

TIP PROJECT: B-4545

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

**LOCATION: BRIDGE 72 OVER MUD CREEK ON SR 1137
 (CRAIL FARM RD /MIDDLETON RD)
 TYPE OF WORK: GRADING, DRAINAGE AND CULVERT**

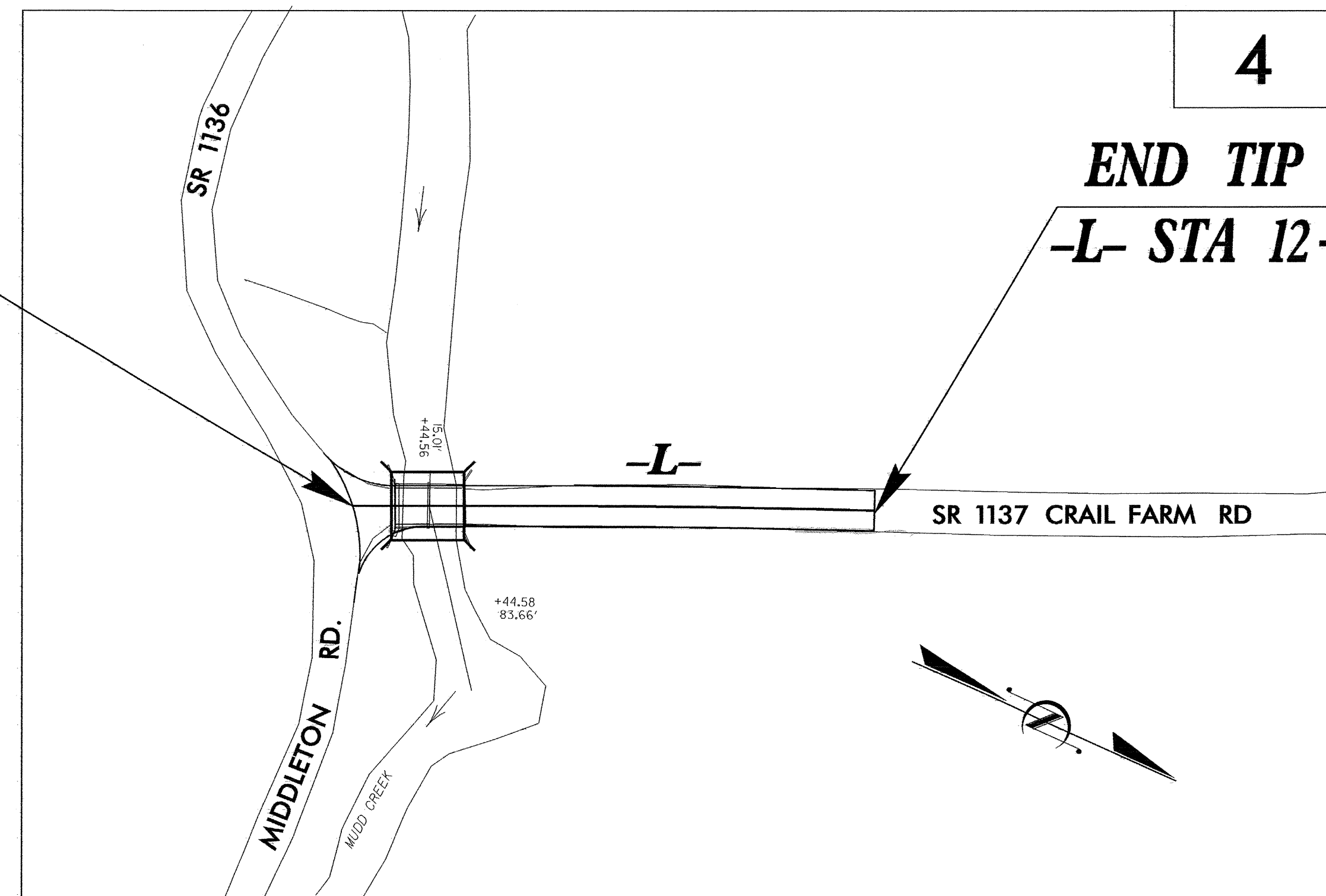
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4545	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch.....	TD
1630.05	Temporary Diversion.....	TD
1605.01	Temporary Silt Fence.....	III III III
1606.01	Special Sediment Control Fence.....	III III III
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.....	⊗

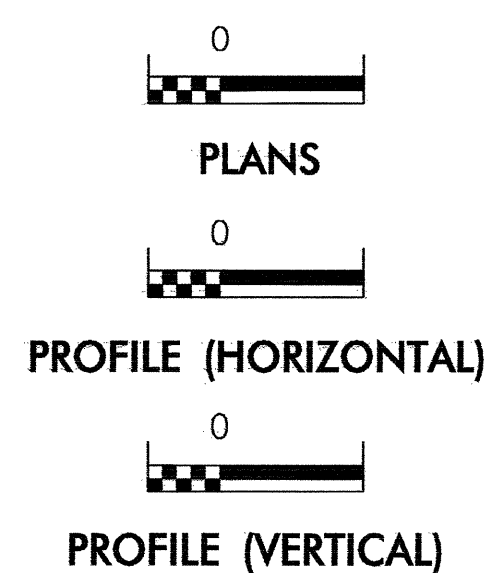
**THIS PROJECT CONTAINS
 EROSION CONTROL PLANS
 FOR CLEARING AND
 GRUBBING PHASE OF
 CONSTRUCTION.**

**BEGIN TIP PROJECT B-4545
 -L- STA 10+11.00**



SR 1171 FINLEY COVE RD.

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

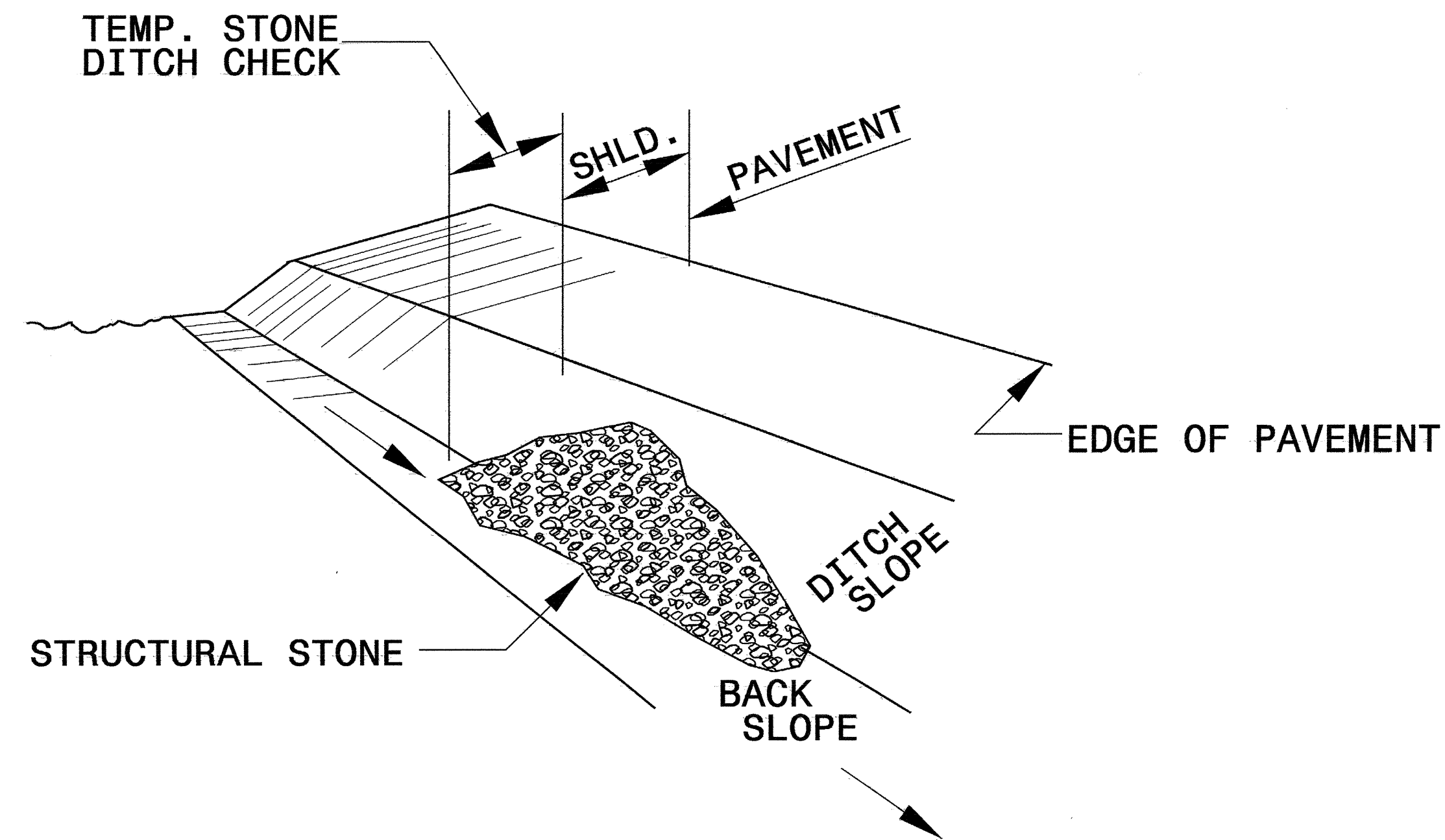
Roadway Standard Drawings

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 | 1630.05 Temporary Diversion |
| 1606.01 Special Sediment Control Fence | 1630.06 Special Stilling Basin |
| 1607.01 Gravel Construction Entrance | 1633.01 Temporary Rock Silt Check Type A |

PROJECT REFERENCE NO. B-4545	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

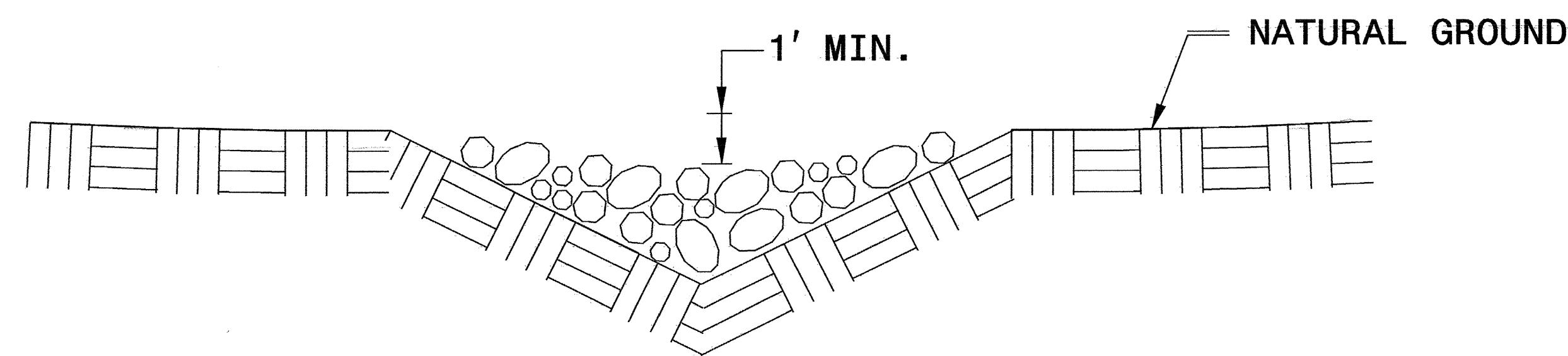


ISOMETRIC VIEW

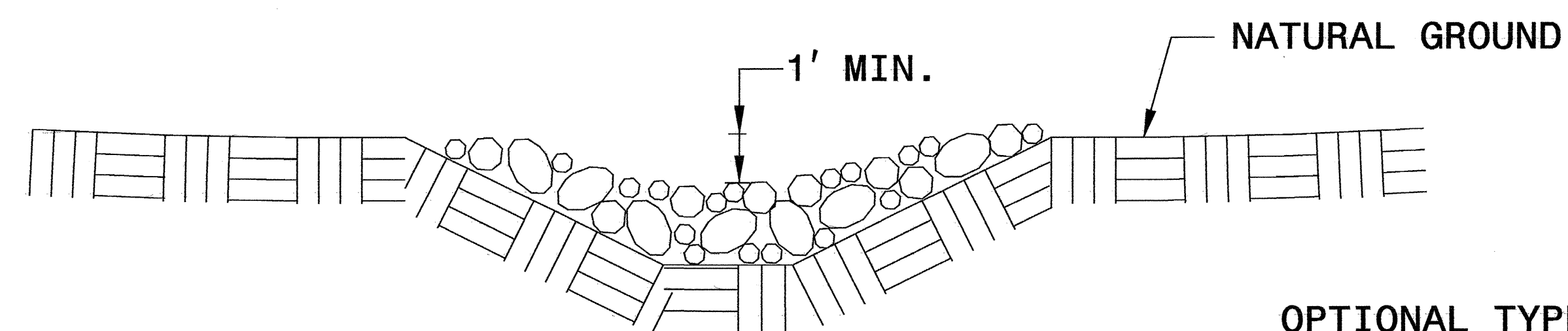
NOTES:

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

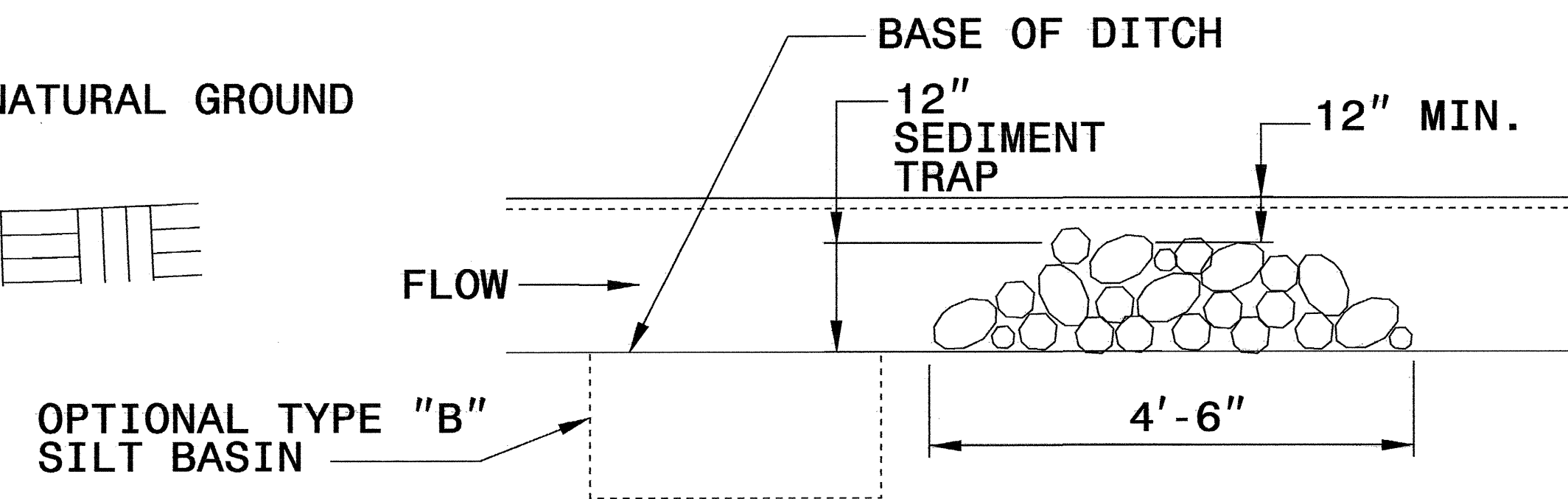
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION
VEE DITCH**



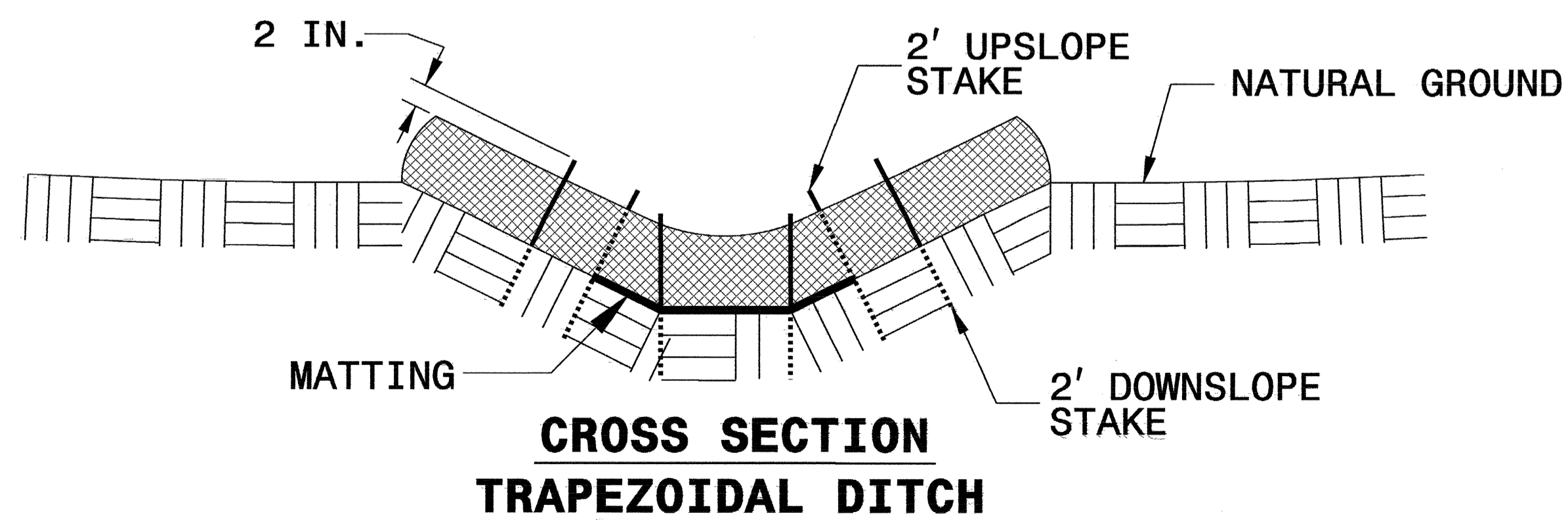
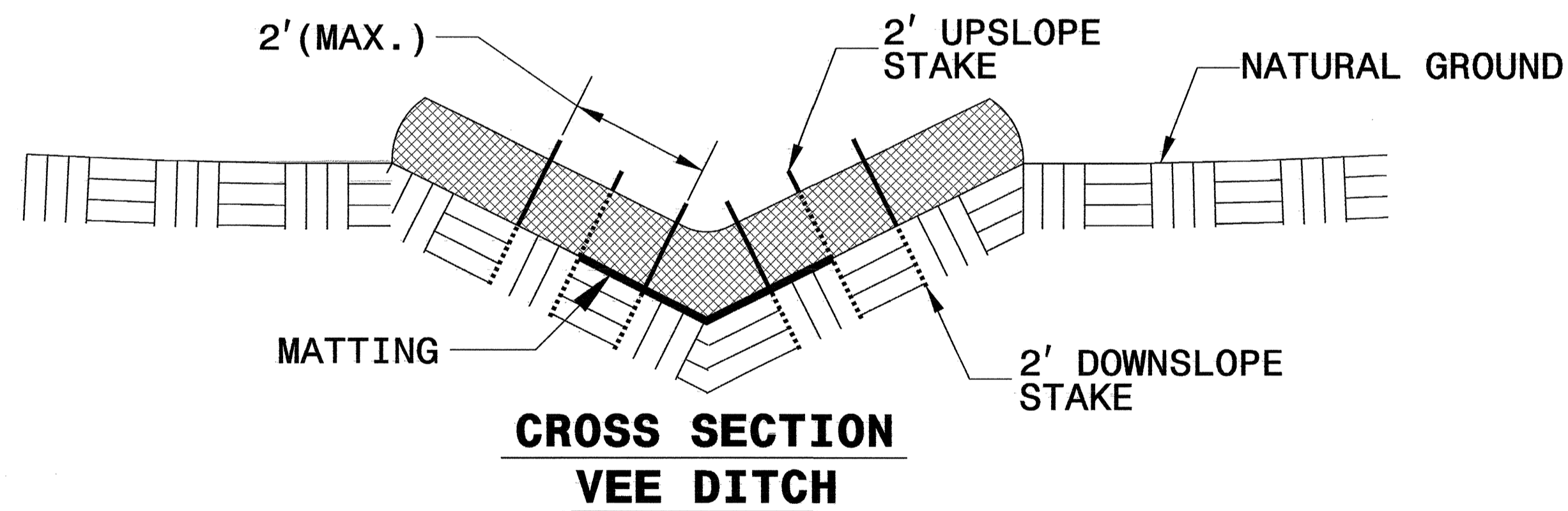
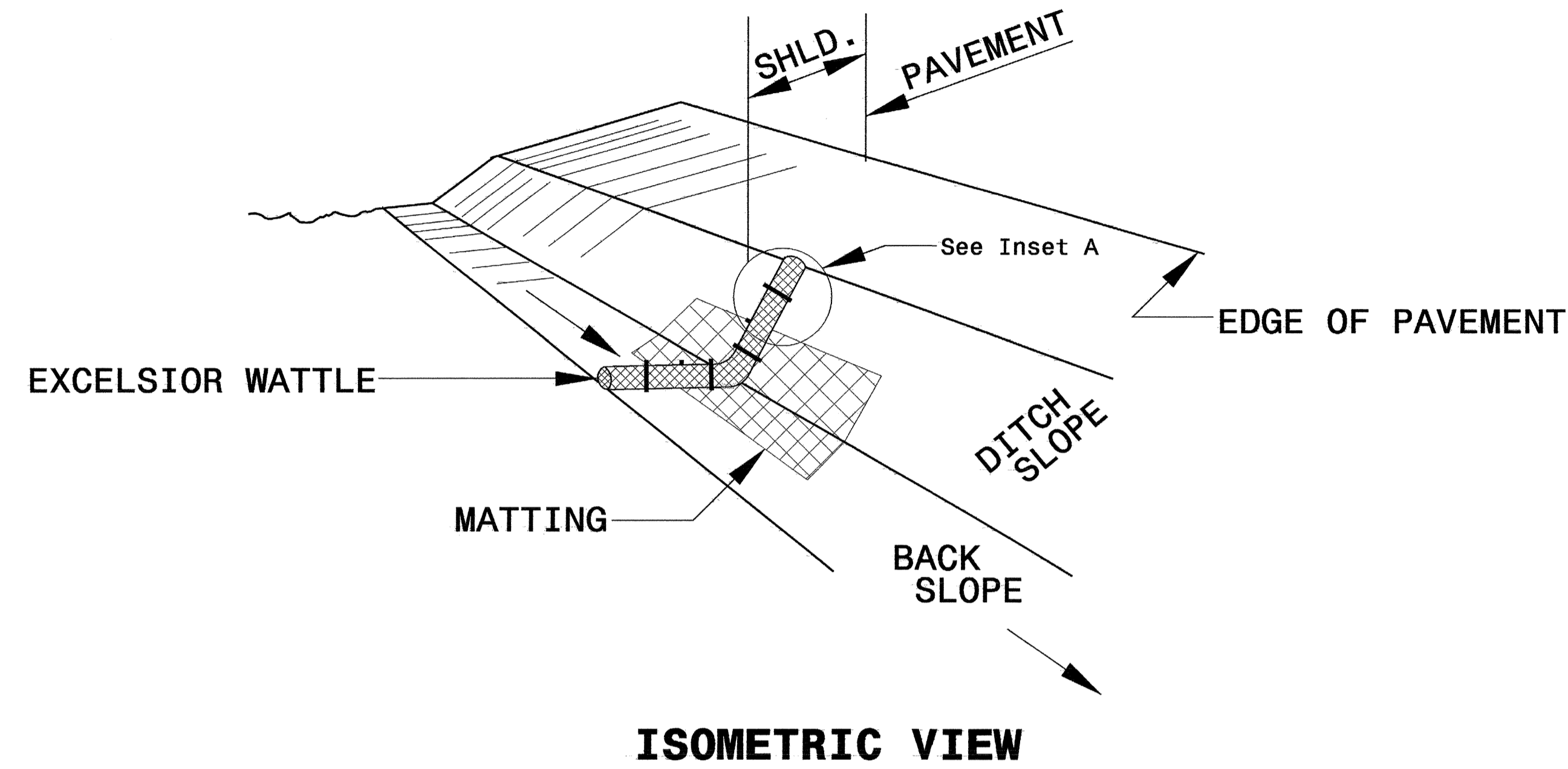
**CROSS SECTION
TRAPEZOIDAL DITCH**



ELEVATION VIEW

PROJECT REFERENCE NO. B-4545	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WATTLE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

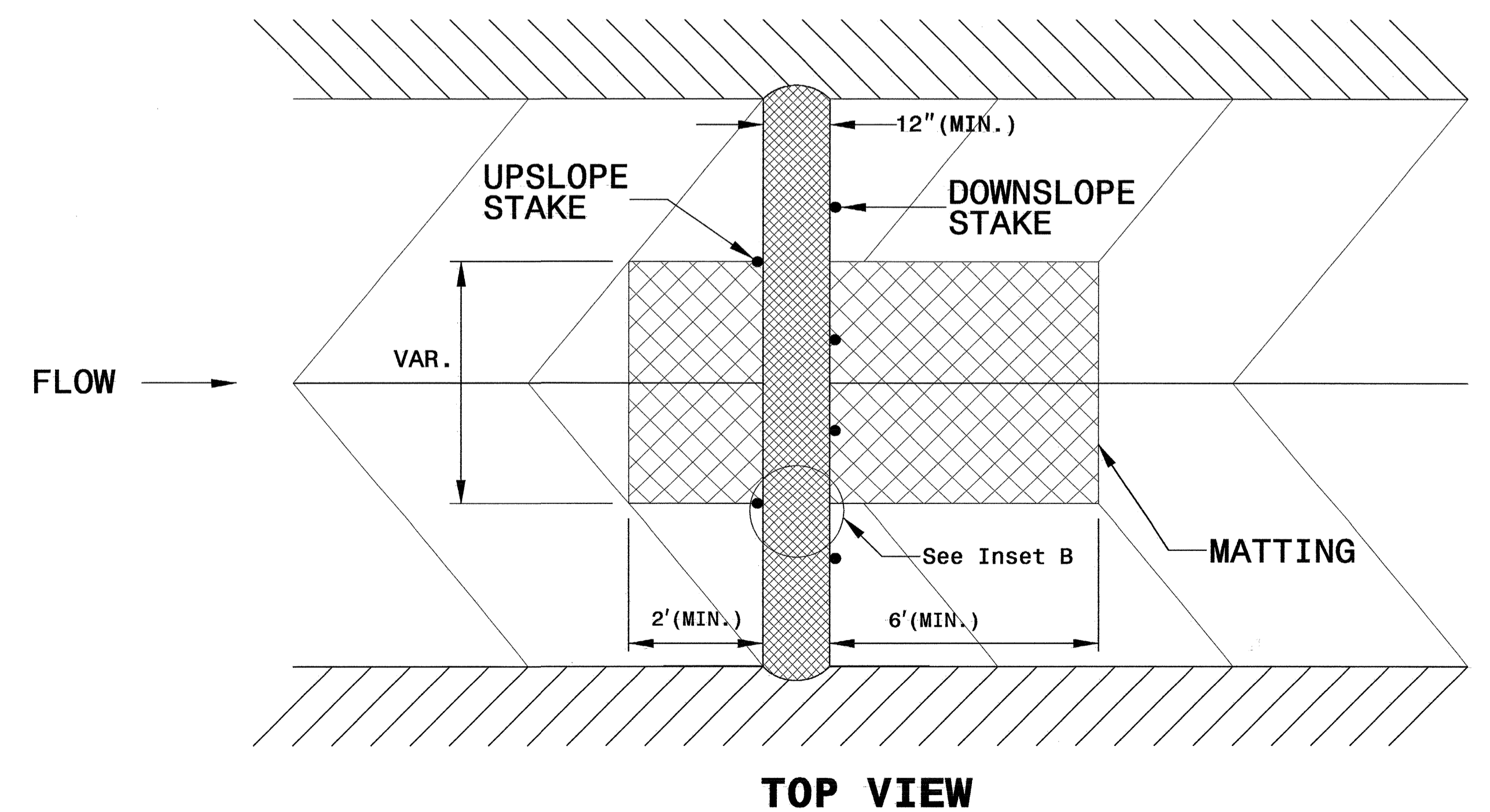
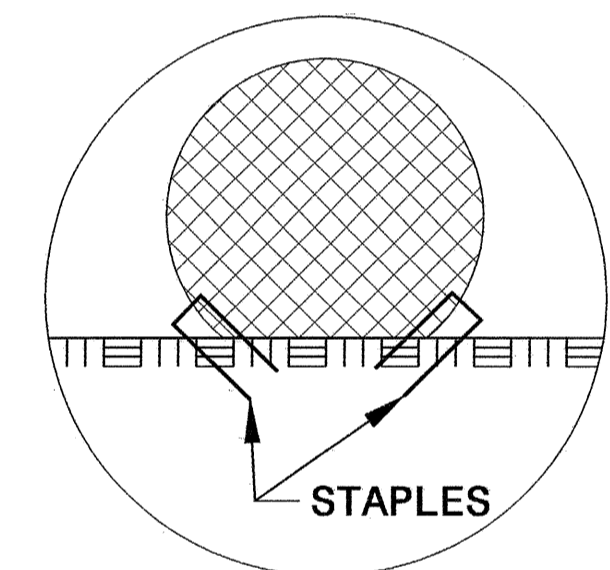
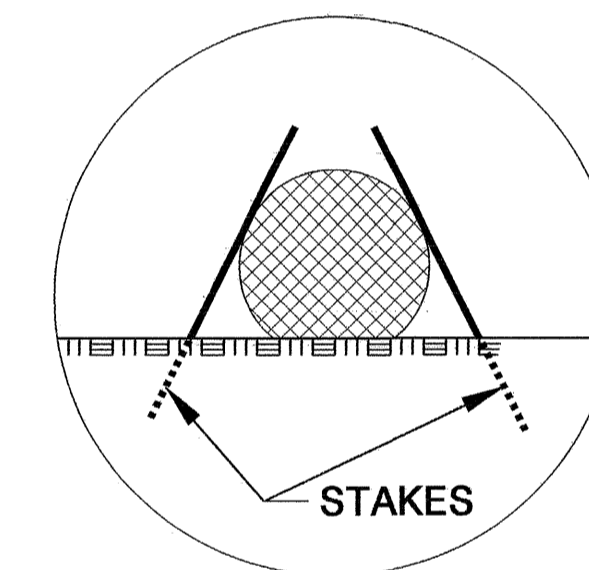
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

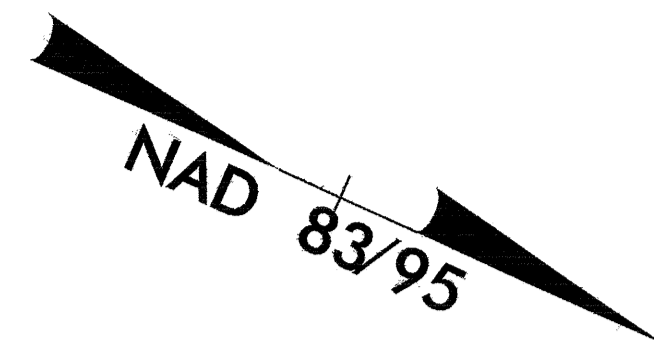
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

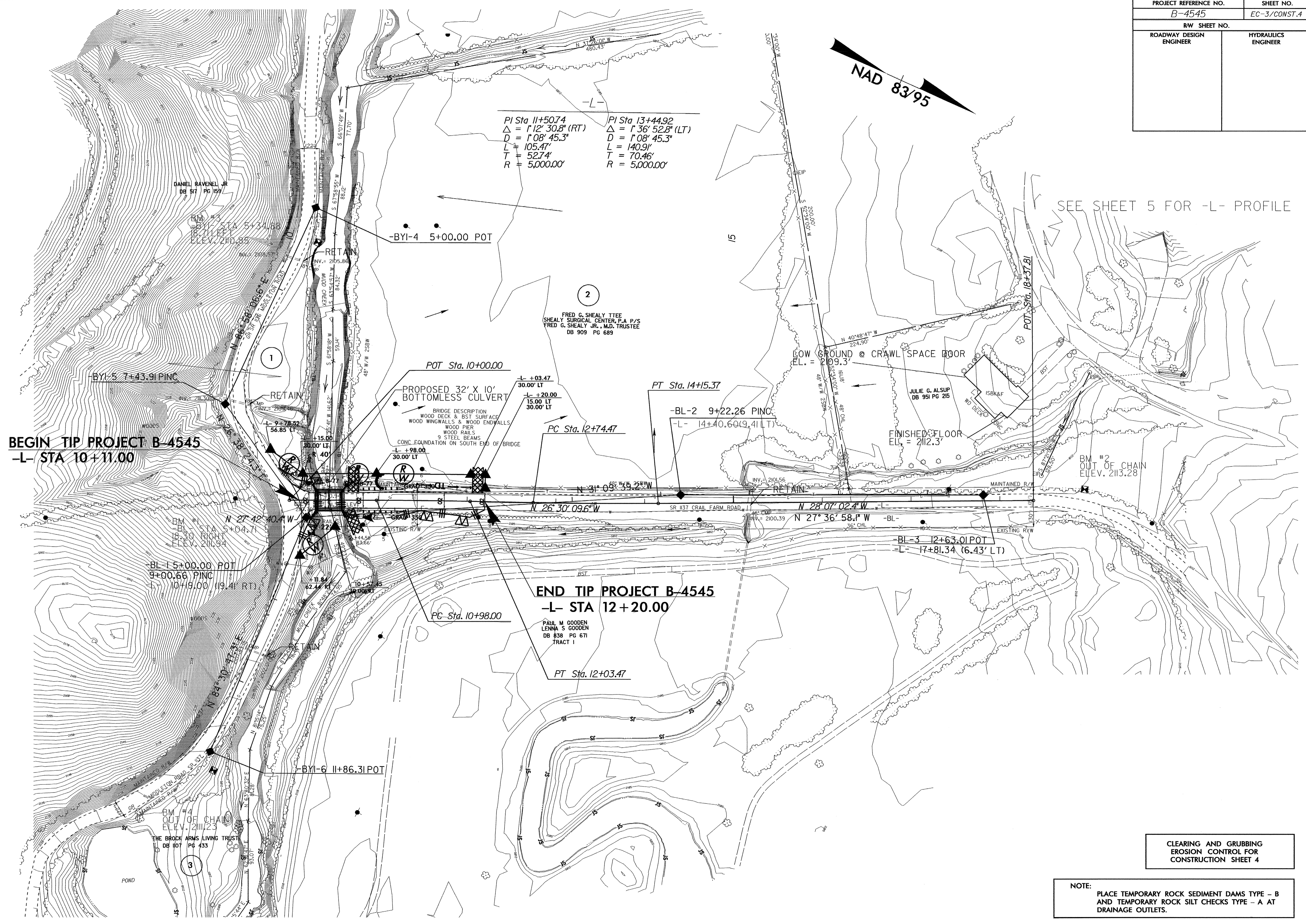


PROJECT REFERENCE NO. B-4545	SHEET NO. EC-3/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PI Sta 11+50.74 PI Sta 13+44.92
 $\Delta = 1' 12' 30.8''$ (RT) $\Delta = 1' 36' 52.8''$ (LT)
 $D = 1' 08' 45.3''$ $D = 1' 08' 45.3''$
 $L = 105.47'$ $L = 140.91'$
 $T = 52.74'$ $T = 70.46'$
 $R = 5,000.00'$ $R = 5,000.00'$

SEE SHEET 5 FOR -L- PROFILE



BEGIN TIP PROJECT B-4545
-L- STA 10+11.00

END TIP PROJECT B-4545
-L- STA 12+20.00

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.

REVISIONS
 RIGHT OF WAY REVISION - REMOVED PROPOSED TCE AND PARCEL NUMBER FROM PARCEL NO 4 - ckw 2/17/2009

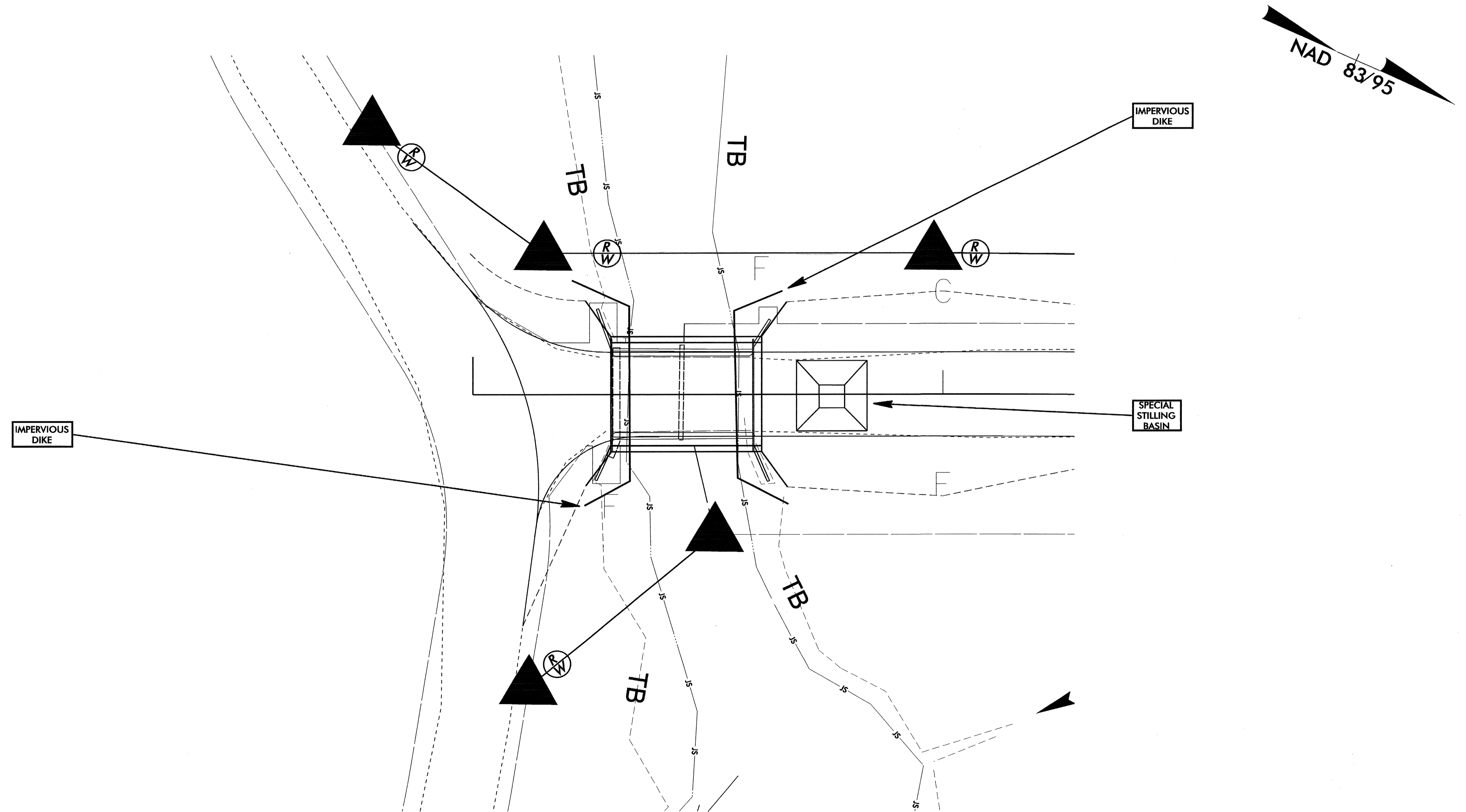
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21-MAY-2009 10:00
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 11:00 AM

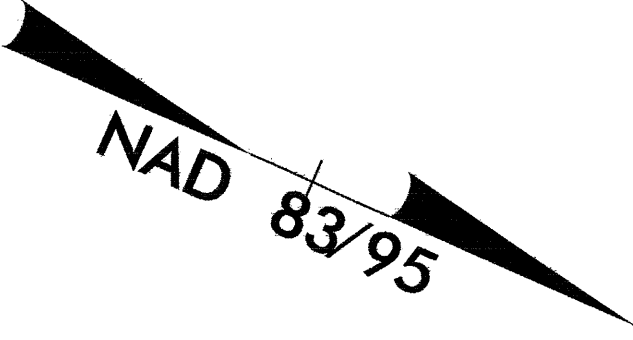
PROJECT REFERENCE NO. B-4545	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CULVERT CONSTRUCTION SEQUENCE STA. 10+45.40 -L-

1. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED THROUGHOUT CULVERT CONSTRUCTION.
2. REMOVE EXISTING BRIDGE.
3. CONSTRUCT IMPERVIOUS DIKES.
4. CONSTRUCT FOOTINGS FOR BOTTOMLESS CULVERT.
5. INSTALL PRECAST CONCRETE BOTTOMLESS CULVERT.
6. REMOVE IMPERVIOUS DIKES.
7. COMPLETE ANY NECESSARY UPSTREAM/DOWNSTREAM CHANNEL IMPROVEMENTS.
8. REMOVE ANY REMAINING SPECIAL STILLING BASIN(S), AND COMPLETE ROADWAY.



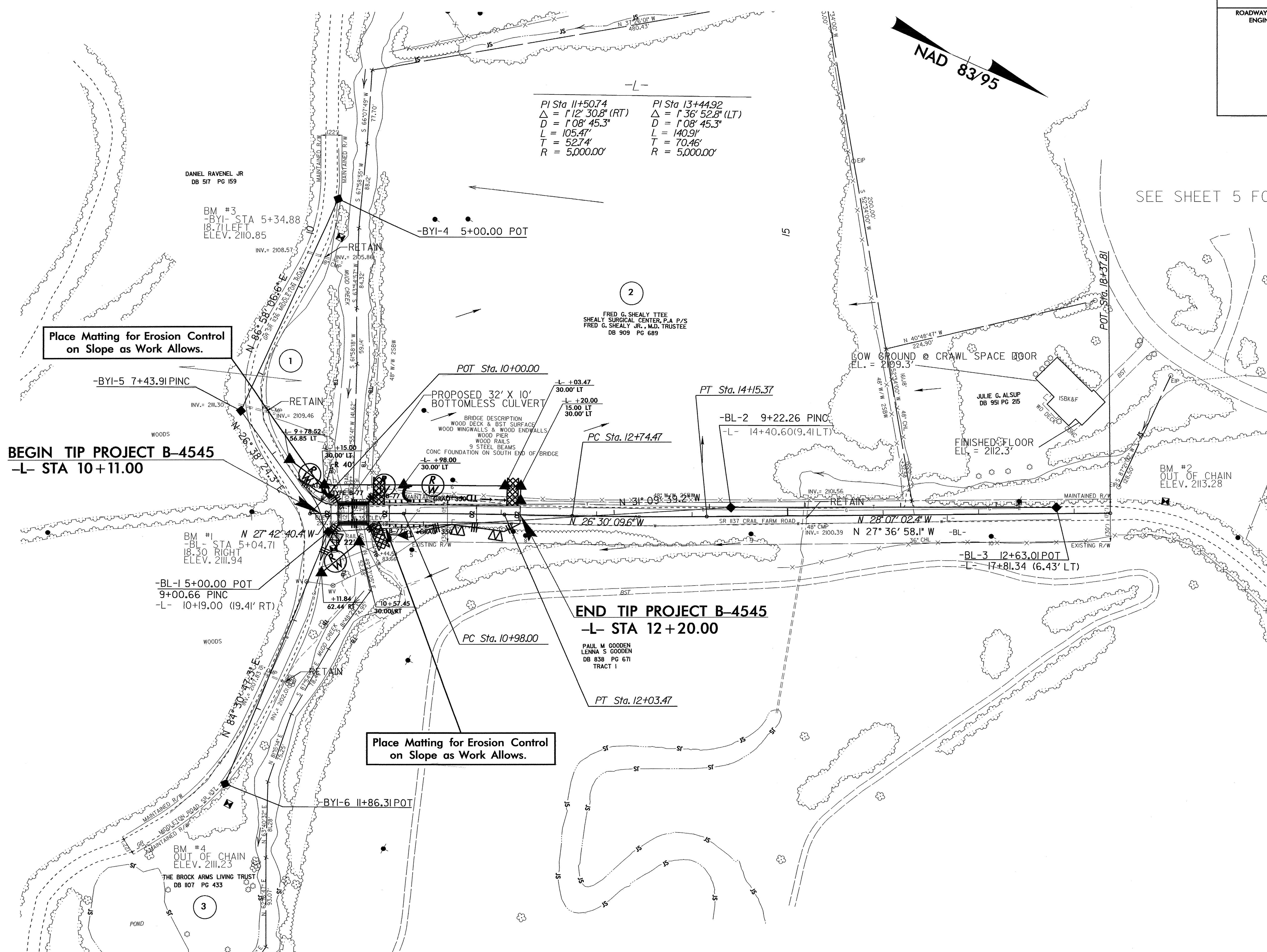
PROJECT REFERENCE NO.	SHEET NO.
B-4545	EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



SEE SHEET 5 FOR -L- PROFILE

-L-

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Place Matting for Erosion Control on Slope as Work Allows.

Place Matting for Erosion Control on Slope as Work Allows.

BEGIN TIP PROJECT B-4545
-L- STA 10+11.00

END TIP PROJECT B-4545
-L- STA 12+20.00

RIGHT OF WAY REVISION - REMOVED PROPOSED TCE AND PARCEL NUMBER FROM PARCEL NO 4 - dkw 2/17/2009

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