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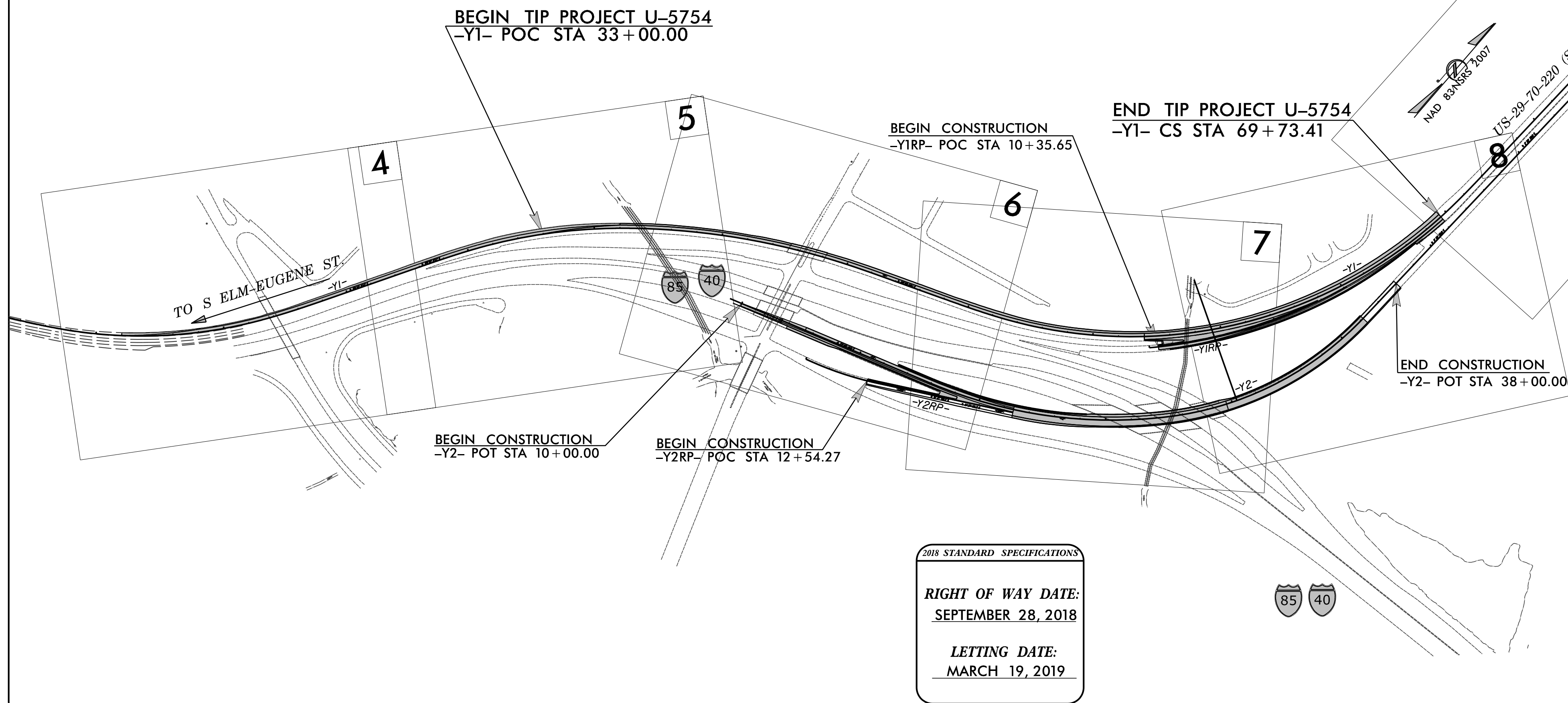
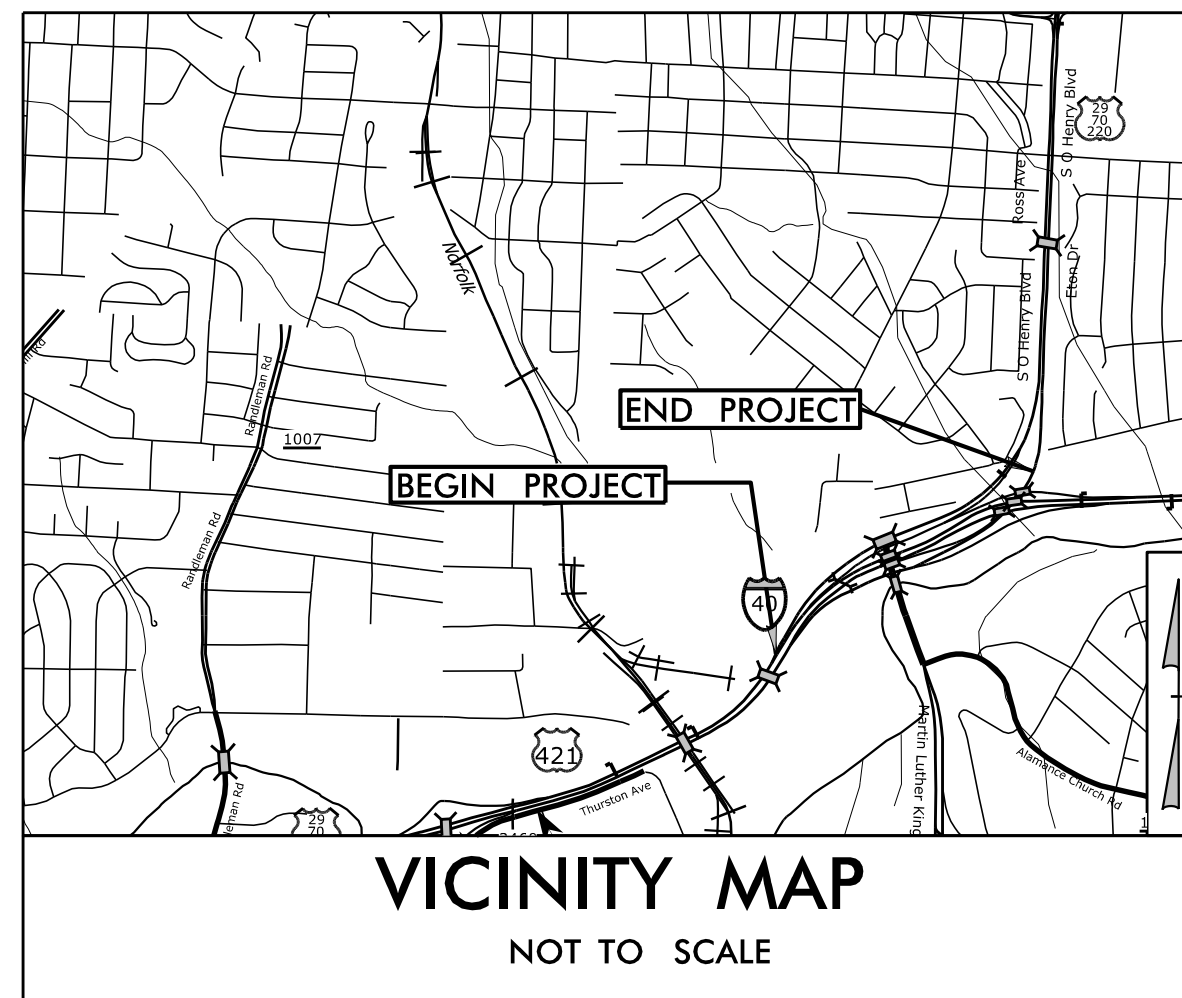
TIP PROJECT: U-5754

CONTRACT: C204295

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
GUILFORD COUNTY

LOCATION: US 29 /US 70 /US 220 (O'HENRY BOULEVARD) FROM I-40 /
BUSINESS 85 TO SOUTH OF FLORIDA STREET IN GREENSBORO
TYPE OF WORK: GRADING, PAVING, AND DRAINAGE

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C. | U-5754 | EC-1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 54034.1.1 | NHP-0029(065) | P.E. | |
| 54034.2.1 | NHP-0029(065) | ROW | |
| 54034.3.1 | NHP-0029(065) | CONST | |



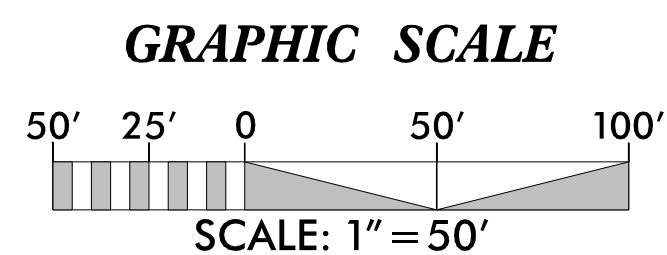
EROSION AND SEDIMENT CONTROL MEASURES

| Std. # | Description | Symbol |
|---------|--|--------|
| 1630.03 | Temporary Silt Ditch | no |
| 1630.05 | Temporary Diversion | TD |
| 1605.01 | Temporary Silt Fence | |
| 1606.01 | Special Sediment Control Fence | ▲▲▲ |
| 1622.01 | Temporary Berms and Slope Drains | — |
| 1630.02 | Silt Basin Type B | ▨ |
| 1633.01 | Temporary Rock Silt Check Type-A | ⊗ |
| | Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM) | ⊗ |
| 1633.02 | Temporary Rock Silt Check Type-B | ▶ |
| | Wattle / Coir Fiber Wattle | — |
| | Wattle / Coir Fiber Wattle with Polyacrylamide (PAM) | — |
| 1634.01 | Temporary Rock Sediment Dam Type-A | ⊗ |
| 1634.02 | Temporary Rock Sediment Dam Type-B | ⊗ |
| 1635.01 | Rock Pipe Inlet Sediment Trap Type-A | ⊗ |
| 1635.02 | Rock Pipe Inlet Sediment Trap Type-B | ⊗ |
| 1630.04 | Stilling Basin | ▭ |
| 1630.06 | Special Stilling Basin | ▭ |
| | Rock Inlet Sediment Trap: | |
| 1632.01 | Type A | A |
| 1632.02 | Type B | B |
| 1632.03 | Type C | C |
| | Skimmer Basin | ▭ |
| | Tiered Skimmer Basin | ▭ |
| | Infiltration Basin | ▭ |

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT
Refer To E. C. Special Provisions for Special Considerations.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 1, 2016 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.

Prepared in the Office of:
SUNGATE DESIGN GROUP, P.A.

905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 858-2243
ENG FIRM LICENSE NO. C-890

Designed by:

MATTHEW C. EDWARDS, EI 3992
NAME LEVEL III CERTIFICATION NO.

Reviewed in the Office of:
ROADSIDE ENVIRONMENTAL UNIT

1 South Wilmington St.
Raleigh, NC 27611

2018 STANDARD SPECIFICATIONS

Reviewed by:

JENNIFER PARISH, EI, CPESC, CPSWQ

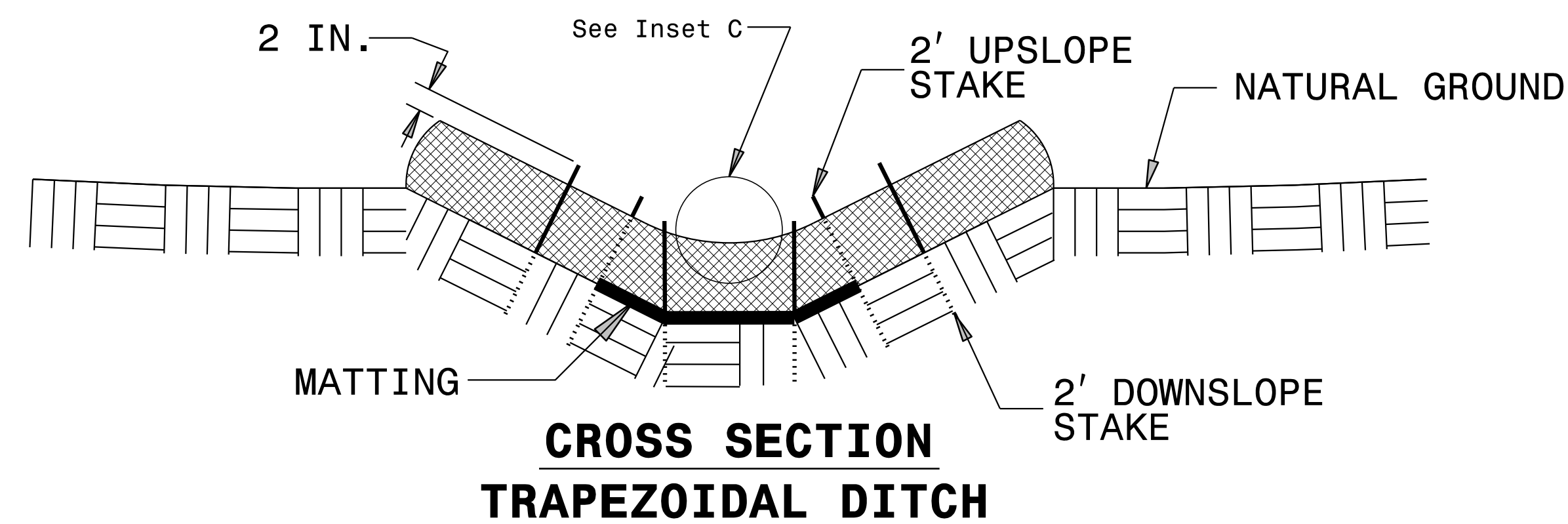
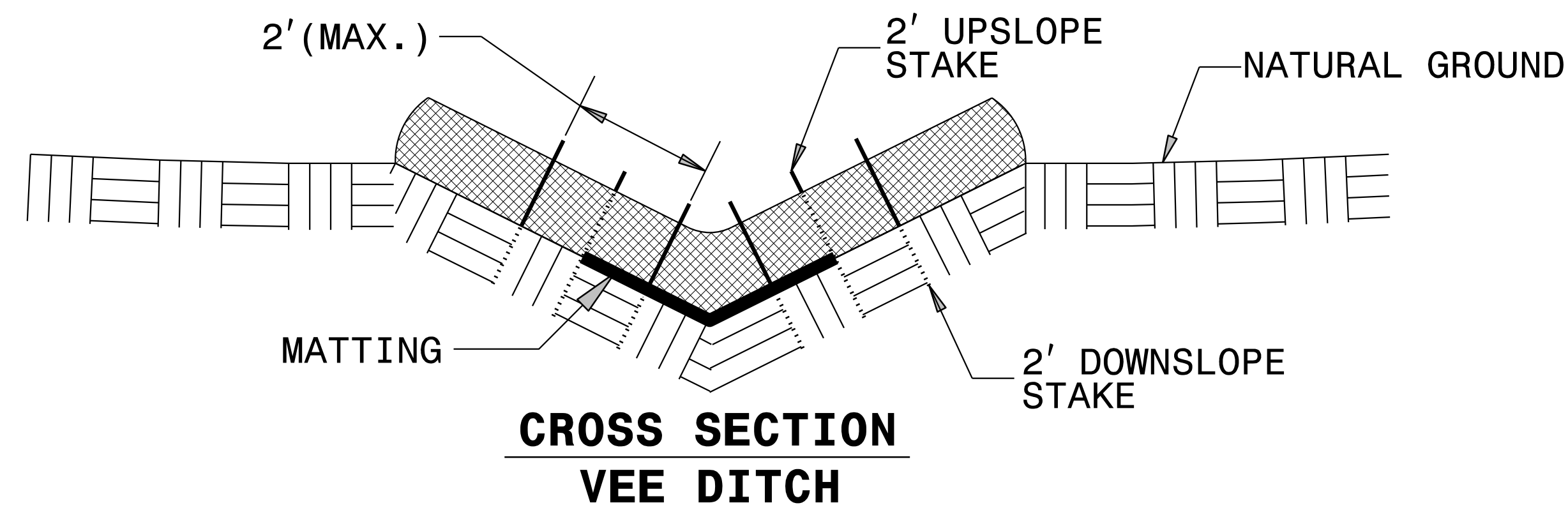
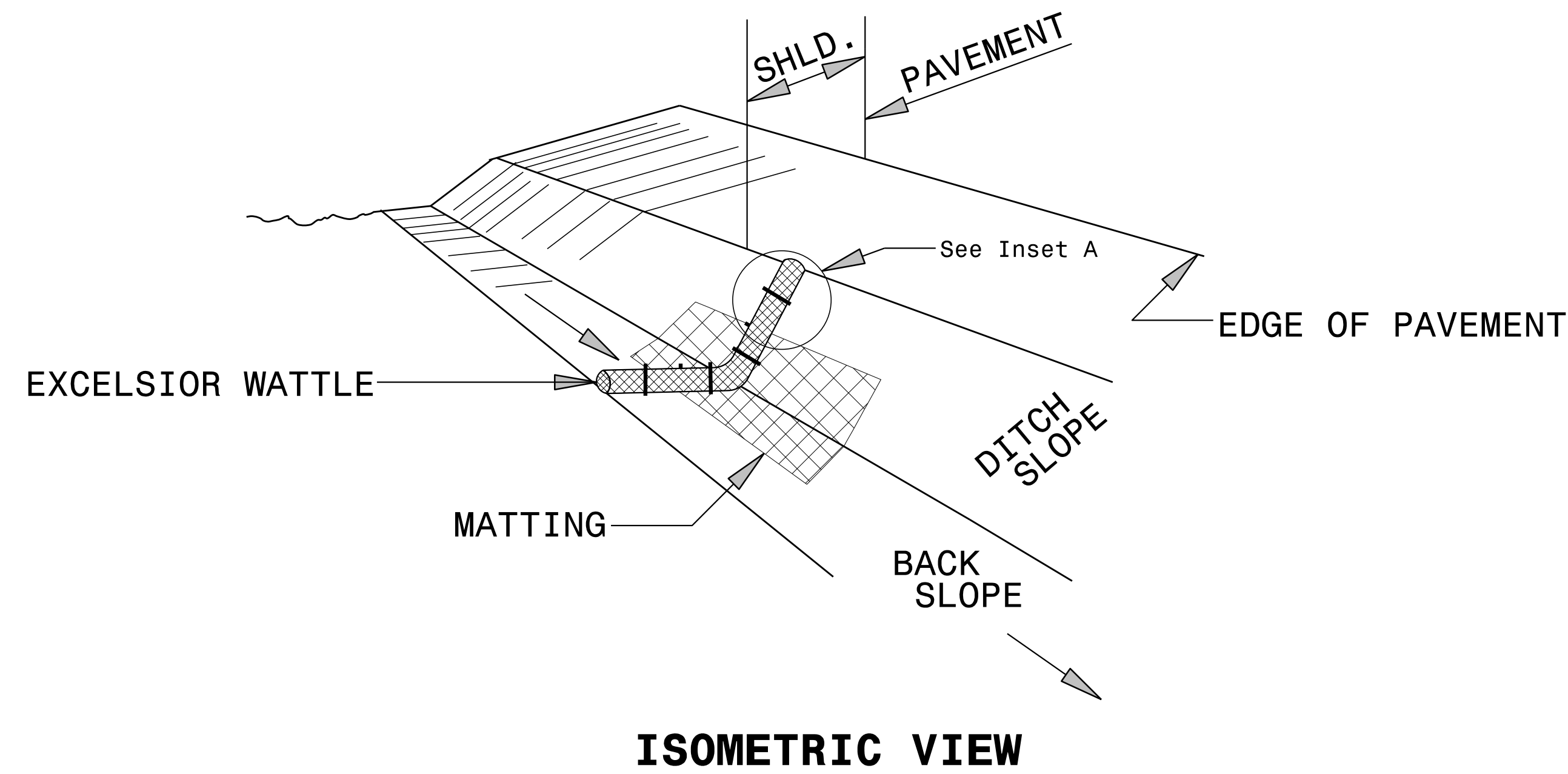
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

| | | | |
|---------|----------------------------------|---------|--------------------------------------|
| 1604.01 | Railroad Erosion Control Detail | 1632.01 | Rock Inlet Sediment Trap Type A |
| 1605.01 | Temporary Silt Fence | 1632.02 | Rock Inlet Sediment Trap Type B |
| 1606.01 | Special Sediment Control Fence | 1632.03 | Rock Inlet Sediment Trap Type C |
| 1607.01 | Gravel Construction Entrance | 1633.01 | Temporary Rock Silt Check Type A |
| 1622.01 | Temporary Berms and Slope Drains | 1633.02 | Temporary Rock Silt Check Type B |
| 1630.01 | Riser Basin | 1634.01 | Temporary Rock Sediment Dam Type A |
| 1630.02 | Silt Basin Type B | 1634.02 | Temporary Rock Sediment Dam Type B |
| 1630.03 | Temporary Silt Ditch | 1635.01 | Rock Pipe Inlet Sediment Trap Type A |
| 1630.04 | Stilling Basin | 1635.02 | Rock Pipe Inlet Sediment Trap Type B |
| 1630.05 | Temporary Diversion | 1640.01 | Coir Fiber Baffle |
| 1630.06 | Special Stilling Basin | 1645.01 | Temporary Stream Crossing |
| 1631.01 | Matting Installation | | |

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. U-5754 | SHEET NO. EC-2 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

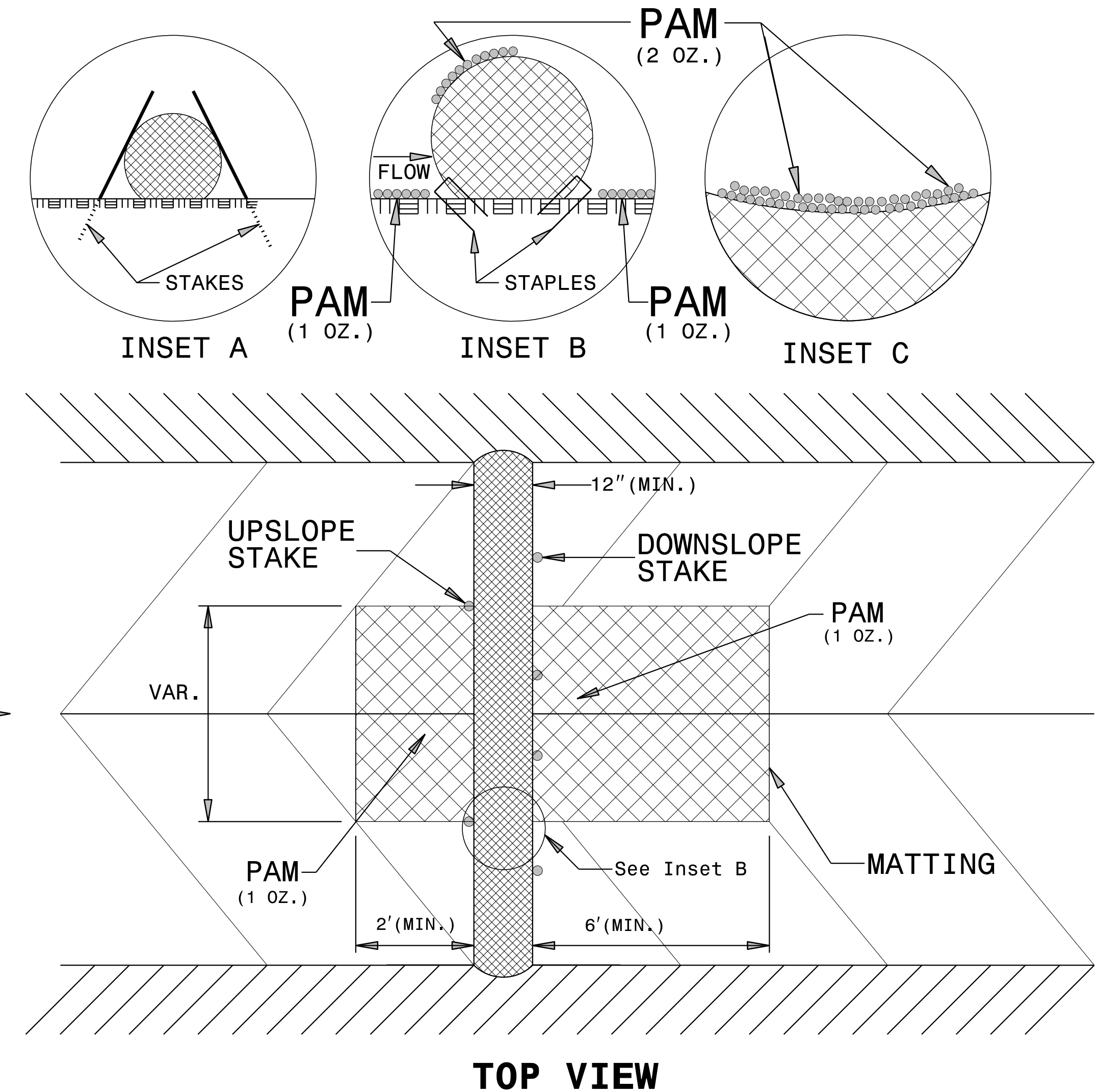
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

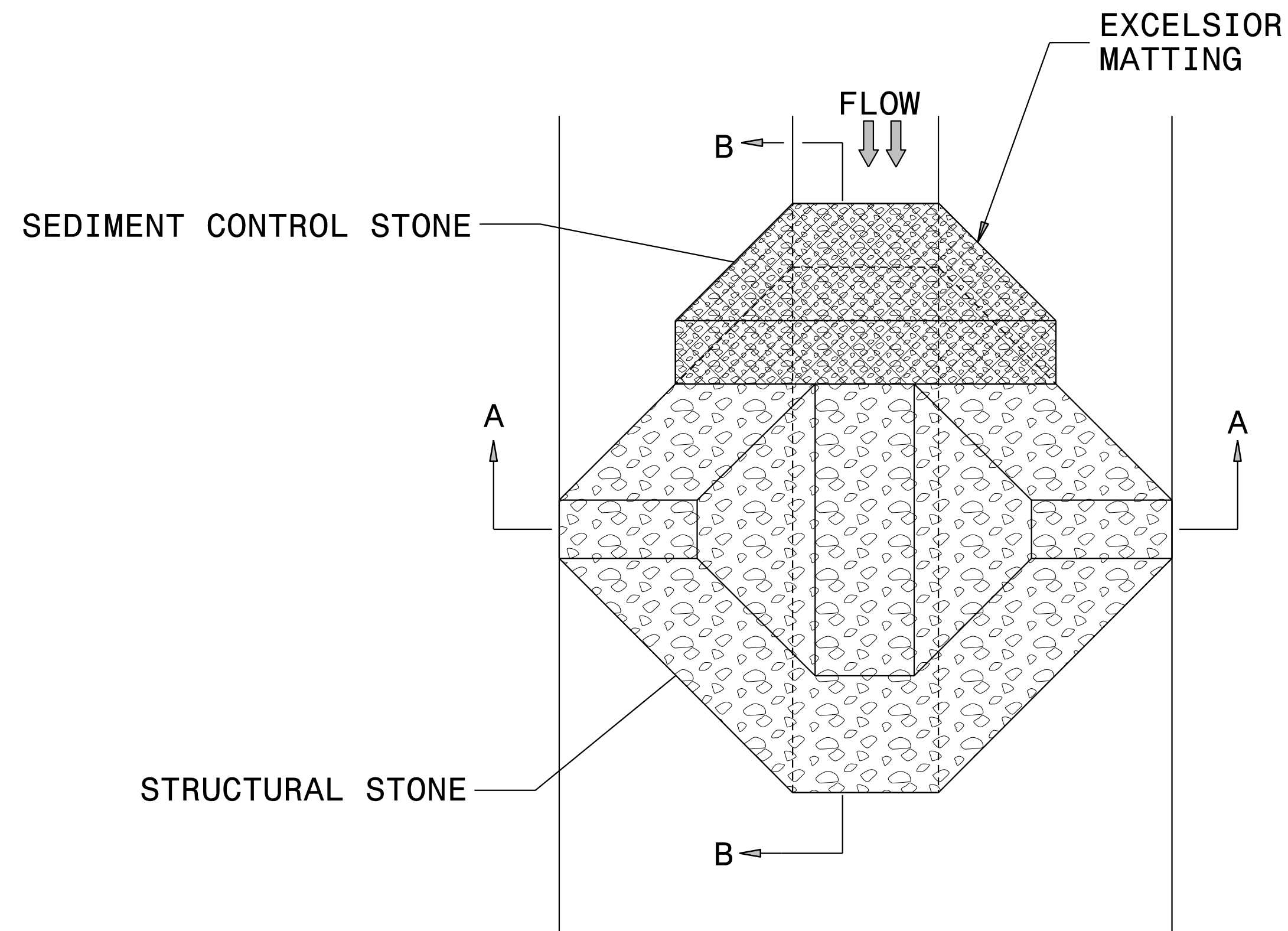
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

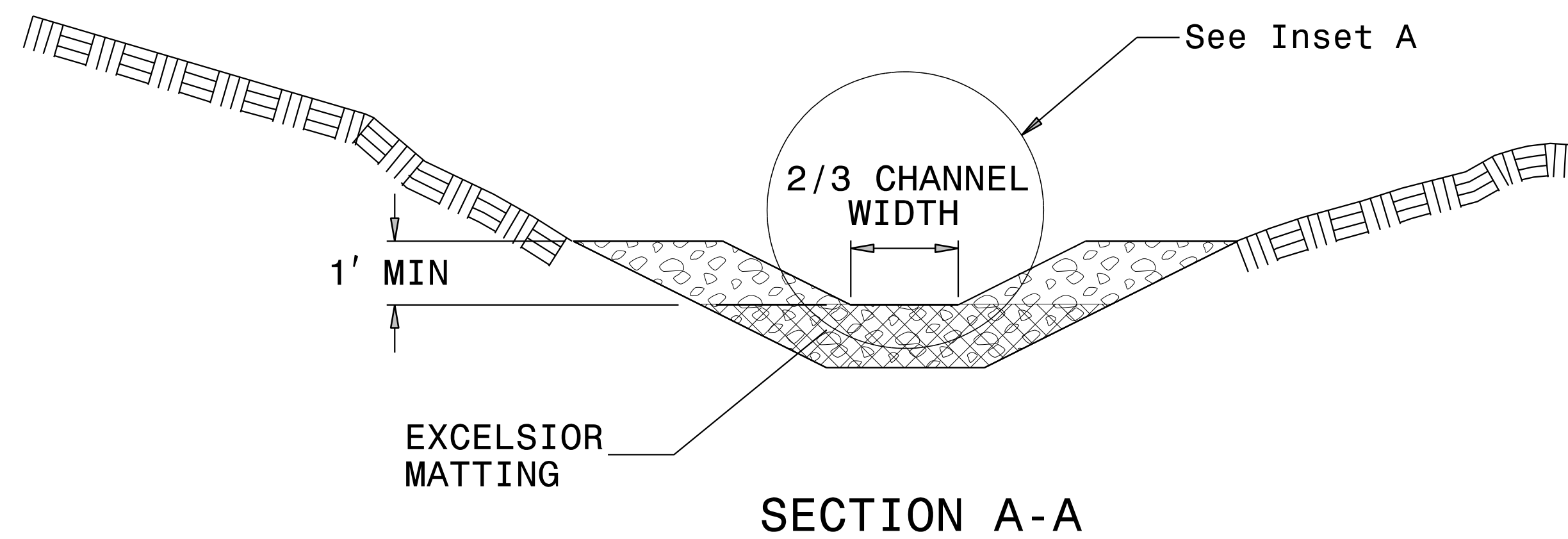


| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. U-5754 | SHEET NO. EC-2A |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



PLAN



SECTION A-A

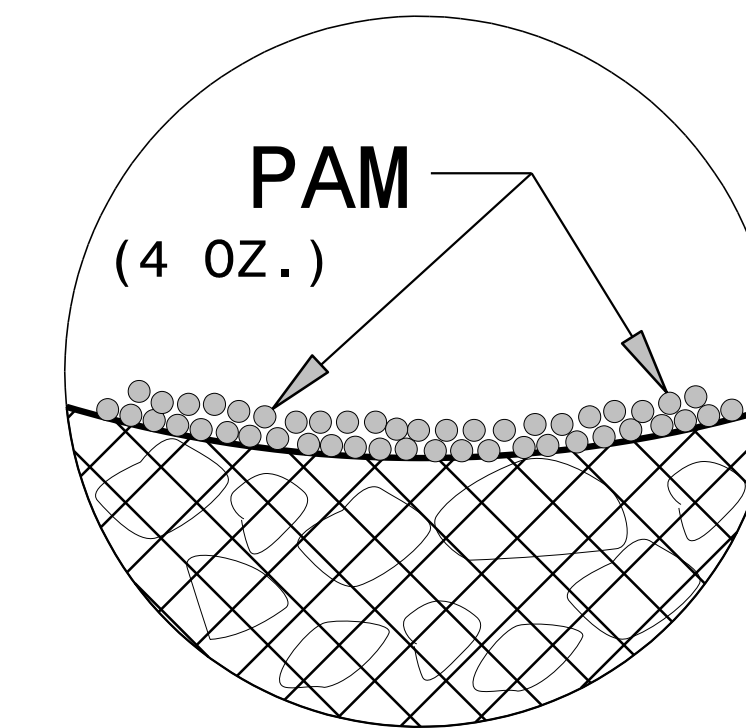
NOTES:

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

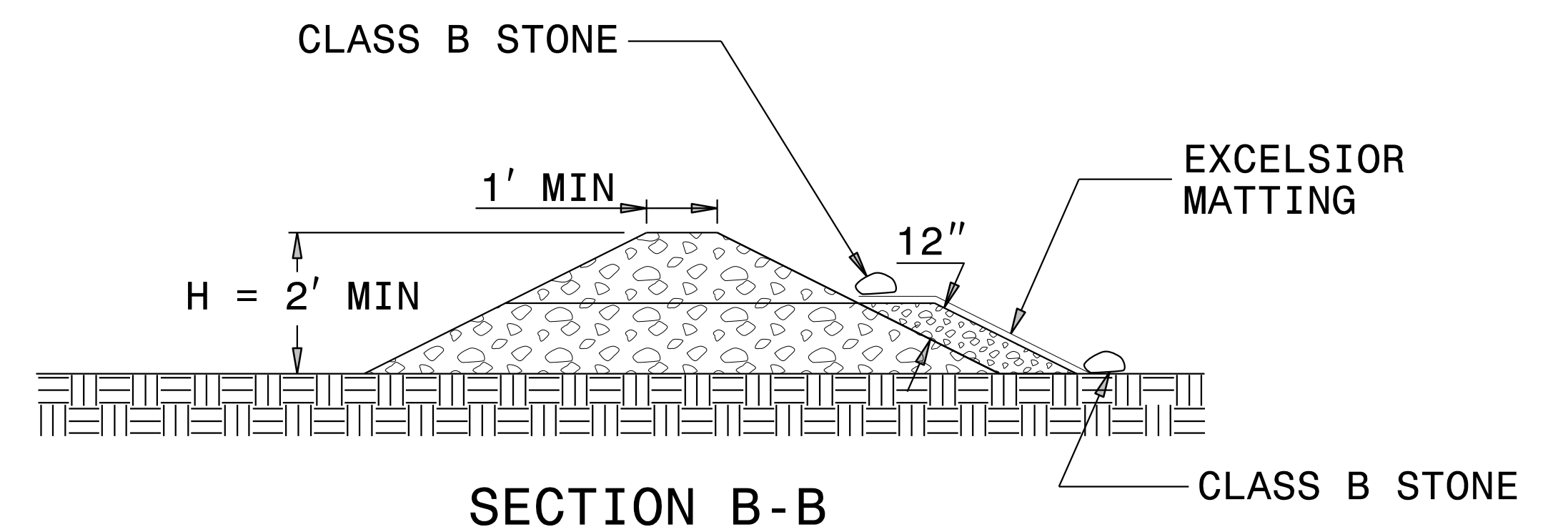
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION B-B

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

| | |
|--|---------------------------|
| PROJECT REFERENCE NO. <i>U-5754</i> | SHEET NO. <i>EC-3A</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

SOIL STABILIZATION TIMEFRAMES

| <i>SITE DESCRIPTION</i> | <i>STABILIZATION TIME</i> | <i>TIMEFRAME EXCEPTIONS</i> |
|--|---------------------------|--|
| PERIMETER DIKES, SWALES, DITCHES AND SLOPES | 7 DAYS | NONE |
| HIGH QUALITY WATER (HQW) ZONES | 7 DAYS | NONE |
| SLOPES STEEPER THAN 3:1 | 7 DAYS | IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED. |
| SLOPES 3:1 OR FLATTER | 14 DAYS | 7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH. |
| ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1 | 14 DAYS | NONE, EXCEPT FOR PERIMETERS AND HQW ZONES. |

NAD 83/NSRS 2007

| -YI- | | |
|-------------------|------------------------|-------------------|
| Pls Sta 12+89.27 | PI Sta 17+57.89 | Pls Sta 22+18.60 |
| Os = 5' 58" 05.9" | Δ = 21' 37" 27.0" (LT) | Os = 5' 58" 05.9" |
| Ls = 375.00' | D = 3' 10' 59.2" | Ls = 375.00' |
| LT = 250.14' | L = 679.34' | LT = 250.14' |
| ST = 125.13' | R = 1,800.00' | ST = 125.13' |
| | DS = 60 MPH | |
| | SE = EXIST | |

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-5754 | EC-04/CONST.04 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 04

-YI- SC Sta. 14+14.13

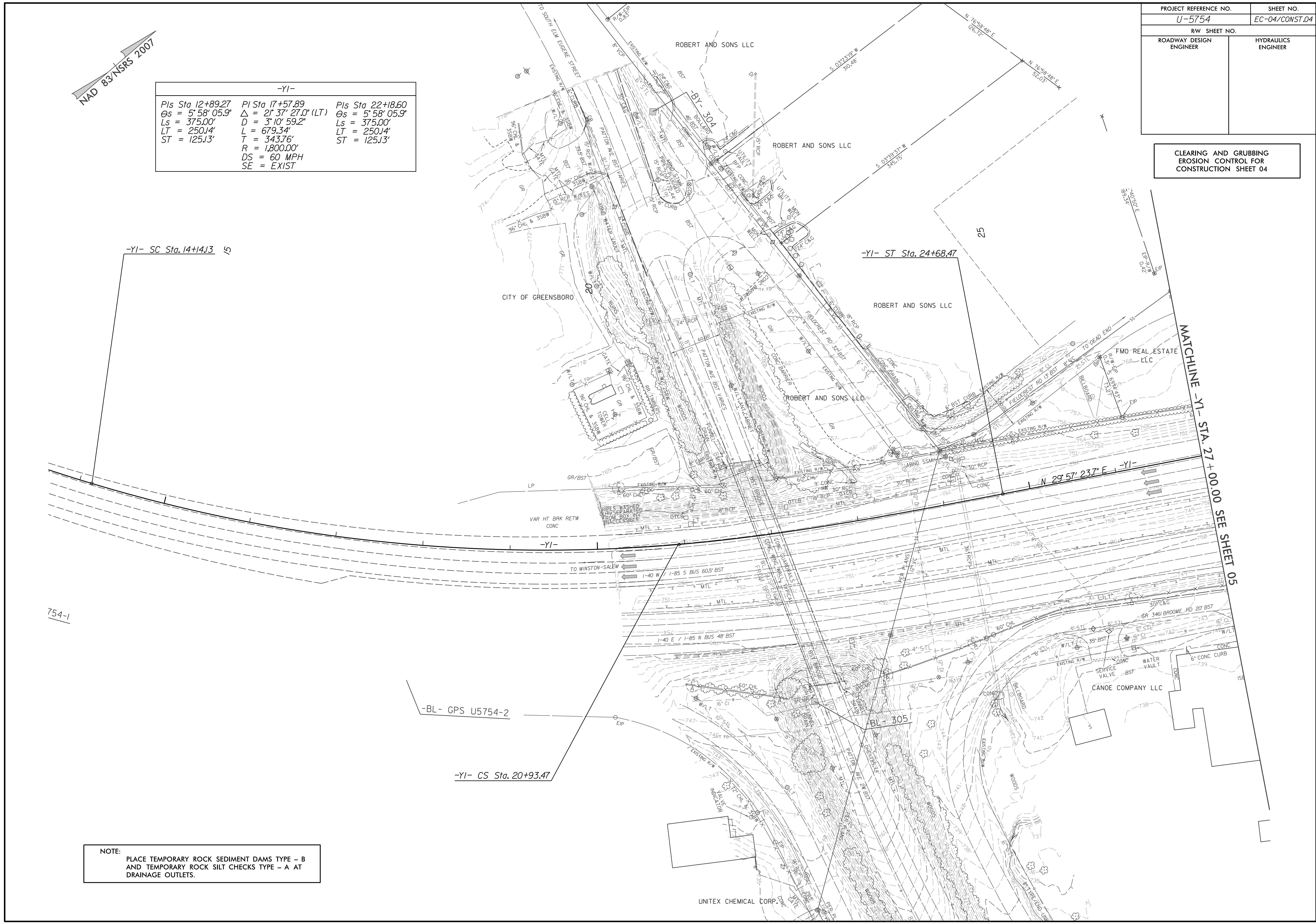
-YI- ST Sta. 24+68.47

754-1

-BL- GPS U5754-2

-YI- CS Sta. 20+93.47

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

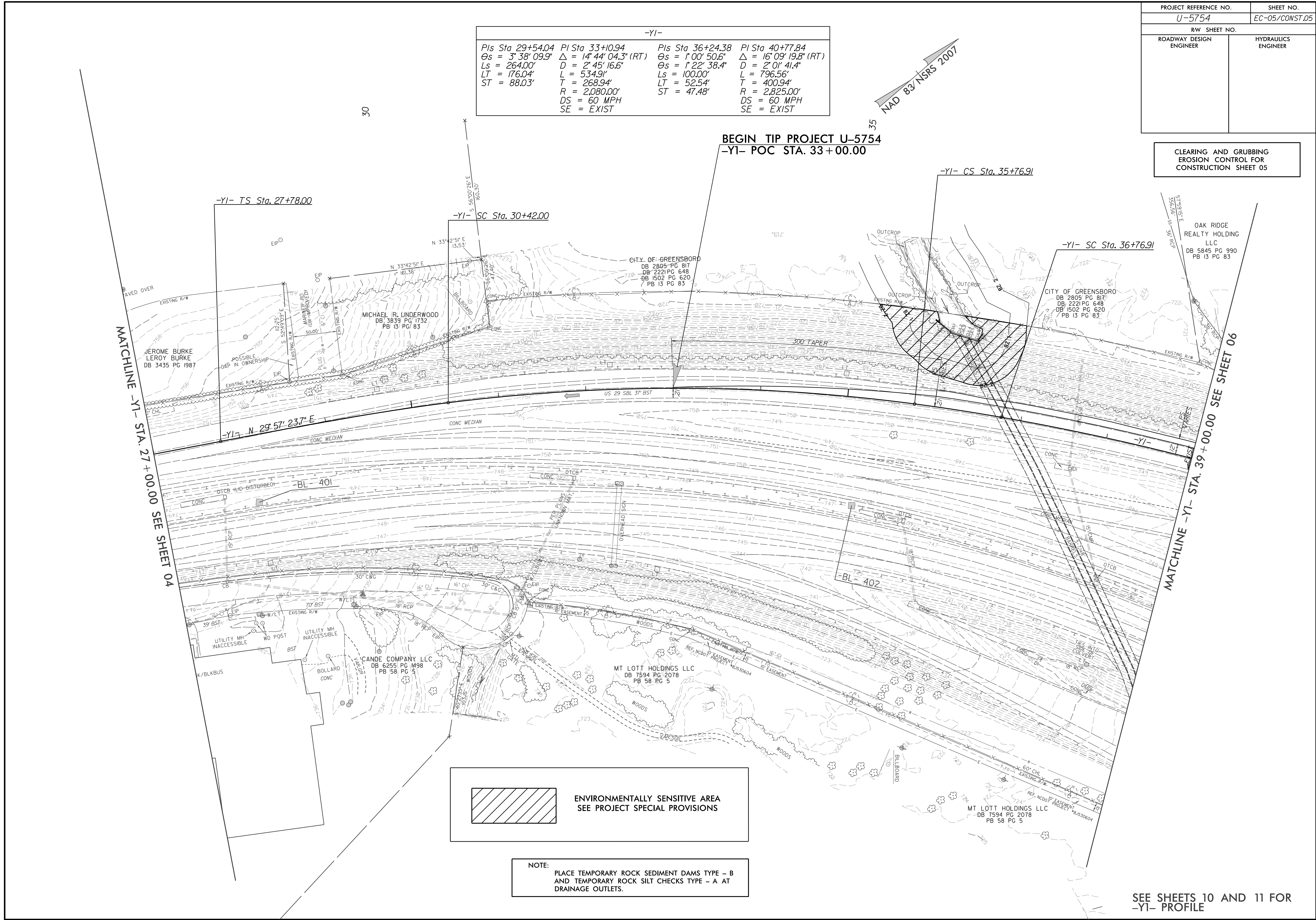


| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-5754 | EC-05/CONST.05 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

| | | | |
|-------------------|------------------------|-------------------|------------------------|
| -Y1- | | | |
| Pls Sta 29+54.04 | Pls Sta 33+10.94 | Pls Sta 36+24.38 | Pls Sta 40+77.84 |
| Os = 3° 38' 09.9" | Δ = 14° 44' 04.3" (RT) | Os = 1° 00' 50.6" | Δ = 16° 09' 19.8" (RT) |
| Ls = 264.00' | D = 2° 45' 16.6" | Os = 1° 22' 38.4" | D = 2° 01' 41.4" |
| LT = 176.04' | L = 534.91' | Ls = 100.00' | L = 796.56' |
| ST = 88.03' | T = 268.94' | LT = 52.54' | T = 400.94' |
| | R = 2,080.00' | ST = 47.48' | R = 2,825.00' |
| | DS = 60 MPH | | DS = 60 MPH |
| | SE = EXIST | | SE = EXIST |

NAD 83/NSRS 2007

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05



SEE SHEETS 10 AND 11 FOR
-Y1- PROFILE

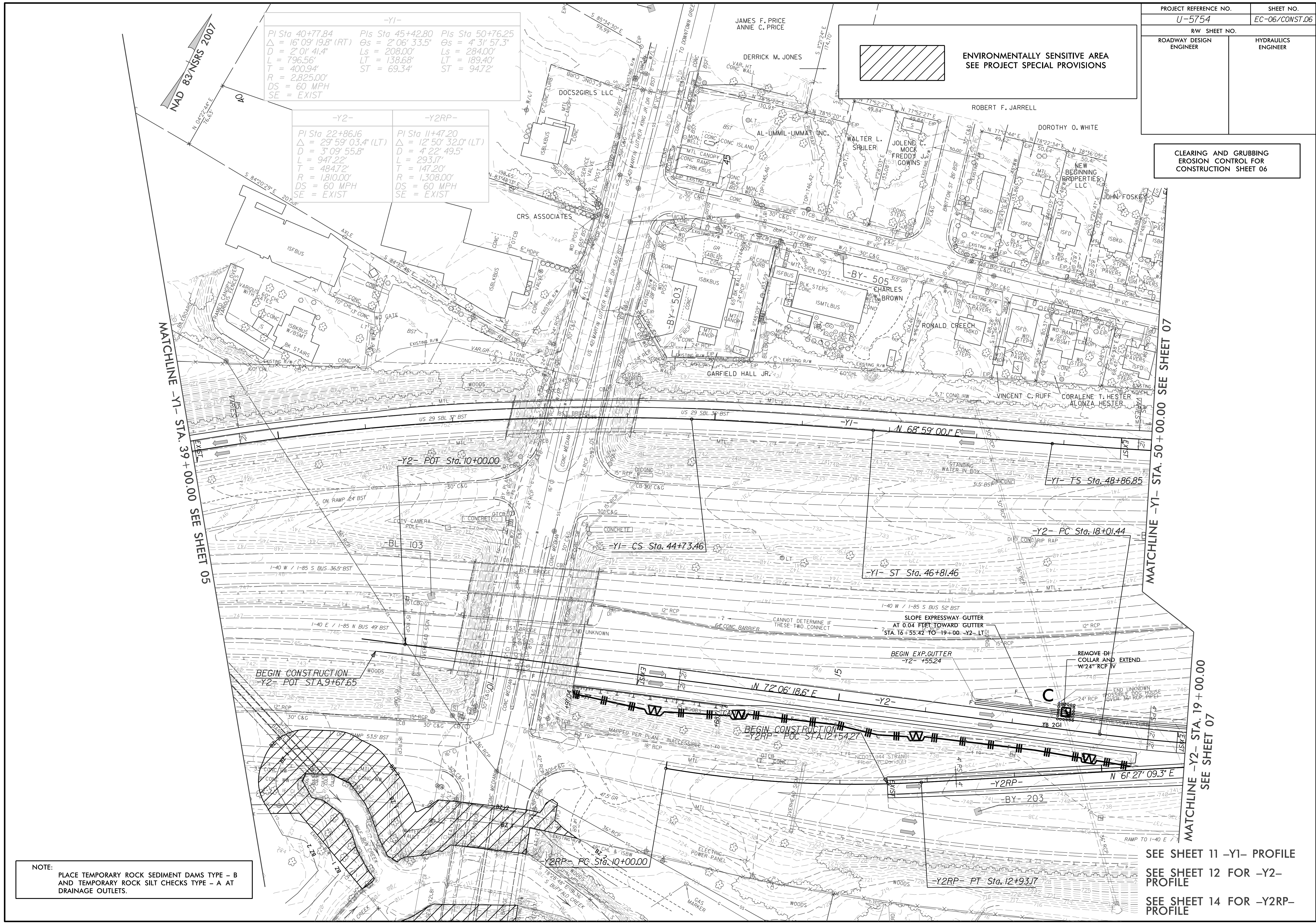
| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-5754 | EC-06/CONST.06 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 06

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

| -Y1- | | |
|------------------------------------|--------------------------------|--------------------------------|
| PI Sta 40+77.84 | PIs Sta 45+42.80 | PIs Sta 50+76.25 |
| $\Delta = 16^{\circ}09'19.8"$ (RT) | $\Theta_s = 2^{\circ}06'33.5"$ | $\Theta_s = 4^{\circ}31'57.3"$ |
| D = 2'01'41.4" | LS = 208.00' | LS = 284.00' |
| L = 796.56' | LT = 138.68' | LT = 189.40' |
| T = 400.94' | ST = 69.34' | ST = 94.72' |
| R = 2,825.00' | | |
| DS = 60 MPH | | |
| SE = EXIST | | |

| -Y2- | | -Y2RP- | |
|------------------------------------|------------------------------------|--------|--|
| PI Sta 22+86.16 | PI Sta 11+47.20 | | |
| $\Delta = 29^{\circ}59'03.4"$ (LT) | $\Delta = 12^{\circ}50'32.0"$ (LT) | | |
| D = 3'09'55.8" | D = 4'22'49.5" | | |
| L = 947.22' | L = 293.17' | | |
| T = 484.72' | T = 147.20' | | |
| R = 1,810.00' | R = 1,308.00' | | |
| DS = 60 MPH | DS = 60 MPH | | |
| SE = EXIST | SE = EXIST | | |

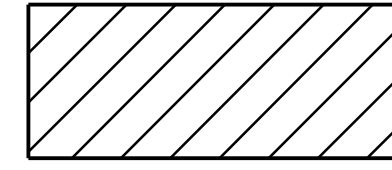


NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

MATCHLINE -Y1- STA. 50+00.00 SEE SHEET 07

MATCHLINE -Y2- STA. 19+00.00
SEE SHEET 07

SEE SHEET 11 -Y1- PROFILE
SEE SHEET 12 FOR -Y2-
PROFILE
SEE SHEET 14 FOR -Y2RP-
PROFILE



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

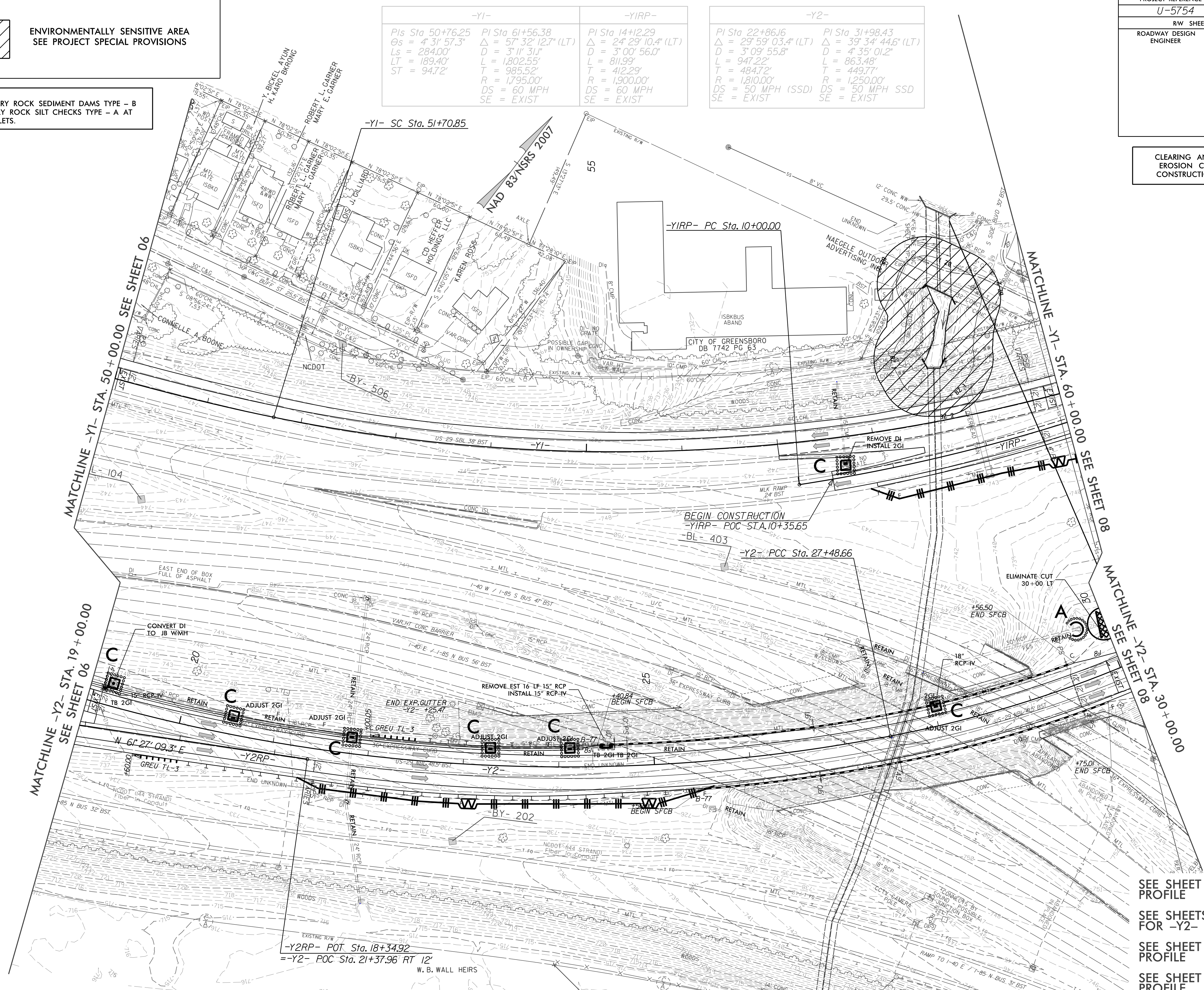
NOTE:

PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

| -Y1- | | -Y1RP- | | -Y2- | |
|---------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--|
| PI Sta 50+76.25 | PI Sta 61+56.38 | PI Sta 14+12.29 | PI Sta 22+86.16 | PI Sta 31+98.43 | |
| $\Theta_s = 4' 31' 57.3"$ | $\Delta = 57' 32' 12.7"$ (LT) | $\Delta = 24' 29' 10.4"$ (LT) | $\Delta = 29' 59' 03.4"$ (LT) | $\Delta = 39' 34' 44.6"$ (LT) | |
| $L_s = 284.00'$ | $D = 3' 11' 31"$ | $D = 3' 00' 56.0"$ | $D = 3' 09' 55.8"$ | $D = 4' 35' 01.2"$ | |
| $LT = 189.40'$ | $L = 1,802.55'$ | $L = 811.99'$ | $L = 947.22'$ | $L = 863.48'$ | |
| $ST = 94.72'$ | $T = 985.52'$ | $T = 412.29'$ | $T = 484.72'$ | $T = 449.77'$ | |
| | $R = 1,795.00'$ | $R = 1,900.00'$ | $R = 1,810.00'$ | $R = 1,250.00'$ | |
| | $DS = 60$ MPH | $DS = 60$ MPH | $DS = 50$ MPH (SSD) | $DS = 50$ MPH SSD | |
| | $SE = EXIST$ | $SE = EXIST$ | $SE = EXIST$ | $SE = EXIST$ | |

| | |
|---------------------------------|-----------------------------|
| PROJECT REFERENCE NO. U-5754 | SHEET NO. EC-07/CONST.07 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 07

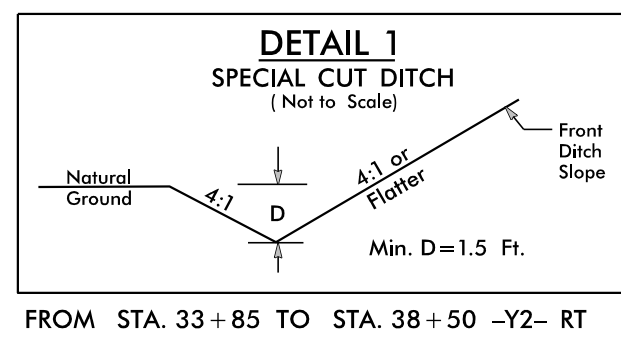
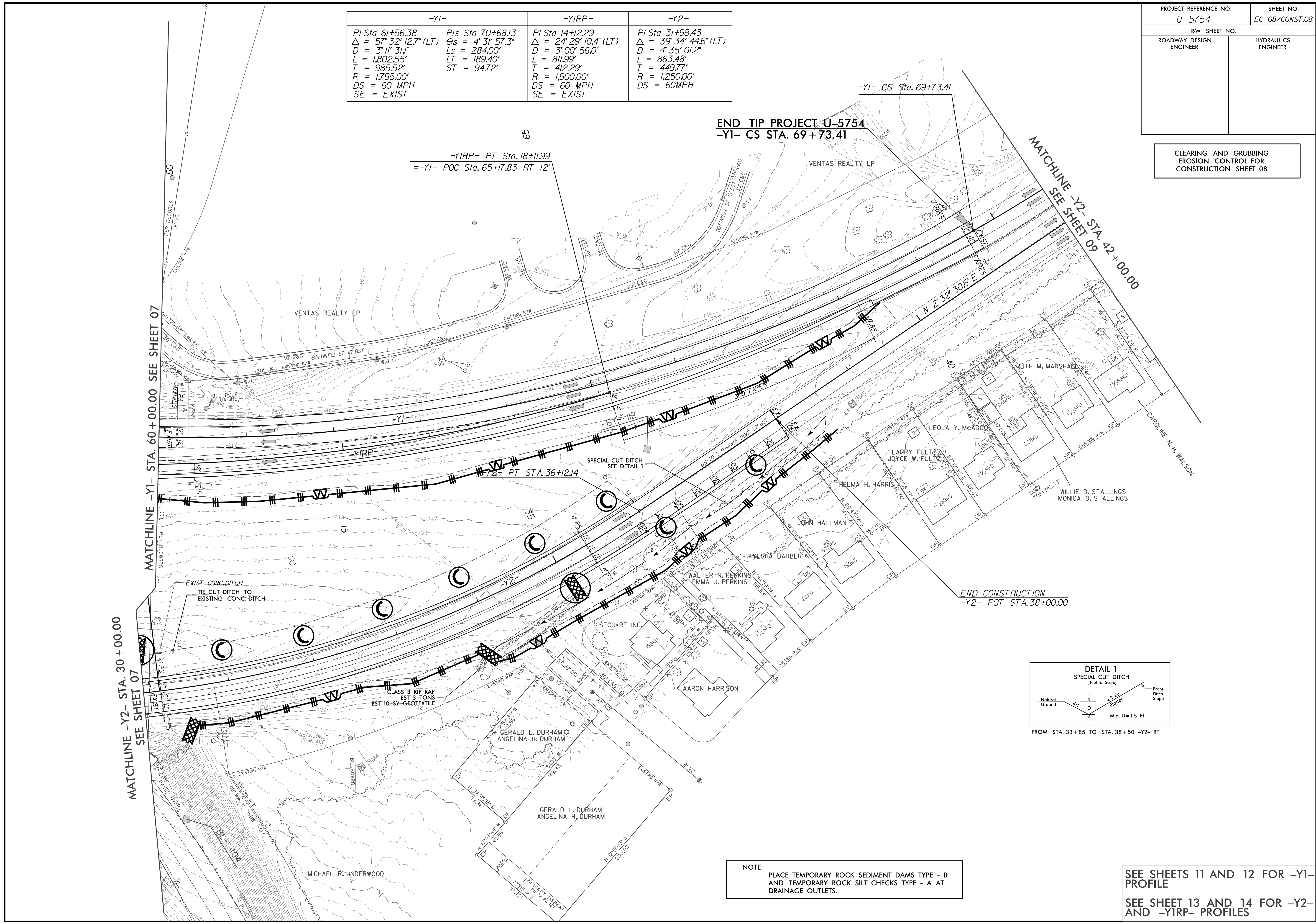


SEE SHEET 12 FOR -Y1-
PROFILE
SEE SHEETS 12 AND 13
FOR -Y2- PROFILE
SEE SHEET 14 FOR -Y1RP-
PROFILE
SEE SHEET 14 FOR -Y2RP-
PROFILE

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-5754 | EC-08/CONST.08 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 08

| -Y1- | | -Y1RP- | -Y2- |
|--------------------------------------|----------------------------------|--------------------------------------|--------------------------------------|
| PI Sta 61+56.38 | PIs Sta 70+68.13 | PI Sta 14+12.29 | PI Sta 31+98.43 |
| $\Delta = 57^{\circ} 32' 12.7" (LT)$ | $\Theta_s = 4^{\circ} 31' 57.3"$ | $\Delta = 24^{\circ} 29' 10.4" (LT)$ | $\Delta = 39^{\circ} 34' 44.6" (LT)$ |
| $D = 3^{\circ} 11' 31.1"$ | $L_s = 284.00'$ | $D = 3^{\circ} 00' 56.0"$ | $D = 4^{\circ} 35' 01.2"$ |
| $L = 1,802.55'$ | $LT = 189.40'$ | $L = 811.99'$ | $L = 863.48'$ |
| $T = 985.52'$ | $ST = 94.72'$ | $T = 412.29'$ | $T = 449.77'$ |
| $R = 1,795.00'$ | | $R = 1,900.00'$ | $R = 1,250.00'$ |
| $DS = 60 MPH$ | | $DS = 60 MPH$ | $DS = 60 MPH$ |
| $SE = EXIST$ | | $SE = EXIST$ | |



NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

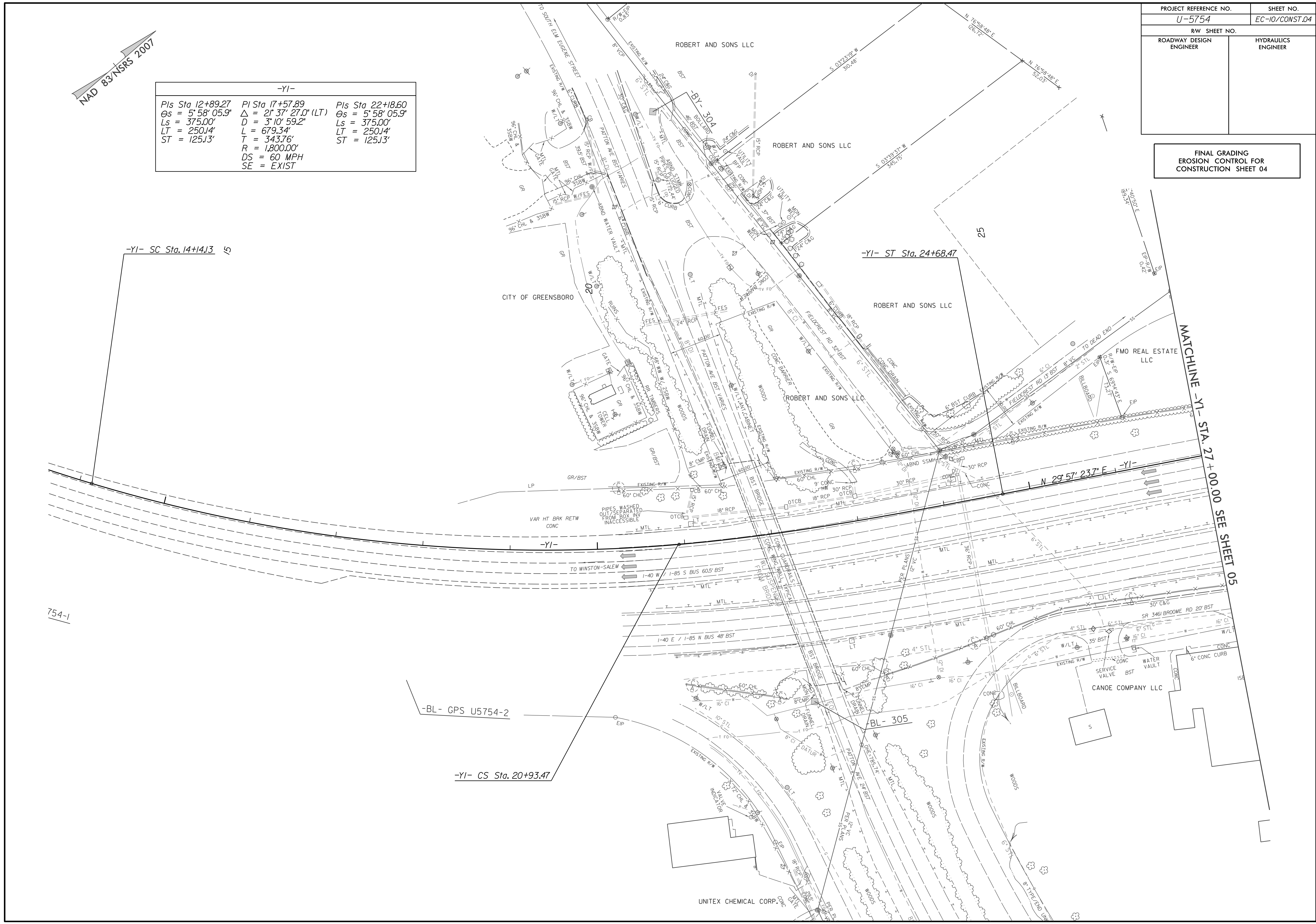
SEE SHEETS 11 AND 12 FOR -Y1-
PROFILE
SEE SHEET 13 AND 14 FOR -Y2-
AND -Y1RP- PROFILES

NAD 83/NSRS 2007

| -YI- | | |
|---------------------------------|-------------------------------------|---------------------------------|
| Pls Sta 12+89.27 | PI Sta 17+57.89 | Pls Sta 22+18.60 |
| $\theta_s = 5^\circ 58' 05.9''$ | $\Delta = 21^\circ 37' 27.0''$ (LT) | $\theta_s = 5^\circ 58' 05.9''$ |
| $L_s = 375.00'$ | $D = 3^\circ 10' 59.2''$ | $L_s = 375.00'$ |
| $LT = 250.14'$ | $L = 679.34'$ | $LT = 250.14'$ |
| $ST = 125.13'$ | $T = 343.76'$ | $ST = 125.13'$ |
| | $DS = 60$ MPH | |
| | $SE = EXIST$ | |

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-5754 | EC-10/CONST.04 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 04



-YI- SC Sta. 14+14.13

-YI- ST Sta. 24+68.47

-YI- CS Sta. 20+93.47

MATCHLINE -YI- STA. 27+00.00 SEE SHEET 05

754-1

-BL- GPS U5754-2

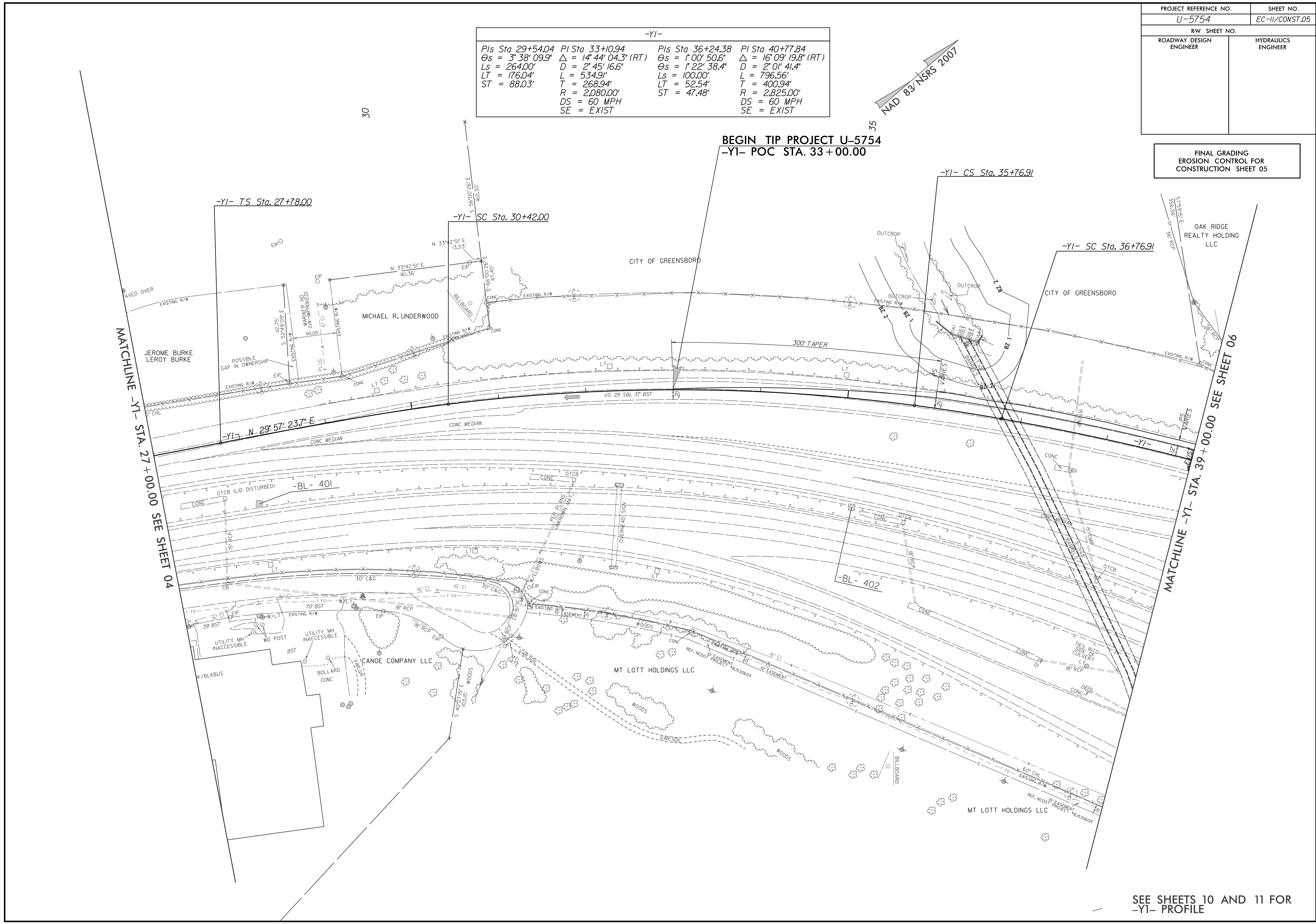
BL- 305

UNITEX CHEMICAL CORP.

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-5754 | EC-II/CONST.05 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

| -Y1- | | | |
|--------------------------------|------------------------------------|--------------------------------|------------------------------------|
| PIs Sta. 29+54.04 | PI Sta. 33+10.94 | PIs Sta. 36+24.38 | PI Sta. 40+77.84 |
| $\Theta_s = 3^\circ 38' 09.9"$ | $\Delta = 14^\circ 44' 04.3"$ (RT) | $\Theta_s = 1^\circ 00' 50.6"$ | $\Delta = 16^\circ 09' 19.8"$ (RT) |
| $L_s = 264.00'$ | $D = 2^\circ 45' 16.6"$ | $\Theta_s = 1^\circ 22' 38.4"$ | $D = 2^\circ 01' 41.4"$ |
| $LT = 176.04'$ | $L = 534.91'$ | $L_s = 100.00'$ | $L = 796.56'$ |
| $ST = 88.03'$ | $T = 268.94'$ | $LT = 52.54'$ | $T = 400.94'$ |
| | $R = 2,080.00'$ | $ST = 47.48'$ | $R = 2,825.00'$ |
| | $DS = 60$ MPH | | $DS = 60$ MPH |
| | $SE = EXIST$ | | $SE = EXIST$ |

NAD 83/NRS 2007



BEGIN TIP PROJECT U-5754
-Y1- POC STA. 33+00.00

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05

MATCHLINE -Y1- STA. 27+00.00 SEE SHEET 04

MATCHLINE -Y1- STA. 39+00.00 SEE SHEET 06

SEE SHEETS 10 AND 11 FOR
-Y1- PROFILE

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-5754 | EC-12/CONST.06 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

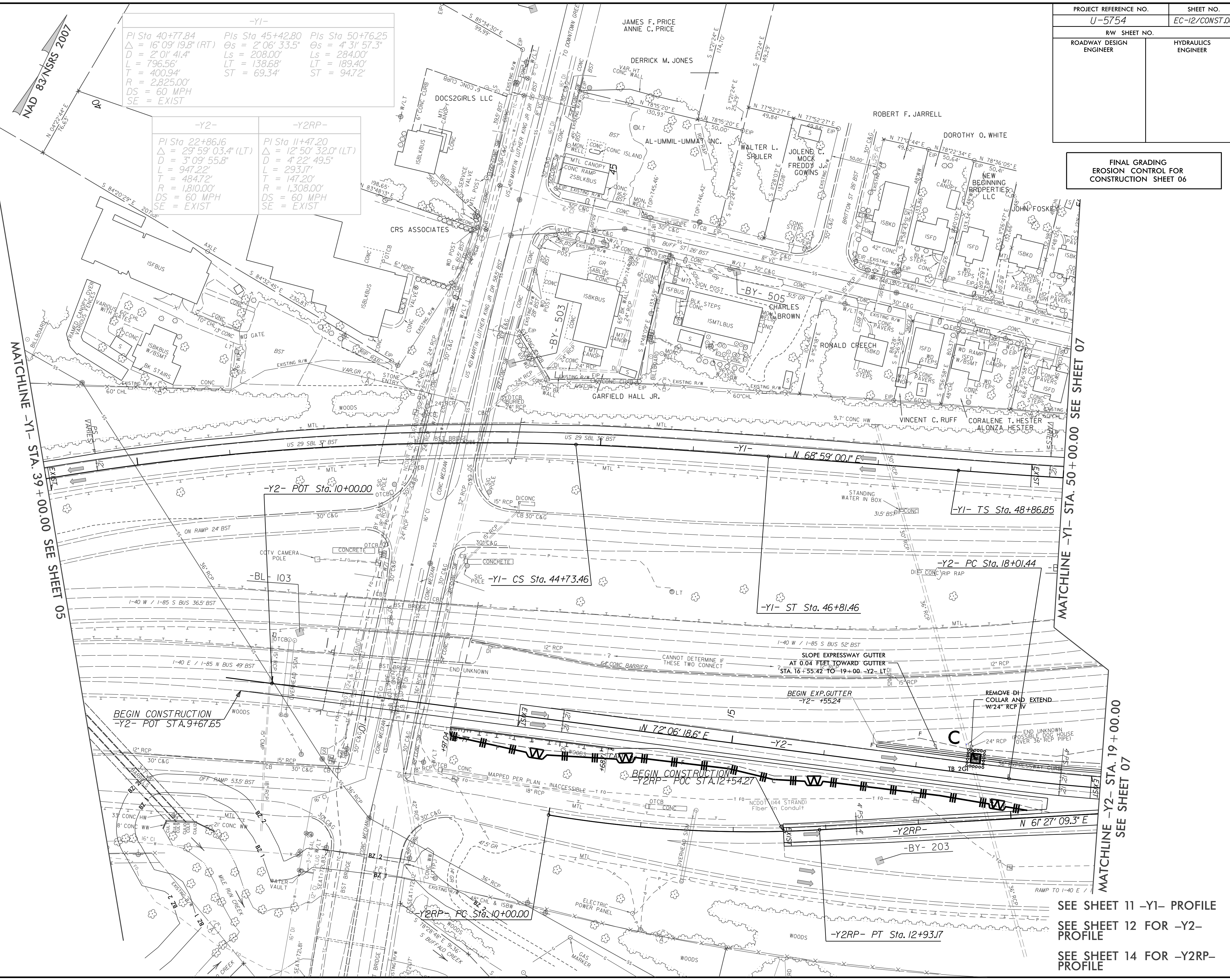
FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 06

-Y1-

| | | |
|-------------------------------------|---------------------------------|---------------------------------|
| PI Sta 40+77.84 | PIs Sta 45+42.80 | PIs Sta 50+76.25 |
| $\Delta = 16^{\circ}09'19.8''$ (RT) | $\Theta_s = 2^{\circ}06'33.5''$ | $\Theta_s = 4^{\circ}31'57.3''$ |
| $D = 2^{\circ}01'41.4''$ | $L_s = 208.00'$ | $L_s = 284.00'$ |
| $L = 796.56'$ | $LT = 138.68'$ | $LT = 189.40'$ |
| $T = 400.94'$ | $ST = 69.34'$ | $ST = 94.72'$ |
| $R = 2,825.00'$ | | |
| $DS = 60$ MPH | | |
| $SE = EXIST$ | | |

-Y2-

| | |
|-------------------------------------|-------------------------------------|
| PI Sta 22+86.16 | PI Sta 11+47.20 |
| $\Delta = 29^{\circ}59'03.4''$ (LT) | $\Delta = 12^{\circ}50'32.0''$ (LT) |
| $D = 3^{\circ}09'55.8''$ | $D = 4^{\circ}22'49.5''$ |
| $L = 947.22'$ | $L = 293.17'$ |
| $T = 484.72'$ | $T = 147.20'$ |
| $R = 1,810.00'$ | $R = 1,308.00'$ |
| $DS = 60$ MPH | $DS = 60$ MPH |
| $SE = EXIST$ | $SE = EXIST$ |



MATCHLINE -Y1- STA. 39+00.00 SEE SHEET 05

MATCHLINE -Y1- STA. 50+00.00 SEE SHEET 07

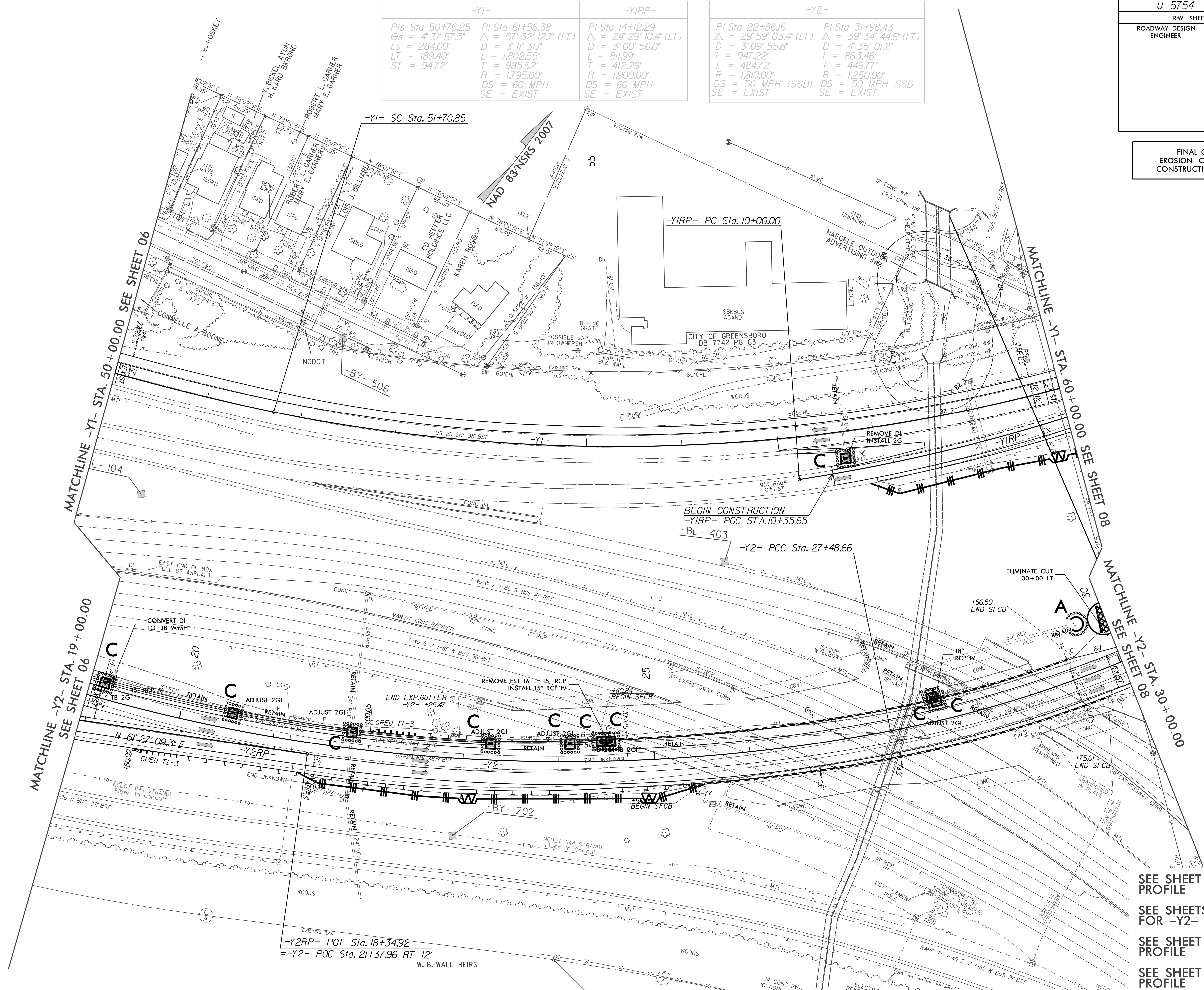
MATCHLINE -Y2- STA. 19+00.00 SEE SHEET 07

SEE SHEET 11 -Y1- PROFILE
SEE SHEET 12 FOR -Y2- PROFILE
SEE SHEET 14 FOR -Y2RP- PROFILE

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-5754 | EC-13/CONST.07 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 07

| -Y1- | | -Y1RP- | | -Y2- | |
|--------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--|
| PI Sta 50+76.25 | PI Sta 61+56.38 | PI Sta 14+12.29 | PI Sta 22+86.16 | PI Sta 31+98.43 | |
| $\theta_s = 4^\circ 31' 57.3"$ | $\Delta = 57^\circ 32' 12.7"$ (LT) | $\Delta = 24^\circ 29' 10.4"$ (LT) | $\Delta = 29^\circ 59' 03.4"$ (LT) | $\Delta = 39^\circ 34' 44.6"$ (LT) | |
| $L_s = 284.00'$ | $D = 3^\circ 11' 31"$ | $D = 3^\circ 00' 56.0"$ | $D = 3^\circ 09' 55.8"$ | $D = 4^\circ 35' 01.2"$ | |
| $LT = 189.40'$ | $L = 1,802.55'$ | $L = 811.99'$ | $L = 947.22'$ | $L = 863.48'$ | |
| $ST = 94.72'$ | $T = 985.52'$ | $T = 412.29'$ | $T = 484.72'$ | $T = 449.77'$ | |
| | $R = 1,795.00'$ | $R = 1,900.00'$ | $R = 1,810.00'$ | $R = 1,250.00'$ | |
| | $DS = 60$ MPH | $DS = 60$ MPH | $DS = 50$ MPH (SSD) | $DS = 50$ MPH SSD | |
| | $SE = EXIST$ | $SE = EXIST$ | $SE = EXIST$ | $SE = EXIST$ | |

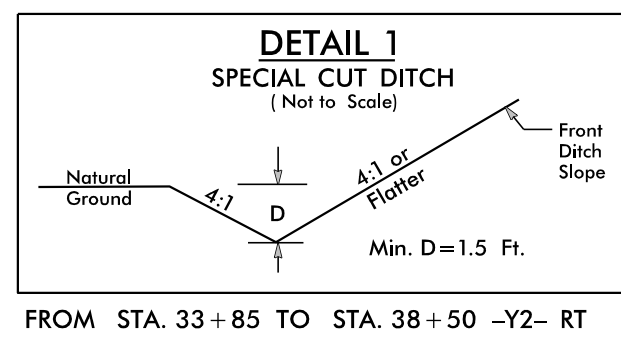
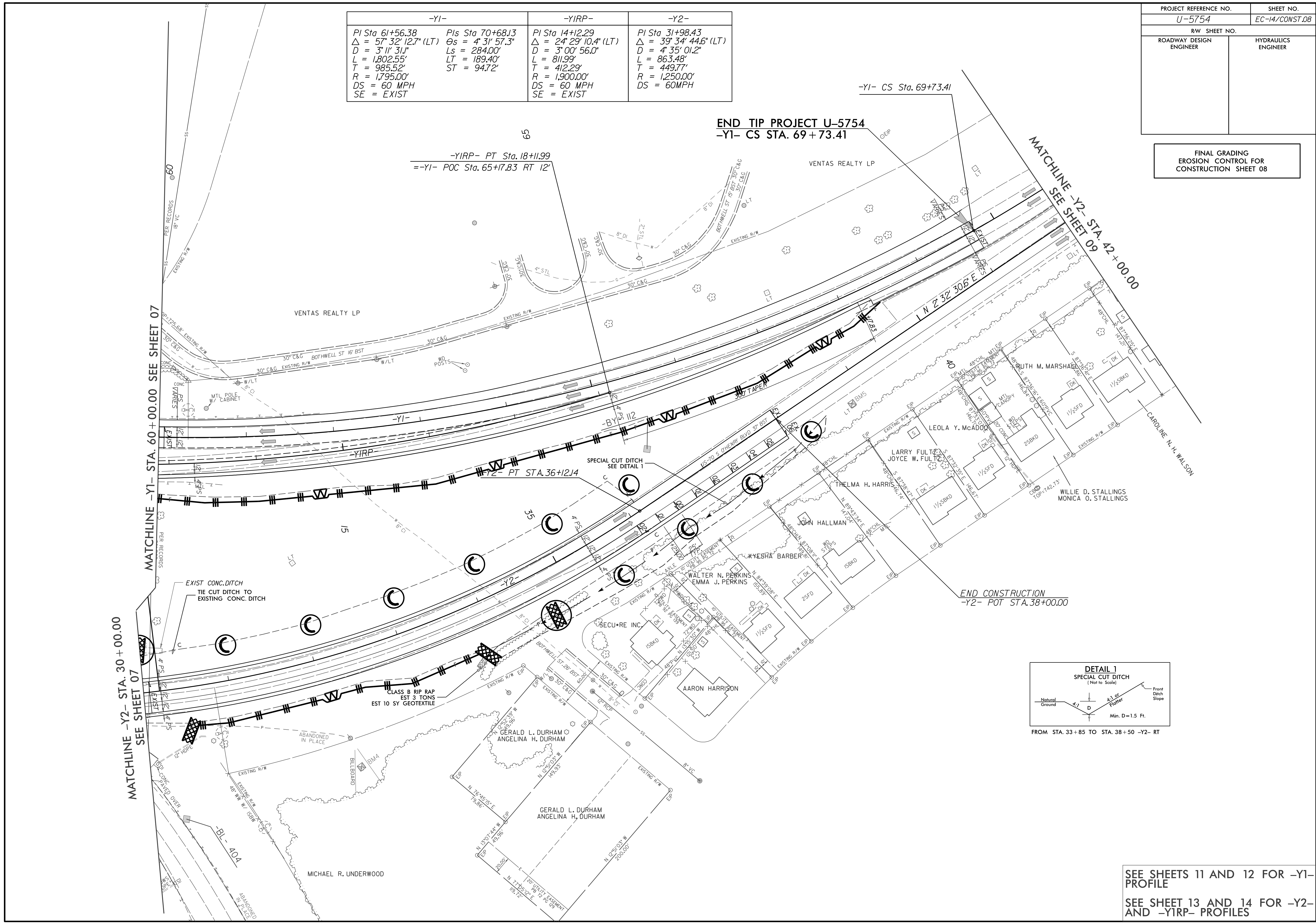


SEE SHEET 12 FOR -Y1- PROFILE
SEE SHEETS 12 AND 13 FOR -Y2- PROFILE
SEE SHEET 14 FOR -Y1RP- PROFILE
SEE SHEET 14 FOR -Y2RP- PROFILE

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-5754 | EC-14/CONST.08 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

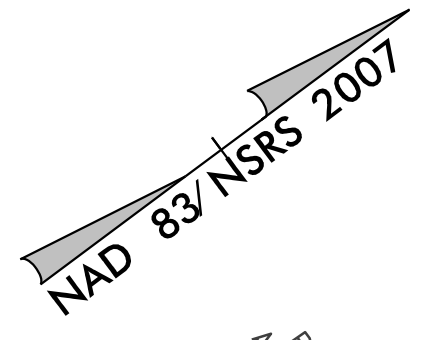
FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 08

| -Y1- | | -YIRP- | -Y2- |
|--------------------------------------|----------------------------------|--------------------------------------|--------------------------------------|
| PI Sta 61+56.38 | PIs Sta 70+68.13 | PI Sta 14+12.29 | PI Sta 31+98.43 |
| $\Delta = 57^{\circ} 32' 12.7" (LT)$ | $\Theta s = 4^{\circ} 31' 57.3"$ | $\Delta = 24^{\circ} 29' 10.4" (LT)$ | $\Delta = 39^{\circ} 34' 44.6" (LT)$ |
| D = 3' 11' 31.1" | Ls = 284.00' | D = 3' 00' 56.0" | D = 4' 35' 01.2" |
| L = 1,802.55' | LT = 189.40' | L = 811.99' | L = 863.48' |
| T = 985.52' | ST = 94.72' | T = 412.29' | T = 449.77' |
| R = 1,795.00' | | R = 1,900.00' | R = 1,250.00' |
| DS = 60 MPH | | DS = 60 MPH | DS = 60 MPH |
| SE = EXIST | | SE = EXIST | SE = EXIST |



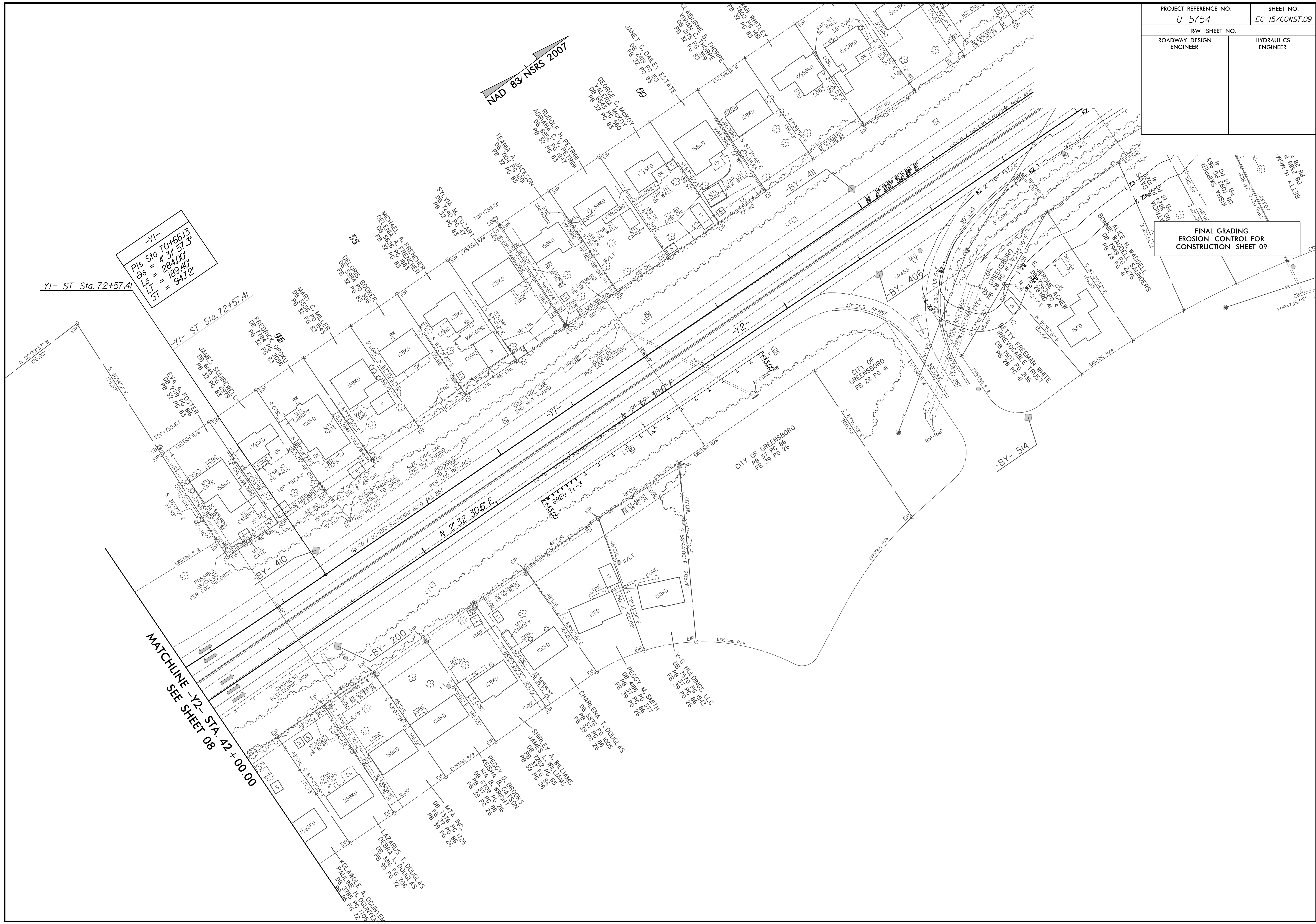
SEE SHEETS 11 AND 12 FOR -Y1-
PROFILE
SEE SHEET 13 AND 14 FOR -Y2-
AND -YIRP- PROFILES

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-5754 | EC-15/CONST.09 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |



-Y1-
Sta 70+68.13
Pis = 431.573
Os = 284.00
Ls = 189.40
Lt = 94.72

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 09



-Y1- ST Sta. 72+57.41

-Y1- ST Sta. 72+57.41

MATCHLINE -Y2- STA. 42+00.00
SEE SHEET 08

N 2 32 30& E

N 2 22 52& E

-Y2-

N 2 12 30& E

-BY- 514

GREU 71-3

GRASS - 406

BZ 1

BZ 2

CITY OF GREENSBORO PG 28 PG 41

CITY OF GREENSBORO PG 39 PG 26

30' C&G 14' BST

30' C&G 14' BST

S 87 10 59 15' E 200.974

S 87 10 59 15' E 200.974

S 87 10 59 15' E 200.974

S 87 10 59 15' E 200.974

S 87 10 59 15' E 200.974

S 87 10 59 15' E 200.974

S 87 10 59 15' E 200.974

S 87 10 59 15' E 200.974

S 87 10 59 15' E 200.974