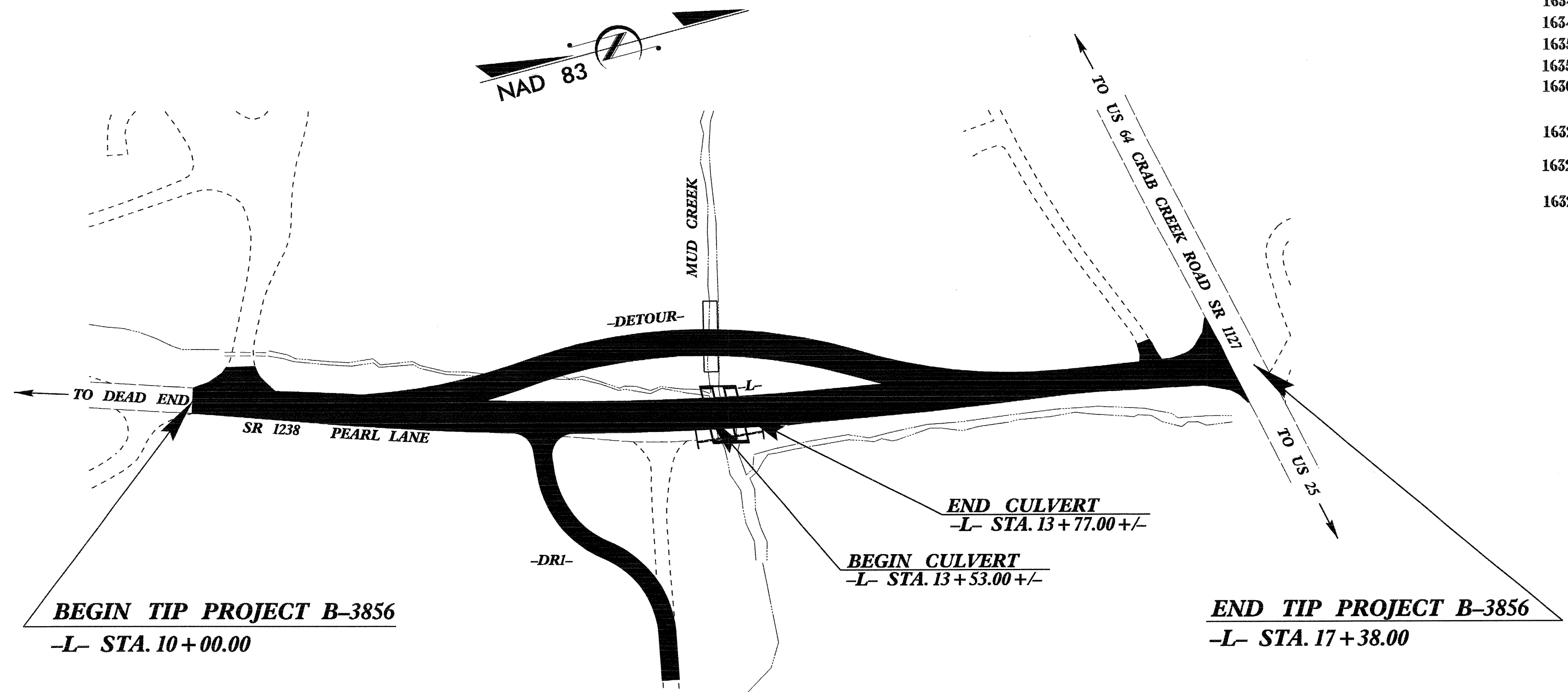


TIP PROJECT: B-3856

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

LOCATION: BRIDGE NO. 335 OVER MUD CREEK AND
 APPROACHES ON SR 1238 (PEARL LANE)
 TYPE OF WORK: GRADING, DRAINAGE, PAVING AND CULVERT



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3856	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

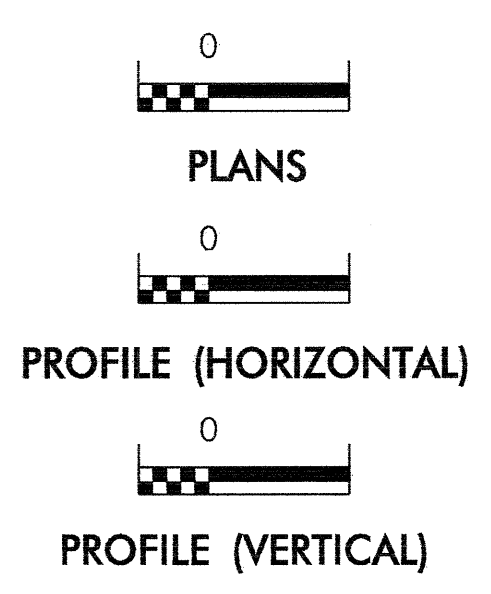
EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation.....	
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.....	
1630.02	Silt Basin Type B.....	
1633.01	Temporary Rock Silt Check Type-A.....	
	Temporary Rock Silt Check Type-B.....	
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.....	
	Rock Inlet Sediment Trap:	
1632.01	Type A.....	
1632.02	Type B.....	
1632.03	Type C.....	
	Skimmer Basin.....	
	Tiered Skimmer Basin.....	

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

ENVIRONMENTALLY
 SENSITIVE AREA(S) EXIST
 ON THIS PROJECT
 Refer To E. C. Special Provisions
 for Special Considerations.

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

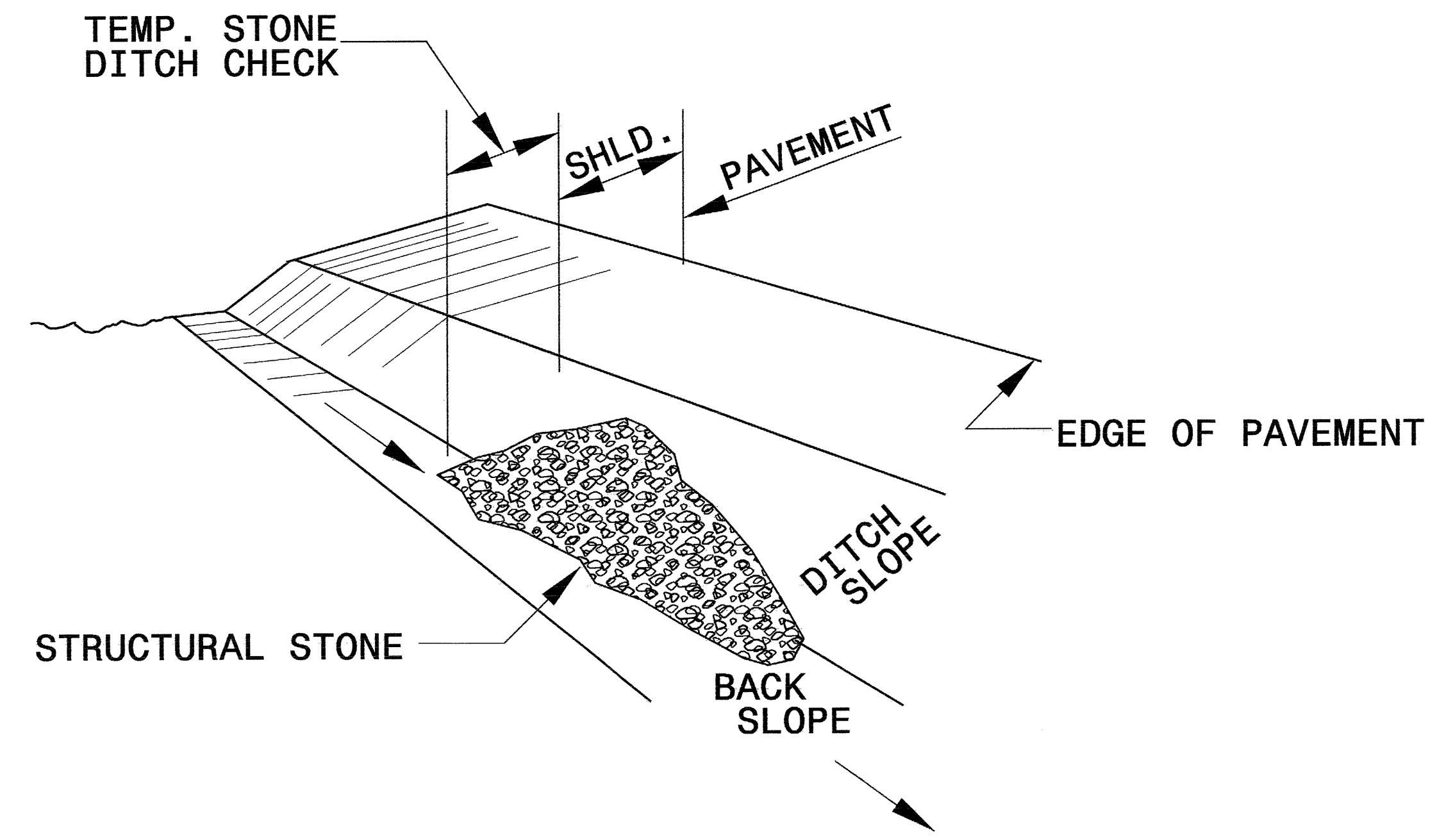
Roadway Standard Drawings
 The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered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

1605.01 Temporary Silt Fence	1633.01 Temporary Rock Silt Check Type A
1606.01 Special Sediment Control Fence	1634.02 Temporary Rock Sediment Dam Type B
1607.01 Gravel Construction Entrance	
1630.02 Silt Basin Type B	
1630.04 Stilling Basin	
1630.05 Temporary Diversion	

C:\projects\B-3856\env\20060718\163004.dwg
 20060718 16:49
 jenniferrichardson AT B-3856

PROJECT REFERENCE NO. B-3856	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

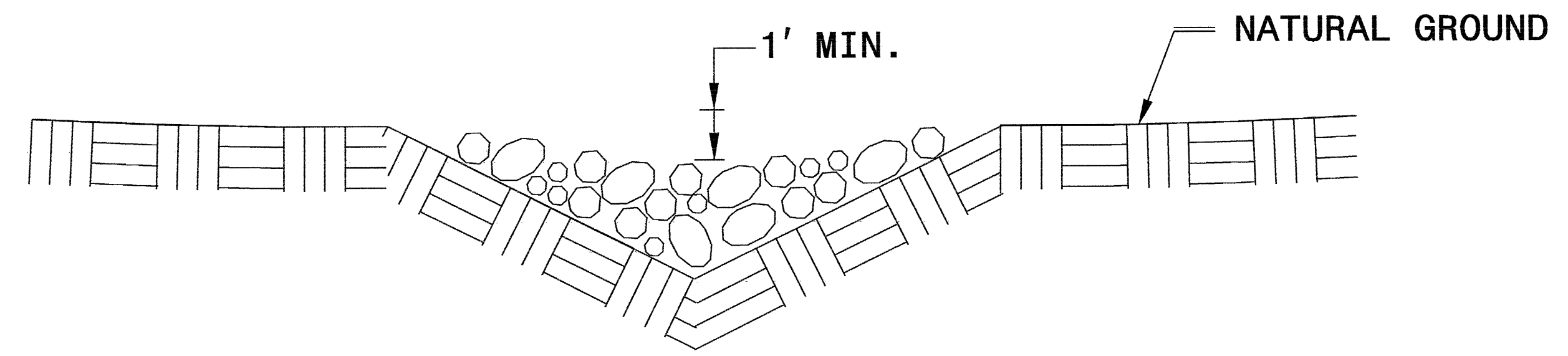


ISOMETRIC VIEW

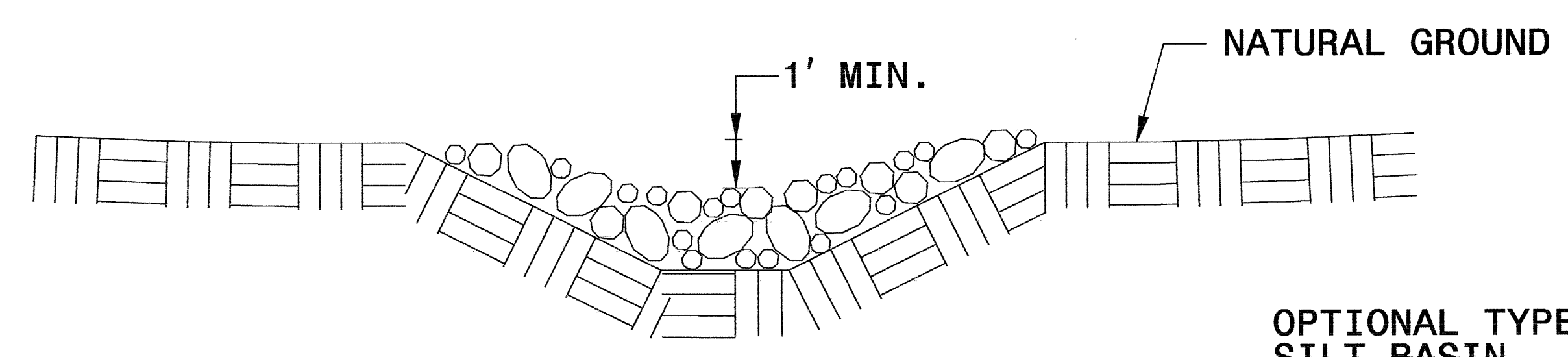
NOTES:

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

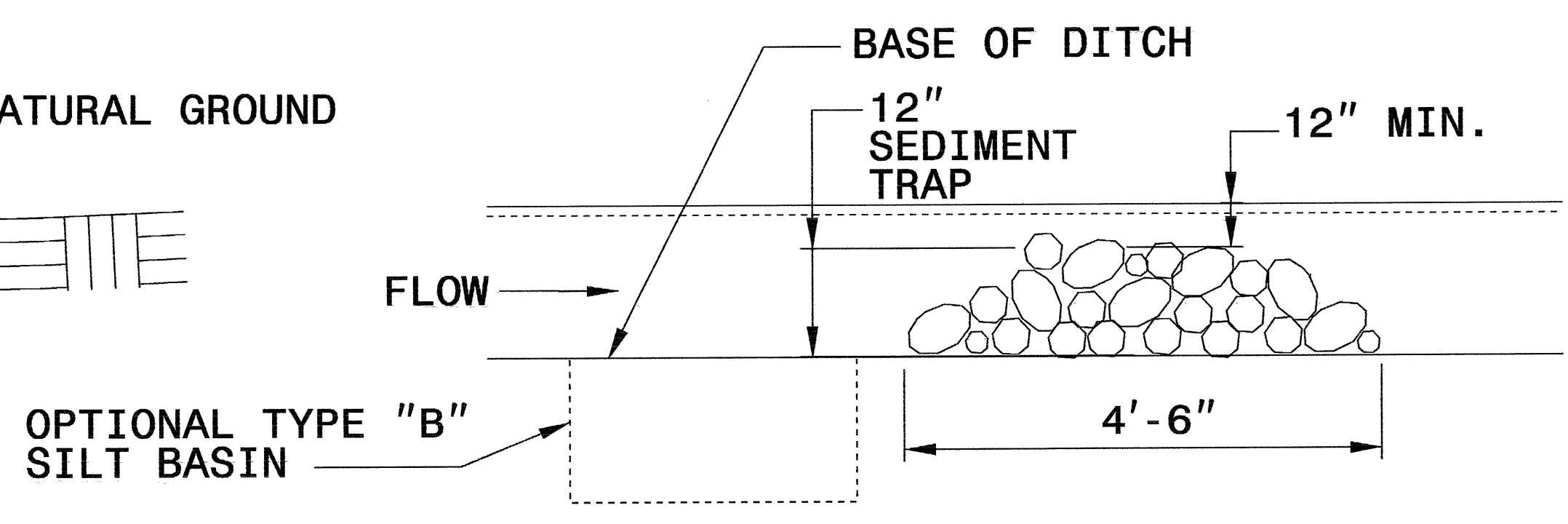
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



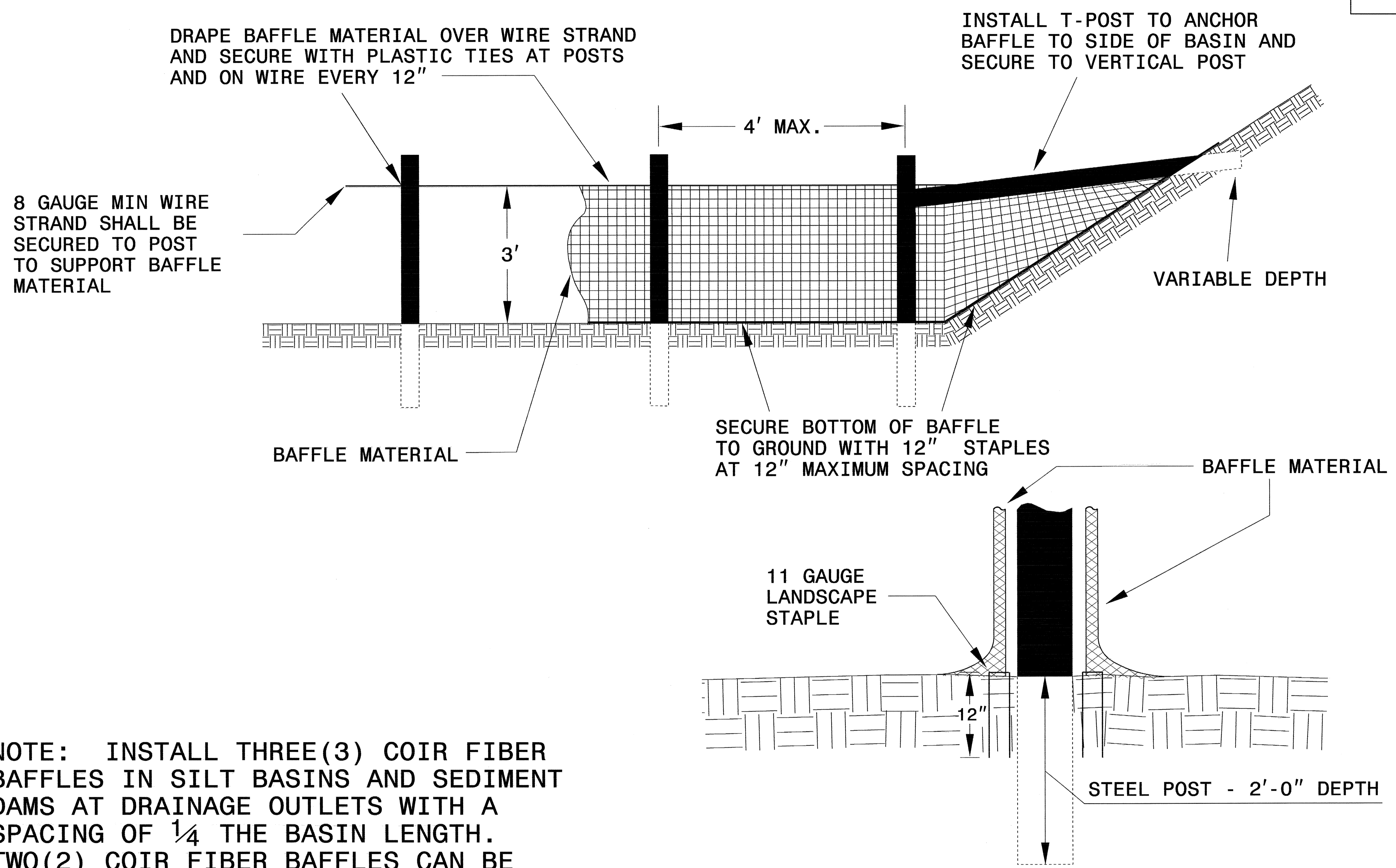
CROSS SECTION TRAPEZOIDAL DITCH



ELEVATION VIEW

PROJECT REFERENCE NO. B-3856	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL

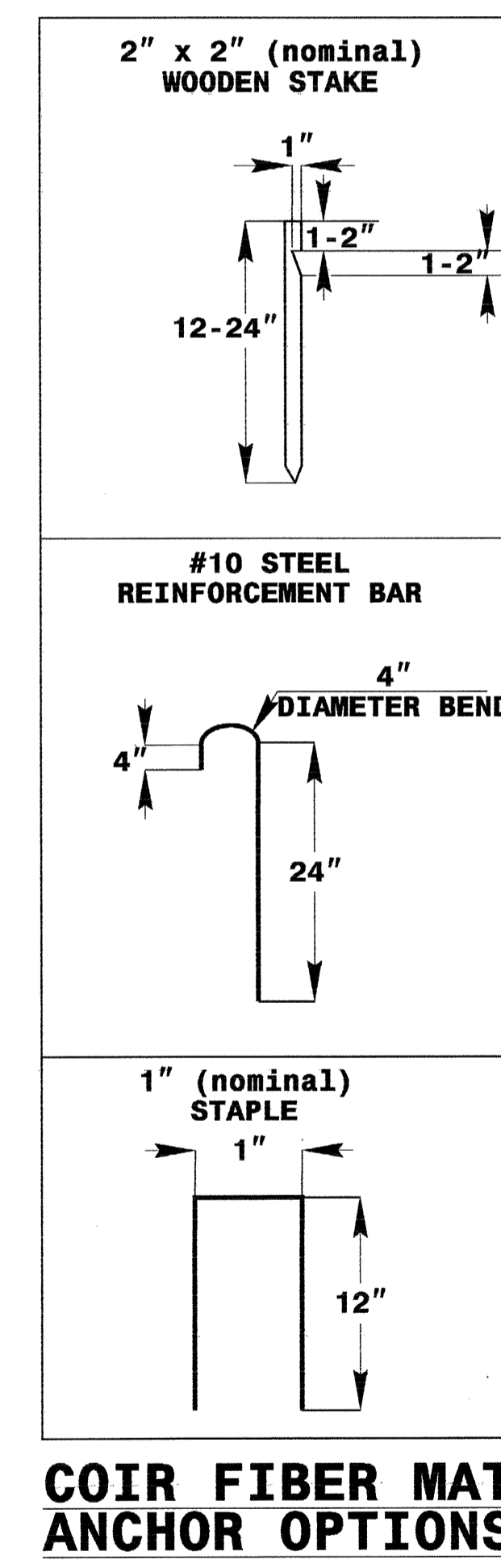
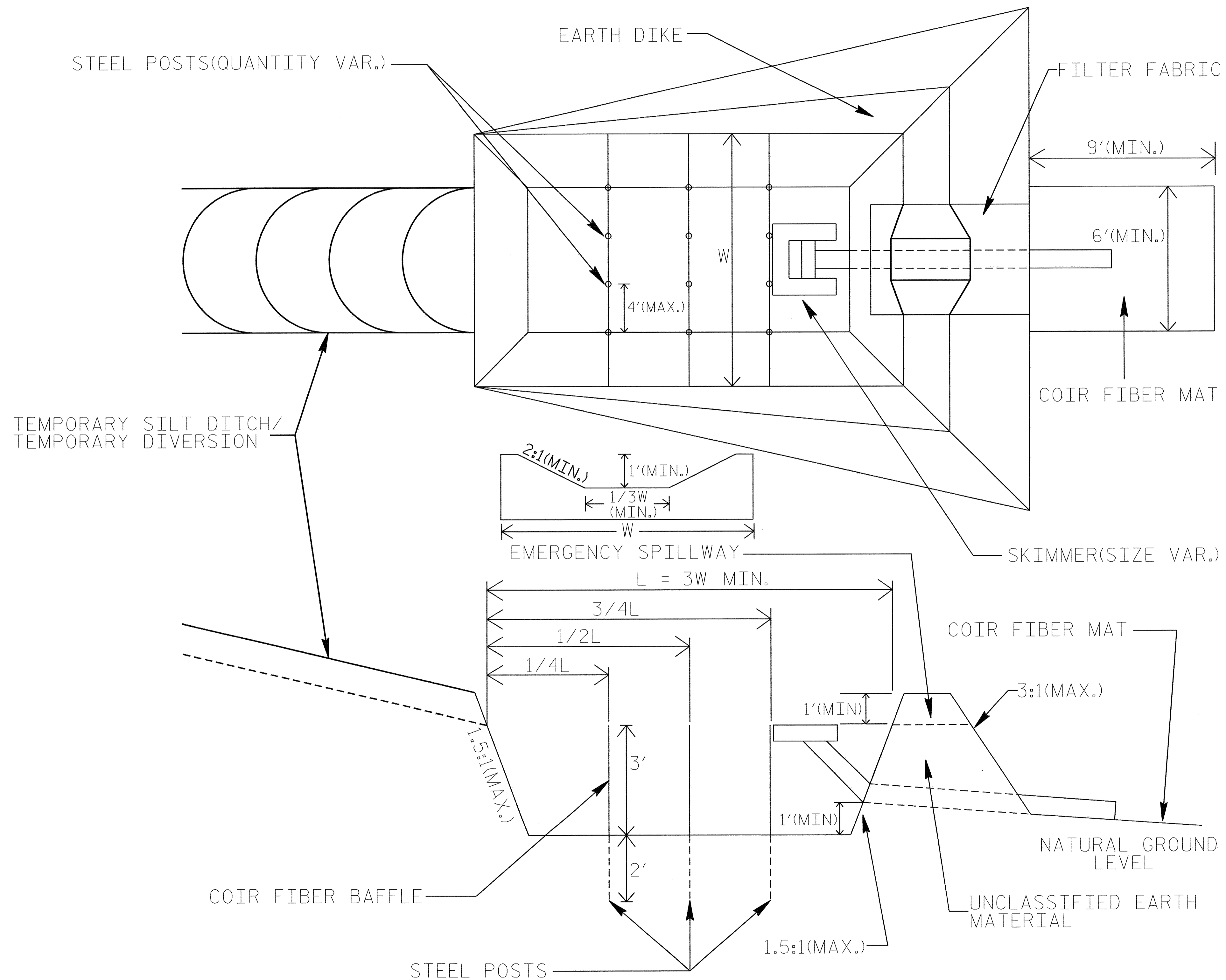


NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.

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

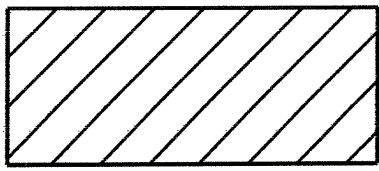
SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. B-3856	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DETOUR

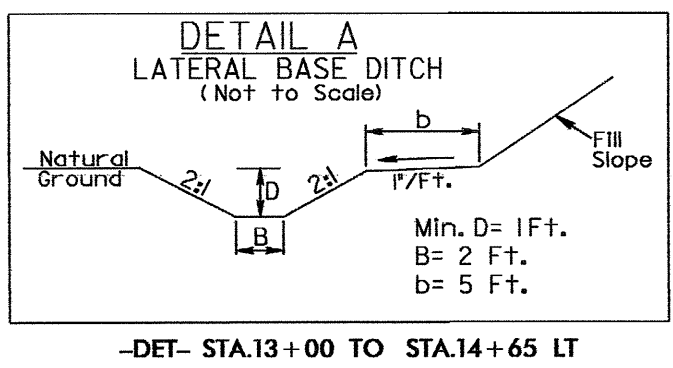
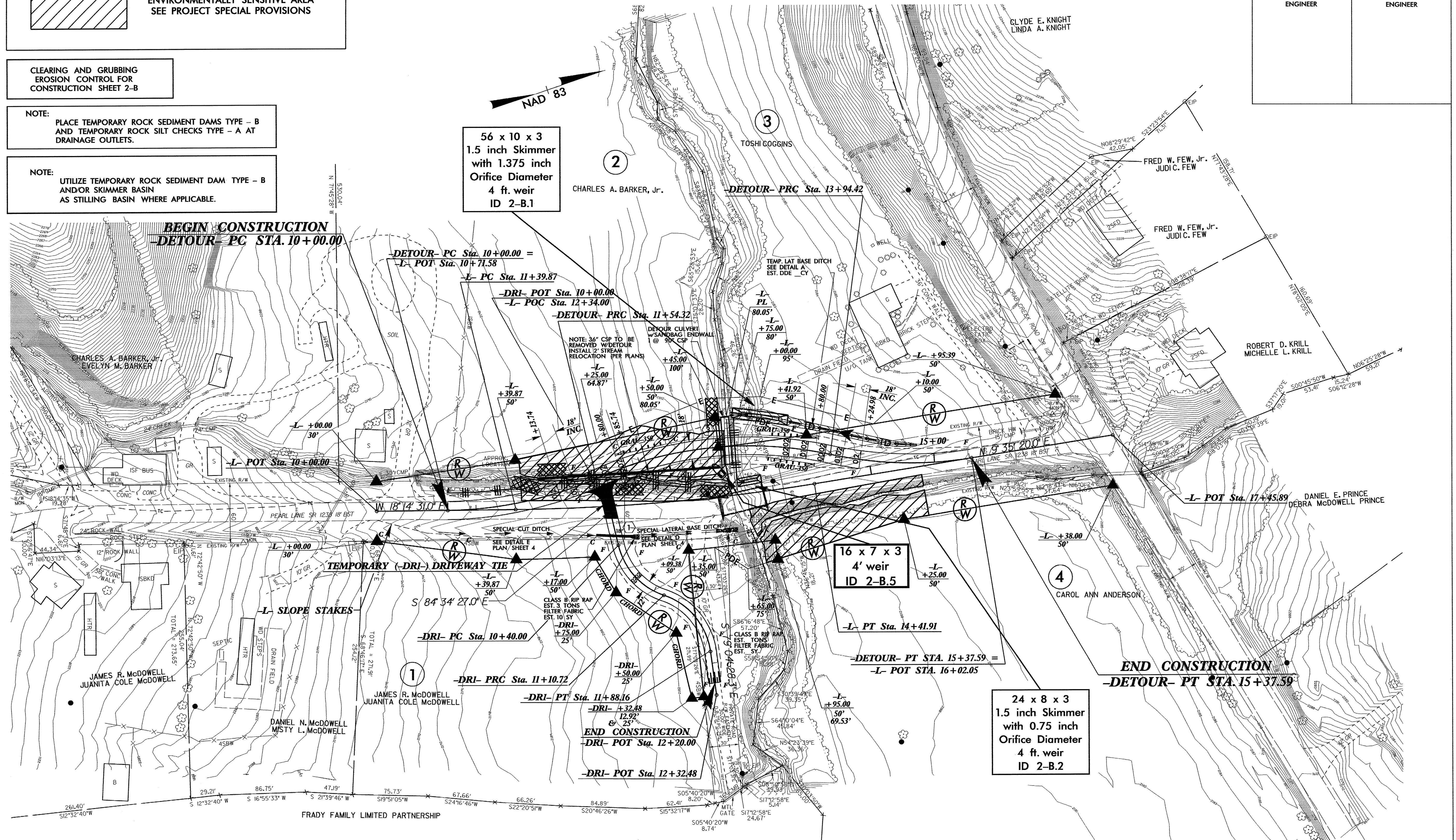
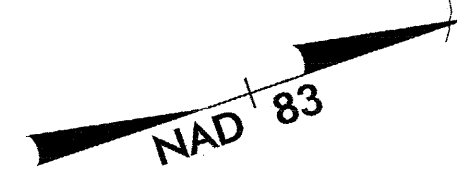
PROJECT REFERENCE NO. B-3856	SHEET NO. EC-4/CONST.2-B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 2-B

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

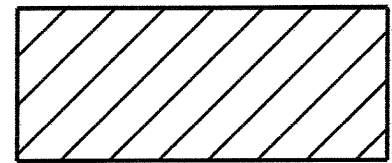
NOTE:
UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE - B
AND/OR SKIMMER BASIN
AS STILLING BASIN WHERE APPLICABLE.



-DRI-	
PI Sta 10+57.61	PI Sta 11+87.51
$\Delta = 70^{\circ} 49' 21.0''$ (LT)	$\Delta = 65^{\circ} 03' 44.0''$ (RT)
D = 114' 35' 29.6"	D = 114' 35' 29.6"
L = 61.80'	L = 56.78'
T = 35.55'	T = 31.89'
R = 50.00'	R = 50.00'
SE = NC	SE = NC

NOTES:
1) FOR -L- PLAN VIEW SEE SHEET 4.
2) FOR -L- PROFILE SEE SHEET 5.
3) FOR -DETOUR- PROFILE SEE SHEET 5.
4) FOR -DRI- PLAN VIEW SEE SHEET 4.
5) FOR -DRI- PROFILE SEE SHEET 5.
6) ALL DRIVEWAY RADII ARE 15' UNLESS OTHERWISE NOTED.

PROJECT REFERENCE NO.	SHEET NO.
B-3856	EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



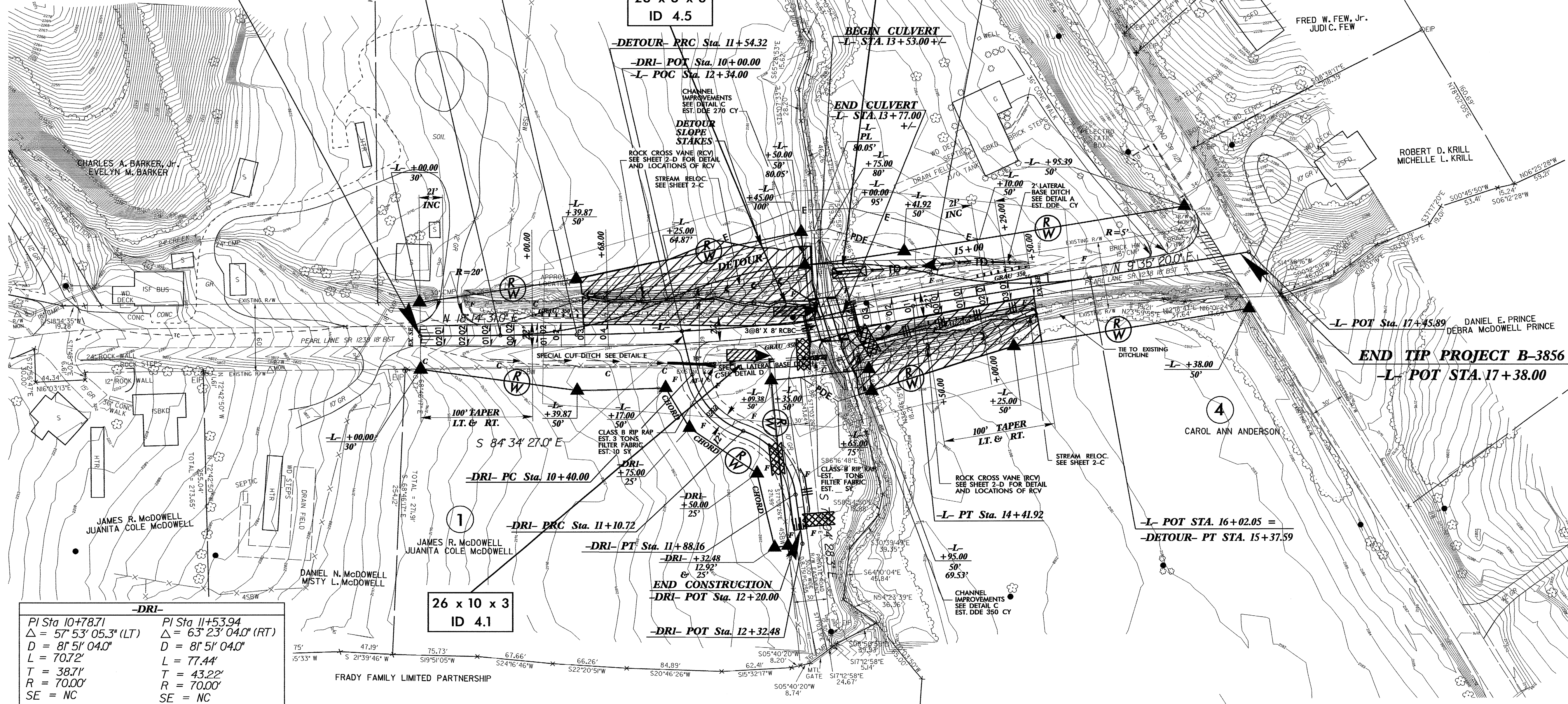
ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

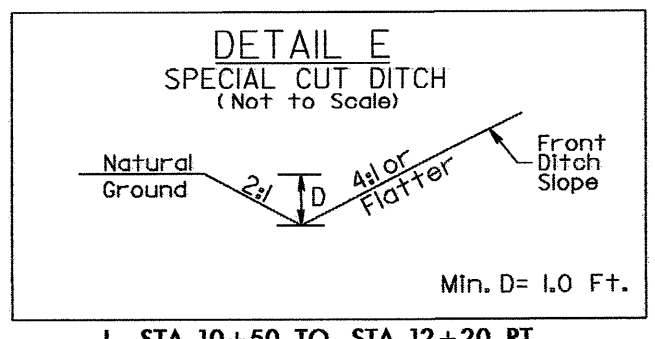
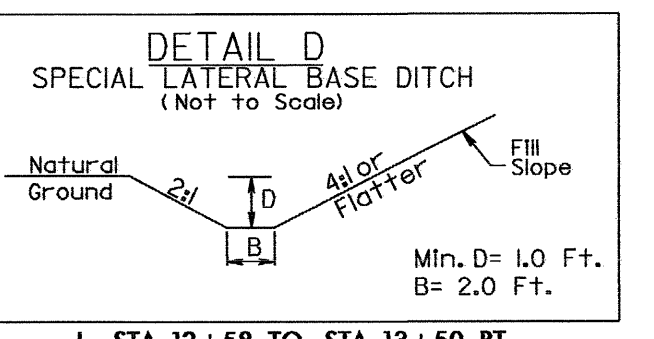
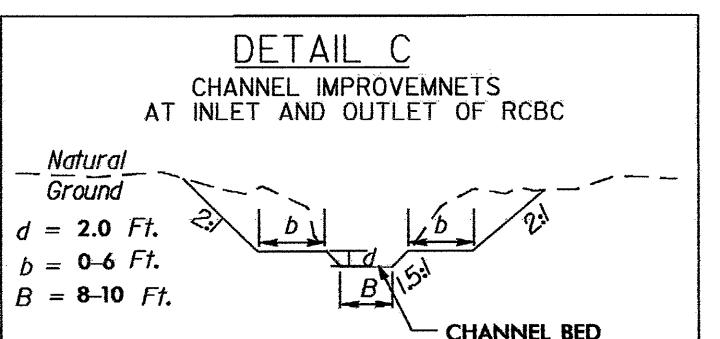
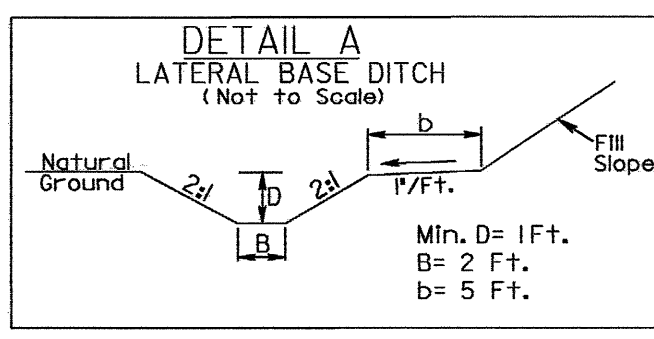
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

DESIGN EXCEPTIONS FOR VERTICAL
ALIGNMENT AND VERTICAL STOPPING
SIGHT DISTANCE ARE REQUIRED.

BEGIN TIP PROJECT B-3856
-L- POT STA. 10+00.00



-DRI-	
PI Sta 10+78.71	PI Sta 11+53.94
$\Delta = 57^{\circ} 53' 05.3''$ (LT)	$\Delta = 63^{\circ} 23' 04.0''$ (RT)
D = 81' 51" 04.0"	D = 81' 51" 04.0"
L = 70.72'	L = 77.44'
T = 38.71'	T = 43.22'
R = 70.00'	R = 70.00'
SE = NC	SE = NC



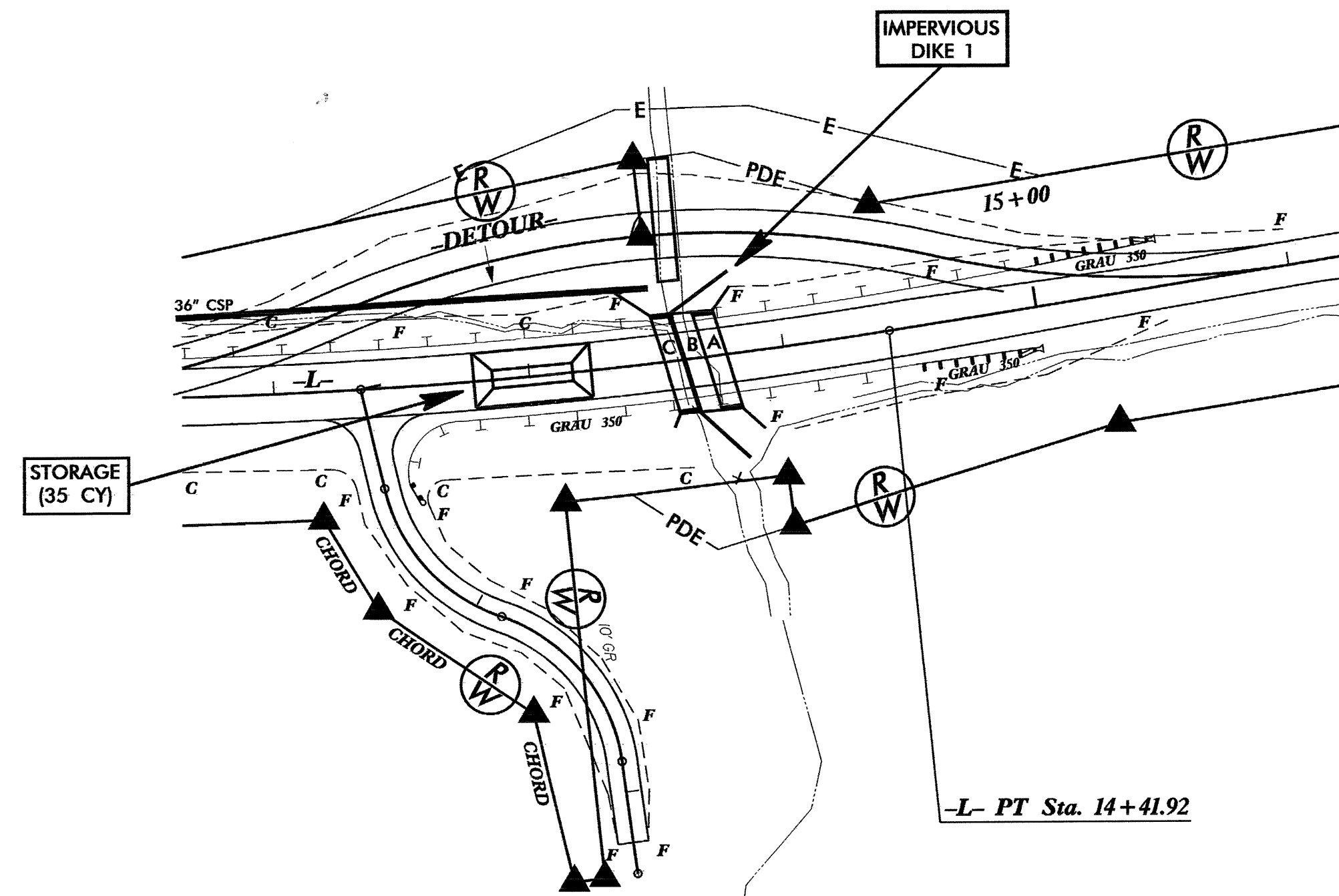
- NOTES:**
- 1) FOR -L- PROFILE SEE SHEET 5.
 - 2) FOR -DRI- PROFILE SEE SHEET 5.
 - 3) FOR -DETOUR- PLAN VIEW SEE SHEET 2-B.
 - 4) FOR -DETOUR- PROFILE SEE SHEET 5.
 - 5) ALL DRIVEWAY RADII ARE 15' UNLESS OTHERWISE NOTED.
 - 6) FOR CULVERT PLANS SEE SHEET C-1 THRU 2.

PROJECT REFERENCE NO. B-3856	SHEET NO. EC-6/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CULVERT CONSTRUCTION SEQUENCE STA. 13+65 -L-

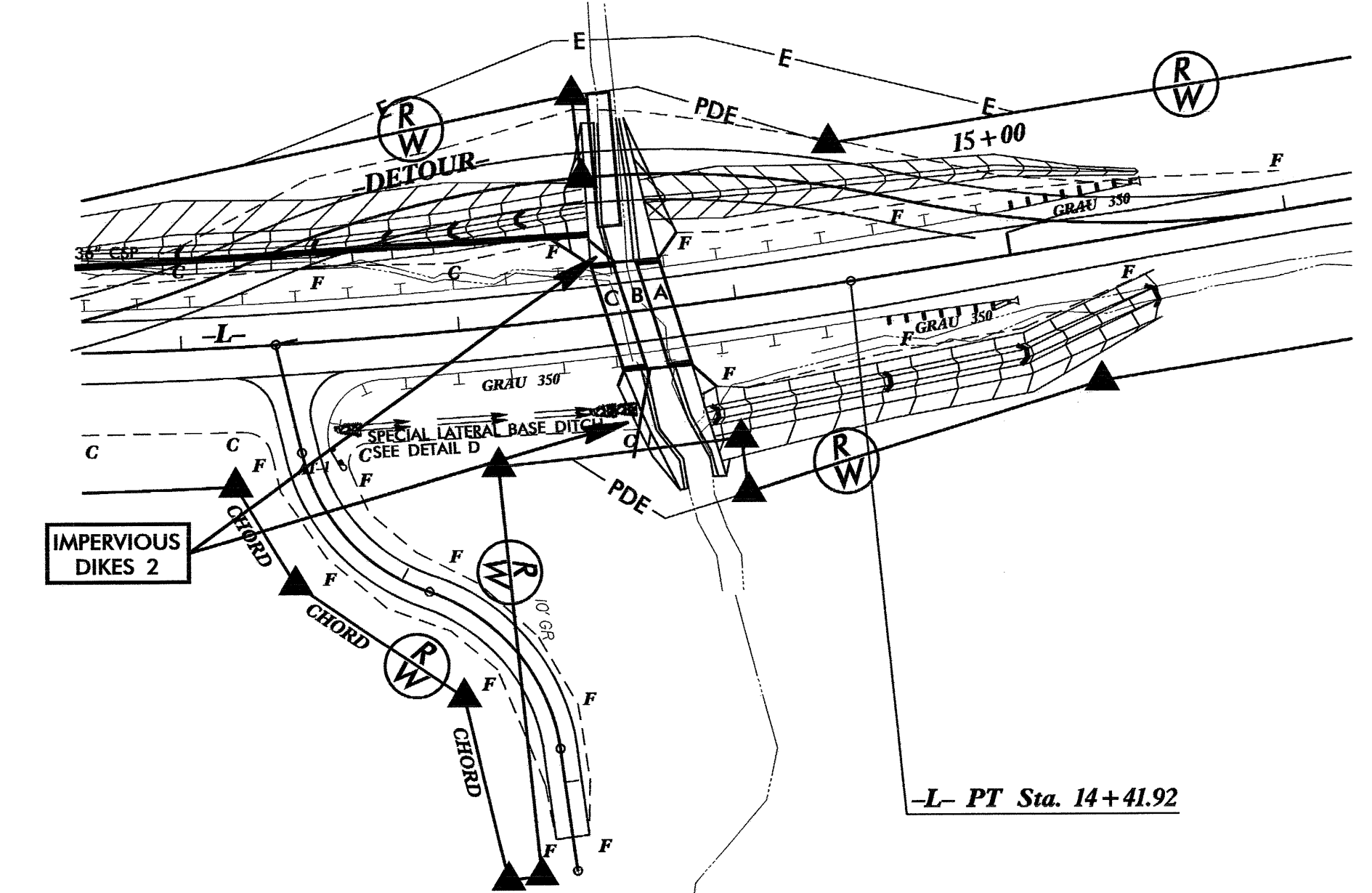
PHASE 1

1. INSTALL TEMPORARY 36 IN. CSP AND DETOUR CULVERT (90 CSP).
2. CONSTRUCT DETOUR AND REROUTE TRAFFIC.
3. CONSTRUCT STILLING BASIN (35 CY).
4. INSTALL IMPERVIOUS DIKE 1 AND CONSTRUCT CULVERT BARRELS A AND B.



PHASE 2

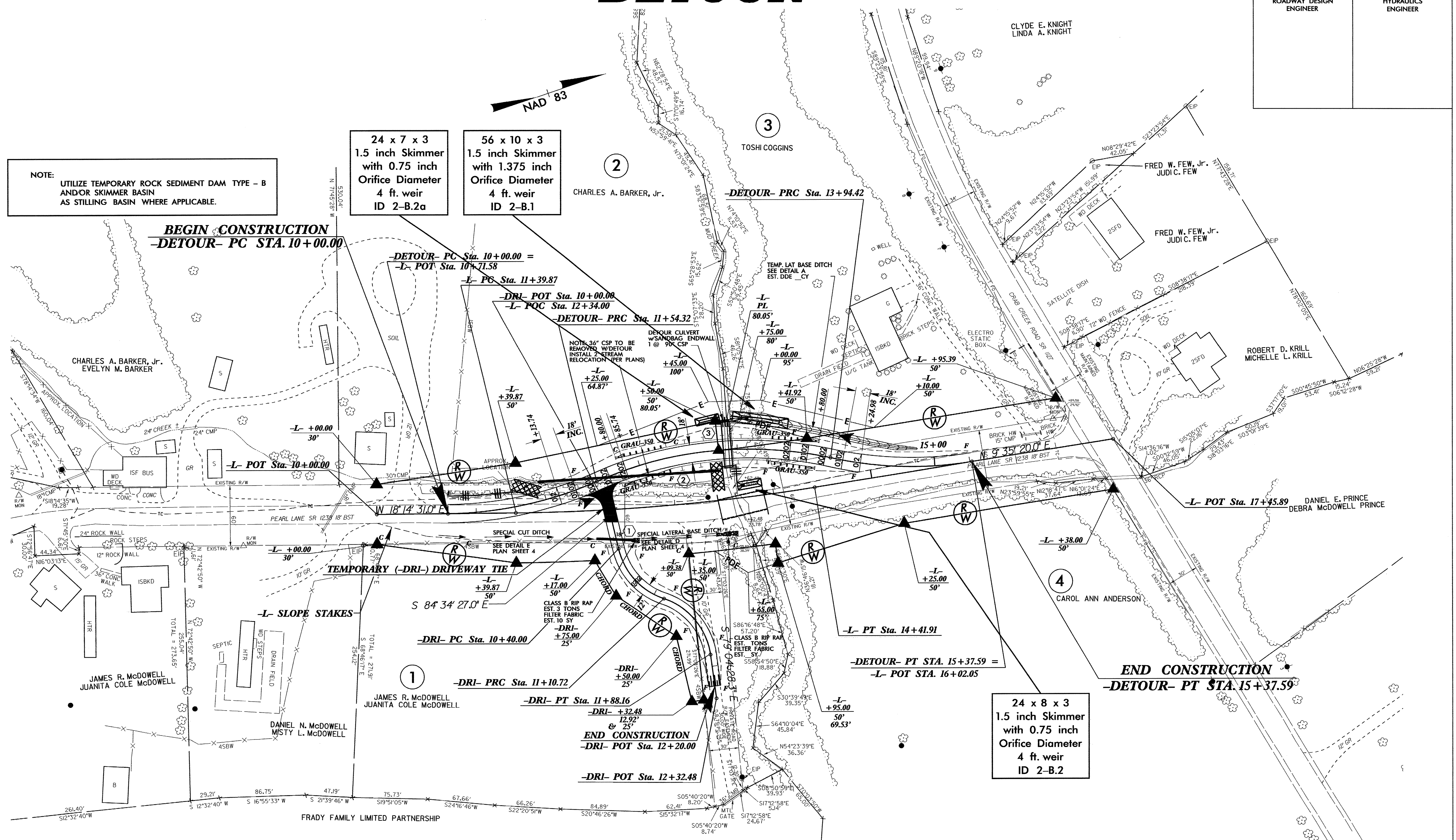
5. REMOVE IMPERVIOUS DIKE 1 AND INSTALL IMPERVIOUS DIKES 2, DIVERTING WATER THROUGH BARRELS A AND B.
6. CONSTRUCT CULVERT BARREL C.
7. REMOVE IMPERVIOUS DIKES 2 AND DIVERT TOTAL FLOW THROUGH RCBC.
8. REMOVE TEMPORARY 36 IN. CSP AND MAKE CHANNEL IMPROVEMENTS.
9. COMPLETE ROADWAY AND INSTALL STREAM RELOCATIONS.



DETOUR

PROJECT REFERENCE NO.	SHEET NO.
B-3856	EC-7/CONST.2-B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE - B AND/OR SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.

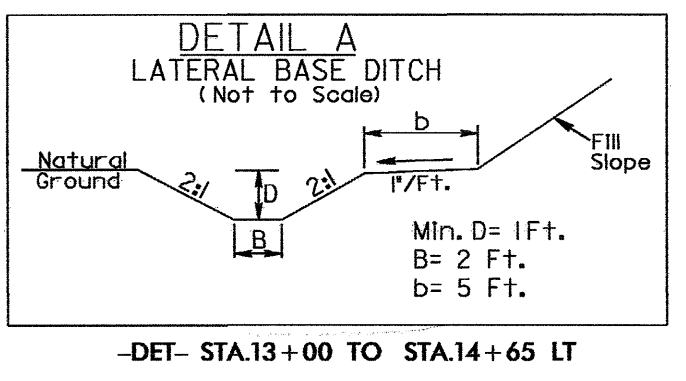


BEGIN CONSTRUCTION
-DETOUR- PC STA. 10+00.00

END CONSTRUCTION
-DETOUR- PT STA. 15+37.59

- 24 x 7 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
4 ft. weir
ID 2-B.2a
- 56 x 10 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
4 ft. weir
ID 2-B.1

- 24 x 8 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
4 ft. weir
ID 2-B.2



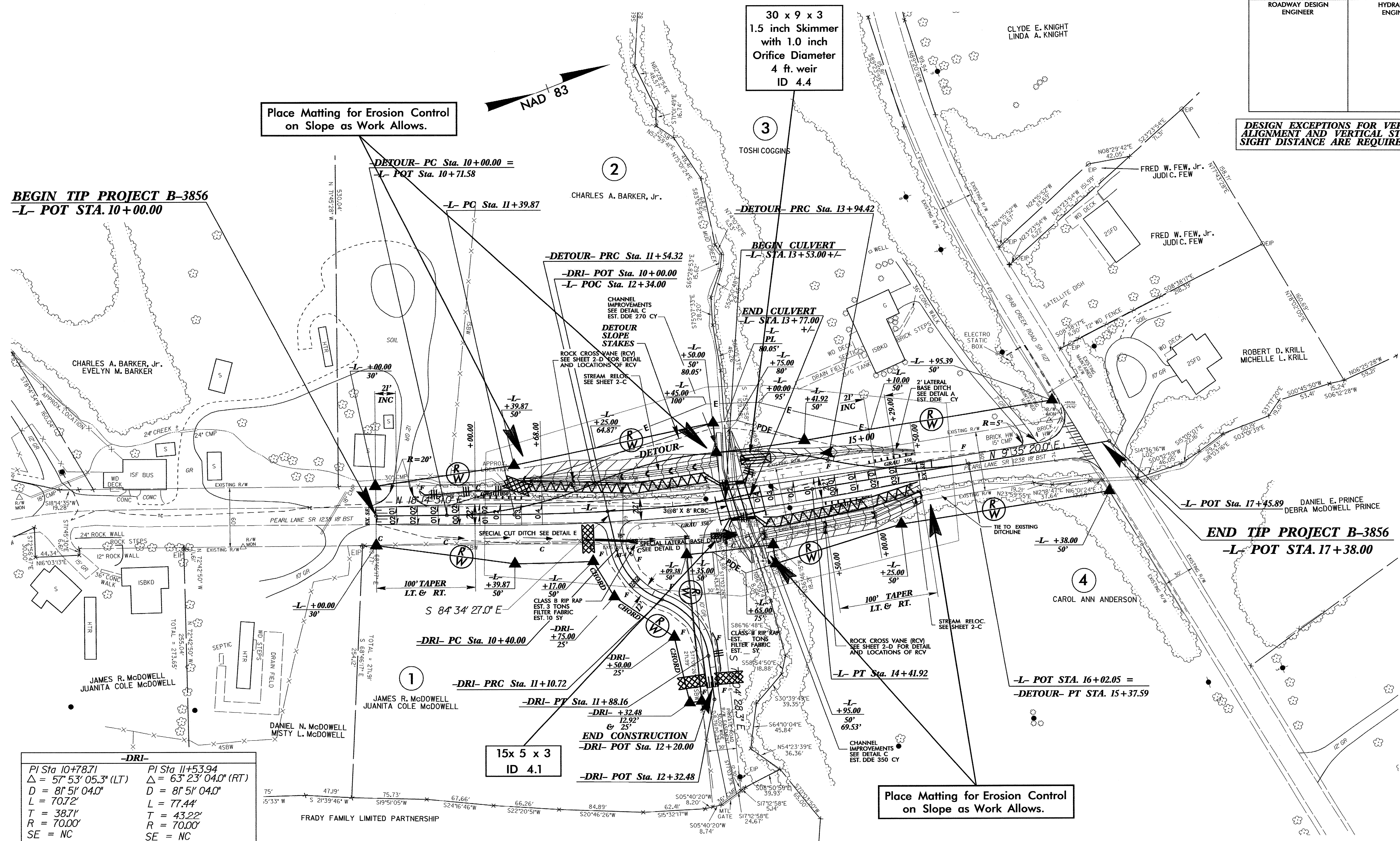
-DRI-	
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- NOTES:**
- 1) FOR -L- PLAN VIEW SEE SHEET 4.
 - 2) FOR -L- PROFILE SEE SHEET 5.
 - 3) FOR -DETOUR- PROFILE SEE SHEET 5.
 - 4) FOR -DRI- PLAN VIEW SEE SHEET 4.
 - 5) FOR -DRI- PROFILE SEE SHEET 5.
 - 6) ALL DRIVEWAY RADII ARE 15' UNLESS OTHERWISE NOTED.

DESIGN EXCEPTIONS FOR VERTICAL ALIGNMENT AND VERTICAL STOPPING SIGHT DISTANCE ARE REQUIRED.

BEGIN TIP PROJECT B-3856
-L- POT STA. 10+00.00

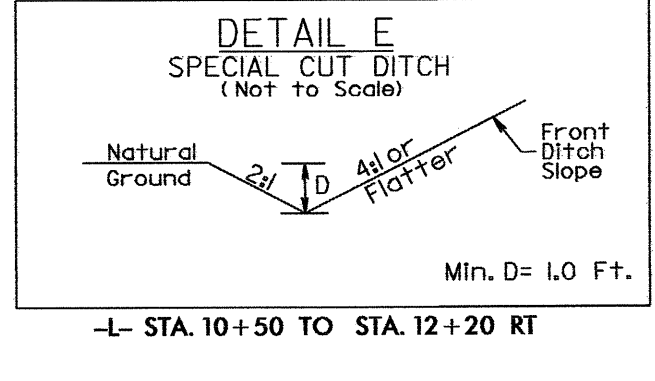
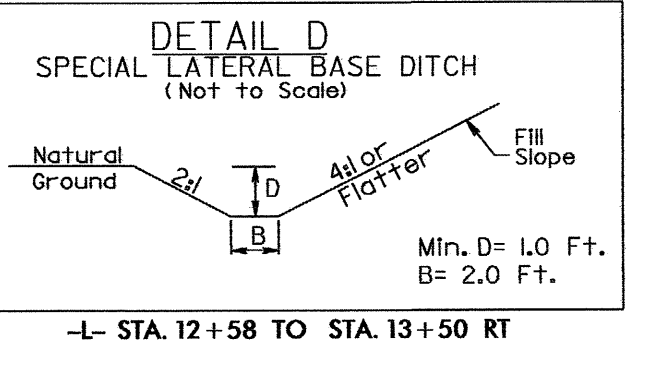
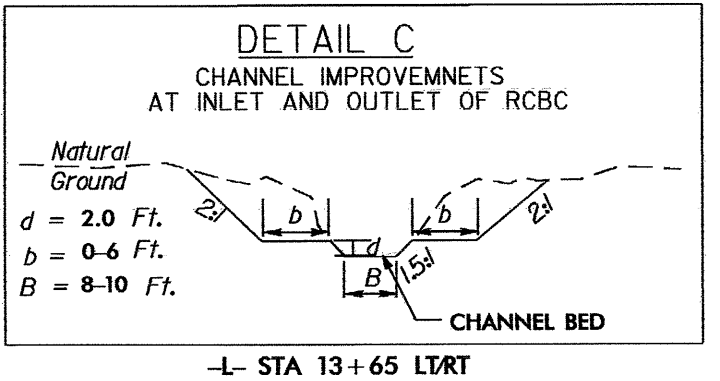
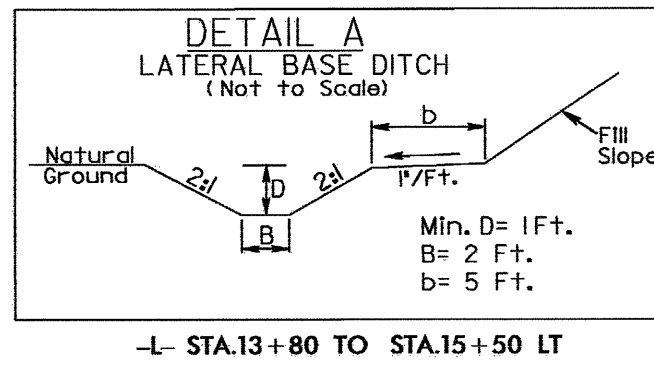
END TIP PROJECT B-3856
-L- POT STA. 17+38.00



Place Matting for Erosion Control on Slope as Work Allows.

Place Matting for Erosion Control on Slope as Work Allows.

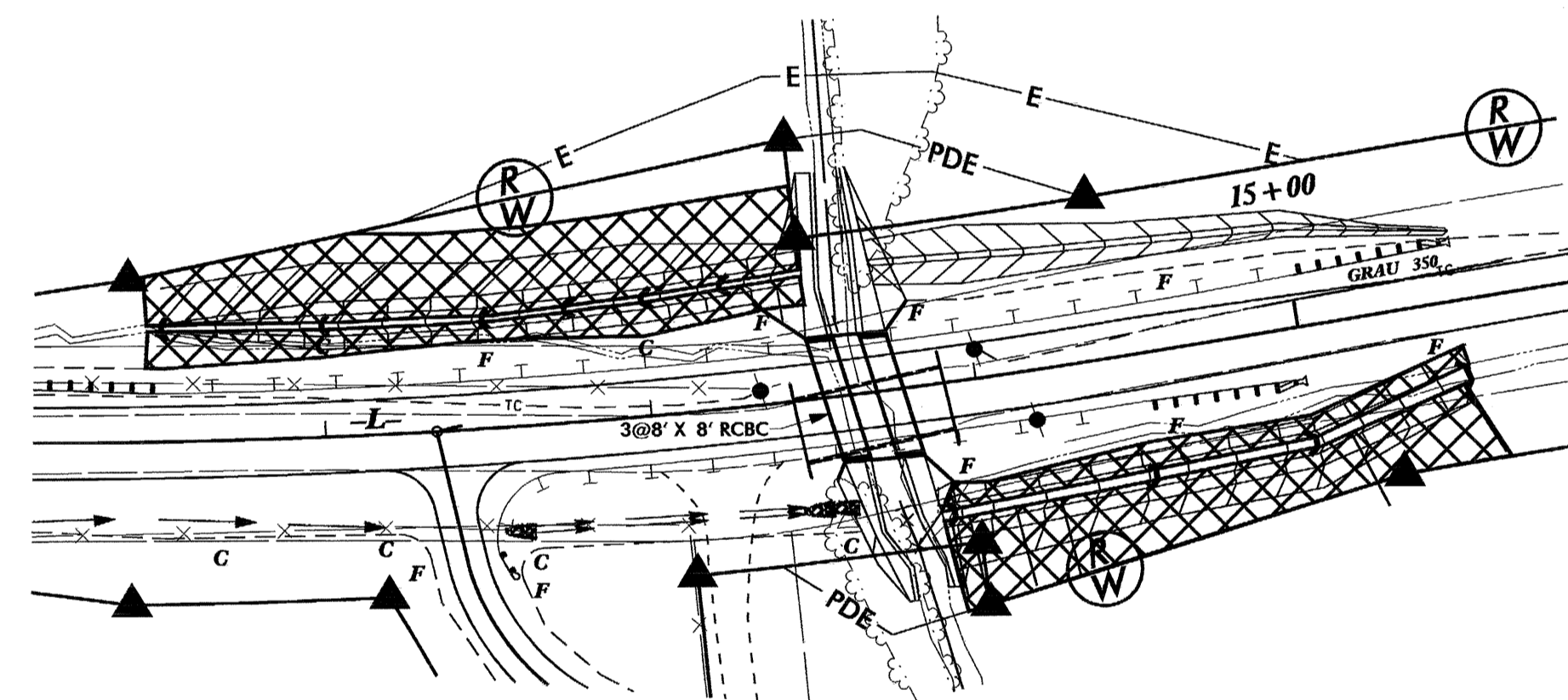
-DRI-	
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$L = 70.72'$	$L = 77.44'$
$T = 38.71'$	$T = 43.22'$
$R = 70.00'$	$R = 70.00'$
SE = NC	SE = NC



- NOTES:**
- 1) FOR -L- PROFILE SEE SHEET 5.
 - 2) FOR -DRI- PROFILE SEE SHEET 5.
 - 3) FOR -DETOUR- PLAN VIEW SEE SHEET 2-B.
 - 4) FOR -DETOUR- PROFILE SEE SHEET 5.
 - 5) ALL DRIVEWAY RADII ARE 15' UNLESS OTHERWISE NOTED.
 - 6) FOR CULVERT PLANS SEE SHEET C-1 THRU 2.

PROJECT REFERENCE NO.	SHEET NO.
B-3856	EC-9/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

0.3 ACRE STREAMBANK REFORESTATION



SEE RF-1, RF-2, AND PROJECT SPECIAL PROVISIONS