

TIP PROJECT: B-4410

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

ANSON COUNTY

**LOCATION: BRIDGE NO. 307 OVER THE WINSTON-SALEM SOUTH
BOUND RAILROAD ON SR 1627 (PINKSTON RIVER ROAD)**

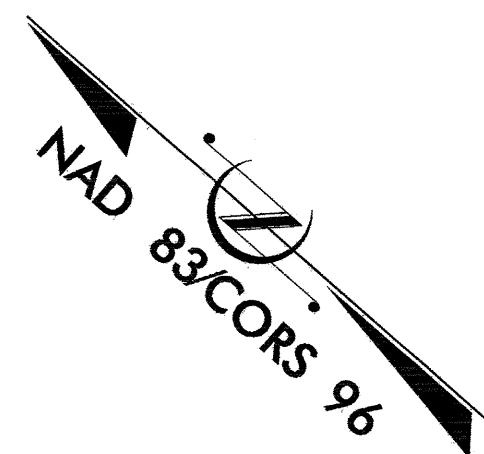
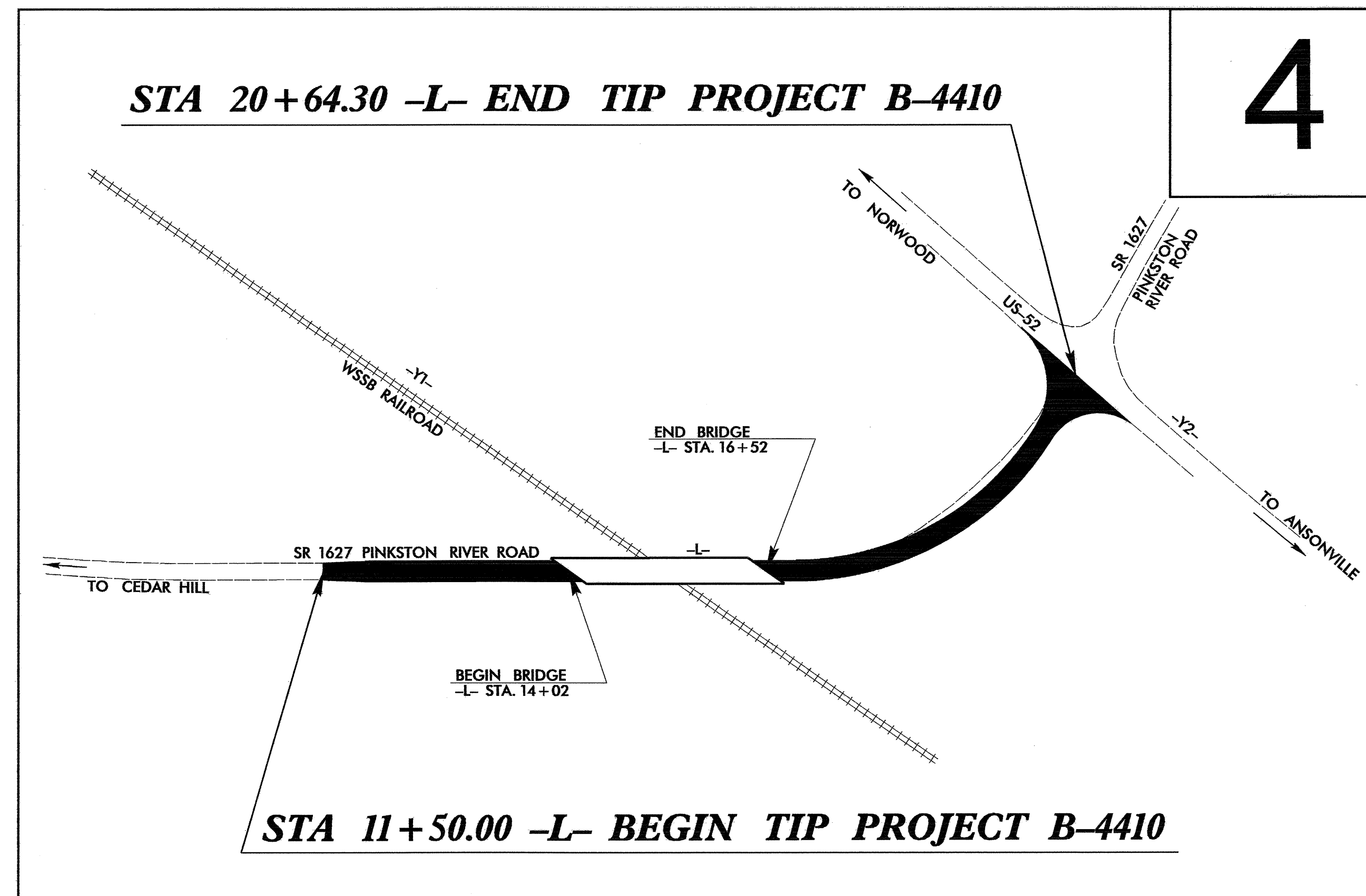
TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C. | B-4410 | EC-1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
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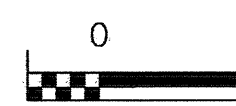
EROSION AND SEDIMENT CONTROL MEASURES

| Std. # | Description | Symbol |
|---------|--------------------------------------|--------|
| 1630.05 | 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 | |
| 1632.05 | Type C | |
| | Skimmer Basin | |
| | Tiered Skimmer Basin | |
| | Infiltration Basin | |

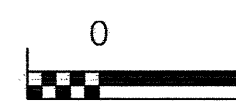
**THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.**



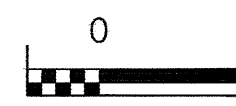
GRAPHIC SCALE



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

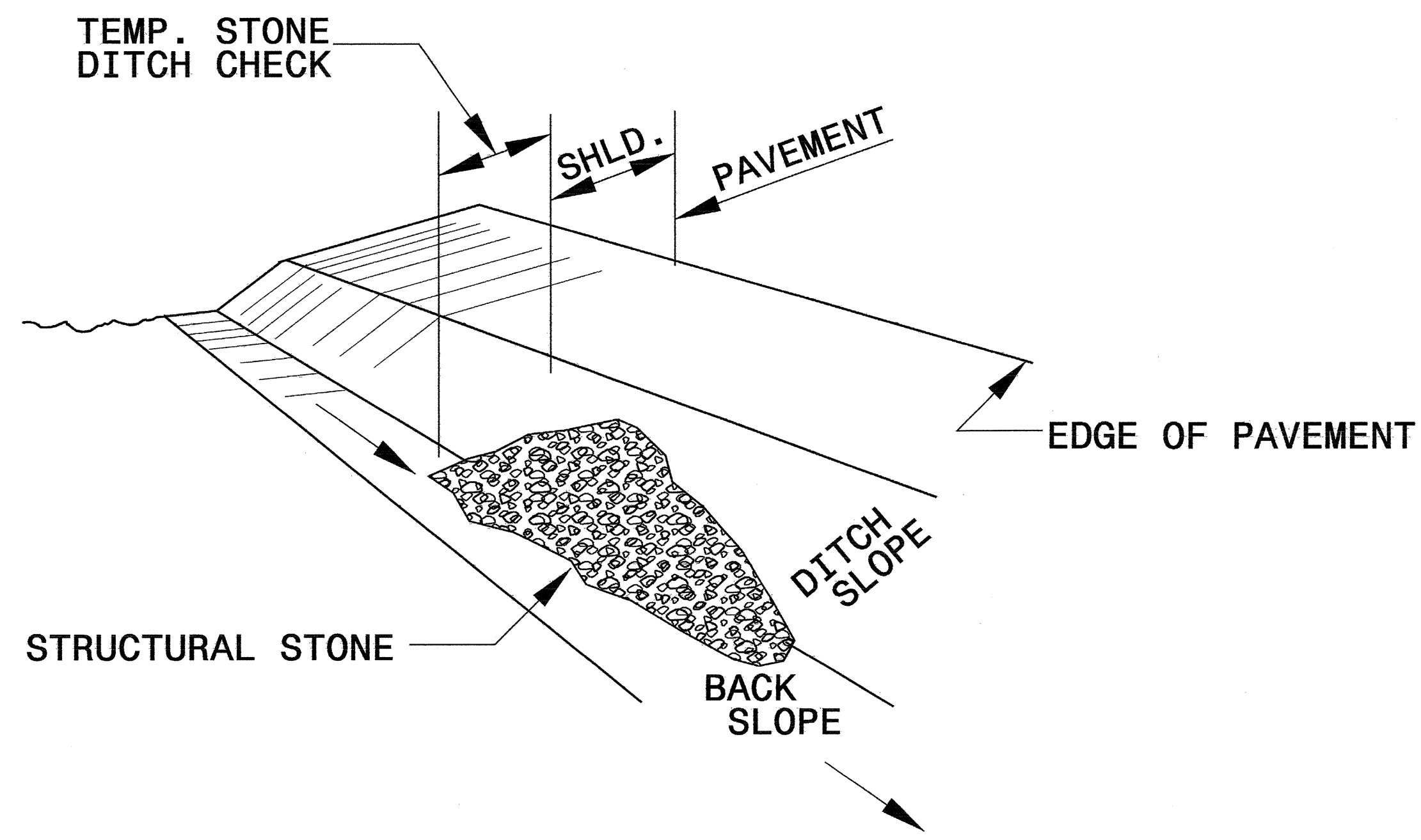
Roadway Standard Drawings

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 | 1632.03 Rock Inlet Sediment Trap Type C |
| 1607.01 Gravel Construction Entrance | 1633.01 Temporary Rock Silt Check Type A |
| | 1634.02 Temporary Rock Sediment Dam Type B |
| | 1635.02 Rock Pipe Inlet Sediment Trap Type B |

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|---------------------------------|---------------------|
| PROJECT REFERENCE NO. B-4410 | SHEET NO. EC-2 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

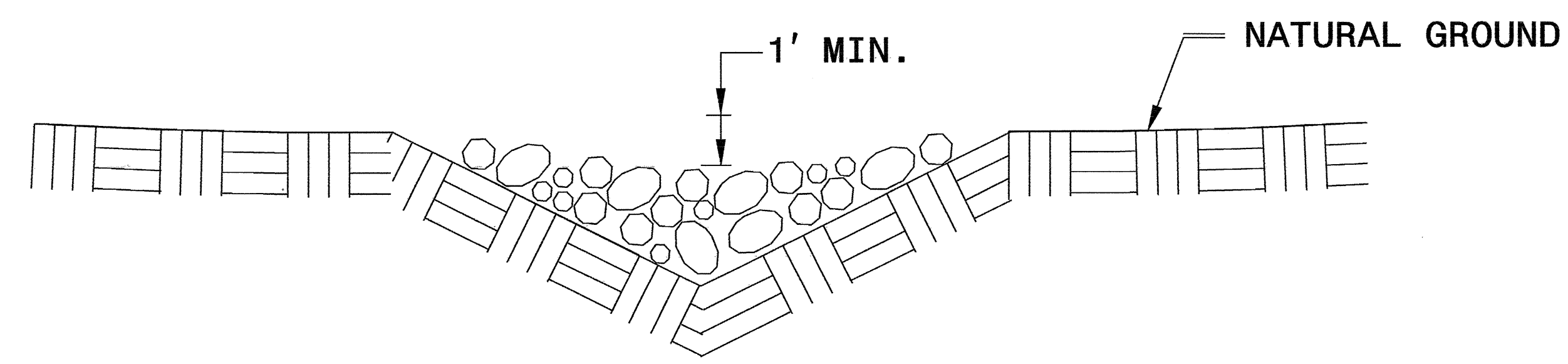


ISOMETRIC VIEW

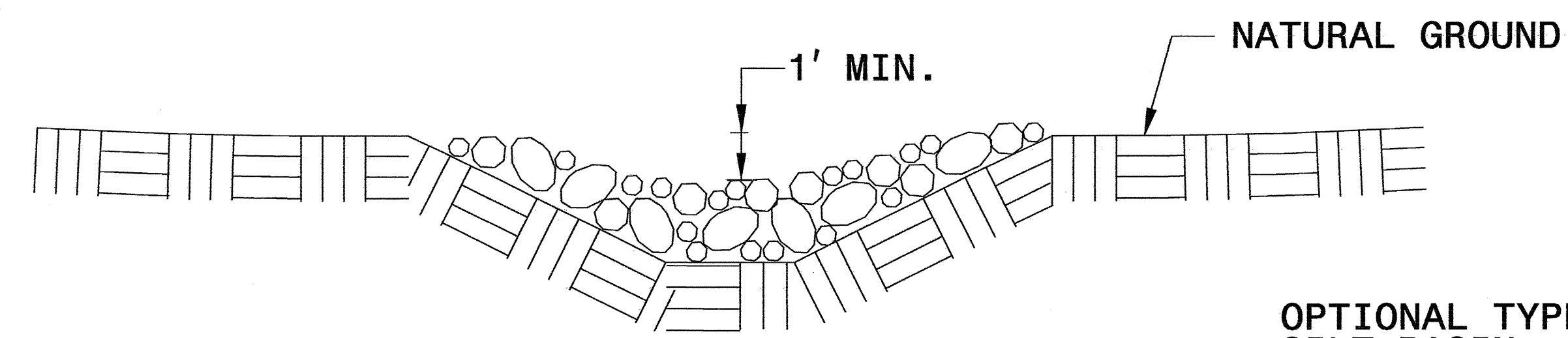
NOTES:

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

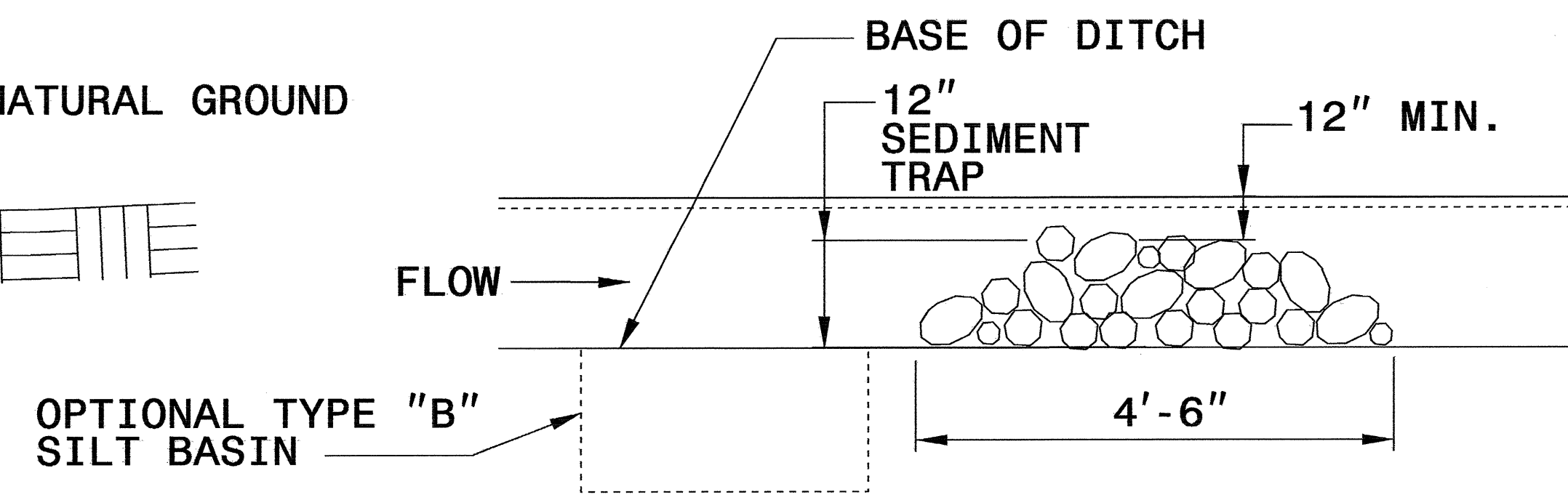
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



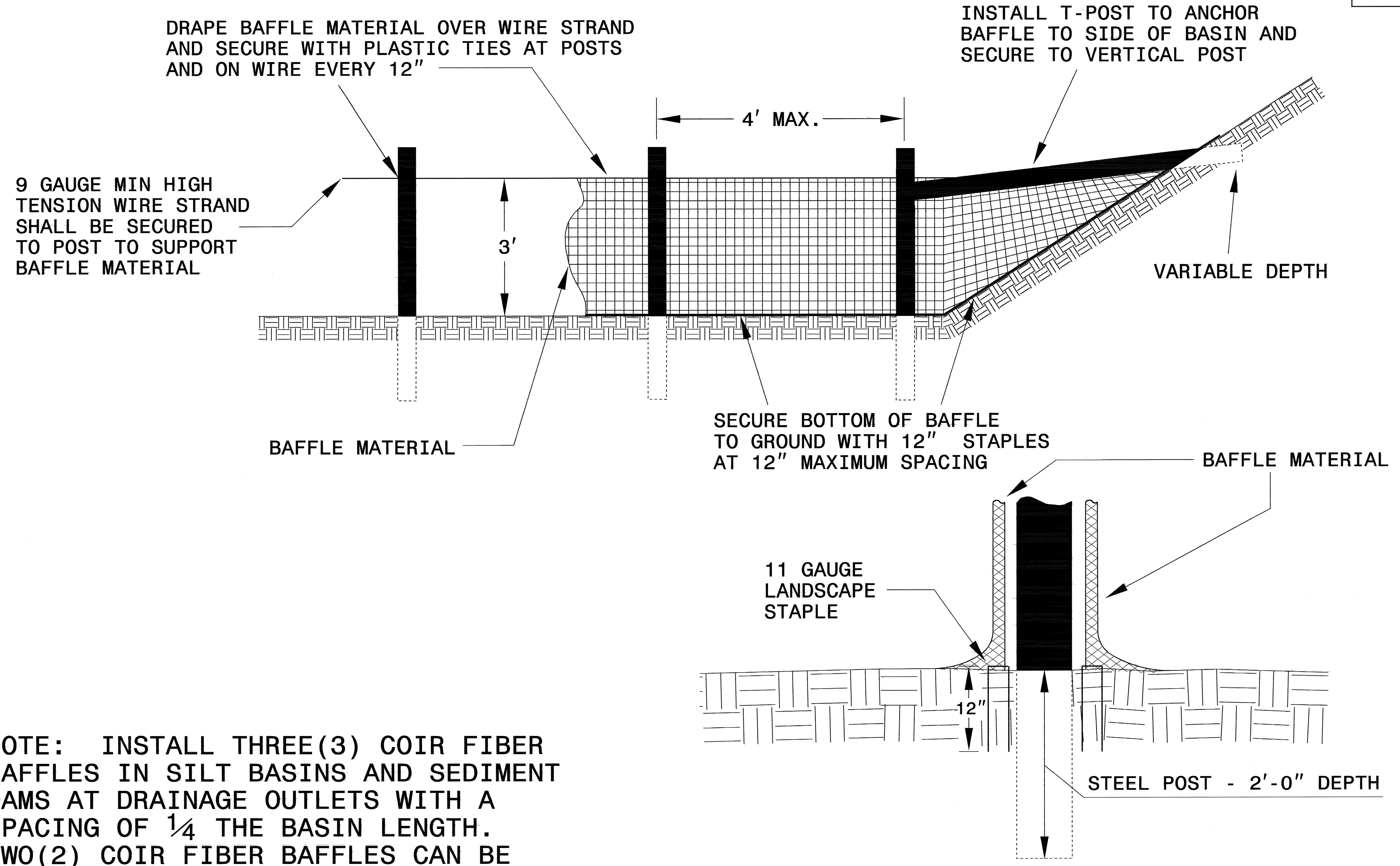
CROSS SECTION TRAPEZOIDAL DITCH



ELEVATION VIEW

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. B-4410 | SHEET NO. EC-2A |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

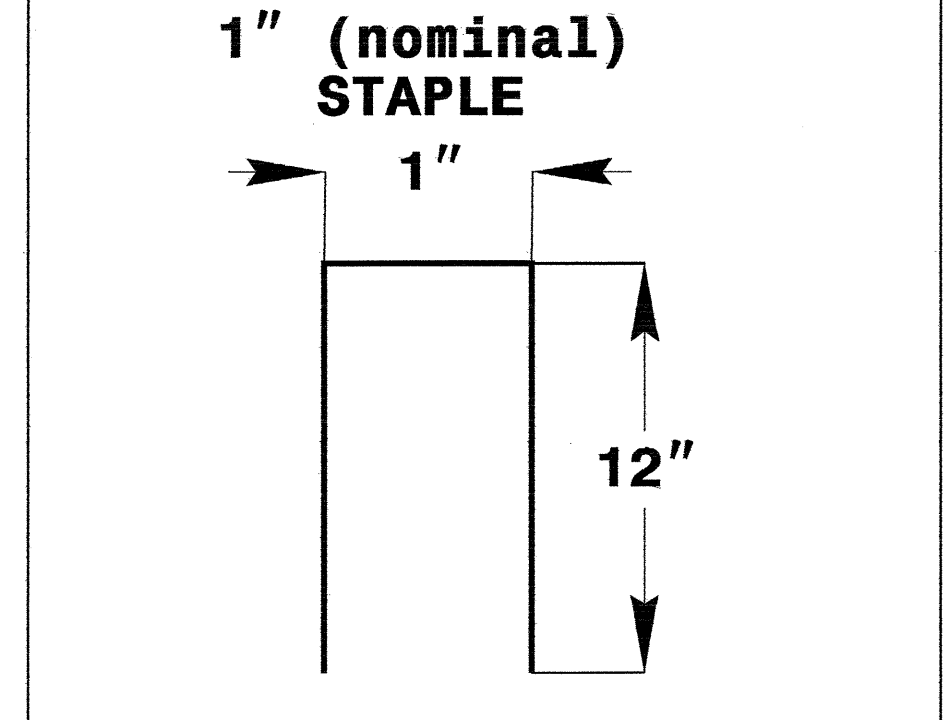
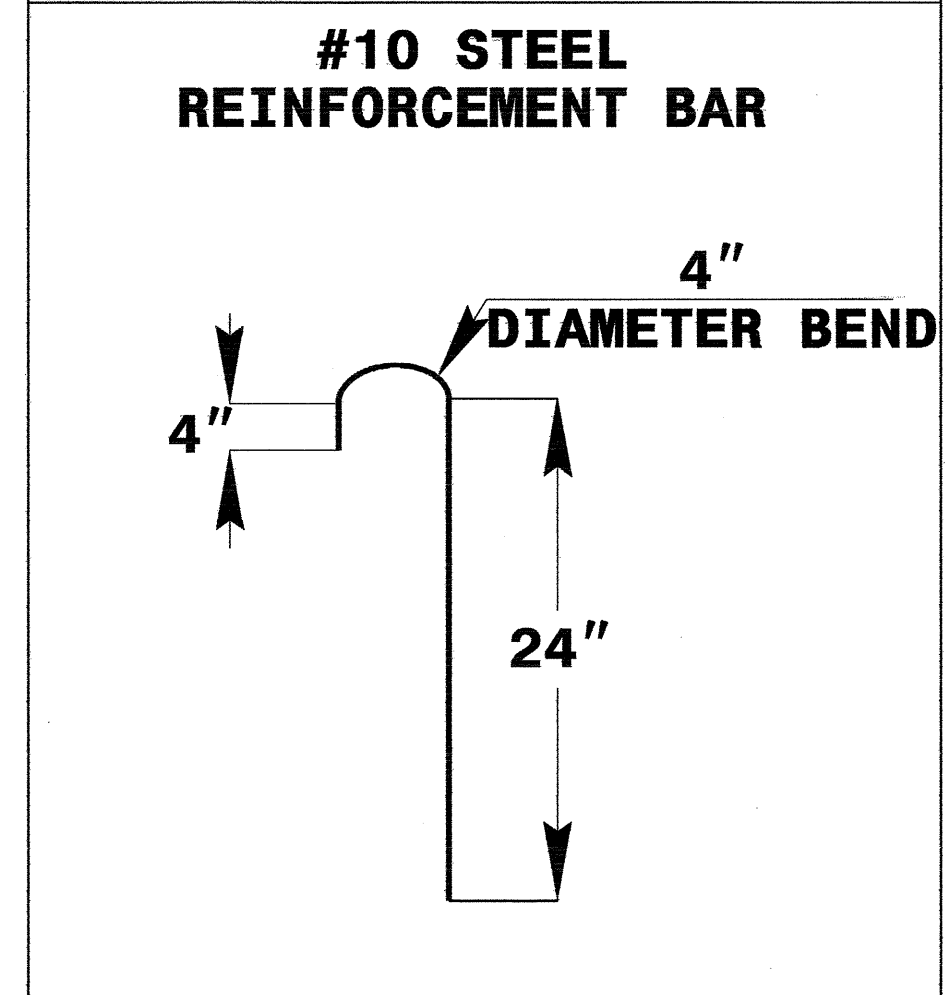
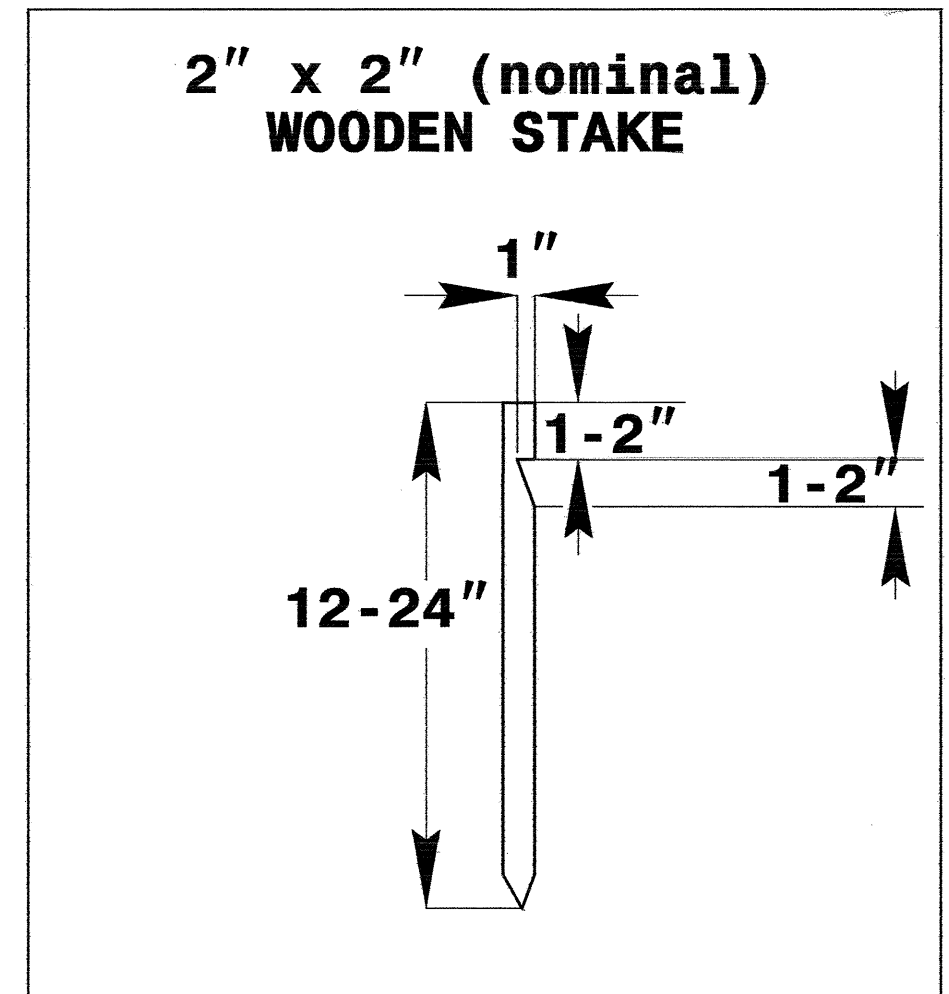
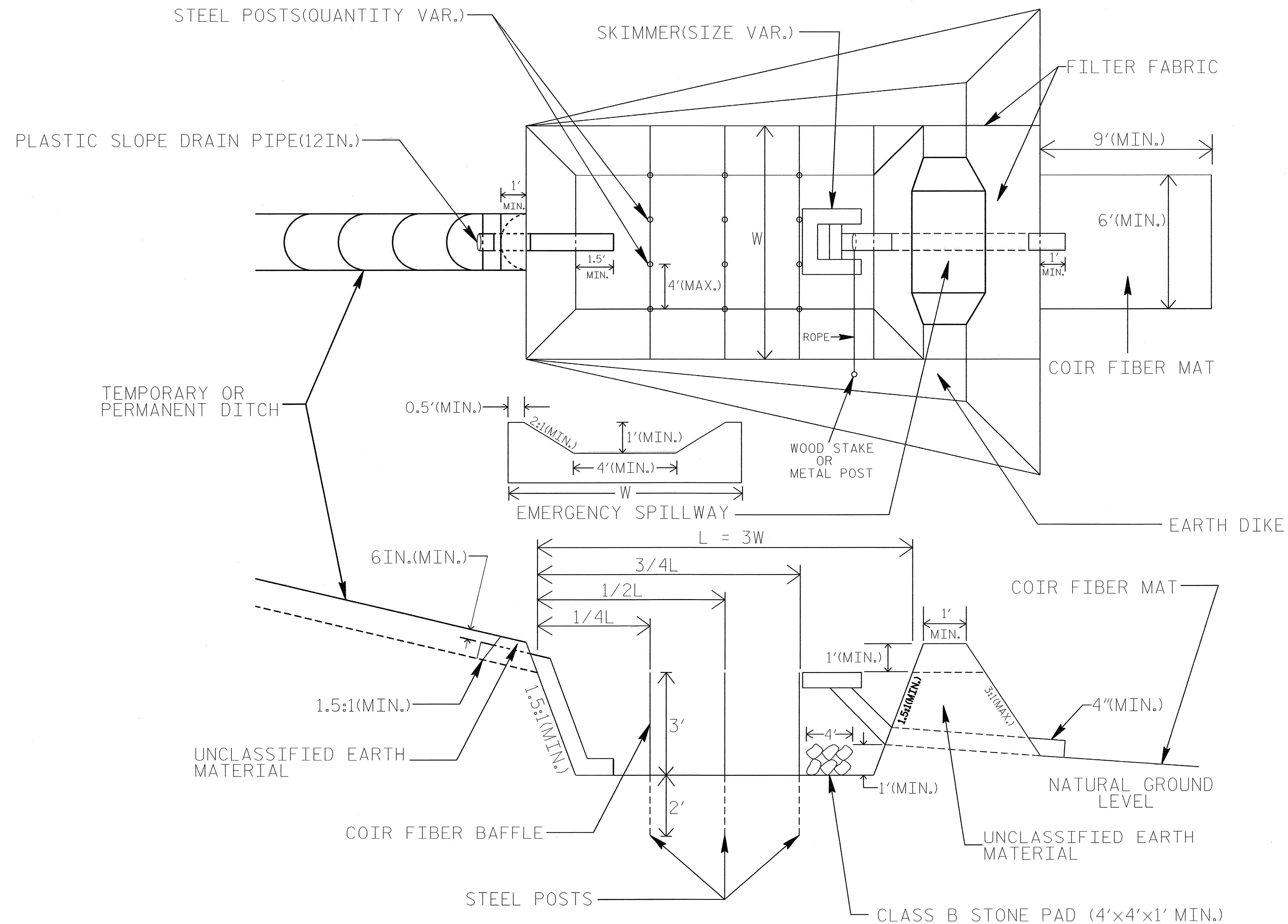
COIR FIBER BAFFLE DETAIL



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.

SKIMMER BASIN WITH BAFFLES DETAIL

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. B-4410 | SHEET NO. EC-2B |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |



COIR FIBER MAT ANCHOR OPTIONS

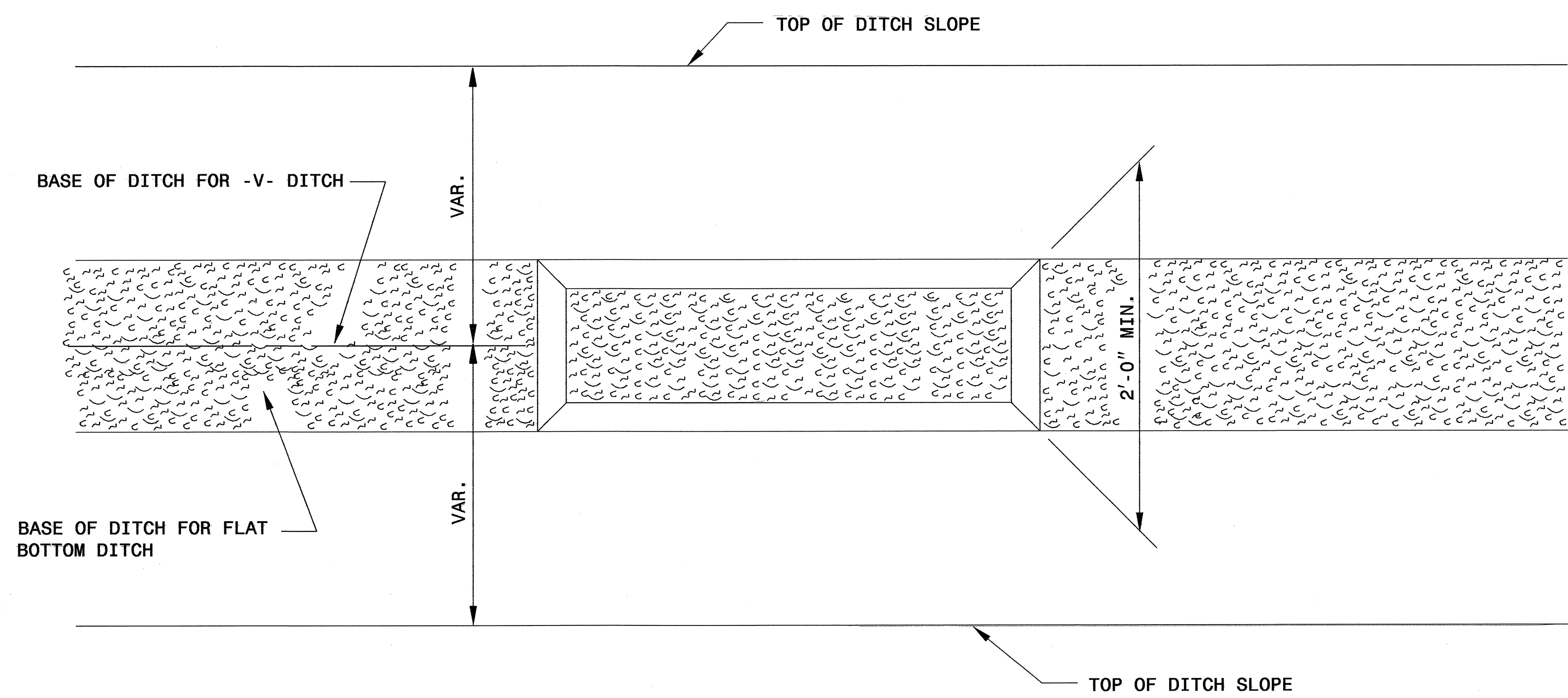
NOTES

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.

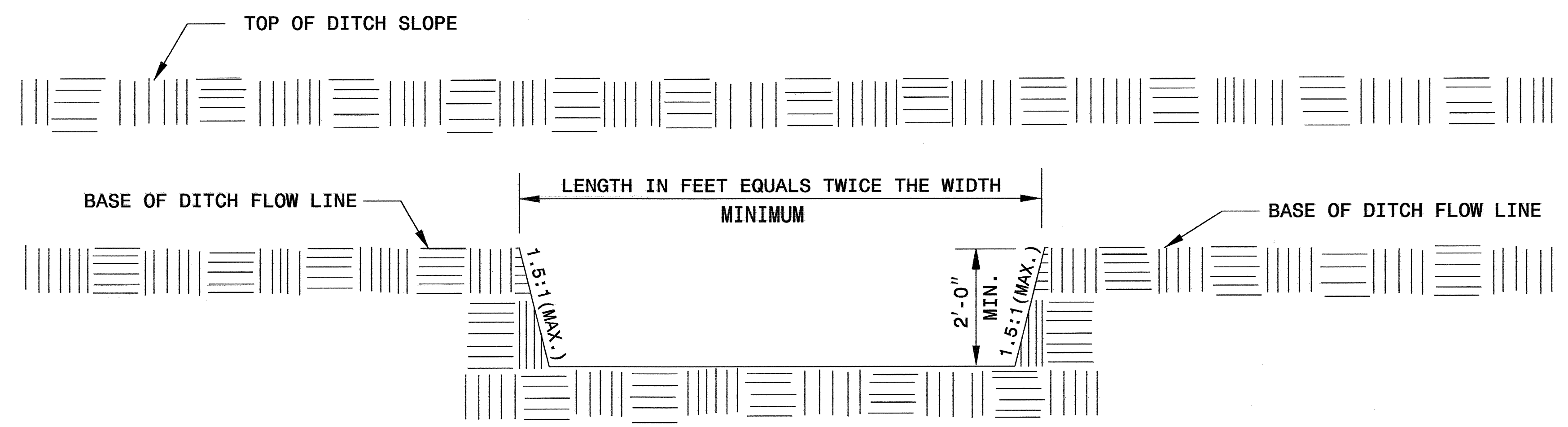
NOT TO SCALE

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. B-4410 | SHEET NO. EC-2C |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

SILT BASIN 'B' DETAIL



PLAN



ELEVATION

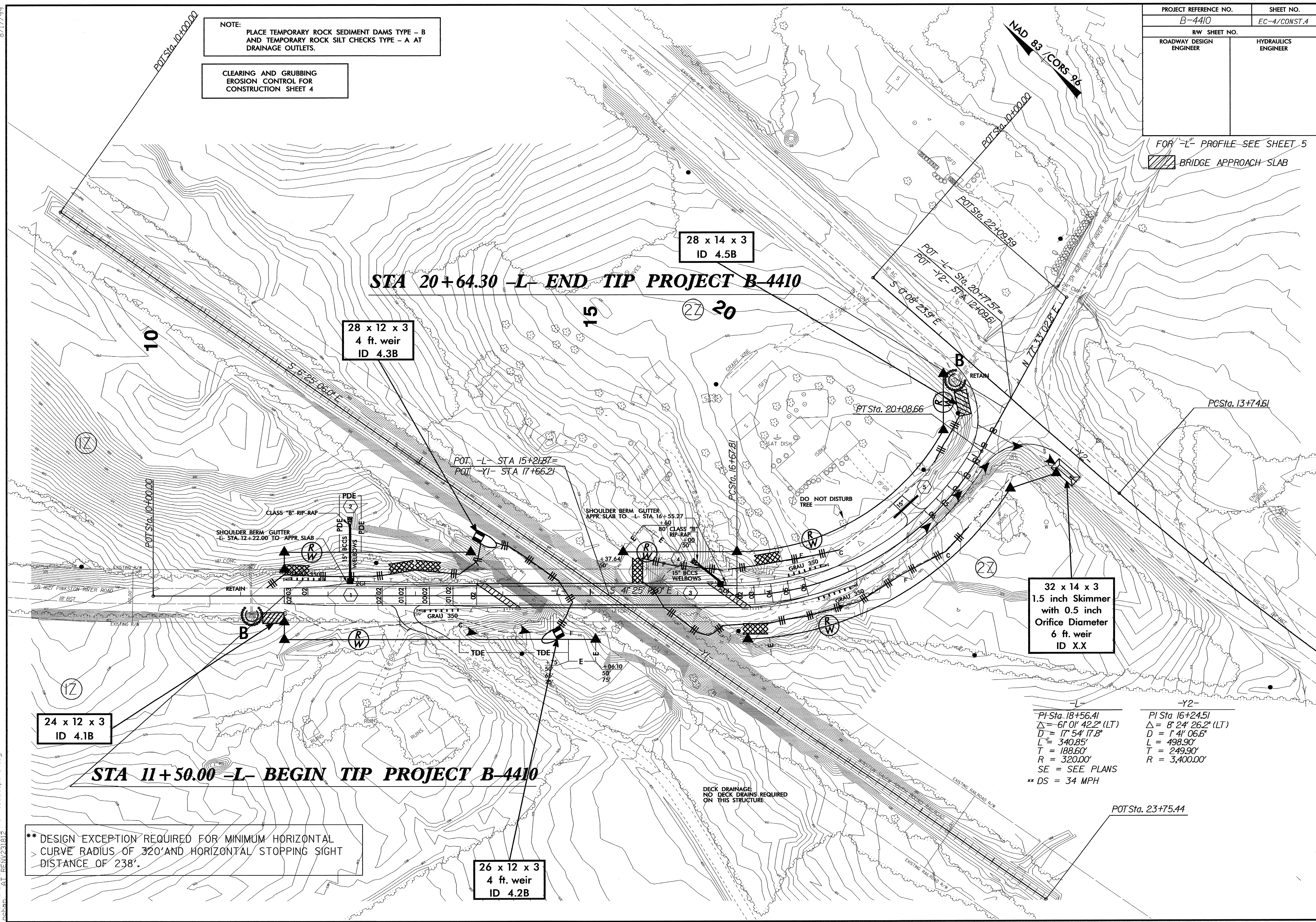
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|---|---------------------------|
| PROJECT REFERENCE NO. B-4410 | SHEET NO. EC-4/CONST.4 |
| RW SHEET NO. ROADWAY DESIGN ENGINEER | |
| HYDRAULICS ENGINEER | |

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 4

FOR "L" PROFILE SEE SHEET 5
 BRIDGE APPROACH SLAB



24 x 12 x 3
ID 4.1B

28 x 12 x 3
4 ft weir
ID 4.3B

28 x 14 x 3
ID 4.5B

26 x 12 x 3
4 ft weir
ID 4.2B

32 x 14 x 3
1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
6 ft weir
ID X.X

STA 11+50.00 -L- BEGIN TIP PROJECT B-4410

STA 20+64.30 -L- END TIP PROJECT B-4410

| | |
|---------------------------------------|--------------------------------------|
| -Y1- | -Y2- |
| PI Sta. 18+56.41 | PI Sta. 16+24.51 |
| $\Delta = 61^{\circ} 01' 42.2''$ (LT) | $\Delta = 8^{\circ} 24' 26.2''$ (LT) |
| D = 17' 54' 17.8" | D = 1' 41' 06.6" |
| L = 340.85' | L = 498.90' |
| T = 188.60' | T = 249.90' |
| R = 320.00' | R = 3,400.00' |
| SE = SEE PLANS | |
| ** DS = 34 MPH | |

** DESIGN EXCEPTION REQUIRED FOR MINIMUM HORIZONTAL CURVE RADIUS OF 320' AND HORIZONTAL STOPPING SIGHT DISTANCE OF 238'.

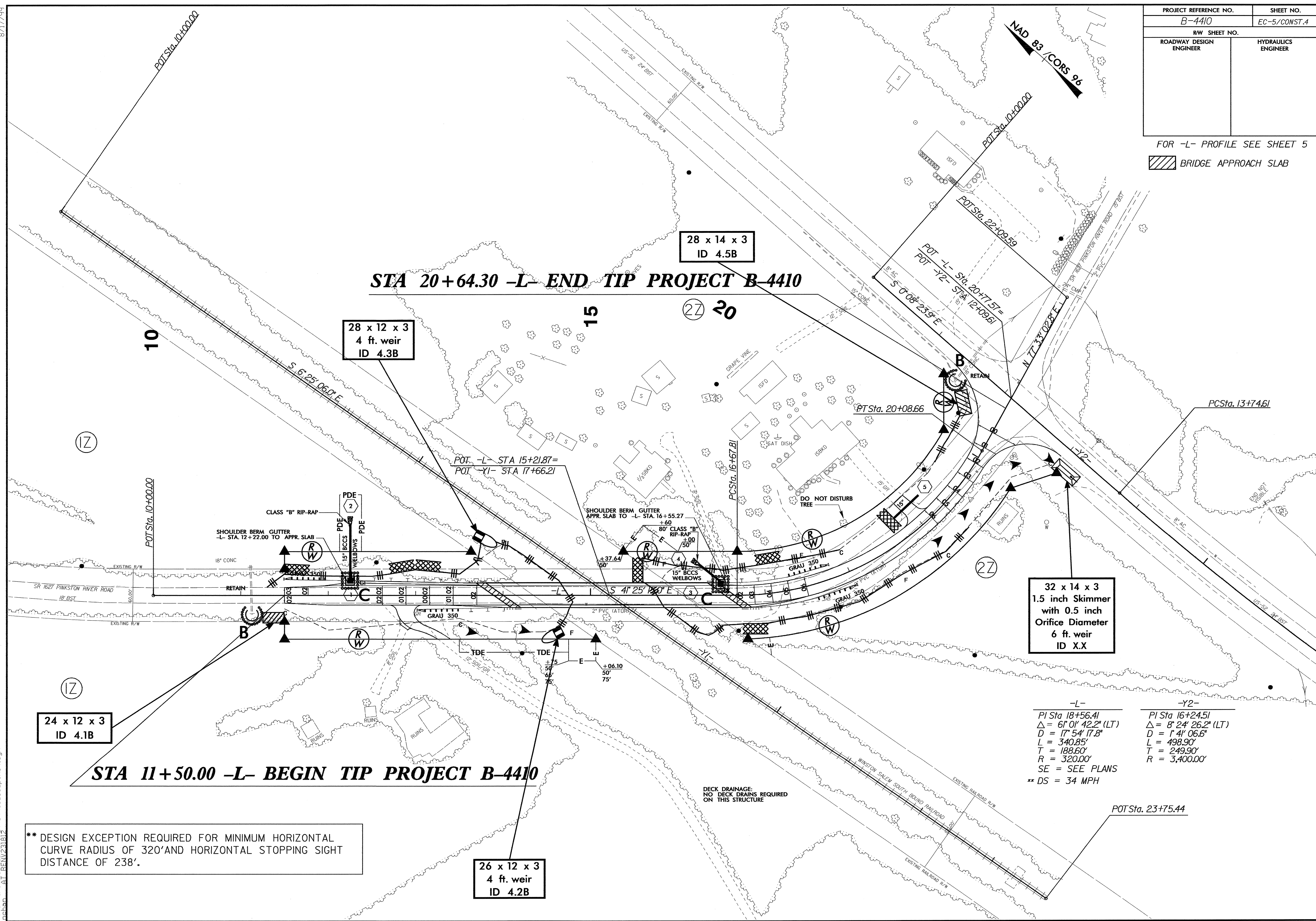
DECK DRAINAGE
NO DECK DRAINS REQUIRED
ON THIS STRUCTURE

8/17/99
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|---------------------------------|---------------------------|
| PROJECT REFERENCE NO. B-4410 | SHEET NO. EC-5/CONST.4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

FOR -L- PROFILE SEE SHEET 5

 BRIDGE APPROACH SLAB



28 x 14 x 3
ID 4.5B

STA 20+64.30 -L- END TIP PROJECT B-4410

28 x 12 x 3
4 ft. weir
ID 4.3B

32 x 14 x 3
1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
6 ft. weir
ID X.X

24 x 12 x 3
ID 4.1B

STA 11+50.00 -L- BEGIN TIP PROJECT B-4410

26 x 12 x 3
4 ft. weir
ID 4.2B

| -L- | -Y2- |
|-------------------------------|------------------------------|
| PI Sta 18+56.41 | PI Sta 16+24.51 |
| $\Delta = 61' 01" 42.2" (LT)$ | $\Delta = 8' 24" 26.2" (LT)$ |
| $D = 17' 54" 17.8"$ | $D = 1' 41" 06.6"$ |
| $L = 340.85'$ | $L = 498.90'$ |
| $T = 188.60'$ | $T = 249.90'$ |
| $R = 320.00'$ | $R = 3,400.00'$ |
| SE = SEE PLANS | |
| ** DS = 34 MPH | |

** DESIGN EXCEPTION REQUIRED FOR MINIMUM HORIZONTAL CURVE RADIUS OF 320' AND HORIZONTAL STOPPING SIGHT DISTANCE OF 238'.

DECK DRAINAGE:
NO DECK DRAINS REQUIRED
ON THIS STRUCTURE