

TIP PROJECT: W-5713R

CONTRACT: DM00267

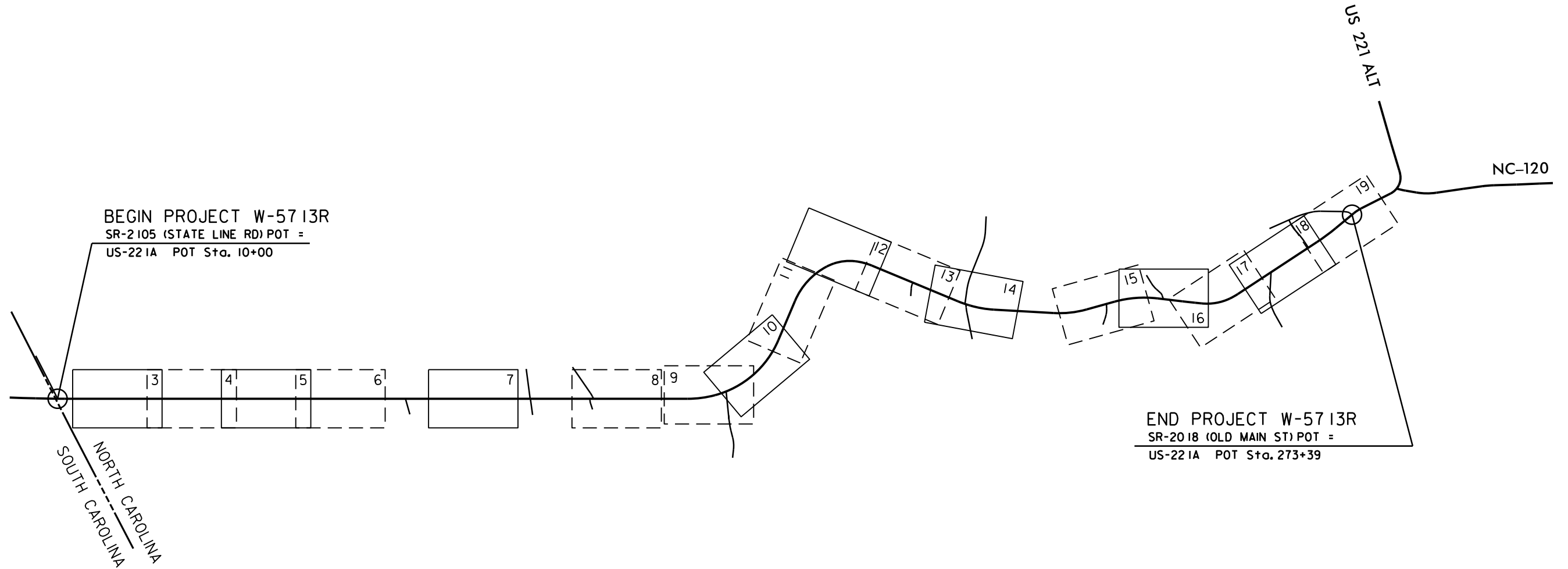
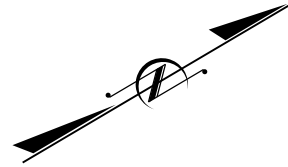
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**RUTHERFORD COUNTY**

LOCATION: US-221A 0.25 MILES FROM THE SOUTH CAROLINA  
STATE LINE TO SR-2018 (OLD MAIN ST)

TYPE OF WORK: GUARDRAIL INSTALLATION AND REPLACEMENT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5713R	1	19
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
44861.1.18	HSIP-0221(049)	PE	
44861.3.18	HSIP-0221(049)	CONST.	



Prepared in the Office of:  
**NCDOT DIVISION 13**  
55 Orange St., Asheville NC, 28801

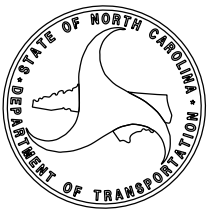
2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

PROJECT ENGINEER

LETTING DATE:  
JANUARY 16, 2019

PROJECT DESIGN ENGINEER





MATCH LINE STA 15+00 SEE SHEET 3

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





PROPOSED GUARDRAIL LOCATION I

250 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3

MATCH LINE STA 15+00 SEE SHEET 2



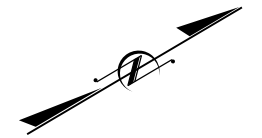
MATCH LINE STA 29+00 SEE SHEET 4

PROPOSED GUARDRAIL LOCATION IA

75 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





PROPOSED GUARDRAIL LOCATION 2

525 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3

MATCH LINE STA 29+00 SEE SHEET 3



MATCH LINE STA 43+00 SEE SHEET 5

PROPOSED GUARDRAIL LOCATION 3

112.5 LF STEEL BEAM GUARDRAIL  
25 LF STEEL BEAM GUARDRAIL, SHOP CURVED  
1 EA GUARDRAIL END UNITS, TYPE TL-3  
1 EA GUARDRAIL END UNITS, TYPE AT-1

PROPOSED GUARDRAIL LOCATION 4

125 LF STEEL BEAM GUARDRAIL  
12.5 LF STEEL BEAM GUARDRAIL, SHOP CURVED  
1 EA GUARDRAIL END UNITS, TYPE TL-3  
1 EA GUARDRAIL END UNITS, TYPE AT-1

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





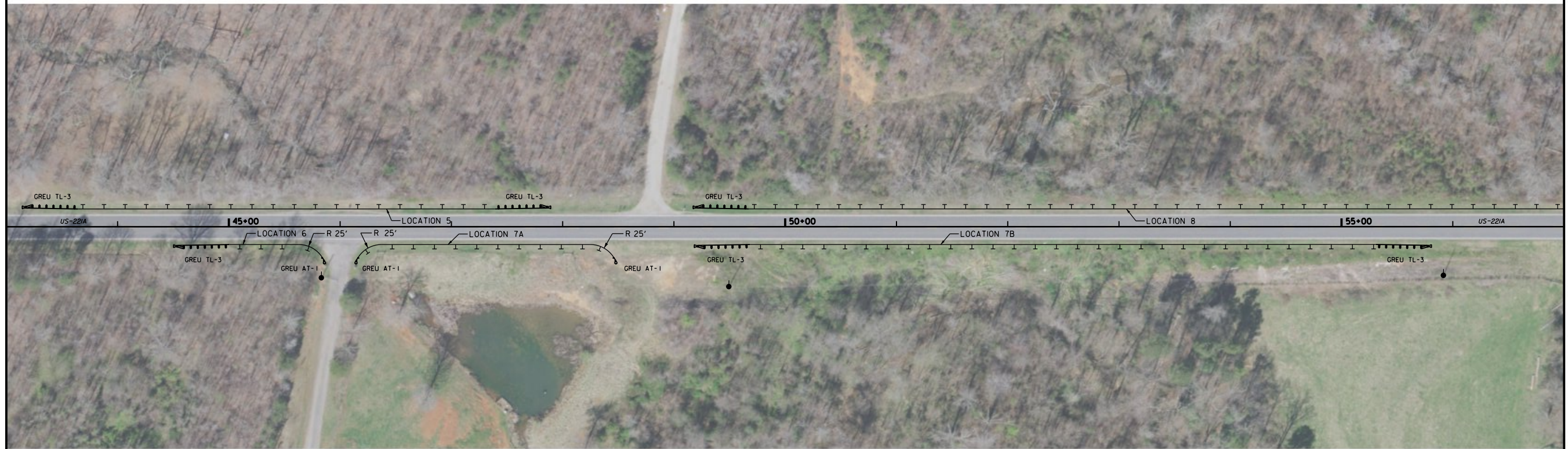
PROPOSED GUARDRAIL LOCATION 5

375 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3

PROPOSED GUARDRAIL LOCATION 8

812.5 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3

MATCH LINE STA 43+00 SEE SHEET 4



MATCH LINE STA 57+00 SEE SHEET 6

PROPOSED GUARDRAIL LOCATION 6

62.5 LF STEEL BEAM GUARDRAIL  
25 LF STEEL BEAM GUARDRAIL, SHOP CURVED  
1 EA GUARDRAIL END UNITS, TYPE TL-3  
1 EA GUARDRAIL END UNITS, TYPE AT-1

PROPOSED GUARDRAIL LOCATION 7A

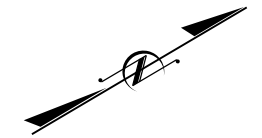
187.5 LF STEEL BEAM GUARDRAIL  
50 LF STEEL BEAM GUARDRAIL, SHOP CURVED  
2 EA GUARDRAIL END UNITS, TYPE AT-1

PROPOSED GUARDRAIL LOCATION 7B

562.5 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





PROPOSED GUARDRAIL LOCATION 10

175 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3

MATCH LINE STA 57+00 SEE SHEET 5



PROPOSED GUARDRAIL LOCATION 7C

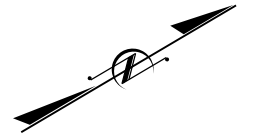
100 LF STEEL BEAM GUARDRAIL  
37.5 LF STEEL BEAM GUARDRAIL, SHOP CURVED  
2 EA GUARDRAIL END UNITS, TYPE AT-1

PROPOSED GUARDRAIL LOCATION 9

112.5 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.

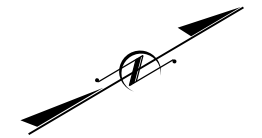




PROPOSED GUARDRAIL LOCATION 11  
 125 LF STEEL BEAM GUARDRAIL  
 2 EA GUARDRAIL END UNITS, TYPE TL-3

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





PROPOSED GUARDRAIL LOCATION 13

925 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3



PROPOSED GUARDRAIL LOCATION 12

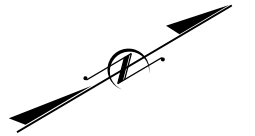
825 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.



PROPOSED GUARDRAIL LOCATION 15

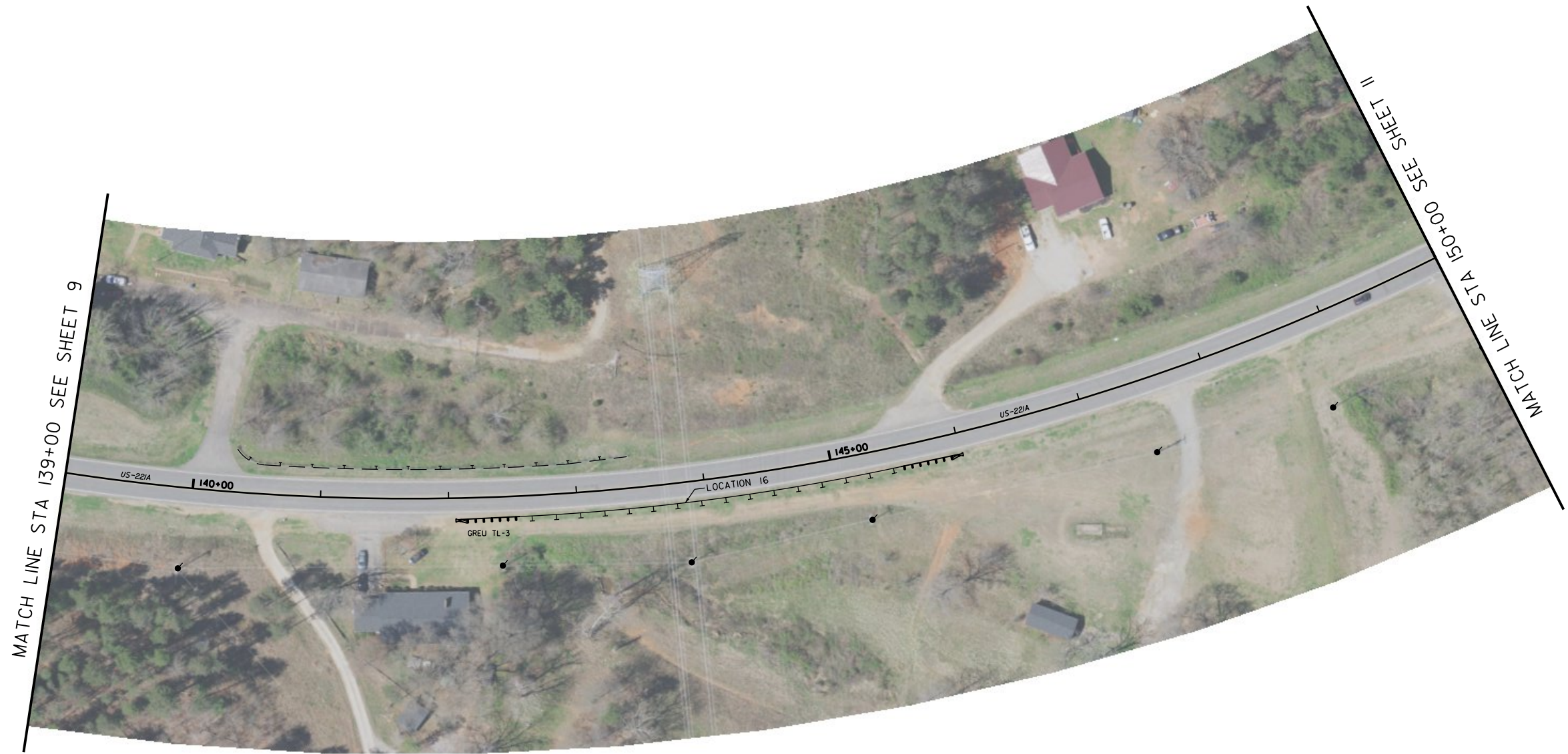
300 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3



PROPOSED GUARDRAIL LOCATION 14

387.5 LF STEEL BEAM GUARDRAIL  
100 LF STEEL BEAM GUARDRAIL, SHOP CURVED  
2 EA GUARDRAIL END UNITS, TYPE TL-3

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.

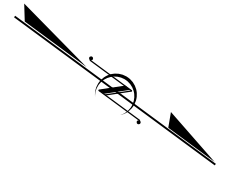


PROPOSED GUARDRAIL LOCATION 16

300 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3

NOTE: ALIGNMENT AND STATIONING IS FOR  
REFERENCE PURPOSES ONLY.





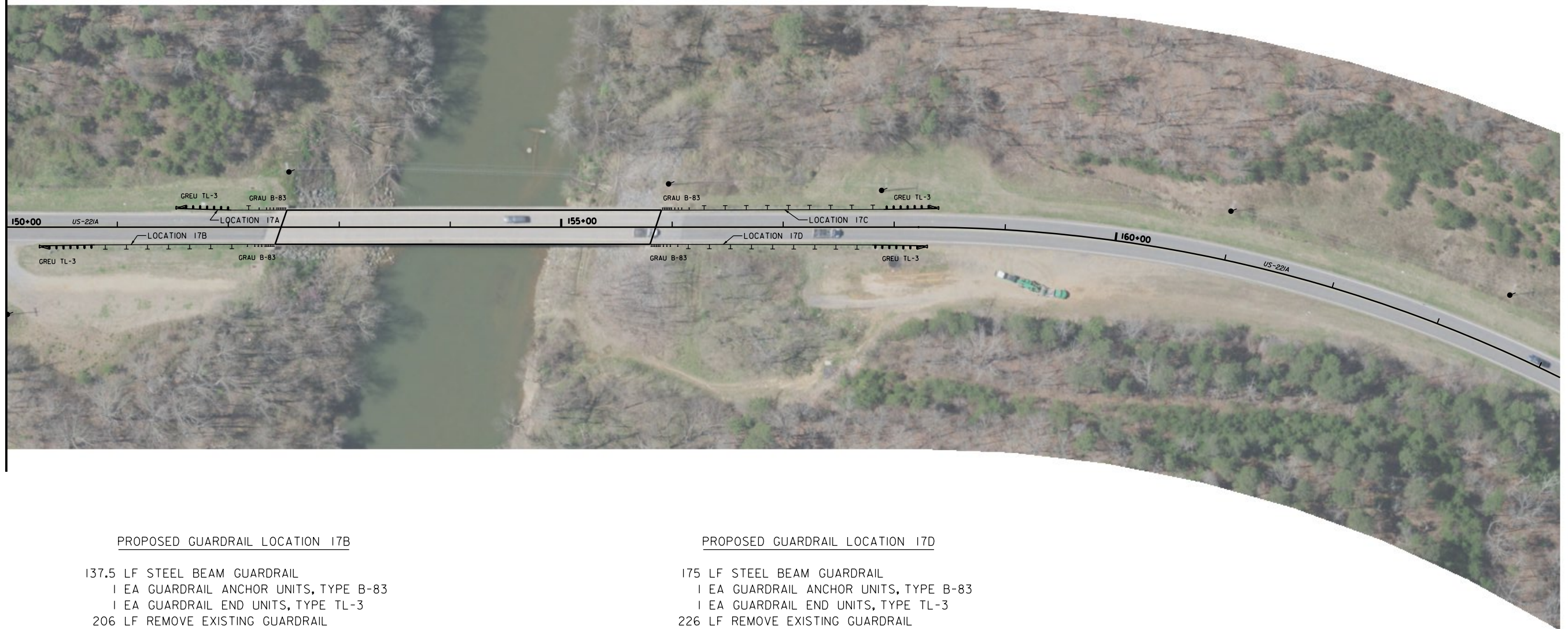
PROPOSED GUARDRAIL LOCATION 17A

- 25 LF STEEL BEAM GUARDRAIL
- 1 EA GUARDRAIL ANCHOR UNITS, TYPE B-83
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 92 LF REMOVE EXISTING GUARDRAIL

PROPOSED GUARDRAIL LOCATION 17C

- 175 LF STEEL BEAM GUARDRAIL
- 1 EA GUARDRAIL ANCHOR UNITS, TYPE B-83
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 242 LF REMOVE EXISTING GUARDRAIL

MATCH LINE STA 150+00 SEE SHEET 10



PROPOSED GUARDRAIL LOCATION 17B

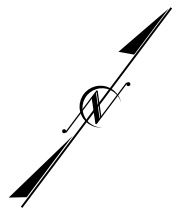
- 137.5 LF STEEL BEAM GUARDRAIL
- 1 EA GUARDRAIL ANCHOR UNITS, TYPE B-83
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 206 LF REMOVE EXISTING GUARDRAIL

PROPOSED GUARDRAIL LOCATION 17D

- 175 LF STEEL BEAM GUARDRAIL
- 1 EA GUARDRAIL ANCHOR UNITS, TYPE B-83
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 226 LF REMOVE EXISTING GUARDRAIL

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





PROPOSED GUARDRAIL LOCATION 18

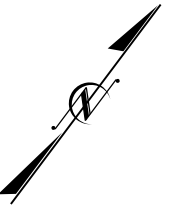
500 LF STEEL BEAM GUARDRAIL  
2 EA GUARDRAIL END UNITS, TYPE TL-3



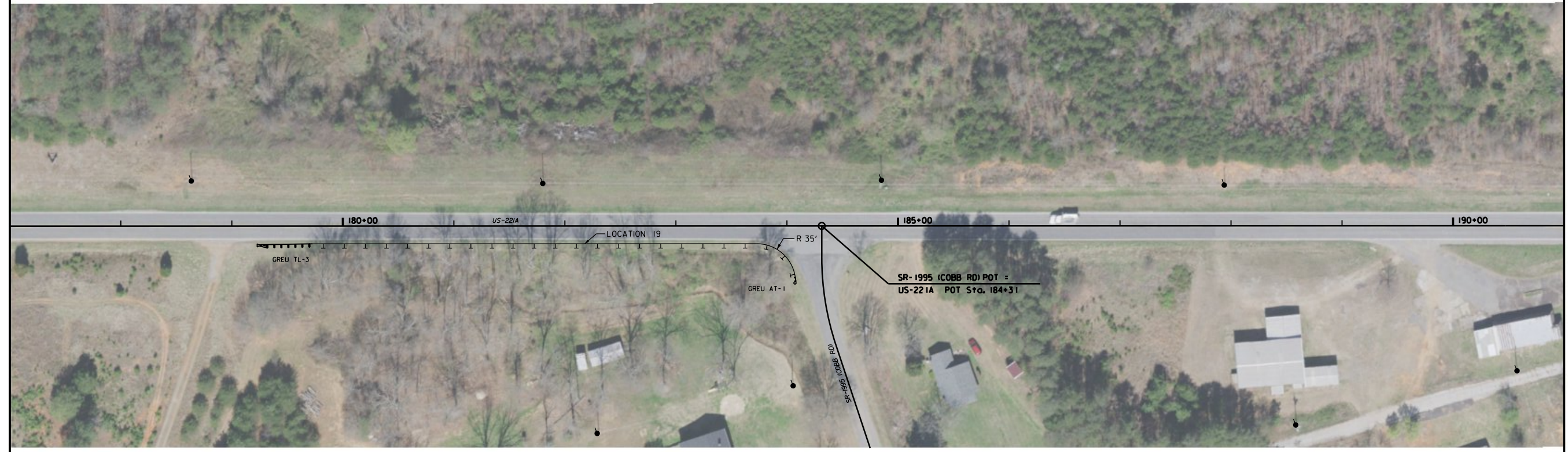
MATCH LINE STA 177+00 SEE SHEET 13

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





MATCH LINE STA 177+00 SEE SHEET 12



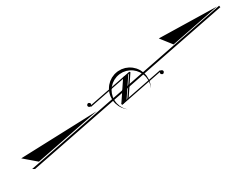
MATCH LINE STA 191+00 SEE SHEET 14

PROPOSED GUARDRAIL LOCATION 19

- 400 LF STEEL BEAM GUARDRAIL
- 50 LF STEEL BEAM GUARDRAIL, SHOP CURVED
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 1 EA GUARDRAIL END UNITS, TYPE AT-1

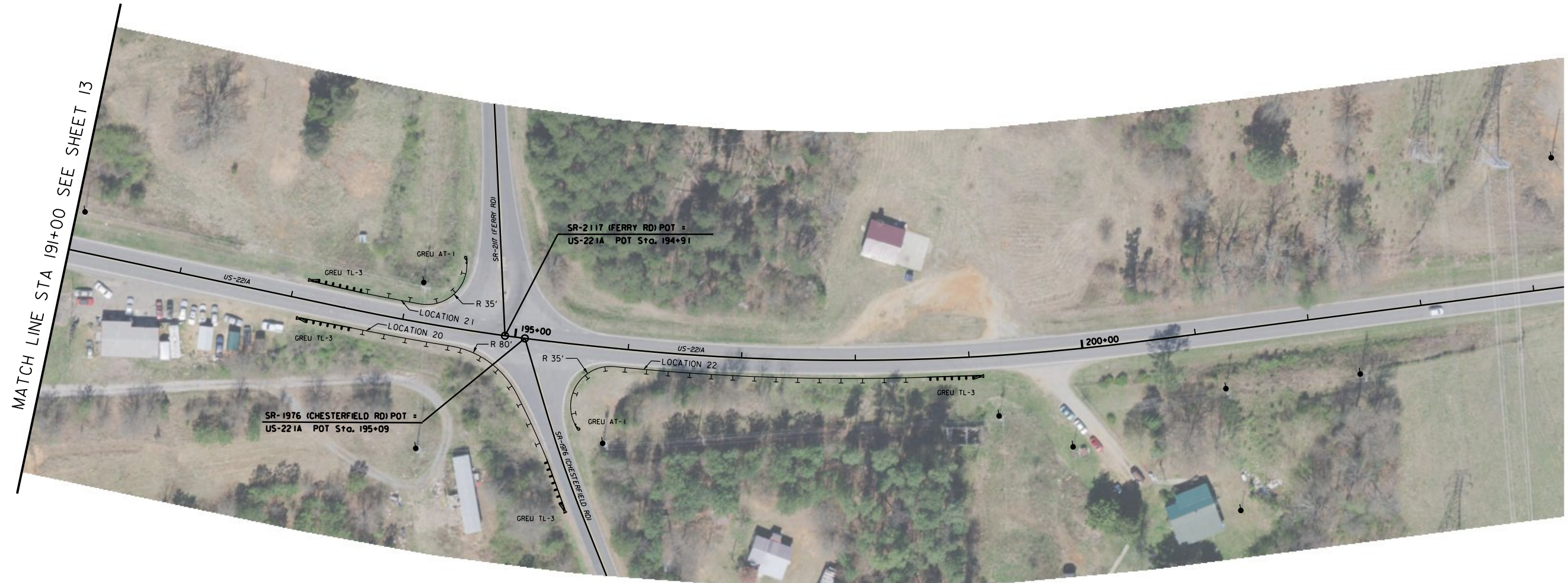
NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





PROPOSED GUARDRAIL LOCATION 21

50 LF STEEL BEAM GUARDRAIL  
 62.5 LF STEEL BEAM GUARDRAIL, SHOP CURVED  
 1 EA GUARDRAIL END UNITS, TYPE TL-3  
 1 EA GUARDRAIL END UNITS, TYPE AT-1



PROPOSED GUARDRAIL LOCATION 20

150 LF STEEL BEAM GUARDRAIL  
 75 LF STEEL BEAM GUARDRAIL, SHOP CURVED  
 2 EA GUARDRAIL END UNITS, TYPE TL-3

PROPOSED GUARDRAIL LOCATION 22

275 LF STEEL BEAM GUARDRAIL  
 75 LF STEEL BEAM GUARDRAIL, SHOP CURVED  
 1 EA GUARDRAIL END UNITS, TYPE TL-3  
 1 EA GUARDRAIL END UNITS, TYPE AT-1

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





PROPOSED GUARDRAIL LOCATION 24

- 525 LF STEEL BEAM GUARDRAIL
- 25 LF STEEL BEAM GUARDRAIL, SHOP CURVED
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 1 EA GUARDRAIL END UNITS, TYPE AT-1



PROPOSED GUARDRAIL LOCATION 23A

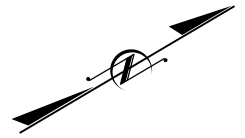
- 400 LF STEEL BEAM GUARDRAIL
- 62.5 LF STEEL BEAM GUARDRAIL, SHOP CURVED
- 2 EA GUARDRAIL END UNITS, TYPE TL-3

PROPOSED GUARDRAIL LOCATION 23B

- 150 LF STEEL BEAM GUARDRAIL
- 50 LF STEEL BEAM GUARDRAIL, SHOP CURVED
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 1 EA GUARDRAIL END UNITS, TYPE AT-1

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





PROPOSED GUARDRAIL LOCATION 25A

- 1675 LF STEEL BEAM GUARDRAIL
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 1 EA GUARDRAIL ANCHOR UNITS, TYPE B-83
- 1238 LF REMOVE EXISTING GUARDRAIL

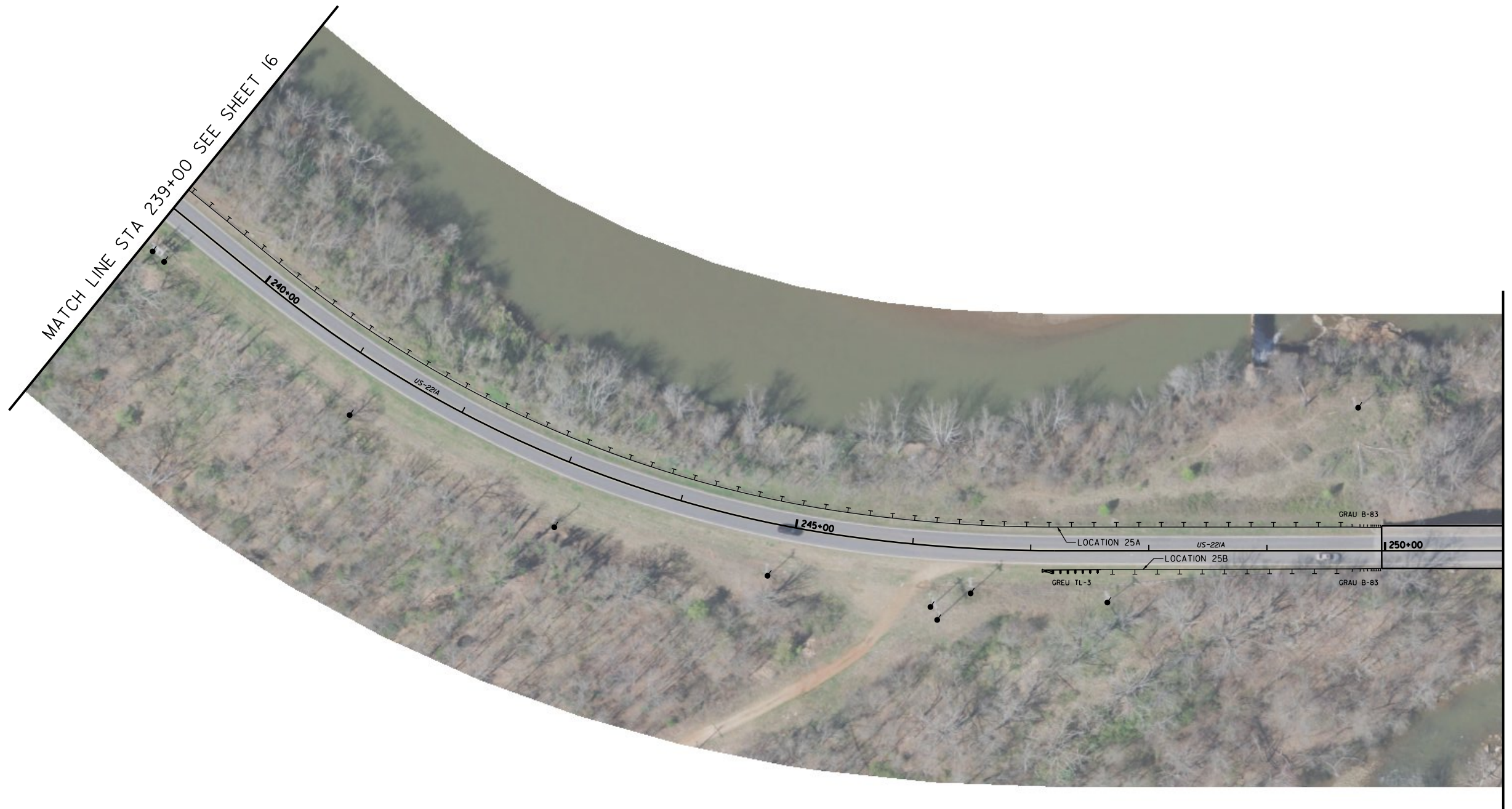


MATCH LINE STA 228+00 SEE SHEET 15

MATCH LINE STA 239+00 SEE SHEET 17

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





MATCH LINE STA 239+00 SEE SHEET 16

MATCH LINE STA 251+00 SEE SHEET 18

PROPOSED GUARDRAIL LOCATION 25B

- 212.5 LF STEEL BEAM GUARDRAIL
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 1 EA GUARDRAIL ANCHOR UNITS, TYPE B-83
- 227 LF REMOVE EXISTING GUARDRAIL

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





PROPOSED GUARDRAIL LOCATION 26A

- 25 LF STEEL BEAM GUARDRAIL
- 12.5 LF STEEL BEAM GUARDRAIL, SHOP CURVED
- 1 EA GUARDRAIL END UNITS, TYPE AT-1
- 1 EA GUARDRAIL ANCHOR UNITS, TYPE B-83
- 52 LF REMOVE EXISTING GUARDRAIL

PROPOSED GUARDRAIL LOCATION 27A

- 625 LF STEEL BEAM GUARDRAIL
- 2 EA GUARDRAIL END UNITS, TYPE TL-3
- 746 LF REMOVE EXISTING GUARDRAIL

MATCH LINE STA 251+00 SEE SHEET 17



MATCH LINE STA 265+00 SEE SHEET 19

PROPOSED GUARDRAIL LOCATION 26B

- 162.5 LF STEEL BEAM GUARDRAIL
- 37.5 LF STEEL BEAM GUARDRAIL, SHOP CURVED
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 1 EA GUARDRAIL ANCHOR UNITS, TYPE B-83
- 276 LF REMOVE EXISTING GUARDRAIL

PROPOSED GUARDRAIL LOCATION 27B

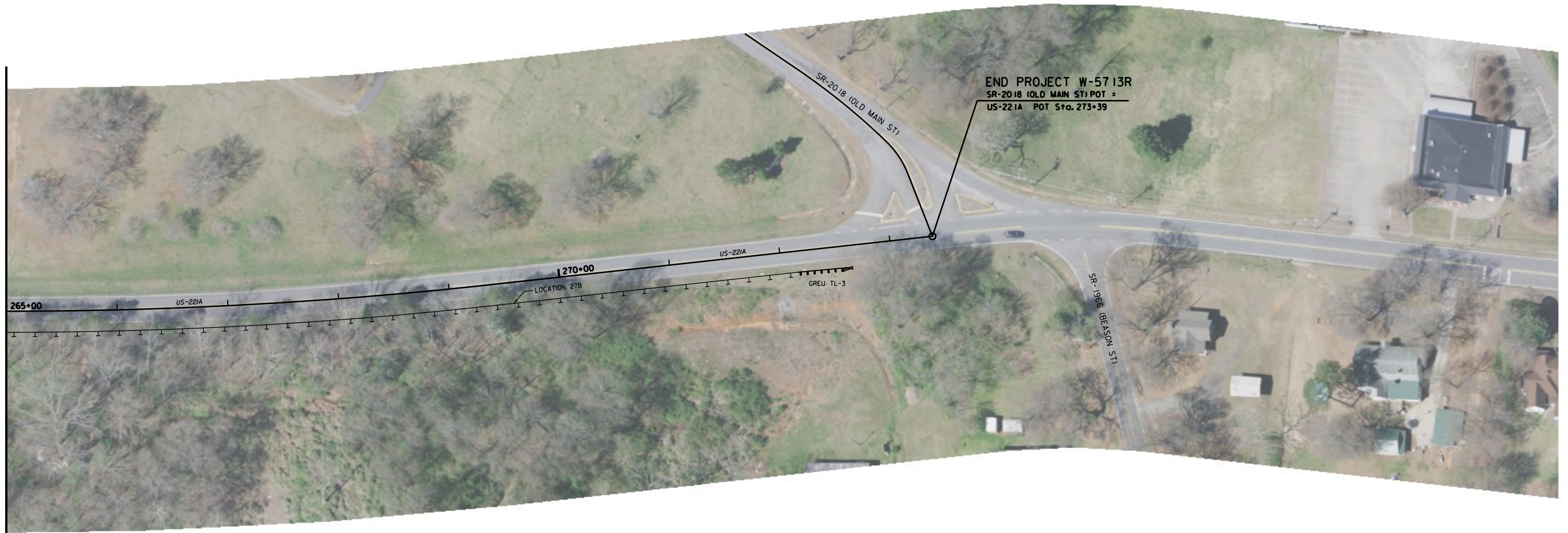
- 1912.5 LF STEEL BEAM GUARDRAIL
- 62.5 LF STEEL BEAM GUARDRAIL, SHOP CURVED
- 1 EA GUARDRAIL END UNITS, TYPE TL-3
- 1 EA GUARDRAIL END UNITS, TYPE AT-1
- 1960 LF REMOVE EXISTING GUARDRAIL

NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.





MATCH LINE STA 265+00 SEE SHEET 18



NOTE: ALIGNMENT AND STATIONING IS FOR REFERENCE PURPOSES ONLY.