

TIP PROJECT: I-5405D

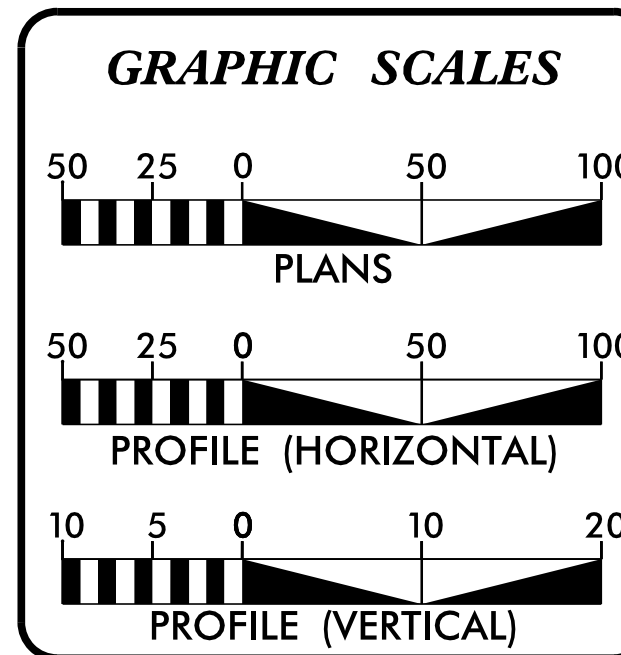
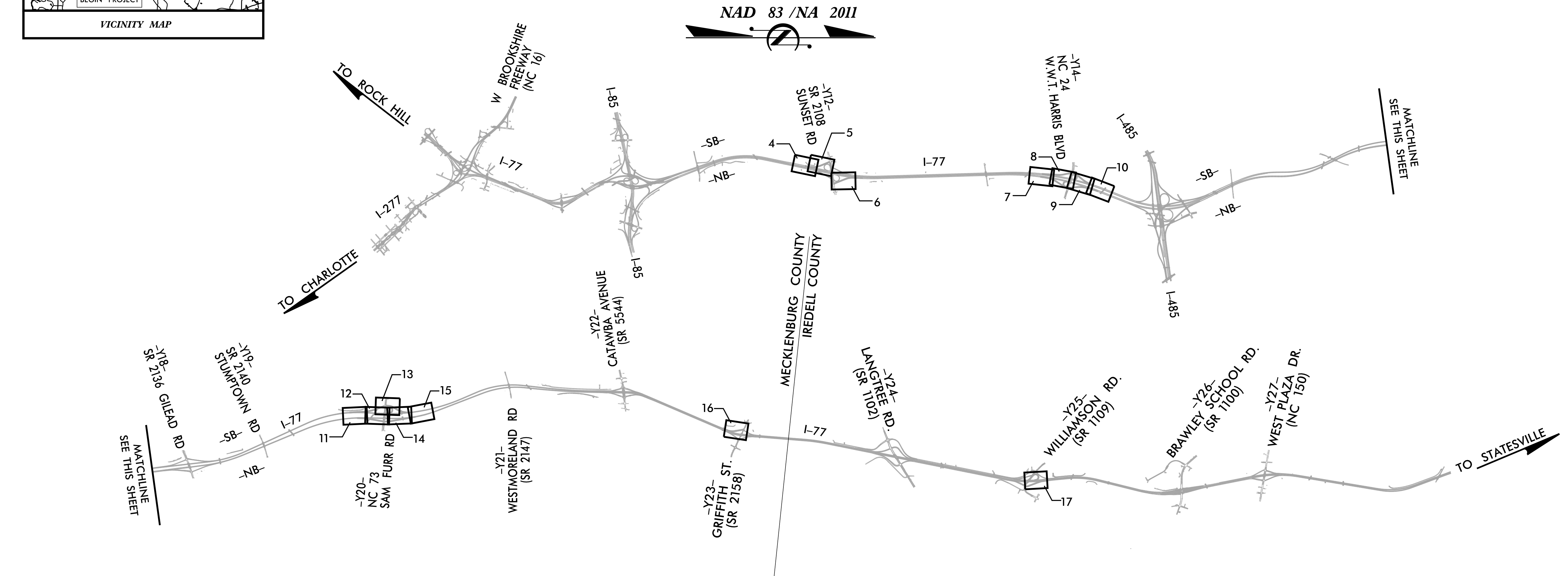
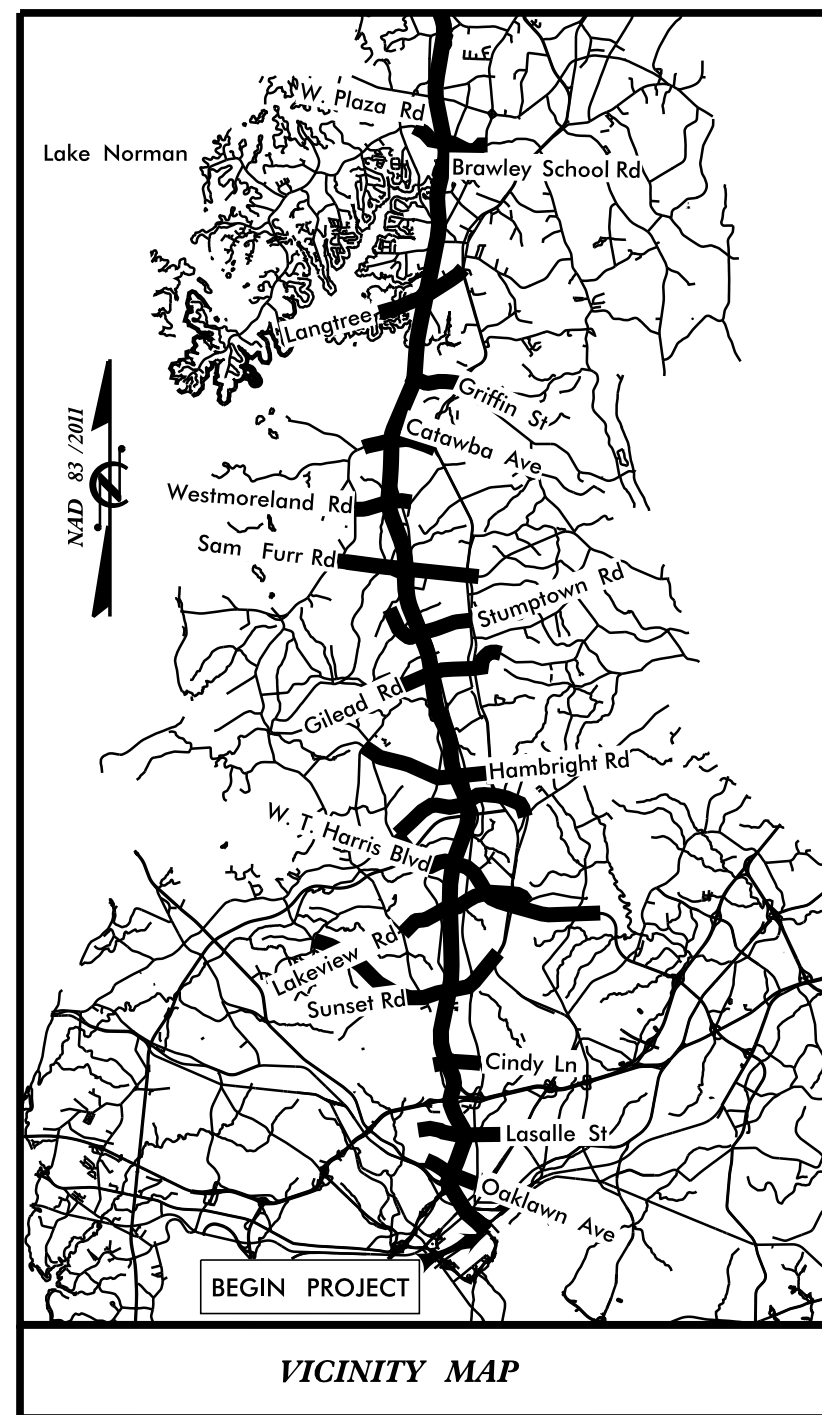
CONTRACT: C205138

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

# I-77 RAMPS & RESURFACING MECKLENBURG / IREDELL COUNTIES

**LOCATION:** I-77 RAMPS - US 21 (SUNSET RD) SB ON RAMP & NB ON RAMP, NC 24 (W. W. T. HARRIS BLVD) INTERCHANGE, NC 73 (SAM FURR RD), SR 2158 (GRIFFITH ST) SB ON RAMP, SR 1109 (WILLIAMSON RD) SB LOOP & NB ON RAMP  
**TYPE OF WORK:** PAVEMENT RECONSTRUCTION AND RESURFACING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5405D	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45454.3.12		CONST.	



**DESIGN DATA**

ADT 2026 =	114,100
ADT 2046 =	190,900
K =	10 %
D =	68 %
T =	8 % *
V =	70 MPH
* TTST = 4% DUAL 4%	
FUNC CLASS =	INTERSTATE
STATEWIDE TIER	

**PROJECT LENGTH**

EXIT 16 SUNSET ROAD (US 21) SOUTHBOUND ON RAMP	0.30 MI
EXIT 16 SUNSET ROAD (US 21) NORTHBOUND ON RAMP	0.28 MI
EXIT 18 HARRIS BLVD (NC 24) SOUTHBOUND OFF RAMP	0.16 MI
EXIT 18 HARRIS BLVD (NC 24) SOUTHBOUND ON RAMP	0.35 MI
EXIT 18 HARRIS BLVD (NC 24) NORTHBOUND OFF RAMP	0.34 MI
EXIT 18 HARRIS BLVD (NC 24) NORTHBOUND ON RAMP	0.35 MI
EXIT 18 HARRIS BLVD (NC 24) SOUTHBOUND LOOP	0.15 MI
EXIT 18 HARRIS BLVD (NC 24) NORTHBOUND LOOP	0.14 MI
EXIT 25 SAM FURR RD (NC 73) SOUTHBOUND OFF RAMP	0.28 MI
EXIT 25 SAM FURR RD (NC 73) SOUTHBOUND ON RAMP	0.42 MI
EXIT 25 SAM FURR RD (NC 73) NORTHBOUND OFF RAMP	0.30 MI
EXIT 25 SAM FURR RD (NC 73) NORTHBOUND ON RAMP	0.36 MI
EXIT 25 SAM FURR RD (NC 73) SOUTHBOUND LOOP	0.20 MI
EXIT 30 GRIFFITH ST (SR 2158) SOUTHBOUND ON RAMP	0.20 MI
EXIT 33 WILLIAMSON RD (SR 1109) SOUTHBOUND LOOP	0.17 MI
EXIT 33 WILLIAMSON RD (SR 1109) NORTHBOUND ON RAMP	0.24 MI
<b>TOTAL MILEAGE OF THE PROJECT: 4.24 MI</b>	

**CTL ENGINEERING**  
3362 Six Forks Rd.  
Raleigh, N.C. 27609  
Tel: 919-302-1178  
Website: ctleng.com  
License: C-2259

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: N/A

LETTING DATE: MAY 19, 2026

DEAN HATFIELD, P.E.  
PROJECT ENGINEER

CAROLINE WILLIAMS, P.E.  
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

Walter Daniel Roberts, P.E.  
SIGNATURE

ROADWAY DESIGN ENGINEER

Caroline Williams, P.E.  
SIGNATURE


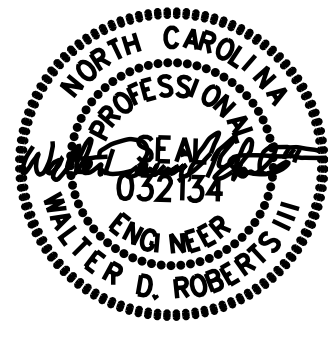
Professional Engineer Seals for Walter D. Roberts and Caroline C. Williams.

NC DOT CONTACT:

JASON BROOKS  
716 W. MAIN ST.  
ALBEMARLE, NC 28001

Seal of the State of North Carolina Department of Transportation.

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. I-5405D	SHEET NO. 1A
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES AND LIST OF STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2A-1 THRU 2A-4	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
3B-1 THRU 3B-2	ROADWAY SUMMARIES
4 THRU 17	PLAN SHEETS
18 THRU 19	PROFILE SHEET
TMP-1 THRU TMP-21	TRAFFIC MANAGEMENT PLANS
PM-1 THRU PM-17	PAVEMENT MARKING PLANS
EC-1 THRU EC-6	EROSION CONTROL PLANS
SIG-1	SIGNAL SHEET
X-1	CROSS-SECTION INDEX
X-1A	CROSS-SECTION SUMMARY SHEET
X-1A THRU X-15	CROSS-SECTIONS

LIST OF STANDARD DRAWINGS

STD. NO.	TITLE
EFF. 08-11-2025 REV. 11-26-2025	
2024 ROADWAY ENGLISH STANDARD DRAWINGS	
The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January 16, 2024 are applicable to this project and by reference hereby are considered a part of these plans:	
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.03	Deceleration and Acceleration Lanes
225.05	Method of Obtaining Superelevation - Divided Highways
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.02	Method of Shoulder Construction - High Side of Superelevated Curve - Method II
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
665.01	Asphalt Shoulders - Milled Rumble Strips
665.02	Limits for Asphalt Shoulders - Milled Rumble Strips
DIVISION 7 - CONCRETE PAVEMENTS AND SHOULDERS	
720.01	Concrete Shoulder - Stamped or Rilled Rumble Strips, Milled Rumble Strips
720.02	Limits of Concrete Shoulder Rumble Strips

GENERAL NOTES

GENERAL NOTES: 2024 SPECIFICATIONS  
EFFECTIVE: 01-16-2024

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 11.

SUPERELEVATION:  
ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225-05 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. 560.02.

REVISIONS

4/9/2026  
X:\PROJECTS\NCDOT\1-77 Mobility Partners\80-Drawings\83-Design\83b-Sheets\PSH\01A.IDX.dgn  
E. ROBINSON\Zwilliams

Note: Not to Scale

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

I-5405D  
SYM | IB

### BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin (EIP)	○ EIP
Computed Property Corner	×
Existing Concrete Monument (ECM)	◻ ECM
Parcel / Sequence Number	⑫
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	-w-lb-
Proposed Wetland Boundary	-w-lb-
Existing Endangered Animal Boundary	-eab-
Existing Endangered Plant Boundary	-epb-
Existing Historic Property Boundary	-hpb-
Known Contamination Area: Soil	-s-s-
Potential Contamination Area: Soil	-s-s-
Known Contamination Area: Water	-w-w-
Potential Contamination Area: Water	-w-w-
Contaminated Site: Known or Potential	☠ ☢

### BUILDINGS AND OTHER CULTURE:

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

### HYDROLOGY:

Stream or Body of Water	~~~~~
Hydro, Pool or Reservoir	▭
Jurisdictional Stream	-js-
Buffer Zone 1	-bz 1-
Buffer Zone 2	-bz 2-
Flow Arrow	z
Disappearing Stream	→
Spring	W
Wetland	⋆
Proposed Lateral, Tail, Head Ditch	← Flum
False Sump	◊

### RAILROADS:

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

### RIGHT OF WAY & PROJECT CONTROL:

Primary Horiz Control Point	◻
Primary Horiz and Vert Control Point	◆
Secondary Horiz and Vert Control Point	◆
Vertical Benchmark	⊕
Existing Right of Way Monument	△
Proposed Right of Way Monument (Rebar and Cap)	▲
Proposed Right of Way Monument (Concrete)	▲
Existing Permanent Easement Monument	◇
Proposed Permanent Easement Monument (Rebar and Cap)	◇
Existing C/A Monument	△
Proposed C/A Monument (Rebar and Cap)	▲
Proposed C/A Monument (Concrete)	▲
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Existing Control of Access Line	-----
Proposed Control of Access Line	-----
Proposed ROW and CA Line	-----
Existing Easement Line	-----
Proposed Temporary Construction Easement	-----
Permanent Construction Easement	-----
Proposed Temporary Drainage Easement	-----
Proposed Permanent Drainage Easement	-----
Proposed Permanent Drainage/Utility Easement	-----
Proposed Permanent Utility Easement	-----
Proposed Temporary Utility Easement	-----
Proposed Aerial Utility Easement	-----

### ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-c-
Proposed Slope Stakes Fill	-f-
Proposed Curb Ramp	CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	XXXX

### VEGETATION:

Single Tree	☼
Single Shrub	☼

Hedge	~~~~~
Woods Line	~~~~~
Orchard	☼ ☼ ☼ ☼
Vineyard	◻ Vineyard

### EXISTING STRUCTURES:

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

UTILITIES: \* SUE - Subsurface Utility Engineering  
LOS - Level of Service - A,B,C or D (Accuracy)

### POWER:

Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊕
Power Transformer	⊕
U/G Power Cable Hand Hole	PH
H-Frame Pole	●
U/G Power Line Test Hole (SUE - LOS A)*	⊕
U/G Power Line (SUE - LOS B)*	-----
U/G Power Line (SUE - LOS C)*	-----
U/G Power Line (SUE - LOS D)*	-----

### TELEPHONE:

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

### WATER:

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

### TV:

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

### GAS:

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

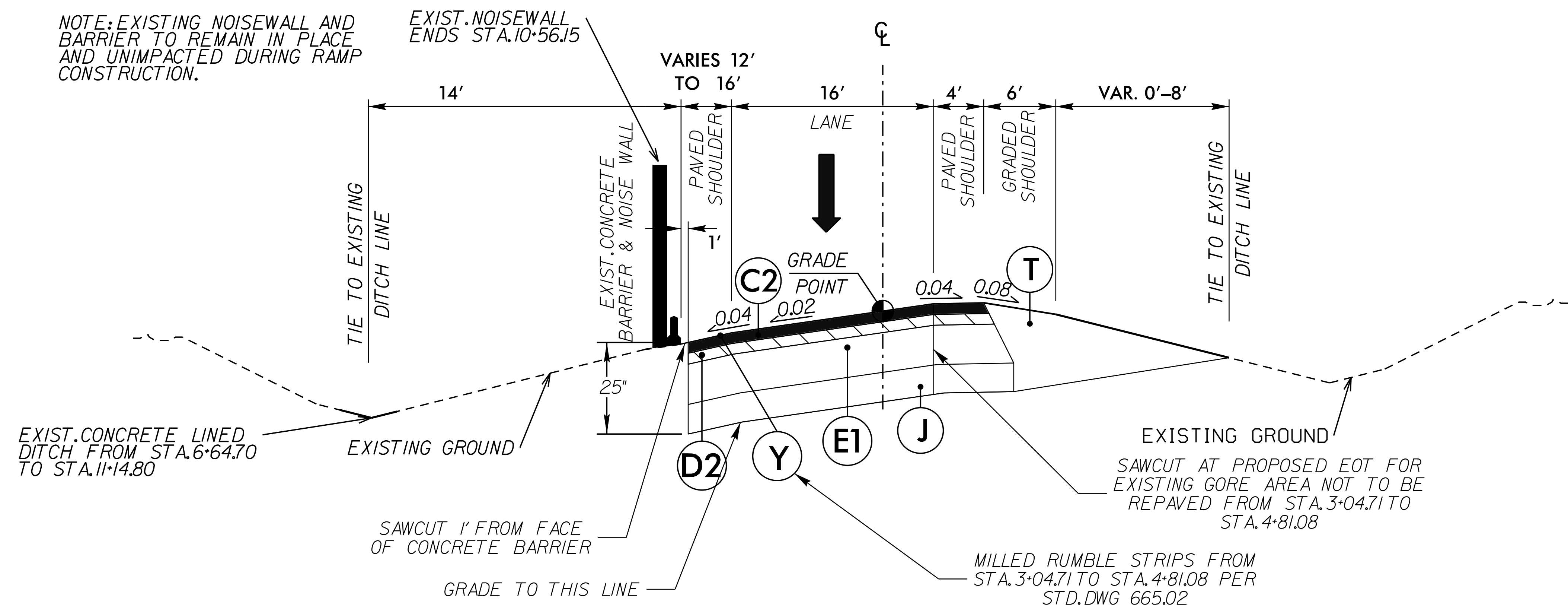
### SANITARY SEWER:

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

### MISCELLANEOUS:

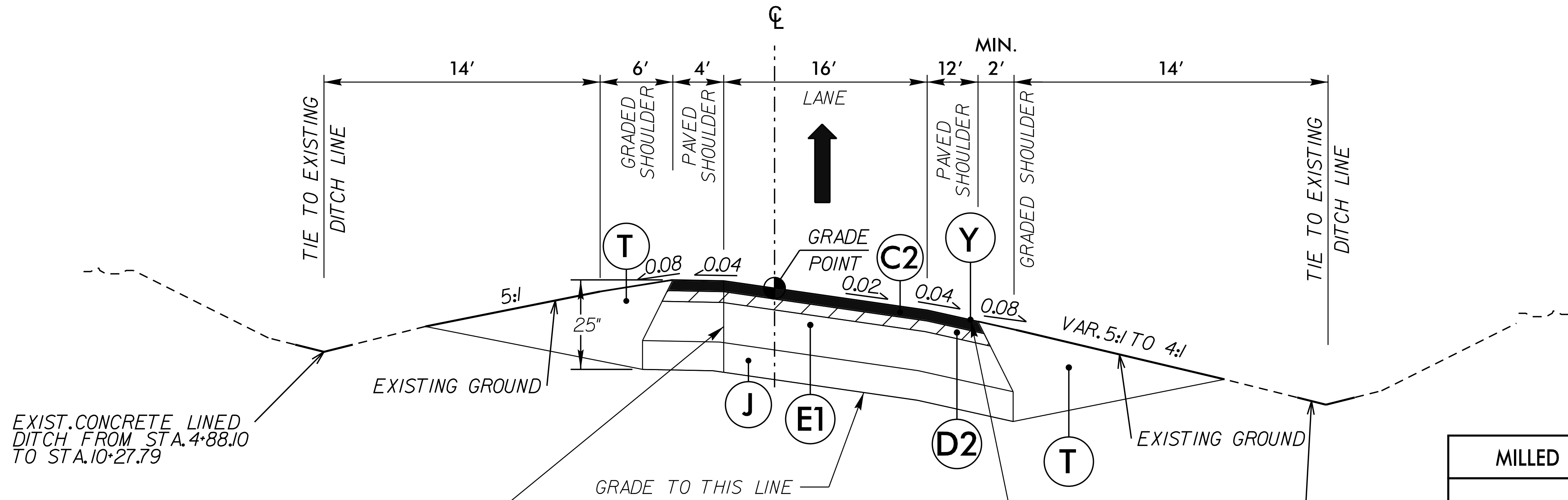
Utility Pole	●
Utility Pole with Base	⊕
Utility Located Object	○
Utility Traffic Signal Box	⊕
Utility Unknown U/G Line (SUE - LOS B)*	-----
U/G Tank; Water, Gas, Oil	◻
Underground Storage Tank, Approx. Loc.	UST
A/G Tank; Water, Gas, Oil	◻
Geoenvironmental Boring	⊕
Abandoned According to Utility Records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

NOTE: EXISTING NOISEWALL AND BARRIER TO REMAIN IN PLACE AND UNIMPACTED DURING RAMP CONSTRUCTION.



**TYPICAL SECTION No. 1**

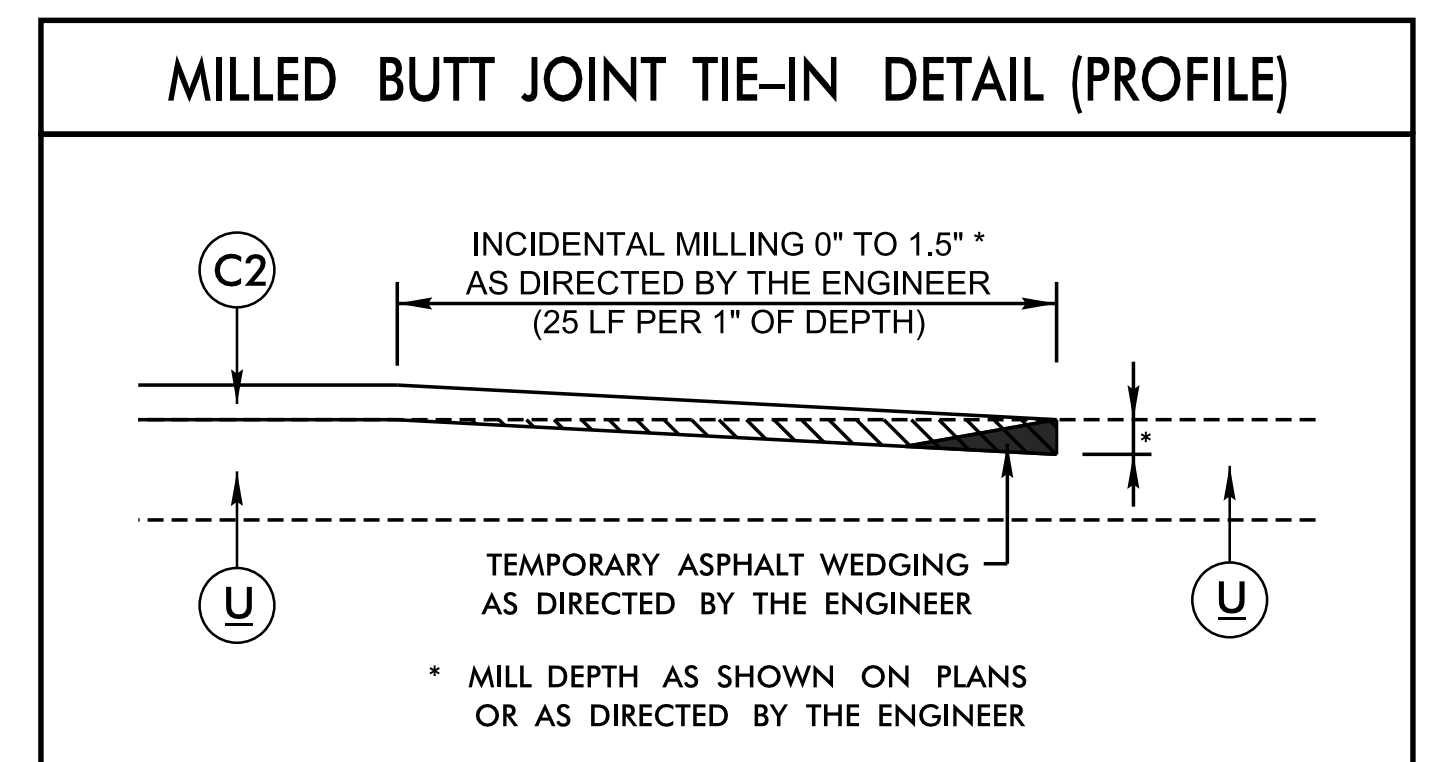
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**TYPICAL SECTION No. 2**

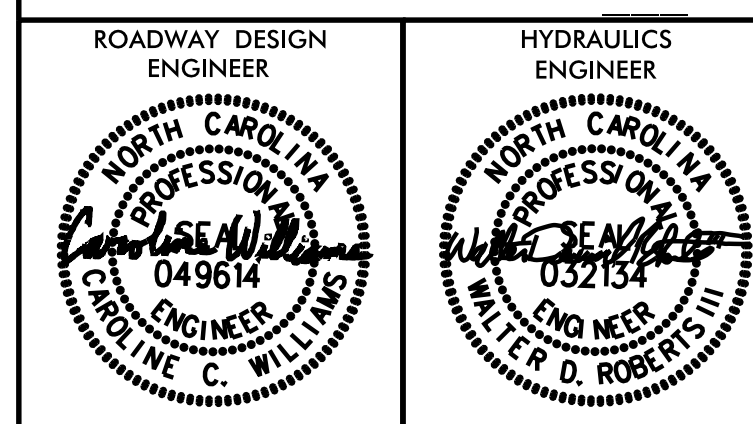
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PAVEMENT SCHEDULE	
ITEM	DESCRIPTION
C2	Prop. 3.0" Depth Asphalt Concrete Surface Course, Type S9.5D, at an Average Rate of 168 lbs. Per sq. yard in each of the two layers
D2	Prop. Approx. 3.0" Depth Asphalt Concrete Intermediate Course, Type I19.0C, at an Average Rate of 342 lbs. Per sq. yard
E1	Prop. Approx. 11" Depth Asphalt Concrete Base Course, Type B25.0C, at an Average Rate of 627 lbs. Per sq. yard in each of two layers
J	Prop. 8" Aggregate Base Course
T	Earth Material
Y	Milled Rumble Strips



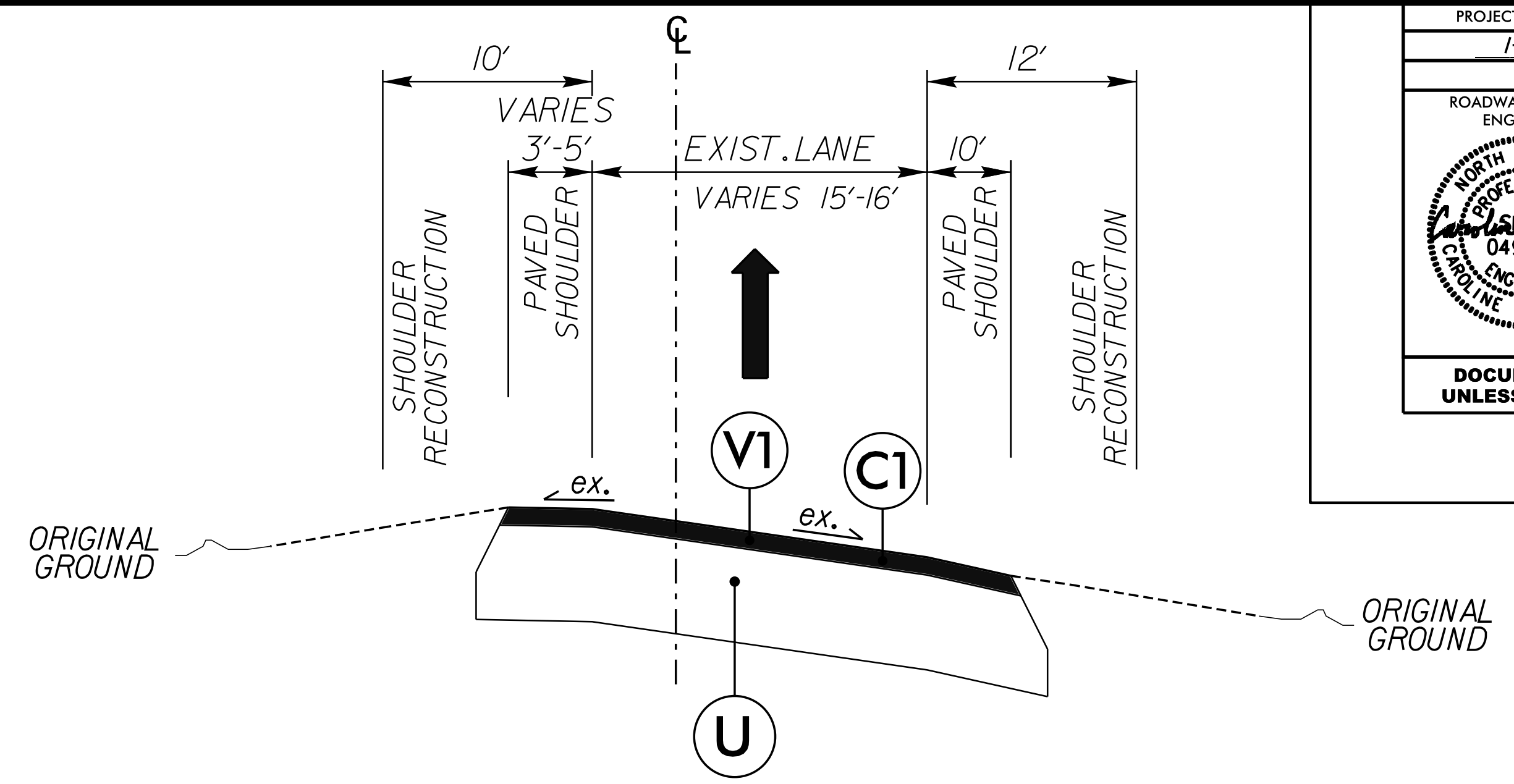
REVISIONS

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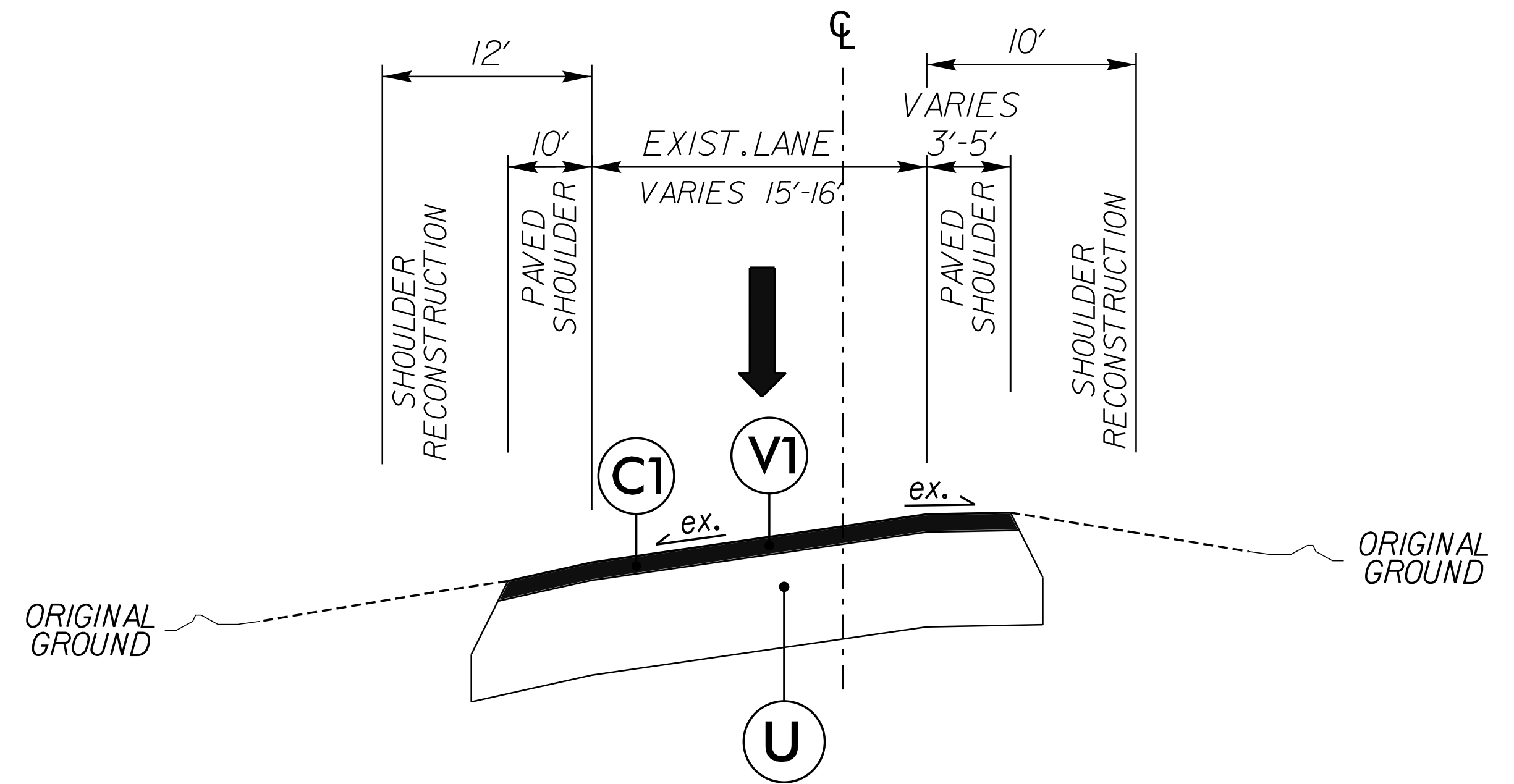
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PAVEMENT SCHEDULE	
ITEM	DESCRIPTION
C1	Prop. Approx. 1.5" Depth Asphalt Concrete Surface Course, Type S9.5D, at an Average Rate of 168 lbs. Per sq. yard
C2	Prop. 3.0" Depth Asphalt Concrete Surface Course, Type S9.5D, at an Average Rate of 168 lbs. Per sq. yard in each of the two layers
D1	Prop. Approx. 2.5" Depth Asphalt Concrete Intermediate Course, Type I19.0C, at an Average Rate of 285 lbs. Per sq. yard
D2	Prop. Approx. 3.0" Depth Asphalt Concrete Intermediate Course, Type I19.0C, at an Average Rate of 342 lbs. Per sq. yard
E1	Prop. Approx. 11" Depth Asphalt Concrete Base Course, Type B25.0C, at an Average Rate of 627 lbs. Per sq. yard in each of two layers
J	Prop. 8" Aggregate Base Course
R1	Existing 2'-6" Concrete Curb and Gutter (TO REMAIN)
T	Earth Material
U	Existing Pavement (Asphalt)
V1	1½" MILLING
V2	2½" MILLING
V3	3" MILLING



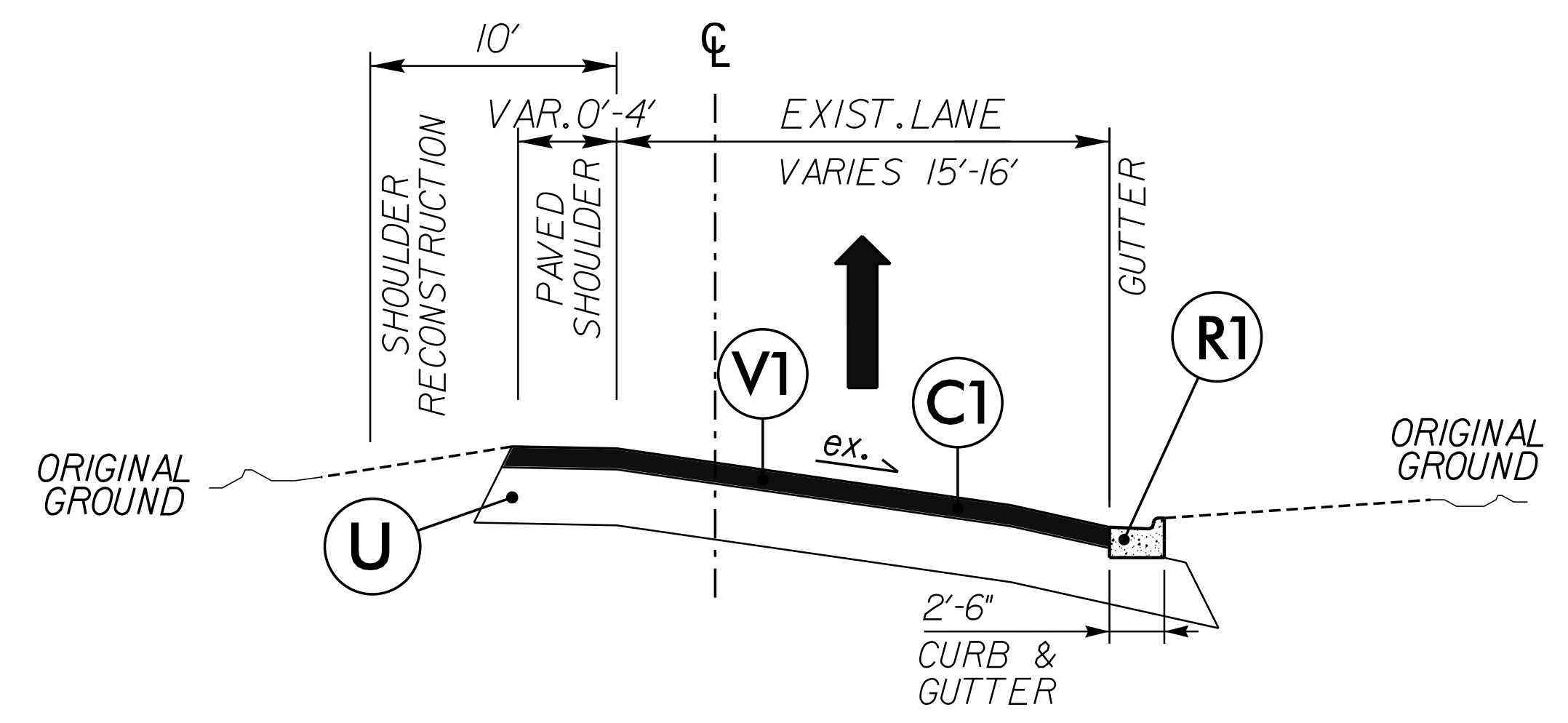
TYPICAL SECTION No. 3

-Y14RPB- STA. 00+00.00 TO STA. 18+02.77  
 -Y14RPD- STA. 00+00.00 TO STA. 18+42.63



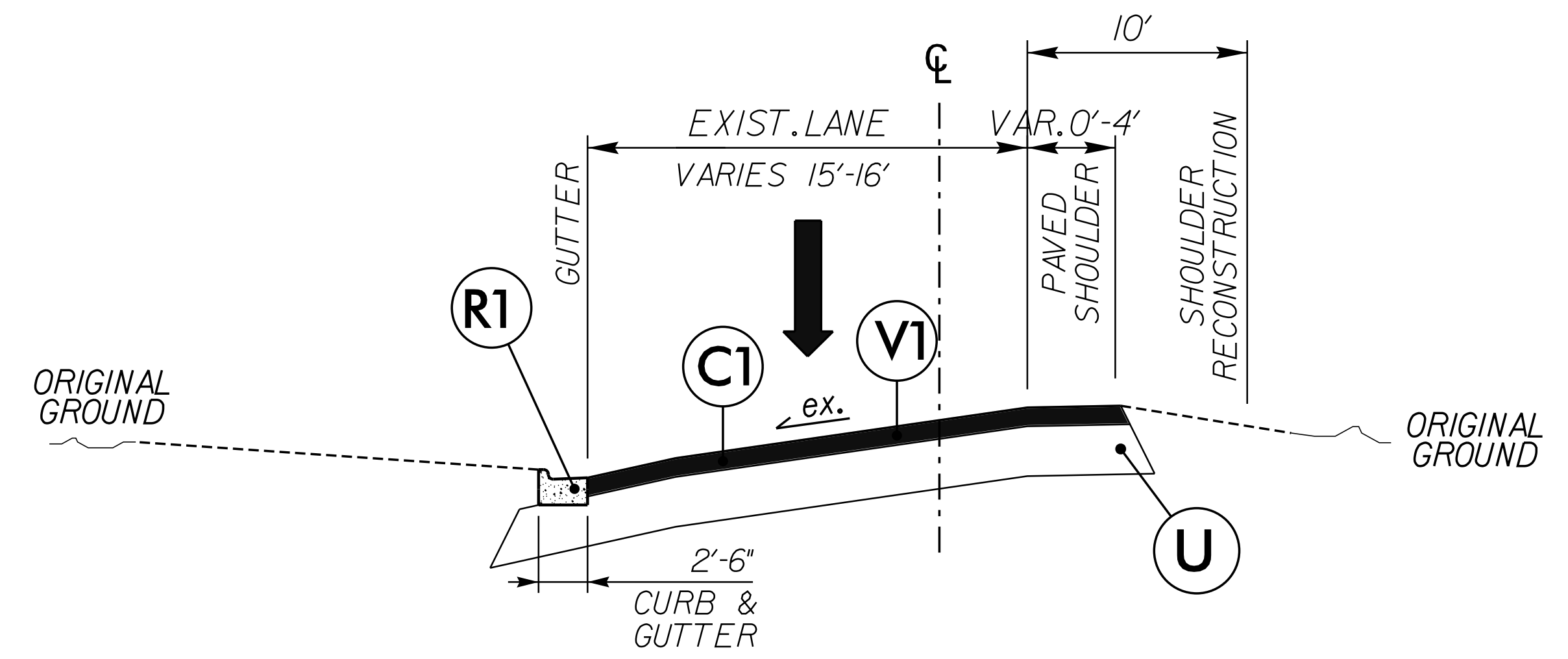
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 -Y14RPC- STA. 06+27.72 TO STA. 14+80.64



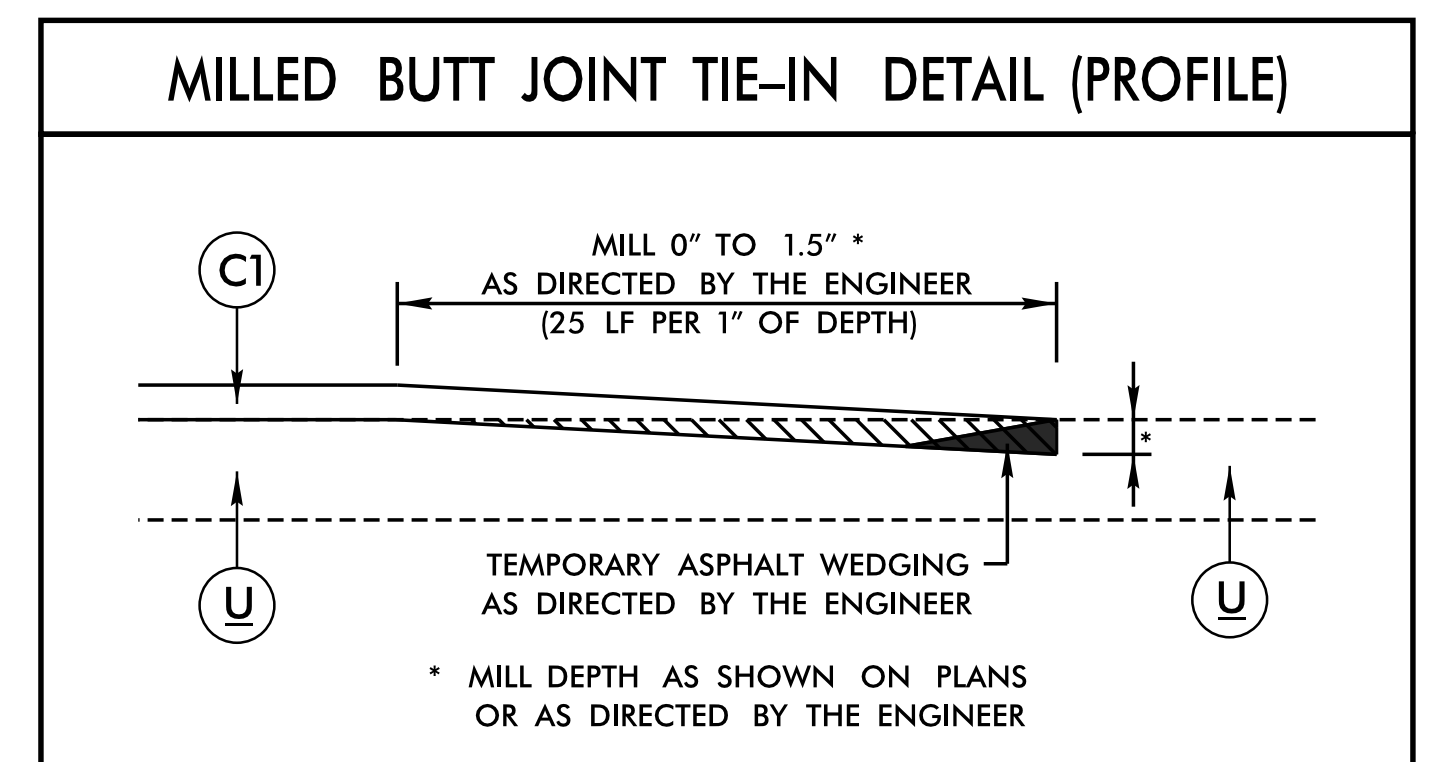
TYPICAL SECTION No. 5

-Y14LPB- STA. 00+00.00 TO STA. 07+54.62



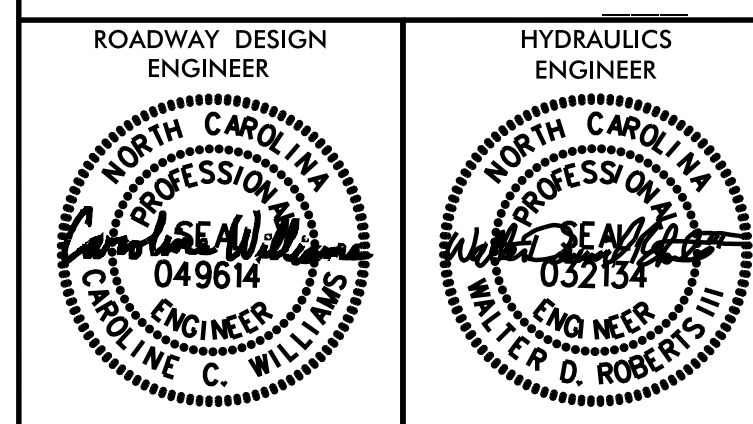
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-Y14LPA- STA. 00+00.00 TO STA. 07+69.24



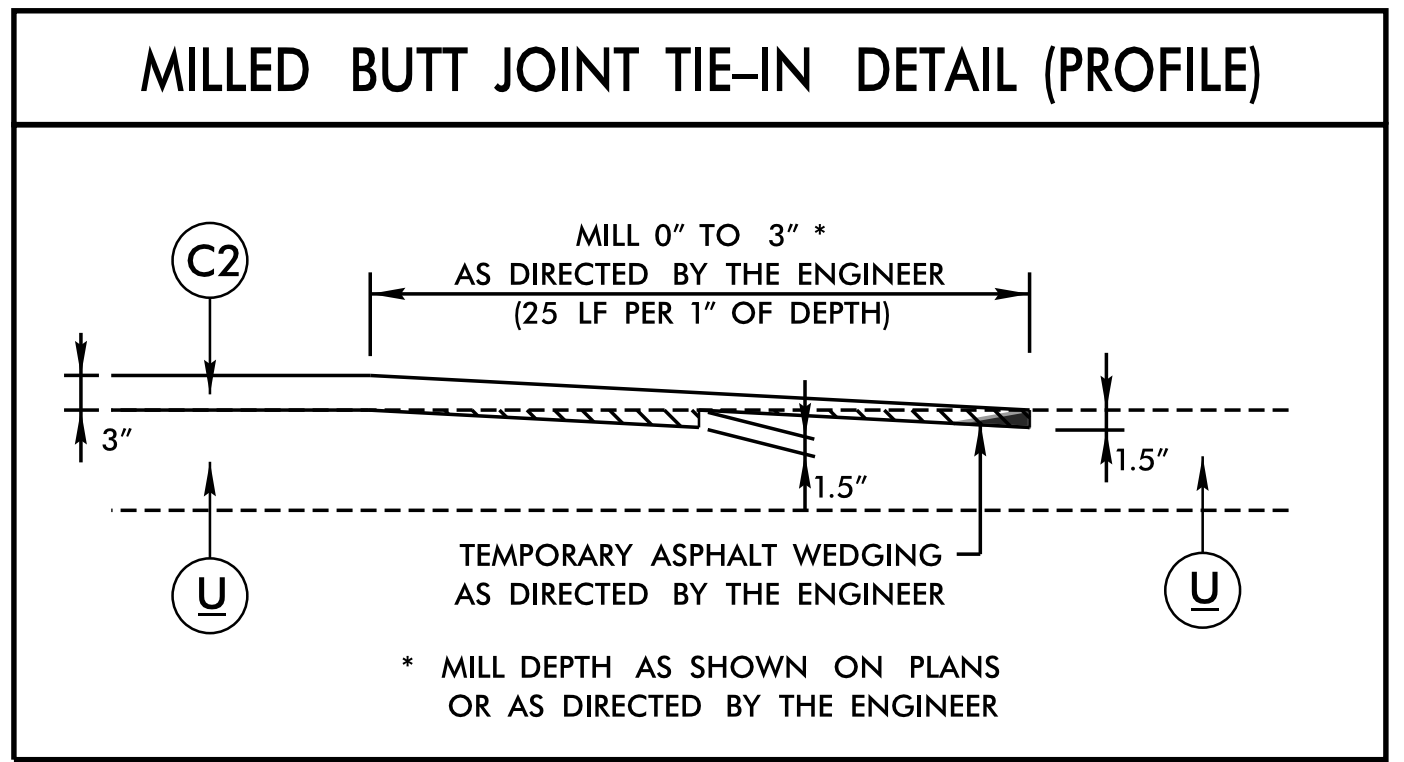
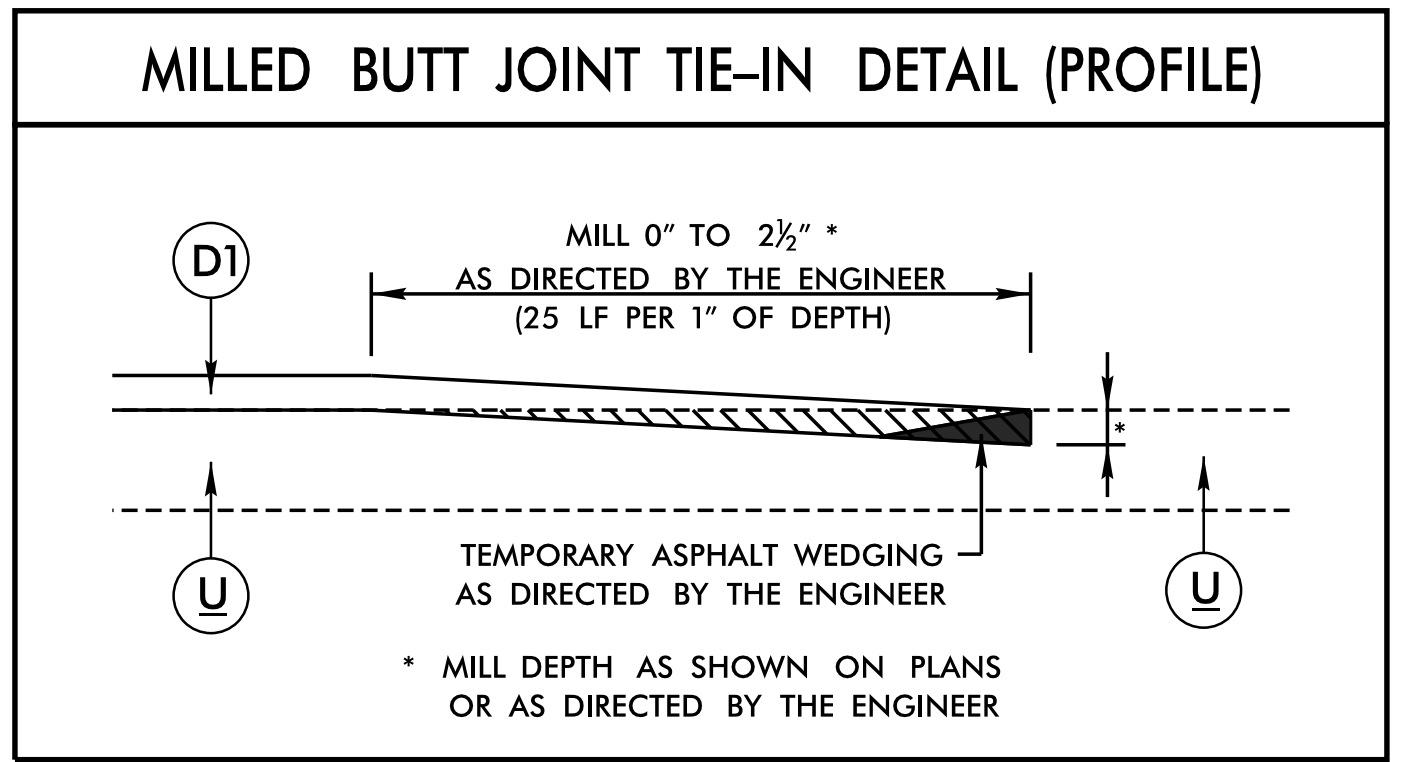
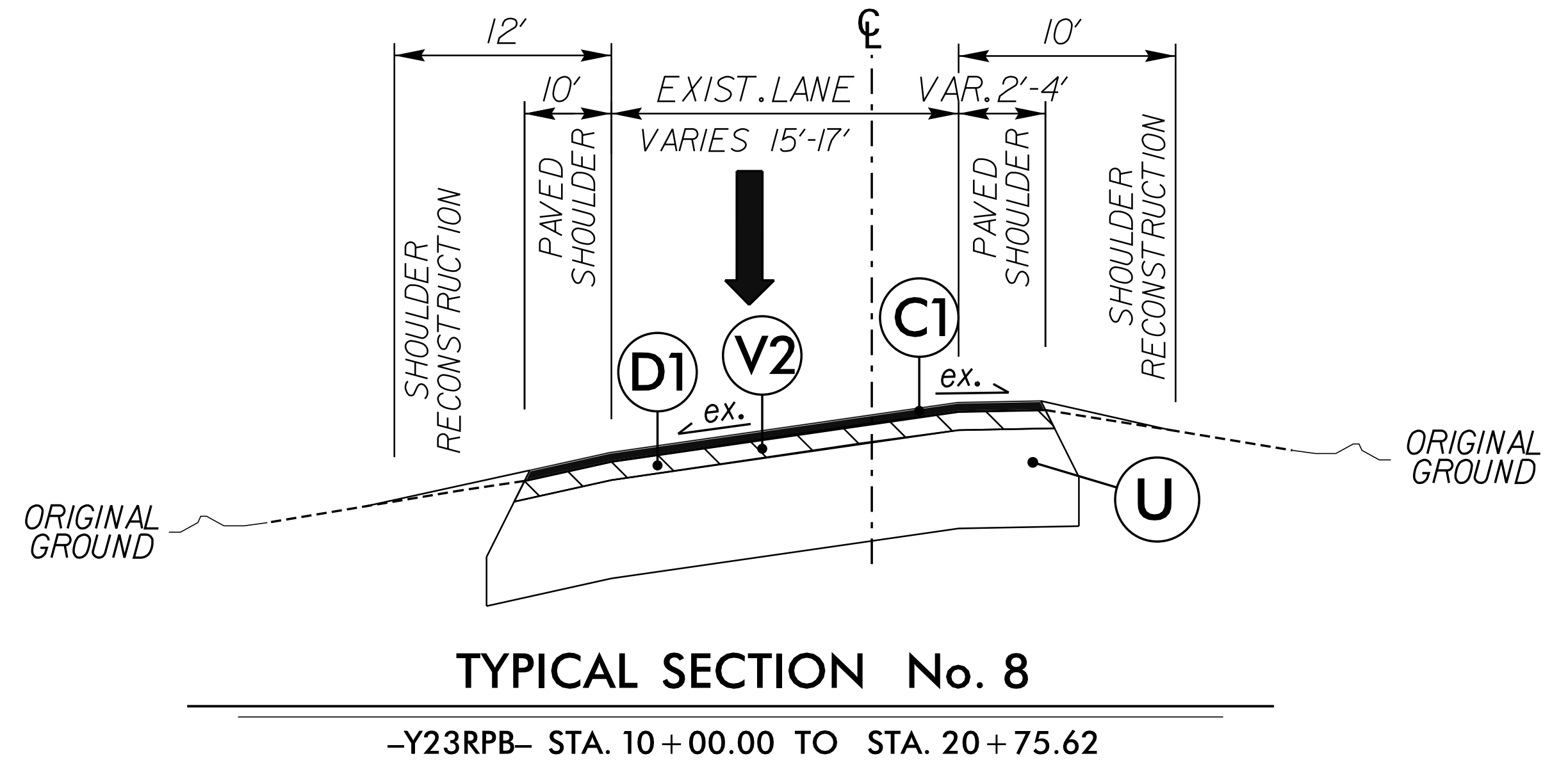
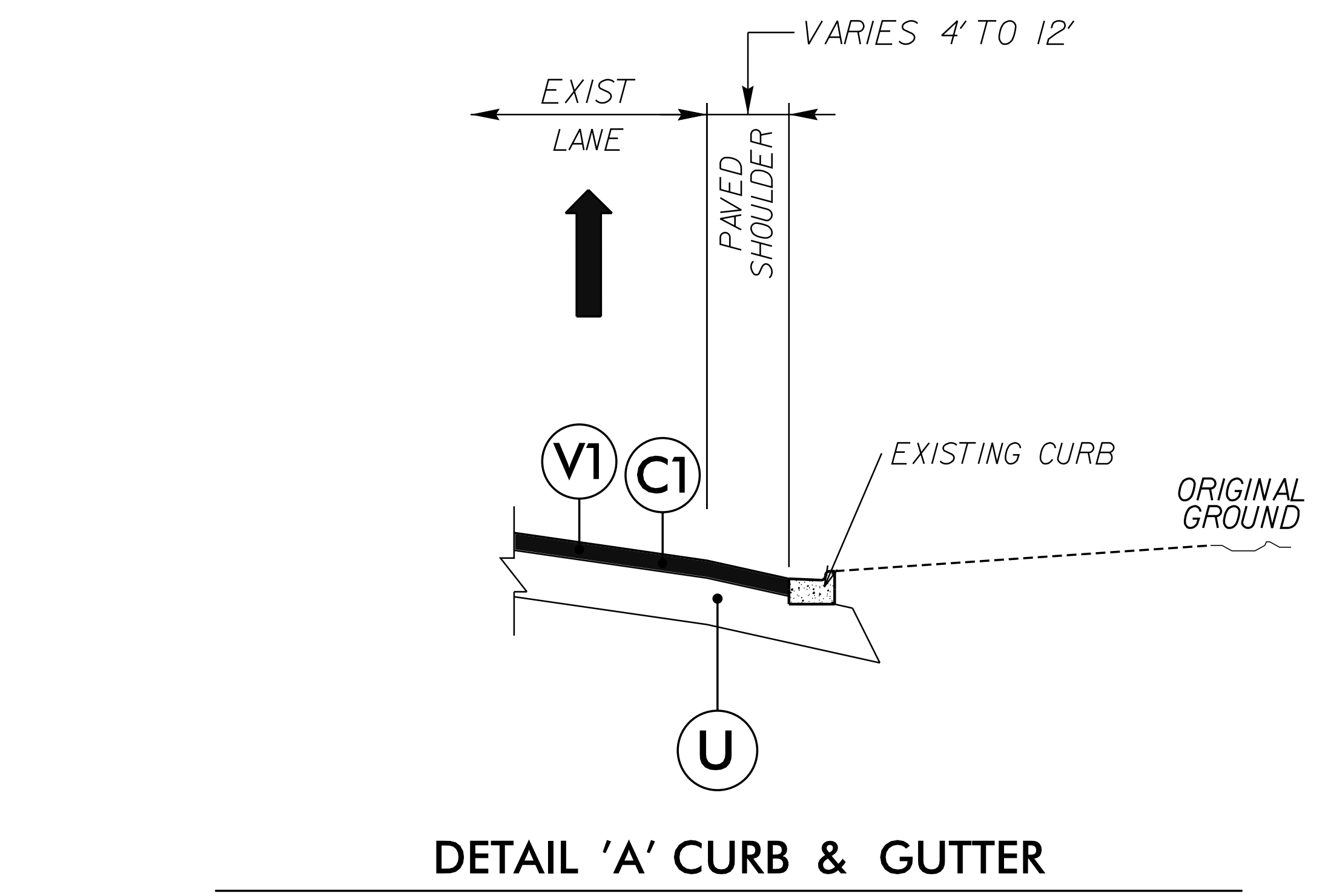
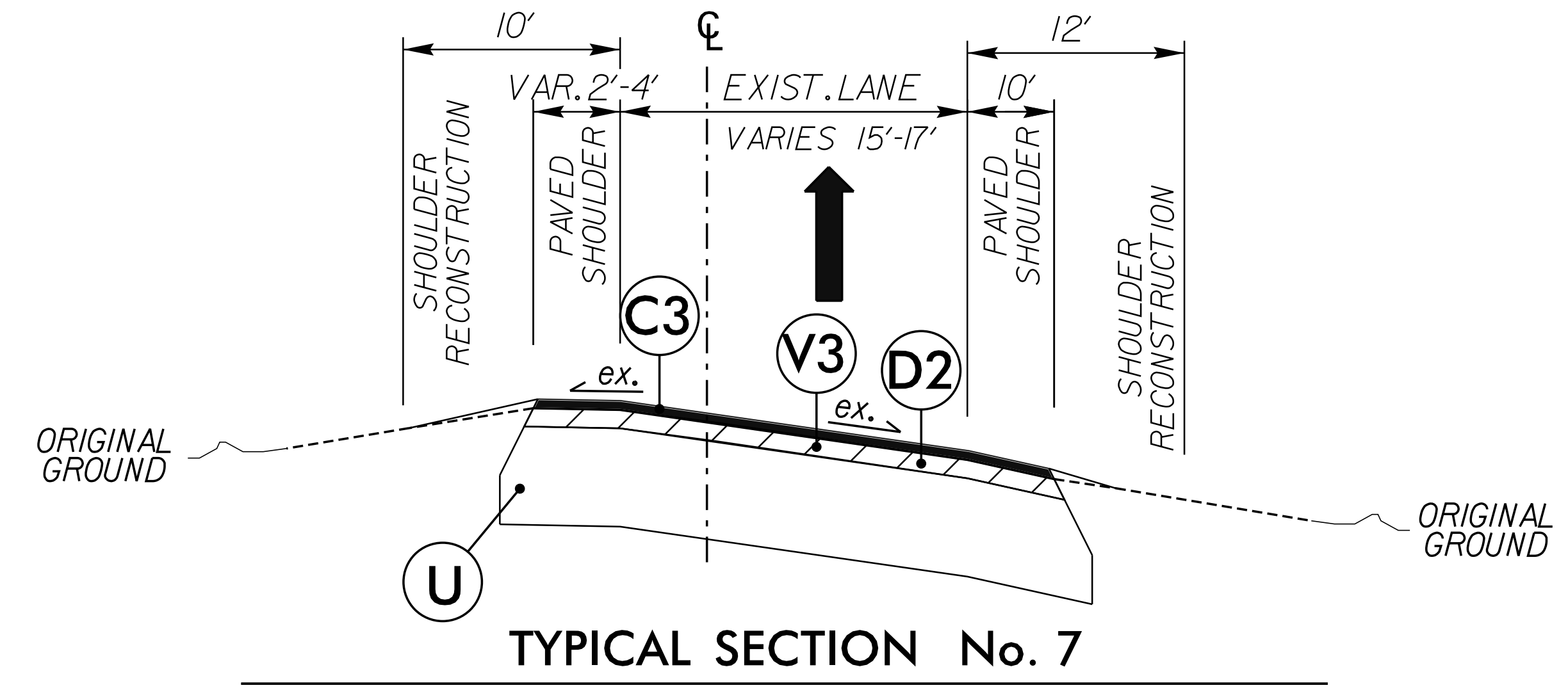
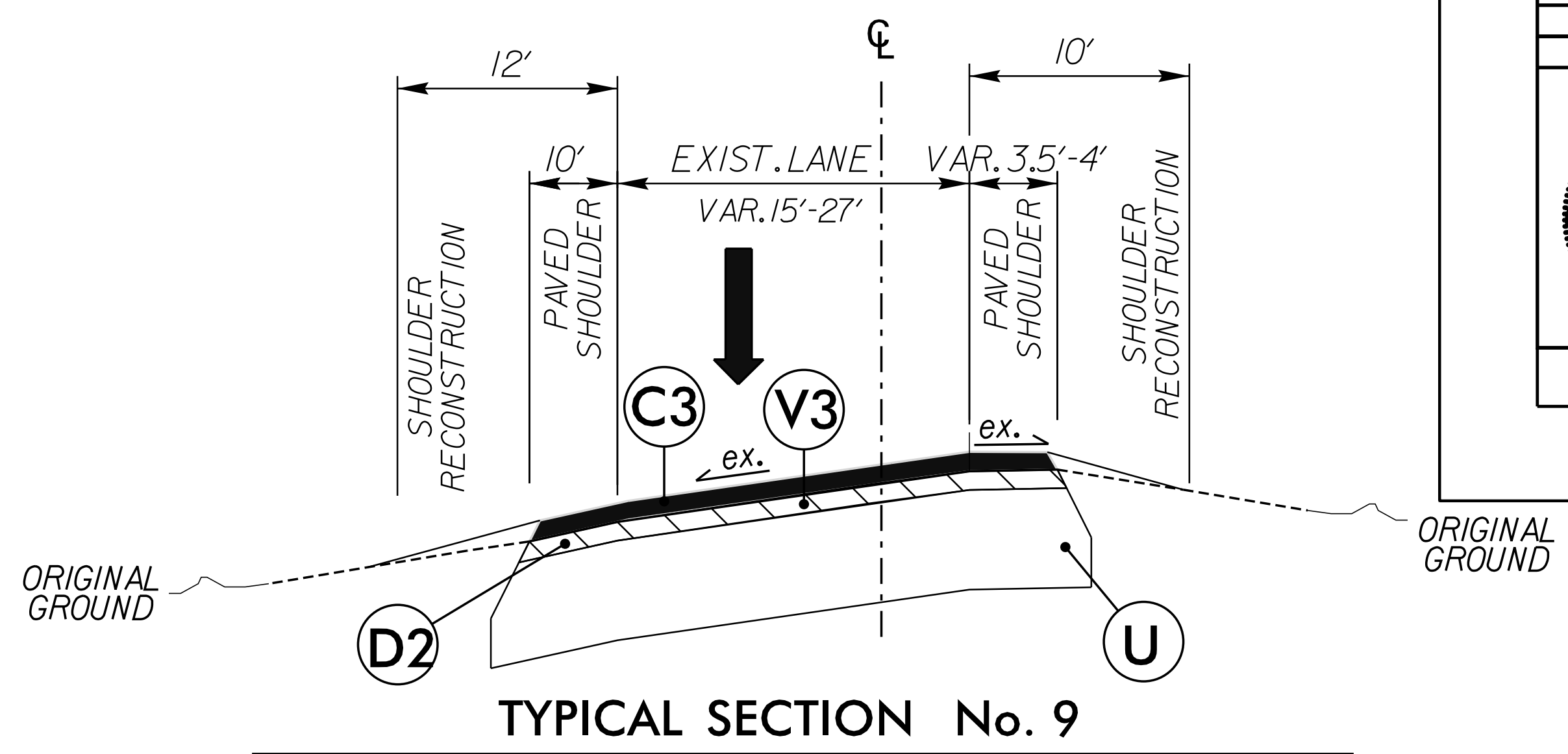
REVISIONS

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REVISIONS

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STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

Table with columns: STATION, UNCL. EXCAV., EMBANK. +15 %, BORROW, WASTE. Includes subtotals for -Y12RPA-, -Y12RPD-, and GRAND TOTALS.

Earthwork quantities are calculated by the Roadway Designer. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineer.

Approximate quantities only. Unclassified excavation, borrow excavation, fine grading, clearing and grubbing, and removal of existing pavement will be paid for at the contract lump sum price for grading.

SUMMARY OF EXISTING ASPHALT PAVEMENT REMOVAL

Table with columns: SURVEY LINE, STATION, LOCATION LT/RT/CL, YD<sup>2</sup>. Includes subtotals for -Y12RPA-, -Y12RPD-, and GRAND TOTALS.

SUMMARY OF EXISTING CONCRETE PAVEMENT REMOVAL

Table with columns: SURVEY LINE, STATION, LOCATION LT/RT/CL, YD<sup>2</sup>. Includes subtotals for -Y12RPA-, -Y12RPD-, and GRAND TOTALS.

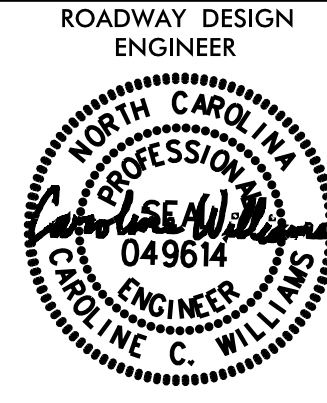
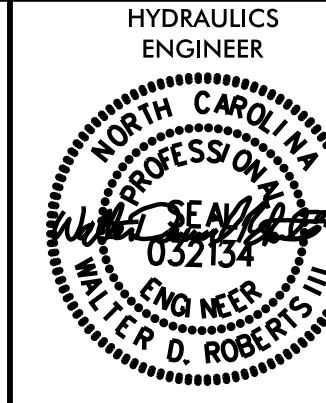
SUMMARY OF QUANTITIES

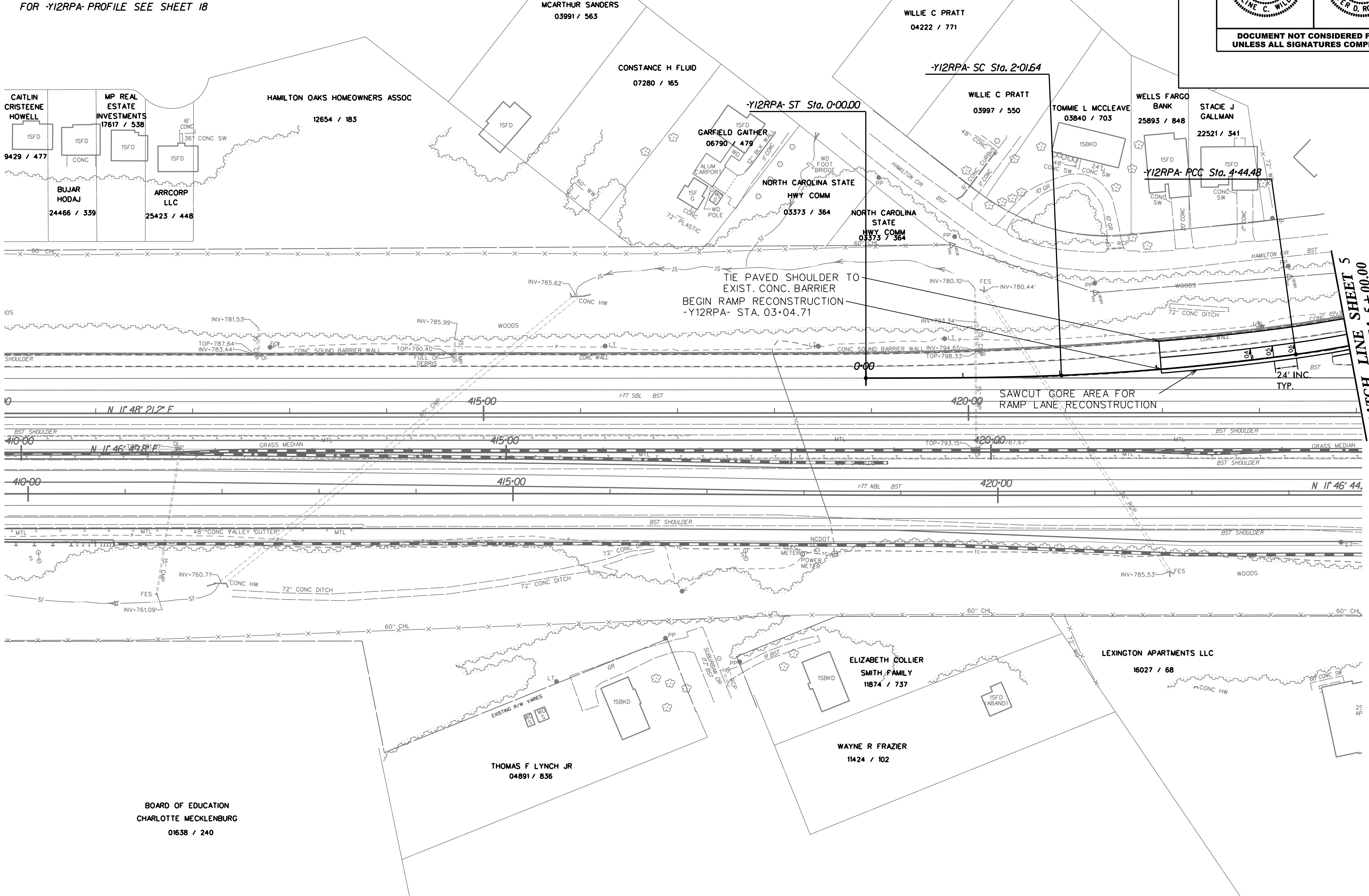
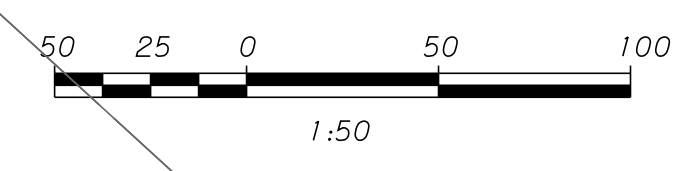
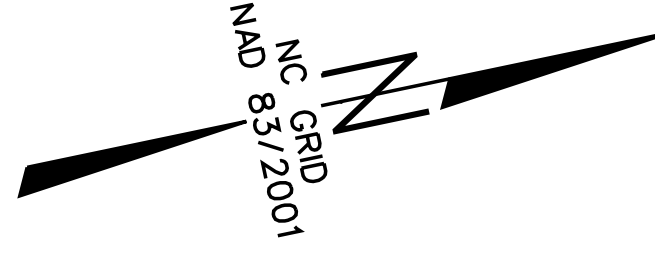
Large summary table with columns: PROJECT NO., COUNTY, SHEET NO., ALIGNMENT, ROUTE, DESCRIPTION, TYP. NO., LANES, LENGTH, WIDTH, and various material quantities (AGGREGATE, FINE GRADING, SHOULDER, etc.)



-Y12RPA-		
PI Sta 1+34.44	PI Sta 3+23.15	PI Sta 7+25.79
Os = 2' 18" 38.2"	Δ = 5' 33" 55.5" (LT)	Δ = 26' 23" 14.6" (LT)
Ls = 201.64'	D = 2' 17" 30.6"	D = 4' 46" 28.7"
LT = 134.44'	L = 242.84'	L = 552.66'
ST = 67.22'	T = 121.51'	T = 281.32'
	R = 2,500.00'	R = 1,200.00'
	e = 4%	e = 6%
	DS = 50 MPH	DS = 50 MPH

FOR -Y12RPA- PROFILE SEE SHEET 18

PROJECT REFERENCE NO. I-5405D	SHEET NO. 04
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



MATCH LINE SHEET 5  
-Y12RPA- STA. 5+00.00

REVISIONS

Z:\S\2026\15\NCDOT\1-77 Mobility Partners\80-Drawings\83-Design\83b-Sheets\PSH\_04\_-Y12-.dgn

BOARD OF EDUCATION  
CHARLOTTE MECKLENBURG  
01638 / 240

ELIZABETH COLLIER  
SMITH FAMILY  
11874 / 737

LEXINGTON APARTMENTS LLC  
16027 / 68

WAYNE R FRAZIER  
11424 / 102

THOMAS F LYNCH JR  
04891 / 836

CAITLIN CRISTEENE HOWELL  
9429 / 477

MP REAL ESTATE INVESTMENTS  
17617 / 538

BUJAR HODAJ  
24466 / 339

ARRCORP LLC  
25423 / 448

HAMILTON OAKS HOMEOWNERS ASSOC  
12654 / 183

MCARTHUR SANDERS  
03991 / 563

CONSTANCE H FLUID  
07280 / 165

GARFIELD GATHER  
06790 / 479

NORTH CAROLINA STATE  
HWY COMM  
03373 / 364

NORTH CAROLINA STATE  
HWY COMM  
03373 / 364

WILLIE C PRATT  
03997 / 550

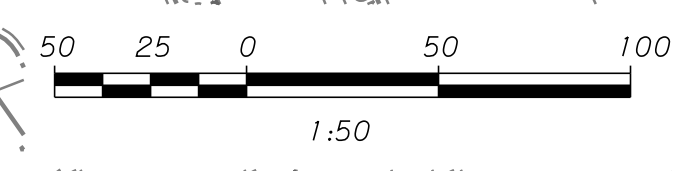
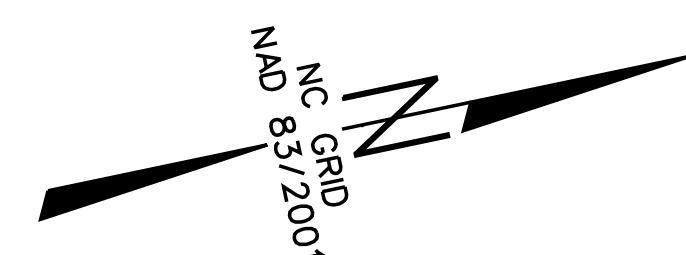
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03840 / 703

WELLS FARGO BANK  
25893 / 848

STACIE J GALLMAN  
22521 / 341

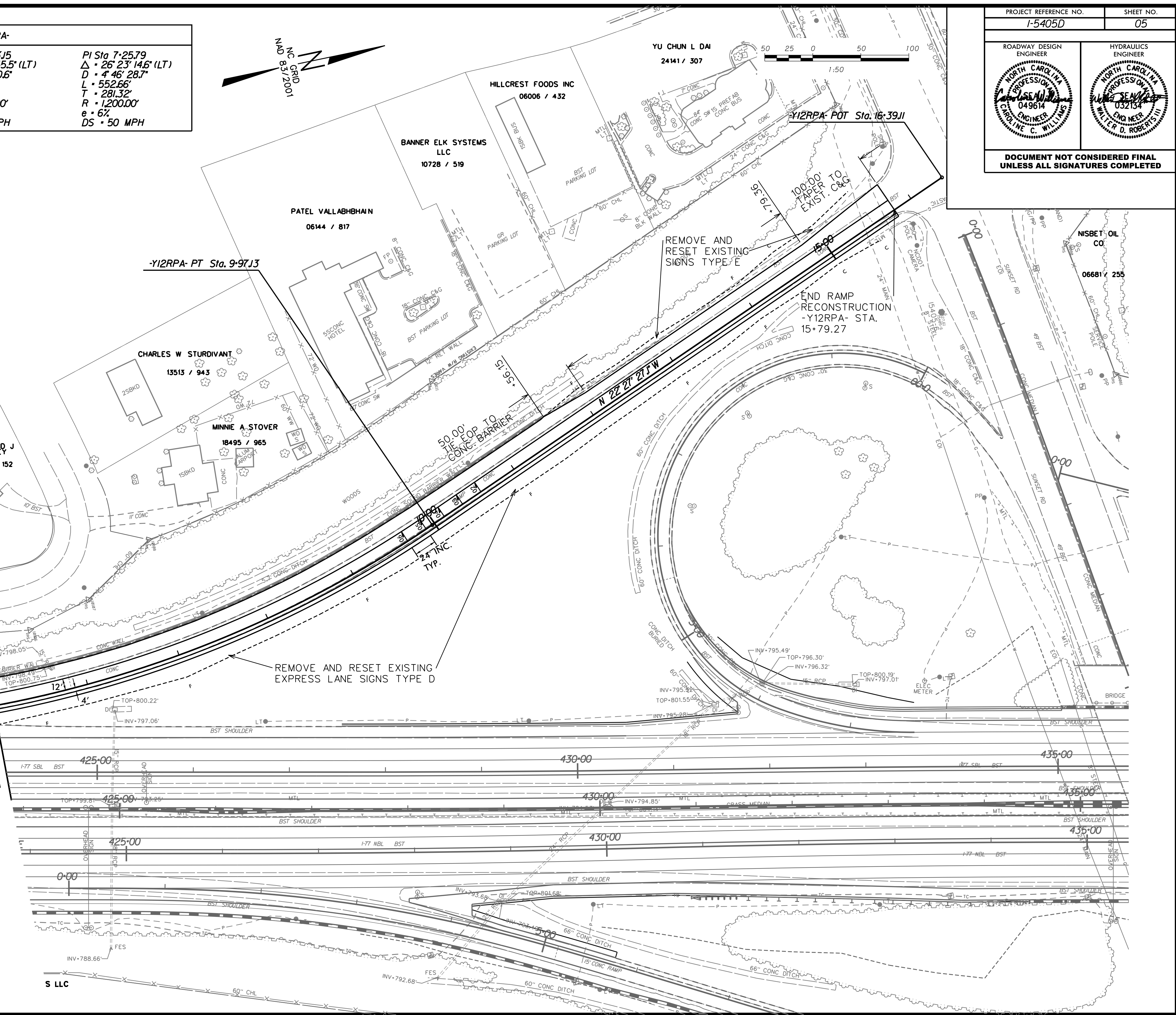
-Y12RPA-		
PI Sta 1+34.44	PI Sta 3+23.15	PI Sta 7+25.79
Os = 2' 18" 38.2"	Δ = 5' 33" 55.5" (LT)	Δ = 26' 23" 14.6" (LT)
Ls = 201.64'	D = 2' 17" 30.6"	D = 4' 46" 28.7"
LT = 134.44'	L = 242.84'	L = 552.66'
ST = 67.22'	T = 121.51'	T = 281.32'
	R = 2,500.00'	R = 1,200.00'
	e = 4%	e = 6%
	DS = 50 MPH	DS = 50 MPH

FOR -Y12RPA- PROFILE SEE SHEET 18


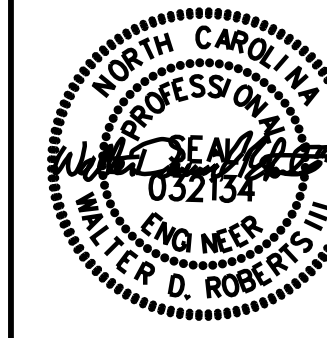


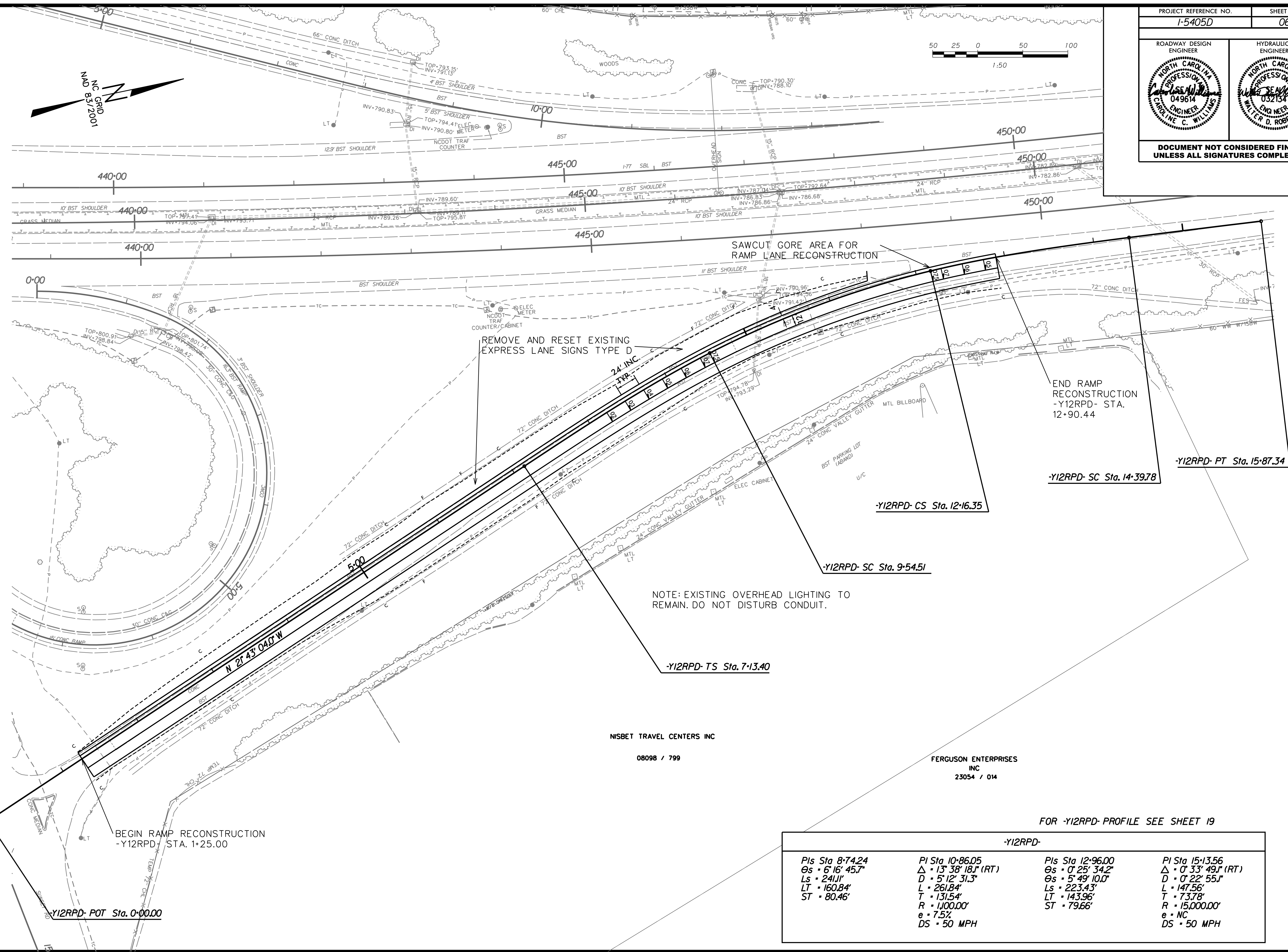
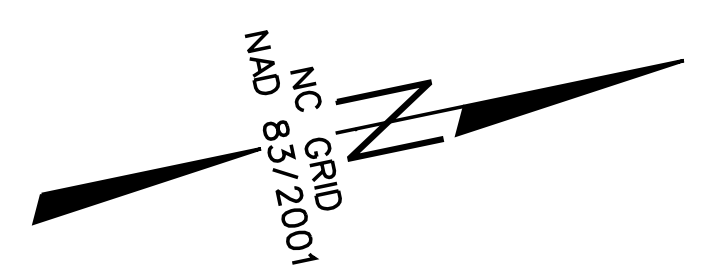
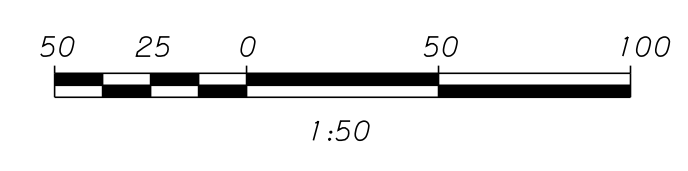
REVISIONS

MATCH LINE SHEET 4  
-Y12RPA- STA. 5+00.00



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PROJECT REFERENCE NO. <b>I-5405D</b>	SHEET NO. <b>06</b>
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



REVISIONS

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REMOVE AND RESET EXISTING EXPRESS LANE SIGNS TYPE D

NOTE: EXISTING OVERHEAD LIGHTING TO REMAIN. DO NOT DISTURB CONDUIT.

END RAMP RECONSTRUCTION -Y12RPD- STA. 12+90.44

-Y12RPD- PT Sta. 15+87.34

-Y12RPD- SC Sta. 14+39.78

-Y12RPD- CS Sta. 12+16.35

-Y12RPD- SC Sta. 9+54.51

-Y12RPD- TS Sta. 7+13.40

NISBET TRAVEL CENTERS INC

08098 / 799

FERGUSON ENTERPRISES INC  
23054 / 014

BEGIN RAMP RECONSTRUCTION -Y12RPD- STA. 1+25.00


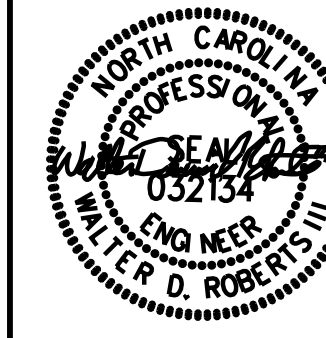
-Y12RPD- POT Sta. 0+00.00

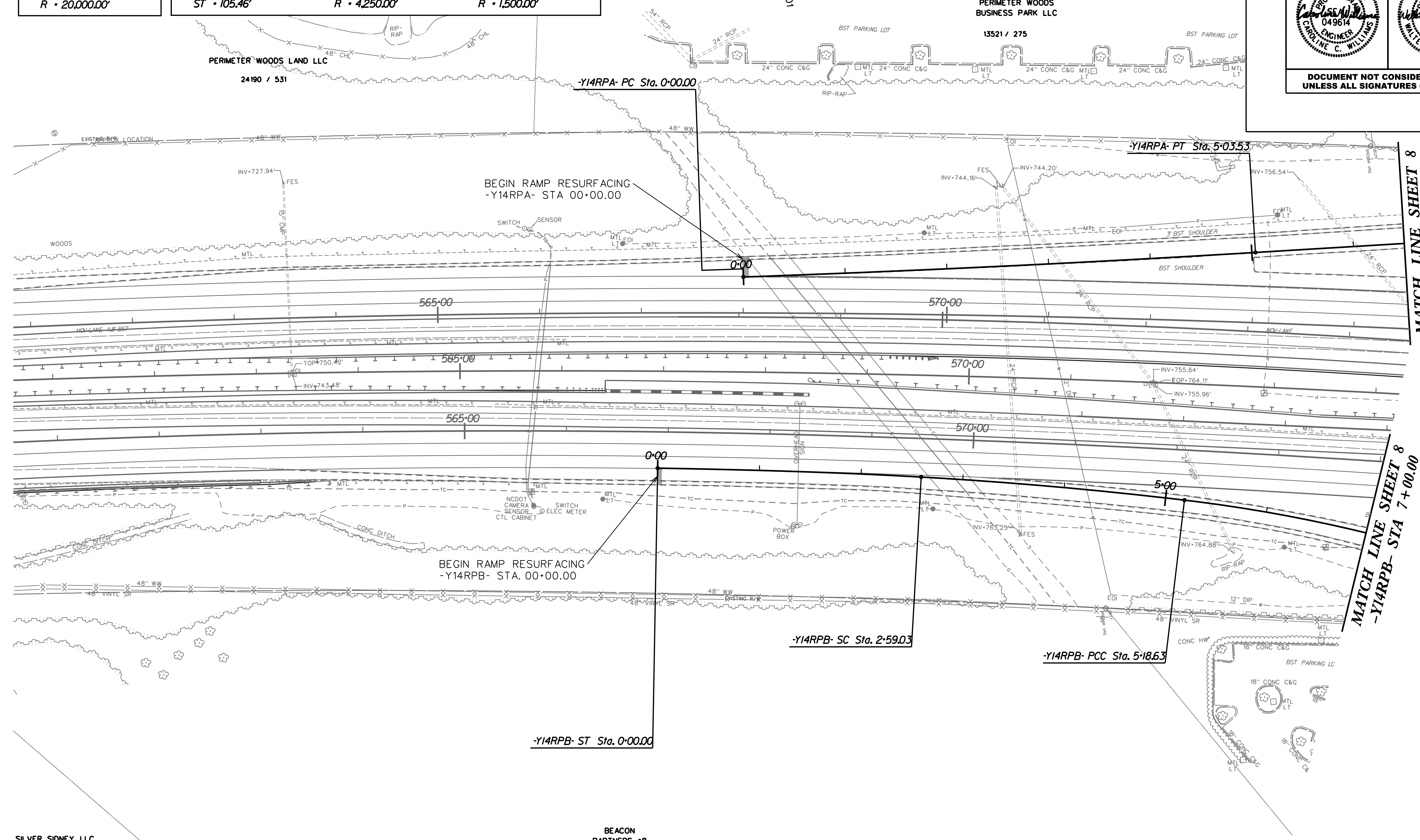
FOR -Y12RPD- PROFILE SEE SHEET 19

-Y12RPD-			
PIs Sta 8+74.24	PI Sta 10+86.05	PIs Sta 12+96.00	PI Sta 15+13.56
Os • 6'16' 45.7"	Δ • 13' 38' 18.1" (RT)	Os • 0' 25' 34.2"	Δ • 0' 33' 49.1" (RT)
Ls • 241.11'	D • 5' 12' 31.3"	Os • 5' 49' 10.0"	D • 0' 22' 55.1"
LT • 160.84'	L • 261.84'	Ls • 223.43'	L • 147.56'
ST • 80.46'	T • 131.54'	LT • 143.96'	T • 73.78'
	R • 15,000.00'	R • 15,000.00'	R • 15,000.00'
	e • 7.5%	ST • 79.66'	e • NC
	DS • 50 MPH		DS • 50 MPH

-Y14RPA-
PI Sta 2+51.78
$\Delta \cdot 1' 26' 33.0''$ (LT)
D $\cdot 0' 17' 11.3''$
L $\cdot 503.53'$
T $\cdot 251.78'$
R $\cdot 20,000.00'$

-Y14RPB-
PI Sta 1+53.61
$\Theta s \cdot 0' 29' 45.2''$
$\Theta s \cdot 1' 44' 45.9''$
Ls $\cdot 259.03'$
LT $\cdot 153.61'$
ST $\cdot 105.46'$
PI Sta 3+88.87
$\Delta \cdot 3' 29' 58.8''$ (RT)
D $\cdot 1' 20' 53.3''$
L $\cdot 259.59'$
T $\cdot 129.84'$
R $\cdot 4,250.00'$
PI Sta 7+38.12
$\Delta \cdot 16' 38' 59.3''$ (RT)
D $\cdot 3' 49' 11.0''$
L $\cdot 435.89'$
T $\cdot 219.49'$
R $\cdot 1,500.00'$

PROJECT REFERENCE NO. I-5405D	SHEET NO. 07
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

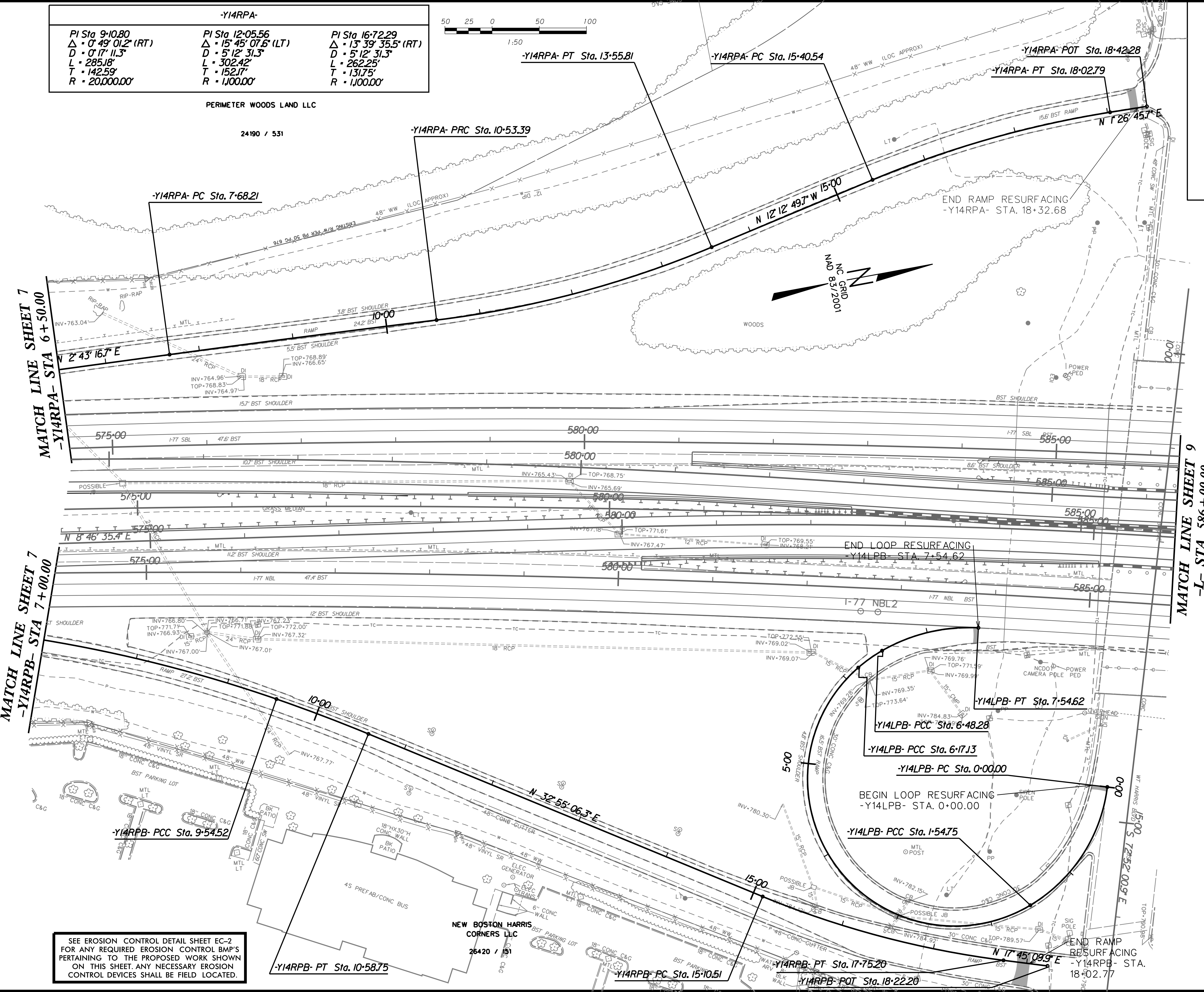
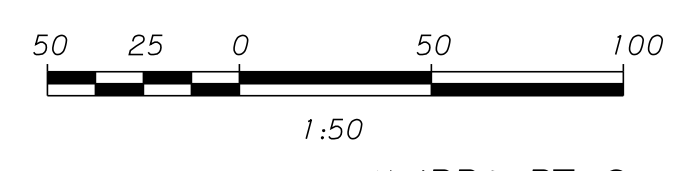


REVISIONS

Z:\S\2026\TSA\NCDOT\1-77 Mobility Partners\80-Drawings\83-Design\83b-Sheets\PSH-07-Y14.dgn

SEE EROSION CONTROL DETAIL SHEET EC-2 FOR ANY REQUIRED EROSION CONTROL BMP'S PERTAINING TO THE PROPOSED WORK SHOWN ON THIS SHEET. ANY NECESSARY EROSION CONTROL DEVICES SHALL BE FIELD LOCATED.

-Y14RPA-		
PI Sta 9+10.80 Δ = 0° 49' 01.2" (RT) D = 0' 17" 11.3" L = 285.18' T = 142.59' R = 20,000.00'	PI Sta 12+05.56 Δ = 15° 45' 07.6" (LT) D = 5' 12' 31.3" L = 302.42' T = 152.17' R = 1,000.00'	PI Sta 16+72.29 Δ = 13° 39' 35.5" (RT) D = 5' 12' 31.3" L = 262.25' T = 131.75' R = 1,000.00'



PERIMETER WOODS LAND LLC  
24190 / 531

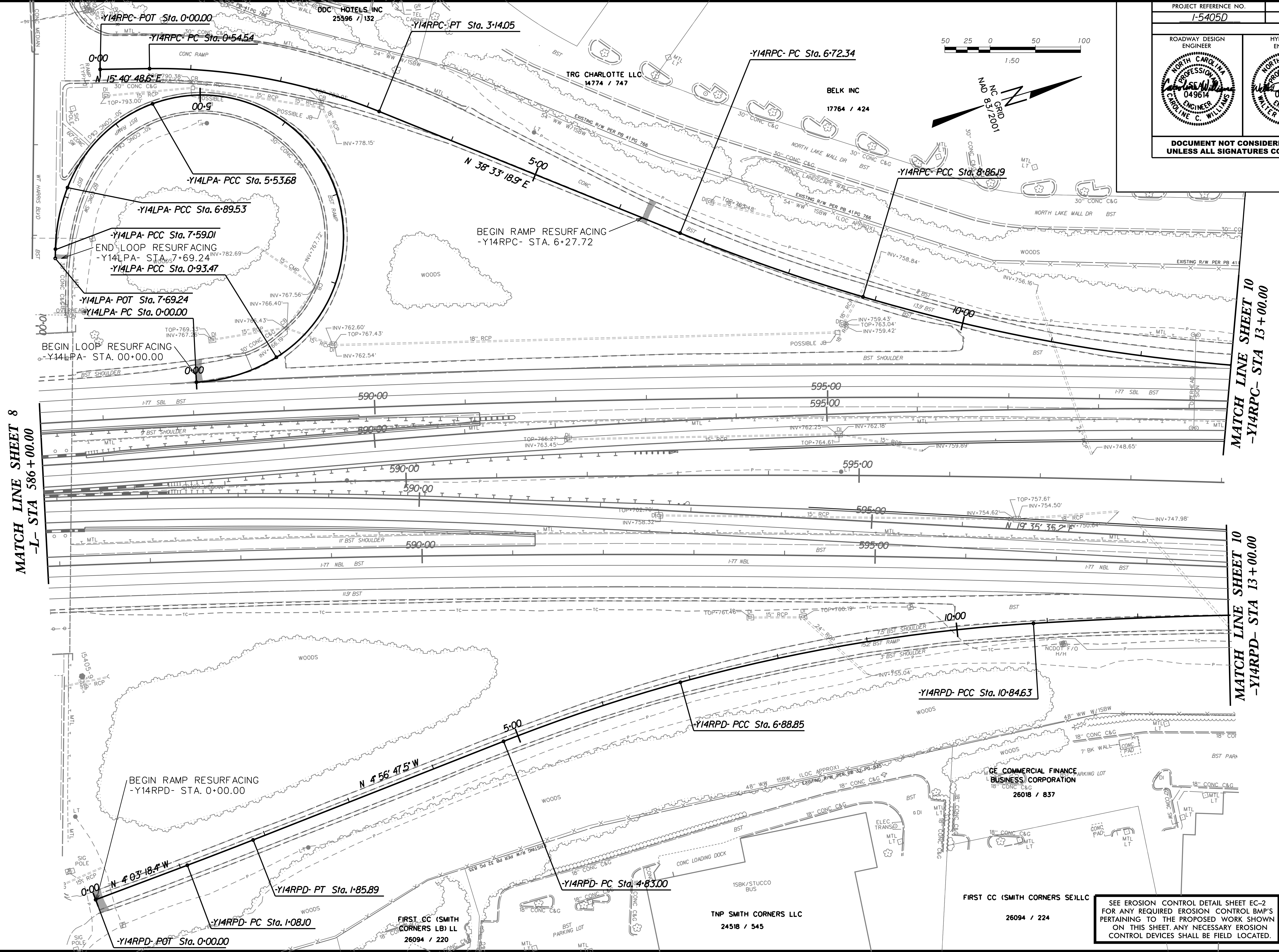
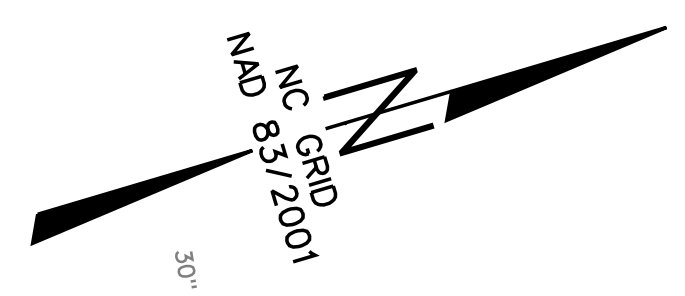
NEW BOSTON HARRIS CORNERS LLC  
26420 / 151

SEE EROSION CONTROL DETAIL SHEET EC-2 FOR ANY REQUIRED EROSION CONTROL BMP'S PERTAINING TO THE PROPOSED WORK SHOWN ON THIS SHEET. ANY NECESSARY EROSION CONTROL DEVICES SHALL BE FIELD LOCATED.

REVISIONS

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PROJECT REFERENCE NO. I-5405D	SHEET NO. 09
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER C. WILLIAMS 049614	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER WALTER D. ROBERTS 032134
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS

MATCH LINE SHEET 8  
-I- STA 586 + 00.00

MATCH LINE SHEET 10  
-Y14RPC- STA 13 + 00.00

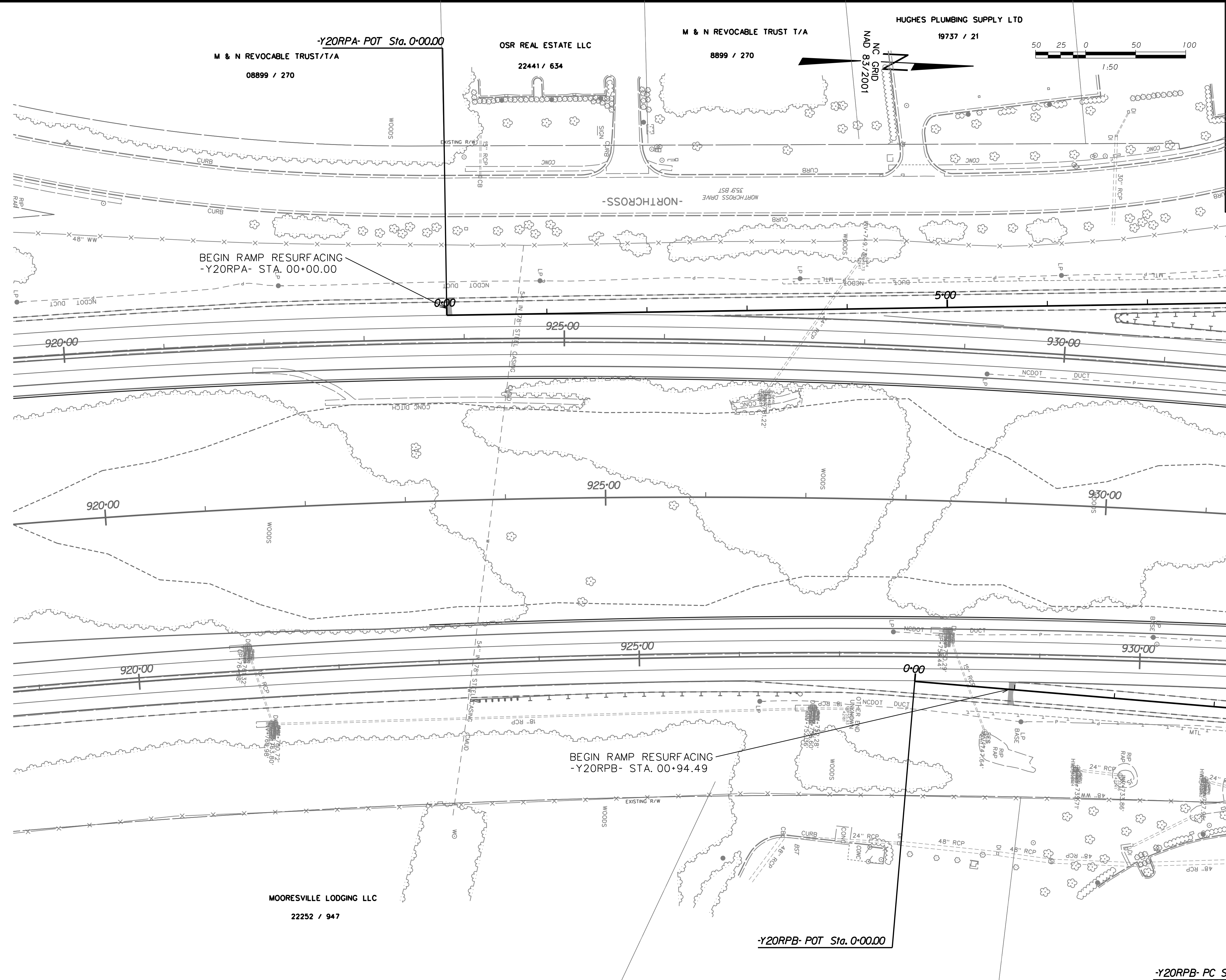
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-Y14RPD- STA 13 + 00.00

SEE EROSION CONTROL DETAIL SHEET EC-2 FOR ANY REQUIRED EROSION CONTROL BMP'S PERTAINING TO THE PROPOSED WORK SHOWN ON THIS SHEET. ANY NECESSARY EROSION CONTROL DEVICES SHALL BE FIELD LOCATED.

Z:\S\2026\15\NCDOT\1-77 Mobility Partners\80-Drawings\83-Design\83b-Sheets\PSH\09\_-Y14-.dgn



PROJECT REFERENCE NO. 1-5405D	SHEET NO. 11
ROADWAY DESIGN ENGINEER C. WILLIAMS 049614	HYDRAULICS ENGINEER M. ROBERTS 032134
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



BEGIN RAMP RESURFACING  
-Y20RPA- STA. 00+00.00

BEGIN RAMP RESURFACING  
-Y20RPB- STA. 00+94.49

SEE EROSION CONTROL DETAIL SHEET EC-2  
FOR ANY REQUIRED EROSION CONTROL BMP'S  
PERTAINING TO THE PROPOSED WORK SHOWN  
ON THIS SHEET. ANY NECESSARY EROSION  
CONTROL DEVICES SHALL BE FIELD LOCATED.

MATCH LINE SHEET 12  
-Y20RPA- STA. 9 + 50.00

MATCH LINE SHEET 12  
-Y20RPB- STA. 5 + 00.00

REVISIONS

Z:\S\2026\15\NCDOT\1-77 Mobility Partners\80-Drawings\83-Design\83b-Sheets\PSH\_11\_-Y20-egp

JS & TS LLC  
08616 / 718

CHARLOTTE-MECKLENBURG HOSPITAL  
AUTHORITY  
08845 / 270

MOORESVILLE LODGING LLC  
22252 / 947


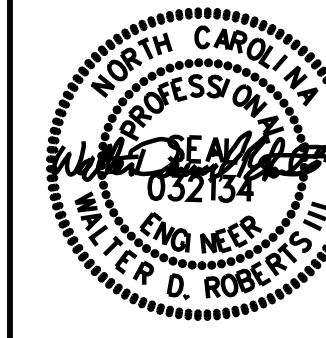
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08899 / 270

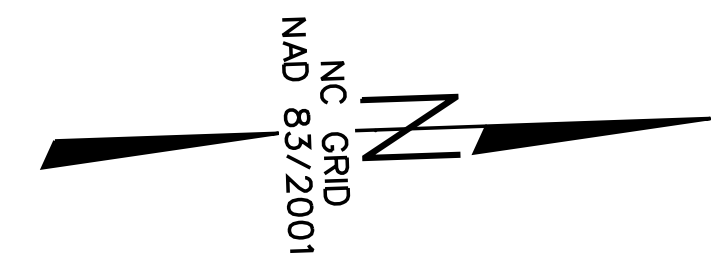
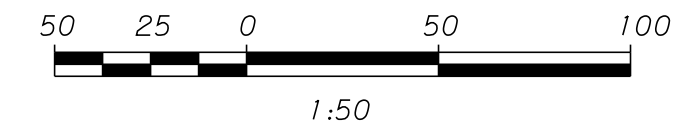
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22441 / 634

M & N REVOCABLE TRUST T/A  
8899 / 270

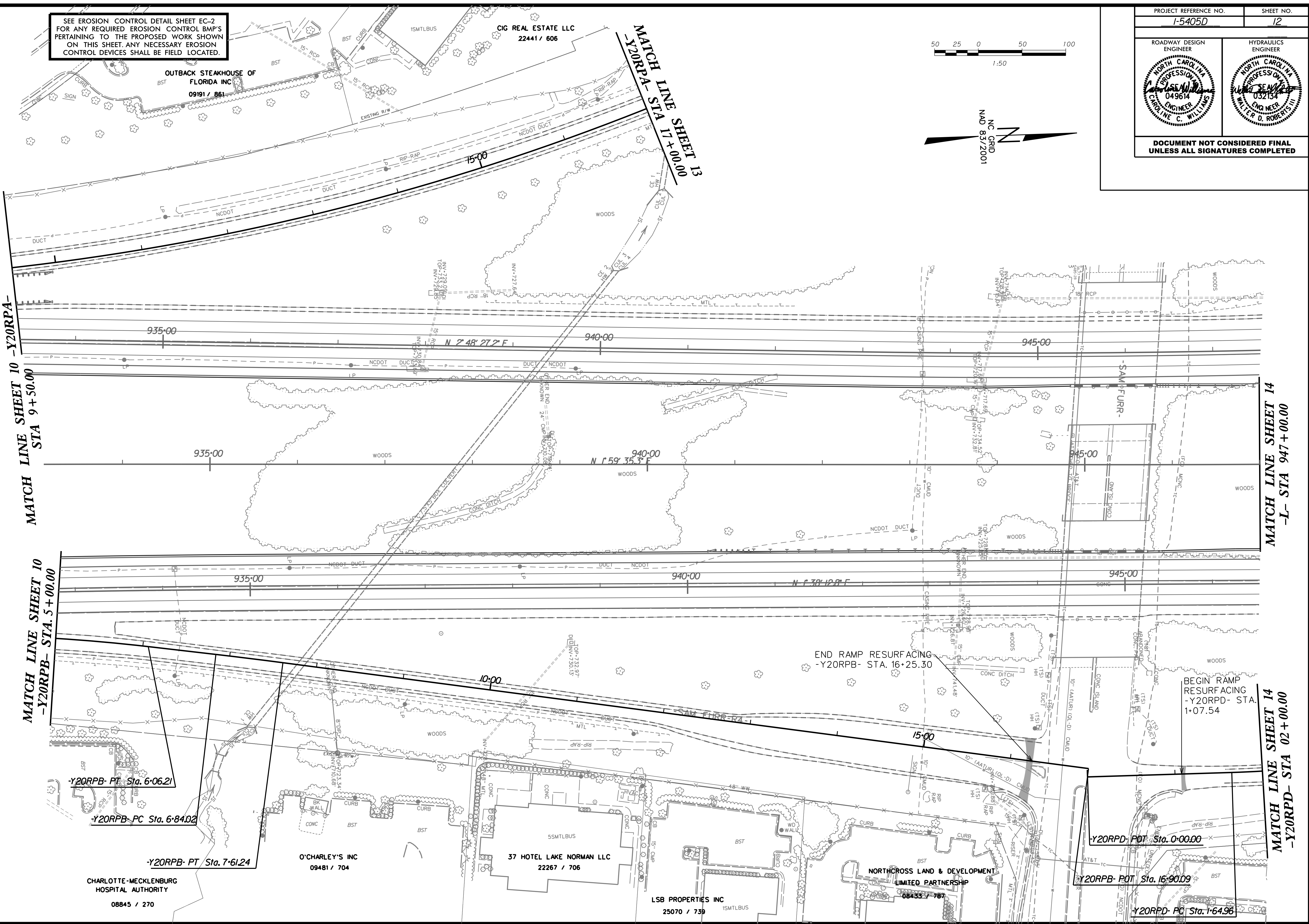
HUGHES PLUMBING SUPPLY LTD  
19737 / 21

SEE EROSION CONTROL DETAIL SHEET EC-2 FOR ANY REQUIRED EROSION CONTROL BMP PERTAINING TO THE PROPOSED WORK SHOWN ON THIS SHEET. ANY NECESSARY EROSION CONTROL DEVICES SHALL BE FIELD LOCATED.

PROJECT REFERENCE NO. 1-5405D	SHEET NO. 12
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS



OUTBACK STEAKHOUSE OF FLORIDA INC  
09191 / 861

CIG REAL ESTATE LLC  
22441 / 606

MATCH LINE SHEET 10 - Y20RPA - STA 9 + 50.00

MATCH LINE SHEET 13 - Y20RPA - STA 17 + 00.00

MATCH LINE SHEET 14 - L - STA 947 + 00.00

MATCH LINE SHEET 10 - Y20RPB - STA 5 + 00.00

MATCH LINE SHEET 14 - Y20RPD - STA 02 + 00.00

-Y20RPB- PT Sta. 6+06.21

-Y20RPB- PC Sta. 6+84.02

-Y20RPB- PT Sta. 7+61.24

CHARLOTTE-MECKLENBURG HOSPITAL AUTHORITY  
08845 / 270

O'CHARLEY'S INC  
09481 / 704

37 HOTEL LAKE NORMAN LLC  
22267 / 706

LSB PROPERTIES INC  
25070 / 739

NORTHCROSS LAND & DEVELOPMENT LIMITED PARTNERSHIP  
08433 / 787

-Y20RPD- POT Sta. 0+00.00

-Y20RPB- POT Sta. 16+90.09

-Y20RPD- PC Sta. 1+64.96

END RAMP RESURFACING  
-Y20RPB- STA. 16+25.30

BEGIN RAMP RESURFACING  
-Y20RPD- STA. 1+07.54

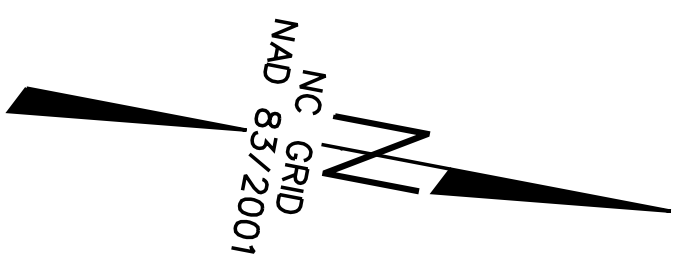
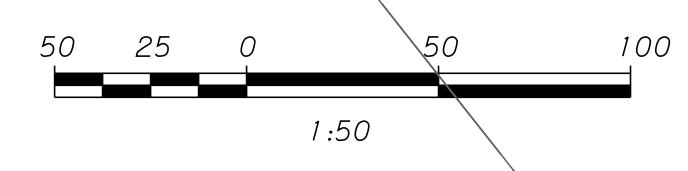
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SEE EROSION CONTROL DETAIL SHEET EC-2 FOR ANY REQUIRED EROSION CONTROL BMP'S PERTAINING TO THE PROPOSED WORK SHOWN ON THIS SHEET. ANY NECESSARY EROSION CONTROL DEVICES SHALL BE FIELD LOCATED.

PROJECT REFERENCE NO. 1-5405D	SHEET NO. 15
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



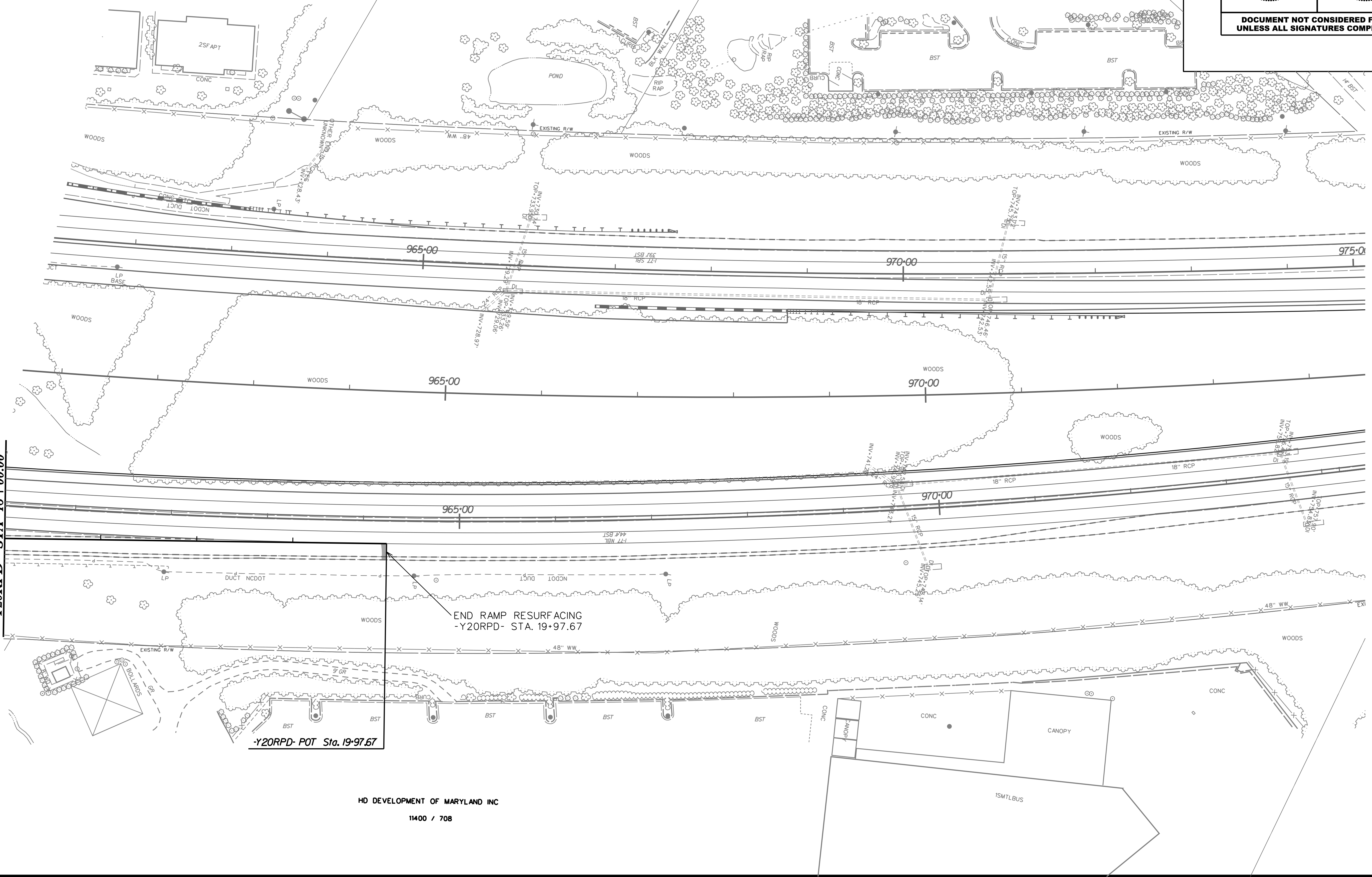
G PARTNERSHIP LP  
25471 / 867

CITY OF CHARLOTTE  
18118 / 982

NC MED PROPERTY LL 5 LLC  
25983 / 442

REVISIONS

MATCH LINE SHEET 14  
-Y20RPD- STA 16 + 00.00



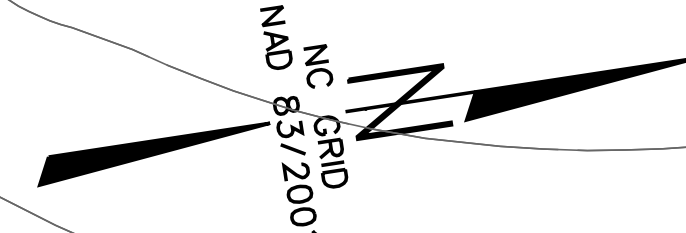
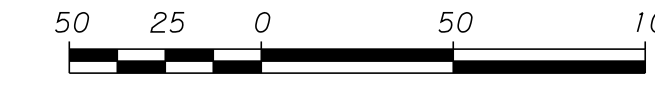
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-Y20RPD- STA. 19+97.67


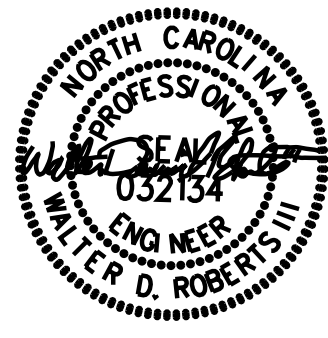
-Y20RPD- POT Sta. 19+97.67

HD DEVELOPMENT OF MARYLAND INC  
11400 / 708

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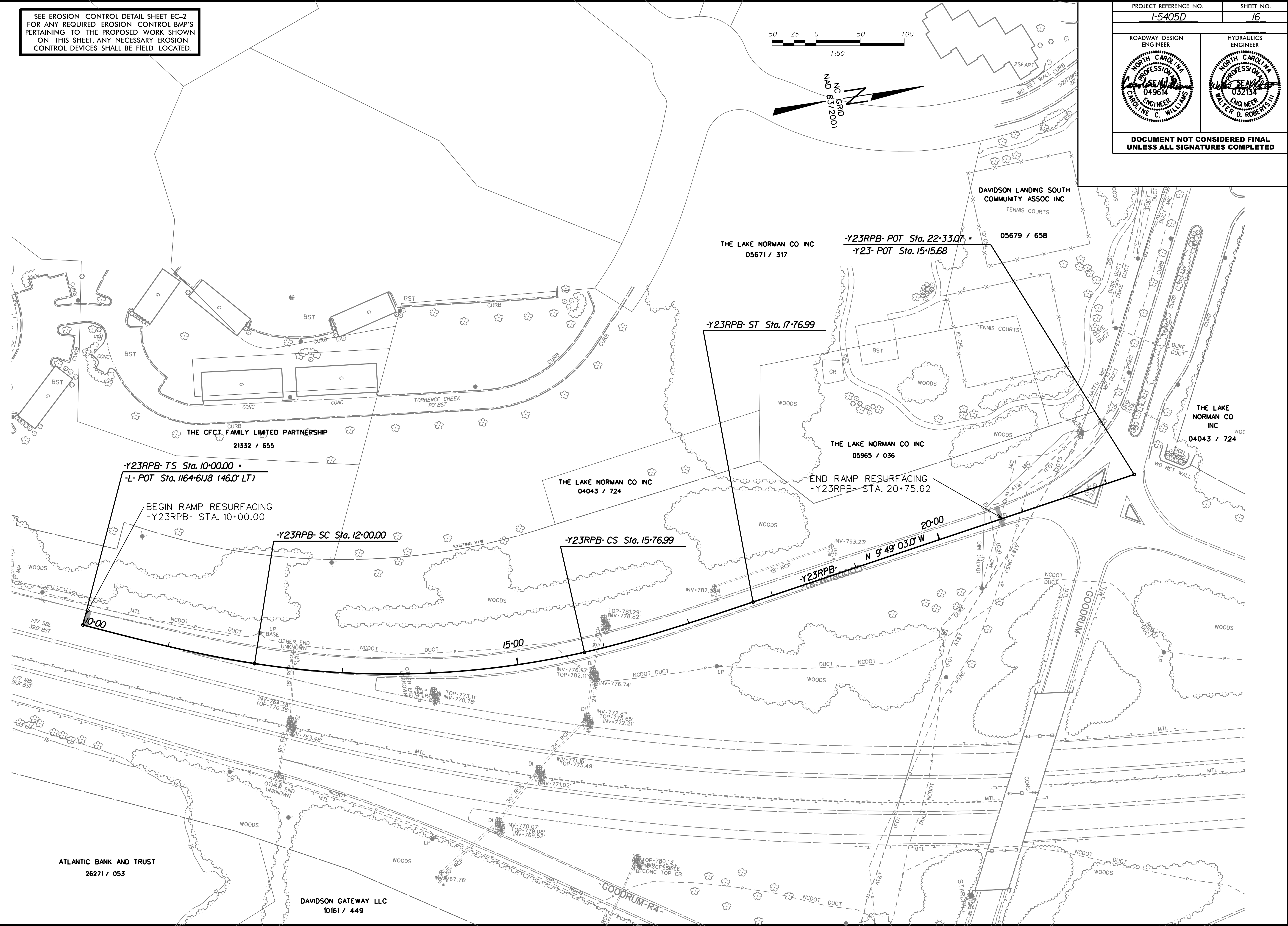
SEE EROSION CONTROL DETAIL SHEET EC-2 FOR ANY REQUIRED EROSION CONTROL BMP'S PERTAINING TO THE PROPOSED WORK SHOWN ON THIS SHEET. ANY NECESSARY EROSION CONTROL DEVICES SHALL BE FIELD LOCATED.



PROJECT REFERENCE NO. 1-5405D		SHEET NO. 16	
ROADWAY DESIGN ENGINEER 		HYDRAULICS ENGINEER 	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			

REVISIONS

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ROADWAY DESIGN ENGINEER  
 JOHN K & PATRICIA B MOORE  
 00682 / 0182

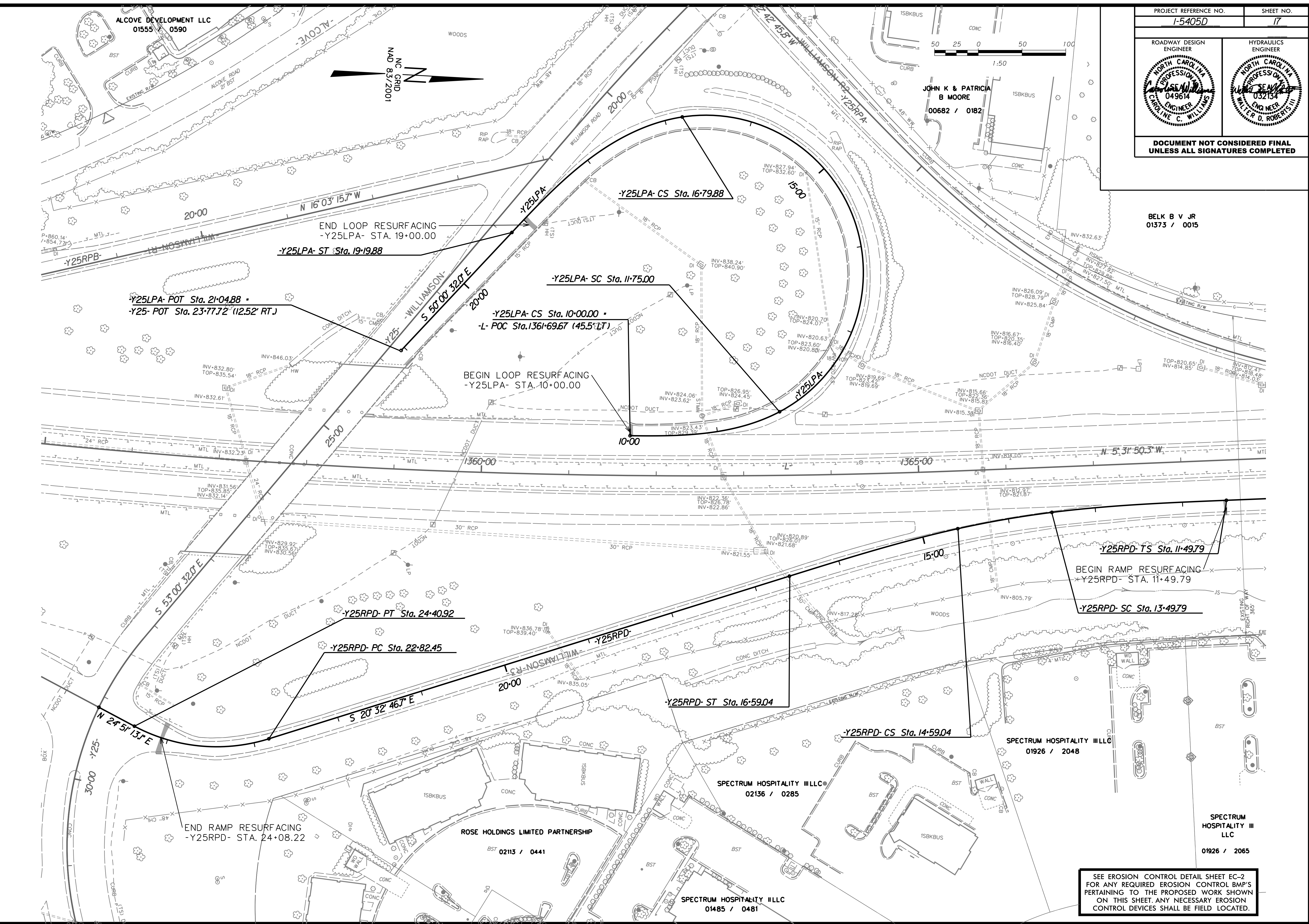
HYDRAULICS ENGINEER  
 WALTER D. ROBERTS, III  
 032134

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

BELK B V JR  
 01373 / 0015

REVISIONS

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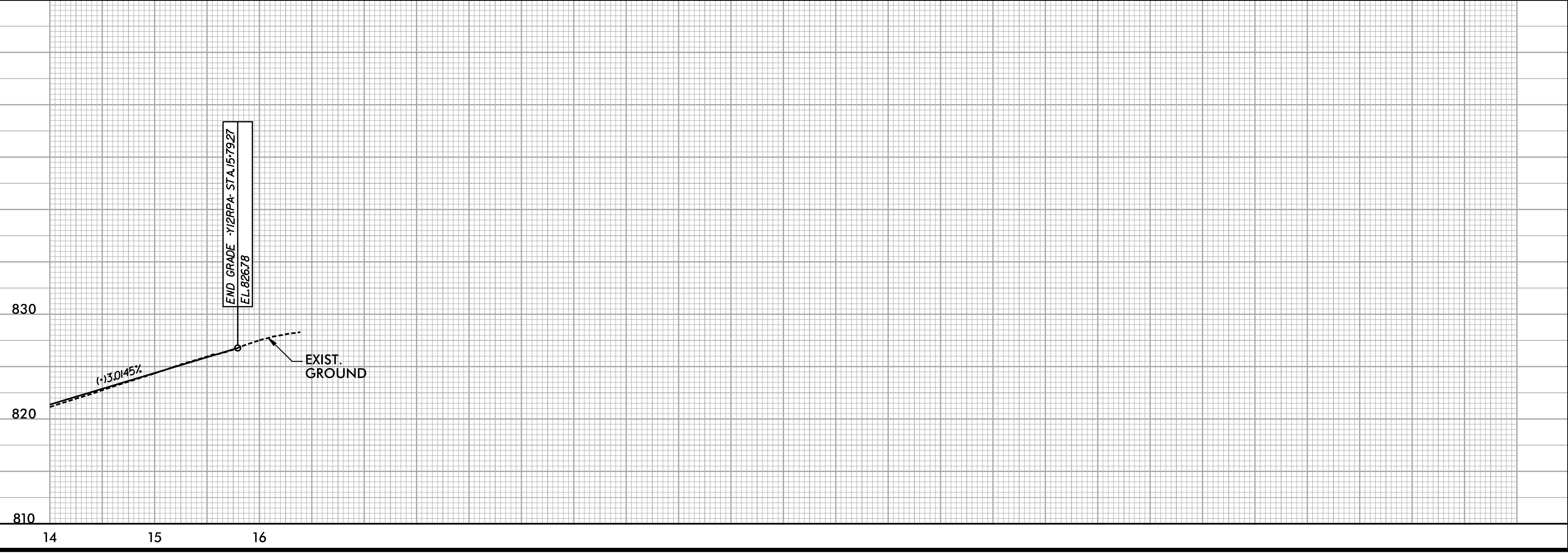
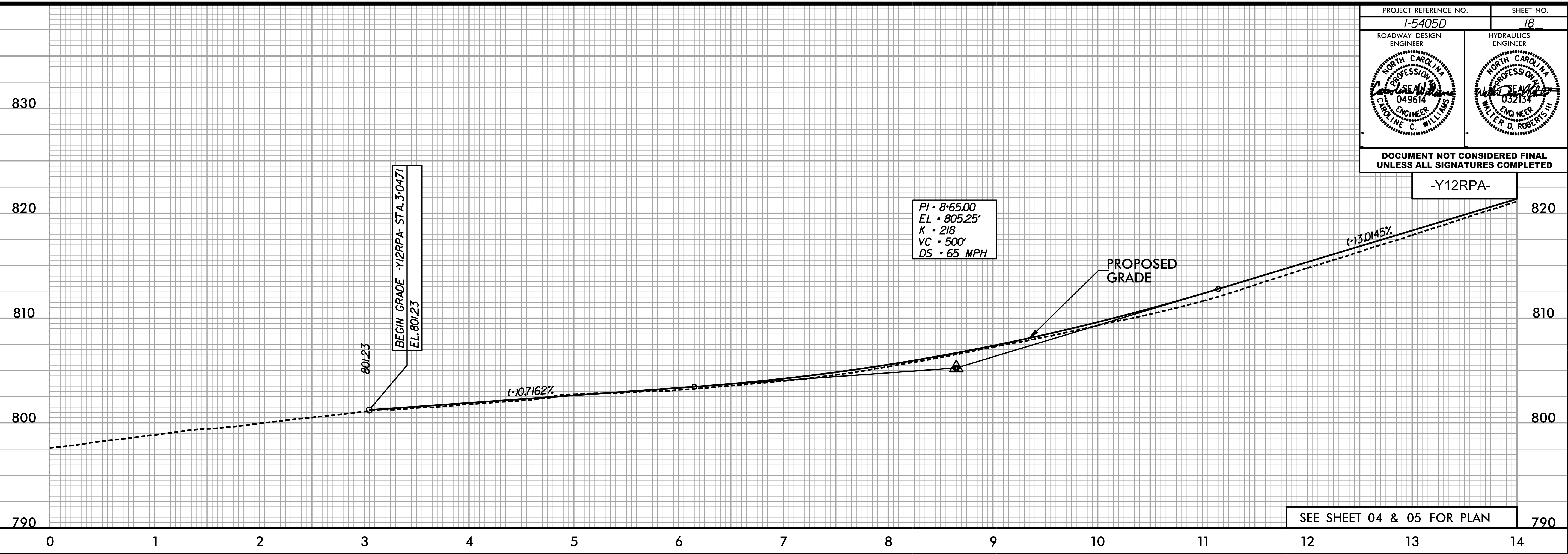
SEE EROSION CONTROL DETAIL SHEET EC-2  
 FOR ANY REQUIRED EROSION CONTROL BMP'S  
 PERTAINING TO THE PROPOSED WORK SHOWN  
 ON THIS SHEET. ANY NECESSARY EROSION  
 CONTROL DEVICES SHALL BE FIELD LOCATED.

PROJECT REFERENCE NO. 1-5405D	SHEET NO. 18
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER 049614 CAROLINE C. WILLIAMS	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER 032134 WILLIAM D. ROBERTS

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

-Y12RPA-

PI • 8+65.00  
EL • 805.25'  
K • 218  
VC • 500'  
DS • 65 MPH

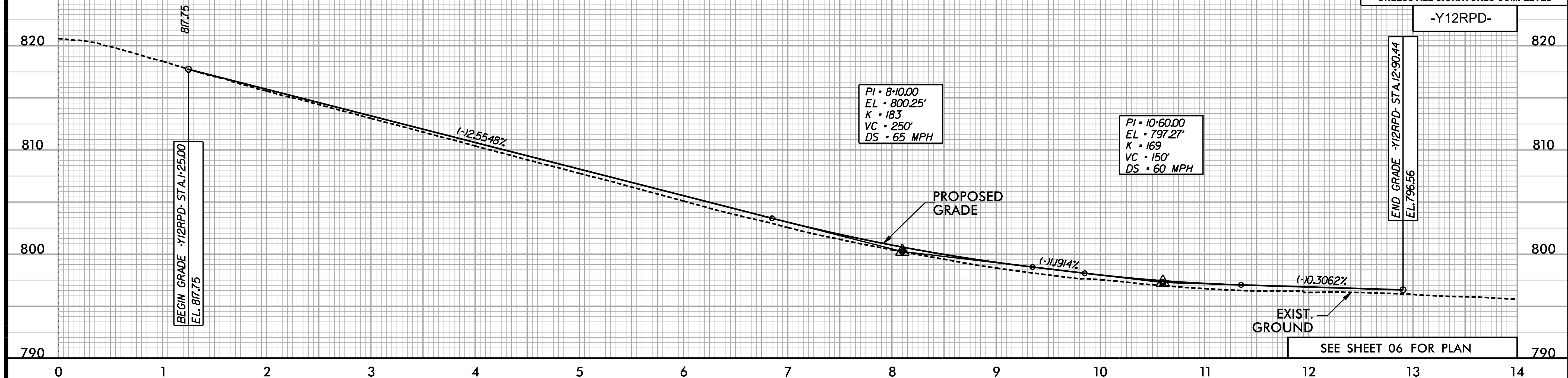


5/28/99  
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C:\Users\carolcwilliams

5/28/99

PROJECT REFERENCE NO. I-5405D	SHEET NO. 19
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER CARRIE C. WILLIAMS 049614	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER WILLIAM D. ROBERTS 032134

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



2/9/2006 1:15:00 PM C:\Users\carrie\Documents\83b-Design\83b-Sheets\PSH-19\_PFL-Y12.dgn

