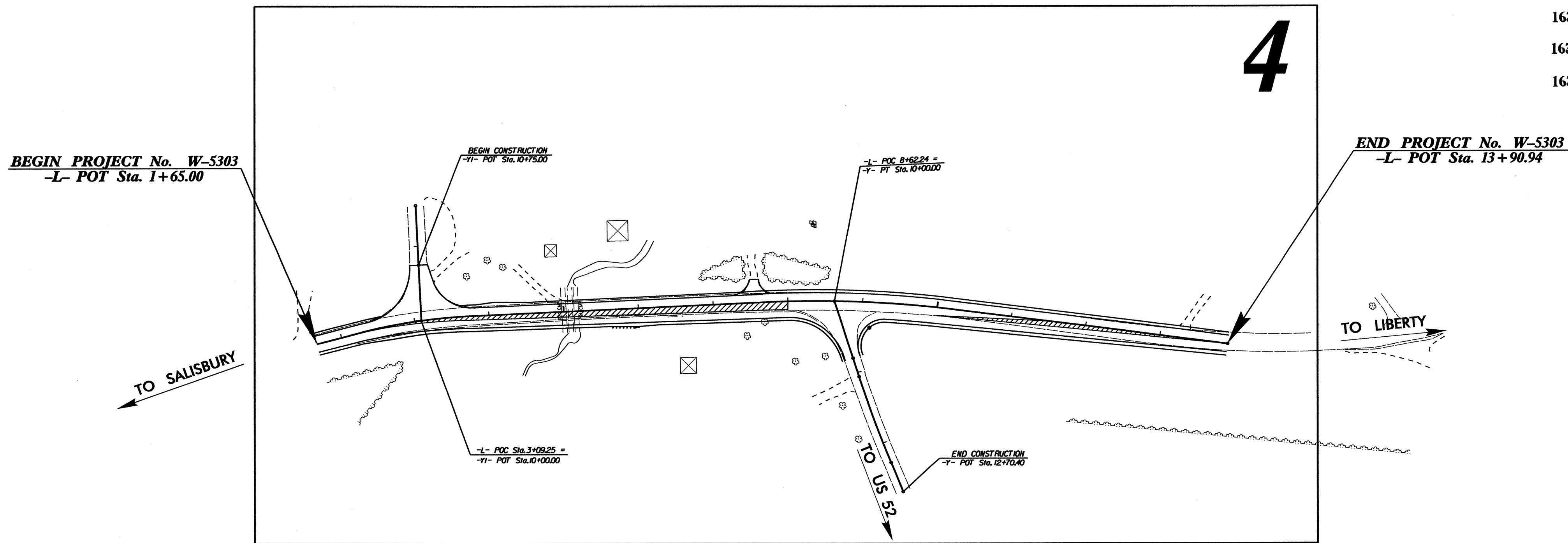
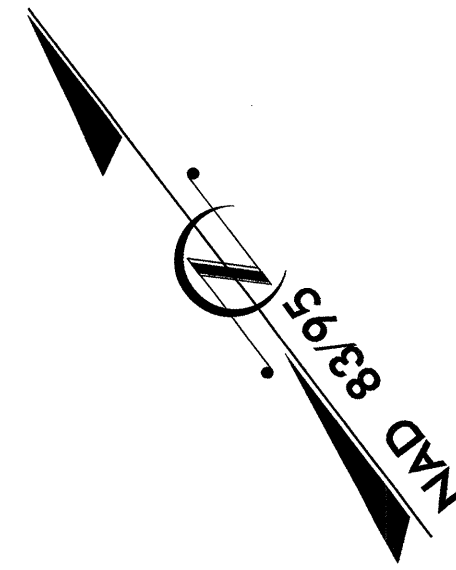


TIP PROJECT: W-5303

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

**LOCATION: UPGRADE INTERSECTION WITH SR 1004
 (STOKES FERRY ROAD.) AND SR 2380 (ODDIE ROAD.).**

TYPE OF WORK: GRADING, PAVING, DRAINAGE, WIDENING.



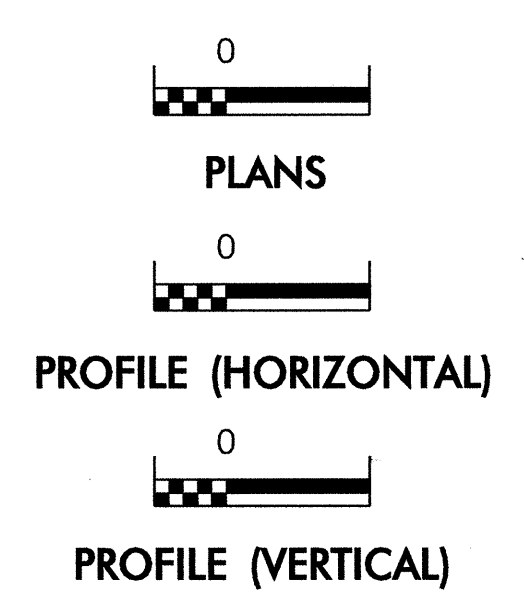
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5303	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch.....	TD
1630.05	Temporary Diversion.....	TD
1605.01	Temporary Silt Fence.....	
1606.01	Special Sediment Control Fence.....	△△△△
1622.01	Temporary Berms and Slope Drains.....	—
1630.02	Silt Basin Type B.....	□
1635.01	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.....	⌒
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM).....	⌒
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.

GRAPHIC SCALE



ROADSIDE ENVIRONMENTAL UNIT
 DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared in the Office of:
ROADSIDE ENVIRONMENTAL UNIT
 1 South Wilmington St.
 Raleigh, NC 27611
2012 STANDARD SPECIFICATIONS

Roadway Standard Drawings

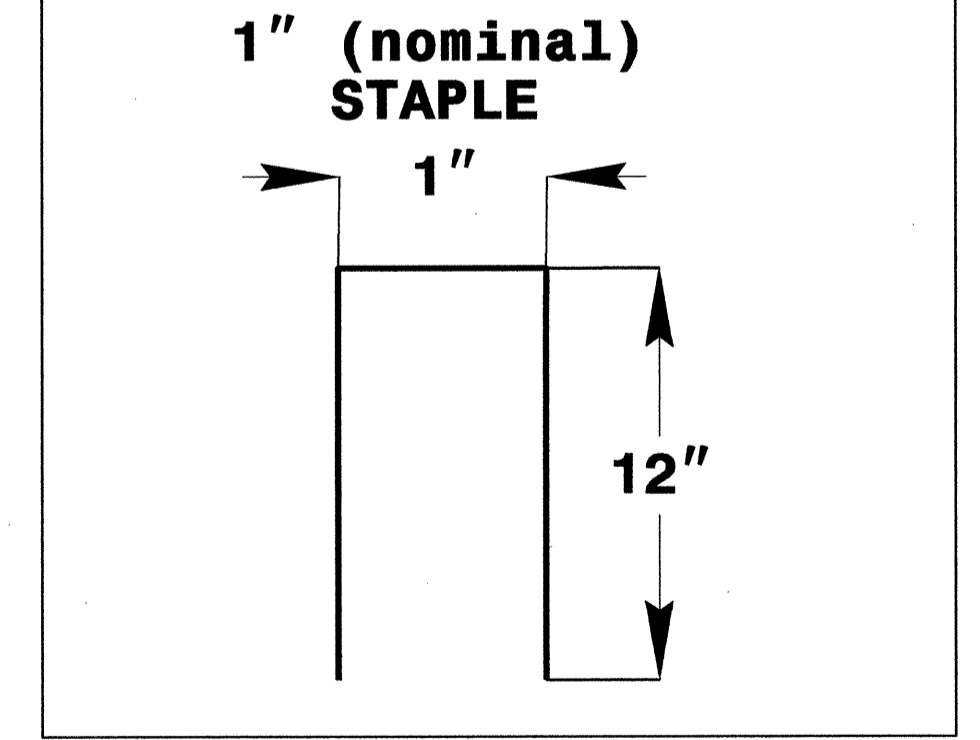
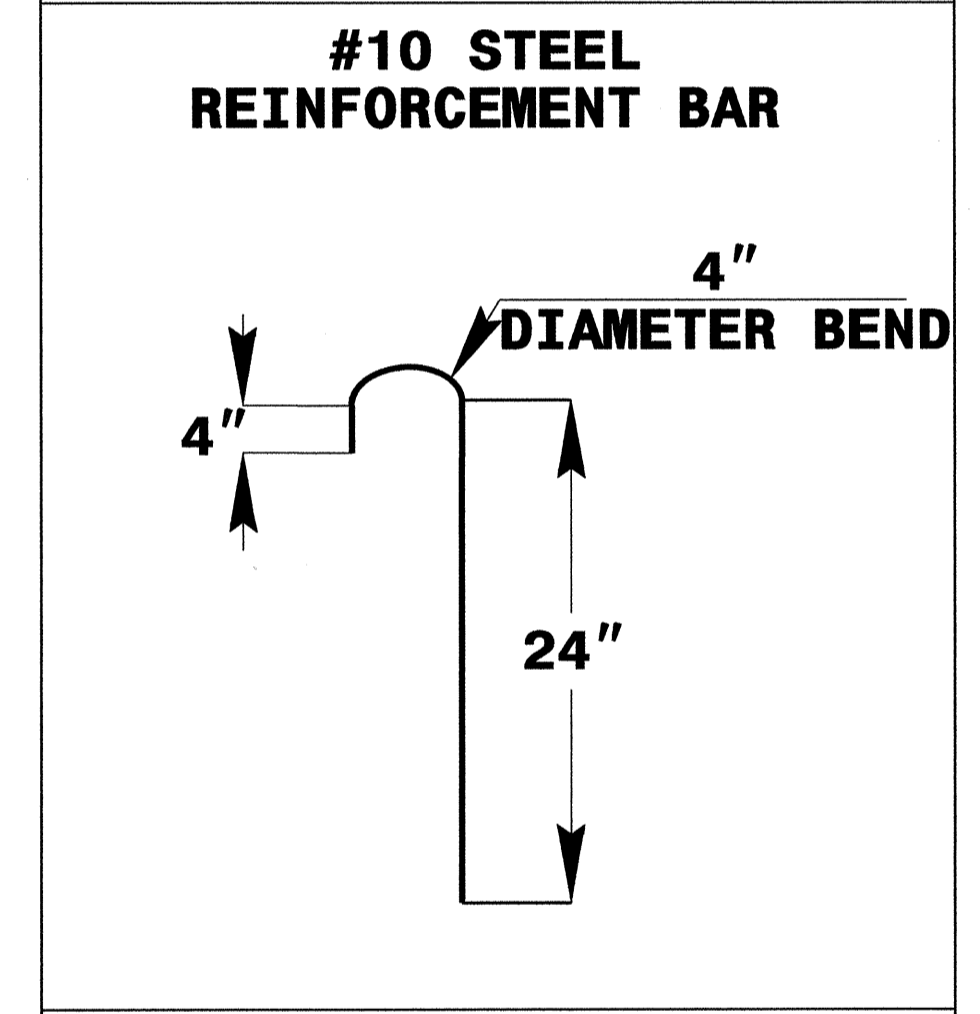
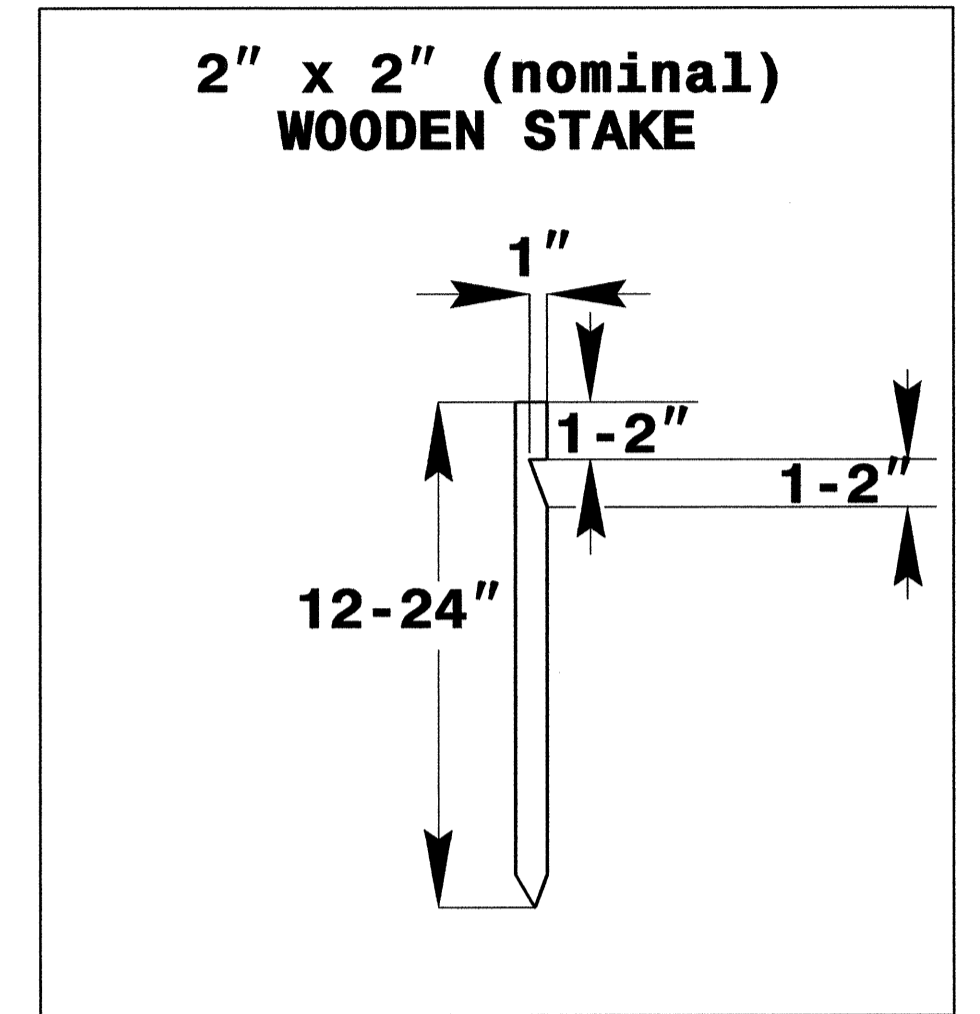
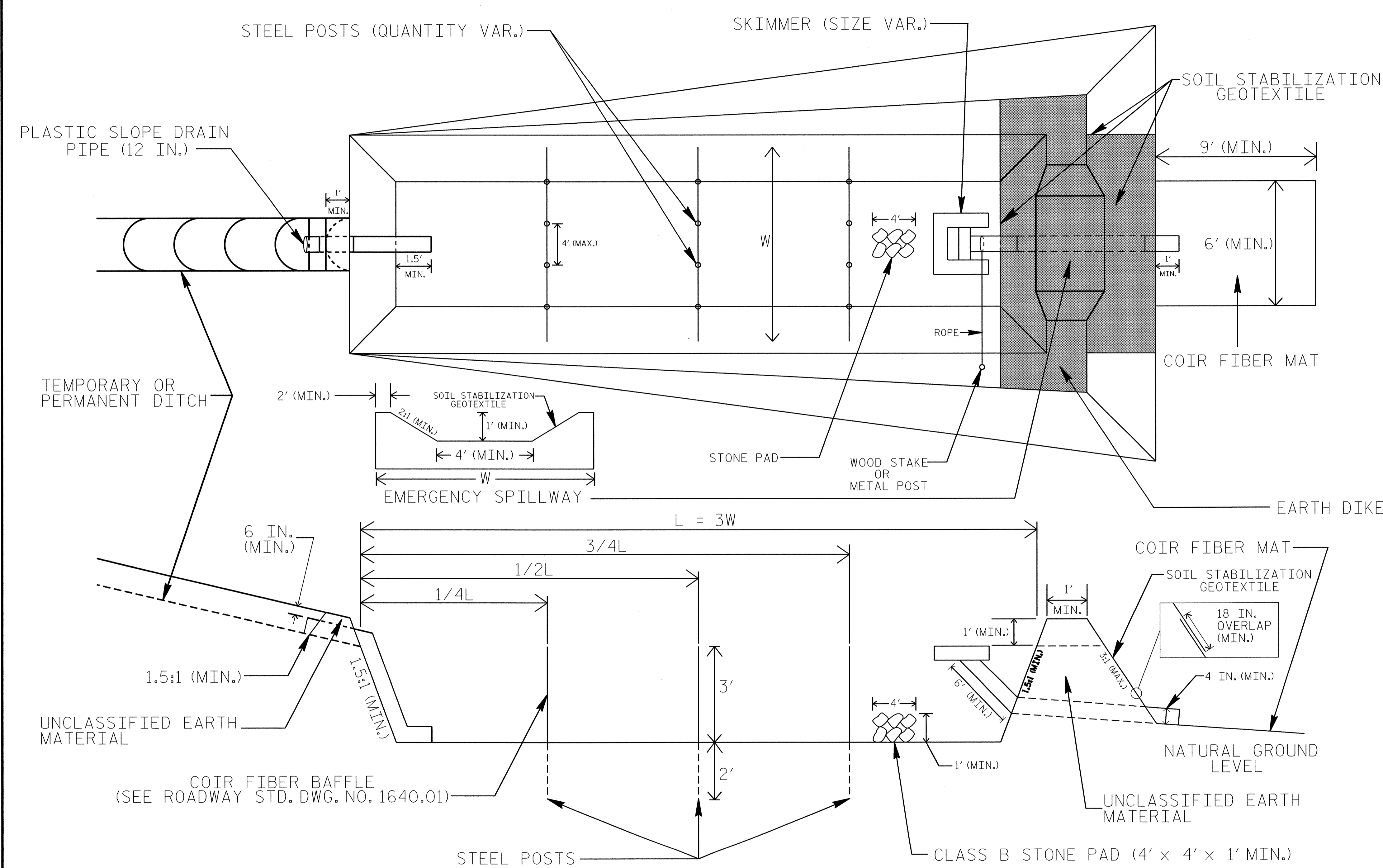
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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	

14 MAY 2012 10:02 AM
 REVISIONS TO: W-5303, EC-1, 1/12
 DRAWN BY: J. HENNING

PROJECT REFERENCE NO. W-5303	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

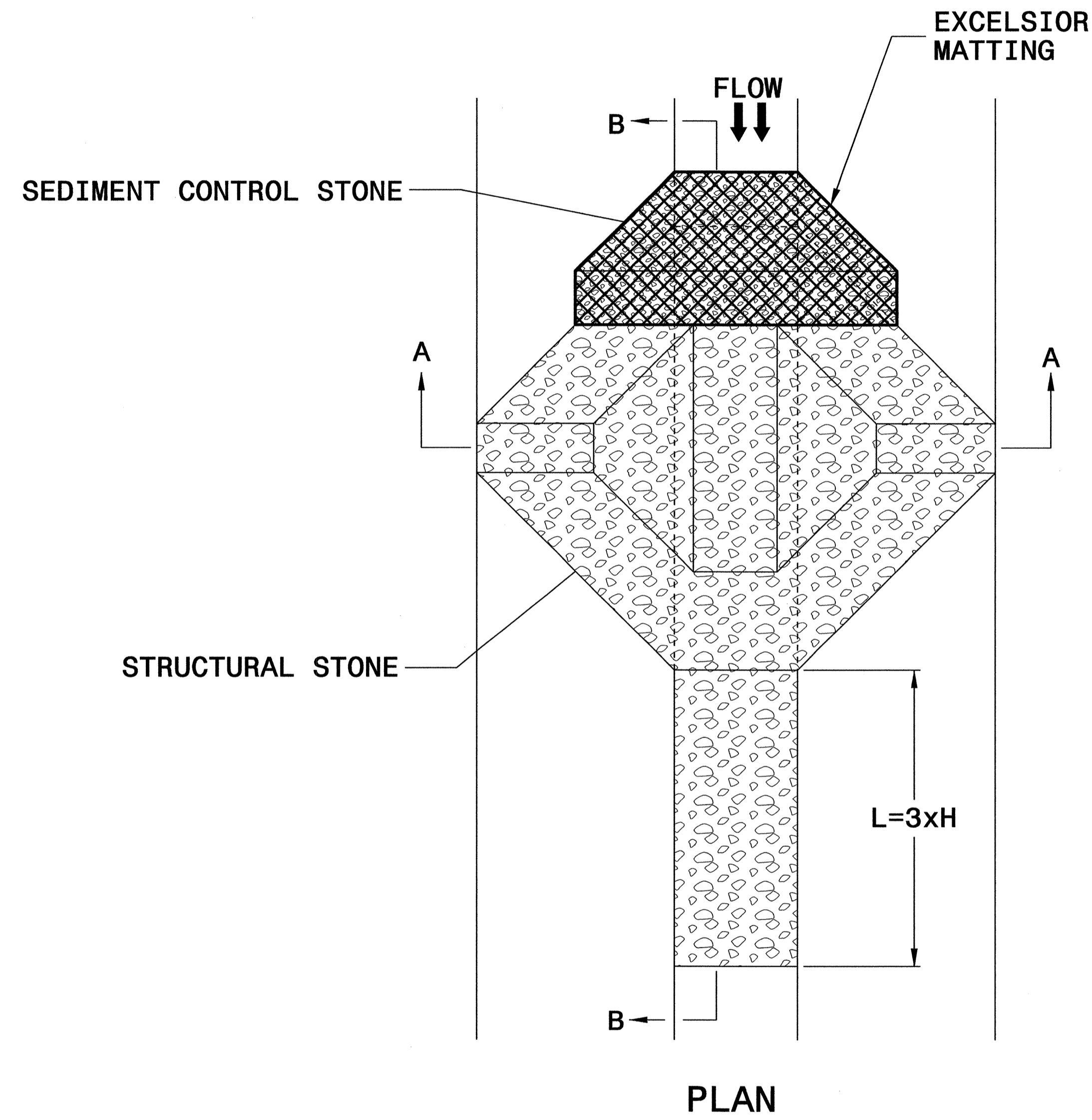
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., 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.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

PROJECT REFERENCE NO. W-5303	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

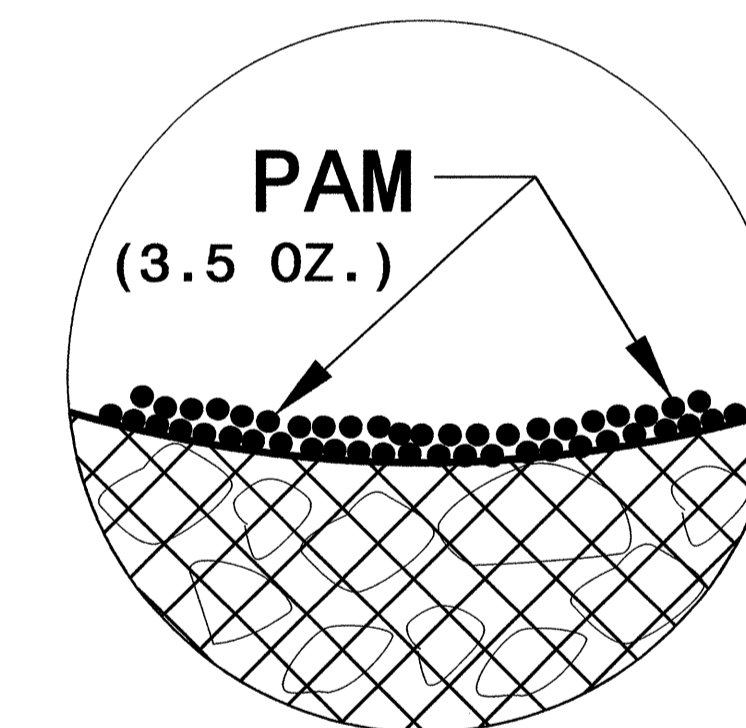


NOTES

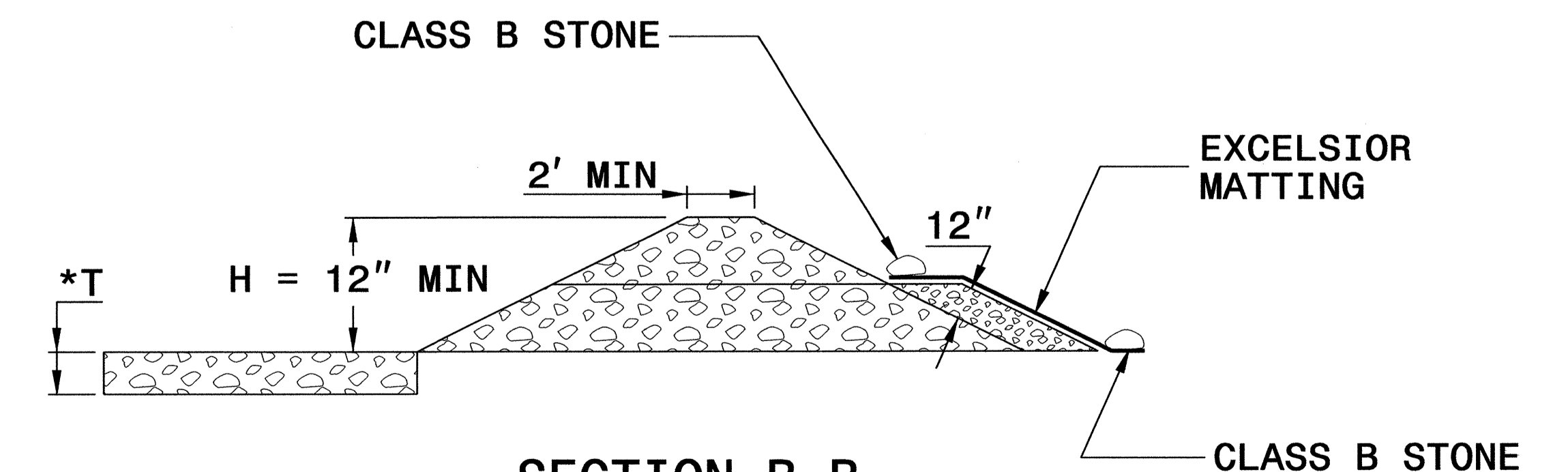
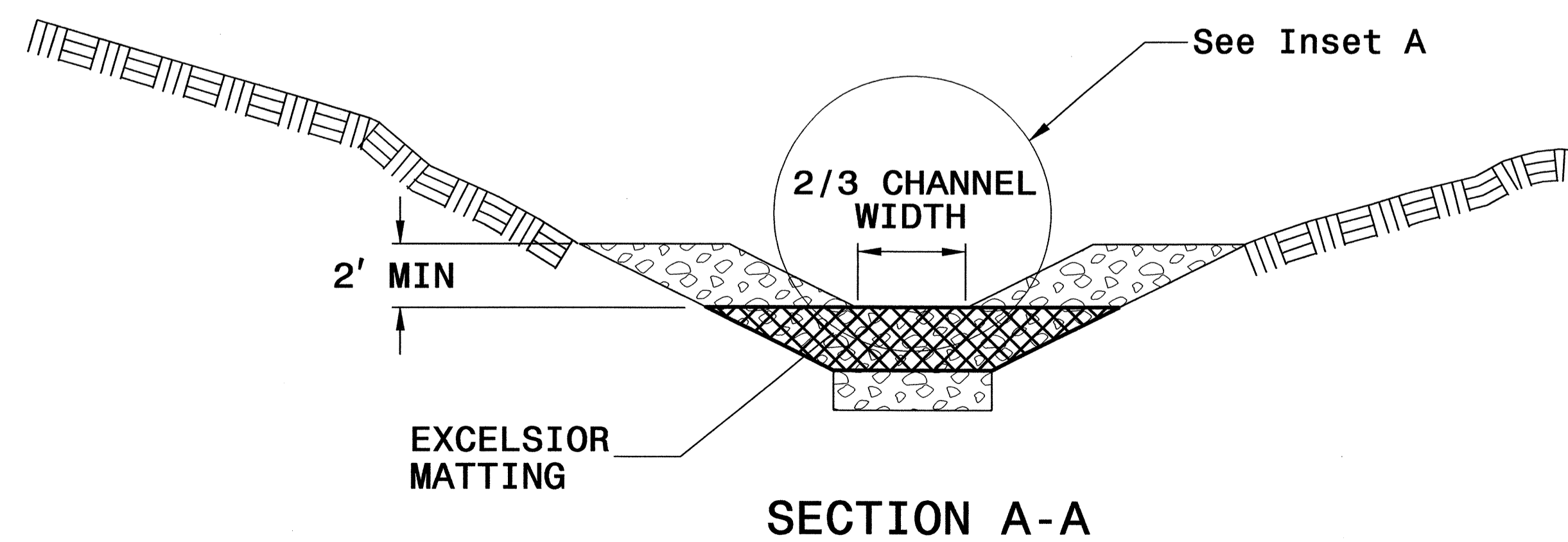
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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



INSET A



*T = 12" MIN., 18" MAX.

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>W-5303</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

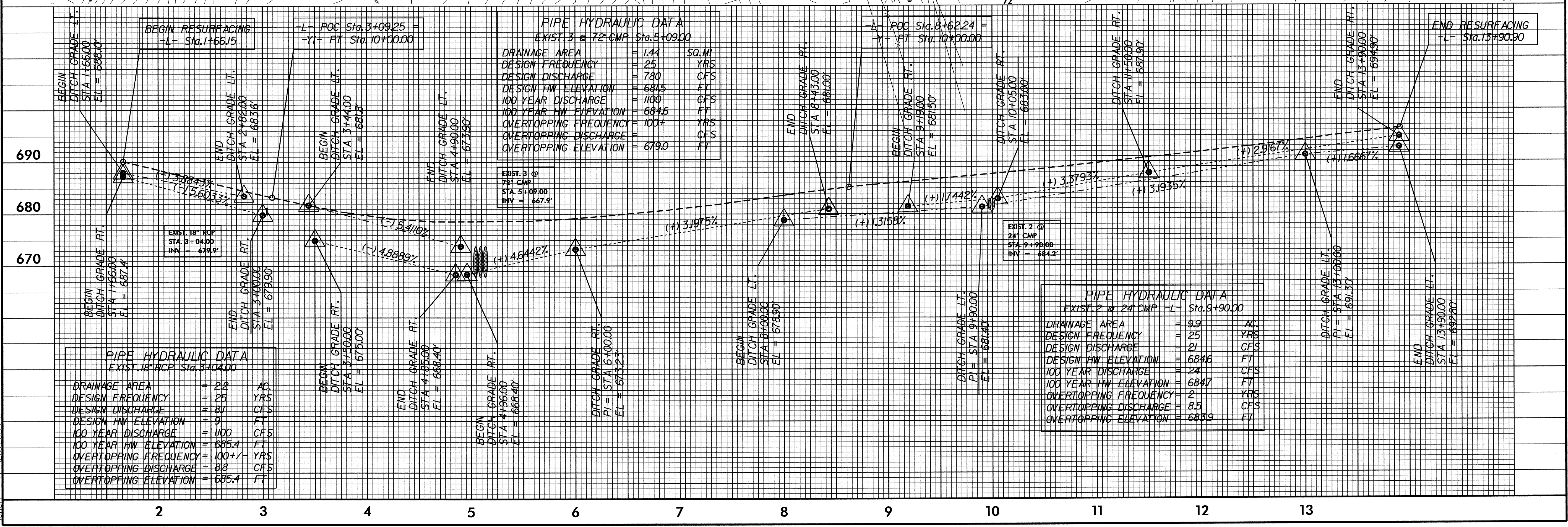
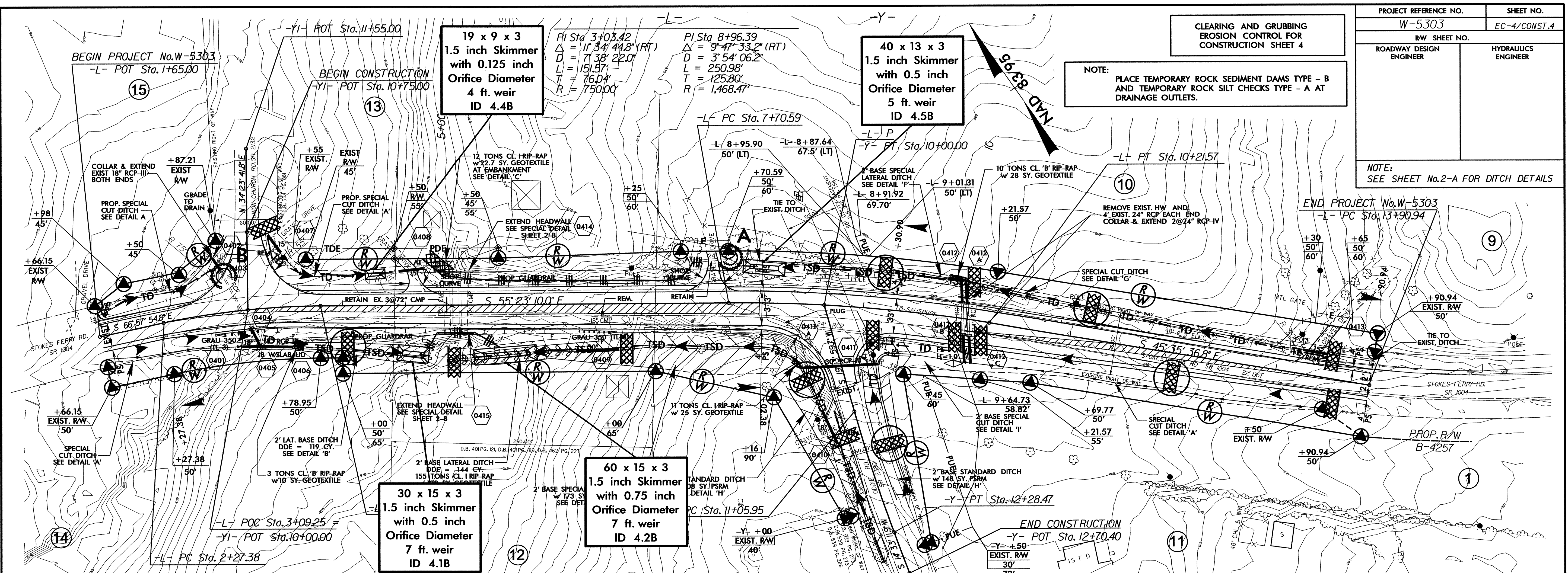
SOIL STABILIZATION TIMEFRAMES

<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.

**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.

NOTE:
SEE SHEET No.2-A FOR DITCH DETAILS



PIPE HYDRAULIC DATA
EXIST. 3 @ 72\"/>

DRAINAGE AREA	= 144	SQ. MI
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 780	CFS
DESIGN HW ELEVATION	= 6815	FT
100 YEAR DISCHARGE	= 1100	CFS
100 YEAR HW ELEVATION	= 6846	FT
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 100+	CFS
OVERTOPPING ELEVATION	= 6790	FT

PIPE HYDRAULIC DATA
EXIST. 2 @ 24\"/>

DRAINAGE AREA	= 9.9	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 21	CFS
DESIGN HW ELEVATION	= 6846	FT
100 YEAR DISCHARGE	= 24	CFS
100 YEAR HW ELEVATION	= 6847	FT
OVERTOPPING FREQUENCY	= 2	YRS
OVERTOPPING DISCHARGE	= 8.5	CFS
OVERTOPPING ELEVATION	= 6839	FT

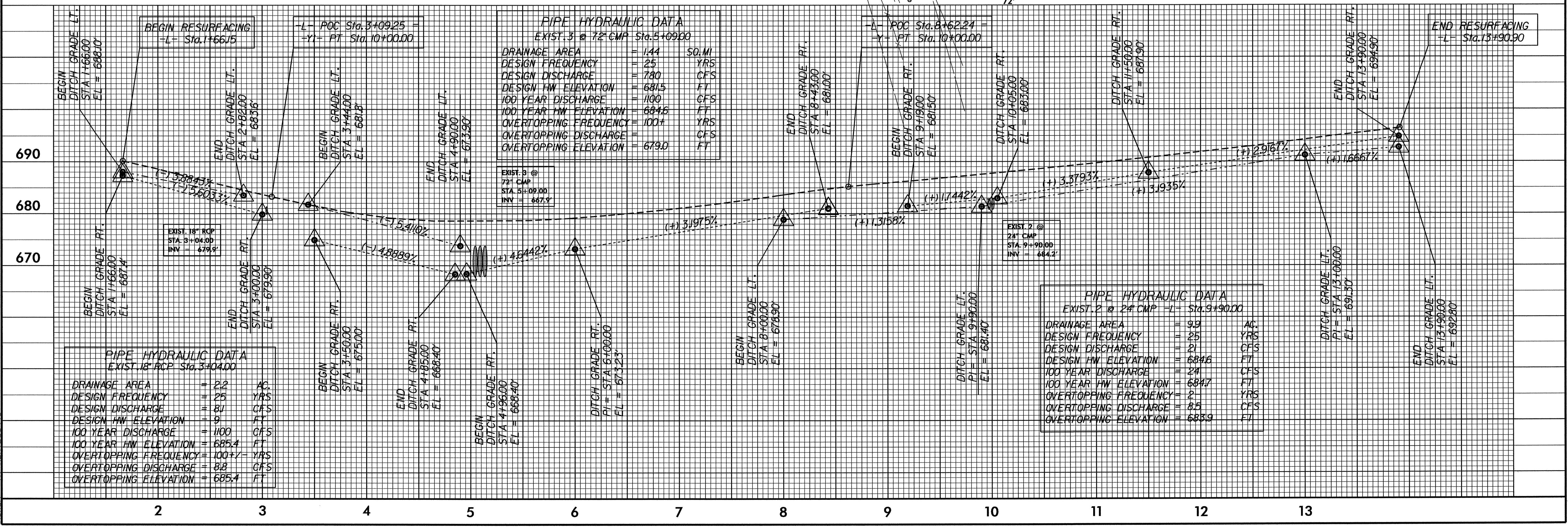
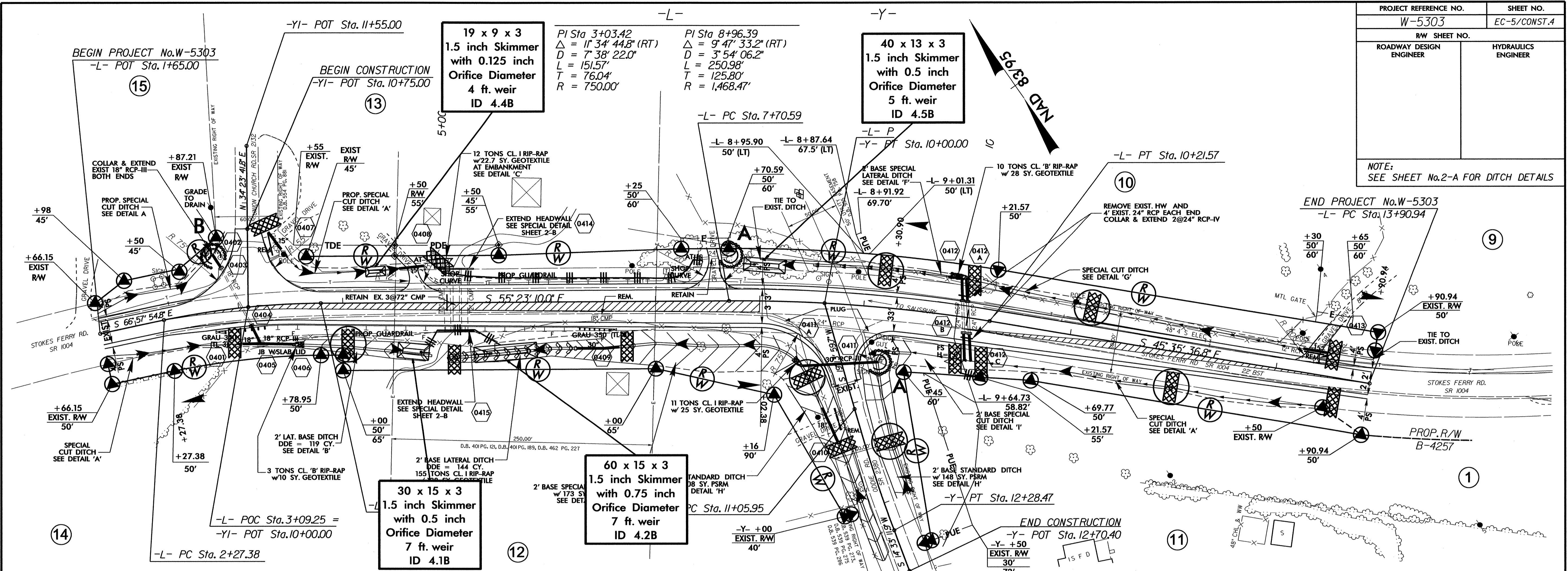
PIPE HYDRAULIC DATA
EXIST. 18\"/>

DRAINAGE AREA	= 2.2	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 81	CFS
DESIGN HW ELEVATION	= 9	FT
100 YEAR DISCHARGE	= 1100	CFS
100 YEAR HW ELEVATION	= 6854	FT
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 8.8	CFS
OVERTOPPING ELEVATION	= 6854	FT

8/17/99
 14-MAY-2012 14:10
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 Author: A. HENY

PROJECT REFERENCE NO. W-5303	SHEET NO. EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
SEE SHEET No.2-A FOR DITCH DETAILS



8/17/99
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