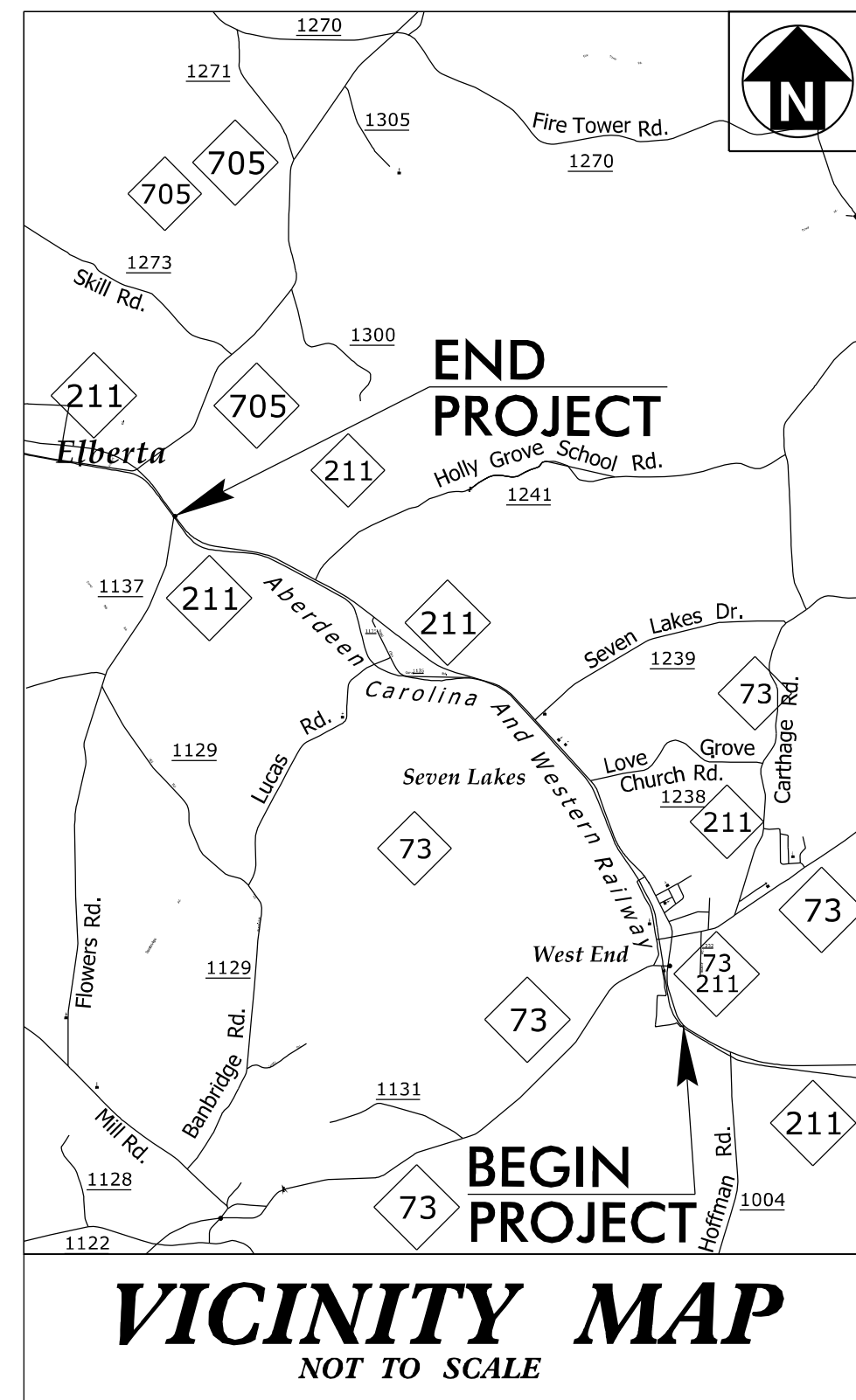


TIP PROJECT: R-5726



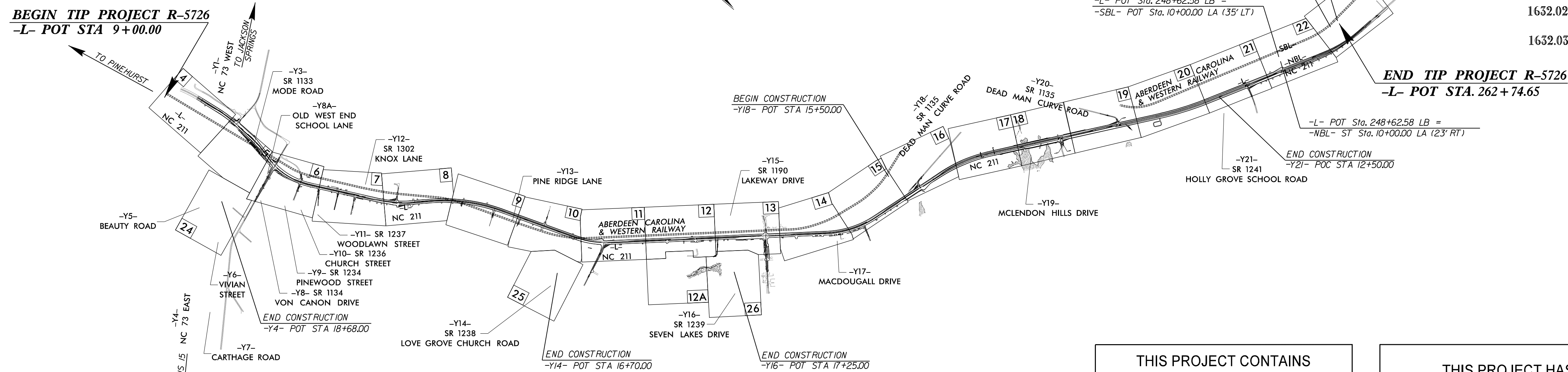
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
MOORE COUNTY

LOCATION: NC 211 FROM SOUTH OF NC 73 IN WEST END TO NORTH OF SR 1241 (HOLLY GROVE SCHOOL ROAD).

TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND SIGNALS

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C. | R-5726 | EC-1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| | | | |
| | | | |
| | | | |

| Std. # | Description | Symbol |
|---------|--|--------|
| 1650.05 | Temporary Silt Ditch | |
| 1650.05 | Temporary Diversion | |
| 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 | |
| 1655.01 | Rock Pipe Inlet Sediment Trap Type-A | |
| 1655.02 | Rock Pipe Inlet Sediment Trap Type-B | |
| 1650.04 | Stilling Basin | |
| 1630.06 | Special Stilling Basin | |
| | Rock Inlet Sediment Trap: | |
| 1632.01 | Type A | |
| 1632.02 | Type B | |
| 1632.05 | Type C | |
| | Skimmer Basin | |
| | Tiered Skimmer Basin | |
| | Infiltration Basin | |

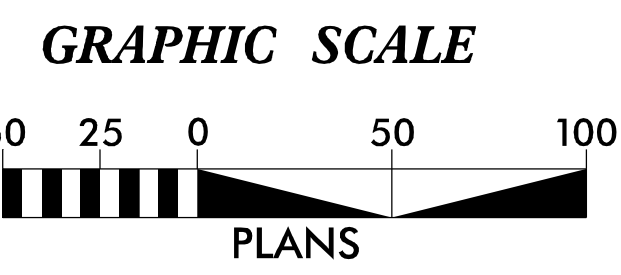


ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT
Refer To E. C. Special Provisions for Special Considerations.

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

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

HIGH QUALITY WATER(S) EXIST ON THIS PROJECT
High Quality Water Zone(s) Exist From Sta. Begin Project to Sta. End Project
Refer To E. C. Special Provisions for Special Considerations.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG010000 GENERAL STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.

HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

PREPARED IN THE OFFICE OF:
HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116
2018 STANDARD SPECIFICATIONS

DESIGNED BY:
David R. Wagner II 4286
NAME LEVEL III CERTIFICATION NO.

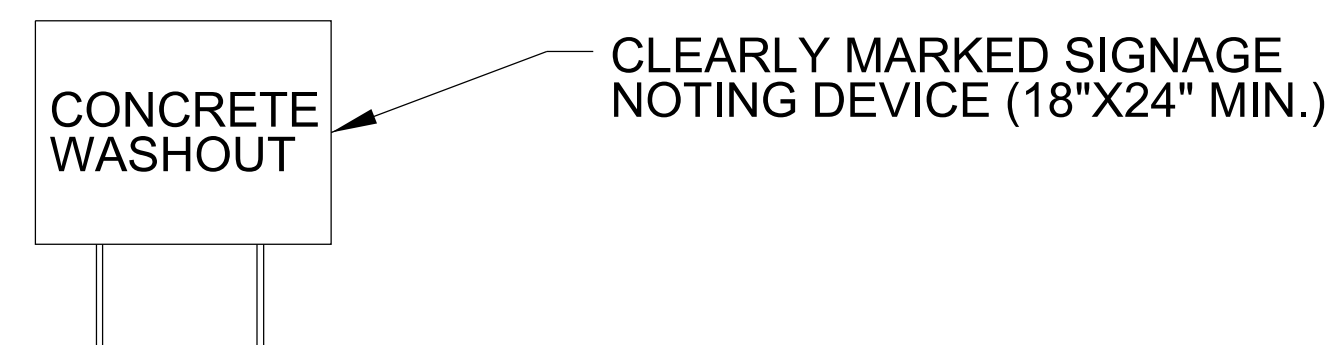
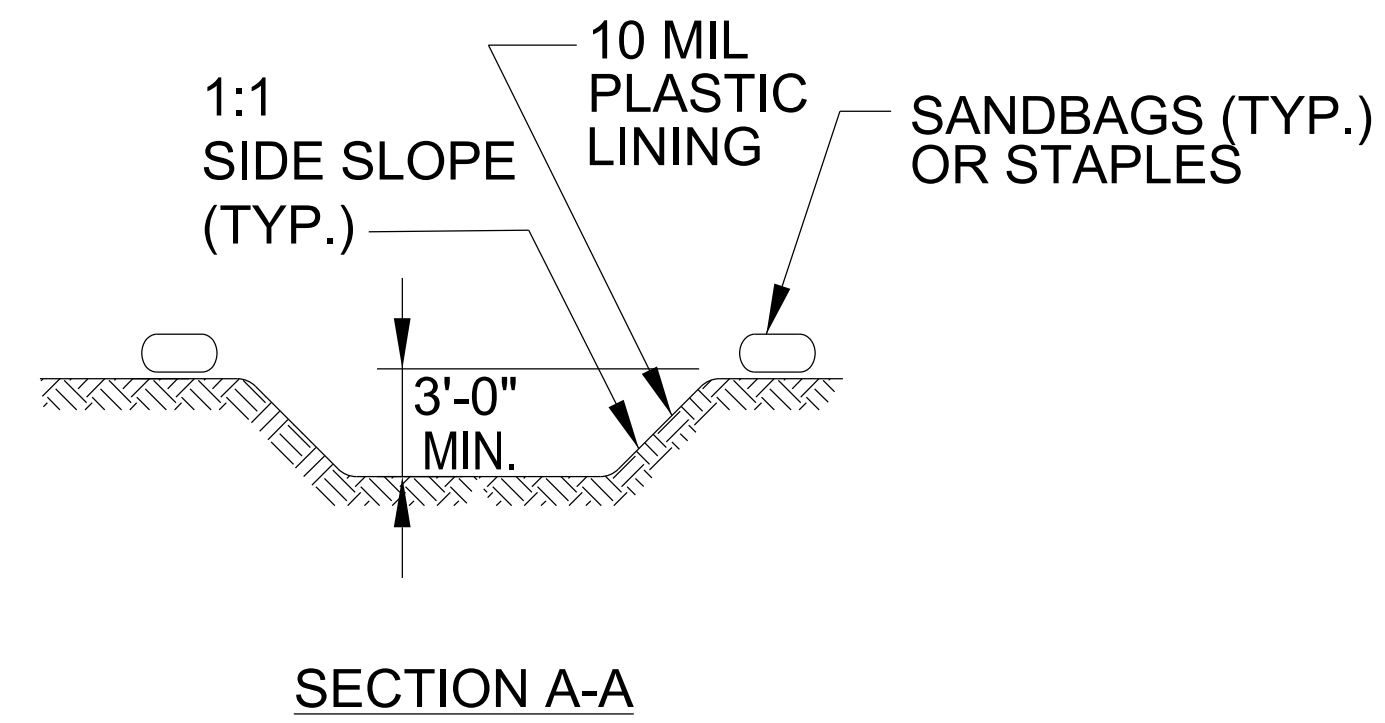
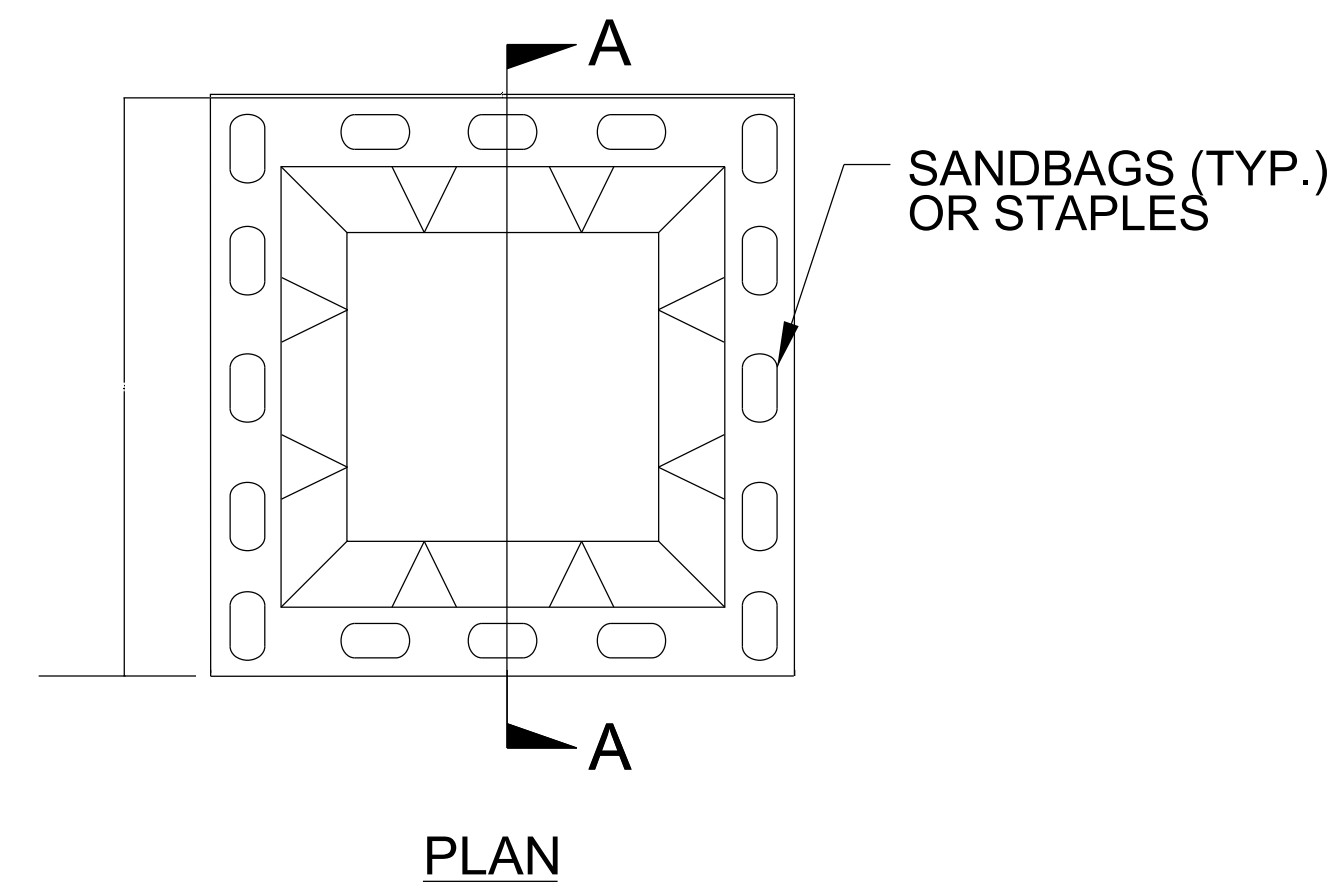
Roadway Standard Drawings

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 J |
| 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 J |
| 1630.01 Riser Basin | 1634.01 Temporary Rock Sediment Dam Type A |
| 1630.02 Silt Basin Type J | 1634.02 Temporary Rock Sediment Dam Type J |
| 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 J |
| 1630.05 Temporary Diversion | 1640.01 Coir Fiber Jaffle |
| 1630.06 Special Stilling Basin | 1645.01 Temporary Stream Crossing |
| 1631.01 Matting Installation | |

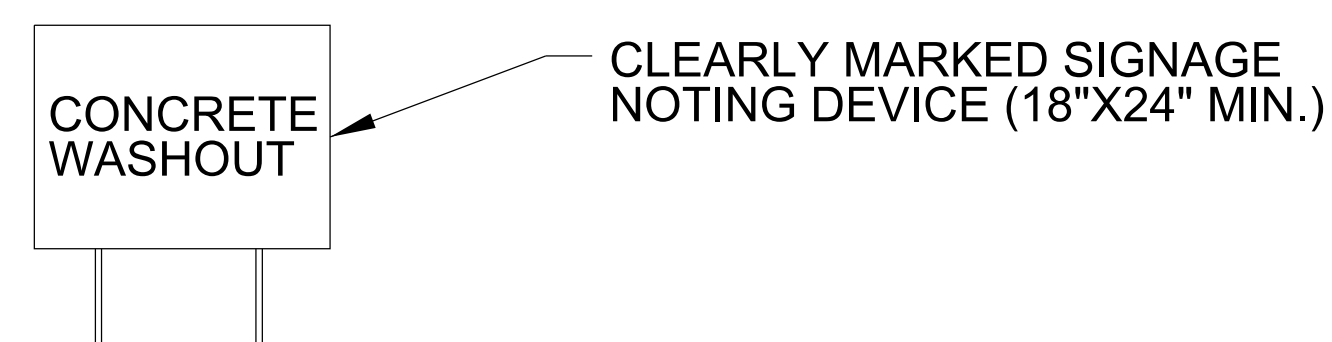
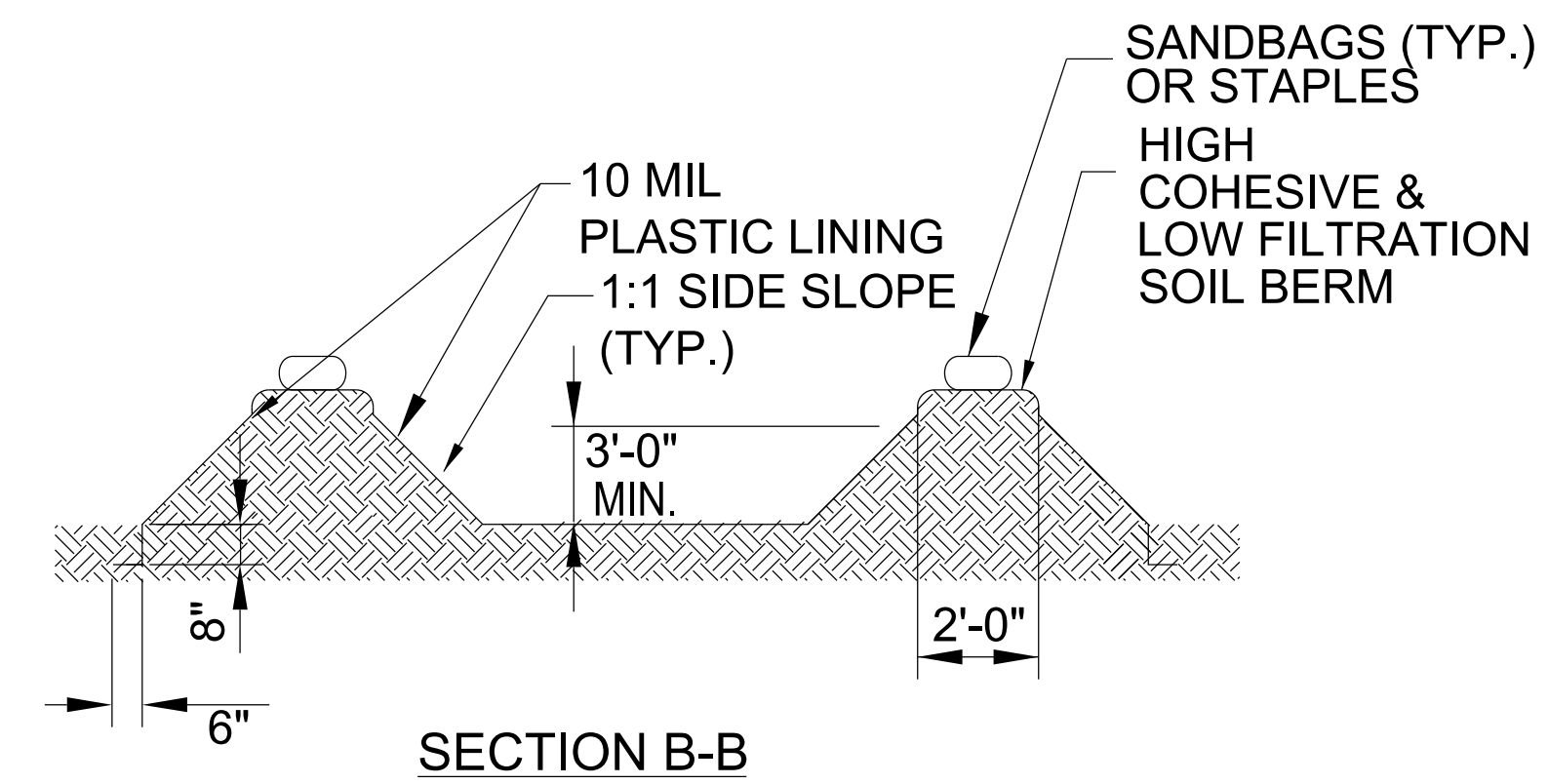
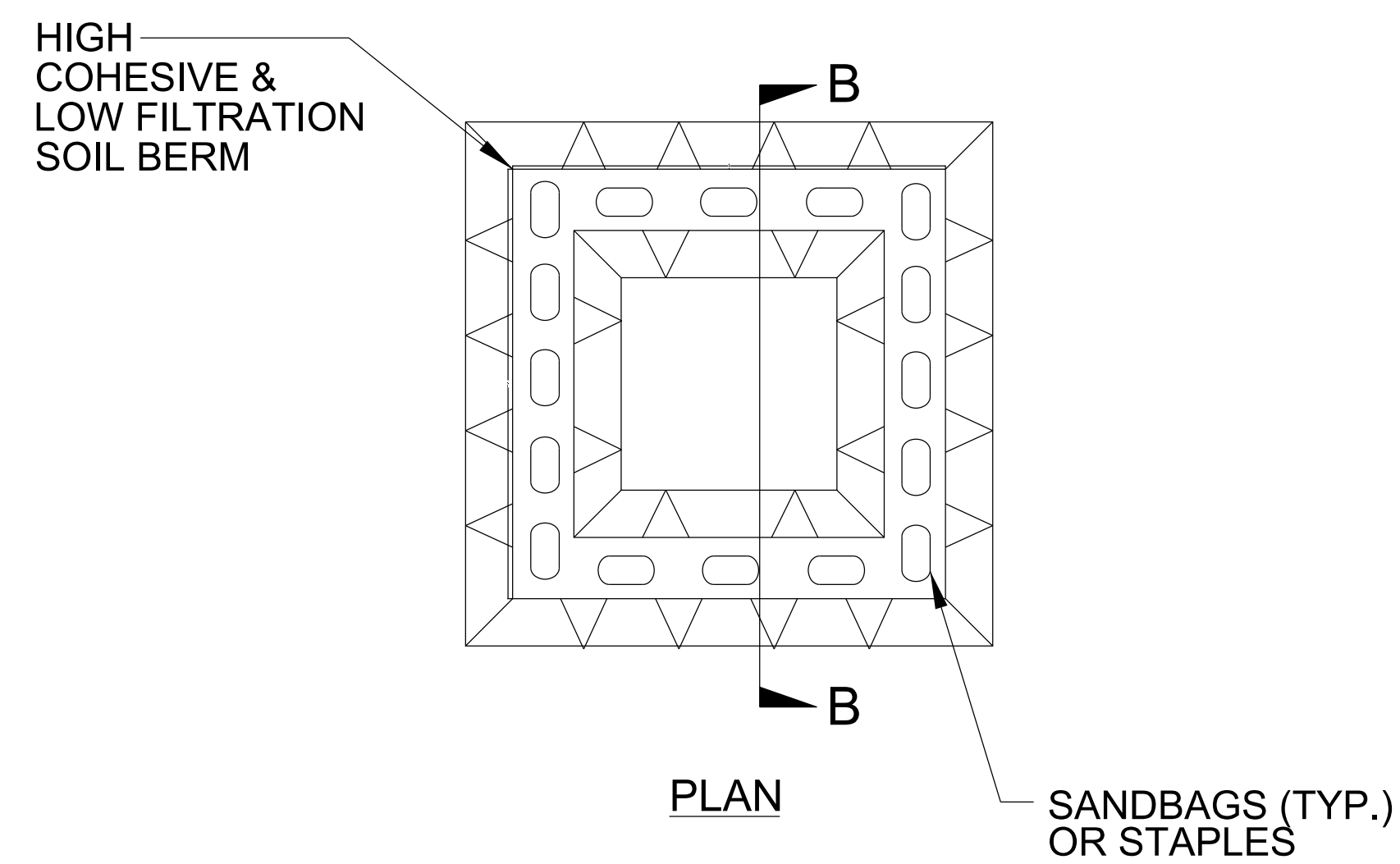
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|--|--------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-2</i> |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

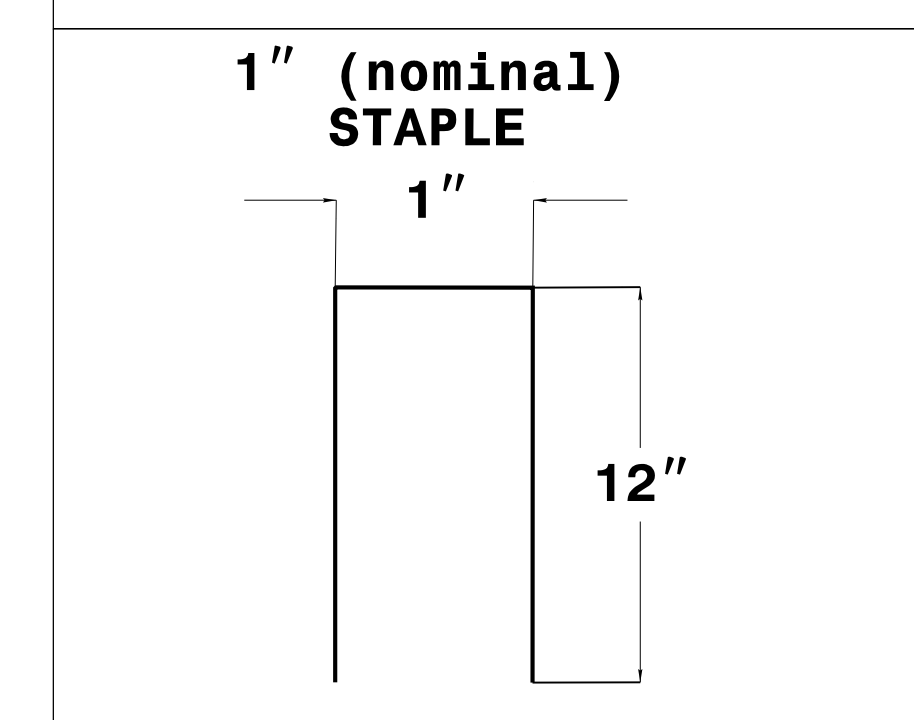
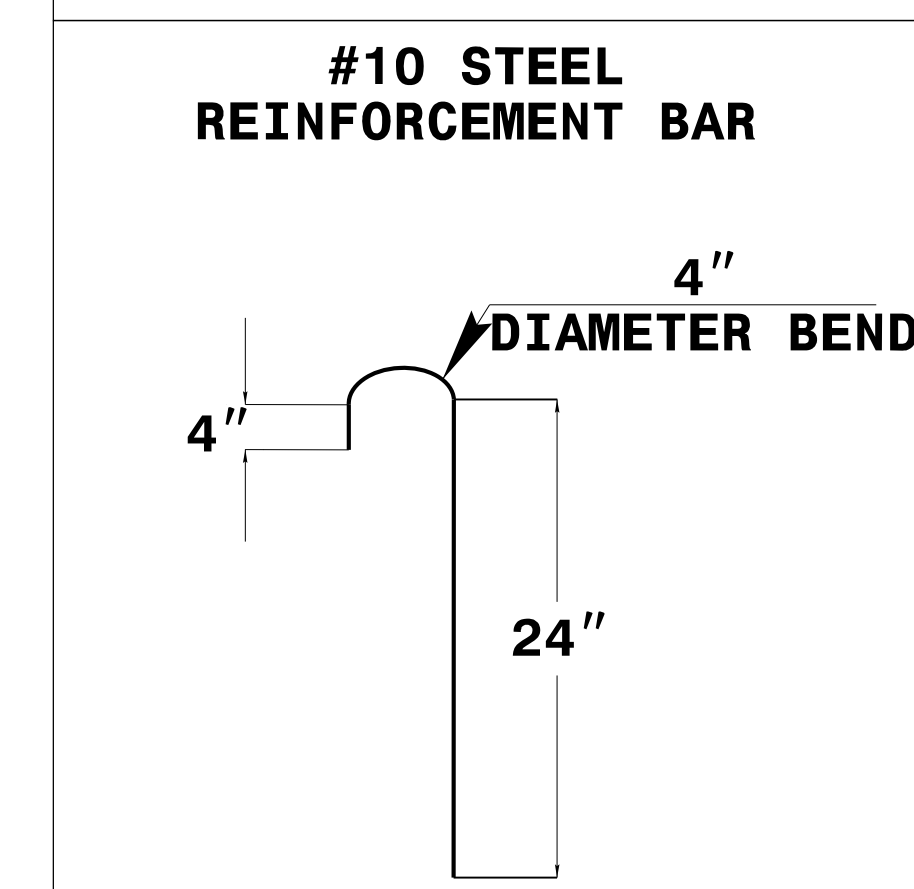
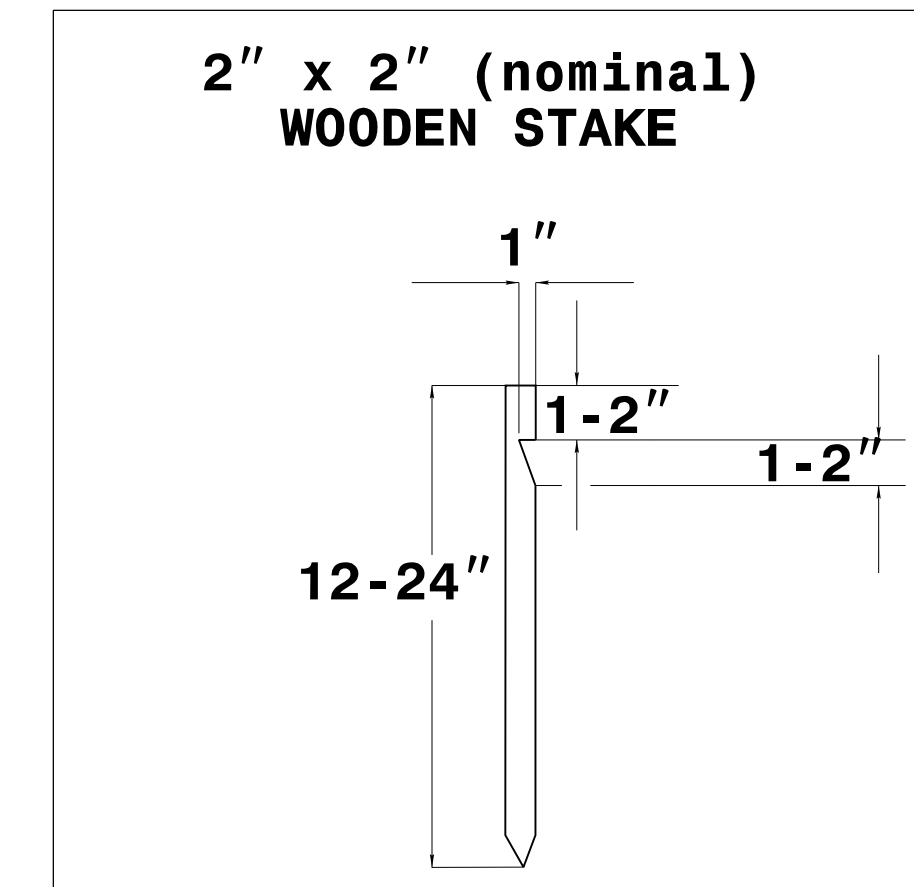
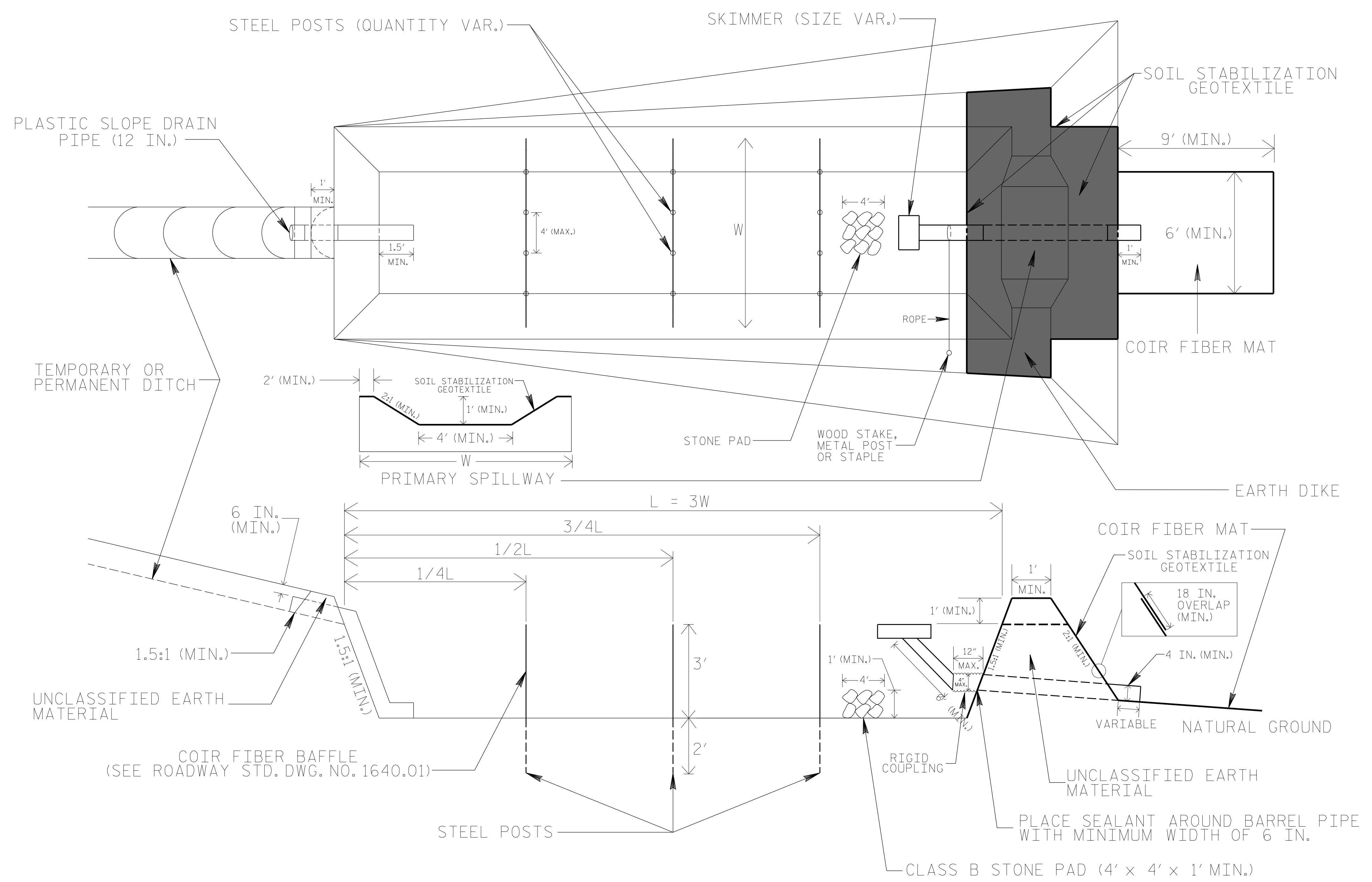


ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

SKIMMER BASIN DETAIL

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. R-5726 | SHEET NO. EC-2A |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |



COIR FIBER MAT ANCHOR OPTIONS

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE PRIMARY SPILLWAY WEIR LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

| | |
|--|---------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-2B</i> |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) 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.

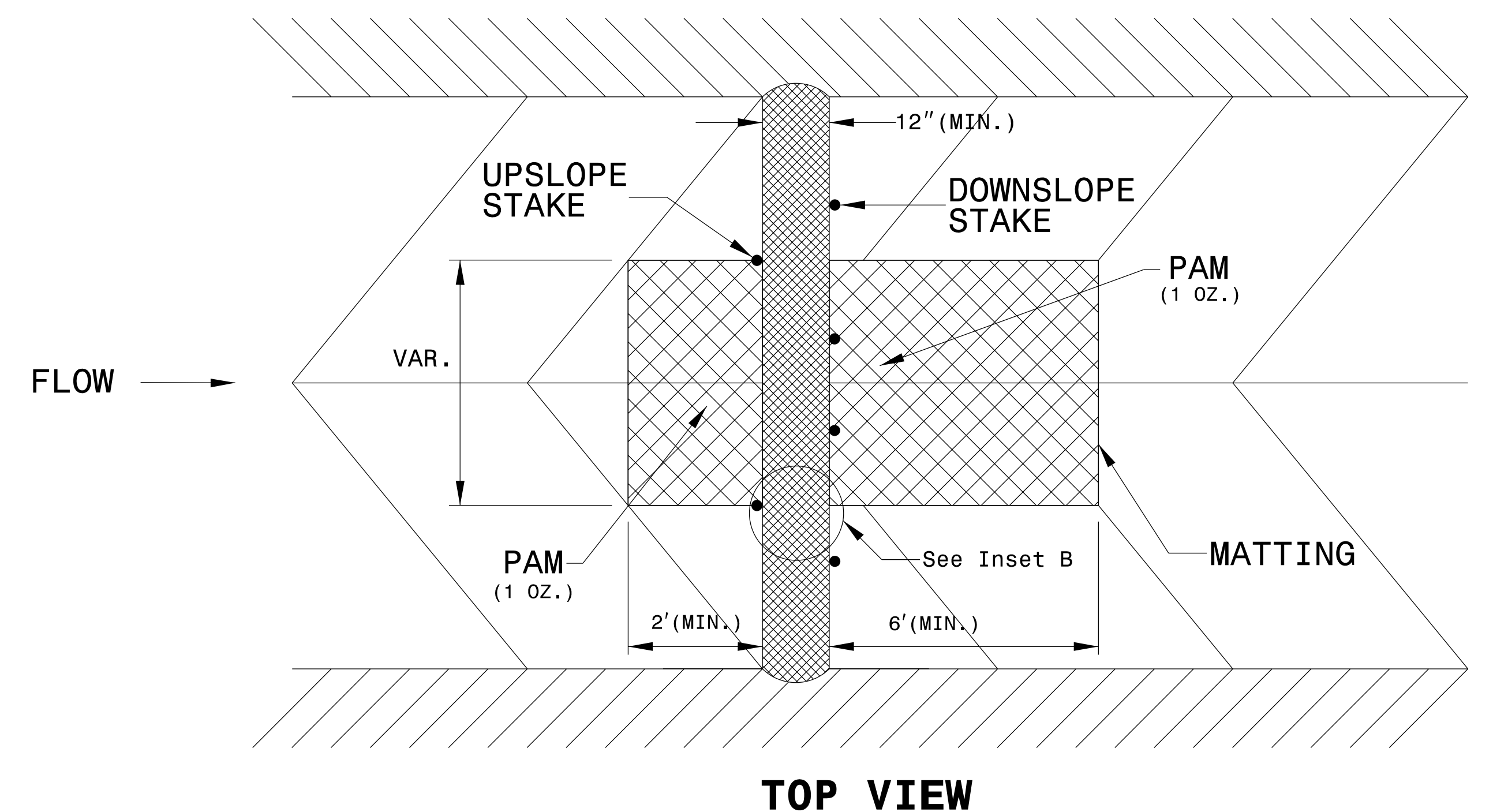
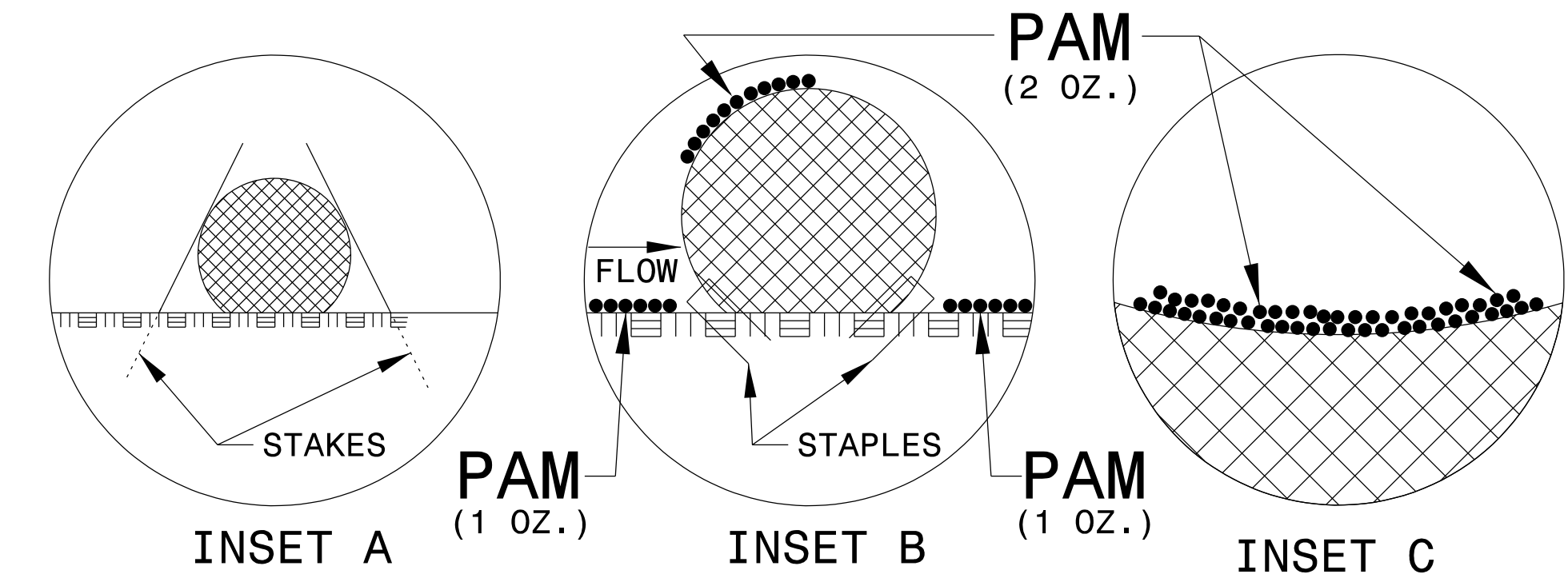
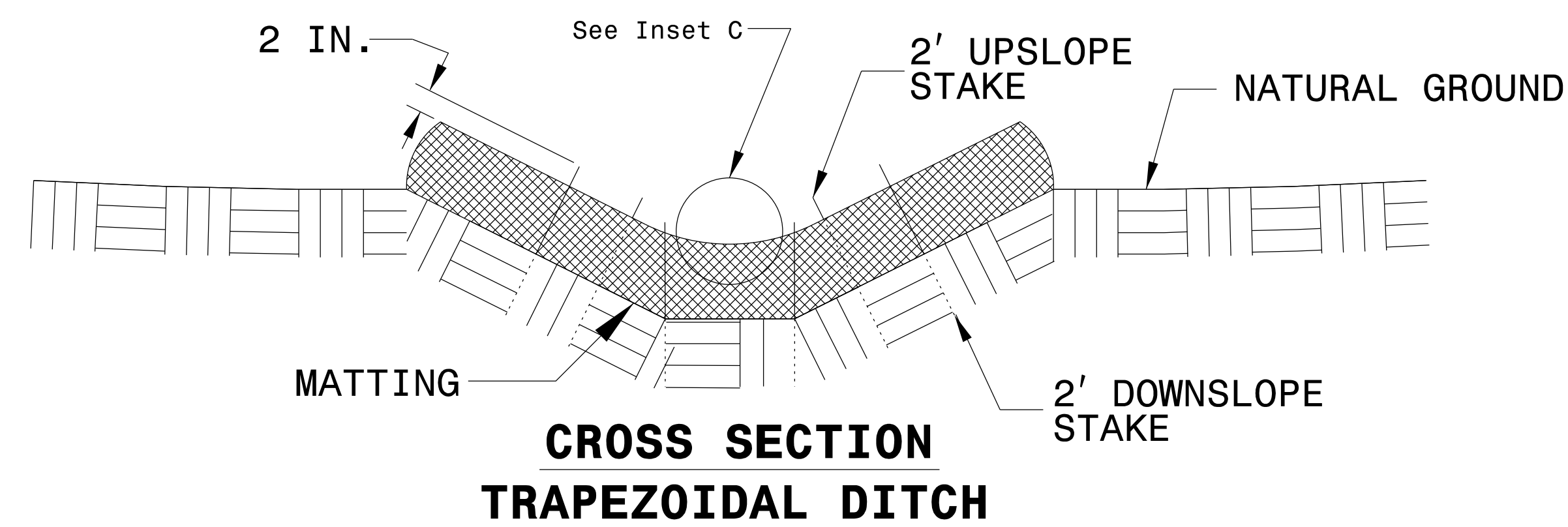
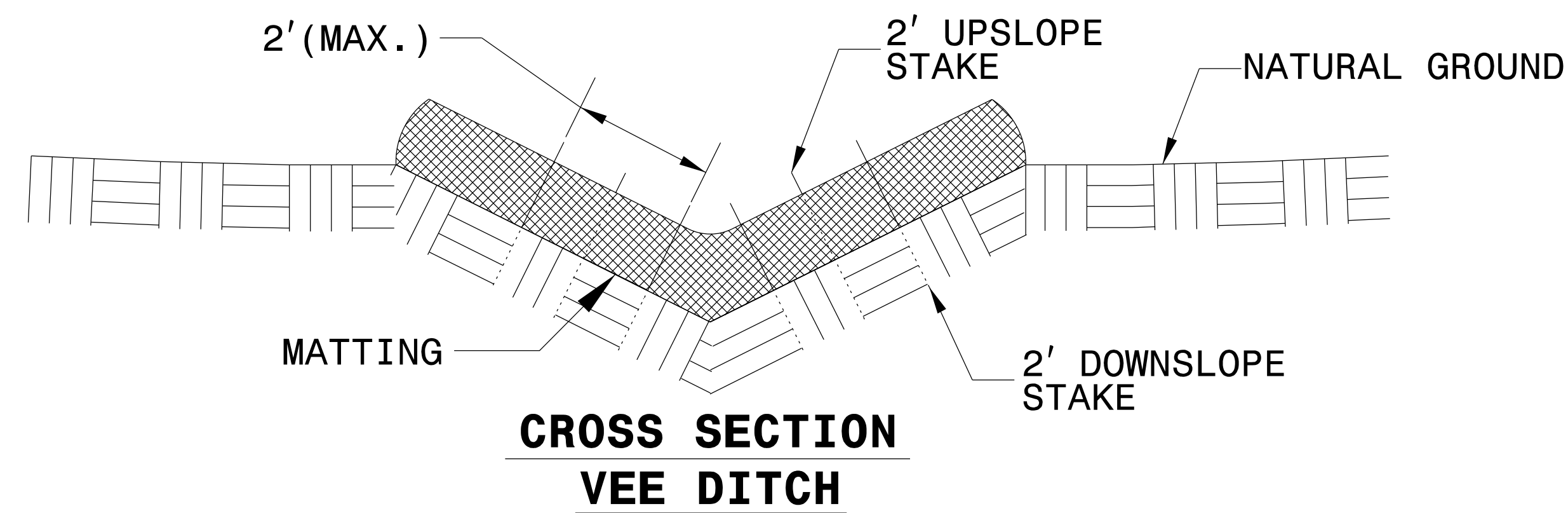
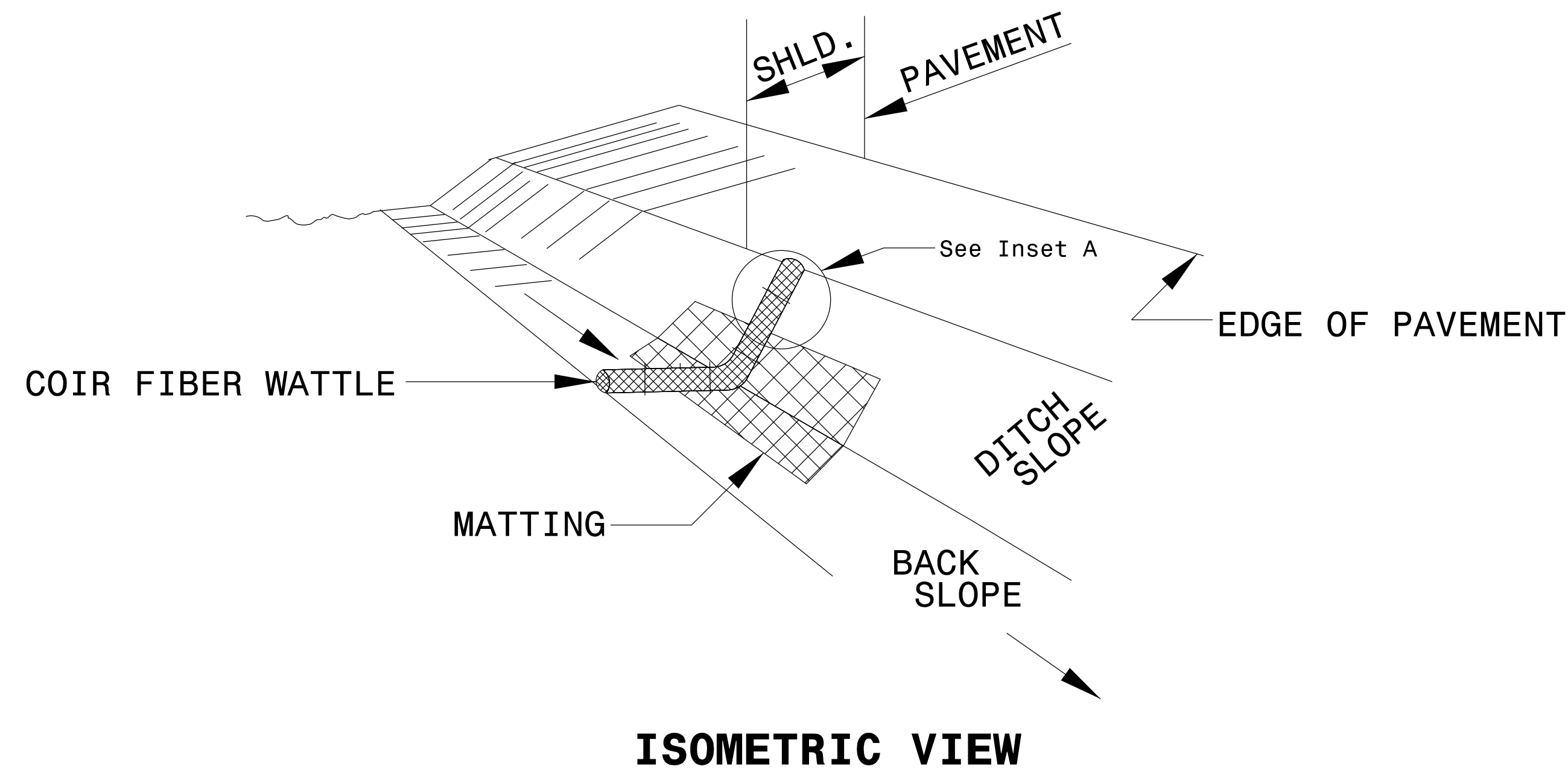
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

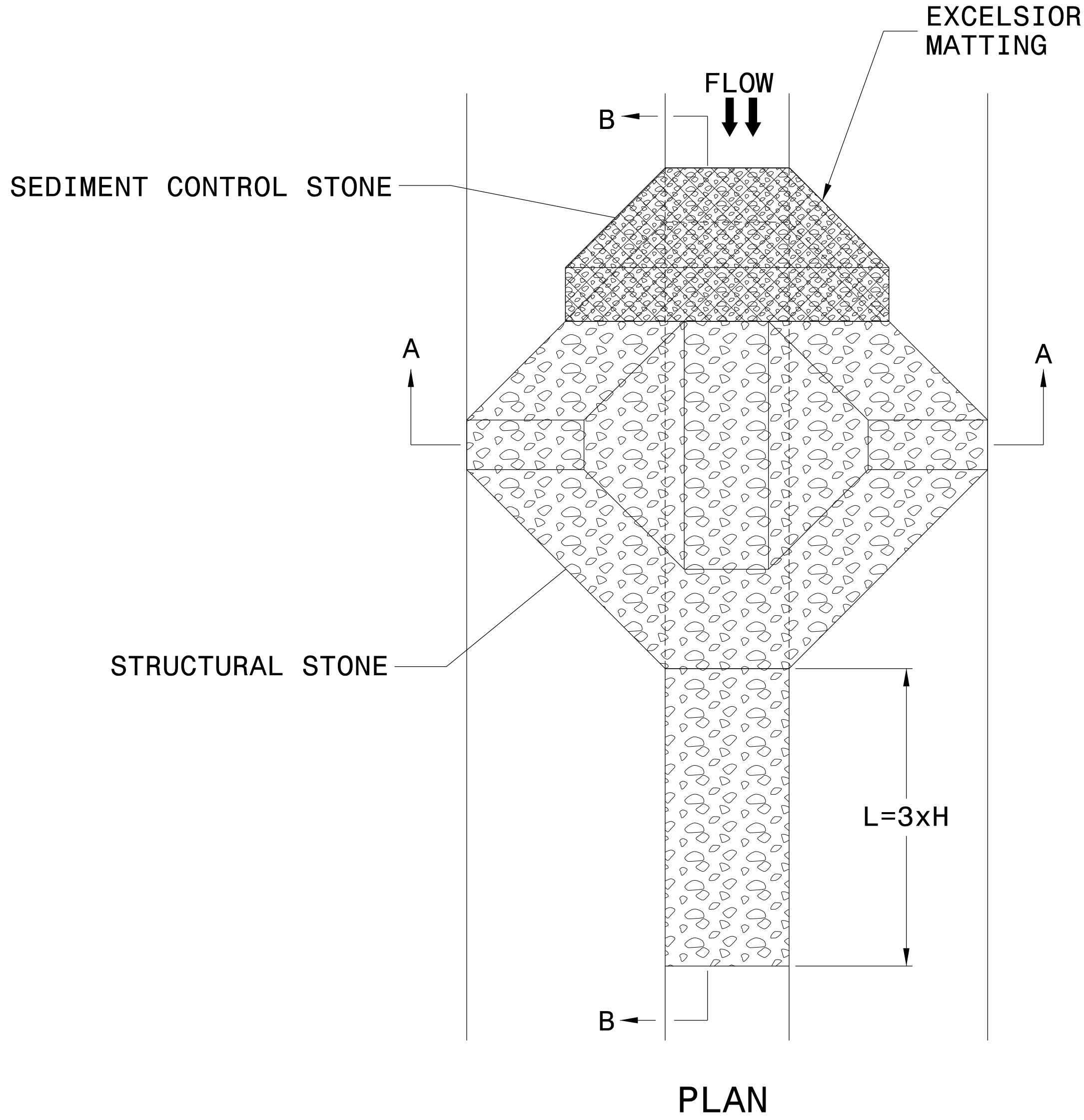
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

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.



| | |
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| PROJECT REFERENCE NO. R-5726 | SHEET NO. EC-2C |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

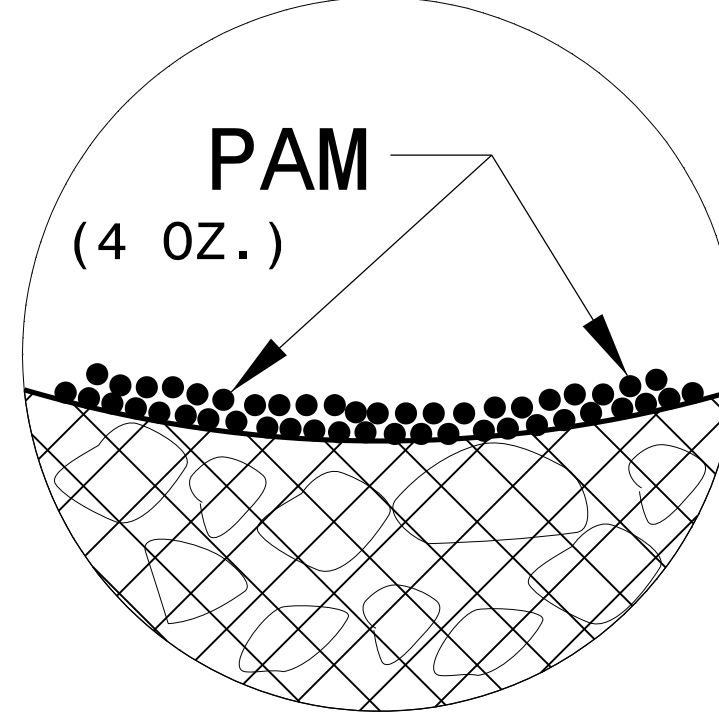


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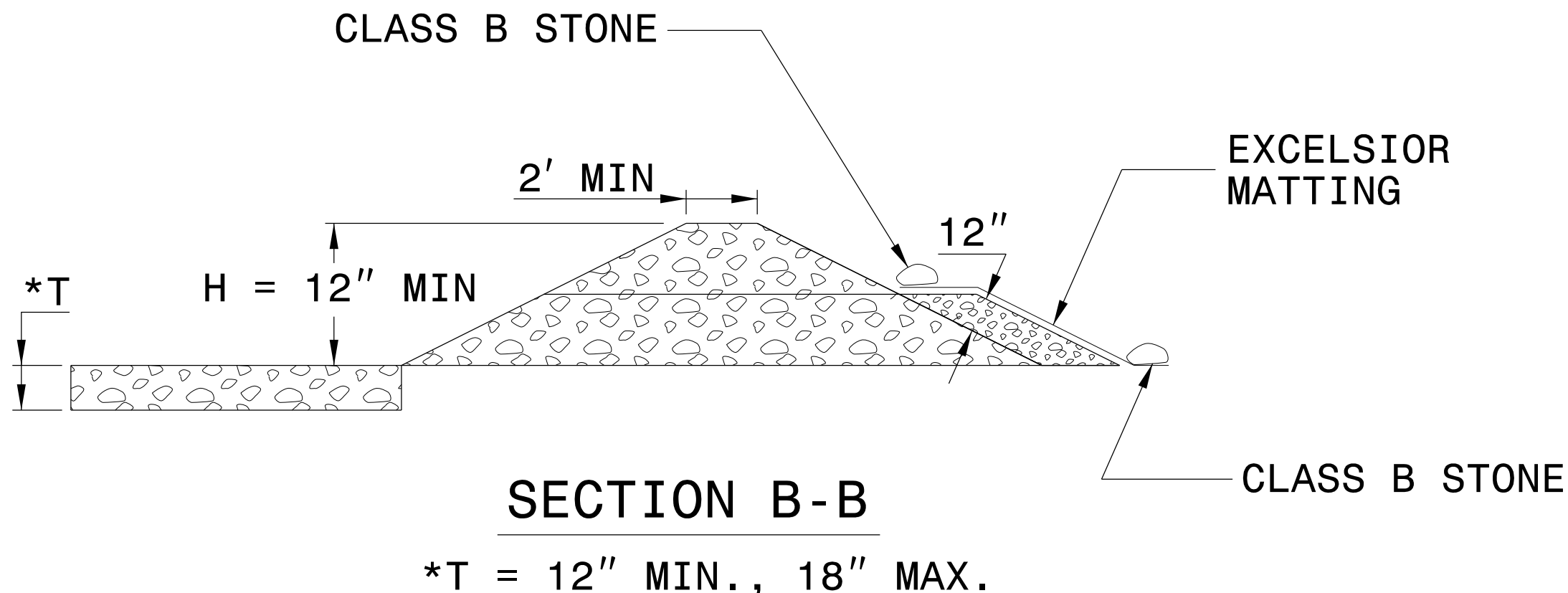
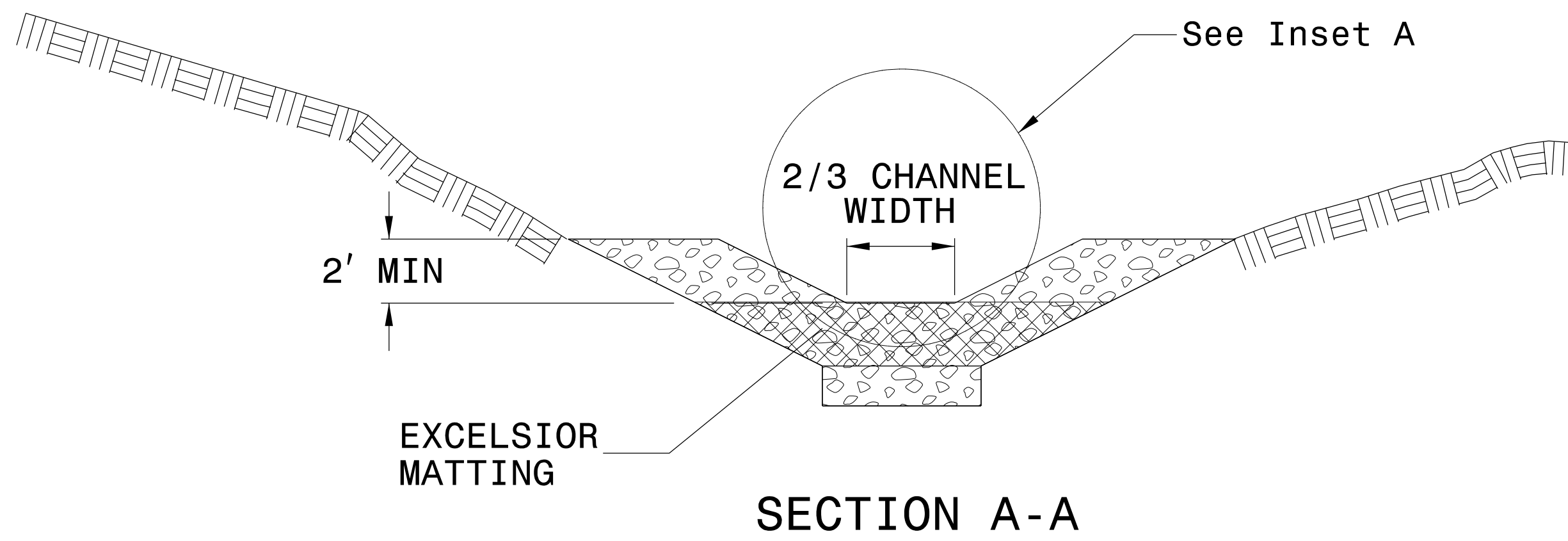
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.



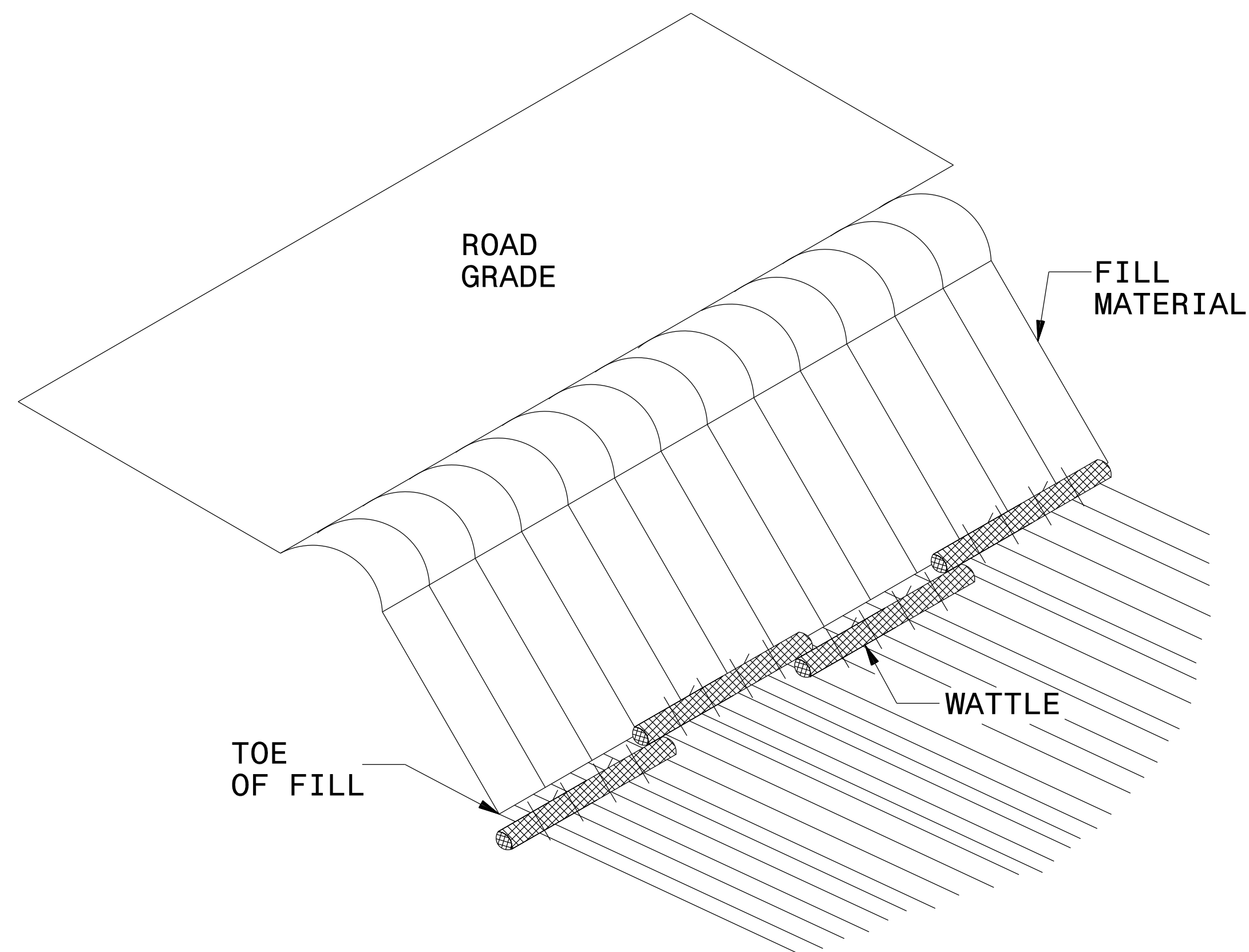
INSET A



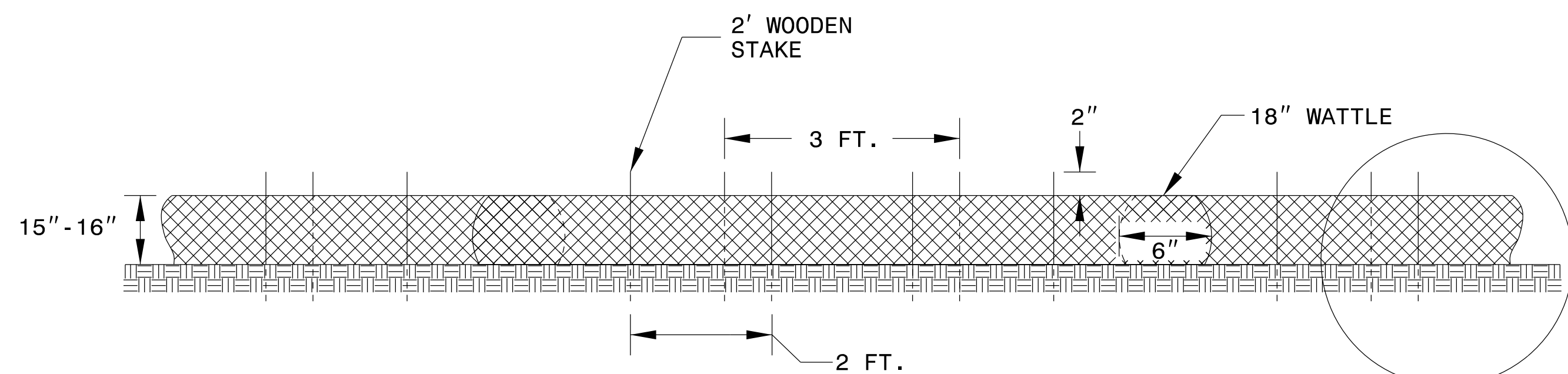
NOT TO SCALE

| | |
|--|---------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-2D</i> |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

WATTLE BARRIER DETAIL



ISOMETRIC VIEW



FRONT VIEW

NOTES:

USE MINIMUM 18 IN. NOMINAL DIAMETER EXCELSIOR WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 2 TO 3 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLES ON TOE OF SLOPE.

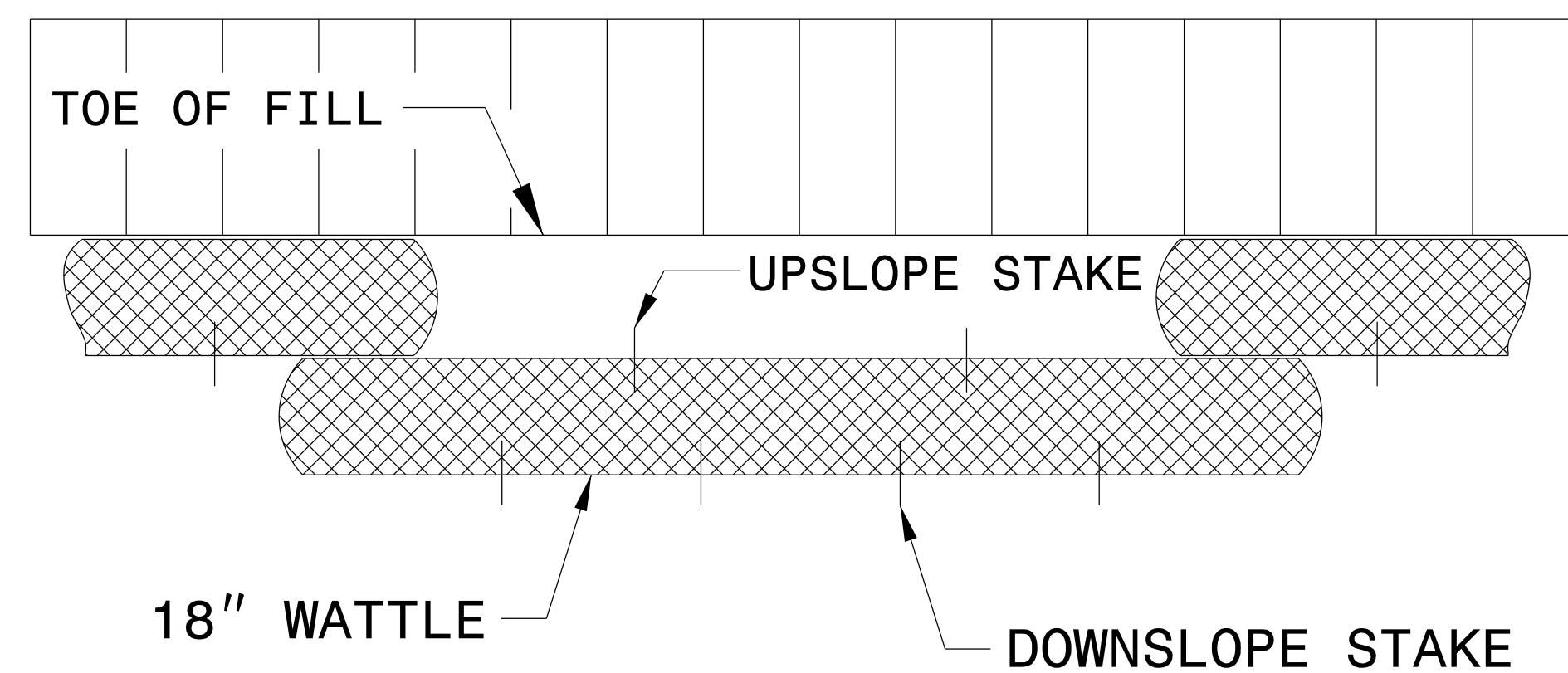
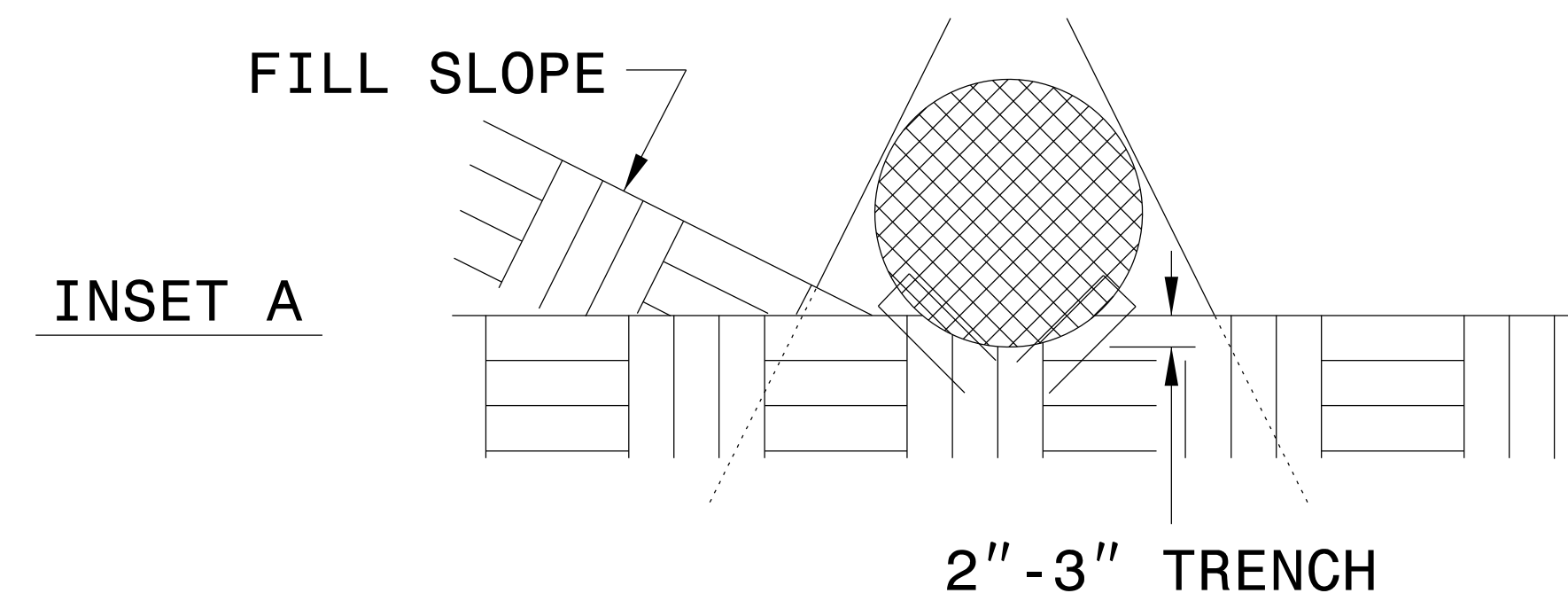
USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

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

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.

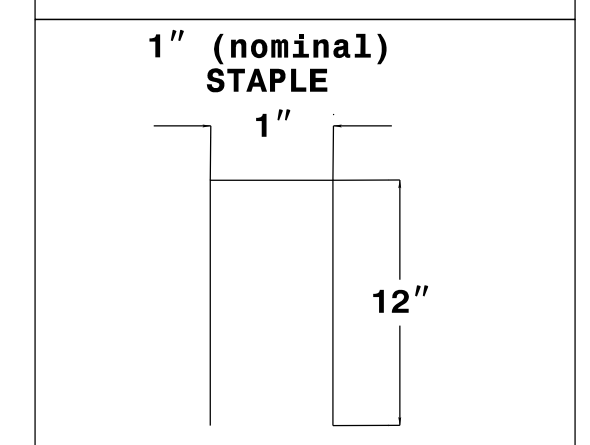
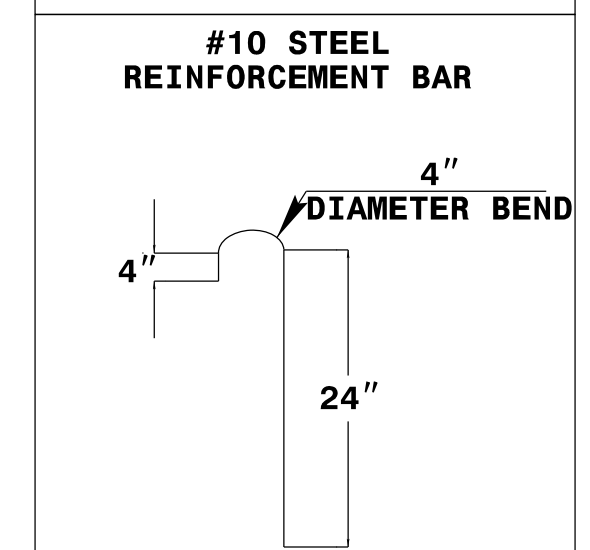
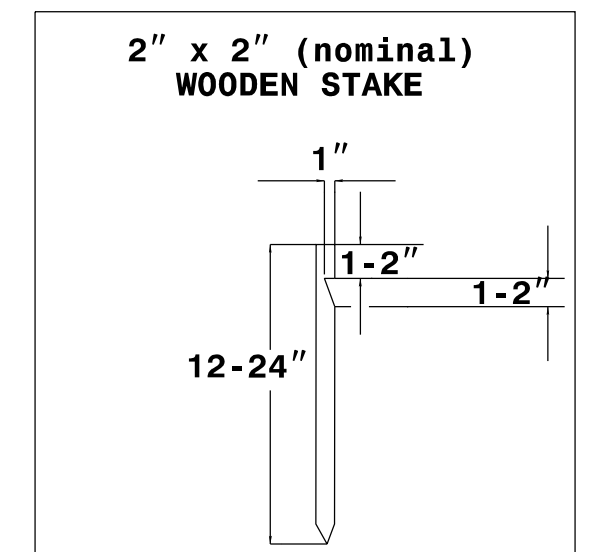
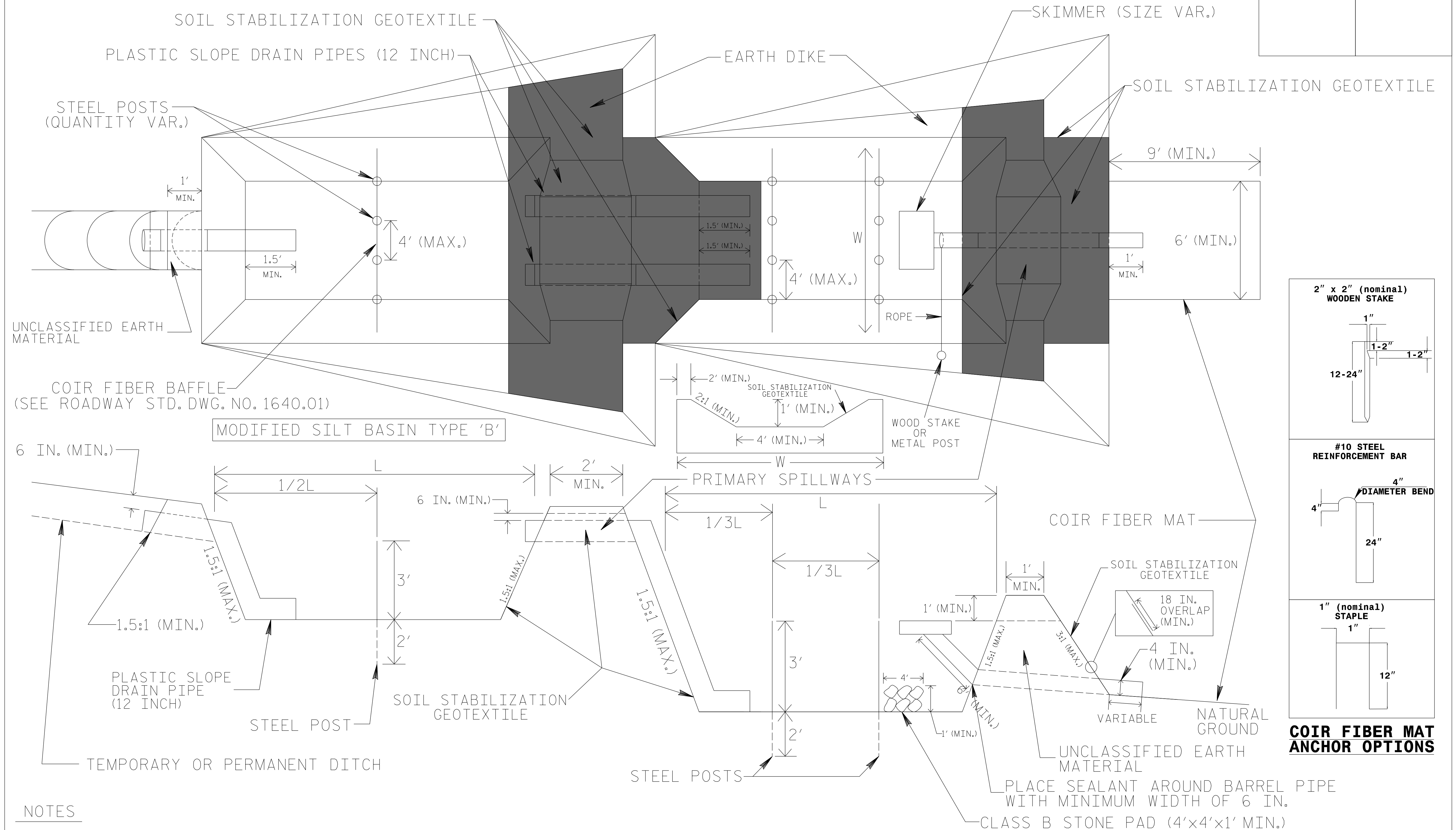
FOR BREAKS ALONG LARGE SLOPES, USE MAXIMUM SPACING OF 20 FT.



TOP VIEW

TIERED SKIMMER BASIN DETAIL

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. R-5726 | SHEET NO. EC-2E |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |



COIR FIBER MAT ANCHOR OPTIONS

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES OF BASINS.
2. LIMIT HEIGHT OF EARTH DIKES TO 5 FT.
3. ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.
4. FOR BASIN DEPTHS OF 3FT., THE MINIMUM BASIN WIDTHS SHALL BE 9 FT.
5. DETERMINE PRIMARY SPILLWAY LENGTHS (FT.) USING $Q/0.4$, WHERE Q IS FLOW RATE (CFS) INTO UPPER BASIN.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAYS SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

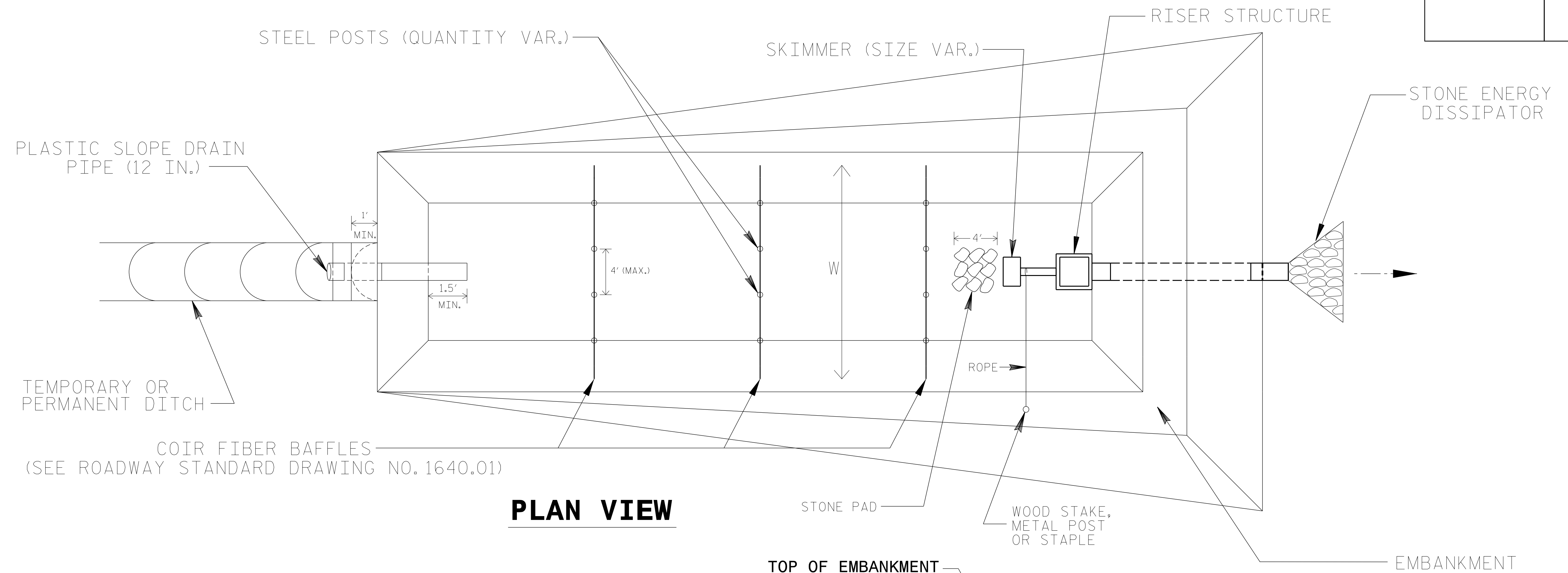
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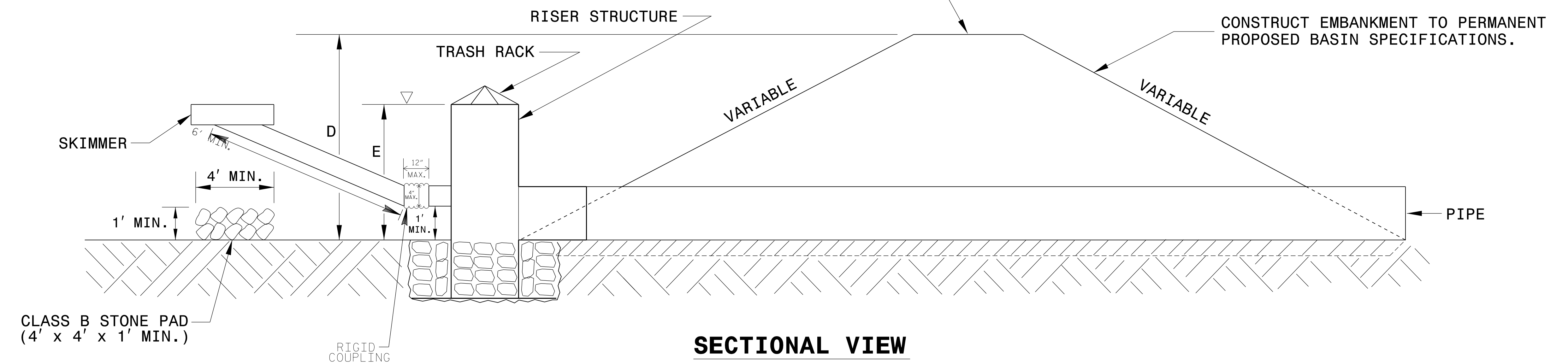
HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

| | |
|--|---------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-2F</i> |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

STORMWATER BASIN WITH SKIMMER



PLAN VIEW



SECTIONAL VIEW

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. INSTALL A MINIMUM OF 3 COIR FIBER BAFFLES IN ACCORDANCE WITH ROADWAY STD. DRAWING 1640.01.
3. INSTALL SKIMMER AND COUPLING TO RISER STRUCTURE OR DIRECTLY INTO EMBANKMENT 1 FT. FROM BOTTOM OF BASIN.
4. THE ARM PIPE SHALL HAVE A MINIMUM LENGTH OF 6 FT. BETWEEN THE SKIMMER AND COUPLING.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE AS DIRECTED.
6. THE DIFFERENCE BETWEEN LENGTHS "D" AND "E" REPRESENT THE FREEBOARD AND SHOULD BE 1 FT. MINIMUM.

NOT TO SCALE

PLOT DRIVER: NCDOT.ncdot_color_eng.100.dwt
 USER: DWAGNER
 FILE: \

PENTABLE: NCDOT.TSH.R5726.tbl
 TIME: 8:53:23 AM
 DATE: 7/2/2024

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

| | |
|--|--------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-3</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

SOIL STABILIZATION SUMMARY SHEET

MATTING IN DITCHES - STRAW

MATTING IN DITCHES - STRAW

| CONST SHEET NO. | LINE | FROM STATION | TO STATION | SIDE | ESTIMATE (SY) |
|-----------------|-------|--------------|------------|------|---------------|
| 4 | -L- | 18+00 | 14+17 | LT. | 385 |
| 4 | -L- | 22+00 | 22+25 | LT. | 25 |
| 4 | -Y1- | 16+70 | 17+15 | RT. | 40 |
| 5 | -L- | 23+50 | 22+25 | LT. | 125 |
| 5 | -L- | 27+00 | 25+85 | LT. | 105 |
| 5 | -L- | 33+00 | 34+00 | LT. | 90 |
| 5 | -L- | 35+00 | 34+00 | LT. | 90 |
| 5 | -Y3- | 13+50 | 14+00 | LT. | 45 |
| 5 | -Y3- | 13+50 | 14+00 | RT. | 45 |
| 6 | -Y8A- | 10+25 | 10+50 | LT. | 25 |
| 7 | -Y12- | 11+75 | 12+50 | LT. | 70 |
| 7 | -L- | 52+50 | 49+50 | RT. | 375 |
| 7 | -L- | 55+00 | 52+50 | RT. | 310 |
| 7 | -L- | 55+00 | 59+00 | RT. | 495 |
| 8 | -L- | 56+50 | 62+00 | LT. | 810 |
| 8 | -L- | 64+00 | 63+05 | LT. | 75 |
| 8 | -L- | 64+50 | 63+50 | RT. | 125 |
| 8 | -L- | 71+00 | 68+00 | LT. | 445 |
| 8 | -L- | 69+00 | 68+75 | RT. | 40 |
| 8 | -L- | 69+50 | 69+00 | RT. | 75 |
| 8 | -L- | 73+50 | 71+00 | LT. | 370 |
| 9 | -L- | 80+50 | 74+50 | LT. | 600 |
| 9 | -L- | 80+50 | 78+00 | RT. | 315 |
| 9 | -L- | 81+50 | 80+50 | LT. | 150 |
| 9 | -L- | 86+00 | 81+50 | LT. | 665 |
| 9 | -L- | 87+50 | 82+00 | RT. | 810 |
| 10 | -L- | 91+00 | 93+50 | LT. | 370 |
| 10 | -L- | 93+50 | 97+50 | LT. | 590 |
| 10 | -Y14- | 11+00 | 12+10 | LT. | 125 |
| 10 | -Y14- | 11+25 | 13+50 | RT. | 200 |

| CONST SHEET NO. | LINE | FROM STATION | TO STATION | SIDE | ESTIMATE (SY) |
|-----------------|-------|--------------|------------|------|---------------|
| 10 | -Y14- | 12+10 | 14+50 | LT. | 270 |
| 15 | -L- | 166+00 | 165+45 | LT. | 45 |
| 15 | -Y18- | 11+50 | 12+38 | LT. | 70 |
| 16 | -L- | 168+50 | 167+50 | LT. | 150 |
| 16 | -L- | 169+75 | 168+50 | LT. | 185 |
| 16 | -L- | 172+50 | 177+50 | M. | 700 |
| 16 | -L- | 173+00 | 177+50 | LT. | 665 |
| 16 | -L- | 173+00 | 177+50 | RT. | 560 |
| 16 | -L- | 177+50 | 182+00 | RT. | 560 |
| 16 | -L- | 177+50 | 182+50 | M. | 740 |
| 17 | -L- | 182+00 | 184+50 | LT. | 310 |
| 17 | -L- | 182+00 | 184+50 | M. | 370 |
| 17 | -L- | 184+50 | 186+00 | M. | 225 |
| 17 | -L- | 192+25 | 188+67 | M. | 530 |
| 18 | -L- | 194+50 | 192+25 | M. | 335 |
| 18 | -L- | 204+17 | 195+00 | LT. | 1135 |
| 18 | -L- | 199+00 | 195+65 | M. | 495 |
| 18 | -L- | 199+00 | 197+00 | RT. | 295 |
| 18 | -L- | 205+50 | 199+00 | M. | 960 |
| 18 | -L- | 204+00 | 199+00 | RT. | 740 |
| 18 | -L- | 204+17 | 207+00 | LT. | 350 |
| 19 | -L- | 208+00 | 209+00 | LT. | 150 |
| 19 | -L- | 209+00 | 209+75 | LT. | 115 |
| 19 | -L- | 212+50 | 211+80 | RT. | 70 |
| 19 | -L- | 218+50 | 215+00 | LT. | 520 |
| 19 | -L- | 220+50 | 215+00 | M. | 810 |
| 20 | -L- | 226+00 | 220+50 | LT. | 810 |
| 20 | -L- | 226+00 | 220+50 | M. | 810 |
| 20 | -L- | 226+00 | 220+50 | RT. | 810 |
| 20 | -L- | 231+05 | 226+00 | LT. | 745 |

PENTABLE: NCDOT_TSH_R5726.tbl
TIME: 8:53:25 AM SCALE: 1:398.182

PLOT DRIVER: NCDOT_pdf_color_eng.100.plt
USER: DWAGNER DATE: 7/2/2024
FILE: \

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

| | |
|--|---------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-3A</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

SOIL STABILIZATION SUMMARY SHEET

MATTING IN DITCHES - STRAW

MATTING IN DITCHES - EXCELSIOR

| CONST SHEET NO. | LINE | FROM STATION | TO STATION | SIDE | ESTIMATE (SY) |
|-----------------|-------|--------------|------------|-------|---------------|
| 20 | -L- | 231+05 | 226+00 | -L- | 745 |
| 20 | -L- | 231+05 | 226+00 | -L- | 745 |
| 21 | -L- | 231+05 | 234+00 | -L- | 295 |
| 21 | -L- | 231+05 | 238+50 | -L- | 1100 |
| 21 | -L- | 238+50 | 241+50 | -L- | 445 |
| 21 | -L- | 238+50 | 243+00 | -L- | 665 |
| 21 | -L- | 243+00 | 244+00 | -L- | 150 |
| 21 | -Y21- | 11+00 | 12+50 | -Y21- | 135 |
| 22 | -L- | 243+00 | 251+00 | -L- | 1180 |
| 22 | -L- | 247+00 | 252+00 | -L- | 740 |
| 22 | -NØL- | 13+35 | 13+85 | -NØL- | 75 |
| 24 | -Y4- | 13+00 | 18+45 | -Y4- | 485 |
| 25 | -Y14- | 15+00 | 15+75 | -Y14- | 85 |
| 25 | -Y14- | 13+50 | 16+00 | -Y14- | 225 |
| | | | TOTAL | | 29590 SY |

| CONST SHEET NO. | LINE | FROM STATION | TO STATION | SIDE | ESTIMATE (SY) |
|-----------------|-------|--------------|------------|------|---------------|
| 6 | -Y8A- | 10+50 | 10+75 | RT. | 25 |
| 7 | -L- | 52+00 | 51+35 | LT. | 70 |
| 7 | -L- | 59+00 | 60+00 | RT. | 115 |
| 8 | -L- | 60+00 | 62+50 | RT. | 255 |
| 8 | -L- | 62+00 | 63+05 | LT. | 110 |
| 15 | -L- | 163+00 | 163+33 | LT. | 30 |
| 15 | -L- | 164+75 | 163+33 | LT. | 145 |
| 15 | -Y18- | 11+62 | 12+25 | RT. | 80 |
| 16 | -L- | 177+50 | 182+00 | LT. | 665 |
| 18 | -L- | 197+00 | 195+87 | RT. | 140 |
| 21 | -Y21- | 10+75 | 12+50 | RT. | 155 |
| | | | TOTAL | | 1790 SY |

PENTABLE: NCDOT_TSH_R5726.tbl
TIME: 8:53:26 AM SCALE: 1:401.59

PLOT DRIVER: NCDOT_pdf_color_eng_100.plt
USER: DWAGNER DATE: 7/2/2024
FILE: \

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

| | |
|--|---------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-3B</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

SOIL STABILIZATION SUMMARY SHEET

MATTING ON SLOPES

| CONST SHEET NO. | LINE | FROM STATION | TO STATION | SIDE | ESTIMATE (SY) |
|-----------------------|------|--------------|------------|------|--|
| 9 | -L- | 74+75 | 76+55 | RT | 920 |
| 14 | -L- | 142+00 | 145+85 | LT | 430 |
| 14 | -L- | 151+55 | 152+50 | RT | 315 |
| 15 | -L- | 161+75 | 167+00 | RT | 2800 |
| 16 | -L- | 167+00 | 168+50 | RT | 800 |
| 16 | -L- | 175+15 | 177+00 | RT | 575 |
| 16 | -L- | 175+34 | 180+00 | LT | 2850 |
| 16 | -L- | 178+50 | 180+00 | RT | 465 |
| 17 | -L- | 180+00 | 183+85 | LT | 2355 |
| 17 | -L- | 180+00 | 180+50 | RT | 155 |
| 17 | -L- | 183+50 | 193+00 | RT | 10555 |
| 17 | -L- | 185+70 | 189+35 | LT | 2230 |
| 17 | -L- | 190+40 | 192+75 | LT | 1200 |
| 18 | -L- | 193+00 | 195+00 | RT | 2220 |
| 18 | -L- | 195+75 | 200+70 | LT | 2640 |
| 18 | -L- | 197+75 | 200+75 | RT | 1535 |
| | | | TOTAL | | 32045 |
| MATTING TOTALS | | | | | |
| | | | | | TOTAL FOR DITCHES - STRAW 29590 |
| | | | | | TOTAL FOR DITCHES - EXCELSIOR 1790 |
| | | | | | TOTAL FOR SLOPES 32045 |
| | | | | | MISC. MATTING TO BE INSTALLED AS DIRECTED BY ENGINEER 31,100 |
| | | | | | OVERALL TOTAL 94,525 |
| | | | | | SAY 95,000 |

PERMANENT SOIL REINFORCEMENT MAT (PSRM)

| CONST SHEET NO. | LINE | FROM STATION | TO STATION | SIDE | ESTIMATE (SY) |
|----------------------|-------|--------------|------------|------|---------------|
| PSRM - TYPE 2 | | | | | |
| 15 | -Y18- | 10+50 | 11+50 | LT. | 80 |
| 25 | -Y14- | 14+50 | 15+00 | LT. | 60 |
| PSRM - TYPE 4 | | | | | |
| 17 | -L- | 194+50 | 191+25 | LT. | 330 |
| PSRM - TYPE 5 | | | | | |
| 9 | -L- | 78+00 | 77+80 | RT. | 25 |

PENTABLE: NCDOT_TSH_R5726.tbl
TIME: 8:53:27 AM SCALE: 1:401.59

PLOT DRIVER: NCDOT_pdf_color_eng.100.plt
USER: DWAGNER DATE: 7/2/2024
FILE: \

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

| | |
|--|---------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-3C</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 TO 4:1 | 14 DAYS | 7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES |
| ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1 | 14 DAYS | 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES |

| | |
|---|---------------------------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| R-5726 | EC-04/CONST.04 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| MOTT MACDONALD I & E, LLC LICENSE NO. F-0669 | HDR ENGINEERING LICENSE NO. F-0116 |

Prepared in the Office of:

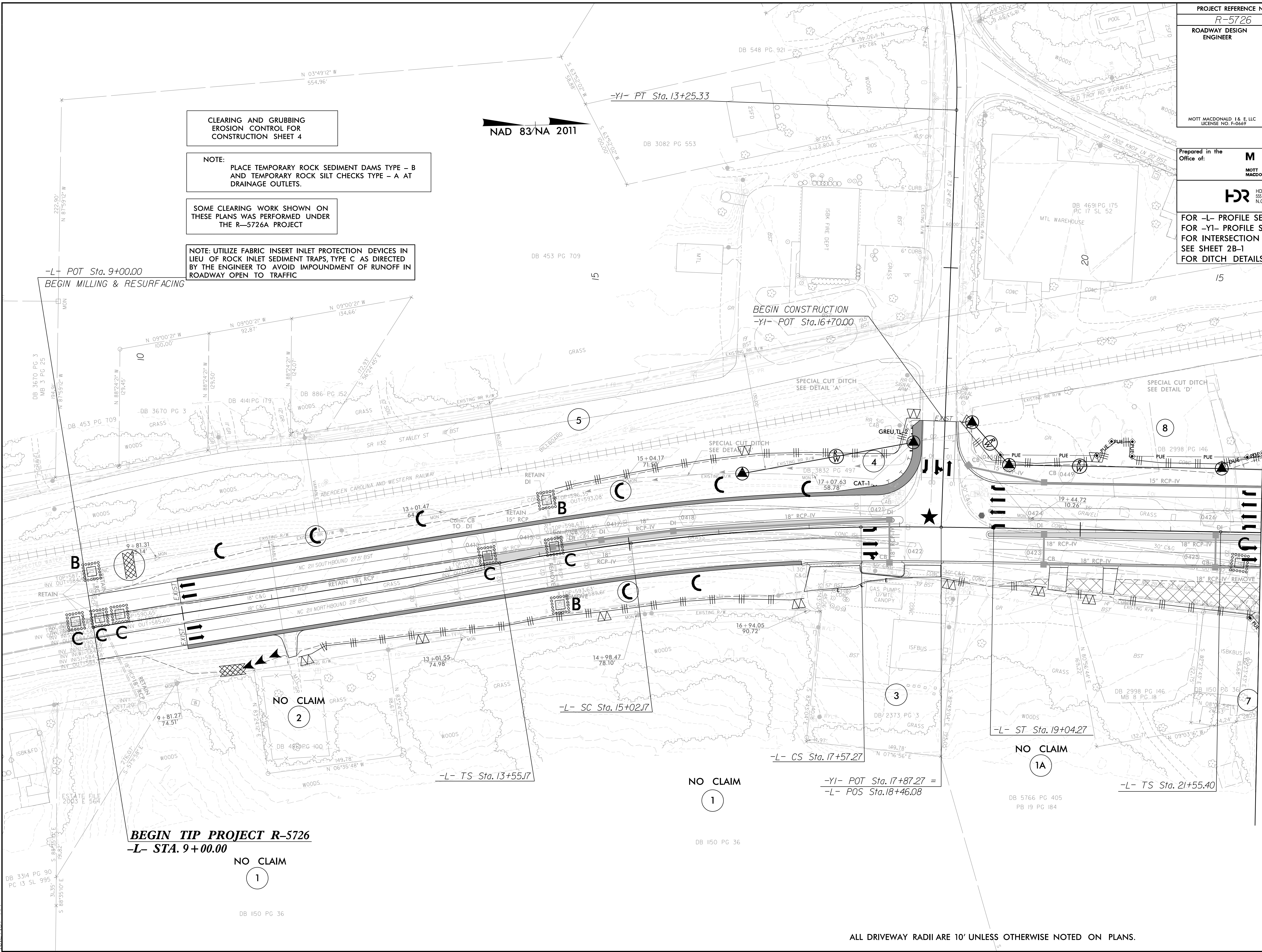
M MOTT MACDONALD
 P PO Box 700
 Fuquay-Varina, NC 27526
 www.mottmac.com/americas

HDR HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St., Suite 900, Raleigh, NC 27601
 N.C.B.E.L.S. License Number: F-0116

FOR -L- PROFILE SEE SHEET 27
 FOR -Y1- PROFILE SEE SHEET 38
 FOR INTERSECTION DETAIL SEE SHEET 2B-1
 FOR DITCH DETAILS SEE SHEET 2D-1

★ TRAFFIC SIGNAL

MATCHLINE -L- STA. 22 + 00.00 SEE SHEET NO. 5



CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 4

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

SOME CLEARING WORK SHOWN ON
 THESE PLANS WAS PERFORMED UNDER
 THE R-5726A PROJECT

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN
 LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE C AS DIRECTED
 BY THE ENGINEER TO AVOID IMPOUNDMENT OF RUNOFF IN
 ROADWAY OPEN TO TRAFFIC

NAD 83/NA 2011

BEGIN TIP PROJECT R-5726
-L- STA. 9 + 00.00

-Y1- POT Sta. 17+87.27 =
 -L- POS Sta. 18+46.08

ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED ON PLANS.

8/17/99
 8/29/2024
 10:22:45 AM
 EC_PSH+CG.dgn
 DB 3314 PG 90
 PC 13 SL 995
 S 88°35'10"E
 31.35'

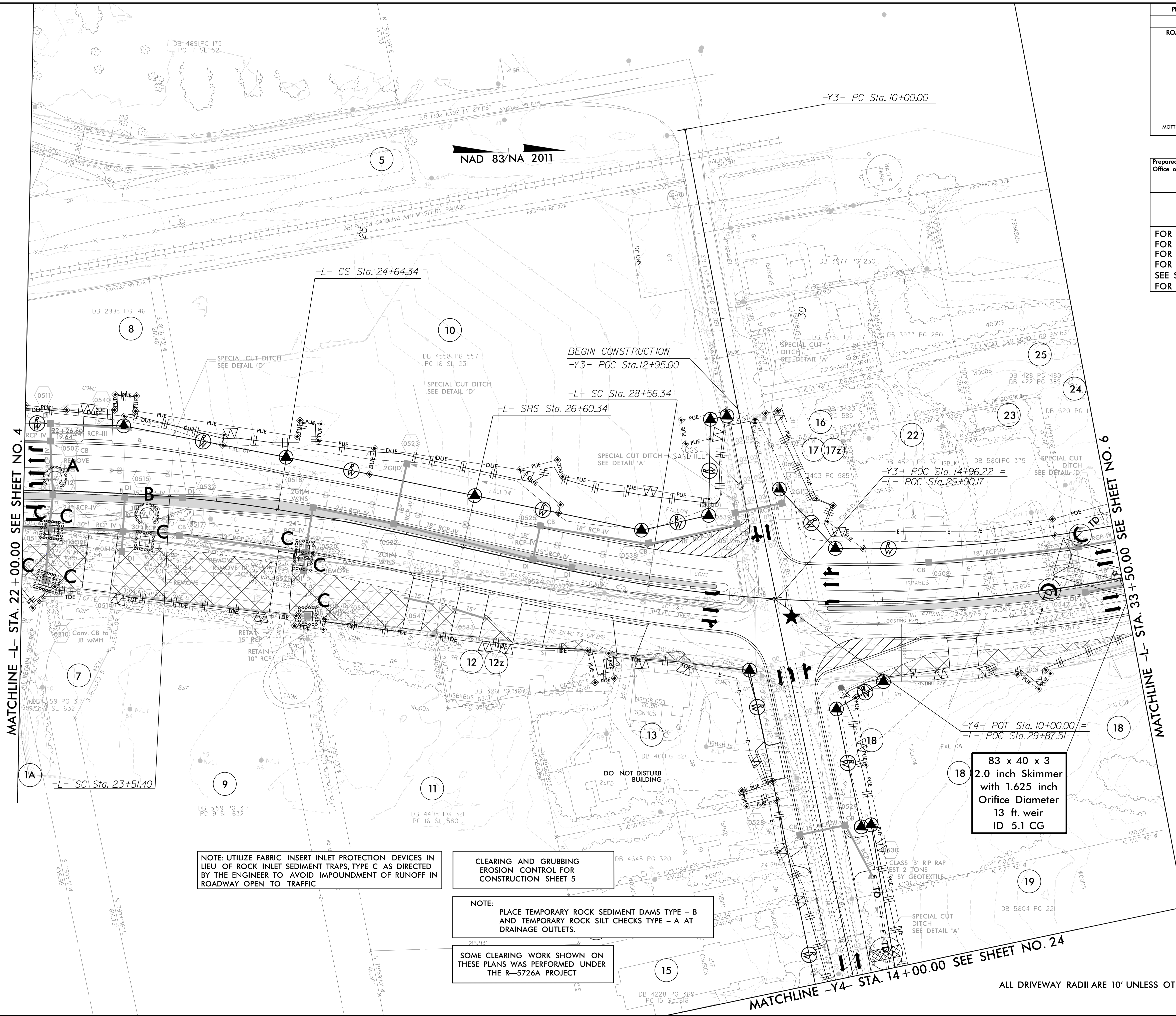
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|---|---------------------------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| R-5726 | EC-05/CONST.05 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| MOTT MACDONALD I & E, LLC LICENSE NO. F-0669 | HDR ENGINEERING LICENSE NO. F-0116 |

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 N.C.B.E.L.S. License Number: F-0116

FOR -L- PROFILE SEE SHEET 27
 FOR -Y3- PROFILE SEE SHEET 38
 FOR -Y4- PROFILE SEE SHEET 39
 FOR INTERSECTION DETAIL SEE SHEET 2B-1
 FOR DITCH DETAILS SEE SHEET 2D-1

★ TRAFFIC SIGNAL



NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE C AS DIRECTED BY THE ENGINEER TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

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

SOME CLEARING WORK SHOWN ON THESE PLANS WAS PERFORMED UNDER THE R-5726A PROJECT

83 x 40 x 3
 2.0 inch Skimmer
 with 1.625 inch
 Orifice Diameter
 13 ft. weir
 ID 5.1 CG

ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED ON PLANS.

8/17/99

8/29/2024
 10:28:02 AM
 10:28:02 AM
 EC_PSH+CG.dgn

8/17/99

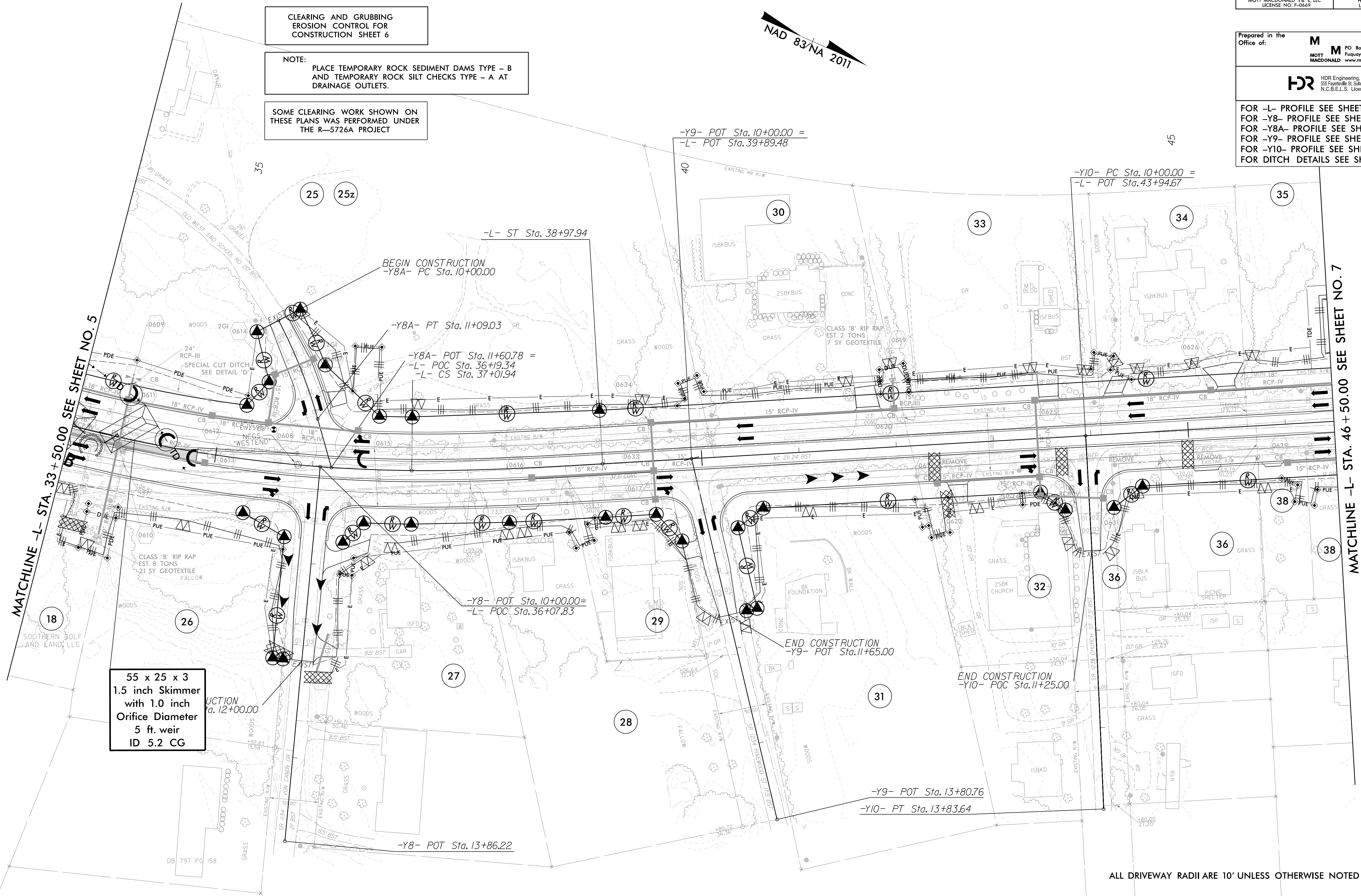
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|---|---------------------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-06/CONST.06</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| MOTT MACDONALD I & E, LLC LICENSE NO. F-0669 | HDR ENGINEERING LICENSE NO. F-0116 |

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 N.C.B.E.L.S. License Number: F-0116

FOR -L- PROFILE SEE SHEET 28
 FOR -Y8- PROFILE SEE SHEET 39
 FOR -Y8A- PROFILE SEE SHEET 39
 FOR -Y9- PROFILE SEE SHEET 40
 FOR -Y10- PROFILE SEE SHEET 40
 FOR DITCH DETAILS SEE SHEET 2D-1



7/2/2024
 R-5726-EC-PSH-LC.dgn
 8:45:34 AM

ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED ON PLANS.

| | |
|--|---------------------------------------|
| PROJECT REFERENCE NO. R-5726 | SHEET NO. EC-07/CONST.07 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| MOTT MACDONALD I & E LLC LICENSE NO. F-0669 | HDR ENGINEERING LICENSE NO. F-0116 |

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 555 Fayetteville St., Suite 900, Raleigh, NC 27601
 N.C.B.E.L.S. License Number: F-0116

FOR -L- PROFILE SEE SHEET 28
 FOR -Y11- PROFILE SEE SHEET 40
 FOR -Y12- PROFILE SEE SHEET 40
 FOR INTERSECTION DETAIL SEE SHEET 2B-1
 FOR DITCH DETAILS SEE SHEET 2D-1
 FOR RETAINING WALL 1 SEE SHEET W-1

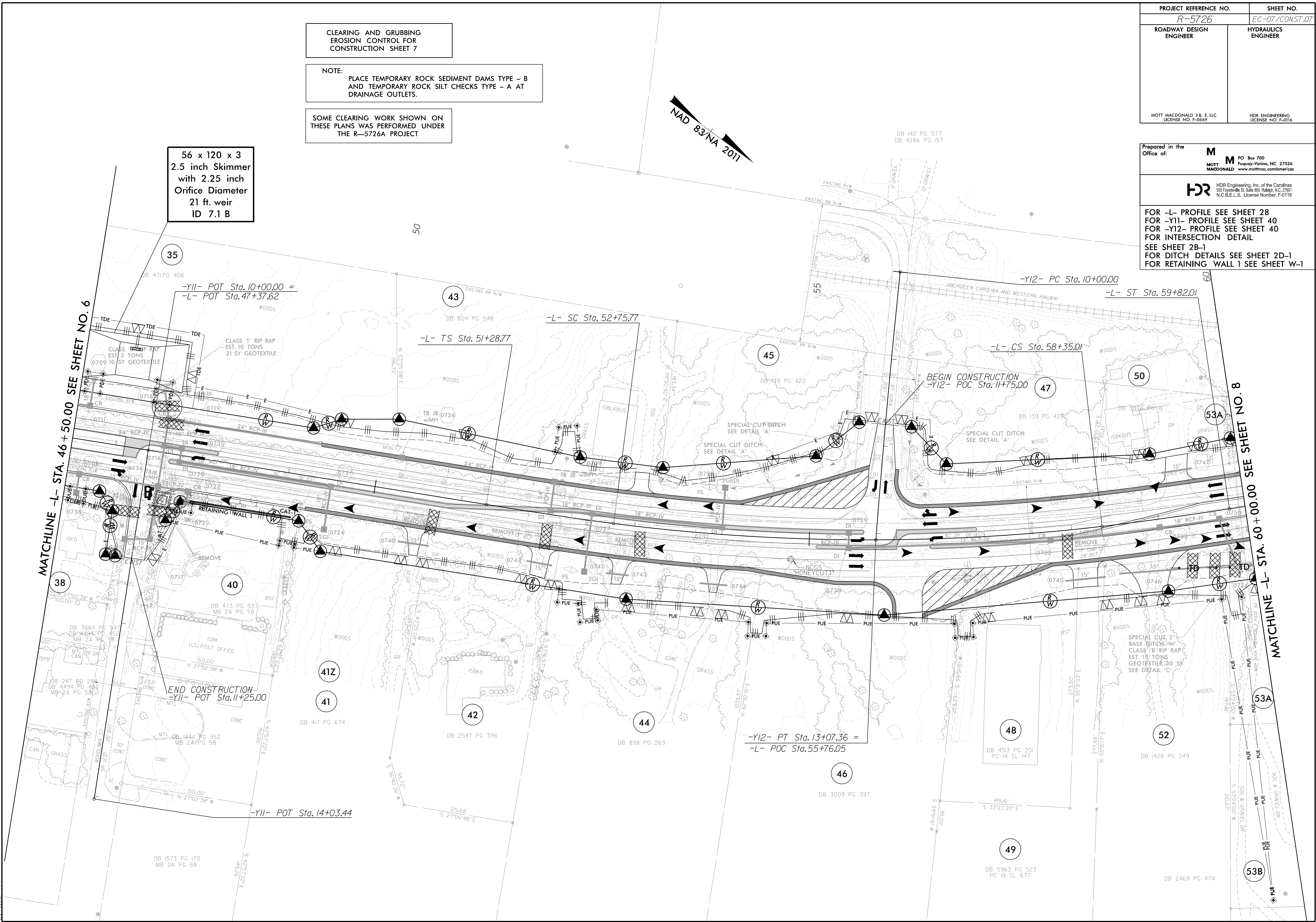
CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 7

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

SOME CLEARING WORK SHOWN ON
 THESE PLANS WAS PERFORMED UNDER
 THE R-5726A PROJECT

56 x 120 x 3
 2.5 inch Skimmer
 with 2.5 inch
 Orifice Diameter
 21 ft. weir
 ID 7.1 B

8/17/99



MATCHLINE -L- STA. 46 + 50.00 SEE SHEET NO. 6

MATCHLINE -L- STA. 60 + 00.00 SEE SHEET NO. 8

7/26/2024
 11:52:52 AM
 R-5726-EC_PSH-CC.dgn

| | |
|---|---------------------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-08/CONST.08</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| MOTT MACDONALD I & E LLC LICENSE NO. F-06697 | HDR ENGINEERING LICENSE NO. F-0116 |

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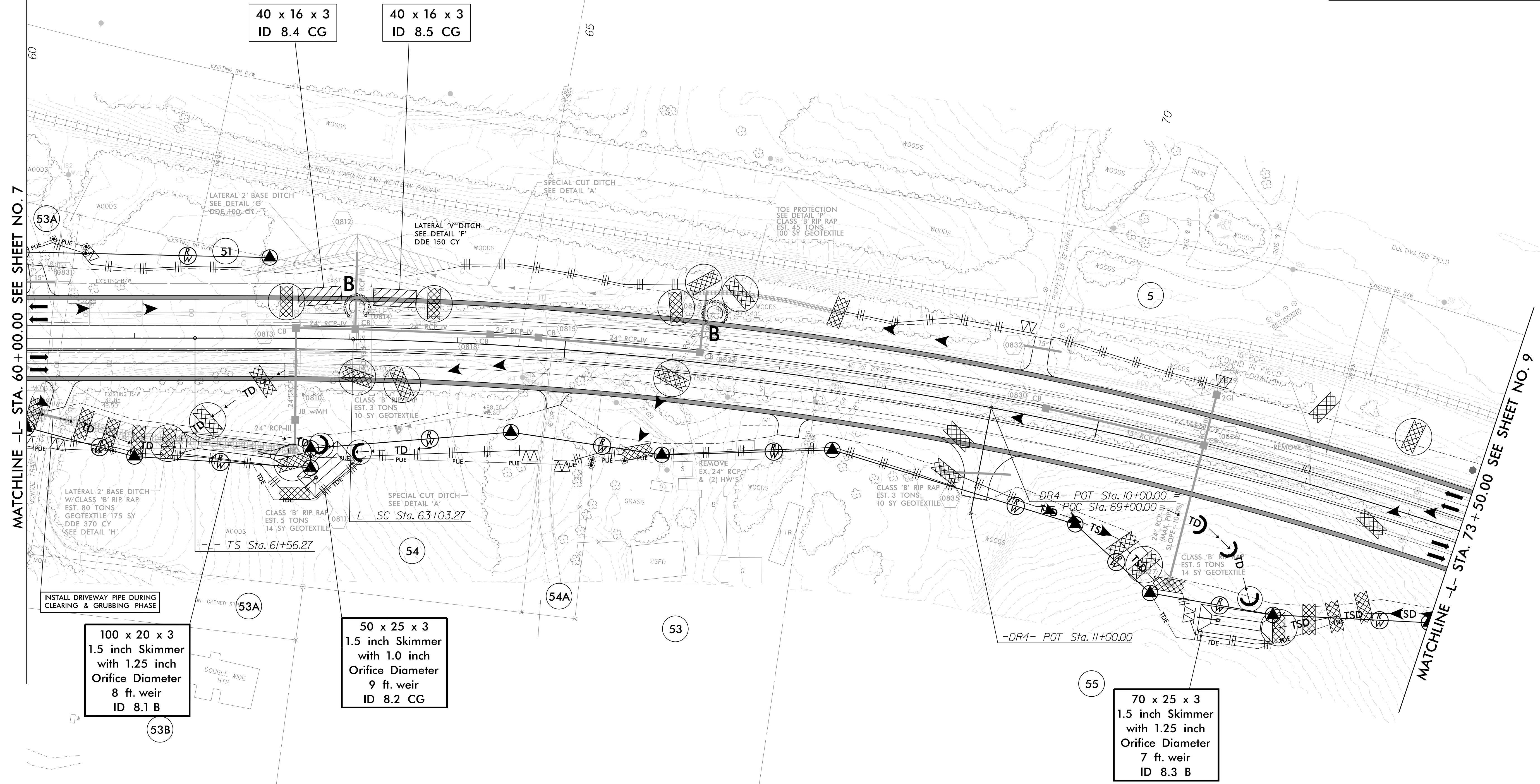
HDR HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St., Suite 900, Raleigh, NC 27601
 N.C.B.E.L.S. License Number: F-0116

FOR -L- PROFILE SEE SHEET 29
 FOR DITCH DETAILS SEE SHEET 2D-1

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 8

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

SOME CLEARING WORK SHOWN ON
 THESE PLANS WAS PERFORMED UNDER
 THE R-5726A PROJECT



ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED ON PLANS.

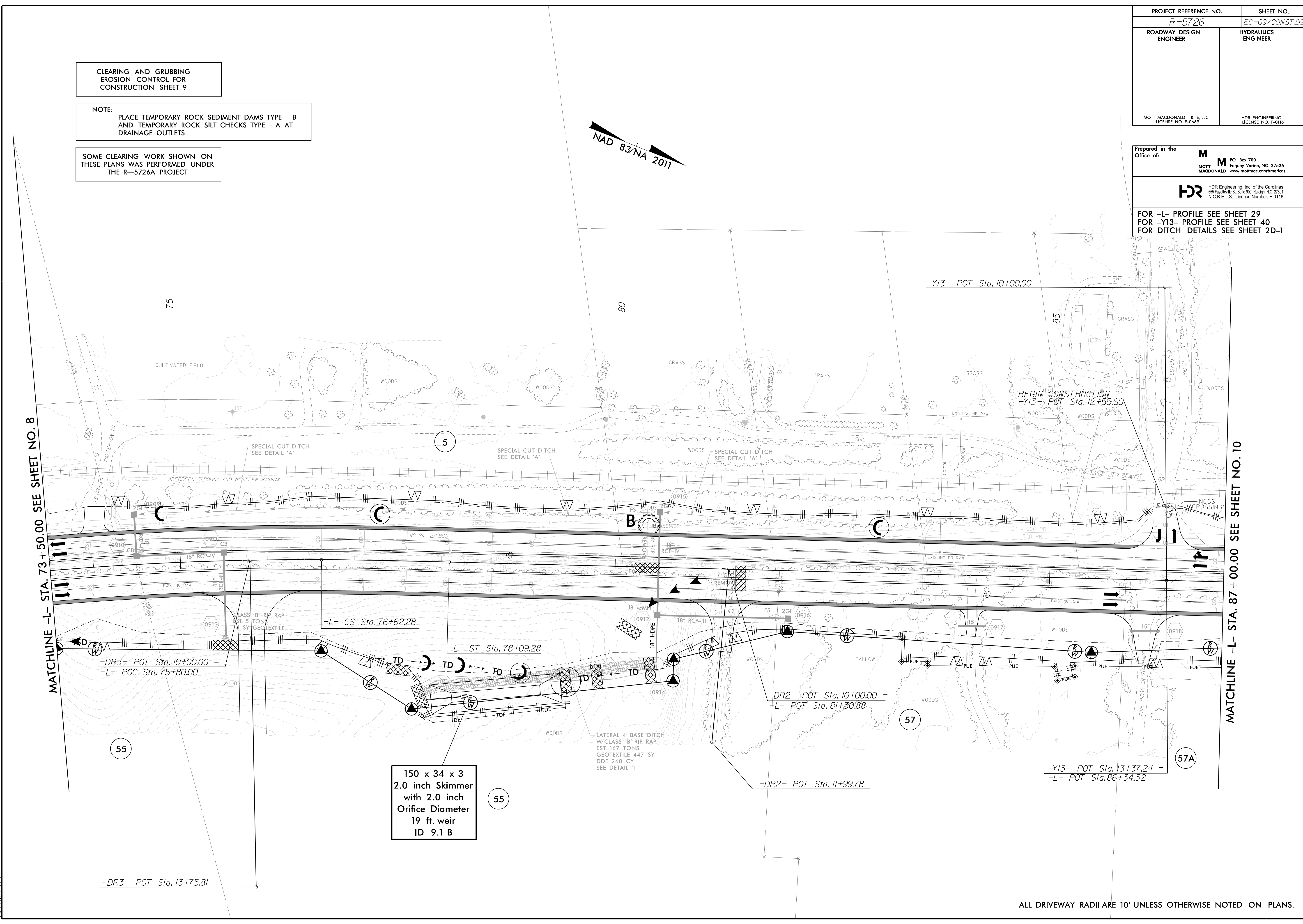
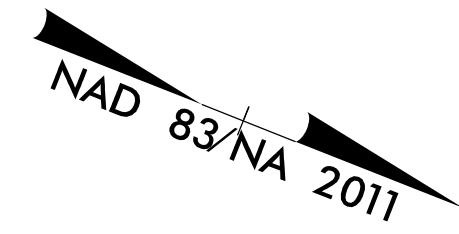
8/17/99
 7/2/2024
 R:\5726\EC_PSH.CG.dgn
 3:56:56 AM

| | |
|--|--|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-09/CONST.09</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| MOTT MACDONALD I & E LLC LICENSE NO. F-0669 | HDR ENGINEERING LICENSE NO. F-0116 |
| Prepared in the Office of: | M MOTT MACDONALD PO Box 700 Fuquay-Varina, NC 27526 www.mottmac.com/americas |
| HDR HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900, Raleigh, NC 27601 N.C.B.E.L.S. License Number: F-0116 | |
| FOR -L- PROFILE SEE SHEET 29 FOR -Y13- PROFILE SEE SHEET 40 FOR DITCH DETAILS SEE SHEET 2D-1 | |

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9

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

SOME CLEARING WORK SHOWN ON
THESE PLANS WAS PERFORMED UNDER
THE R-5726A PROJECT



150 x 34 x 3
2.0 inch Skimmer
with 2.0 inch
Orifice Diameter
19 ft. weir
ID 9.1 B

ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED ON PLANS.

8/17/99
7/2/2024
R-5726-EC-PSH-LC.dgn
R-5726-09.dwg

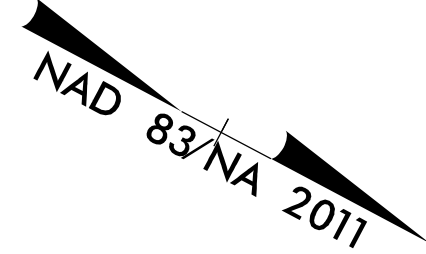
8/17/99

| | |
|--|---------------------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-10/CONST JO</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| MOTT MACDONALD I & E, LLC LICENSE NO. F-06697 | HDR ENGINEERING LICENSE NO. F-0116 |

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10

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

SOME CLEARING WORK SHOWN ON
THESE PLANS WAS PERFORMED UNDER
THE R-5726A PROJECT

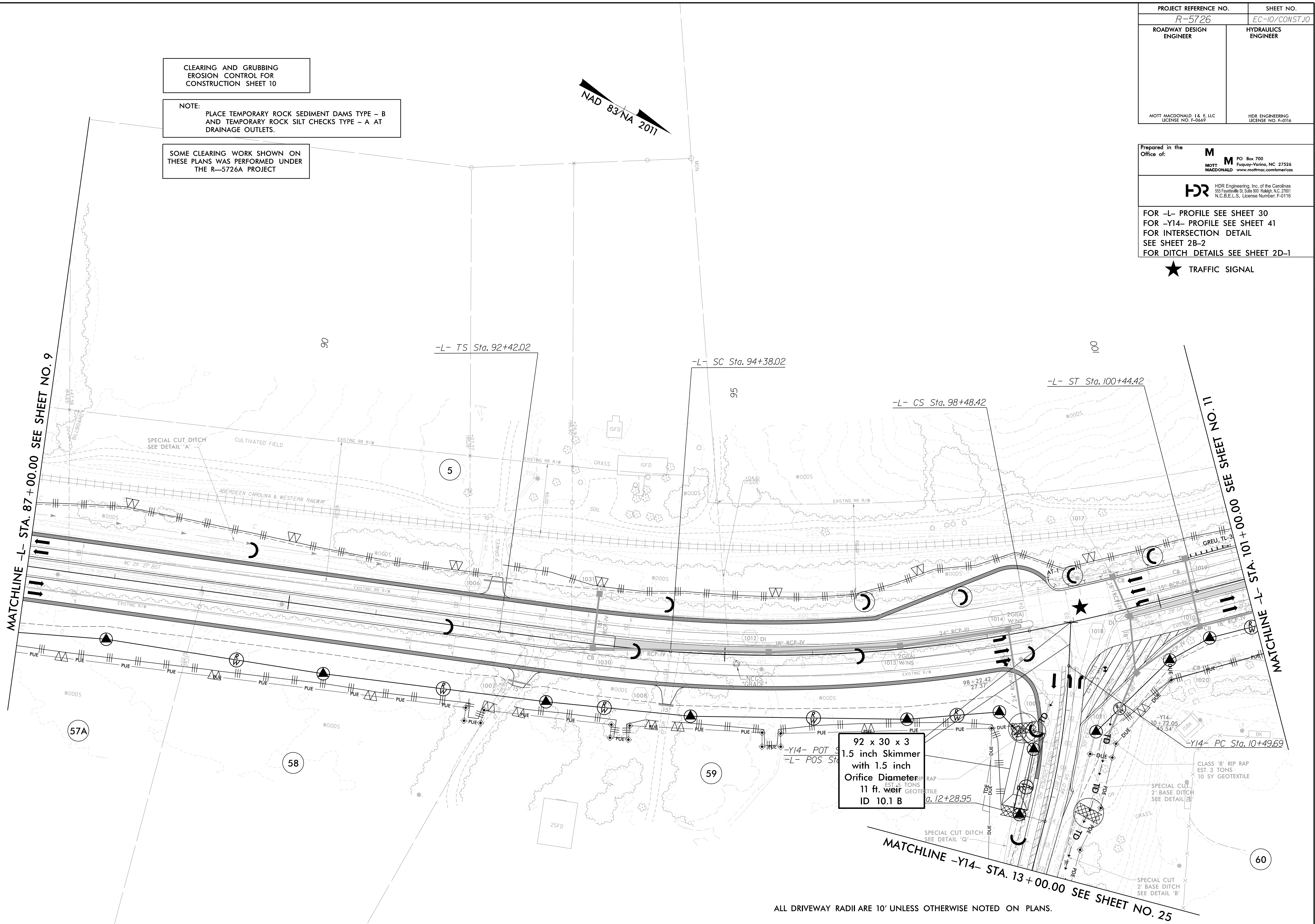


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Fuquay-Varina, NC 27526
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555 Fayetteville St., Suite 900, Raleigh, NC 27601
N.C.B.E.L.S. License Number: F-0116

FOR -L- PROFILE SEE SHEET 30
FOR -Y14- PROFILE SEE SHEET 41
FOR INTERSECTION DETAIL
SEE SHEET 2B-2
FOR DITCH DETAILS SEE SHEET 2D-1

★ TRAFFIC SIGNAL



92 x 30 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
11 ft. weir
ID 10.1 B

ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED ON PLANS.

MATCHLINE -Y14- STA. 13+00.00 SEE SHEET NO. 25

7/2/2024
R-5726-EC-PSH-LC.dgn
8:54:05 AM

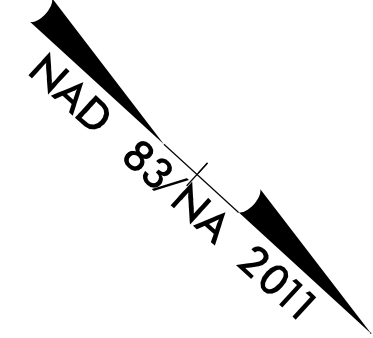
8/17/99

| | |
|---|---------------------------------------|
| PROJECT REFERENCE NO. <i>R-5726</i> | SHEET NO. <i>EC-II/CONST.II</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| MOTT MACDONALD I & E, LLC LICENSE NO. F-0669 | HDR ENGINEERING LICENSE NO. F-0116 |

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11

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

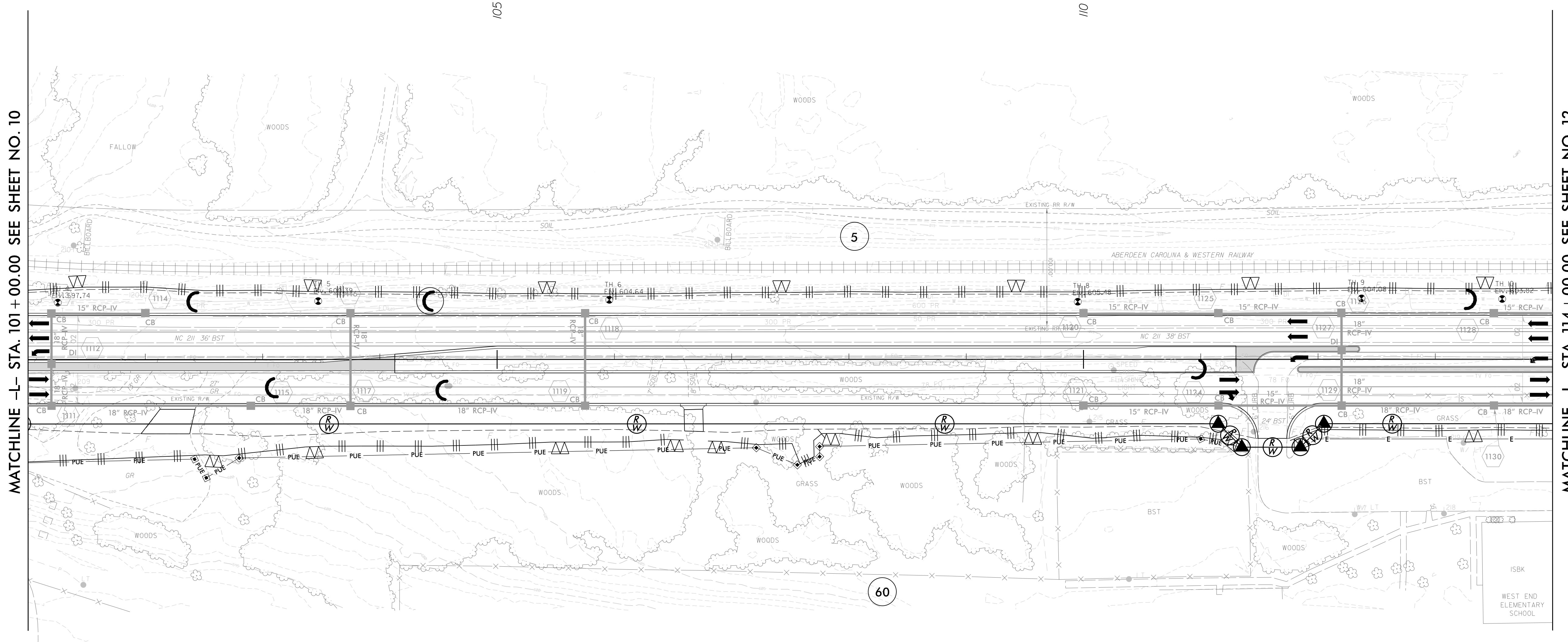
SOME CLEARING WORK SHOWN ON
THESE PLANS WAS PERFORMED UNDER
THE R-5726A PROJECT



Prepared in the
Office of: **M**
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Fuquay-Varina, NC 27526
www.mottmac.com/americas

HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St., Suite 900, Raleigh, NC 27601
N.C.B.E.L.S. License Number: F-0116

FOR -L- PROFILE SEE SHEET 30
FOR INTERSECTION DETAIL
SEE SHEET 2B-2
FOR DITCH DETAILS SEE SHEET 2D-1



7/2/2024
R-5726_EC_PSH+CG.dgn
8:54:11 AM

ALL DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED ON PLANS.