

TIP PROJECT: B-3656

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

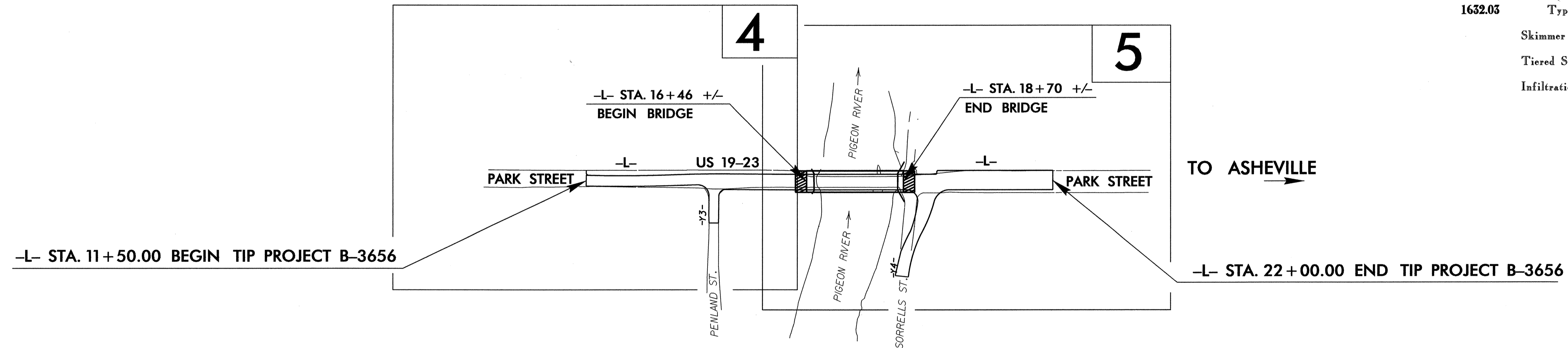
**LOCATION: BRIDGE 419 ON US 19-23 OVER PIGEON RIVER
 IN CANTON**

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3656	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch.....	TD
1630.05	Temporary Diversion.....	TD
1605.01	Temporary Silt Fence.....	III III III
1606.01	Special Sediment Control Fence.....	X X X X X X
1622.01	Temporary Berms and Slope Drains.....	T
	Silt Basin Type B.....	S
1633.01	Temporary Rock Silt Check Type-A.....	R
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM).....	R
	Temporary Rock Silt Check Type-B.....	R
	Wattle / Coir Fiber Wattle.....	W
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM).....	W
1634.01	Temporary Rock Sediment Dam Type-A.....	RSD
1634.02	Temporary Rock Sediment Dam Type-B.....	RSD
1635.01	Rock Pipe Inlet Sediment Trap Type-A.....	RPI
1635.02	Rock Pipe Inlet Sediment Trap Type-B.....	RPI
1630.04	Stilling Basin.....	S
1630.06	Special Stilling Basin.....	SS
	Rock Inlet Sediment Trap:	
1632.01	Type A.....	A
1632.02	Type B.....	B
1632.03	Type C.....	C
	Skimmer Basin.....	S
	Tiered Skimmer Basin.....	TS
	Infiltration Basin.....	I



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

**THIS PROJECT HAS
 BEEN DESIGNED TO
 SENSITIVE WATERSHED
 STANDARDS.**

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

GRAPHIC SCALE

0

PLANS

0

PROFILE (HORIZONTAL)

0

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

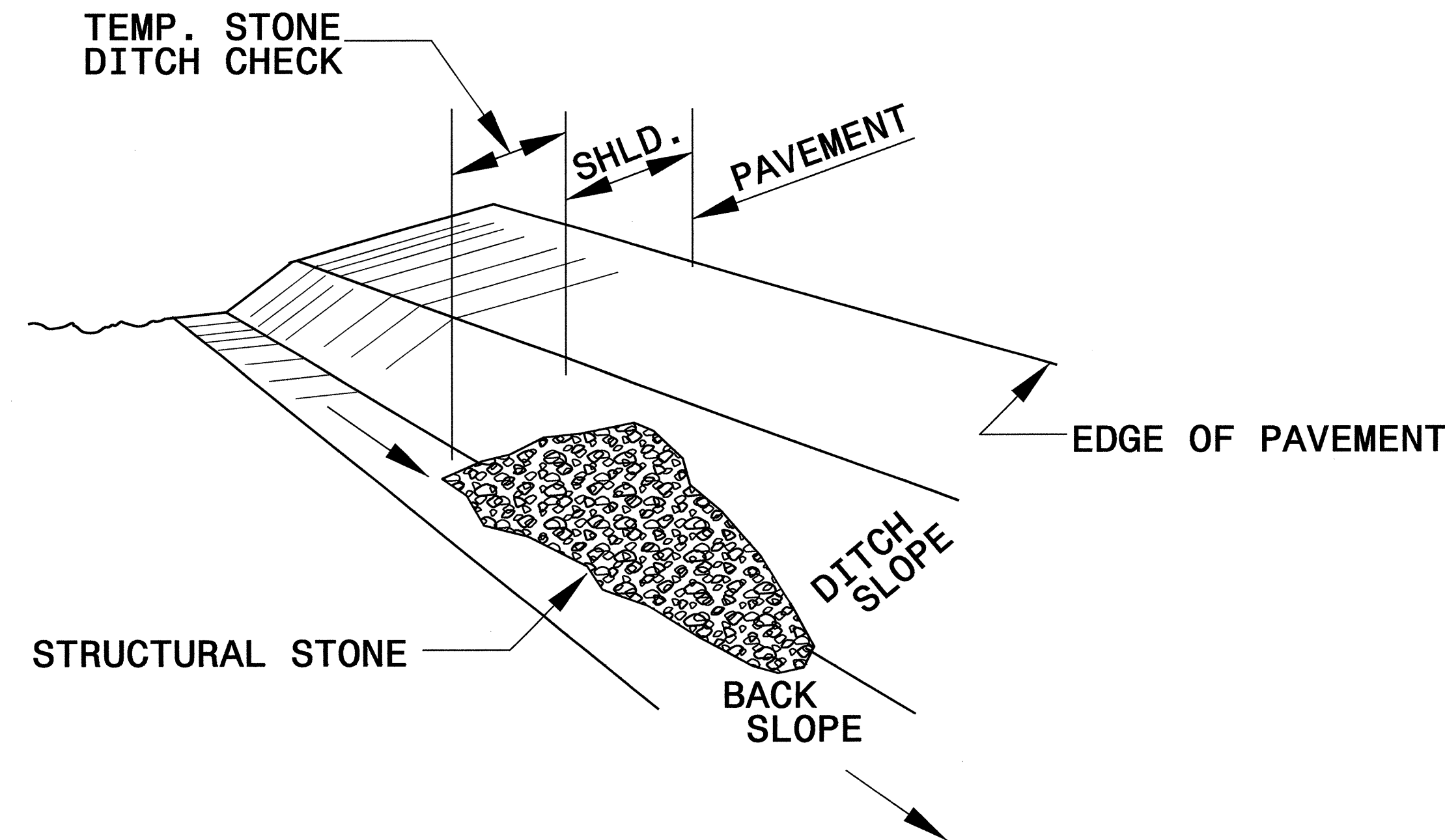
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1630.06 Special Stilling Basin
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
1622.01 Temporary Berms and Slope Drains	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	

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PROJECT REFERENCE NO. <i>B-3656</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

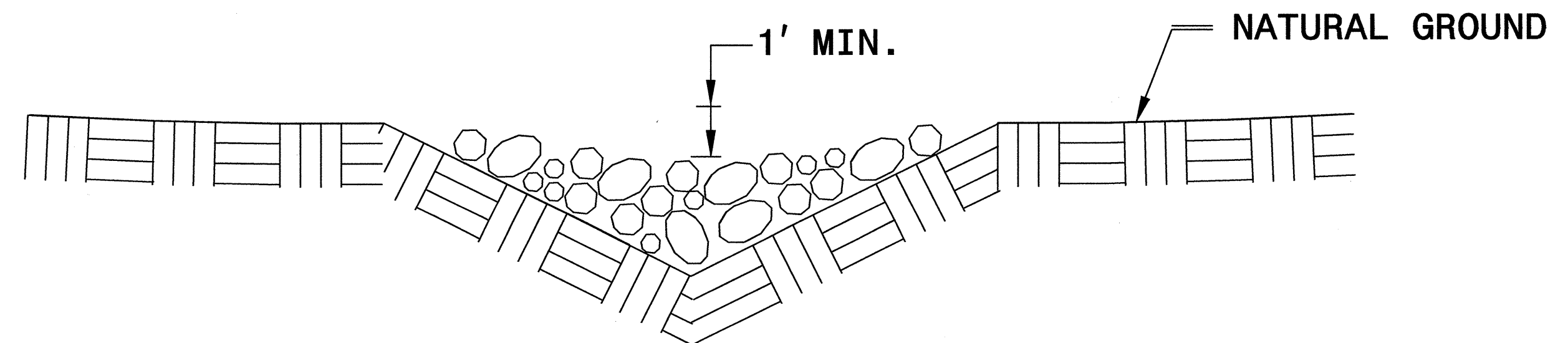


ISOMETRIC VIEW

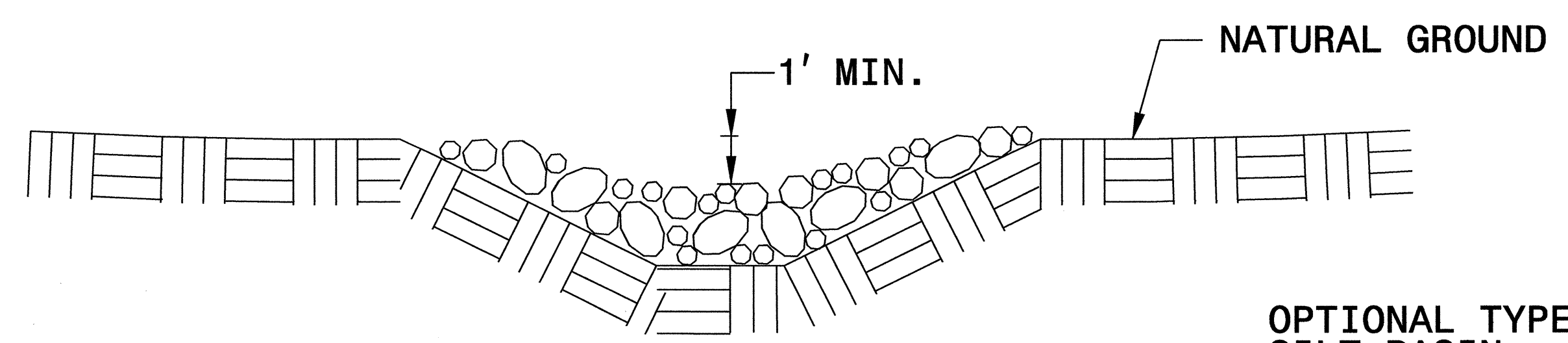
NOTES:

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

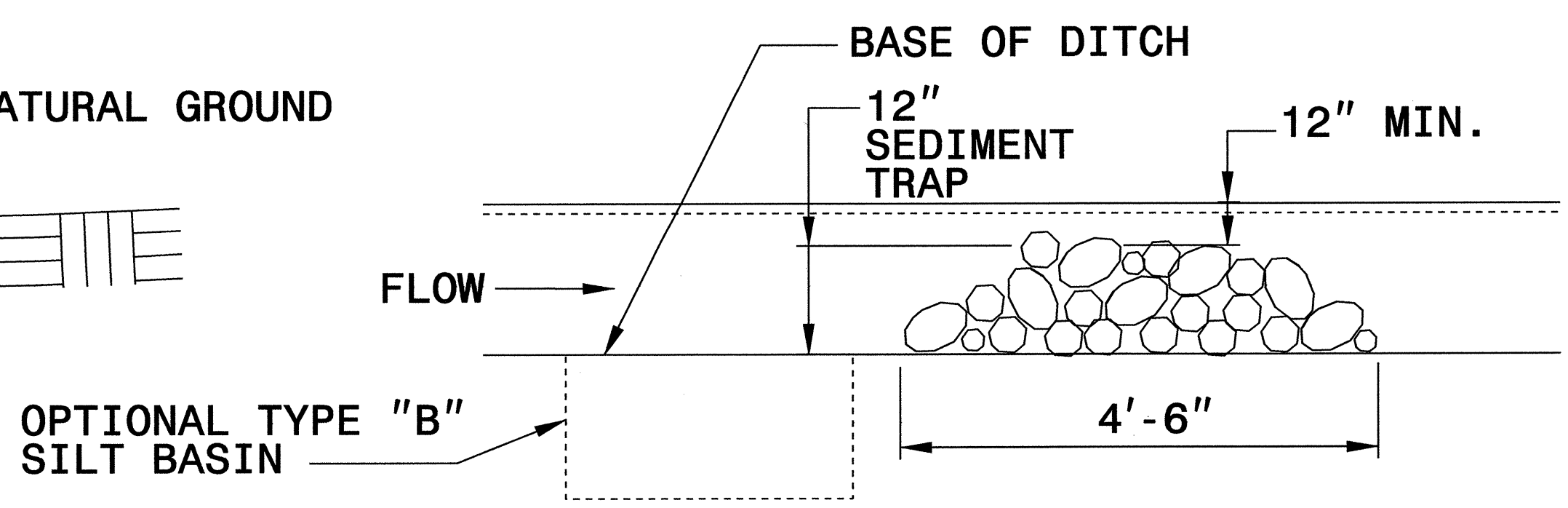
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



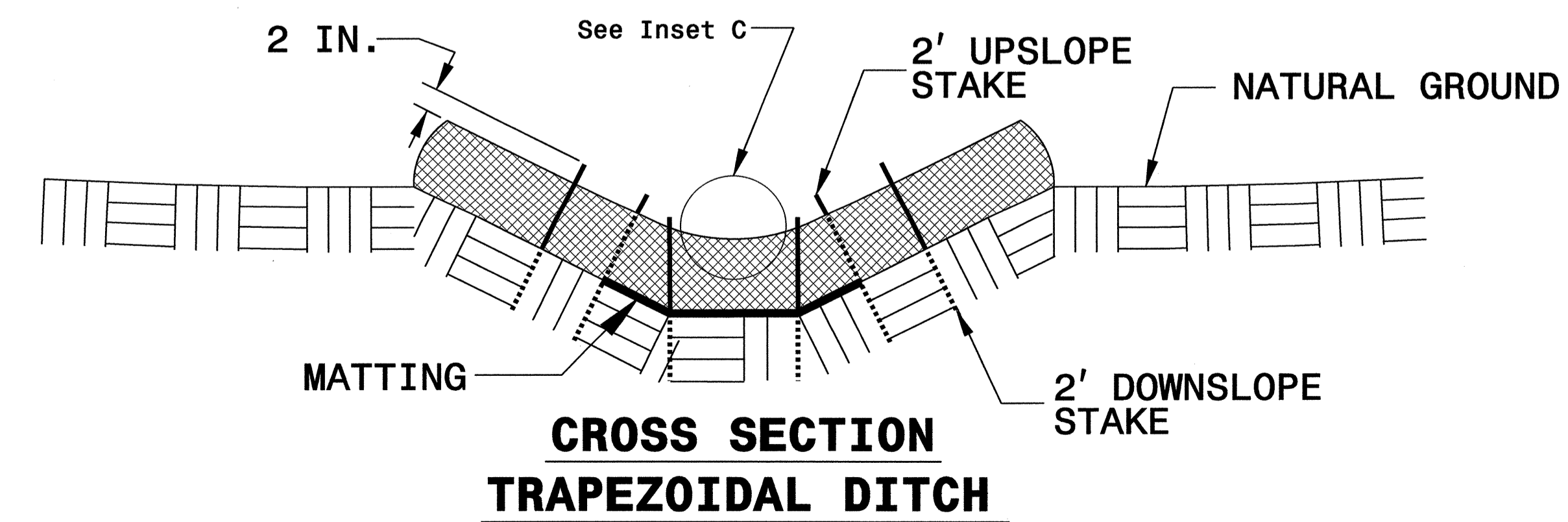
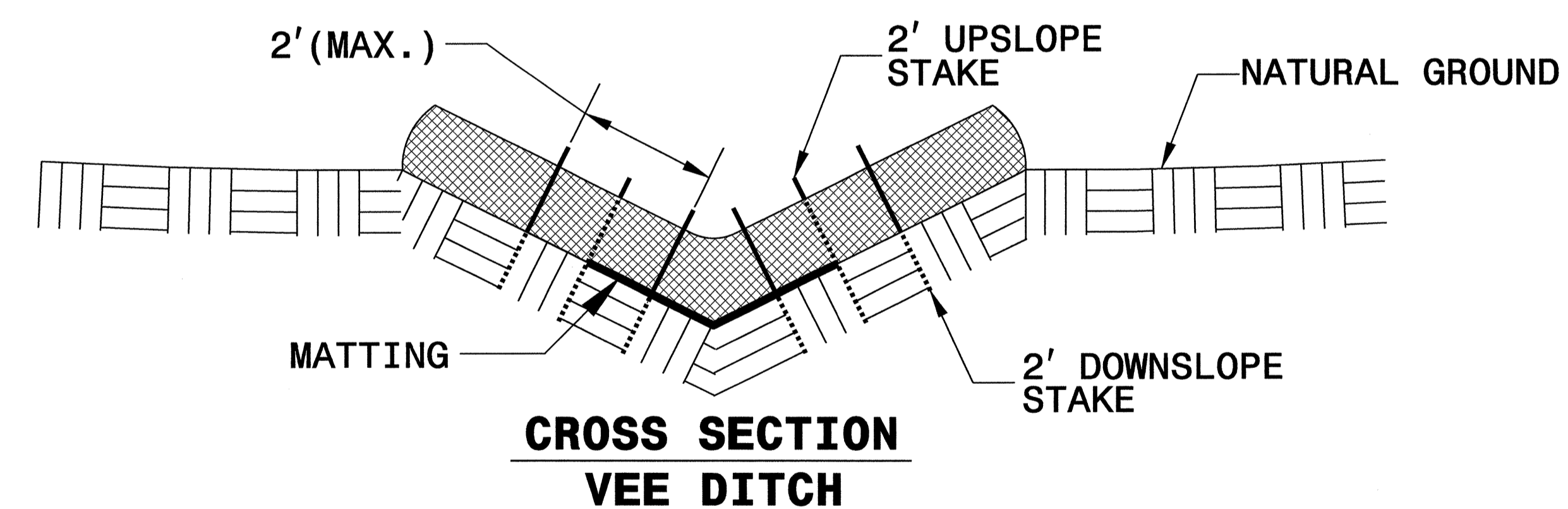
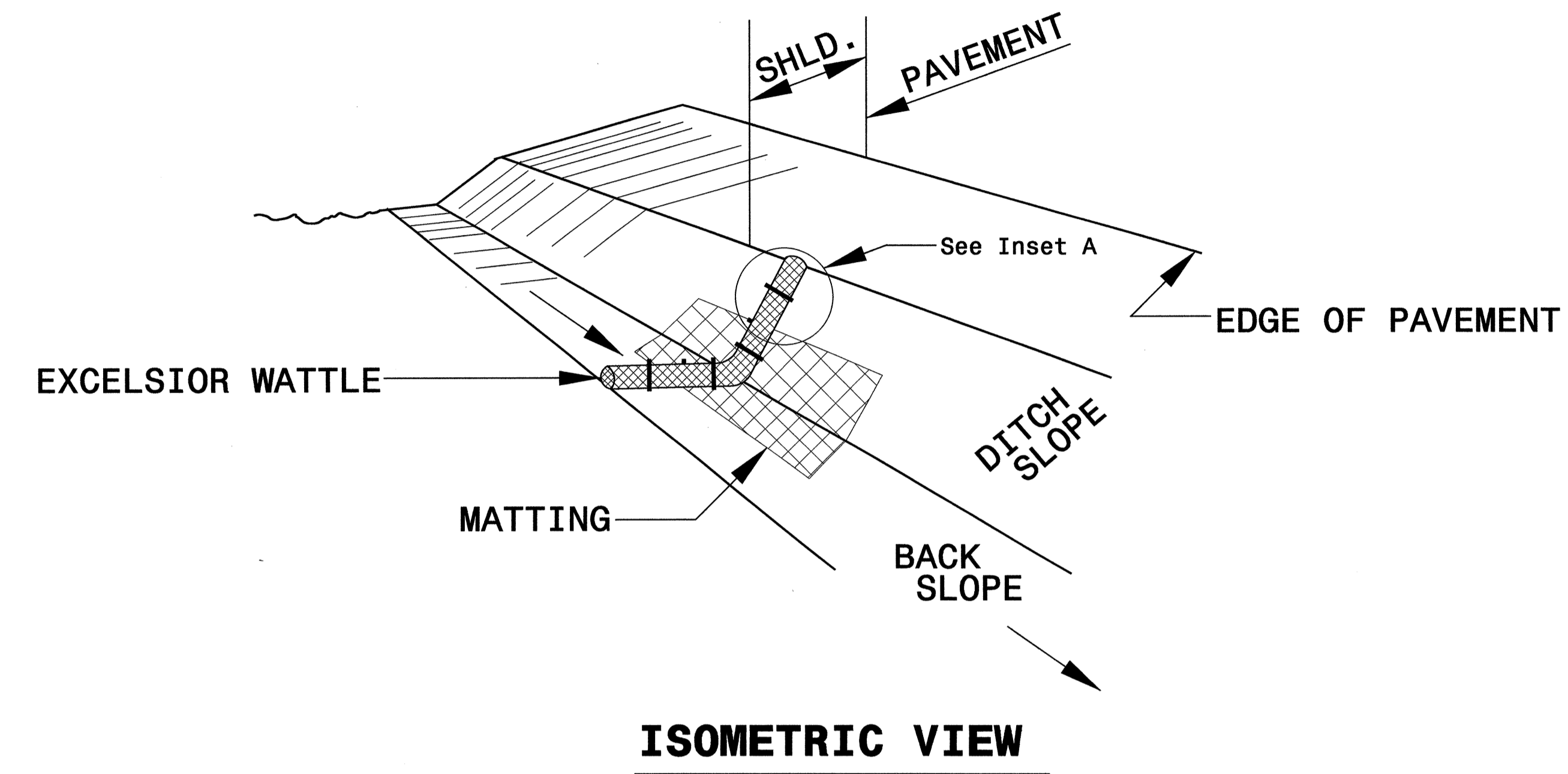
CROSS SECTION TRAPEZOIDAL DITCH



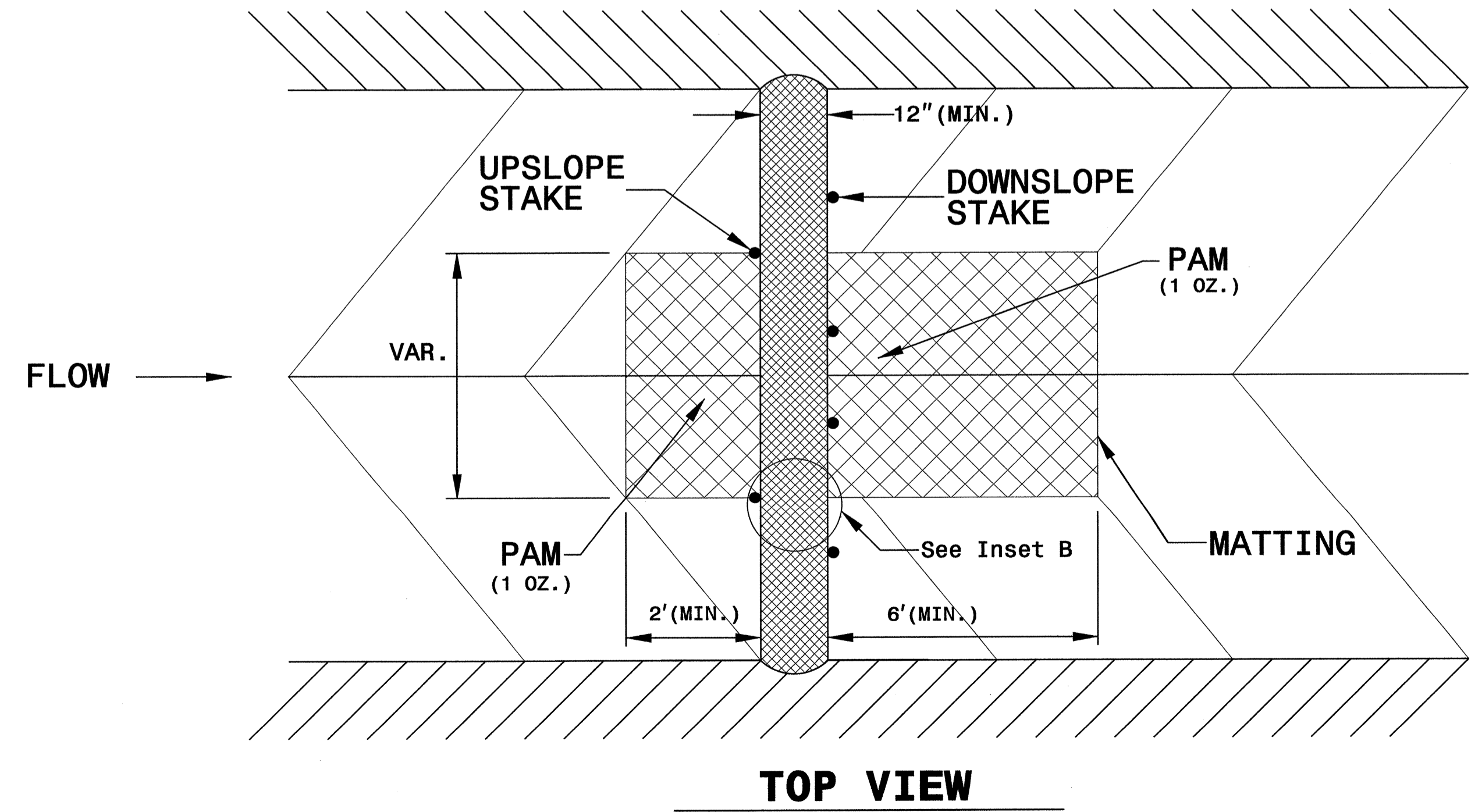
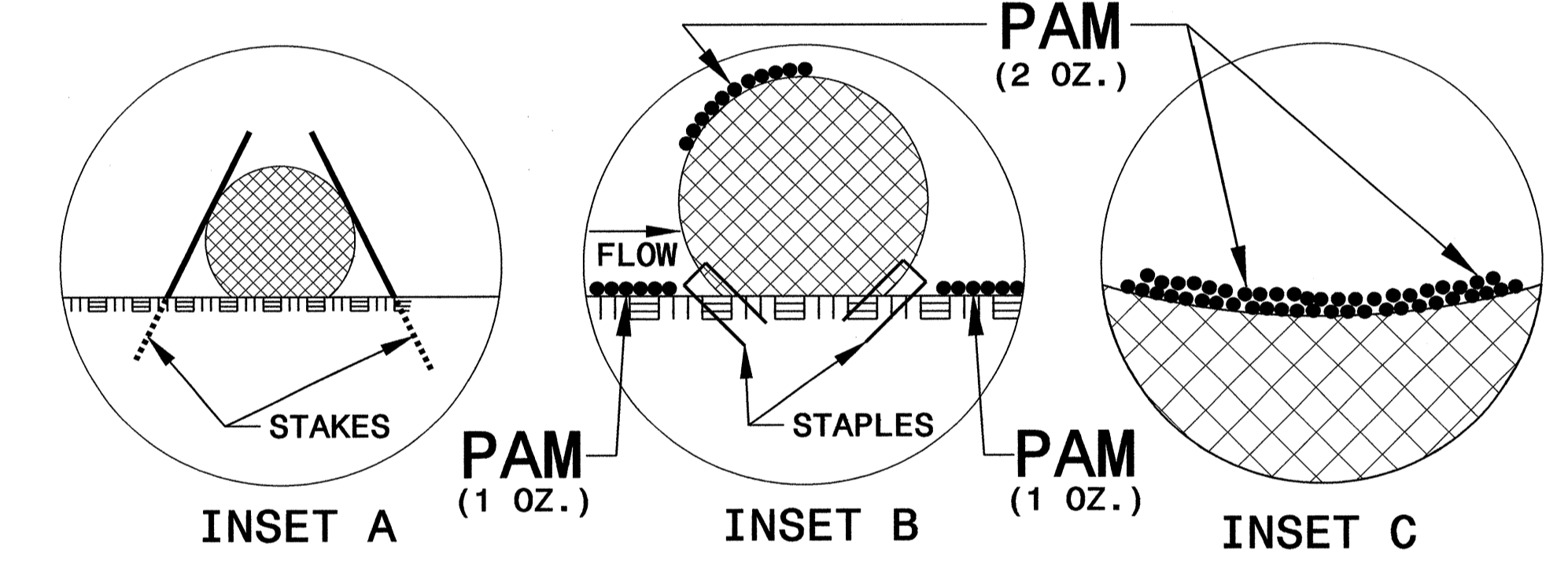
ELEVATION VIEW

PROJECT REFERENCE NO. B-3656	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

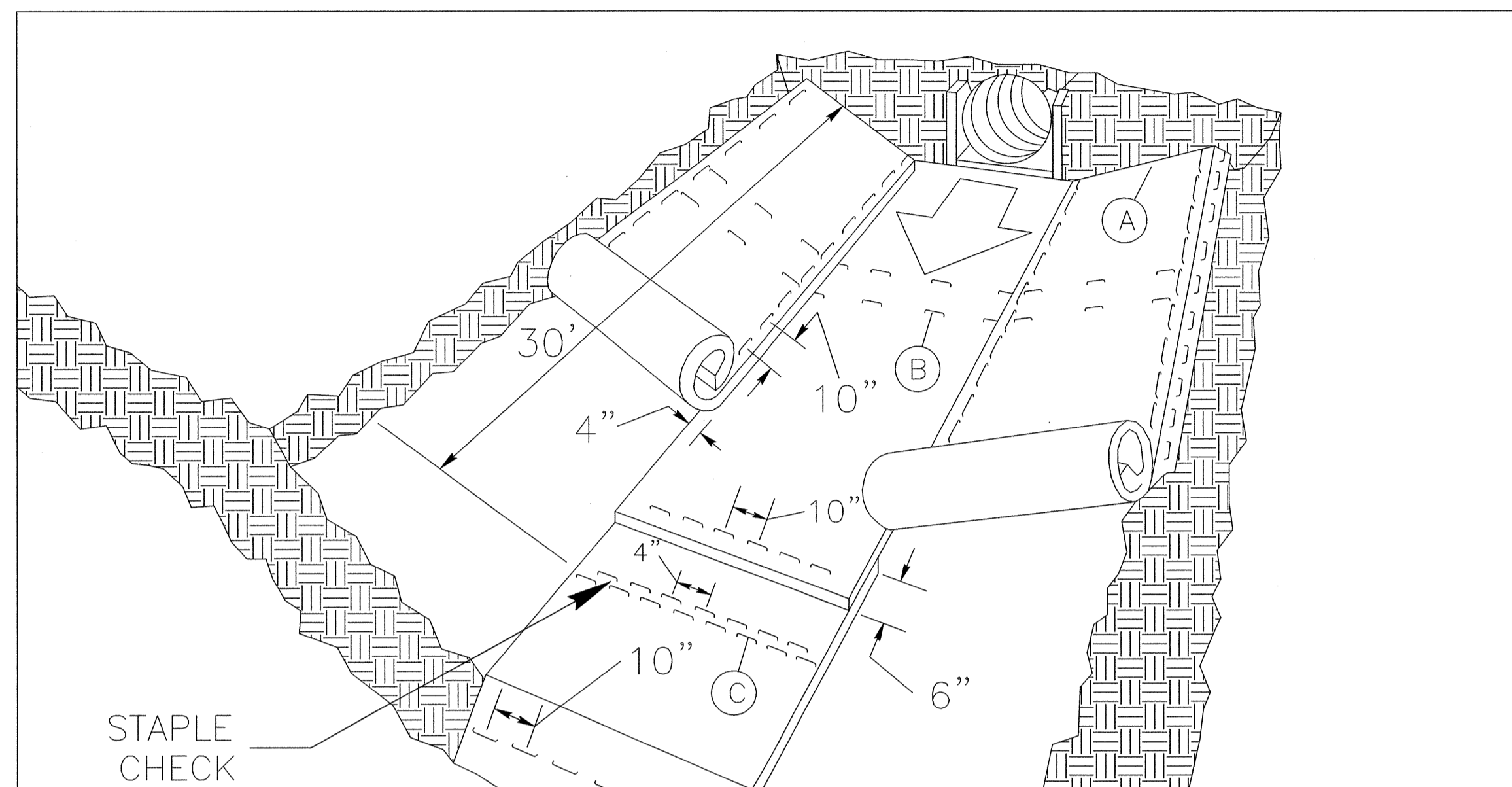


- NOTES:
- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
 - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
 - ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
 - INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE 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.
 - 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 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



PROJECT REFERENCE NO. B-3656	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

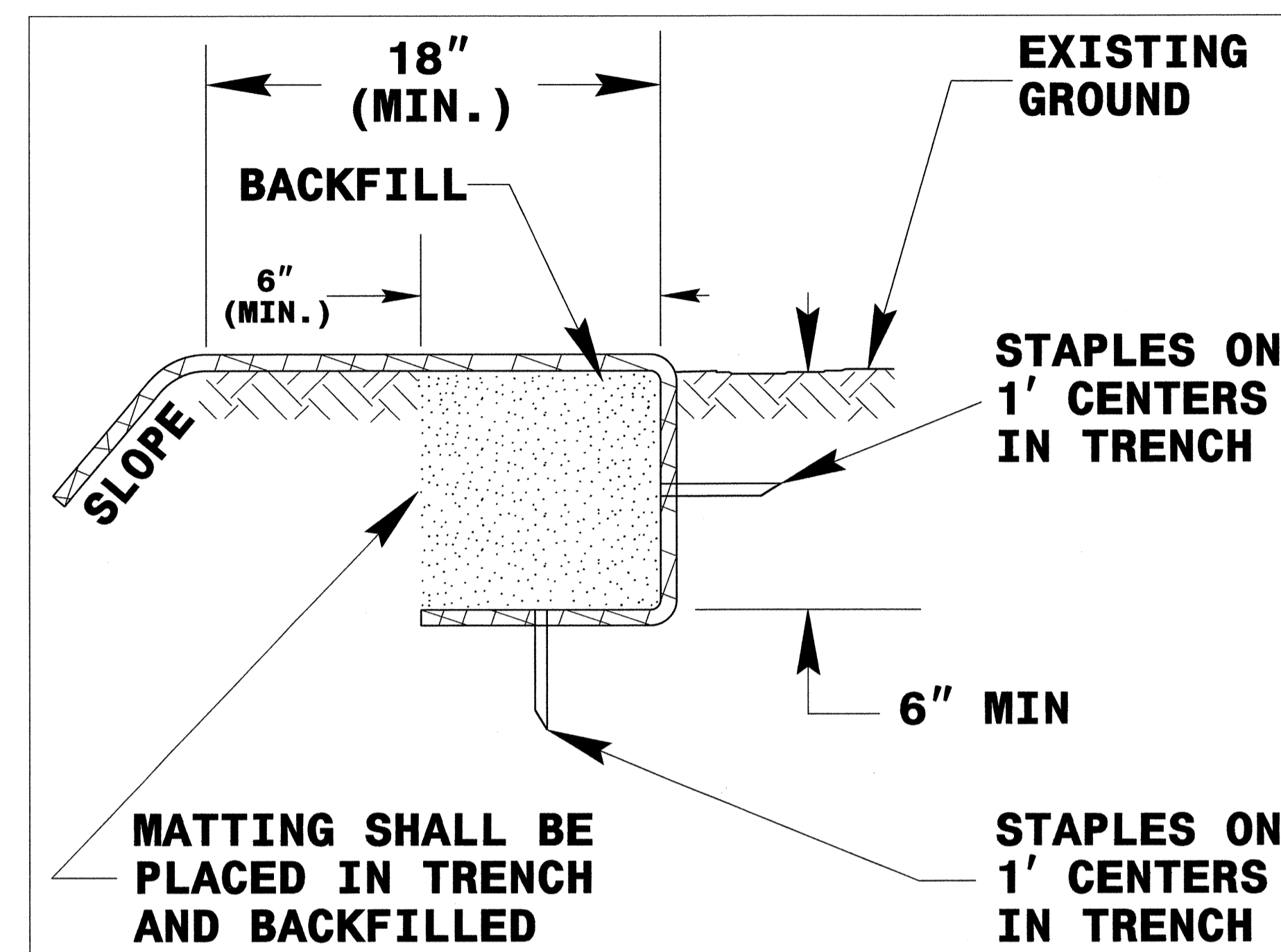
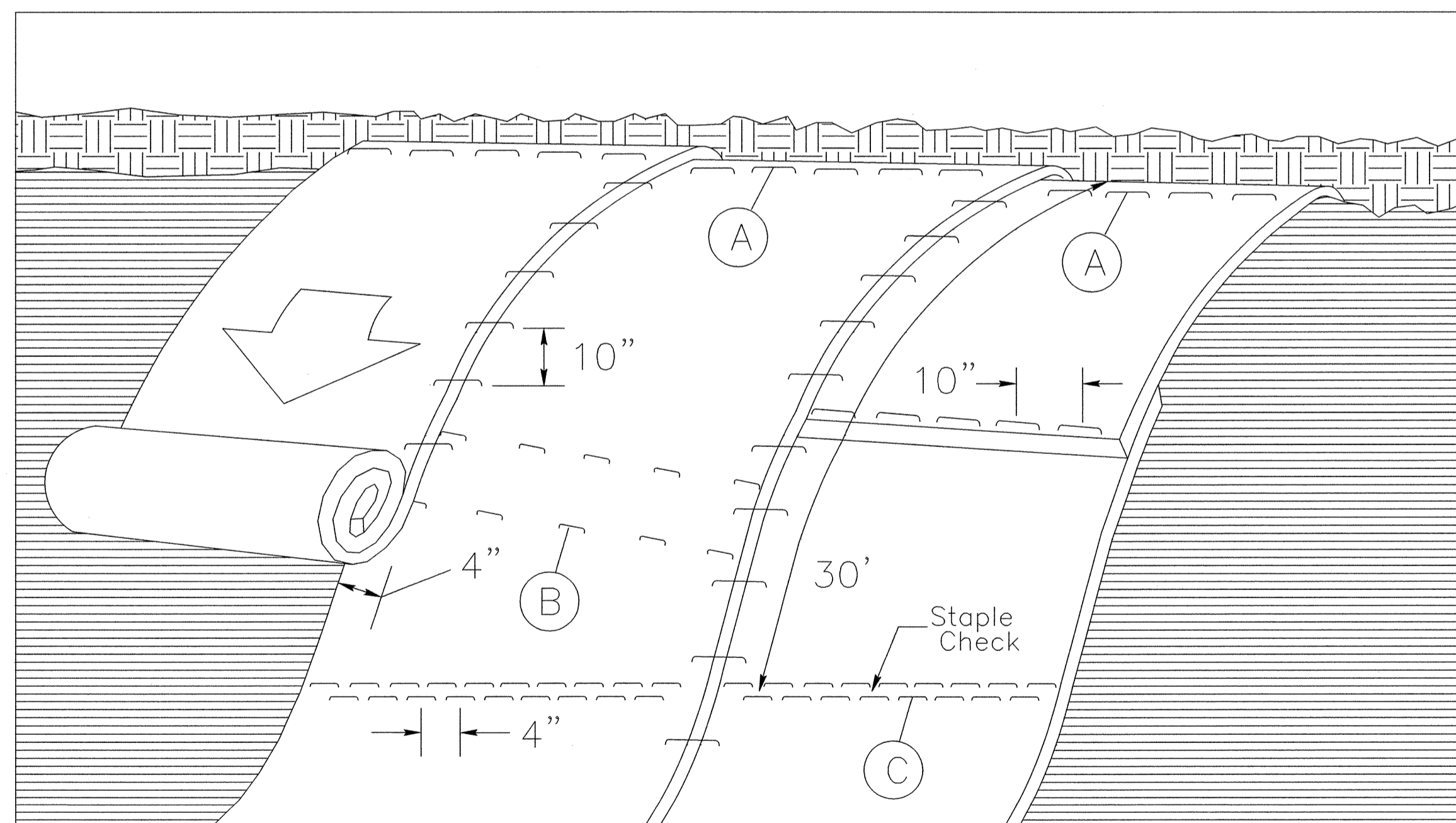


DIAGRAM (A)



MATTING ON SLOPES

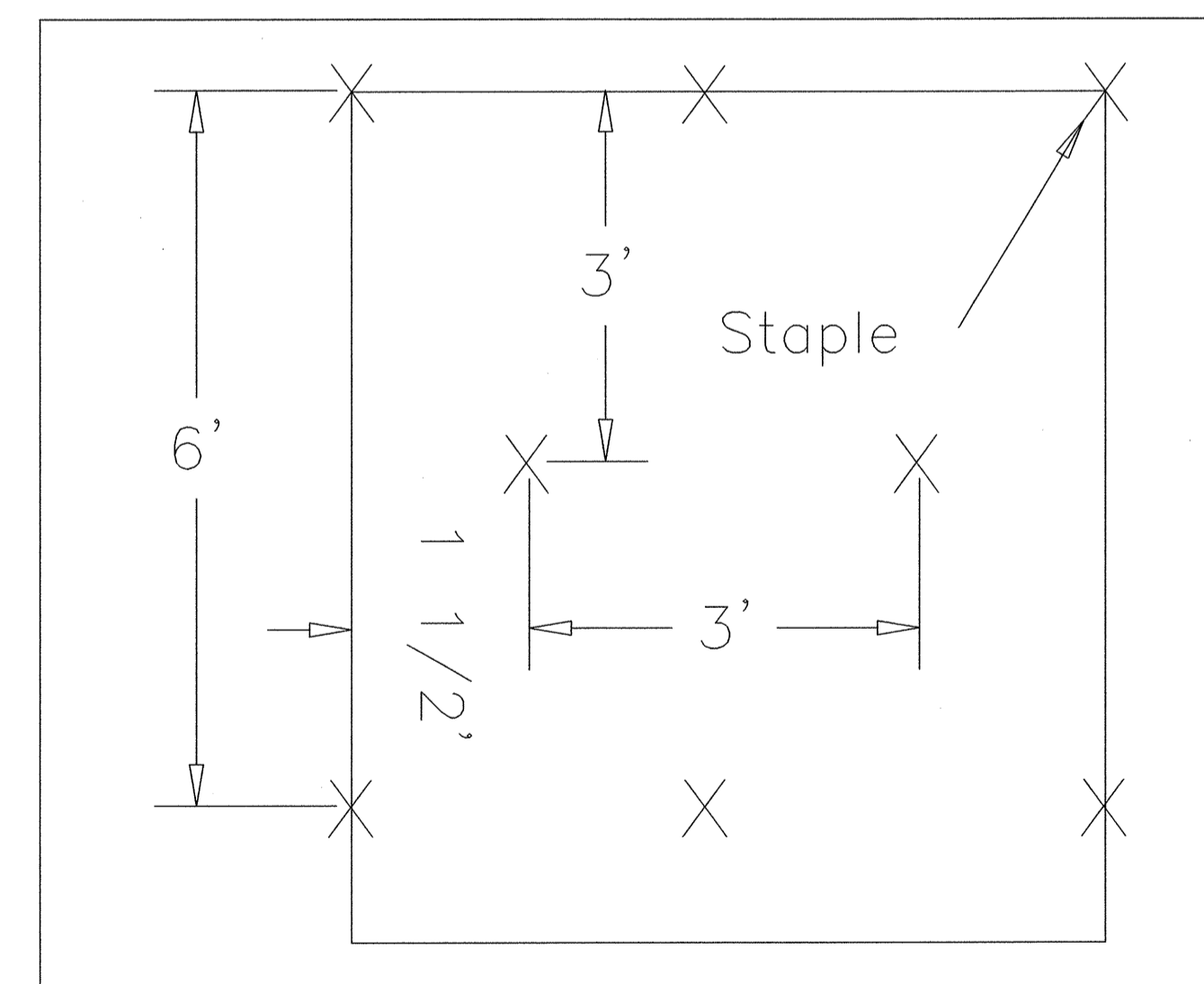


DIAGRAM (B)

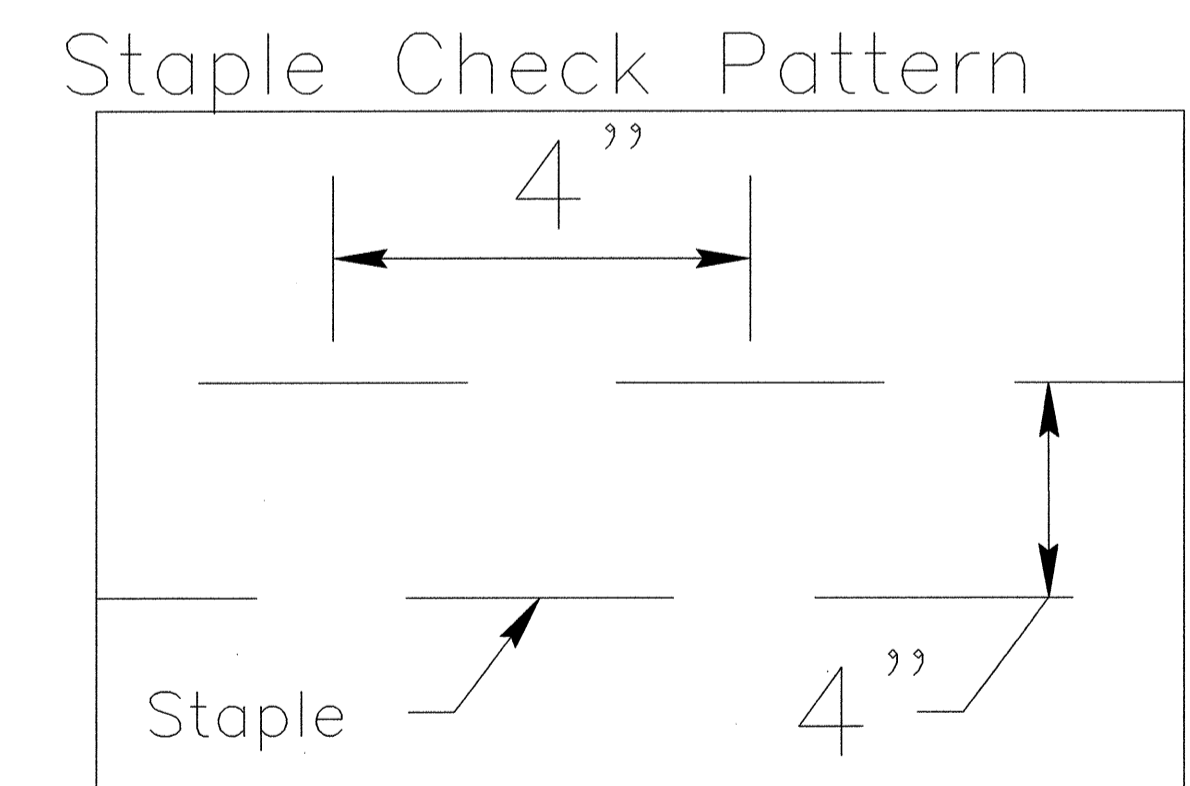


DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.
 STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

PROJECT REFERENCE NO. B-3656	SHEET NO. EC-03/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

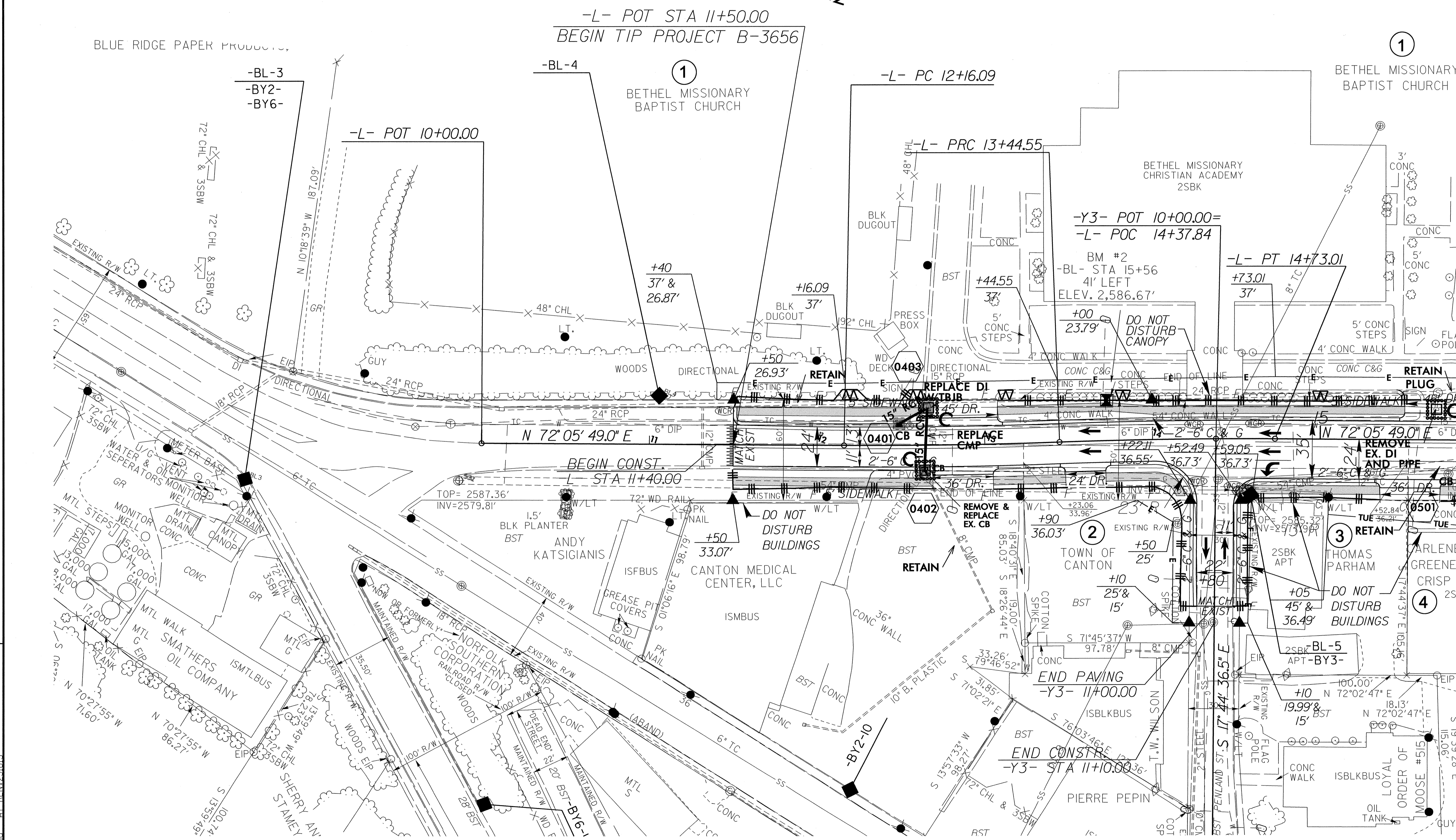
4" CONC. SIDEWALK

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.

8/17/99

NAD 83 NSRS 2007



REVISIONS

25-OCT-2010 15:10
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MATCHLINE -L- STA. 15+85.00 SEE SHEET 5

PROJECT REFERENCE NO.	SHEET NO.
B-3656	EC-04/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: UTILIZE SPECIAL STILLING BASIN WHERE APPLICABLE

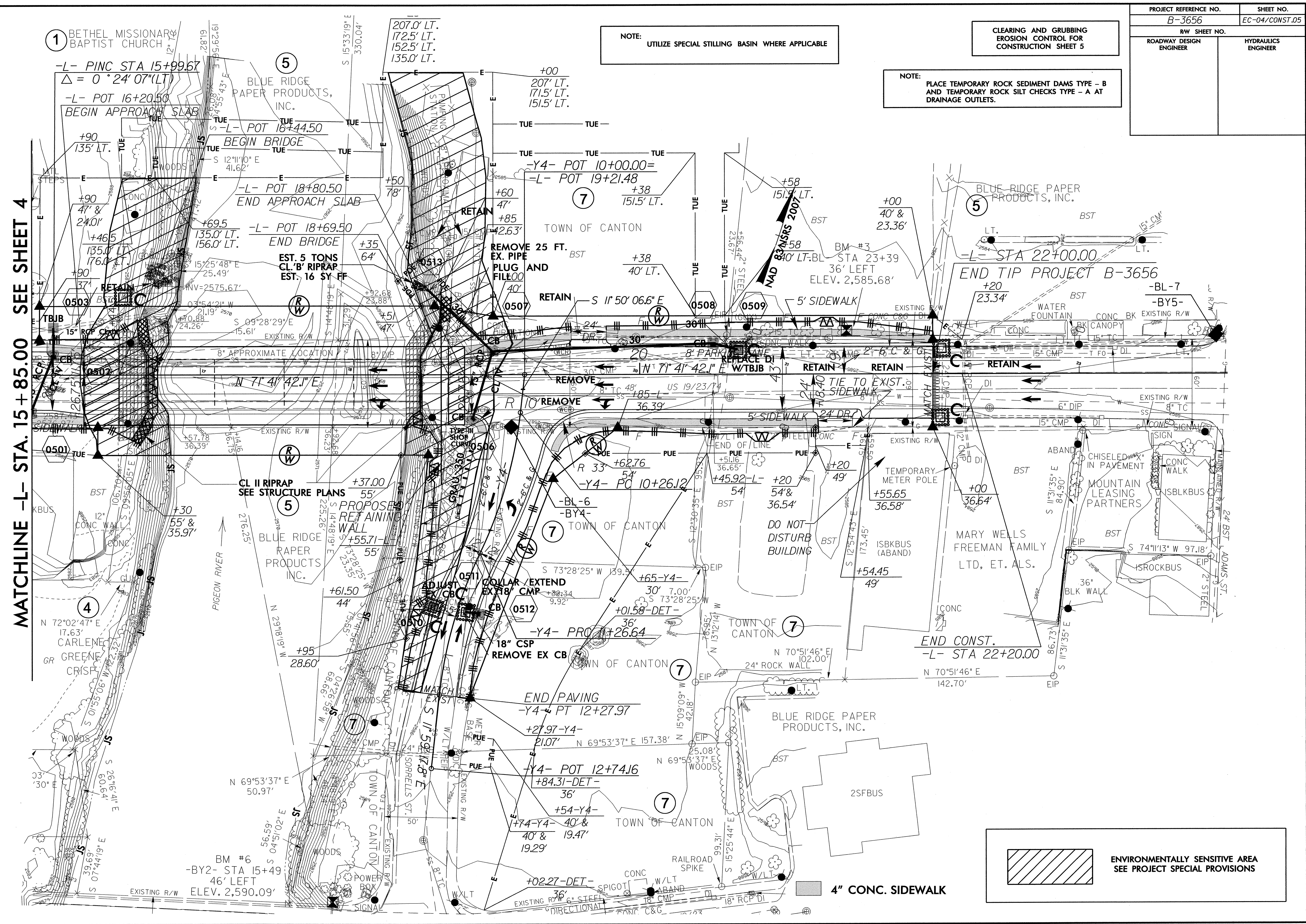
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

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

MATCHLINE -L- STA. 15 + 85.00 SEE SHEET 4

R/W REVISION 4/16/2010 JBT -CHANGED PUE TO TUE FOR PARCELS 3 & 4

23-FEB-2011 11:31 R:\Environment\Design\B3656_EC.pst\5.dgn



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

4" CONC. SIDEWALK

8/17/99

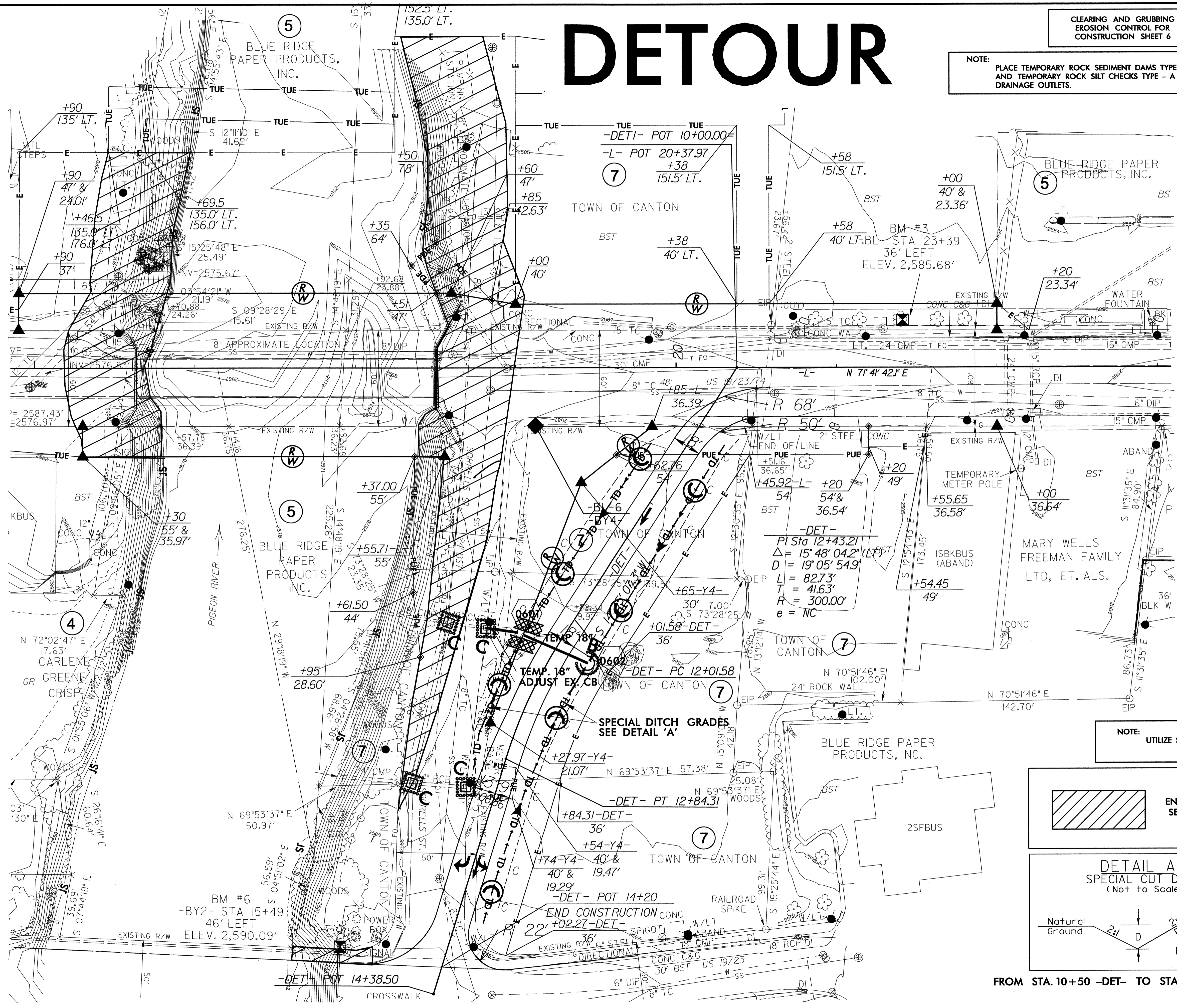
DETOUR

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

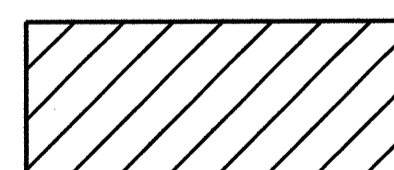
PROJECT REFERENCE NO.	SHEET NO.
B-3656	EC-05/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

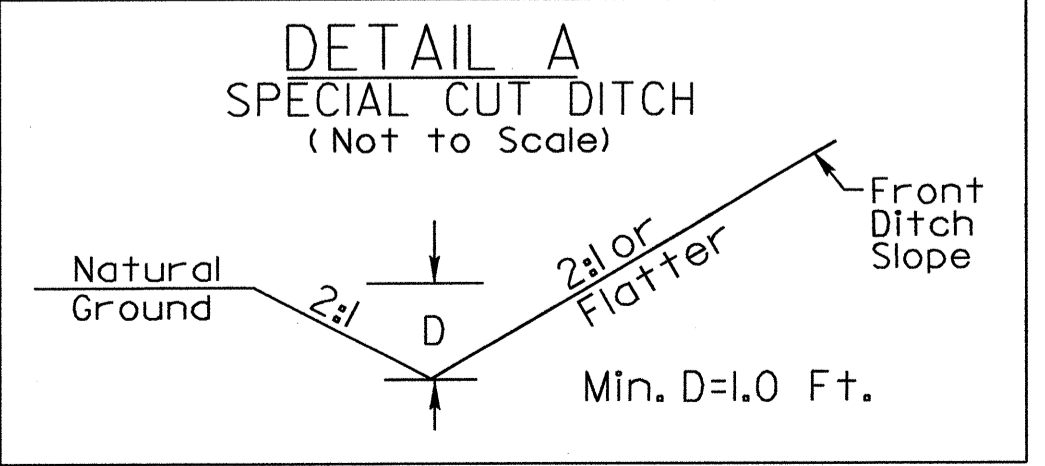
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NAD 83 N58S 2007



NOTE: UTILIZE SPECIAL STILLING BASIN WHERE APPLICABLE.

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS



FROM STA. 10+50 -DET- TO STA. 13+75 -DET- (LT & RT)

REVISIONS

23-FEB-2011 11:53
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drawing AT REN26565

8/17/99

4" CONC. SIDEWALK

PROJECT REFERENCE NO. B-3656	SHEET NO. EC-06/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 NSRS 2007

-L- POT STA 11+50.00
BEGIN TIP PROJECT B-3656

BLUE RIDGE PAPER PRODUCTS

1
BETHEL MISSIONARY BAPTIST CHURCH

1
BETHEL MISSIONARY BAPTIST CHURCH

BETHEL MISSIONARY CHRISTIAN ACADEMY 2SBK

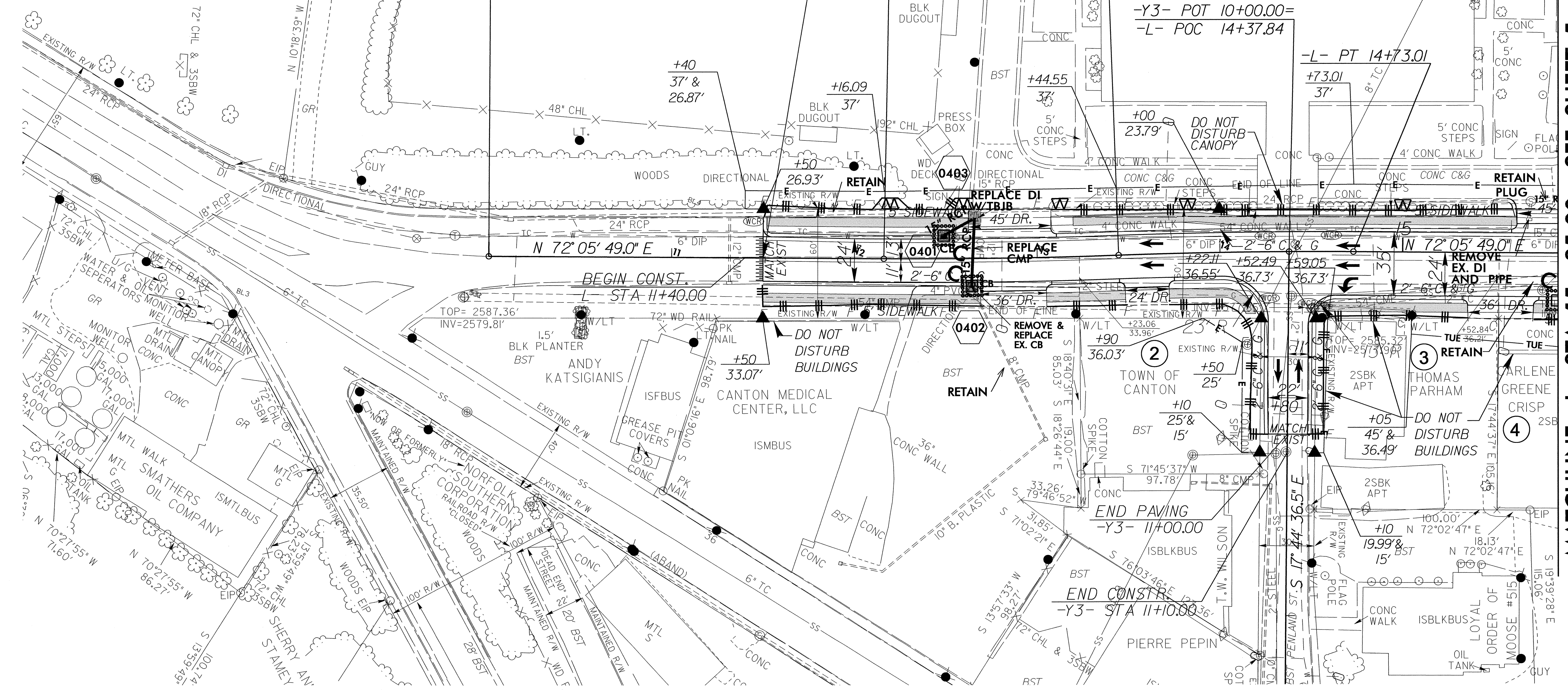
-L- POT 10+00.00

-L- PC 12+16.09

-L- PRC 13+44.55

-Y3- POT 10+00.00=
-L- POC 14+37.84

-L- PT 14+73.01



REVISIONS

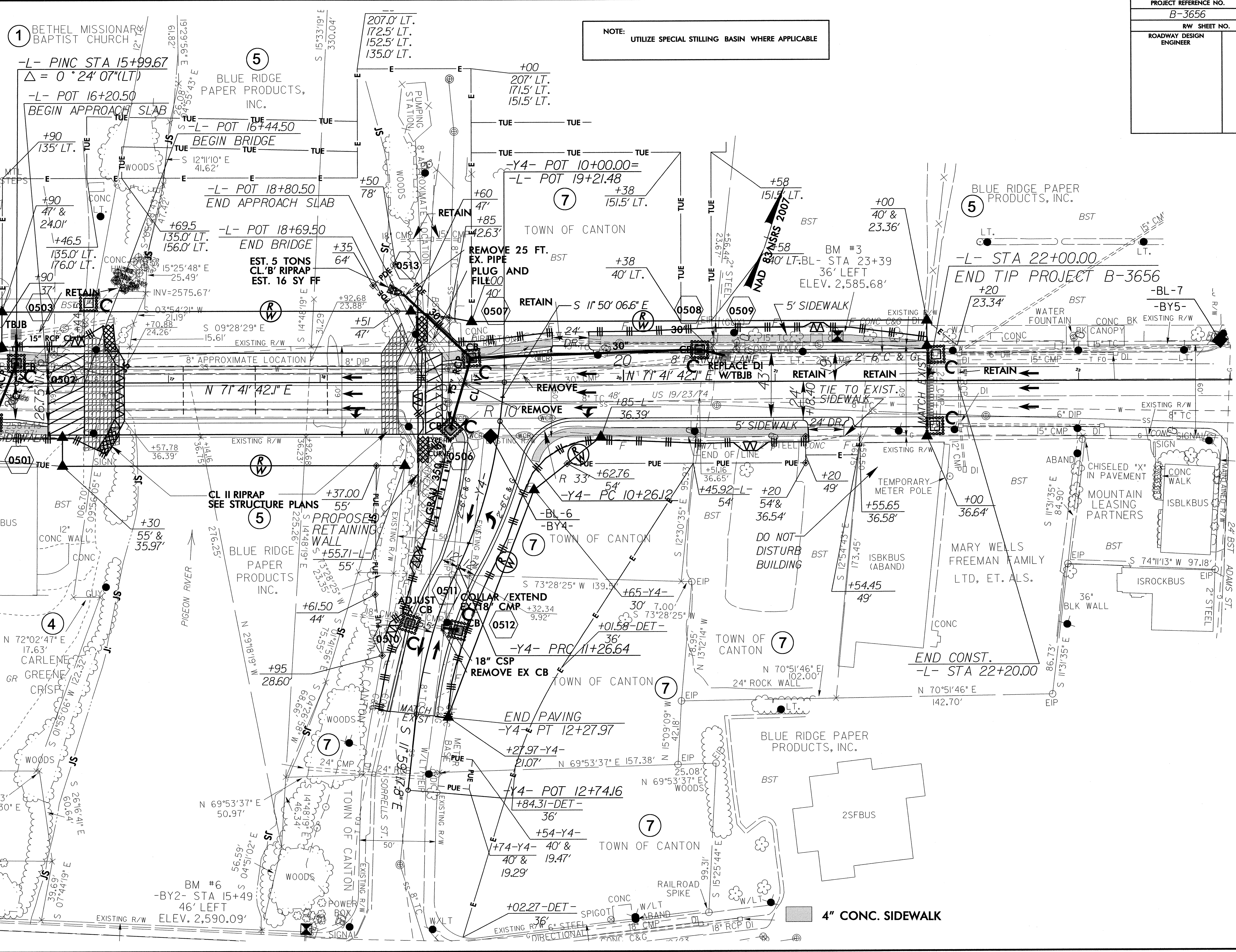
MATCHLINE -L- STA. 15 + 85.00 SEE SHEET 5

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 AT REM 2639

PROJECT REFERENCE NO.	SHEET NO.
B-3656	EC-07/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: UTILIZE SPECIAL STILLING BASIN WHERE APPLICABLE

MATCHLINE -L- STA. 15+85.00 SEE SHEET 4



REVISIONS

R/W REVISION 4/16/2010 JBT
-CHANGED PUE TO TUE FOR PARCELS 3 & 4

8/17/99

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AT REV 26395

4" CONC. SIDEWALK

1 BETHEL MISSIONARY BAPTIST CHURCH
-L- PINE STA 15+99.67
 $\Delta = 0^\circ 24' 07''$ (LT)

5 BLUE RIDGE PAPER PRODUCTS, INC.
-L- POT 16+44.50
BEGIN BRIDGE

-L- POT 18+80.50
END APPROACH SLAB

-L- POT 18+69.50
END BRIDGE

5 EST. 5 TONS CL. B' RIPRAP
EST. 16 SY FF

5 CL II RIPRAP
SEE STRUCTURE PLANS

5 BLUE RIDGE PAPER PRODUCTS, INC.

+00
207' LT.
171.5' LT.
151.5' LT.

7
+38
151.5' LT.

7 TOWN OF CANTON

7 TOWN OF CANTON

7 TOWN OF CANTON

5 BLUE RIDGE PAPER PRODUCTS, INC.

-L- STA 22+00.00
END TIP PROJECT B-3656

MARY WELLS FREEMAN FAMILY LTD, ET. ALS.

BLUE RIDGE PAPER PRODUCTS, INC.

2SFBUS

4 CARLENE GREENE CRIST
N 72°02'47" E 17.63'

BM #6
-BY2- STA 15+49
46' LEFT
ELEV. 2,590.09'

END PAVING
-Y4- PT 12+27.97

-Y4- POT 12+74.16
+84.31-DET-
36'

+54-Y4-
+74-Y4- 40' &
40' & 19.47'
19.29'

+02.27-DET-
36'

DO NOT DISTURB BUILDING

END CONST.
-L- STA 22+20.00

MOUNTAIN LEASING PARTNERS

ISBLKBUS

ISROCKBUS

ISBLKBUS

ISBLKBUS

ISBLKBUS

ISBLKBUS

ISBLKBUS

ISBLKBUS

ISBLKBUS

ISBLKBUS

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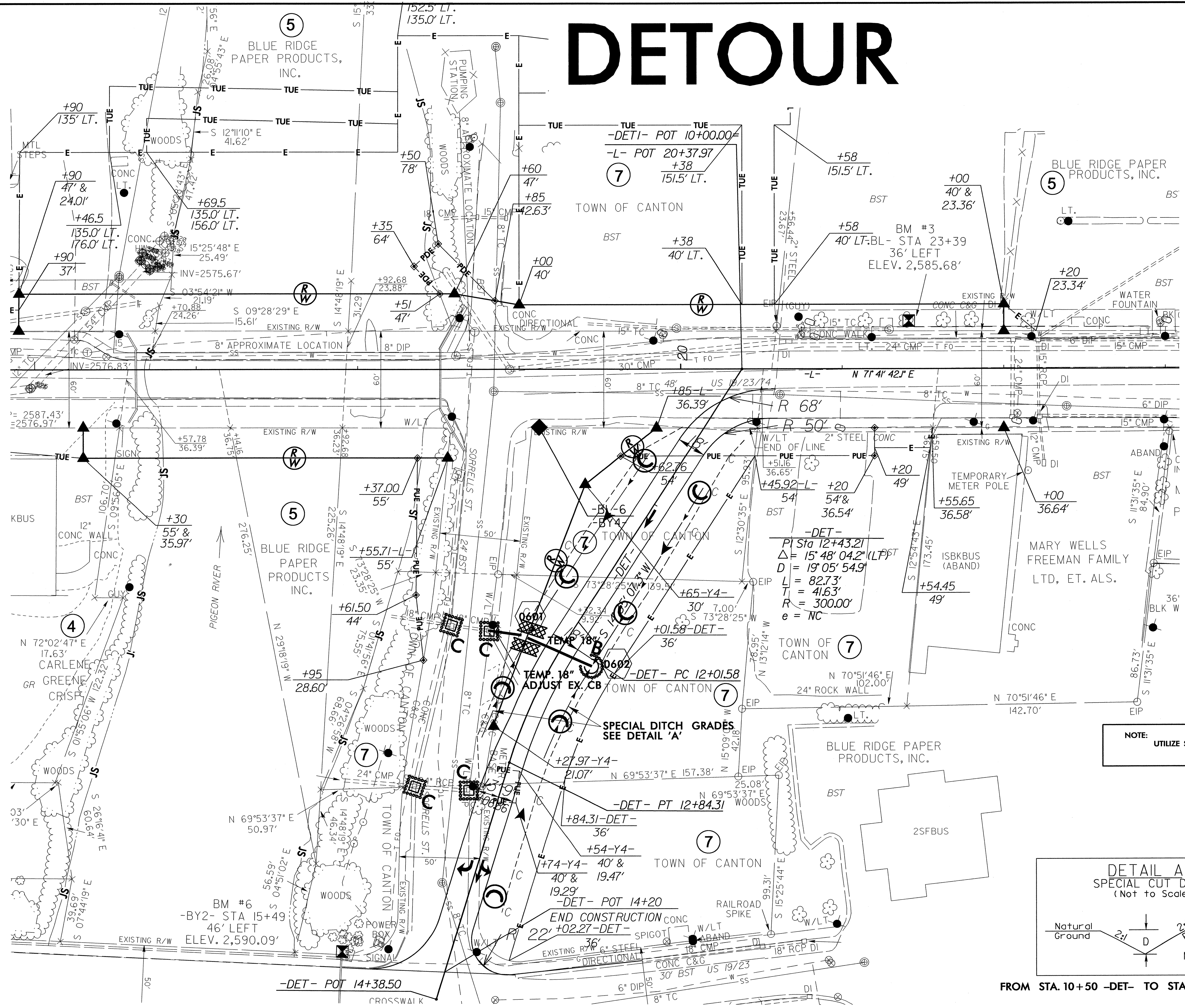
ISBLKBUS

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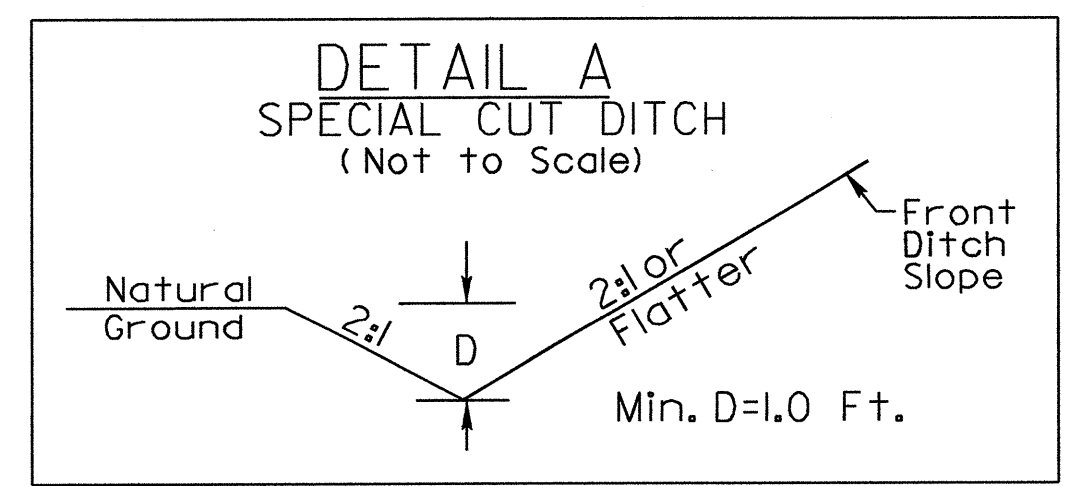
DETOUR

PROJECT REFERENCE NO.	SHEET NO.
B-3656	EC-08/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 NSRS 2007



NOTE: UTILIZE SPECIAL STILLING BASIN WHERE APPLICABLE.



FROM STA. 10+50 -DET- TO STA. 13+75 -DET- (LT & RT)

REVISIONS

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23-FEB-2011 14:49
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Drawing: AT REV 2/26/09