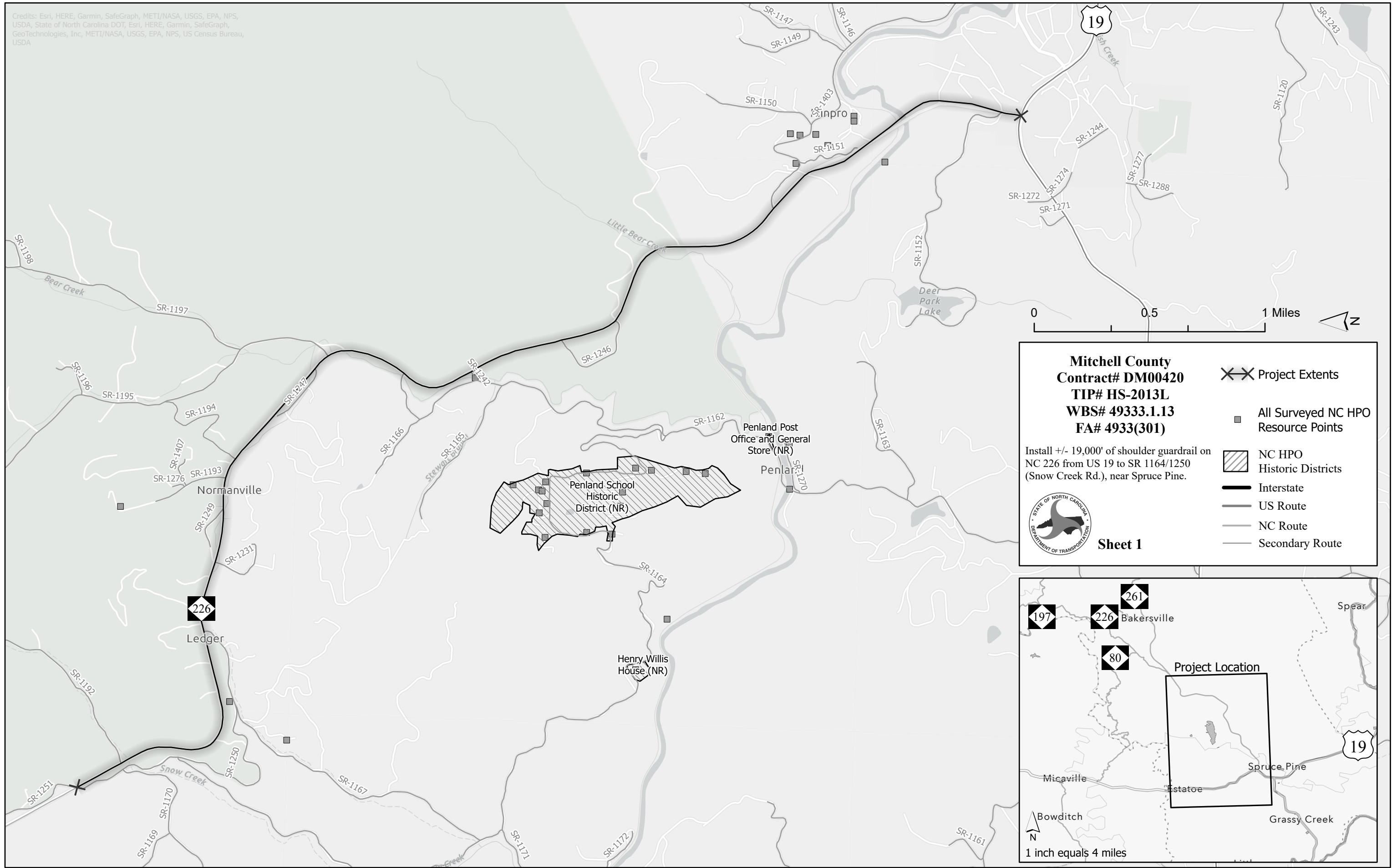


Credits: Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, State of North Carolina DOT, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

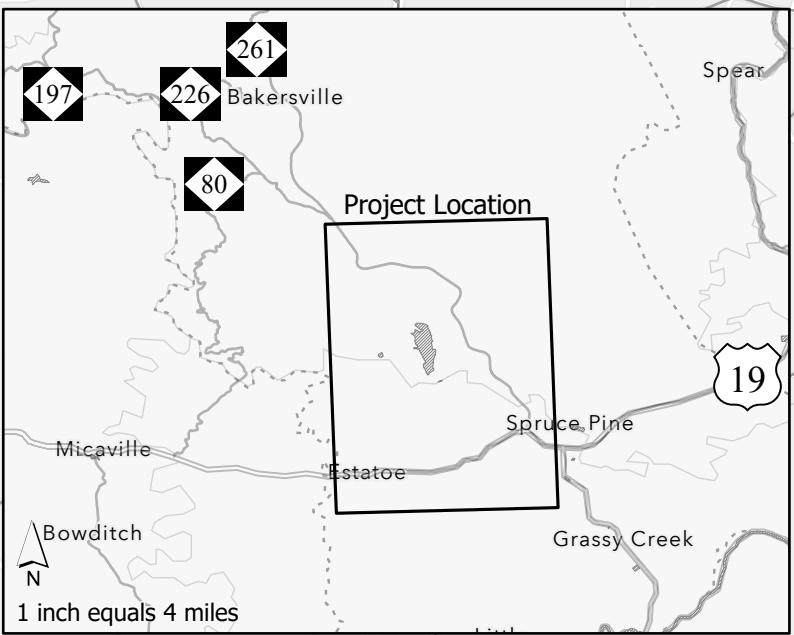


Mitchell County
Contract# DM00420
TIP# HS-2013L
WBS# 49333.1.13
FA# 4933(301)

Install +/- 19,000' of shoulder guardrail on NC 226 from US 19 to SR 1164/1250 (Snow Creek Rd.), near Spruce Pine.

Sheet 1

- Project Extents
- All Surveyed NC HPO Resource Points
- NC HPO Historic Districts
- Interstate
- US Route
- NC Route
- Secondary Route



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

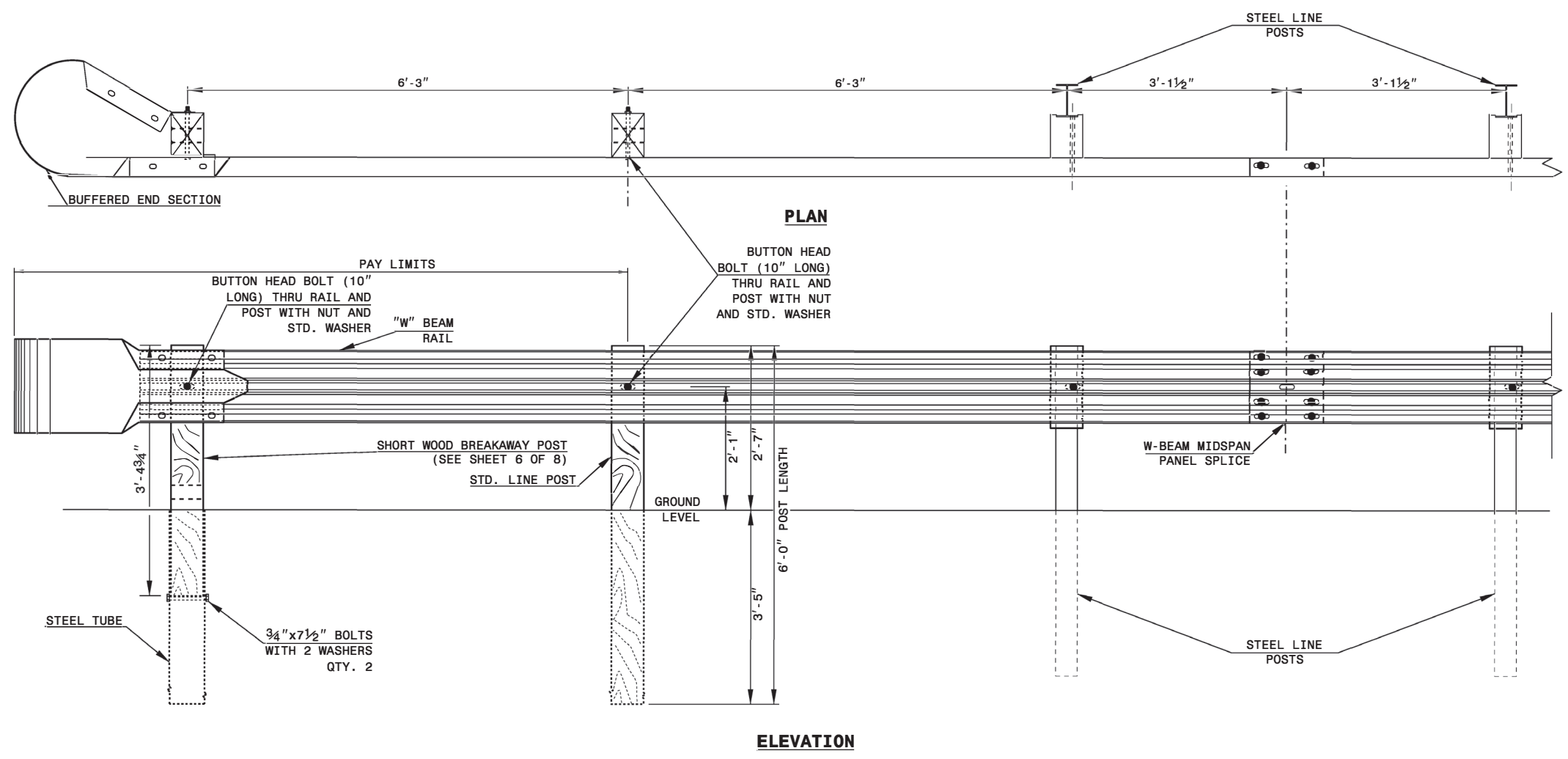
ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET OF

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



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.: _____

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RALEIGH, N.C.

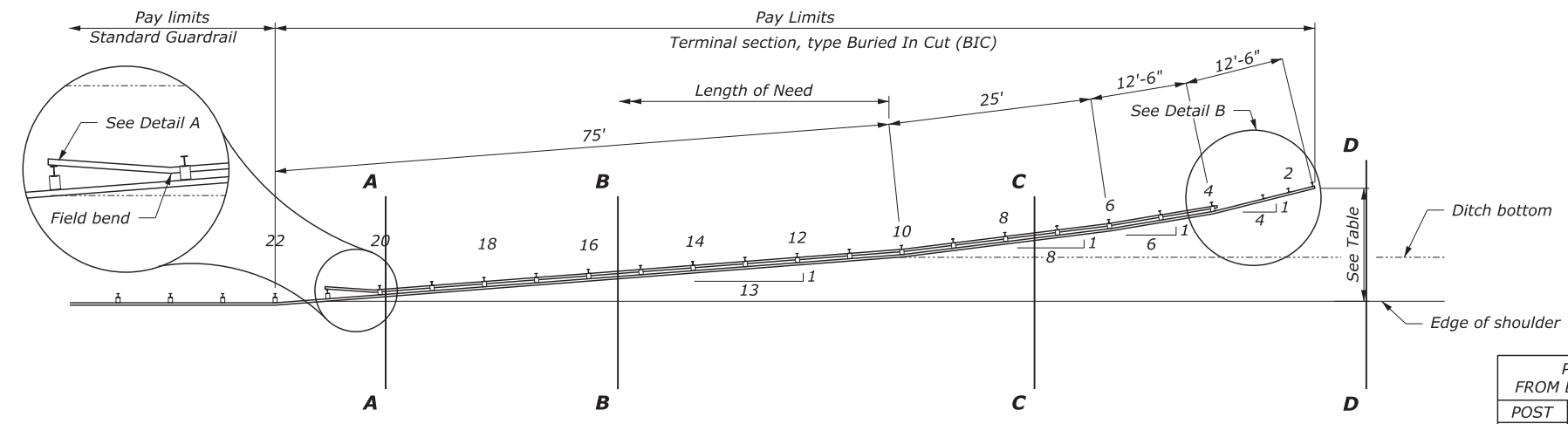
ROADWAY DETAIL DRAWING FOR
**GUARDRAIL PLACEMENT
BURIED IN CUT END UNIT**

SHEET 1 OF 2
862D01

STATE OF NORTH CAROLINA
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RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
**GUARDRAIL PLACEMENT
BURIED IN CUT END UNIT**

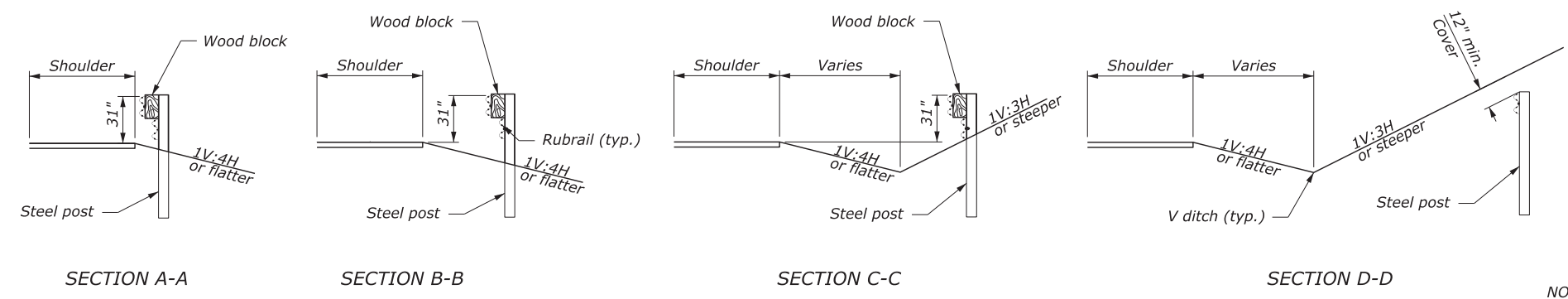
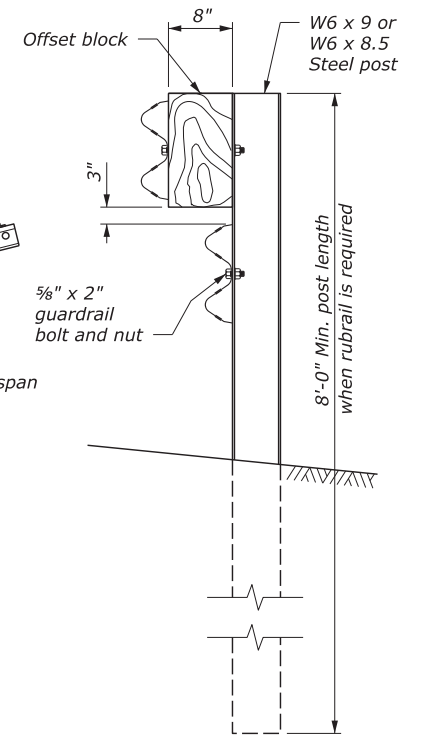
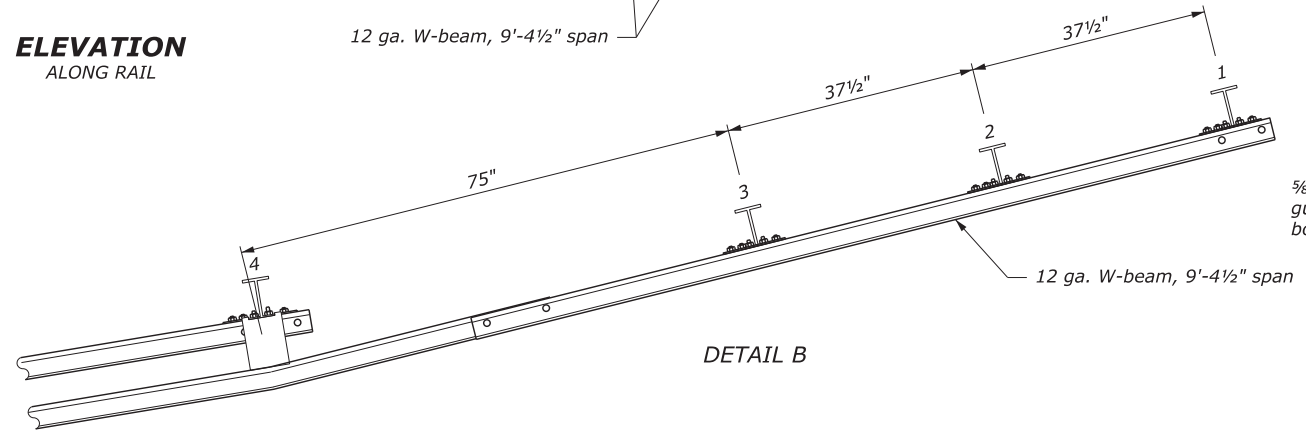
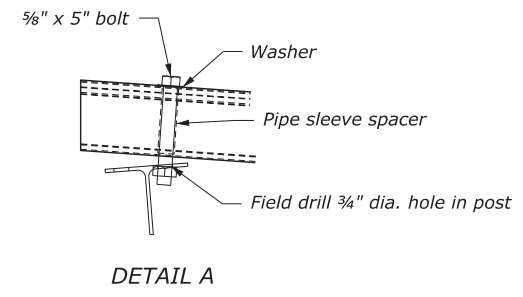
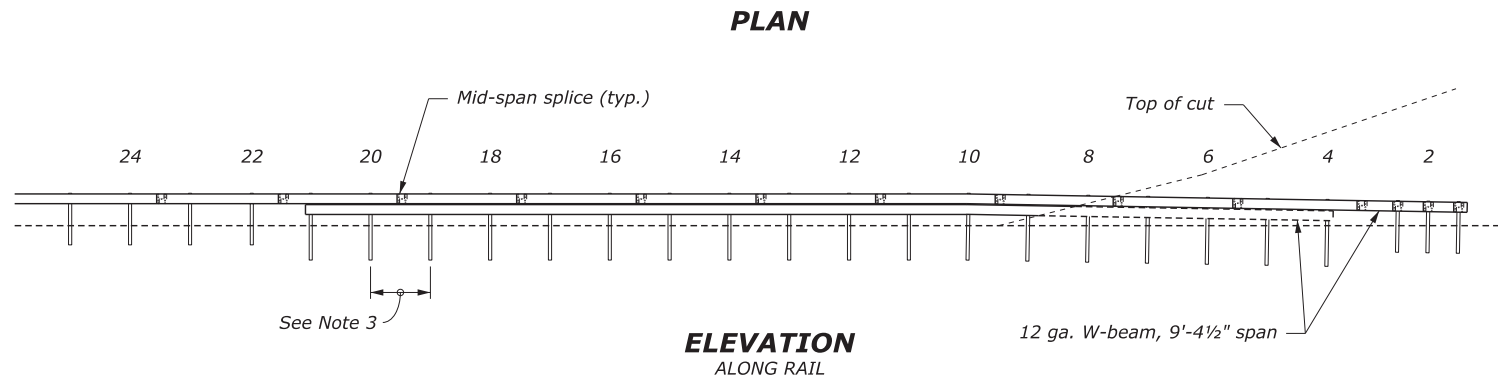
SHEET 1 OF 2
862D01



DRAWING NOT TO SCALE

- NOTE:**
1. See Detail sheet 2 of 2 for other details.
 2. Steel posts shown.
 3. Typical post spacing is 6'-3" unless otherwise noted.

| POST OFFSETS FROM EDGE OF SHOULDER | |
|------------------------------------|--------------------------------------|
| POST | DISTANCE |
| 1 | 13'-11 ³ / ₄ " |
| 4 | 10'-11" |
| 6 | 8'-10 ¹ / ₄ " |
| 10 | 69" |



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GUARDRAIL PLACEMENT BURIED IN CUT END UNIT

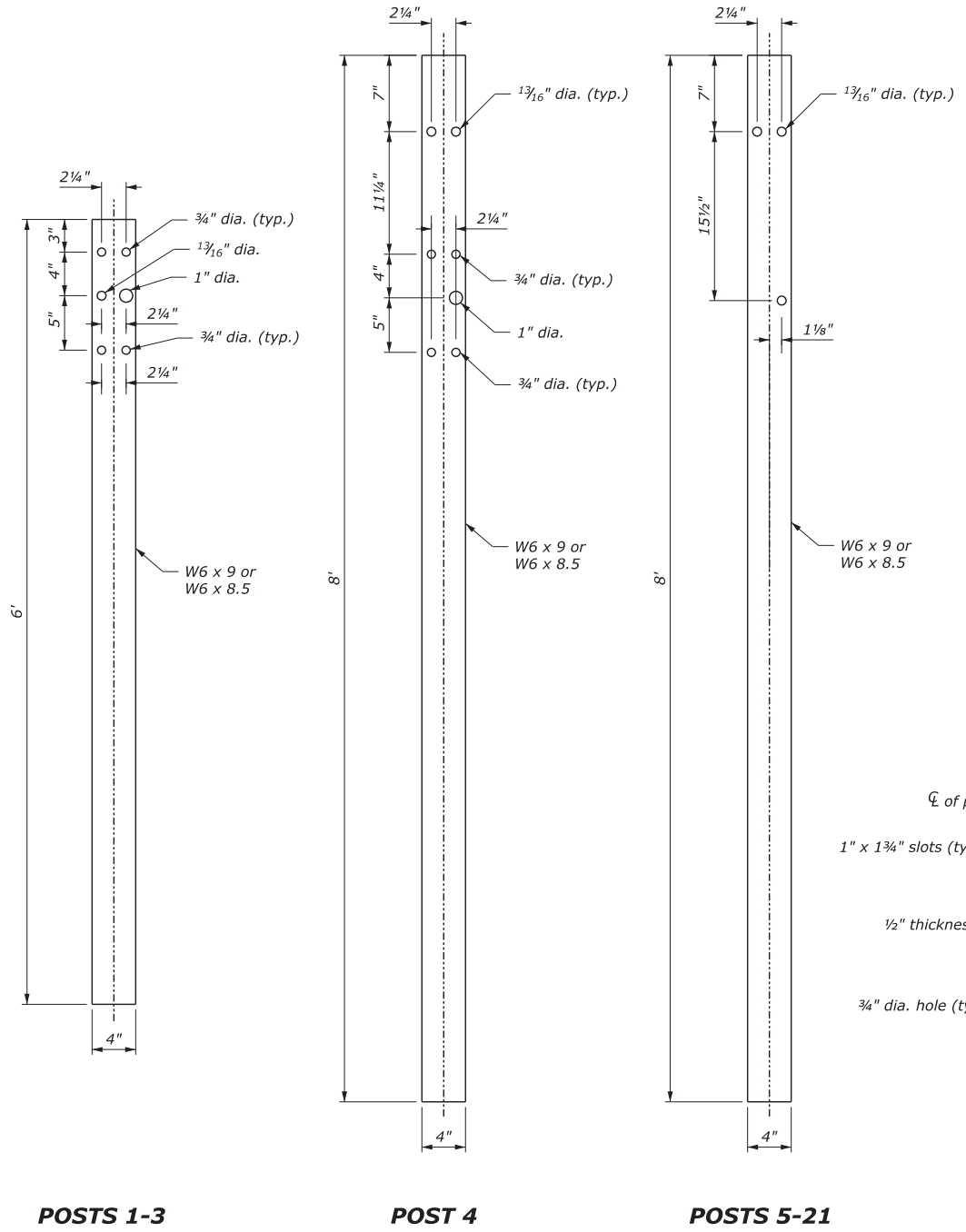
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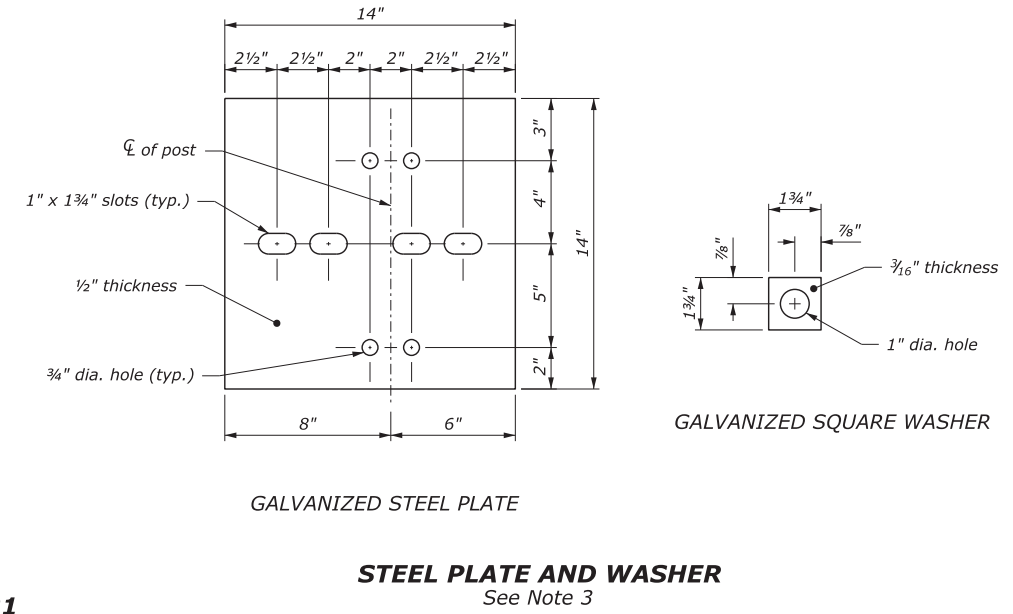
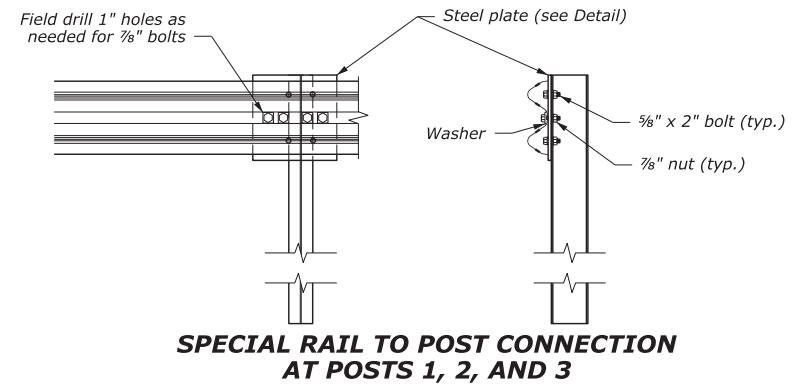
ROADWAY DETAIL DRAWING FOR
GUARDRAIL PLACEMENT
BURIED IN CUT END UNIT

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ROADWAY DETAIL DRAWING FOR
GUARDRAIL PLACEMENT
BURIED IN CUT END UNIT



- NOTE:**
1. See Sheet 1 of 2 for terminal layout.
 2. Use zinc rich paint to coat field drilled holes.
 3. Anchor plate and hardware are typical on top rail of Posts 1 -3 and rub rail at Post 4.



SHEET 2 OF 2
862D01

SHEET 2 OF 2
862D01



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GUARDRAIL PLACEMENT BURIED IN CUT END UNIT

ORIGINAL BY: _____ DATE: _____
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| | |
|-------------|-----------|
| PROJECT NO. | SHEET NO. |
| 49333.3.13 | 5 |

GUARDRAIL ITEM SUMMARY

| LOCATION NO | ROUTE | DESCRIPTION | SHOULDER LT/RT | 3030000000-E | 3045000000-E | 3195000000-N | 3210000000-N | 3287000000-N | 3319000000-N | 3345000000-E | 3360000000-E | 3436000000-N | NOTES |
|--------------------|--------|--|-------------------|-----------------------|---------------------------------------|--------------------------------------|--|--------------------------------------|---|---|---------------------------------|--|------------------------------------|
| | | | | STEEL BM GUARDRAIL | STEEL BM GUARDRAIL, SHOP CURVED | GUARDRAIL END UNITS, TYPE AT-1 | GUARDRAIL END UNITS, TYPE CAT- 1 | GUARDRAIL END UNITS, TYPE TL-3 | GUARDRAIL ANCHOR UNITS, TYPE B-83 | REMOVE AND RESET EXISTING GUARDRAIL | REMOVE EXISTING GUARDRAIL | GUARDRAIL END UNITS, TYPE BURIED IN CUT | |
| | | | | LF | LF | EA | EA | EA | EA | LF | LF | EA | |
| 1 | NC 226 | APPROXIMATELY 0.00 MILES FROM US 19-E | LT | 2575 | 50 | 1 | | | | | 2575 | | |
| 2 | NC 226 | APPROXIMATELY 0.00 MILES FROM US 19-E | RT | 575 | 50 | | 1 | | | | 575 | 1 | |
| 3 | NC 226 | APPROXIMATELY 0.26 MILES FROM US 19-E | LT | 1000 | | | | 1 | 1 | | 1000 | | |
| 4 | NC 226 | APPROXIMATELY 0.36 MILES FROM US 19-E | RT | 1225 | 125 | 1 | | | | | 1225 | | TIE TO EXISTING BRIDGE ANCHOR UNIT |
| 5 | NC 226 | APPROXIMATELY 0.61 MILES FROM US 19-E | LT | 325 | | 1 | | | 1 | 25 | 325 | | |
| 6 | NC 226 | APPROXIMATELY 0.60 MILES FROM US 19-E | RT | 100 | | | 1 | | 1 | | 100 | | |
| 7 | NC 226 | APPROXIMATELY 0.70 MILES FROM US 19-E | LT | 1200 | | | | 1 | | 25 | 1200 | | |
| 8 | NC 226 | APPROXIMATELY 0.71 MILES FROM US 19-E | RT | 1350 | | 1 | | | | | 1350 | | TIE TO EXISTING GUARDRAIL |
| 9 | NC 226 | APPROXIMATELY 1.06 MILES FROM US 19-E | RT | 850 | 132.25 | 1 | | | | | 850 | | |
| 10 | NC 226 | APPROXIMATELY 1.12 MILES FROM US 19-E | LT | 1125 | 50 | 1 | | | | 25 | 1125 | | |
| 11 | NC 226 | APPROXIMATELY 1.51 MILES FROM US 19-E | LT | 900 | 50 | 1 | | 1 | | | 900 | | |
| 12 | NC 226 | APPROXIMATELY 1.56 MILES FROM US 19-E | RT | 650 | 32.5 | 1 | | | | | 650 | | |
| 13 | NC 226 | APPROXIMATELY 1.77 MILES FROM US 19-E | LT | 62.5 | | | | 1 | | 25 | 62.5 | | |
| 14 | NC 226 | APPROXIMATELY 1.80 MILES FROM US 19-E | RT | 175 | 32.5 | 1 | | | | | 175 | | |
| 15 | NC 226 | APPROXIMATELY 1.94 MILES FROM US 19-E | RT | 25 | | | | 1 | | | 25 | | |
| 16 | NC 226 | APPROXIMATELY 2.33 MILES FROM US 19-E | LT | | | | | 1 | | 25 | | | |
| 17 | NC 226 | APPROXIMATELY 3.15 MILES FROM US 19-E | LT | 50 | | | | 1 | | 25 | 50 | | |
| 18 | NC 226 | APPROXIMATELY 3.17 MILES FROM US 19-E | RT | 25 | 25 | 1 | | 1 | | | 25 | | |
| 19 | NC 226 | APPROXIMATELY 3.20 MILES FROM US 19-E | RT | 50 | 25 | 1 | | 1 | | | 50 | | |
| 20 | NC 226 | APPROXIMATELY 3.51 MILES FROM US 19-E | LT | 300 | | | | 2 | | | 300 | | |
| 21 | NC 226 | APPROXIMATELY 3.60 MILES FROM US 19-E | RT | 100 | 32.5 | 1 | | | | | 100 | | |
| 22 | NC 226 | APPROXIMATELY 4.09 MILES FROM US 19-E | RT | 237.5 | 25 | 1 | | 1 | | | 237.5 | | |
| 23 | NC 226 | APPROXIMATELY 6.06 MILES FROM US 19-E | RT | 50 | | | | | | 50 | 50 | | |
| 24 | NC 226 | APPROXIMATELY 6.06 MILES FROM US 19-E | LT | 150 | | | | 1 | | | 150 | | |
| 25 | NC 226 | APPROXIMATELY 6.16 MILES FROM US 19-E | LT | 200 | | | | | | 50 | 200 | | |
| 26 | NC 226 | APPROXIMATELY 8.02 MILES FROM US 19-E | RT | 650 | | | | | | 25 | 650 | | |
| 27 | NC 226 | APPROXIMATELY 8.17 MILES FROM US 19-E | LT | 400 | | | | | | | 400 | | |
| GRAND TOTAL | | | | 14,350.0 | 629.75 | 13 | 2 | 13 | 3 | 275 | 14,350.0 | 1 | |

NOTES: QUANTITIES ARE ESTIMATED AND MAY CHANGE ACCORDING TO ACTUAL FIELD CONDITIONS.
THE ENGINEER SHALL FIELD MARK ALL PROPOSED GUARDRAIL AND END UNITS PRIOR TO BEGINNING CONSTRUCTION AT EACH LOCATION.