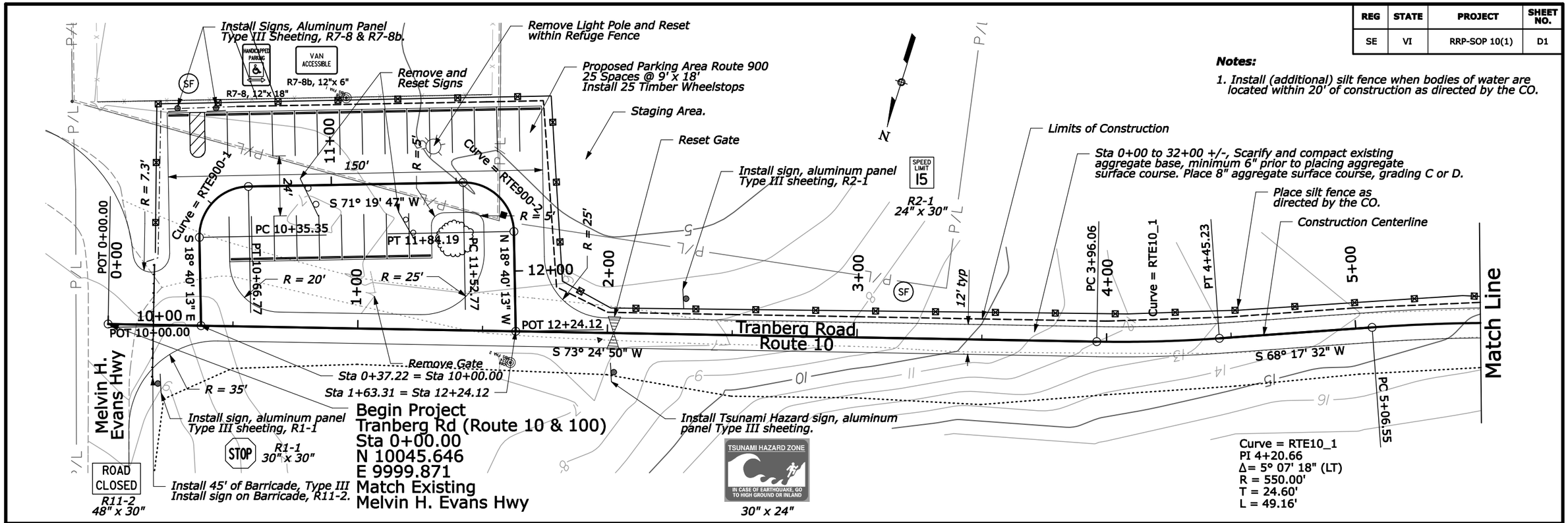
## APPENDIX A:  SITE PLANS

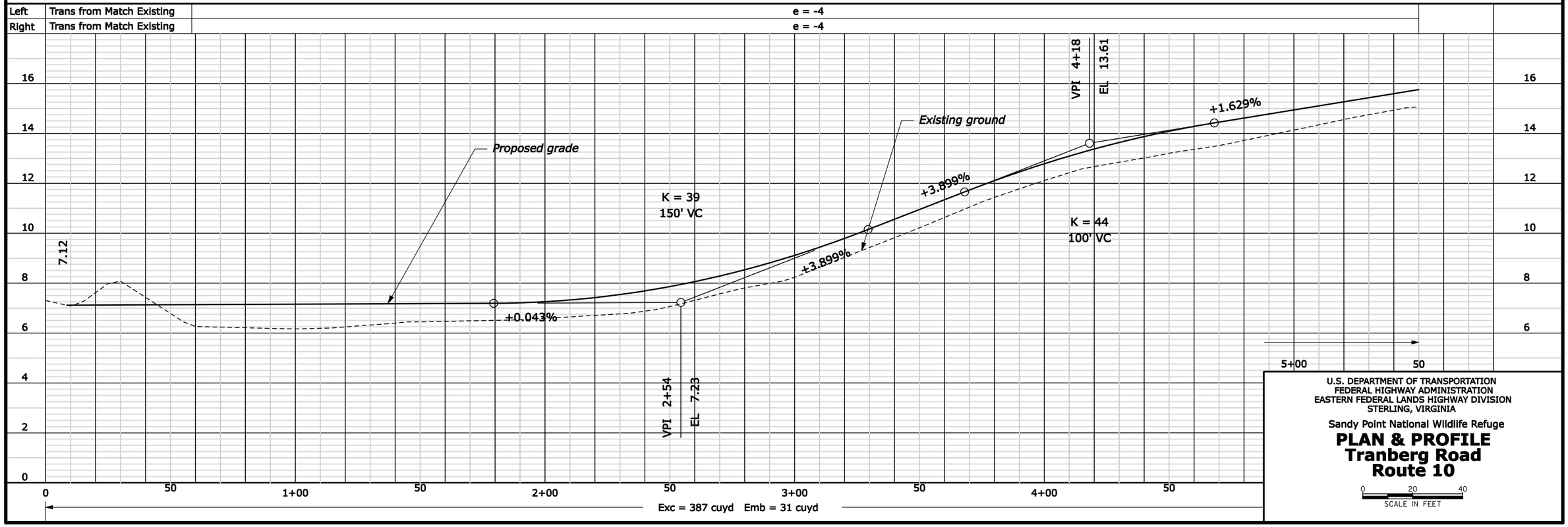
The project plans are in draft form, and are subject to change.

| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | D1 |

**Notes:**

1. Install (additional) silt fence when bodies of water are located within 20' of construction as directed by the CO.

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FEDERAL HIGHWAY ADMINISTRATION
EASTERN FEDERAL LANDS HIGHWAY DIVISION
STERLING, VIRGINIA

Sandy Point National Wildlife Refuge

**PLAN & PROFILE**
**Tranberg Road**
**Route 10**

0 20 40
SCALE IN FEET

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| REG | STATE | PROJECT | SHEET NO. |
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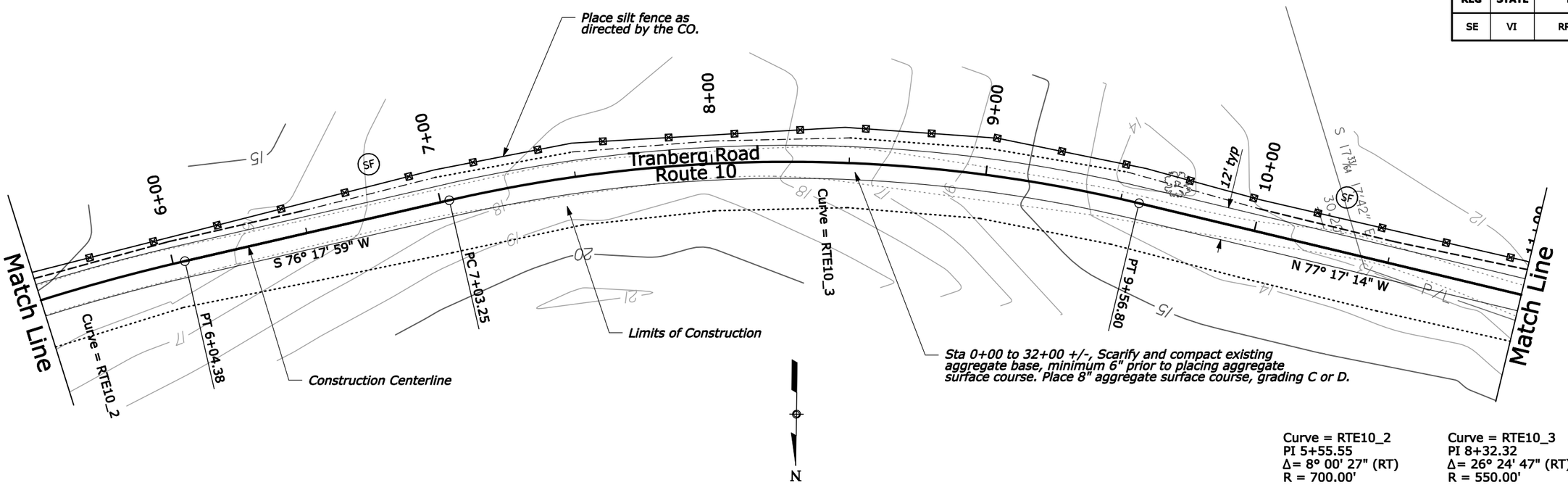
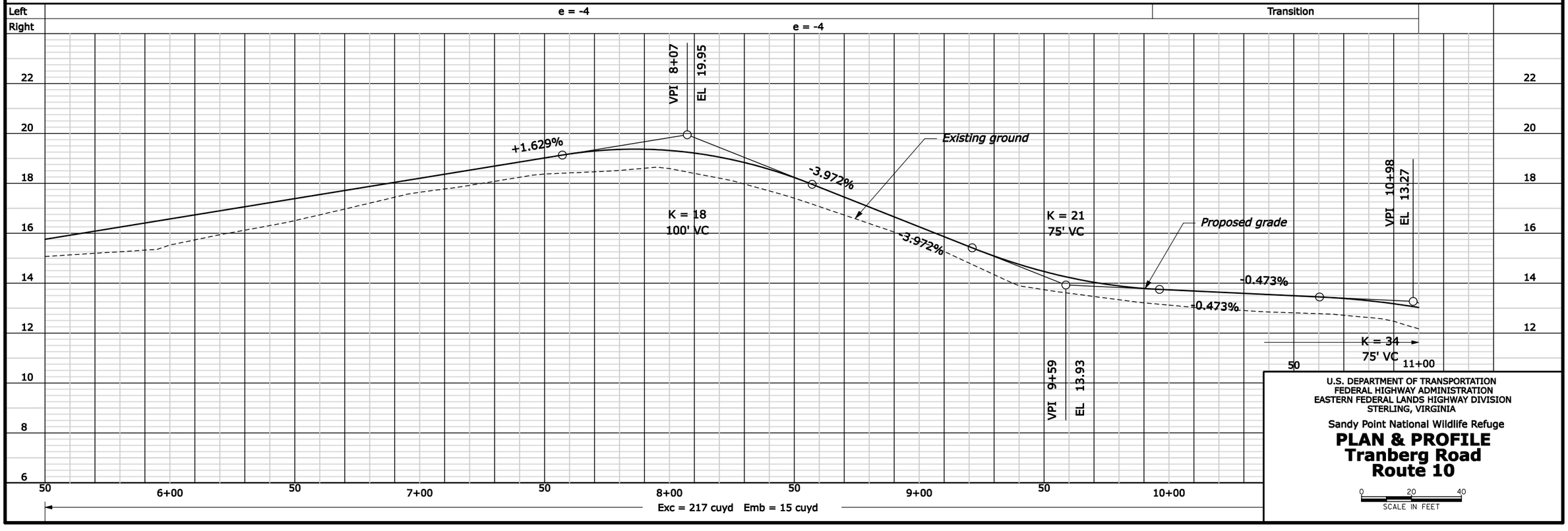



Curve = RTE10_2
PI 5+55.55
Δ= 8° 00' 27" (RT)
R = 700.00'
T = 48.99'
L = 97.83'

Curve = RTE10_3
PI 8+32.32
Δ= 26° 24' 47" (RT)
R = 550.00'
T = 129.07'
L = 253.55'

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**PLAN & PROFILE**
**Tranberg Road**
**Route 10**

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SCALE IN FEET

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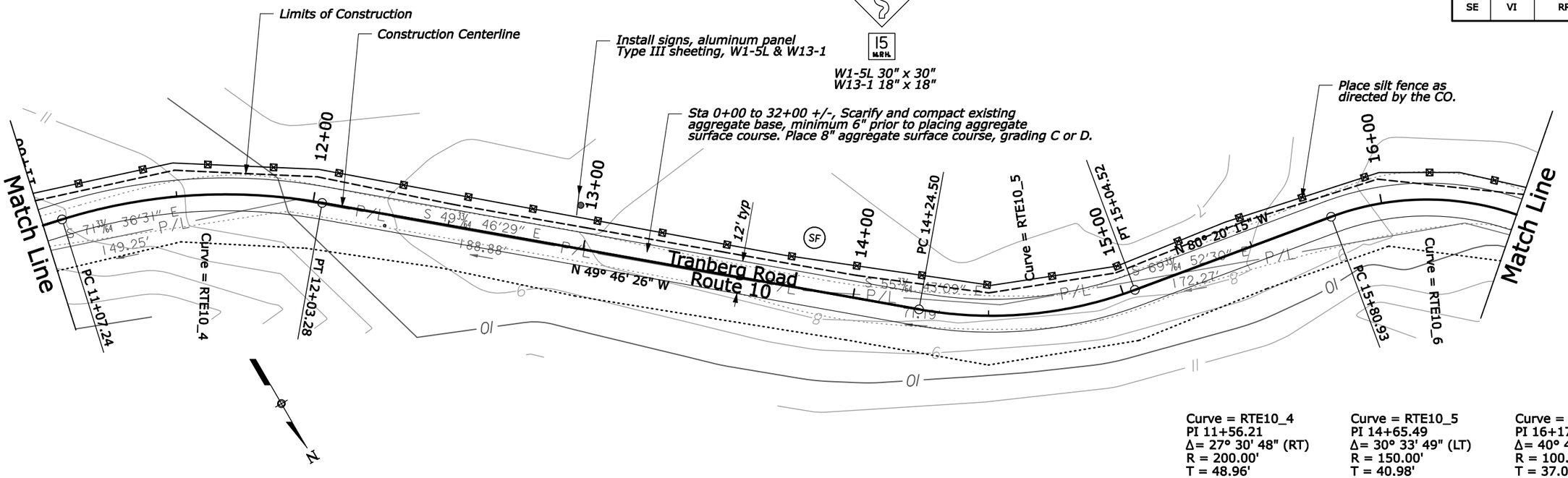
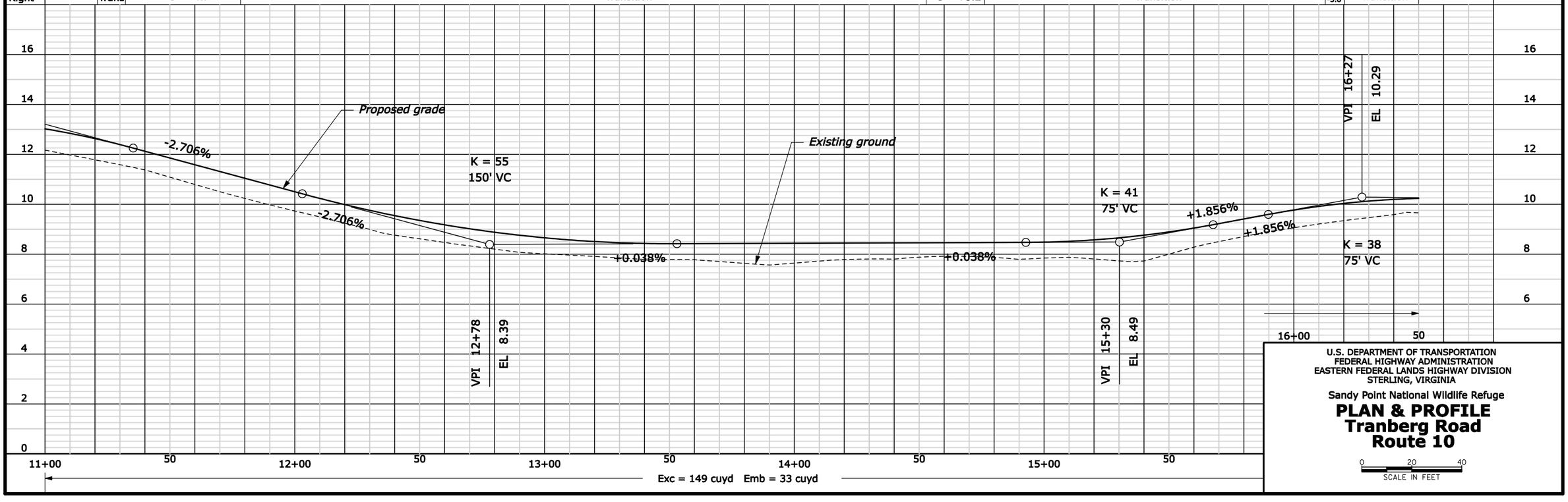



Curve = RTE10_4
PI 11+56.21
Δ= 27° 30' 48" (RT)
R = 200.00'
T = 48.96'
L = 96.04'

Curve = RTE10_5
PI 14+65.49
Δ= 30° 33' 49" (LT)
R = 150.00'
T = 40.98'
L = 80.02'

Curve = RTE10_6
PI 16+17.99
Δ= 40° 40' 31" (RT)
R = 100.00'
T = 37.07'
L = 70.99'

| Left | Transition | e = +4.7 | Transition | e = -5.2 | Transition | e = +5.8 | Transition |
|---|---|---|---|---|---|---|---|
| Right | Trans | e = -4.7 | Transition | e = +5.2 | Transition | e = -5.8 | Transition |

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**PLAN & PROFILE**
**Tranberg Road**
**Route 10**

0 20 40
SCALE IN FEET

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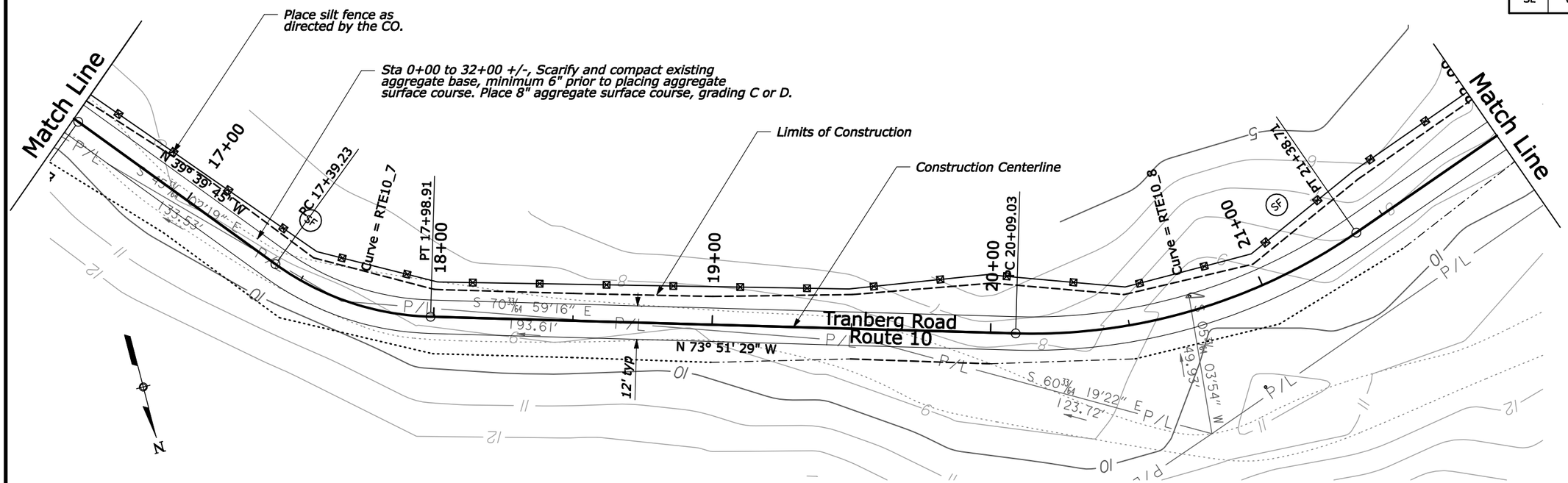


Curve = RTE10_7
PI 17+69.99
Δ= 34° 11' 45" (LT)
R = 100.00'
T = 30.76'
L = 59.68'

Curve = RTE10_8
PI 20+76.12
Δ= 36° 14' 44" (LT)
R = 205.00'
T = 67.09'
L = 129.68'

| Left | Transition | e = -5.4 | Transition | e = -4 |
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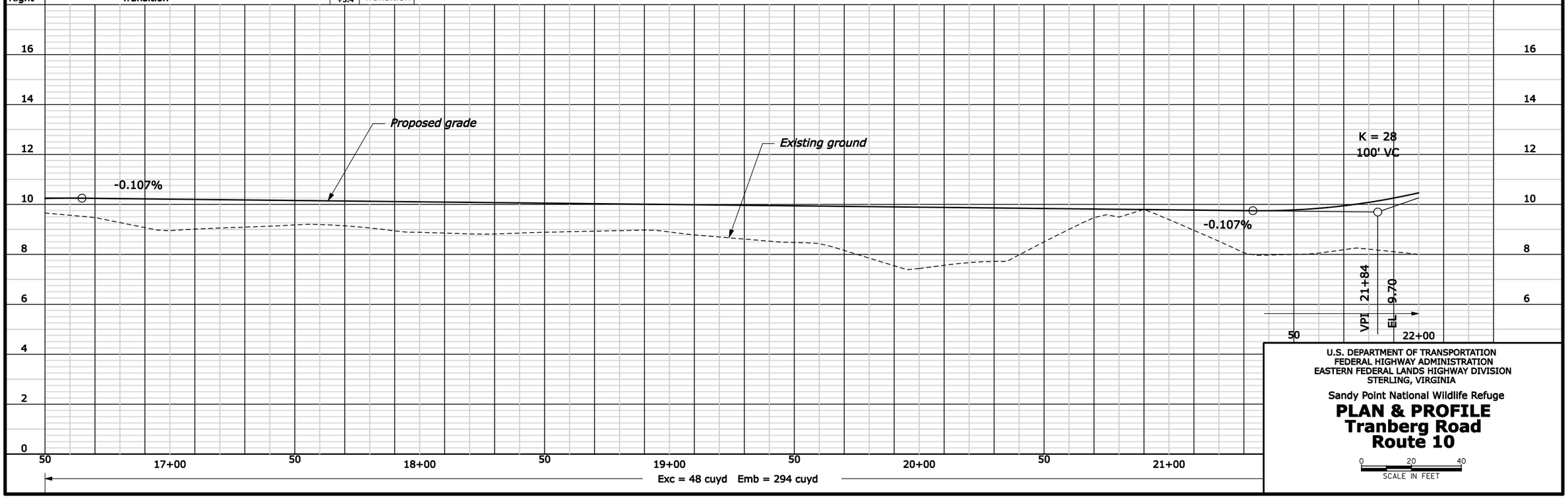
| Right | Transition | e = +5.4 | Transition | e = +4 |




Exc = 48 cuyd Emb = 294 cuyd

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# PLAN & PROFILE
# Tranberg Road
# Route 10

0 20 40
SCALE IN FEET

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| REG | STATE | PROJECT | SHEET NO. |
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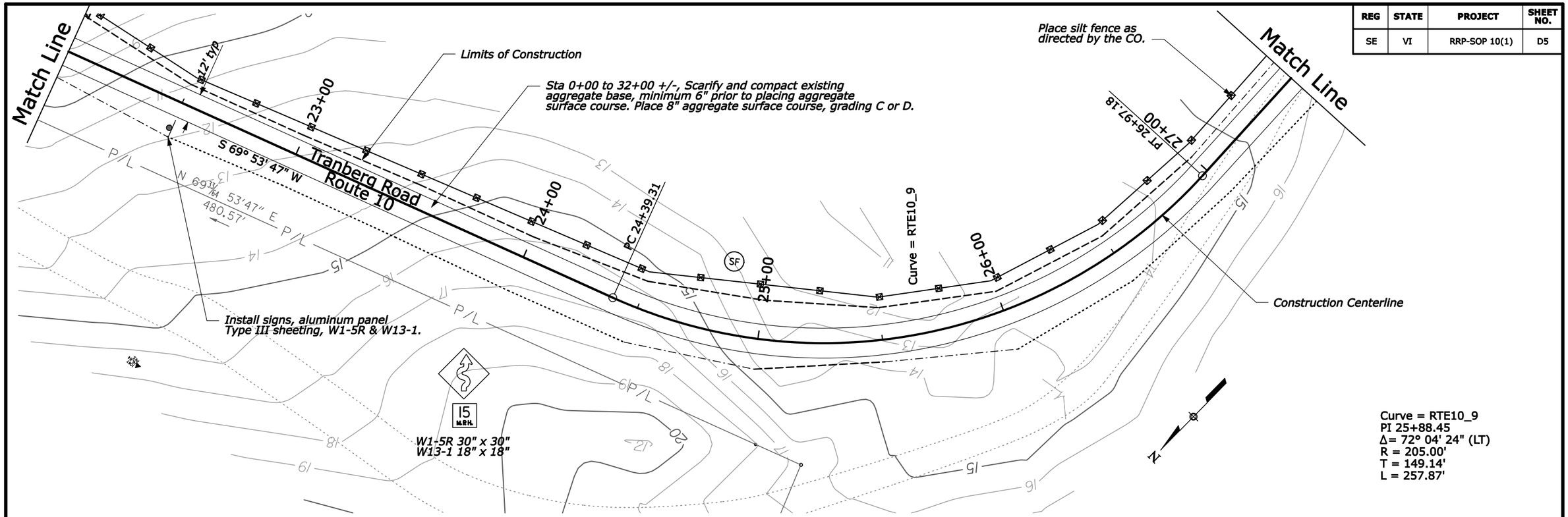


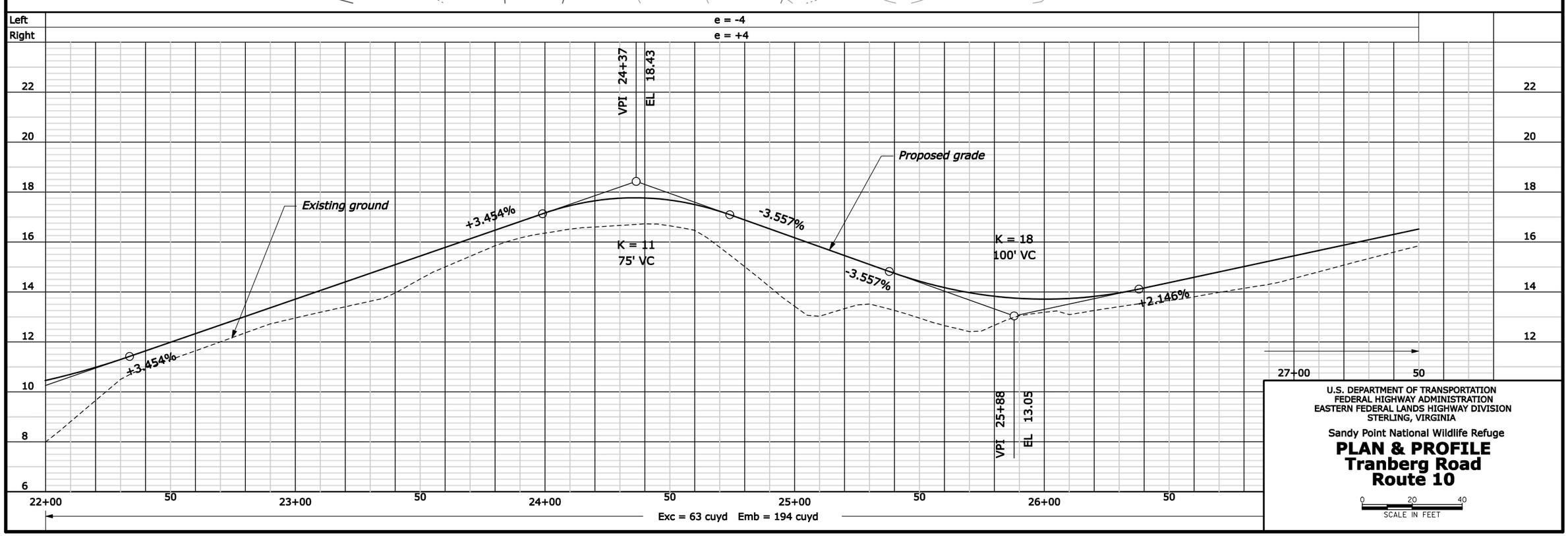


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**PLAN & PROFILE**
**Tranberg Road**
**Route 10**

0 20 40
SCALE IN FEET

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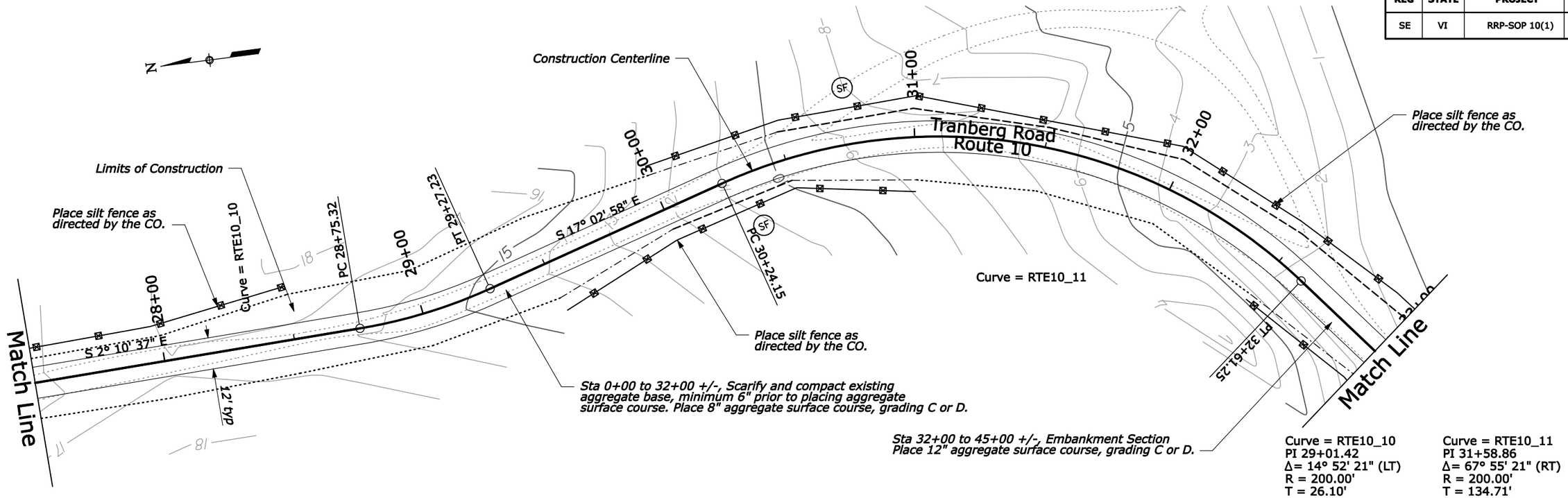
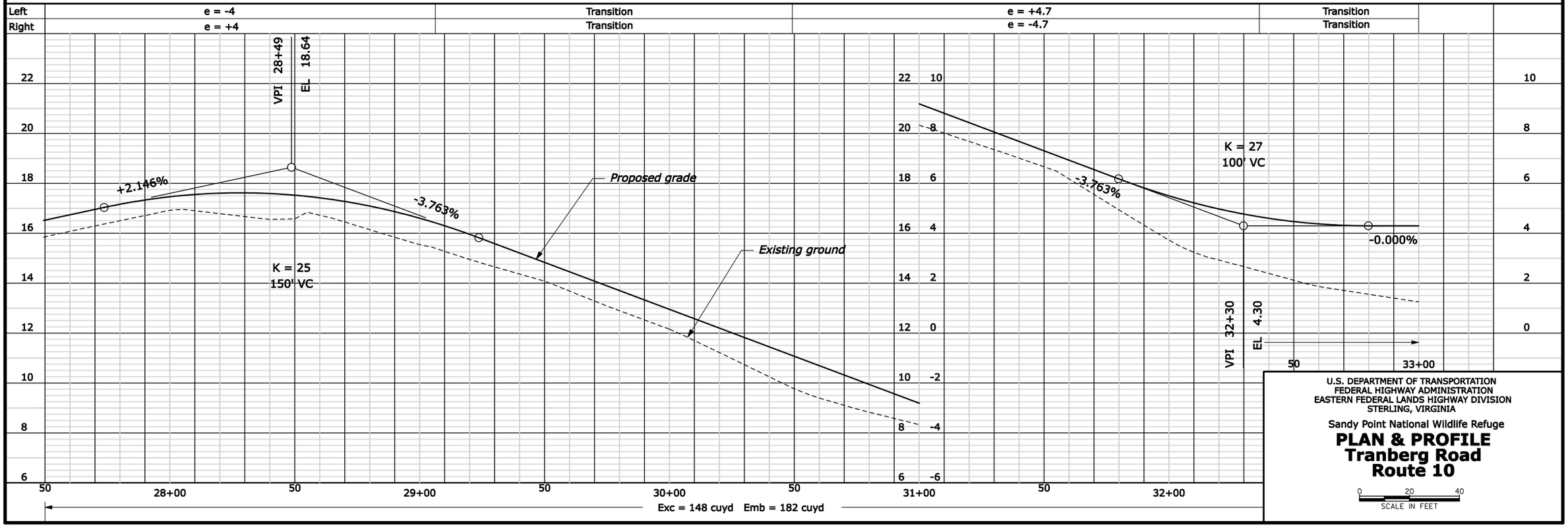



Curve = RTE10_10
PI 29+01.42
Δ= 14° 52' 21" (LT)
R = 200.00'
T = 26.10'
L = 51.92'

Curve = RTE10_11
PI 31+58.86
Δ= 67° 55' 21" (RT)
R = 200.00'
T = 134.71'
L = 237.09'

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Sandy Point National Wildlife Refuge

# PLAN & PROFILE
# Tranberg Road
# Route 10

SCALE IN FEET

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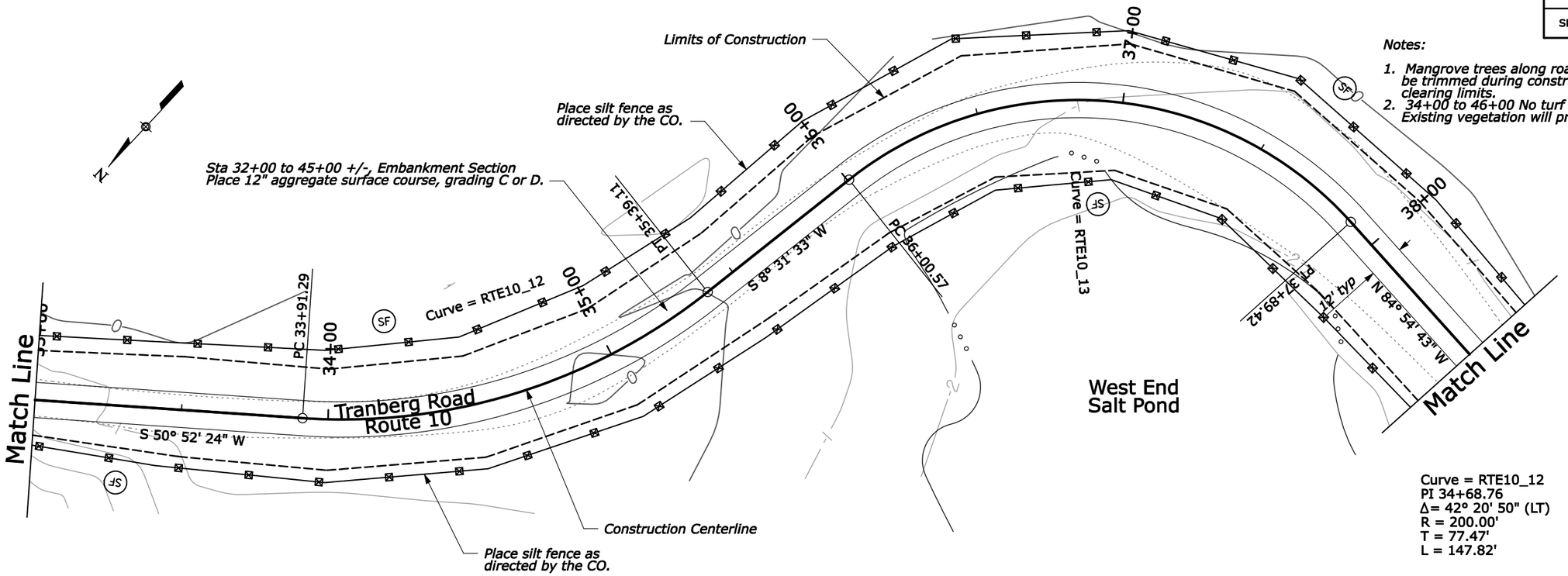
| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | D7 |



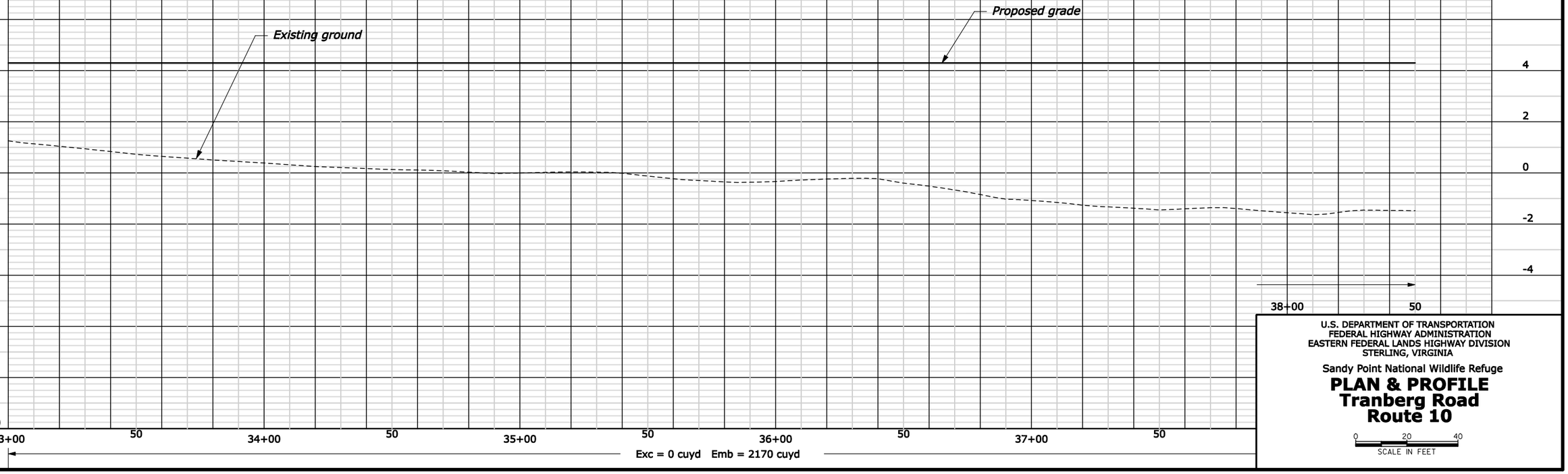

Notes:

1. Mangrove trees along road from 34+00 to 46+00 must be trimmed during construction. Refuge will verify the clearing limits.
2. 34+00 to 46+00 No turf establishment necessary. Existing vegetation will provide cover.

Curve = RTE10_12
PI 34+68.76
Δ= 42° 20' 50" (LT)
R = 200.00'
T = 77.47'
L = 147.82'

Curve = RTE10_13
PI 37+18.29
Δ= 86° 33' 44" (RT)
R = 125.00'
T = 117.72'
L = 188.85'

| Left | Transition | e = -4.7 | Transition | e = +5.5 | Transition | | |
|---|---|---|---|---|---|---|---|
| Right | Transition | e = +4.7 | Transition | e = -5.5 | Transition | e = -4 | |

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Sandy Point National Wildlife Refuge

# PLAN & PROFILE
# Tranberg Road
# Route 10

0 20 40
SCALE IN FEET

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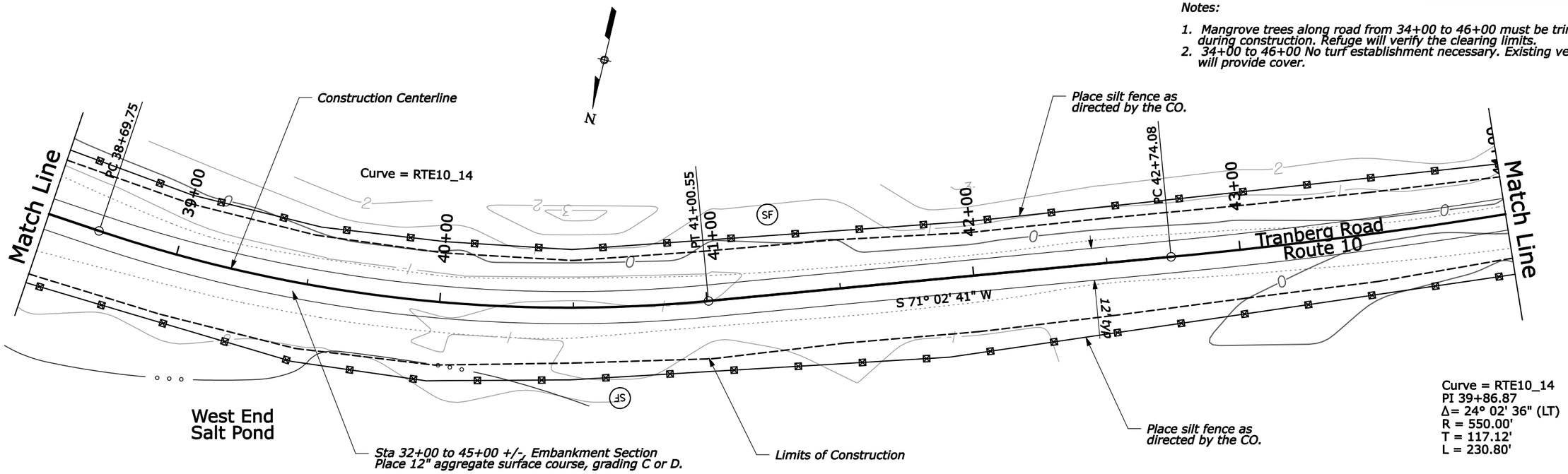
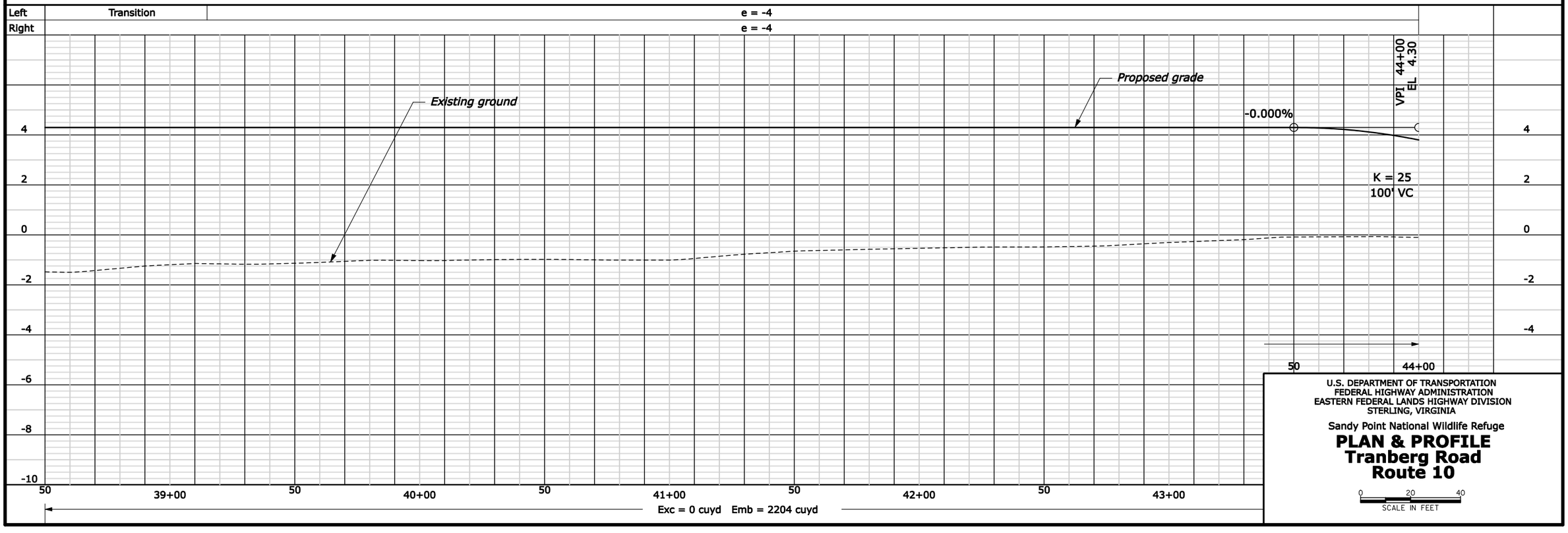
| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | D8 |

Notes:

1. Mangrove trees along road from 34+00 to 46+00 must be trimmed during construction. Refuge will verify the clearing limits.
2. 34+00 to 46+00 No turf establishment necessary. Existing vegetation will provide cover.




Curve = RTE10_14
PI 39+86.87
Δ= 24° 02' 36" (LT)
R = 550.00'
T = 117.12'
L = 230.80'

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EASTERN FEDERAL LANDS HIGHWAY DIVISION
STERLING, VIRGINIA

Sandy Point National Wildlife Refuge

**PLAN & PROFILE**
**Tranberg Road**
**Route 10**

0 20 40
SCALE IN FEET

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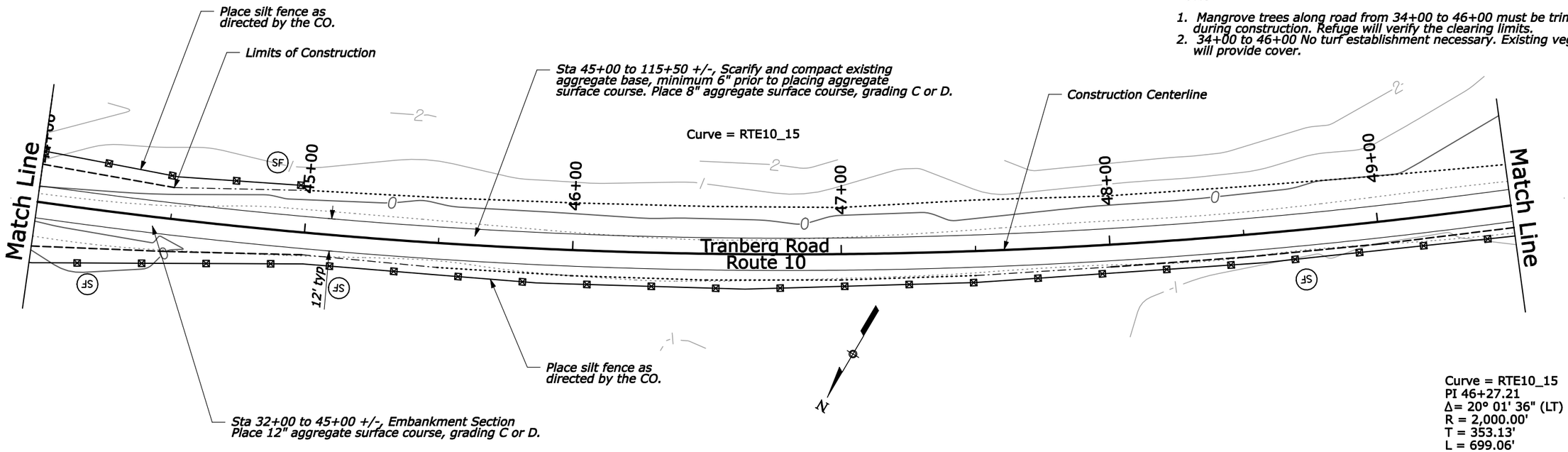
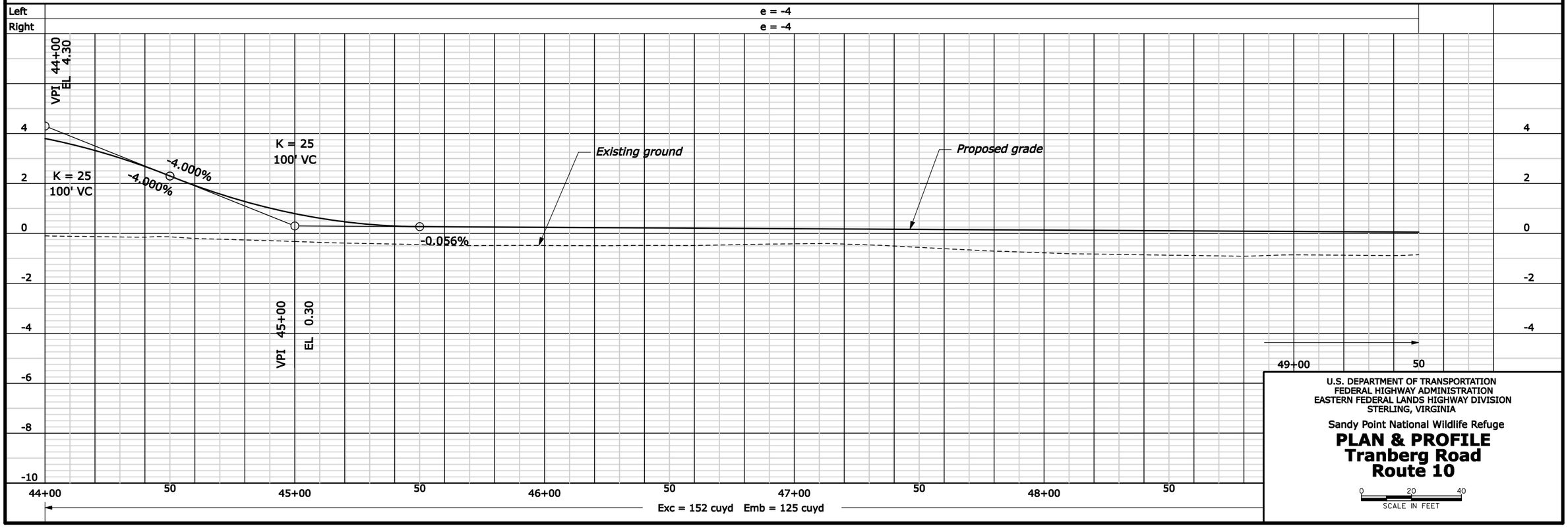
| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | D9 |

*Notes:*

1. *Mangrove trees along road from 34+00 to 46+00 must be trimmed during construction. Refuge will verify the clearing limits.*
2. *34+00 to 46+00 No turf establishment necessary. Existing vegetation will provide cover.*




Curve = RTE10_15
PI 46+27.21
Δ= 20° 01' 36" (LT)
R = 2,000.00'
T = 353.13'
L = 699.06'

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Sandy Point National Wildlife Refuge

# PLAN & PROFILE
# Tranberg Road
# Route 10

0 20 40
SCALE IN FEET

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| REG | STATE | PROJECT | SHEET NO. |
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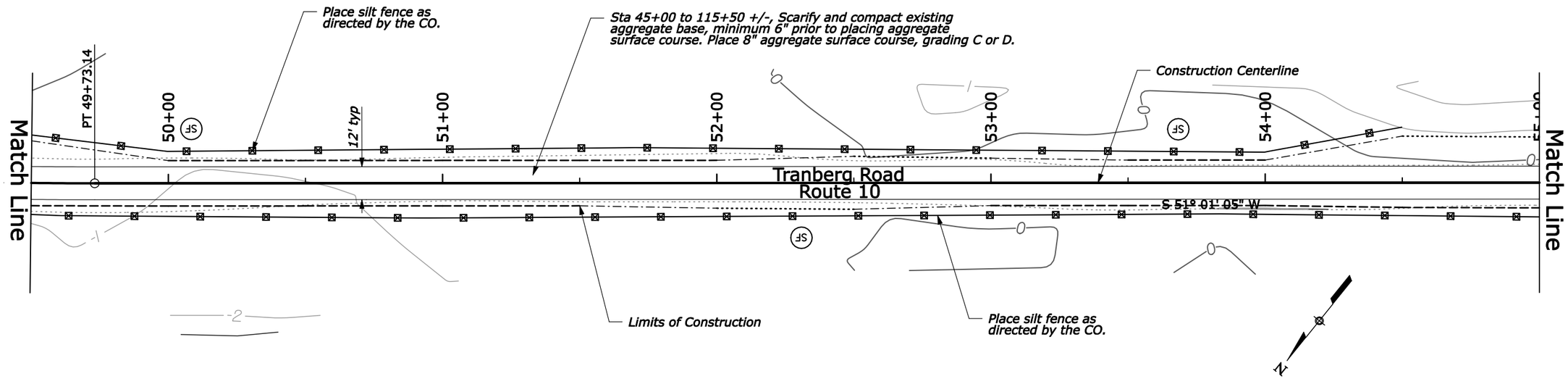
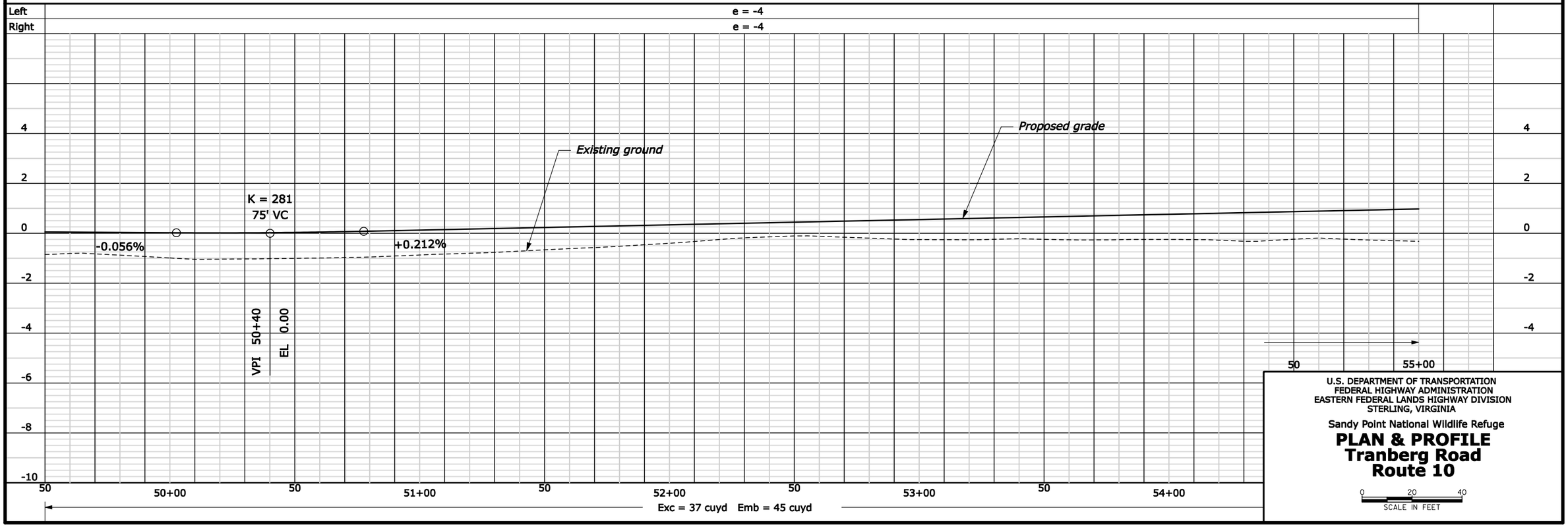
| SE | VI | RRP-SOP 10(1) | D10 |

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EASTERN FEDERAL LANDS HIGHWAY DIVISION
STERLING, VIRGINIA

Sandy Point National Wildlife Refuge

**PLAN & PROFILE**
**Tranberg Road**
**Route 10**

0 20 40
SCALE IN FEET

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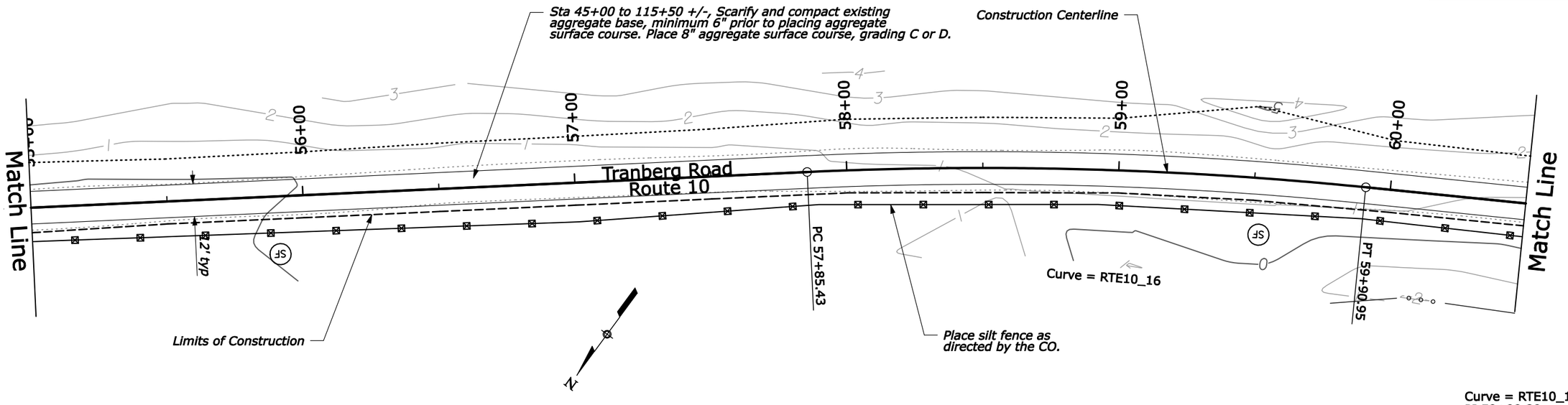
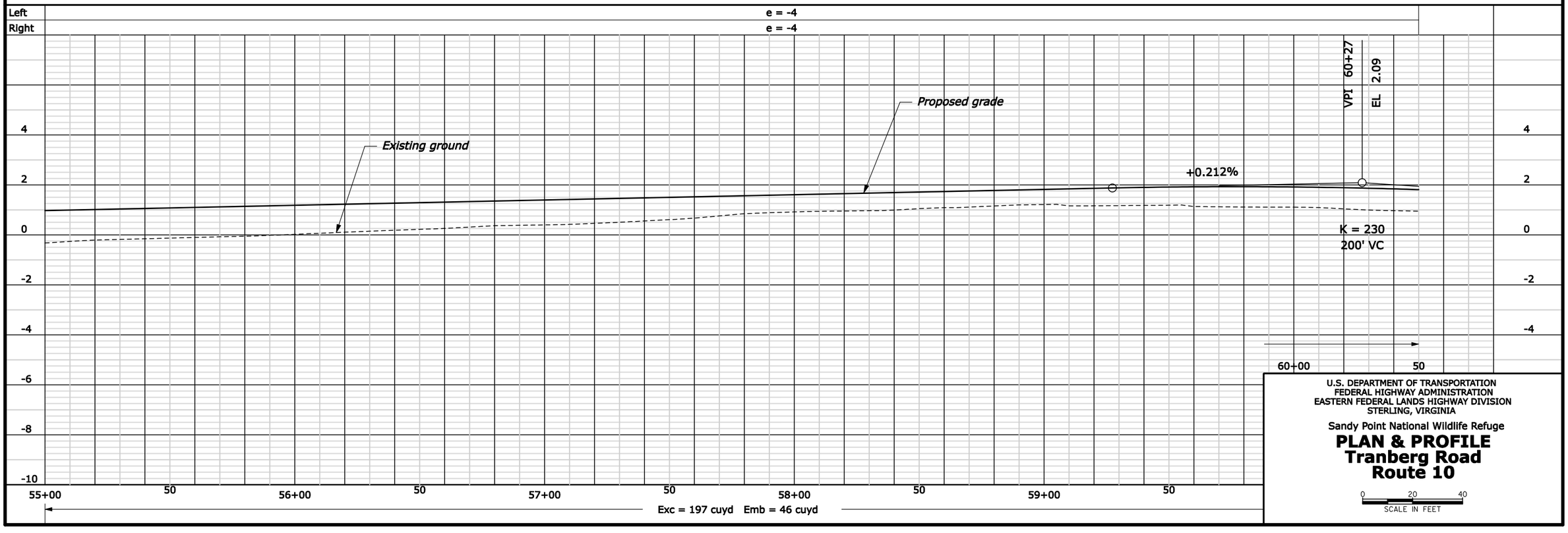



Curve = RTE10_16
PI 58+88.38
Δ= 8° 24' 39" (RT)
R = 1,400.00'
T = 102.94'
L = 205.52'

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Sandy Point National Wildlife Refuge

# PLAN & PROFILE
# Tranberg Road
# Route 10

0 20 40
SCALE IN FEET

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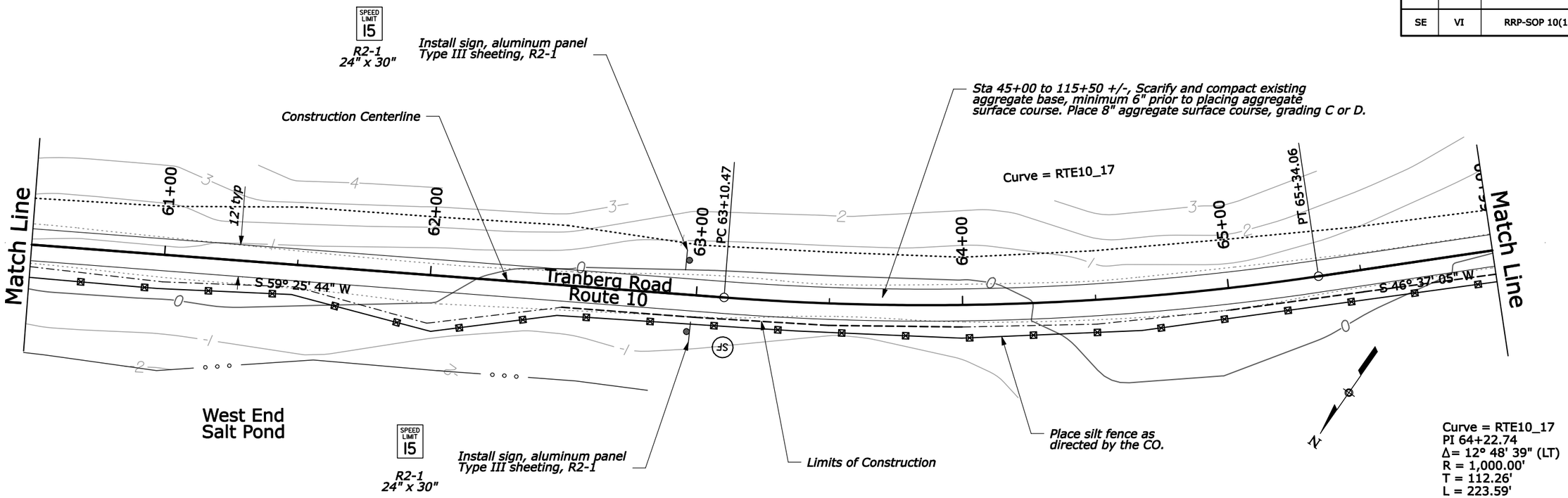


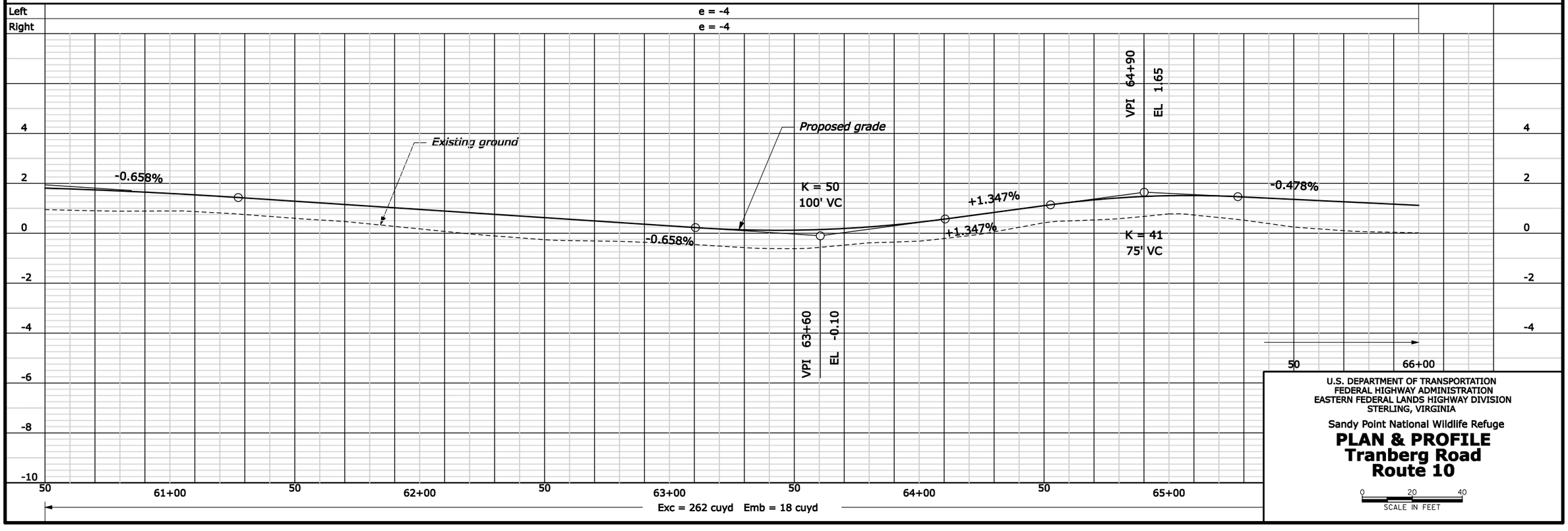


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STERLING, VIRGINIA

Sandy Point National Wildlife Refuge

# PLAN & PROFILE
# Tranberg Road
# Route 10

0 20 40
SCALE IN FEET

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| REG | STATE | PROJECT | SHEET NO. |
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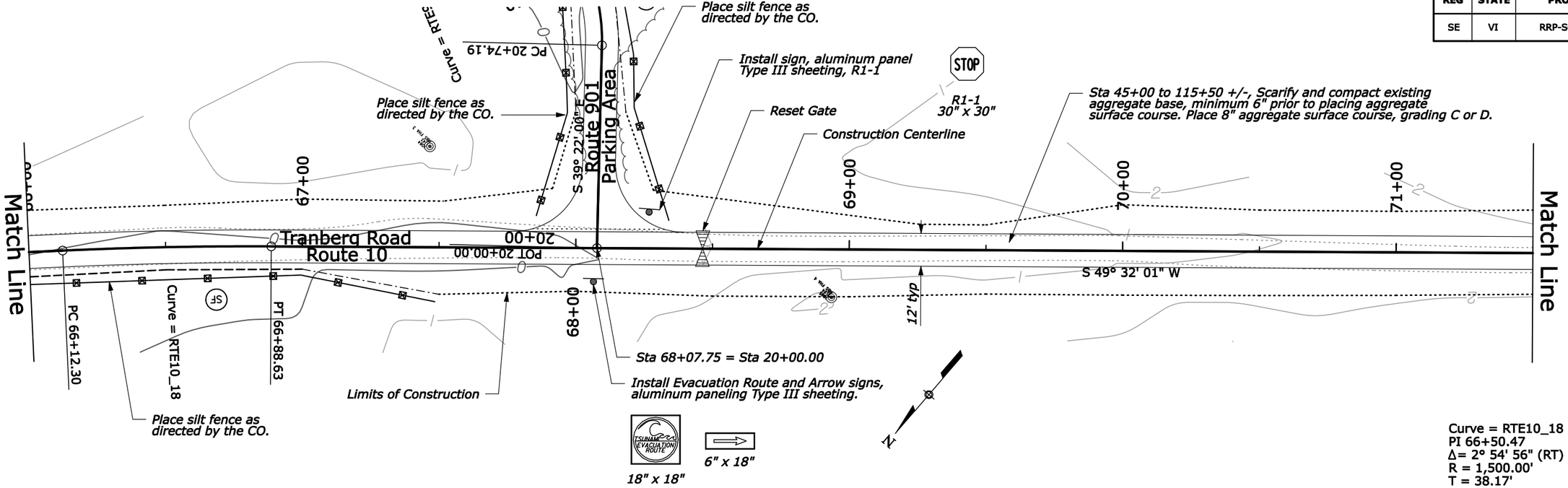
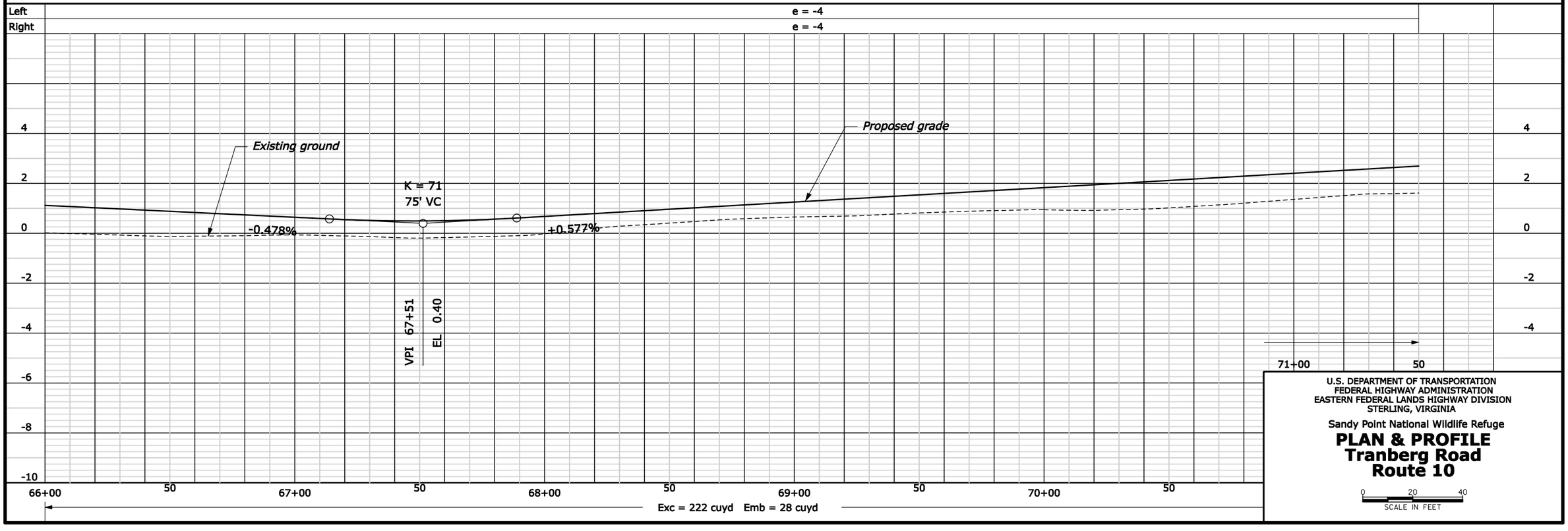



Curve = RTE10_18
PI 66+50.47
Δ= 2° 54' 56" (RT)
R = 1,500.00'
T = 38.17'
L = 76.33'

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EASTERN FEDERAL LANDS HIGHWAY DIVISION
STERLING, VIRGINIA

Sandy Point National Wildlife Refuge

# PLAN & PROFILE
# Tranberg Road
# Route 10

0 20 40
SCALE IN FEET

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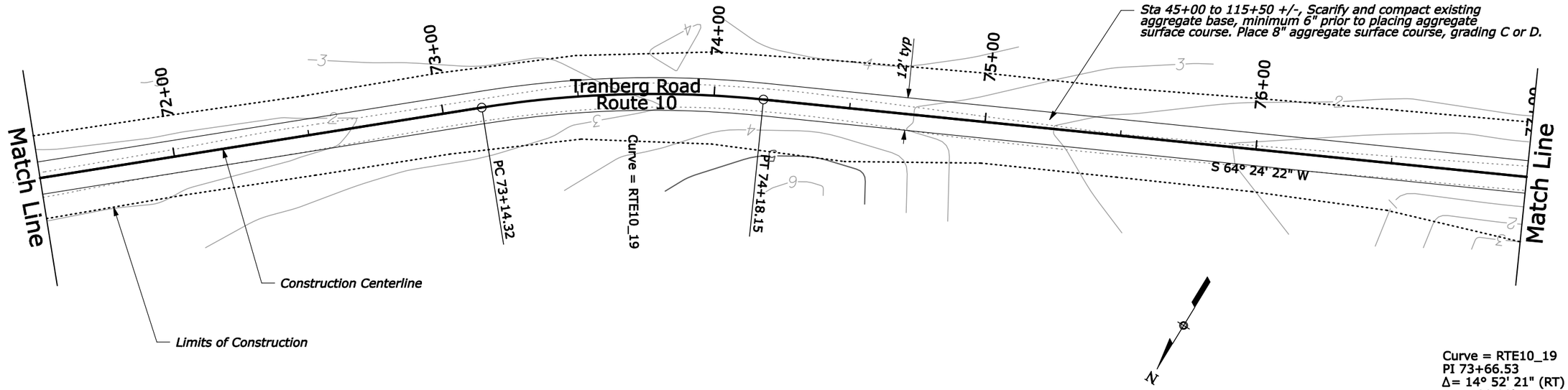
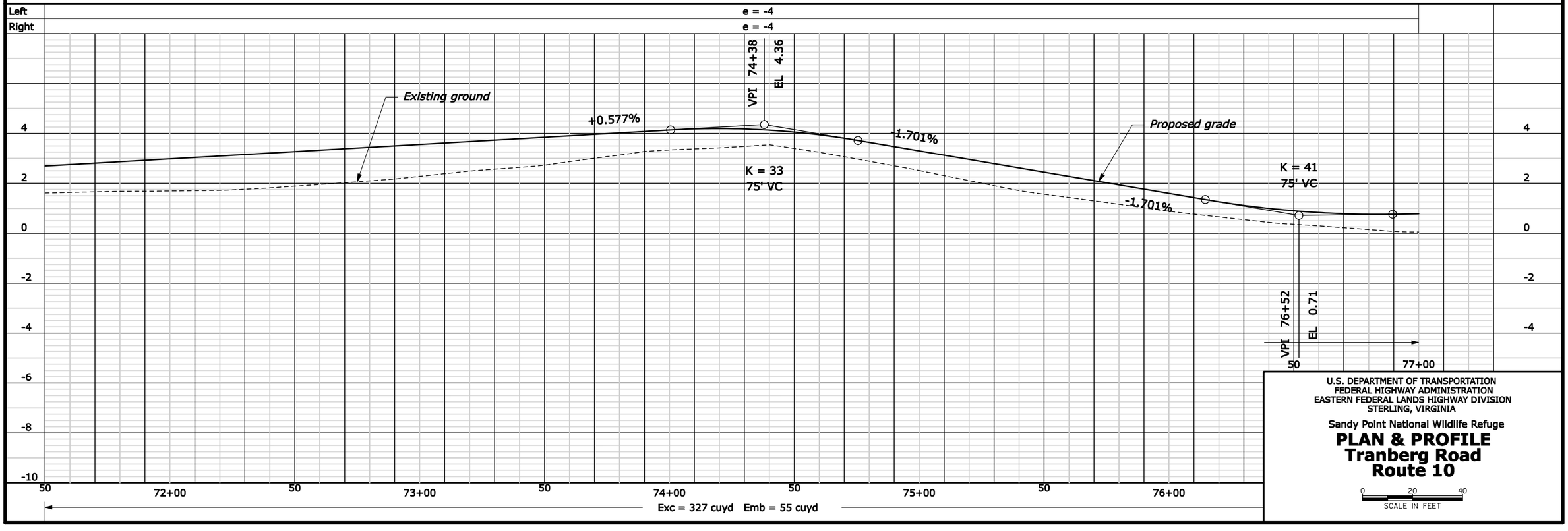



Curve = RTE10_19
PI 73+66.53
Δ= 14° 52' 21" (RT)
R = 400.00'
T = 52.21'
L = 103.83'

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**PLAN & PROFILE**
**Tranberg Road**
**Route 10**

0 20 40
SCALE IN FEET

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| REG | STATE | PROJECT | SHEET NO. |
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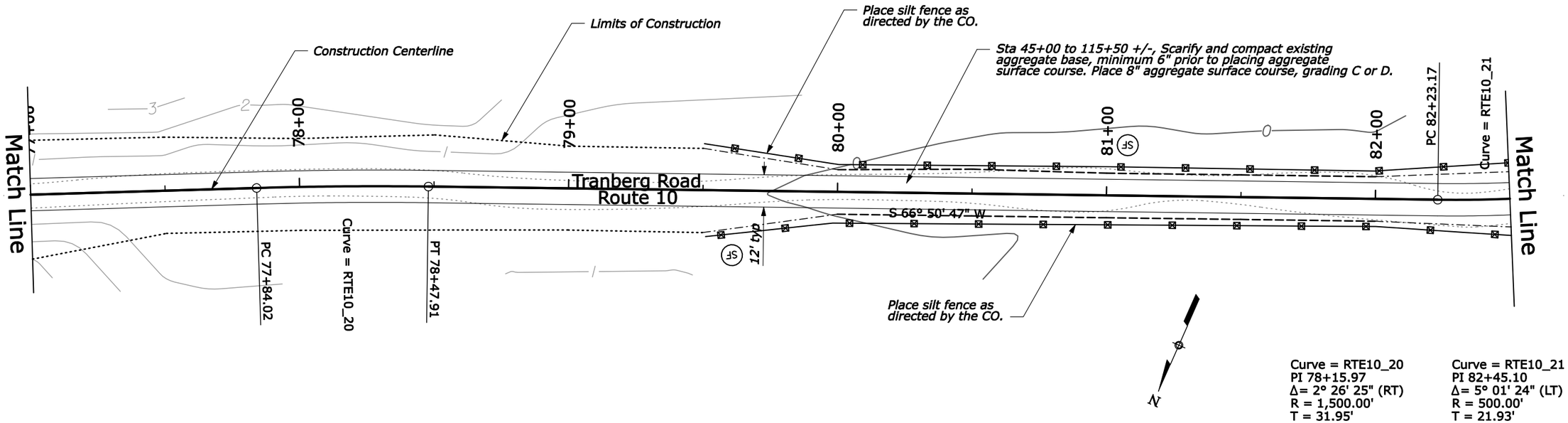
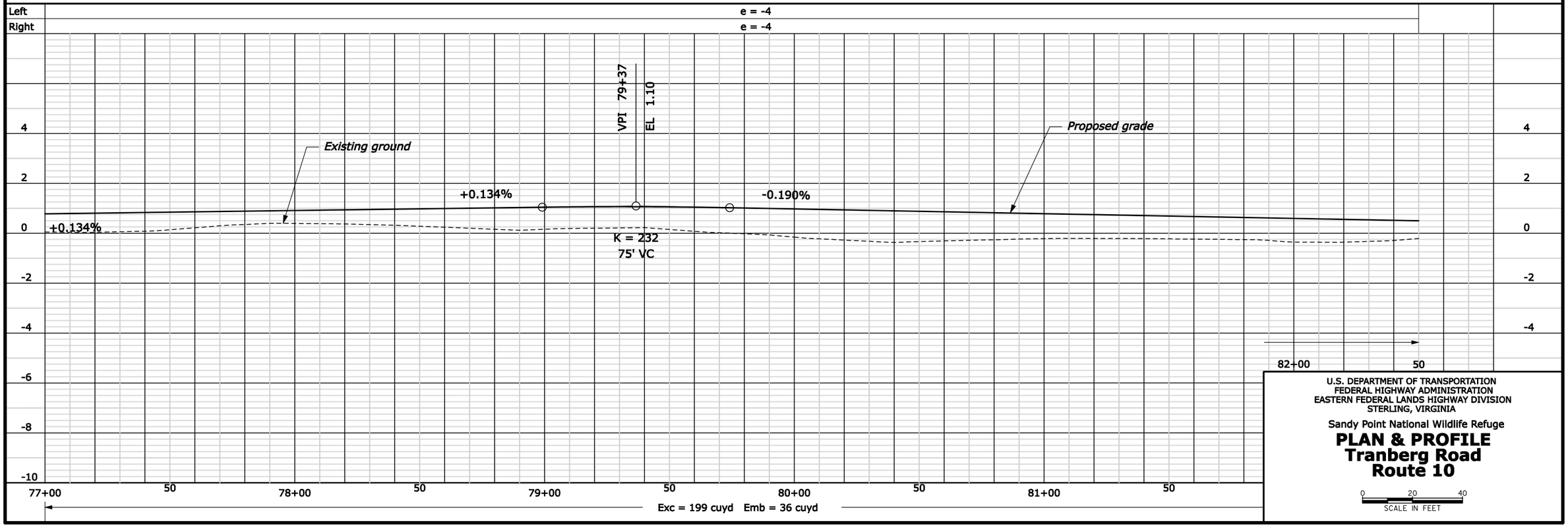



Curve = RTE10_20
PI 78+15.97
Δ= 2° 26' 25" (RT)
R = 1,500.00'
T = 31.95'
L = 63.89'

Curve = RTE10_21
PI 82+45.10
Δ= 5° 01' 24" (LT)
R = 500.00'
T = 21.93'
L = 43.84'

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# PLAN & PROFILE
# Tranberg Road
# Route 10

0 20 40
SCALE IN FEET

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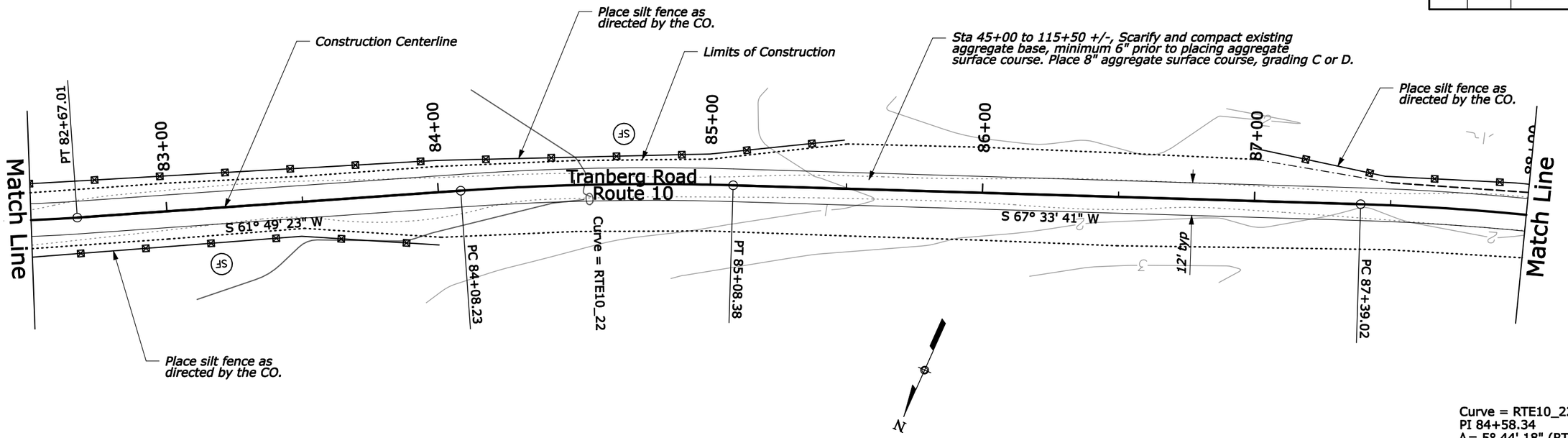
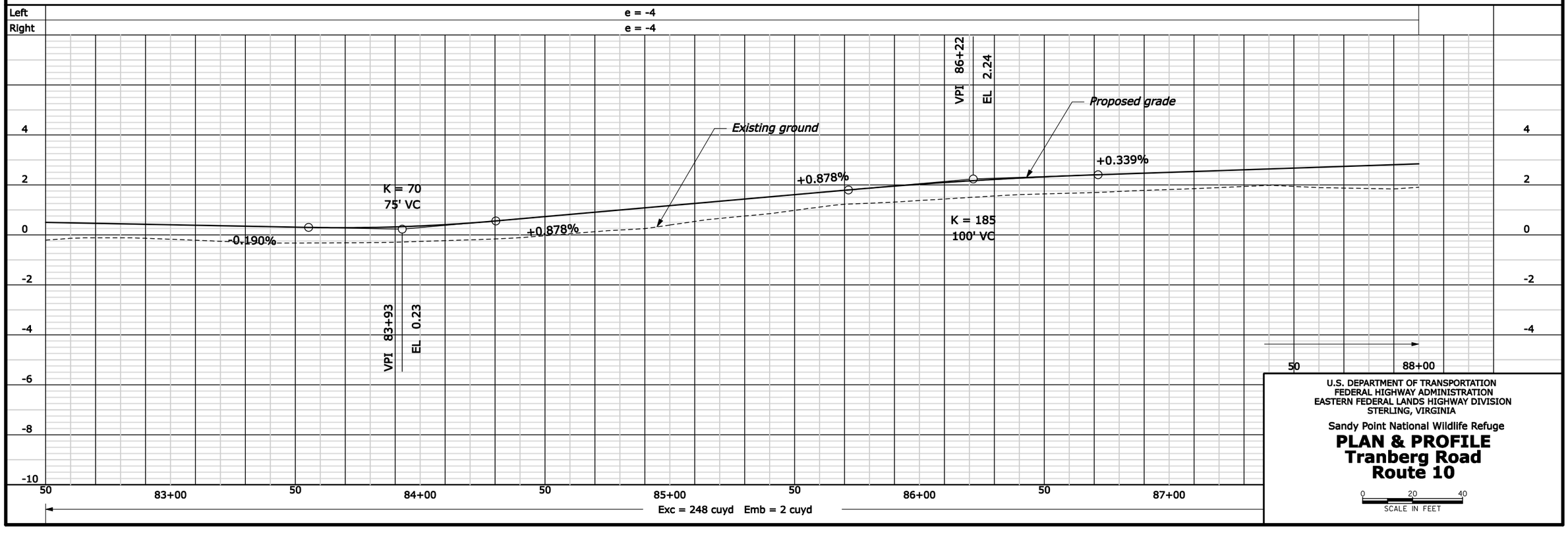
| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | D16 |




Curve = RTE10_22
PI 84+58.34
Δ= 5° 44' 18" (RT)
R = 1,000.00'
T = 50.12'
L = 100.15'

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FEDERAL HIGHWAY ADMINISTRATION
EASTERN FEDERAL LANDS HIGHWAY DIVISION
STERLING, VIRGINIA

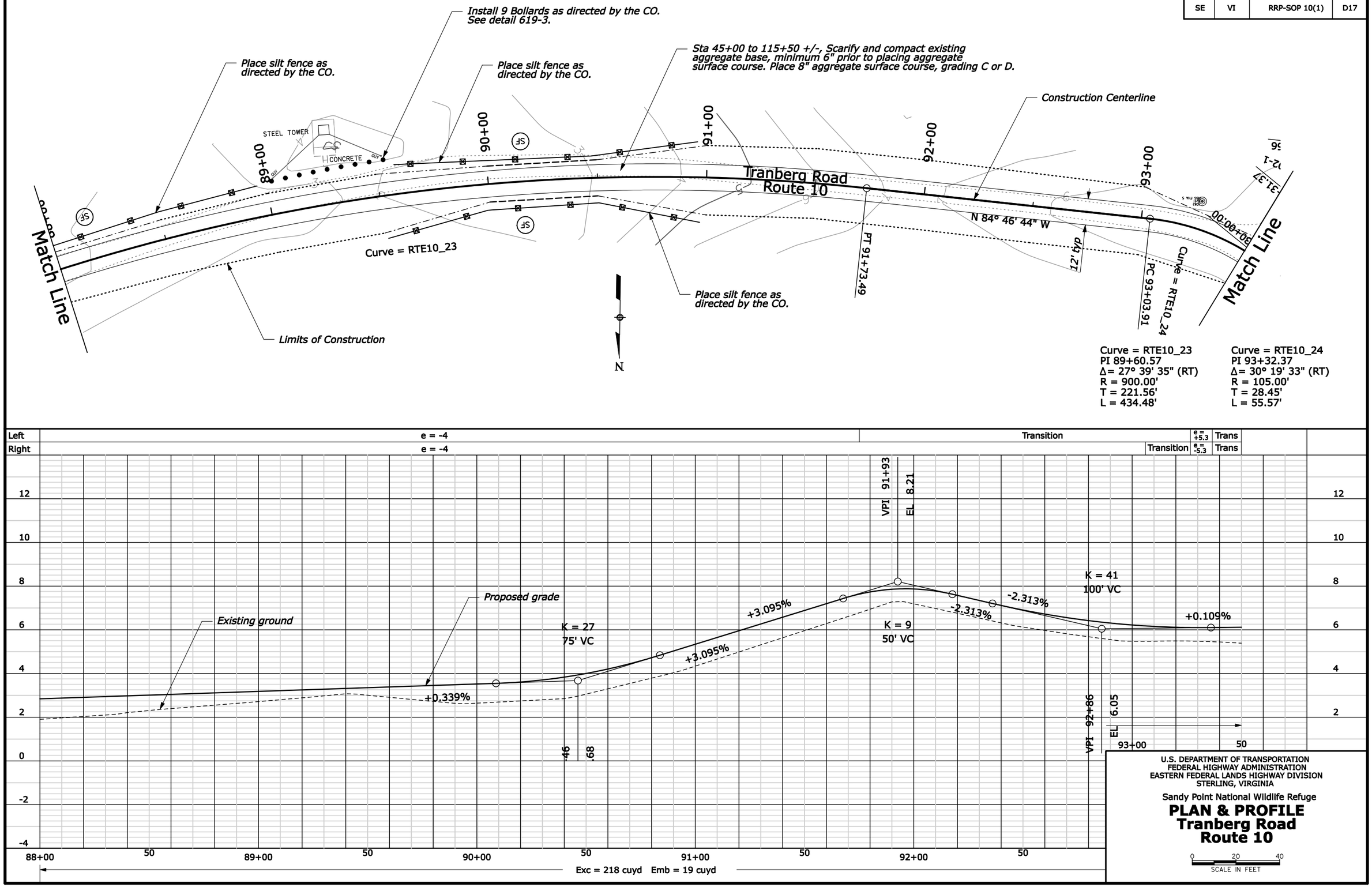
Sandy Point National Wildlife Refuge

# PLAN & PROFILE
# Tranberg Road
# Route 10

0 20 40
SCALE IN FEET

4/30/2009 7:30:09 AM M:\Projects\refuge\VI\sop\10\1\proj_dir\CADD\D0I-SOP10(1)_p&p.dgn

| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | D17 |

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EASTERN FEDERAL LANDS HIGHWAY DIVISION
STERLING, VIRGINIA

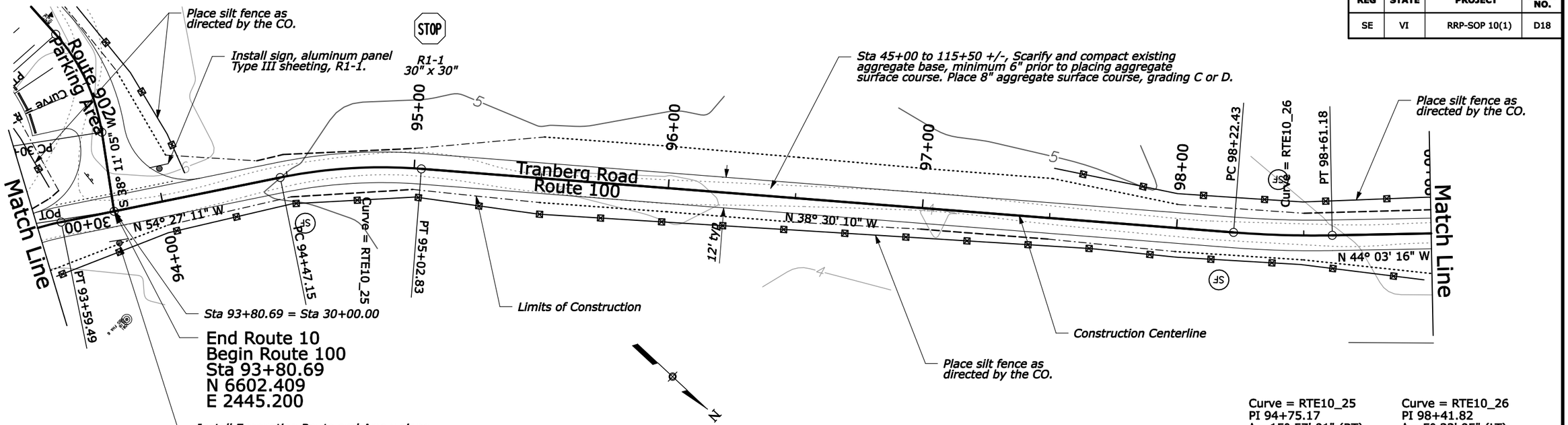
Sandy Point National Wildlife Refuge

**PLAN & PROFILE**
**Tranberg Road**
**Route 10**

0 20 40
SCALE IN FEET

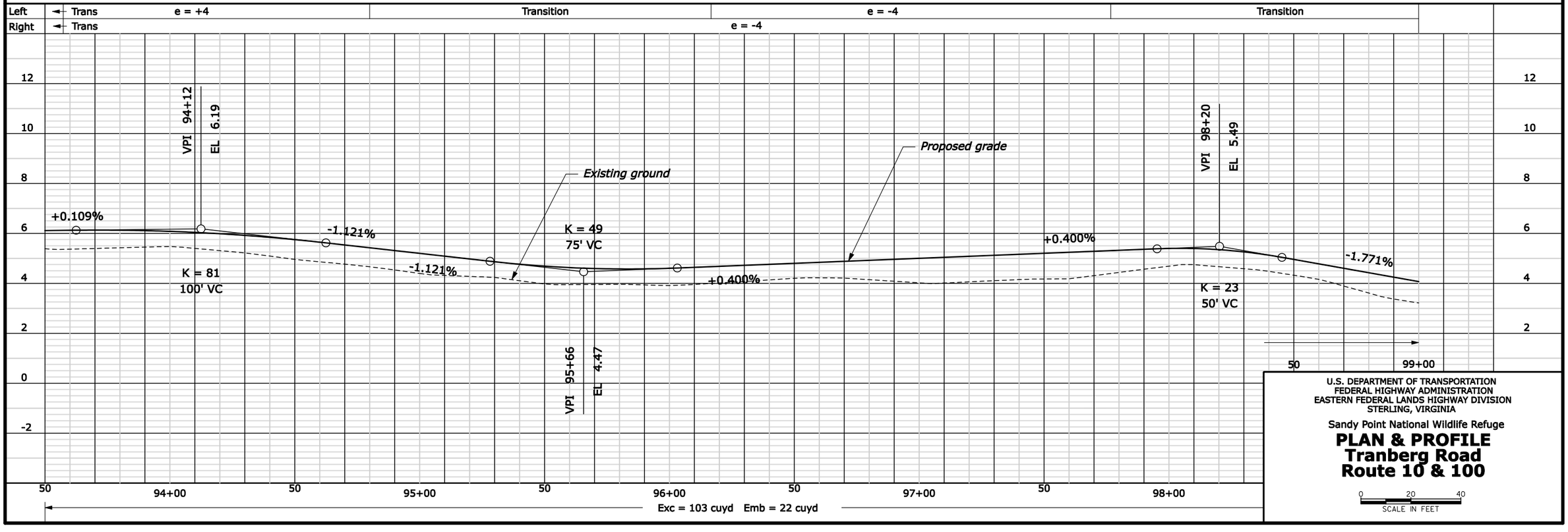
4/30/2009 7:30:15 AM M:\Projects\refuge\vi\sop10(1)\proj_dev\CADD\D01-SOP10(1)_p&p.dgn

| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | D18 |




Curve = RTE10_25
PI 94+75.17
Δ= 15° 57' 01" (RT)
R = 200.00'
T = 28.02'
L = 55.68'

Curve = RTE10_26
PI 98+41.82
Δ= 5° 33' 05" (LT)
R = 400.00'
T = 19.39'
L = 38.76'

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EASTERN FEDERAL LANDS HIGHWAY DIVISION
STERLING, VIRGINIA

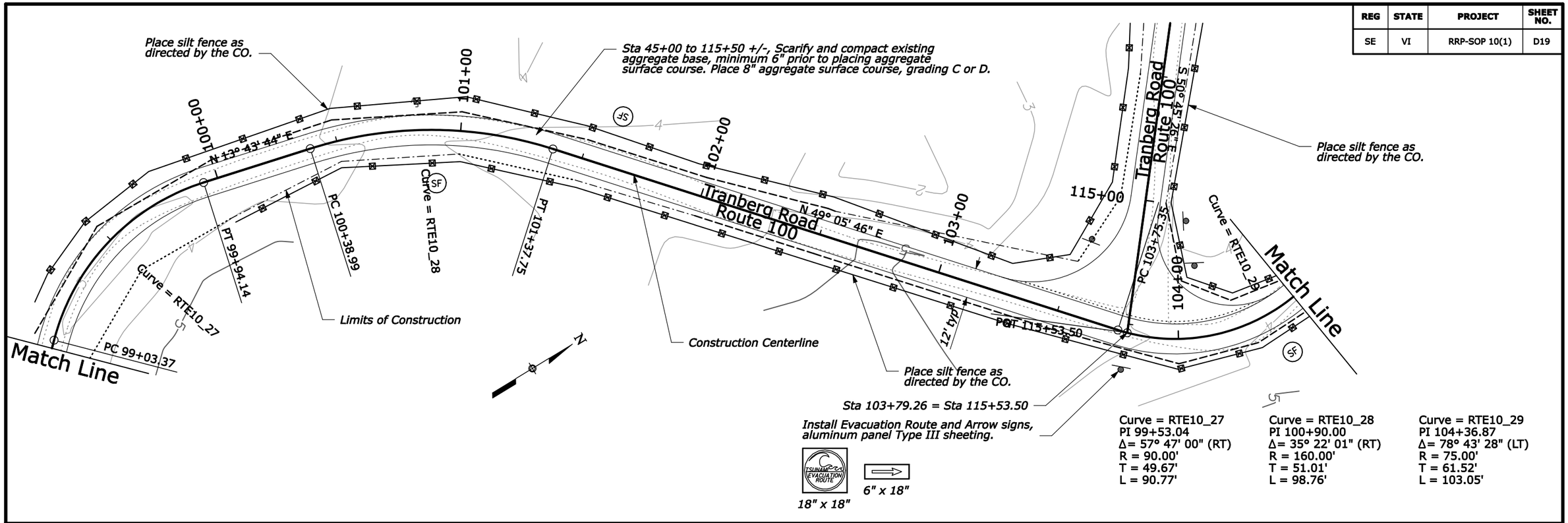
Sandy Point National Wildlife Refuge

# PLAN & PROFILE
# Tranberg Road
# Route 10 & 100

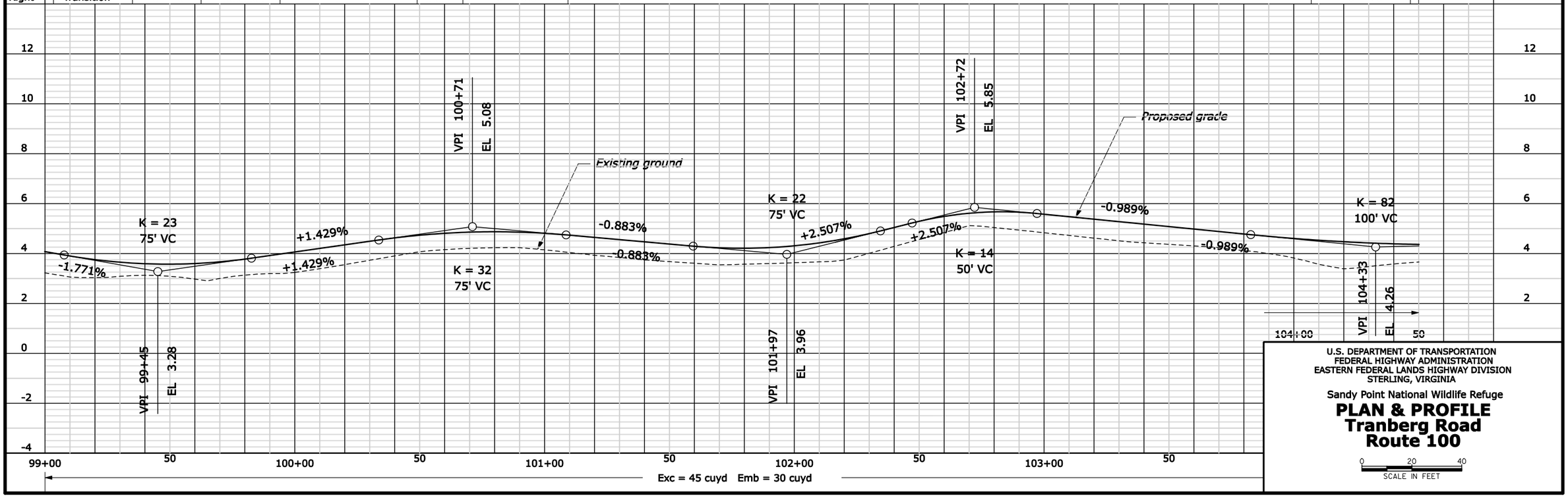
0 20 40
SCALE IN FEET

4/30/2009 7:30:21 AM M:\Projects\Refuge\VI\Sop\10\1\proj_dir\CADD\D0I-SOP10(1)_p&p.dgn

| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | D19 |




| Left | Transition | e = +6 | Transition | e = +4 | Trans | e = +5.1 | Transition | e = -6 |
|---|---|---|---|---|---|---|---|---|
| Right | Transition | e = -6 | Transition | e = -4 | Trans | e = -5.1 | Transition | e = +6 |

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# PLAN & PROFILE
# Tranberg Road
# Route 100

0 20 40
SCALE IN FEET

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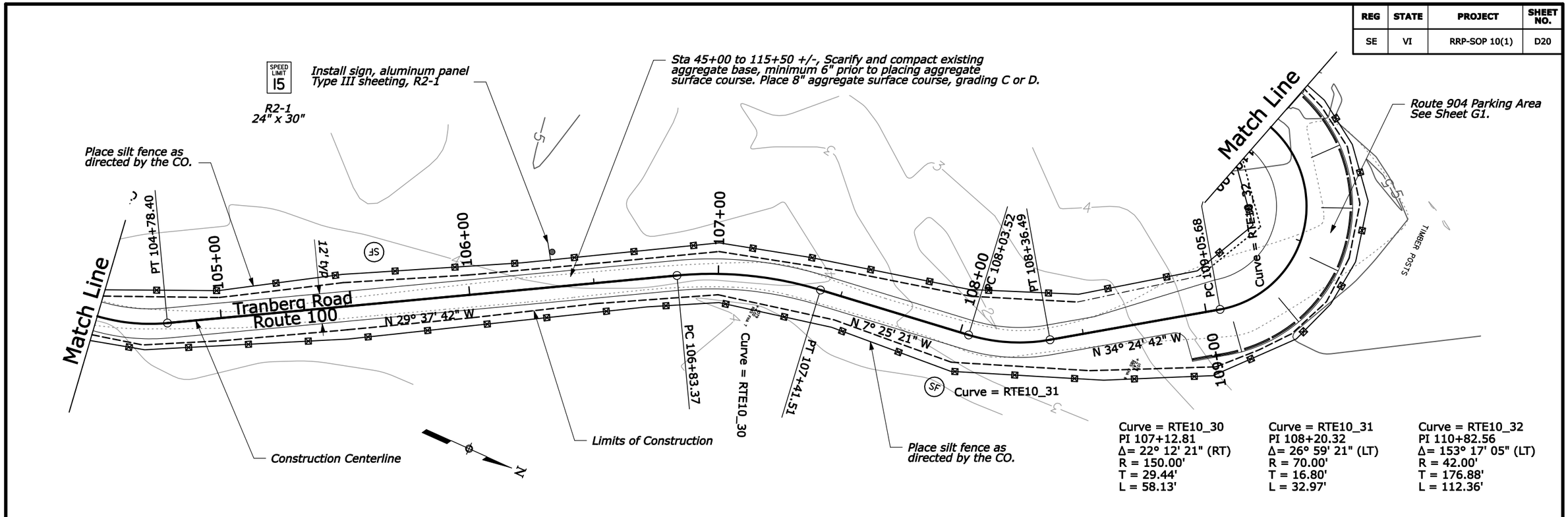
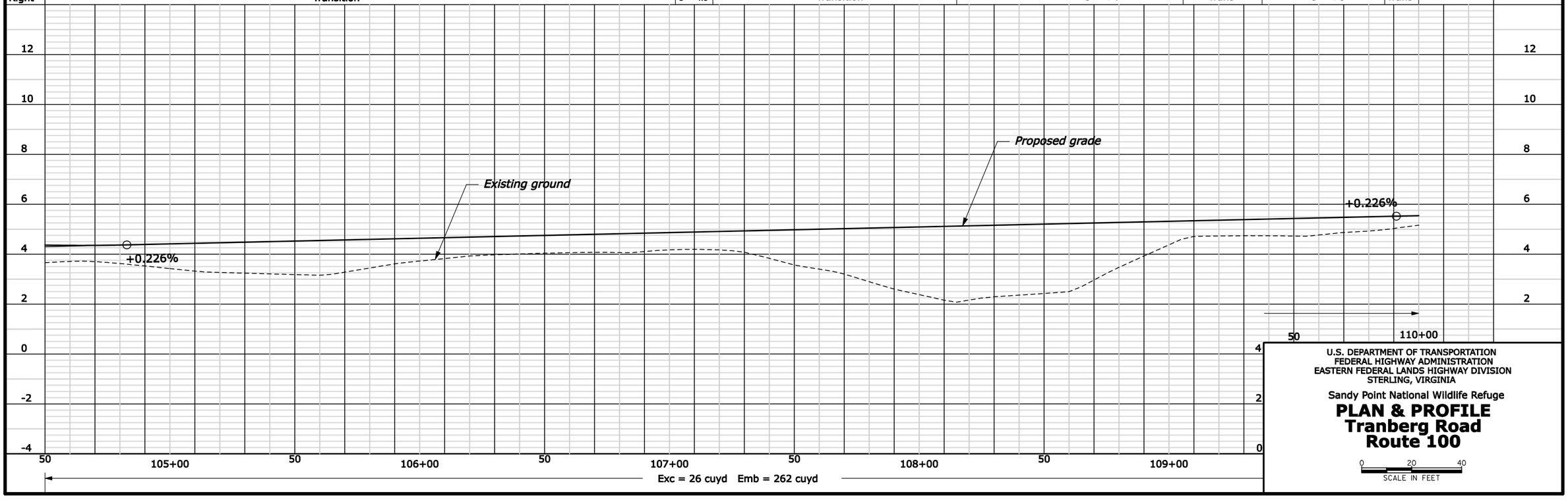
| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | D20 |




| Left | Transition | e = -4.8 | Transition | e = -4 | Trans | e = -6 | Trans |
|---|---|---|---|---|---|---|---|
| Right | Transition | e = -4.8 | Transition | e = +4 | Trans | e = +6 | Trans |

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STERLING, VIRGINIA

Sandy Point National Wildlife Refuge

**PLAN & PROFILE**
**Tranberg Road**
**Route 100**

0 20 40
SCALE IN FEET

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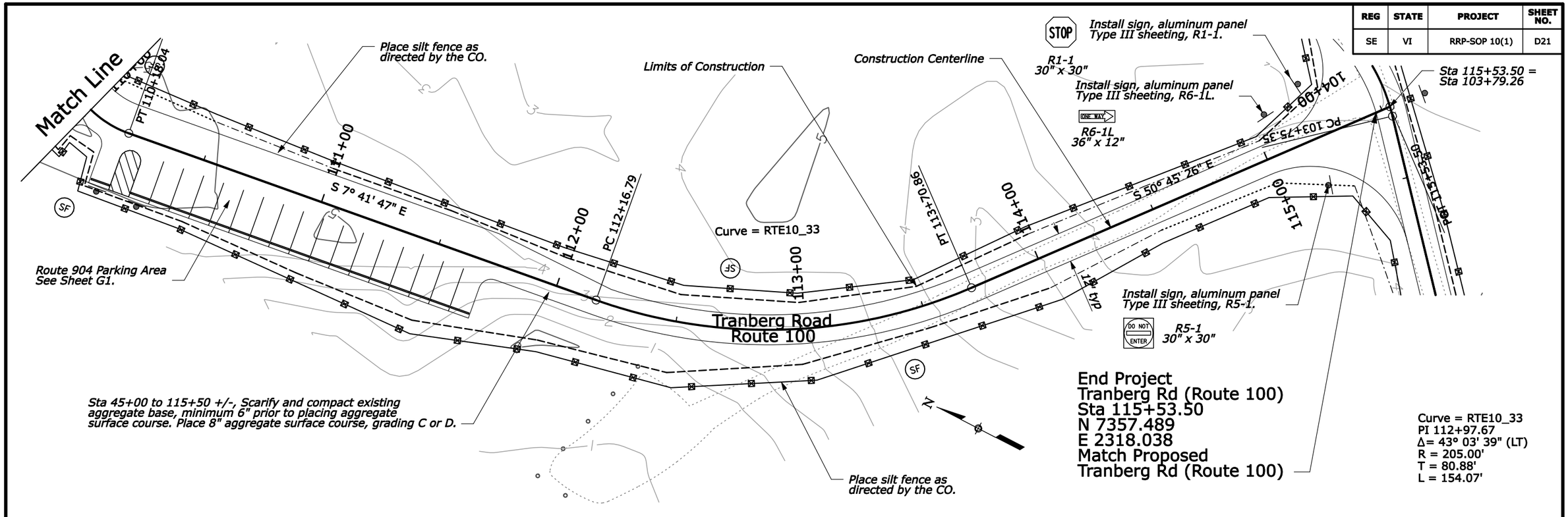
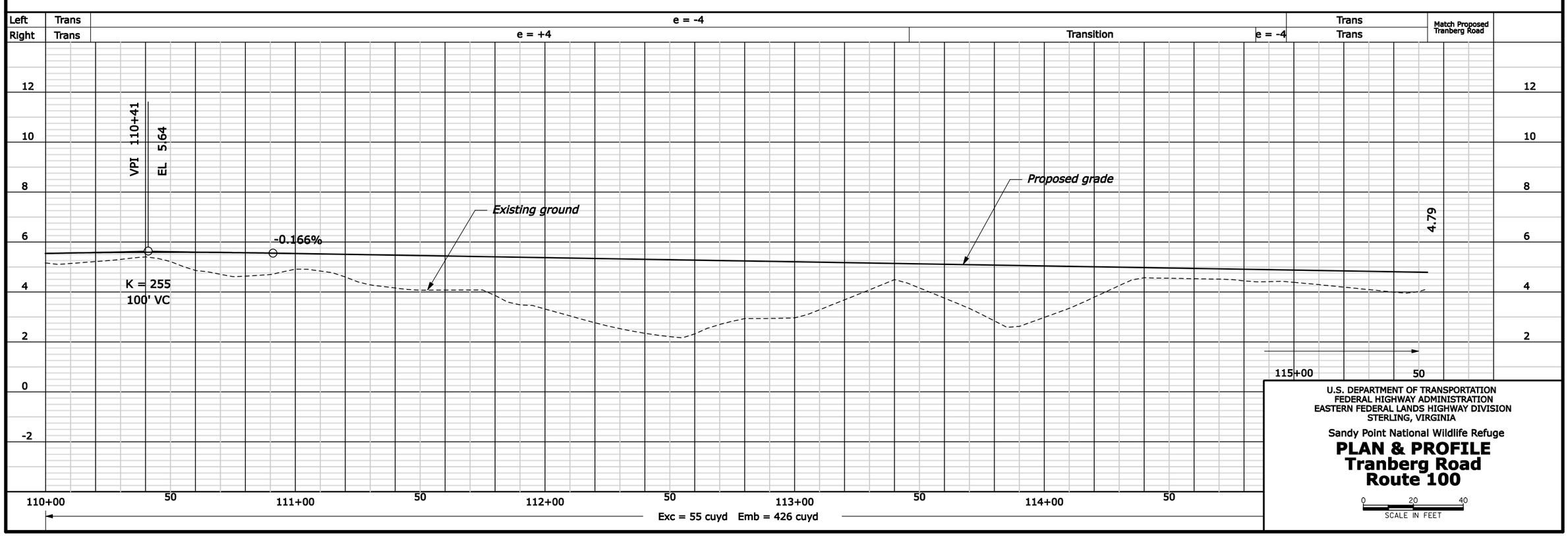
| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | D21 |

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EASTERN FEDERAL LANDS HIGHWAY DIVISION
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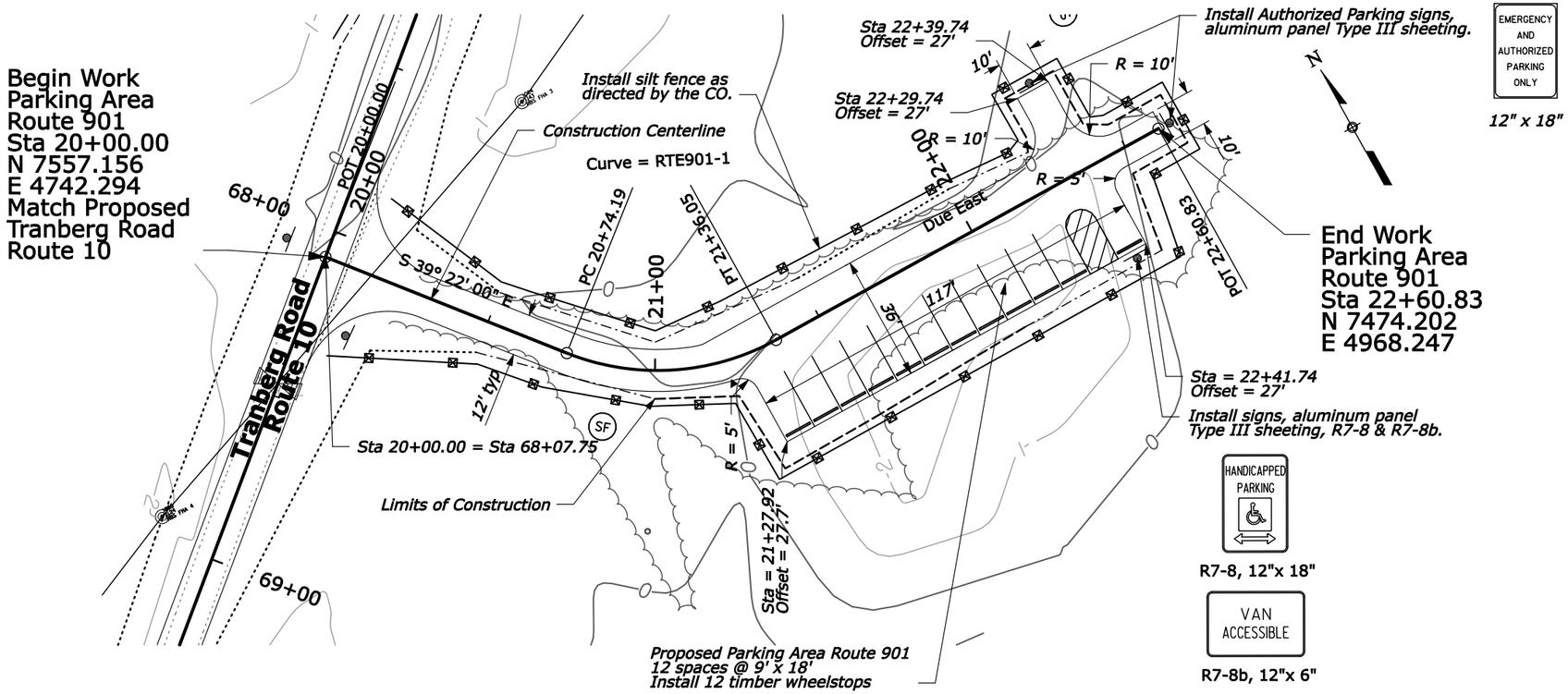
**PLAN & PROFILE**
**Tranberg Road**
**Route 100**

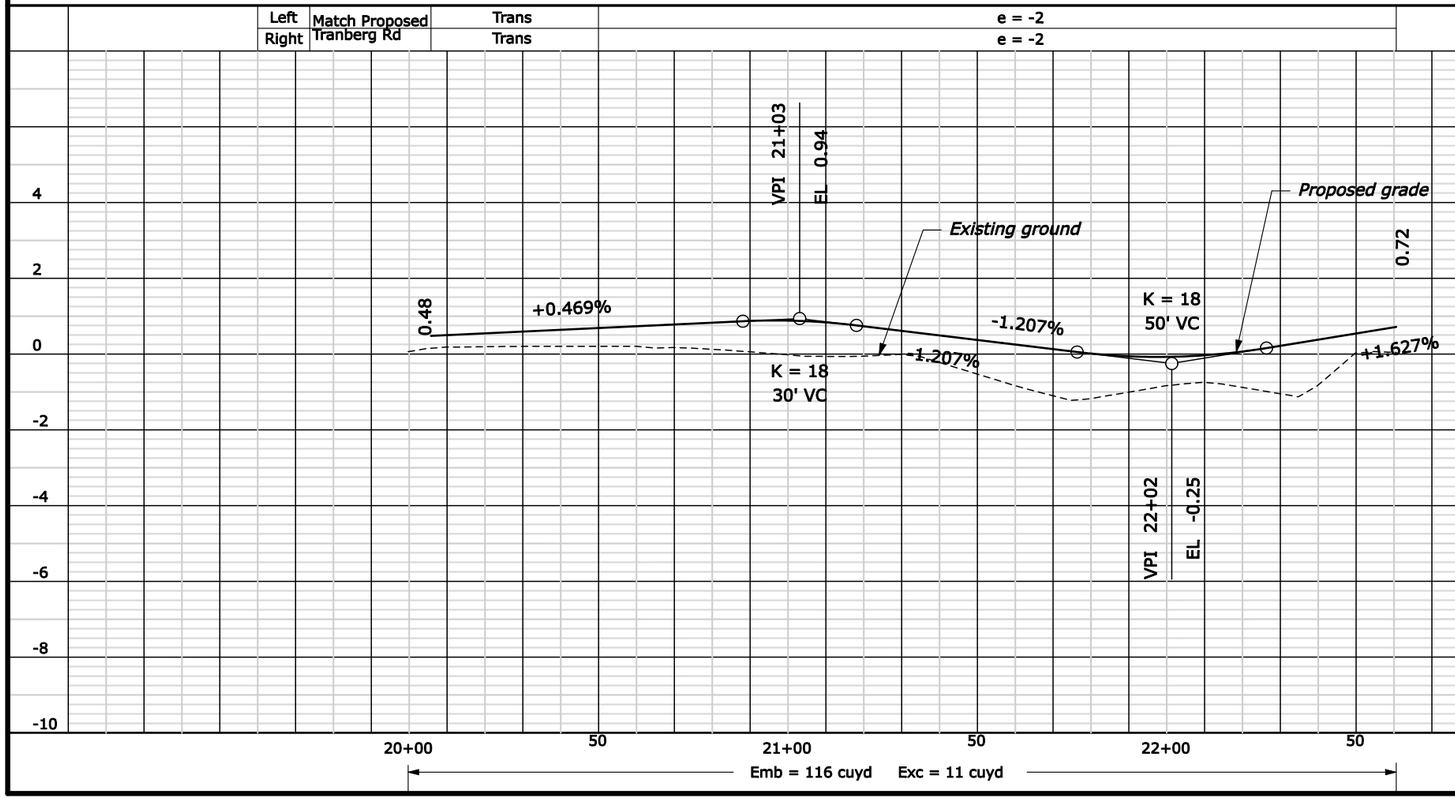
0 20 40
SCALE IN FEET

4/30/2009 7:30:44 AM M:\Projects\refuge\vi\sop10(1)\proj_dev\CADD\DOI-SOP10(1)_p&p.dgn

| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | E1 |




| | | | |
|---|---|---|---|
| Left | Match Proposed | Trans | e = -2 |
| Right | Tranberg Rd | Trans | e = -2 |

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# PLAN & PROFILE
# Parking Area
# Route 901

0 20 40
SCALE IN FEET

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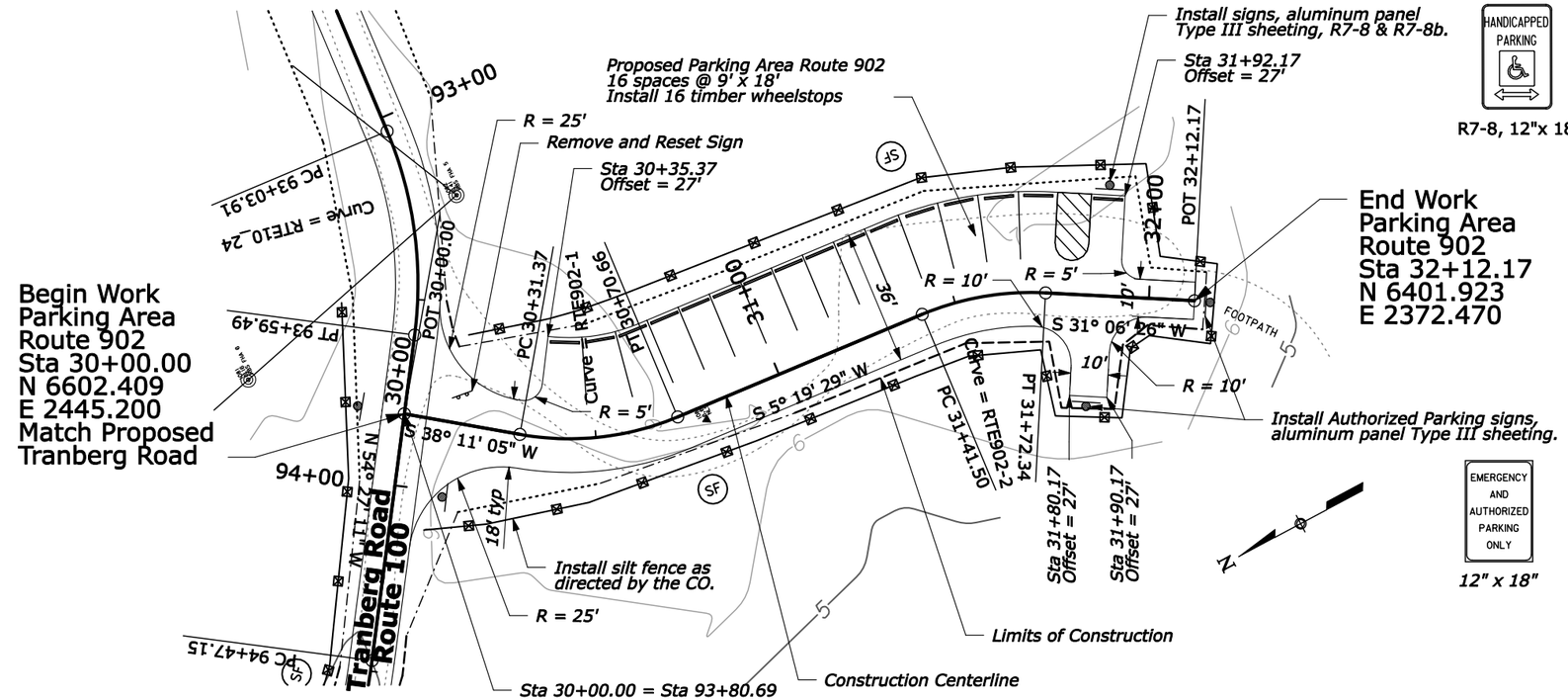
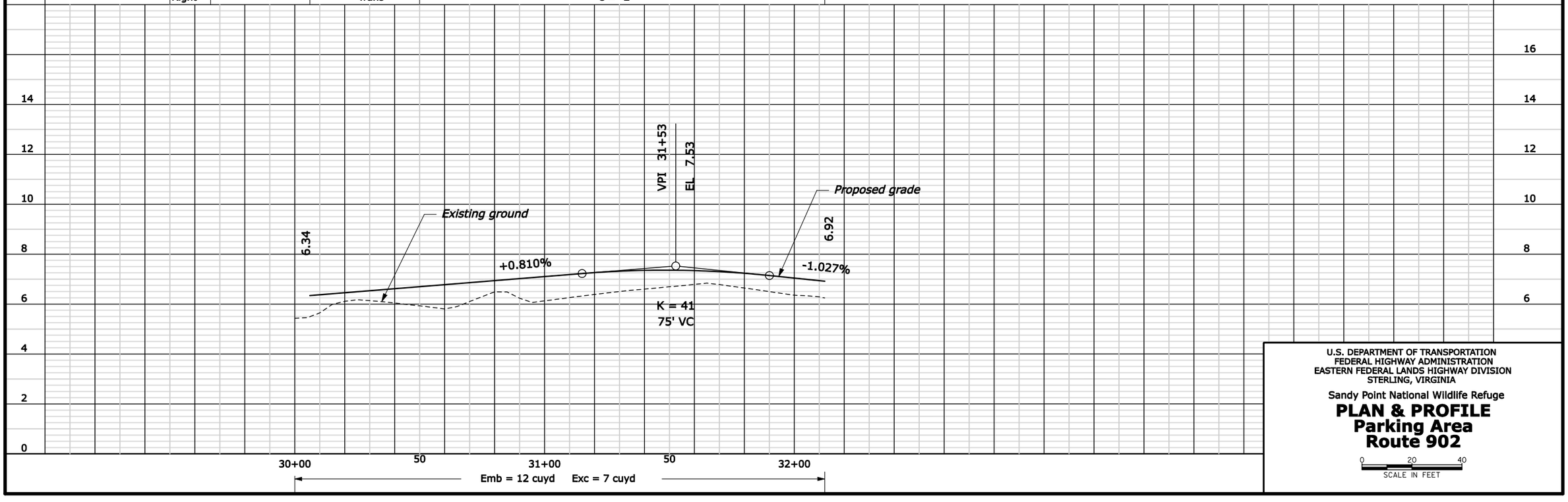
| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | F1 |




| | | |
|---|---|---|
| Left | Match Proposed Tranberg Rd | Trans e = -2 |
| Right | | Trans e = -2 |

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# PLAN & PROFILE
# Parking Area
# Route 902

0 20 40
SCALE IN FEET

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| REG | STATE | PROJECT | SHEET NO. |
|---|---|---|---|
| SE | VI | RRP-SOP 10(1) | G1 |

**Notes:**

1. Install (additional) silt fence when bodies of water are located within 20' of construction as directed by the CO.

Construction centerline

Limits of construction

Proposed Parking Area Route 904
18 spaces @ 8.5' x 18'
Install 18 Timber Wheelstops

HANDICAPPED PARKING
R7-8, 12"x 18"

VAN ACCESSIBLE
R7-8b, 12"x 6"

Install Signs, aluminum panel
Type III sheeting, R7-8 & R7-8b.

Sta 111+71.04
Offset = 24'

Sta 110+12.66
Offset = 24.5'

Sta 109+99.80
Offset = 18.5'

Sta 112+21.04
Offset = 6'

Sta 111+71.04
Offset = 12'

Sta 108+55.68
Offset = 6'

Sta 109+05.68
Offset = 12'

Sta 108+91.18
Offset = 18.5'

PC 103+75.35

PT 104+78.40

PT 113+70.86

PC 112+16.79

PT 110+18.04

PC 108+03.52

PT 108+36.49

PC 106+83.37

PT 107+41.51

PC 109+05.68

Curve = RTE10_33

Curve = RTE10_29

Curve = RTE10_30

Curve = RTE10_31

Curve = RTE10_32

S 50° 45' 26" E

S 7° 41' 47" E

N 29° 37' 42" W

N 7° 25' 21" W

N 34° 24' 42" W

161'-6"

36'

12' typ

103+00

104+00

105+00

106+00

107+00

108+00

109+00

110+00

111+00

112+00

113+00

114+00

115+00

SF

Tranberg Road
Route 100

Install silt fence as directed by the CO.

Install silt fence as directed by the CO.

Sta 45+00 to 115+50 +/-, Scarify and compact existing aggregate base, minimum 6" prior to placing aggregate surface course. Place 8" aggregate surface course, grading C or D.

Proposed Parking Area Route 904
6 spaces @ 12.5' x 20'
Install 12 Timber Wheelstops

TIMBER POSTS

N

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# PLAN
# Route 904
# Parking Area

0 20 40
SCALE IN FEET

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