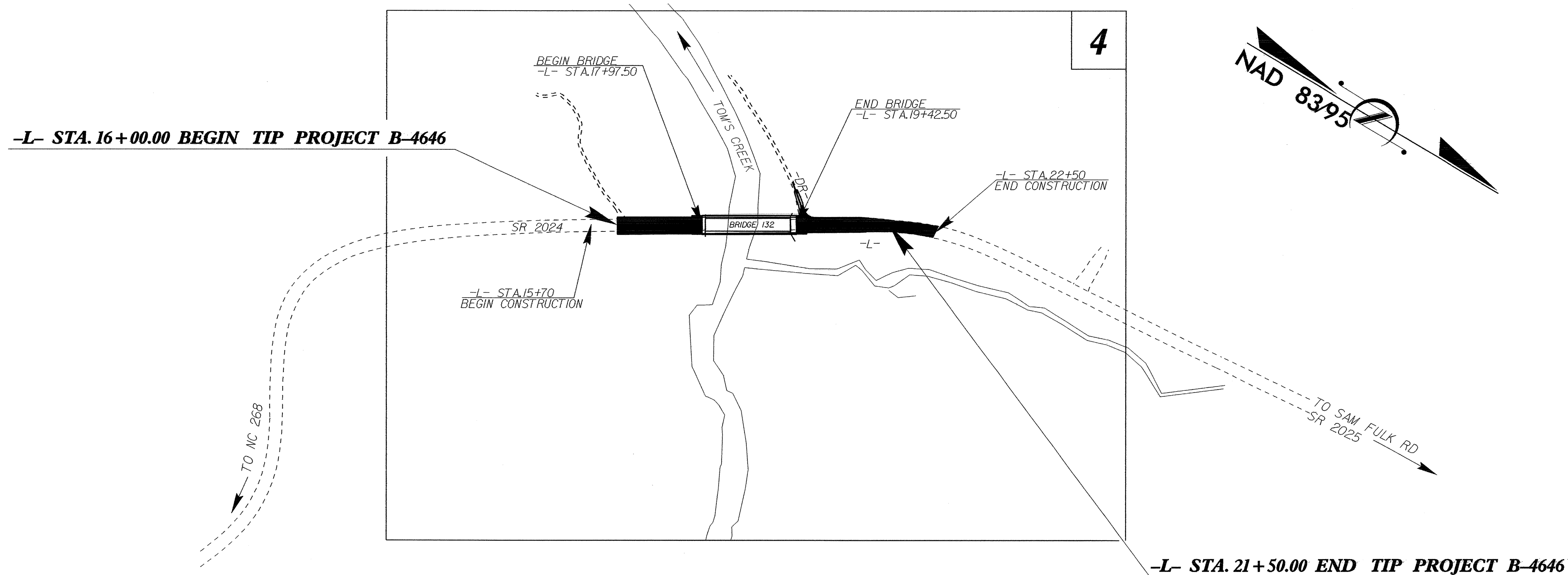


TIP PROJECT: B-4646

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

LOCATION: BRIDGE 132 ON SR 2024 OVER TOMS CREEK

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



| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C. | B-4646 | EC-1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| | | | |
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EROSION AND SEDIMENT CONTROL MEASURES

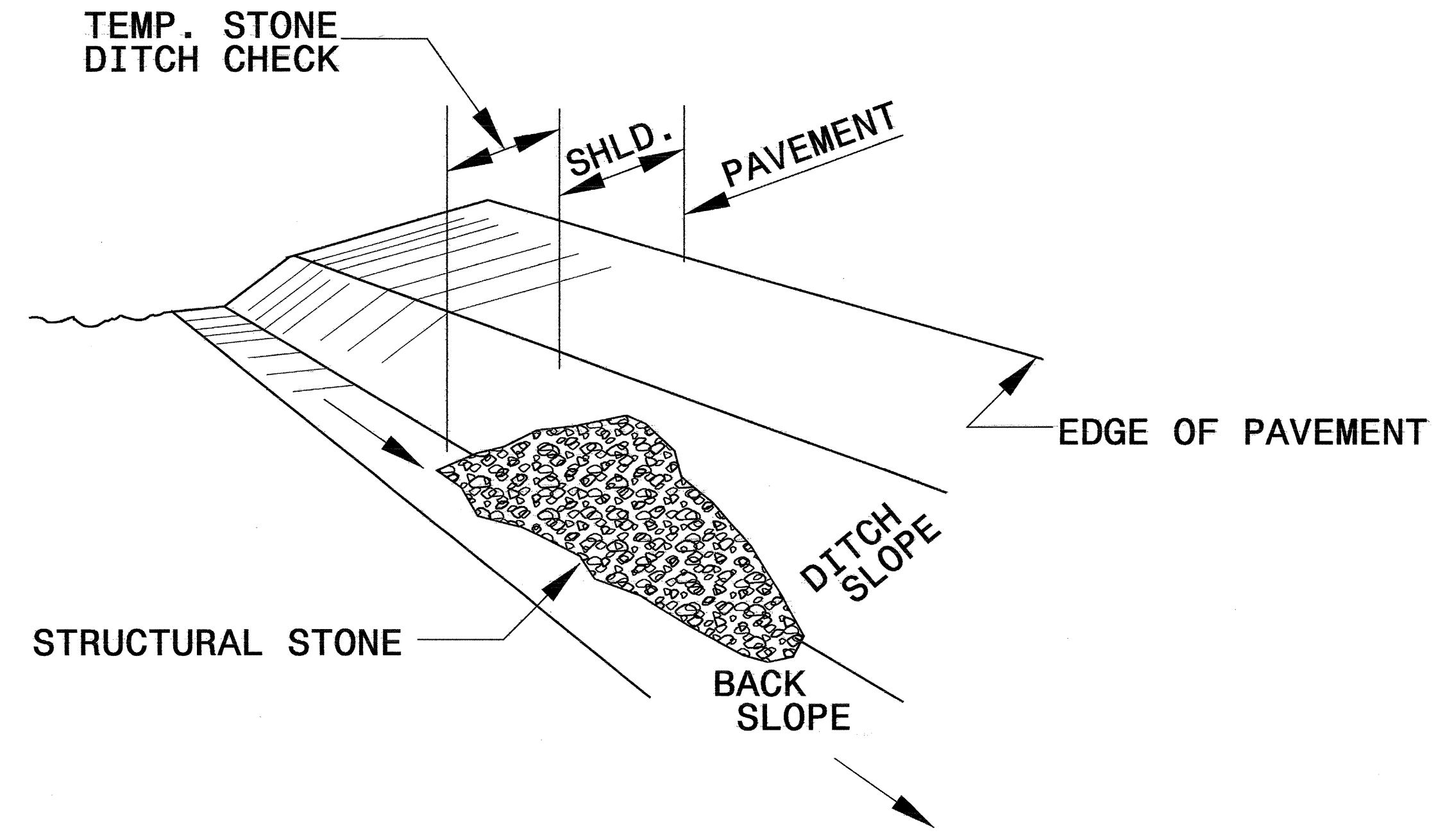
| Std. # | Description | Symbol |
|---------|--------------------------------------|--------|
| 1630.03 | Temporary Silt Ditch | TD |
| 1630.05 | Temporary Diversion | TD |
| 1605.01 | Temporary Silt Fence | |
| 1606.01 | Special Sediment Control Fence | |
| 1622.01 | Temporary Berms and Slope Drains | TBD |
| 1630.01 | Riser Basin | ⊙ |
| | Silt Basin Type B | ⊙ |
| 1633.01 | Temporary Rock Silt Check Type-A | ⊗ |
| | Temporary Rock Silt Check Type-B | ⊗ |
| | Wattle | ⤴ |
| 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.**

| | | | | | | | | | | | | | | | |
|---|---|---|---|------------------------------|--------------------------------|--|---|--------------------------------------|--|--|--|------------------------------|--|-----------------------------|--|
| <p>GRAPHIC SCALE</p> <p style="text-align: center;">0 PLANS</p> <p style="text-align: center;">0 PROFILE (HORIZONTAL)</p> <p style="text-align: center;">0 PROFILE (VERTICAL)</p> | <p>ROADSIDE ENVIRONMENTAL UNIT DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA</p> | <p>Prepared in the Office of: ROADSIDE ENVIRONMENTAL UNIT 1 South Wilmington St. Raleigh, NC 27611 2006 STANDARD SPECIFICATIONS</p> | <p>Roadway Standard Drawings</p> <p>The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.</p> <table style="width: 100%; font-size: small;"> <tr> <td>1605.01 Temporary Silt Fence</td> <td>1630.06 Special Stilling Basin</td> </tr> <tr> <td>1606.01 Special Sediment Control Fence</td> <td>1632.03 Rock Inlet Sediment Trap Type C</td> </tr> <tr> <td>1607.01 Gravel Construction Entrance</td> <td>1633.01 Temporary Rock Silt Check Type A</td> </tr> <tr> <td>1622.01 Temporary Berms and Slope Drains</td> <td>1635.02 Rock Pipe Inlet Sediment Trap Type B</td> </tr> <tr> <td>1630.03 Temporary Silt Ditch</td> <td></td> </tr> <tr> <td>1630.05 Temporary Diversion</td> <td></td> </tr> </table> | 1605.01 Temporary Silt Fence | 1630.06 Special Stilling Basin | 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 | 1635.02 Rock Pipe Inlet Sediment Trap Type B | 1630.03 Temporary Silt Ditch | | 1630.05 Temporary Diversion | |
| 1605.01 Temporary Silt Fence | 1630.06 Special Stilling Basin | | | | | | | | | | | | | | |
| 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 | 1635.02 Rock Pipe Inlet Sediment Trap Type B | | | | | | | | | | | | | | |
| 1630.03 Temporary Silt Ditch | | | | | | | | | | | | | | | |
| 1630.05 Temporary Diversion | | | | | | | | | | | | | | | |

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. B-4646 | SHEET NO. EC-2 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

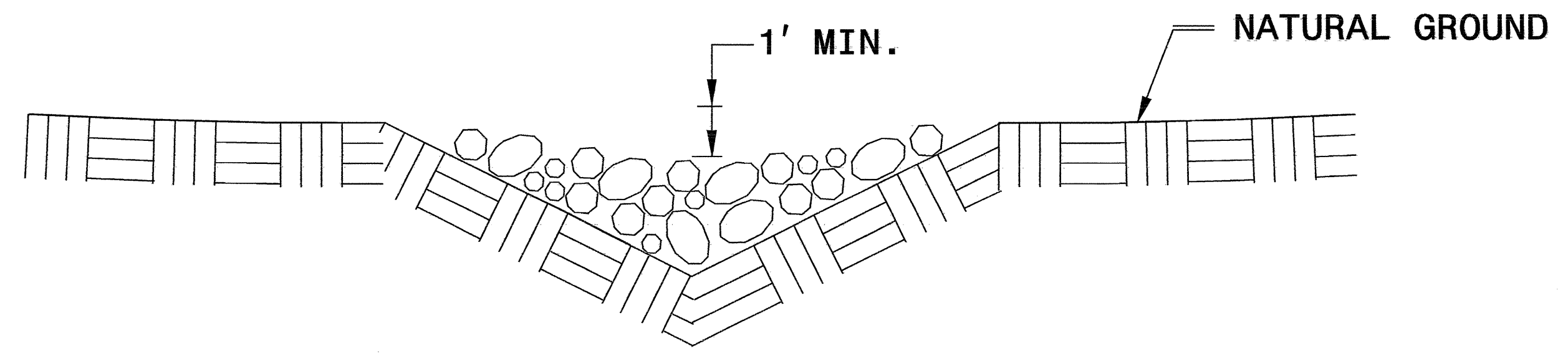


ISOMETRIC VIEW

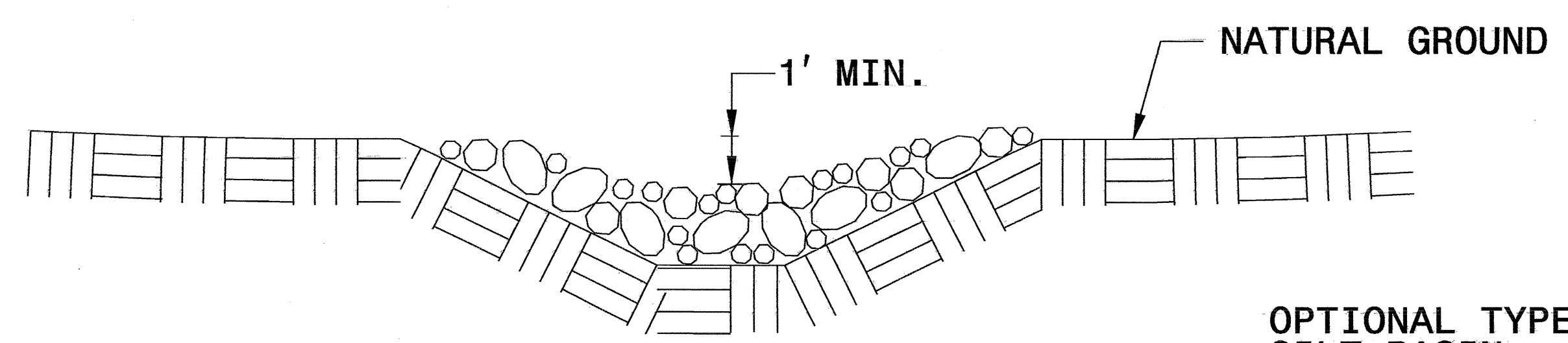
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

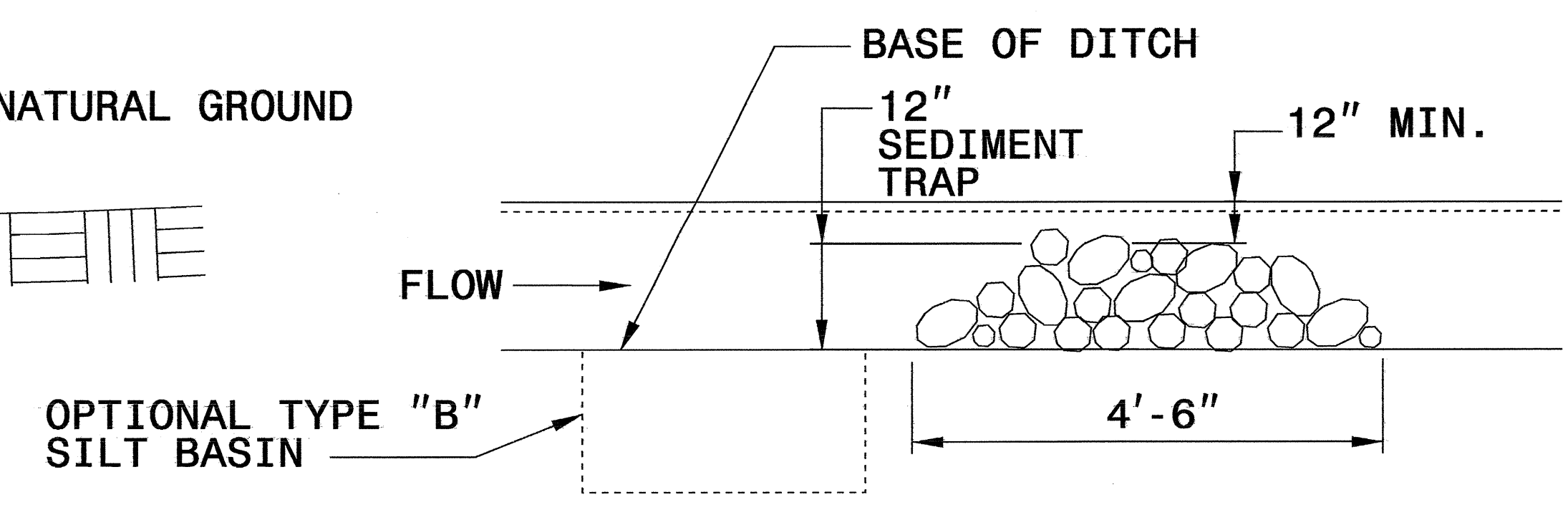
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



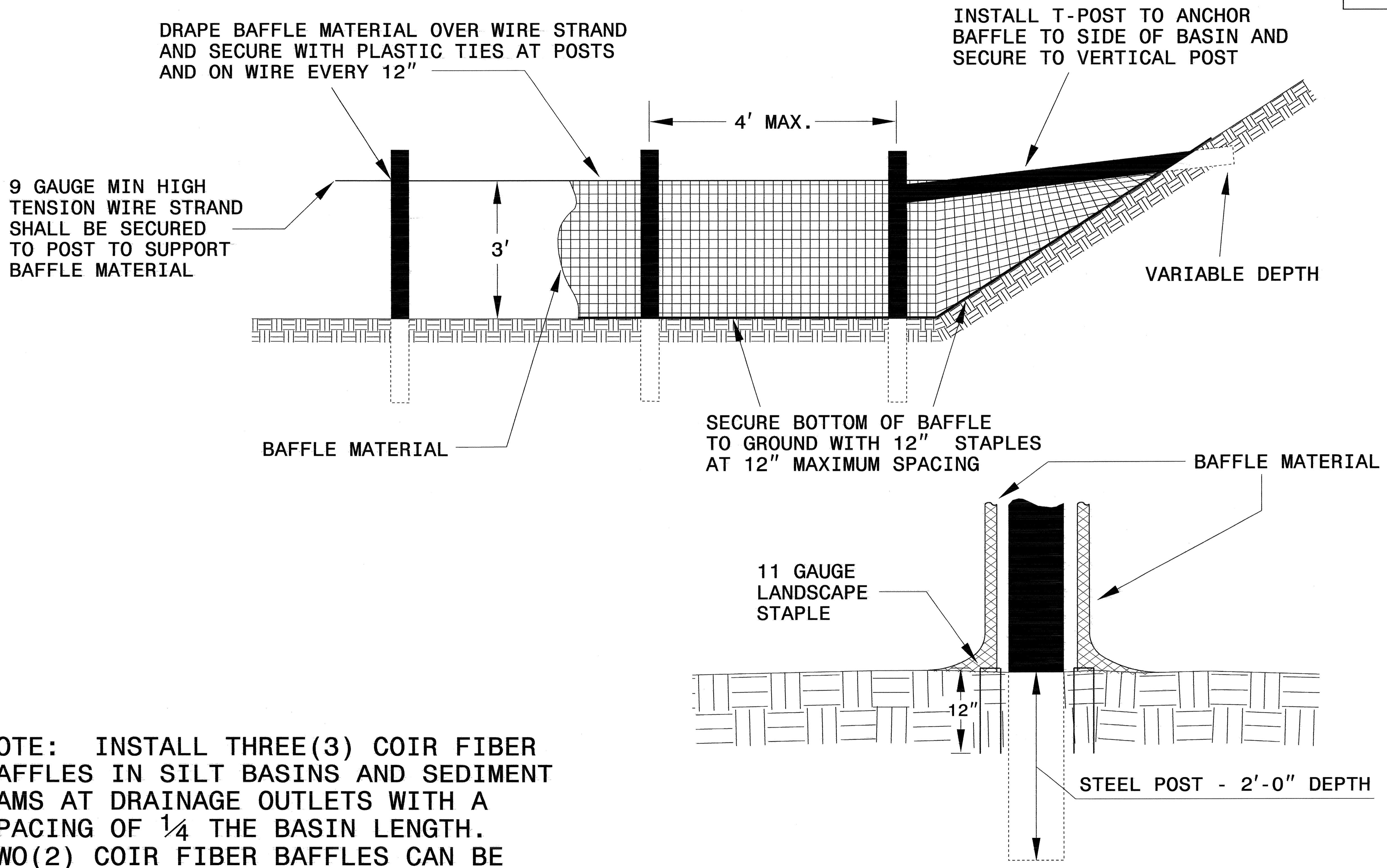
CROSS SECTION TRAPEZOIDAL DITCH



ELEVATION VIEW

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. B-4646 | SHEET NO. EC-2A |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

COIR FIBER BAFFLE DETAIL

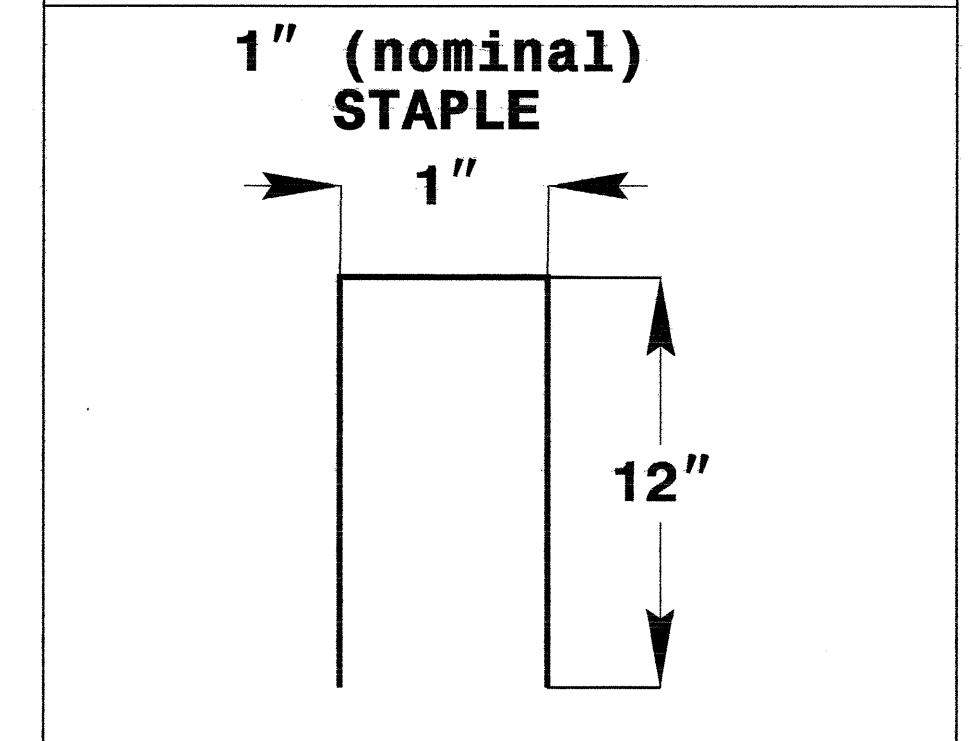
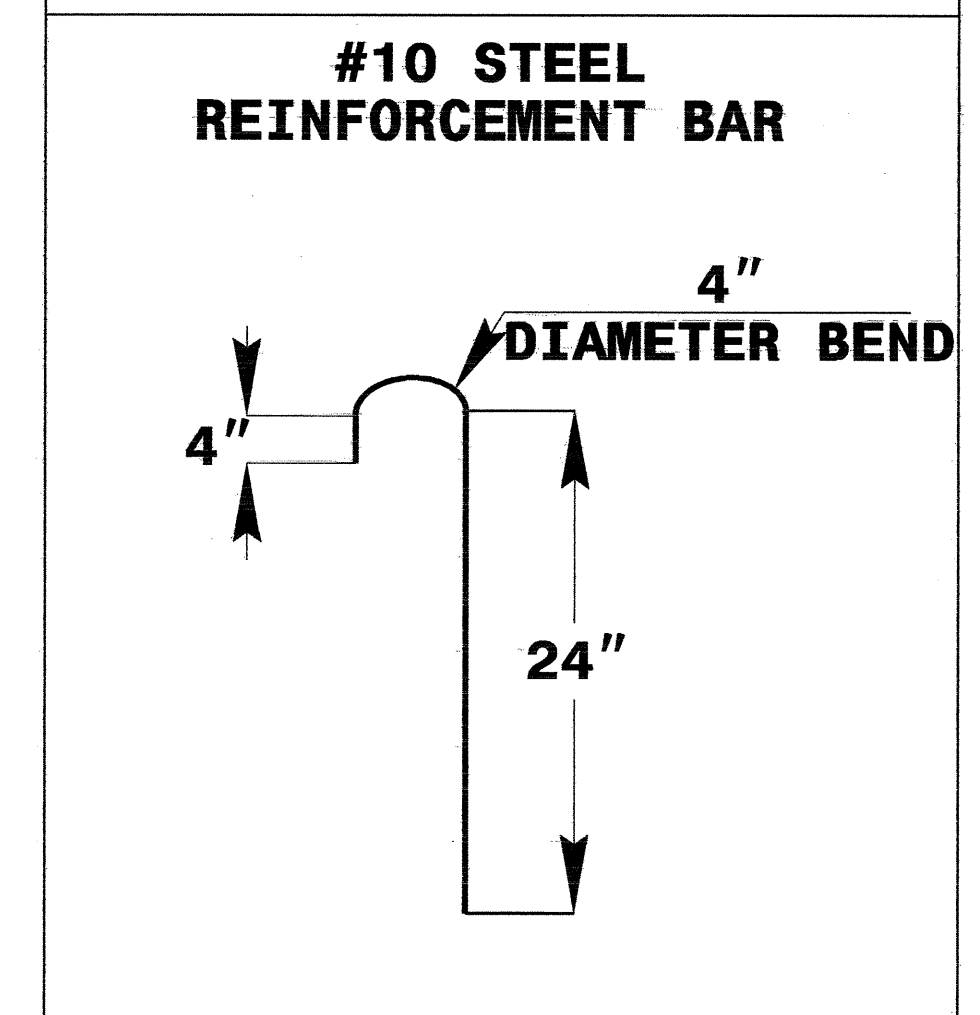
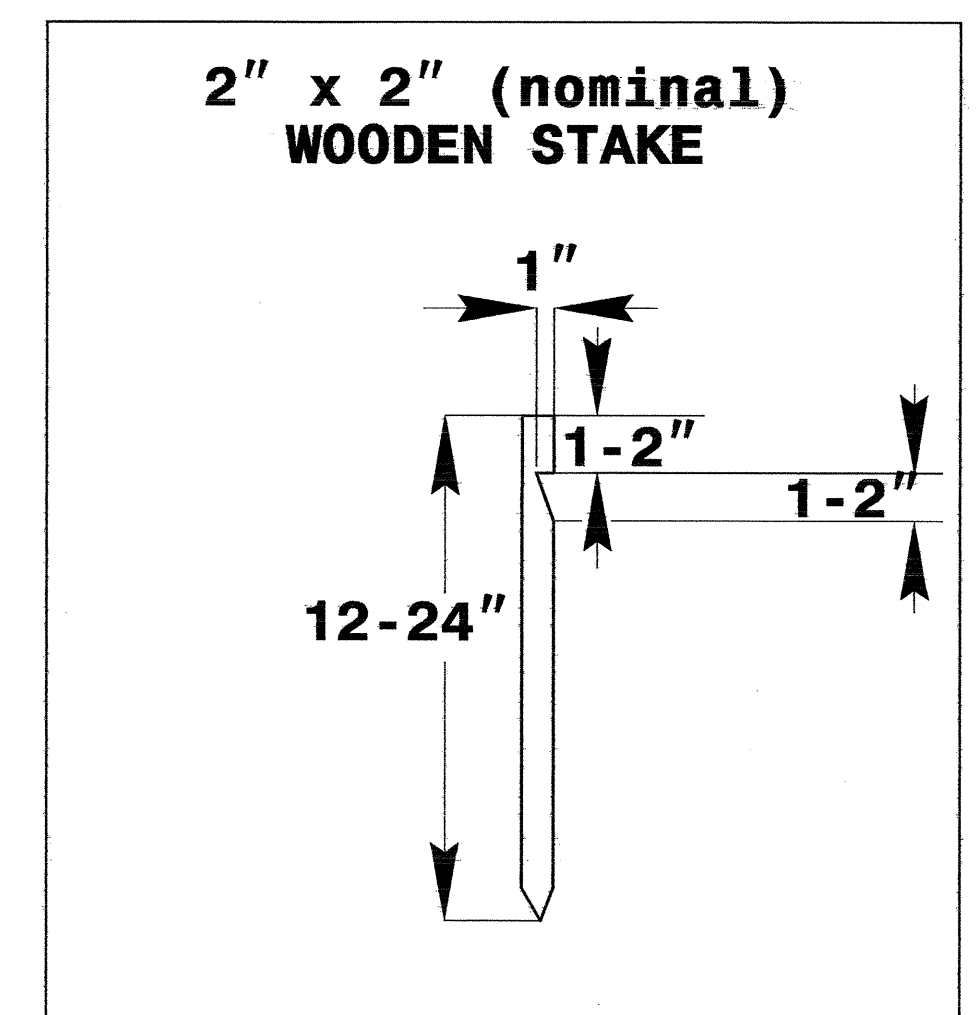
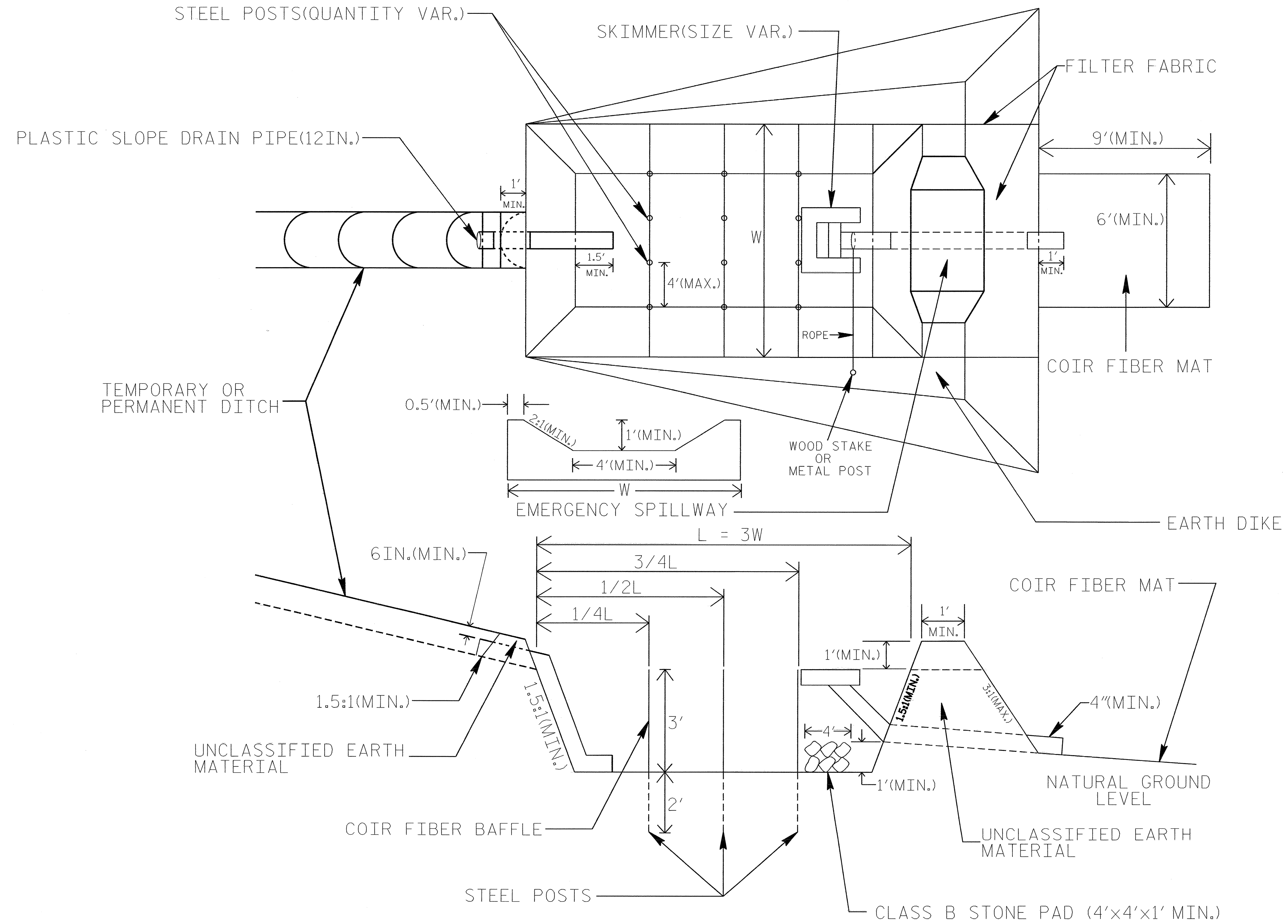


NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.

BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

SKIMMER BASIN WITH BAFFLES DETAIL

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. B-4646 | SHEET NO. EC-2B |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |



COIR FIBER MAT ANCHOR OPTIONS

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.

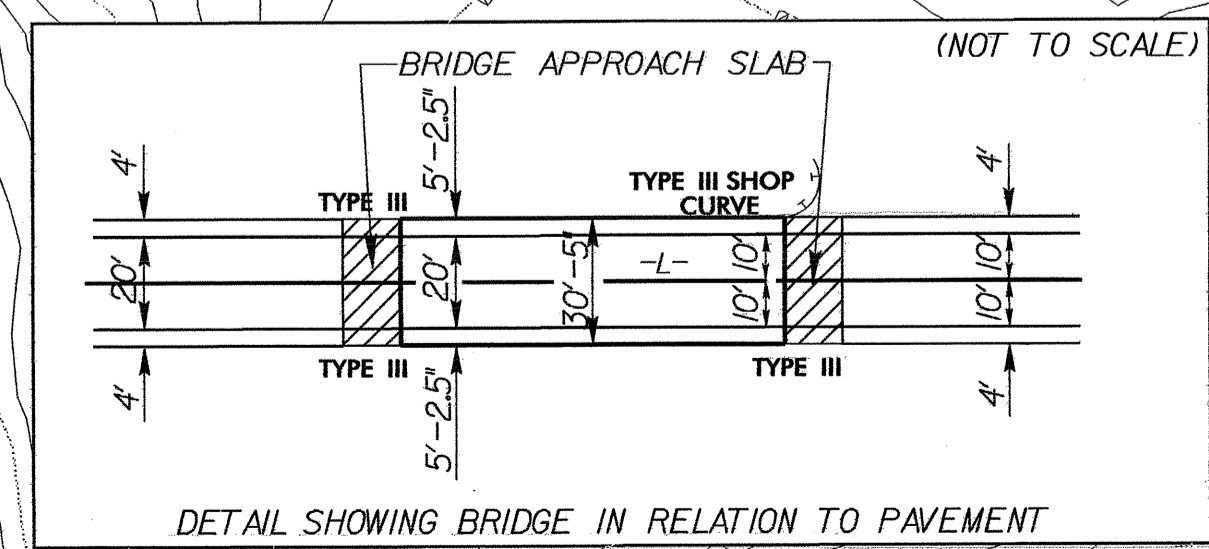
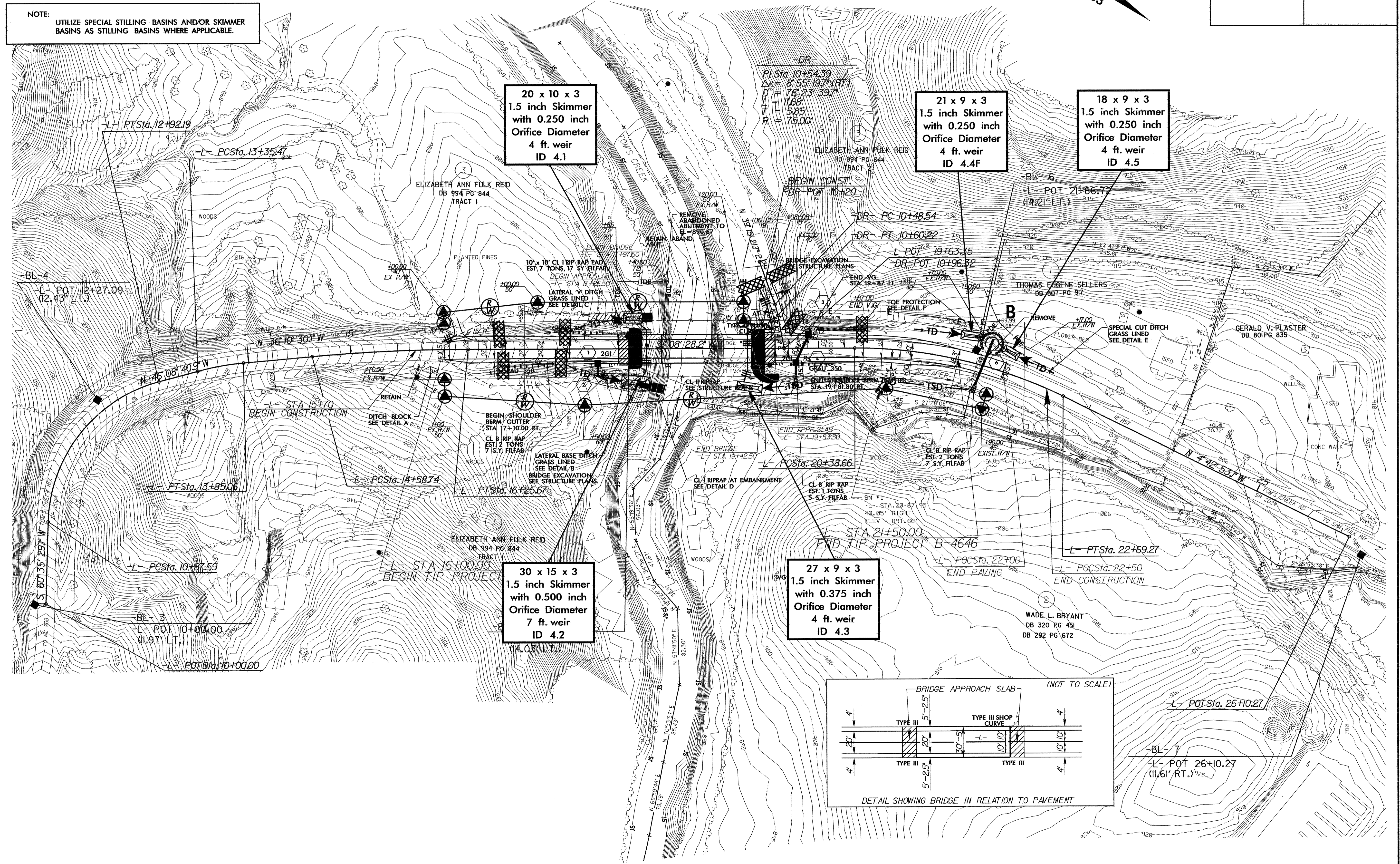
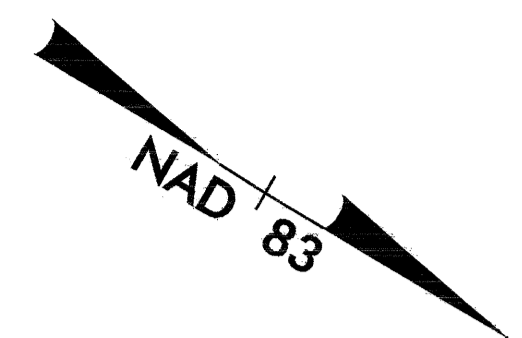
NOT TO SCALE

| | |
|---------------------------------|-----------------------------|
| PROJECT REFERENCE NO. B-4646 | SHEET NO. EC-04/CONST.04 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

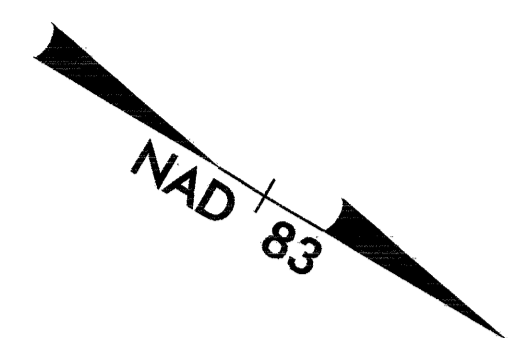
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 04

NOTE:
UTILIZE SPECIAL STILLING BASINS AND/OR SKIMMER BASINS AS STILLING BASINS WHERE APPLICABLE.

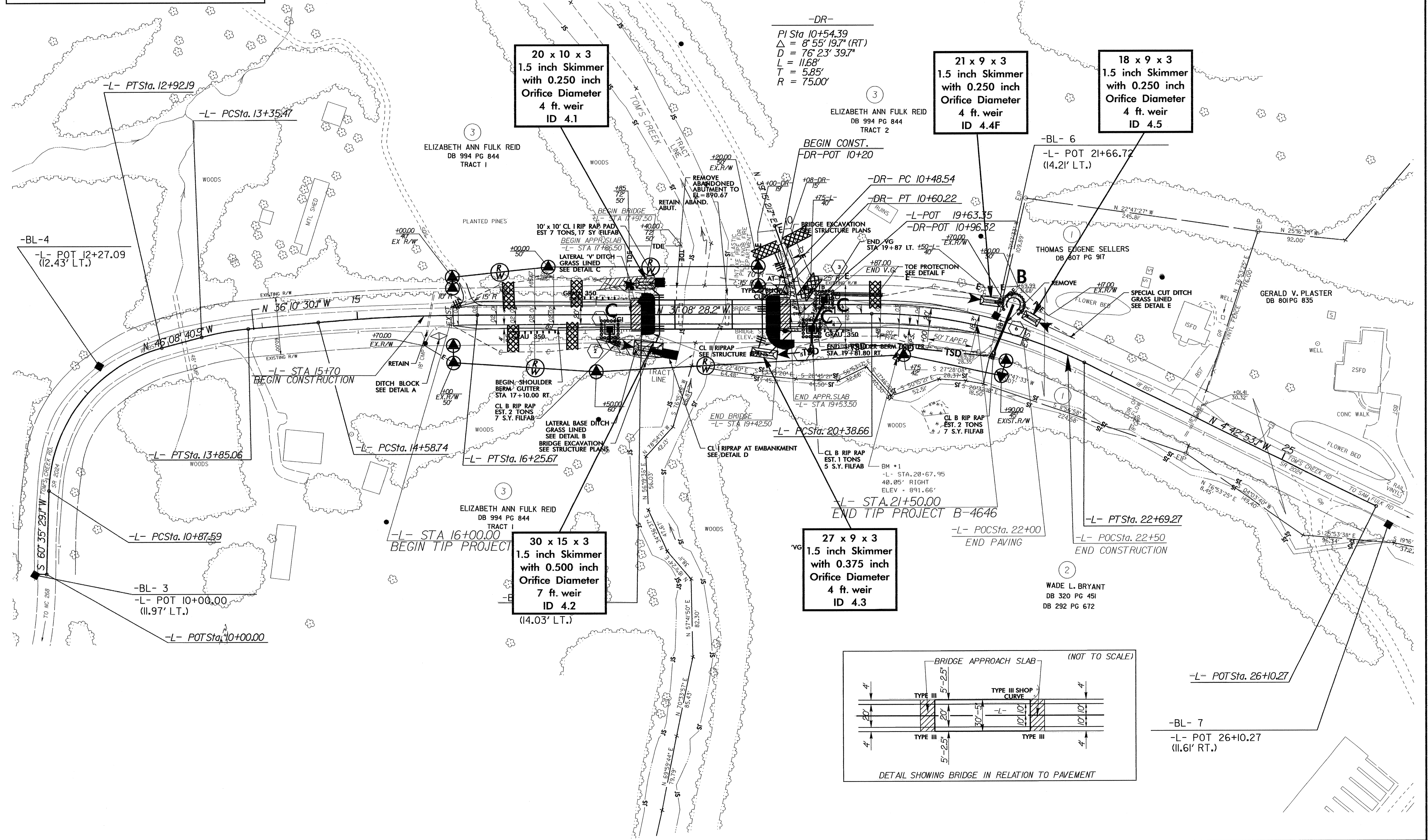


DETAIL SHOWING BRIDGE IN RELATION TO PAVEMENT

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| B-4646 | EC-05/CONST.04 |
| R/W SHEET NO. | HYDRAULICS ENGINEER |
| ROADWAY DESIGN ENGINEER | |



NOTE: UTILIZE SPECIAL STILLING BASINS AND/OR SKIMMER BASINS AS STILLING BASINS WHERE APPLICABLE.



20 x 10 x 3
1.5 inch Skimmer
with 0.250 inch
Orifice Diameter
4 ft. weir
ID 4.1

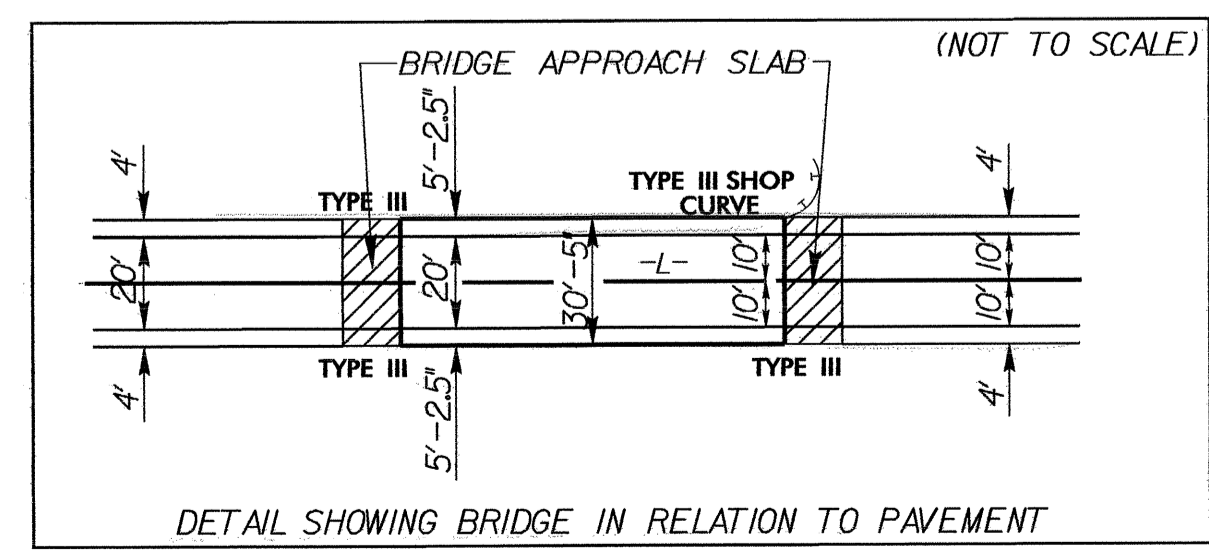
21 x 9 x 3
1.5 inch Skimmer
with 0.250 inch
Orifice Diameter
4 ft. weir
ID 4.4F

18 x 9 x 3
1.5 inch Skimmer
with 0.250 inch
Orifice Diameter
4 ft. weir
ID 4.5

30 x 15 x 3
1.5 inch Skimmer
with 0.500 inch
Orifice Diameter
7 ft. weir
ID 4.2
(14.03' LT.)

27 x 9 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
4 ft. weir
ID 4.3

-DR-
PI Sta 10+54.39
 $\Delta = 8^{\circ}55'19.7''$ (RT)
 $D = 76^{\circ}23'39.7''$
 $L = 11.68'$
 $T = 5.85'$
 $R = 75.00'$



-L- POTSta. 26+10.27

-BL- 7
-L- POT 26+10.27
(11.61' RT.)