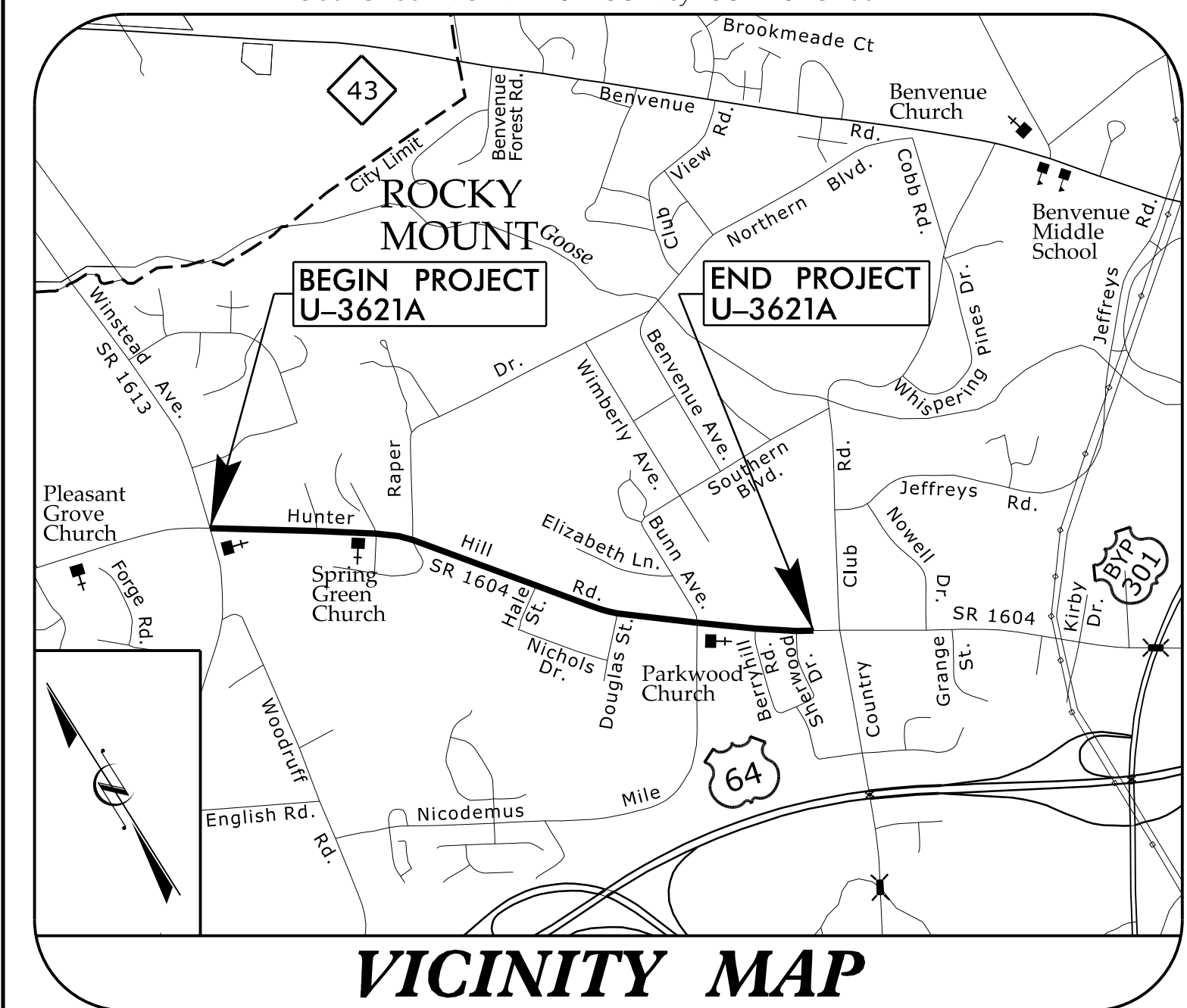


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with their signature on that page.**

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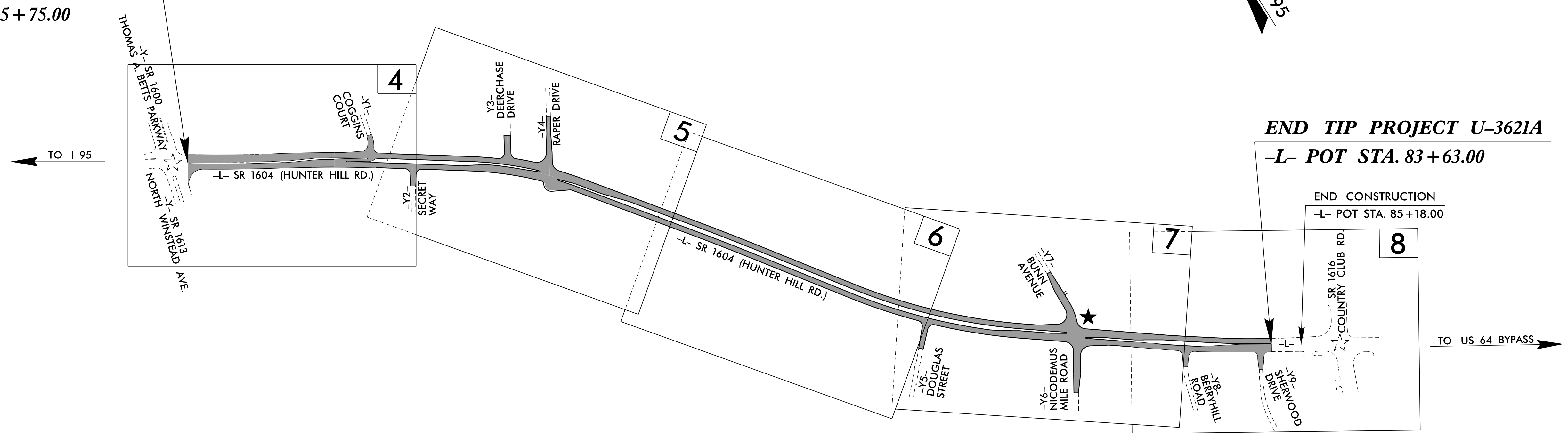
See Sheet 1A For Index of Sheets
 See Sheet 1B For Conventional Symbols
 See Sheet 1C-1 For Survey Control Sheet



VICINITY MAP

BEGIN TIP PROJECT U-3621A

-L- POC STA. 25 + 75.00



END TIP PROJECT U-3621A

-L- POT STA. 83 + 63.00

END CONSTRUCTION
 -L- POT STA. 85 + 18.00

TO US 64 BYPASS

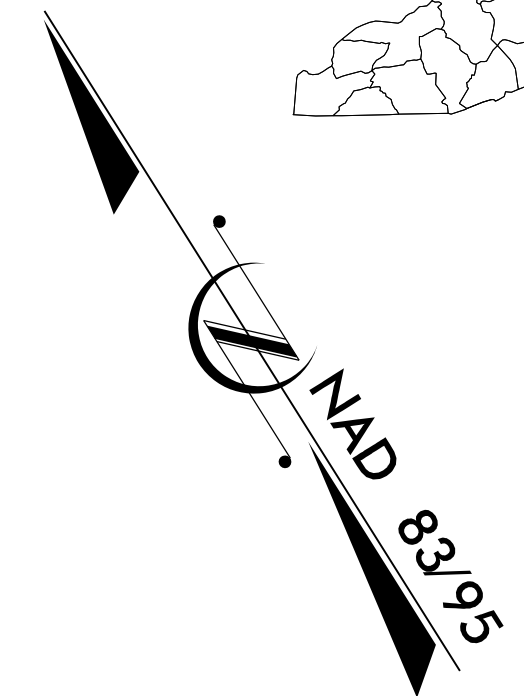
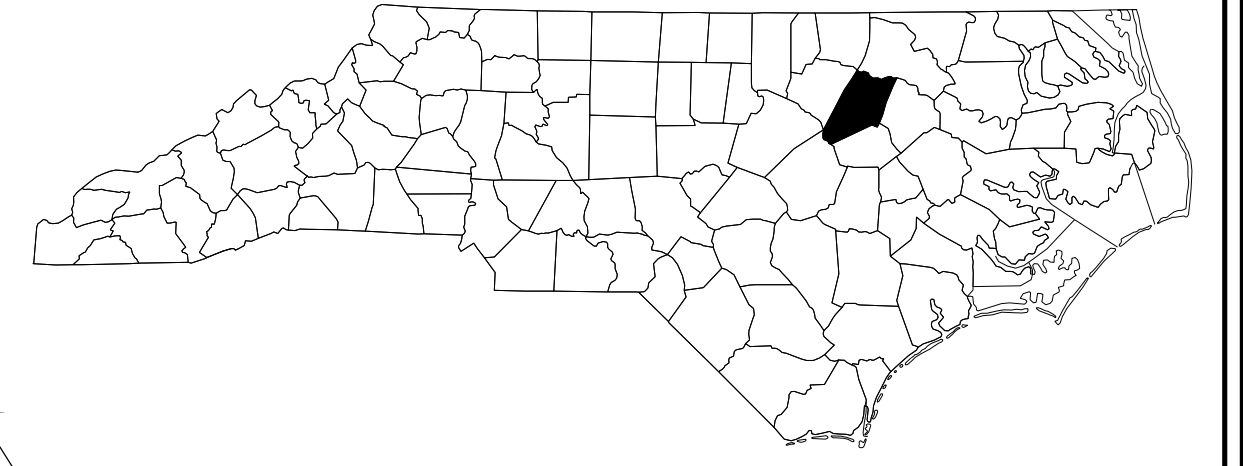
STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

NASH COUNTY

**LOCATION: ROCKY MOUNT - SR 1604 (HUNTER HILL ROAD)
 FROM SR 1613 (NORTH WINSTEAD AVE) TO
 SR 1616 (COUNTRY CLUB ROAD)
 TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND SIGNALS**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3621A	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34964.1.2	STP-1604(008)	P.E.	
34964.3.2		RW	
34964.3.4		UTILITY	
34964.2.2		CONST.	

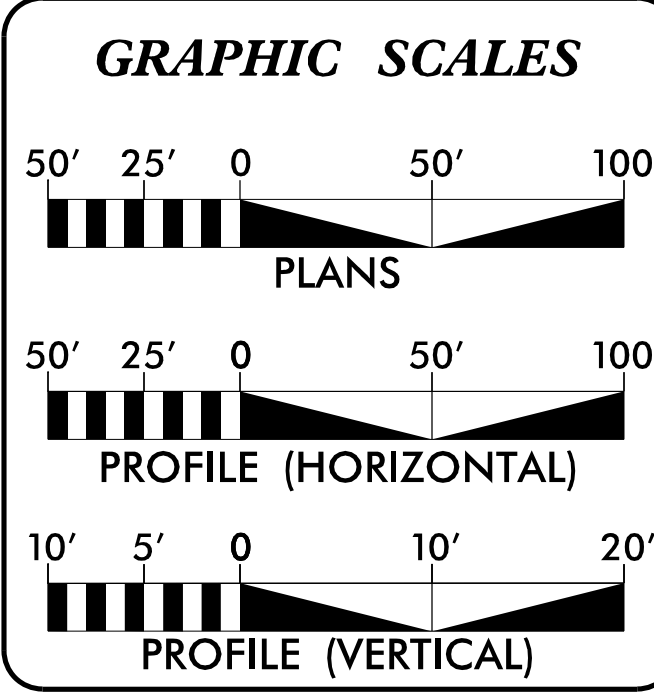
☆ EXISTING TRAFFIC SIGNAL
 ★ PROPOSED TRAFFIC SIGNAL



TIP PROJECT: U-3621A

CONTRACT: C203942

THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.



DESIGN DATA

ADT 2017 =	21740
ADT 2040 =	33400
K =	9 %
D =	60 %
T =	3 % *
V =	50 MPH
* TTST =	1% DUAL = 2%
MINOR URBAN ARTERIAL SUB-REGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-3621A =	1.096 Miles
TOTAL LENGTH TIP PROJECT U-3621A =	1.096 Miles

Prepared in the Office of:

SEPI
 ENGINEERING & CONSTRUCTION
 1025 Wade Avenue
 Raleigh, NC 27605
 Tel: 919-789-9977
 Fax: 919-789-9591
 License: C-2197

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
 JULY 23, 2015

LETTING DATE:
 JUNE 20, 2017

BEN CRAWFORD, PE
 PROJECT ENGINEER

DANIEL W. GARDNER, JR., PE
 PROJECT DESIGN ENGINEER

GARY R. LOVERING, PE
 NCDOT CONTACT

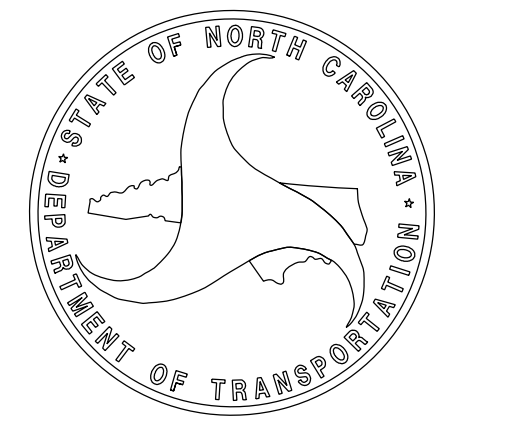
HYDRAULICS ENGINEER

5/4/2017
 DocuSigned by:
 Gary R. Lovering, Jr.
 SIGNATURE: _____
 P.E.

ROADWAY DESIGN ENGINEER

5/4/2017
 DocuSigned by:
 Daniel W. Gardner, Jr.
 SIGNATURE: _____
 P.E.

DOCUMENT NOT CONSIDERED FINAL
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License: C-2197

PROJECT REFERENCE NO. U-3621A	SHEET NO. 1A
ROADWAY DESIGN ENGINEER	
Daniel W. Gardner, Jr. <small>DocuSigned by</small>	

**DOCUMENT NOT CONSIDERED FINAL
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SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL PLAN SHEET SYMBOLS
1C-1 THRU 1C-2	SURVEY CONTROL SHEETS
2A-1 THRU 2A-3	PAVEMENT SCHEDULE, WEDGING DETAILS, AND TYPICAL SECTIONS
2B-1	DETAIL OF -Y1- AND -L- INTERSECTION
2C-1	COAL COMBUSTION PRODUCT PLACEMENT DETAIL
2C-2	TRANSITION FROM 2'-6" C & G TO CONCRETE VALLEY GUTTER
2C-3	MINIMUM DEPTH CONCRETE CATCH BASIN DETAIL
3B-1	SUMMARY OF EARTHWORK, REMOVAL OF ASPHALT PAVEMENT SUMMARY, AND CHAIN LINK FENCE SUMMARY
3D-1 THRU 3D-7	DRAINAGE SUMMARIES
3G-1	SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION AND SUMMARY OF SUBSURFACE DRAINAGE
3P-1	PARCEL INDEX SHEET
4 THRU 8	PLAN SHEETS
9 THRU 12	PROFILE SHEETS
TMP-1 THRU TMP-18	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-7	PAVEMENT MARKING PLANS
EC-1 THRU EC-13	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-12	SIGNING PLANS
SIG-1 THRU SIG-2.2	SIGNAL PLANS
SIG-M1 THRU SIG-M8	STANDARD DRAWINGS FOR METAL POLES
SCP-1 THRU SCP-4	COMMUNICATIONS CABLE AND CONDUIT ROUTING CABLES
UC-1 THRU UC-10	UTILITY CONSTRUCTION PLANS
UD-1 THRU UD-6	UTILITIES BY OTHERS PLANS
X-1	CROSS-SECTION SUMMARY SHEET
X-1A THRU X-1B	CROSS-SECTION INDEX SHEET
X-2 THRU X-30	CROSS-SECTIONS

GENERAL NOTES:

2012 SPECIFICATIONS
EFFECTIVE: 01-17-2012
REVISED: 01-24-2017

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.

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.

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 CenturyLink, City of Rocky Mount (Water & Power), Piedmont Natural Gas, and MCNC-Communications.

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 CONTRACT.

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.

EFF. 01-17-2012
REV. 02-29-2016

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
DIVISION 2 - EARTHWORK	
200.03	Method of Clearing - Method III
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
225.06	Method of Grading Sight Distance at Intersections
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.10	Driveway Pipe Construction
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
806.01	Concrete Right-of-Way Marker
806.02	Granite Right-of-Way Marker
815.02	Subsurface Drain
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
840.25	Anchorage for Frames - Brick or Concrete or Precast
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
840.72	Pipe Collar
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
852.01	Concrete Islands
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
852.10	Median Construction - with Curb and Gutter
866.01	Chain Link Fence - 4', 5' and 6' High Fence
876.01	Rip Rap in Channels
876.02	Guide for Rip Rap at Pipe Outlets

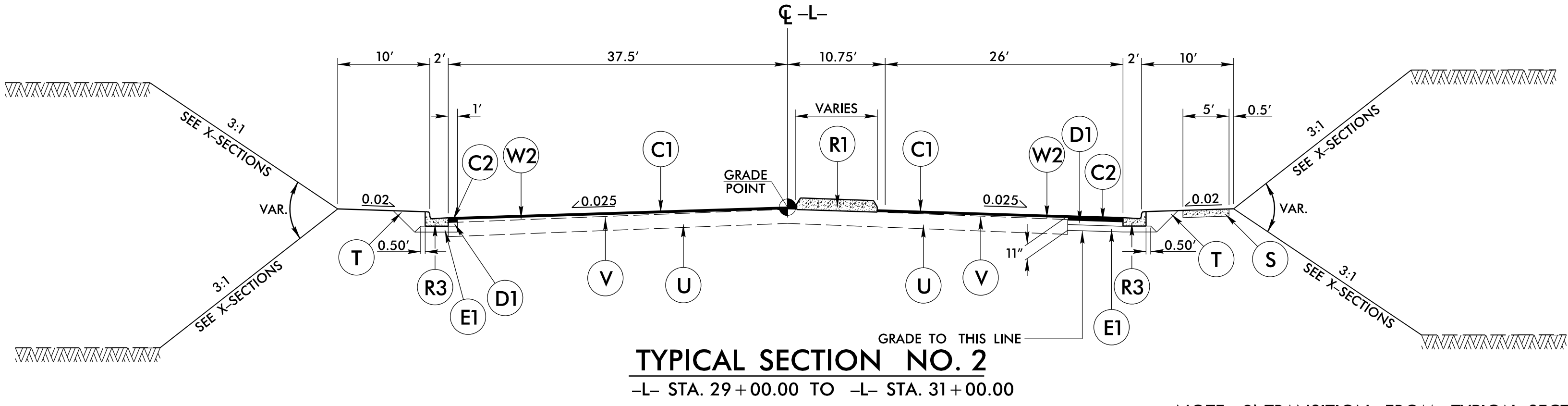
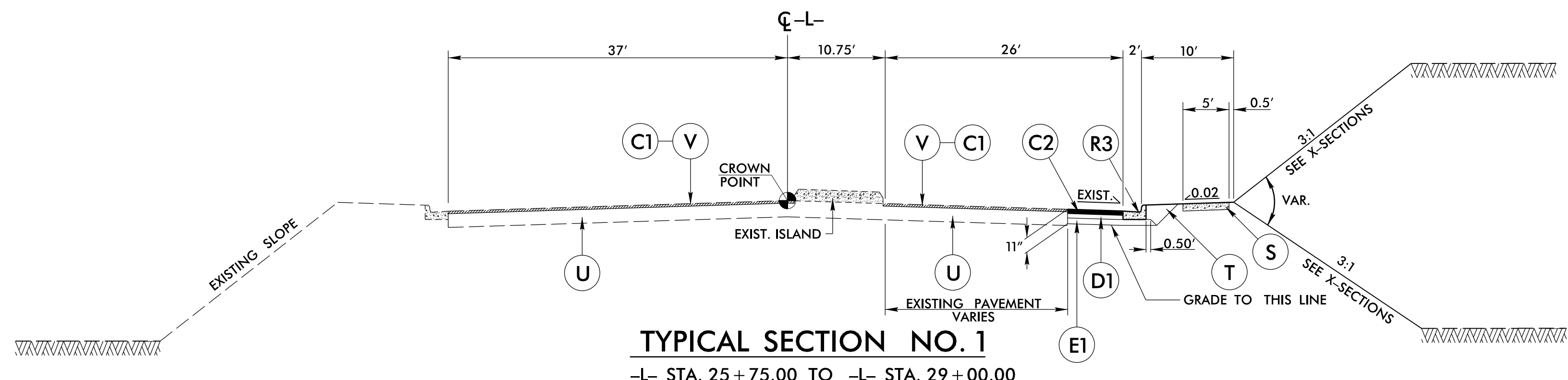
**PAVEMENT SCHEDULE
(FINAL PAVEMENT DESIGN)**

C1	PROP. APPROX. 1½" 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 LESS THAN 1.5" OR GREATER THAN 2" 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 5.5" IN DEPTH.
L	12" CLASS IV AGGREGATE STABILIZATION
N	GEOTEXTILE FOR SOIL STABILIZATION
R1	5" MONOLITHIC CONCRETE ISLAND (KEYED IN).
R2	1'-6" CONCRETE CURB AND GUTTER.
R3	2'-6" CONCRETE CURB AND GUTTER.
R4	2' VALLEY GUTTER.
S	4" CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V	MILLING BITUMINOUS PAVEMENT, 1½" DEPTH.
W1	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE STANDARD WEDGING DETAIL NO. 1)
W2	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE STANDARD WEDGING DETAIL NO. 2)
W3	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE STANDARD WEDGING DETAIL NO. 3)

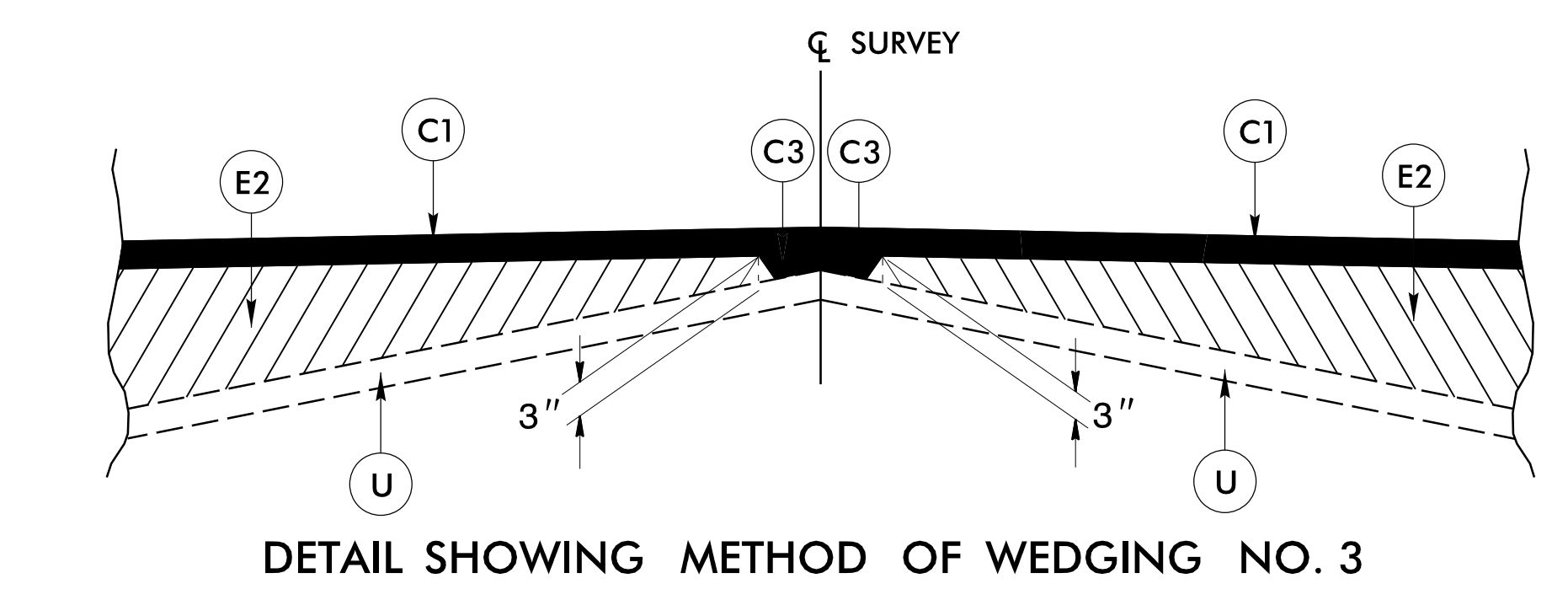
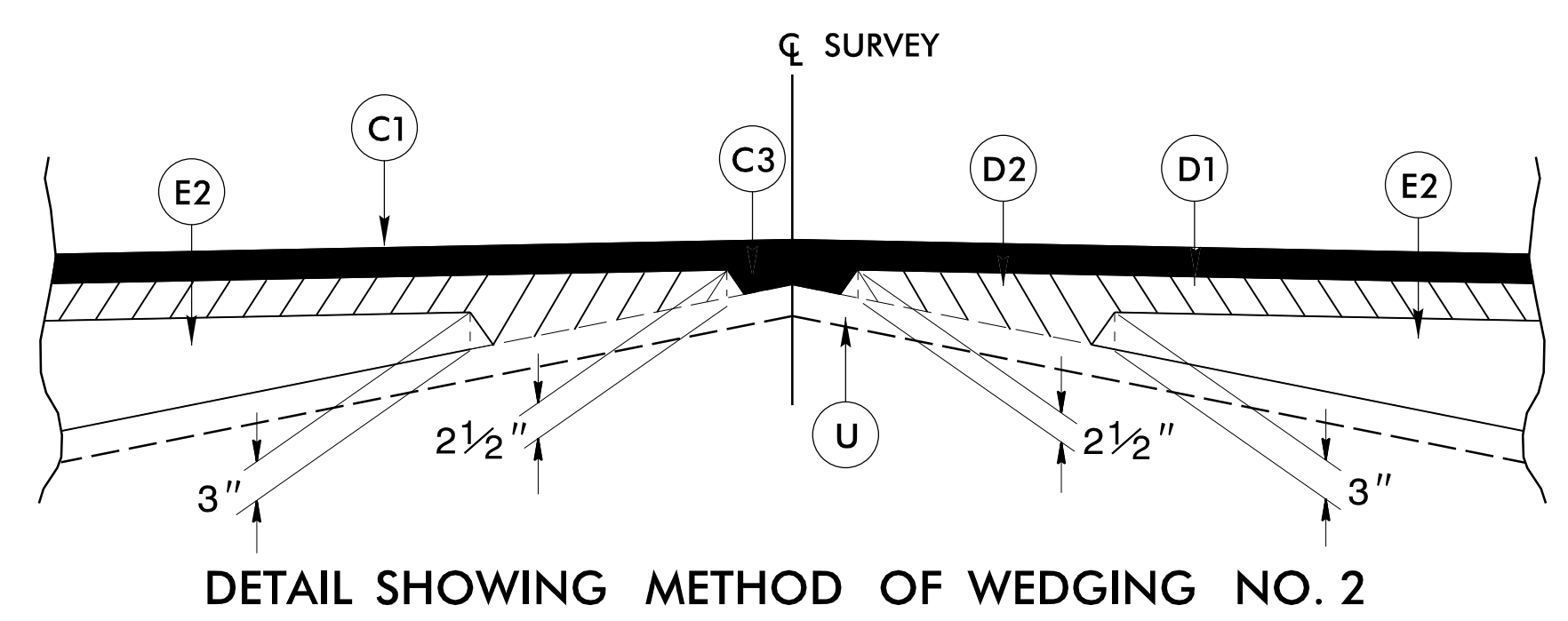
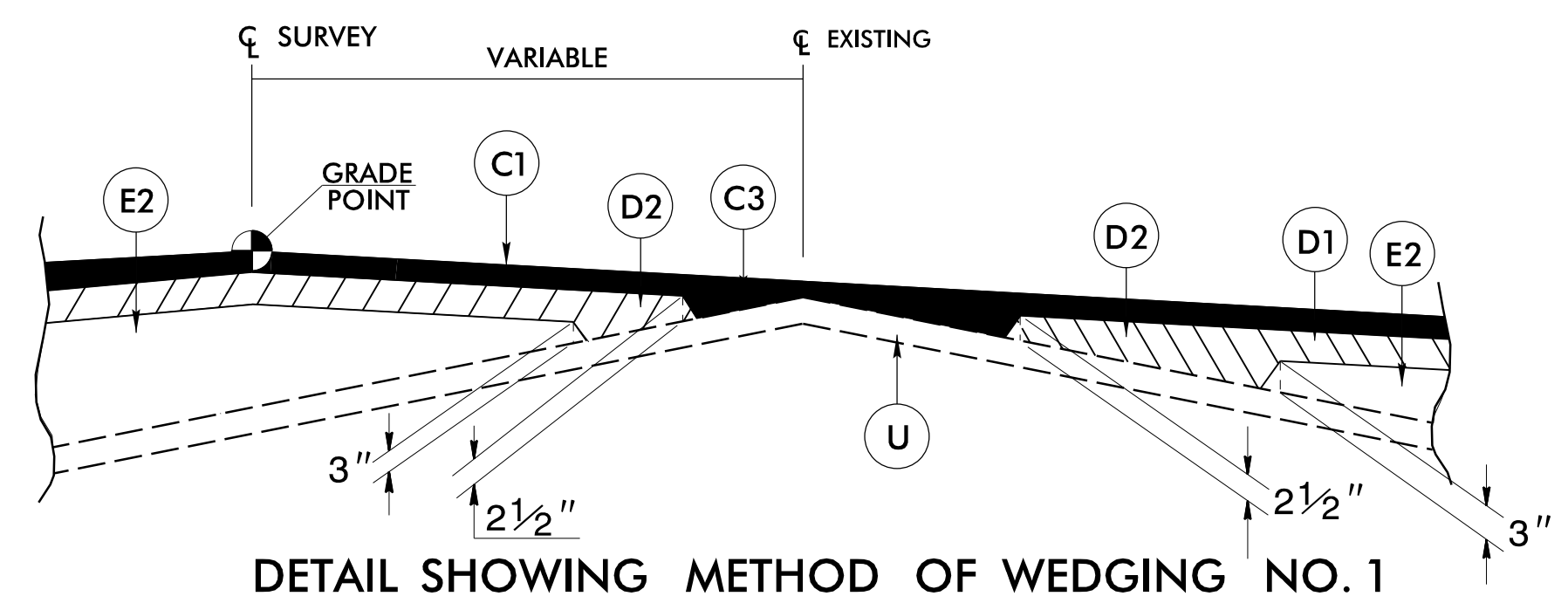
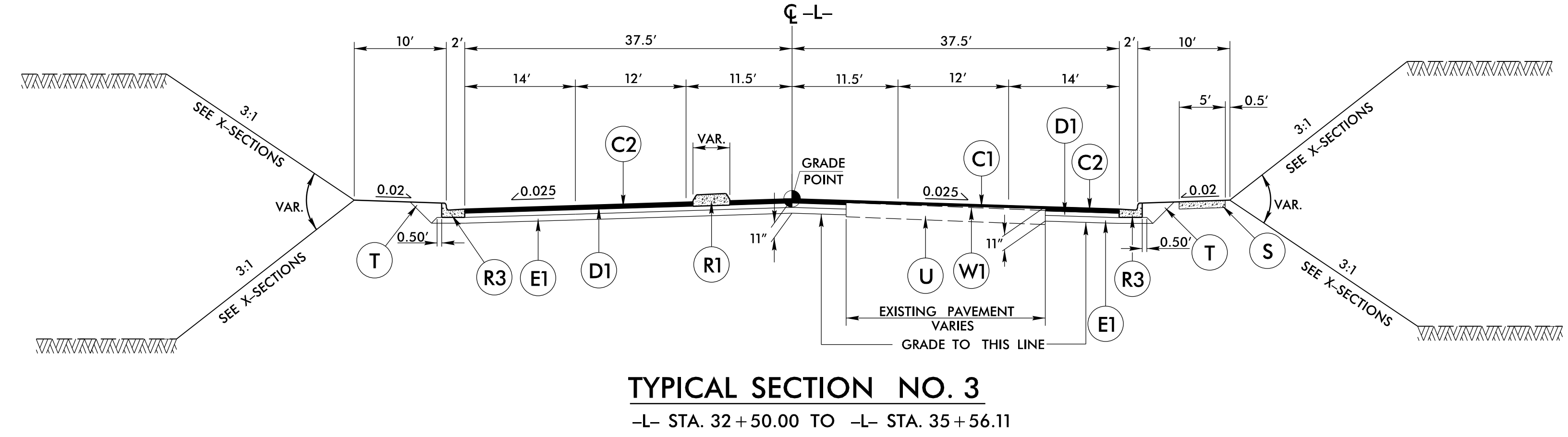
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE SHOWN.

SEPI
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Raleigh, NC 27605
Tel: 919-789-9977
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PROJECT REFERENCE NO. U-3621A	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER <i>David W. Gardner, Jr.</i> SEAL 33871 4/12/2007	PAVEMENT DESIGN ENGINEER <i>Clark S. Morrison</i> SEAL 22896 4/12/2007
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



NOTE: 2) TRANSITION FROM TYPICAL SECTION NO. 2 TO TYPICAL SECTION NO. 3
-L- STA. 31+00.00 TO -L- STA. 32+50.00 (MEDIAN TAPER)

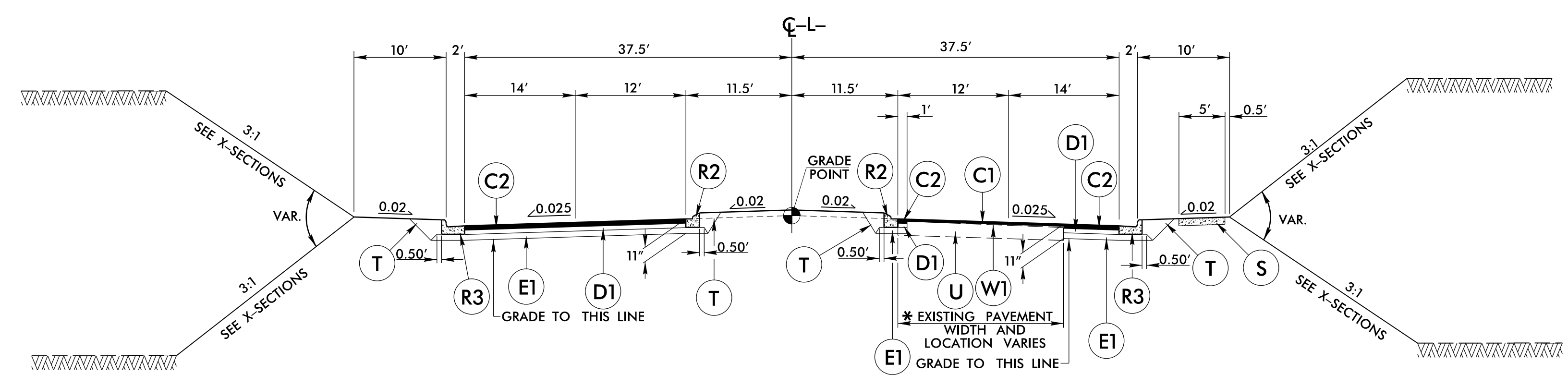




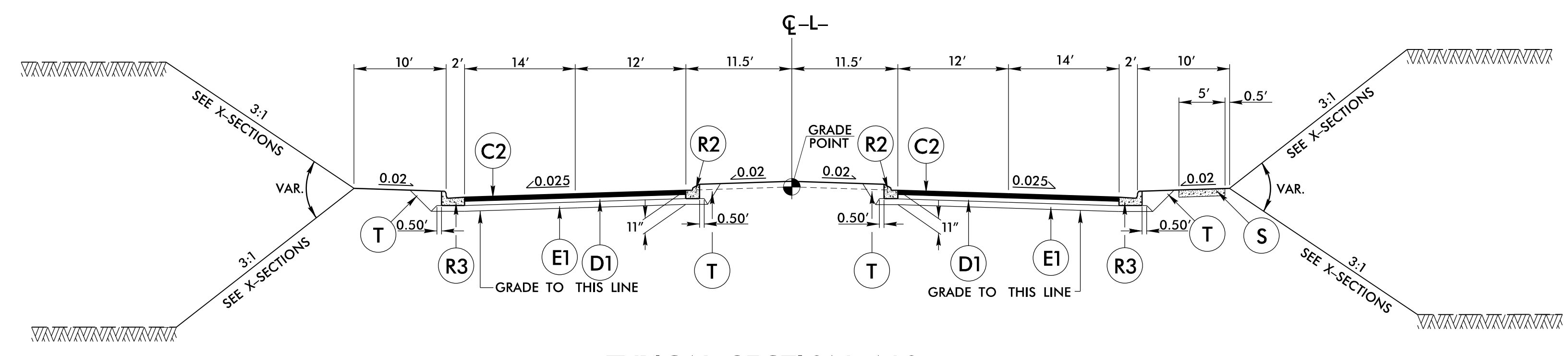
PROJECT REFERENCE NO. U-3621A	SHEET NO. 2A-2
ROADWAY DESIGN ENGINEER SEAL 33871 4/12/2007 Daniel W. Gardner, Jr.	PAVEMENT DESIGN ENGINEER SEAL 22896 4/12/2007 Clark S. Morrison

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

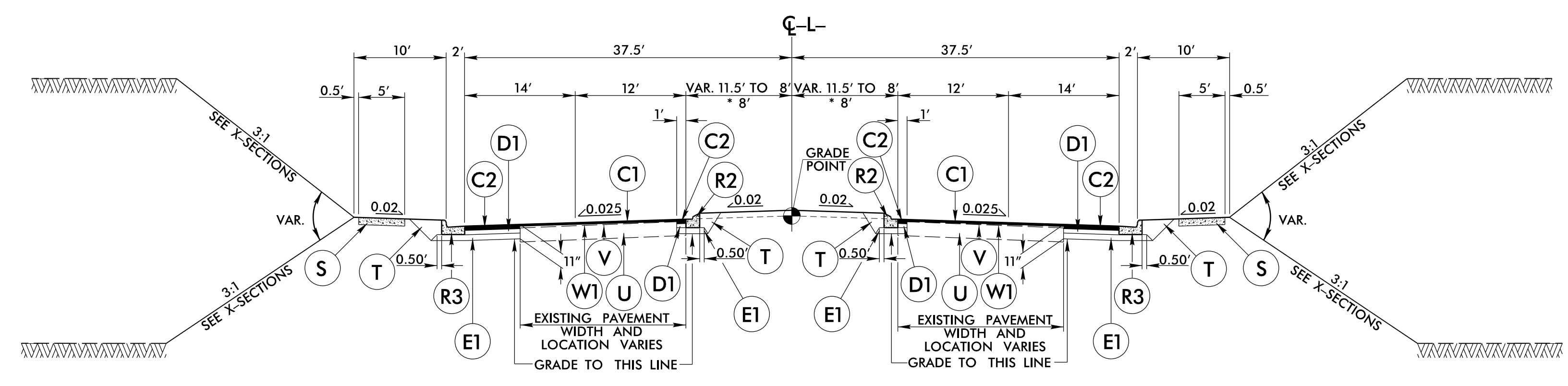
PAVEMENT SCHEDULE	
C1	1.5" S9.5B
C2	3" S9.5B.
C3	VAR. S9.5B
D1	4" I19.0B
D2	VAR. I19.0B
E1	4" B25.0B
E2	VAR. B25.0B
L	12" CL. IV AGG. STAB.
N	GEOTEXT. FOR SOIL STAB.
R1	5" MONOLITHIC ISLAND
R2	1'-6" CURB AND GUTTER
R3	2'-6" CURB AND GUTTER
R4	2' VALLEY GUTTER
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING
W1	WEDGING (SEE DETAIL 1)
W2	WEDGING (SEE DETAIL 2)
W3	WEDGING (SEE DETAIL 3)



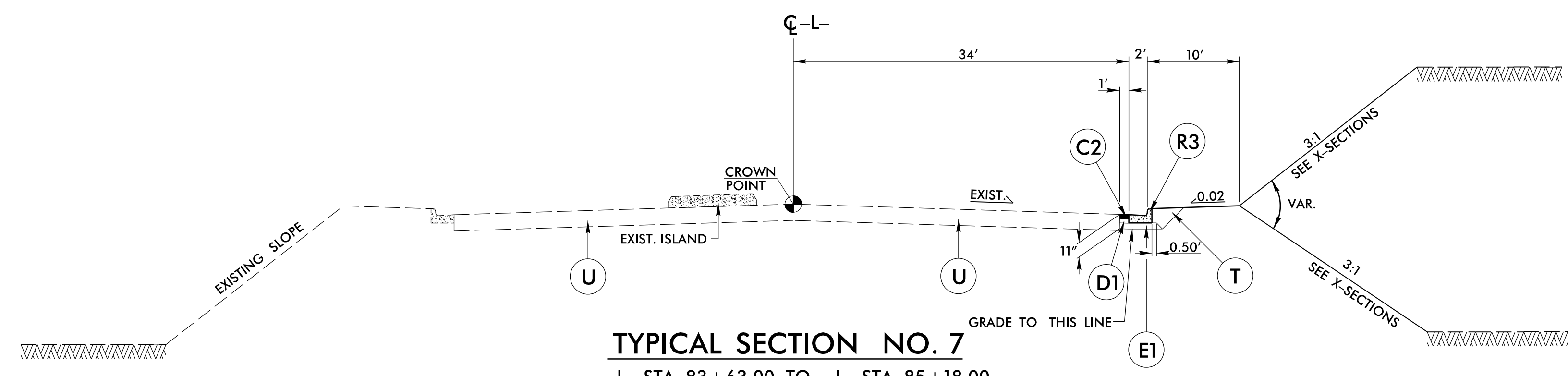
TYPICAL SECTION NO. 4
 -L- STA. 35+56.11 TO -L- STA. 62+00.00
 * -L- STA. 66+00.00 TO -L- STA. 77+50.00 (REVERSE TYPICAL)



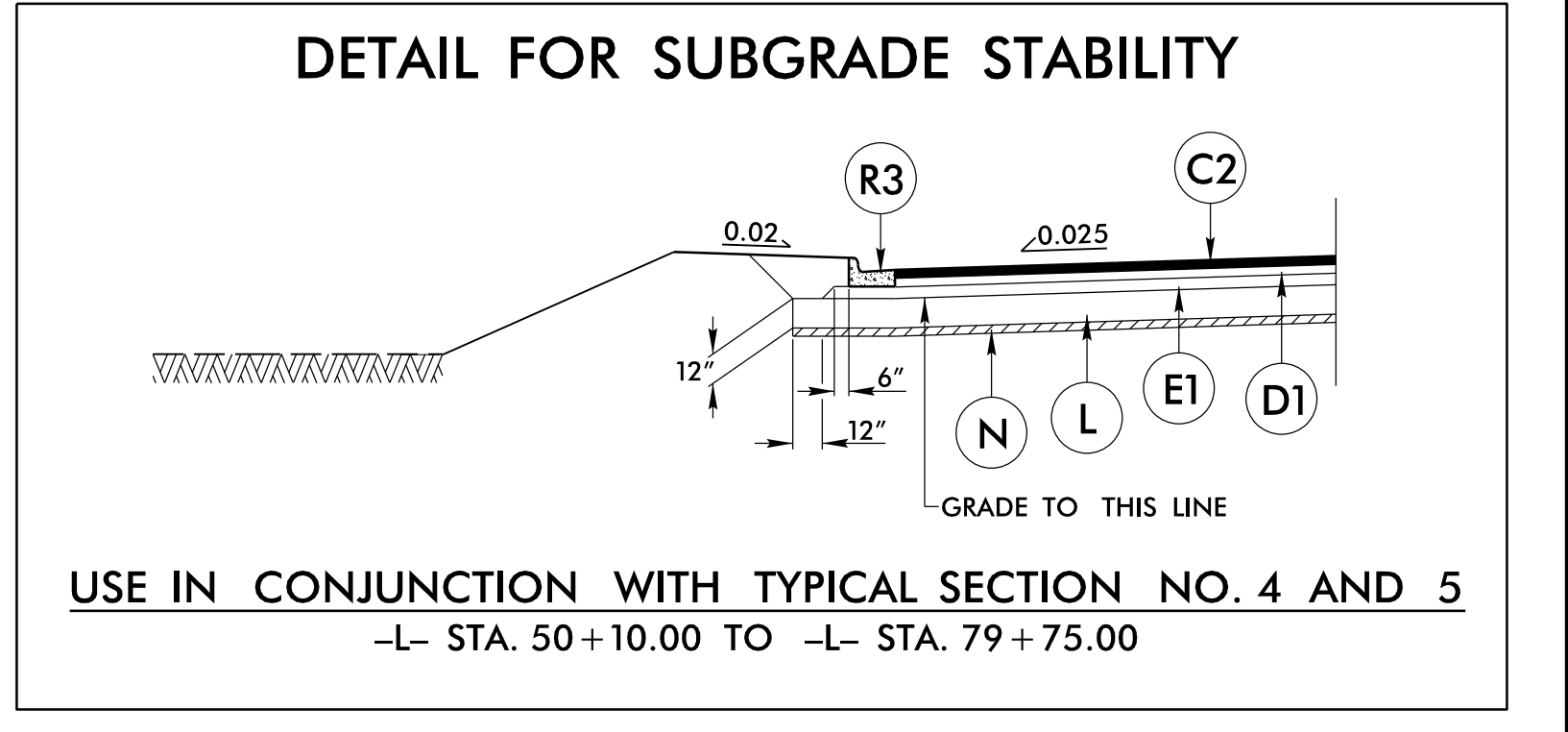
TYPICAL SECTION NO. 5
 -L- STA. 62+00.00 TO -L- STA. 66+00.00
 -L- STA. 77+50.00 TO -L- STA. 80+00.00



TYPICAL SECTION NO. 6
 -L- STA. 80+00.00 TO -L- STA. 82+00.00
 * -L- STA. 82+00.00 TO -L- STA. 83+63.00



TYPICAL SECTION NO. 7
 -L- STA. 83+63.00 TO -L- STA. 85+18.00



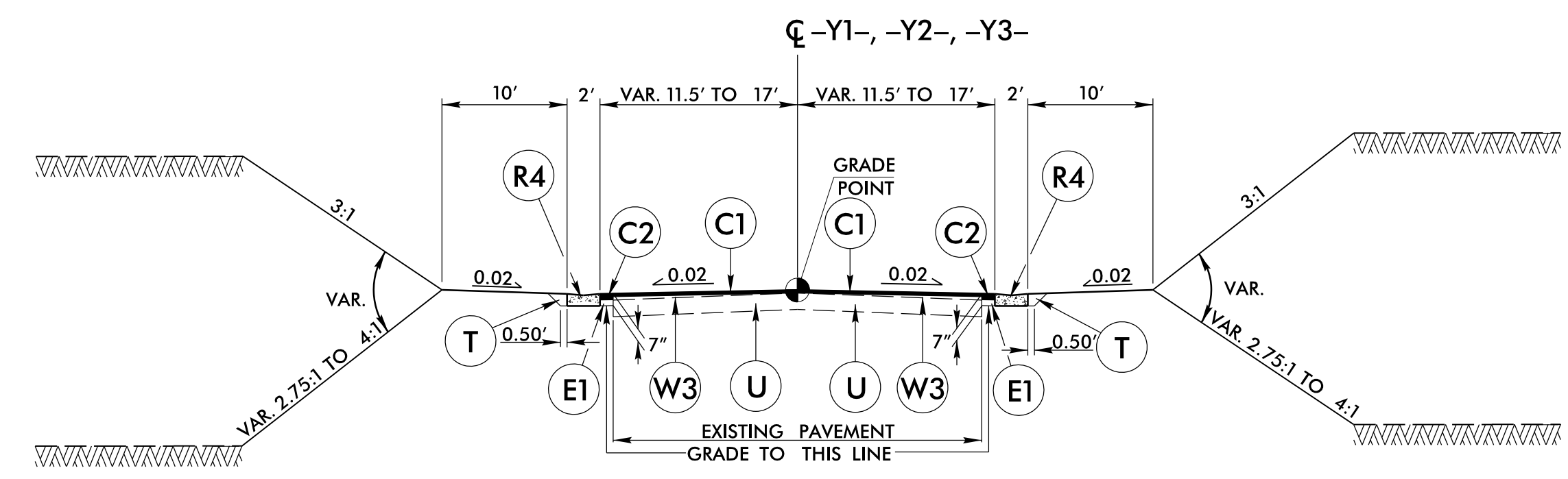
USE IN CONJUNCTION WITH TYPICAL SECTION NO. 4 AND 5
 -L- STA. 50+10.00 TO -L- STA. 79+75.00

PROJECT REFERENCE NO. U-3621A	SHEET NO. 2A-3
ROADWAY DESIGN ENGINEER SEAL 33871 4/12/2007 DocuSigned by: Daniel W. Gardner, Jr.	PAVEMENT DESIGN ENGINEER SEAL 22896 4/12/2007 DocuSigned by: Clark S. Morrison

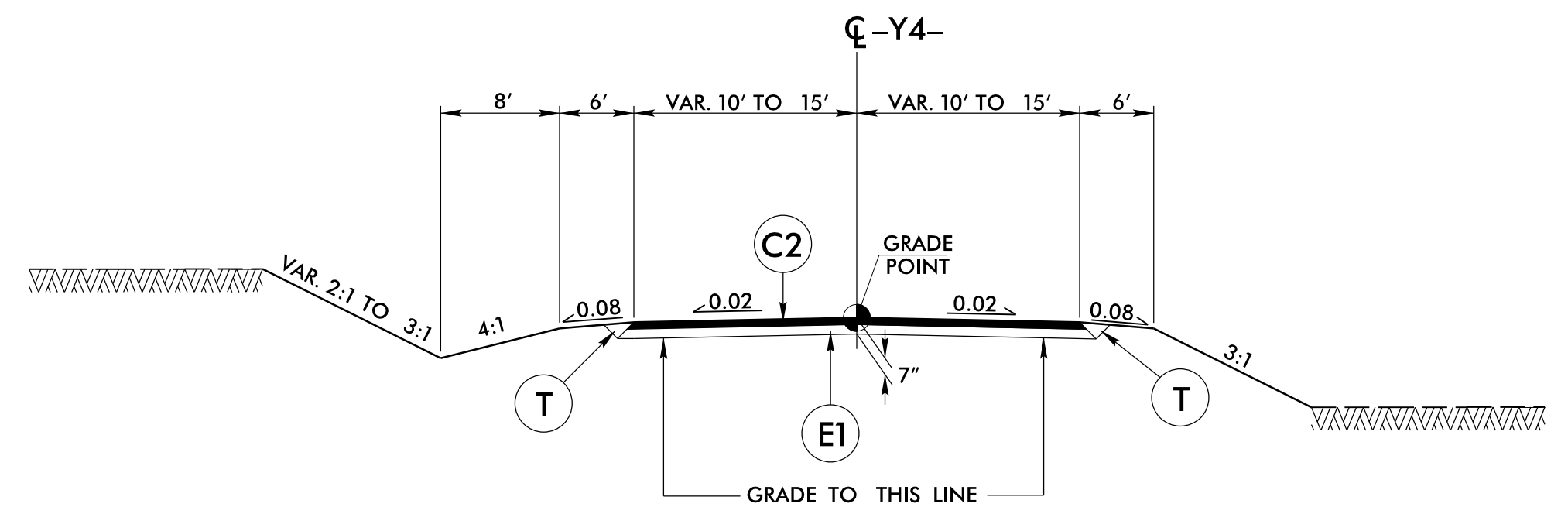
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT SCHEDULE

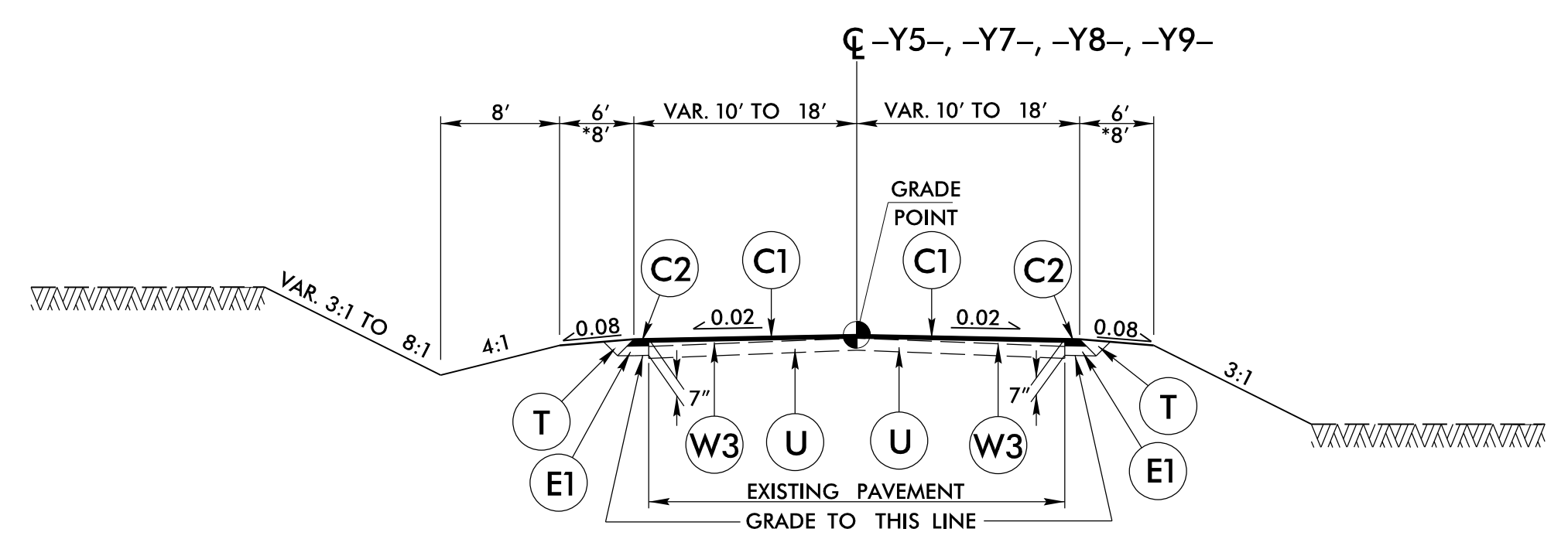
C1	1.5" S9.5B
C2	3" S9.5B.
C3	VAR. S9.5B
D1	4" I19.0B
D2	VAR. I19.0B
E1	4" B25.0B
E2	VAR. B25.0B
L	12" CL. IV AGG. STAB.
N	GEOTEXT. FOR SOIL STAB.
R1	5" MONOLITHIC ISLAND
R2	1'-6" CURB AND GUTTER
R3	2'-6" CURB AND GUTTER
R4	2' VALLEY GUTTER
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING
W1	WEDGING (SEE DETAIL 1)
W2	WEDGING (SEE DETAIL 2)
W3	WEDGING (SEE DETAIL 3)



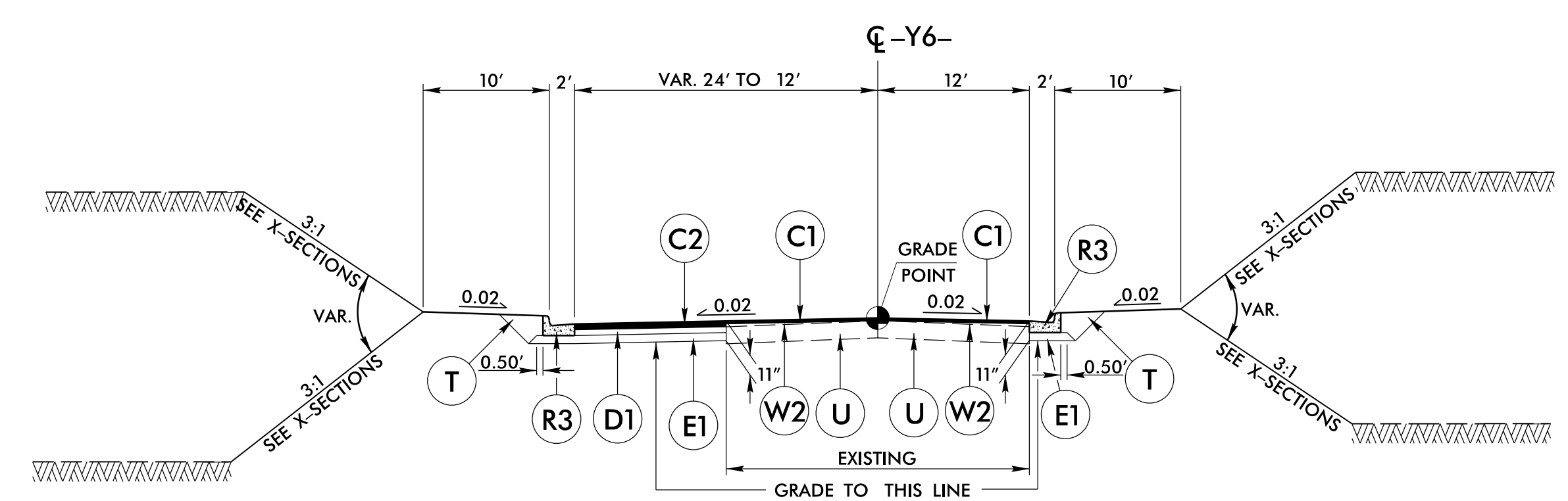
TYPICAL SECTION NO. 8
-Y1- STA. 11+25.00 TO -Y1- STA. 12+18.81
-Y2- STA. 10+37.54 TO -Y2- STA. 11+25.00
-Y3- STA. 10+20.00 TO -Y3- STA. 11+35.42



TYPICAL SECTION NO. 9
-Y4- STA. 12+30.00 TO -Y4- STA. 14+87.95

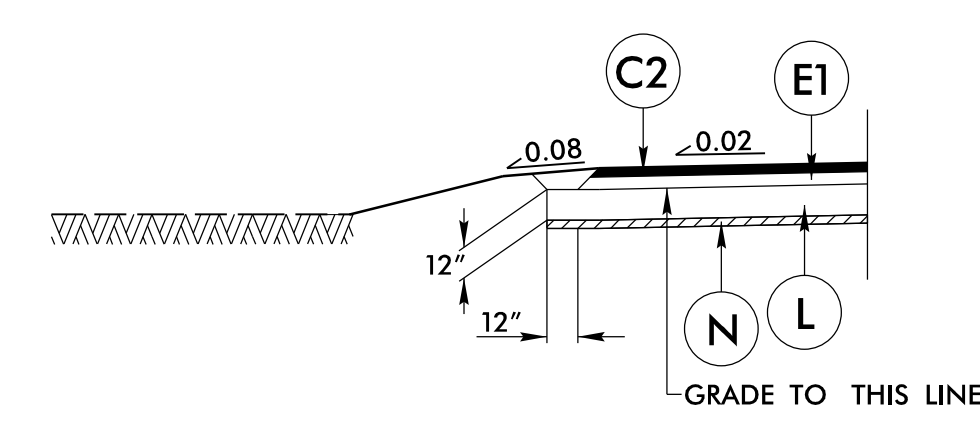


TYPICAL SECTION NO. 10
-Y5- STA. 10+37.55 TO -Y5- STA. 11+75.00
*-Y7- STA. 11+00.00 TO -Y7- STA. 14+10.53
-Y8- STA. 10+37.51 TO -Y8- STA. 11+20.00
-Y9- STA. 10+34.00 TO -Y9- STA. 11+25.00



TYPICAL SECTION NO. 11
-Y6- STA. 10+49.67 TO -Y6- STA. 13+00.00

DETAIL FOR SUBGRADE STABILITY



USE IN CONJUNCTION WITH TYPICAL SECTION NO. 10
-Y5- STA. 10+50.00 TO -Y5- STA. 11+75.00
-Y7- STA. 11+90.00 TO -Y7- STA. 13+50.00

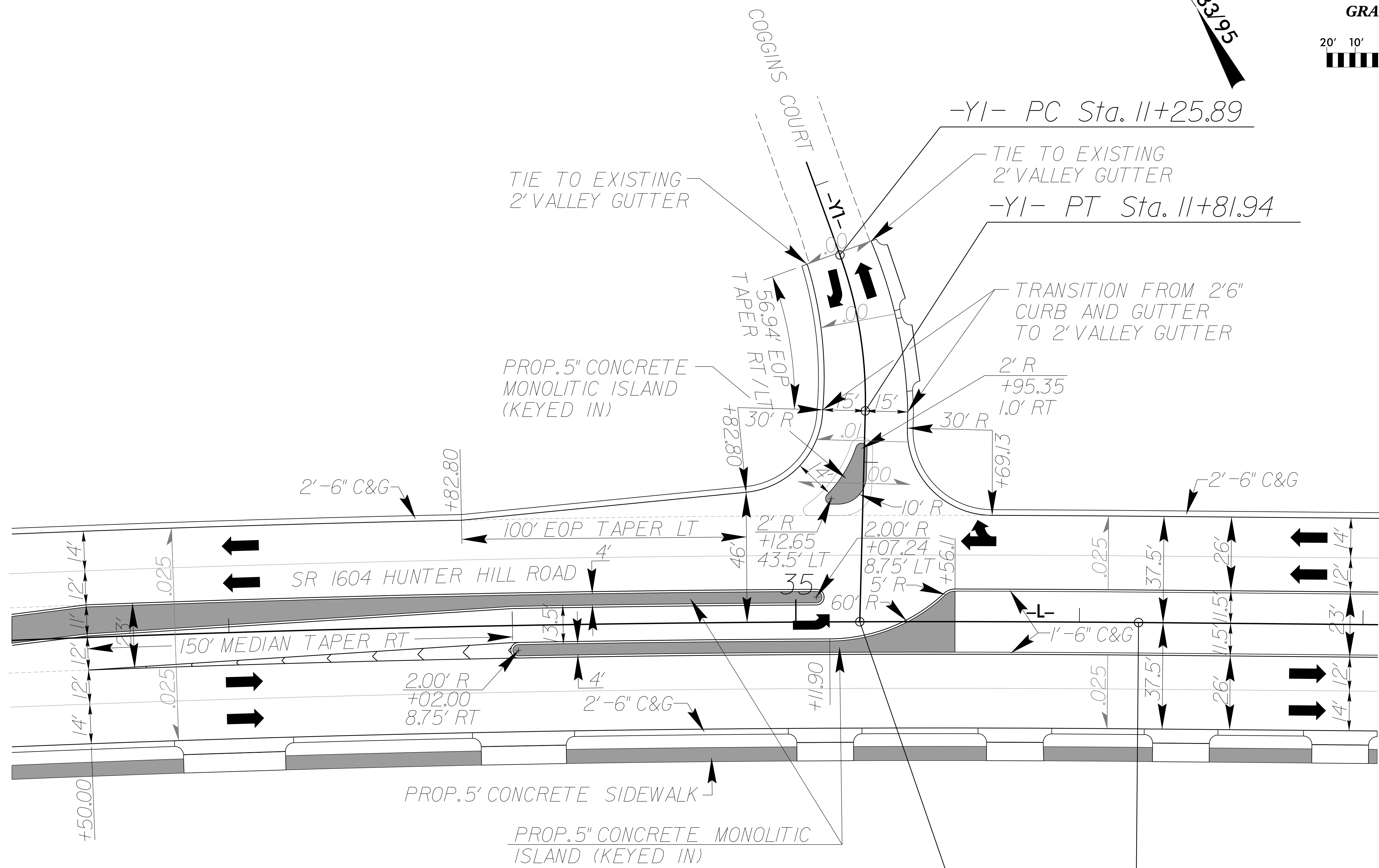
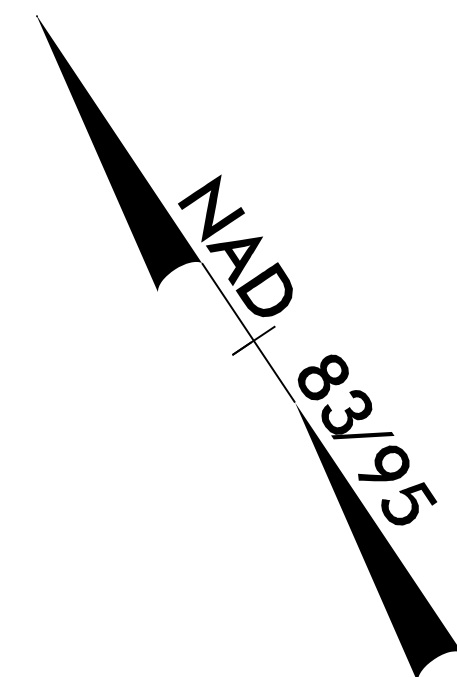
INTERSECTION DETAIL -YI- AND -L-

SEPI
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Fax: 919-789-9591
License: C-2197

PROJECT REFERENCE NO. U-3621A	SHEET NO. 2B-1
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 33871 4/10/2007 W. GARDNER, JR. DocuSigned by: Daniel W. Gardner, Jr.	

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UNLESS ALL SIGNATURES COMPLETED**

GRAPHIC SCALE

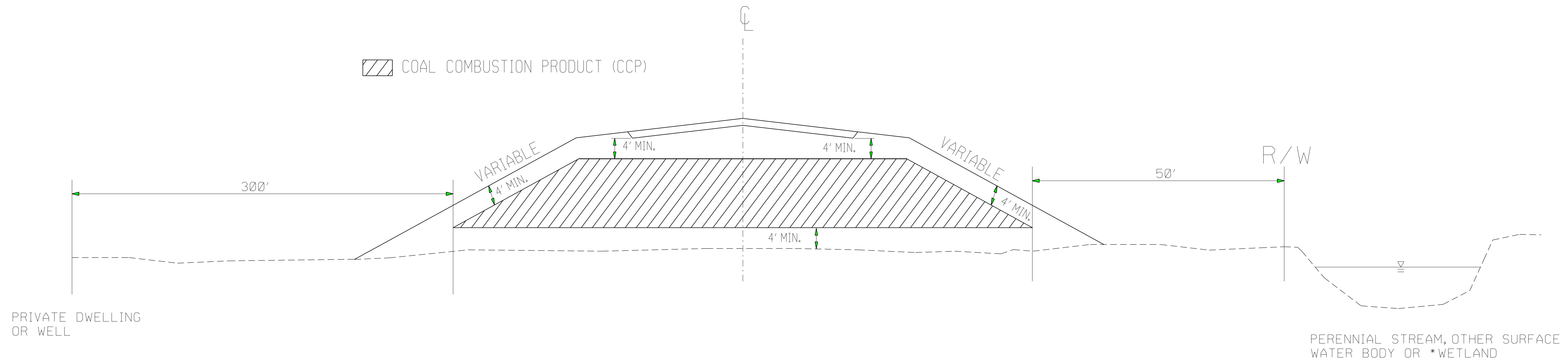


-L- POC STA. 35+22.53 =
-YI- POT STA. 12+56.33

-L- PT Sta. 36+20.86

SEE SHEET 4 FOR PLAN VIEW

COAL COMBUSTION PRODUCT PLACEMENT



PLACE CCP IN HATCHED AREA IN ACCORDANCE WITH THE PROJECT SPECIAL PROVISIONS

PLACE CCP A MINIMUM OF 5' ABOVE SEASONAL HIGH GROUND WATER

PLACE AT LOCATIONS AS APPROVED BY THE ENGINEER

PLACE SOIL BORROW MATERIAL ON THE OUTSIDE OF CCP AS EACH LIFT OF CCP IS PLACED

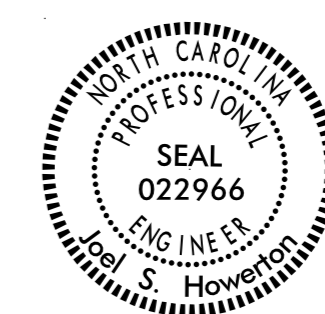
*(OBTAIN PERMISSION FROM ARMY CORPS OF ENGINEERS)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

COAL COMBUSTION PRODUCT PLACEMENT DETAIL

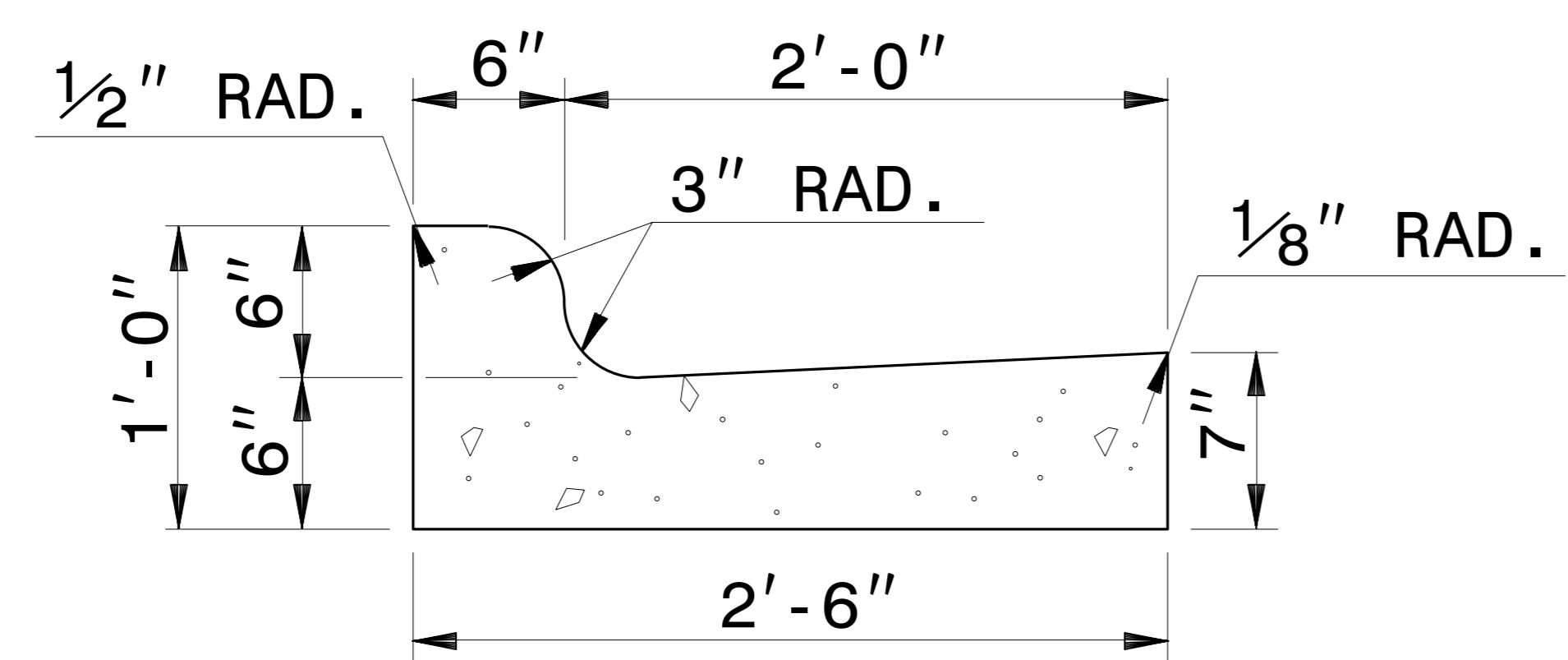
ORIGINAL BY: J.S.H.	DATE: 3/16/15
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC.: joel/coal combustion material detail.dgn	



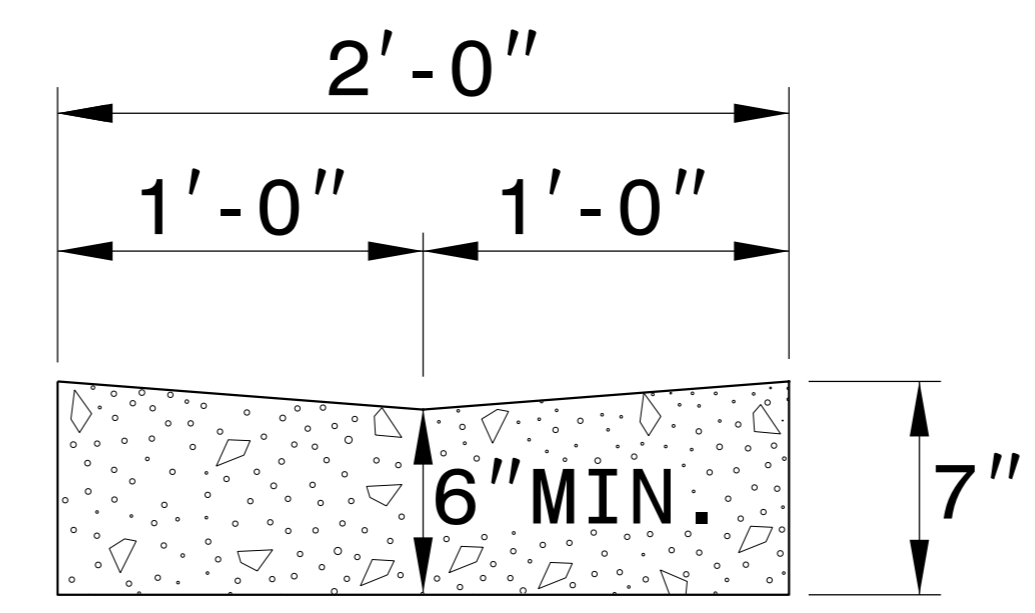
4/10/2017
 DocuSigned by:
 Joel S. Howerton, P.E.
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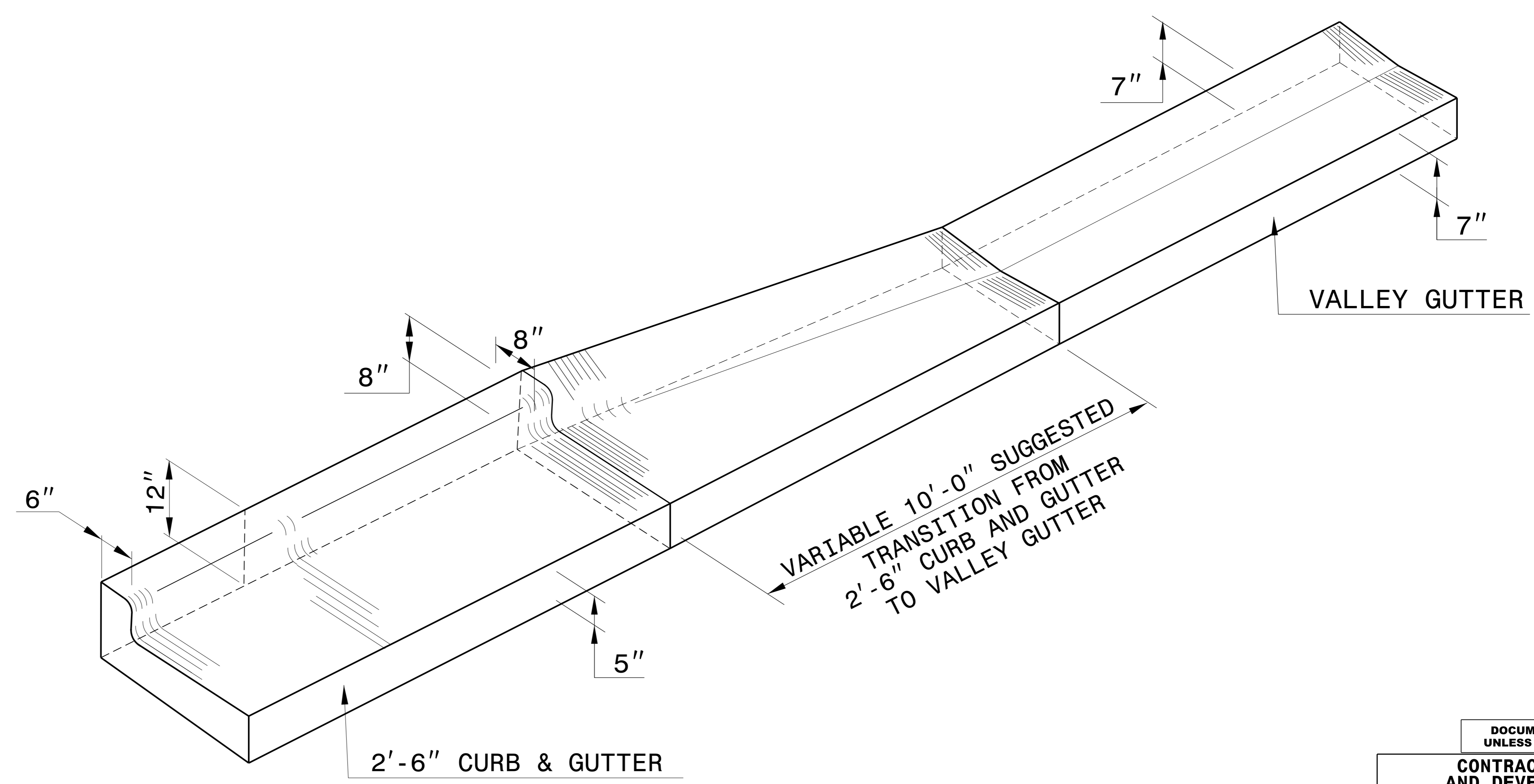
*NOTE: SEE STD. DWG. 846.01 FOR GENERAL NOTES



2'-6" CURB AND GUTTER



VALLEY GUTTER



ISOMETRIC VIEW OF TRANSITION



4/10/2017
 DocuSigned by:
 Joel S. Howerton, P.E.
 at7c30100c4d6

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 Office 919-707-6950 FAX 919-250-4119

TRANSITION FROM 2'-6" CURB AND GUTTER TO VALLEY GUTTER

ORIGINAL BY: T.S. SPELL DATE: FEB. 4, 2009
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC.: w:\usr\details\stand\cgtransit.dgn

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5/14/99

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

ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

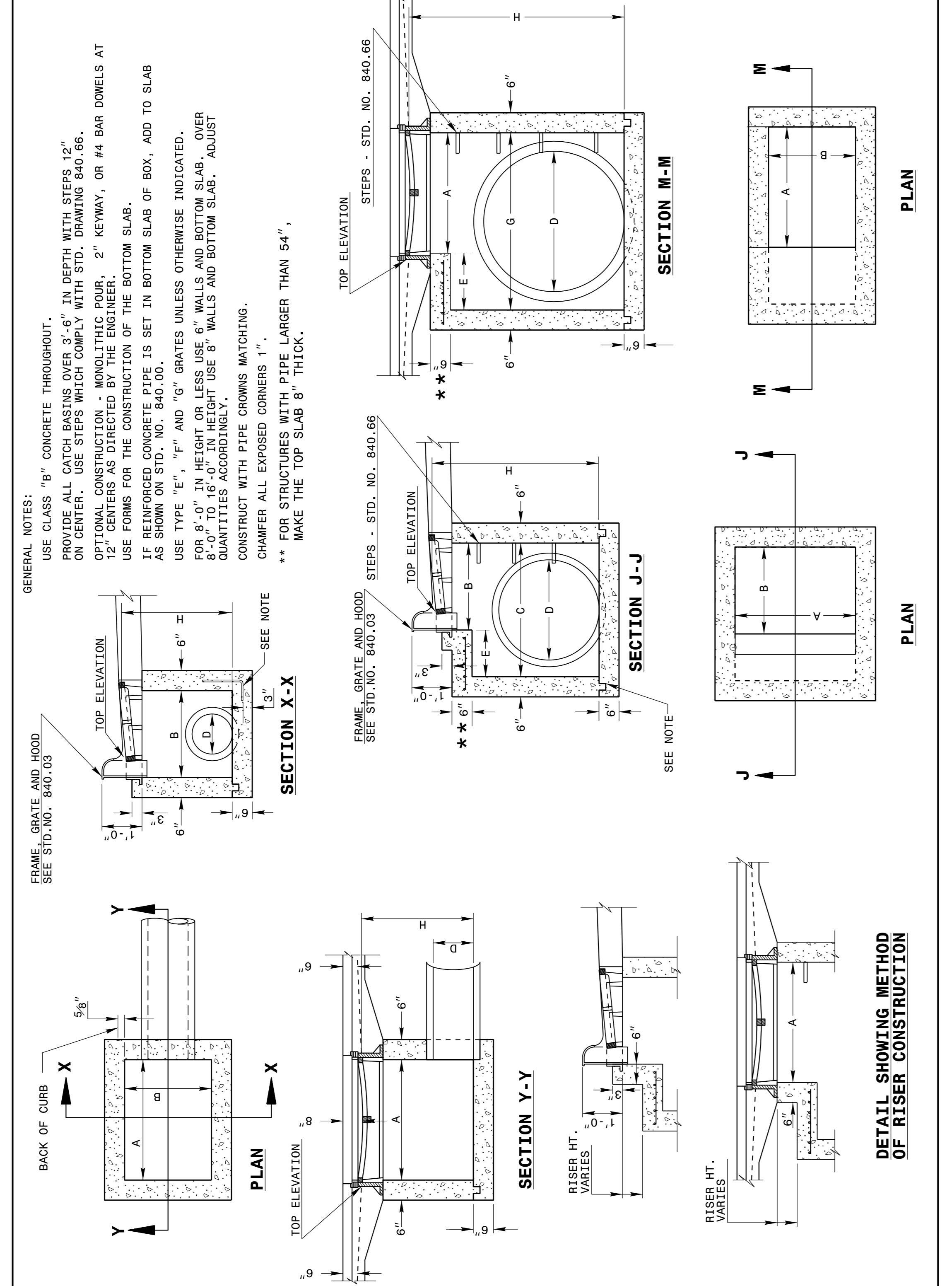
SHEET 1 OF 2
840D02

GENERAL NOTES:
 USE CLASS "B" CONCRETE THROUGHOUT.
 PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
 OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
 USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
 IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
 USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.
 FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 16'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.
 CONSTRUCT WITH PIPE CROWNS MATCHING.
 CHAMFER ALL EXPOSED CORNERS 1".
 ** FOR STRUCTURES WITH PIPE LARGER THAN 54", MAKE THE TOP SLAB 8" THICK.

STATE OF
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 RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

SHEET 1 OF 2
840D02



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

ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

SHEET 1 OF 2
840D02

STATE OF
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 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

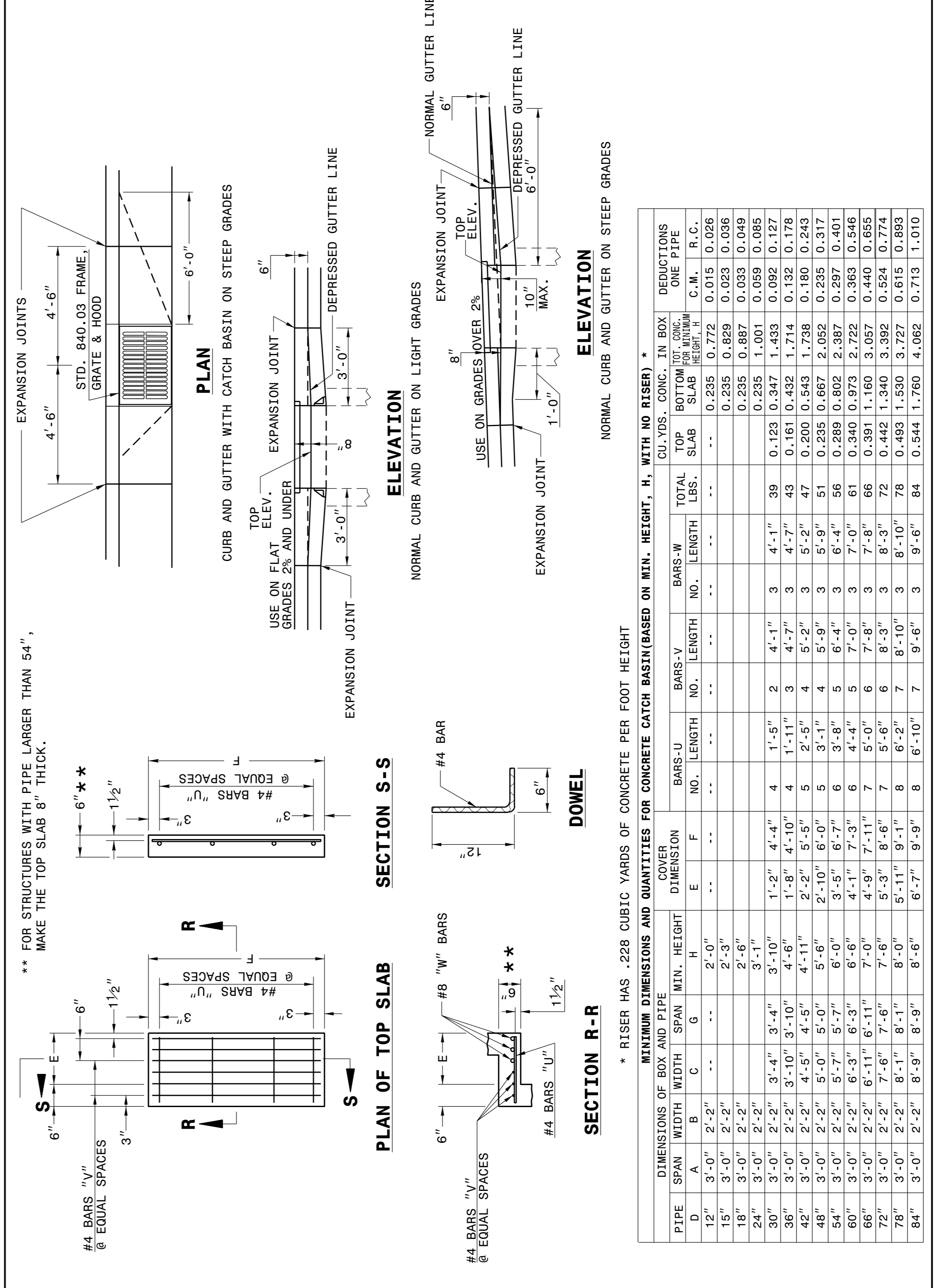
ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

SHEET 2 OF 2
840D02

STATE OF
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 RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

SHEET 2 OF 2
840D02



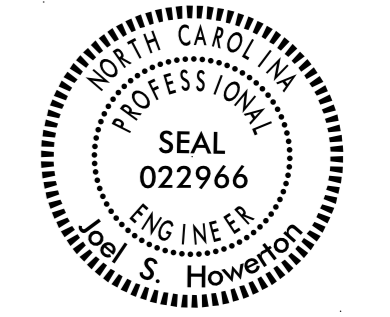
STATE OF NORTH CAROLINA
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 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

SHEET 2 OF 2
840D02

* RISER HAS .228 CUBIC YARDS OF CONCRETE PER FOOT HEIGHT
 * WITH NO RISER

PIPE DIA.	SPAN	WIDTH	DEPTH	MIN. HEIGHT	COVER DIMENSION	BARS-V		BARS-W		TOTAL LBS.	CU. YDS. CONC. IN BOX	REDUCTIONS ONE PIPE	
						NO.	LENGTH	NO.	LENGTH			CONC. FOR MINIMUM HEIGHT. H	R.C.
12"	3'-0"	2'-2"	2'-2"	2'-0"	4'-4"	2	4'-1"	3	4'-1"	39	0.123	0.347	1.493
15"	3'-0"	2'-2"	2'-2"	2'-3"	4'-10"	3	4'-7"	3	4'-7"	43	0.161	0.432	1.714
18"	3'-0"	2'-2"	2'-2"	2'-6"	5'-5"	4	5'-2"	3	5'-2"	51	0.235	0.543	1.738
24"	3'-0"	2'-2"	2'-2"	3'-1"	6'-0"	5	5'-9"	3	5'-9"	56	0.289	0.667	2.052
30"	3'-0"	2'-2"	3'-4"	3'-4"	6'-7"	6	6'-4"	3	6'-4"	61	0.340	0.973	2.722
36"	3'-0"	2'-2"	3'-10"	3'-10"	7'-3"	6	7'-0"	3	7'-0"	66	0.391	1.160	3.057
42"	3'-0"	2'-2"	4'-5"	4'-5"	8'-6"	7	8'-3"	3	8'-3"	72	0.442	1.340	3.392
48"	3'-0"	2'-2"	5'-0"	5'-0"	9'-1"	8	8'-10"	3	8'-10"	78	0.493	1.530	3.727
54"	3'-0"	2'-2"	5'-7"	6'-3"	9'-9"	8	9'-6"	3	9'-6"	84	0.544	1.760	4.062
60"	3'-0"	2'-2"	6'-3"	6'-3"	11'-11"	8	11'-10"	3	11'-10"	90	0.595	2.015	4.397
66"	3'-0"	2'-2"	6'-11"	6'-11"	12'-8"	8	12'-7"	3	12'-7"	96	0.646	2.270	4.732
72"	3'-0"	2'-2"	7'-6"	7'-6"	14'-11"	8	14'-10"	3	14'-10"	102	0.697	2.525	5.067
78"	3'-0"	2'-2"	8'-1"	8'-1"	16'-8"	8	16'-7"	3	16'-7"	108	0.748	2.780	5.402
84"	3'-0"	2'-2"	8'-9"	8'-9"	18'-11"	8	18'-10"	3	18'-10"	114	0.799	3.035	5.737



4/10/2017
 DocuSigned by:
Jul S. Howerton, P.E.
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**CONTRACT STANDARDS
 AND DEVELOPMENT UNIT**
 Office 919-707-6950 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: 2002 Std.840.01 DATE: _____
 MODIFIED BY: E.E. WARD DATE: 3-1-02
 CHECKED BY: _____ DATE: _____
 FILE SPEC.: s:Special Details\jhowerton\840d02.dgn

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS



SUMMARY OF EARTHWORK
 IN CUBIC YARDS

STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
PHASE I					
SUMMARY NO. 1 (LT.)					
-L- STA. 29+00.00	-L- STA. 55+50.00	2,085	3,078	1,190	197
-Y1- STA. 11+25.00	-Y1- STA. 12+18.81	39	10		29
-Y3- STA. 10+20.00	-Y3- STA. 11+35.42	12	131	119	
-Y4- STA. 12+30.00	-Y4- STA. 14+87.95	327	540	213	
TOTAL SUMMARY NO. 1		2,463	3,759	1,522	226
SUMMARY NO. 2 (LT.)					
-L- STA. 55+50.00	-L- STA. 82+96.02	1,173	5,254	5,082	1,001
-Y7- STA. 11+00.00	-Y7- STA. 14+10.53	198	463	448	183
TOTAL SUMMARY NO. 2		1,371	5,717	5,530	1,184
PHASE II					
SUMMARY NO. 3 (RT.)					
-L- STA. 25+78.37	-L- STA. 55+50.00	468	3,410	2,985	43
-Y2- STA. 10+37.54	-Y2- STA. 11+25.00	8	86	78	
TOTAL SUMMARY NO. 3		476	3,496	3,063	43
SUMMARY NO. 4 (RT.)					
-L- STA. 55+50.00	-L- STA. 85+18.00	2,063	4,204	3,518	1,377
-Y5- STA. 10+37.55	-Y5- STA. 11+75.00	246	38	37	245
-Y6- STA. 10+49.67	-Y6- STA. 13+00.00	212	375	263	100
-Y8- STA. 10+37.51	-Y8- STA. 11+20.00	39	73	34	
-Y9- STA. 10+34.00	-Y9- STA. 11+25.00	1	213	212	
TOTAL SUMMARY NO. 4		2,561	4,903	4,064	1,722
SUMMARY TOTALS		6,871	17,875	14,179	3,175
WASTE IN LIEU OF BORROW				-29	-29
LOSS DUE TO CLEARING & GRUBBING:		-300		300	
PROJECT TOTALS		6,571	17,875	14,450	3,146
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT				723	
GRAND TOTALS		6,571	17,875	15,173	3,146
SAY		6,700		15,200	

DDE = 56 CY
 SELECT GRANULAR MATERIAL = 860 CY
 CLASS IV SUBGRADE STABILIZATION = 9470 TONS
 CLASS IV AGGREGATE STABILIZATION (CONTINGENCY) = 250 TONS
 UNDERCUT = 2000 CY
 SHALLOW UNDERCUT = 4250 CY
 PAVEMENT STRUCTURE VOLUME = 3700 CY

Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

ASPHALT PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	SQUARE YARDS
-L-	34+62.35	36+63.01	LT	322.00
-L-	42+37.41	42+75.87	LT	301.70
-L-	55+68.13	65+00.00	LT/RT	1652.50
-L-	65+00.00	72+11.29	LT/RT	894.54
-L-	72+71.14	74+35.29	LT	598.72
-L-	72+92.34	74+75.25	RT	564.65
-L-	74+75.25	77+50.00	LT/RT	363.70
-L-	77+50.00	80+00.00	LT/RT	1055.22
-L-	80+00.00	82+00.00	LT/RT	344.23
TOTALS				6097.25
SAY				6400

48" CHAIN LINK FENCE

STATION TO STATION	LOC. LT/RT	48" FABRIC LF	LINE POSTS	TERMINAL POSTS
-L- 43+74.35 TO -L- 46+06.97	RT	252.00	21	4
TOTALS		252.00	21	4
SAY		260.00	21	4

RD206446

COMPUTED BY: CRAIG FREEMAN DATE: 10/21/14
CHECKED BY: D. GARDNER DATE: 12/12/16

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO. SHEET NO.
U-3621A 3D-1

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, ELEVATIONS, PIPE TYPES (C.S. PIPE, R.C. PIPE CLASS III/IV), QUANTITIES, GRATE TYPES, and REMARKS. Includes a 'SHEET TOTALS' row at the bottom.

RD266446

COMPUTED BY: CRAIG FREEMAN DATE: 10/21/14
CHECKED BY: D. GARDNER DATE: 12/12/16

PROJECT NO. SHEET NO.
U-3621A 3D-3

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, SIZE, THICKNESS OR GAUGE, OFFSET, STRUCTURE NUMBER, TOPOGRAPHY, ELEVATIONS, SLOPE, PIPE TYPE (Drainage, C.S., R.C. Class III/IV), QUANTITIES FOR DRAINAGE STRUCTURES, FRAME/GRATES/HOOD, CONCRETE TRANSITIONAL SECTION, and REMARKS. Includes a SHEET TOTALS row at the bottom.

ABBREVIATIONS
C.A.A. CORRUGATED ALUMINIUM ALLOY
C.B. CATCH BASIN
C.S. CORRUGATED STEEL
D.I. DROP INLET
G.D.I. GRATED DROP INLET
H.D.P.E. HIGH DENSITY POLYETHYLENE
J.B. JUNCTION BOX
M.H. MANHOLE
N.S. NARROW SLOT
P.V.C. POLYVINYL CHLORIDE
R.C. REINFORCED CONCRETE
T.B.D.I. TRAFFIC BEARING DROP INLET
T.B.J.B. TRAFFIC BEARING JUNCTION BOX
W.S. WIDE SLOT

RD268446

COMPUTED BY: CRAIG FREEMAN DATE: 10/21/14
CHECKED BY: D. GARDNER DATE: 12/12/16

PROJECT NO. SHEET NO.
U-3621A 3D-4

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, SIZE, THICKNESS OR GAUGE, OFFSET, STRUCTURE NUMBER, ELEVATIONS, SLOPE, PIPE TYPES (Drainage, C.S., R.C. Class III, R.C. Class IV), QUANTITIES FOR DRAINAGE STRUCTURES, FRAME/GRATES/HOOD, CONCRETE TRANSITIONAL SECTION, FLOWABLE FILL, and REMARKS. Includes a SHEET TOTALS row at the bottom.

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
SUMMARY OF QUANTITIES

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

LINE	STATION	STATION	AGGREGATE TYPE ASU/AST	AGGREGATE THICKNESS INCHES	SHALLOW UNDERCUT CY	CLASS IV SUBGRADE STABILIZATION TONS	GEOTEXTILE FOR SOIL STABILIZATION SY	STABILIZER AGGREGATE TONS	CLASS IV AGGREGATE STABILIZATION TONS
-L-	50+10	79+75	ASU	12	3873	8602	13273		
-Y5-	10+50	11+75	ASU	12	44	88	135		
-Y7-	11+90	13+50	ASU	12	22	195	299		
			CONTINGENCY	AST					250
			CONTINGENCY		300	585	900		
			TOTAL CY/TONS/SY:		4239	9470	14607		250
			SAY:		4250	9470	14610*		250

ASU = AGGREGATE SUBGRADE, AST = AGGREGATE STABILIZATION
 TOTAL SQUARE YARDS OF GEOTEXTILE FOR SOIL STABILIZATION IS ONLY THE ESTIMATED QUANTITY FOR ASU/AST AND MAY ONLY REPRESENT A PORTION OF THE GEOTEXTILE QUANTITY SHOWN IN THE ITEM SHEETS OF THE PROPOSAL.

SUMMARY OF SUBSURFACE DRAINAGE

LINE	STATION	STATION	LOCATION LTR/CL	DRAIN TYPE* UD/BD/SD	LF
			CONTINGENCY	SD	5000
				SUBTOTAL:	5000
				TOTAL LF:	5000

*UD = UNDERDRAIN
 *BD = BLIND DRAIN
 *SD = SUBSURFACE DRAIN

8.17.799

SEPI
ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-9591
License: C-2197

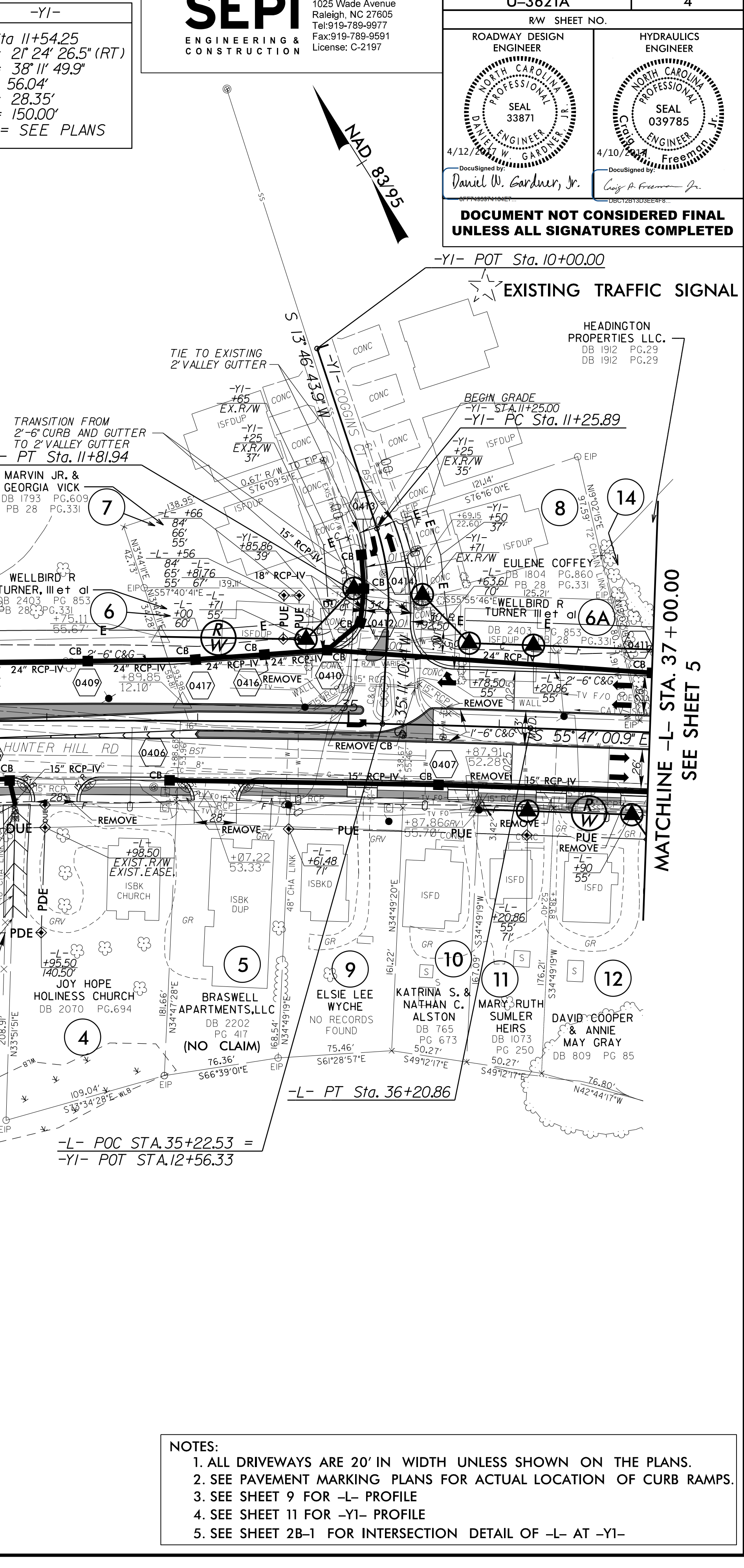
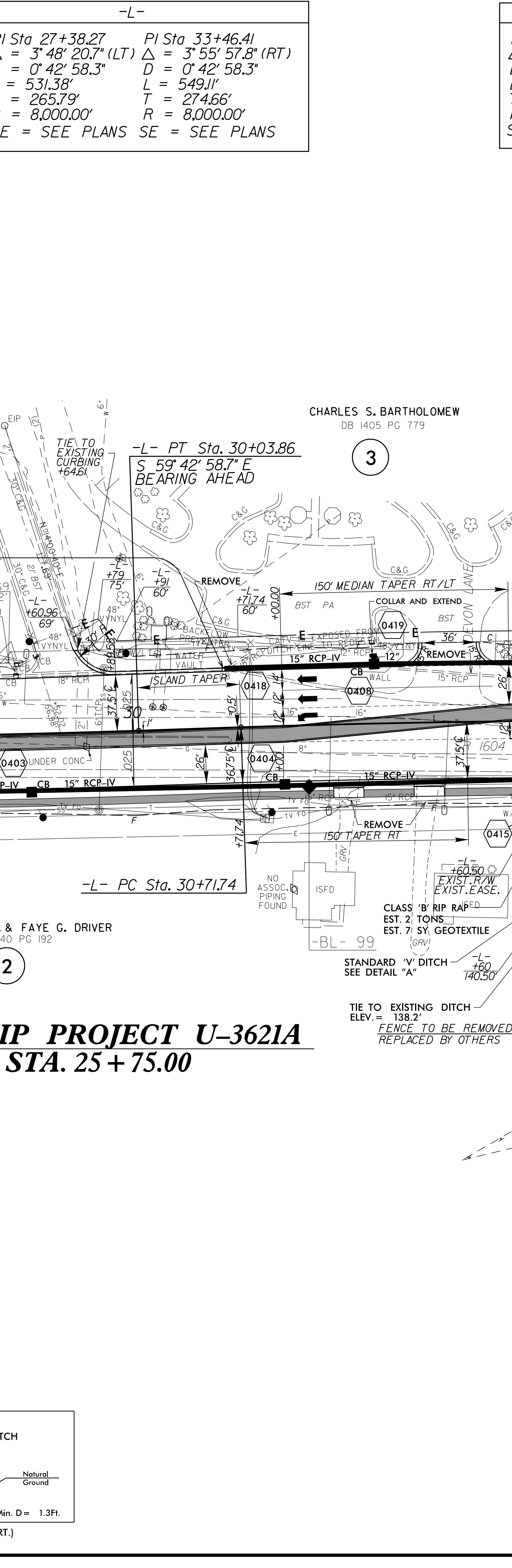
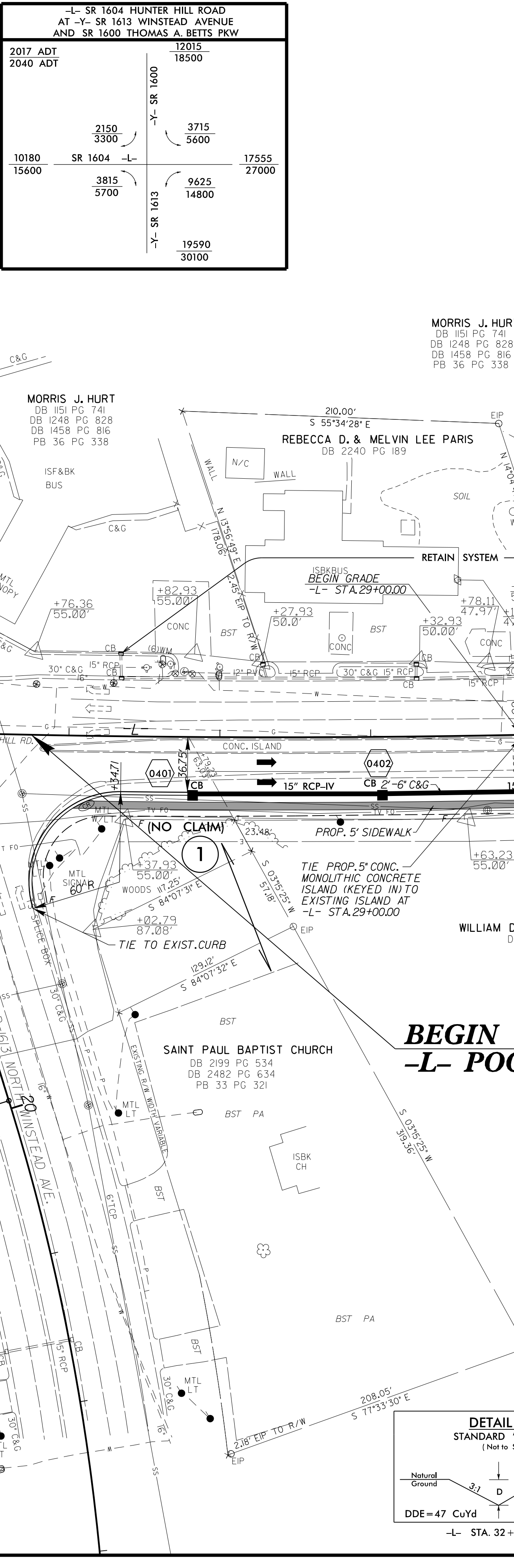
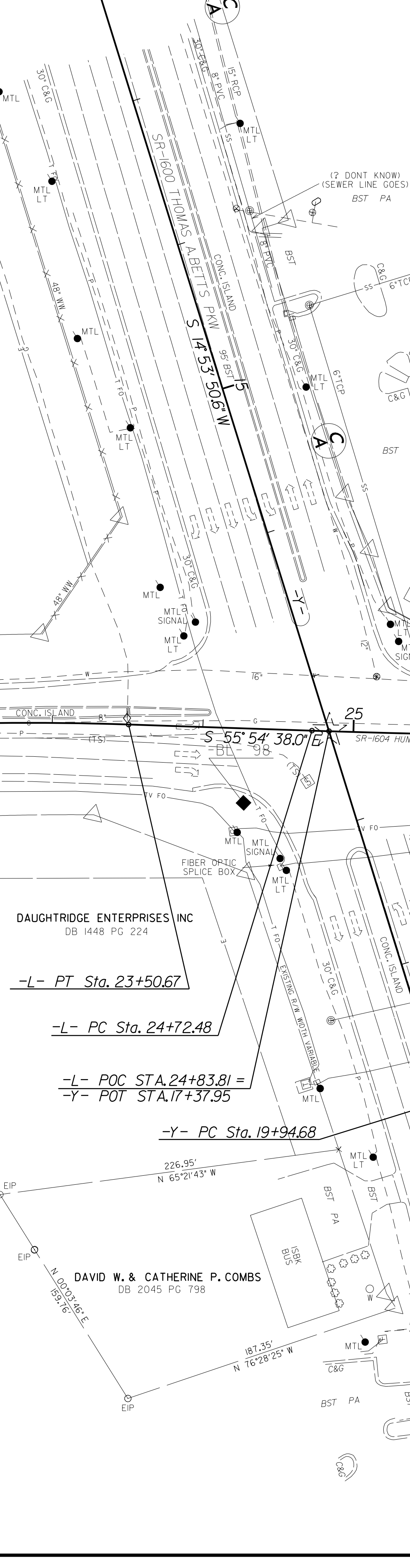
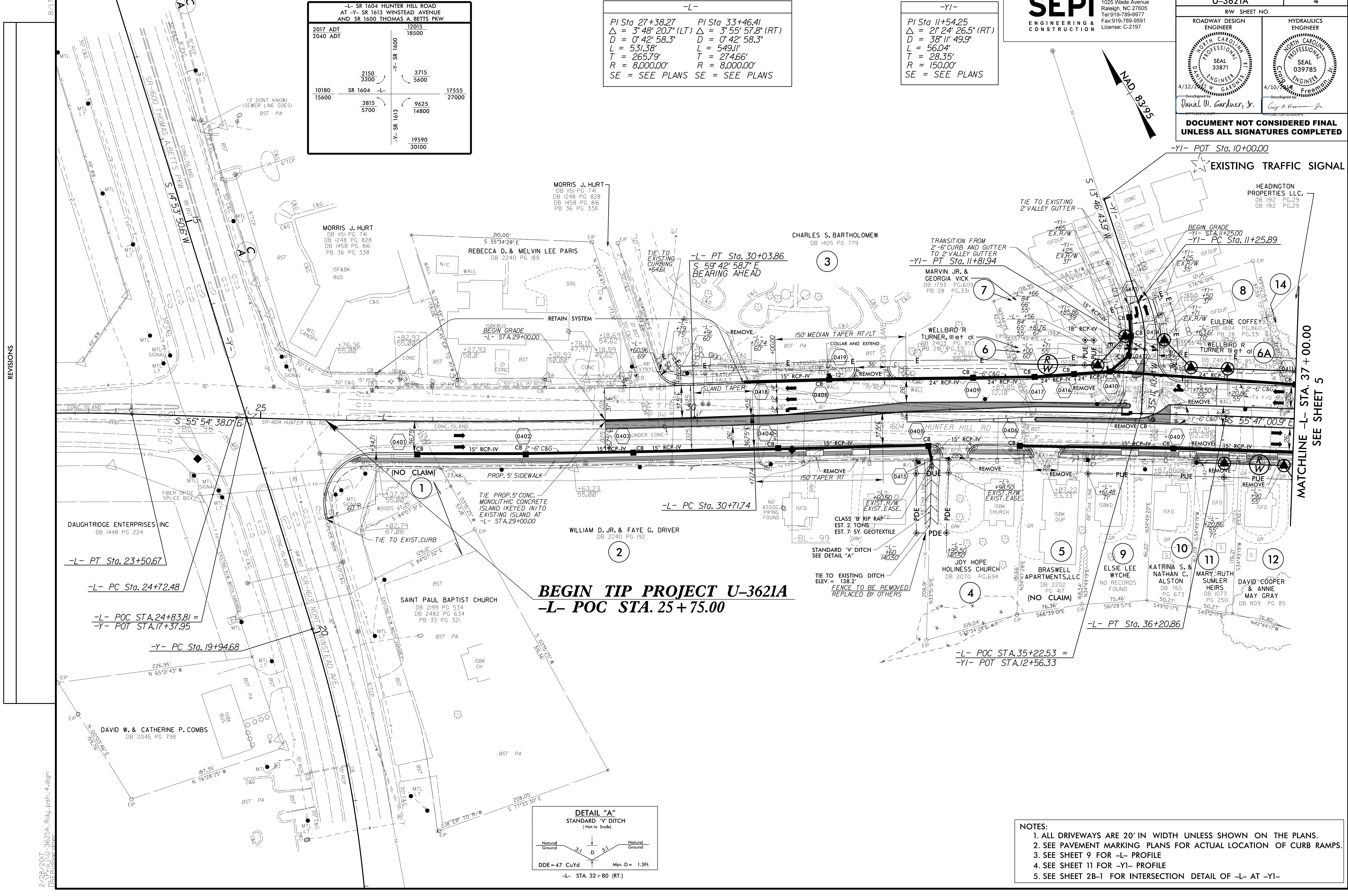
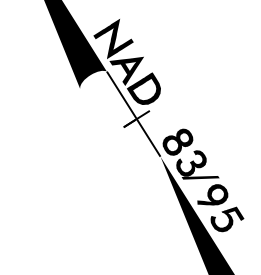
PROJECT REFERENCE NO. U-3621A	SHEET NO. 4
ROADWAY DESIGN ENGINEER <i>(Signature)</i>	HYDRAULICS ENGINEER <i>(Signature)</i>

SEAL 33871
4/12/2017 W. GARDNER JR.
SEAL 039785
4/10/2017 G. A. FROEMER JR.
DocuSigned by:
Daniel W. Gardner, Jr.
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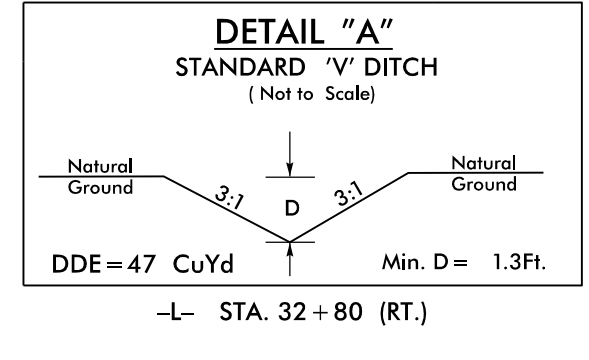
-L- SR 1604 HUNTER HILL ROAD AT -Y- SR 1613 WINSTEAD AVENUE AND SR 1600 THOMAS A. BETTS PKW	
2017 ADT 2040 ADT	12015 18500
10180 15600	17555 27000
2150 3300	3715 5600
3815 5700	9625 14800
	19590 30100

-L-
PI Sta. 27+38.27 PI Sta. 33+46.41
 $\Delta = 3^{\circ} 48' 20.7" (LT)$ $\Delta = 3^{\circ} 55' 57.8" (RT)$
 $D = 0^{\circ} 42' 58.3"$ $D = 0^{\circ} 42' 58.3"$
 $L = 531.38'$ $L = 549.11'$
 $T = 265.79'$ $T = 274.66'$
 $R = 8,000.00'$ $R = 8,000.00'$
SE = SEE PLANS SE = SEE PLANS

-YI-
PI Sta. 11+54.25
 $\Delta = 21^{\circ} 24' 26.5" (RT)$
 $D = 38^{\circ} 11' 49.9"$
 $L = 56.04'$
 $T = 28.35'$
 $R = 150.00'$
SE = SEE PLANS



BEGIN TIP PROJECT U-3621A
-L- POC STA. 25+75.00



- NOTES:
1. ALL DRIVEWAYS ARE 20' IN WIDTH UNLESS SHOWN ON THE PLANS.
 2. SEE PAVEMENT MARKING PLANS FOR ACTUAL LOCATION OF CURB RAMPS.
 3. SEE SHEET 9 FOR -L- PROFILE
 4. SEE SHEET 11 FOR -YI- PROFILE
 5. SEE SHEET 2B-1 FOR INTERSECTION DETAIL OF -L- AT -YI-

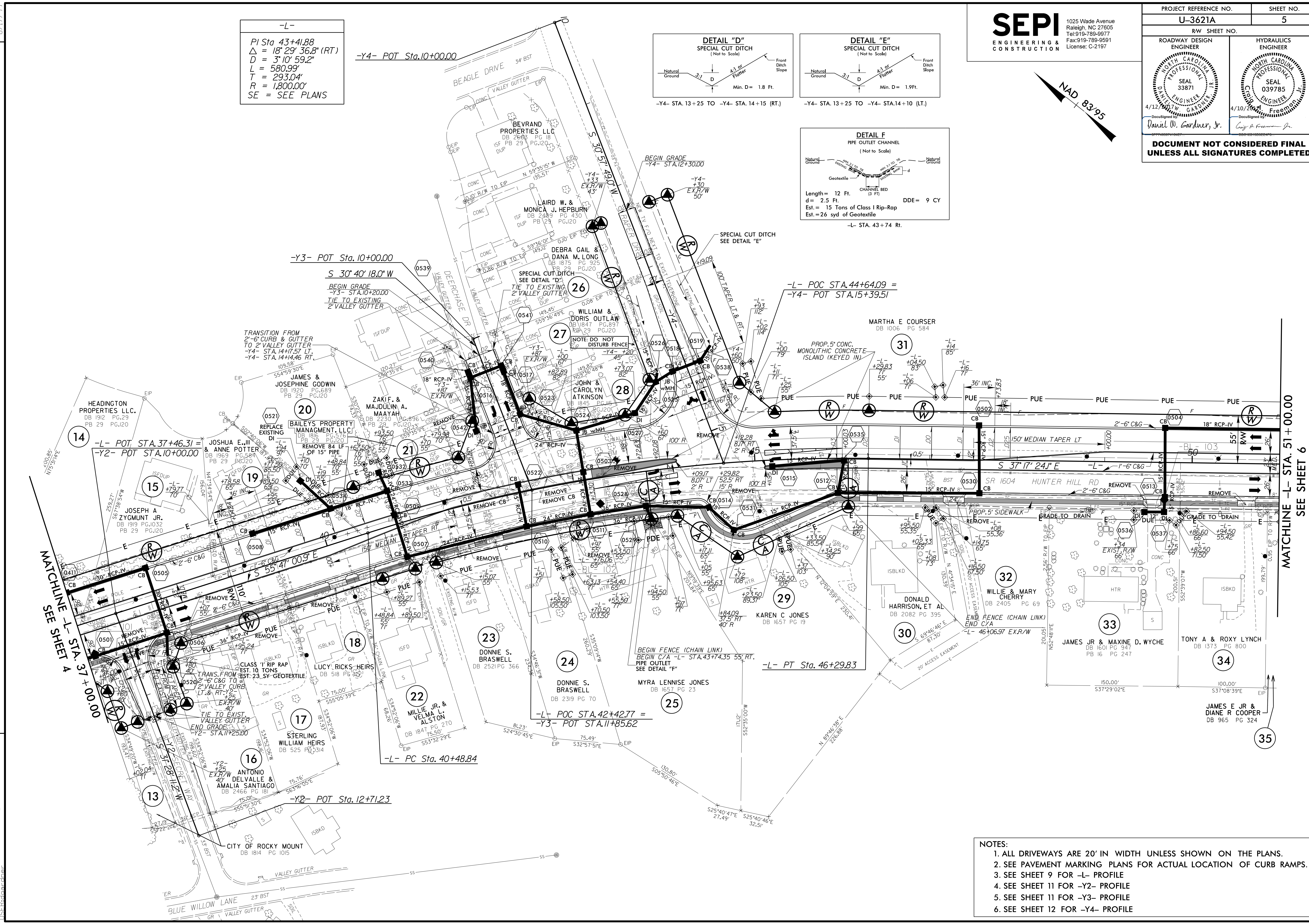
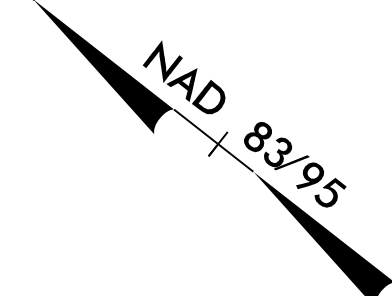
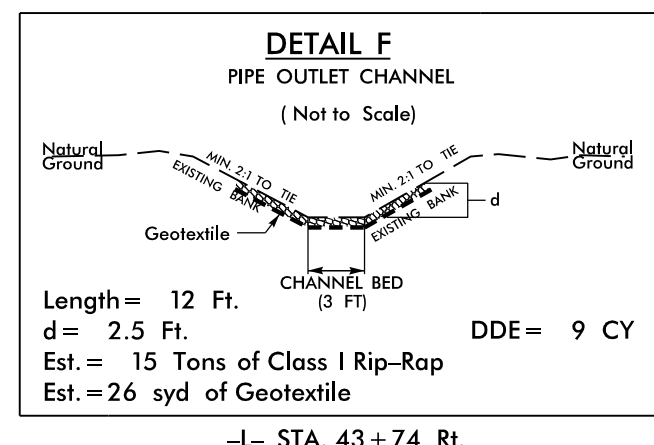
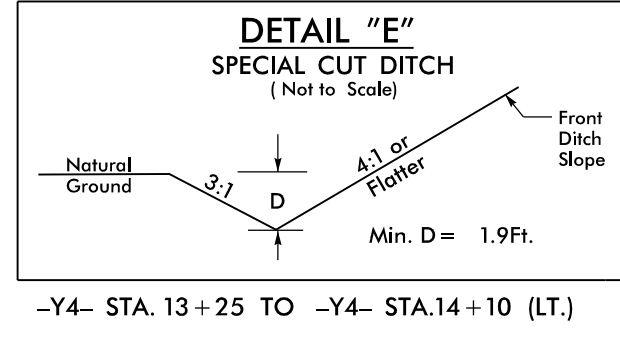
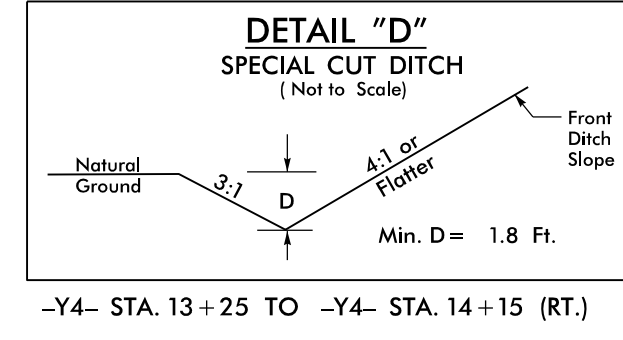
REVISIONS

MATCHLINE -L- STA. 37+00.00
SEE SHEET 5

2/28/2017 U-3621A_Rdu_psh_4.dgn
11:58:48 AM

PROJECT REFERENCE NO. U-3621A	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER SEAL 33871 4/12/2017 Daniel W. Gardner, Jr.	HYDRAULICS ENGINEER SEAL 039785 4/10/2014 Craig A. Freeman, Jr.
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-L-
 $PI\ Sta\ 43+41.88$
 $\Delta = 18^{\circ}29'36.8''(RT)$
 $D = 3'10''59.2''$
 $L = 580.99'$
 $T = 293.04'$
 $R = 1,800.00'$
 $SE = SEE\ PLANS$



- NOTES:**
1. ALL DRIVEWAYS ARE 20' IN WIDTH UNLESS SHOWN ON THE PLANS.
 2. SEE PAVEMENT MARKING PLANS FOR ACTUAL LOCATION OF CURB RAMPS.
 3. SEE SHEET 9 FOR -L- PROFILE
 4. SEE SHEET 11 FOR -Y2- PROFILE
 5. SEE SHEET 11 FOR -Y3- PROFILE
 6. SEE SHEET 12 FOR -Y4- PROFILE

REVISIONS

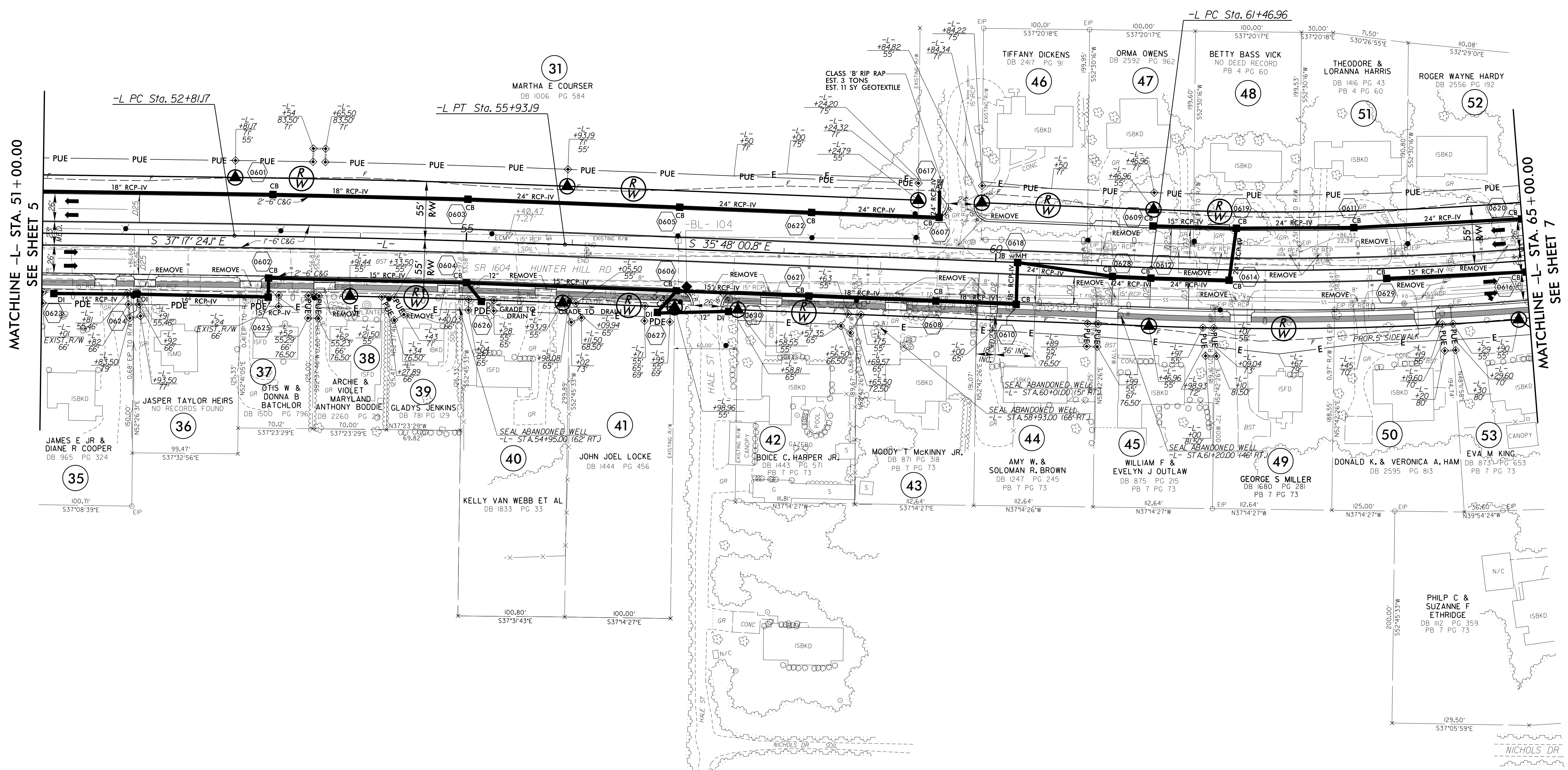
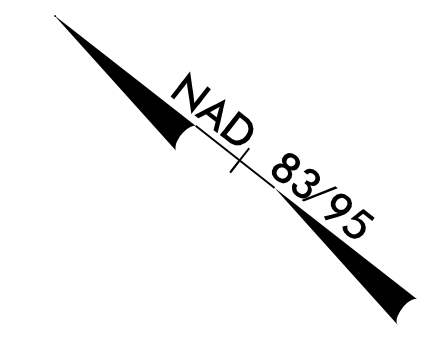
MATCHLINE SEE SHEET 4
-L- STA. 37+00.00

MATCHLINE -L- STA. 51+00.00
SEE SHEET 6

3/3/2017 U-3621A_Rdwy_psh_5.dgn
11:58:00 am

PROJECT REFERENCE NO. U-3621A	SHEET NO. 6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-L-	
PI Sta 54+37.19 Δ = 1° 29' 23.3" (RT) D = 0° 28' 38.9" L = 312.02' T = 156.02' R = 12,000.00' SE = SEE PLANS	PI Sta 66+10.12 Δ = 17° 33' 09.6" (LT) D = 1° 54' 35.5" L = 919.06' T = 463.16' R = 3,000.00' SE = SEE PLANS



MATCHLINE -L- STA. 51+00.00
SEE SHEET 5

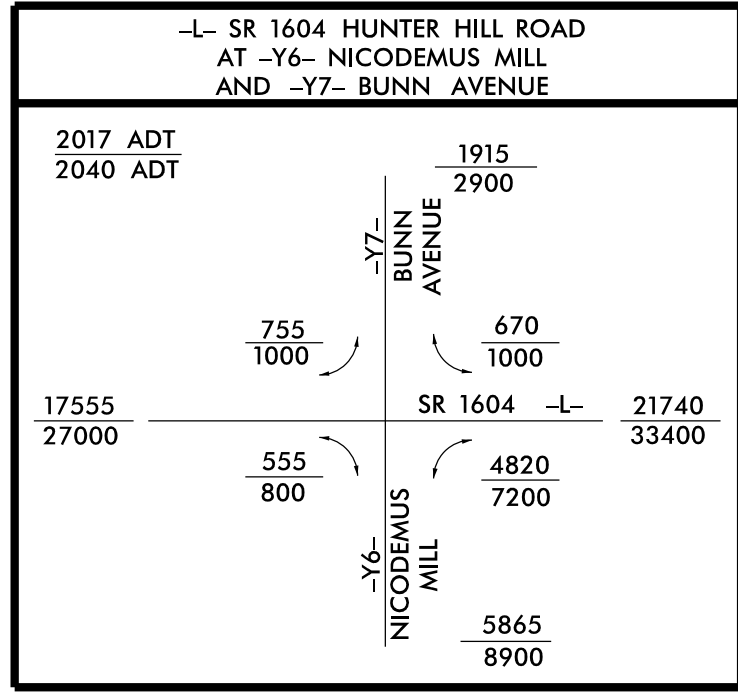
MATCHLINE -L- STA. 65+00.00
SEE SHEET 7

REVISIONS

2/28/2007 U-3621A_Rdu_psh_6.dgn
I:\SEPCAD\psh

- NOTES:
1. ALL DRIVEWAYS ARE 20' IN WIDTH UNLESS SHOWN ON THE PLANS.
 2. SEE PAVEMENT MARKING PLANS FOR ACTUAL LOCATION OF CURB RAMPS.
 3. SEE SHEET 10 FOR -L- PROFILE

8/17/99
2/28/2017 U:\3621A_Rdu_psh_7.dgn
USF:\dca\pdr



-L-

PI Sta 66+10.12
 $\Delta = 17^{\circ} 33' 09.6" (LT)$
 $D = 1^{\circ} 54' 35.5"$
 $L = 919.06'$
 $T = 463.16'$
 $R = 3,000.00'$
 SE = SEE PLANS

-Y7-

PI Sta 13+70.84
 $\Delta = 30^{\circ} 53' 38.8" (RT)$
 $D = 19^{\circ} 05' 54.9"$
 $L = 161.76'$
 $T = 82.90'$
 $R = 300.00'$
 SE = SEE PLANS

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 ENGINEERING &
 CONSTRUCTION

1025 Wade Avenue
 Raleigh, NC 27605
 Tel: 919-789-9977
 Fax: 919-789-9591
 License: C-2197

PROJECT REFERENCE NO. U-3621A	SHEET NO. 7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 Daniel W. Gardner, Jr. 4/12/2017 DocuSign: 9971483711647	 Guy A. Freeman, Jr. 4/10/2017 DocuSign: 16061610502626
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

★ PROPOSED TRAFFIC SIGNAL

THE KEMP
 D. BATTLE
 HOUSE
 HISTORIC
 PROPERTY

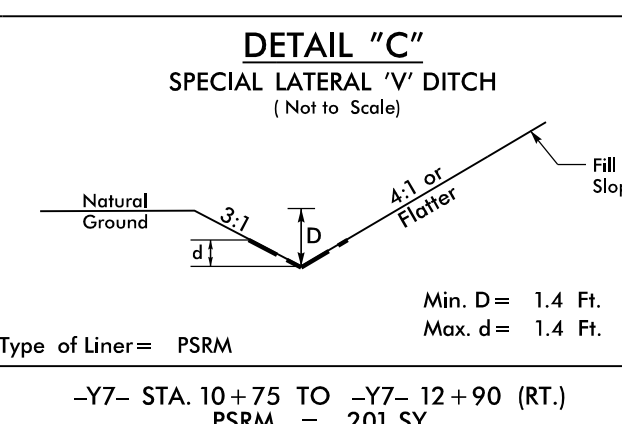
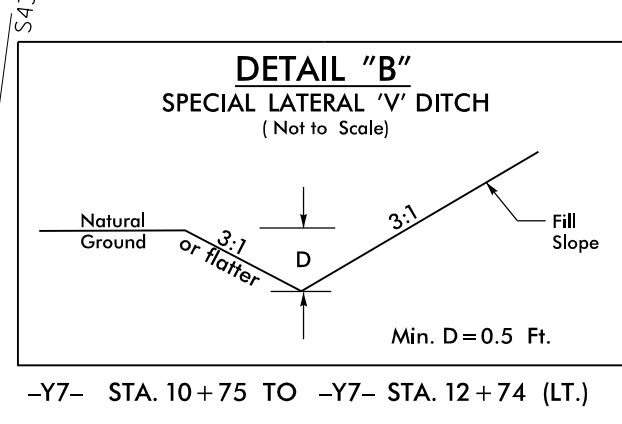
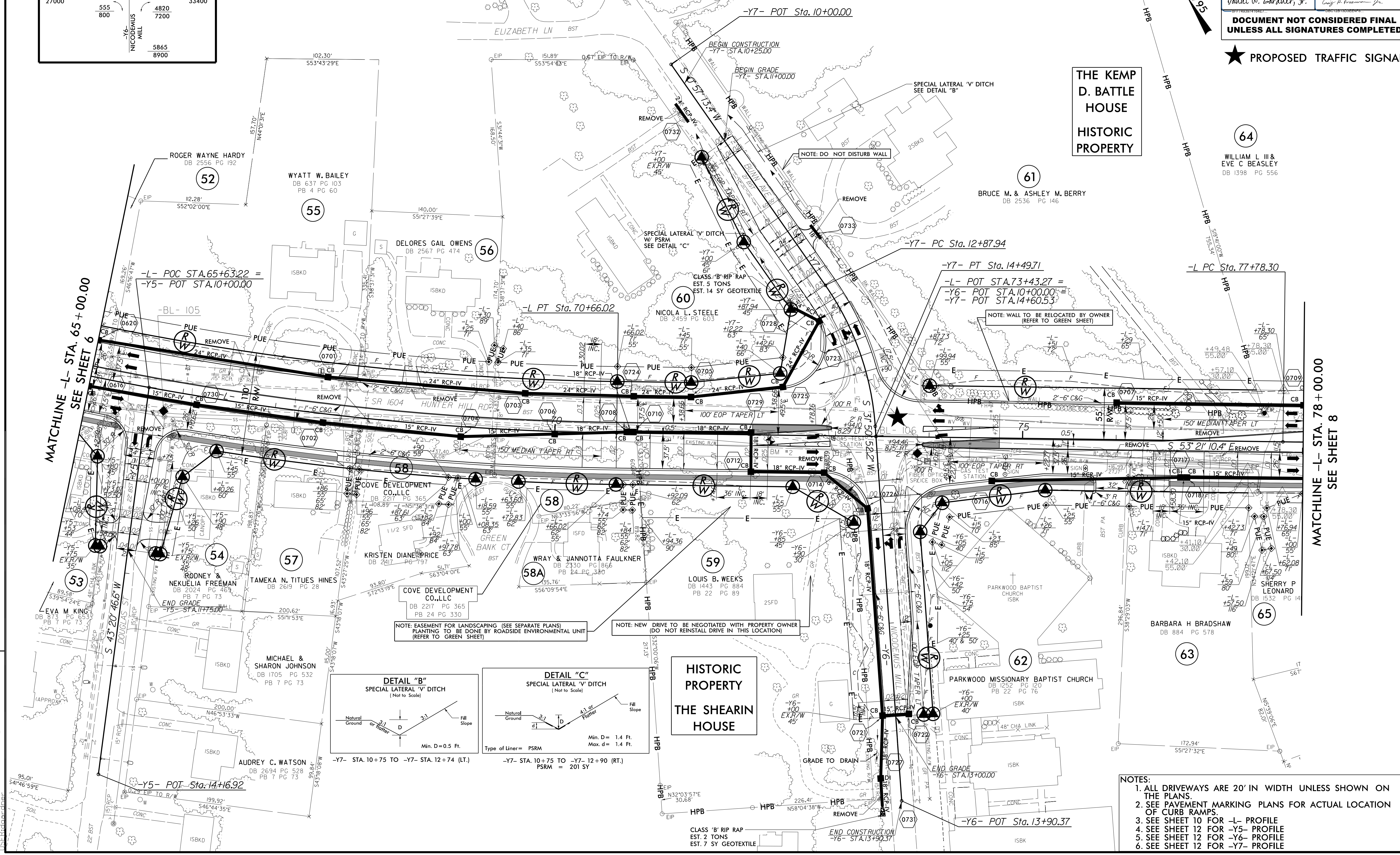
64

WILLIAM L. III &
 EVE C BEASLEY
 DB 1398 PG 556

61
 BRUCE M. & ASHLEY M. BERRY
 DB 2536 PG 146

MATCHLINE -L- STA. 65+00.00
 SEE SHEET 6

MATCHLINE -L- STA. 78+00.00
 SEE SHEET 8

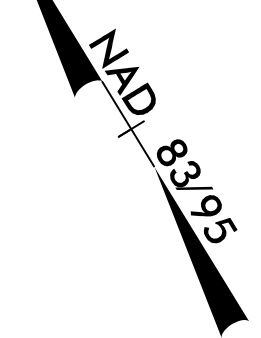


HISTORIC
 PROPERTY
 THE SHEARIN
 HOUSE

- NOTES:
1. ALL DRIVEWAYS ARE 20' IN WIDTH UNLESS SHOWN ON THE PLANS.
 2. SEE PAVEMENT MARKING PLANS FOR ACTUAL LOCATION OF CURB RAMPS.
 3. SEE SHEET 10 FOR -L- PROFILE
 4. SEE SHEET 12 FOR -Y5- PROFILE
 5. SEE SHEET 12 FOR -Y6- PROFILE
 6. SEE SHEET 12 FOR -Y7- PROFILE

PROJECT REFERENCE NO. U-3621A		SHEET NO. 8	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		SEAL 33871	
4/12/2017		4/10/2017	
DocuSign: Daniel W. Gardner, Jr.		DocuSign: Craig P. Freeman, Jr.	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

-L-	-Y8-	-Y9-	-Y10-
PI Sta 80+37.32	PI Sta 11+52.48	PI Sta 12+97.20	PI Sta 14+11.07
$\Delta = 4' 56" 37.8" (LT)$	$\Delta = 20' 50" 39.7" (LT)$	$\Delta = 26' 43" 55.4" (LT)$	$\Delta = 7' 57" 10.4" (LT)$
$D = 0' 57" 17.7"$	$D = 10' 25" 02.7"$	$D = 11' 27" 33.0"$	$D = 2' 30" 00.0"$
$L = 517.72'$	$L = 200.09'$	$L = 233.28'$	$L = 318.12'$
$T = 259.02'$	$T = 101.16'$	$T = 118.80'$	$T = 159.31'$
$R = 6,000.00'$	$R = 550.00'$	$R = 500.00'$	$R = 2,291.83'$
SE = SEE PLANS	SE = SEE PLANS	SE = SEE PLANS	



EXISTING TRAFFIC SIGNAL

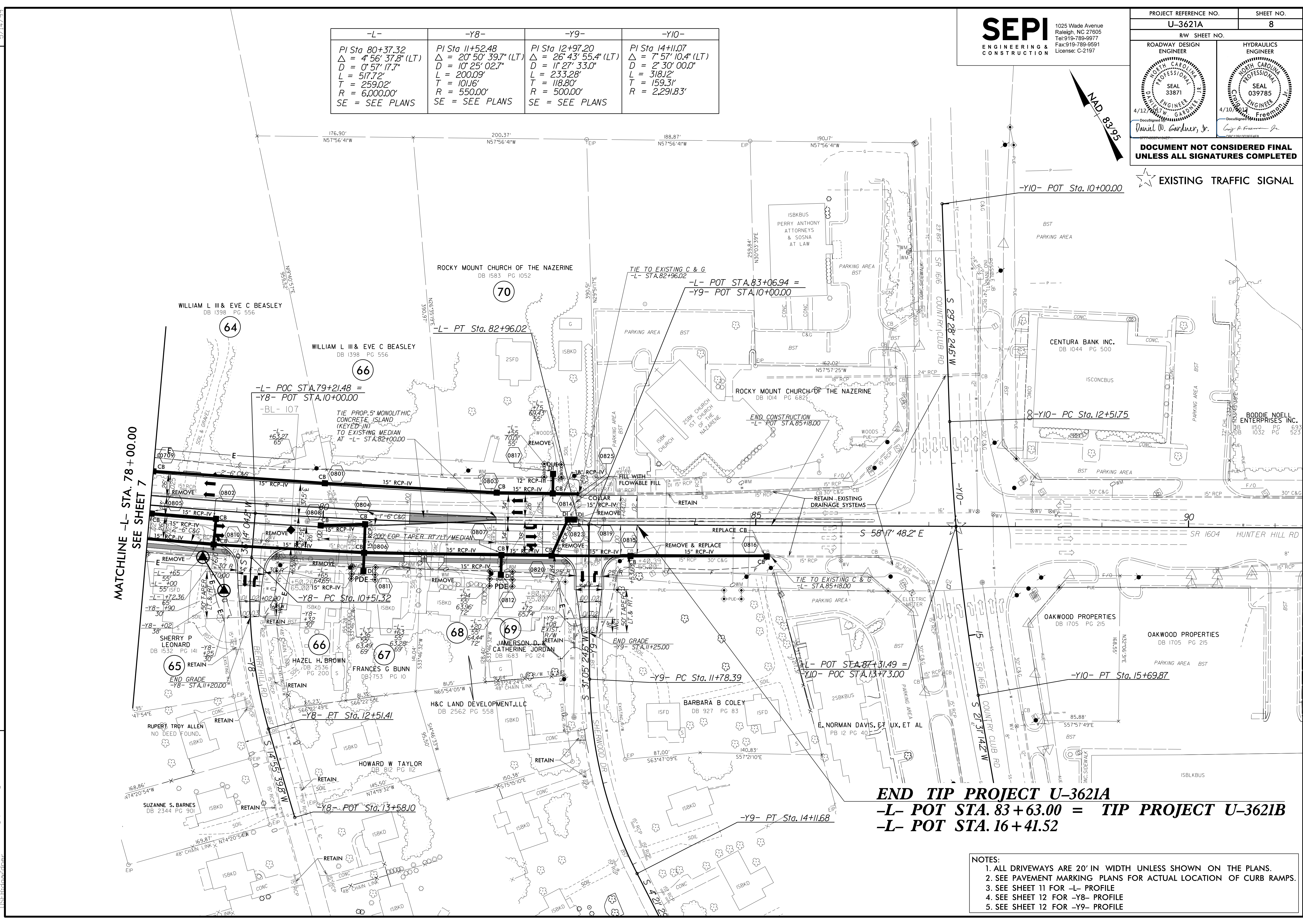
REVISIONS

MATCHLINE -L- STA. 78 + 00.00
SEE SHEET 7

END TIP PROJECT U-3621A
-L- POT STA. 83 + 63.00 = TIP PROJECT U-3621B
-L- POT STA. 16 + 41.52

- NOTES:
1. ALL DRIVEWAYS ARE 20' IN WIDTH UNLESS SHOWN ON THE PLANS.
 2. SEE PAVEMENT MARKING PLANS FOR ACTUAL LOCATION OF CURB RAMPS.
 3. SEE SHEET 11 FOR -L- PROFILE
 4. SEE SHEET 12 FOR -Y8- PROFILE
 5. SEE SHEET 12 FOR -Y9- PROFILE

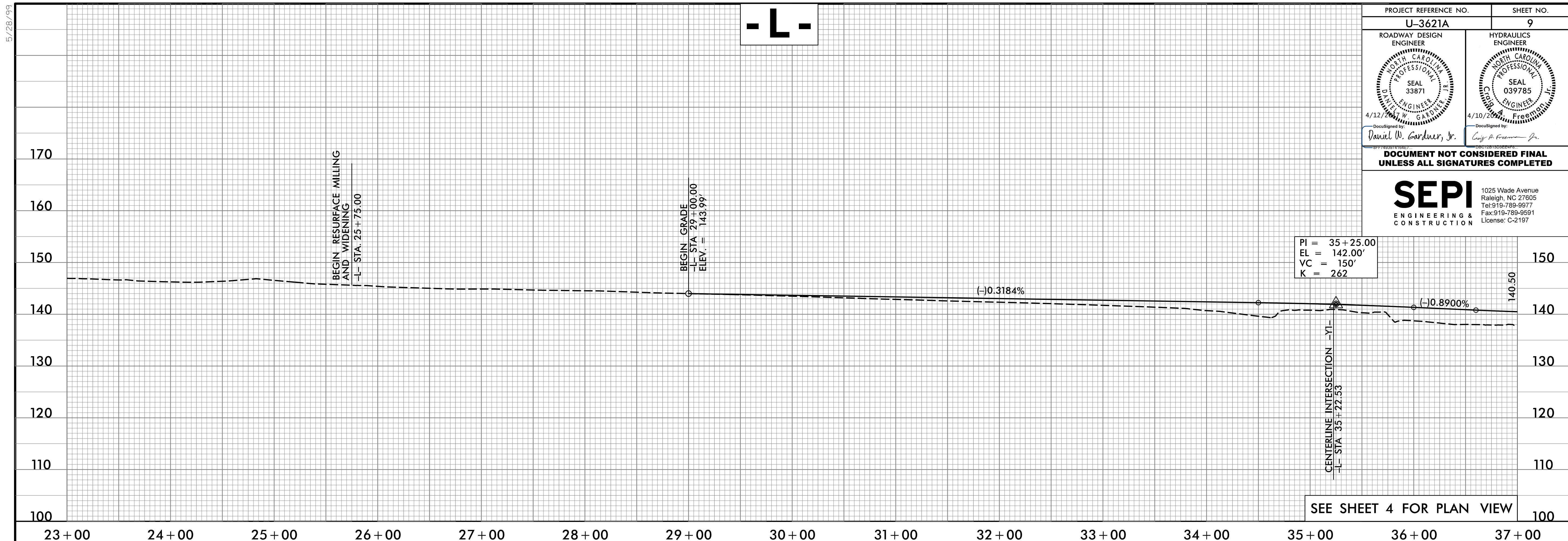
2/28/2017 U-3621A_Rdy_psh_8.dgn
US:Rdy:ps:sh



PROJECT REFERENCE NO. U-3621A	SHEET NO. 9
ROADWAY DESIGN ENGINEER SEAL 33871 4/12/2017 DANIEL W. GARDNER, JR.	HYDRAULICS ENGINEER SEAL 039785 4/10/2017 LARRY A. FRANKLIN, JR.

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

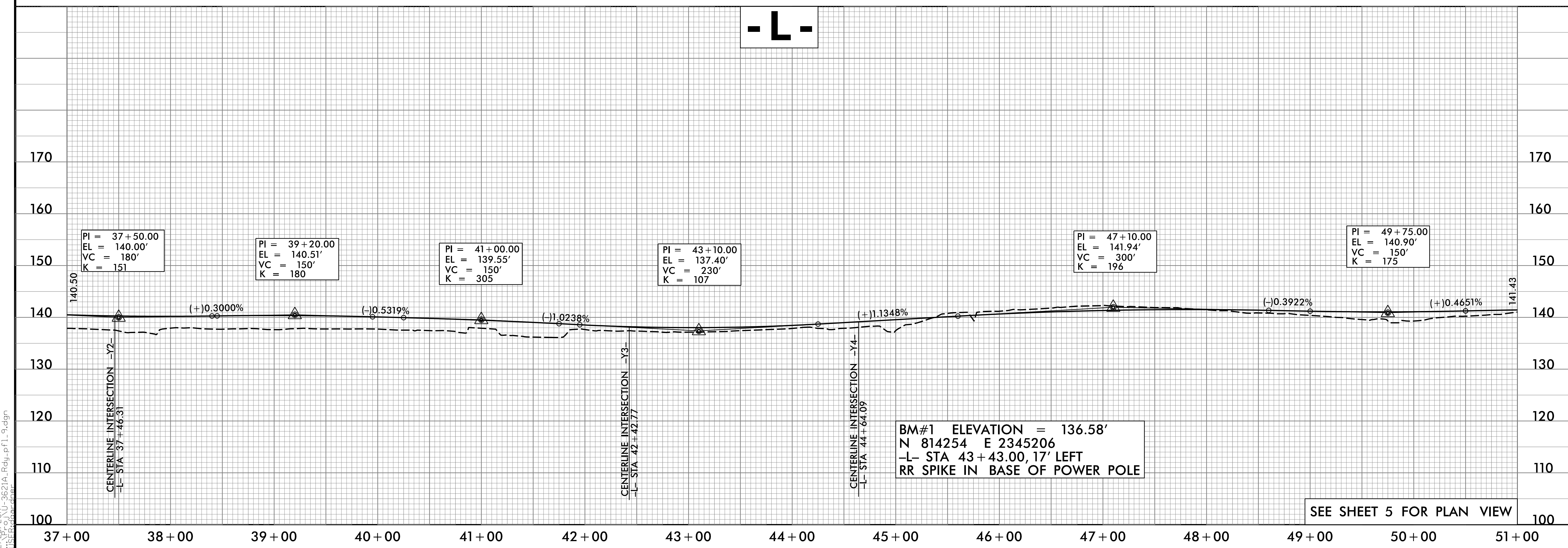
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Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-9591
License: C-2197



PI = 35+25.00
EL = 142.00'
VC = 150'
K = 262

CENTERLINE INTERSECTION -Y1-
-L- STA. 35+22.53

SEE SHEET 4 FOR PLAN VIEW



PI = 37+50.00
EL = 140.00'
VC = 180'
K = 151

PI = 39+20.00
EL = 140.51'
VC = 150'
K = 180

PI = 41+00.00
EL = 139.55'
VC = 150'
K = 305

PI = 43+10.00
EL = 137.40'
VC = 230'
K = 107

PI = 47+10.00
EL = 141.94'
VC = 300'
K = 196




PI = 49+75.00
EL = 140.90'
VC = 150'
K = 175

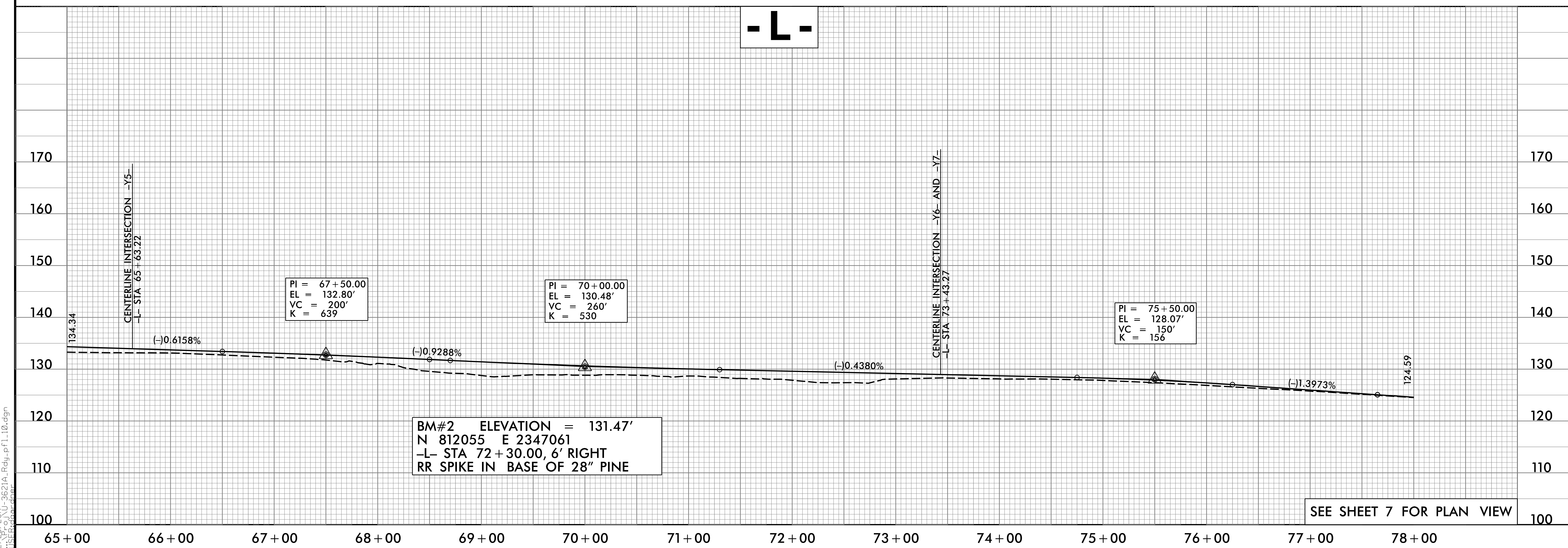
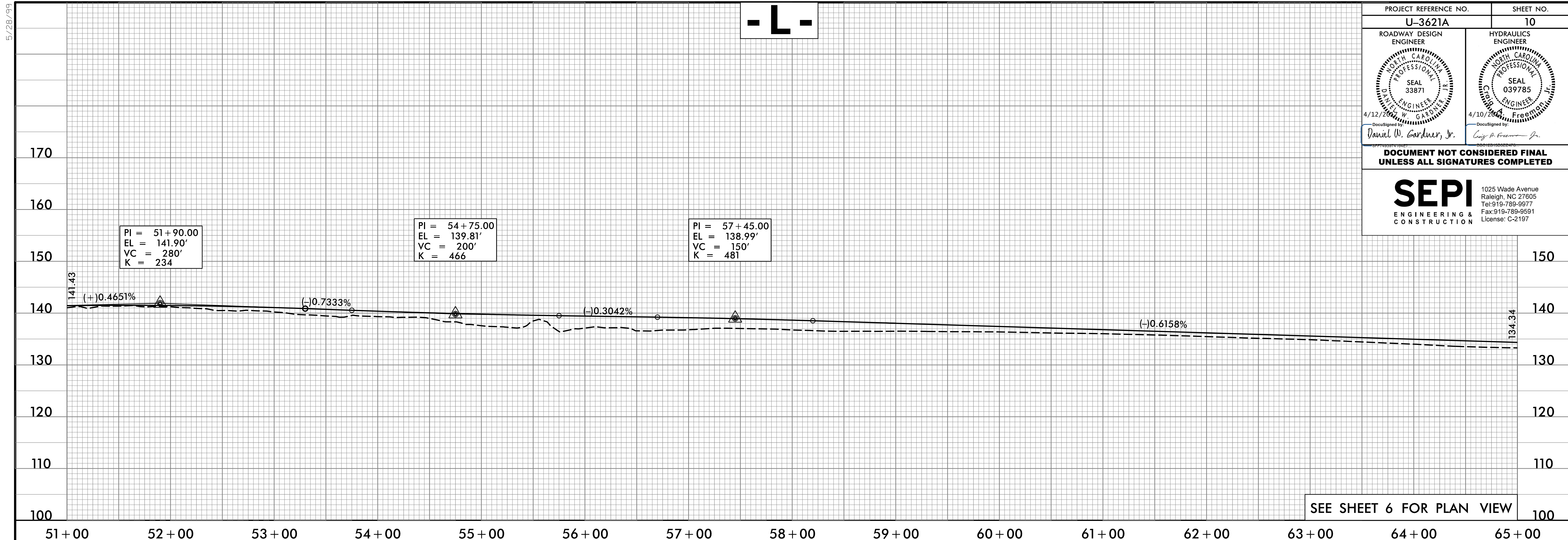
BM#1 ELEVATION = 136.58'
N 814254 E 2345206
-L- STA 43+43.00, 17' LEFT
RR SPIKE IN BASE OF POWER POLE

SEE SHEET 5 FOR PLAN VIEW


5/28/99

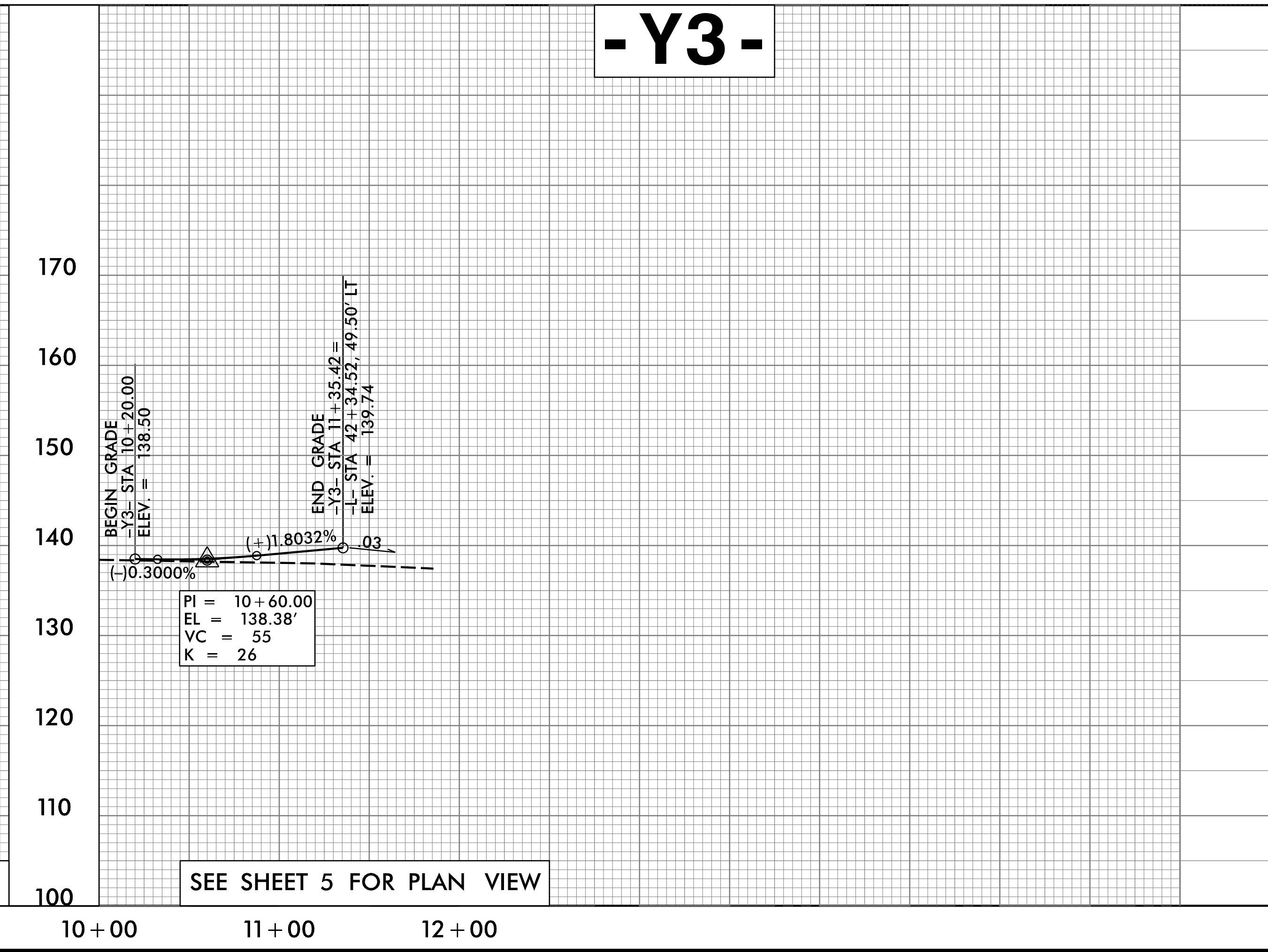
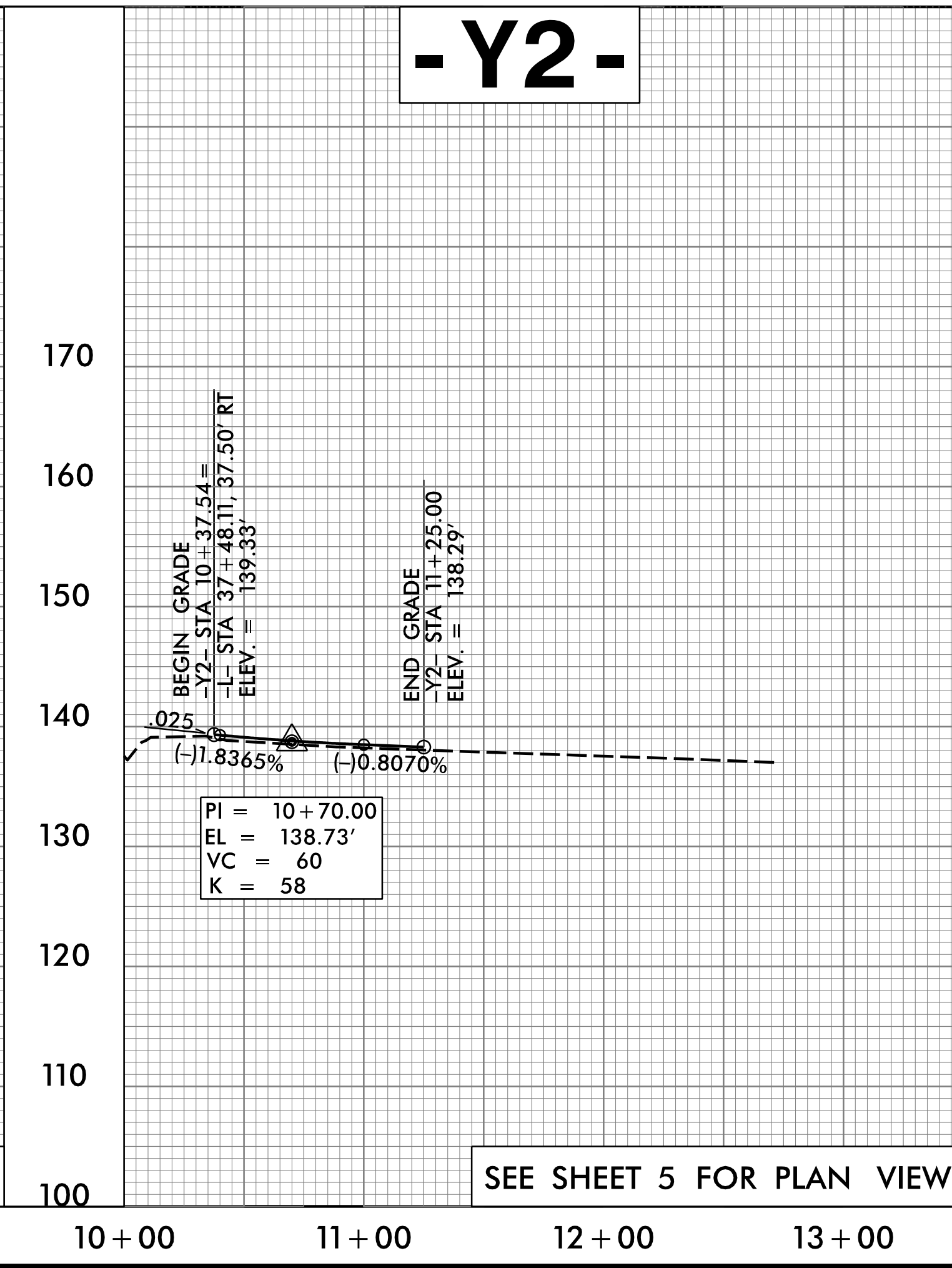
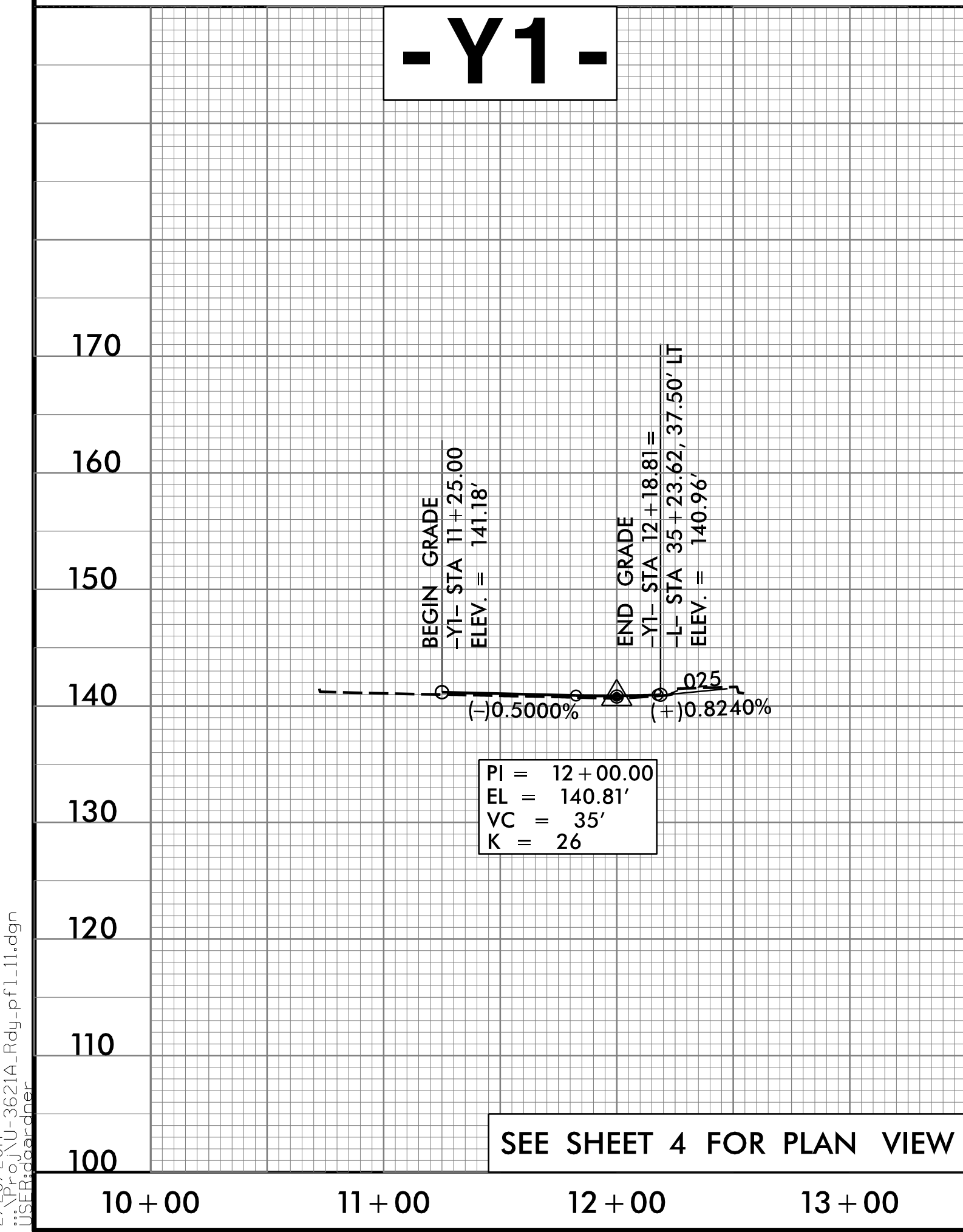
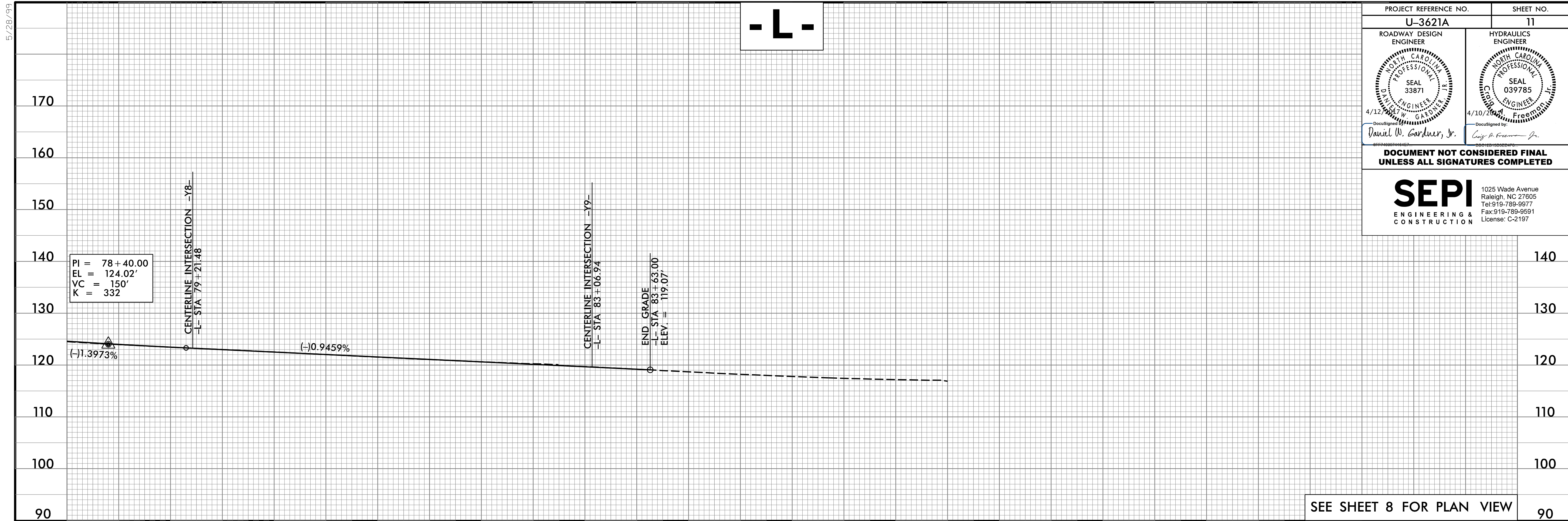
2/28/2017 U:\U-3621A_Rd.dgn
11551600.dwg



PROJECT REFERENCE NO. U-3621A	SHEET NO. 10
ROADWAY DESIGN ENGINEER  4/12/2014 Daniel W. Gardner, Jr. DocuSigned by:	HYDRAULICS ENGINEER  4/10/2014 Craig A. Freeman, Jr. DocuSigned by:
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 SEPI ENGINEERING & CONSTRUCTION	
1025 Wade Avenue Raleigh, NC 27605 Tel: 919-789-9977 Fax: 919-789-9591 License: C-2197	



2/28/2017 11:55:10 AM U:_3621A_Rd\p1_10.dgn

PROJECT REFERENCE NO. U-3621A	SHEET NO. 11
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 33871 4/12/2017 Daniel W. Gardner, Jr.	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 039785 4/10/2017 Craig A. Freeman, Jr.
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 SEPI ENGINEERING & CONSTRUCTION	
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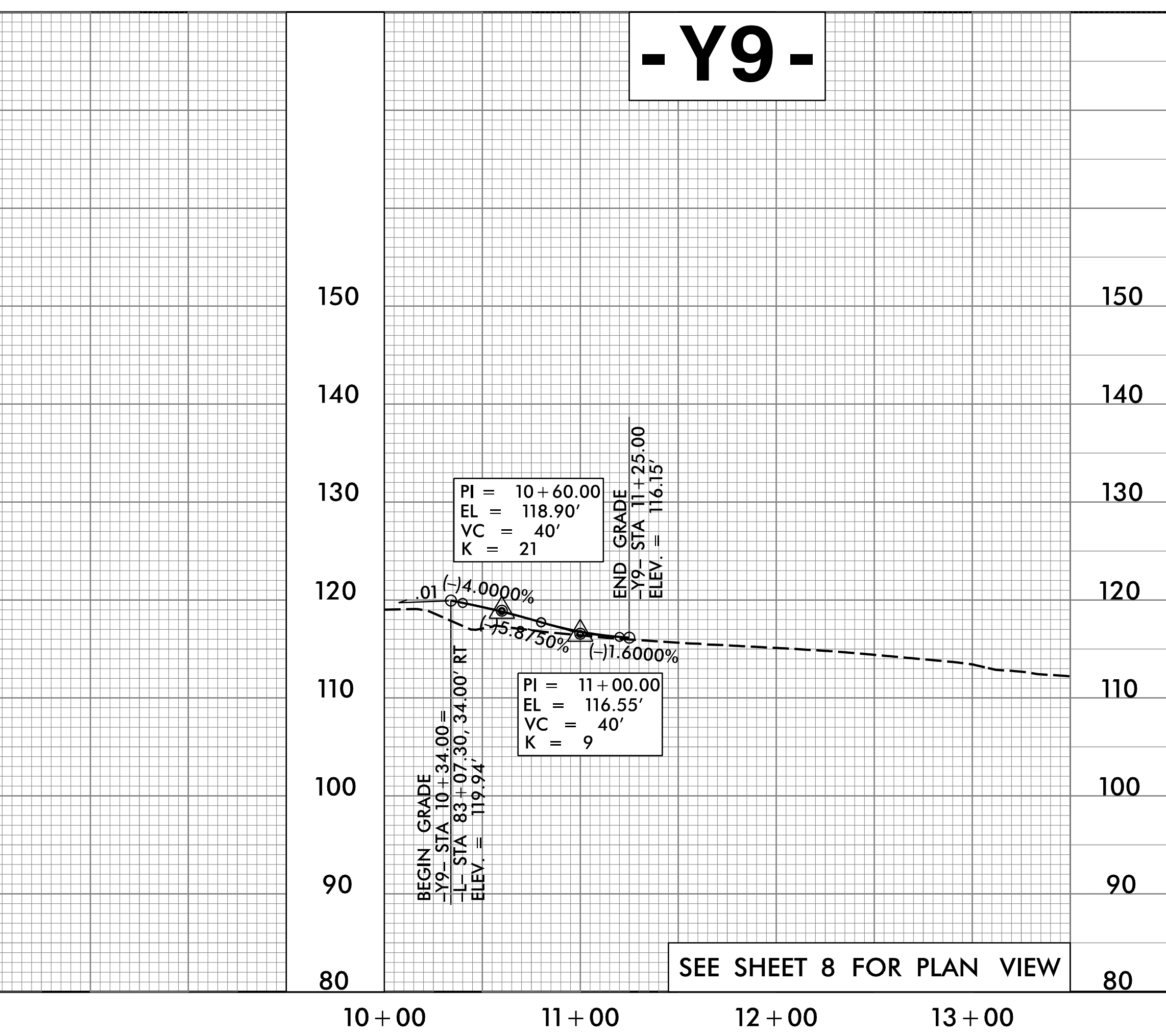
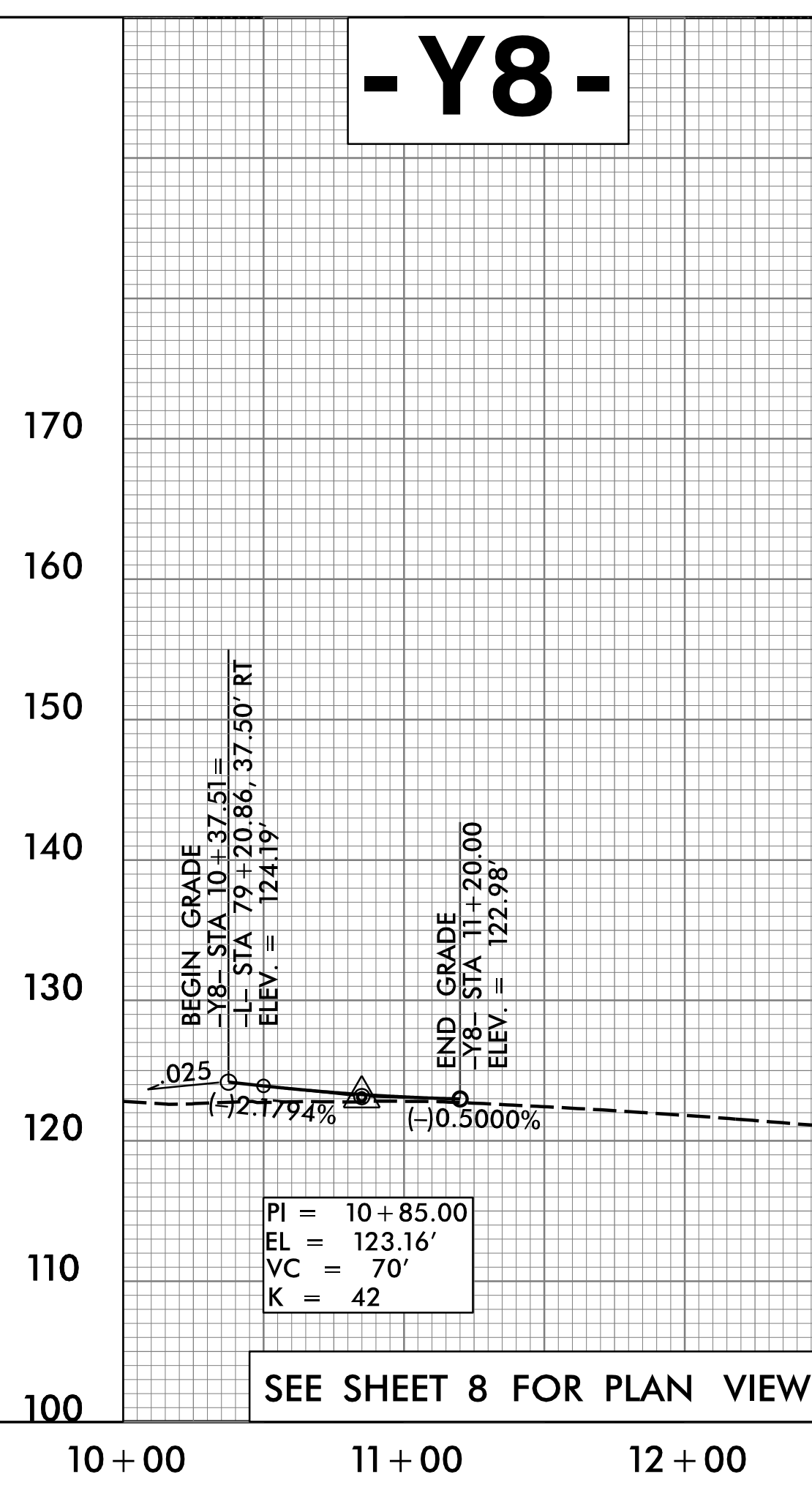
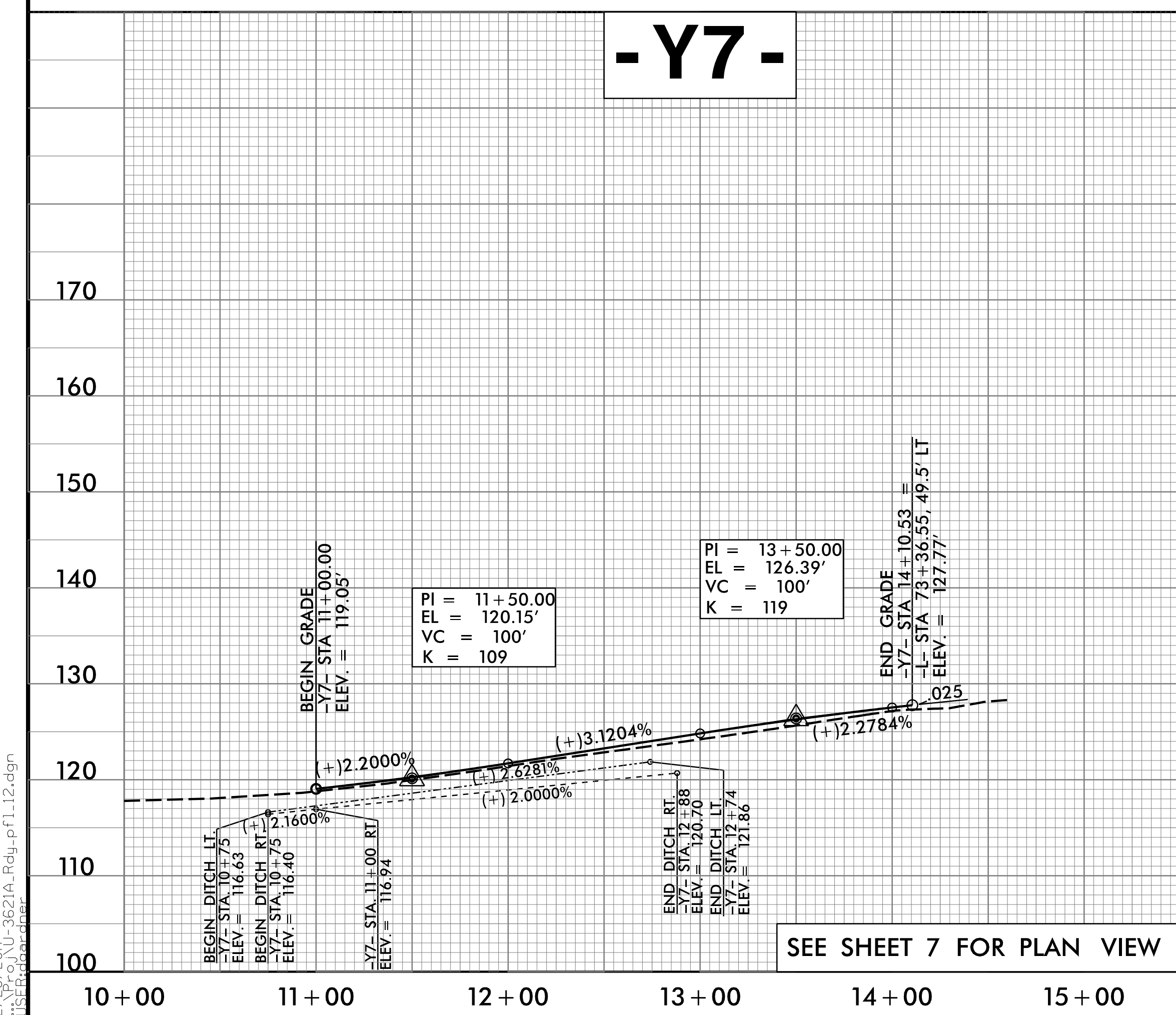
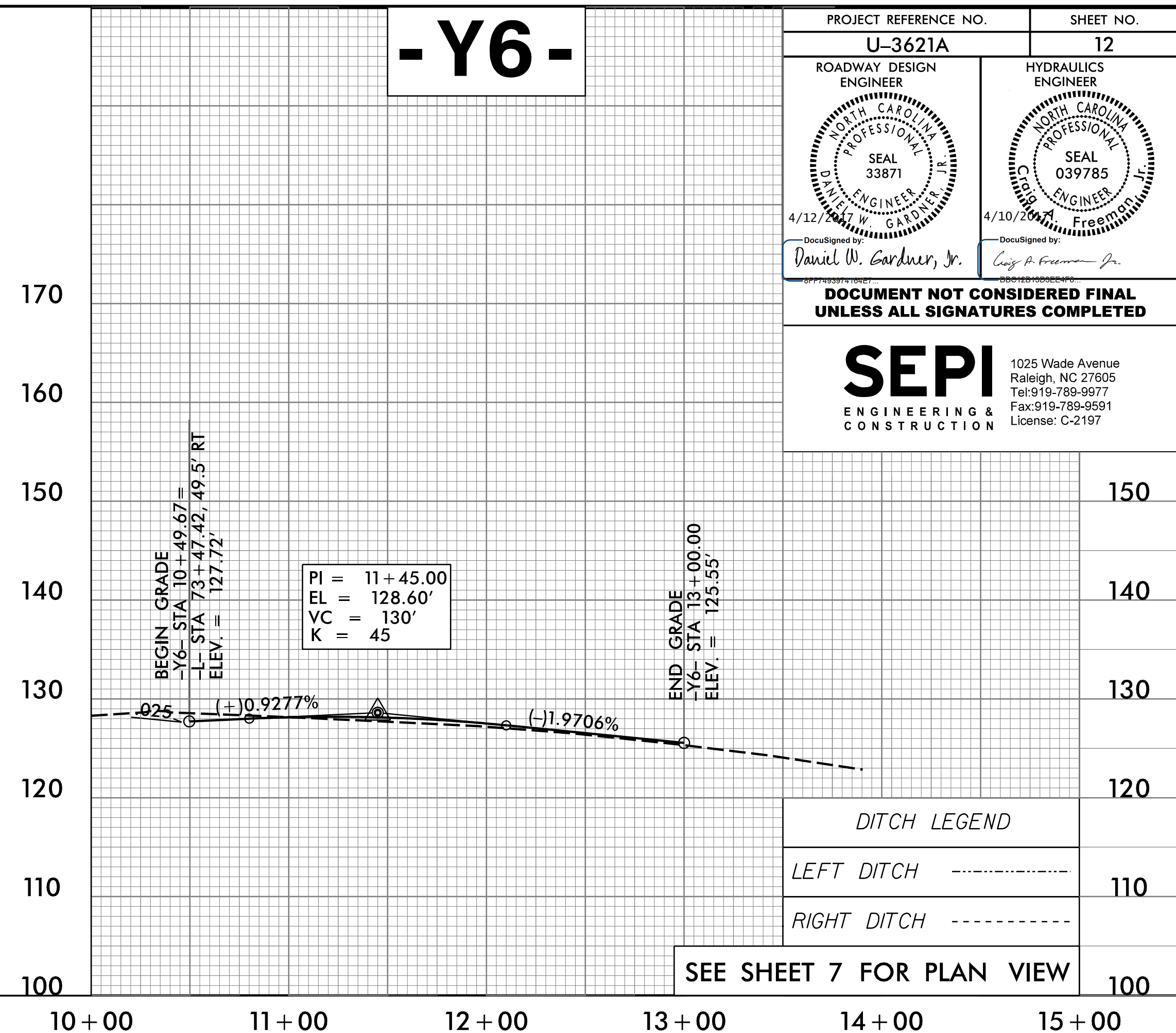
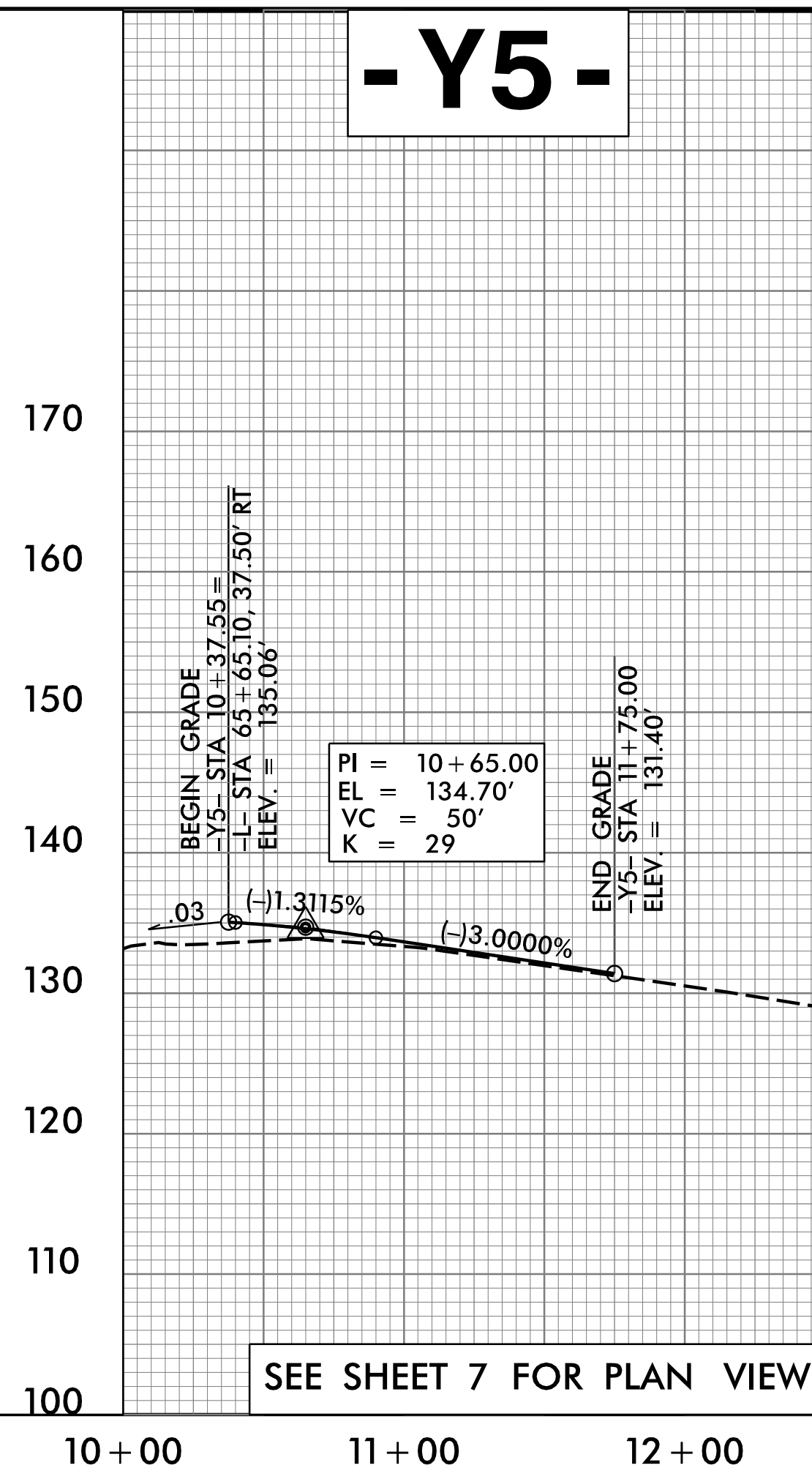
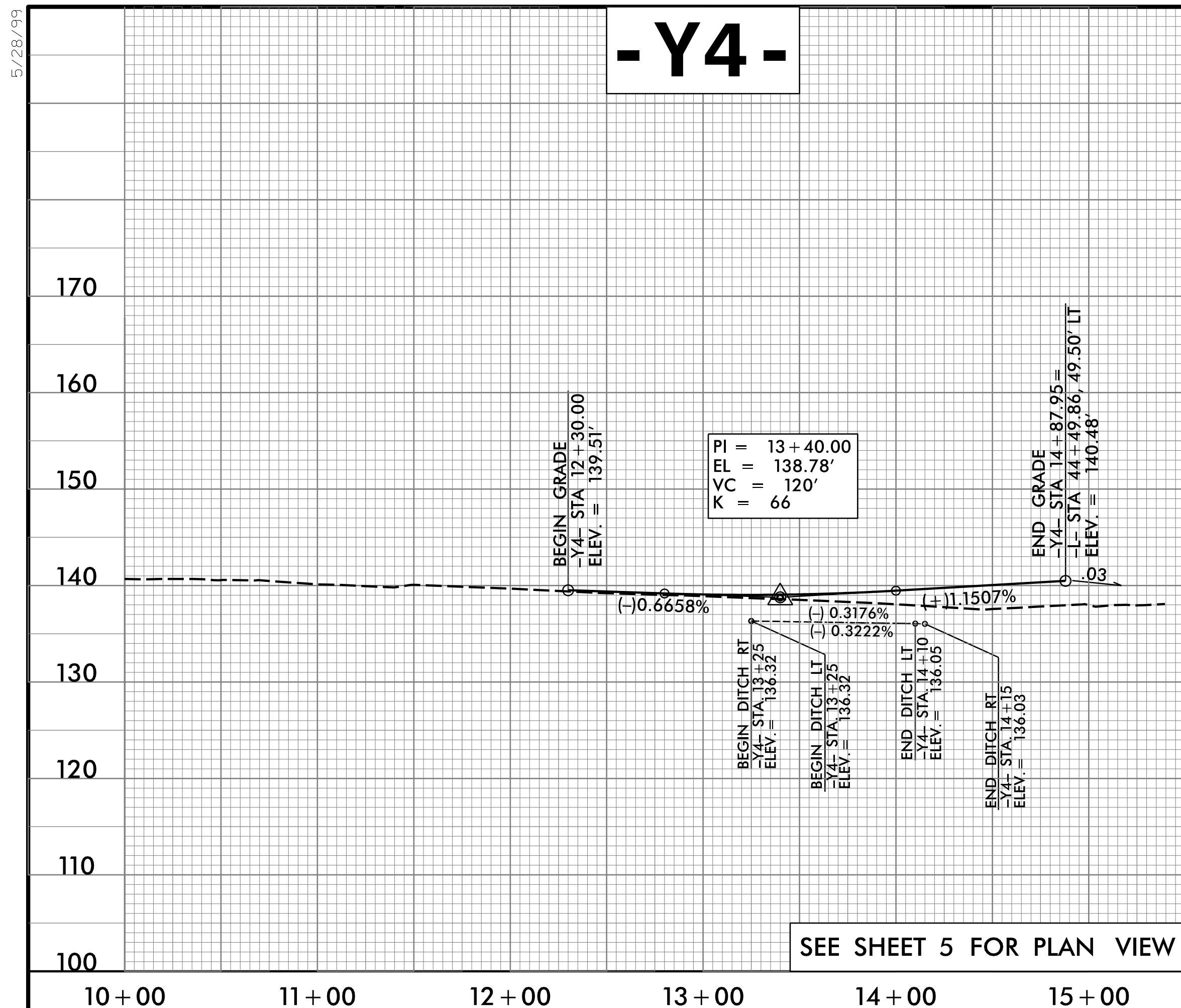


PROJECT REFERENCE NO. U-3621A	SHEET NO. 12
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
<p>DocuSigned by: <i>Daniel W. Gardner, Jr.</i></p> <p>DocuSigned by: <i>Craig A. Freeman, Jr.</i></p>	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	

SEPI ENGINEERING & CONSTRUCTION

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Raleigh, NC 27605
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Fax: 919-789-9591
License: C-2197

DITCH LEGEND	
LEFT DITCH	-----
RIGHT DITCH	-----



5/28/99
2/28/2007 U:\3621A_Rd\p1.12.dgn
115:Edgar:rdp