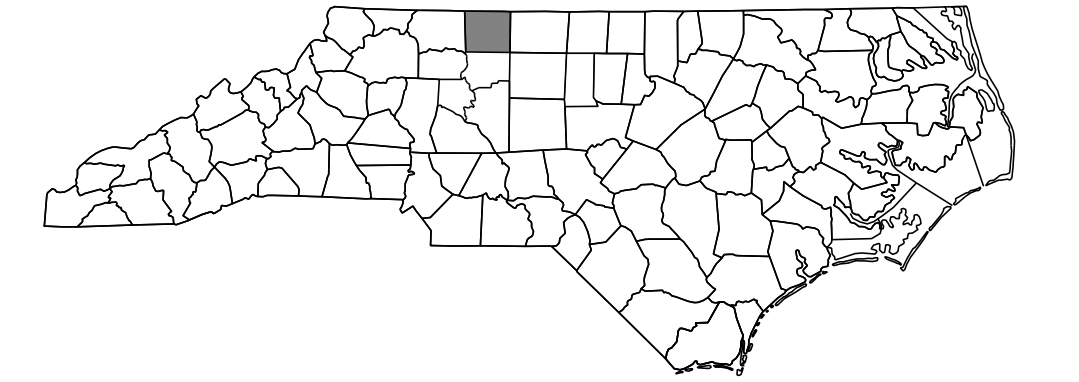


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shall not be considered a certified document.**

| | | | |
|-----------------|-----------------------------|-------------|--------------|
| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
| N.C. | R-5768 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 44670.1.1 | STP-0311(035) | PE | |
| 44670.2.1 | STP-0311(035) | RW | |
| 44670.3.1 | STP-0311(035) | CONST. | |

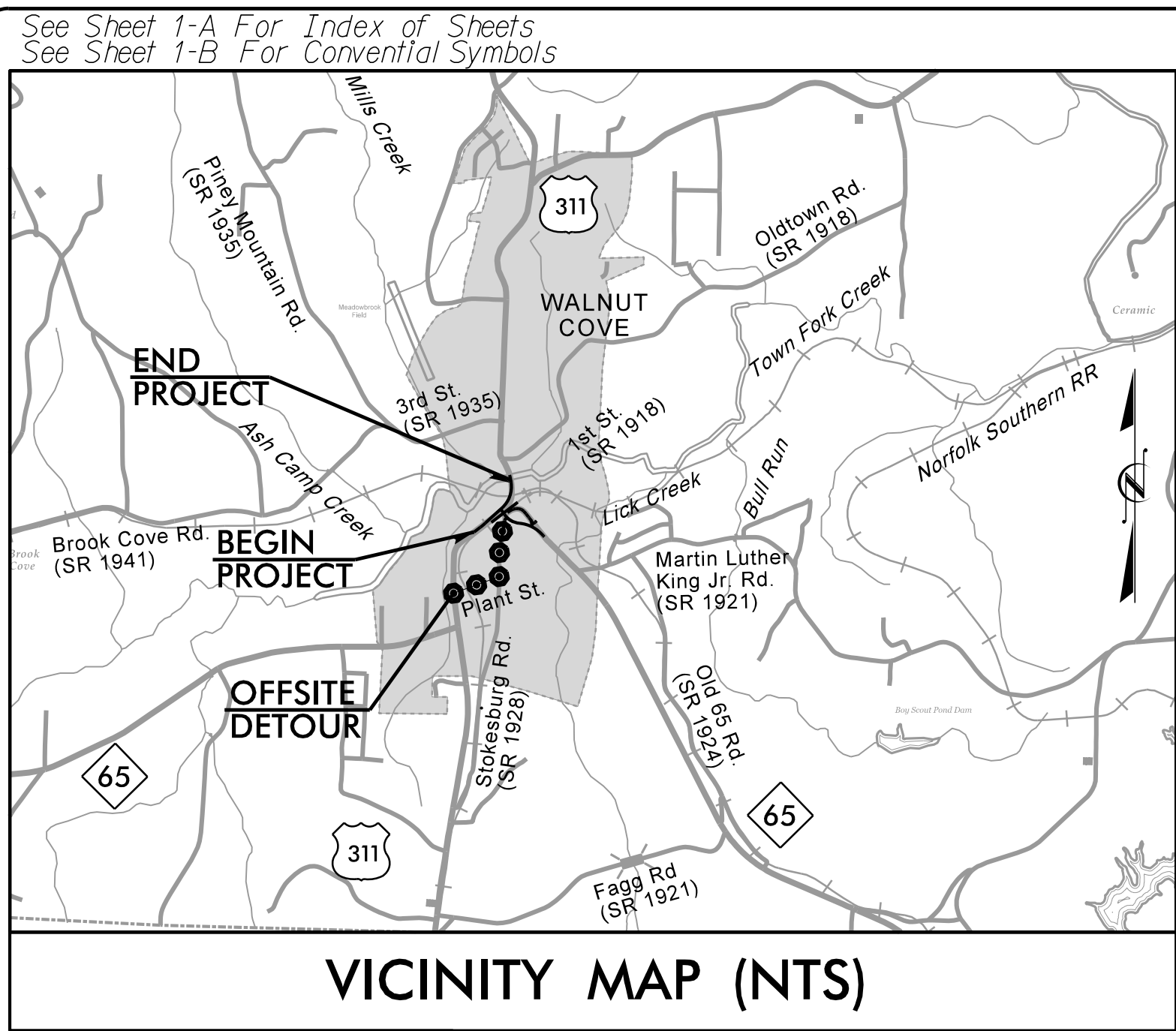


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STOKES COUNTY

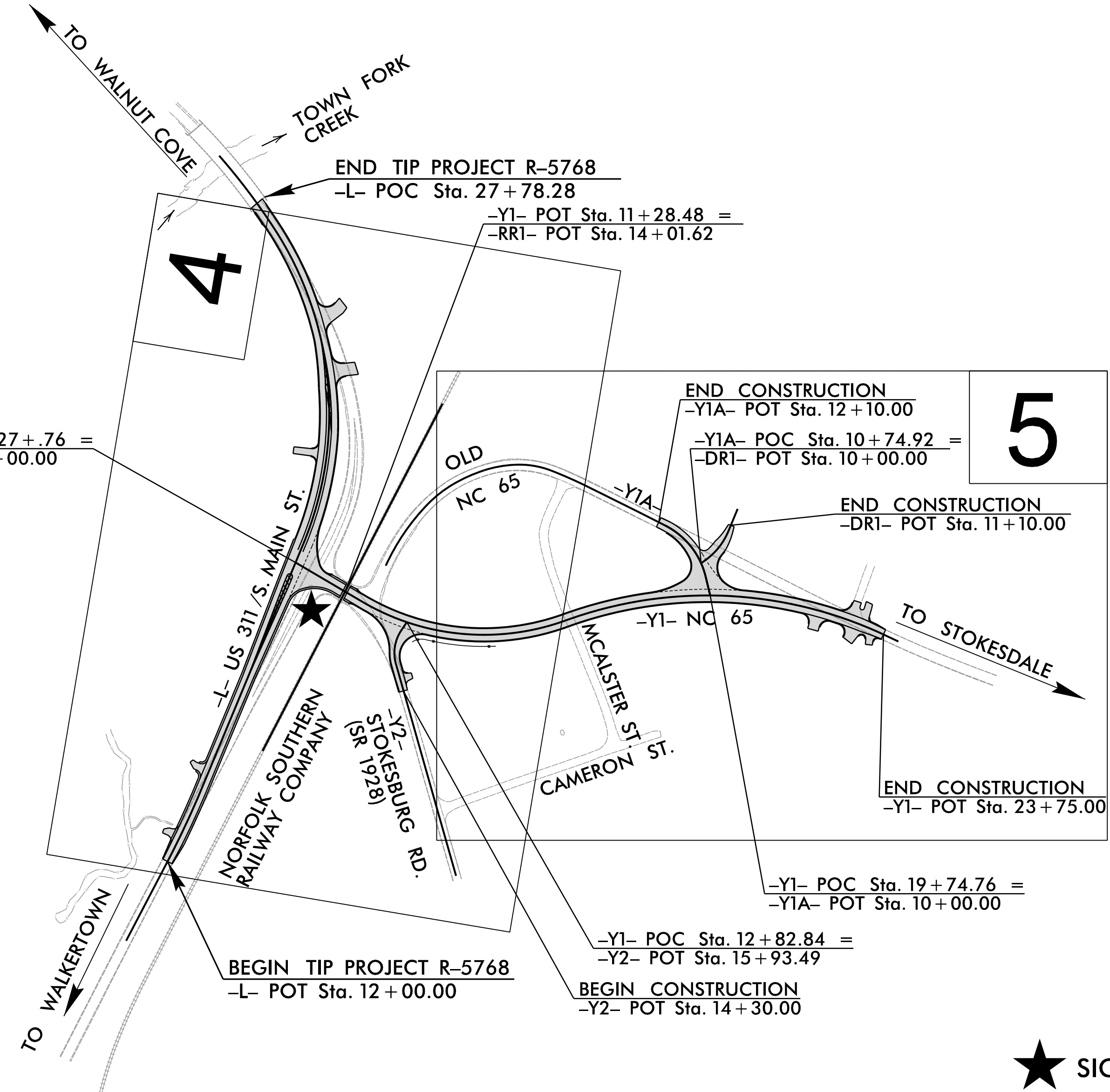
LOCATION: US 311 / NC 65 IN VICINITY OF SR 1928 (STOKESBURG RD.) IN WALNUT COVE

TYPE OF WORK: GRADING, PAVING, DRAINAGE, SIGNALS, & WALLS



VICINITY MAP (NTS)

OFFSITE DETOUR

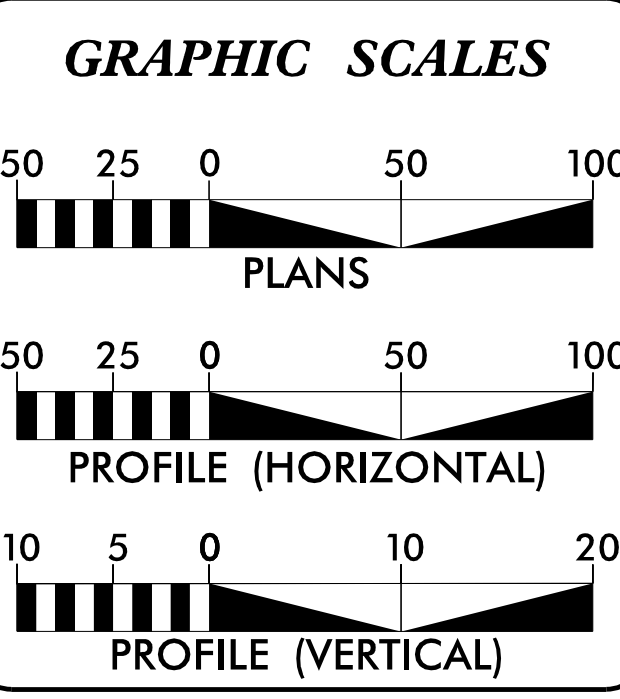


★ SIGNALIZED INTERSECTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TIP PROJECT: R-5768

CONTRACT: C204800



DESIGN DATA

| |
|--------------------------------------|
| ADT 2022 = 13,048 |
| ADT 2042 = 14,300 |
| K = 9% |
| D = 60% |
| T = 5%* |
| V = 40 MPH |
| FUNC CLASS = ARTERIAL STATEWIDE TIER |
| * TTST = 2% + DUALS = 3% |

PROJECT LENGTH

| | |
|--|-------------|
| LENGTH ROADWAY TIP PROJECT R-5768..... | 0.299 mile |
| LENGTH STRUCTURE TIP PROJECT R-5768..... | 0.000 miles |
| TOTAL LENGTH OF PROJECT R-5768..... | 0.299 mile |

PLANS PREPARED BY:

RK&K
RUMMEL KLEPPER & KAHL, LLP
8601 SIX FORKS ROAD, FORUM 1, SUITE 700
RALEIGH, NORTH CAROLINA 27615-3960
NC LICENSE NO. F-0112

FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: January 31, 2019

LETTING DATE: DECEMBER 20, 2022

NCDOT CONTACT: Al Blanton, P.E., PLS
PROJECT ENGINEER - DIVISION 9

HYDRAULICS ENGINEER

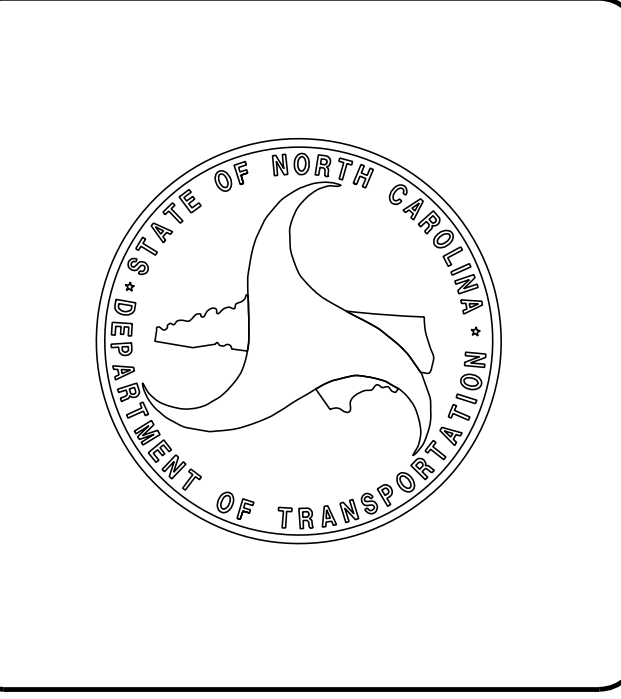
11/7/2022

DocuSigned by:
Courland Hoffman
SIGNATURE: 93469E2FB758480 P.E.

ROADWAY DESIGN ENGINEER

11/7/2022

DocuSigned by:
Scott D. Blevins
SIGNATURE: 479C9C50465E4A1 P.E.



5/14/99
R:\Roadway\Projects\02\01\RDY\5768_Rdy_psh_1a.dgn

INDEX OF SHEETS

| SHEET NUMBER | SHEET | EFF. 01-16-2018 REV. |
|----------------------|---|--|
| 1 | TITLE SHEET | 2018 ROADWAY ENGLISH STANDARD DRAWINGS |
| 1A | INDEX OF SHEETS, GENERAL NOTES, AND 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, 2018 are applicable to this project and by reference hereby are considered a part of these plans: |
| 1B | CONVENTIONAL SYMBOLS | |
| 2A-1 THRU 2A-2 | PAVEMENT SCHEDULE AND TYPICAL SECTIONS | STD.NO. TITLE |
| 2B-1 | ROADWAY DETOUR SHEET | DIVISION 2 - EARTHWORK |
| 2B-2 | TEMP. DRAINAGE DETAIL SHEET | 200.03 Method of Clearing - Method III |
| 2C-1 THRU 2C-3 | ROADWAY DETAILS | 225.02 Guide for Grading Subgrade - Secondary and Local |
| 2D-1 | DITCH DETAIL SHEET | 225.04 Method of Obtaining Superlevation - Two Lane Pavement |
| 3B-1 THRU 3B-3 | ROADWAY SUMMARY SHEETS | 240.01 Guide for Berm Ditch Construction |
| 3D-1 THRU 3D-3 | DRAINAGE SUMMARY SHEETS | DIVISION 3 - PIPE CULVERTS |
| 3G-1 | GEOTECH SUMMARY SHEET | 300.01 Method of Pipe Installation |
| 3P-1 | PARCEL INDEX SHEET | DIVISION 5 - SUBGRADE, BASES AND SHOULDERS |
| 4 THRU 5 | PLAN SHEETS | 560.01 Method of Shoulder Construction - High Side of Superelevated Curve - Method I |
| 6 THRU 7 | PROFILE SHEETS | DIVISION 6 - ASPHALT BASES AND PAVEMENTS |
| RW01 THRU RW05 | RIGHT OF WAY SHEETS | 654.01 Pavement Repairs |
| TMP-1 THRU TMP-9 | TRANSPORTATION MANAGEMENT PLANS | DIVISION 8 - INCIDENTALS |
| PMP-1 THRU PMP-4 | PAVEMENT MARKING PLANS | 806.01 Concrete Right-of-Way Marker |
| EC-1 THRU EC-7 | EROSION CONTROL PLANS | 806.02 Granite Right-of-Way Marker |
| SIGN-1 THRU SIGN-5 | SIGNING PLANS | 815.03 Pipe Underdrain and Blind Drain |
| SIG 1.0 THRU SIG 2.6 | SIGNAL PLANS | 840.00 Concrete Base Pad for Drainage Structures |
| SIG M-1 THRU SIG M-8 | METAL POLE PLANS | 840.01 Brick Catch Basin - 12" thru 54" Pipe |
| UC-1 THRU UC-7 | UTILITY CONSTRUCTION PLANS | 840.02 Concrete Catch Basin - 12" thru 54" Pipe |
| UO-1 THRU UO-3 | UTILITY BY OTHERS PLANS | 840.03 Frame, Grates and Hood - for Use on Standard Catch Basin |
| X-0 | CROSS-SECTION INDEX | 840.17 Concrete Grated Drop Inlet Type 'A' - 12" thru 72" Pipe |
| X-1A | CROSS SECTION SUMMARY | 840.18 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe |
| X-1 THRU X-18 | CROSS-SECTIONS | 840.19 Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe |
| W-1 THRU W-2 | WALL PLANS | 840.24 Frames and Narrow Slot Sag Grates |

2018 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, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

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

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

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

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

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

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

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

UNDERDRAINS:
UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.

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

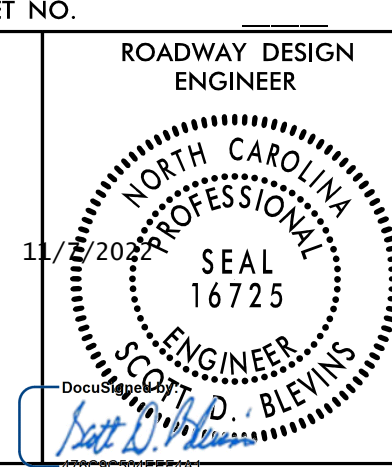
STREET TURNOUT:
STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADIUS NOTED ON PLANS.

GUARDRAIL:
THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

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

UTILITIES:
UTILITY OWNERS ON THIS PROJECT ARE DUKE ENERGY, CENTURYLINK, CHARTER COMMUNICATIONS, PIEDMONT NATURAL GAS (DUKE ENERGY), WALNUT COVE PUBLIC WORKS WATER/SEWER, SPRINT, WILKES TMC

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

| | |
|---|-----------------|
| PROJECT REFERENCE NO. R-5768 | SHEET NO. 1A |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | |
|  | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

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

Note: Not to Scale

BOUNDARIES AND PROPERTY:

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

BUILDINGS AND OTHER CULTURE:

| | |
|-------------------------------|---|
| Gas Pump Vent or U/G Tank Cap | ○ |
| Sign | ○ |
| Well | ○ |
| Small Mine | × |
| Foundation | □ |
| Area Outline | □ |
| Cemetery | □ |
| Building | □ |
| School | □ |
| Church | □ |
| Dam | □ |

HYDROLOGY:

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

RAILROADS:

| | |
|--------------------|-------|
| Standard Gauge | ----- |
| RR Signal Milepost | ○ |
| Switch | □ |
| RR Abandoned | ----- |
| RR Dismantled | ----- |

RIGHT OF WAY & PROJECT CONTROL:

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

ROADS AND RELATED FEATURES:

| | |
|----------------------------|-------|
| Existing Edge of Pavement | ----- |
| Existing Curb | ----- |
| Proposed Slope Stakes Cut | -C- |
| Proposed Slope Stakes Fill | -F- |
| Proposed Curb Ramp | ○ |
| Existing Metal Guardrail | ----- |
| Proposed Guardrail | ----- |
| Existing Cable Guiderail | ----- |
| Proposed Cable Guiderail | ----- |
| Equality Symbol | ⊕ |
| Pavement Removal | ⊠ |
| VEGETATION: | |
| Single Tree | ○ |
| Single Shrub | ○ |
| Hedge | ----- |

| | |
|------------|-------|
| Woods Line | ----- |
| Orchard | ----- |
| Vineyard | ----- |

EXISTING STRUCTURES:

| | |
|--|-------|
| MAJOR: | |
| Bridge, Tunnel or Box Culvert | ----- |
| Bridge Wing Wall, Head Wall and End Wall | ----- |
| MINOR: | |
| Head and End Wall | ----- |
| Pipe Culvert | ----- |
| Footbridge | ----- |
| Drainage Box: Catch Basin, DI or JB | ----- |
| Paved Ditch Gutter | ----- |
| Storm Sewer Manhole | ○ |
| Storm Sewer | ----- |

UTILITIES:

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

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

TELEPHONE:

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

WATER:

| | |
|---|-------|
| Water Manhole | ○ |
| Water Meter | ○ |
| Water Valve | ⊗ |
| Water Hydrant | ⊕ |
| U/G Water Line Test Hole (SUE - LOS A)* | ○ |
| U/G Water Line (SUE - LOS B)* | ----- |
| U/G Water Line (SUE - LOS C)* | ----- |
| U/G Water Line (SUE - LOS D)* | ----- |
| Above Ground Water Line | ----- |
| TV: | |
| TV Pedestal | ⊠ |
| TV Tower | ⊗ |
| U/G TV Cable Hand Hole | ○ |
| U/G TV Test Hole (SUE - LOS A)* | ○ |
| U/G TV Cable (SUE - LOS B)* | ----- |
| U/G TV Cable (SUE - LOS C)* | ----- |
| U/G TV Cable (SUE - LOS D)* | ----- |
| U/G Fiber Optic Cable (SUE - LOS B)* | ----- |
| U/G Fiber Optic Cable (SUE - LOS C)* | ----- |
| U/G Fiber Optic Cable (SUE - LOS D)* | ----- |

GAS:

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

SANITARY SEWER:

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

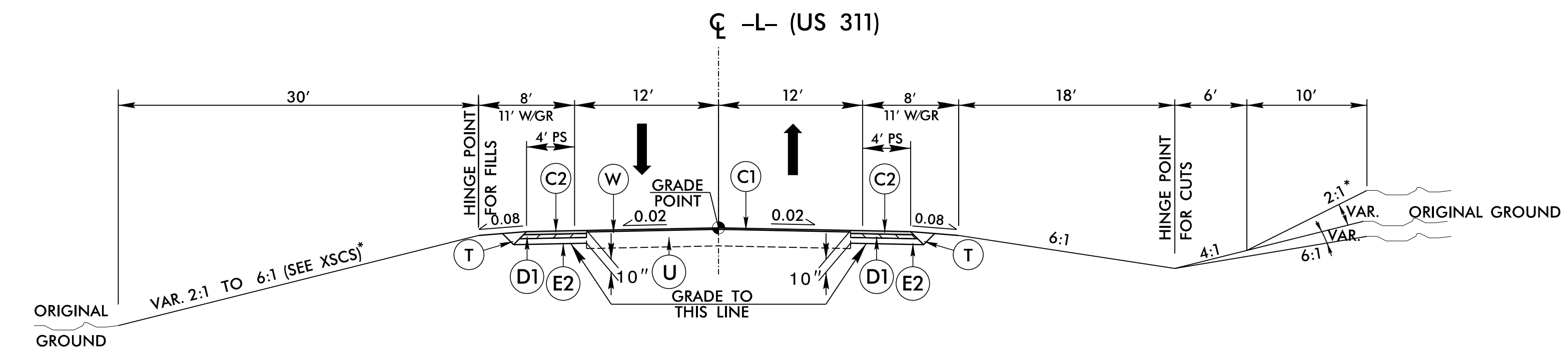
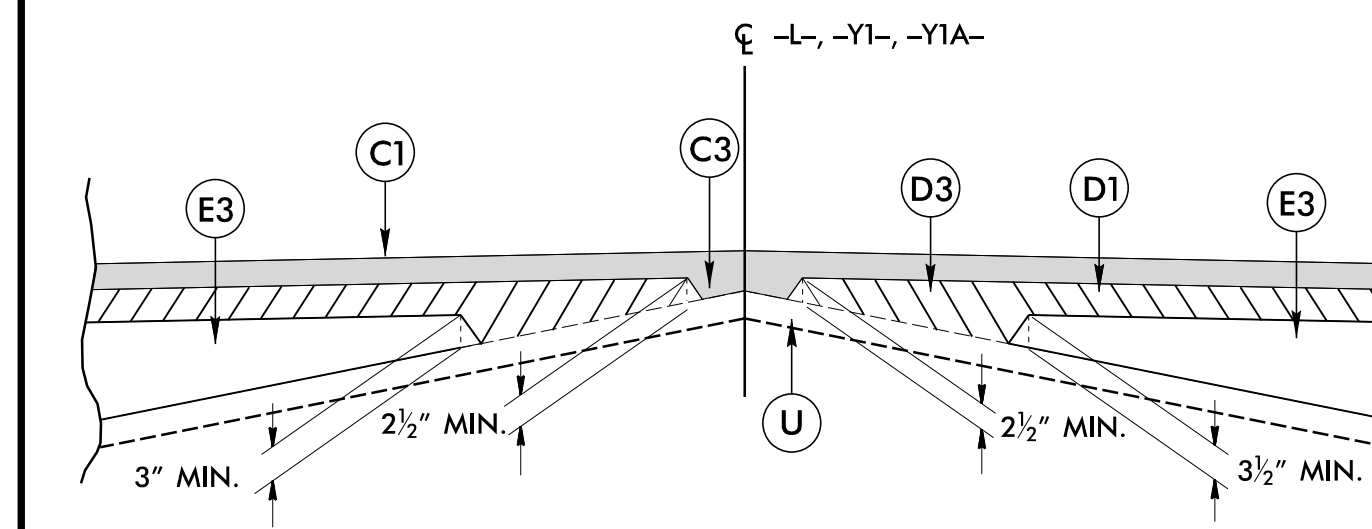
MISCELLANEOUS:

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

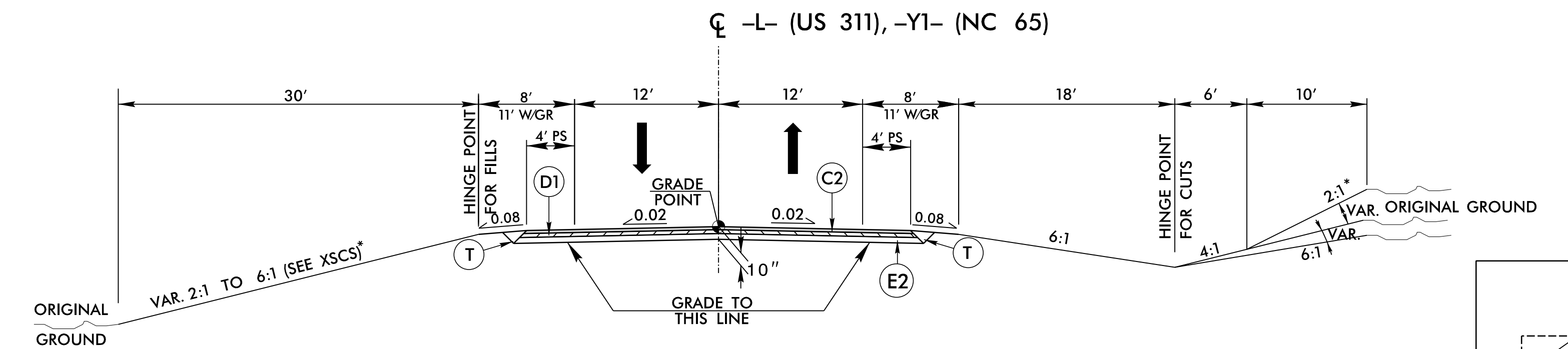
FINAL PAVEMENT SCHEDULE

| | |
|----|--|
| C1 | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. |
| C2 | 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. |
| C3 | 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 1.5" IN DEPTH. |
| D1 | PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD. |
| D2 | PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. |
| D3 | PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2.5" IN DEPTH OR GREATER THAN 4" IN DEPTH. |
| E1 | PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. |
| E2 | PROP. APPROX. 4.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 513 LBS. PER SQ. YD. |
| E3 | PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5.5" IN DEPTH. |
| J1 | PROP. 8" AGGREGATE BASE COURSE |
| R1 | 2'-6" CONCRETE CURB AND GUTTER |
| R2 | SHOULDER BERM GUTTER |
| T | EARTH MATERIAL. |
| U | EXISTING PAVEMENT. |
| W | VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAILS). |

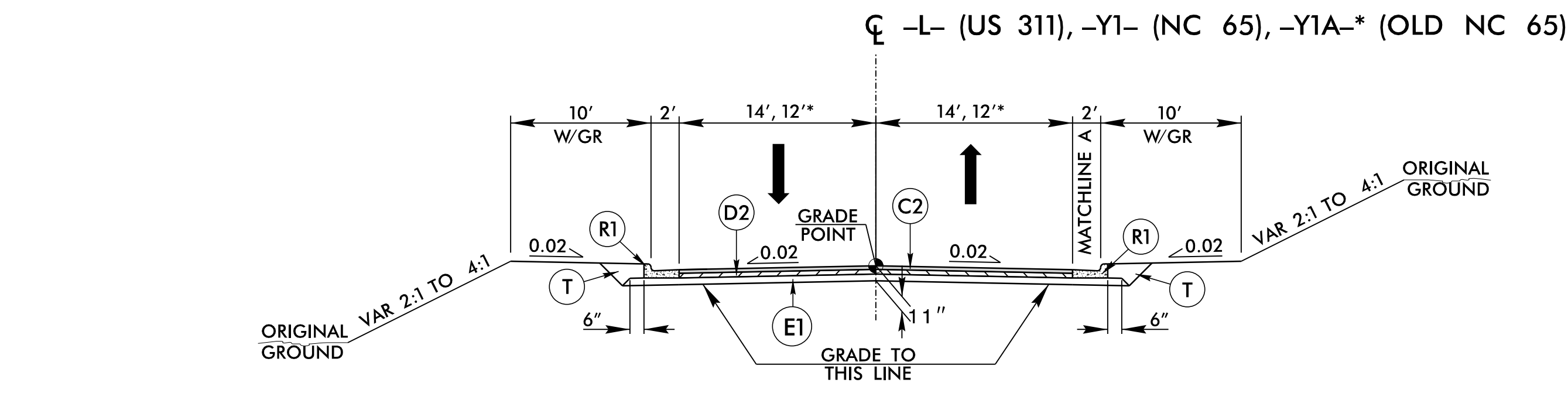
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE. SEE PLANS FOR LOCATIONS OF TURN LANES AND TAPERS.



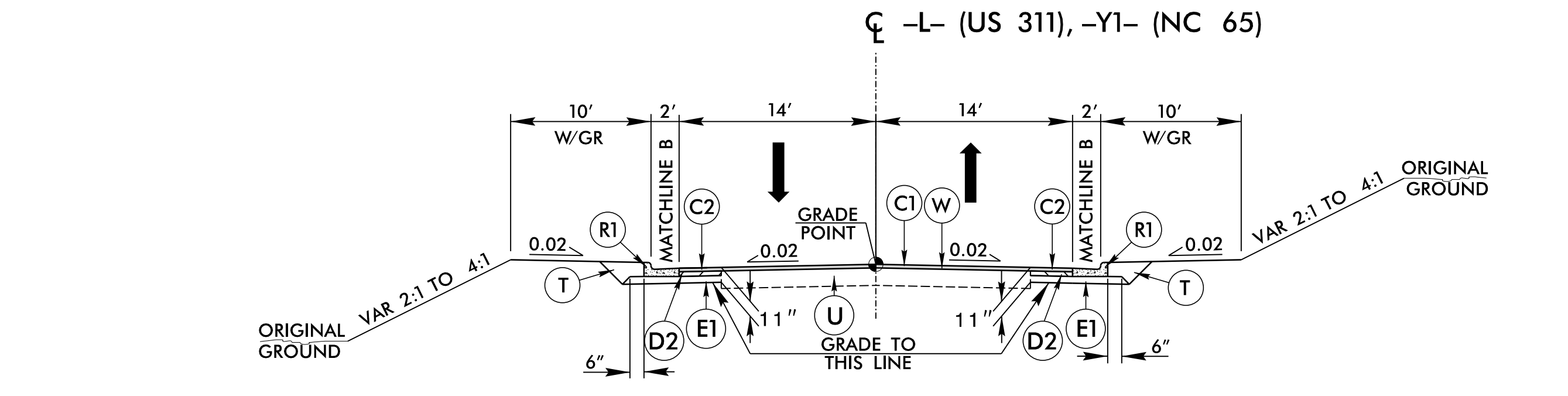
TYPICAL SECTION NO. 1
-L- STA. 12+00.00 TO 15+77.92



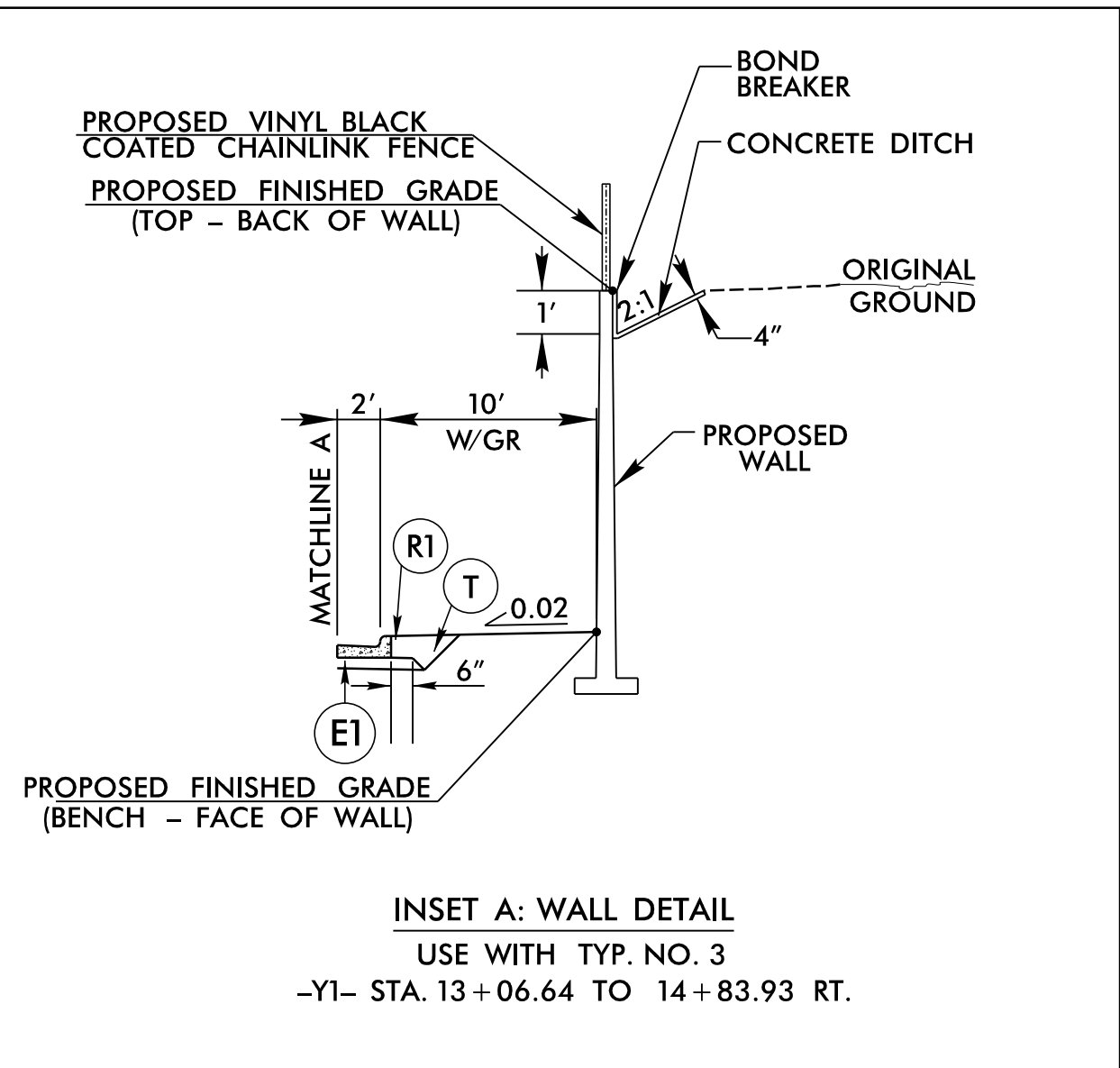
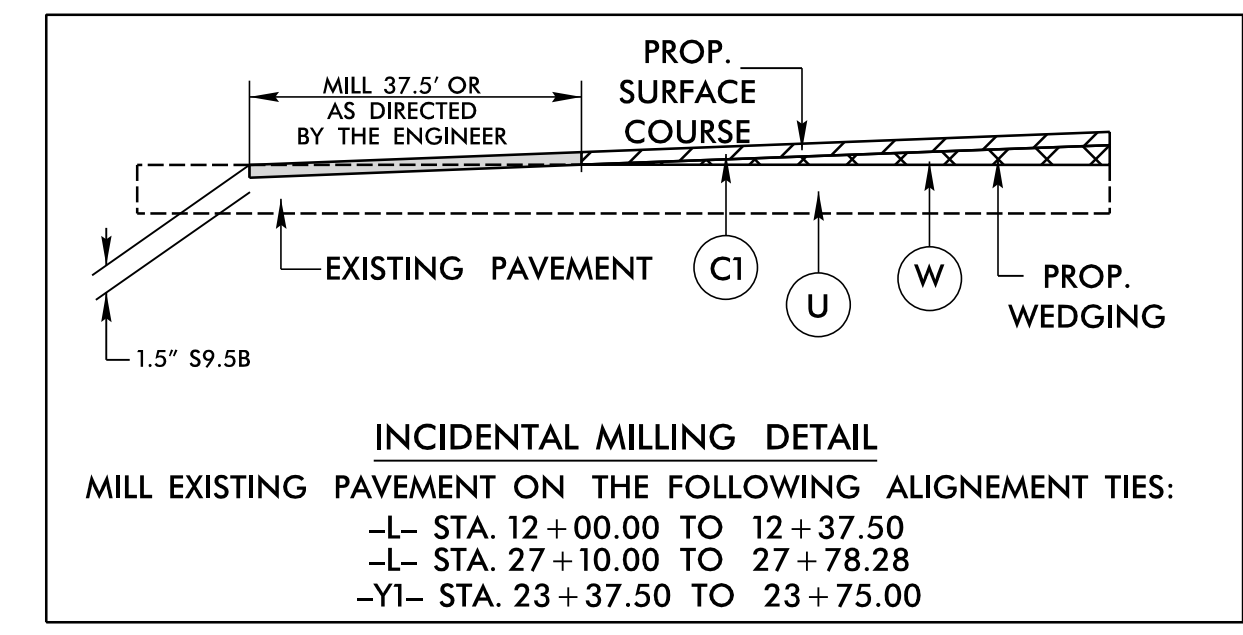
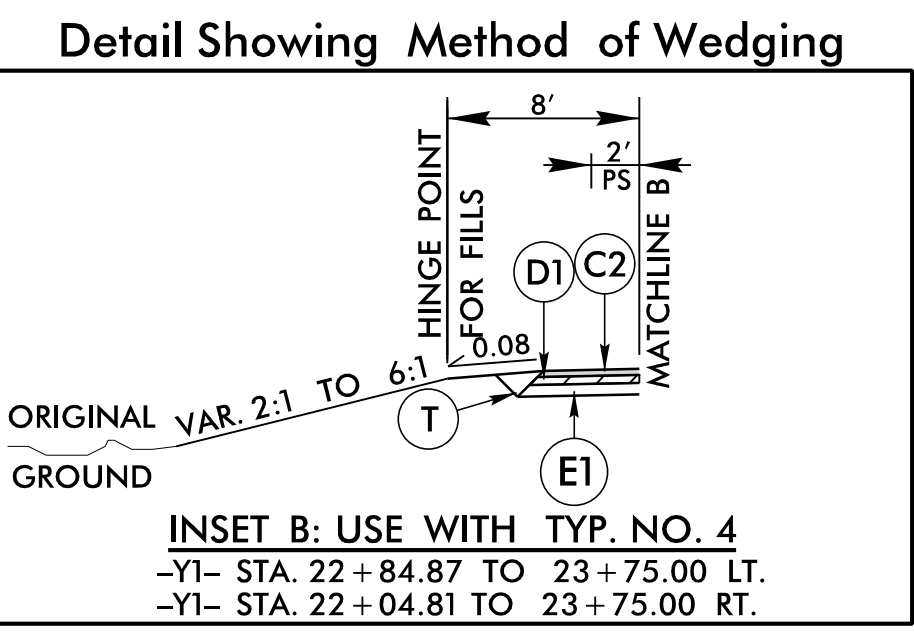
TYPICAL SECTION NO. 2
-L- STA. 15+77.92 TO 19+75.00
-Y1- STA. 10+85.03 TO 11+25.98
-Y1- STA. 11+30.98 TO 11+48.00



TYPICAL SECTION NO. 3
-L- STA. 19+75.00 TO 24+22.92
-Y1- STA. 11+48.00 TO 21+75.00
-Y1A- STA. 10+14.41 TO 11+06.07

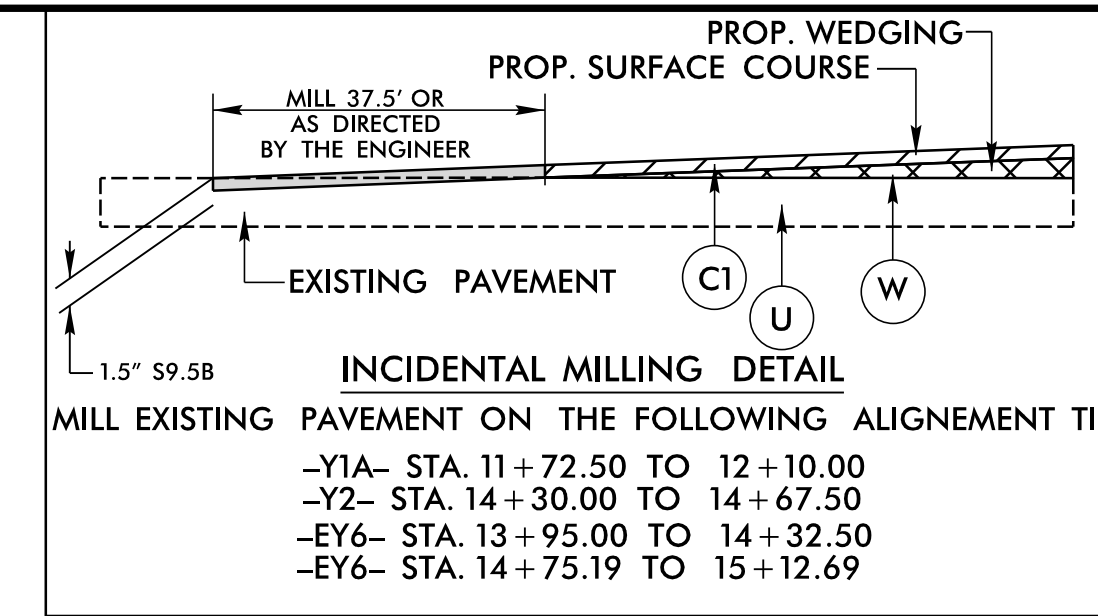
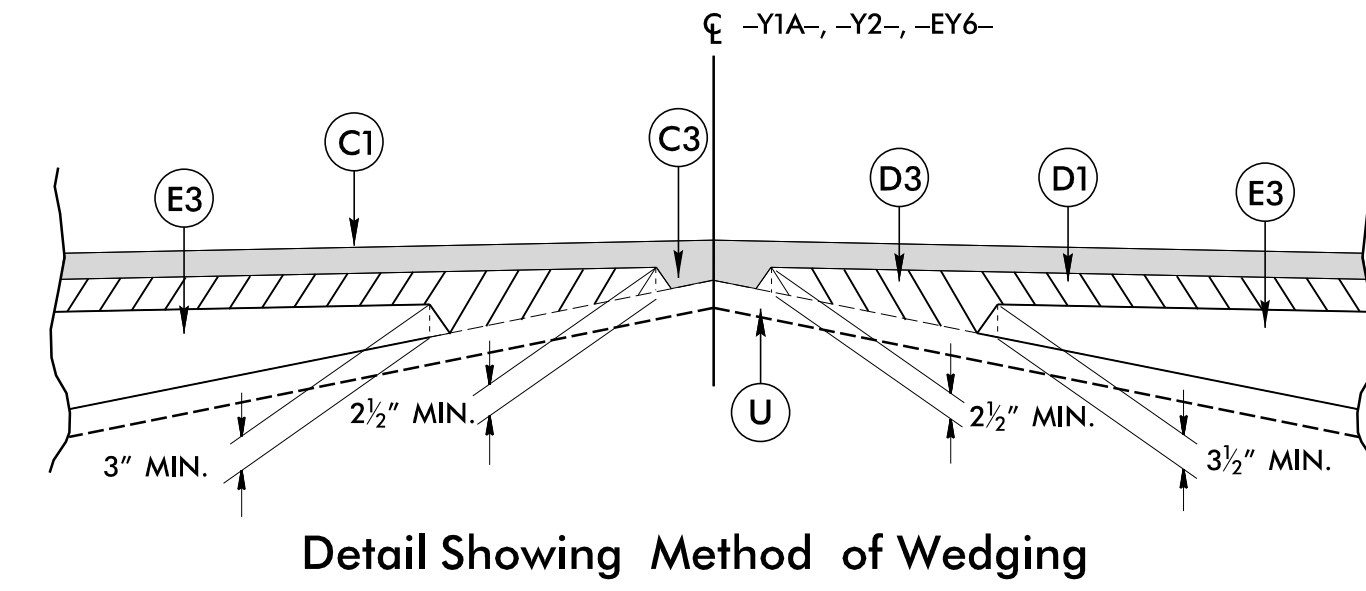
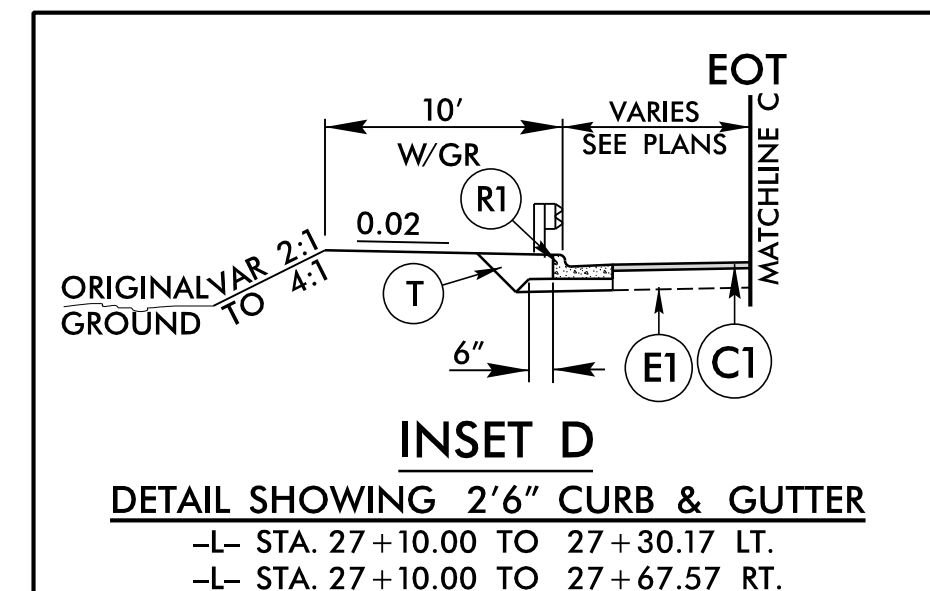
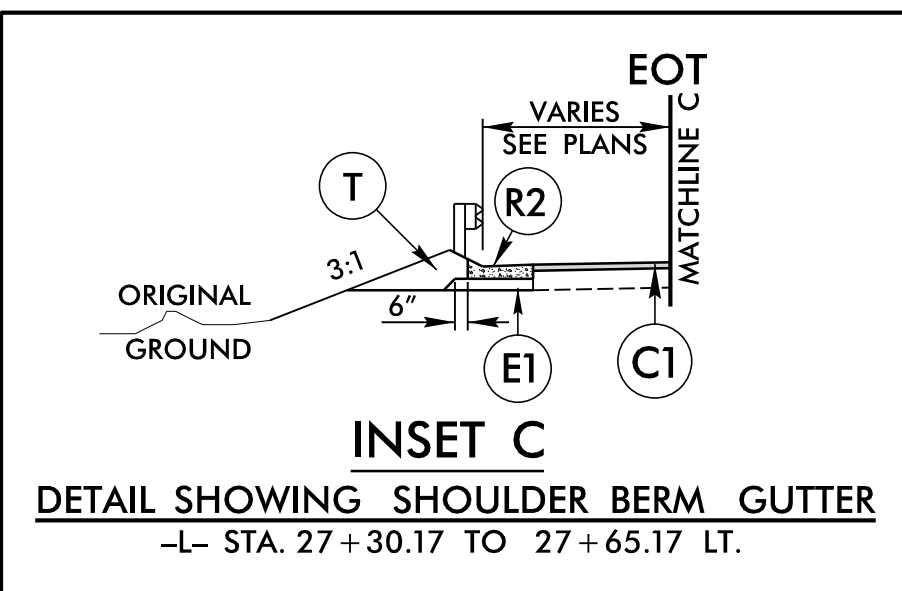


TYPICAL SECTION NO. 4
-L- STA. 24+22.92 TO 27+10.00
-Y1- STA. 21+75.00 TO 23+75.00

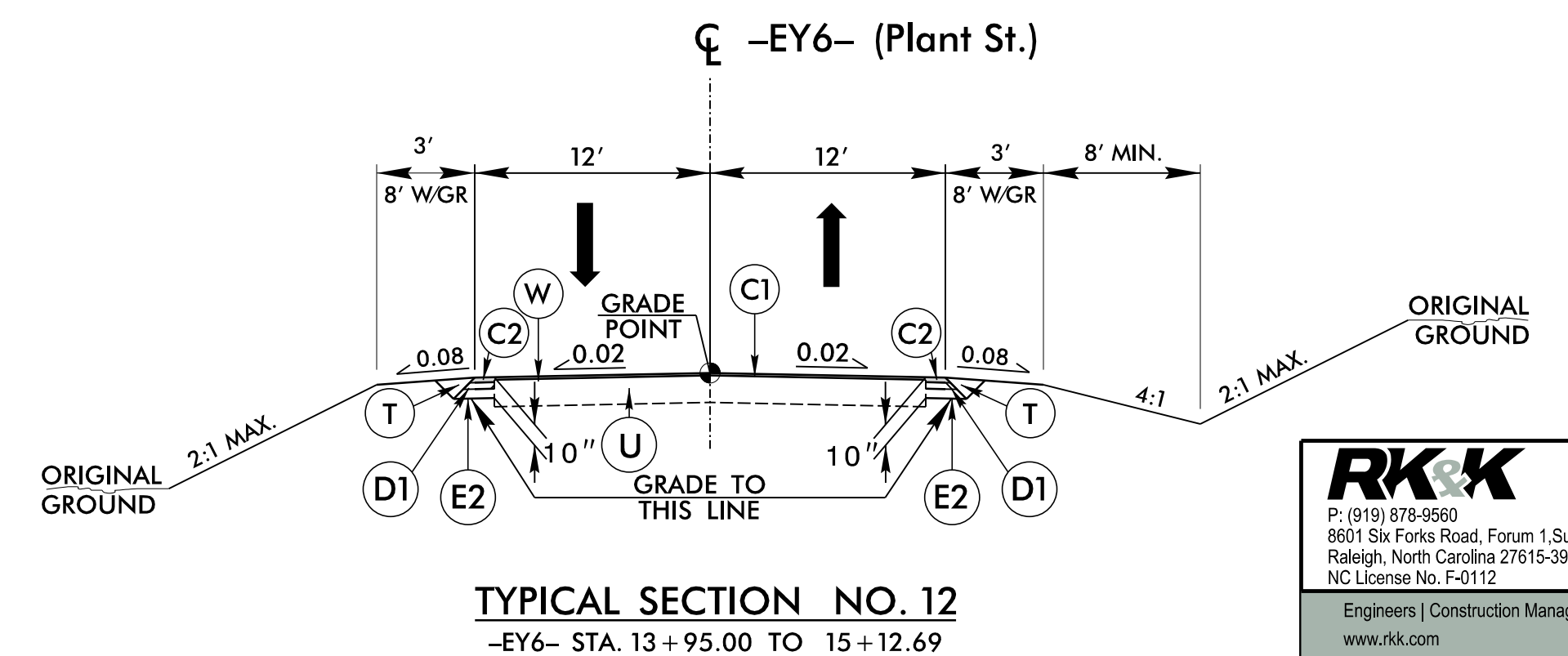
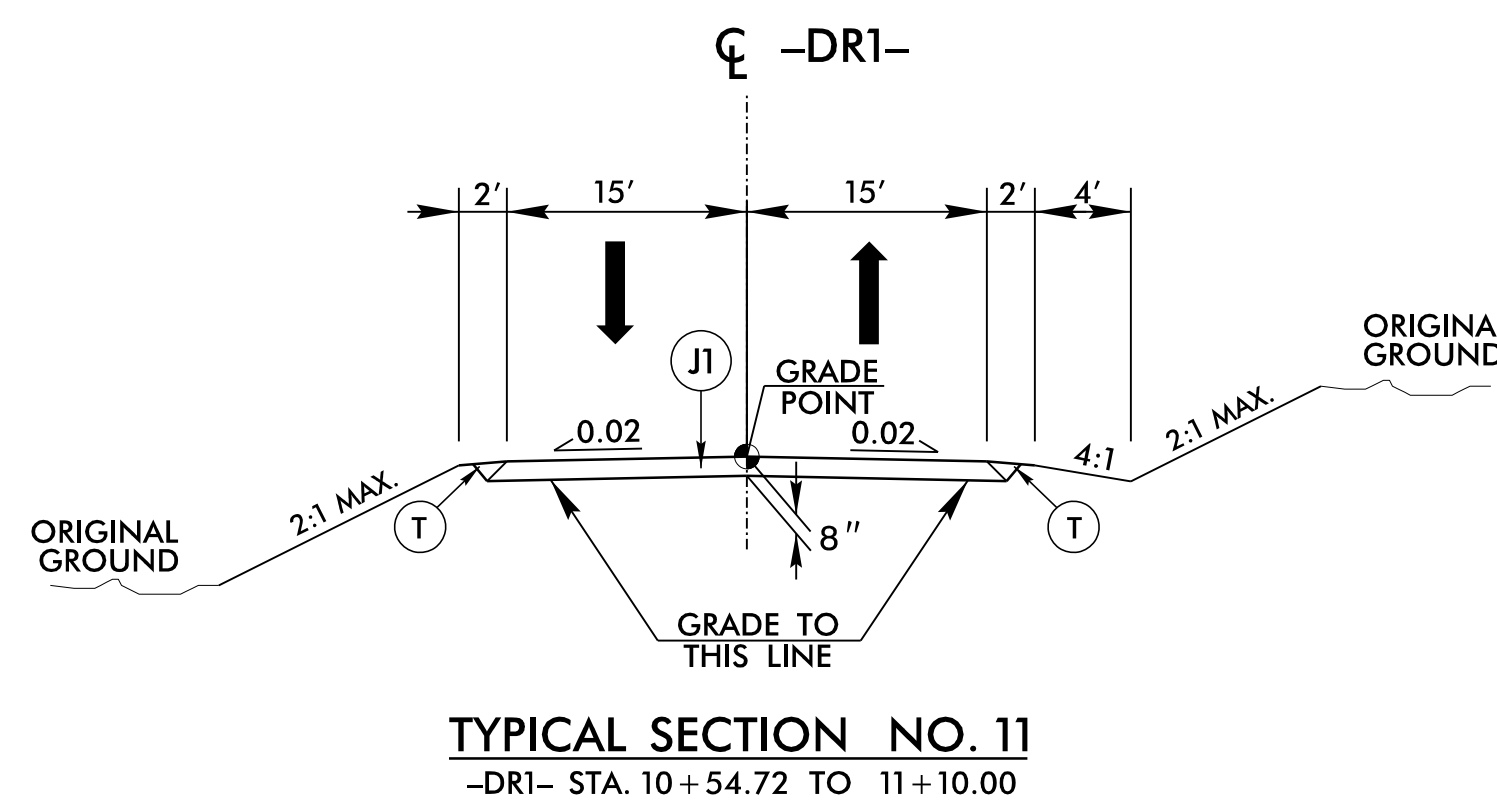
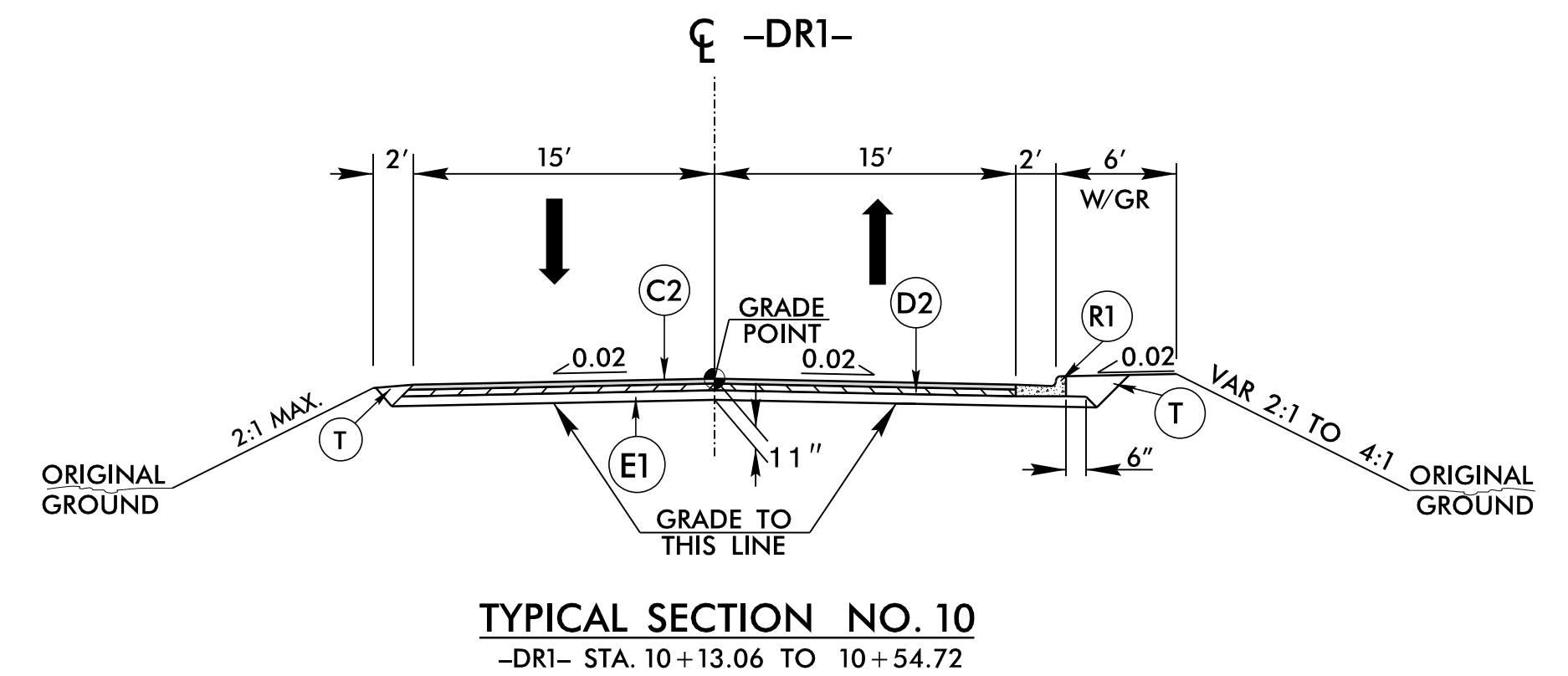
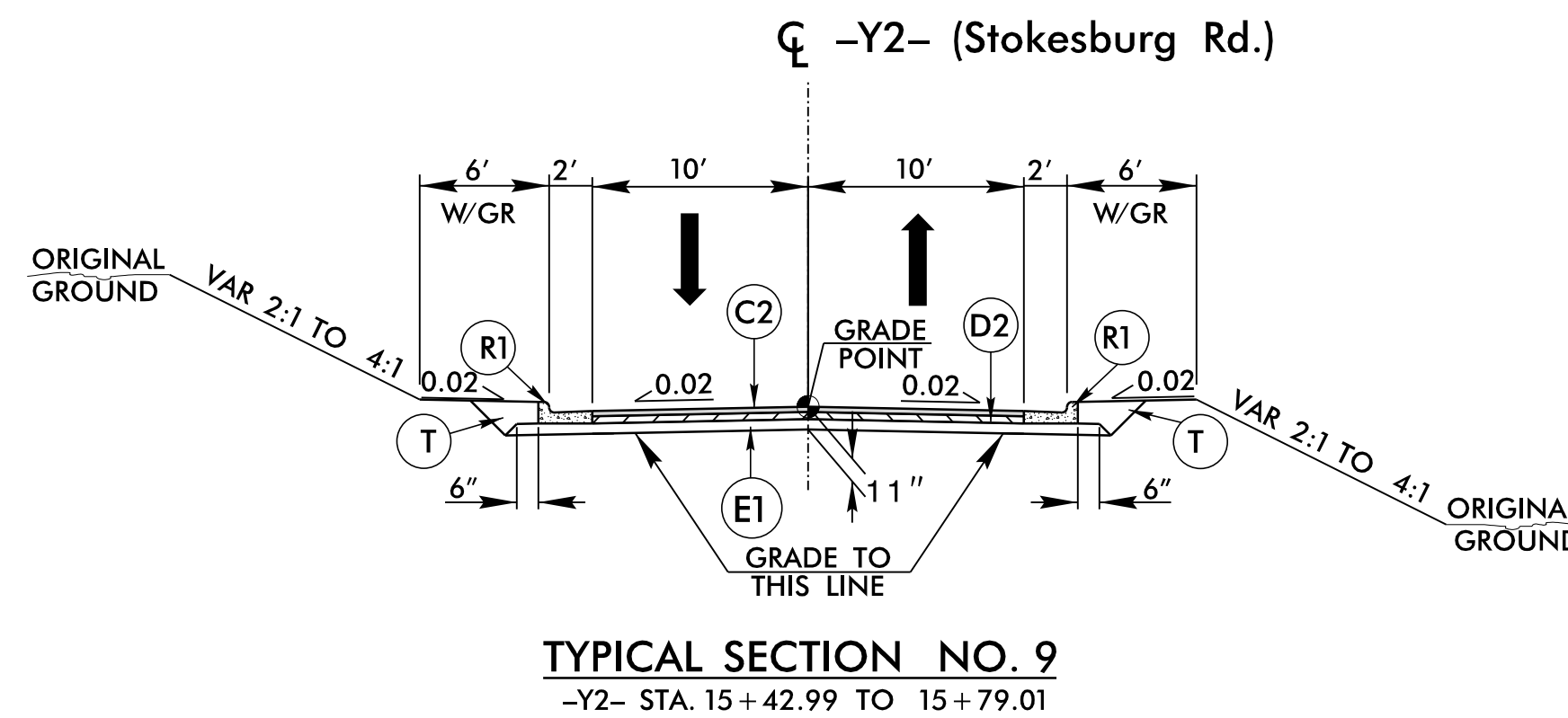
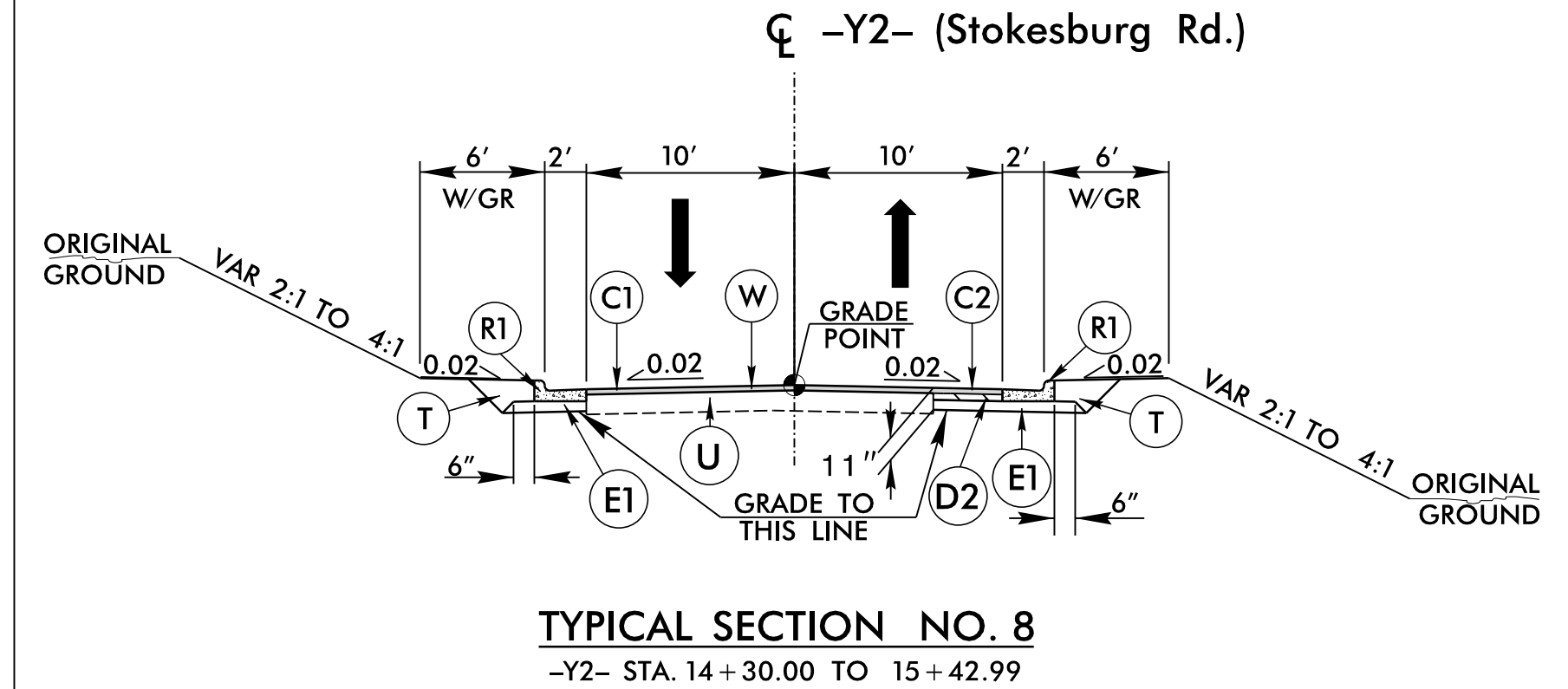
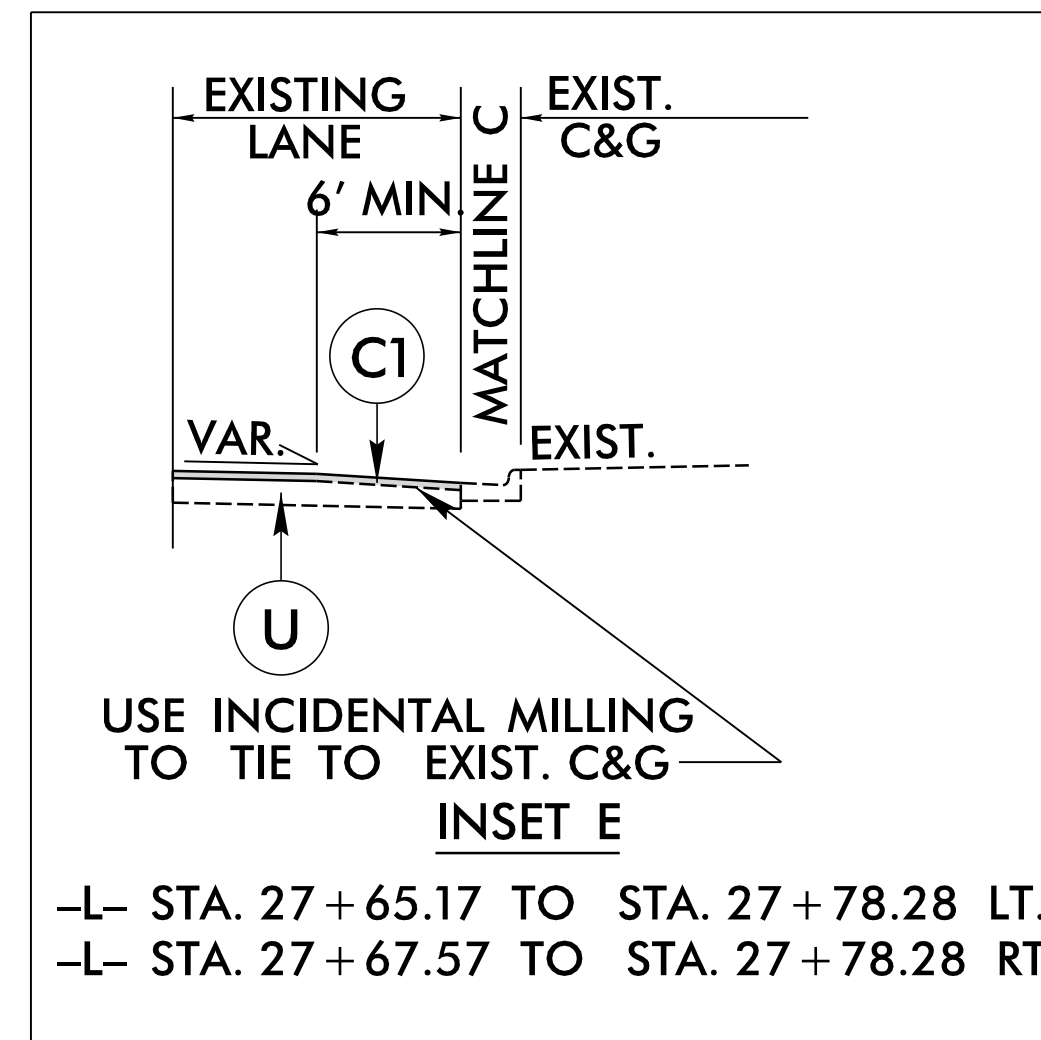
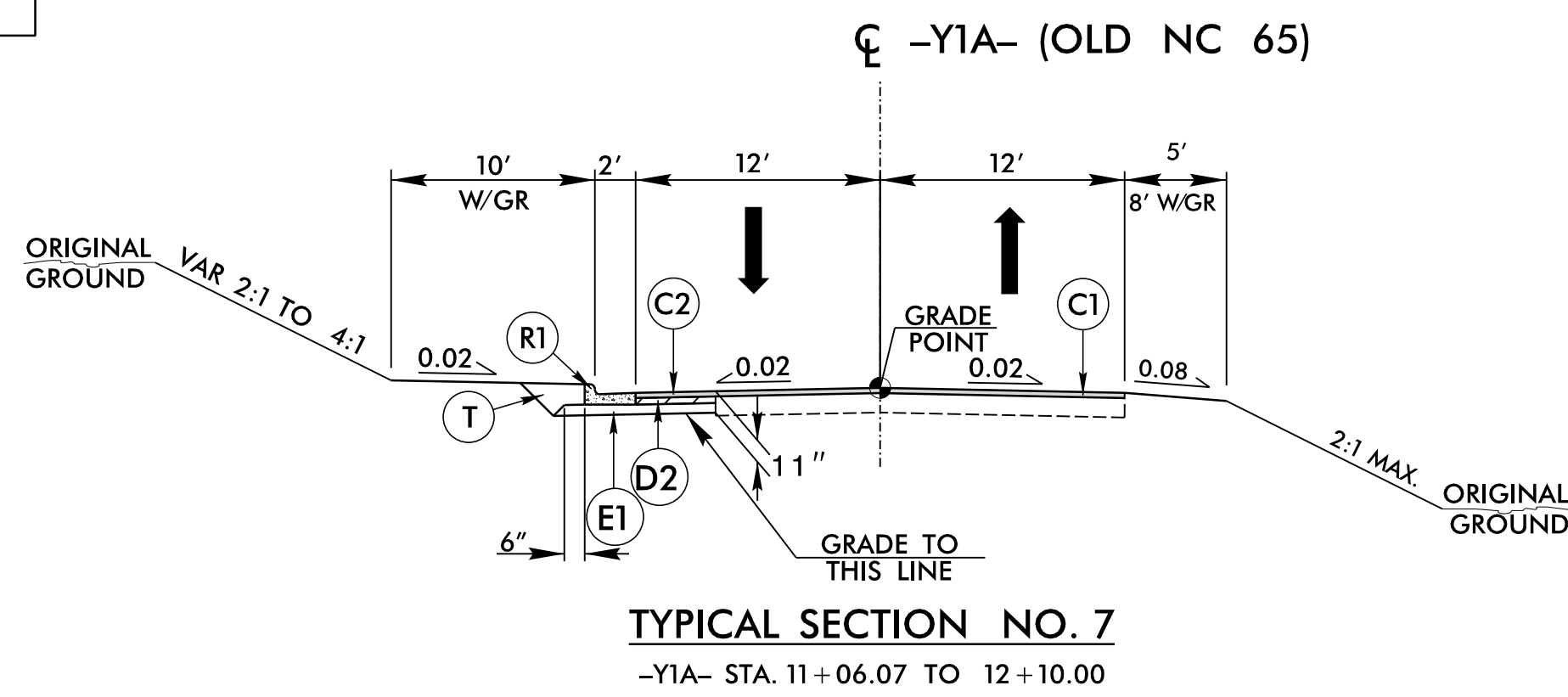
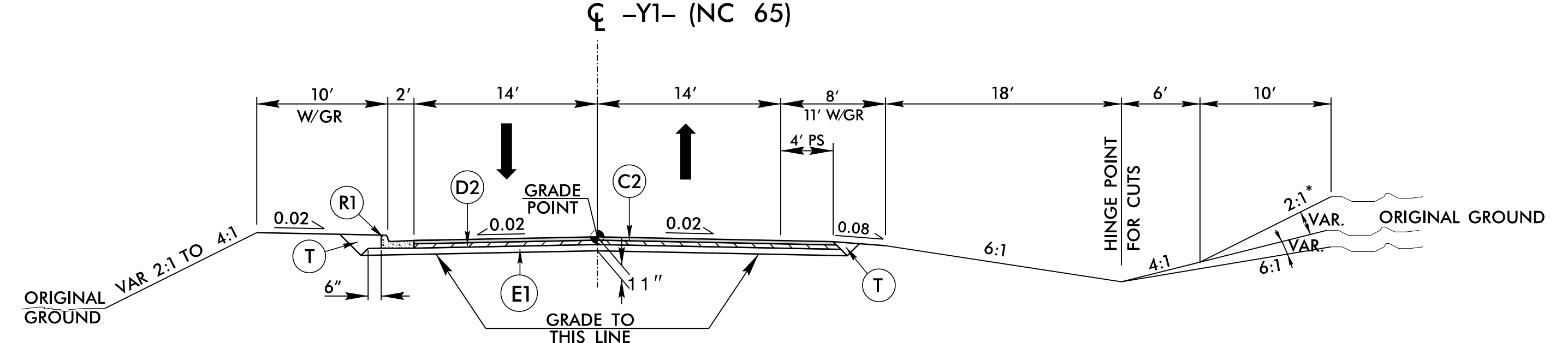
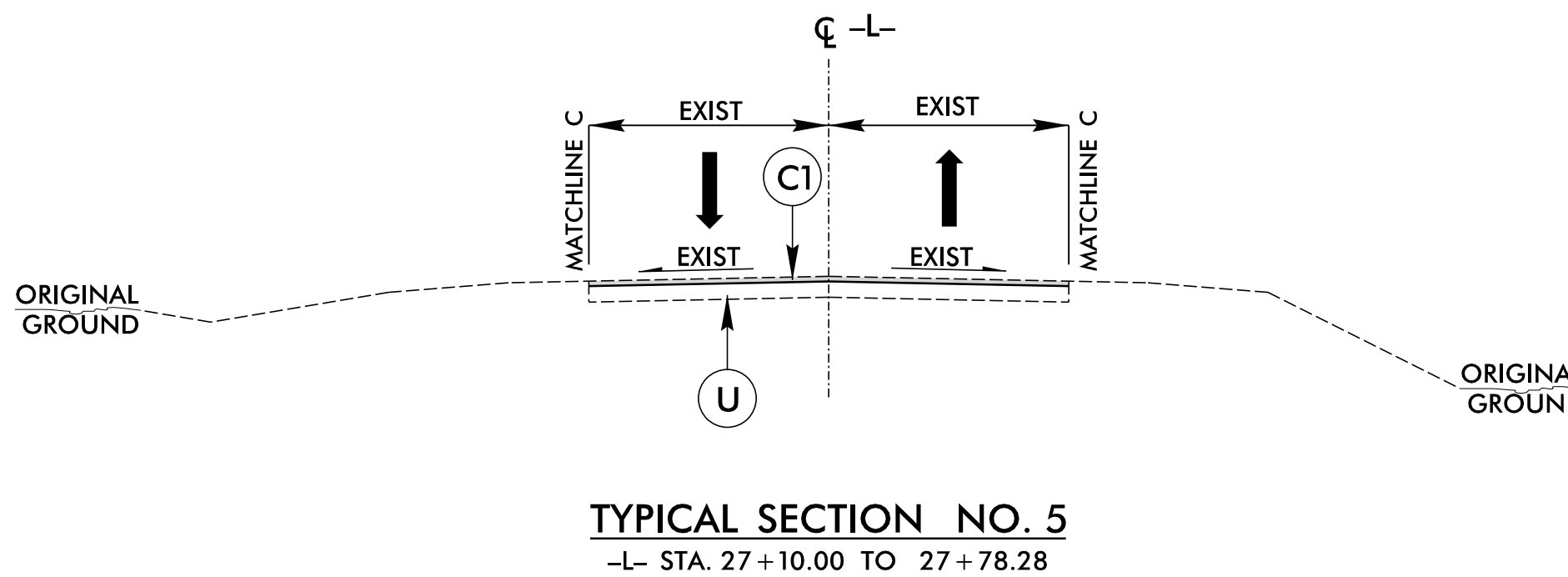


| | |
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| PROJECT REFERENCE NO. R-5768 | SHEET NO. 2A-1 |
| ROADWAY DESIGN ENGINEER SEAL 16725 D. BLEVINS | PAVEMENT DESIGN ENGINEER SEAL 25499 WILLIAM H. BLANTON |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

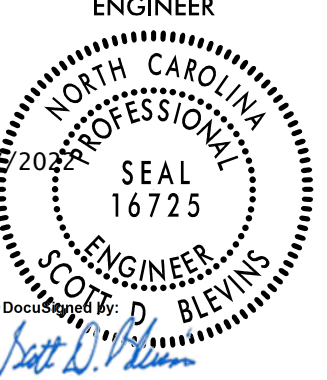
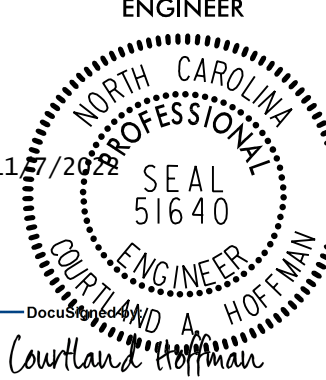
| FINAL PAVEMENT SCHEDULE | |
|-------------------------|----------------------|
| C1 | 1.5" TYPE S9.5B |
| C2 | 3" TYPE S9.5B |
| C3 | VAR. TYPE S9.5B |
| D1 | 2.5" TYPE I19.0C |
| D2 | 4" TYPE I19.0C |
| D3 | VAR. TYPE I19.0C |
| E1 | 4" TYPE B25.0C |
| E2 | 4.5" TYPE B25.0C |
| E3 | VAR. TYPE B25.0C |
| J1 | 8" ABC |
| R1 | 2'-6" C&G |
| R2 | SHOULDER BERM GUTTER |
| T | EARTH MATERIAL |
| U | EXISTING PAVEMENT |
| W | WEDGING |

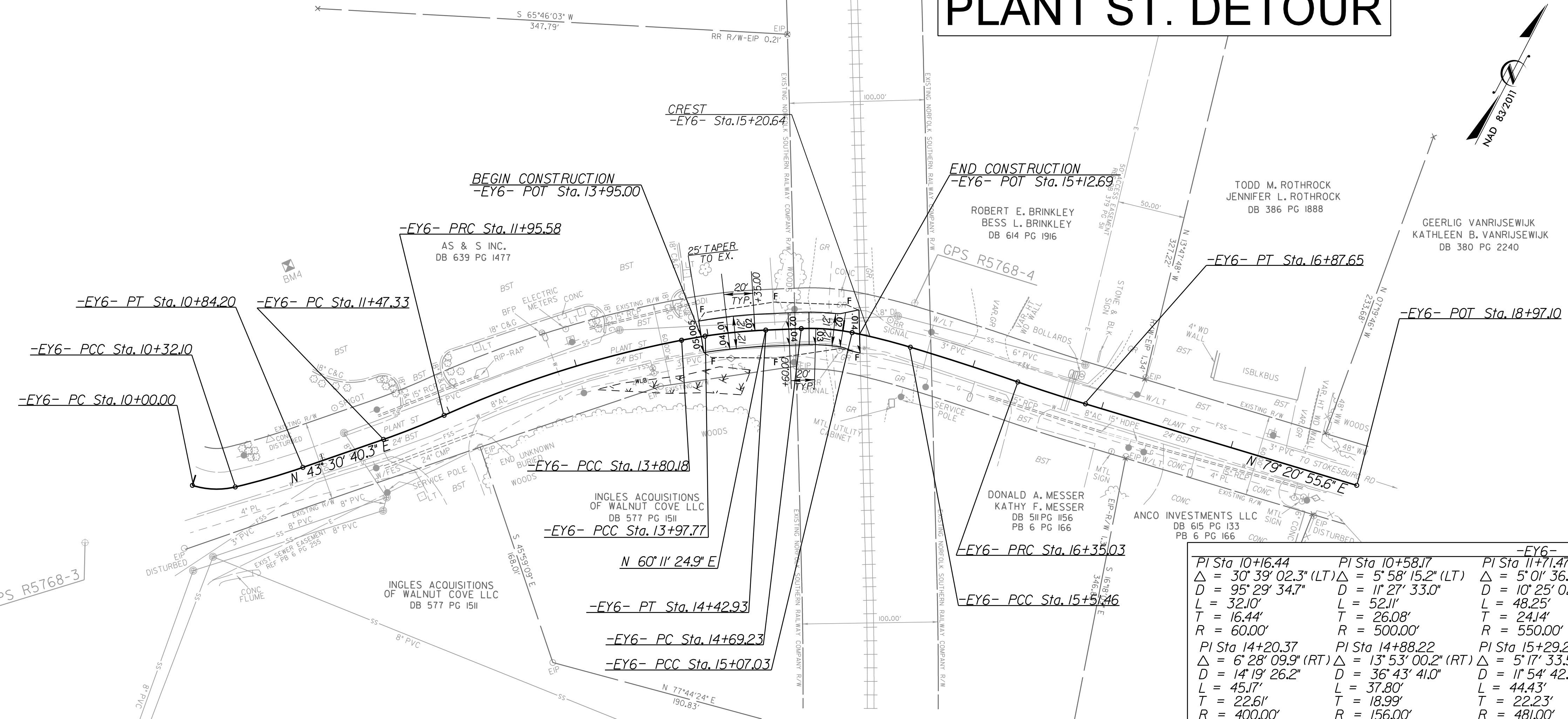


| | |
|--|------------------------------|
| PROJECT REFERENCE NO. R-5768 | SHEET NO. 2A-2 |
| ROADWAY DESIGN ENGINEER | PAVEMENT DESIGN ENGINEER |
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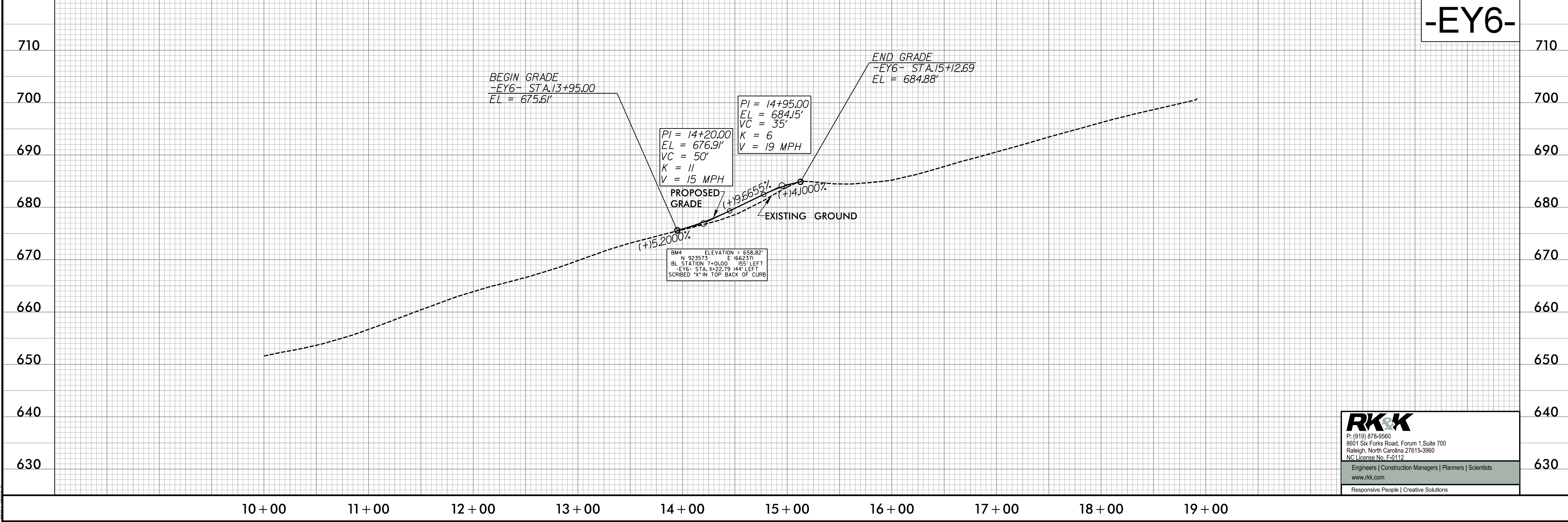



PLANT ST. DETOUR

| | |
|--|--|
| PROJECT REFERENCE NO. R-5768 | SHEET NO. 2B-1 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER  | HYDRAULICS ENGINEER  |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |



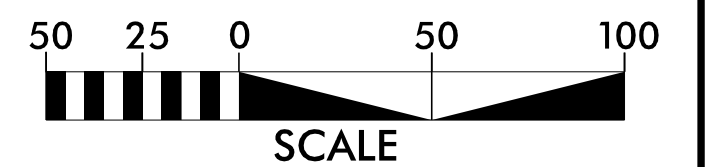
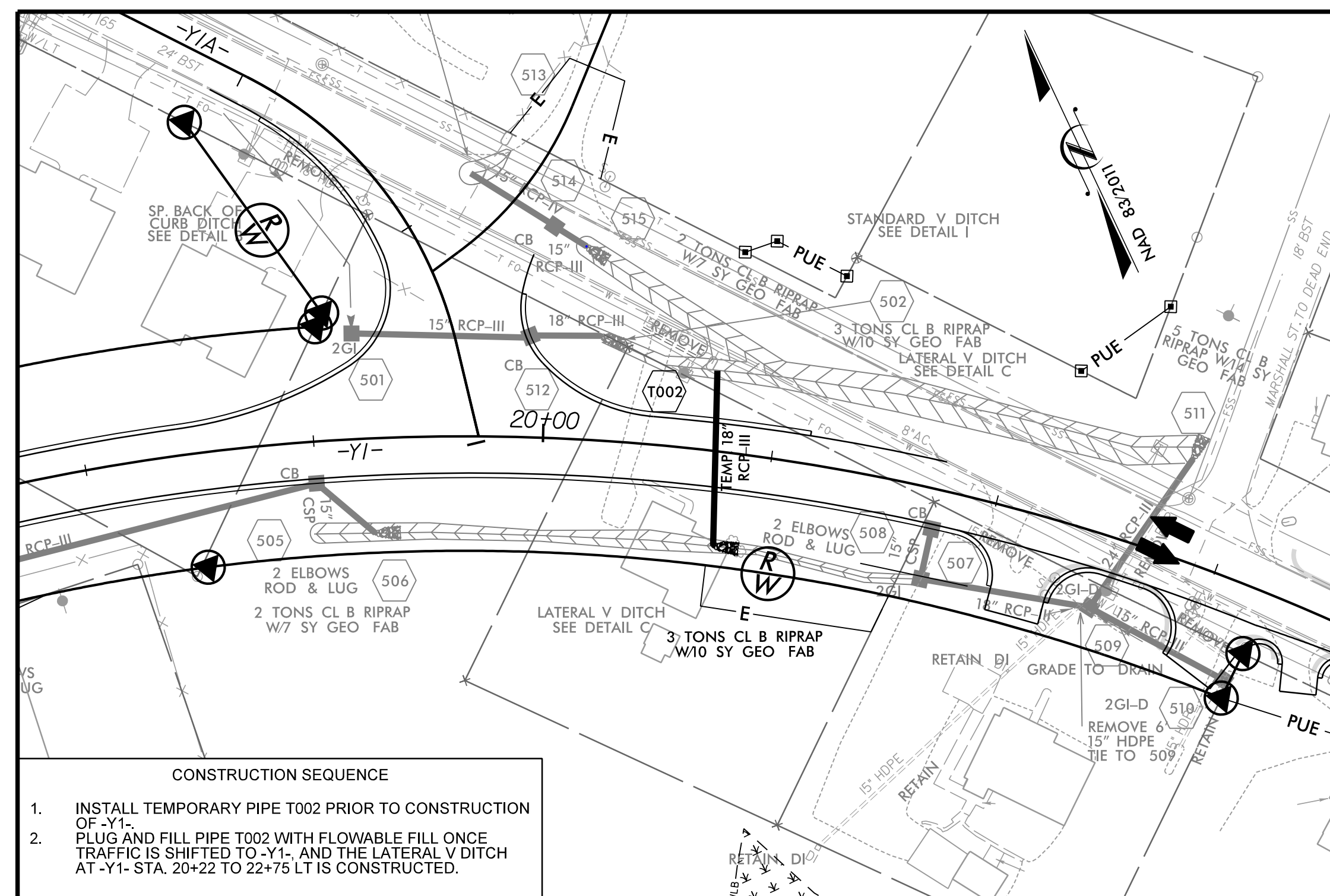
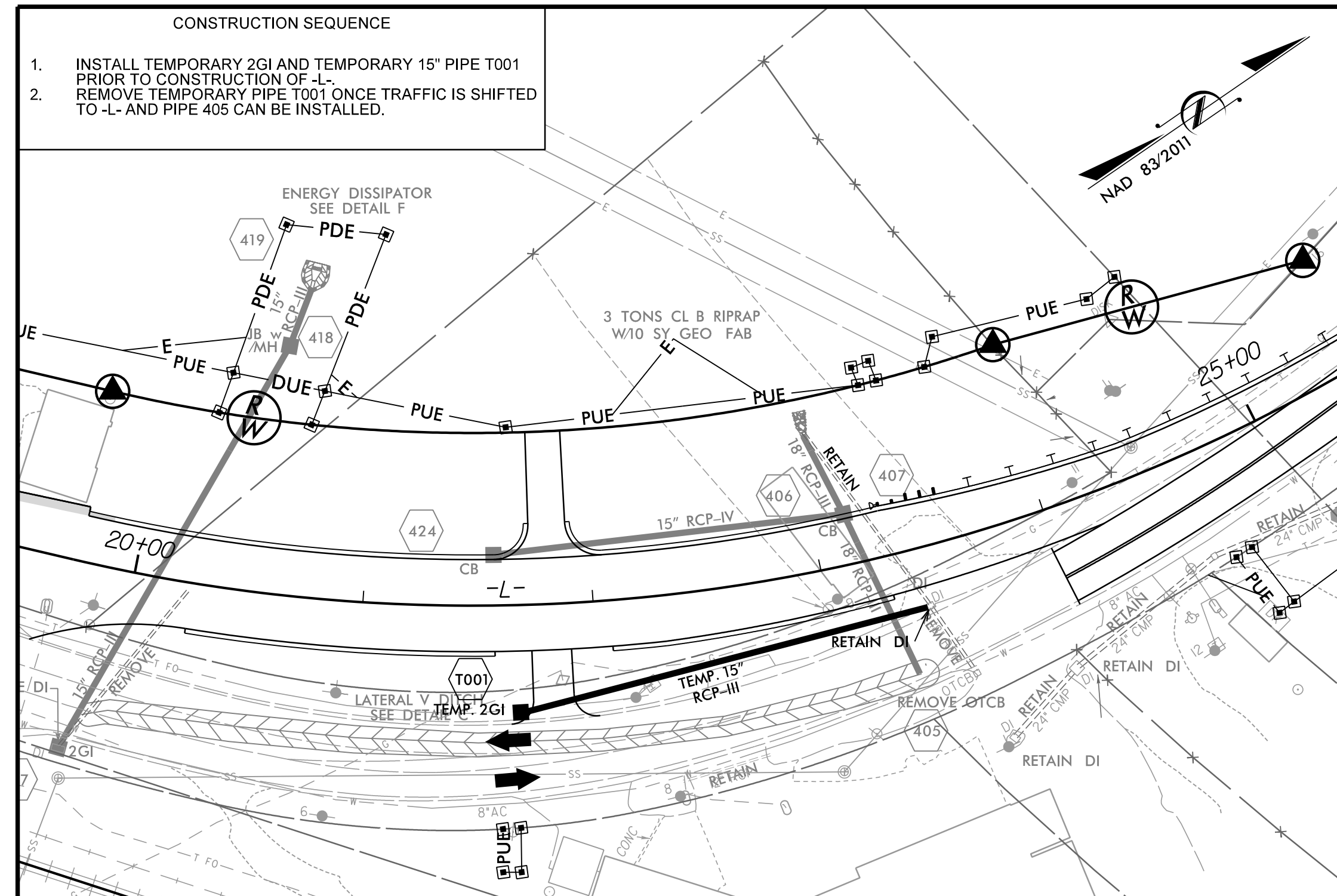
| -EY6- | | | | |
|--|---|--|---|---|
| PI Sta 10+16.44 Δ = 30° 39' 02.3" (LT) D = 95' 29' 34.7" L = 32.10' T = 16.44' R = 60.00' | PI Sta 10+58.17 Δ = 5° 58' 15.2" (LT) D = 11' 27' 33.0" L = 52.11' T = 26.08' R = 500.00' | PI Sta 11+71.47 Δ = 5° 01' 36.7" (LT) D = 10' 25' 02.7" L = 48.25' T = 24.14' R = 550.00' | PI Sta 12+88.29 Δ = 13° 13' 14.5" (RT) D = 7' 09' 43.1" L = 184.60' T = 92.71' R = 800.00' | PI Sta 13+88.97 Δ = 2° 00' 56.9" (RT) D = 11' 27' 33.0" L = 17.59' T = 8.80' R = 500.00' |
| PI Sta 14+20.37 Δ = 6° 28' 09.9" (RT) D = 14' 19' 26.2" L = 45.17' T = 22.61' R = 400.00' | PI Sta 14+88.22 Δ = 13° 53' 00.2" (RT) D = 36' 43' 41.0" L = 37.80' T = 18.99' R = 156.00' | PI Sta 15+29.26 Δ = 5° 17' 33.5" (RT) D = 11' 54' 42.5" L = 44.43' T = 22.23' R = 481.00' | PI Sta 15+93.25 Δ = 2° 23' 39.1" (RT) D = 2' 51' 53.2" L = 83.57' T = 41.79' R = 2,000.00' | PI Sta 16+61.34 Δ = 2° 24' 42.1" (LT) D = 4' 35' 01.2" L = 52.62' T = 26.31' R = 1,250.00' |

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 Raleigh, North Carolina 27615-3960
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TEMPORARY DRAINAGE FOR TRAFFIC PHASING

| | |
|--|---------------------|
| PROJECT REFERENCE NO. R-5768 | SHEET NO. 2B-2 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

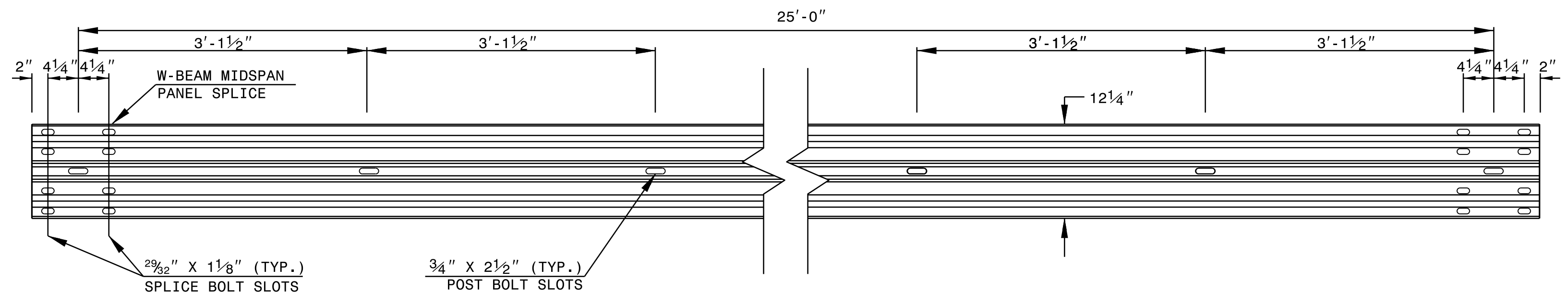


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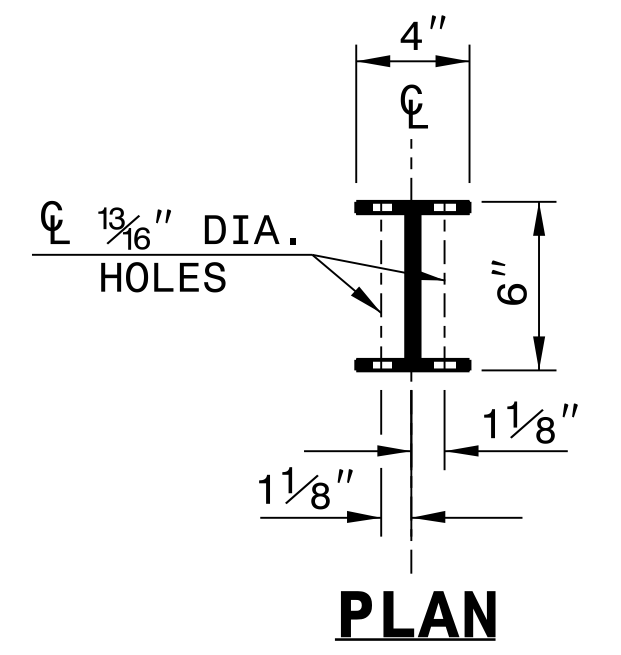
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

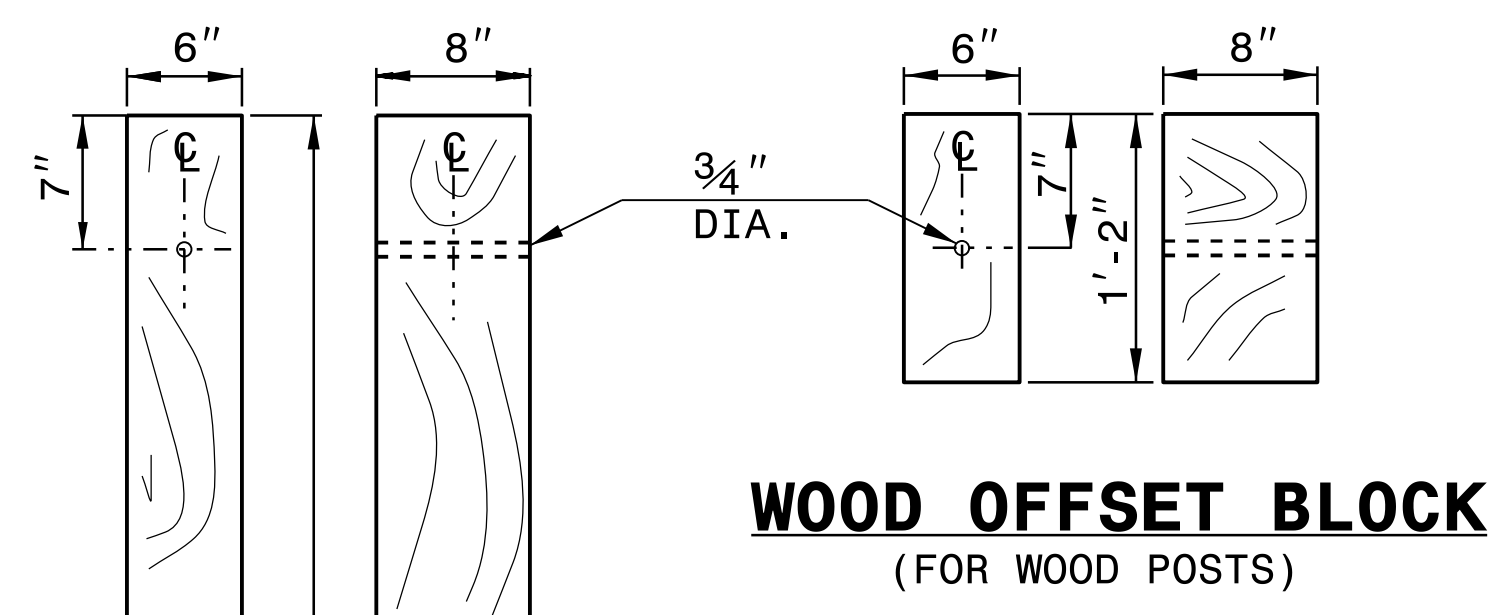
SHEET 6 OF 8
862D02



STANDARD W-BEAM GUARDRAIL



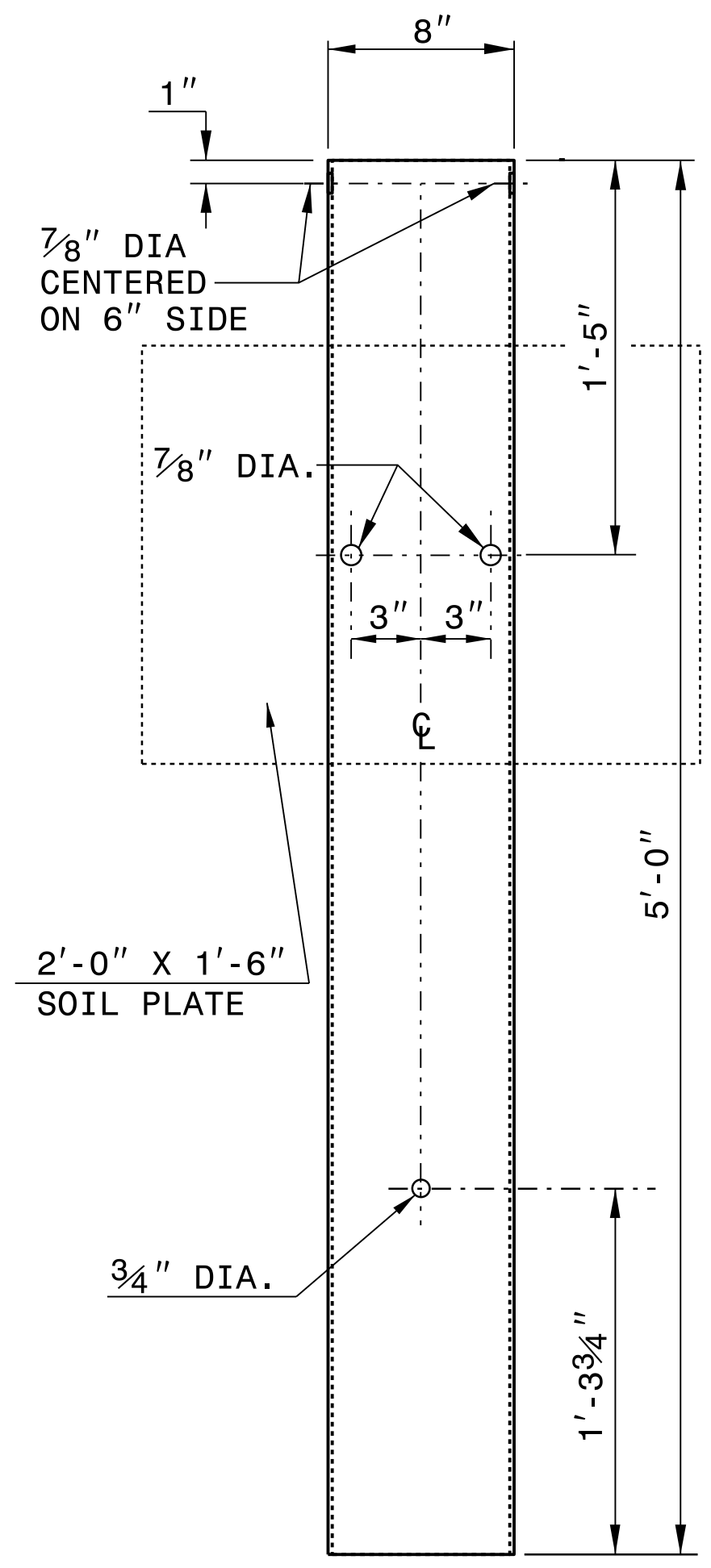
PLAN



**WOOD OFFSET BLOCK
(FOR WOOD POSTS)**

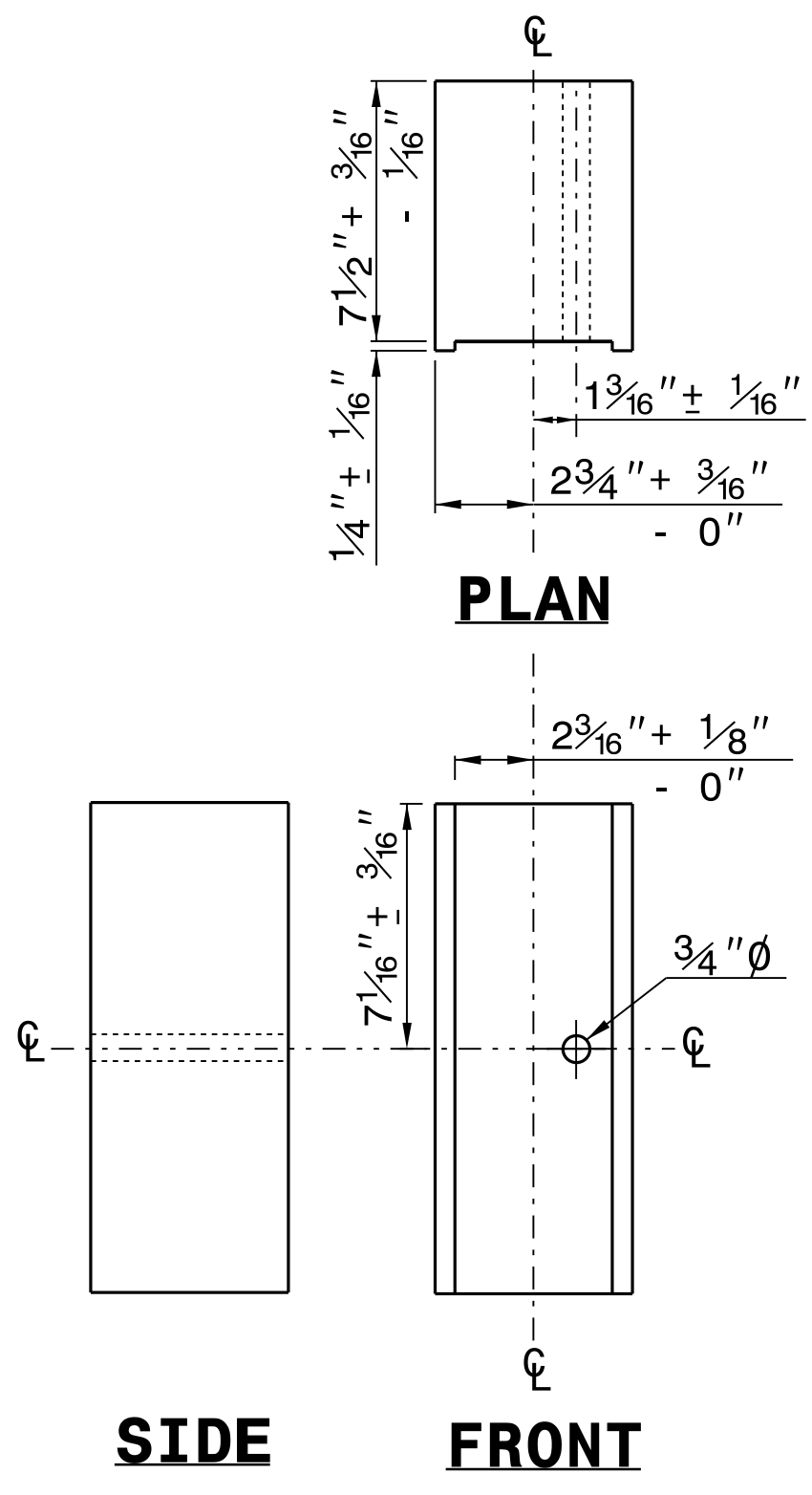
**STANDARD
LINE POST**

**SHORT WOOD
BREAKAWAY POST**



**STEEL TUBE
TS 6"x8"x0.1875"**

SYSTEM PARTS

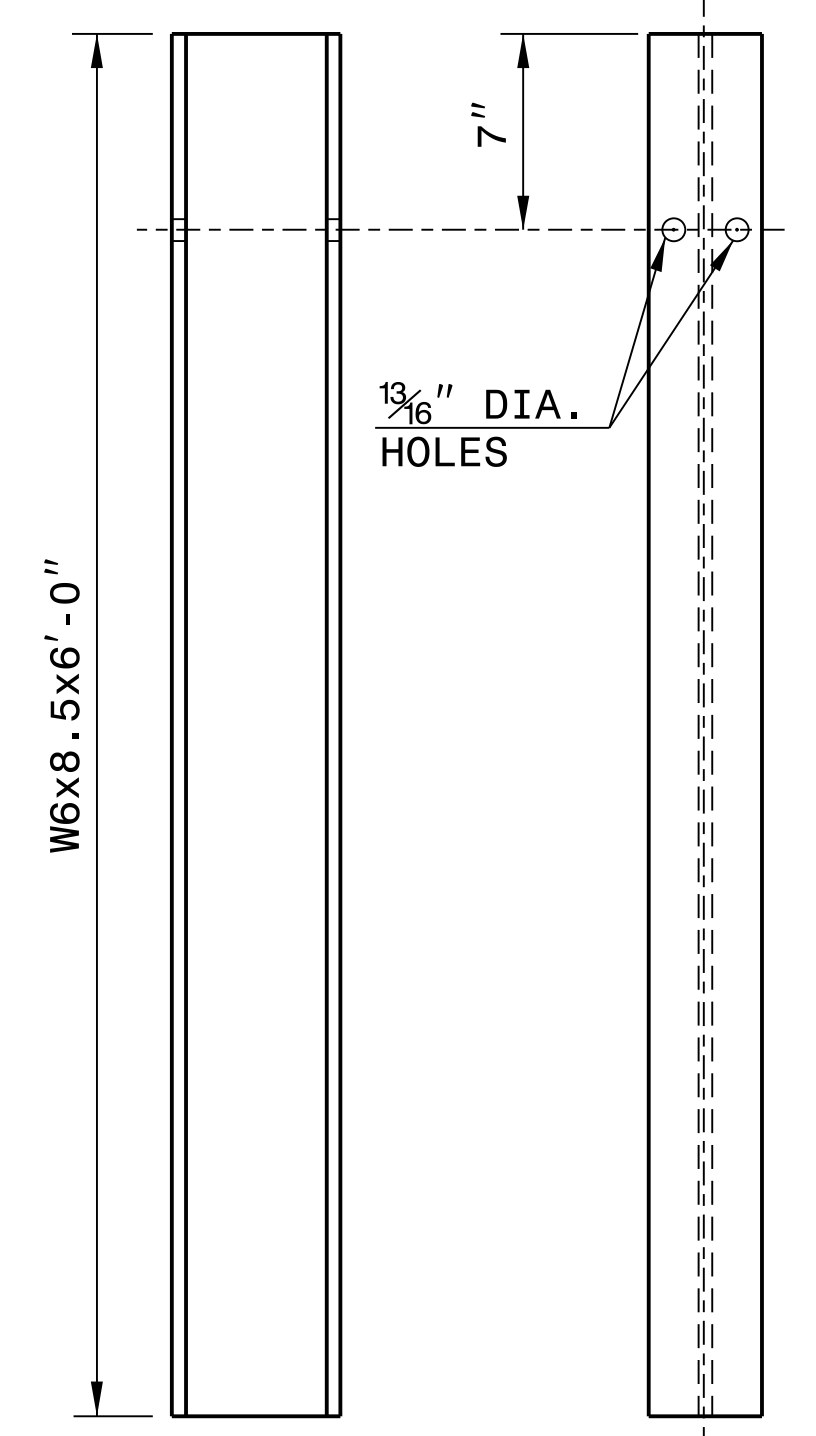


PLAN

SIDE

FRONT

**ROUTED
OFFSET BLOCK**



SIDE

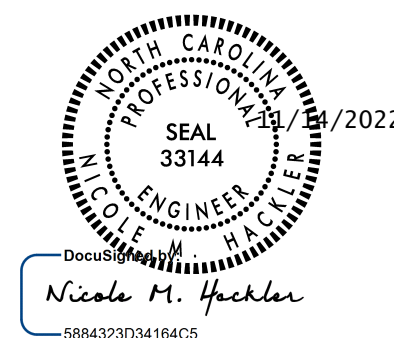
FRONT

"W6" STEEL POST

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

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 6 OF 8
862D02



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

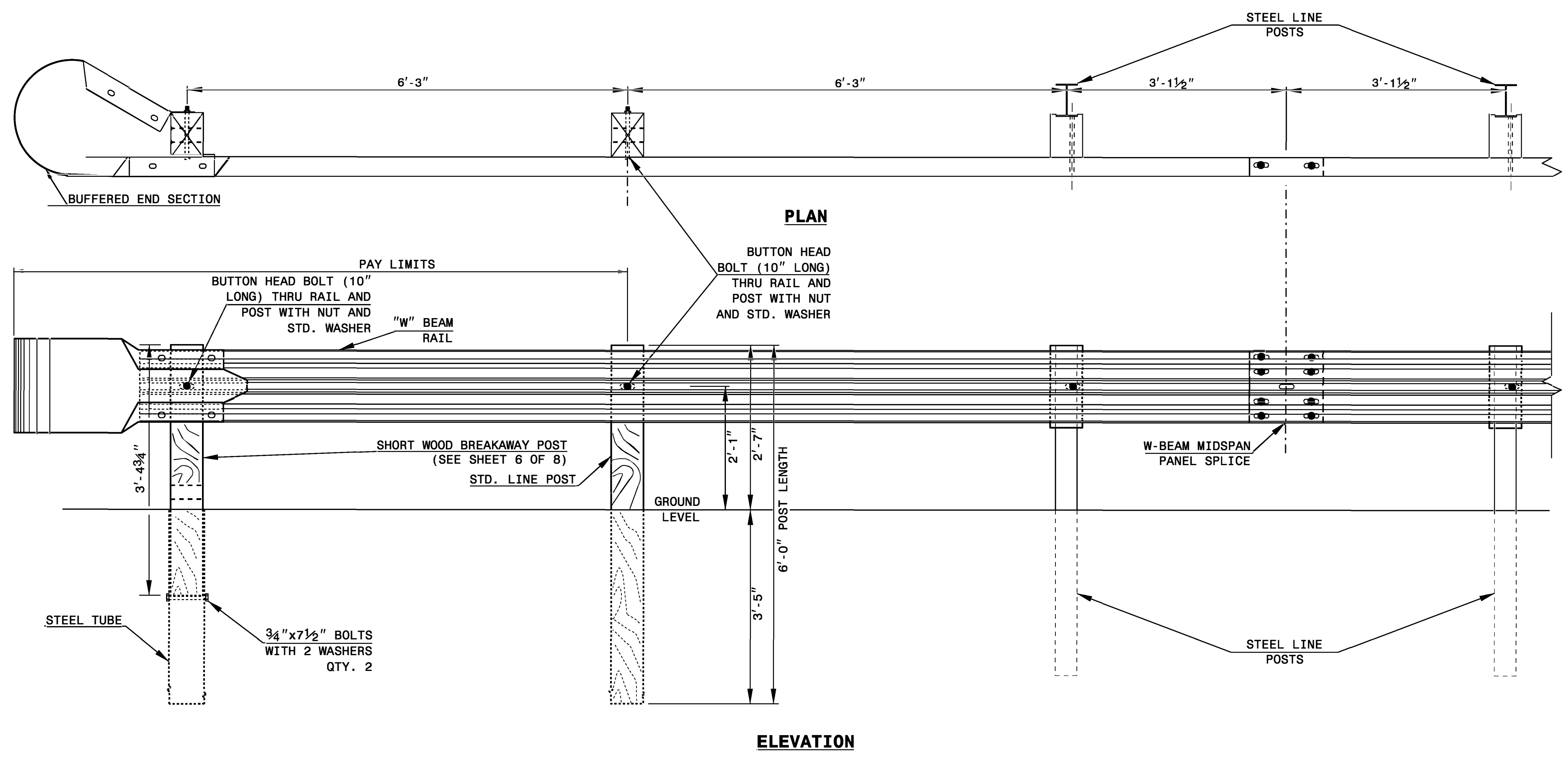
SEE TITLE BLOCK

ORIGINAL BY: J. HOWERTON DATE: 3-7-2018
MODIFIED BY: DATE: _____
CHECKED BY: DATE: _____
FILE SPEC.: _____

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

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET OF

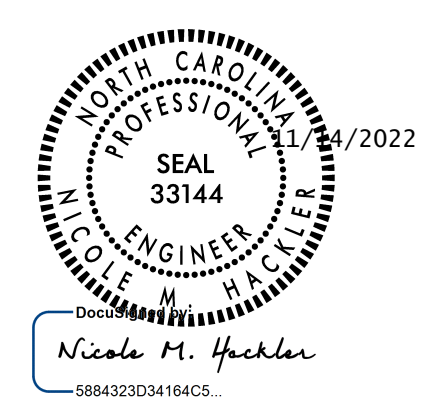


TRAILING END UNIT ASSEMBLY
A.T. - 1 SYSTEM

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

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET OF

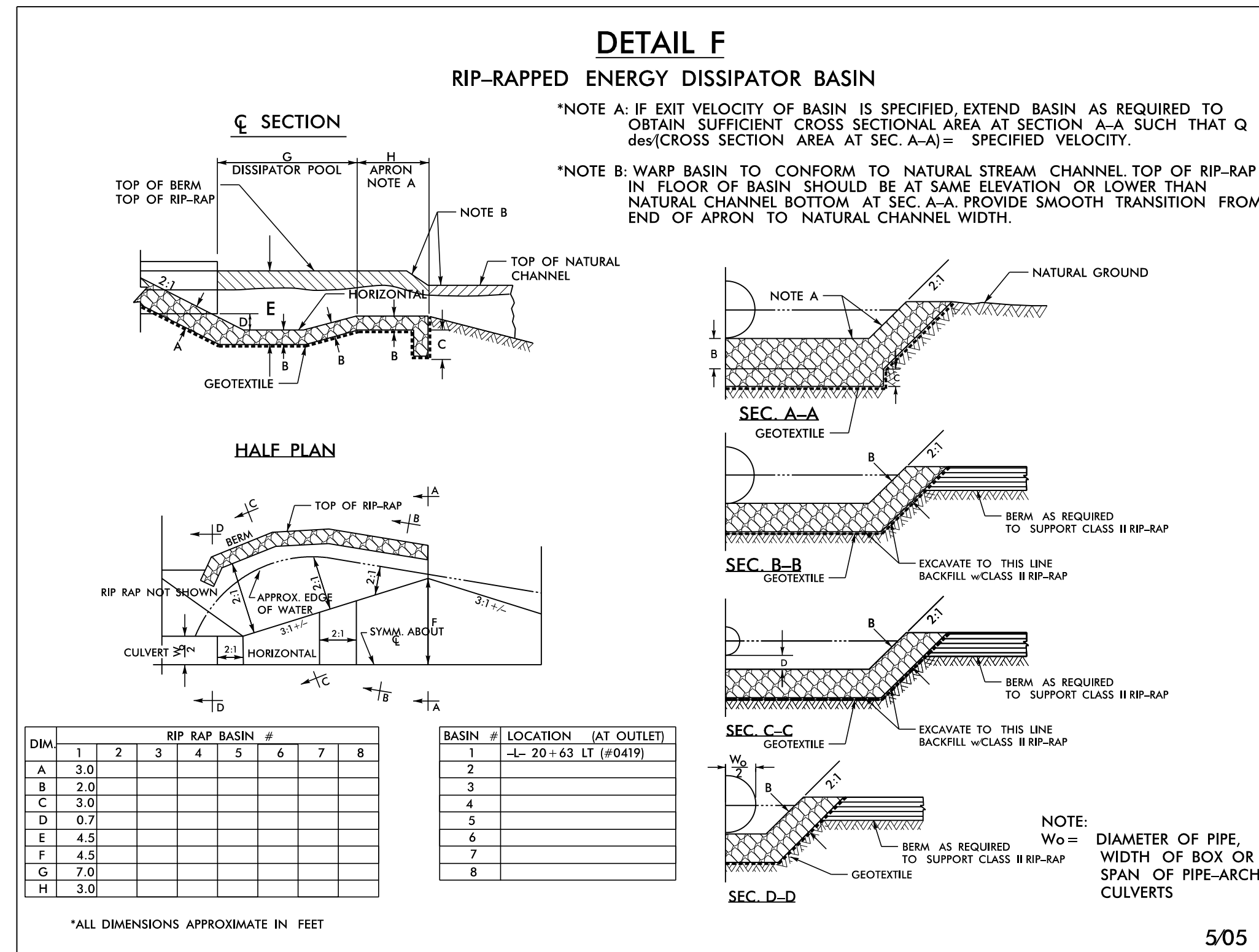
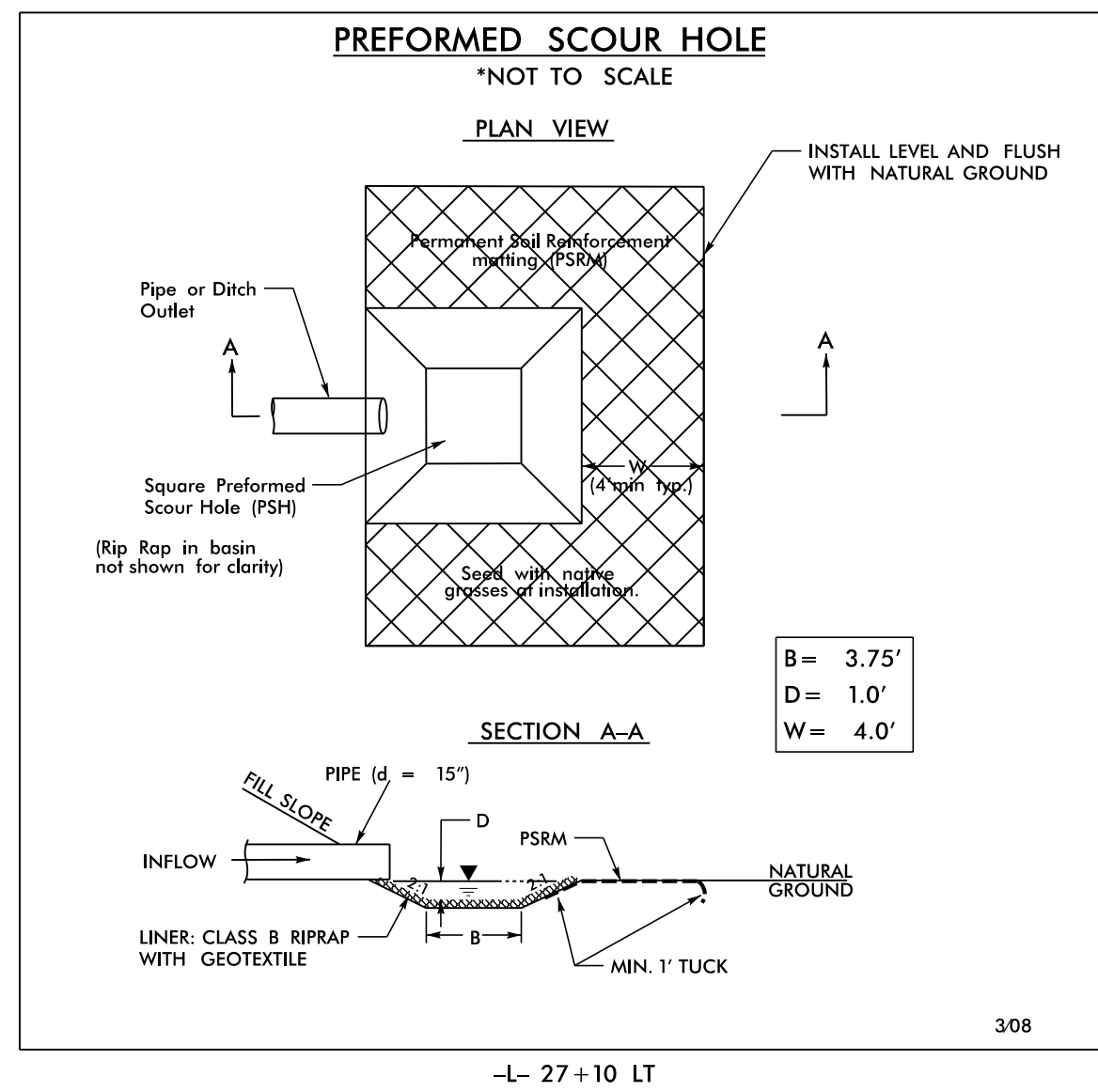
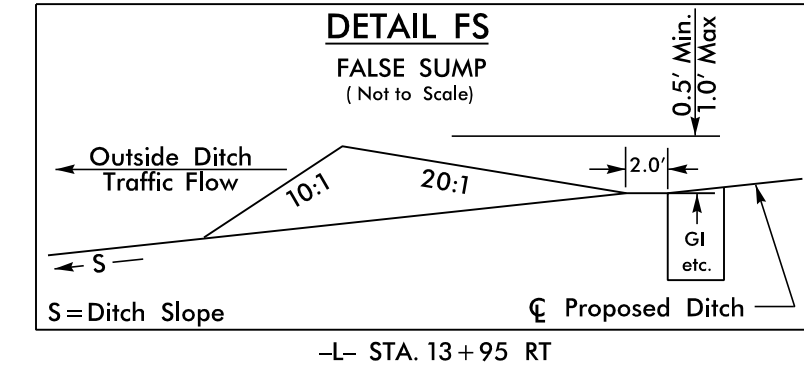
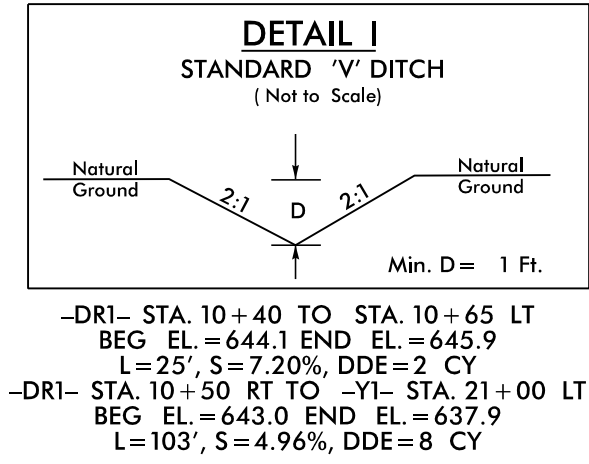
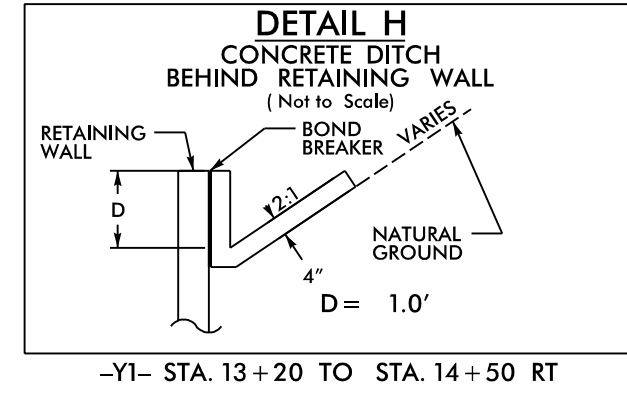
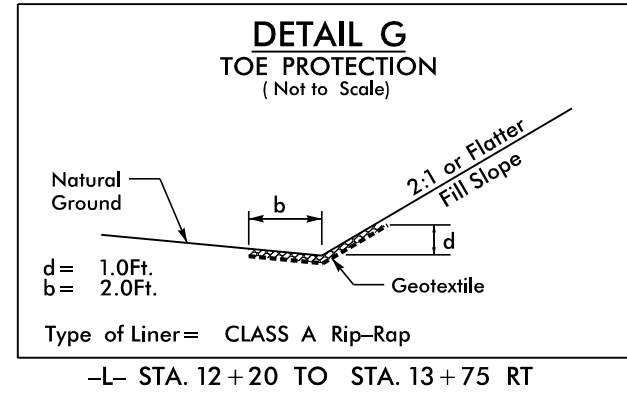
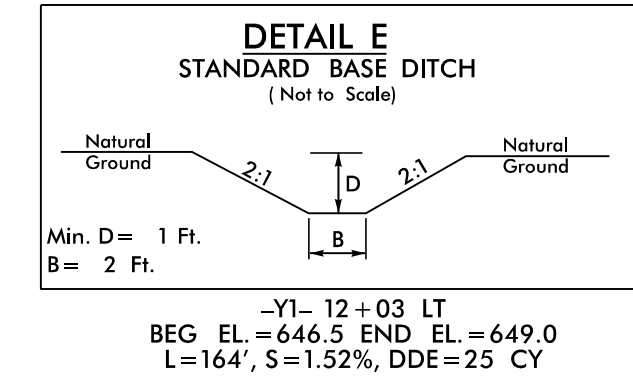
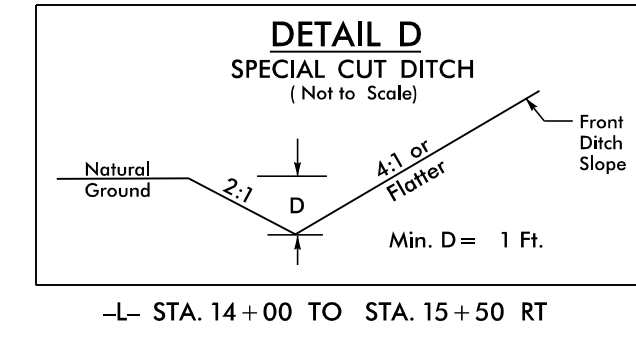
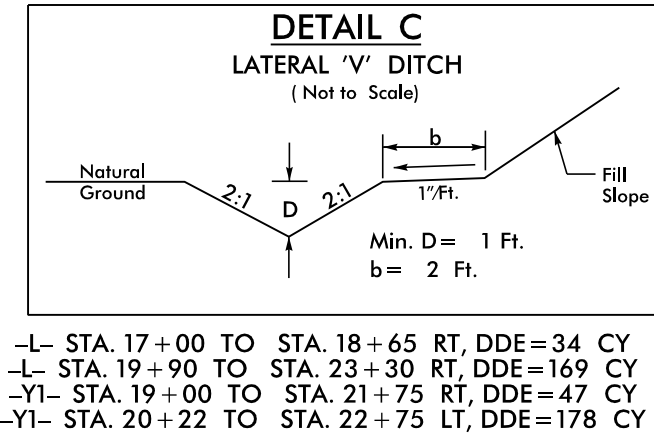
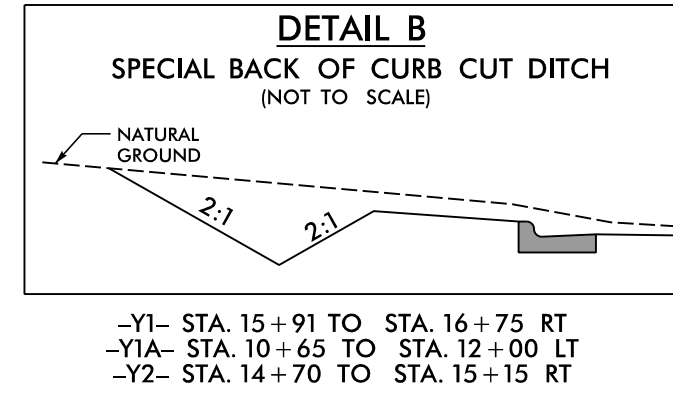
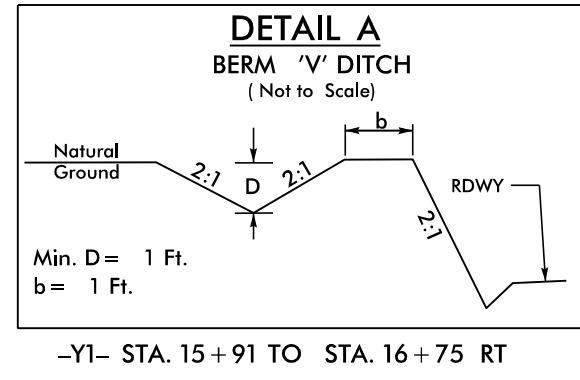


DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

A.T. - 1 SYSTEM

| | |
|--------------------|-------------|
| ORIGINAL BY: _____ | DATE: _____ |
| MODIFIED BY: _____ | DATE: _____ |
| CHECKED BY: _____ | DATE: _____ |
| FILE SPEC.: _____ | |



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SUMMARY OF GUARDRAIL

IN FEET

| SURVEY LINE | BEG. STA. | END STA. | LOCATION | LENGTH | | | ANCHORS | | | | | | | IMPACT ATTENUATOR TYPE 350 | | | SAFETY RAIL | SINGLE FACED CONCRETE BARRIER | REMOVE EXISTING GUARDRAIL | REMARKS | |
|-------------------------------|--|----------|------------|-------------|-------------|--------------|---------|----|-----------|-----------|------|------|-----|----------------------------|------|----|-------------|-------------------------------|---------------------------|---------|--|
| | | | | STRAIGHT | SHOP CURVED | DOUBLE FACED | XI MOD | XI | GREU TL-3 | GREU TL-2 | B-83 | AT-1 | TES | IA MASH TL-3 | AT-1 | NG | | | | | |
| -L- | 23+28.28 | 27+78.28 | LT | 450.00 | | | | | | | 1 | 1 | | | | | | | | | |
| -L- | 25+28.28 | 27+78.28 | RT | 250.00 | | | | | | | 1 | 1 | | | | | | | | | |
| -Y1/Y2- | 14+70.72 | 13+33.00 | RT | | 125 | | | | | | | | 1 | | | | | | | | |
| -Y1- | 13+33.00 | 16+33.00 | RT | 300.00 | | | | | | 1 | | | | | | | | | | | |
| -Y1- | 16+50.00 | 16+50.00 | LT/RT | 75.00 | | | | | | | | | 4 | | | | | | | | |
| -L- | 24+07.21 | 27+77.05 | LT | | | | | | | | | | | | | | | | | 365.71 | |
| -L- | 25+20.27 | 27+79.60 | RT | | | | | | | | | | | | | | | | | 266.49 | |
| TOTAL | | | | 1,075.00 | 125.00 | 0 | 0 | 0 | 1 | 2 | 2 | 5 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 635.00 | | |
| LESS ANCHOR DEDUCTIONS | | | | | | | | | | | | | | | | | | | | | |
| | GREU TL-3 | 1 | @50' = | 50.00' | | | | | | | | | | | | | | | | | |
| | TYPE B-83 | 2 | @22.875' = | 45.75' | | | | | | | | | | | | | | | | | |
| | GREU TL-2 | 2 | @25' = | 50.00' | | | | | | | | | | | | | | | | | |
| | ATTEN. TYPE 350 | 0 | @21' = | 0.00' | | | | | | | | | | | | | | | | | |
| | AT-1 | 5 | @6.25' = | 31.25' | | | | | | | | | | | | | | | | | |
| | TES | 0 | @2.3' = | 0.00' | | | | | | | | | | | | | | | | | |
| | TOTAL GUARDRAIL = | | | 900' | 125' | | | | | | | | | | | | | | | | |
| | SAFETY RAIL = | | | 0' | | | | | | | | | | | | | | | | | |
| | SINGLE FACED CONCRETE BARRIER = | | | 0' | | | | | | | | | | | | | | | | | |
| | REMOVE EXISTING GUARDRAIL = | | | 635' | | | | | | | | | | | | | | | | | |
| | (ADDITIONAL GUARDRAIL POSTS - 5 EA) | | | | | | | | | | | | | | | | | | | | |

5/9/2026
I:\7/2022\RA\Projects\RA\5768\RA-5768-03B-2.dgn

COMPUTED BY: J. Mize DATE: 9/21/18
 CHECKED BY: G. Goins DATE: 9/21/18

(5-15-18)

PROJECT NO.
R-5768

SHEET NO.
3G-1

**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS**

SUMMARY OF SUBSURFACE DRAINAGE

| LINE | Station | Station | Location LT/RT/CL | Drain Type* UD/BD/SD | LF |
|------------------|---------|---------|----------------------|-------------------------|-----|
| -L- | 12+00 | 14+00 | | UD | 200 |
| -Y1- | 19+00 | 21+00 | | UD | 200 |
| CONTINGENCY | | | | | |
| TOTAL LF: | | | | | 400 |

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

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

| LINE | Station | Station | Aggregate Type* ASU(1/2)/ AST | Aggregate Thickness INCHES [8" for ASU(2)] | Shallow Undercut CY | Class IV Subgrade Stabilization TONS | Geotextile for Soil Stabilization SY | Stabilizer Aggregate TONS | Class IV Aggregate Stabilization TONS |
|--------------------------|---------|---------|--|--|---------------------------|---|---|---------------------------------|--|
| CONTINGENCY | | | | | | | | | |
| | | | | | 100 | 100 | 400 | | |
| TOTAL CY/TONS/SY: | | | | | 100 | 100** | 400** | 0 | 0 |

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

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PARCEL INDEX SHEET

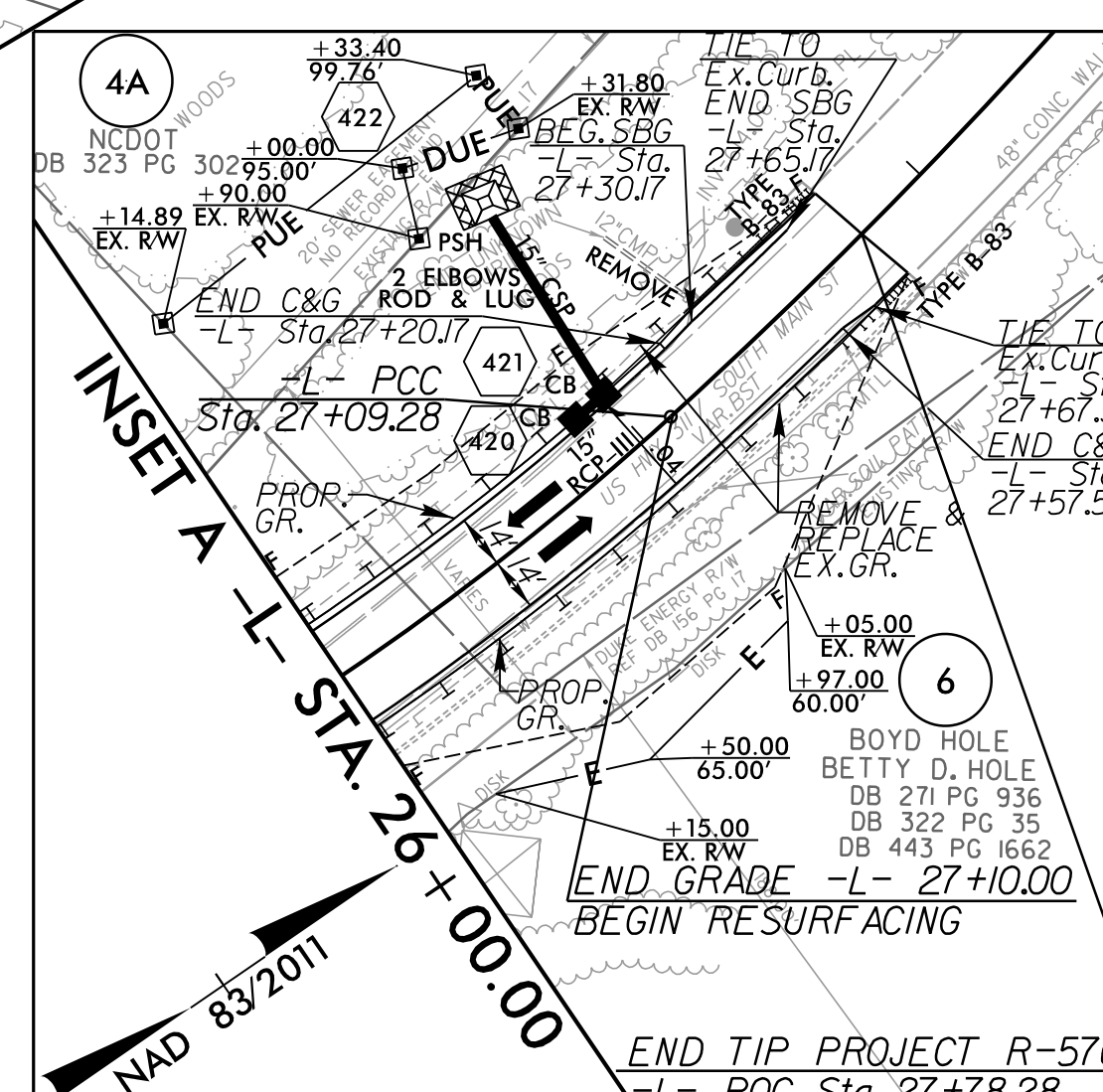
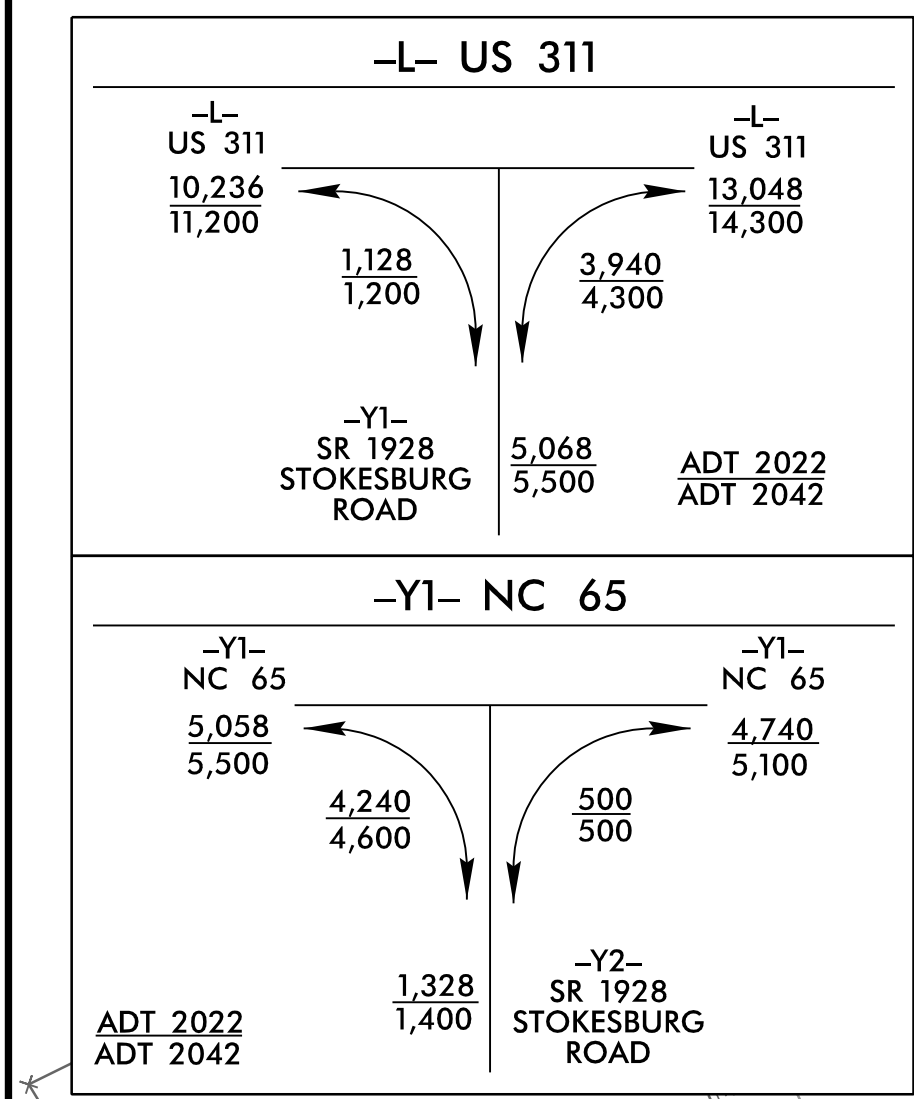
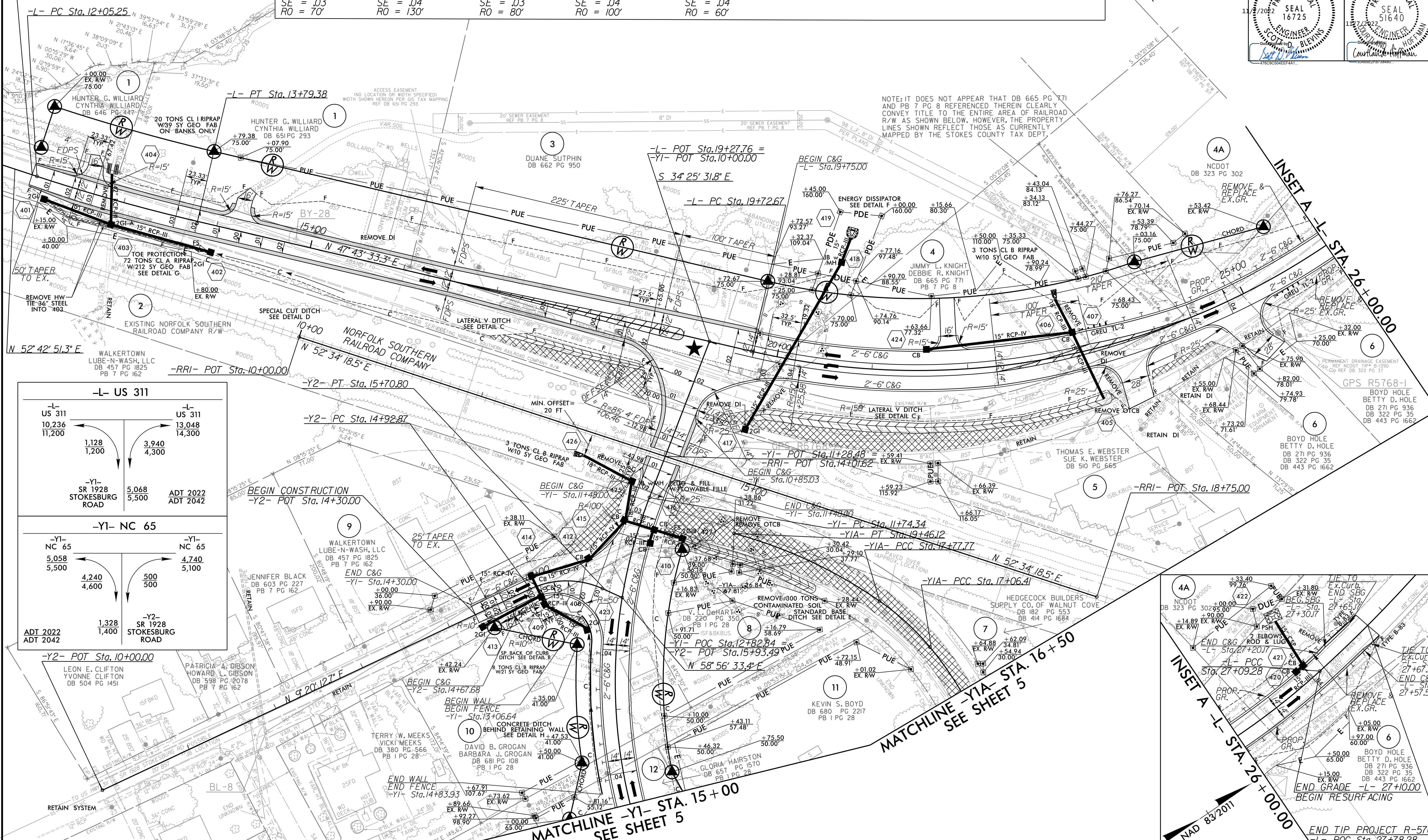
| PARCEL NO. | SHEET NO. | PROPERTY OWNER NAME |
|------------|-----------|---|
| 1 | 4 | HUNTER G. WILLIARD, CYNTHIA WILLIARD |
| 2 | 4 | EXISTING NORFOLK SOUTHER RAILROAD R/W |
| 3 | 4 | DUANE SUTPHIN |
| 4 | 4 | JIMMY L. KNIGHT, DEBBIE R. KNIGHT |
| 4A | 4 | NCDOT |
| 5 | 4 | THOMAS E. WEBSTER & SUE K. WEBSTER |
| 6 | 4 | BOYD HOLE & BETTERY D. HOLE |
| 7 | 4,5 | HEDGECKOCK BUILDERS SUPPLY CO. OF WALNUT COVE |
| 8 | 4 | V.L. DeHART |
| 9 | 4 | WALKERTOWN LUBE-N-WASH, LLC |
| 10 | 4 | DAVID B. GROGAN, BARBARA J. GROGAN |
| 11 | 4,5 | KEVIN S. BOYD |
| 12 | 4,5 | GLORIA HAIRSTON |
| 13 | 5 | GLORIA T. HAIRSTON |
| 14 | 5 | OLD STILL VENTURES, LLC |
| 15 | 5 | THOMAS M. NORMAN, KAREN B. NORMAN |
| 16 | 5 | LYNN S. DEVINEY |
| 17 | | COMBINED WITH PARCEL 7 |
| 18 | 5 | JAMES B. DALTON |
| 19 | | COMBINED WITH PARCEL 18 |

5/28/99

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default

| | | | | | | | |
|---|--|--|--|---|--|--|---|
| -L- PI Sta 12+92.37 Δ = 4° 59' 18.1" (LT) D = 2° 51' 53.2" L = 174.13' T = 87.12' R = 2,000.00' V = 40 MPH SE = .03 RO = 70' | -L- PI Sta 23+72.80 Δ = 55° 31' 55.9" (LT) D = 7° 32' 20.1" L = 736.61' T = 400.13' R = 760.00' V = 40 MPH SE = .04 RO = 130' | -L- PI Sta 28+12.06 Δ = 8° 11' 38.0" (LT) D = 3° 59' 33.9" L = 205.22' T = 102.79' R = 1,435.00' V = 40 MPH SE = .03 RO = 80' | -Y1- PI Sta 14+25.91 Δ = 50° 22' 00.7" (LT) D = 10° 42' 34.2" L = 470.30' T = 102.79' R = 535.00' V = 40 MPH SE = .04 RO = 100' | -Y2- PI Sta 15+34.47 Δ = 49° 36' 20.7" (RT) D = 6° 39' 43.1" L = 77.92' T = 41.59' R = 90.00' V = 20 MPH SE = .04 RO = 60' | -Y1A- PI Sta 16+68.25 Δ = 12° 32' 34.3" (LT) D = 16° 22' 12.8" L = 76.62' T = 38.46' R = 350.00' V = 40 MPH | -Y1A- PI Sta 17+42.31 Δ = 15° 25' 45.2" (LT) D = 21° 37' 15.8" L = 71.36' T = 35.90' R = 265.00' | -Y1A- PI Sta 18+62.78 Δ = 19° 41' 04.4" (LT) D = 11° 41' 34.9" L = 168.34' T = 85.01' R = 490.00' |
|---|--|--|--|---|--|--|---|

BEGIN TIP PROJECT R-5768
-L- POT Sta. 12+00.00



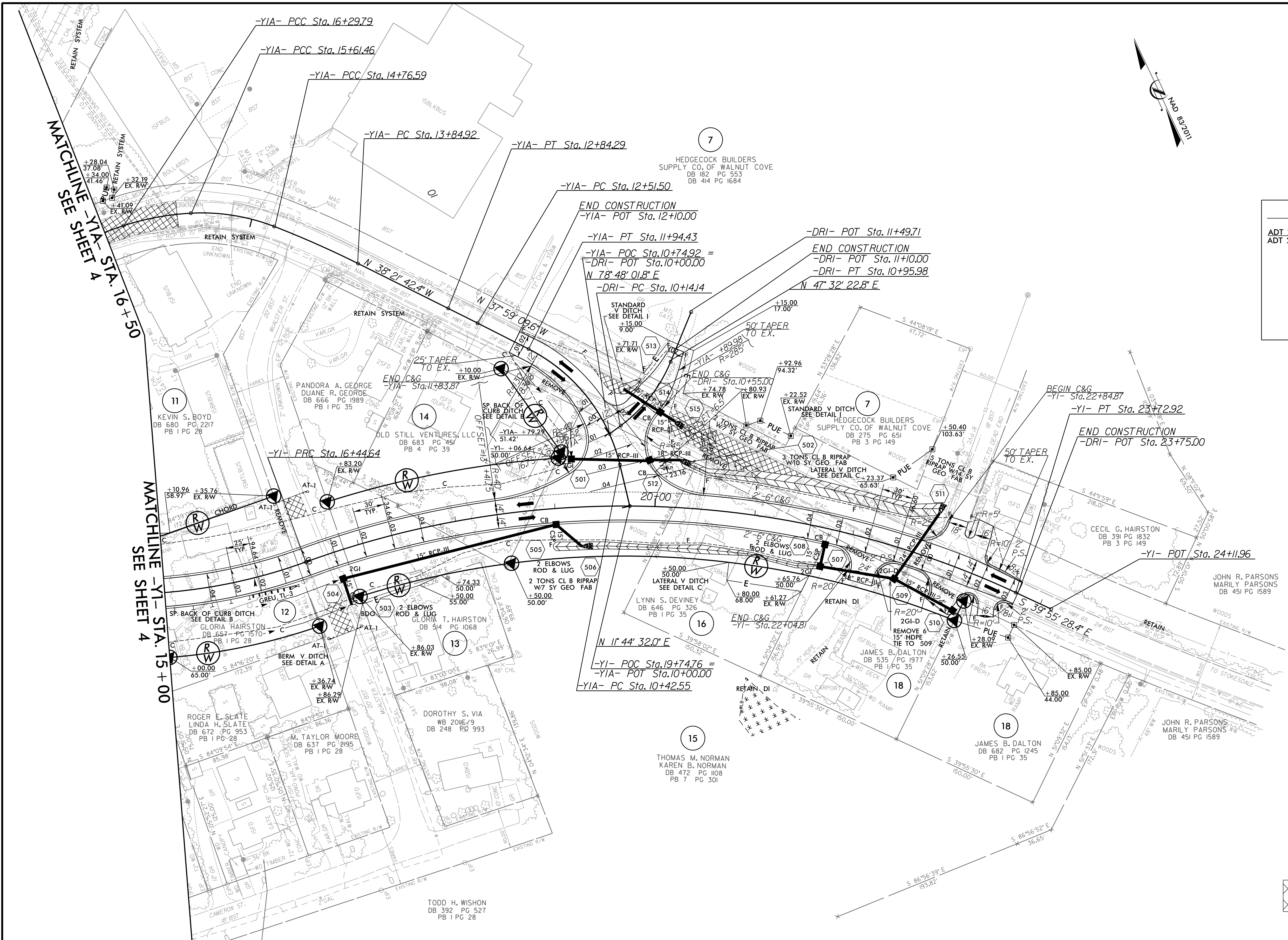
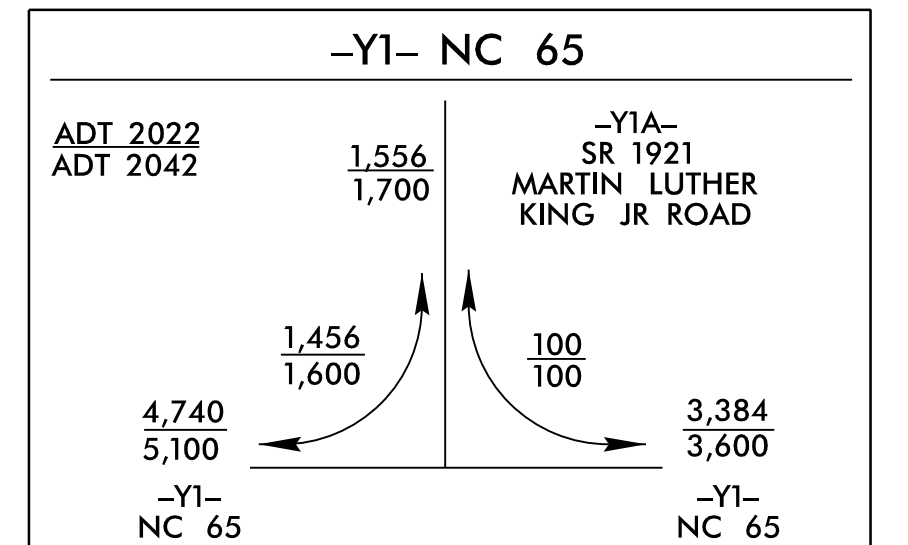
★ PROPOSED SIGNAL

▨ PAVEMENT REMOVAL

FOR -L- PROFILE, SEE SHT. 6
FOR -Y1- PROFILE, SEE SHT. 7
FOR -Y2- PROFILE, SEE SHT. 7
FOR DITCH DETAILS, SEE SHT. 2D-1

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| -YI- | | -YIA- | | -DRI- | |
|------------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|
| PI Sta 14+25.91 | PI Sta 20+28.61 | PI Sta 11+23.64 | PI Sta 12+67.90 | PI Sta 14+30.79 | PI Sta 15+19.67 |
| Δ = 50° 22' 00.7" (LT) | Δ = 44° 52' 04.1" (RT) | Δ = 49° 43' 41.6" (LT) | Δ = 0° 22' 32.9" (LT) | Δ = 5° 15' 06.7" (LT) | Δ = 24° 18' 49.0" (LT) |
| D = 10' 42' 34.2" | D = 6' 09' 39.0" | D = 32' 44' 25.6" | D = 1' 08' 45.3" | D = 5' 43' 46.5" | D = 28' 38' 52.4" |
| L = 470.30' | L = 728.27' | L = 151.89' | L = 32.79' | L = 91.66' | L = 84.87' |
| T = 251.56' | T = 383.96' | T = 81.0' | T = 16.40' | T = 45.86' | T = 43.08' |
| R = 535.00' | R = 930.00' | R = 175.00' | R = 5,000.00' | R = 1,000.00' | R = 200.00' |
| V = 40 MPH | V = 50 MPH | V = 25 MPH | V = 25 MPH | V = 40 MPH | V = 40 MPH |
| SE = .04 | SE = .04 | SE = .04 | SE = .04 | SE = .04 | SE = .04 |
| RO = 100' | RO = 120' | RO = 70' | RO = 70' | RO = 70' | RO = 30' |

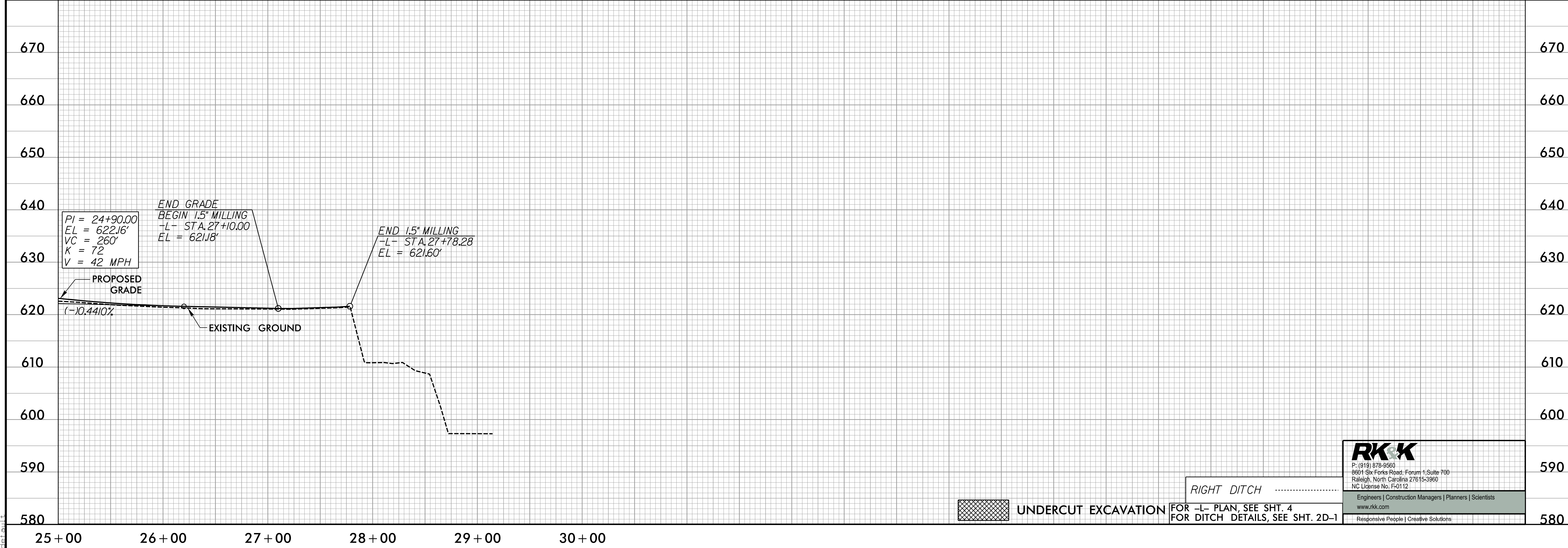
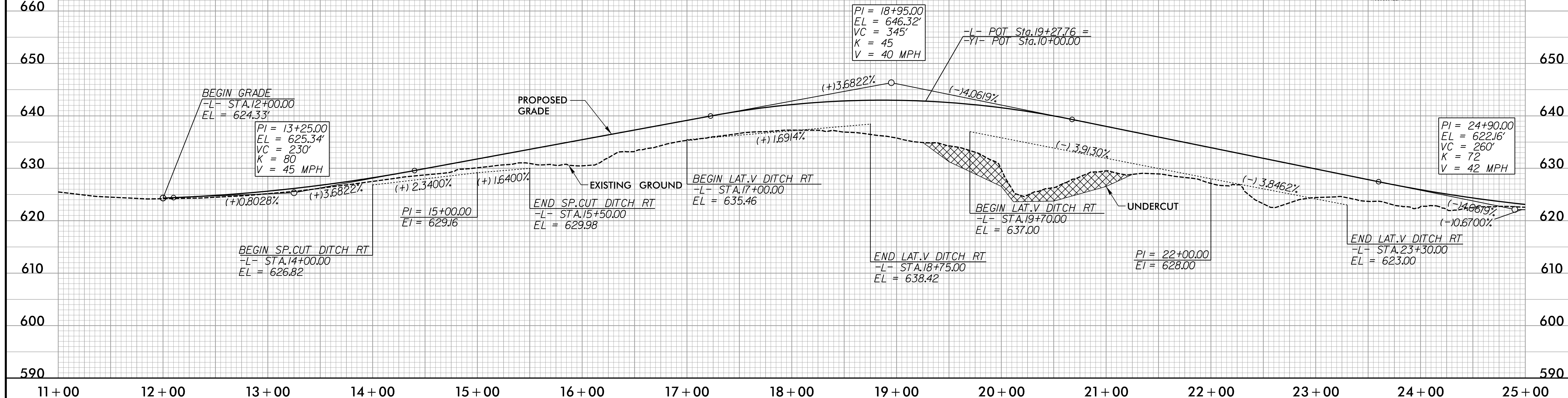
FOR -YI- PROFILE, SEE SHT. 7
 FOR -YIA- PROFILE, SEE SHT. 7
 FOR -DRI- PROFILE, SEE SHT. 7
 FOR DITCH DETAILS, SEE SHT. 2D-1

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 Detail

5/28/99

| | | |
|---------------------------------|--|---------------------|
| PROJECT REFERENCE NO. R-5768 | | SHEET NO. 6 |
| ROADWAY DESIGN ENGINEER | | HYDRAULICS ENGINEER |
| | | |



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RIGHT DITCH
 FOR -L- PLAN, SEE SHT. 4
 FOR DITCH DETAILS, SEE SHT. 2D-1

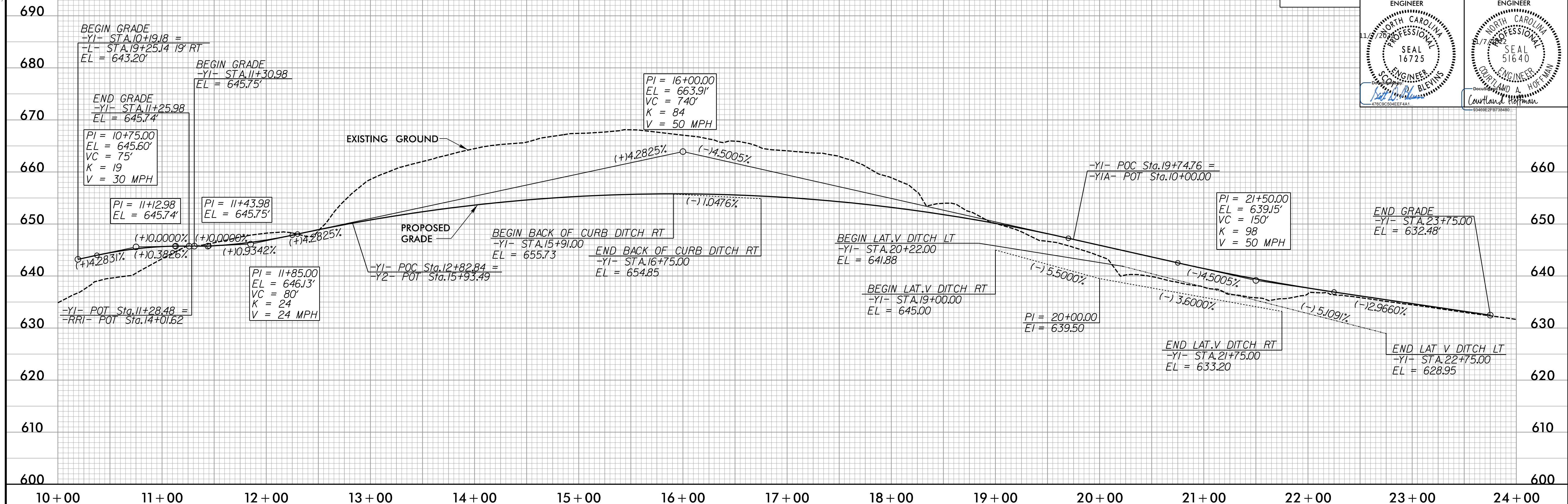
UNDERCUT EXCAVATION

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5/28/99

-Y1-

| | |
|--|--|
| PROJECT REFERENCE NO. R-5768 | SHEET NO. 7 |
| ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 16725 S. C. BLEVINS | HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 51640 COURTNEY AND A. HOFFMAN |



| | -Y1A- | | -Y2- | | -DR1- | |
|-----|-------|-----|------|-----|-------|-----|
| 690 | 690 | 690 | 690 | 690 | 690 | 690 |
| 680 | 680 | 680 | 680 | 680 | 680 | 680 |
| 670 | 670 | 670 | 670 | 670 | 670 | 670 |
| 660 | 660 | 660 | 660 | 660 | 660 | 660 |
| 650 | 650 | 650 | 650 | 650 | 650 | 650 |
| 640 | 640 | 640 | 640 | 640 | 640 | 640 |
| 630 | 630 | 630 | 630 | 630 | 630 | 630 |
| 620 | 620 | 620 | 620 | 620 | 620 | 620 |
| 610 | 610 | 610 | 610 | 610 | 610 | 610 |
| 600 | 600 | 600 | 600 | 600 | 600 | 600 |

VERTICAL CURVE DATA (Continued):

- PI = 11+05.00, EL = 648.88', VC = 170', K = 66, V = 40 MPH
- PI = 15+50.00, EL = 651.47', VC = 50', K = 49, V = 41 MPH
- PI = 10+60.00, EL = 645.95', VC = 70', K = 11, V = 15 MPH

DITCH DATA (Continued):

- BEGIN BACK OF CURB DITCH LT: -Y1A- STA. 12+10.00, EL = 652.92'
- BEGIN BACK OF CURB DITCH RT: -Y2- STA. 14+70.00, EL = 652.00; -Y2- STA. 15+00.00, EL = 651.50
- BEGIN GRADE: -Y2- STA. 14+30.00, EL = 653.93'
- BEGIN GRADE: -DRI- STA. 10+77.52 12.77' RT, EL = 648.54'
- END GRADE: -DRI- STA. 11+10.00, EL = 646.45'

GRADES (Continued): (+)1.2514%, (+)3.8441%, (+)0.7400%, (+)0.3000%, (+)6.4400%, (-)12.0500%, (-)13.0679%, (-)1.6667%, (+)2.0000%, (-)5.5019%, (+)1.0000%

BM ELEVATION = 649.97'
N 925838 E 1663520
BL STATION 38+08.00 91' LEFT
-Y2- STA. 14+94.35 108' LEFT
SCRIBED "X" IN CONCRETE

LEFT DITCH
RIGHT DITCH

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FOR -Y1- PLAN, SEE SHTS. 4 & 5
FOR -Y1A- PLAN, SEE SHT. 4 & 5
FOR -Y2- PLAN, SEE SHT. 4
FOR -DRI- PLAN, SEE SHT. 5
FOR DITCH DETAILS, SEE SHT. 2D-1

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