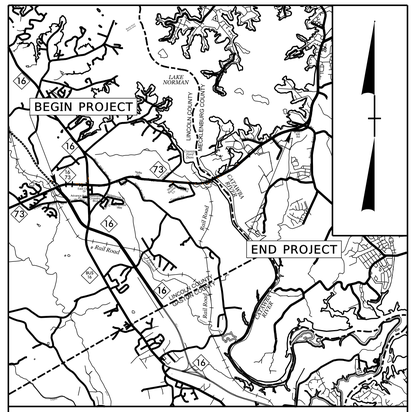
01/16/24

TIP PROJECT: R-5721A

CONTRACT:

See Sheet 1A For Index of Sheets



VICINITY MAP (NTS)

DESIGN RECOMMENDATION PLAN SET

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

LINCOLN & MECKLENBURG COUNTY

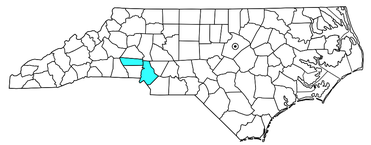
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5721A	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
50215.1.2		PE
50215.2.1		ROW
50215.2.2		UTILITIES RELO.
50215.3.1		CONST.

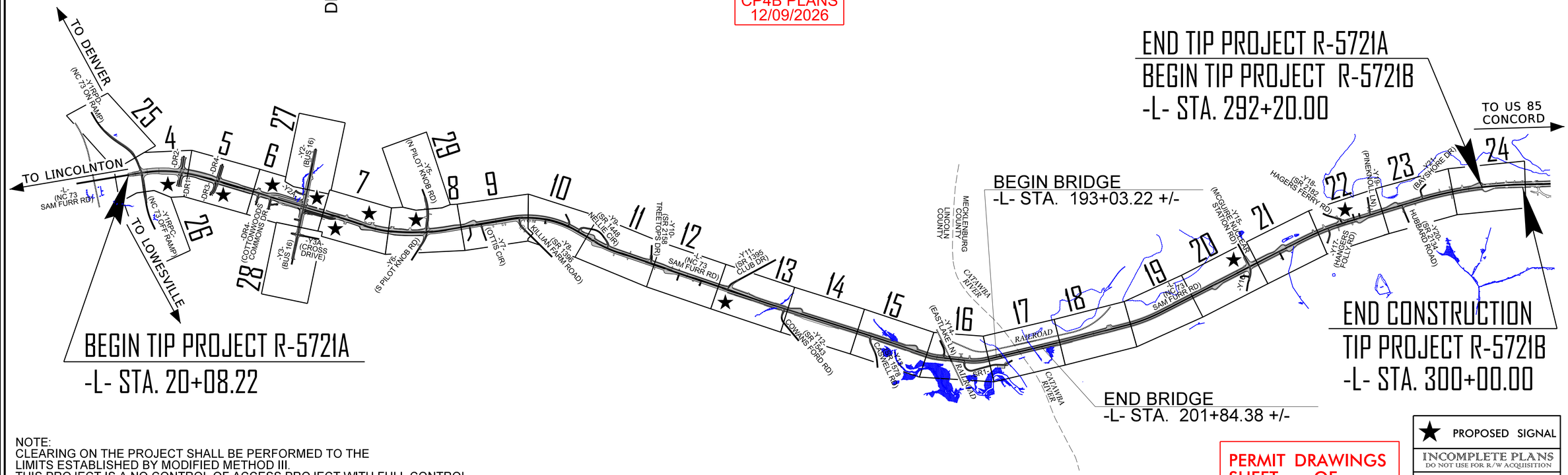
LOCATION: *NC 73 FROM NC 16 IN LINCOLN COUNTY TO I-77 IN MECKLENBURG COUNTY*

TYPE OF WORK: *WIDENING, GRADING, DRAINAGE, PAVING, STRUCTURES, RETAINING WALLS, SIGNALS, SIGNING, AND PAVEMENT MARKINGS*

NAD 83/2011



CP4B PLANS
12/09/2026



NOTE:
CLEARING ON THE PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY MODIFIED METHOD III.
THIS PROJECT IS A NO CONTROL OF ACCESS PROJECT WITH FULL CONTROL OF ACCESS BEING LIMITED TO POINTS AS SHOWN ON PLANS.

PERMIT DRAWINGS
SHEET ___ OF ___

★ PROPOSED SIGNAL

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2030 = 43,034
ADT 2045 = 53,784
K = 9 %
D = 55 %
T = 5 % *
V = 50 MPH
* TTST = 1% DUAL = 4%
FUNC CLASS =
PRINCIPAL ARTERIAL
STATEWIDE TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT R-5721A = 5.154 MILES

LENGTH OF STRUCTURE TIP PROJECT R-5721A = 0.167 MILE

TOTAL LENGTH OF TIP PROJECT R-5721A = 4.987 MILES

NCDOT CONTACT: RADHA ATTALURI, P.E
PROJECT MANAGER

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: 7/31/2026

LETTING DATE: 7/16/2030

PAUL ROBBINS, P.E.
PROJECT ENGINEER

JORDAN BOND, P.E.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

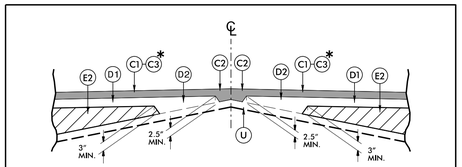
STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

PAVEMENT SCHEDULE

(PRELIMINARY PAVEMENT DESIGN)

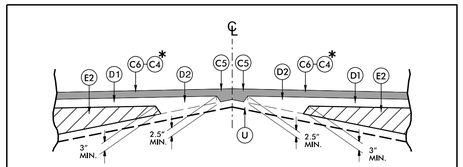
A1	6″ PORTLAND CEMENT PAVEMENT	R2	2′-6″ CONCRETE CURB AND GUTTER.
C1	PROP. APPROX. 3″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	R3	5″ MONOLITHIC CONCRETE ISLAND (KEYED IN MOUNTED).
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, 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.	R4	2′-0″ CONCRETE ISLAND VALLEY GUTTER.
C3	PROP. APPROX. 1.5″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	R5	2′-9″ CONCRETE CURB AND GUTTER.
C4	PROP. APPROX. 3″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	S1	4″ CONCRETE MULTI-USE PATH
C5	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1″ DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2″ IN DEPTH.	S2	4″ CONCRETE SIDEWALK
C6	PROP. APPROX. 1.5″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	T	EARTH MATERIAL.
D1	PROP. APPROX. 4″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	U	EXISTING PAVEMENT.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1″ DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½″ IN DEPTH OR GREATER THAN 4″ IN DEPTH.	V1	1.5″ ASPHALT MILLING
D3	PROP. APPROX. 3″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.	V2	3.0″ ASPHALT MILLING
E1	PROP. APPROX. 4″ ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	W1	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL).
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1″ DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3″ IN DEPTH OR GREATER THAN 5½″ IN DEPTH.	W2	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL).
R1	1′-6″ CONCRETE CURB AND GUTTER.		

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



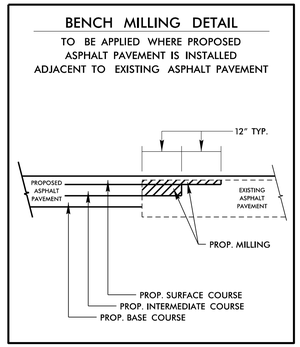
(W1) - DETAIL SHOWING METHOD OF WEDGING

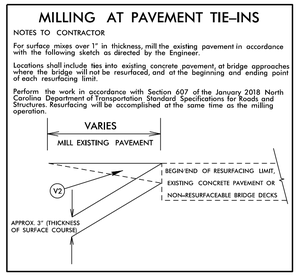
* USE C3 FOR ALL –Y– LINES



(W2) - DETAIL SHOWING METHOD OF WEDGING

* USE C4 FOR –Y25–





R-5721A

2A-1

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY



ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

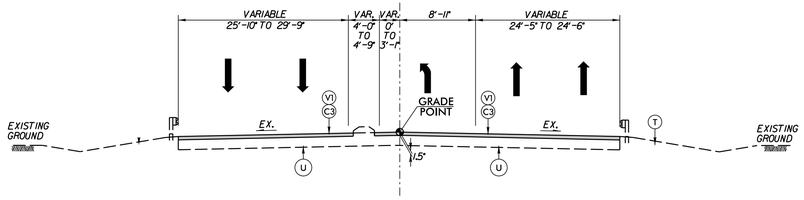
PREPARED BY

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: P-0116

REVISIONS

NOTES:
* SEE PLANS FOR MUP/SIDEWALK WIDTHS & LOCATIONS

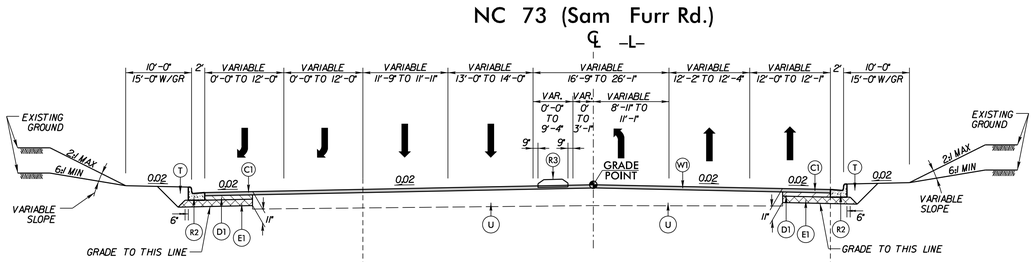
NC 73 (Sam Furr Rd.)
℄ –L–



TYPICAL SECTION NO. 01

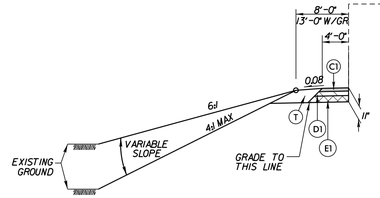
LINE	FROM STATION	TO STATION
–L–	20+08.22	20+77.00

NC 73 (Sam Furr Rd.)
℄ –L–



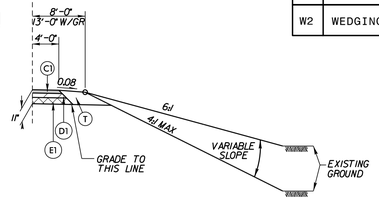
TYPICAL SECTION NO. 02

LINE	FROM STATION	TO STATION
–L–	20+77.00	22+88.77



SUBTYPICAL SECTION NO. 02A

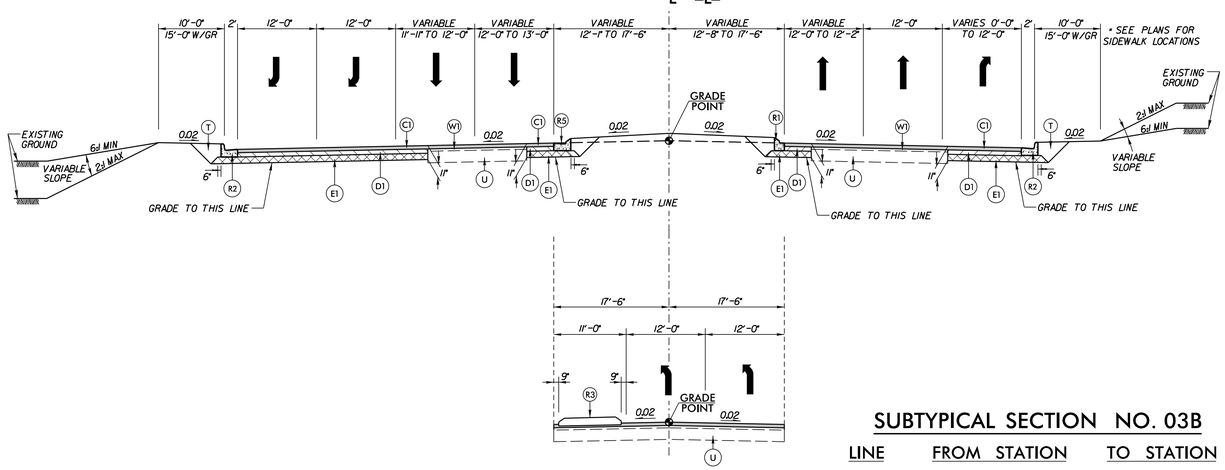
LINE	FROM STATION	TO STATION
–L–	20+77.00	21+98.45



SUBTYPICAL SECTION NO. 02B

LINE	FROM STATION	TO STATION
–L–	20+77.00	22+26.01

NC 73 (Sam Furr Rd.)
℄ –L–



TYPICAL SECTION NO. 03

LINE	FROM STATION	TO STATION
–L–	22+88.77	30+87.51

SUBTYPICAL SECTION NO. 03B

LINE	FROM STATION	TO STATION
–L–	25+89.75	29+49.17

PAVEMENT SCHEDULE	
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING

R-5721A
2A-2

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PREPARED BY

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: P-0116

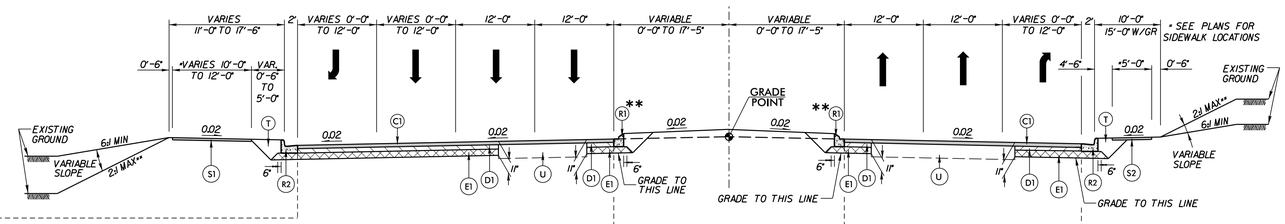
REVISIONS

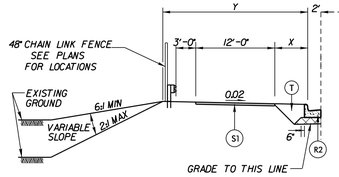
11/14/23

NOTES:
* SEE PLANS FOR MUP/SIDEWALK WIDTHS & LOCATIONS
** USE (R5) IN LIEU OF (R1) ON THE LOW SIDE OF SUPERELEVATED CURVES. SEE PLANS FOR LOCATIONS

TYPICAL SECTION NO. 04

LINE	FROM STATION	TO STATION
–L–	30+87.51	47+08.66
–L–	64+45.03	184+10.00
–L–	213+15.00	292+20.00



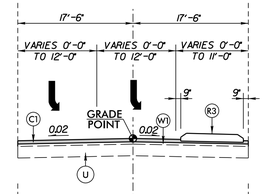


SUBTYPICAL SECTION NO. 04F

LINE	FROM STATION	TO STATION	X	Y
–L–	148+75.00	151+50.00	5'–0"	22'–0"
–L–	167+50.00	182+29.08	5'–0"	22'–0"
–L–	228+00.00	234+25.00	2'–6"	19'–6"
–L–	270+66.52	270+76.60	5'–0"	22'–0"

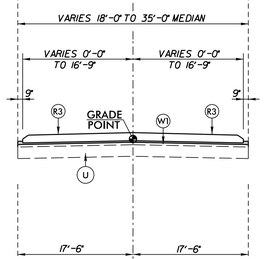
SUBTYPICAL SECTION NO. 04A

LINE	FROM STATION	TO STATION
–L–	30+87.51	34+02.91
–L–	46+13.00	47+40.00 (MIRRORED)



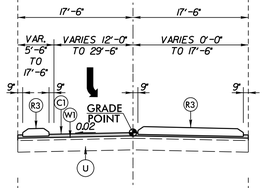
SUBTYPICAL SECTION NO. 04B

LINE	FROM STATION	TO STATION
–L–	37+09.36	37+62.50
–L–	177+30.64	177+50.00
–L–	183+04.74	184+10.00
–L–	275+63.12	276+27.08



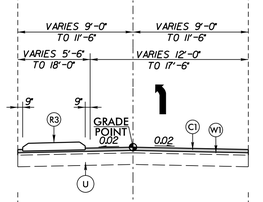
SUBTYPICAL SECTION NO. 04C

LINE	FROM STATION	TO STATION	LINE	FROM STATION	TO STATION
–L–	65+99.00	67+05.02	–L–	111+91.76	112+81.88
–L–	77+66.33	78+81.00 (MIRRORED)	–L–	122+76.54	124+16.35 (MIRRORED)
–L–	78+81.00	80+05.66	–L–	126+55.15	128+10.14
–L–	87+50.04	88+55.04 (MIRRORED)	–L–	138+31.07	139+91.07 (MIRRORED)
–L–	96+40.31	97+47.97	–L–	138+31.07	139+91.07 (MIRRORED)
–L–	110+96.38	111+86.38 (MIRRORED)			



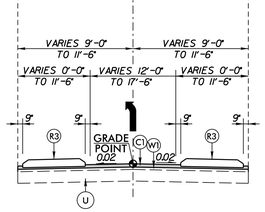
SUBTYPICAL SECTION NO. 04D

LINE	FROM STATION	TO STATION	LINE	FROM STATION	TO STATION
–L–	149+45.00	154+15.50	–L–	253+86.00	255+08.75 (MIRRORED)
–L–	167+95.00	171+58.00(MIRRORED)	–L–	262+19.02	263+41.63
–L–	171+58.00	177+30.64	–L–	268+43.00	271+80.00 (MIRRORED)
–L–	177+50.00	183+04.74	–L–	271+80.00	274+58.00
–L–	213+15.00	214+40.01	–L–	277+51.84	279+15.49
–L–	250+34.27	251+57.00	–L–	290+03.27	291+26.00



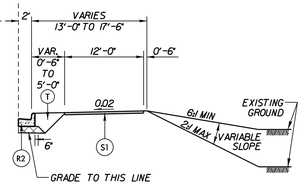
SUBTYPICAL SECTION NO. 04E

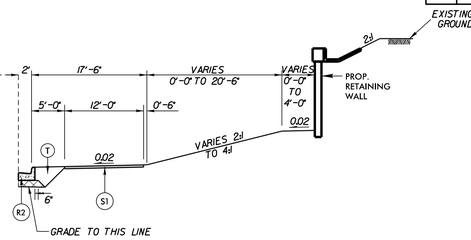
LINE	FROM STATION	TO STATION	LINE	FROM STATION	TO STATION
–L–	214+40.01	215+85.00	–L–	267+23.00	268+43.00 (MIRRORED)
–L–	236+60.00	242+52.00 (MIRRORED)	–L–	274+58.00	275+63.12
–L–	251+57.00	252+67.00	–L–	276+27.08	277+51.84 (MIRRORED)
–L–	252+67.00	253+86.00 (MIRRORED)	–L–	291+26.00	292+20.00
–L–	263+41.63	265+00.00			



SUBTYPICAL SECTION NO. 04H

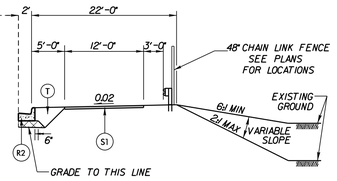
LINE	FROM STATION	TO STATION
–L–	139+55.00	292+20.00





SUBTYPICAL SECTION NO. 04I

LINE	FROM STATION	TO STATION
–L–	153+00.00	162+00.00



SUBTYPICAL SECTION NO. 04J

LINE	FROM STATION	TO STATION
–L–	146+43.75	150+12.50
–L–	169+30.00	183+50.00

PAVEMENT SCHEDULE	
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING

R-5721A
2A-3

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY



ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PREPARED BY

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555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: P-0116

REVISIONS

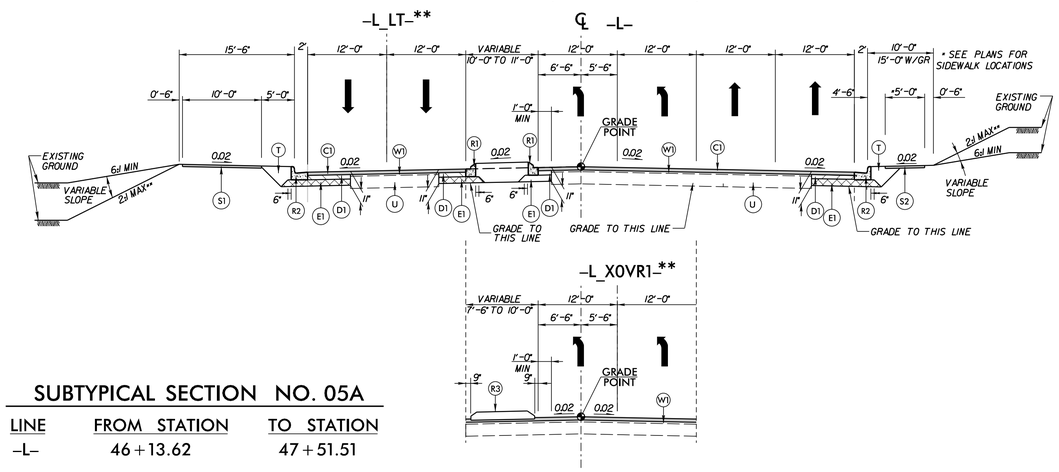
11/14/23

NOTES:
* SEE PLANS FOR MUP/SIDEWALK WIDTHS & LOCATIONS
** SEE PLANS FOR ALIGNMENT STATIONING

TYPICAL SECTION NO. 05

LINE	FROM STATION	TO STATION
–L–	45+04.82	47+08.66

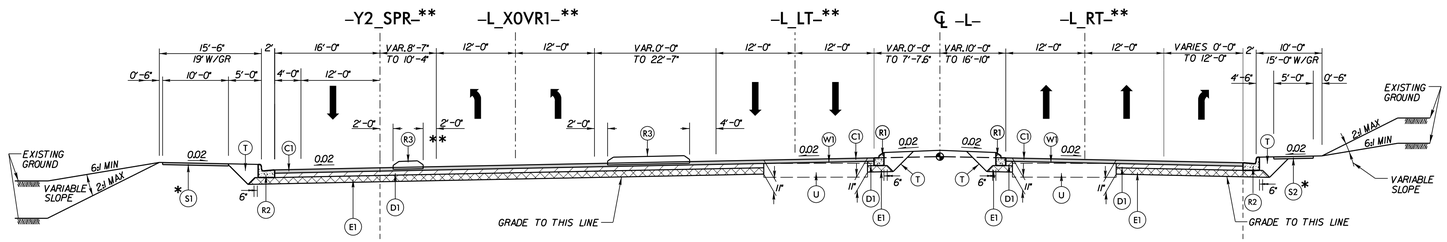
NC 73 (Sam Furr Rd.)



SUBTYPICAL SECTION NO. 05A

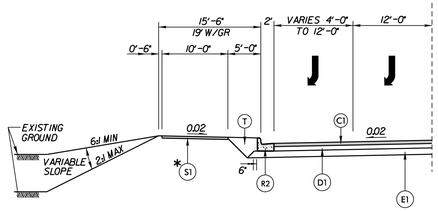
LINE	FROM STATION	TO STATION
–L–	46+13.62	47+51.51

PAVEMENT SCHEDULE	
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING



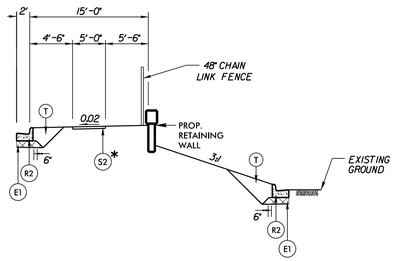
TYPICAL SECTION NO. 06

LINE	FROM STATION	TO STATION
–L–	47+08.66	54+58.71



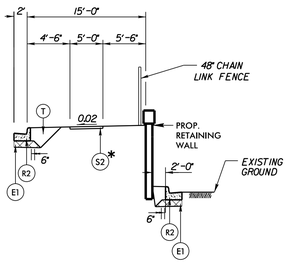
SUBTYPICAL SECTION NO. 06A

LINE	FROM STATION	TO STATION
–L–	47+13.48	51+93.57



SUBTYPICAL SECTION NO. 06B

LINE	FROM STATION	TO STATION
–L–	50+90.00	51+64.53



SUBTYPICAL SECTION NO. 06C

LINE	FROM STATION	TO STATION
–L–	51+64.53	53+53.11

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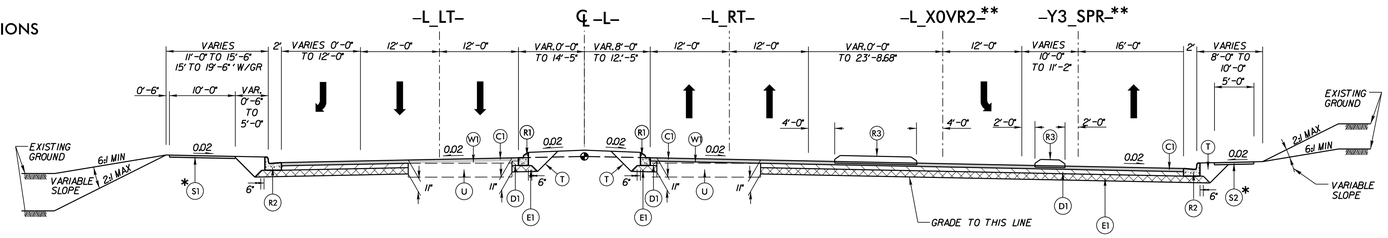
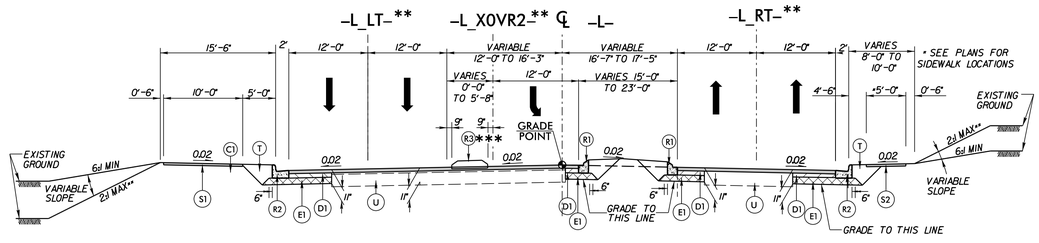
NOTES:
* SEE PLANS FOR MUP/SIDEWALK WIDTHS & LOCATIONS
** SEE PLANS FOR ALIGNMENT STATIONING



TYPICAL SECTION NO. 07

LINE	FROM STATION	TO STATION
–L–	54+58.71	61+60.83

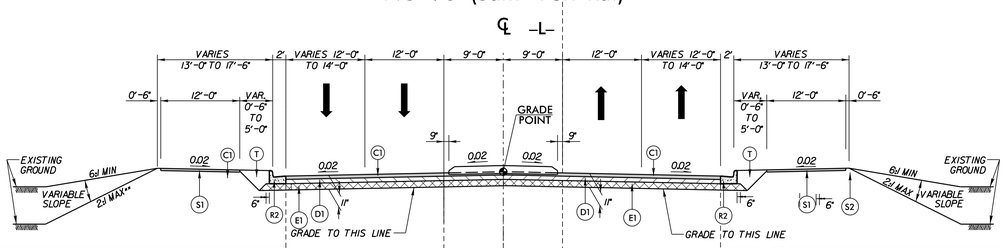


*** ISLAND ENDS AT –L– STA. 61+76.81

TYPICAL SECTION NO. 08

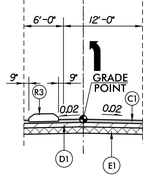
LINE	FROM STATION	TO STATION
–L–	61+60.83	64+45.03

NC 73 (Sam Furr Rd.)



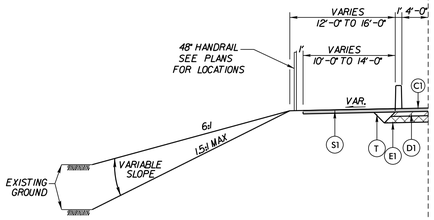
TYPICAL SECTION NO. 09

LINE	FROM STATION	TO STATION
–L–	184+10.00	193+03.22 (BEGIN BRIDGE)
–L–	201+84.38 (END BRIDGE)	213+15.00



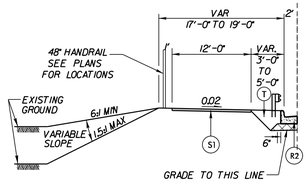
SUBTYPICAL SECTION NO. 09A

LINE	FROM STATION	TO STATION
–L–	184+37.78	186+49.19
–L–	186+63.65	192+35.00 (MIRRORED)
–L–	205+25.79	210+15.00 (MIRRORED)
–L–	210+15.00	213+15.00



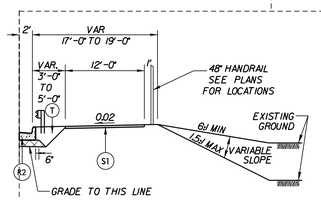
SUBTYPICAL SECTION NO. 09B

LINE	FROM STATION	TO STATION
–L–	191+90.00	193+03.22 (BEGIN BRIDGE)
–L–	201+84.38 (END BRIDGE)	202+50.00



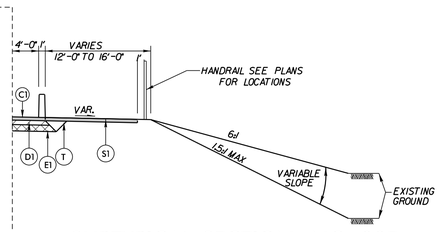
SUBTYPICAL SECTION NO. 09C

LINE	FROM STATION	TO STATION
–L–	202+50.00	204+75.00



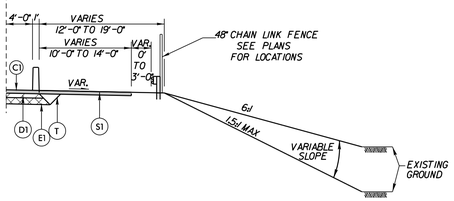
SUBTYPICAL SECTION NO. 09D

LINE	FROM STATION	TO STATION
–L–	187+74.18	192+35.00



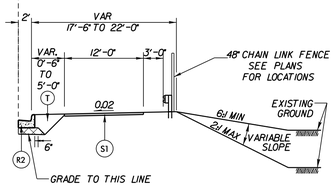
SUBTYPICAL SECTION NO. 09E

LINE	FROM STATION	TO STATION
–L–	192+35.00	193+03.22 (BEGIN BRIDGE)



SUBTYPICAL SECTION NO. 09F

LINE	FROM STATION	TO STATION
–L–	201+84.38 (END BRIDGE)	203+05.00



SUBTYPICAL SECTION NO. 09G

LINE	FROM STATION	TO STATION
–L–	203+05.00	207+97.25

PAVEMENT SCHEDULE	
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING

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NORTH CAROLINA
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NOTES:
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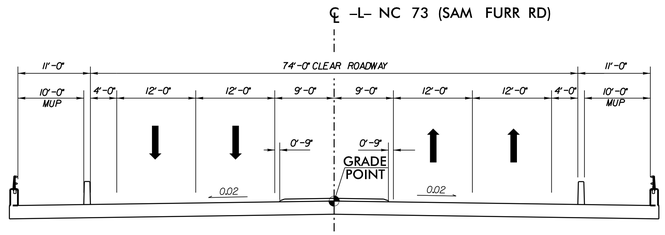
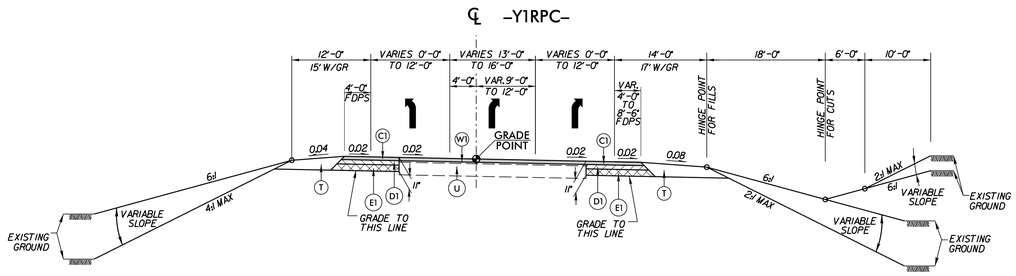
PAVEMENT SCHEDULE	
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING



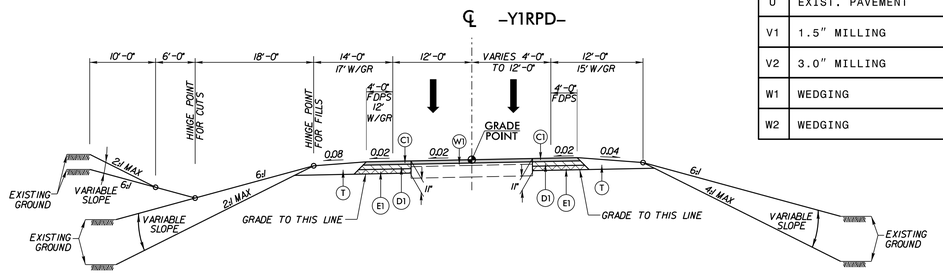
TYPICAL SECTION NO. 10

LINE	FROM STATION	TO STATION
–L–	193+03.22	201+84.38



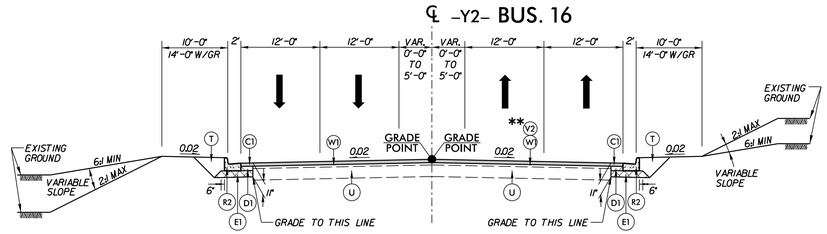
TYPICAL SECTION NO. 11

LINE	FROM STATION	TO STATION
–Y1RPC–	15+38.00	20+85.57



TYPICAL SECTION NO. 12

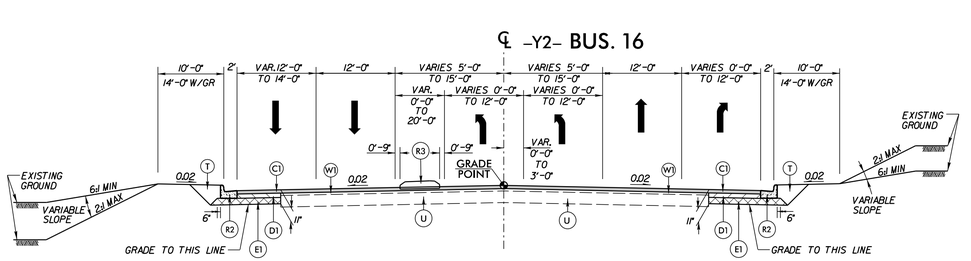
LINE	FROM STATION	TO STATION
–Y1RPD–	13+45.00	25+07.25



** MILL UP TO 3" IN LIEU OF WEDGING
10+20.00 TO 11+00.00

TYPICAL SECTION NO. 13

LINE	FROM STATION	TO STATION
–Y2–	10+20.00	13+42.45



TYPICAL SECTION NO. 14

LINE	FROM STATION	TO STATION
–Y2–	13+42.45	21+14.54

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NOTES:
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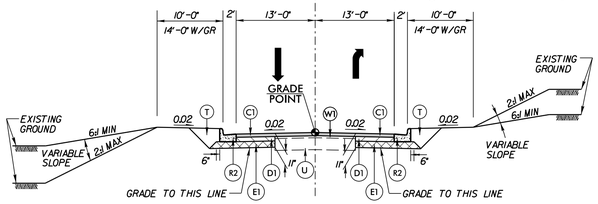
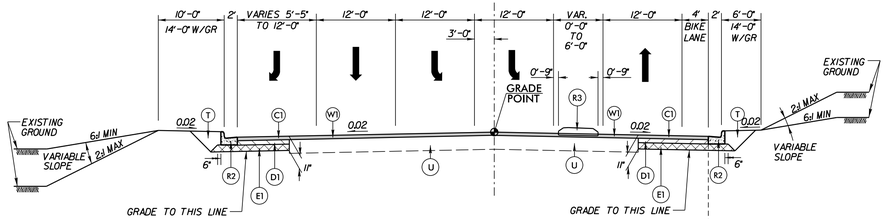
℄ –Y2A– (Walgreen's Entrance)



TYPICAL SECTION NO. 15

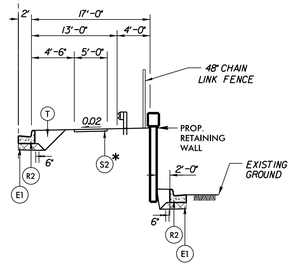
LINE	FROM STATION	TO STATION
–Y2A	10+00.00	11+86.03

℄ –Y3– BUS. 16 SOUTH



TYPICAL SECTION NO. 16

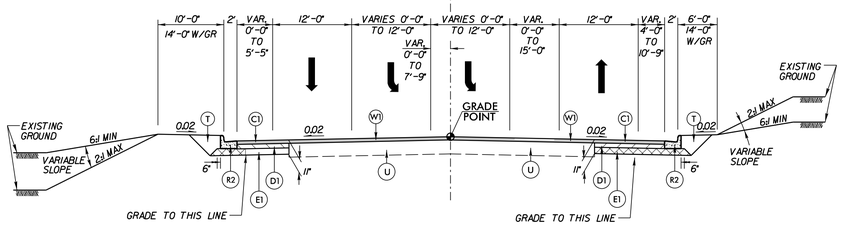
LINE	FROM STATION	TO STATION
–Y3–	10+34.12	14+20.00



SUBTYPICAL SECTION NO. 16A

LINE	FROM STATION	TO STATION
–Y3–	10+36.98	12+23.73

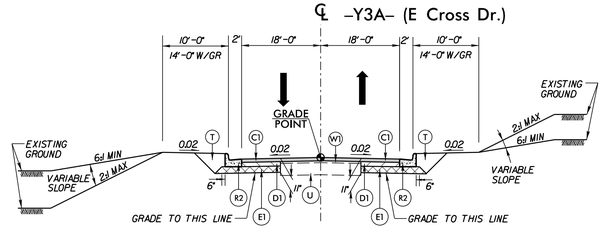
℄ –Y3– BUS. 16 SOUTH



TYPICAL SECTION NO. 17

LINE	FROM STATION	TO STATION
–Y3–	14+20.00	20+25.00

℄ –Y3A– (E Cross Dr.)



TYPICAL SECTION NO. 18

LINE	FROM STATION	TO STATION
–Y3A–	13+02.00	13+94.43

PAVEMENT SCHEDULE	
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING

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NORTH CAROLINA
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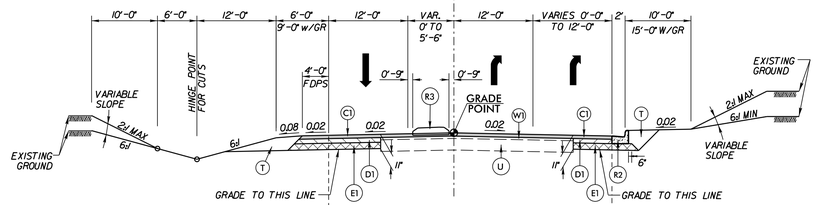
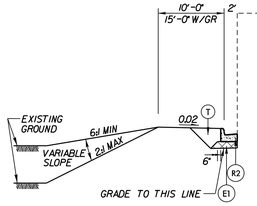
℄ –Y5– North Pilot Knob Rd.



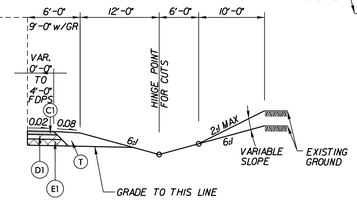
TYPICAL SECTION NO. 19

LINE	FROM STATION	TO STATION
–Y5–	11+35.00	17+98.85



SUBTYPICAL SECTION NO. 19A

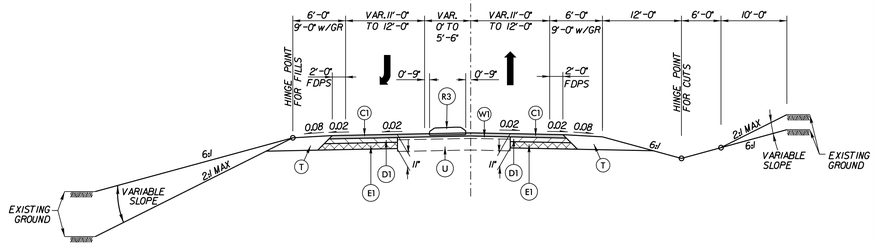
LINE	FROM STATION	TO STATION
–Y5–	16+21.85	17+98.85



SUBTYPICAL SECTION NO. 19B

LINE	FROM STATION	TO STATION
–Y5–	11+35.00	12+35.00

℄ –Y6– South Pilot Knob Rd.

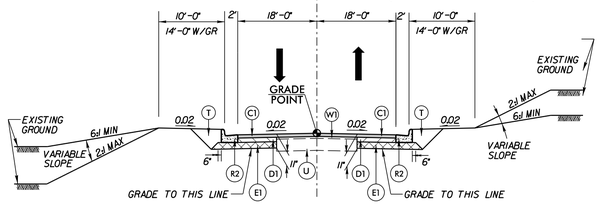


TYPICAL SECTION NO. 20

LINE	FROM STATION	TO STATION
–Y6–	10+44.97	13+85.00

PAVEMENT SCHEDULE	
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING

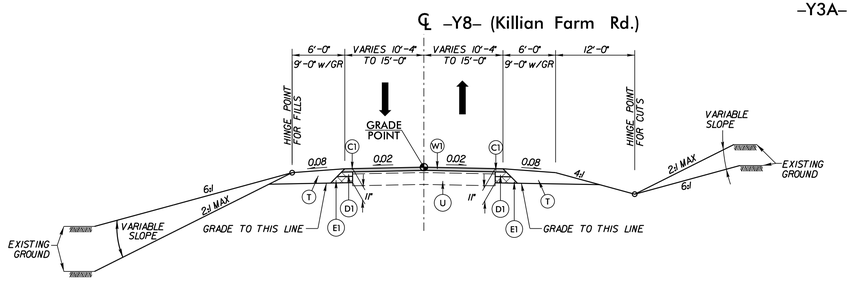
℄ –Y8– (Killian Farm Rd.)



TYPICAL SECTION NO. 21

LINE	FROM STATION	TO STATION
–Y3A–	10+41.51	11+76.80

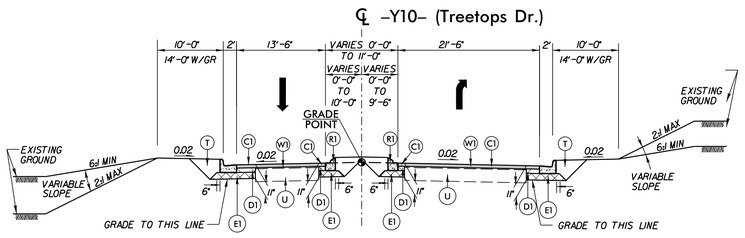
℄ –Y8– (Killian Farm Rd.)



TYPICAL SECTION NO. 22

LINE	FROM STATION	TO STATION
–Y8–	11+76.80	13+63.00

℄ –Y10– (Treetops Dr.)



TYPICAL SECTION NO. 23

LINE	FROM STATION	TO STATION
–Y10–	11+95.00	13+10.32

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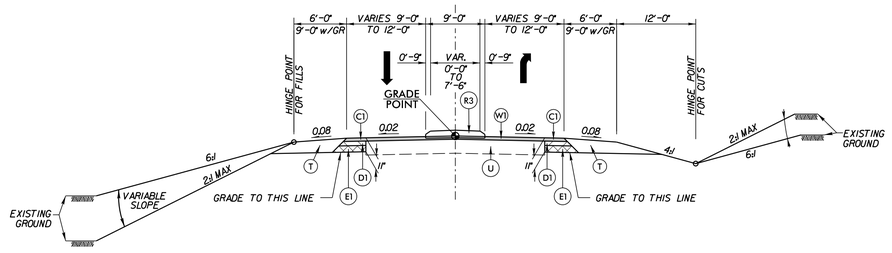
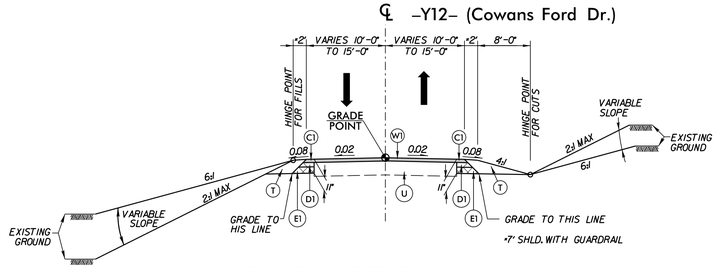
℄ –Y11– (Club Dr.)



TYPICAL SECTION NO. 24

LINE	FROM STATION	TO STATION
–Y11–	20+70.00	23+23.76

℄ –Y12– (Cowans Ford Dr.)

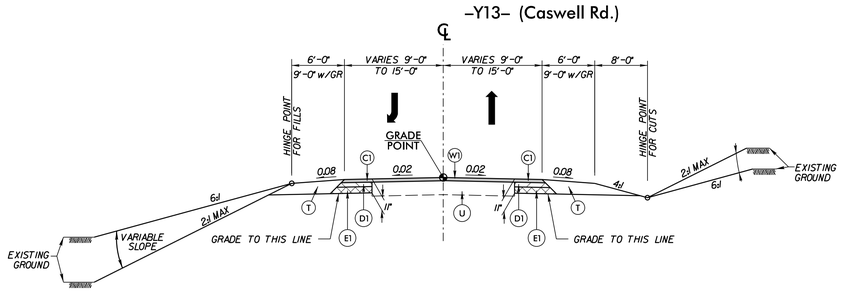


TYPICAL SECTION NO. 25

LINE	FROM STATION	TO STATION
–Y12–	10+33.16	11+75.00

PAVEMENT SCHEDULE	
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING

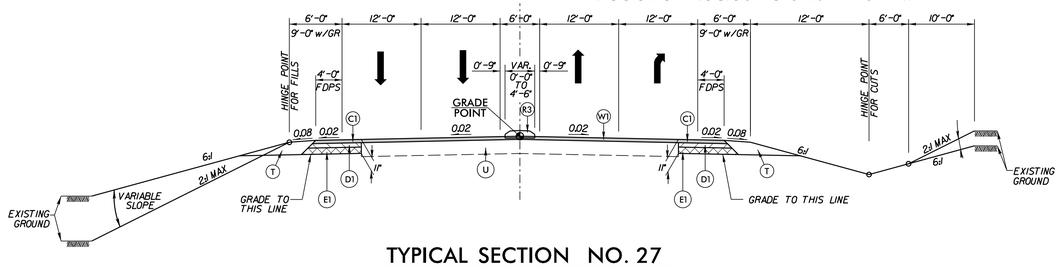
–Y13– (Caswell Rd.)
℄



TYPICAL SECTION NO. 26

LINE	FROM STATION	TO STATION
–Y13–	10+33.00	13+45.00

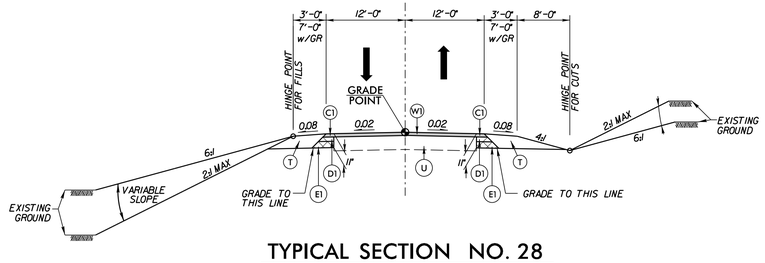
℄ –Y15– McGuire Nuclear Station Rd N.



TYPICAL SECTION NO. 27

LINE	FROM STATION	TO STATION
–Y15–	12+74.64	14+59.07

℄ –Y16– (McGuire Nuclear Station Rd S.)



TYPICAL SECTION NO. 28

LINE	FROM STATION	TO STATION
–Y16–	10+37.72	12+73.58

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NOTES:
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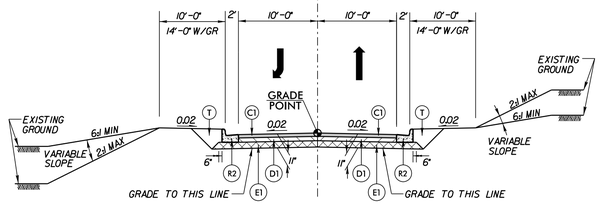
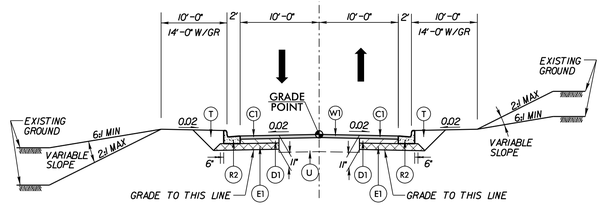
℄ –Y17– (Hagers Folly Rd.)



TYPICAL SECTION NO. 29

LINE	FROM STATION	TO STATION
–Y17–	10+35.50	11+66.59

℄ –Y17– (Hagers Folly Rd.)

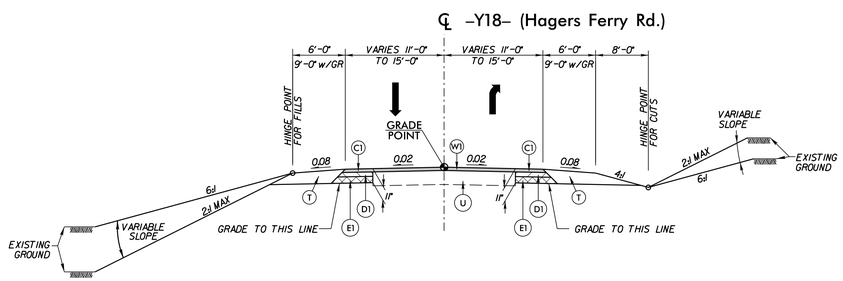


TYPICAL SECTION NO. 30

LINE	FROM STATION	TO STATION
–Y17–	111+66.59	12+85.00

PAVEMENT SCHEDULE	
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING

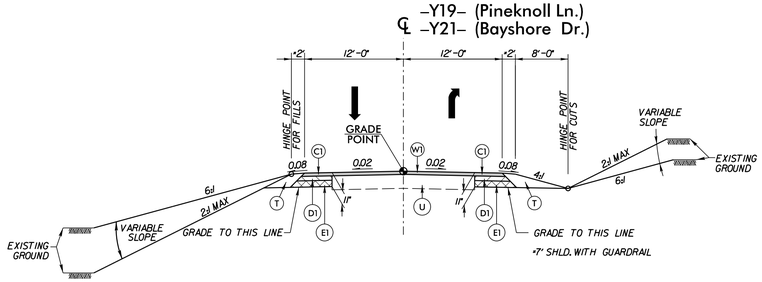
℄ –Y18– (Hagers Ferry Rd.)



TYPICAL SECTION NO. 31

LINE	FROM STATION	TO STATION
–Y18–	11+90.00	14+03.09

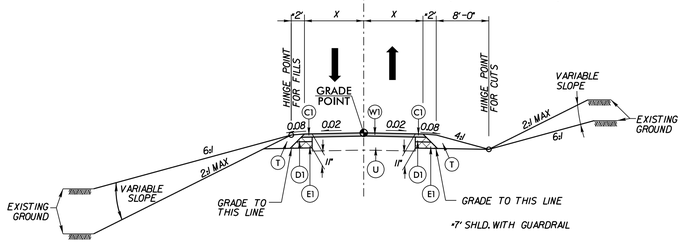
–Y19– (Pineknoll Ln.)
℄ –Y21– (Bayshore Dr.)



TYPICAL SECTION NO. 32

LINE	FROM STATION	TO STATION
–Y19–	11+15.00	13+07.35
–Y21–	12+05.00	12+93.19

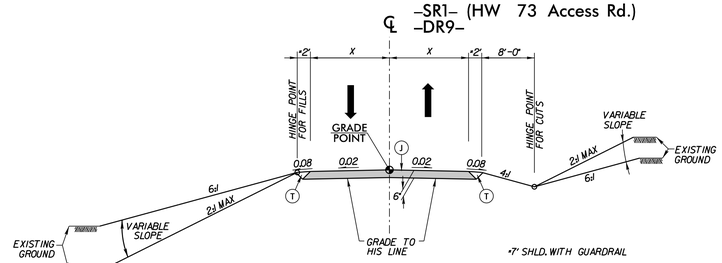
–Y7– (Otts Cir.)
–Y9– (Nellie Cir.)
–Y14– (Eastlake Ln.)
℄ –Y20– (Hubbard Rd.)



TYPICAL SECTION NO. 33

LINE	FROM STATION	TO STATION	X
–Y7–	10+41.71	11+55.18	VARIES 9'–0" TO 10'–0"
–Y9–	10+43.02	12+75.00	VARIES 9'–0" TO 15'–0"
–Y9–	15+95.00	17+84.88	VARIES 9'–0" TO 15'–0"
–Y14–	12+70.00	13+24.20	VARIES 9'–0" TO 11'–0"
–Y20–	10+35.50	11+50.00	VAR. 12'–0" TO 9'–0"

–SR1– (HW 73 Access Rd.)
℄ –DR9–



TYPICAL SECTION NO. 34

LINE	FROM STATION	TO STATION	X
–SR1–	10+33.00	17+80.81	VAR. 10'–0" TO 15'–0"
–SR1–	17+80.81	20+06.76	VAR. 10'–0" TO 65'–0"
–DR9–	10+53.50	12+25.00	8'–6"

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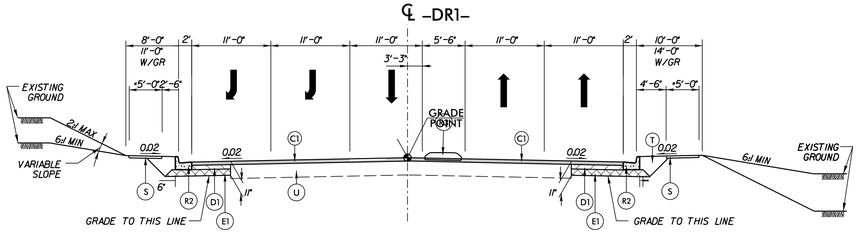
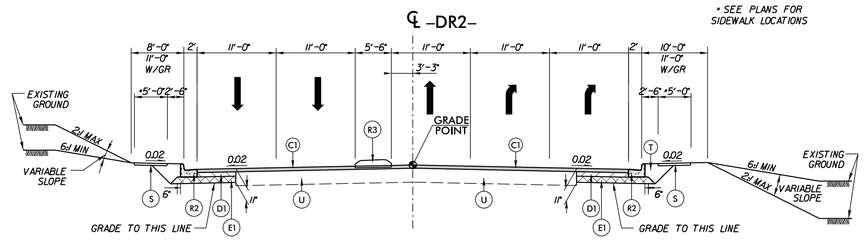


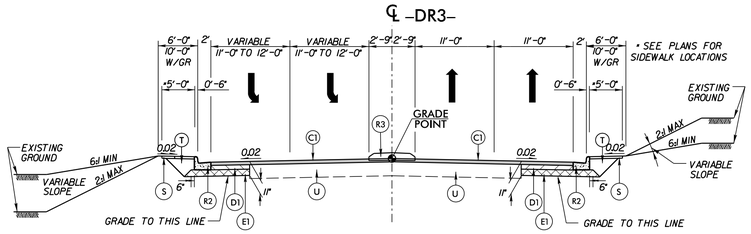
TYPICAL SECTION NO. 35

LINE	FROM STATION	TO STATION
–DR1–	10+41.72	12+70.00



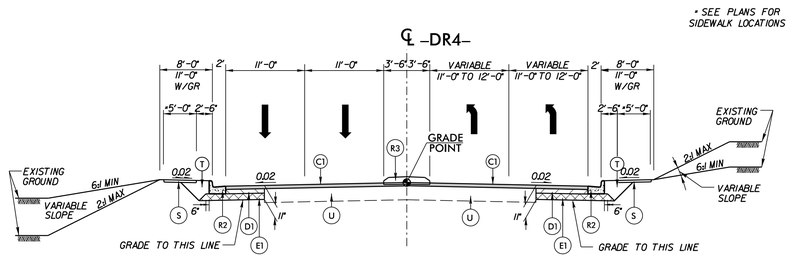
TYPICAL SECTION NO. 36

LINE	FROM STATION	TO STATION
–DR2–	10+25.00	12+86.91



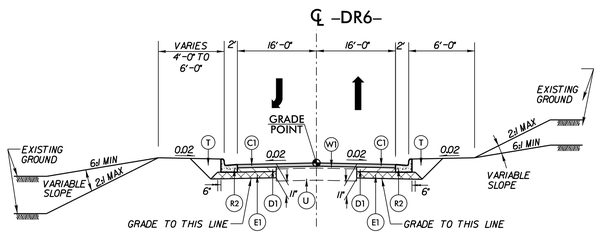
TYPICAL SECTION NO. 37

LINE	FROM STATION	TO STATION
–DR3–	10+46.11	12+90.00



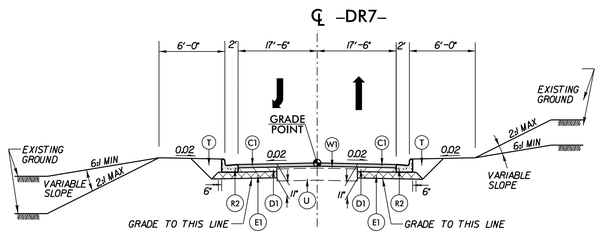
TYPICAL SECTION NO. 38

LINE	FROM STATION	TO STATION
–DR4–	10+30.00	12+89.92



TYPICAL SECTION NO. 39

LINE	FROM STATION	TO STATION
–DR6–	10+41.50	11+75.00



TYPICAL SECTION NO. 40

LINE	FROM STATION	TO STATION
–DR7–	10+12.02	12+03.95

PAVEMENT SCHEDULE	
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING

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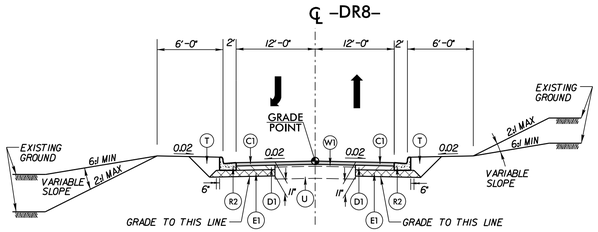
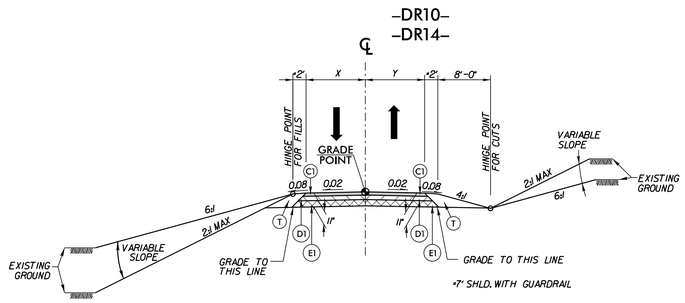


TYPICAL SECTION NO. 41

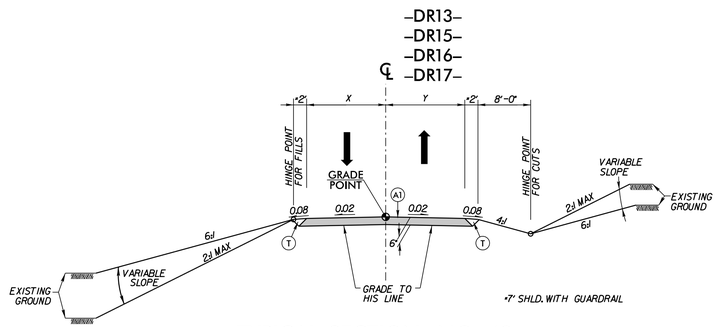
LINE	FROM STATION	TO STATION
–DR8–	10+17.50	11+35.04



TYPICAL SECTION NO. 42

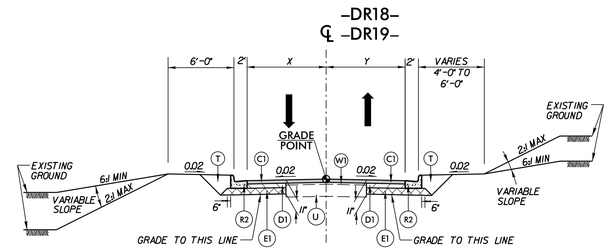
LINE	FROM STATION	TO STATION	X	Y
–DR10–	10+60.00	12+15.86	10'–0"	VAR. 5'–0" TO 10'–0"
–DR14–	10+53.50	11+31.00	VARIES 5'–0" TO 10'–0"	VAR. 3'–0" TO 10'–0"

PAVEMENT SCHEDULE	
A1	6" PCCP
C1	3" S9.5C
C3	1.5" S9.5C
C4	3" S9.5B
D1	4" I19.0C
D3	3" I19.0C
E1	4" B25.0C
J	6" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	5" MONO. CONC. ISLAND
R4	2'-0" CONC. VALLEY CURB
R5	2'-9" CURB & GUTTER
S1	MULTI-USE PATH
S2	SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	1.5" MILLING
V2	3.0" MILLING
W1	WEDGING
W2	WEDGING



TYPICAL SECTION NO. 43

LINE	FROM STATION	TO STATION	X	Y
–DR13–	10+53.50	10+85.00	VAR. 10'–0" TO 35'–0"	VAR. 5'–0" TO 10'–0"
–DR15–	10+53.50	10+85.00	VAR. 9'–2" TO 10'–0"	VAR. 10'–0" TO 25'–8"
–DR16–	10+13.00	10+62.00	VAR. 7'–8" TO 10'–0"	VAR. 10'–0" TO 10'–4"
–DR17–	10+07.50	10+41.04	VAR. 9'–0" TO 10'–0"	VAR. 8'–0" TO 10'–0"



TYPICAL SECTION NO. 44

LINE	FROM STATION	TO STATION	X	Y
–DR18–	10+30.00	11+75.00	14'–0"	VAR. 14'–0" TO 14'–5"
–DR19–	10+26.44	11+09.09	VAR. 15'–10" TO 16–6"	VAR. 16'–3" TO 16'–6"

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2A-12

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MATCH LINE -Y1RPD- STA 22+29.49 SEE SHEET 025

Scale: 1"= 50'

NAD 83

-Y1RPD- PT 23+16.77

BEGIN TIP PROJECT R-5721A
STA. -L- POC 20+08.22

-L- POC 22+62.19=
-Y1RPC- POE 21+22.03

-L- PC 21+84.36

-L- POC 22+63.53=
-Y1RPD- POE 25+44.39

RO = 224'

RO = 150'

-DR2- POB 10+00.00
BEGIN CONSTR.
-DR2- POT 10+25.00

-DR2- PC 11+82.76

-DR2- PT 12+67.79

S32°30'31.7"W

S27°52'09.1"W

-L- POC 30+18.63 =
-DR2- POE 13+22.89

-L- POC 30+30.69=
-DR1- POT 10+00.00

S32°30'31.7"W

-DR1- PC 11+42.51

-DR1- PT 12+42.92

END CONSTR.
-DR1- POT 12+70.00

-DR1- POE 12+77.90

MATCH LINE -L- STA 31+50.00 SEE SHEET 5

MATCH LINE -Y1RPC- STA 17+50.00 SEE SHEET 026

MONO. ISLAND

485' LANE TAPER

200' MEDIAN TAPER

100' TAPER

2'-6" C&G

1'-6" C&G

5' SIDEWALK

REMOVE

RETAIN

WAL-MART STORES EAST, LP
DB 1822 PG 803
PB 14 PG 081

LOWE'S HOME CENTERS, INC
DB 1829 PG 845
PB 14 PG 002

MURPHY OIL USA, INC
DB 2098 PG 268
PB 15 PG 112

HAGAN PROPERTIES, LLC
DB 2095 PG 850
PB 15 PG 111

JUSA AUTO WASH OWNER, LLC
DB 2095 PG 850
PB 15 PG 111

BURGER KING CORPORATION
DB 1349 PG 0061
PB 14 PG 001

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SHEET ___ OF ___

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Scale: 1"= 50'

-DR4- POB 10+00.00
BEGIN CONSTR.
-DR4- POT 10+30.00

-L- POT 36+93.81=
-DR3- POB 10+00.00

-L- PT 35+05.60

-DR4- PC 12+30.10

-L- POT 37+71.73=
-DR4- POE 13+49.79

-DR3- PT 11+11.11

-DR3- PC 11+65.42

-DR3- PT 12+55.48

END CONSTR.
-DR3- POT 12+90.00

-DR3- POE 13+21.43

RO = 150'

MATCH LINE -L- STA 31+50.00 SEE SHEET 4

MATCH LINE -L- STA 44+50.00 SEE SHEET 6

NAD 83

WAL-MART REAL ESTATE BUSINESS TRUST
DB 2041PG 653
PB 14 PG 081

SXCW PROPERTIES, LLC
DB 2469 PG 763
PB 14 PG 082

LEXINGTON FOODS, LLC
DB 2438 PG 479
PB 14 PG 082

STONEY'S RIDGE PROPERTIES LLC
DB 3182PG 487
PB 15 PG 424

BAYROCK INVESTMENT CO
DB 3210 PG 602
PB 20 PG 007

LINK LANDING DENVER LLC
DB 1984 PG 642
PB 20 PG 007

CHICK-FIL-A, INC
DB 2581PG 659

CAROLINA PROPERTIES, LLC
DB 2469 PG 763
PB 14 PG 082

CAROLINAZ, LLC
DB 1924 PG 160
PB 14 PG 002

BURGER KING CORPORATION
DB 2039 PG 310
PB 14 PG 002

PROFESSIONAL RESOURCE DEVELOPMENT INC
DB 3145 PG 205
PB 14 PG 002

CATAWBA SPRINGS LLP
DB 2704 PG 260
PB 24 PG 013

TEAM ROBINSON HOLDINGS, LLC
DB 2304 PG 23

YDG DENVER LLC
DB 2733 PG 039
PB 14 PG 223

BOING US HOLDCO INC
DB 3264 PG 413
PB 14 PG 126

MAIDEN SQUARE, LLC
DB 2591PG 673

CATAWBA SPRINGS, LLLP
DB 2704 PG 260

Piedmont Natural Gas Company Inc., 2 ", MDPE, IS/M per records)

Piedmont Natural Gas Company Inc., Unk, S/M

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5

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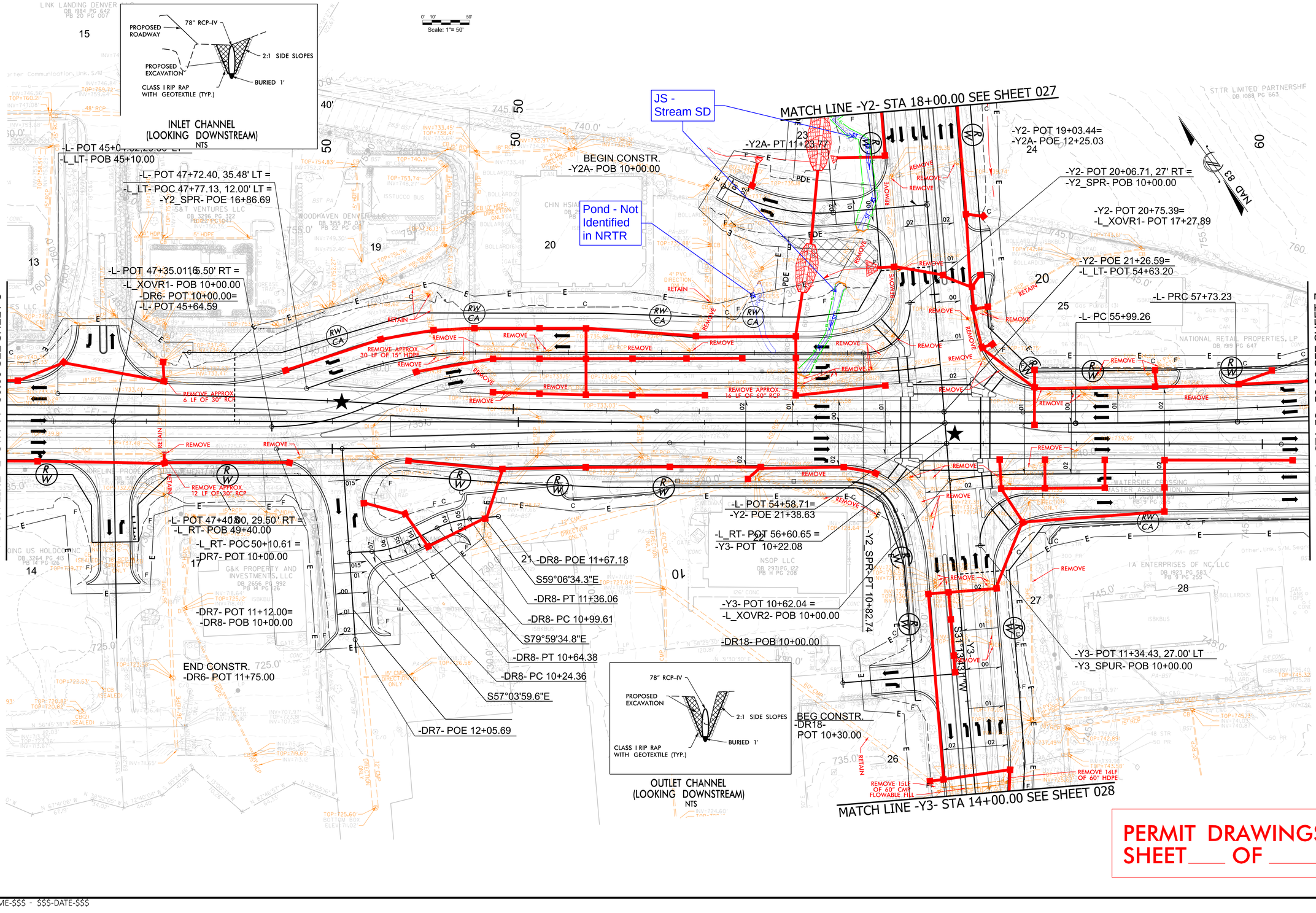
SHEET ___ OF ___

$$$-USER_NAME-$$$ - $$$-DATE-$$$



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SHEET ___ OF ___

11/14/23

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0' 10' 50'
Scale: 1"= 50'

NAD 83

-L- POT 61+73.33, 10.86' LT =
-L_XOVR2- POE 17+21.07

-L- POC 64+45.03, 29.50' LT =
-L_LT- POE 64+51.90

-L- PT 59+08.59

-L- PC 61+85.25

-L- PRC 66+31.51

-L- POC 62+79.25 29.50' RT =
L_RT- POE 64+79.02

-L- POT 61+11.70, 39.93' RT =
-L_RT- POT 63+12.00, 12.00' RT =
-Y3_SPUR- POE 16+54.23

RO = 150'

MATCH LINE -L- STA 58+50.00 SEE SHEET 6

MATCH LINE -L- STA 71+50.00 SEE SHEET 8

PERMIT DRAWINGS
SHEET ___ OF ___

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$$$-USER_NAME-$$$ - $$$-DATE-$$$

Scale: 1"= 50'

MATCH LINE -Y5- STA 14+00.00 SEE SHEET 029

MATCH LINE -L- STA 71+50.00 SEE SHEET 7

MATCH LINE -L- STA 85+50.00 SEE SHEET 9

-Y5- PT 15+98.75

-L- PT 82+98.12

-L- PCC 72+74.09

-L- POC 78+76.35=
-Y5- POE 18+40.98

-Y6- POB 10+00.00

-Y6- PC 10+32.79

-Y6- PT 12+57.17

END CONSTR.
-Y6- POT 13+85.00

BEG FENCE
-L- STA +50.00
70.50' LT

END FENCE
-L- +31.00
58.50' LT

RO = 150'

RO = 96'

RO = 144'

NAD 83

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

8

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PREPARED BY

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

REVISIONS

$$$-USER_NAME-$$$ - $$$-DATE-$$$

11/14/23

Scale: 1"= 50'

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

RO = 200'

NAD 83

MATCH LINE -L- STA 85+50.00 SEE SHEET 8

MATCH LINE -L- STA 98+50.00 SEE SHEET 10

-L- POT 87+15.32=
-DR9- POB 10+00.00

-L- POT 89+37.33=
-Y7- POB 10+00.00

-L- PC 95+18.00

-L- POC 96+77.63=
-Y8- POB 10+00.00

-DR9- PC 11+44.05

-DR9- PT 12+09.27

-DR9- POE 13+05.66

-Y7- PC 11+34.51

END CONSTR.
-Y7- POC 11+55.18

-Y7- PT 11+73.41

-Y7- POE 13+37.77

-Y8- PC 10+87.17

-Y8- PT 11+90.17

END CONSTR.
-Y8- POT 13+63.00

REMOVE

RETAIN

GERALD F NIXON
VICKIE R NIXON
DB 549 PG 172

GARY N ALLEN
LCRO PG 231
BK DB 504 PG 660

CAMELON MILLER CHAPMAN
DB 89E PG 116

CHRISTOPHER NEIL COX
DB 3261PG 344

SCARLETT CHANTER & WALTER A CHANTER
DB 3112

MELANIE DONALDSON & CHARLES V DONALDSON III
DB 3263 PG 371

HHRKI, LLC
DB 2585 PG 707

DENISE MICHELE SHERRILL
DB 19E PG 525
BK DB 414 PG 445

EDWARD F THOMPSON
COURTNEY L SHERRILL
DB 2529 PG 728

KEITH M SHERRILL
EMMA C SHERRILL
DB 2556 PG 622

SHERRY MCGINNIS SHAW & FAYE MCGINNIS MCALLISTER
DB 1E PG 548
DB 1E PG 510

LTJ PROPE
DB 1885

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

9

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

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11/14/23

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

Scale: 1"= 50'

-DR10- POB 10+00.00

BEGIN CONSTR.
-DR10- POT 10+60.00

-DR10- PC 11+35.18

-Y9- PT 11+58.08

END CONSTR.
-Y9- POT 12+75.00

S60°10'54.9"E

-DR10- PT 12+13.48

S38°14'44.2"W

-Y9- PC 10+62.08

-L- PT 107+81.91

-L- POC 106+42.77=
-DR10-POE 12+57.61

-L- POT 108+47.85=
-Y9- POB 10+00.00

- L10 - POC 101+90.28
-DR13- POB 10+00.00

-L- PCC 105+14.69

END CONSTR.
-DR13- POT 10+85.00

-DR13- POE 10+90.69

RO = 900'

N 00° 05' 83" W

REMOVE

MATCH LINE -L- STA 98+50.00 SEE SHEET 9

MATCH LINE -L- STA 110+50.00 SEE SHEET 11

RTIES LLC
PG 514

EVELYN DUCKWORTH JONES REVOCABLE TRUST
DB 2431 PG 312

WILLIAM LEWIS SLAUGHTER
DB 222 PG 222

GREGORY P GRYGLEWICZ
DB 1263 PG 104

GEORGE MANTIS
ANNA D MANTIS
DB 1636 PG 464

ANN PHILLIPS
PG 239
PG 582

HARR ARON
DB 3282 PG 480

LTJ PROPERTIES LLC
DB 1885 PG 514

AT&T Corp. Unk-S/M

Crown Castle Fiber LLC, Unk-S/M

Uniti Fiber Solutions LLC, Unk-S/M

Zayo Enterprise Solutions LLC, Unk-S/M

51 60 61 62 63 64 66 67 100 110

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

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NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

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REVISIONS

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11/14/23

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

Scale: 1"= 50'

NAD 83

RO = 150'

-Y9- PC 13+31.15

BEGIN CONSTR.
-Y9- POT 15+90.00

-Y9- PT 15+42.01

-Y9- PC 16+47.16

-Y9- PCC 17+19.83

-L- PC 112+63.03

-Y9- PT 17+77.10

-L- POC 115+03.18=
-Y9- POT 18+19.98

-L- PT 117+10.83

-Y10- POB 10+00.00

BEGIN CONSTR.
-Y10- POT 11+95.00

-L- POT 123+87.48=
-Y10- POE 13+53.59

RETAIN

REMOVE

MATCH LINE -L- STA 110+50.00 SEE SHEET 10

MATCH LINE -L- STA 124+50.00 SEE SHEET 12

DAVID A CALDWELL
LORI B CALDWELL
DB 1636 PG 587

MARGARET DEAN
SKIPPER LIV TRUST
DB 3171 PG 536

ANDREW J MORRISON
LAURIE A MORRISON
DB 2624 PG 574

BETTY GWEN HAGER
DB 745 PG 714

TIMOTHY HOLOWKO &
DINA HOLOWKO
DB 3264 PG 283

ROBERT SHELTON DUCKWORTH
DB 1700 PG 850

ROBERT S DUCKWORTH
LISA F DUCKWORTH
DB 1414 PG 293

CHRISTINA
WILLIAM GO
MADELINE JJ
SIRI ELIZA
DB 20
BK DB 2

EVELYN D JONES TRUST
DB 2431 PG 312

65 67 68 69 70 71 72 73 120

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

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REVISIONS

$$$-USER_NAME-$$$ - $$$-DATE-$$$

Scale: 1"= 50'

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

NAD 83

MATCH LINE -L- STA 124+50.00 SEE SHEET 11

MATCH LINE -L- STA 137+50.00 SEE SHEET 13

- L10 - POC 129+61.33
-DR14- POB 10+00.00

- L10 - POC 134+04.59
-DR15- POB 10+00.00

-DR14- POB 10+00.00

-DR15- POB 10+00.00

-DR15- POE 11+05.51

END CONSTR.
DR14- POT 11+31.00

-DR14- POE 11+47.75

END CONSTR.
DR15- POT 10+93.00

RETAIN

GRADE TO DRAIN

REMOVE

CLAUDE ALONZO KILLIAN
FRANCES KILLIAN HAMPTON
DB 16E PG 402

BARBARA S SIFFORD
DB 20E PG 062
BK DB 515 PG 62

JEAN CARTER
RDON CARTER
ONES FERRELL
BETH JONES
E PG 501
784 PG 224

FITZGERALD TATUM, JR
JANICE TATUM

GARY L JORDAN, JR
HEATHER B JORDAN
DB 27II PG 95

GREGORY M ALEXANDER
ANGELA S ALEXANDER
DB 2406 PG 521

REBECCA KAY KILLIAN
DB 19E PG 26
BK DB 2784 PG 224

DARRYEL E CONNELL
CAROLYN P CONNELL
DB 617 PG 795

HAZEL P ARMSTRONG REVOC TRUST
BEATTIE F ARMSTRONG REVOC TRUST
DB 3038 PG 613

Verizon Enterprise Solutions LLC Unk. S/M

AT&T Corp., Unk. S/M

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

12

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

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HYDRAULICS ENGINEER

INCOMPLETE PLANS
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N.C.B.E.L.S. License Number: F-0116

REVISIONS

11/14/23

BEGIN CONSTR.
-Y11- POT 20+70.00

-Y11- PC 21+81.18

-Y11- PT 23+14.03

-L- POT 139+32.28=
-Y11- POE 23+66.22

-L- PC 145+91.35

-L- PT 148+89.65

-L- POT 150+90.11=
-Y12- POB 10+00.00

JS - Stream SE

JS - Stream SE

-Y12- PC 11+10.09

END CONSTR.
-Y12- POC 11+75.00

MATCH LINE -L- STA 137+50.00 SEE SHEET 12

MATCH LINE -L- STA 151+50.00 SEE SHEET 14

THE DENVER GROUP LLC
DB 1289 PG 791
PB 8PG 242

ROADRA, LLC
DB 3382 PG 71
PB 19 PG 018

LIFE STORAGE LP
DB 3098 PG 568

REBECCA K KILLIAN
DB 2317 PG 861

HARVEY C CARTNER
BEVERLY K CARTNER
DB 501PG 873

GLENN W FISCUS
DB 2712 PG 829

LRS PROPERTY
DB 2687 PG

RETAIN

REMOVE

PROPOSED 6'X3'-0" RCBC BURIED -1'

REMOVE EXISTING RCBC

PDE

CLASS II RIP RAP (KEYED IN)

2:1 SIDE SLOPES

1' SILL BACKFILL WITH NATIVE MATERIAL PER SPEC

DOWNSTREAM CHANNEL
(LOOKING DOWNSTREAM)
(NTS)

1' SILL BACKFILL WITH NATIVE MATERIAL PER SPEC

UPSTREAM CHANNEL
(LOOKING DOWNSTREAM)
(NTS)

0' 10' 50'
Scale: 1"= 50'

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

013

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

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REVISIONS

$$$-USER_NAME-$$$ - $$$-DATE-$$$

11/14/23

Scale: 1"= 50'

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

NAD 83

MATCH LINE -L- STA 151+50.00 SEE SHEET 13

MATCH LINE -L- STA 165+50.00 SEE SHEET 15

-L- PC 164+38.64

-Y12- PT 12+85.76

SPECIAL CUT DITCH

SPECIAL CUT DITCH

SPECIAL CUT DITCH

BERM DITCH

BERM DITCH

REMOVE

ANN H L ALEXANDER
ROBERT E ALEXANDER, JR
DB 1793 PG 116

DAVID W BROWN
DB 8742 PG 38

SHIRLEY A TURBYFILL
DB 13E PG 276
DB 449 PG 114

SHIRLEY A TURBYFILL
DB 13E PG 276

HEIRS OF
PATRICIA M BROWN
DB 3182 PG 169

TERRY LEE TURBYFILL
DB 2147 PG 519

RONALD KEITH BENNETT JR
& MONICA BENNETT
DB 3260 PG 911

QUINLAN REAL ESTATE
INVESTORS LLC
DB 2349 PG 147
PB 10 PG 200

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

14

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

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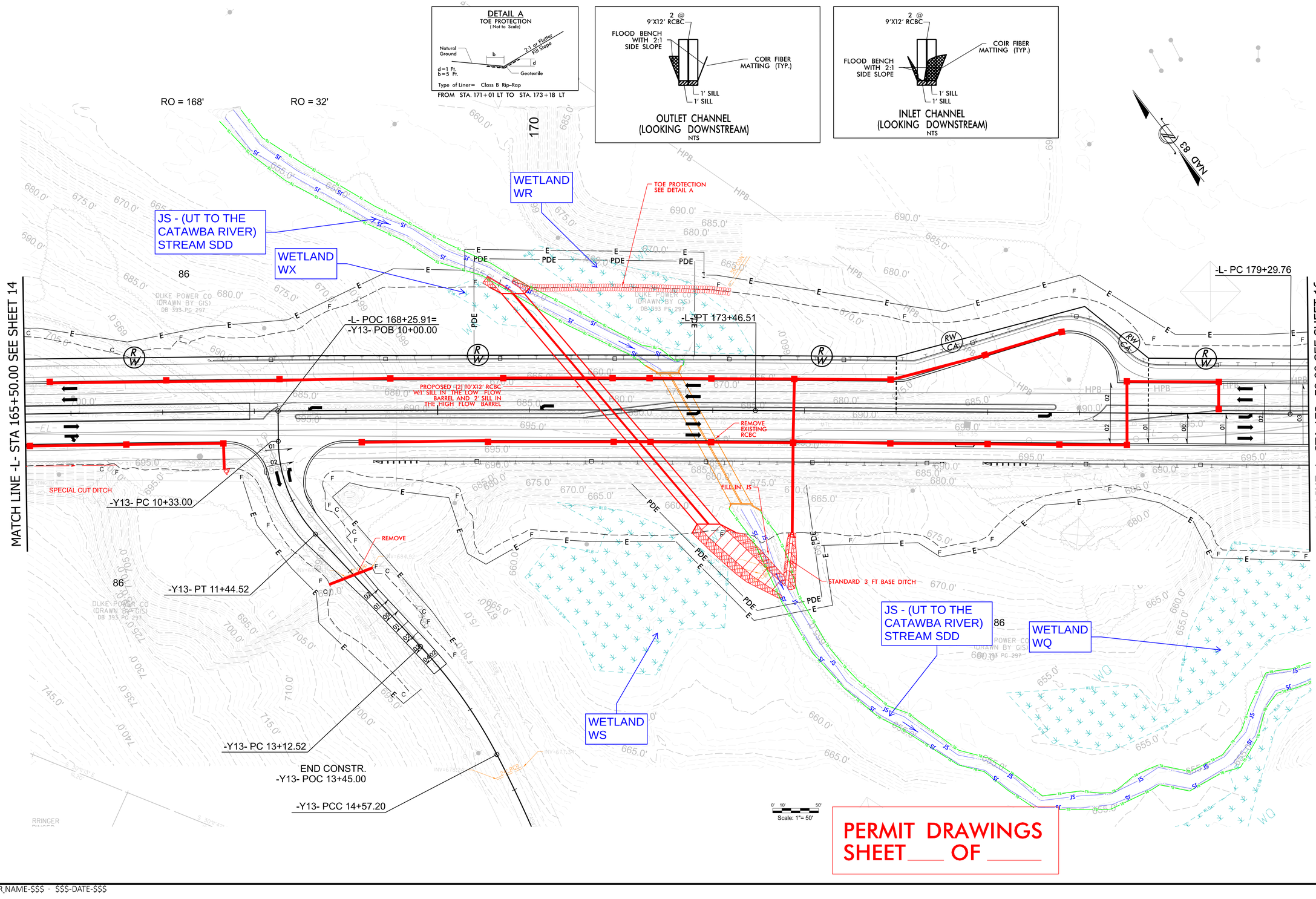
$$$-USER_NAME-$$$ - $$$-DATE-$$$



PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

15

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

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HYDRAULICS ENGINEER

INCOMPLETE PLANS
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N.C.B.E.L.S. License Number: F-0116

REVISIONS

Scale: 1"= 50'

-Y14- POB 10+00.00

-Y14- PC 11+43.06

RO = 168'

RO = 168'

180

NAD 83

190

86

DUKE POWER CO (DRAWN BY GIS) DB 395 PG 297

-L- PT 191+07.44

BEGIN CONSTR. -Y14- POB 12+70.00

-L- PT 182+05.28

-L- PC 187+51.28

-Y14- PT 12+74.58

REMOVE

MATCH LINE -L- STA 179+50.00 SEE SHEET 15

MATCH LINE -L- STA 191+50.00 SEE SHEET 17

-L- POT 182+84.36= -Y14- POE 13+57.20

-L- POT 186+87.92= -SR1- POB 10+00.00

-SR1- PC 10+56.73

-SR1- PT 13+09.85

JS - (UT TO THE CATAWBA RIVER) STREAM SDD

WETLAND WQ

WETLAND WO

WETLAND WN

PERMIT DRAWINGS
SHEET___ OF ____

R-5721A

16

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

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HYDRAULICS ENGINEER

INCOMPLETE PLANS
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REVISIONS

11/14/23

Scale: 1"= 50'

MATCH LINE -L- STA 191+50.00 SEE SHEET 16

MATCH LINE -L- STA 205+50.00 SEE SHEET 18

-L- PC 203+69.62

-SR1- POE 21+04.68

END CONSTR.
-SR1- POT 20+06.76

-SR1- PT 19+38.60

-SR1- PT 17+80.81

-SR1- PC 19+16.41

-SR1- PC 16+90.94

WETLAND WN

JS - (UT TO THE CATAWBA RIVER) STREAM SDD

WETLAND WL

JS NOT IDENTIFIED IN THE NRTR

Catawba River

MECKLENBURG COUNTY
LINCOLN COUNTY

REMOVE

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

17

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

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REVISIONS

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

Scale: 1"= 50'

RO = 126'

210

93

LAKE

LAKE NOT IDENTIFIED IN THE NRTR

NAD 83

-L- PT 208+42.71

-L- PC 218+74.64

RETAIN

REMOVE

REMOVE

REMOVE

MATCH LINE -L- STA 205+50.00 SEE SHEET 17

MATCH LINE -L- STA 219+50.00 SEE SHEET 19

94

PERMIT DRAWINGS
SHEET___ OF _____

R-5721A

18

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

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REVISIONS

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

Scale: 1" = 50'

NAD 83

RO = 126'

LAKE NOT IDENTIFIED IN THE NRTR

-L- PT 225+67.87

MATCH LINE -L- STA 219+50.00 SEE SHEET 18

MATCH LINE -L- STA 232+50.00 SEE SHEET 20

REMOVE

RETAIN

RETAIN

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

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NORTH CAROLINA
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MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

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REVISIONS

11/14/23

Scale: 1"= 50'

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

NAD 83

BEGIN CONSTR.
-Y15- POT 12+74.64

-L- POT 244+92.70 =
-Y15- POB 14+94.57 =
-Y16- POB 10+00.00

MATCH LINE -L- STA 232+50.00 SEE SHEET 19

MATCH LINE -L- STA 246+50.00 SEE SHEET 21

REMOVE

RETAIN

-DR11- POB 10+00.00
BEGIN CONSTR.
-DR11- POT 10+10.00

-DR11- PC 10+15.95

-DR11- PT 10+94.77

-Y16- PC 12+97.61

-Y16- PT 13+52.39

-Y16- POE 14+80.34

-Y16- PC 10+81.46

-Y16- POC 11+98.99=
-DR11- POE 11+94.53

-Y16- PT 11+99.69

END CONSTR.
-Y16- POT 12+73.58

PERMIT DRAWINGS
SHEET___ OF _____

R-5721A

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MECKLENBURG COUNTY AND
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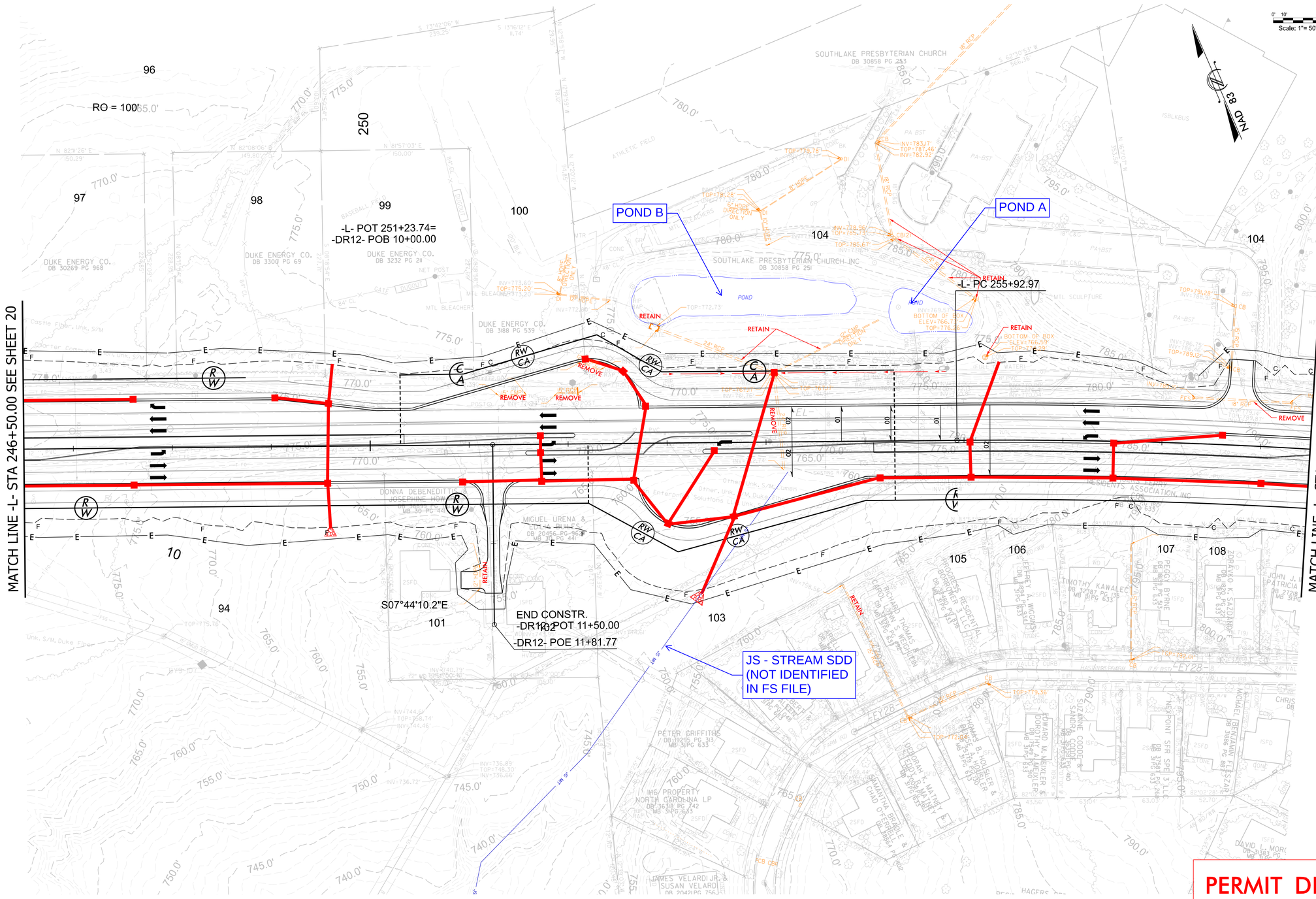
$$$-USER_NAME-$$$ - $$$-DATE-$$$

11/14/23



PERMIT DRAWINGS
SHEET___ OF _____

R-5721A

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NORTH CAROLINA
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11/14/23

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

Scale: 1"= 50'

-Y18- POB 10+00.00

-Y18- PT 11+22.83

-Y18- PC 13+18.78

-Y18- PT 14+03.06

-L- PT 265+03.20

-L- POC 261+61.40=
-Y17- POB 10+00.00

-L- POC 264+46.85=
-Y18- POE 14+38.59

BEGIN CONSTR.
-Y18- POT 11+90.00

GRADE to DRAIN

RETAIN

REMOVE

-Y17- PC 10+65.90

-Y17- PT 11+63.62

END CONSTR.
-Y17- POT 12+85.00
-Y17- POE 12+99.72

-Y19- POB 10+00.00

BEGIN CONSTR.
-Y19- POT 11+15.00

-DR16- POB 10+00.00

BEGIN CONSTR.
-DR16- POT 10+13.00

-DR17- POB 10+00.00

BEGIN CONSTR.
-DR17 - POT 10+07.50

-L- POT 266+92.66=
-DR16- POE 11+15.00

-L- POT 266+92.66
-DR17- POE 10+94.04

-L- POT 270+10.38=
-Y19- POE 13+43.21

MATCH LINE -L- STA 259+50.00 SEE SHEET 21

MATCH LINE -L- STA 272+50.00 SEE SHEET 23

NAD 83

RO = 100'

RO = 32'

SE = SEE PLANS

PERMIT DRAWINGS
SHEET ___ OF ___

U-5751

22

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

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ROADWAY DESIGN ENGINEER

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HYDRAULICS ENGINEER

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REVISIONS

$$$-USER_NAME-$$$ - $$$-DATE-$$$

11/14/23

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

Scale: 1"= 50'

NAD 83

-Y21- PC 11+21.51

-Y21- POB 10+00.00

BEGIN CONSTR.
-Y21- POT 12+05.00

-Y21- PT 11+84.98

-L- PC 279+07.77

-L- POT 280+61.23=
-Y21- POE 13+28.69

GRADE to DRAIN

ENERGY DISSIPATOR BASIN

LAKE NORMAN

-L- POT 276+46.56=
-Y20- POB 10+00.00

-Y20- PC 10+55.73

-Y20- PT 10+99.94

END CONSTR.
-Y20- POT 11+50.00

-Y20- POE 13+61.14

RETAIN

REMOVE

MATCH LINE -L- STA 272+50.00 SEE SHEET 22

MATCH LINE -L- STA 286+50.00 SEE SHEET 24

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

23

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PREPARED BY

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, NC, 27601
N.C.B.E.L.S. License Number: F-0116

REVISIONS

$$$-USER_NAME-$$$ - $$$-DATE-$$$

11/14/23

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

Scale: 1"= 50'

END TIP PROJECT R-5721A
BEGIN TIP PROJECT R-5721B
-L- POC 292+20.00

-L- PT 298+46.60

END CONSTRUCTION
PROJECT R-5721A
-L- POT 300+00.00

MATCH LINE -L- STA 286+50.00 SEE SHEET 23

GRADE to DRAIN

GRADE to DRAIN

RETAIN

REMOVE

REMOVE

REMOVE

REMOVE

290

300

129

130

131

132

133

134

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

24

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

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$$$-USER_NAME-$$$ - $$$-DATE-$$$

11/14/23

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

0' 10' 50'
Scale: 1"= 50'

RO= 196'

RO= 224'

NAD 83

10

20

WAL-MART STORES EAST, LP
DB 1822 PG 803
PB 14 PG 081

WAL-MART REAL ESTATE BUSINESS TRUST
DB 2041 PG 653

HOPE SPRINGS BUILDERS, INC
DB 1852 PG 370
DB 952 PG 370

HOPE SPRINGS BUILDERS INC
DB 952 PG 370

-Y1RPD- POB 10+00.00

-Y1RPD- SC 11+96.00

-Y1RPD- CS 16+50.17

-Y1RPD- SRS 18+46.17

-Y1RPD- SC 20+70.17

JS - STREAM SGG

BEGIN CONSTR.
-Y1RPD- POC 13+45.00

MATCH LINE -Y1RPD- STA 22+30.00 SEE SHEET 004

-NCI6 RAMP A-

-NCI6 RAMP B-

-NCI6 NBL-

-NCI6 SBL-

CAT-1 +14

GREU TL-3 +20

50' TAPER

400' TAPER

8:1

28' (TYP)

BOTTOM BOX ELEV=743.7

24" RCP DIRECTION ONLY NO CULVERT

PERMIT DRAWINGS
SHEET ___ OF ___

U-5751
25

NORTH CAROLINA
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MECKLENBURG COUNTY AND
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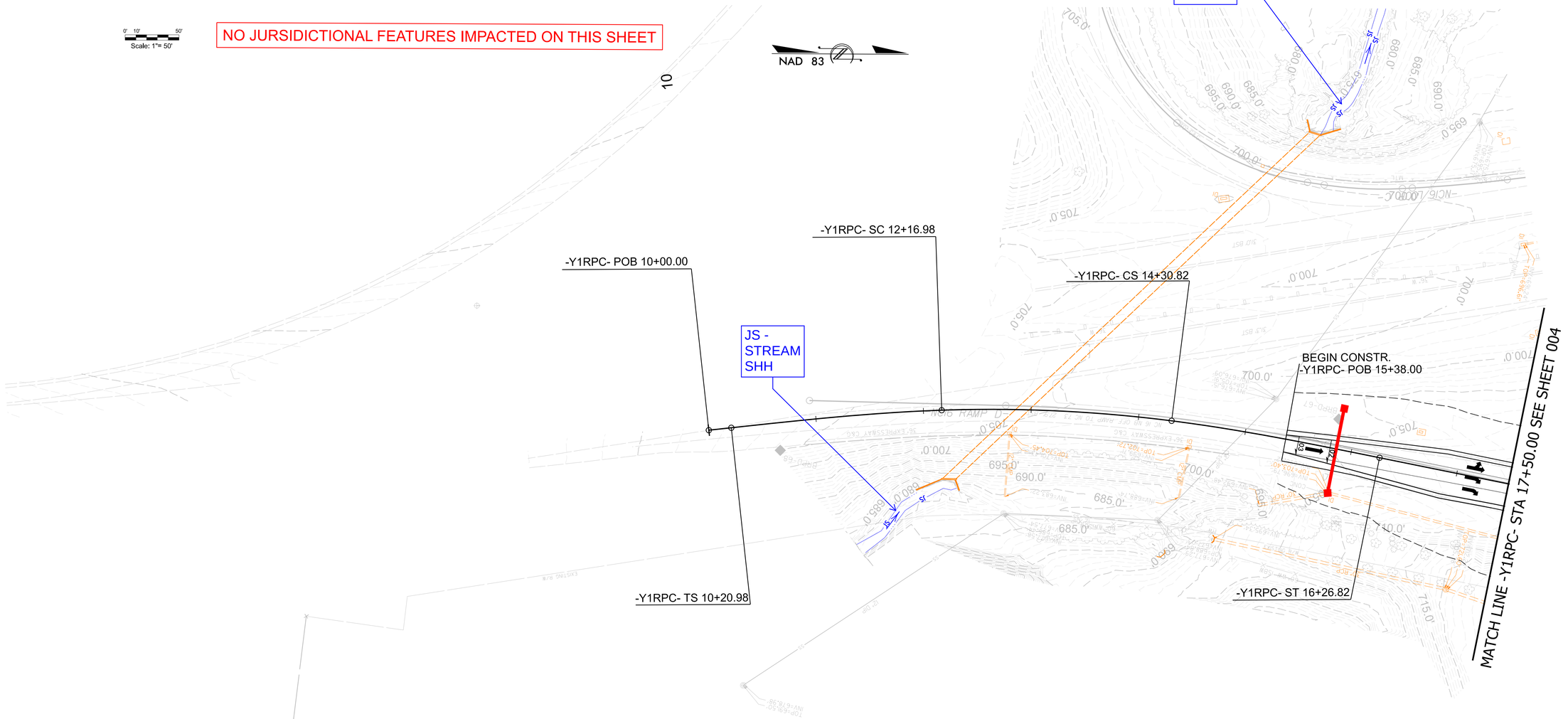
REVISIONS

$$$-USER_NAME-$$$ - $$$-DATE-$$$

0' 10' 50'
Scale: 1"= 50'

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

NAD 83



PERMIT DRAWINGS
SHEET___ OF _____

U-5751
26

NORTH CAROLINA
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MECKLENBURG COUNTY AND
LINCOLN COUNTY

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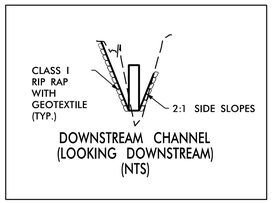
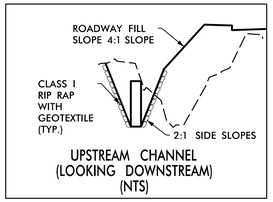
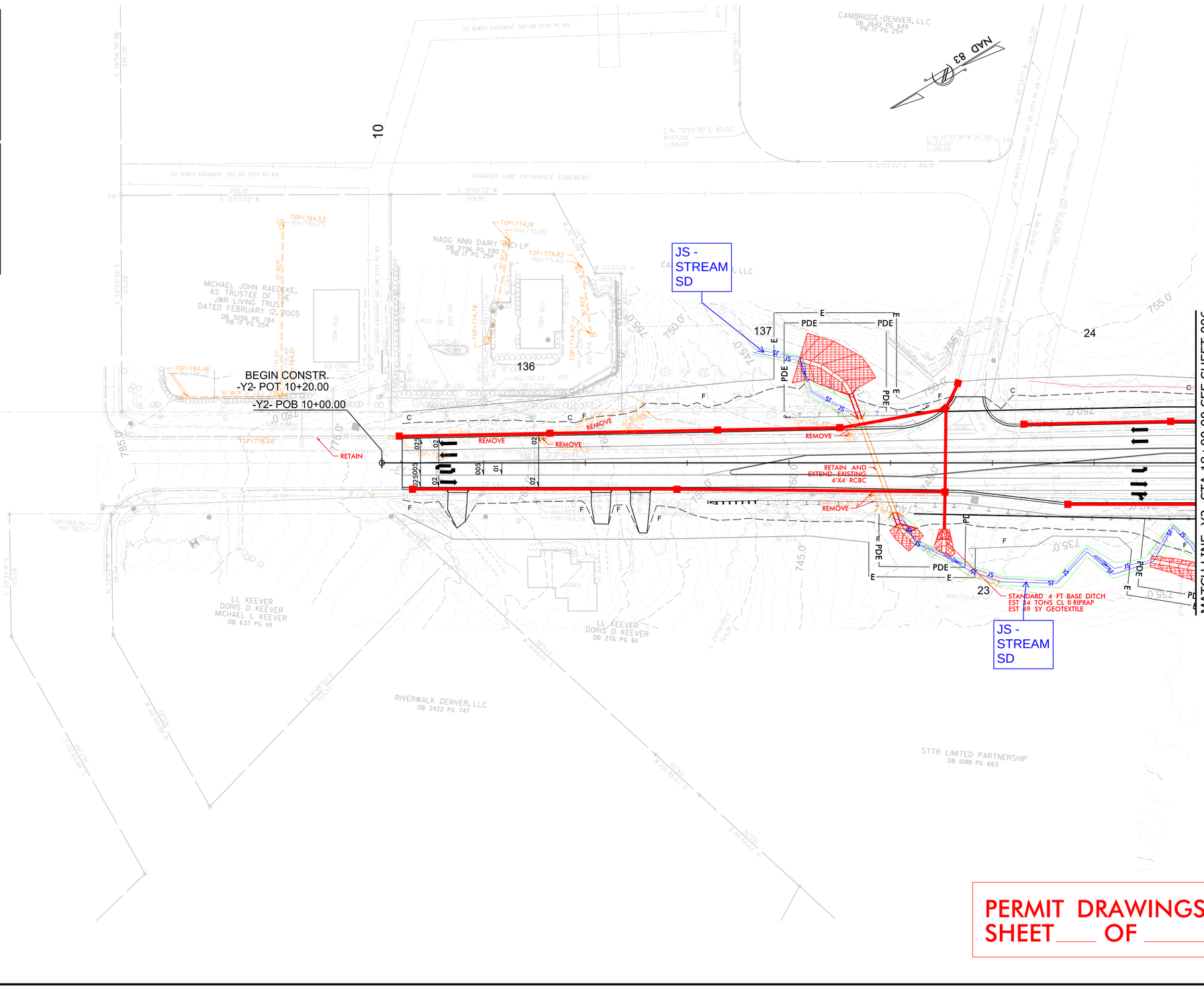


DOWNSTREAM CHANNEL
(LOOKING DOWNSTREAM)
(NTS)



UPSTREAM CHANNEL
(LOOKING DOWNSTREAM)
(NTS)



PERMIT DRAWINGS
SHEET ____ OF _____

R-5721A

27

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

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REVISIONS

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Scale: 1"= 50'

NAD 83

MATCH LINE -Y3- STA 14+00.00 SEE SHEET 006

-Y3A- POB 10+00.00

-Y3A- POB 10+00.00

BEG CONSTR.
-Y3A- POT 13+02.00

-Y3- POT 15+46.98=
-Y3A- POE 14+20.00
-DR19- POB 10+00.00

-Y3A- POE 14+20.00

END CONSTR.
-Y3- POT 20+25.00

-Y3- POE 21+30.92

-DR19- PC 10+39.49
-DR19- PT 11+06.62

END CONSTR.
-DR19- POT 11+09.08

-DR19- POE 11+37.08

FIRST CHARTER REAL ESTATE HOLDINGS
DB 1302 PG 11
PB 9 PG 255

ARCHLAND PROPERTY I, LLC
DB 1606 PG 363
PB 9 PG 255

JIMMIE POURLOS
RONNIE POURLOS
DB 2235 PG 197
PB 9 PG 255

FIRST-CITIZENS BANK & TRUST COMPANY
DB 1049 PG 217
PB 9 PG 66

WATERSIDE CROSSING MASTER ASSOCIATION, INC
DB 2628 PG 69
PB 9 PG 255

WATERSIDE CROSSING MASTER ASSOCIATION, INC
DB 2628 PG 69
PB 9 PG 66

ARC CAFFUSAOOI, LLC
DB 2416 PG 97
PB H PG 133

PEOPLES BANK
DB 988 PG 1

CAROMONT HEALTH SERVICES, INC
DB 1622 PG 386
PB G PG 443

DENVER AAP PARTNERS LLC
DB 33 PG 724
PB 1 PG 380

PERMIT DRAWINGS
SHEET ___ OF ___

R-5721A

28

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
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ROADWAY DESIGN UNIT

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REVISIONS

11/14/23

Scale: 1"= 50'

NO JURSIDICTIONAL FEATURES IMPACTED ON THIS SHEET

NAD 83

RO = 144'

BEGIN CONSTR.
-Y5- POT 11+35.00

-Y5- POB 10+00.00

-Y5- PC 11+41.41

-Y5- STA 14+00.00 SEE SHEET 008

MATCH LINE -Y5- STA 14+00.00 SEE SHEET 008

CHRISTOPHER T CLARK
ANITA J CLARK
DB 897 PG 148

CHRISTOPHER TODD CLARK &
ANITA JOAN CLARK
DB 883 PG 23

CHRISTOPHER TODD CLARK &
ANITA JOAN CLARK
DB 3210 PG 549

STTR LIMITED PARTNERSHIP
DB 1088 PG 663

TIM NORMAN PROPERTIES LLC
DB 2943 PG 466

N. PILOT KNOB RD (SR 1394) 21S' BST

48' STR

15" RCP

142

44

43

ISBKD

810.0'

795.0'

800.0'

805.0'

PERMIT DRAWINGS
SHEET___ OF _____

R-5721A

29

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

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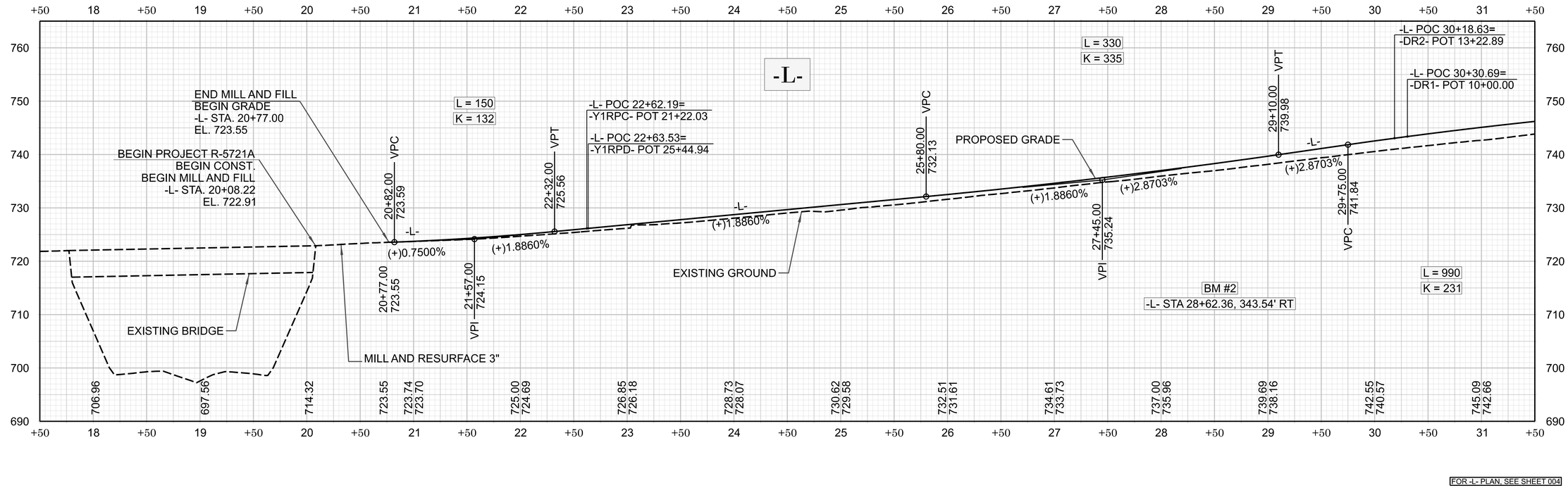
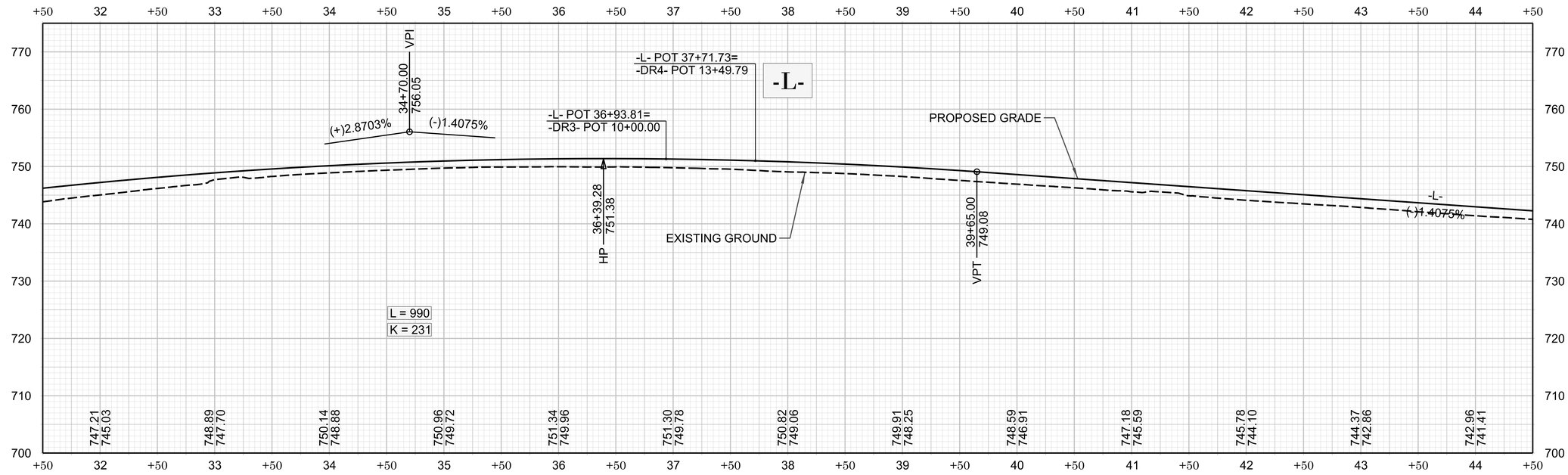
11/14/23



FOR -L- PLAN, SEE SHEET 004



FOR -L- PLAN, SEE SHEET 005

R-5721A

PROFILE | 030

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

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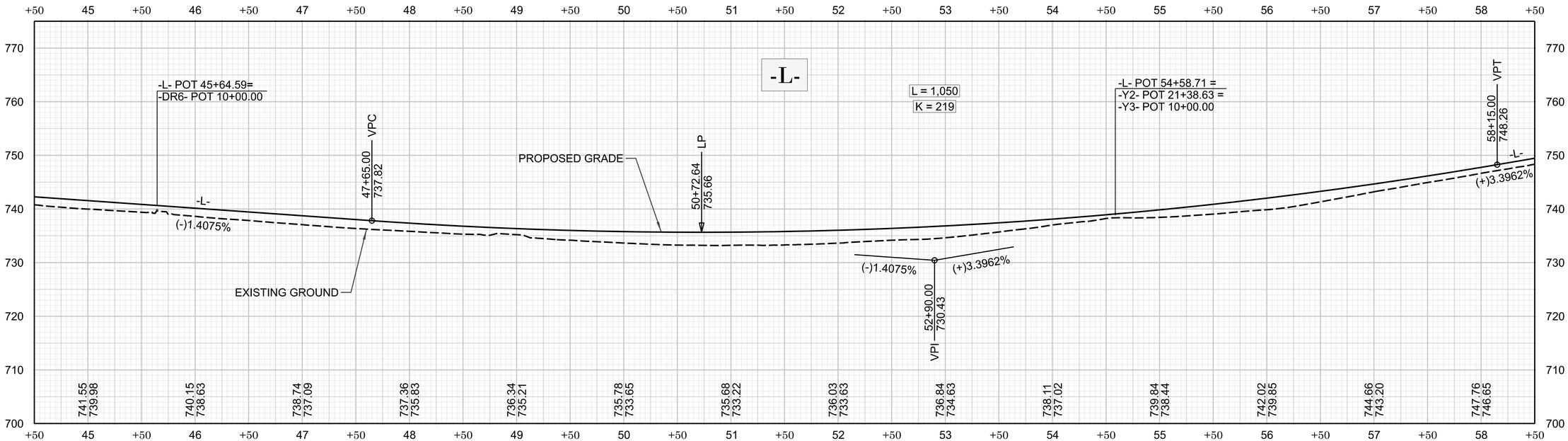
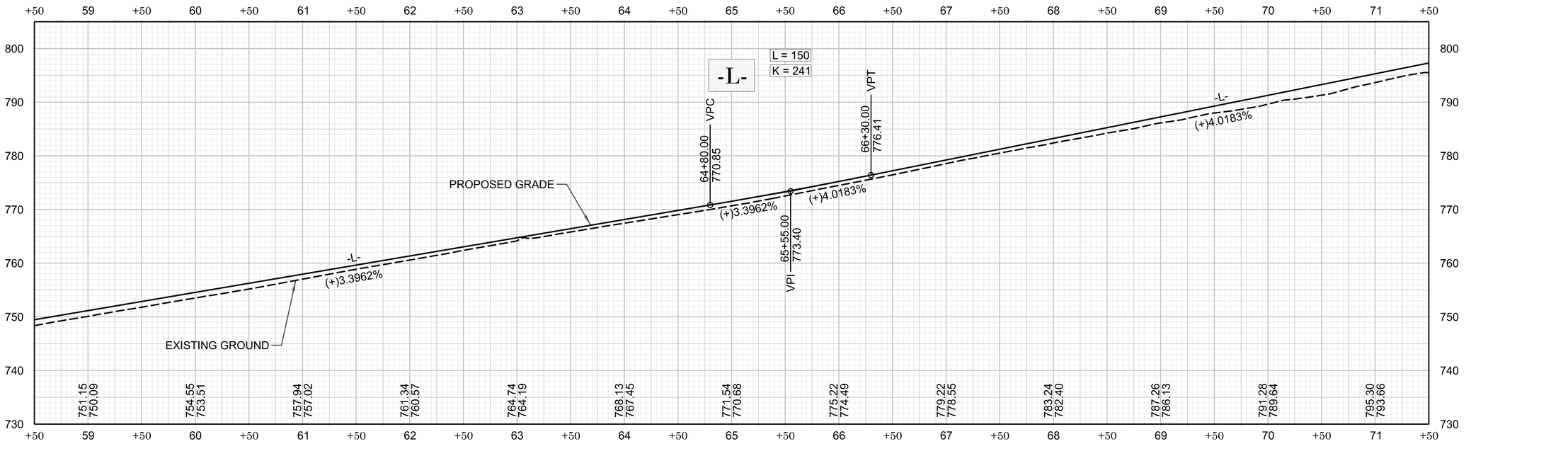


FOR -L- PLAN, SEE SHEET 006



FOR -L- PLAN, SEE SHEET 007

R-5721A

PROFILE | 031

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

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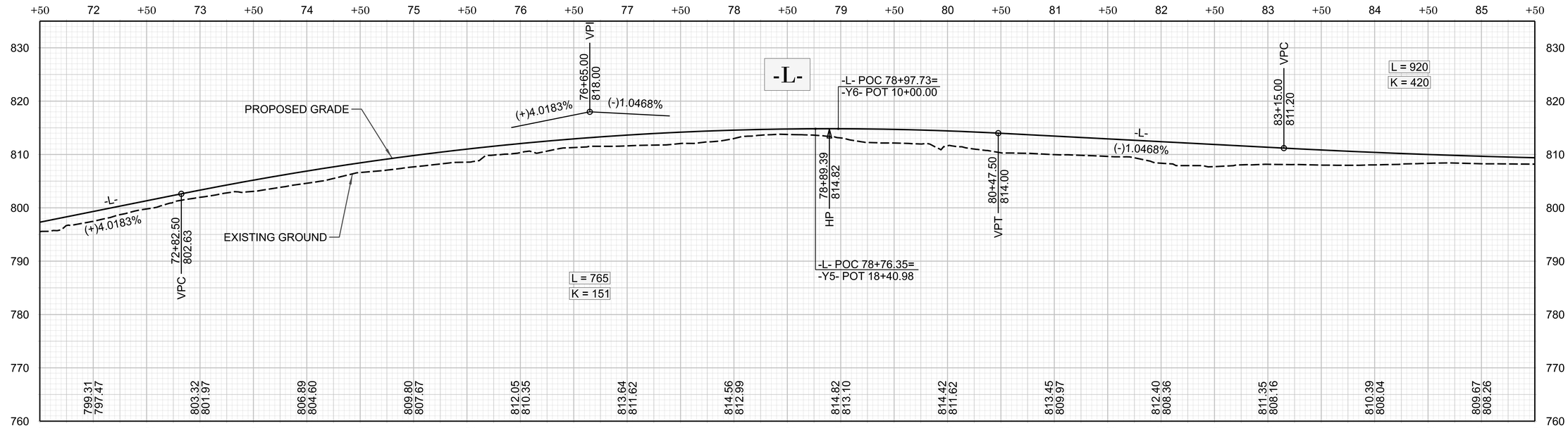
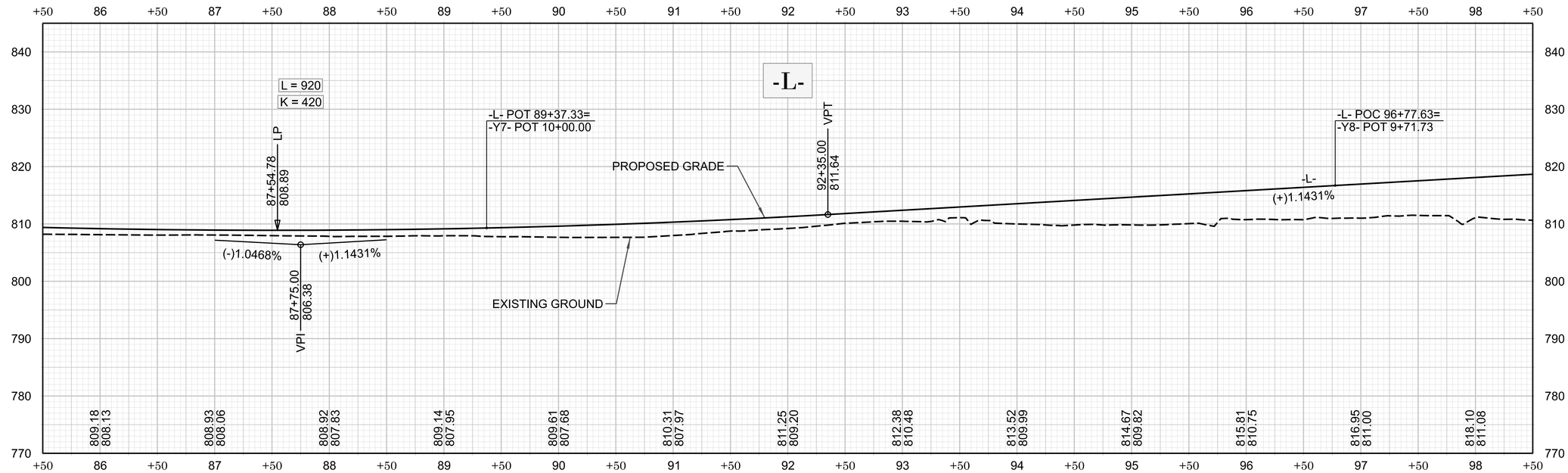
REVISIONS

11/14/23



FOR -L- PLAN, SEE SHEET 008



FOR -L- PLAN, SEE SHEET 009

R-5721A

PROFILE | 032

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

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HYDRAULICS ENGINEER

INCOMPLETE PLANS
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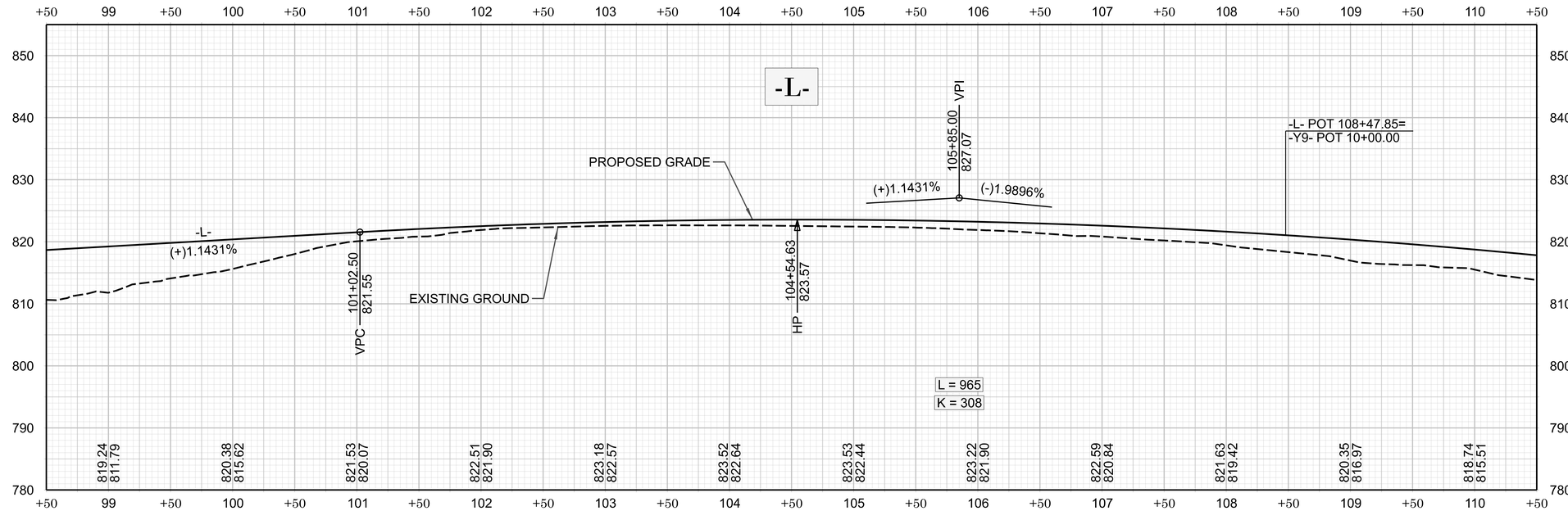
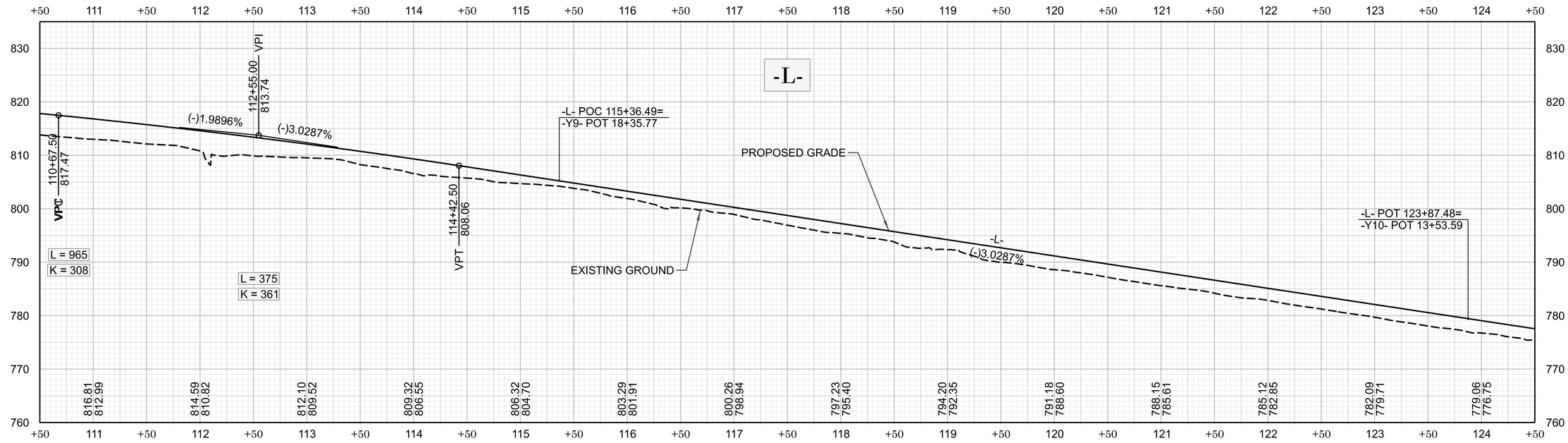
REVISIONS

11/14/23



FOR -L- PLAN, SEE SHEET 010



FOR -L- PLAN, SEE SHEET 011

R-5721A

PROFILE | 033

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY



ROADWAY DESIGN UNIT

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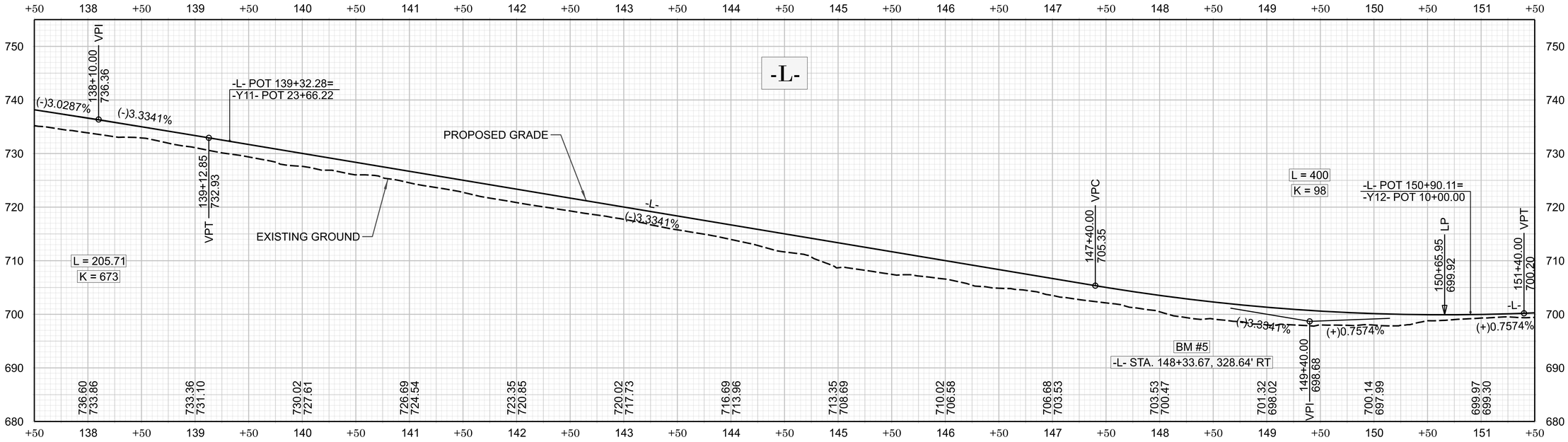
FOR -L- PLAN, SEE SHEET 012



FOR -L- PLAN, SEE SHEET 013

R-5721A

PROFILE | 034

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY



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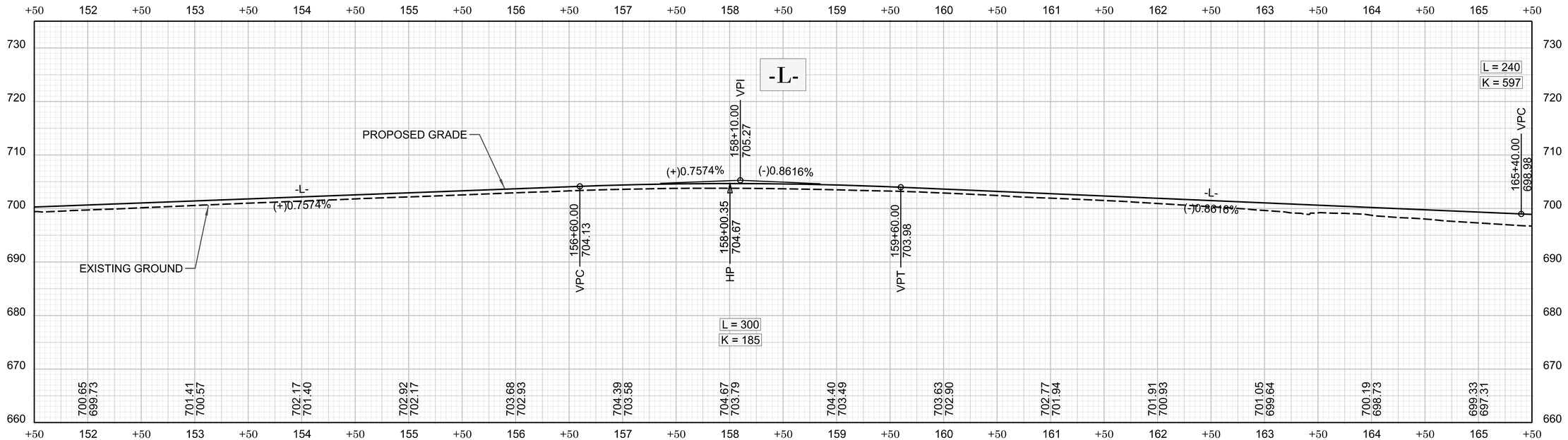
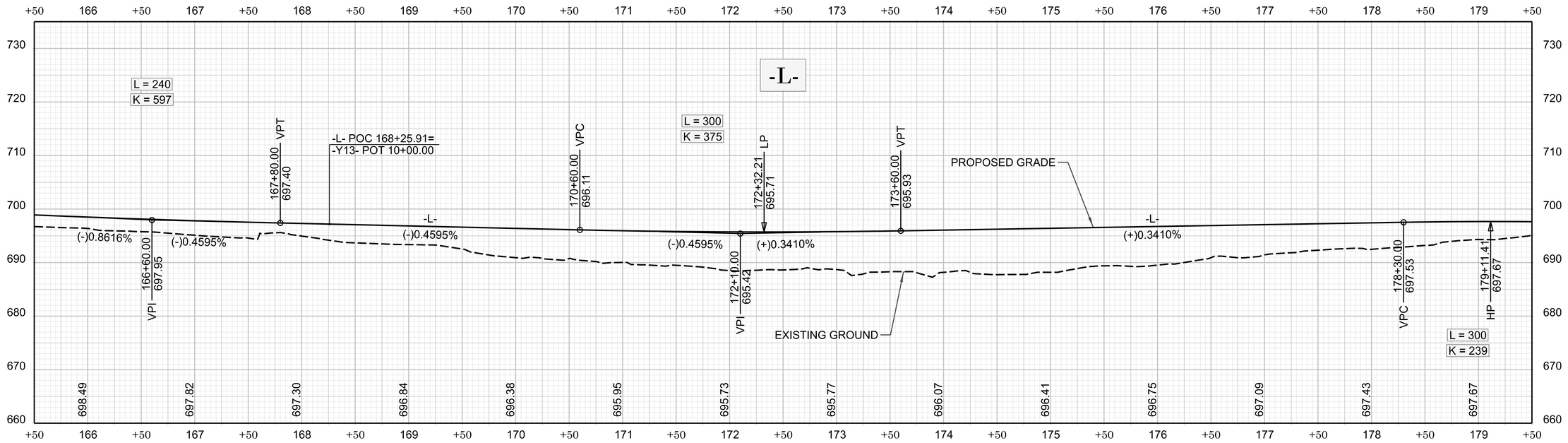


FOR -L- PLAN, SEE SHEET 014



FOR -L- PLAN, SEE SHEET 015

R-5721A

PROFILE | 035

NORTH CAROLINA
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MECKLENBURG COUNTY AND
LINCOLN COUNTY

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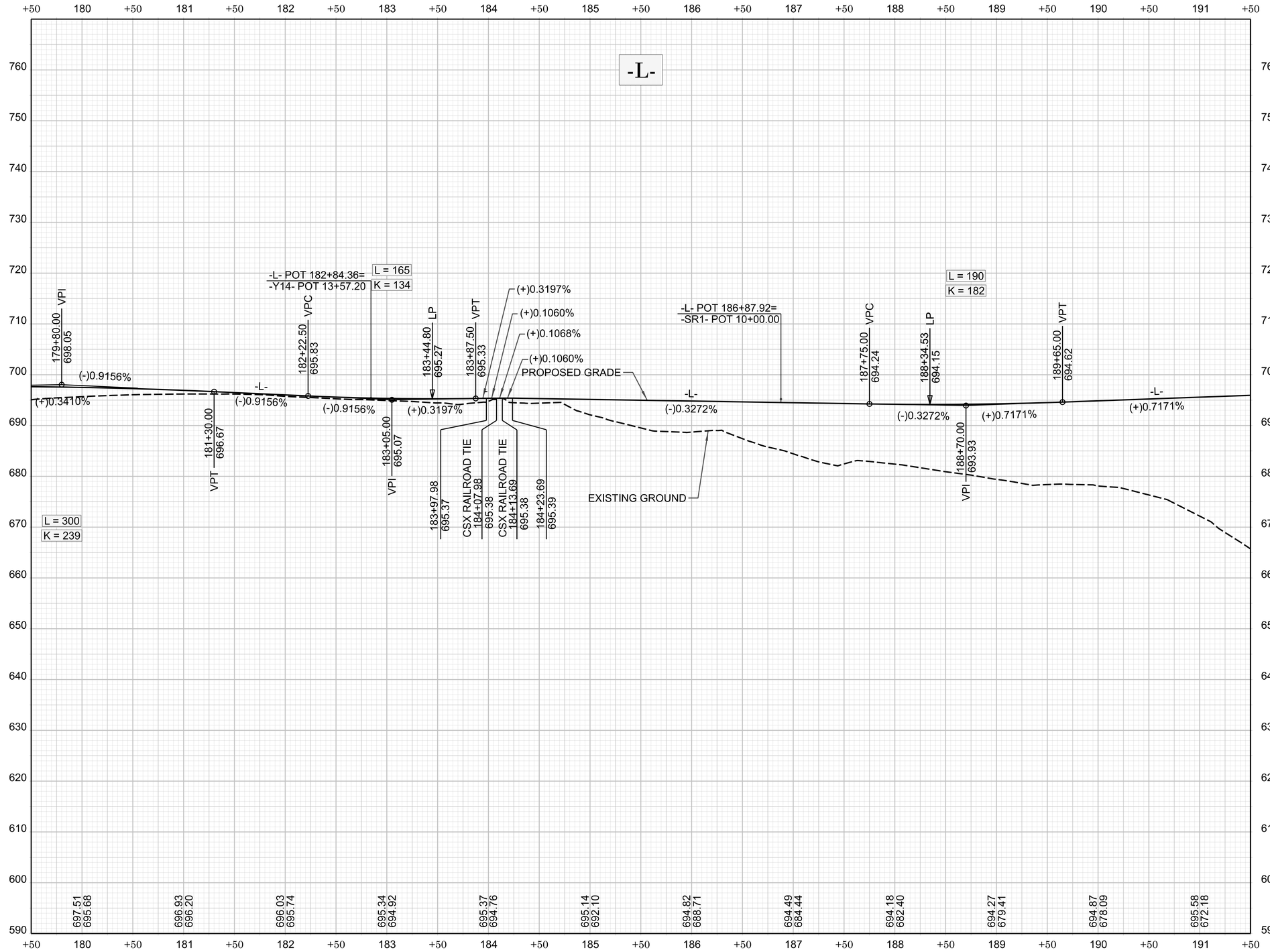

FOR -L- PLAN, SEE SHEET 016

R-5721A

PROFILE | 036

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY



ROADWAY DESIGN UNIT

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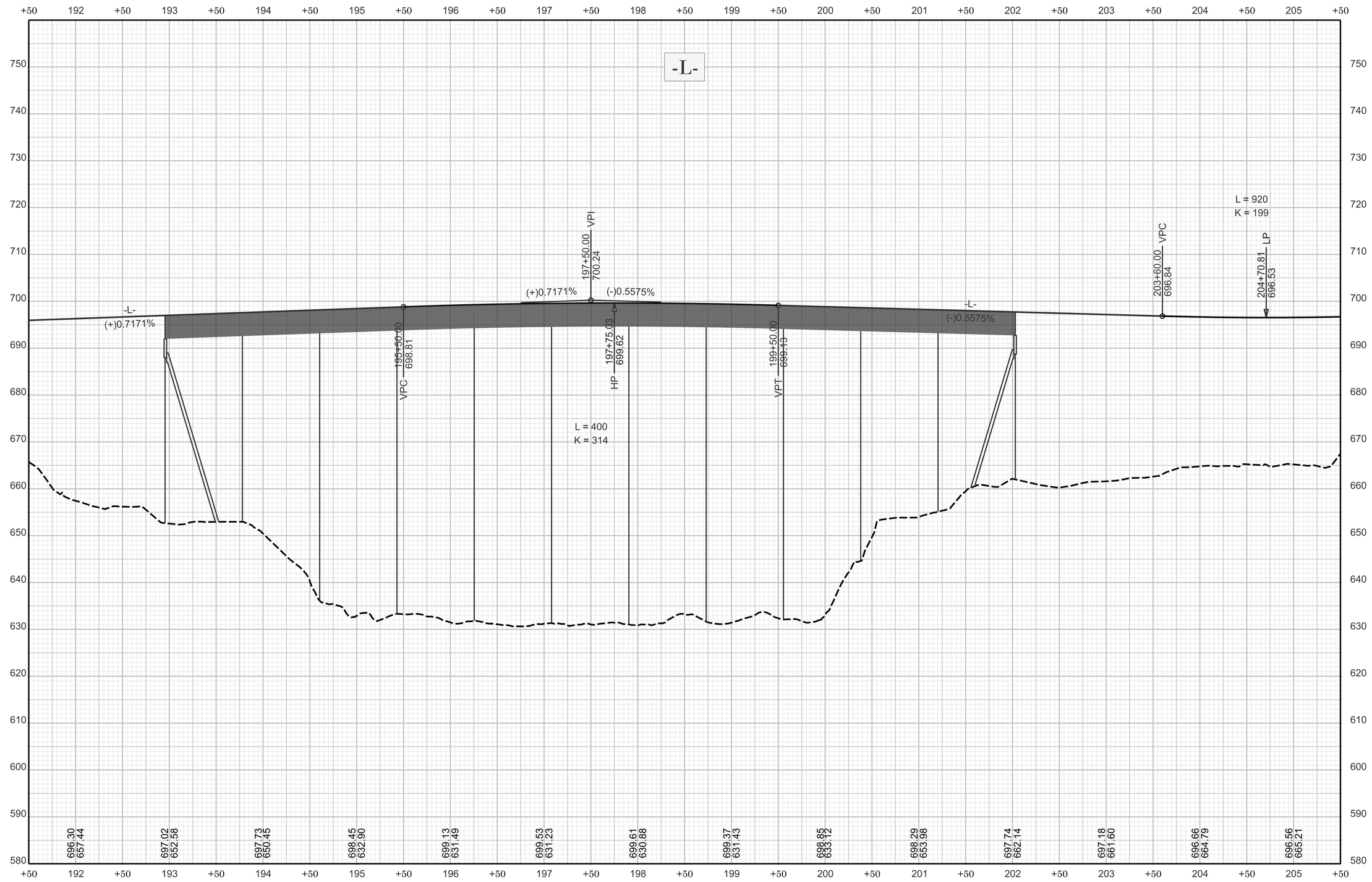

FOR -L- PLAN, SEE SHEET 017

R-5721A

PROFILE | 037

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

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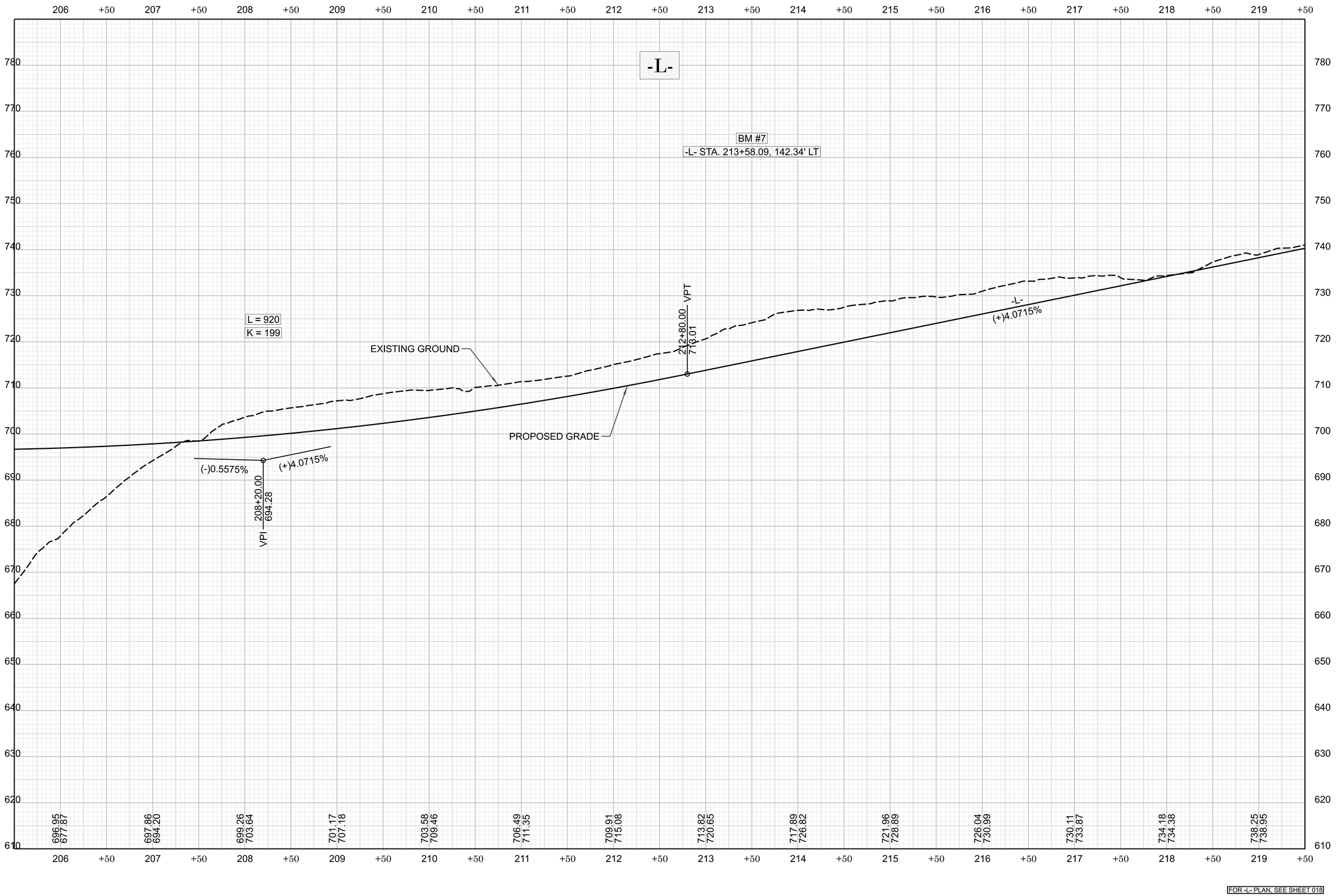
REVISIONS

$$$-USER_NAME-$$$ - $$$-DATE-$$$



FOR -L- PLAN, SEE SHEET 018

R-5721A

PROFILE | 038

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

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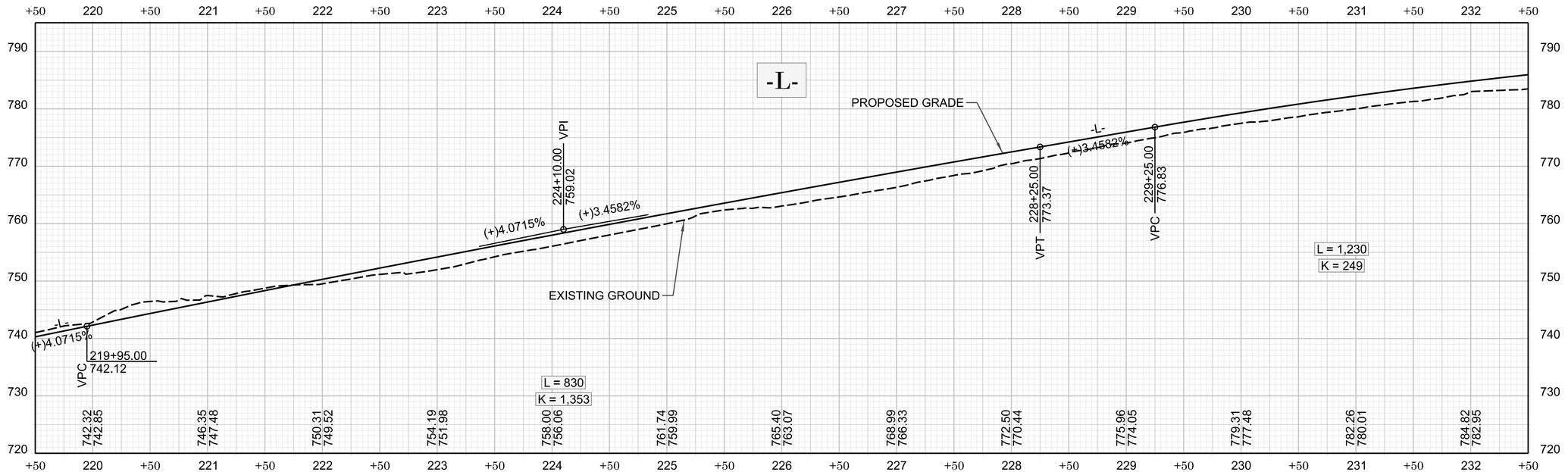
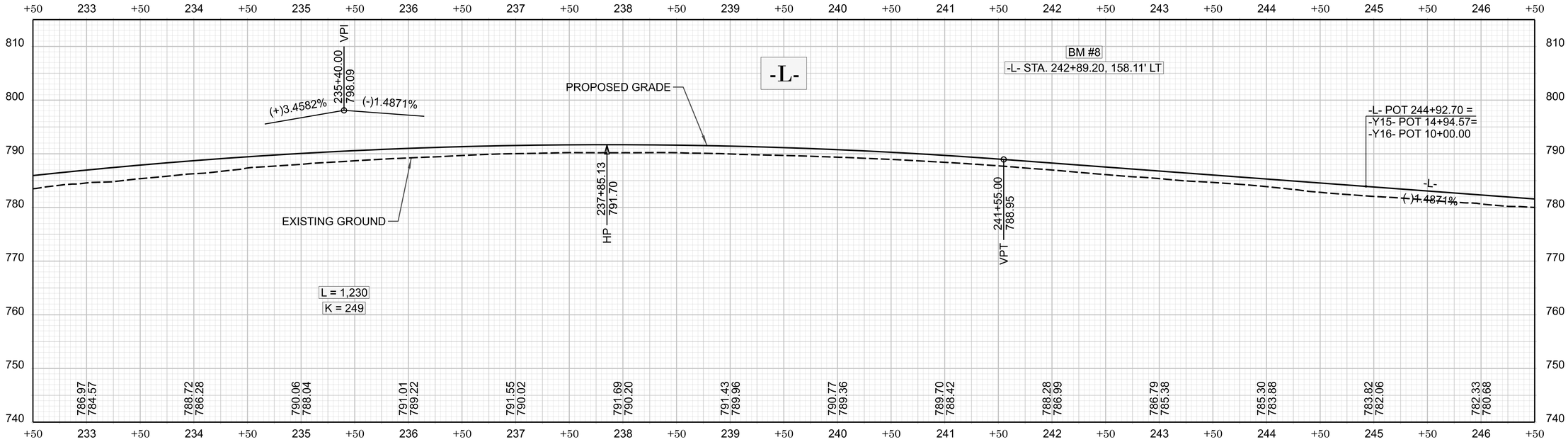


FOR -L- PLAN, SEE SHEET 019



FOR -L- PLAN, SEE SHEET 020

R-5721A

PROFILE | 039

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY



ROADWAY DESIGN UNIT

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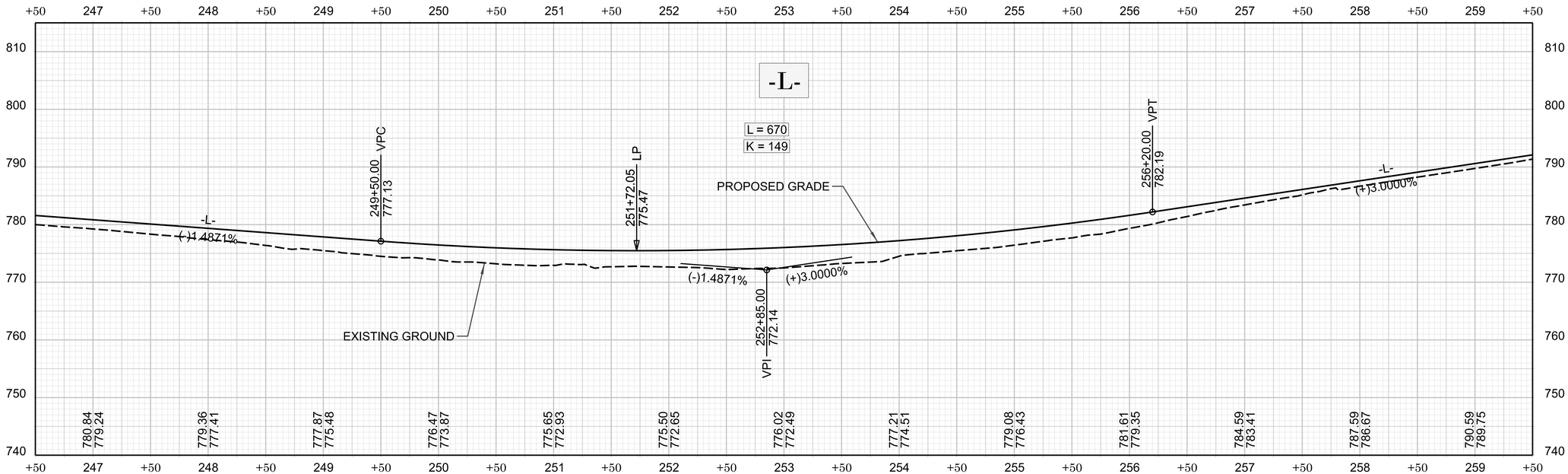
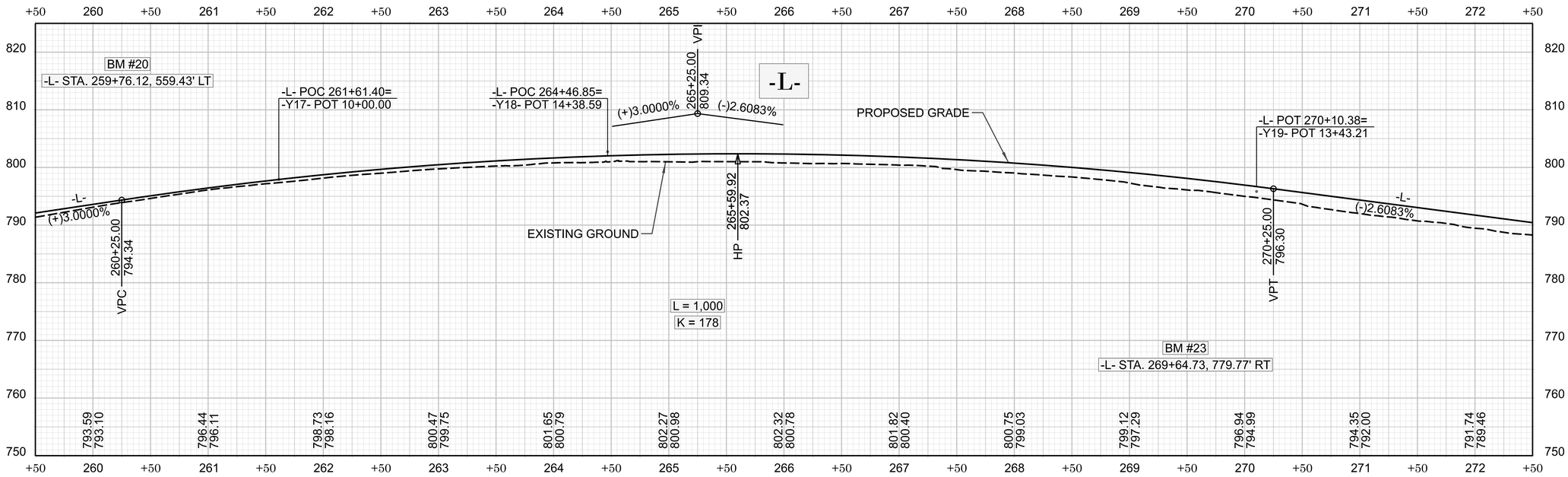
11/14/23



FOR -L- PLAN, SEE SHEET 021



FOR -L- PLAN, SEE SHEET 022

R-5721A

PROFILE | 040

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY



ROADWAY DESIGN UNIT

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REVISIONS

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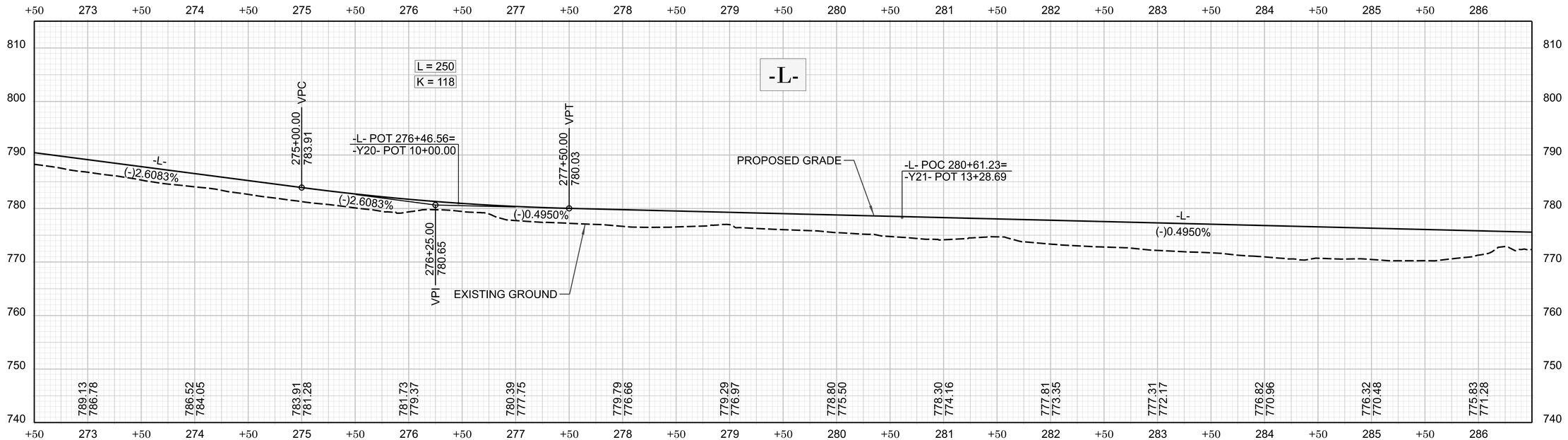
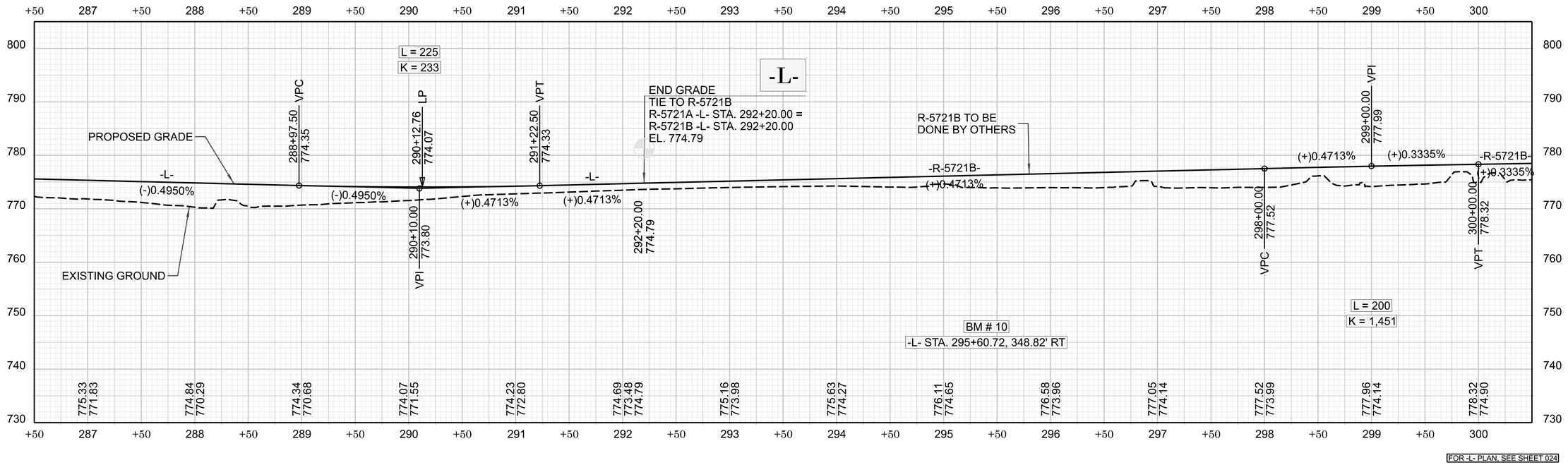


FOR -L- PLAN, SEE SHEET 023



FOR -L- PLAN, SEE SHEET 024

R-5721A

PROFILE | 041

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ROADWAY DESIGN UNIT

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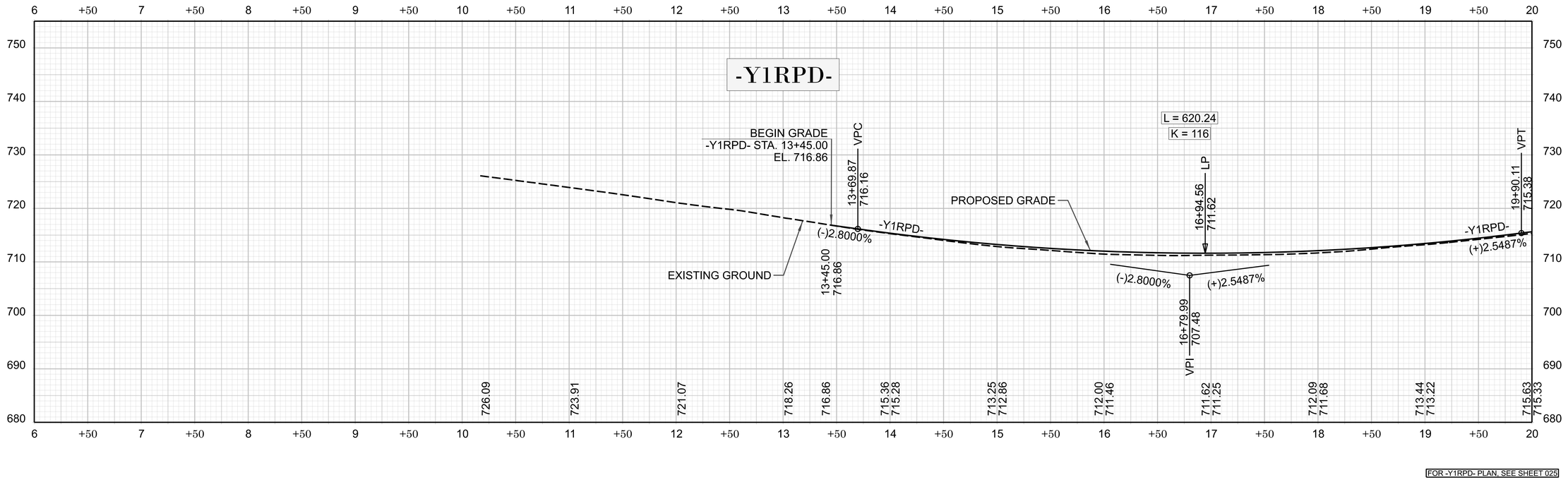

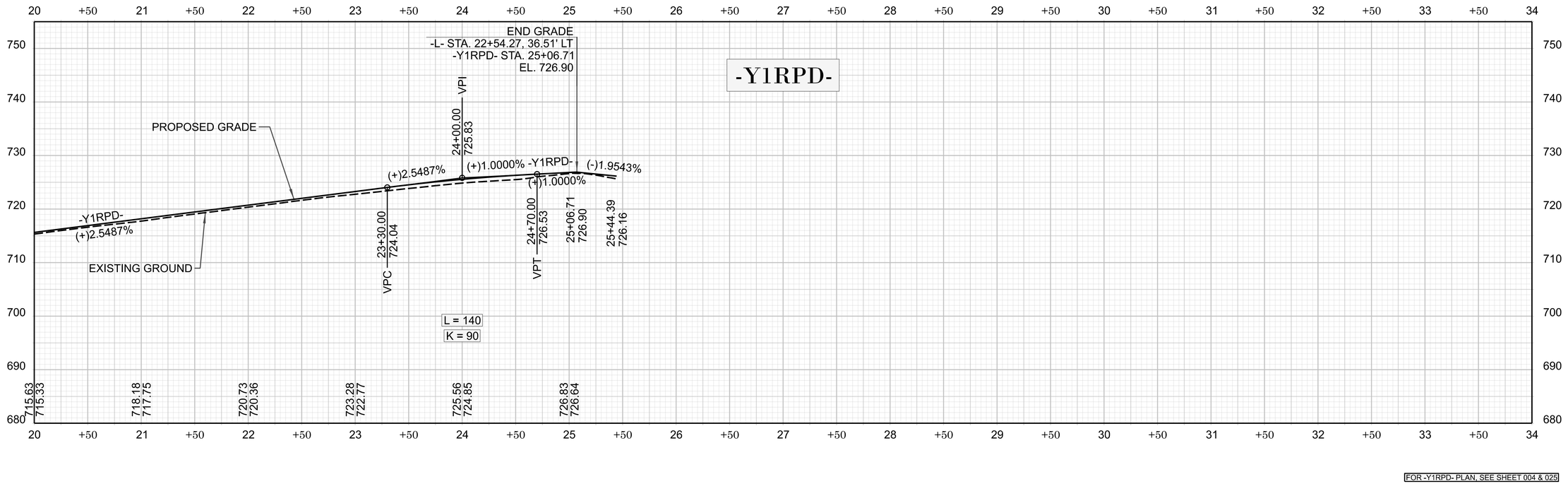

R-5721A

PROFILE | 042

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

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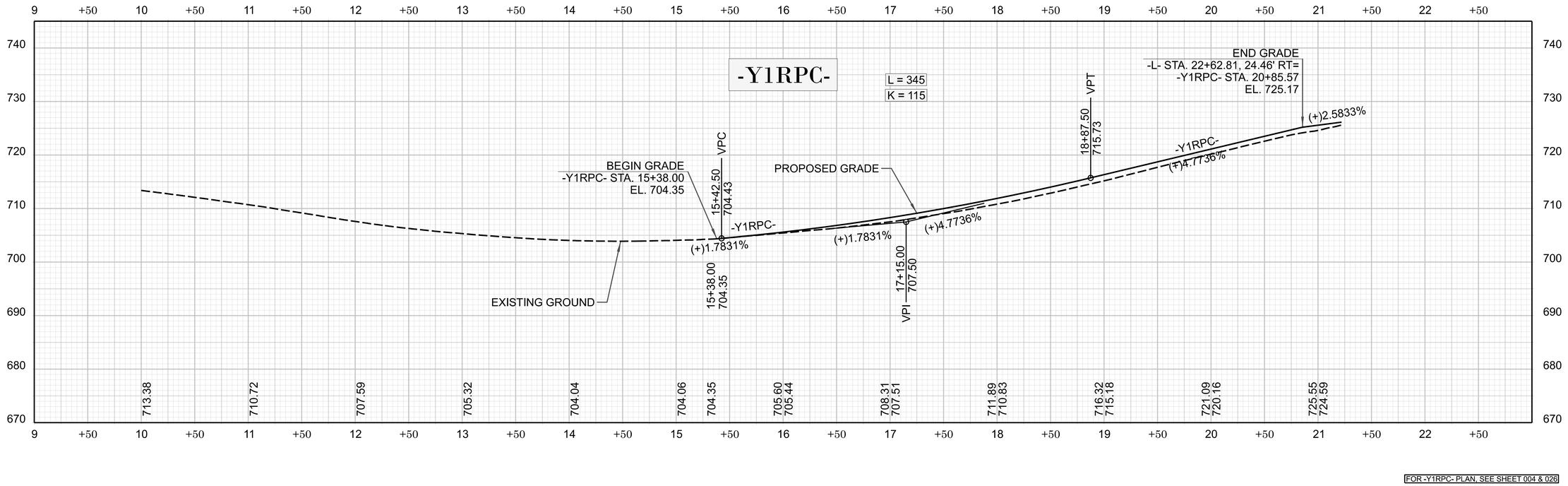
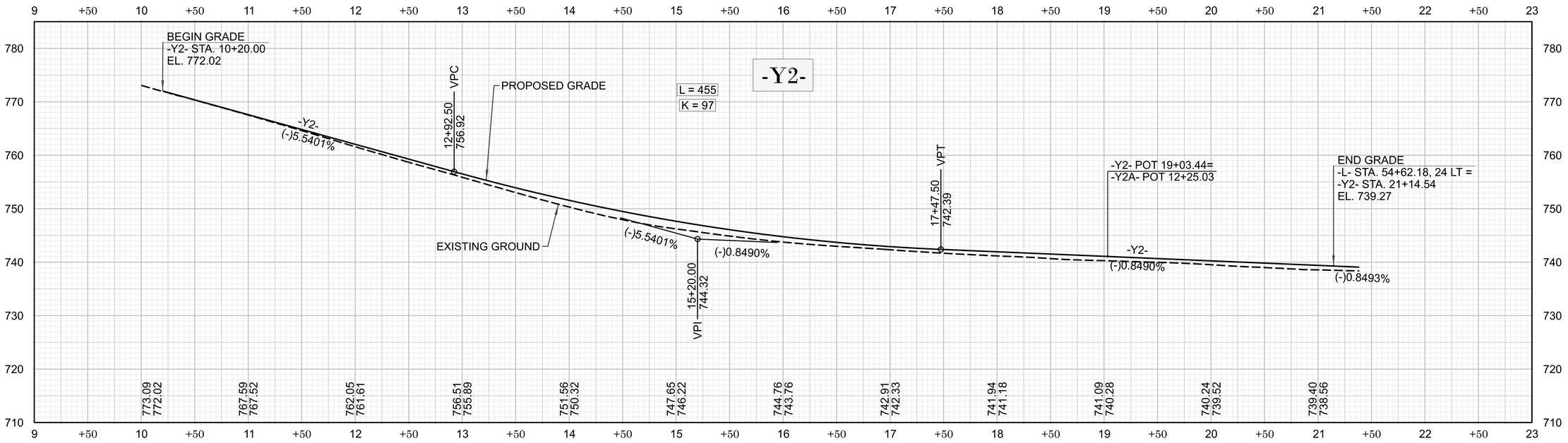


FOR -Y1RPC- PLAN, SEE SHEET 004 & 026



FOR -Y2- PLAN, SEE SHEET 006 & 027

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PROFILE | 043

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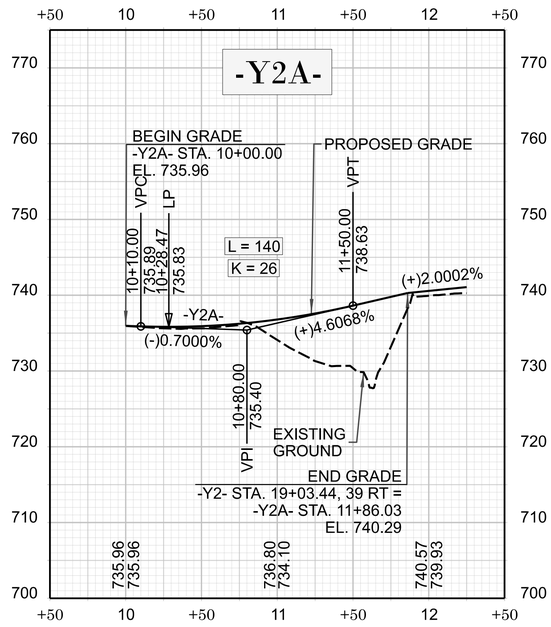
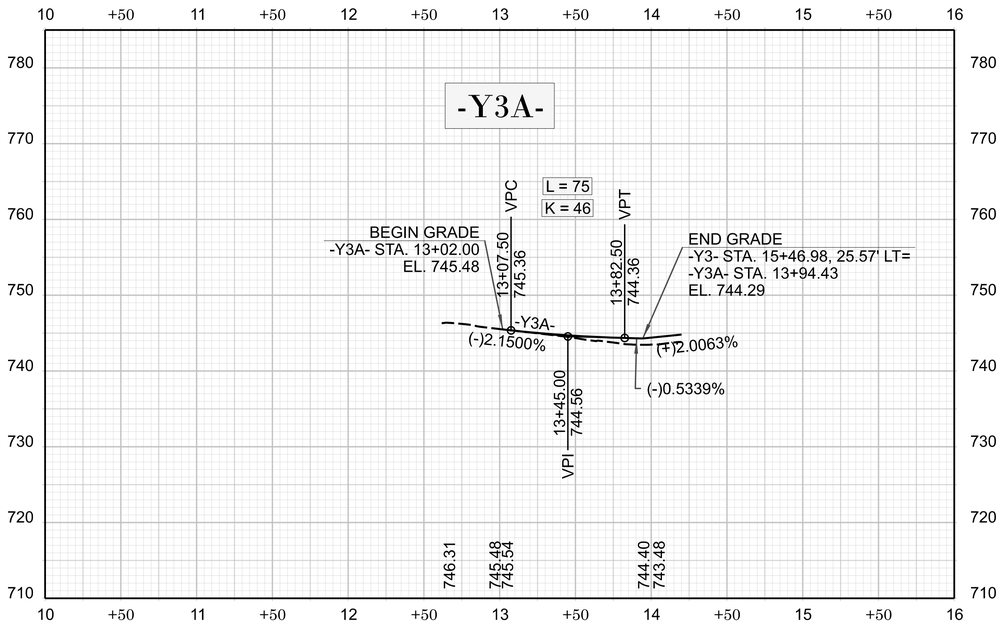
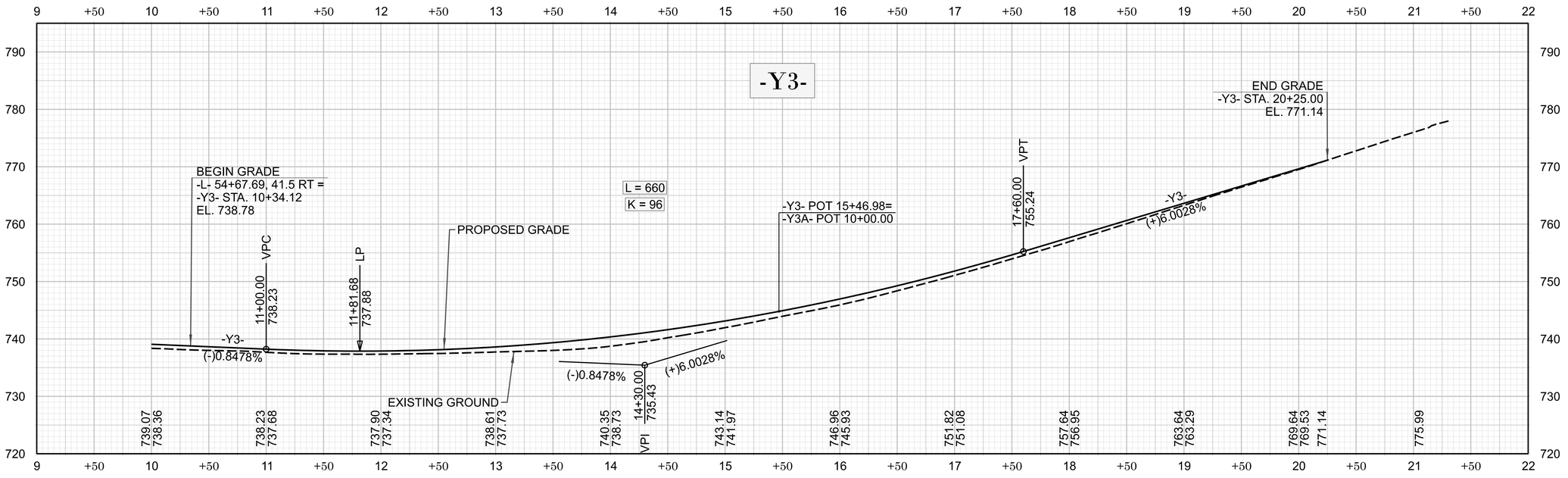




FOR -Y2A- PLAN, SEE SHEET 006
FOR -Y3A- PLAN, SEE SHEET 028



FOR -Y3- PLAN, SEE SHEET 006 & 028

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PROFILE | 044

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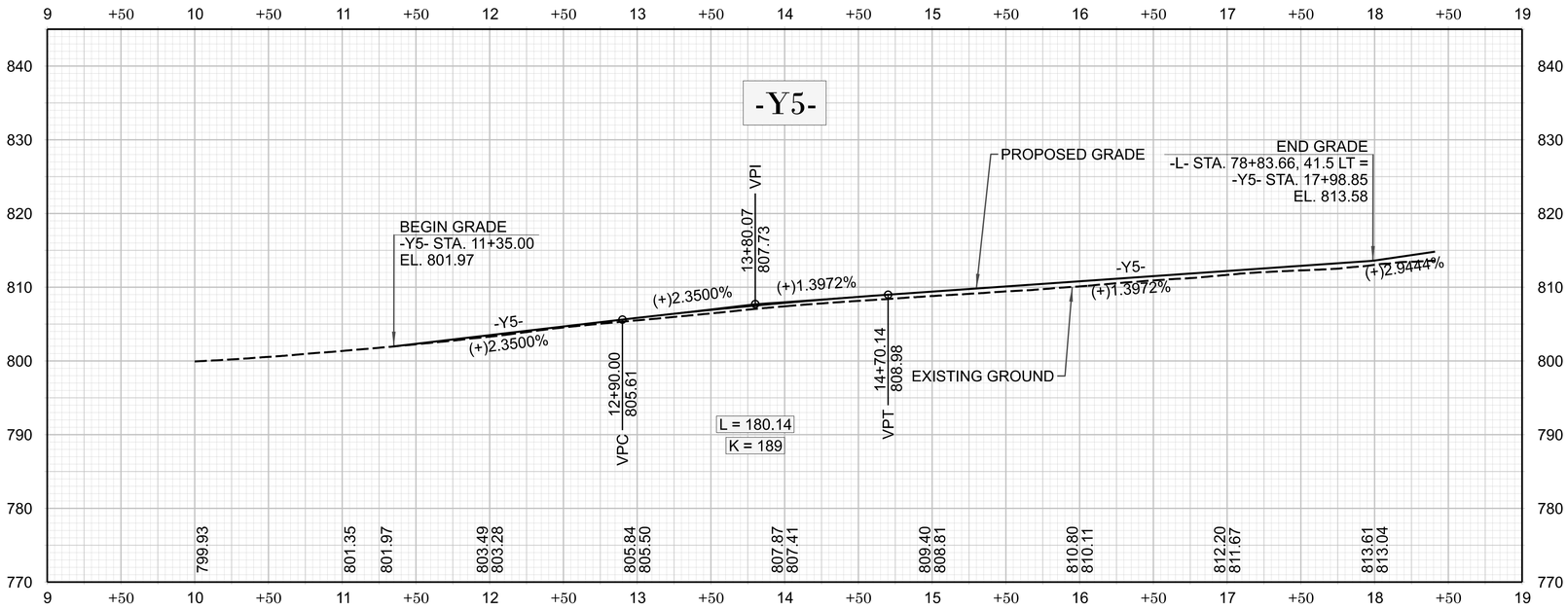
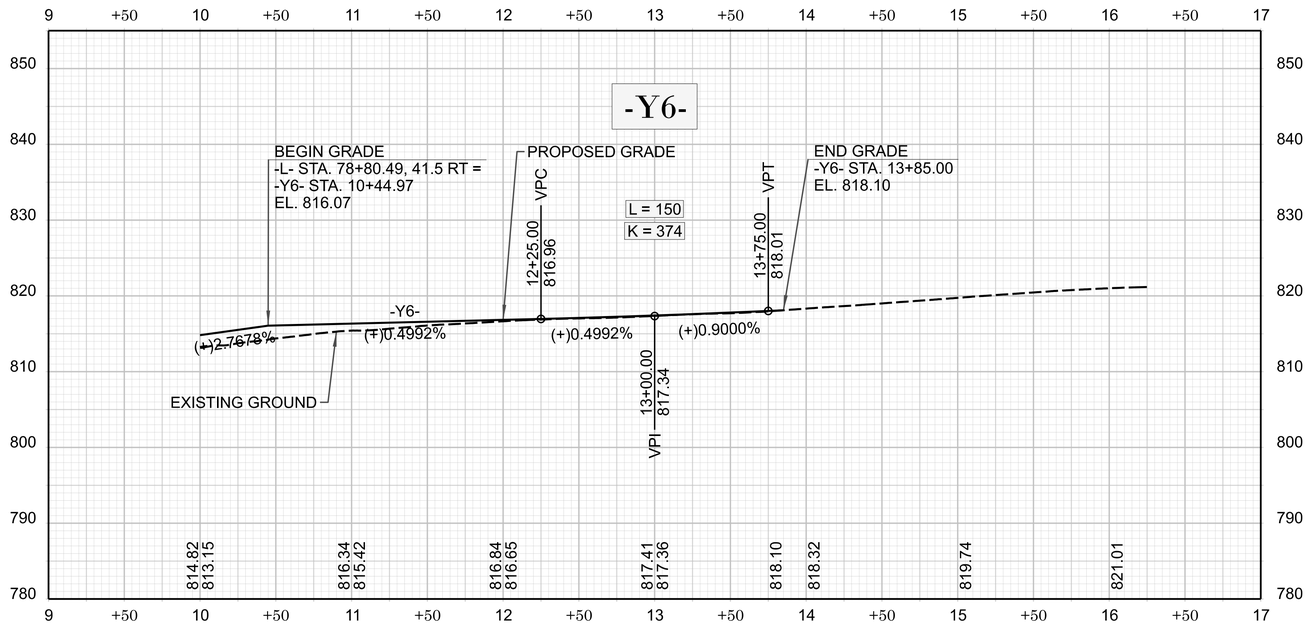


FOR -Y5- PLAN, SEE SHEET 008 & 029



FOR -Y6- PLAN, SEE SHEET 008

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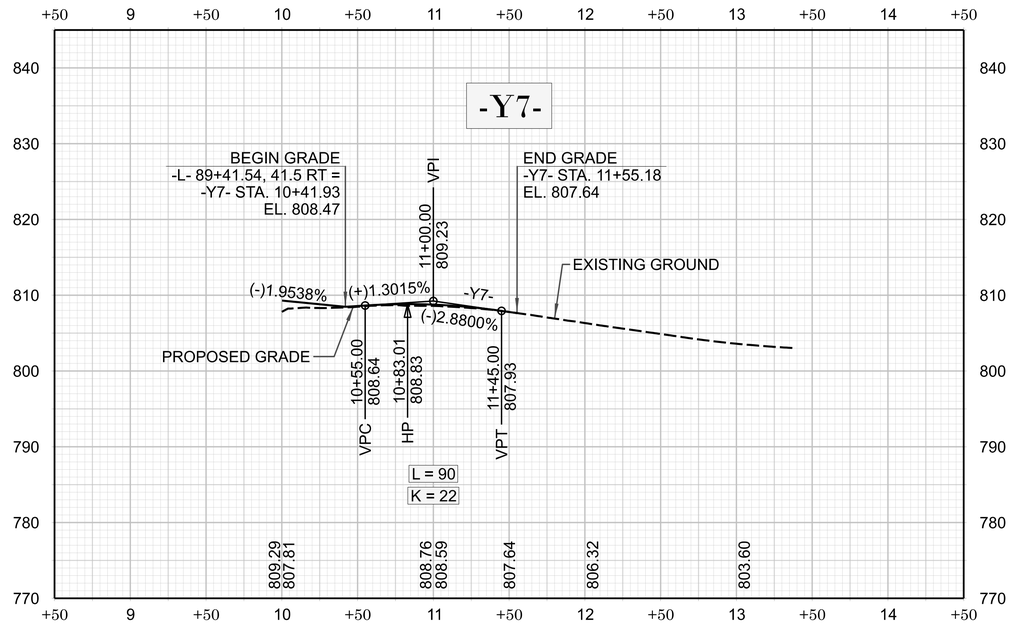
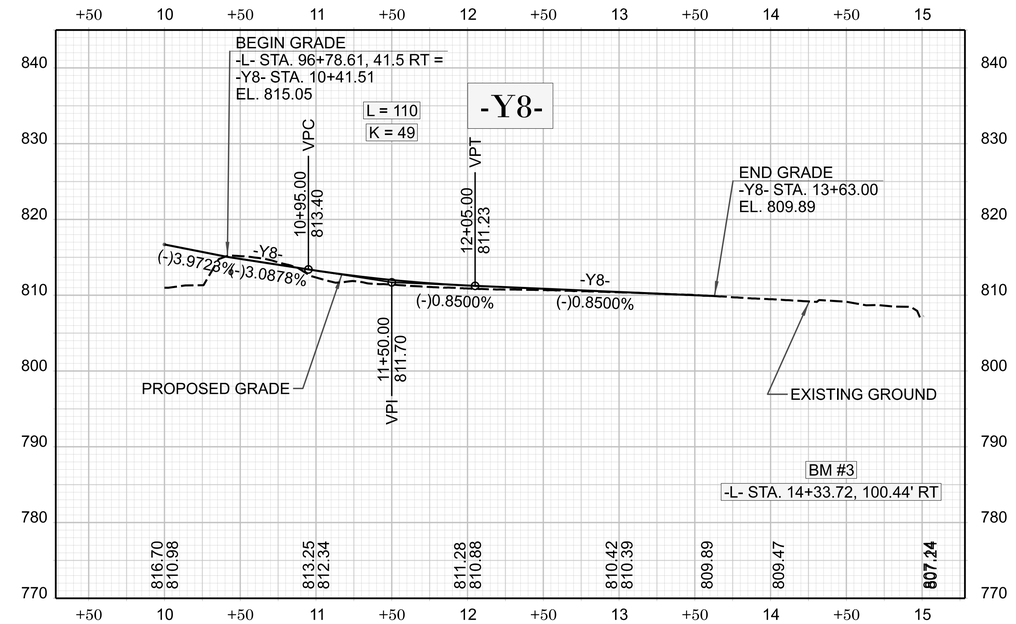
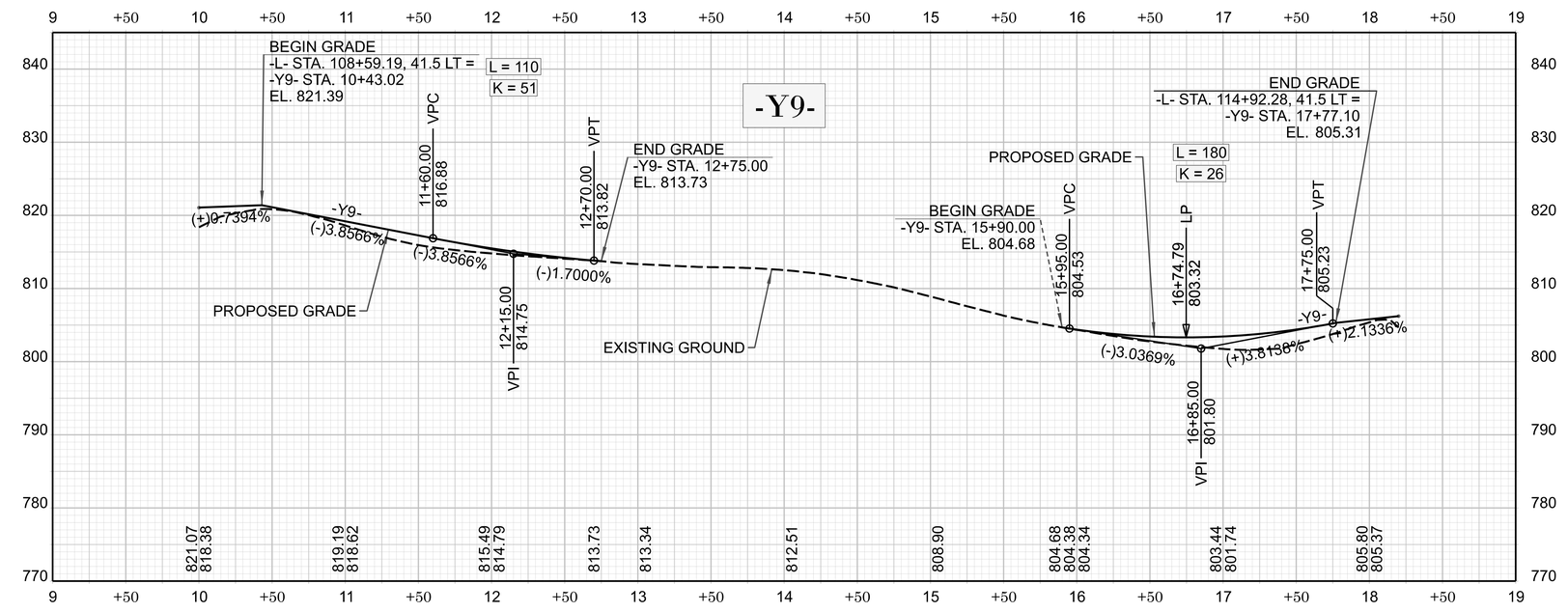




FOR -Y7- PLAN, SEE SHEET 009
FOR -Y8- PLAN, SEE SHEET 009



FOR -Y9- PLAN, SEE SHEET 010 & 011

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PROFILE | 046

NORTH CAROLINA
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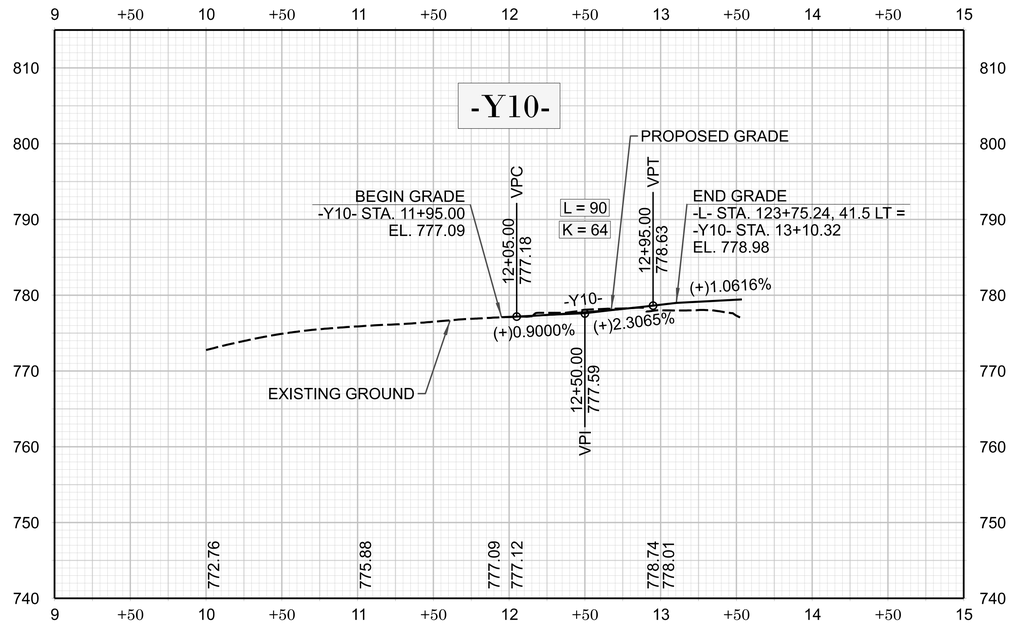
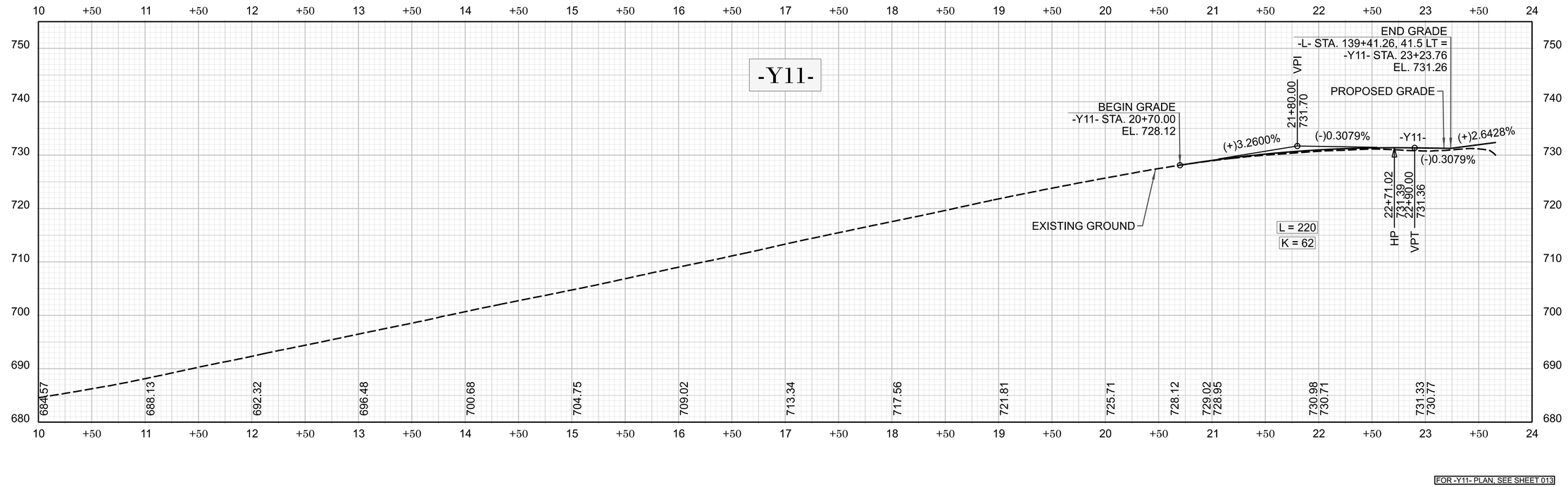


FOR -Y10- PLAN, SEE SHEET 011



FOR -Y11- PLAN, SEE SHEET 013

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PROFILE | 047

NORTH CAROLINA
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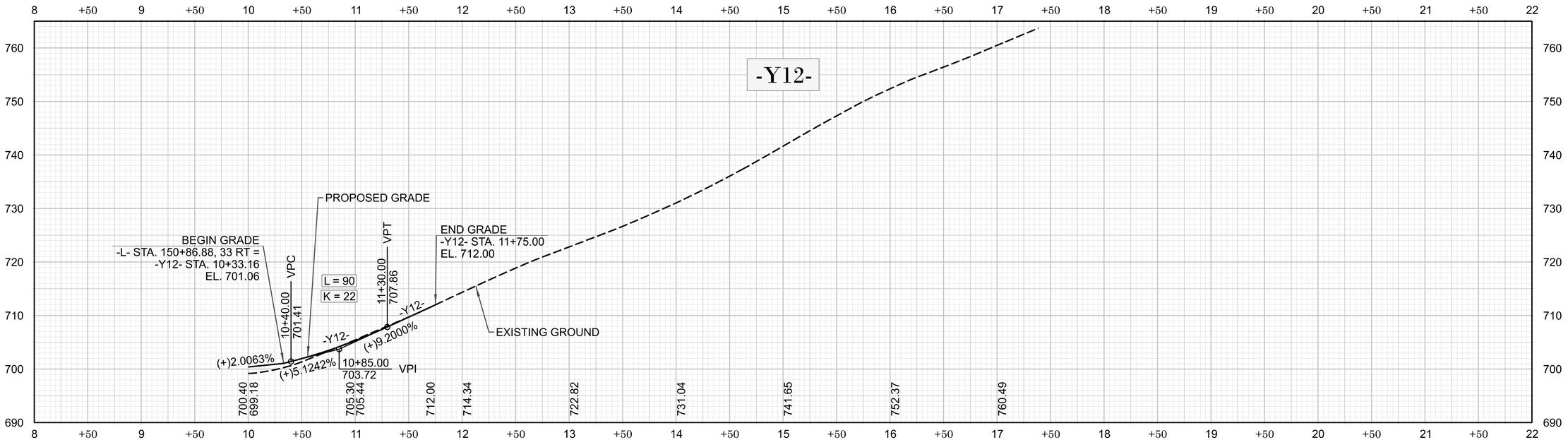
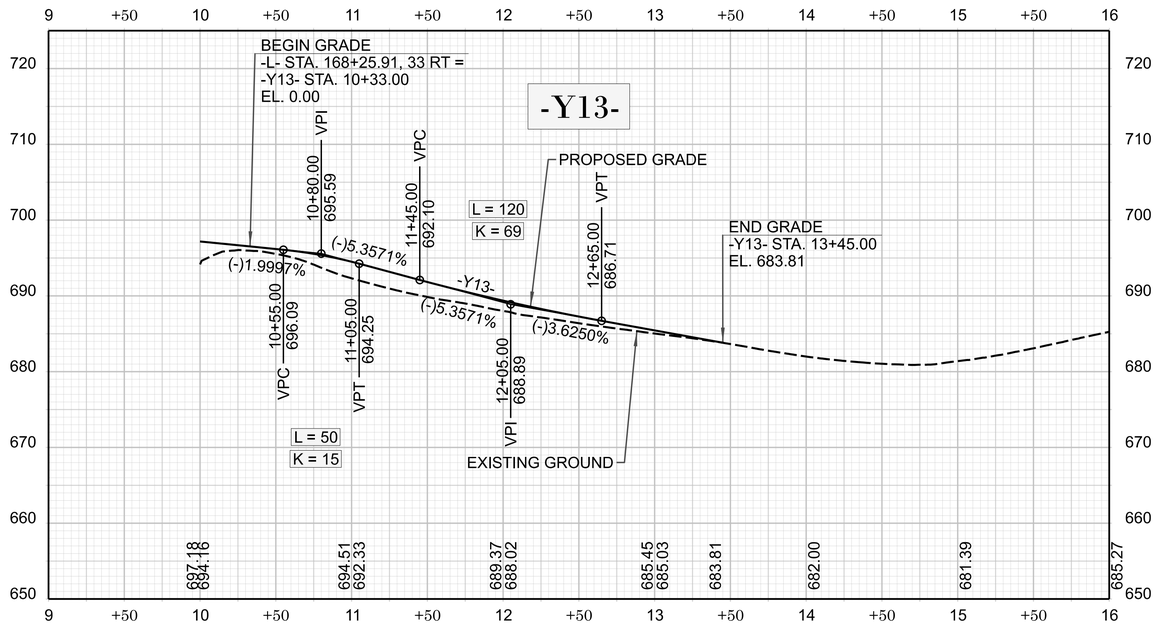
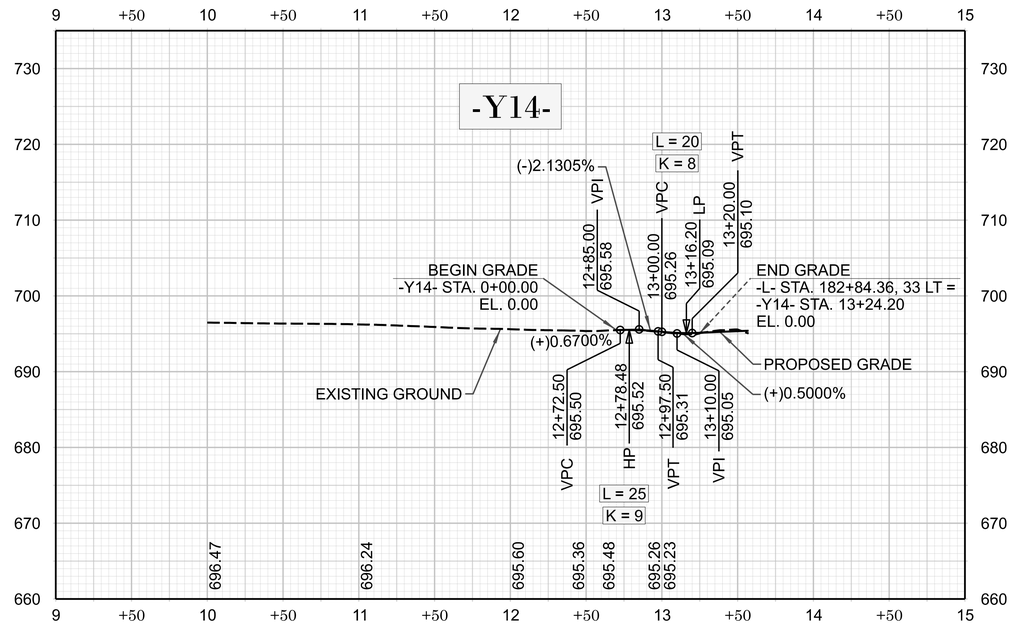


FOR -Y12- PLAN, SEE SHEET 013





FOR -Y13- PLAN, SEE SHEET 015
FOR -Y14- PLAN, SEE SHEET 016

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PROFILE | 048

NORTH CAROLINA
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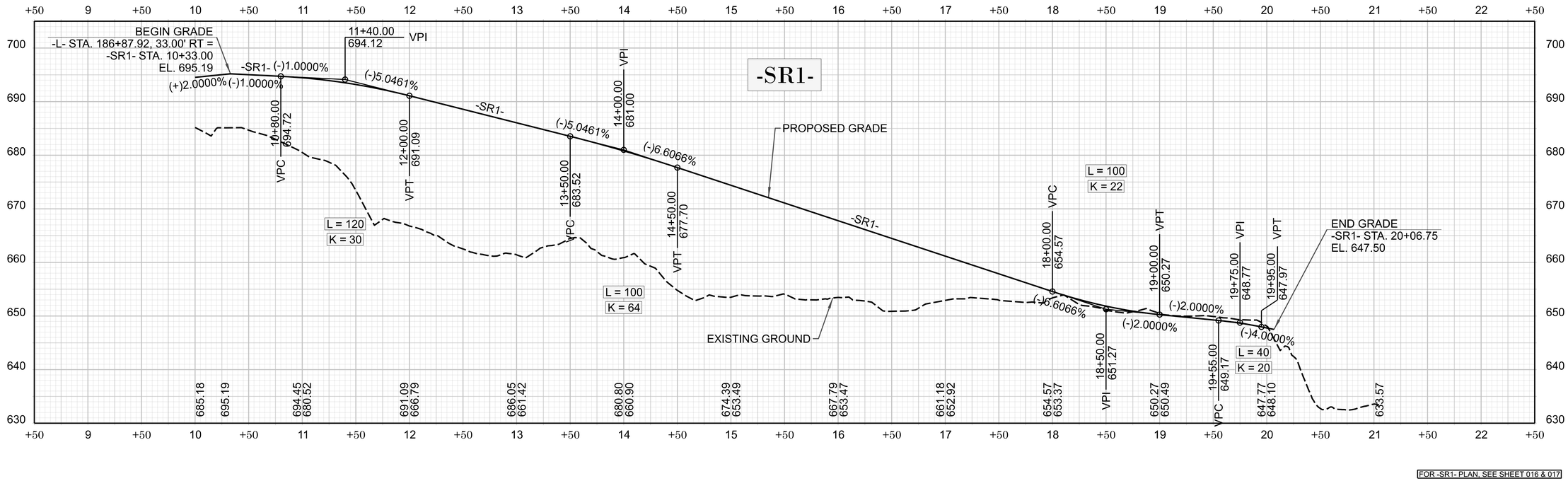

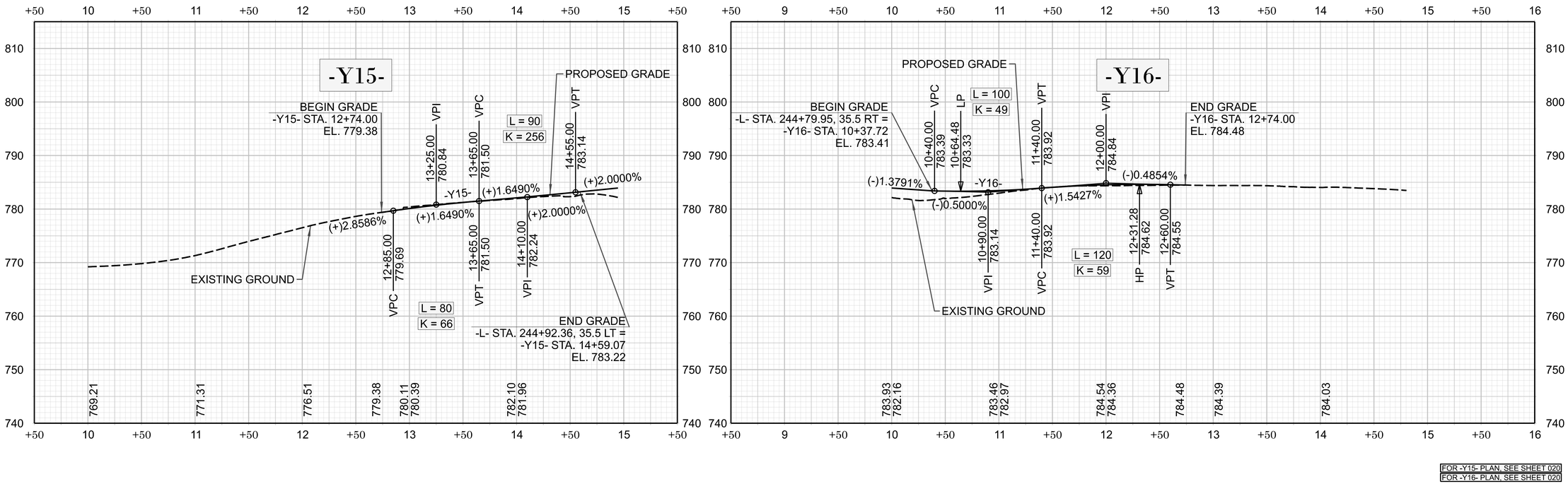

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PROFILE | 049

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

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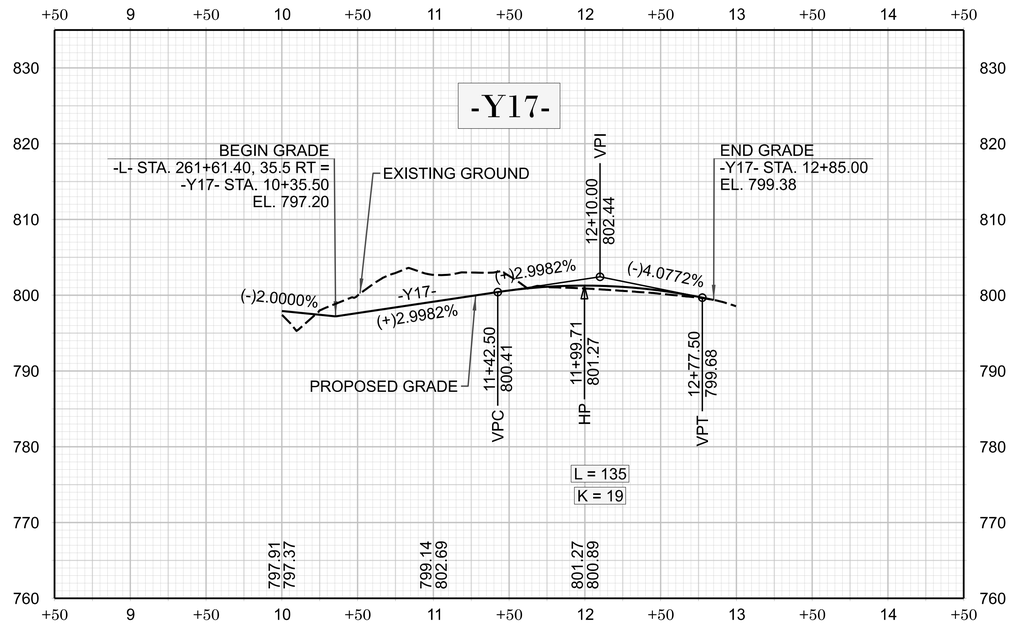
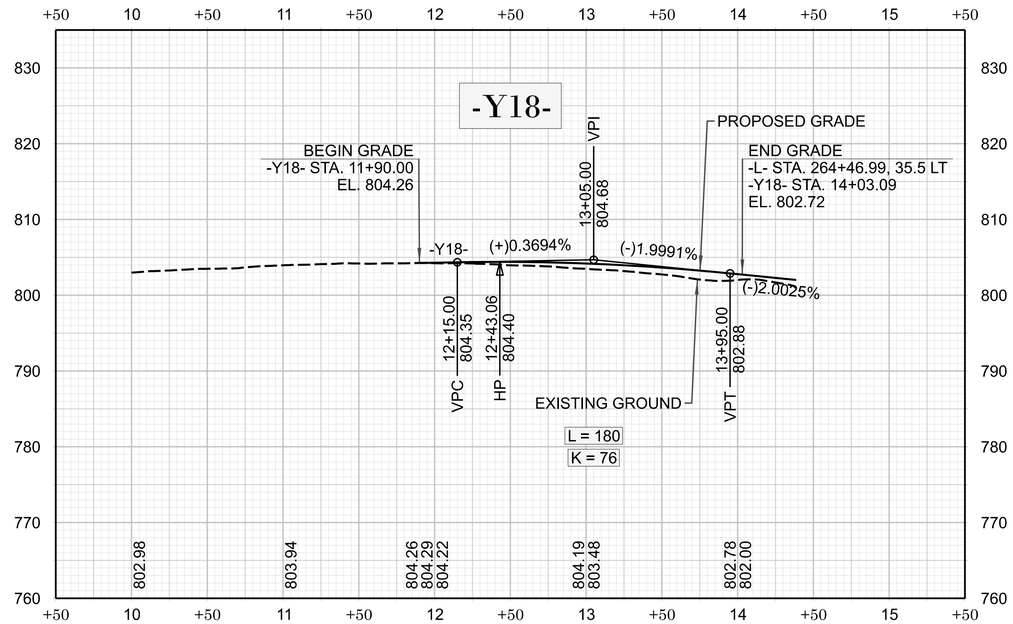
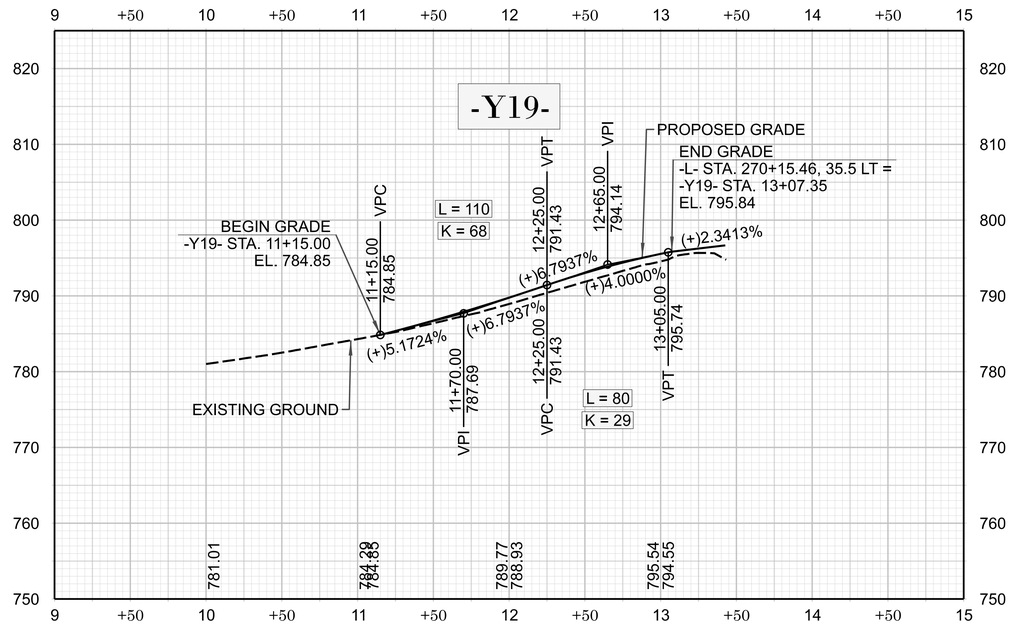
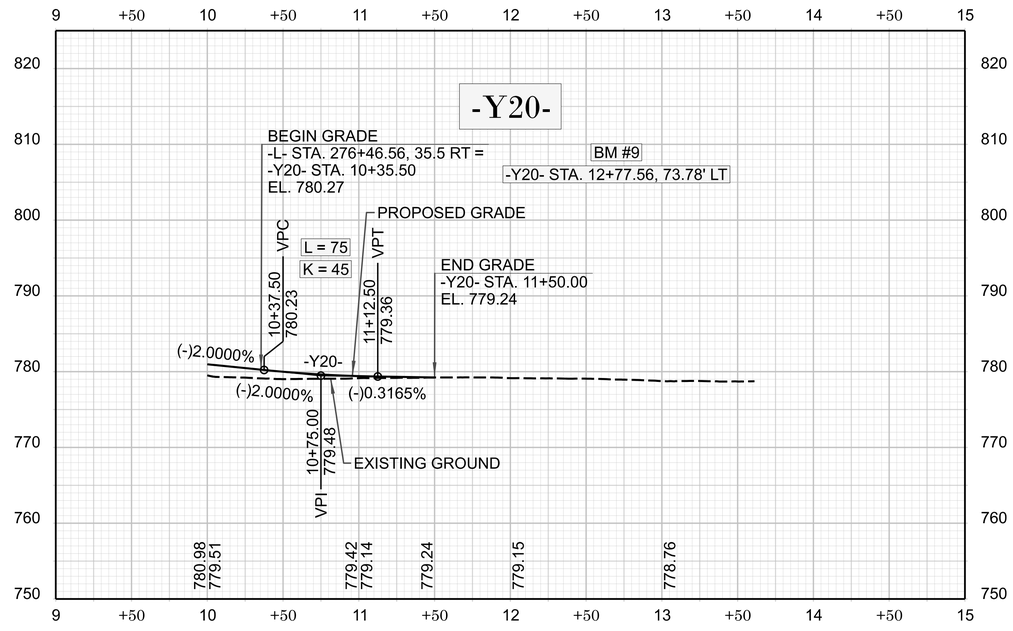




FOR -Y17- PLAN, SEE SHEET 022
FOR -Y18- PLAN, SEE SHEET 022





FOR -Y19- PLAN, SEE SHEET 022
FOR -Y20- PLAN, SEE SHEET 023

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PROFILE | 050

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
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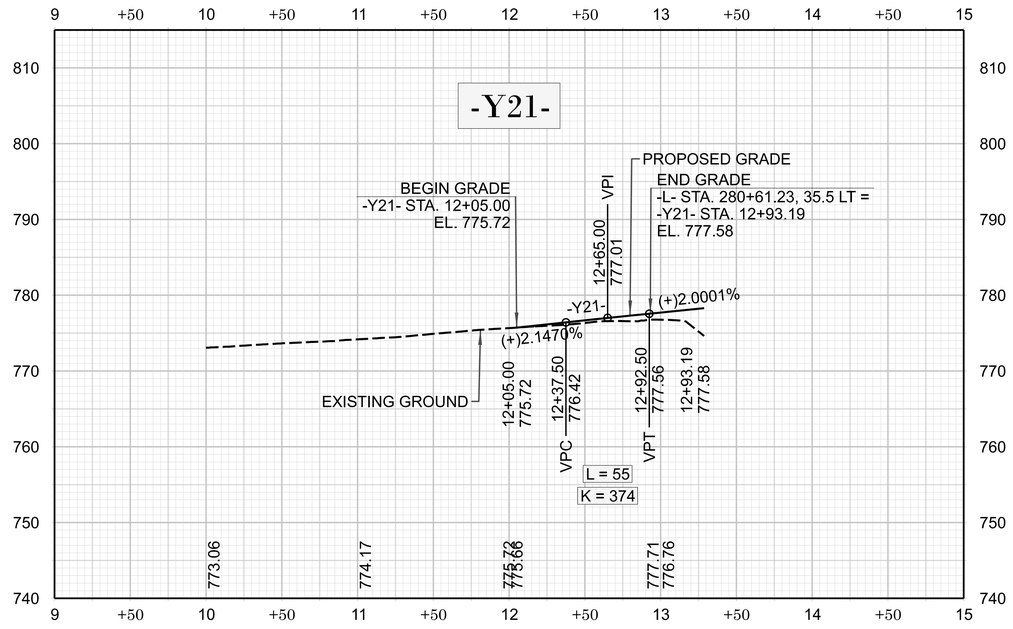
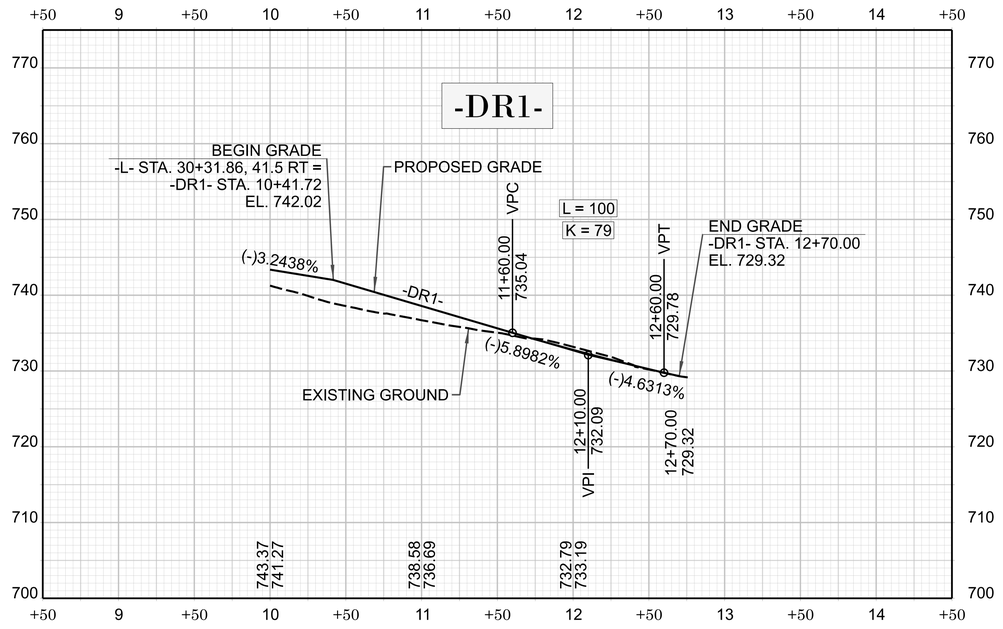
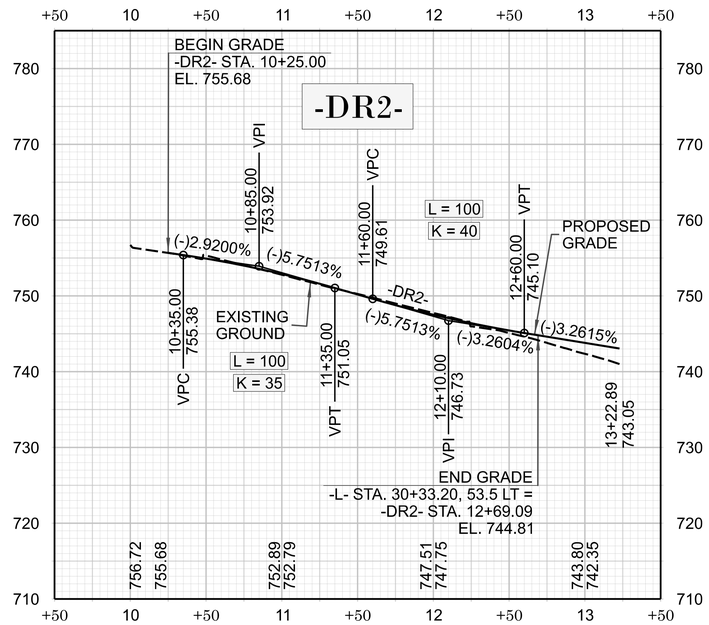
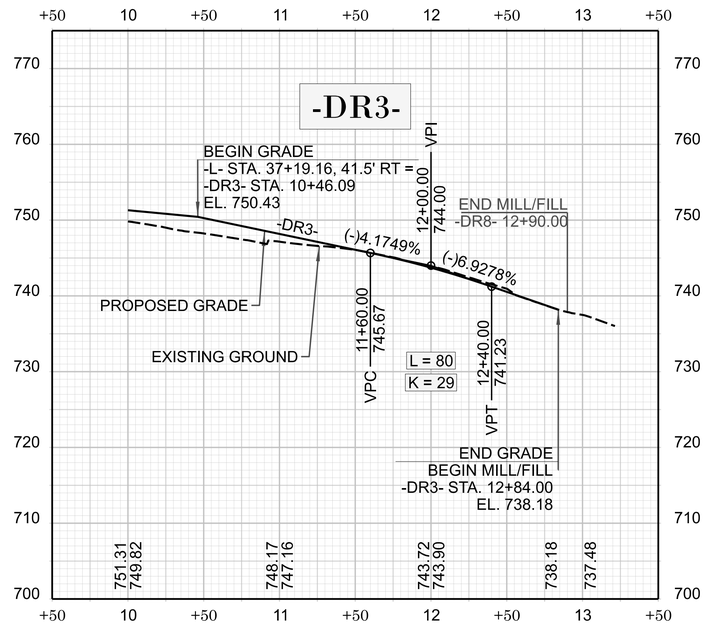
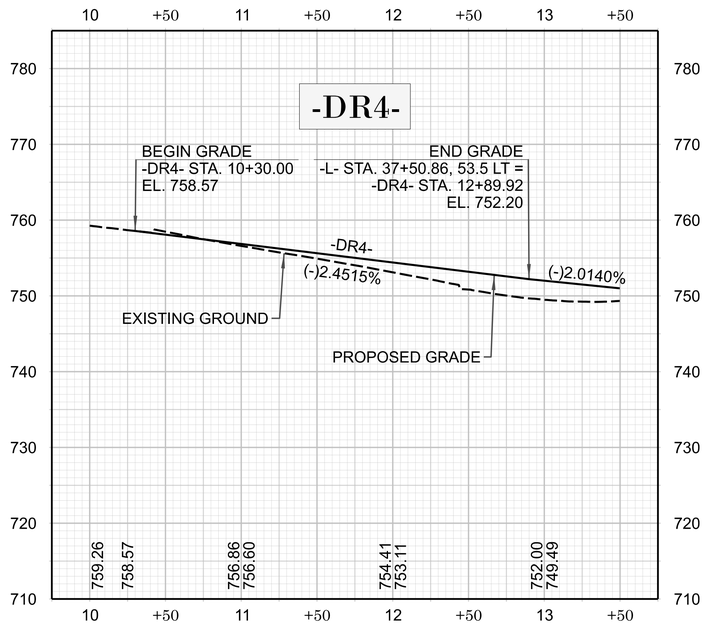




FOR -Y21- PLAN, SEE SHEET 023
FOR -DR1- PLAN, SEE SHEET 004







FOR -DR2- PLAN, SEE SHEET 004
FOR -DR3- PLAN, SEE SHEET 005
FOR -DR4- PLAN, SEE SHEET 005

REVISIONS

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PROFILE | 051

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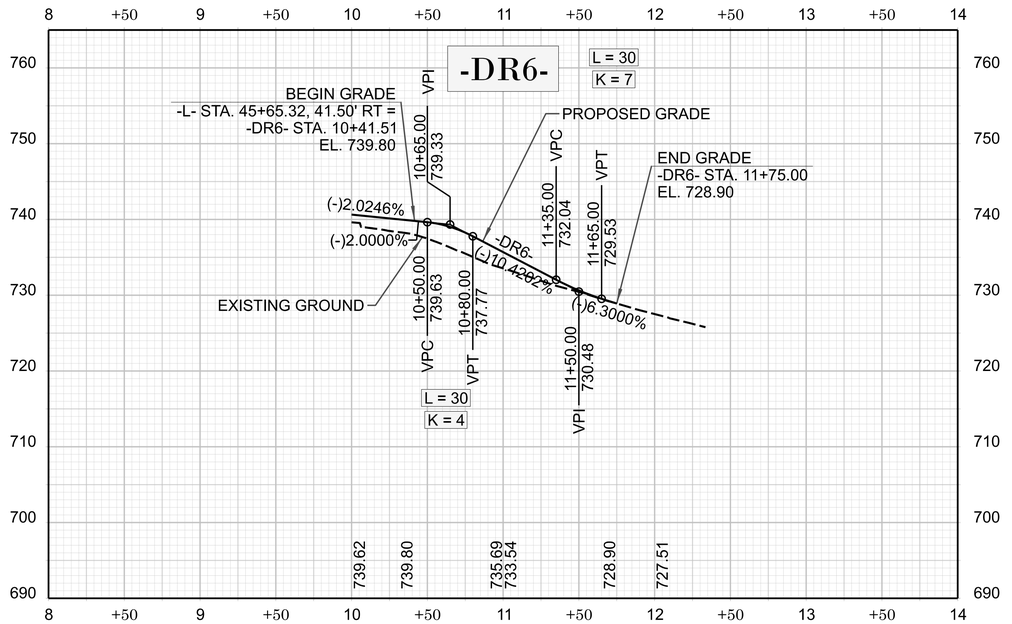
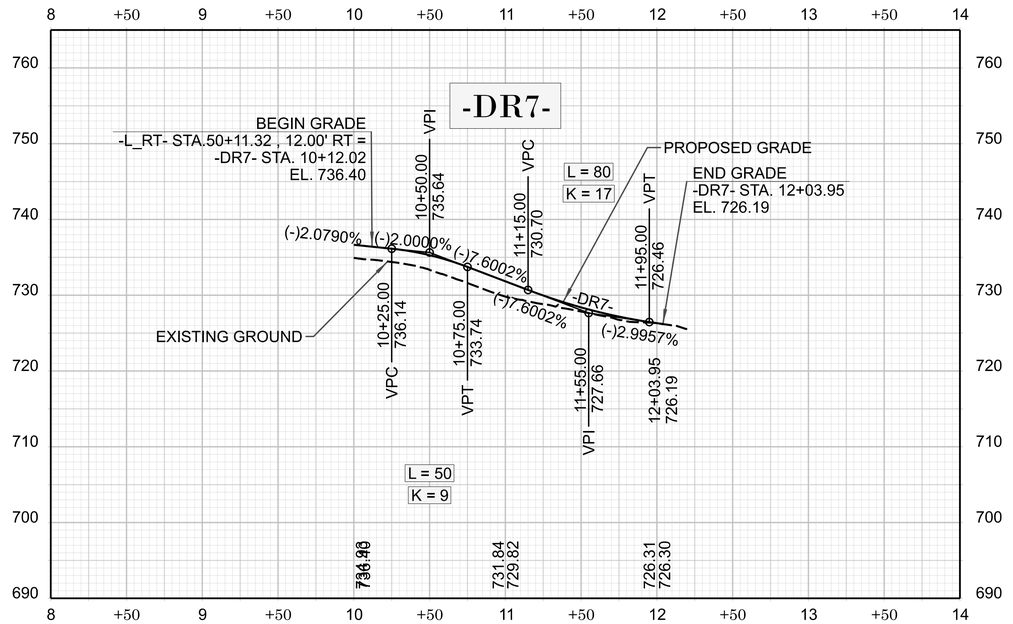
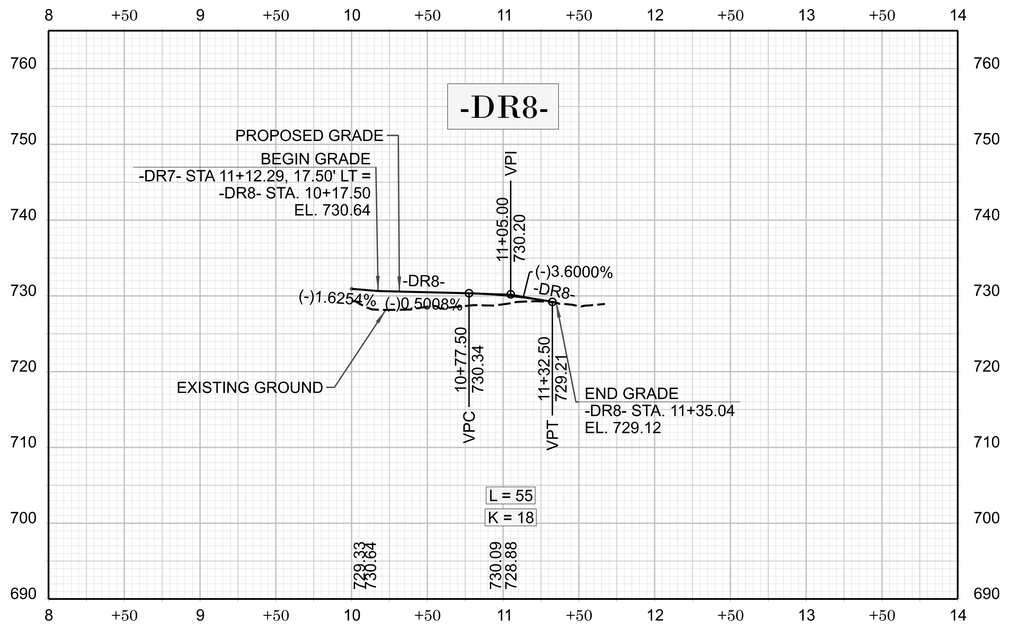
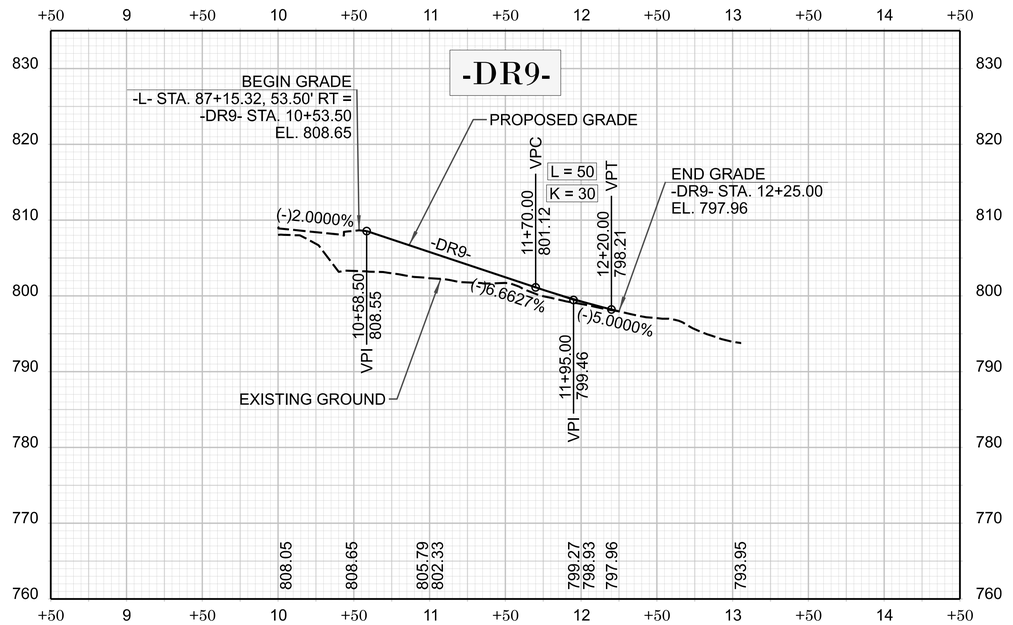




FOR -DR6- PLAN, SEE SHEET 006
FOR -DR7- PLAN, SEE SHEET 006





FOR -DR8- PLAN, SEE SHEET 006
FOR -DR9- PLAN, SEE SHEET 009

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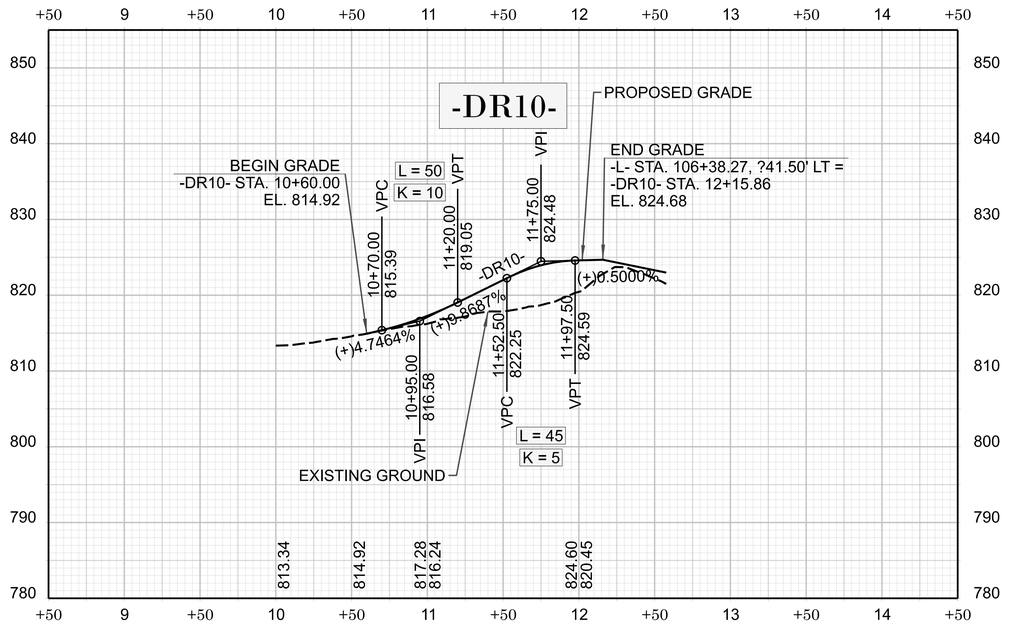

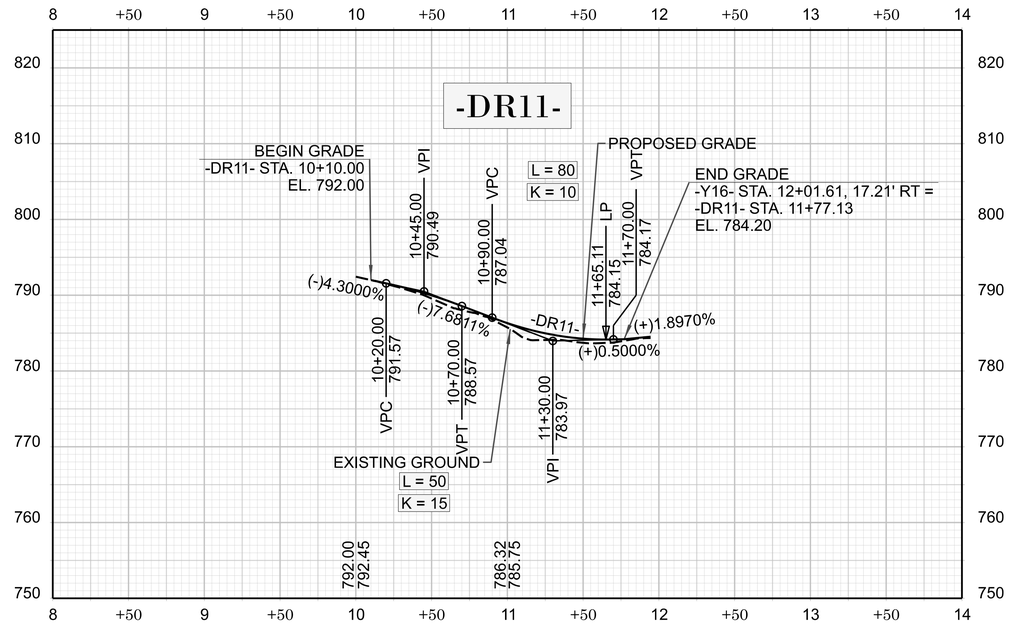

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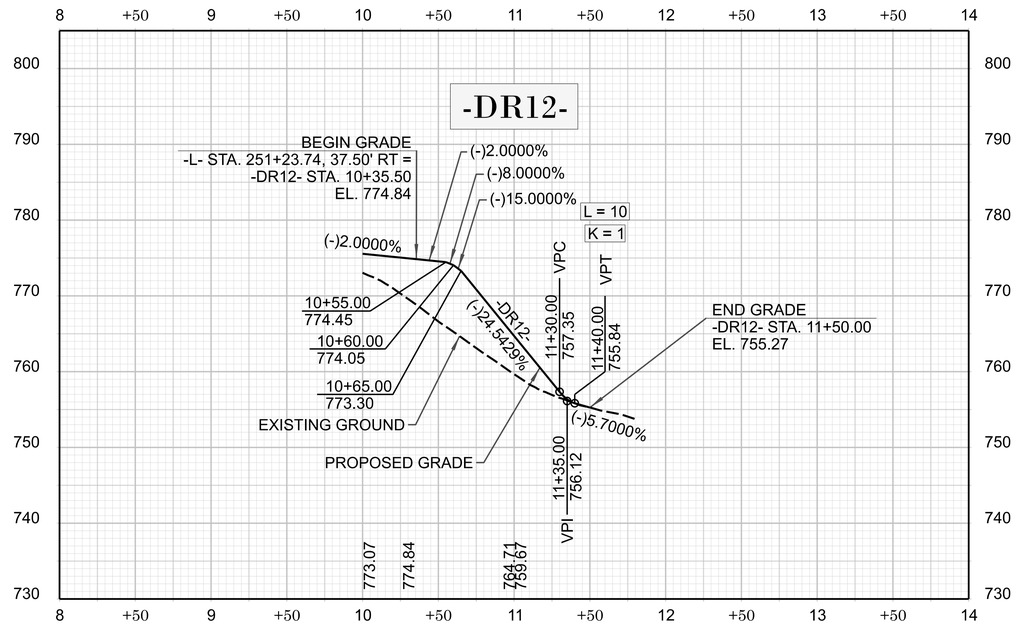
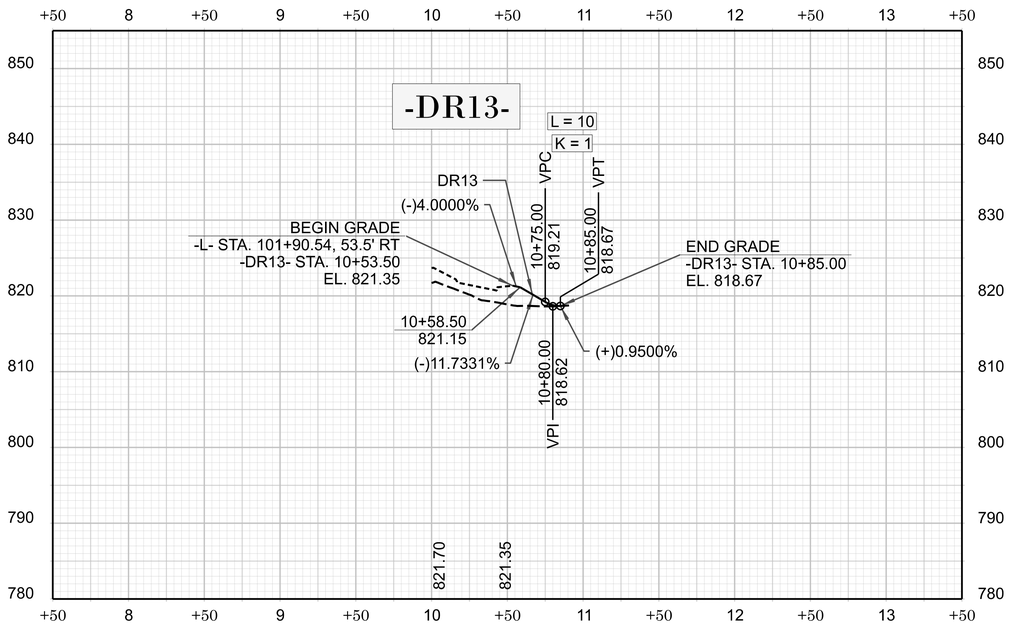
FOR -DR11- PLAN, SEE SHEET 020





FOR -DR12- PLAN, SEE SHEET 021
FOR -DR13- PLAN, SEE SHEET 010

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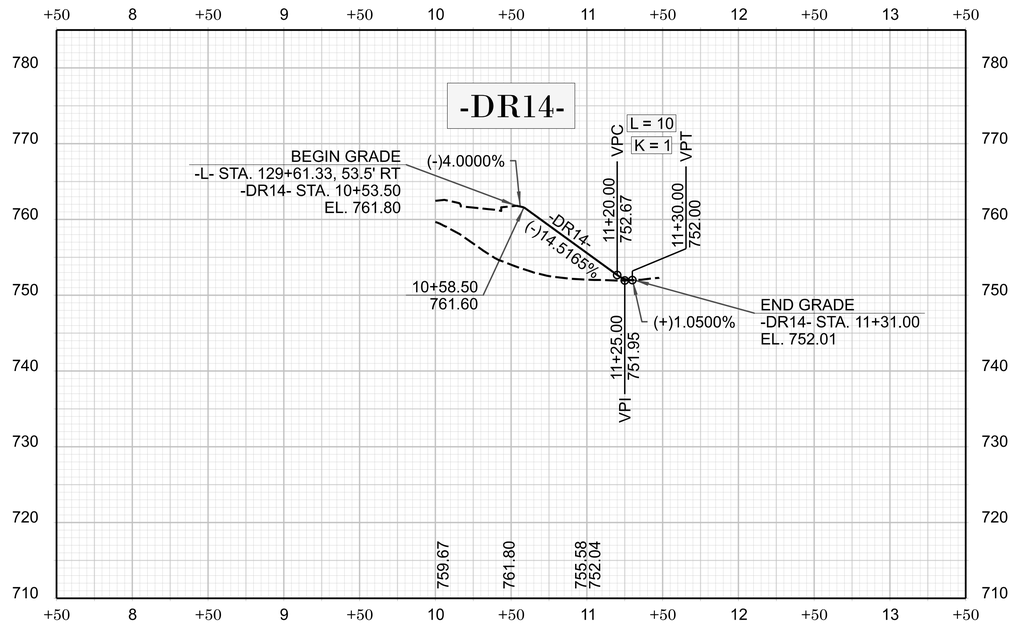
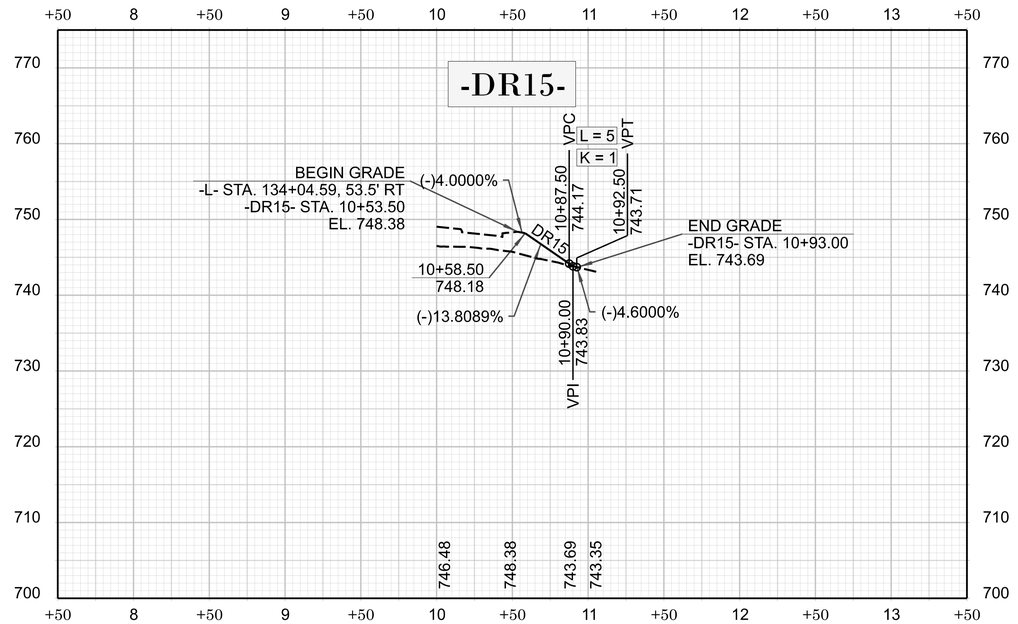
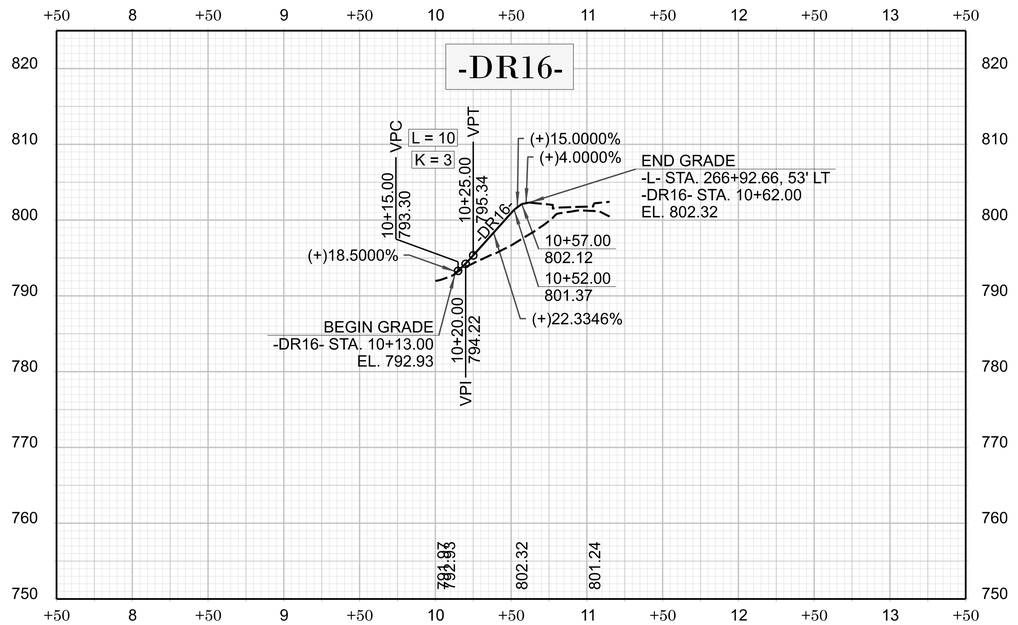
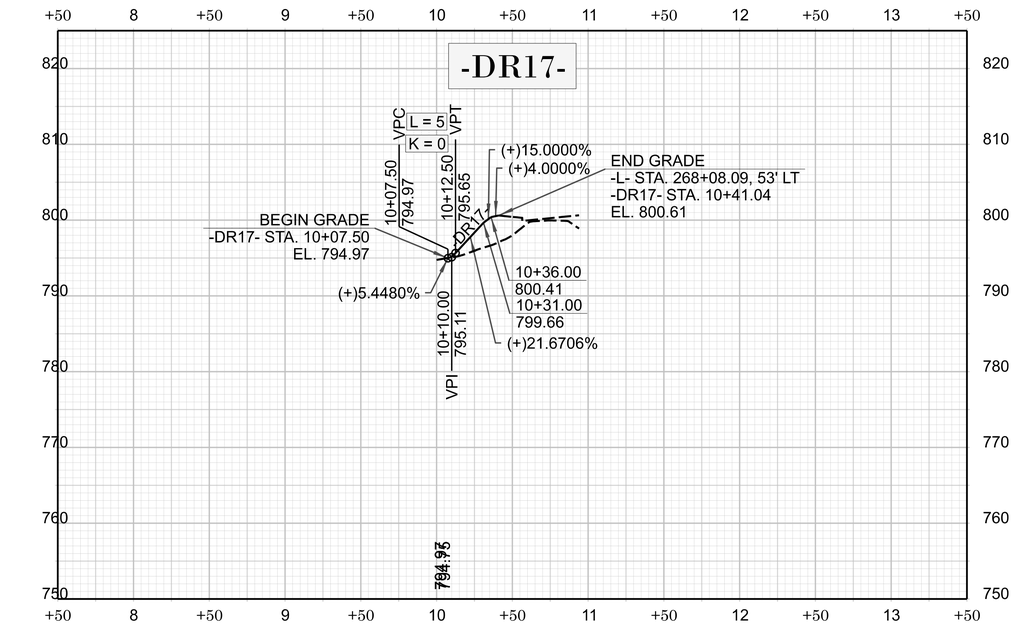




FOR -DR14- PLAN, SEE SHEET 012
FOR -DR15- PLAN, SEE SHEET 012





FOR -DR16- PLAN, SEE SHEET 022
FOR -DR17- PLAN, SEE SHEET 022

R-5721A

PROFILE | 054

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY AND
LINCOLN COUNTY

ROADWAY DESIGN UNIT

ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HYDRAULICS ENGINEER

INCOMPLETE PLANS
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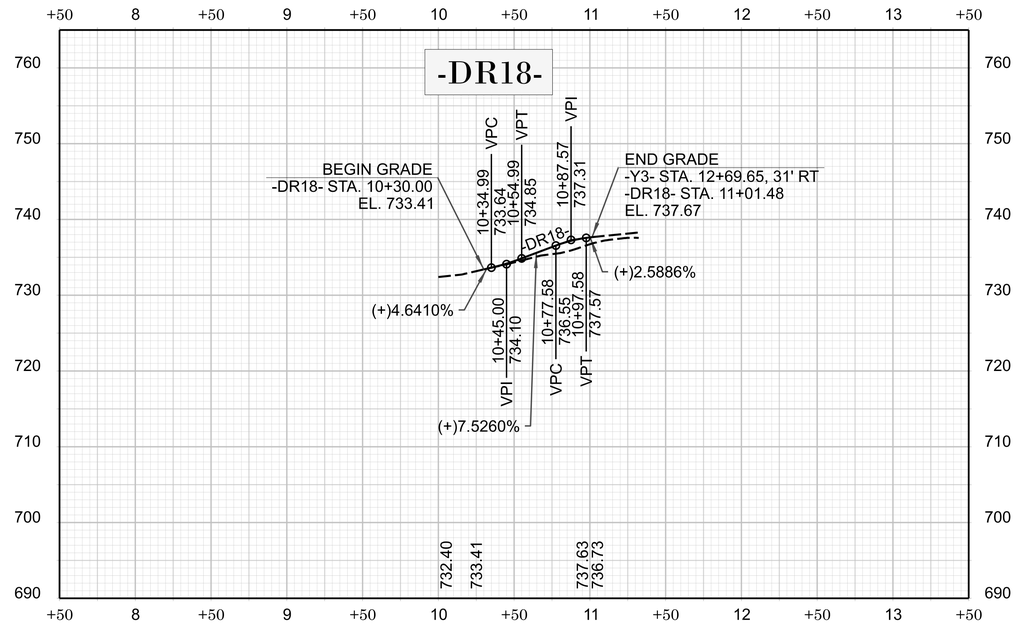
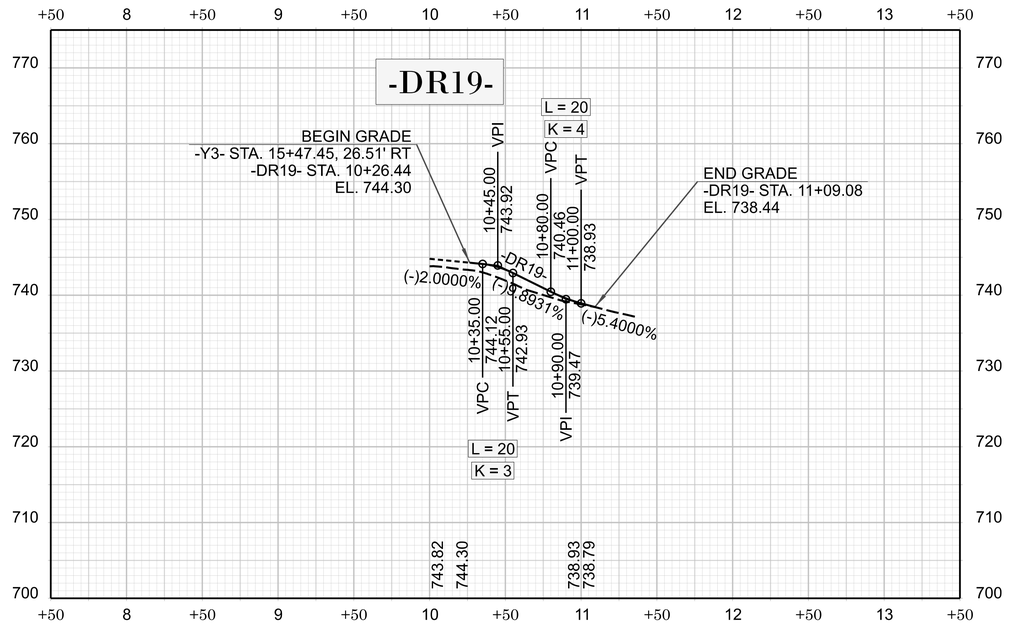
PREPARED BY

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

REVISIONS





FOR -DR18- PLAN, SEE SHEET 006
FOR -DR19- PLAN, SEE SHEET 028

R-5721A

PROFILE | 055

NORTH CAROLINA
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REVISIONS