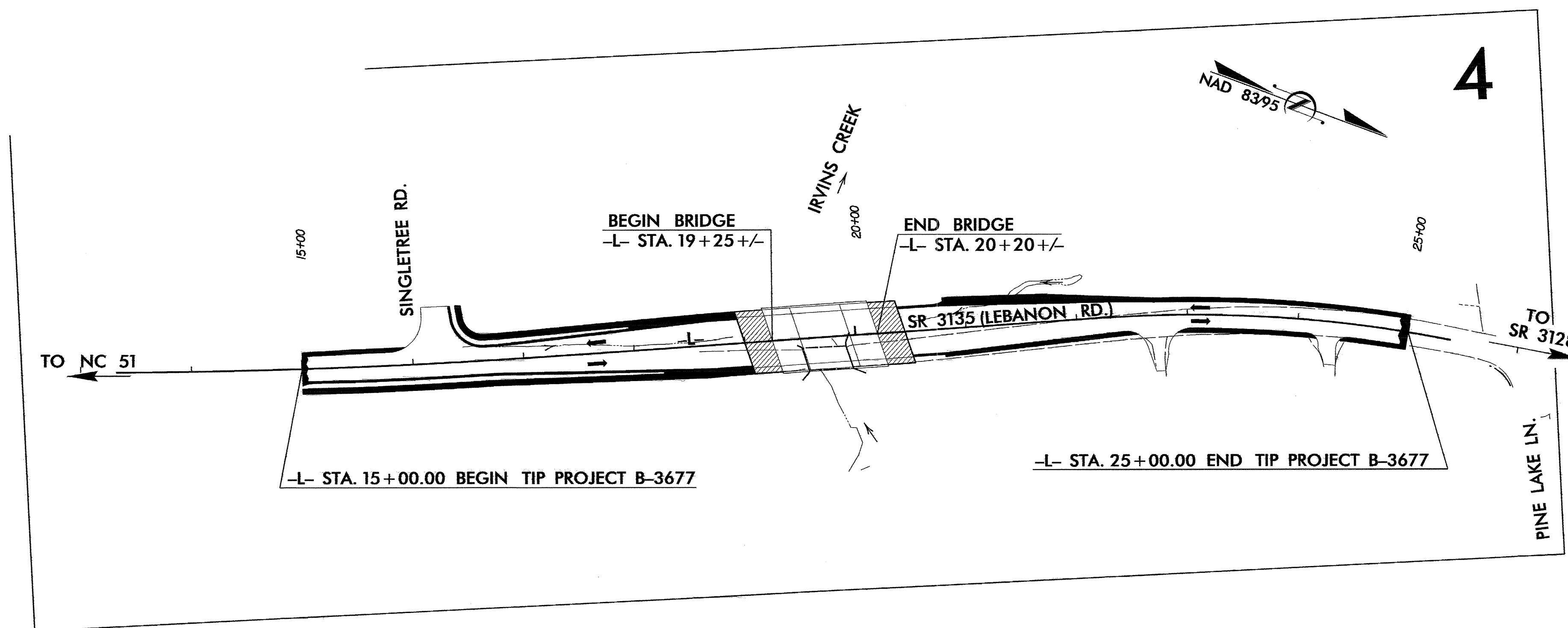


**TIP PROJECT: B-3677**

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

**LOCATION: BRIDGE NO. 36 OVER IRVINS CREEK ON SR 3135  
 (LEBANON ROAD)**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURE  
 REMOVAL & STRUCTURE**



THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF MINT HILL.  
 CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

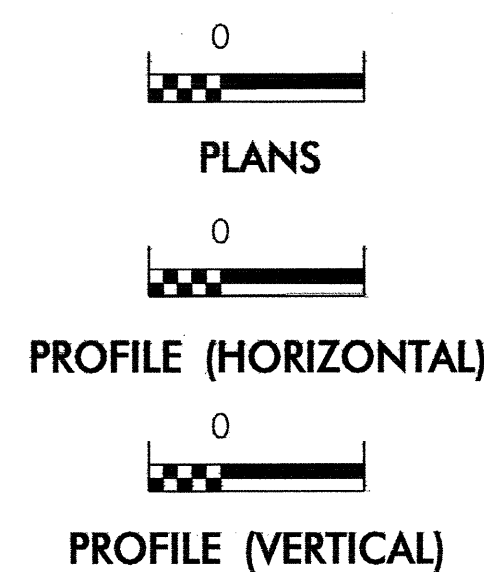
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3677	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

**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.**

**GRAPHIC SCALE**



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**

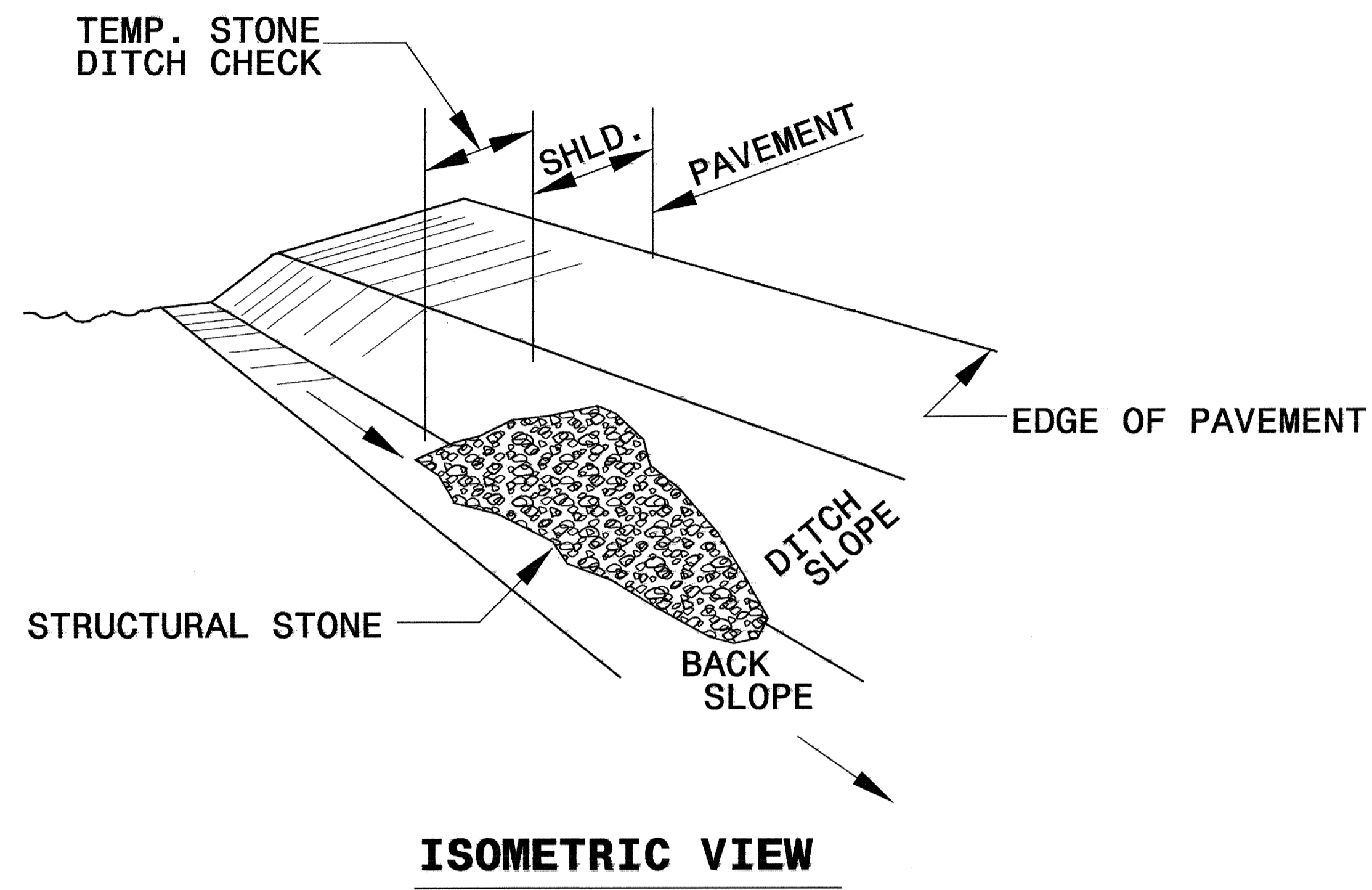
**Roadway Standard Drawings**

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
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
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.05 Temporary Diversion	

PROJECT REFERENCE NO. B-3677	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

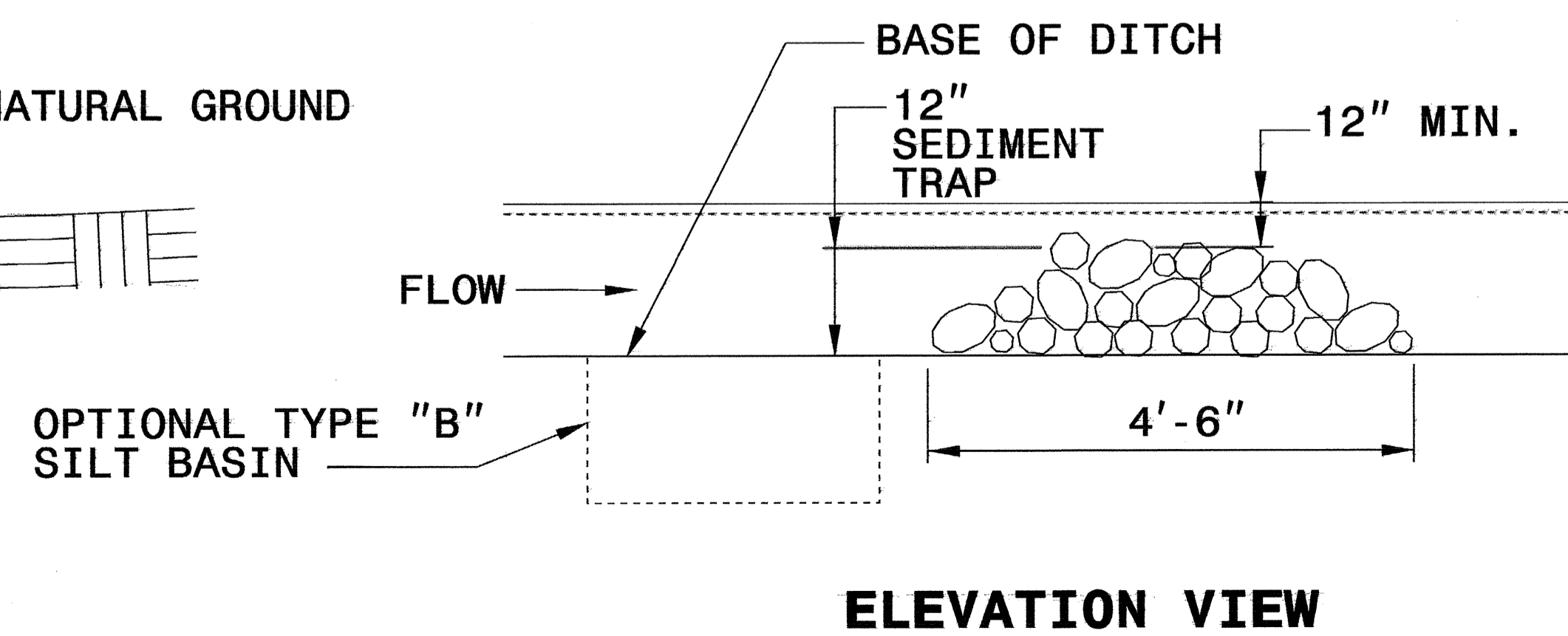
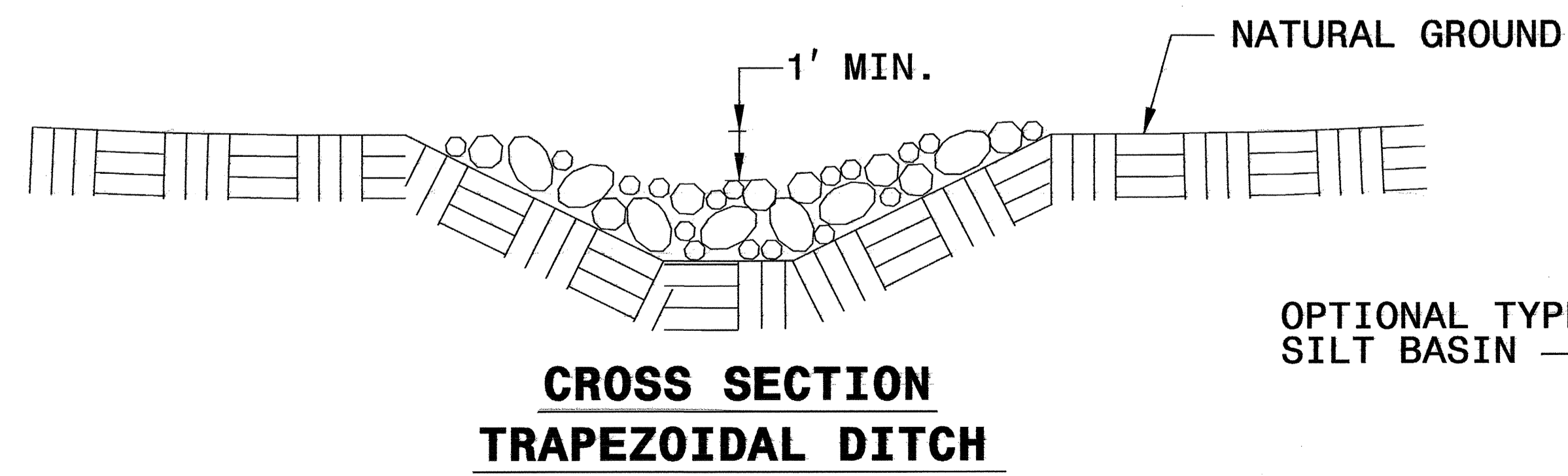
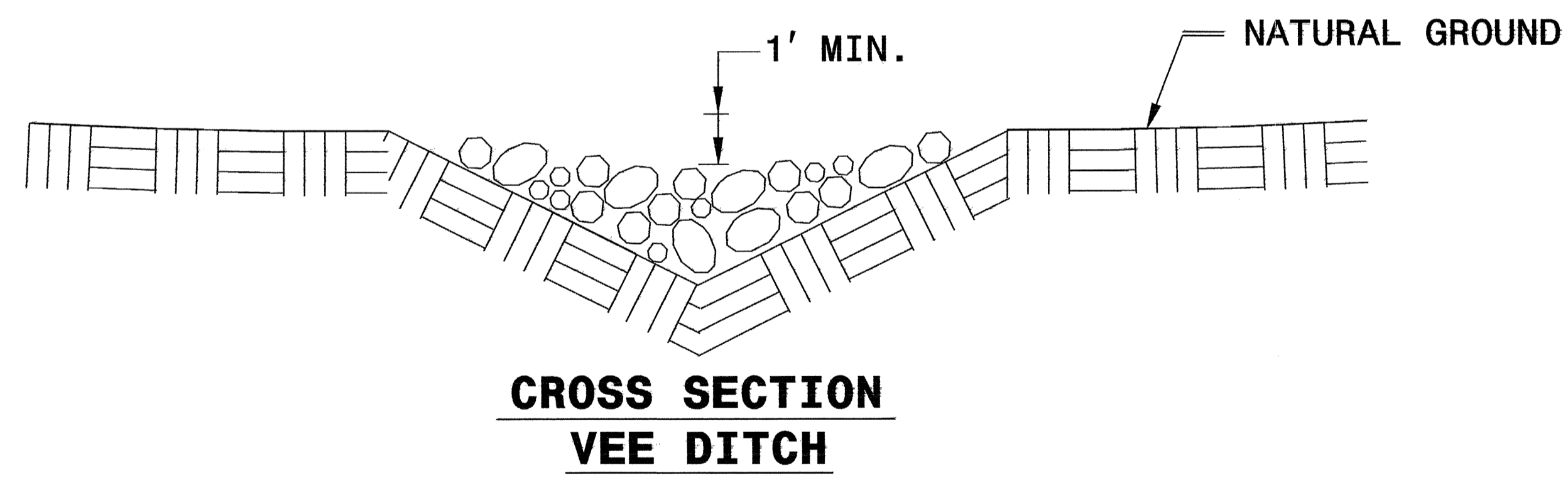
# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL



**NOTES:**

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

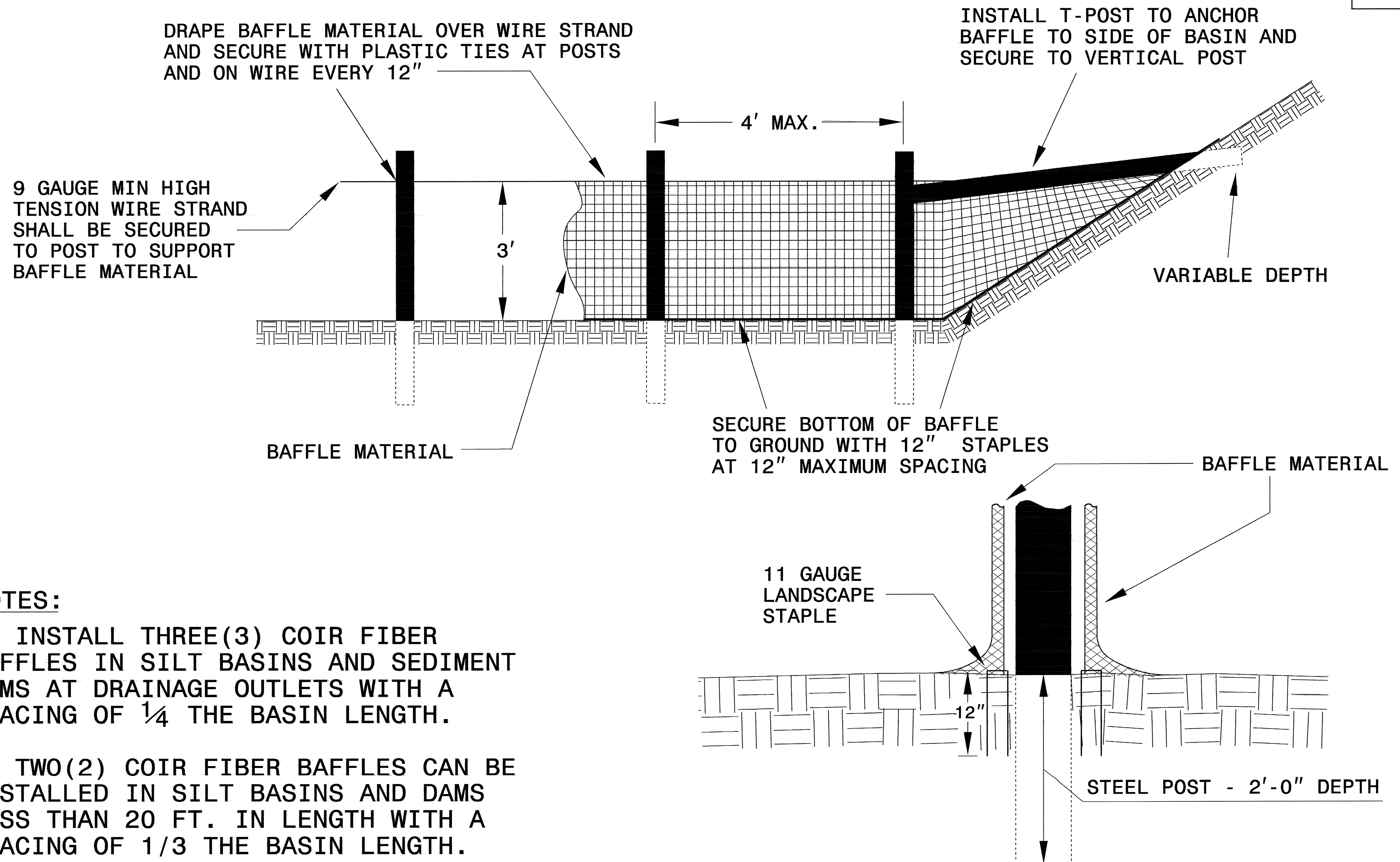
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



OPTIONAL TYPE "B" SILT BASIN

PROJECT REFERENCE NO. B-3677	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# COIR FIBER BAFFLE DETAIL

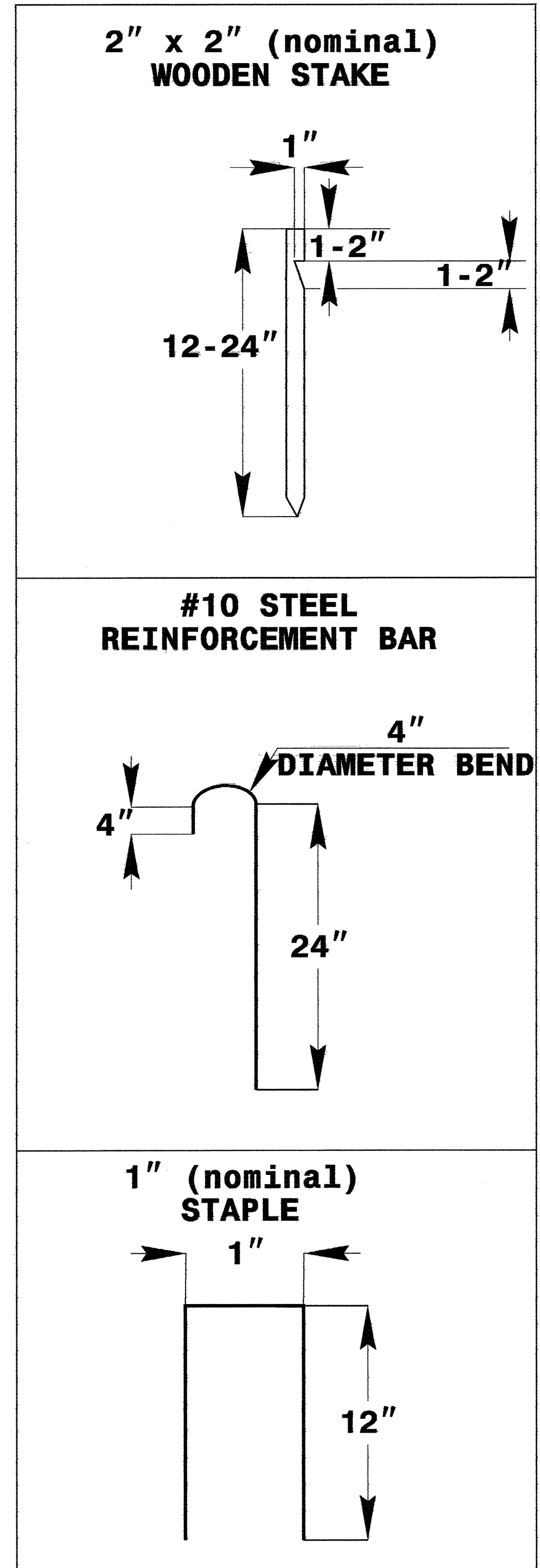
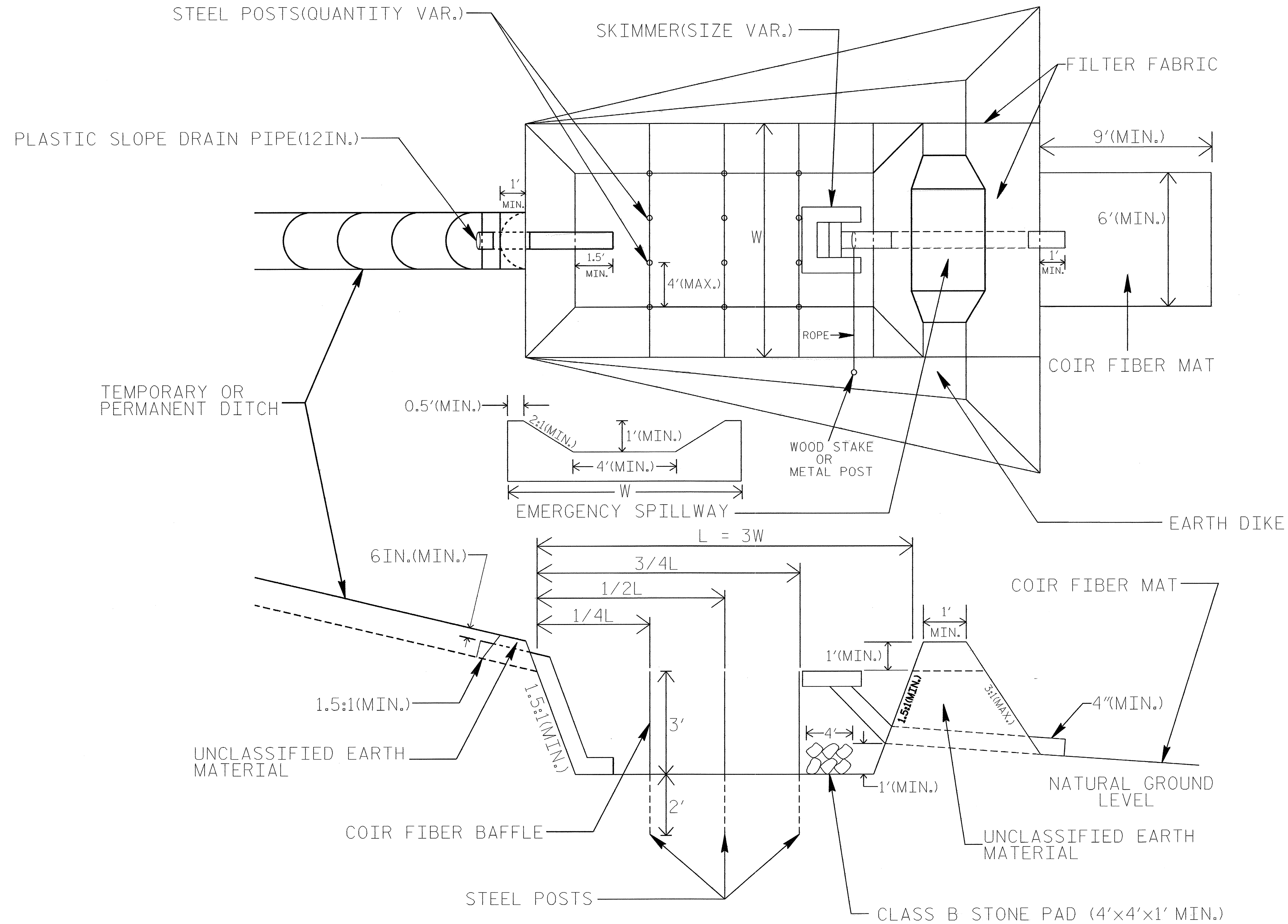


## NOTES:

1. 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.
2. 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.
3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.

# SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. B-3677	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



## COIR FIBER MAT ANCHOR OPTIONS

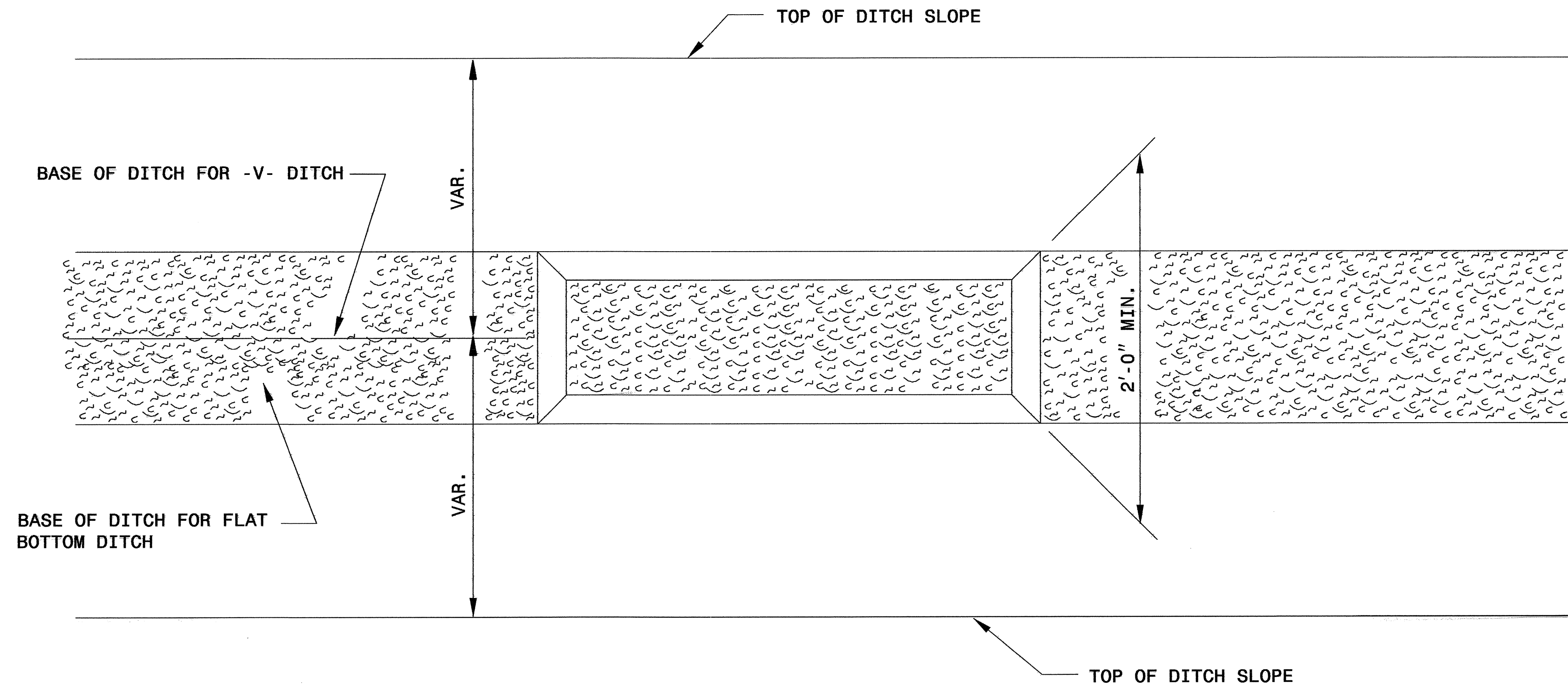
### NOTES

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.

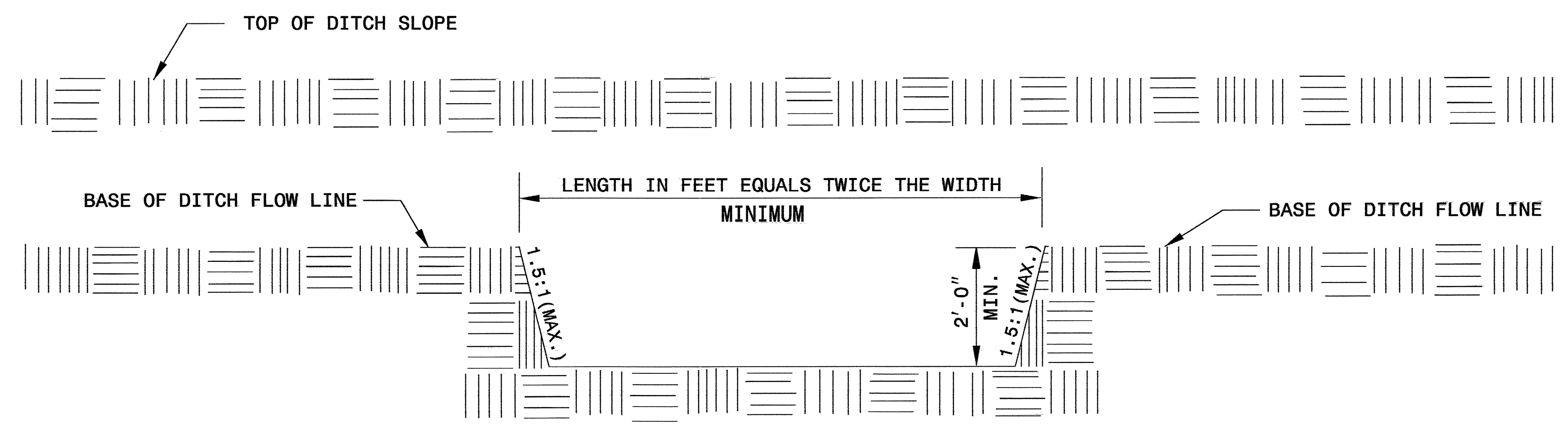
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
B-3677	EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# SILT BASIN 'B' DETAIL



PLAN



ELEVATION

PROJECT REFERENCE NO. B-3677	SHEET NO. EC-2D
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# WATTLE WITH POLYACRYLAMIDE DETAIL

**NOTES:**

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

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

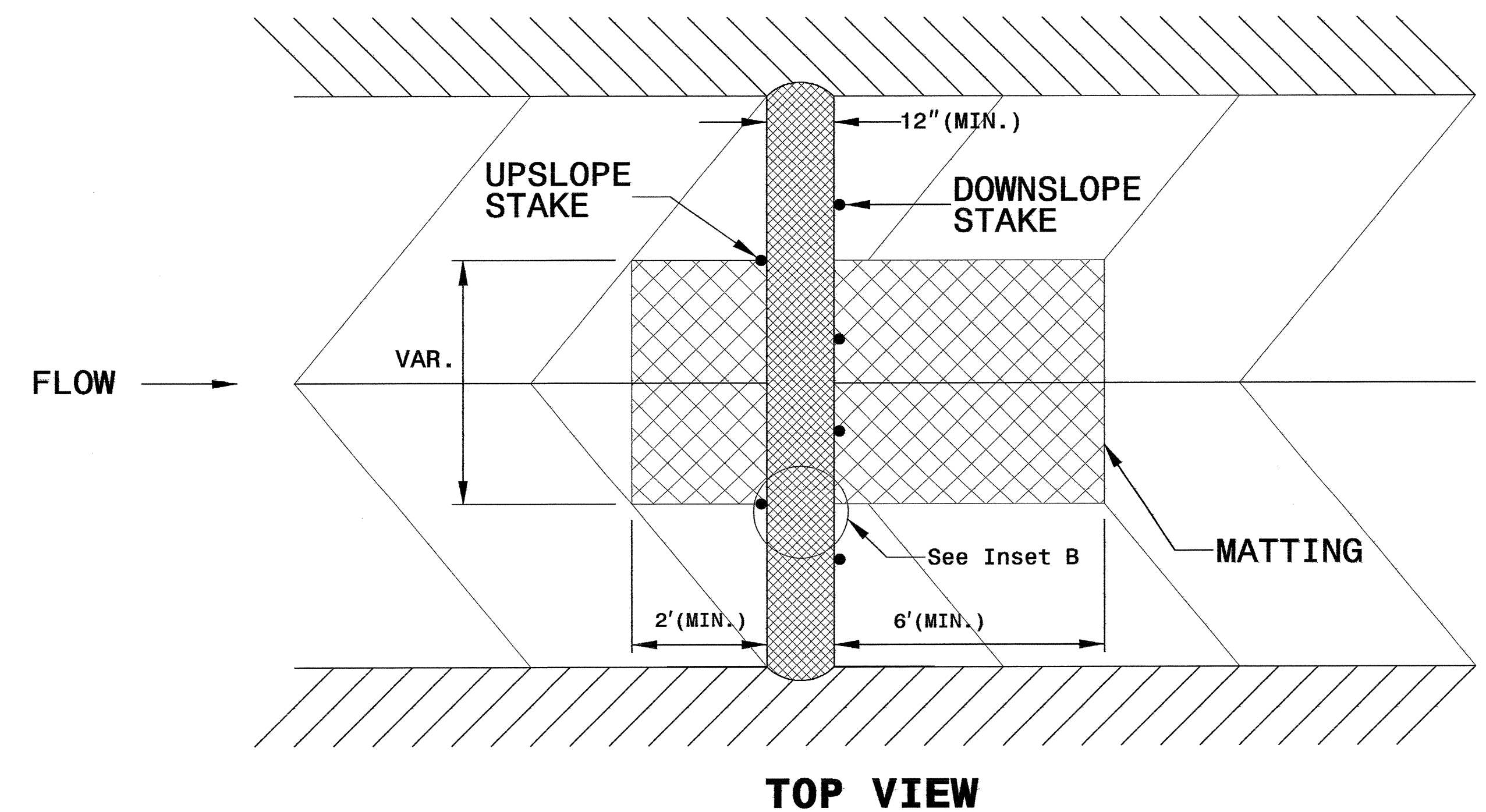
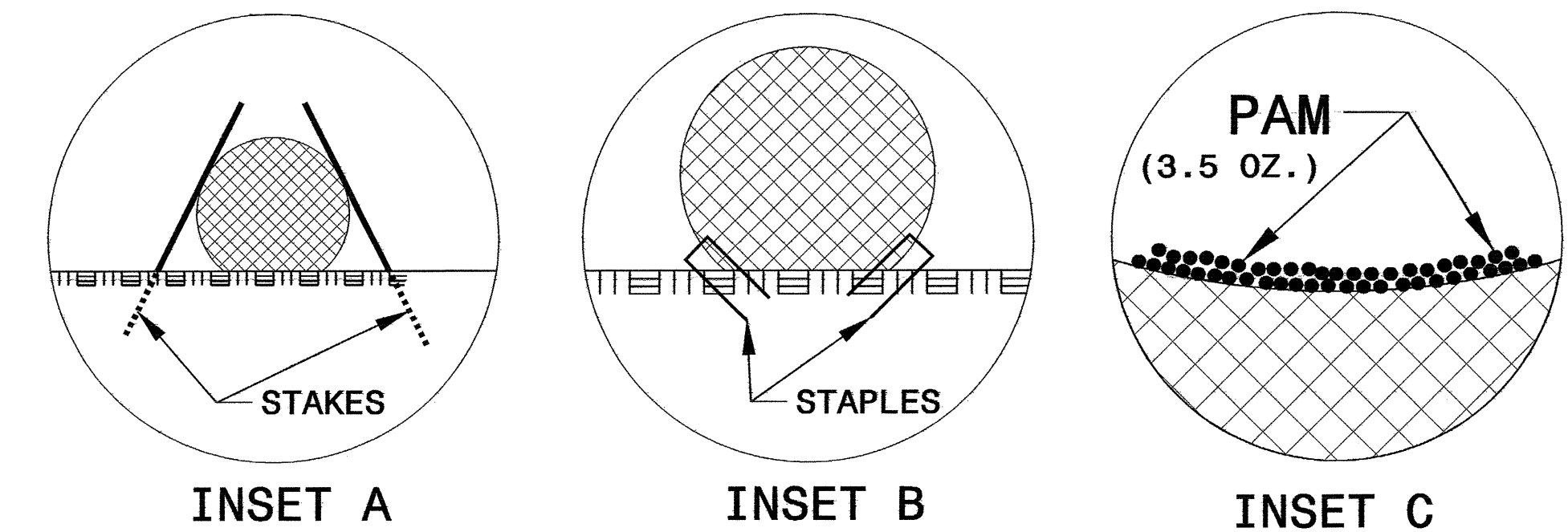
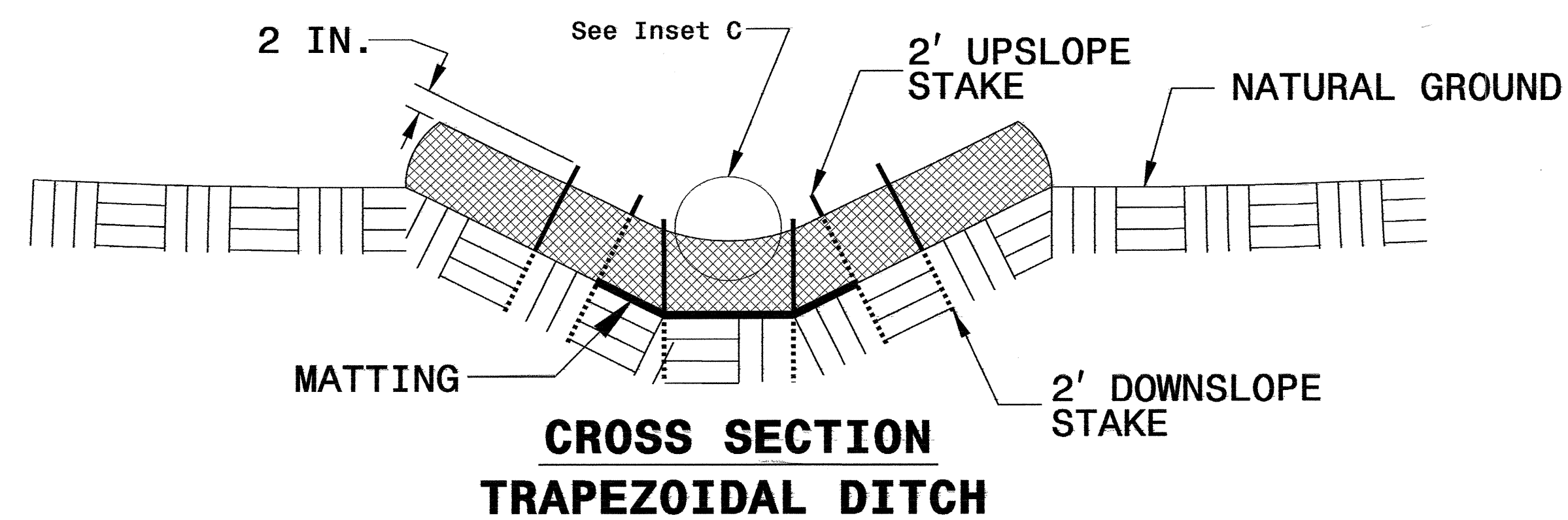
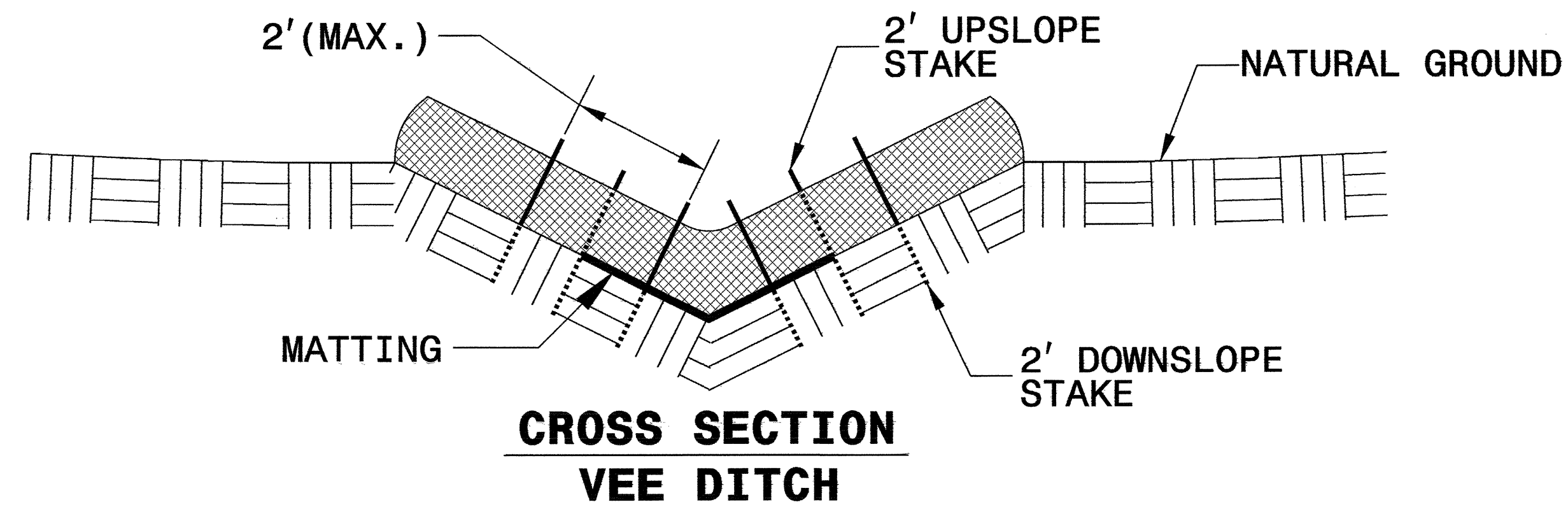
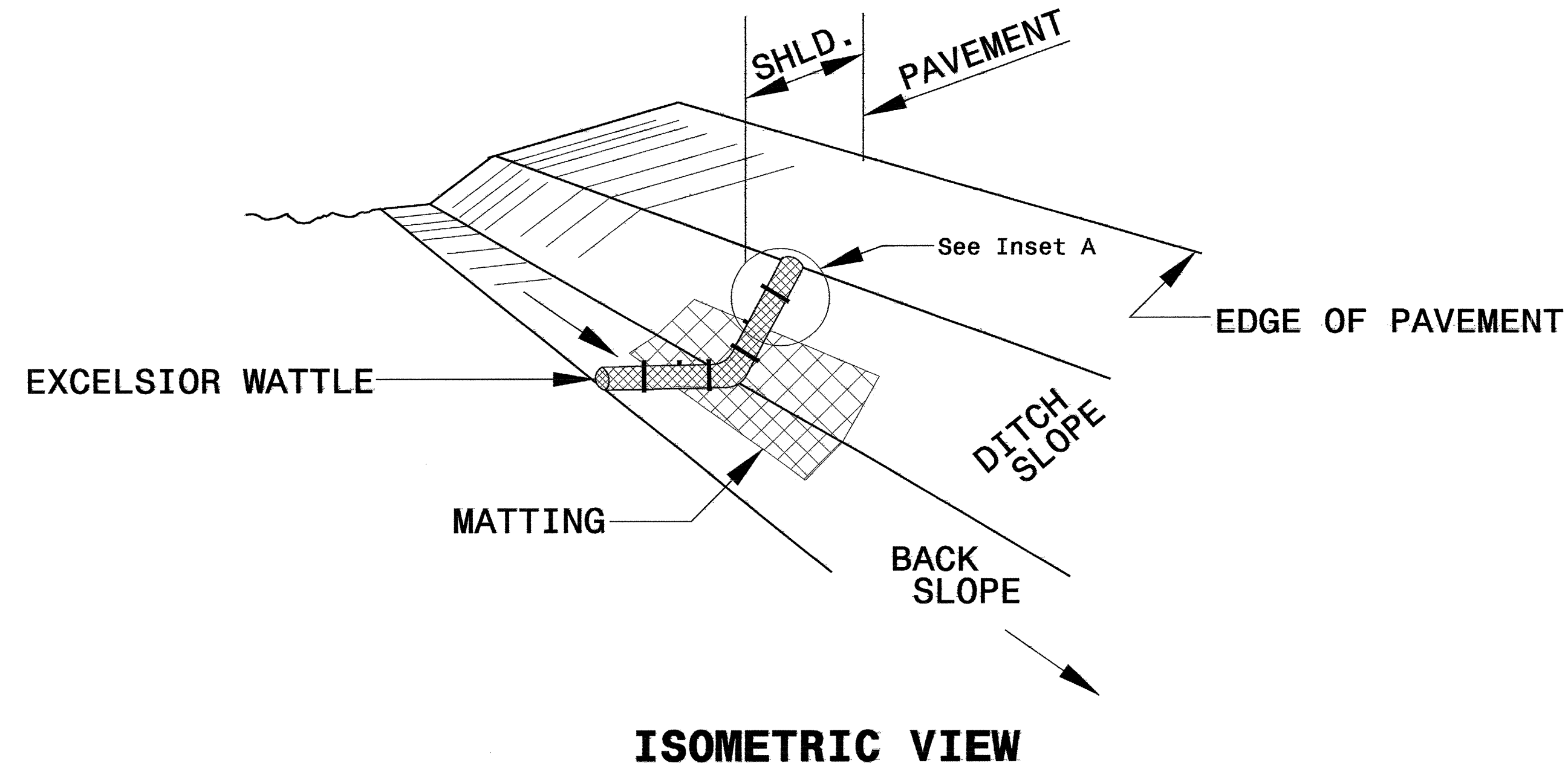
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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 3.5 OUNCES OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



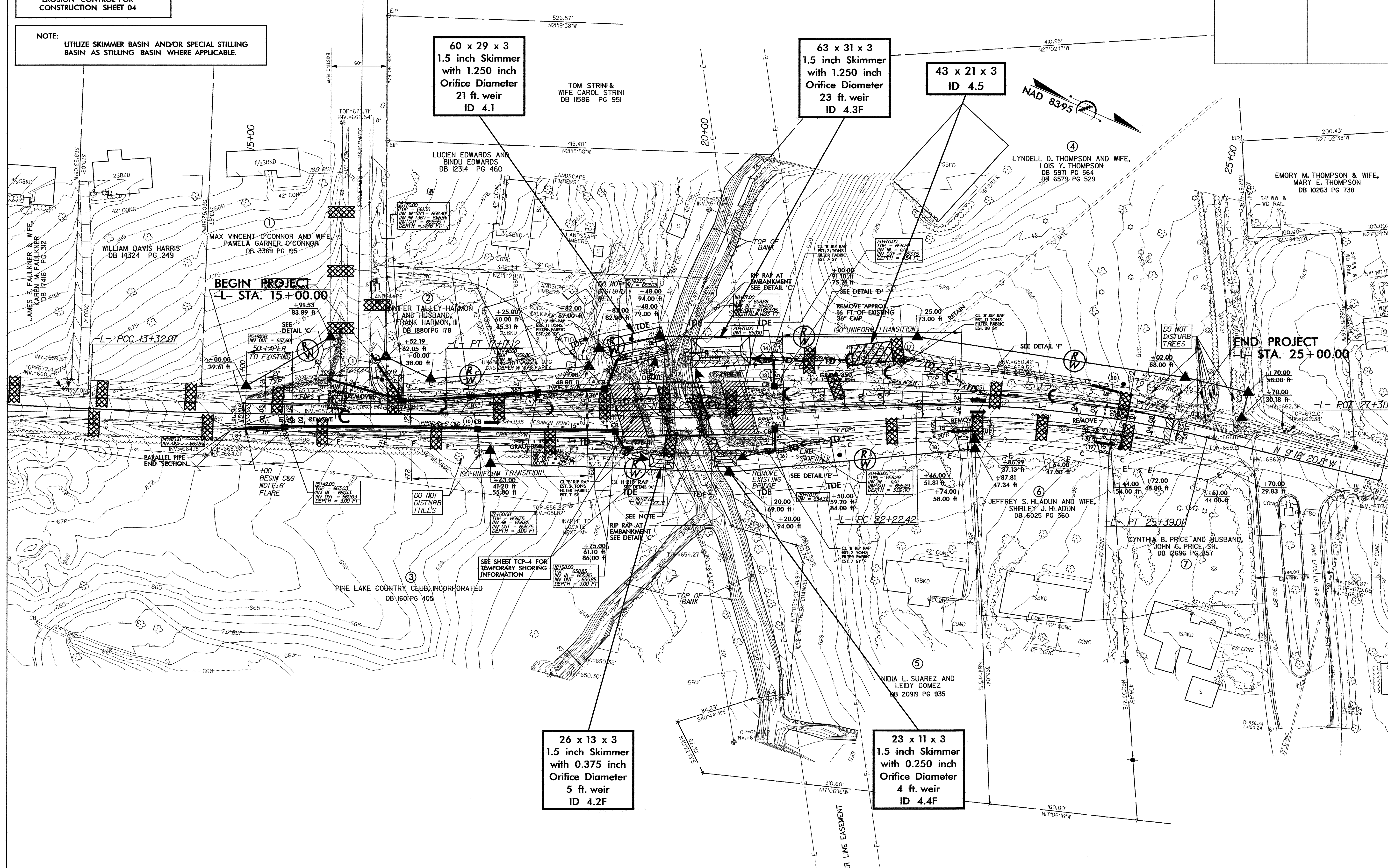


PROJECT REFERENCE NO.		SHEET NO.	
B-3677		EC-04/CONST.04	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

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 SKIMMER BASIN AND/OR SPECIAL STILLING  
BASIN AS STILLING BASIN WHERE APPLICABLE.



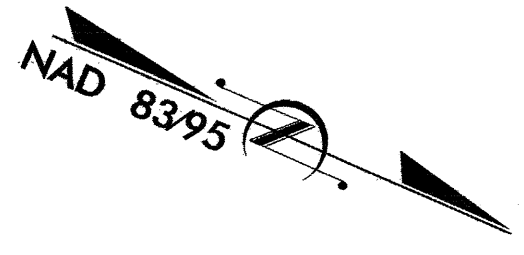
60 x 29 x 3  
1.5 inch Skimmer  
with 1.250 inch  
Orifice Diameter  
21 ft. weir  
ID 4.1

63 x 31 x 3  
1.5 inch Skimmer  
with 1.250 inch  
Orifice Diameter  
23 ft. weir  
ID 4.3F

43 x 21 x 3  
ID 4.5

26 x 13 x 3  
1.5 inch Skimmer  
with 0.375 inch  
Orifice Diameter  
5 ft. weir  
ID 4.2F

23 x 11 x 3  
1.5 inch Skimmer  
with 0.250 inch  
Orifice Diameter  
4 ft. weir  
ID 4.4F



END PROJECT  
L- STA. 25+00.00

BEGIN PROJECT  
L- STA. 15+00.00

L- PCC 13+32.07

L- POT 27+31.07

L- PC 22+22.42

PT 25+39.01

PINE LAKE COUNTRY CLUB, INCORPORATED  
DB 1601 PG 405

NIDIA L. SUAREZ AND  
LEIDY GOMEZ  
DB 20919 PG 935

JEFFREY S. HLADUN AND WIFE,  
SHIRLEY J. HLADUN  
DB 6025 PG 360

CYNTHIA B. PRICE AND HUSBAND,  
JOHN C. PRICE, SR.  
DB 12696 PG 857

LYNELLE D. THOMPSON AND WIFE,  
LOIS Y. THOMPSON  
DB 5971 PG 564  
DB 6579 PG 529

EMORY M. THOMPSON & WIFE,  
MARY E. THOMPSON  
DB 10263 PG 738

TOM STRINI &  
WIFE CAROL STRINI  
DB 11586 PG 951

LUCIEN EDWARDS AND  
BINDU EDWARDS  
DB 12314 PG 460

MAX VINCENT O'CONNOR AND WIFE,  
PAMELA GARNER O'CONNOR  
DB 3389 PG 195

WILLIAM DAVIS HARRIS  
DB 14324 PG 249

JAMES E. FAULKNER & WIFE,  
MAREN M. FAULKNER  
DB 17416 PG 312

25BKD

42\"/>

1/2 SBKD

CONC

LANDSCAPE  
TIMBERS

TOP OF  
BANK

SSFD

36\"/>

54\"/>

54\"/>

PARALLEL PIPE  
END SECTION

+100  
BEGIN C&G  
NOTE: 6'  
FLARE

DO NOT  
DISTURB  
TREES

SEE SHEET TCP-4 FOR  
TEMPORARY SHORING  
INFORMATION

UNABLE TO  
LOCATE  
NEXT MH

REMOVE  
EXISTING  
BRIDGE

REMOVE  
APPROX.  
16 FT. OF  
EXISTING  
36\"/>

REMOVE

REMOVE

REMOVE

50\"/>

SEE  
DETAIL 'C'

SEE  
DETAIL 'C'

SEE  
NOTE

SEE  
DETAIL 'C'

SEE  
DETAIL 'E'

SEE  
DETAIL 'F'

SEE  
DETAIL 'G'

SEE  
DETAIL 'H'

190\"/>

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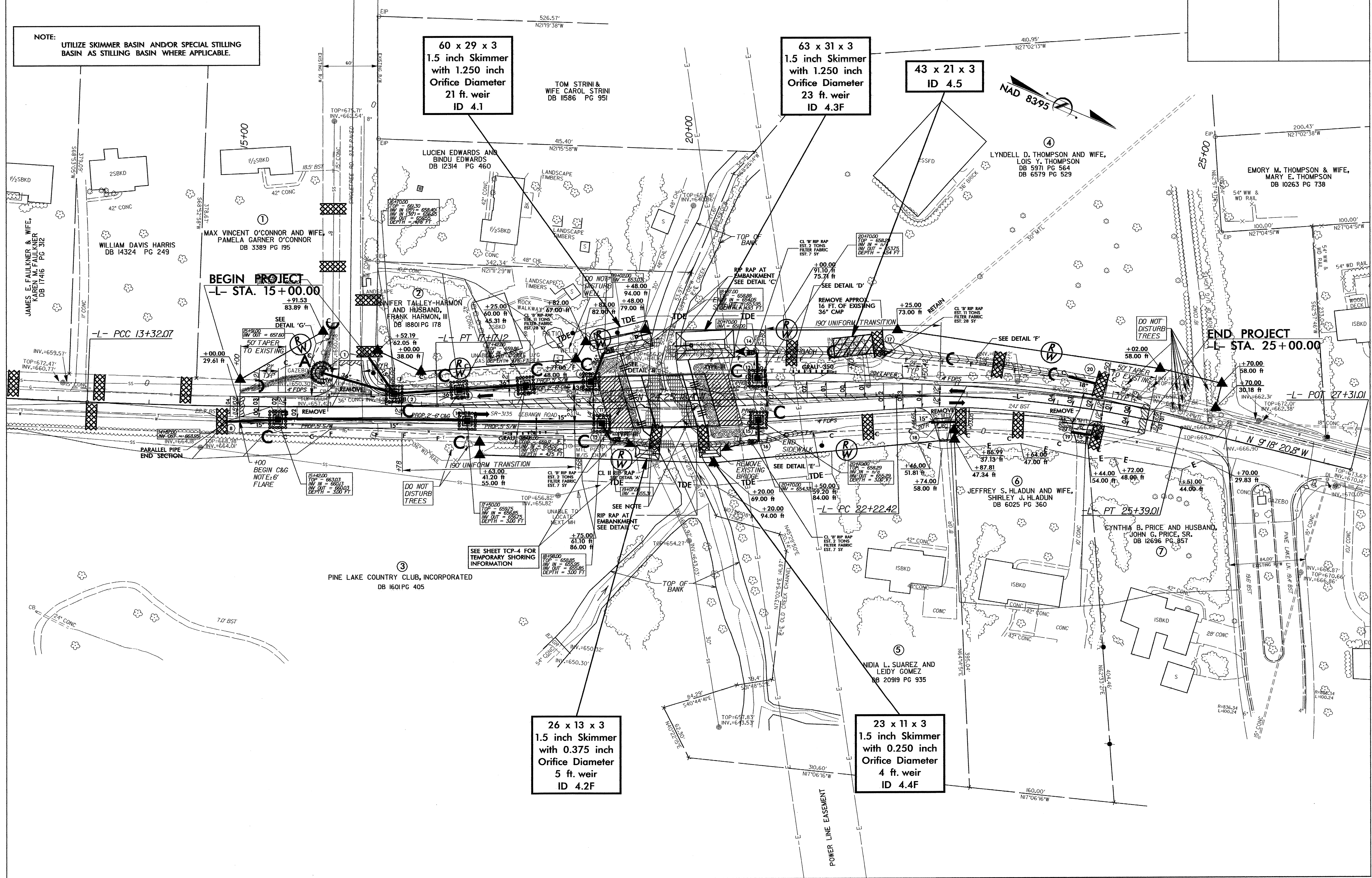
CL 18\"/>

CL 18\"/>



PROJECT REFERENCE NO.	SHEET NO.
B-3677	EC-05/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



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BEGIN PROJECT  
-L- STA. 15+00.00

END PROJECT  
-L- STA. 25+00.00

