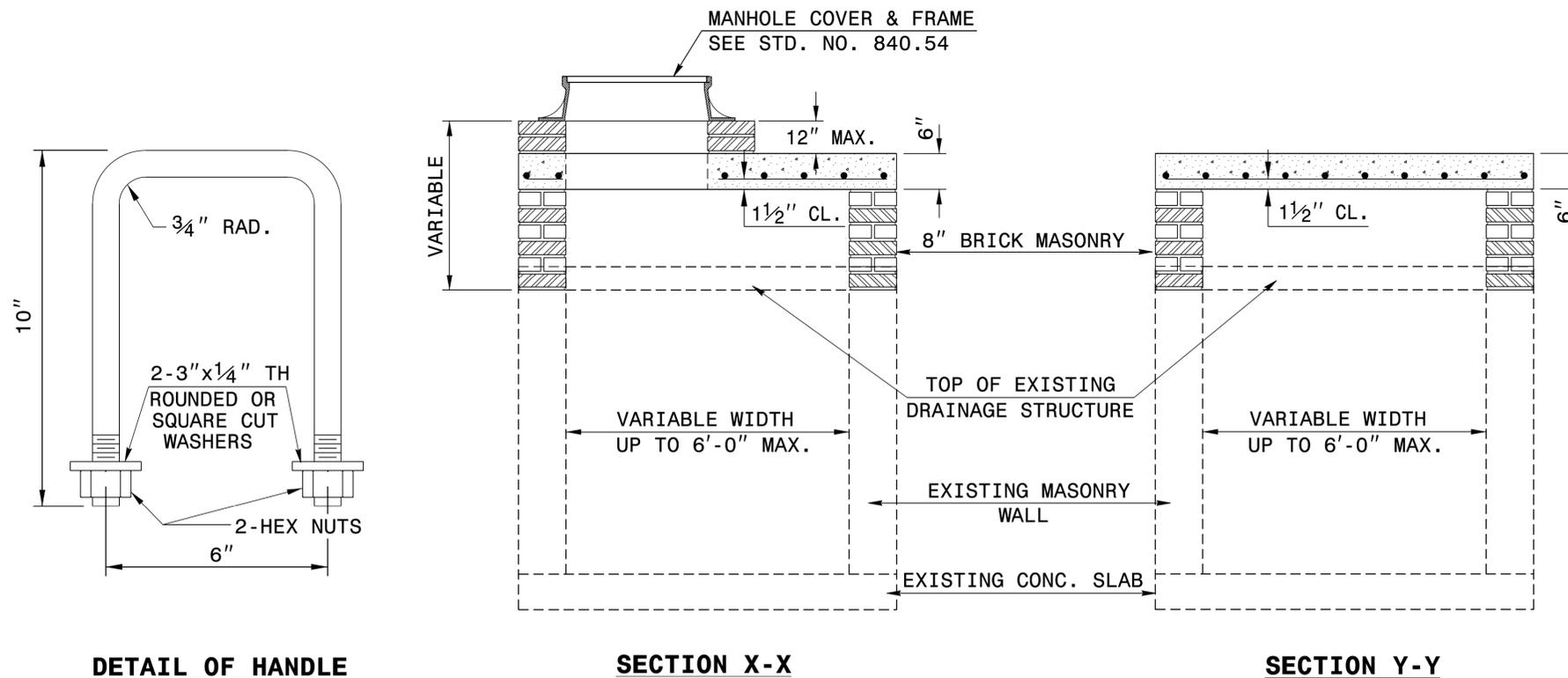


GENERAL NOTES:

CONSTRUCT IN ACCORDANCE WITH SECTION 859 OF THE STANDARD SPECIFICATIONS.

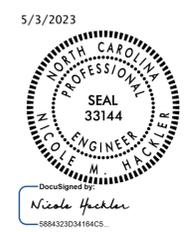
THE DIMENSIONS FOR THE EXISTING BOXES ARE APPROXIMATE AND MAY VARY SLIGHTLY.

DETAIL INTENDED FOR NON-TRAFFIC BEARING DRAINAGE STRUCTURES.



BILL OF MATERIALS				
REINFORCING STEEL				
CODE	SIZE	QTY.	LENGTH	REINF. STEEL LBS.
A	#4	20	4'-6"	60.12
B	#4	8	1'-1"	5.79
TOTAL				65.91 *
MASONRY				CU YDS
TOP SLAB CONCRETE CLASS "B"				.4326 *
BRICK MASONRY PER FT HT (MIN)				.4111

*** NOTE:**
 QUANTITIES BASED ON 3'-6" X 3'-6" DRAINAGE STRUCTURE. ADJUST QUANTITIES FOR LARGER STRUCTURES AND MANHOLE CONSTRUCTION.



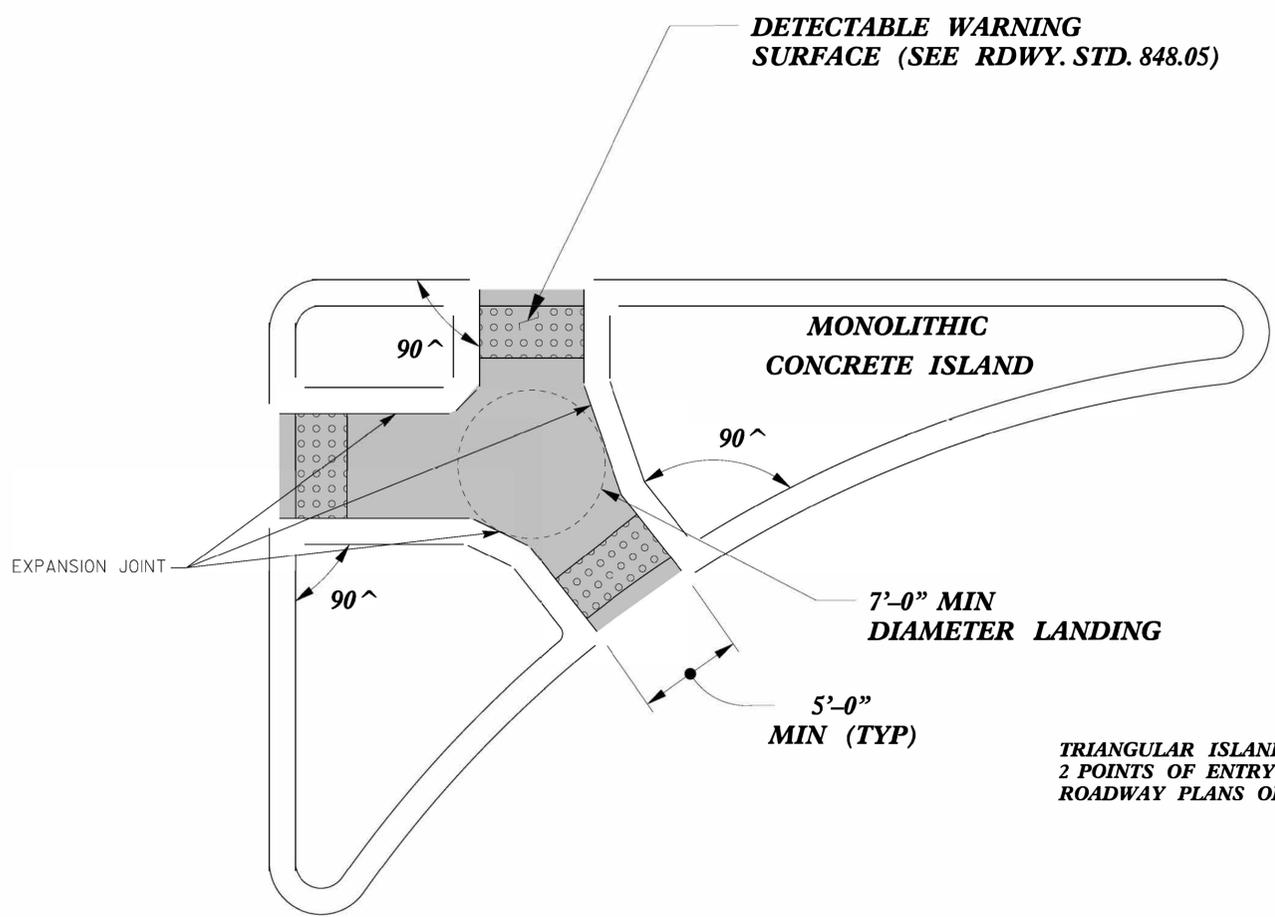
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119
DETAIL TO CONVERT EXISTING DI, CB, OTCB or GI TO JUNCTION BOX (MANHOLE OPTIONAL)

ORIGINAL BY: T.S.S. DATE: NOV. 1997
 MODIFIED BY: T.S.S. DATE: FEB. 2000
 CHECKED BY: DATE:
 FILE SPEC.: ds174:/usr/details/stand/boxtojobe.dgn

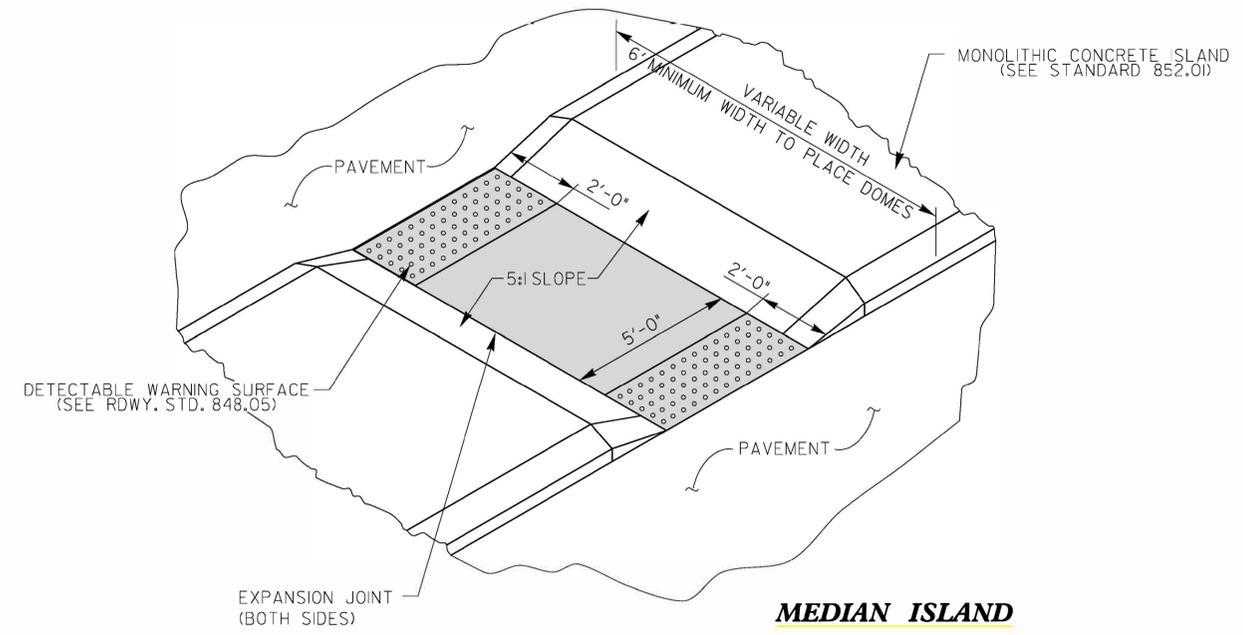
5/3/2023
 58843293418465...

PAY LIMITS FOR 2 OR 3 CURB RAMPS
(CALCULATE BASED ON NUMBER OF
SETS OF TRUNCATED DOMES)

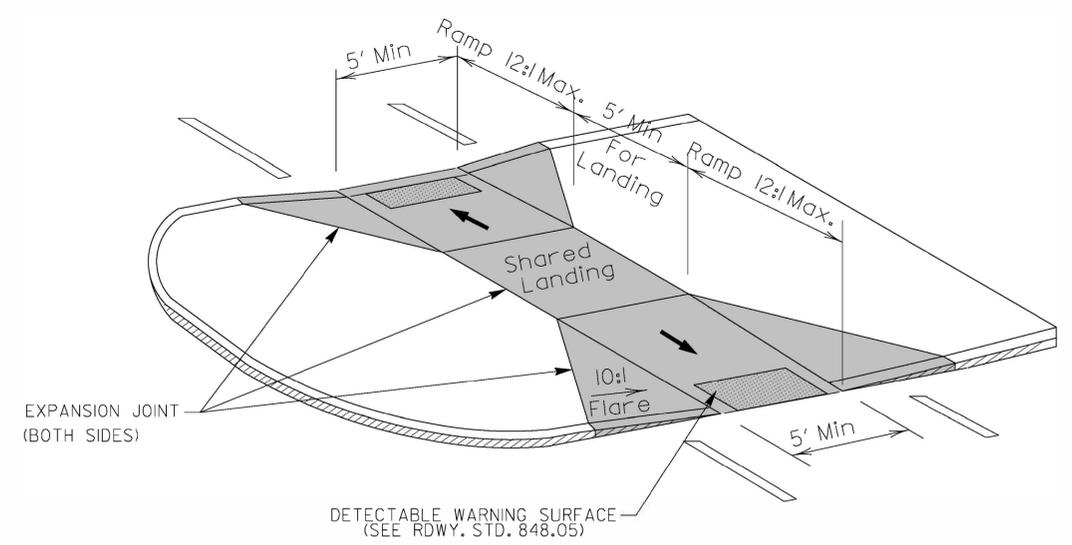


TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY
2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE
ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

**TRIANGULAR ISLAND
WITH CUT THROUGH
TYPE 6**



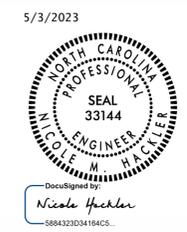
**MEDIAN ISLAND
WITH CUT THROUGH
TYPE 7**



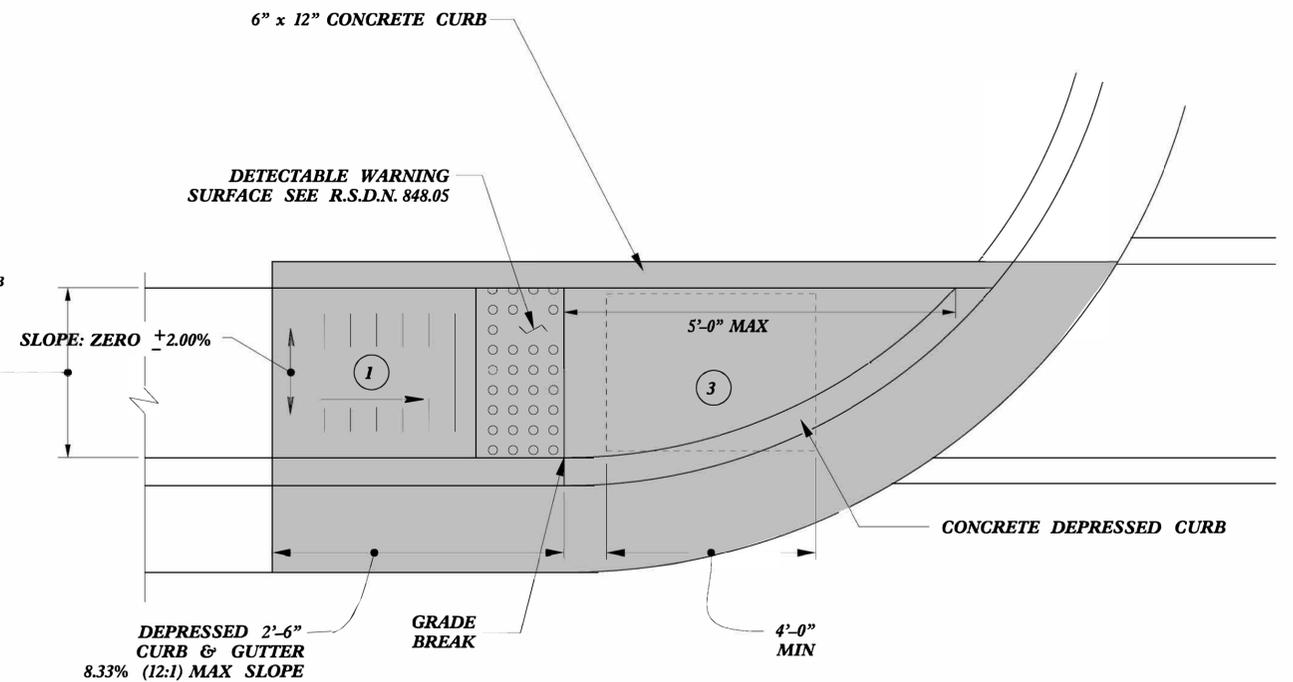
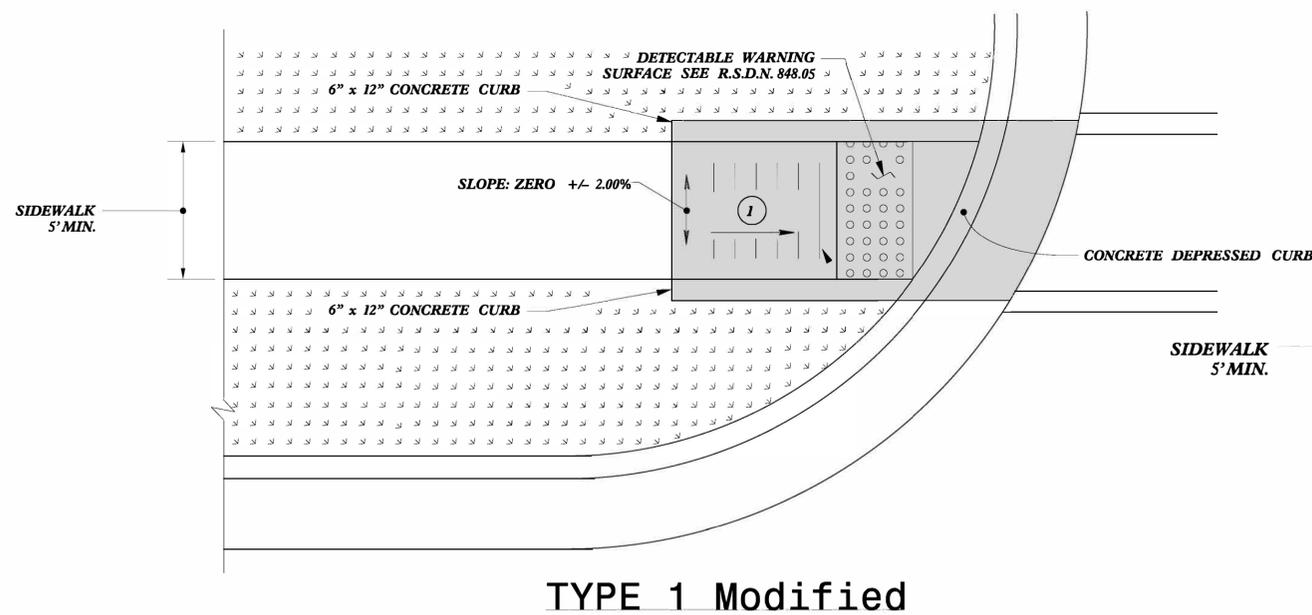
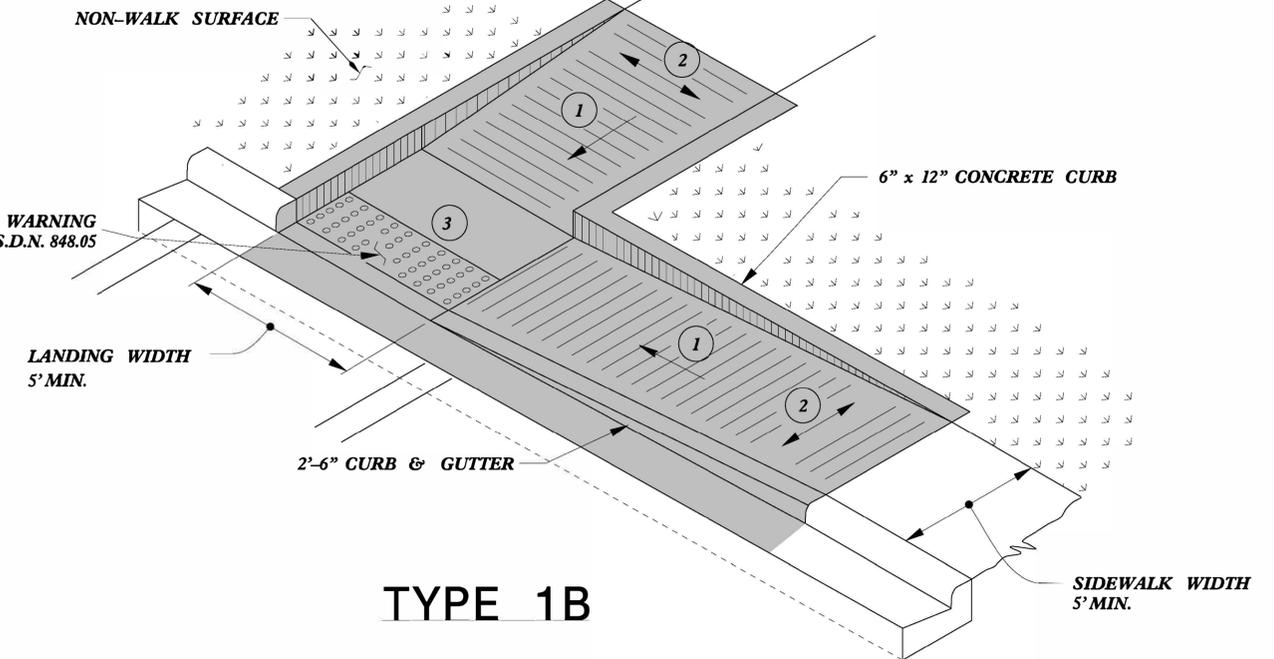
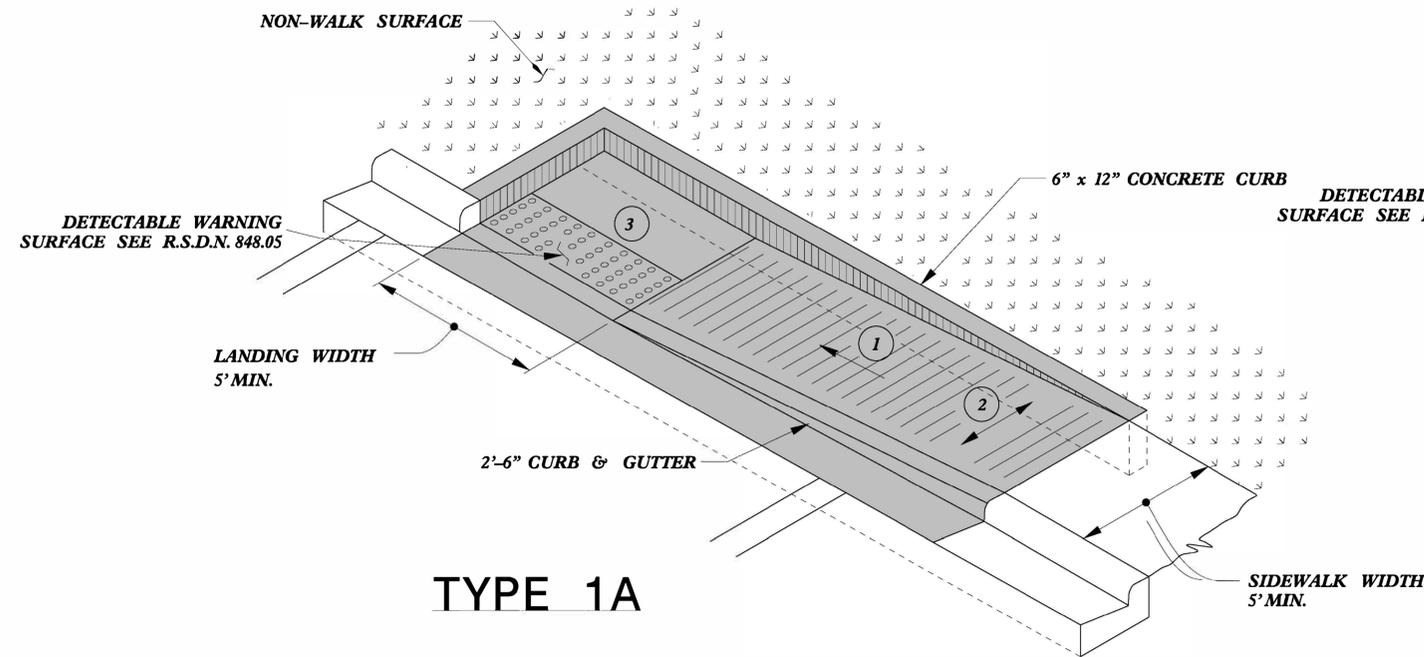
**MEDIAN ISLAND
CURB RAMPS
TYPE 8**

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Median or Turn Lane Islands	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: sids/2012CurbRamp/CurbRampDetails.dgn	



5/14/1999
SYSTEMS CONSULTING SERVICES



- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

PAY LIMITS FOR 1 CURB RAMP

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/3/2023



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

CURB RAMPS
Directional Ramps

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC: sids/2012CurbRamp/CurbRampDetails.dgn

5/14/99

5/14/99

SUMMARY OF EARTHWORK

IN CUBIC YARDS

Station	Station	Uncl. Excav.	Embank. +%	Borrow	Waste
PHASE 1					
-DRIVE2- Sta. 10+00.00	-DRIVE2- Sta. 11+70.00	126	89	0	37
-Y2A- Sta. 15+50.00 LT	-Y2A- Sta. 19+01.64 LT	21	370	349	0
-Y2A- Sta. 15+50.01 RT	-Y2A- Sta. 19+01.65 RT	16	292	276	0
-Y2B- Sta. 10+00.00 LT	-Y2B- Sta. 14+30.00 LT	25	482	457	0
-Y2B- Sta. 10+00.00 RT	-Y2B- Sta. 14+30.0 RT	314	94	0	220
-DRIVE1- Sta. 9+90.00	-DRIVE1- Sta. 11+71.94	17	317	300	0
SUBTOTAL		519	1,644	1,382	257
PHASE 2					
-L2- Sta. 10+00.00 RT	-L2- Sta. 39+50.00 LT	351	4,730	4,379	0
-Y2B- Sta. 14+30.00 LT	-Y2B- Sta. 15+14.01 LT	3	42	39	0
-Y2B- Sta. 15+81.76 LT	-Y2B- Sta. 18+00.00 LT	38	121	83	0
-L2- Sta. 10+00.00 LT	-L2- Sta. 39+50.00 LT	183	5,674	5,491	0
SUBTOTAL		575	10,567	9,992	0
PHASE 3					
-Y2B- Sta. 14+30.00 RT	-Y2B- Sta. 15+14.01 RT	40	24	0	16
-Y2B- Sta. 15+81.76 RT	-Y2B- Sta. 18+00.00 RT	37	44	7	0
-L1- Sta. 11+50.00 LT	-L1- Sta. 21+17.15 LT	2,631	320	0	2,311
-L1- Sta. 11+50.01 RT	-L1- Sta. 21+17.16 RT	1,877	181	0	1,696
-DRIVE3- Sta. 10+00.00	-DRIVE3- Sta. 11+70.00	969	4	0	965
-Y1- Sta. 10+50.00	-Y1- Sta. 13+62.65	77	602	525	0
SUBTOTAL:		5,631	1,175	532	4,988
TOTAL		6,725	13,386	11,906	5,245
MATERIAL FOR SHOULDER CONSTRUCTION			209	209	
WASTE IN LIEU OF BORROW				-109	-109
PROJECT TOTAL:		6,725	13,595	12,006	5,136
EST. 5% REPLACE TOPSOIL ON BORROW PIT				600	
GRAND TOTALS:		6,725		12,606	
SAY:		7,070		13,240	

EST. DDE = 120 CY
 SELECT GRANULAR MATERIAL = 1,500 CY (Contingency)
 UNDERCUT EXCAVATION = 1,250 CY (Contingency)
 UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN TOP 3 FT. OF EMBANKMENT OR BACKFILL
 (-Y1- STA. 12+25 & 12+75) = 1,450 CY

Note: Approximate quantities only. Unclassified Excavation, Fine Grading, Clearing and Grubbing, and Removal of Existing Pavement will be paid for at the contract Lump Sum price for Grading.

PAVEMENT REMOVAL SUMMARY

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	ASPHALT REMOVAL	ASPHALT BREAKUP	CONCRETE REMOVAL	CONCRETE BREAKUP
-DRIVE3-	10+63.95	11+18.80	LT	34.57			
-Y2B-	14+44.97	14+86.54	RT	55.04			
-Y2B-	15+82.29	16+62.73	RT	89.76			
-L2- (Temp. Pvmt.)	10+45.00	22+25	LT	851.36			
TOTAL:				1030.73			
SAY:				1040			

PEDESTRIAN SAFETY RAIL SUMMARY

IN LINEAR FEET

LINE	Station	Station	LENGTH
-L2- RT	17+42.37	19+57.63	216
-L2- RT	34+07.00	35+35.00	129
-DRIVE2- RT	10+25.00	11+25.00	100
TOTAL:			445
SAY:			445

REVISIONS

4/6/2023 4:57:25 PM Rdj_sum_3b-1.dgn
 MICHAEL BURNS

Z:\601

COMPUTED BY: VHB DATE: 3/29/2023
CHECKED BY: VHB DATE: 3/29/2023

PROJECT NO. SHEET NO.
R-5725 3D-1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".

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

Table with columns for Line & Station, Offset, Structure Number, Top Elevation, Invert Elevation, Minimum Required Slope, Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC), R. C. Pipe Class IV, Endwalls, Reinforced Endwalls, Drainage Structure, Quantities for Drainage Structures, Frame, Grates, and Hood, Concrete Transitional Section, and Remarks. Includes a SHEET TOTALS row at the bottom.

**STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS**

SUMMARY OF SUBSURFACE DRAINAGE

LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
CONTINGENCY				SD	200
				TOTAL LF:	200

*UD = Underdrain
 *BD = Blind Drain
 *SD = Subsurface Drain

SUMMARY OF AGGREGATE SUBGRADE STABILIZATION

LINE	Station	Station	Aggregate Type* ASU(1/2)/ AST	Aggregate Thickness INCHES [8" for ASU(2)]	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
-Y2B-	11+75	13+25	ASU (1)	18	125	250	250		
CONTINGENCY			ASU (1)		200	400	400		
					TOTAL CY/TONS/SY:	325	650**	650**	0

*ASU(1/2) = Aggregate Subgrade (Type 1 or 2)
 *AST = Aggregate Stabilization
 **Total tons of "Class IV Subgrade Stabilization" and total square yards of "Geotextile for Soil Stabilization" are only the estimated quantities for ASU(1/2)/AST and may only represent a portion of the subgrade stabilization and geotextile quantities shown in the Item Sheets of the Proposal.

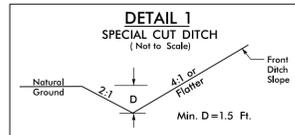
SUMMARY OF ROCK PLATING

LINE	Beginning Slope (H:V)	Approx. Station	Ending Slope (H:V)	Approx. Station	Location LT/RT	Rock Plating Detail No. 1/2/3/4	Riprap Class* 1/2/B	Rock Plating SY
-L2-	1.5:1	17+25	1.5:1	19+75	RT	2	1	1000
							TOTAL SY:	1000

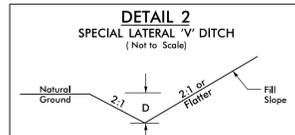
*Use Class 1, 2 or B riprap if riprap class is not shown for rock plating location.

REVISIONS

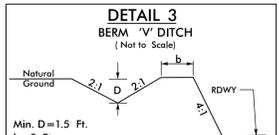
PROJECT REFERENCE NO. R-5725	SHEET NO. 4
ROADWAY DESIGN 5/3/2023 ENGINEER	HYDRAULICS 5/4/2023 ENGINEER
	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



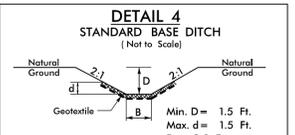
FROM STA. 11+28 TO STA. 13+00 -LI- RT
FROM STA. 12+50 TO STA. 17+00 -LI- LT
FROM STA. 18+00 TO STA. 18+39 -LI- RT



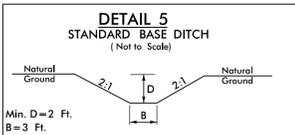
FROM STA. 17+00 TO STA. 18+32 -LI- LT
FROM STA. 18+39 TO STA. 18+50 -LI- RT



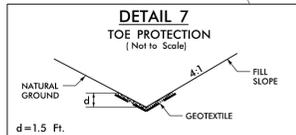
FROM STA. 17+25 TO STA. 18+39 -LI- RT



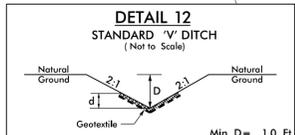
FROM STA. 18+27 TO 18+39 -LI- RT
Type of Liner = Class B Rip Rap



FROM STA. 17+94 TO STA. 18+32 -LI- LT
Type of Liner = Class B Rip Rap



FROM STA. 18+50 TO STA. 20+00 -LI- RT
Type of Liner = Class B Rip Rap



FROM STA. 18+31 TO STA. 18+64 -LI- LT
Type of Liner = Class B Rip Rap

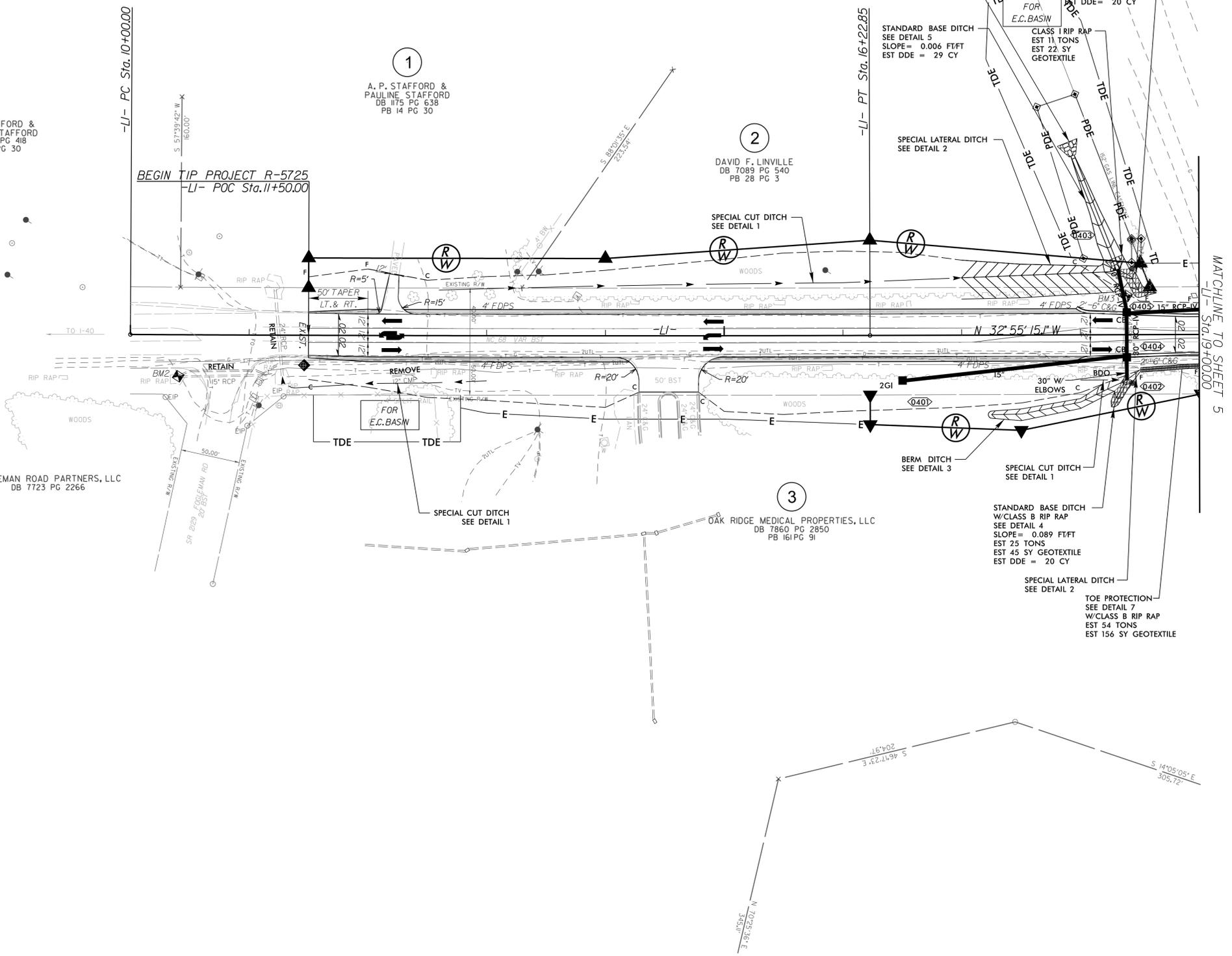
-LI-
PI Sta 13+11.43
 $\Delta = 0^{\circ} 29' 23.8''$ (LT)
 $D = 0^{\circ} 04' 43.2''$
 $L = 622.85'$
 $T = 311.43'$
 $R = 72,838.42'$
 $S_e = NC$
Runoff = 60'

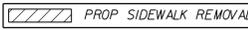
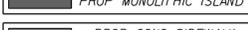
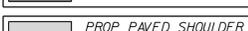
A. P. STAFFORD & PAULINE STAFFORD
DB 1364 PG 418
PB 14 PG 30

1
A. P. STAFFORD & PAULINE STAFFORD
DB 1175 PG 638
PB 14 PG 30

2
DAVID F. LINVILLE
DB 7089 PG 540
PB 28 PG 3

3
OAK RIDGE MEDICAL PROPERTIES, LLC
DB 7860 PG 2850
PB 161 PG 91

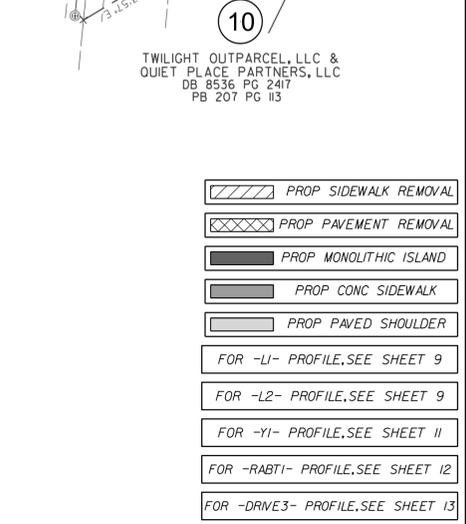
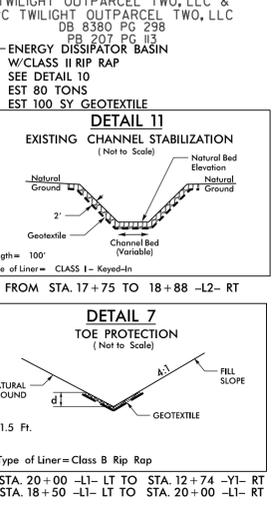
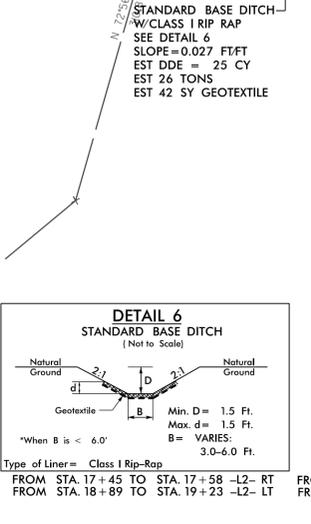
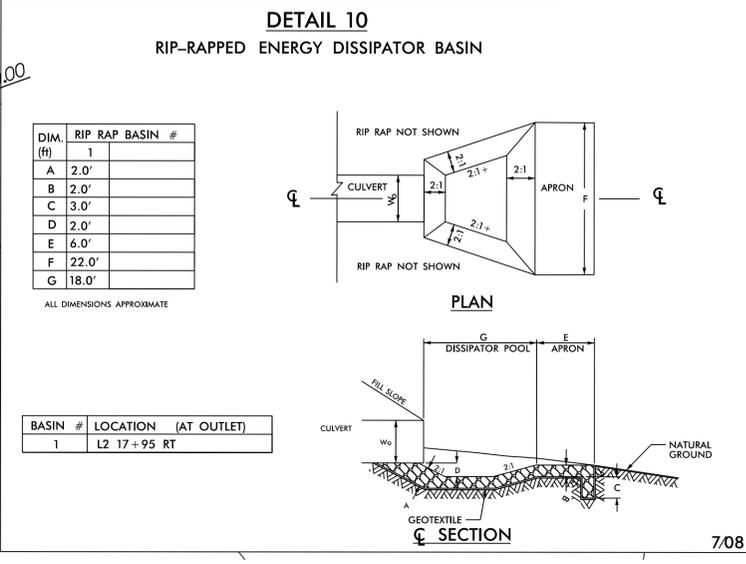
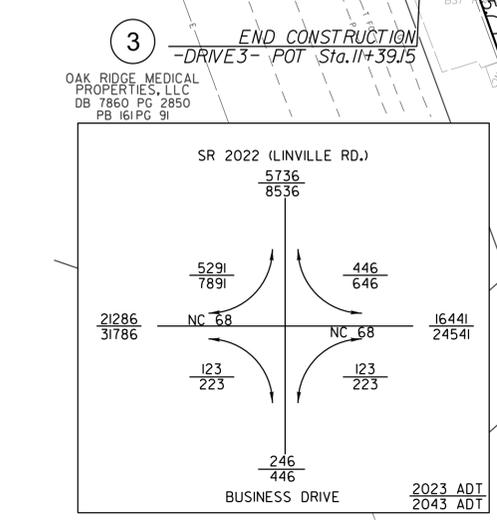
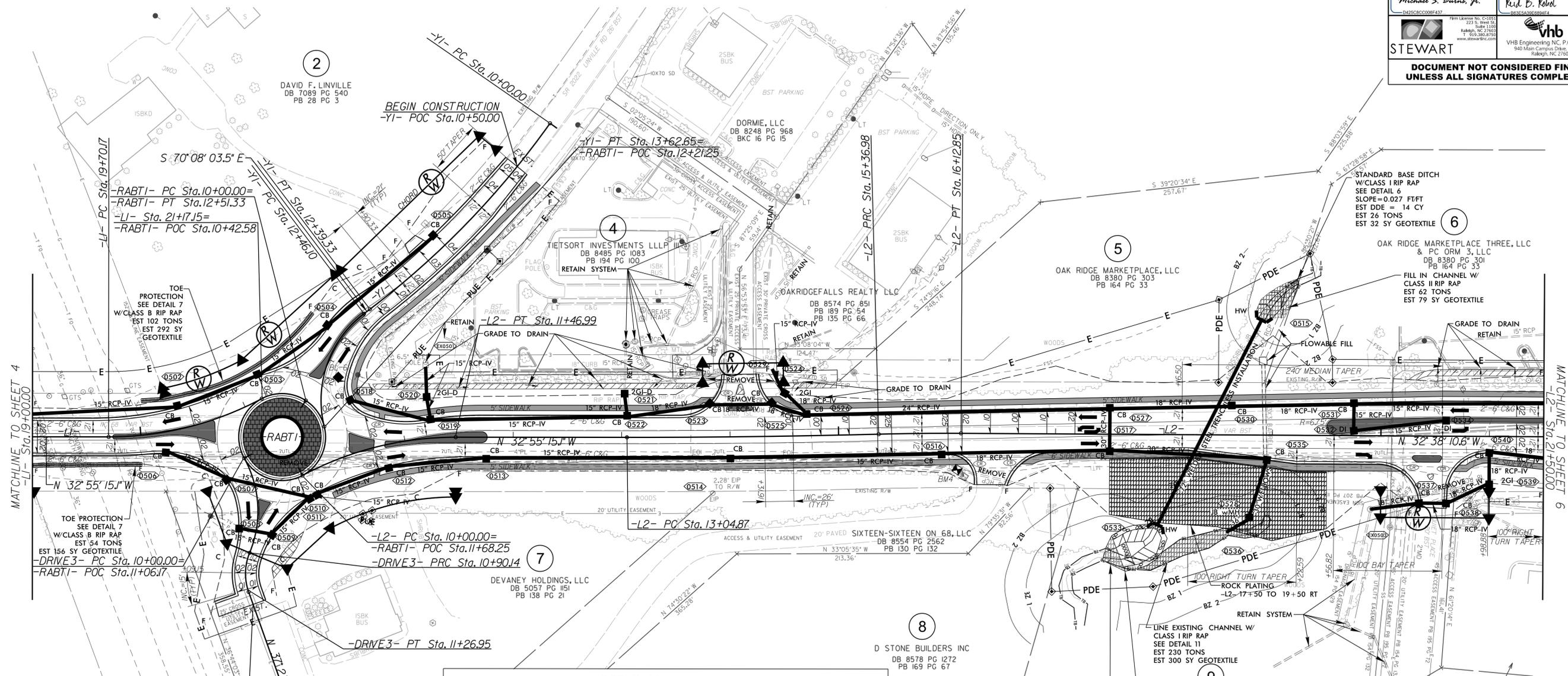


-  PROP SIDEWALK REMOVAL
-  PROP PAVEMENT REMOVAL
-  PROP MONOLITHIC ISLAND
-  PROP CONC SIDEWALK
-  PROP PAVED SHOULDER
- FOR -LI- PROFILE, SEE SHEET 9

REVISIONS

5/3/2023 R5725_Rd.dwg
5/14/2023 R5725_Rd.dwg
5/14/2023 R5725_Rd.dwg

-LI-	-RABTI-	-L2-	-YI-	-DRVE3-
PI Sta 20+45.17 Δ = 28° 04' 21.0" (LT) D = 19' 05" 54.9" L = 146.99' T = 75.00' R = 300.00' V ₀ = 30 MPH	PI Sta 10+00.00 Δ = 360° 00' 00.0" (LT) D = 143' 14" 22.0" L = 251.33' T = 0.00' R = 40.00'	PI Sta 10+75.00 Δ = 28° 04' 21.0" (RT) D = 19' 05" 54.9" L = 146.99' T = 75.00' R = 300.00' V ₀ = 30 MPH	PI Sta 14+20.93 Δ = 1° 32' 26.8" (LT) D = 0' 39" 49.7" L = 232.11' T = 116.06' R = 8,631.32' S _e = NC Runoff = 60'	PI Sta 15+74.92 Δ = 1° 49' 31.3" (RT) D = 2' 24" 22.1" L = 75.86' T = 37.93' R = 2,381.22'
PI Sta 11+20.59 Δ = 17° 21' 04.4" (RT) D = 7' 15" 00.0" L = 239.33' T = 790.29' R = 790.29' S _e = 4% Runoff = 84'	PI Sta 13+12.01 Δ = 66° 46' 49.4" (LT) D = 57' 17" 44.8" L = 116.55' T = 65.91' R = 100.00' V ₀ = 20 MPH	PI Sta 10+48.39 Δ = 57° 38' 57.3" (RT) D = 57' 17" 44.8" L = 90.14' T = 48.39' R = 100.00' V ₀ = 20 MPH	PI Sta 11+09.43 Δ = 42° 10' 38.1" (LT) D = 114' 35" 29.6" L = 36.81' T = 19.28' R = 50.00' V ₀ = 15 MPH	



- PROP SIDEWALK REMOVAL
- PROP PAVEMENT REMOVAL
- PROP MONOLITHIC ISLAND
- PROP CONC SIDEWALK
- PROP PAVED SHOULDER
- FOR -LI- PROFILE, SEE SHEET 9
- FOR -L2- PROFILE, SEE SHEET 9
- FOR -YI- PROFILE, SEE SHEET 11
- FOR -RABTI- PROFILE, SEE SHEET 12
- FOR -DRVE3- PROFILE, SEE SHEET 13

REVISIONS

MATCHLINE TO SHEET 6
-L2- Sta. 24+50.00

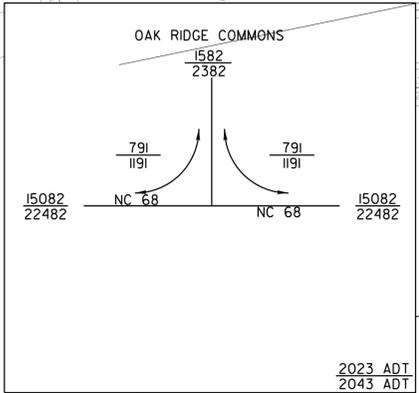
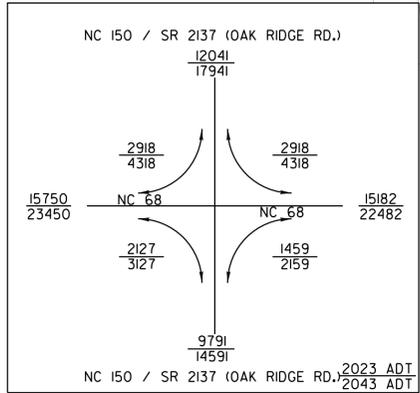
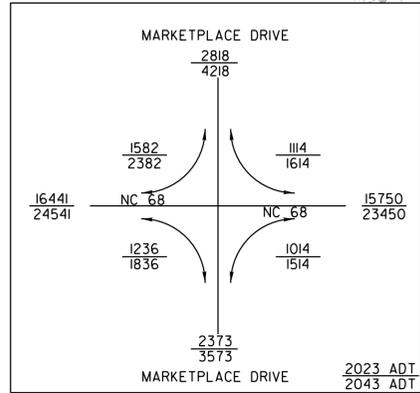
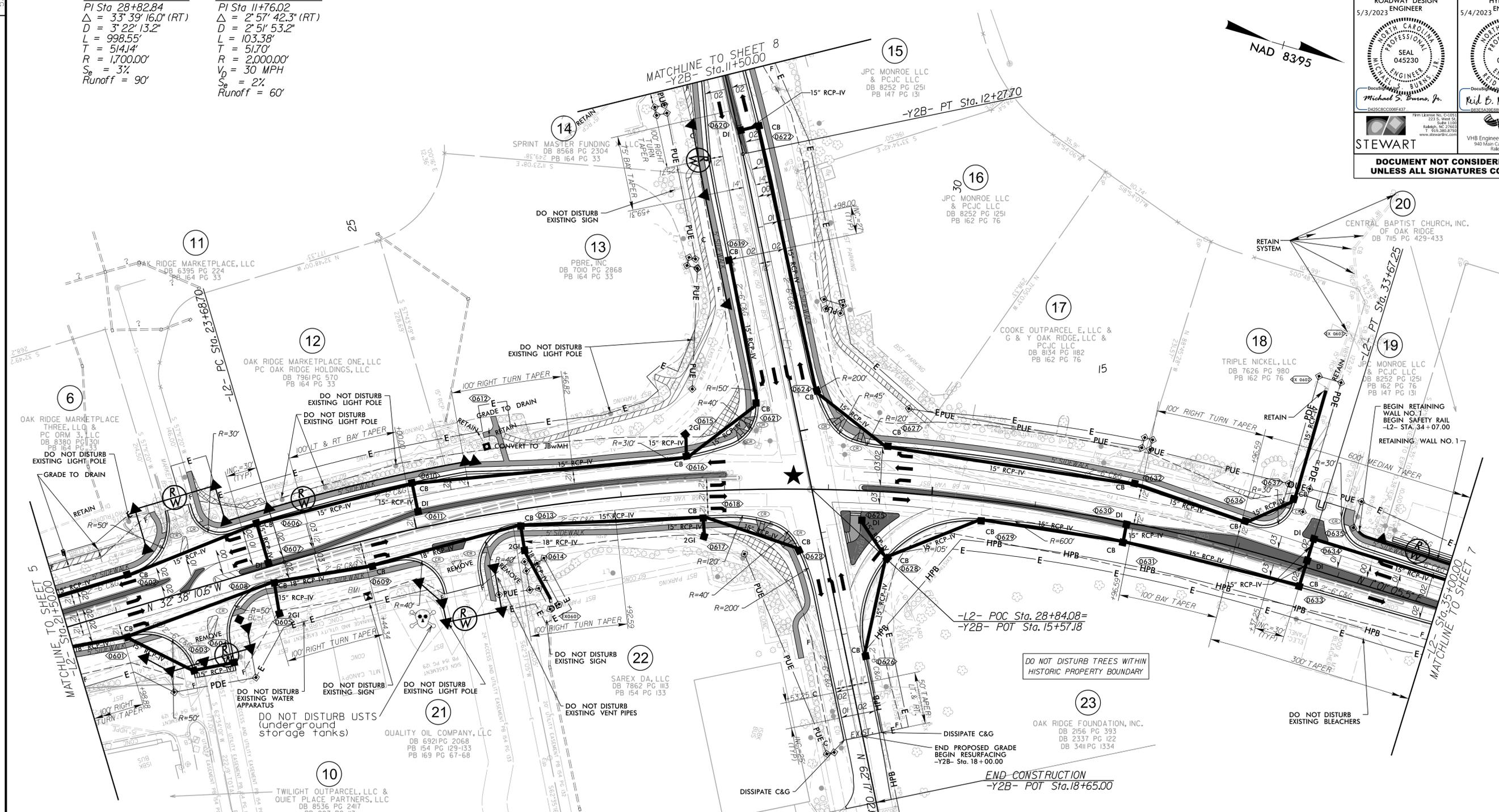
MATCHLINE TO SHEET 4
-LI- Sta. 19+00.00

5/3/2023 R5725_Rdwy_psh.05.dgn
5/14/2023

PROJECT REFERENCE NO. R-5725	SHEET NO. 6
ROADWAY DESIGN ENGINEER 5/3/2023	HYDRAULICS ENGINEER 5/4/2023
Michael S. Burns, Jr. 4455 SC 1000 #437	Reid E. Kolod 4455 SC 1000 #437
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-L2-
 PI Sta 28+82.84
 $\Delta = 33^{\circ} 39' 16.0''$ (RT)
 $D = 3^{\circ} 22' 13.2''$
 $L = 998.55'$
 $T = 514.14'$
 $R = 1700.00'$
 $S_e = 3\%$
 Runoff = 90'

-Y2B-
 PI Sta 11+76.02
 $\Delta = 2^{\circ} 57' 42.3''$ (RT)
 $D = 2^{\circ} 51' 53.2''$
 $L = 103.38'$
 $T = 51.70'$
 $R = 2000.00'$
 $V_D = 30$ MPH
 $S_e = 2\%$
 Runoff = 60'



★ SIGNAL MODIFICATION

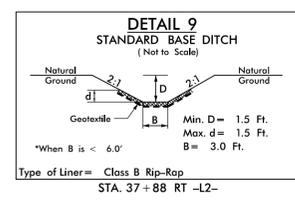
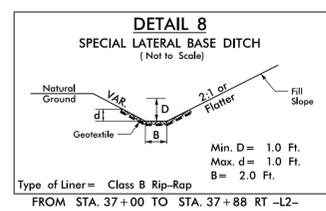
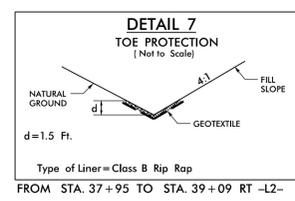
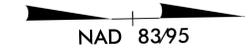
- PROP SIDEWALK REMOVAL
- PROP PAVEMENT REMOVAL
- PROP MONOLITHIC ISLAND
- PROP CONC SIDEWALK
- PROP PAVED SHOULDER

FOR -L2- PROFILE, SEE SHEET 10
 FOR -Y2B- PROFILE, SEE SHEET 12

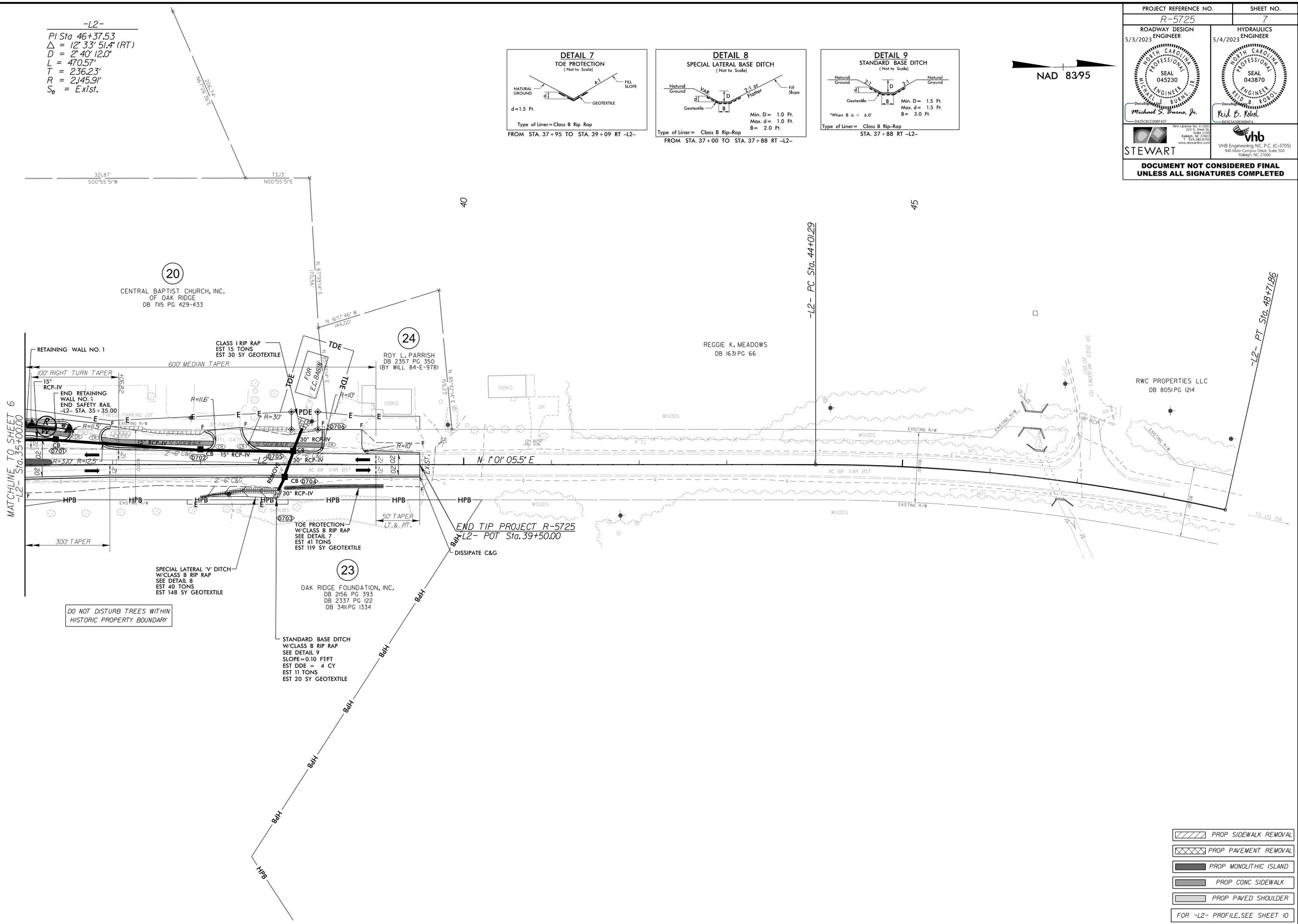
REVISIONS

5/3/2023 R5725_RdL_psh06.dgn I:\STEWART\5725\5725.dgn

PROJECT REFERENCE NO. R-5725	SHEET NO. 7
ROADWAY DESIGN ENGINEER 5/3/2023	HYDRAULICS ENGINEER 5/4/2023
	
Michael S. Burns, Jr. D495C0C00F437	Reid E. Kolod. B836A0E004F4
	
STEWART	VHB Engineering NC, P.C. (C-3705) 940 Main Campus Drive, Suite 500 Raleigh, NC 27603
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



-L2-
PI Sta 46+37.53
Δ = 12° 33' 51.4" (RT)
D = 2° 40' 12.0"
L = 470.57'
T = 236.23'
R = 2,145.91'
S_e = Exi.st.



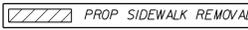
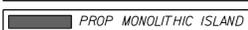
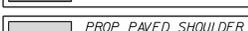
MATCHLINE TO SHEET 6
-L2- Sta. 35+00.00

-L2- PT Sta. 48+71.86

-L2- PC Sta. 44+01.29

REVISIONS

5/3/2023 R5725_RdL_psh07.dgn
USER:mkempzie

-  PROP SIDEWALK REMOVAL
-  PROP PAVEMENT REMOVAL
-  PROP MONOLITHIC ISLAND
-  PROP CONC SIDEWALK
-  PROP PAVED SHOULDER
- FOR -L2- PROFILE, SEE SHEET 10