

**TIP PROJECT: B-4184**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

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PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL

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**MADISON COUNTY**

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**LOCATION: BRIDGE NO. 4 OVER IVY RIVER ON SR 1565**

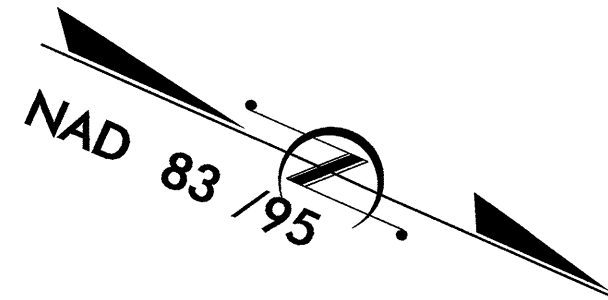
**TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE**

| STATE           | STATE PROJECT REFERENCE NO. | SHEET NO.   | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C.            | B-4184                      | EC-1        |              |
| STATE PROJ. NO. | F.A. PROJ. NO.              | DESCRIPTION |              |
|                 |                             |             |              |
|                 |                             |             |              |
|                 |                             |             |              |
|                 |                             |             |              |
|                 |                             |             |              |

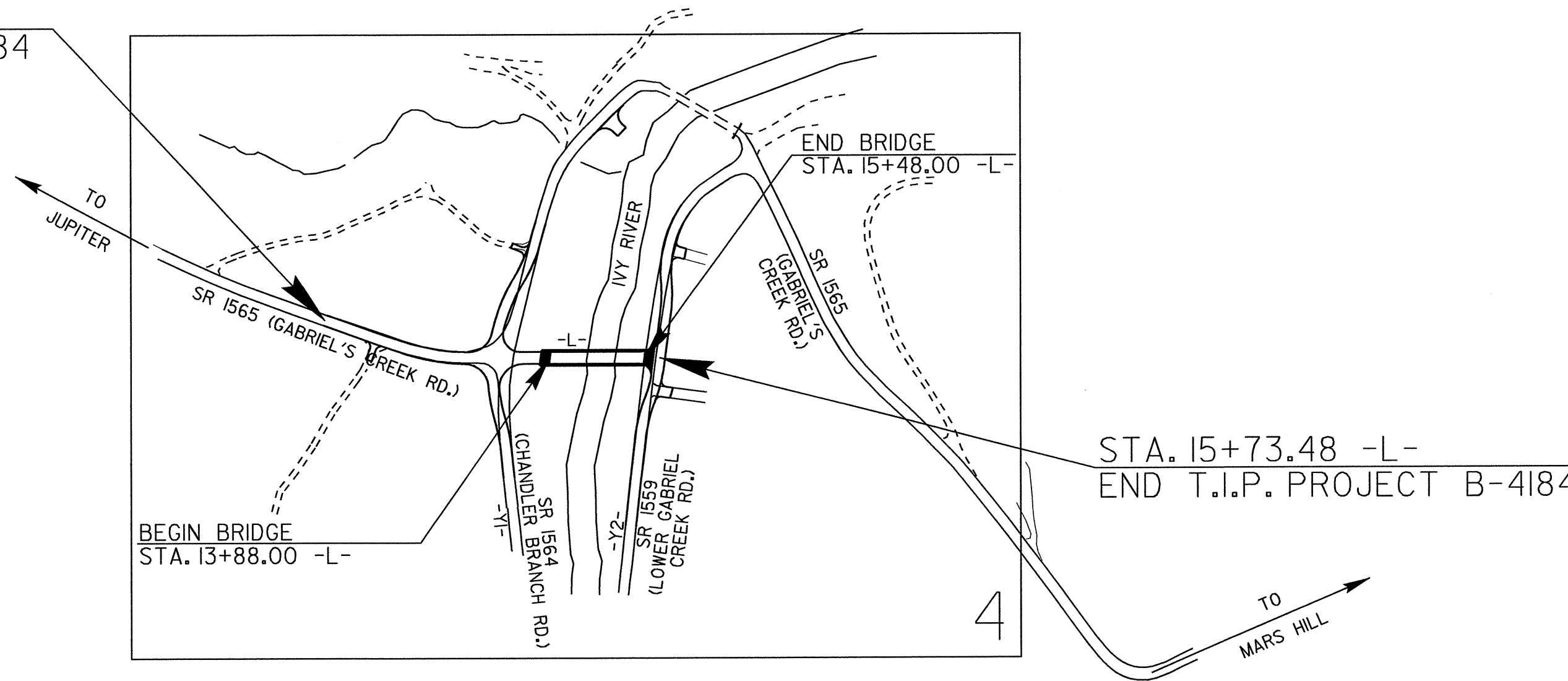
**EROSION AND SEDIMENT CONTROL MEASURES**

| Std. #  | Description                          | Symbol |
|---------|--------------------------------------|--------|
| 1630.03 | Temporary Silt Ditch                 |        |
| 1630.05 | Temporary Diversion                  |        |
| 1605.01 | Temporary Silt Fence                 |        |
| 1606.01 | Special Sediment Control Fence       |        |
| 1622.01 | Temporary Berms and Slope Drains     |        |
| 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                               |        |
| 1632.02 | Type B                               |        |
| 1632.03 | Type C                               |        |
|         | Skimmer Basin                        |        |
|         | Tiered Skimmer Basin                 |        |
|         | Infiltration Basin                   |        |

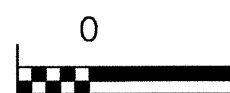
**THIS PROJECT CONTAINS  
EROSION CONTROL PLANS  
FOR CLEARING AND  
GRUBBING PHASE OF  
CONSTRUCTION.**



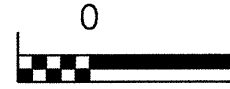
STA. 10+00.00 -L-  
BEGIN T.I.P. PROJECT B-4184



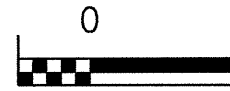
**GRAPHIC SCALE**



PLANS



PROFILE (HORIZONTAL)



PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT  
DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

Prepared in the Office of:  
**ROADSIDE ENVIRONMENTAL UNIT**  
1 South Wilmington St.  
Raleigh, NC 27611  
**2006 STANDARD SPECIFICATIONS**

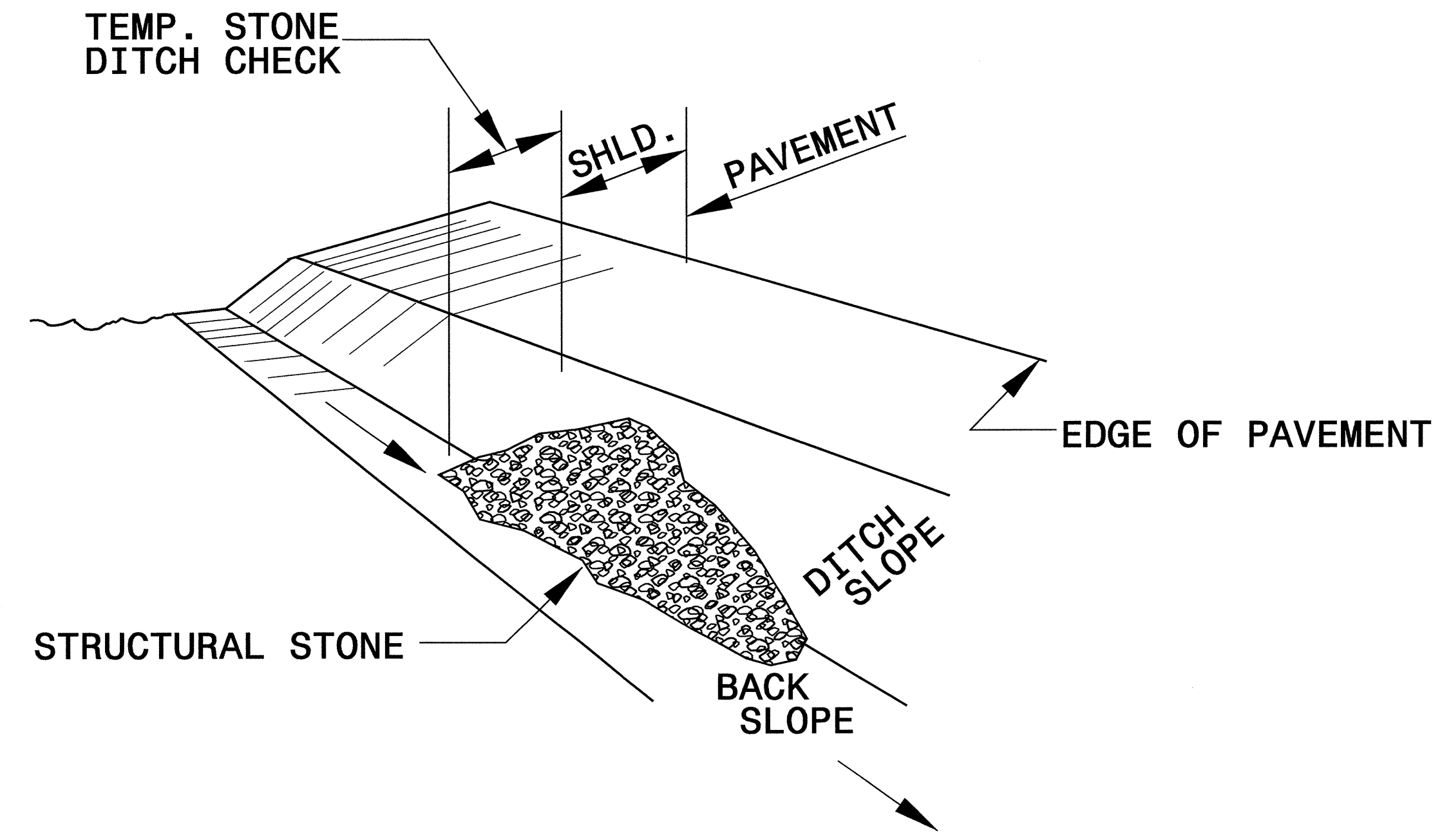
**Roadway Standard Drawings**

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

|                                      |  |
|--------------------------------------|--|
| 1605.01 Temporary Silt Fence         | 1630.06 Special Stilling Basin               |
| 1607.01 Gravel Construction Entrance | 1633.01 Temporary Rock Silt Check Type A     |
| 1630.05 Temporary Diversion          | 1635.02 Rock Pipe Inlet Sediment Trap Type B |

|  |                          |
|--|--------------------------|
| PROJECT REFERENCE NO.<br><i>B-4184</i> | SHEET NO.<br><i>EC-2</i> |
| RW SHEET NO.                           |                          |
| ROADWAY DESIGN ENGINEER                | HYDRAULICS ENGINEER      |

# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

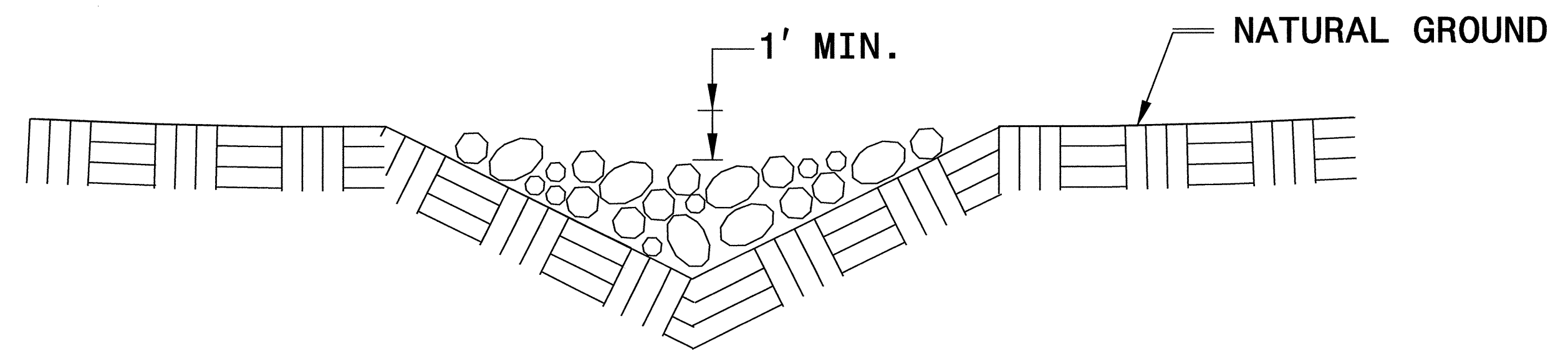


**ISOMETRIC VIEW**

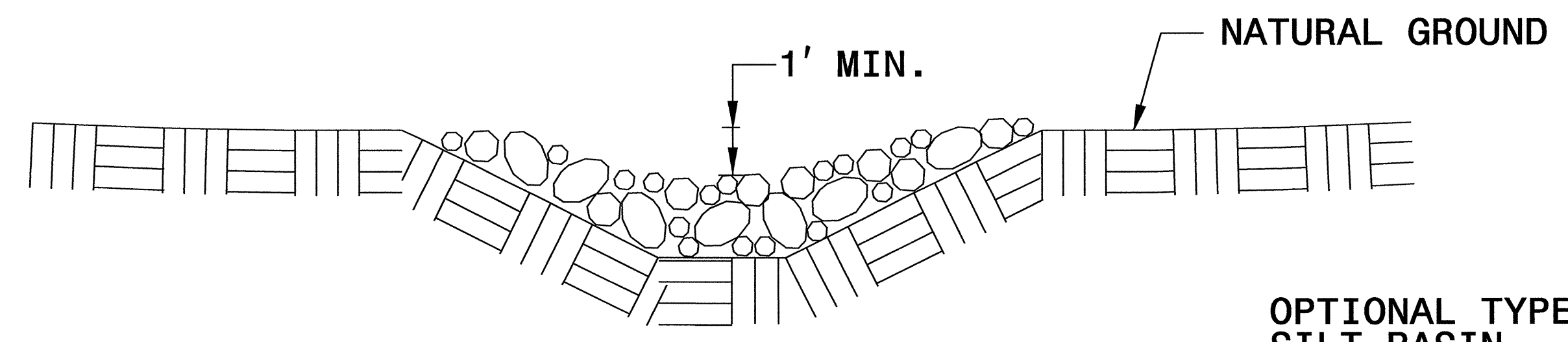
**NOTES:**

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

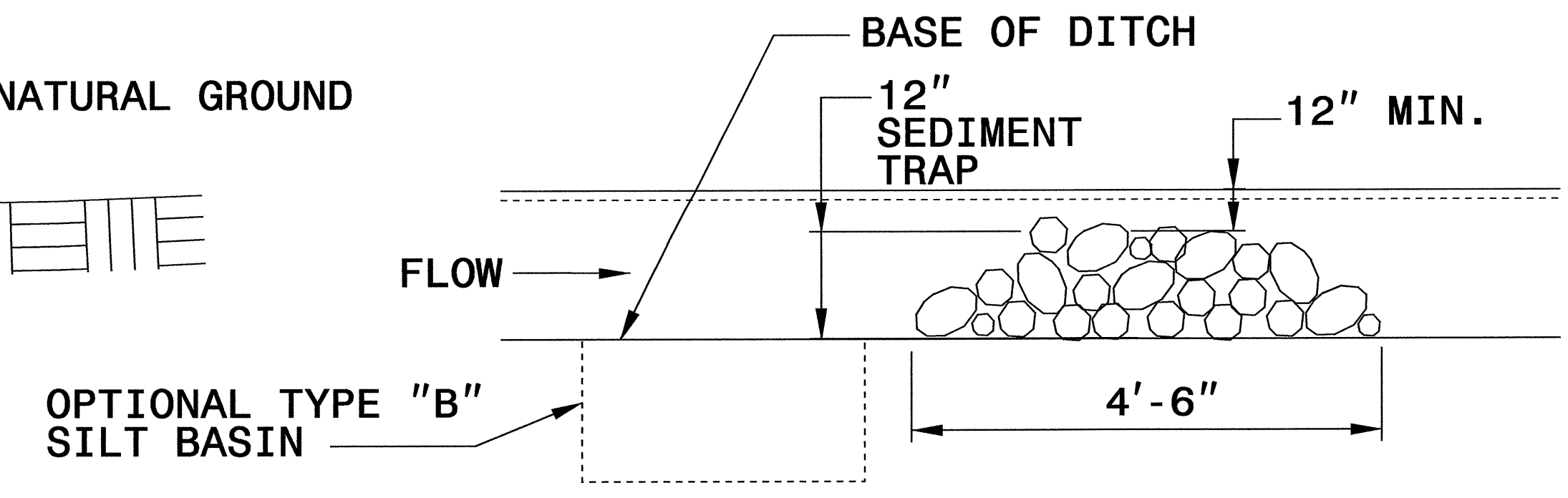
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION VEE DITCH**



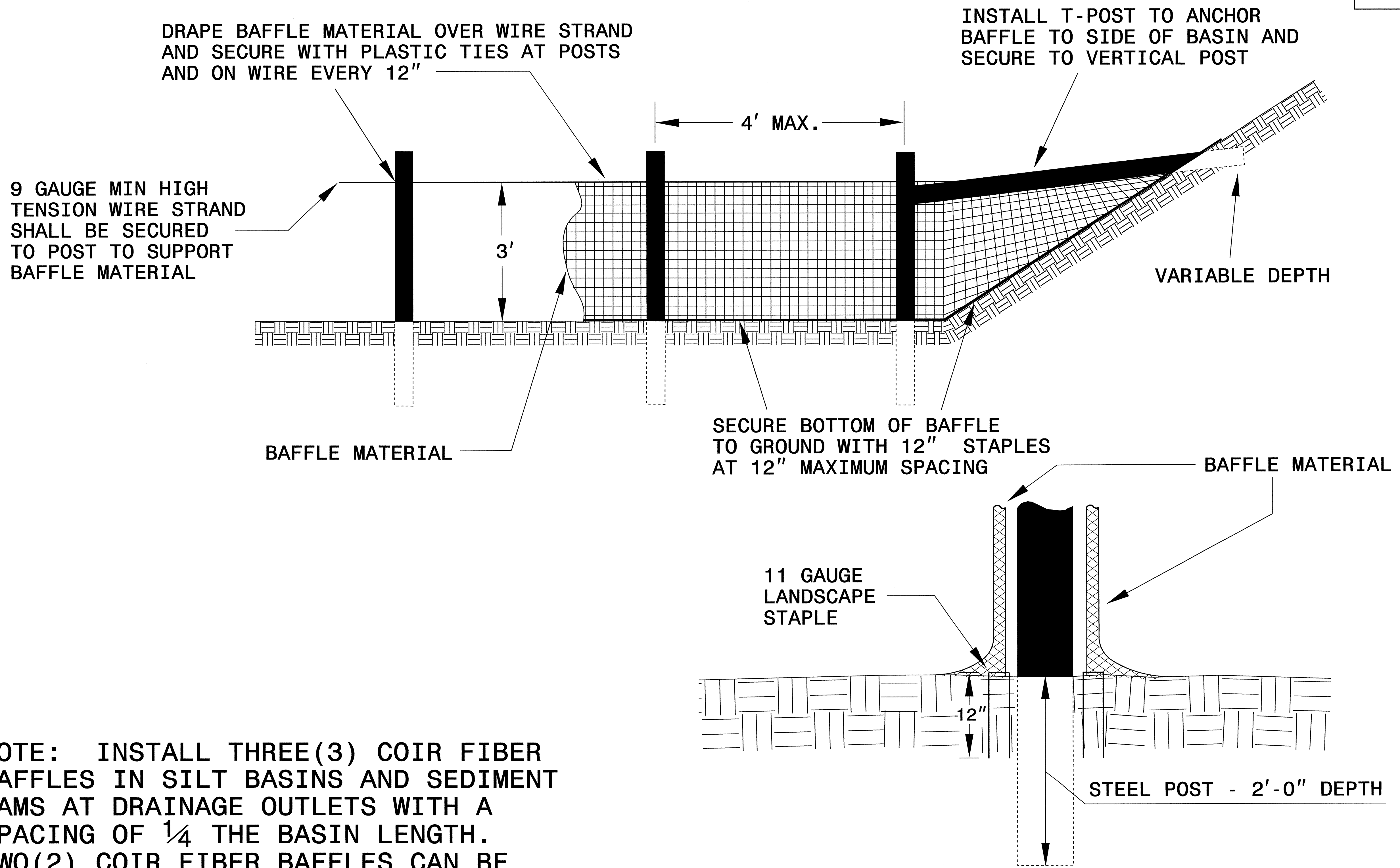
**CROSS SECTION TRAPEZOIDAL DITCH**



**ELEVATION VIEW**

|                                 |                     |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>B-4184 | SHEET NO.<br>EC-2A  |
| RW SHEET NO.                    |                     |
| ROADWAY DESIGN ENGINEER         | HYDRAULICS ENGINEER |

# COIR FIBER BAFFLE DETAIL

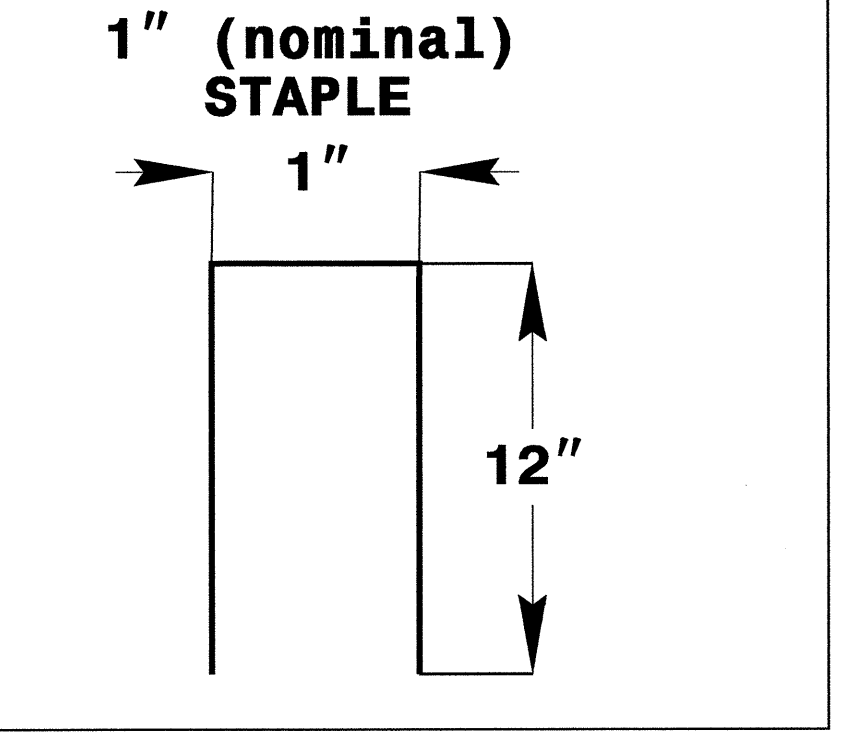
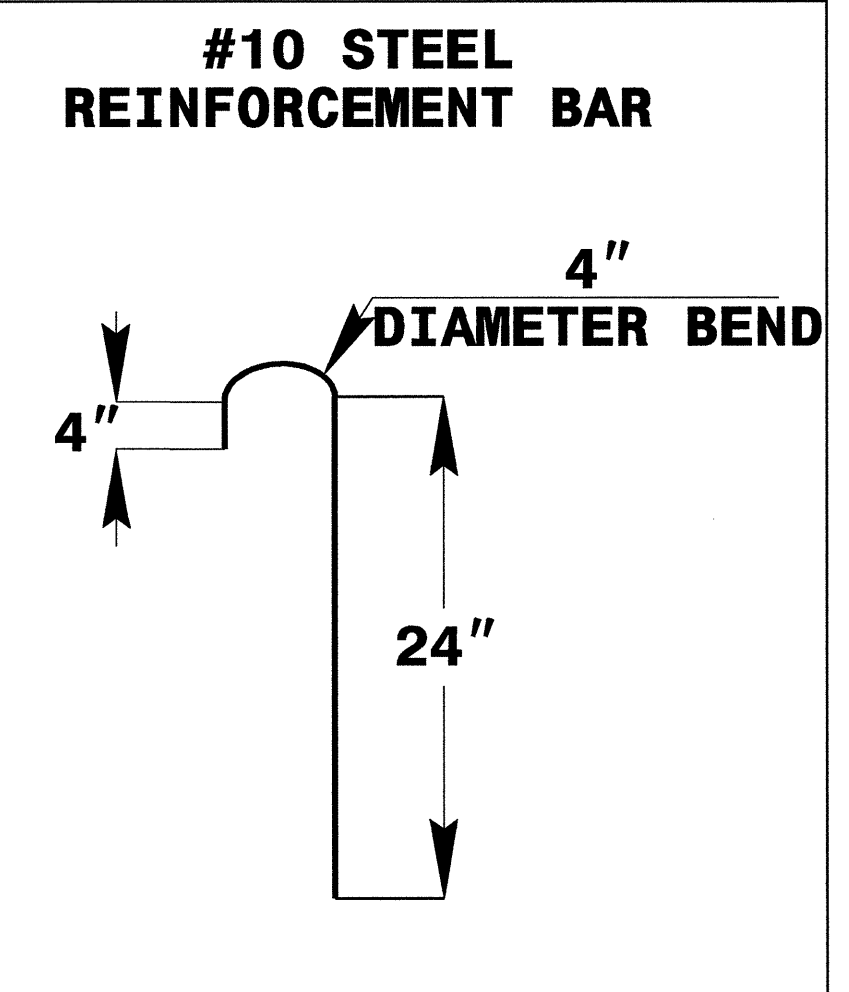
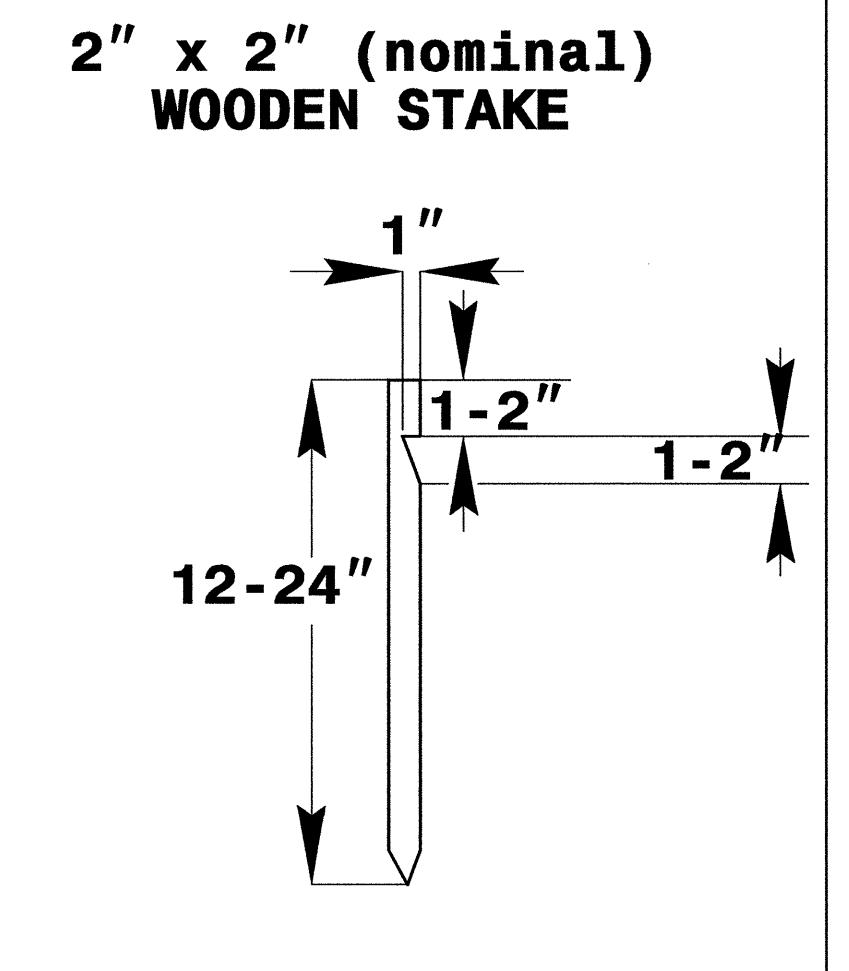
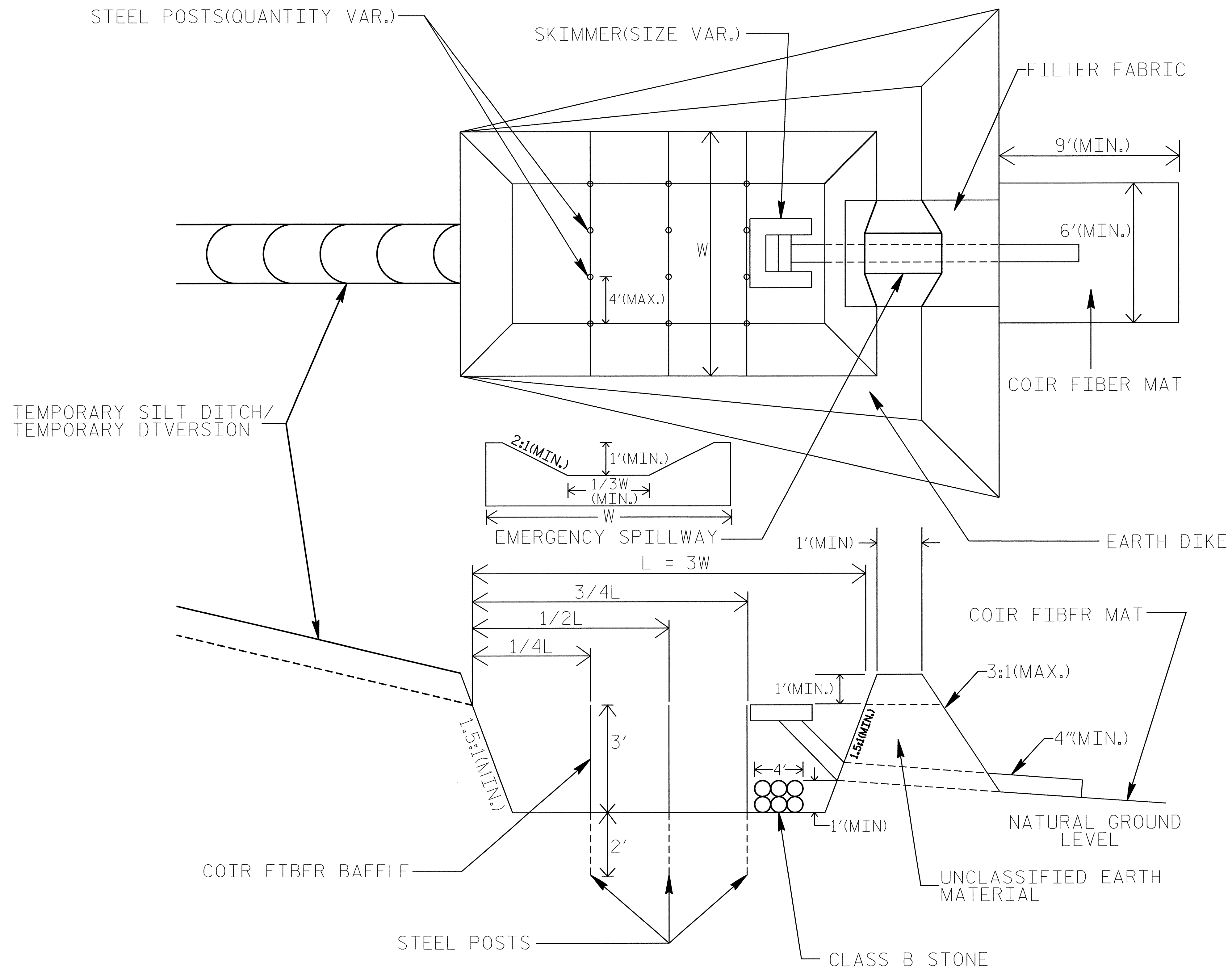


NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF  $\frac{1}{4}$  THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF  $\frac{1}{3}$  THE BASIN LENGTH.

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

# SKIMMER BASIN WITH BAFFLES DETAIL

|                                 |                     |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>B-4184 | SHEET NO.<br>EC-2B  |
| RW SHEET NO.                    |                     |
| ROADWAY DESIGN ENGINEER         | HYDRAULICS ENGINEER |



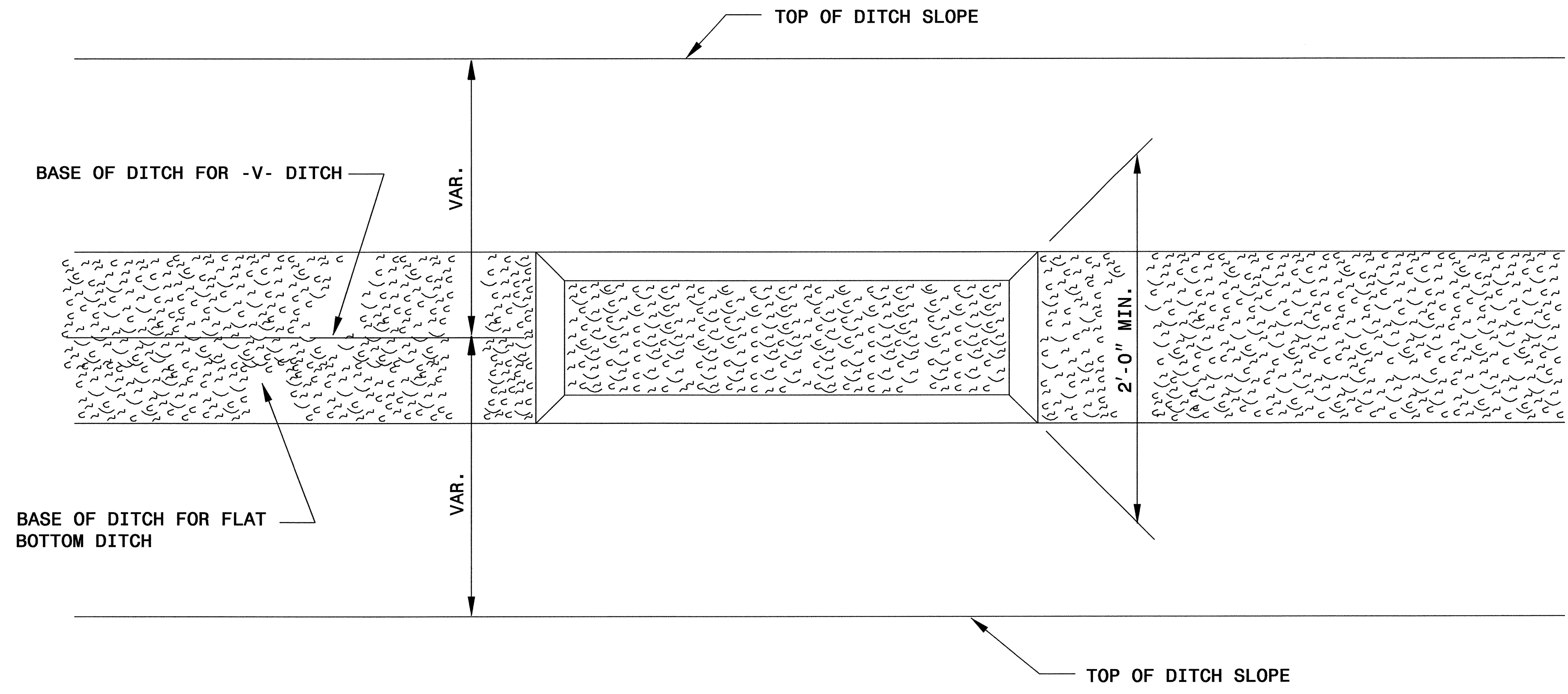
**COIR FIBER MAT ANCHOR OPTIONS**

- NOTES:**
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON SIDESLOPES.
  2. LIMIT EARTH DIKE HEIGHT TO 5 FT.

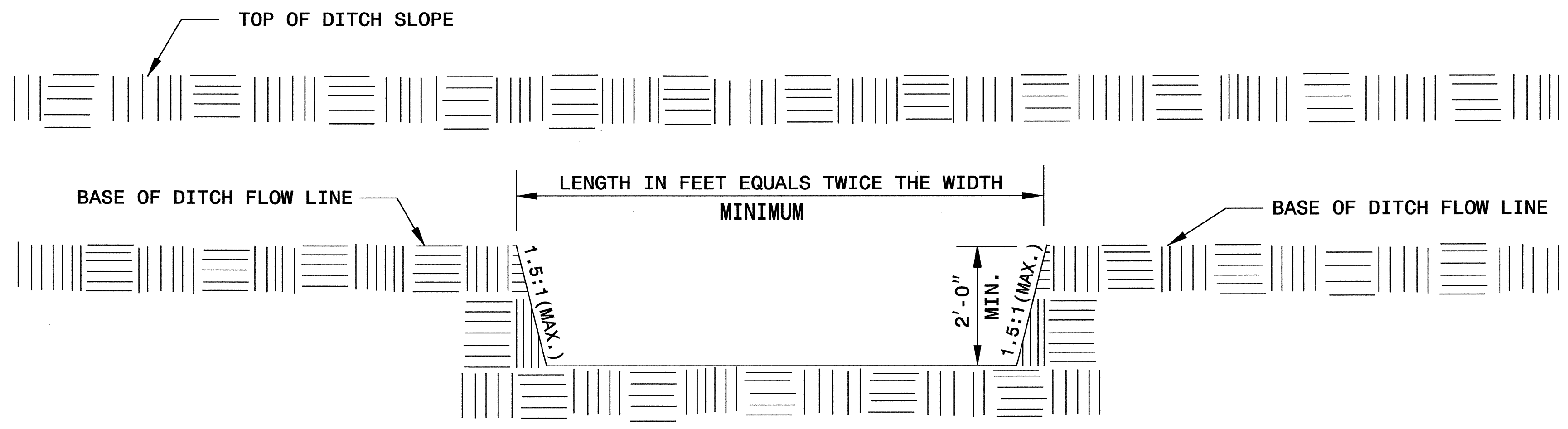


|                         |                     |
|-------------------------|---------------------|
| PROJECT REFERENCE NO.   | SHEET NO.           |
| B-4184                  | EC-2C               |
| RW SHEET NO.            |                     |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

# SILT BASIN 'B' DETAIL



**PLAN**



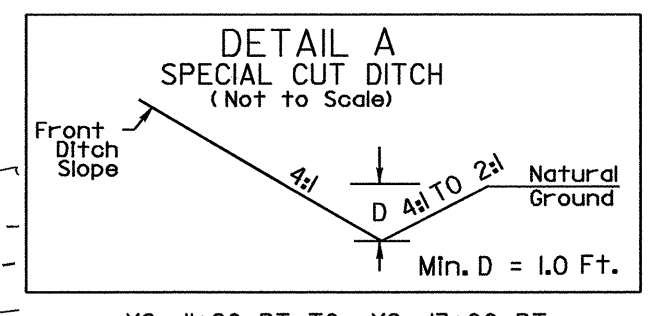
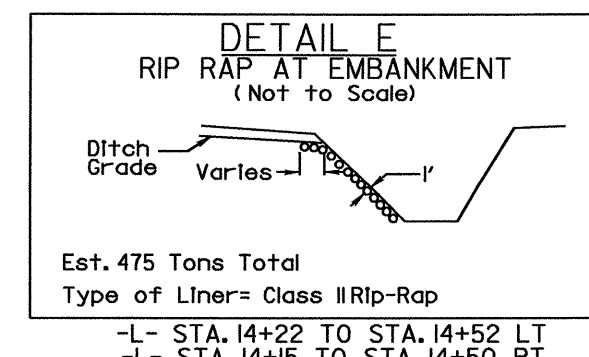
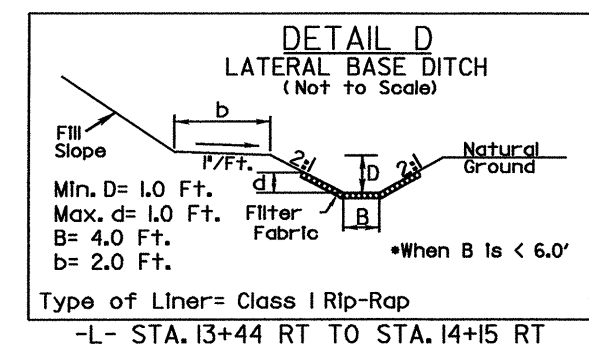
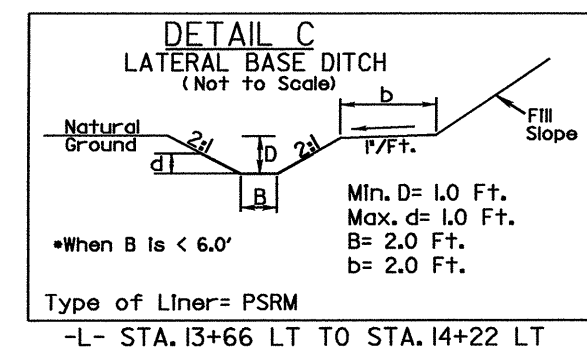
**ELEVATION**







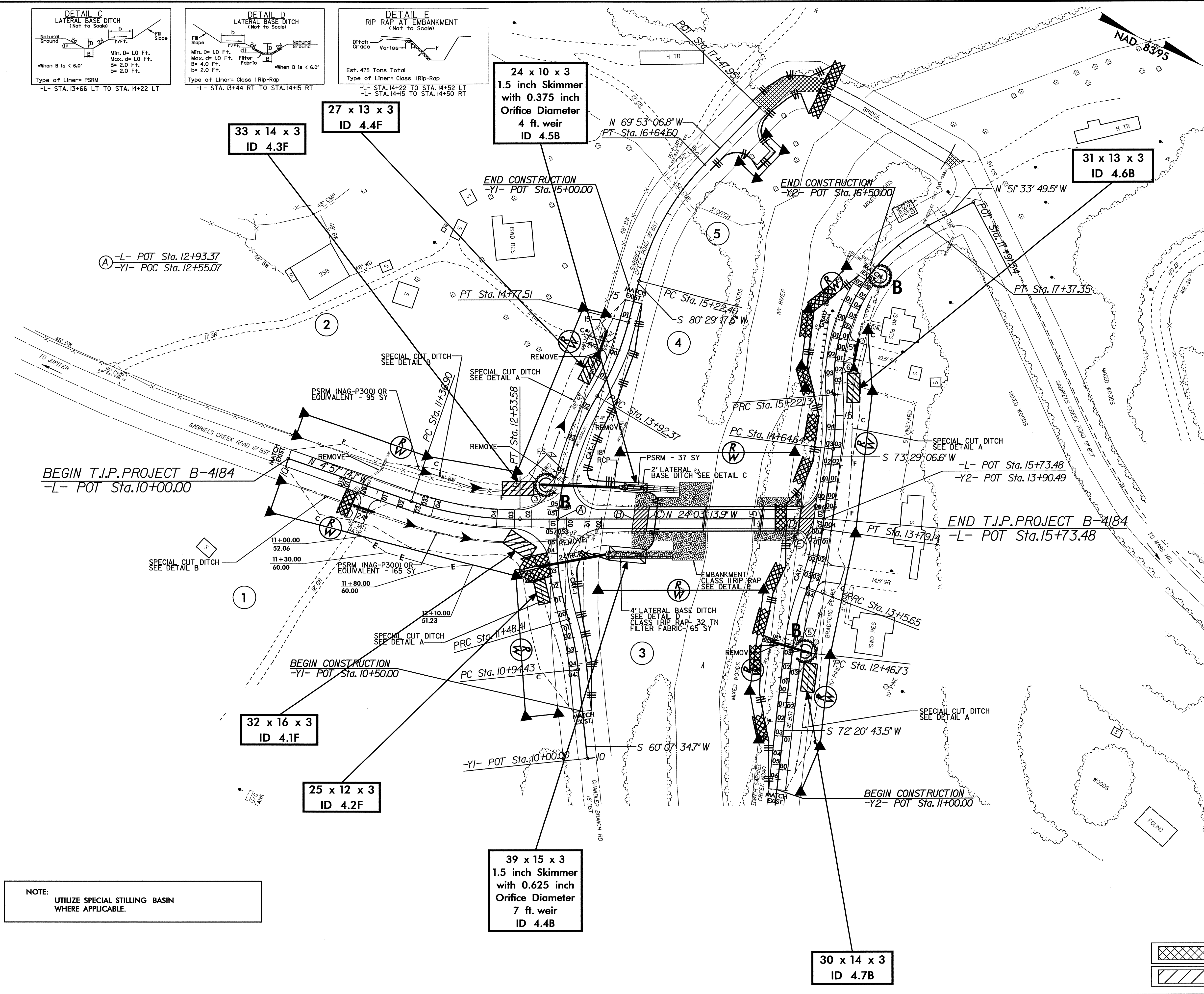
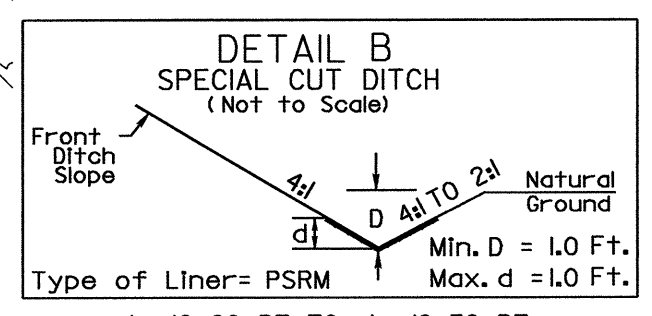




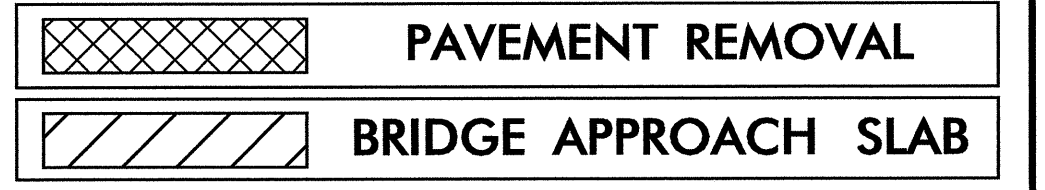
-Y2- 11+20 RT. TO -Y2- 13+00 RT.  
-Y2- 14+50 RT. TO -Y2- 16+30 RT.  
-Y1- 10+55 LT. TO -Y1- 12+05 LT.  
-Y1- 13+25 LT. TO -Y1- 14+90 LT.

**CLASS B RIP RAP**

| STA.              | TONS | S.Y. FILTER FABRIC |
|-------------------|------|--------------------|
| -L- 13+50 50 LT.  | 3    | 10                 |
| -Y2- 12+54 21 LT. | 2    | 7                  |



**NOTE:**  
UTILIZE SPECIAL STILLING BASIN  
WHERE APPLICABLE.



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