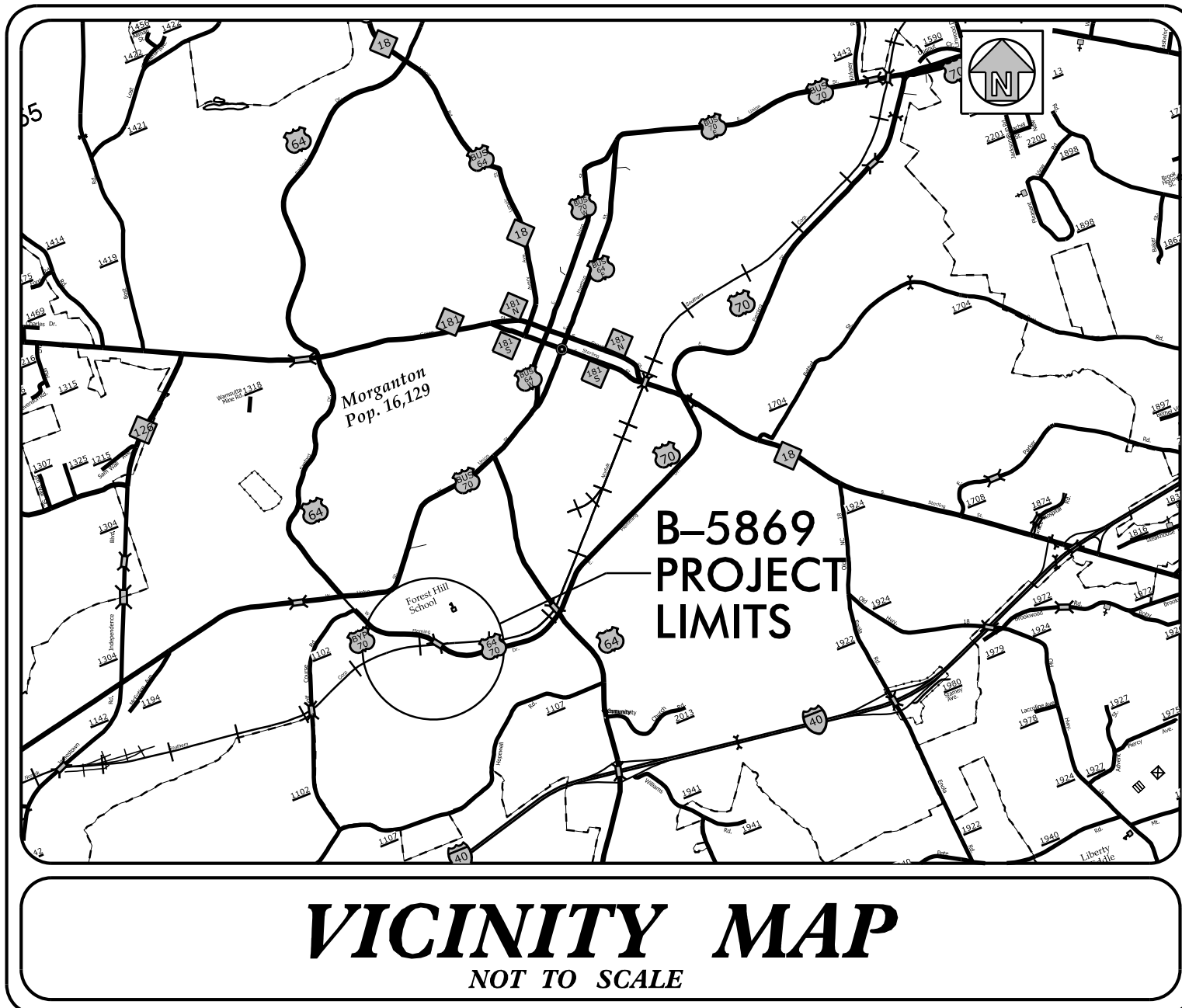


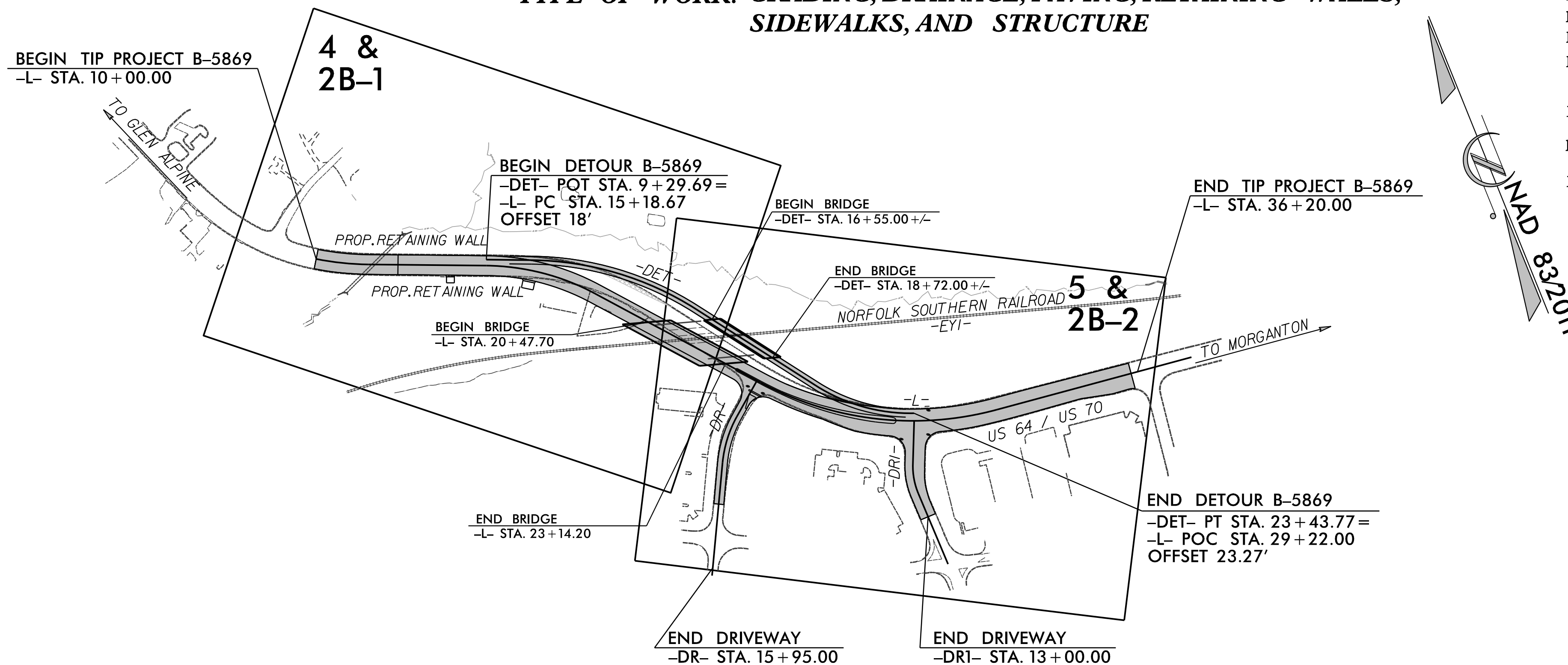
TIP PROJECT: B-5869



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

LOCATION: BRIDGE NO. 99 ON US 64/US 70 (FLEMING DRIVE)
OVER NORFOLK SOUTHERN RAILROAD IN MORGANTON

TYPE OF WORK: GRADING, DRAINAGE, PAVING, RETAINING WALLS,
SIDEWALKS, AND STRUCTURE

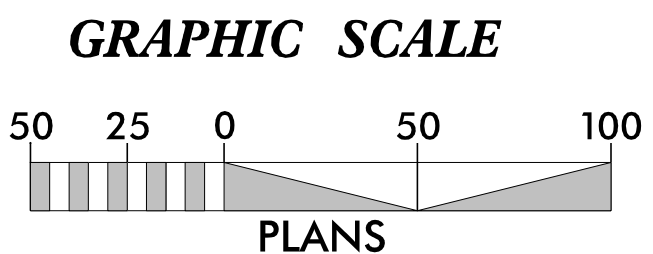


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5869	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
48063.1.FR1	BRSTP-0064(180)	PE	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	no
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	▲▲▲▲▲
1622.01	Temporary Berms and Slope Drains	▲▲▲▲▲
1630.02	Silt Basin Type B	▨
1633.01	Temporary Rock Silt Check Type-A	▨
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	▨
1633.02	Temporary Rock Silt Check Type-B	▨
	Wattle / Coir Fiber Wattle	W
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	W
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	U
1635.02	Rock Pipe Inlet Sediment Trap Type-B	U
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.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH
THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000
GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019
AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.

Prepared in the Office of:
SUNGATE DESIGN GROUP, P.A.

905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243
ENG FIRM LICENSE NO. C-890

Designed by:
BRIAN ELAM, PE 3195

NAME LEVEL III CERTIFICATION NO.

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 January 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
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	1633.02	Temporary Rock Silt Check Type B
1630.01	Riser Basin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt Basin Type B	1634.02	Temporary Rock Sediment Dam Type B
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion	1640.01	Coir Fiber Baffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

2/26/2022-EC-dsn-psh-01.dgn
11/26/2018

PROJECT REFERENCE NO. <i>B-5869</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) 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.

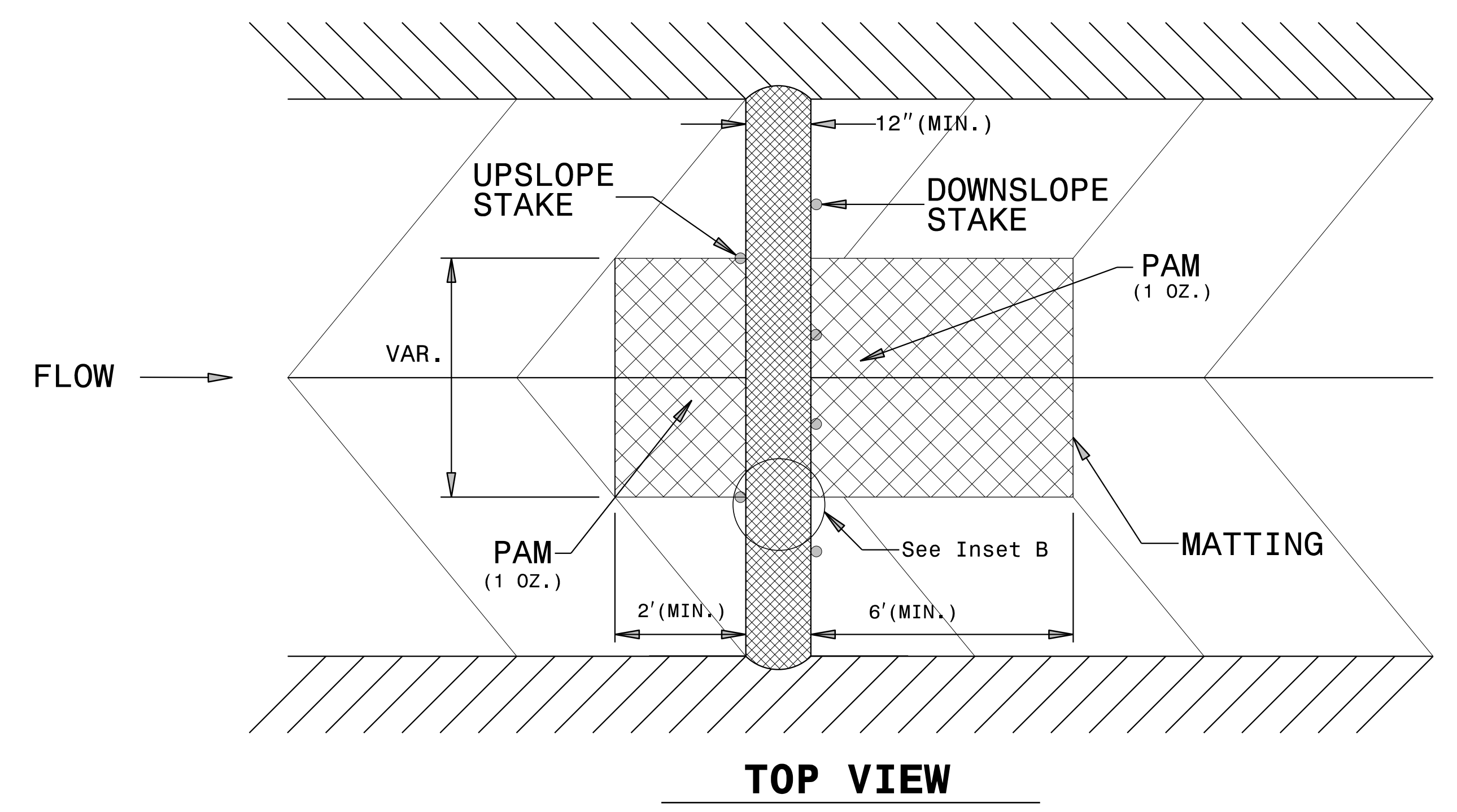
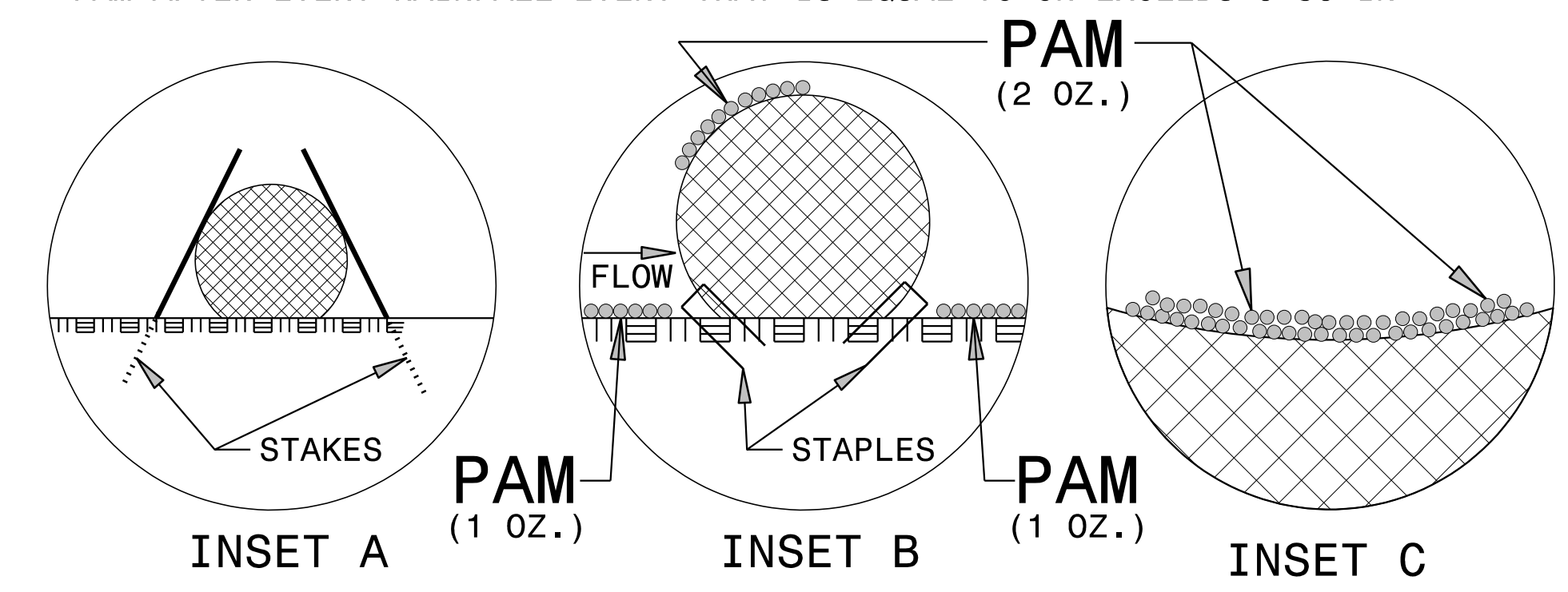
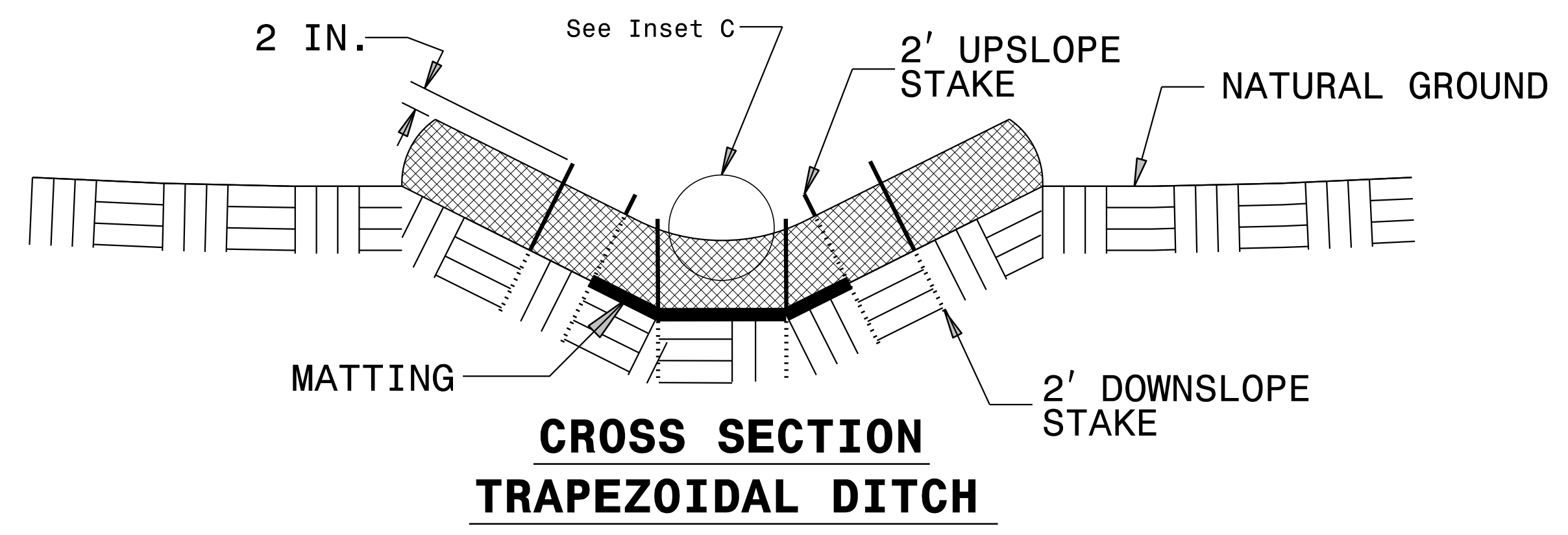
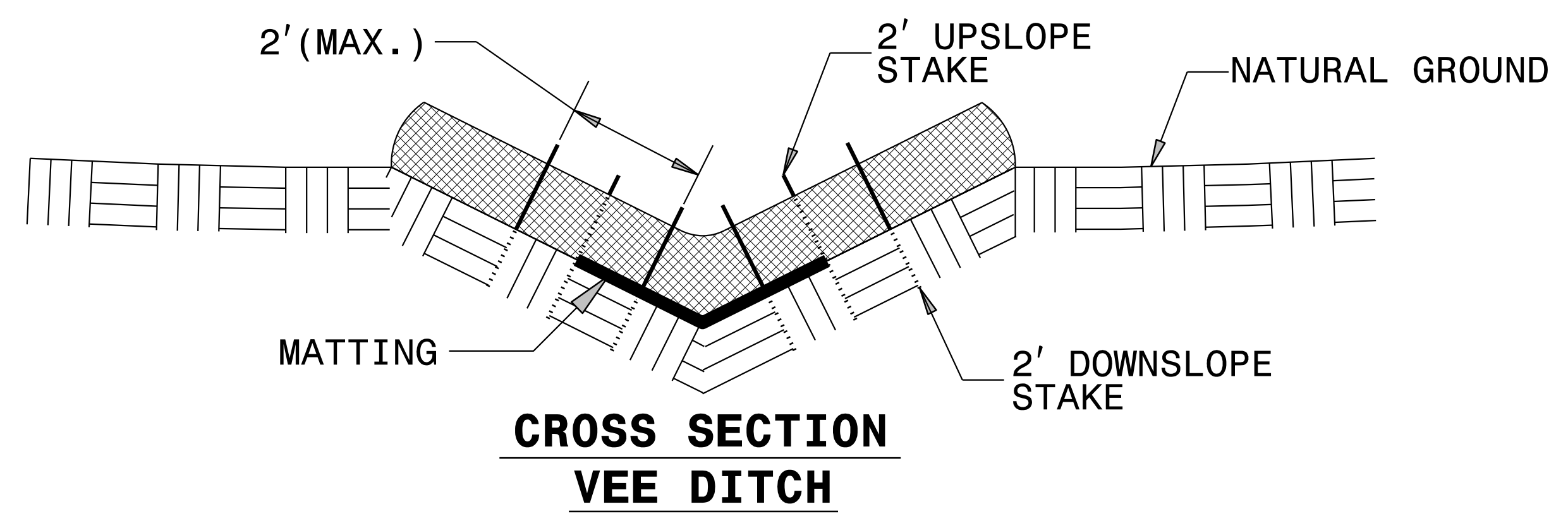
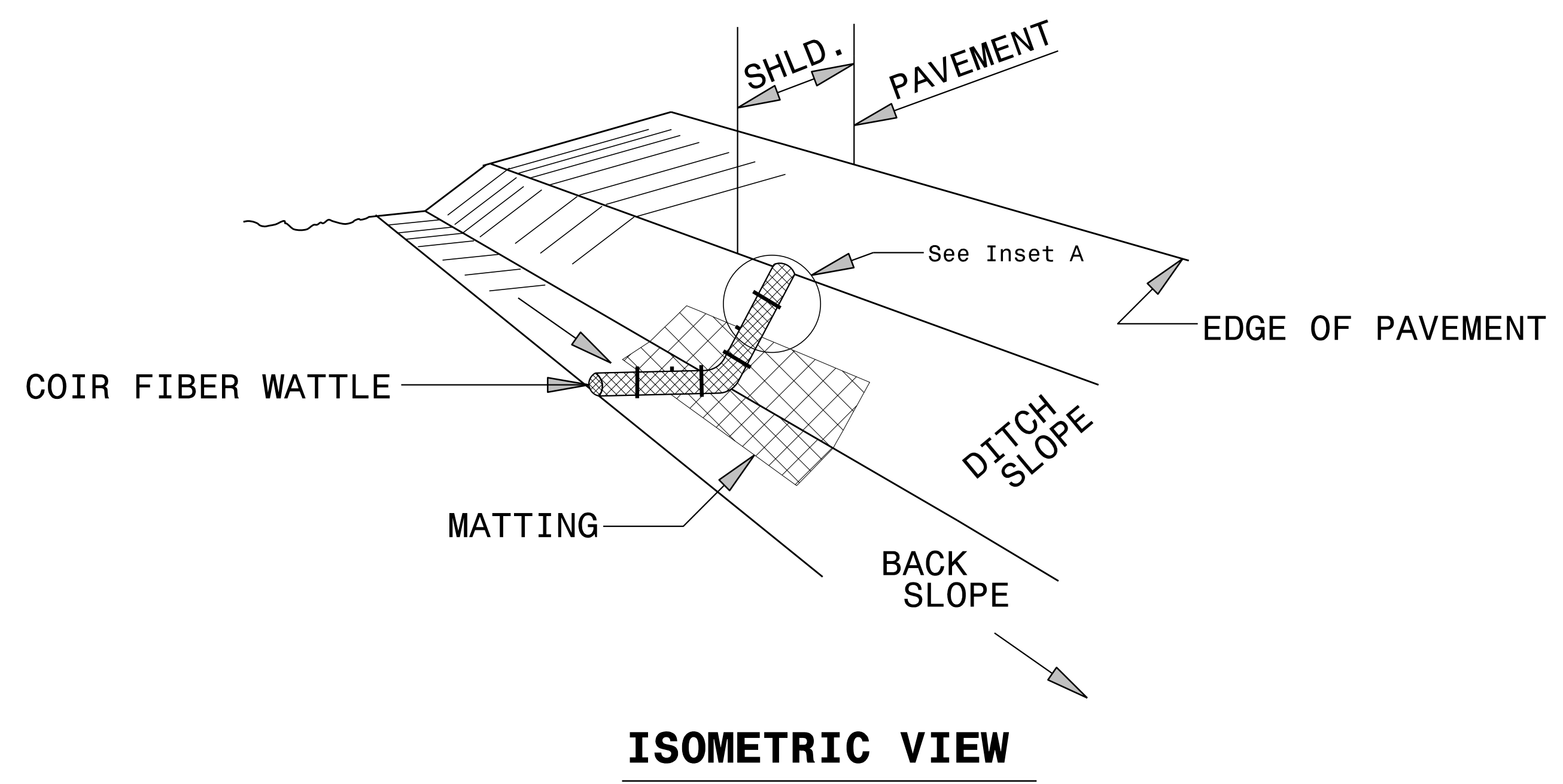
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

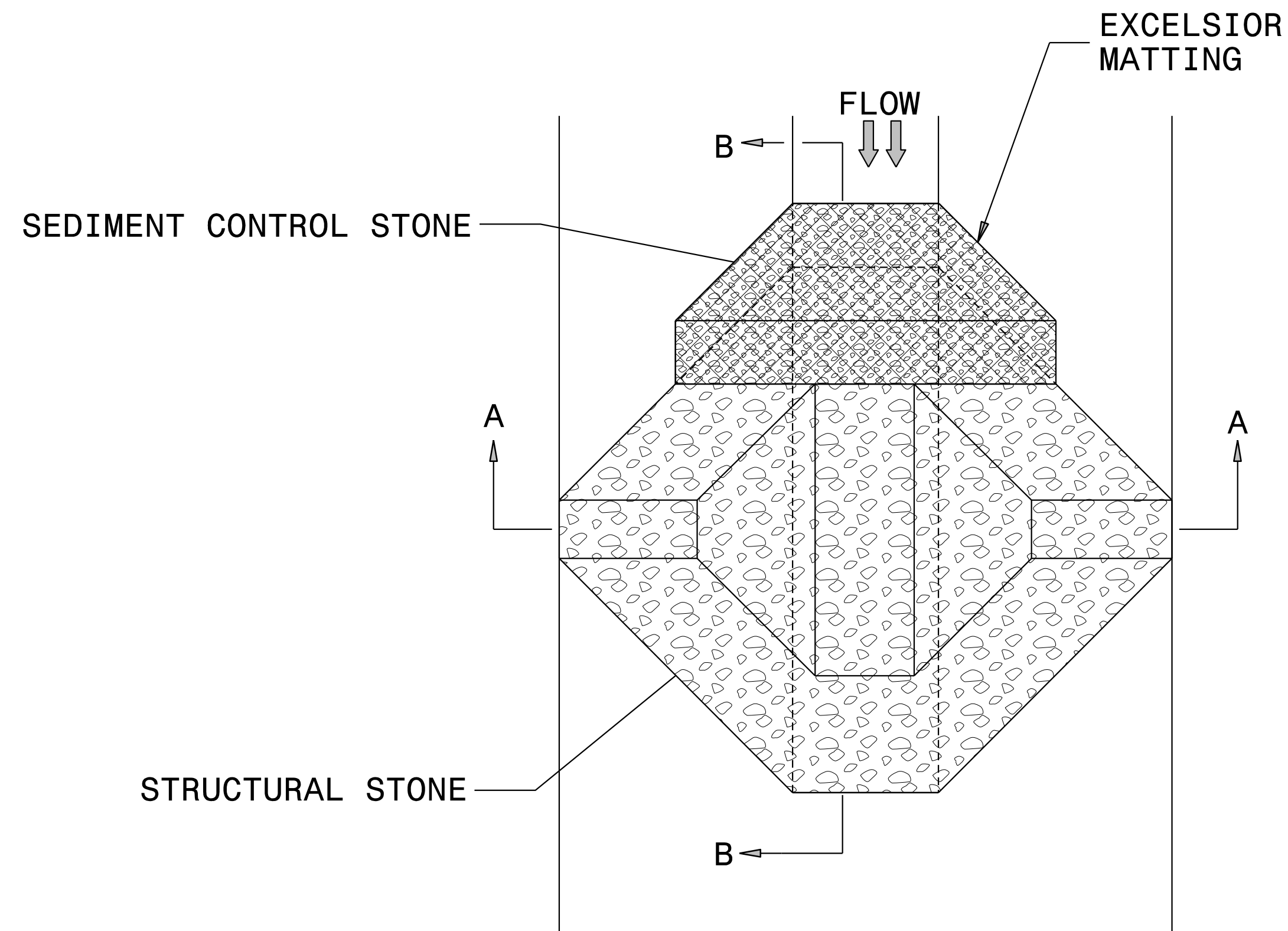
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



PROJECT REFERENCE NO. <i>B-5869</i>	SHEET NO. <i>EC-2A</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



PLAN

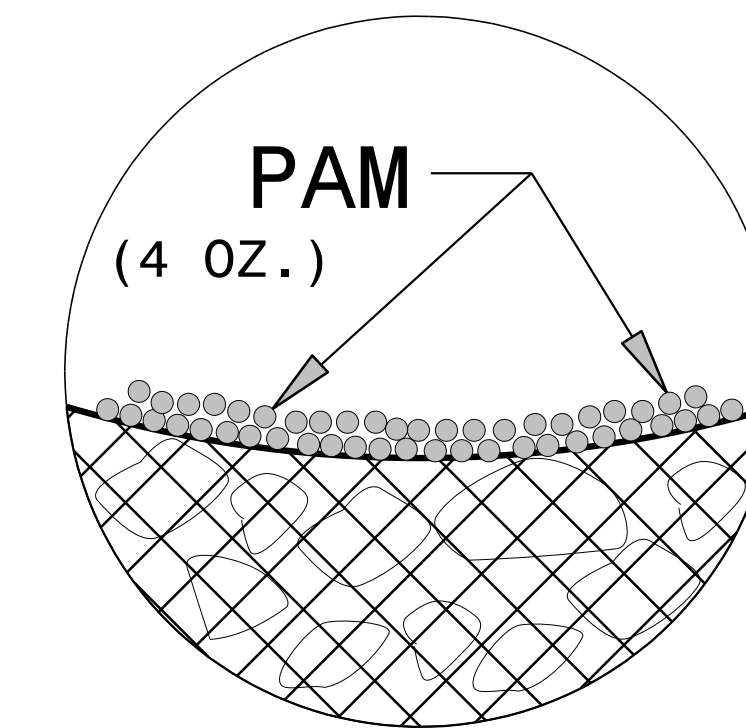
NOTES:

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

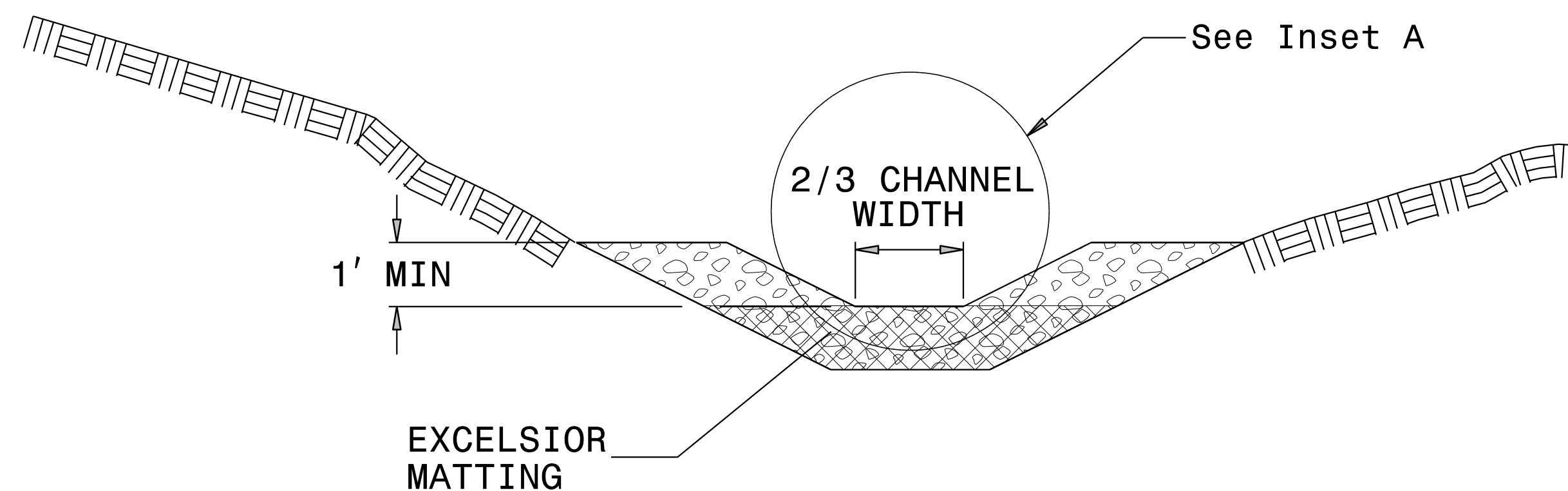
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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 ROCK SILT CHECK.

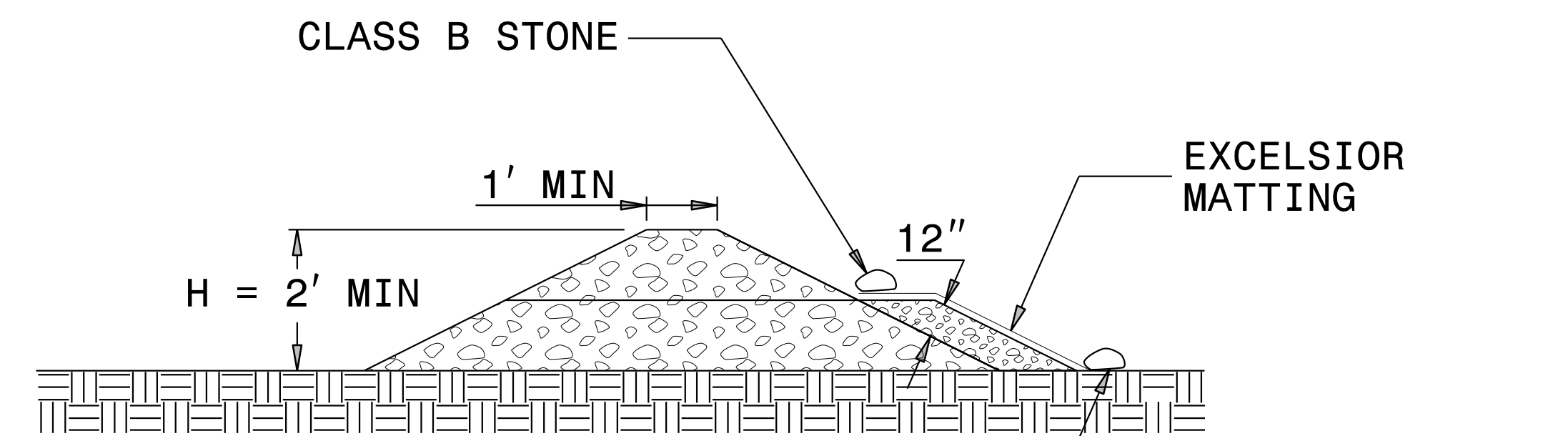
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A



SECTION B-B

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>B-5869</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

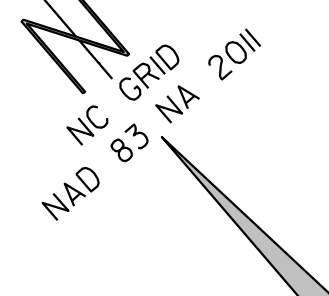
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

PROJECT REFERENCE NO.	SHEET NO.
B-5869	EC-04/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

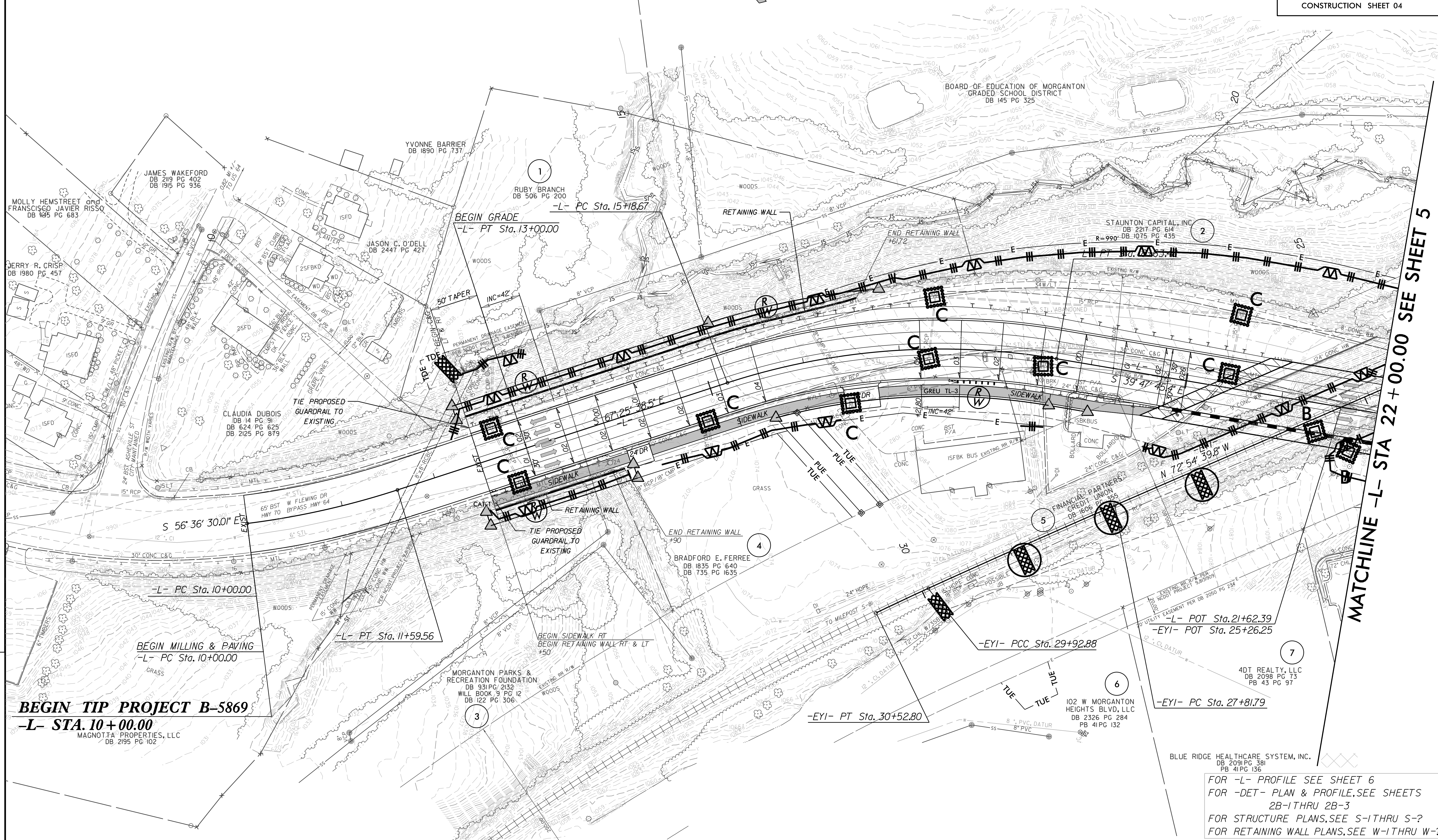
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 04

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF
ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID
IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

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



REVISIONS
ROW REVISION: 12/16/2021; MDPJ -DR- CONVERTED TO RIGHT IN ONLY. PARCELS 7.9 & 10. EASEMENTS ADDED FOR PROPOSED MARKING AND SIGNING REVISIONS.



BEGIN TIP PROJECT B-5869
-L- STA. 10+00.00
MAGNOTTA PROPERTIES, LLC
DB 2195 PG 102

MATCHLINE -L- STA 22+00.00 SEE SHEET 5

FOR -L- PROFILE SEE SHEET 6
FOR -DET- PLAN & PROFILE, SEE SHEETS
2B-1 THRU 2B-3
FOR STRUCTURE PLANS, SEE S-1 THRU S-7
FOR RETAINING WALL PLANS, SEE W-1 THRU W-7

PROJECT REFERENCE NO.	SHEET NO.
B-5869	EC-05/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

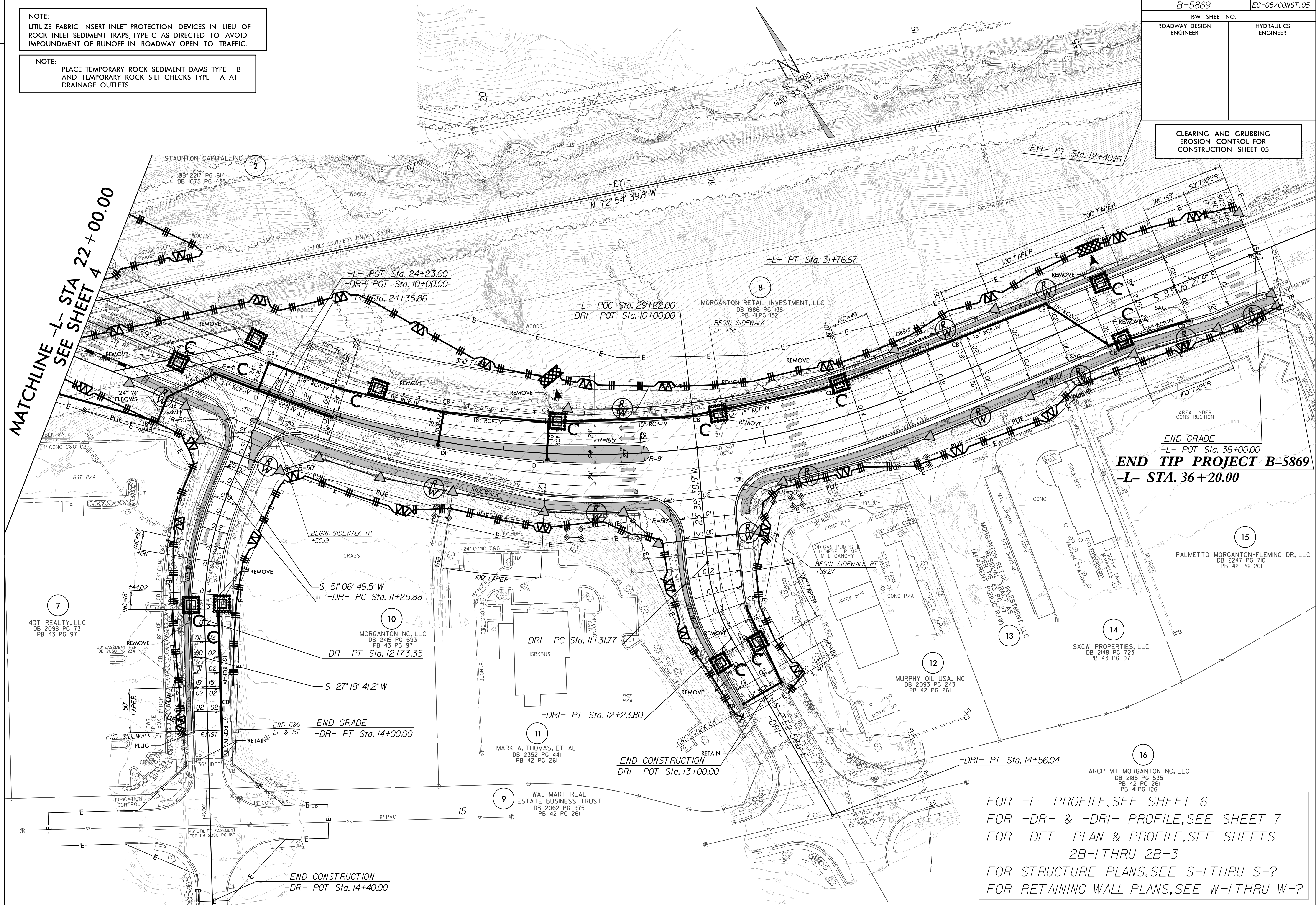
NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

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 05

REVISIONS: [12/16/2021; MDPJ -DR- CONVERTED TO RIGHT IN ONLY. PARCELS 7.9 & 10. EASEMENTS ADDED FOR PROPOSED MARKING AND SIGNING REVISIONS.

MATCHLINE -L- STA 22+00.00
SEE SHEET 4



END GRADE
-L- POT Sta. 36+00.00
END TIP PROJECT B-5869
-L- STA. 36+20.00

FOR -L- PROFILE, SEE SHEET 6
FOR -DR- & -DRI- PROFILE, SEE SHEET 7
FOR -DET- PLAN & PROFILE, SEE SHEETS 2B-1 THRU 2B-3
FOR STRUCTURE PLANS, SEE S-1 THRU S-?
FOR RETAINING WALL PLANS, SEE W-1 THRU W-?

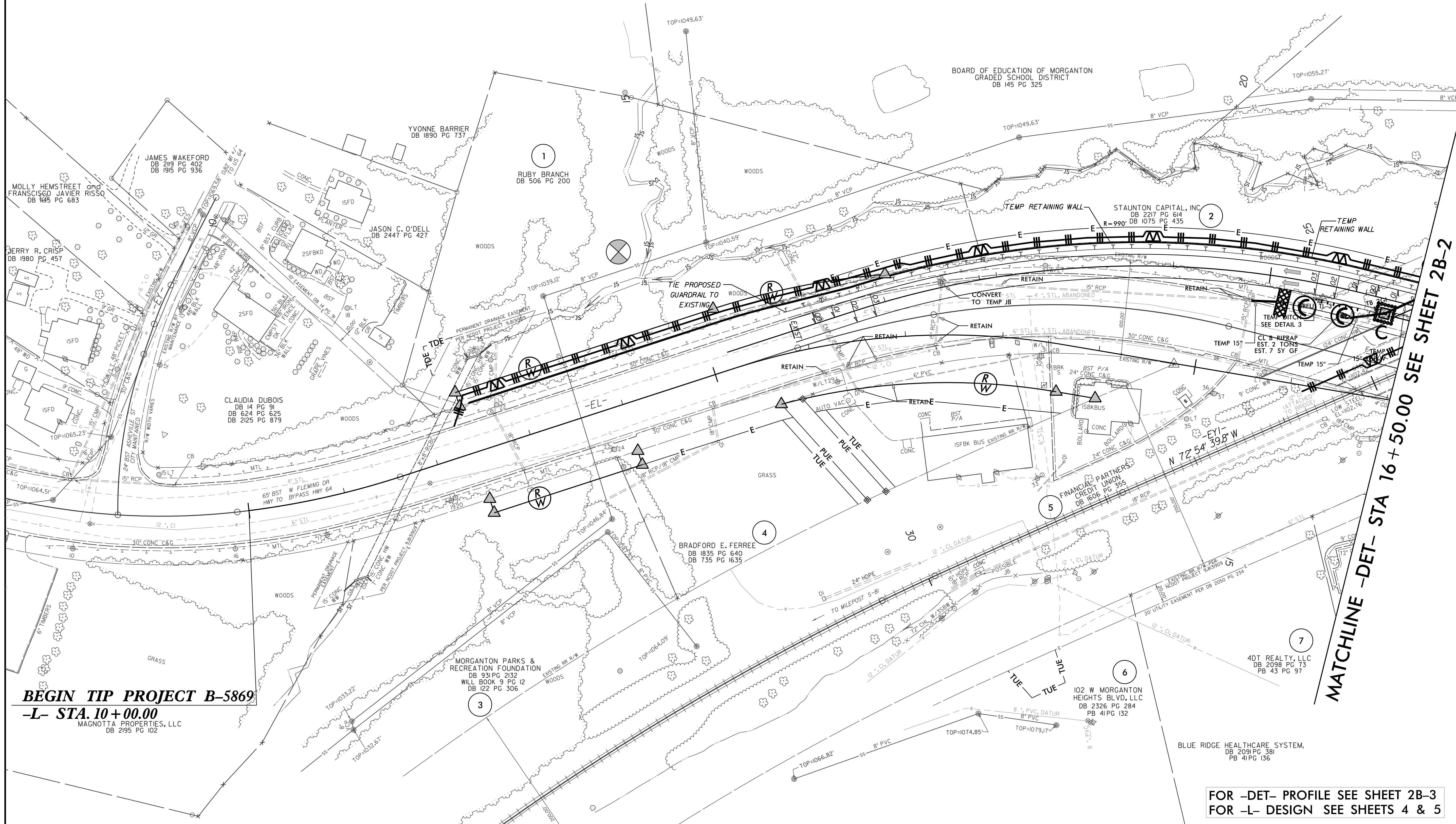
7/27/99

Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 21+60 to Sta. 22+00 -LDET- RT

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF
ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID
IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

PROJECT REFERENCE NO. B-5869	SHEET NO. EC-06/CONST 2B-1
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DETOUR
EROSION CONTROL FOR
CONSTRUCTION SHEET 2B-1



BEGIN TIP PROJECT B-5869
-L- STA. 10+00.00
MAGNOTTA PROPERTIES, LLC
DB 2195 PG 102

MATCHLINE -DET- STA 16+50.00 SEE SHEET 2B-2

FOR -DET- PROFILE SEE SHEET 2B-3
FOR -L- DESIGN SEE SHEETS 4 & 5

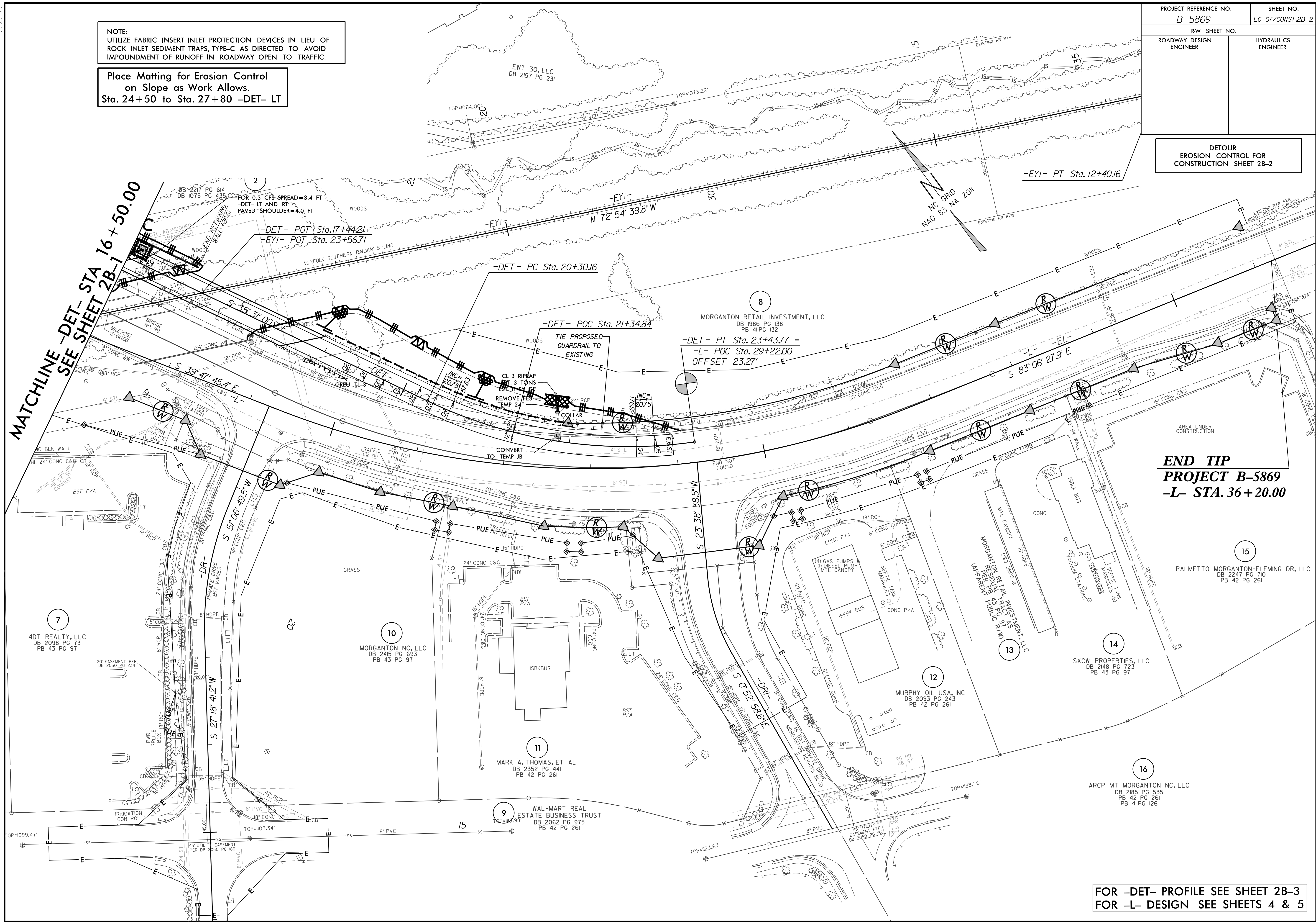
7/27/99

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF
ROCK INLET SEDIMENT TRAPS, TYPE-C, AS DIRECTED TO AVOID
IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 24+50 to Sta. 27+80 -DET- LT

PROJECT REFERENCE NO.		SHEET NO.	
B-5869		EC-07/CONST.2B-2	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

DETOUR
EROSION CONTROL FOR
CONSTRUCTION SHEET 2B-2



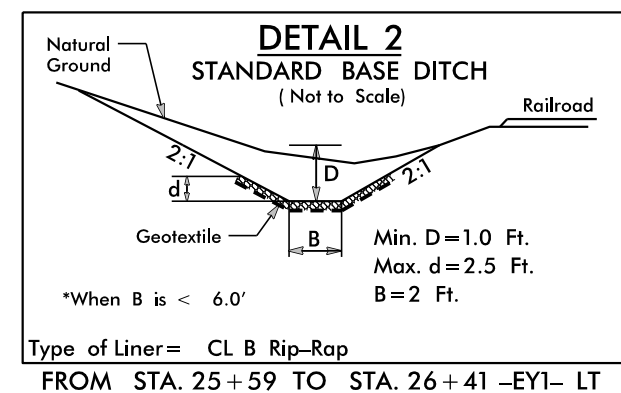
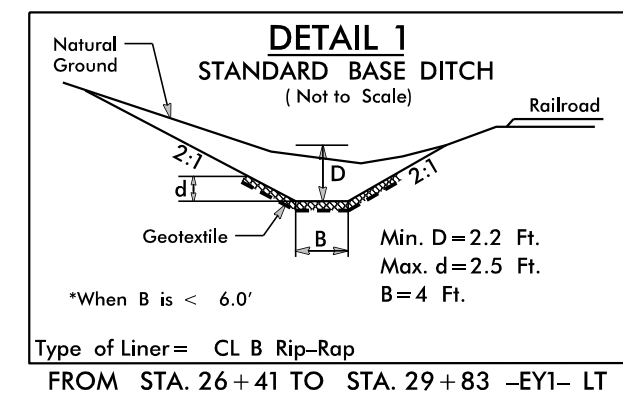
END TIP
PROJECT B-5869
-L- STA. 36+20.00

FOR -DET- PROFILE SEE SHEET 2B-3
FOR -L- DESIGN SEE SHEETS 4 & 5

PROJECT REFERENCE NO.	SHEET NO.
B-5869	EC-08/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

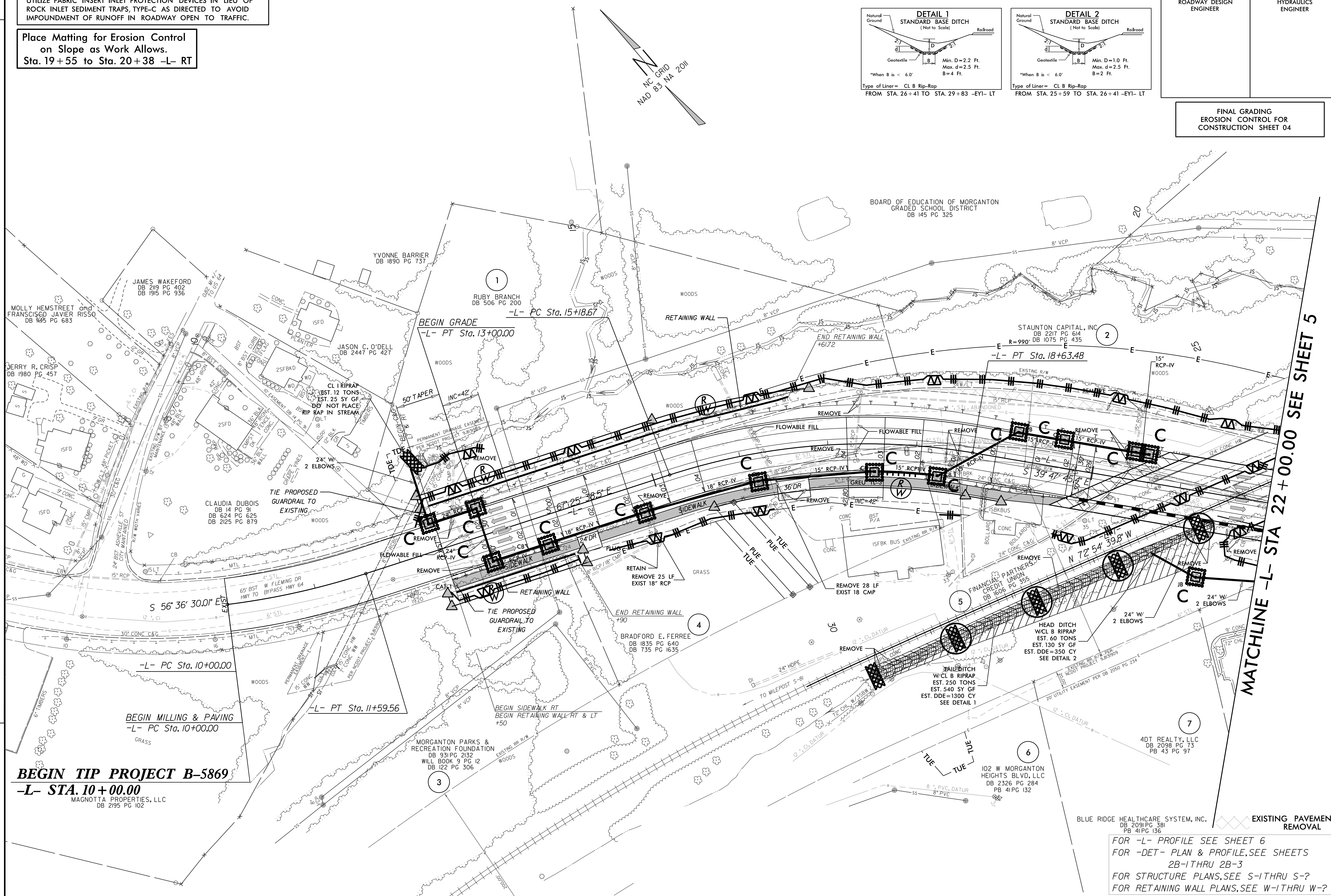
NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 19+55 to Sta. 20+38 -L- RT



FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 04

REVISIONS: [12/16/2021: MDP] -DR- CONVERTED TO RIGHT IN ONLY. PARCELS 7.9 & 10. EASEMENTS ADDED FOR PROPOSED MARKING AND SIGNING REVISIONS.



BEGIN TIP PROJECT B-5869
-L- STA. 10+00.00
MAGNOTTA PROPERTIES, LLC
DB 2195 PG 102

FOR -L- PROFILE SEE SHEET 6
FOR -DET- PLAN & PROFILE, SEE SHEETS 2B-1 THRU 2B-3
FOR STRUCTURE PLANS, SEE S-1 THRU S-7
FOR RETAINING WALL PLANS, SEE W-1 THRU W-7

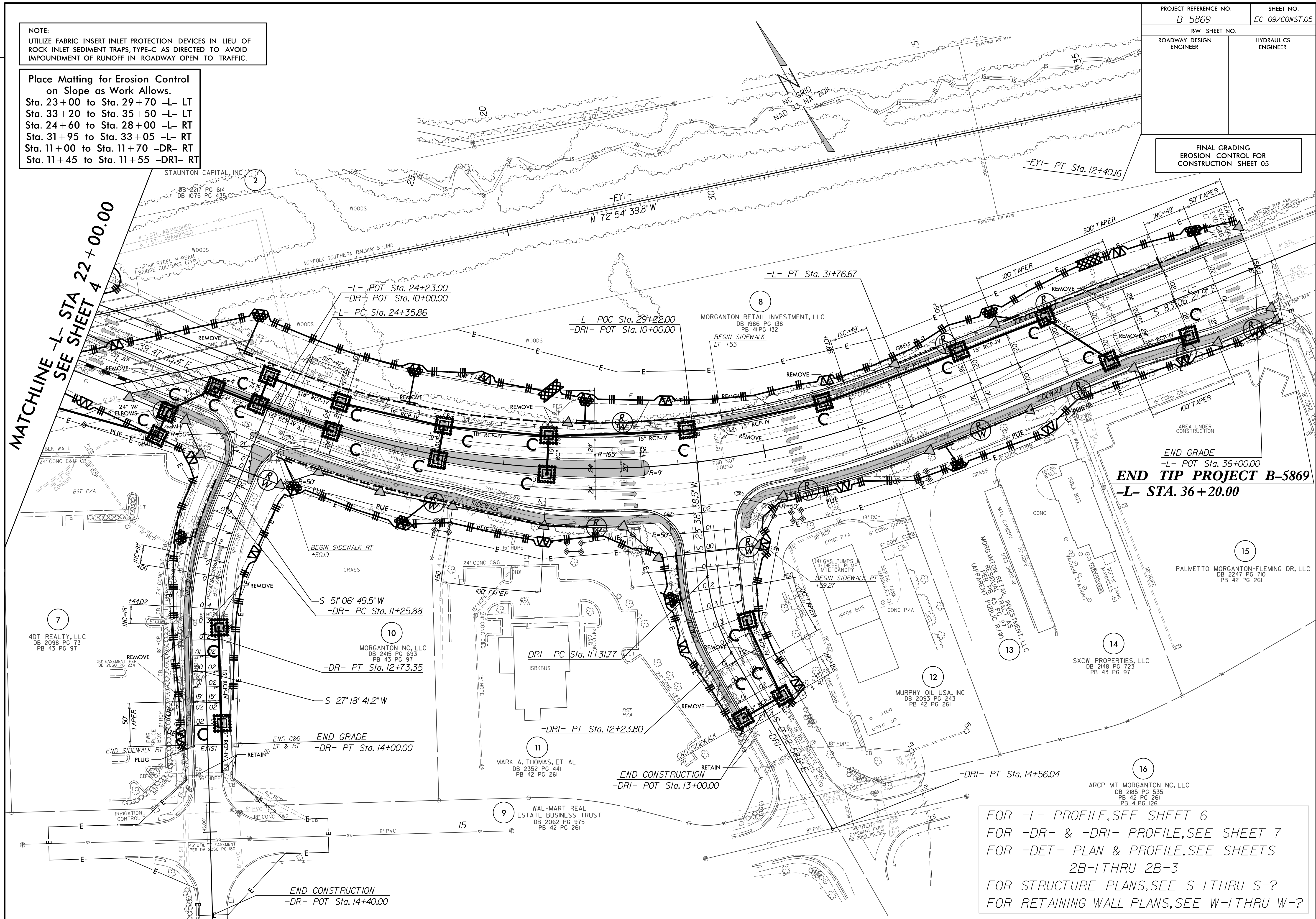
PROJECT REFERENCE NO.	SHEET NO.
B-5869	EC-09/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 23+00 to Sta. 29+70 -L- LT
Sta. 33+20 to Sta. 35+50 -L- LT
Sta. 24+60 to Sta. 28+00 -L- RT
Sta. 31+95 to Sta. 33+05 -L- RT
Sta. 11+00 to Sta. 11+70 -DR- RT
Sta. 11+45 to Sta. 11+55 -DRI- RT

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05

REVISIONS
ROW REVISION: 12/16/2021; MDPJ -DR- CONVERTED TO RIGHT IN ONLY. PARCELS 7.9 & 10. EASEMENTS ADDED FOR PROPOSED MARKING AND SIGNING REVISIONS.



FOR -L- PROFILE, SEE SHEET 6
FOR -DR- & -DRI- PROFILE, SEE SHEET 7
FOR -DET- PLAN & PROFILE, SEE SHEETS 2B-1 THRU 2B-3
FOR STRUCTURE PLANS, SEE S-1 THRU S-?
FOR RETAINING WALL PLANS, SEE W-1 THRU W-?