

**TIP PROJECT: B-4030**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

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PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL

**BRUNSWICK COUNTY**

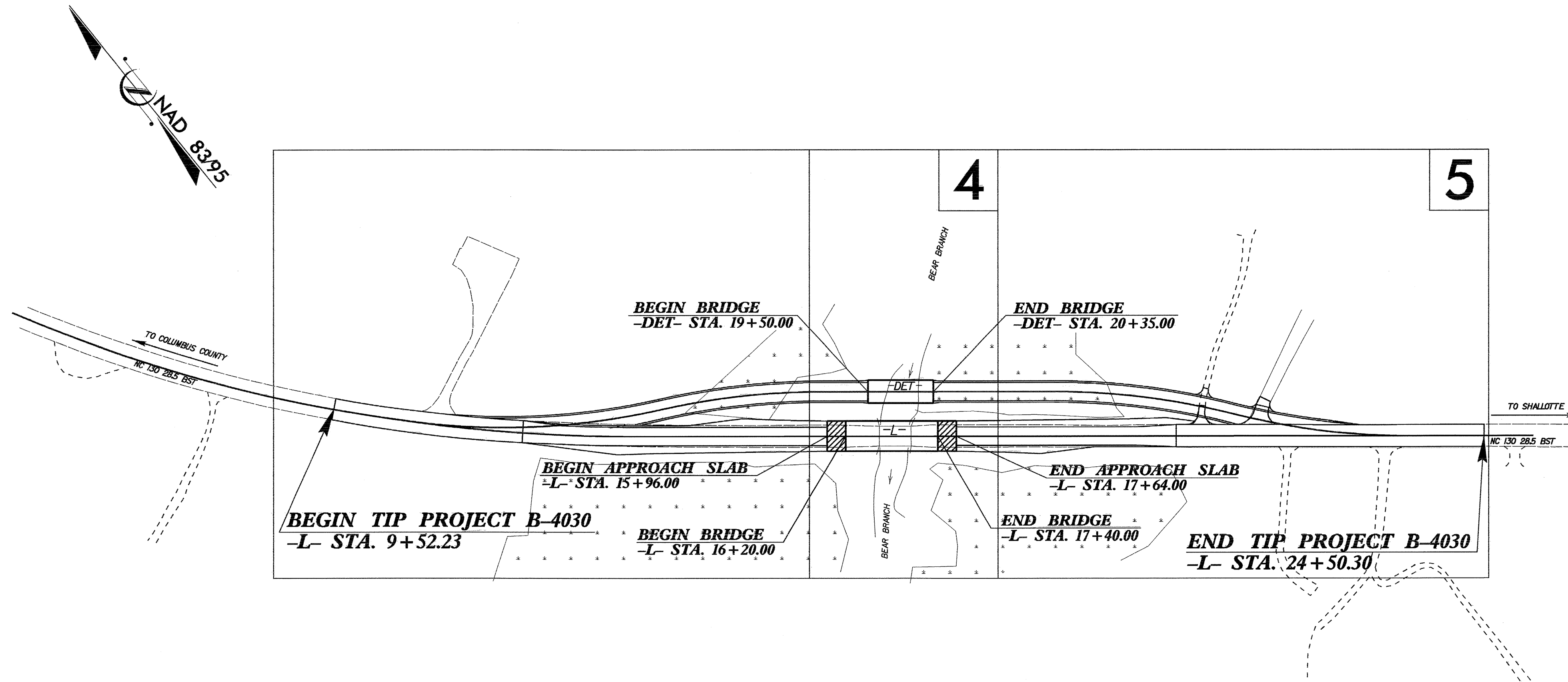
**LOCATION: BRIDGE NO.9 OVER BEAR BRANCH ON NC 130**  
**TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4030	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSO
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	— T —
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.**



**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

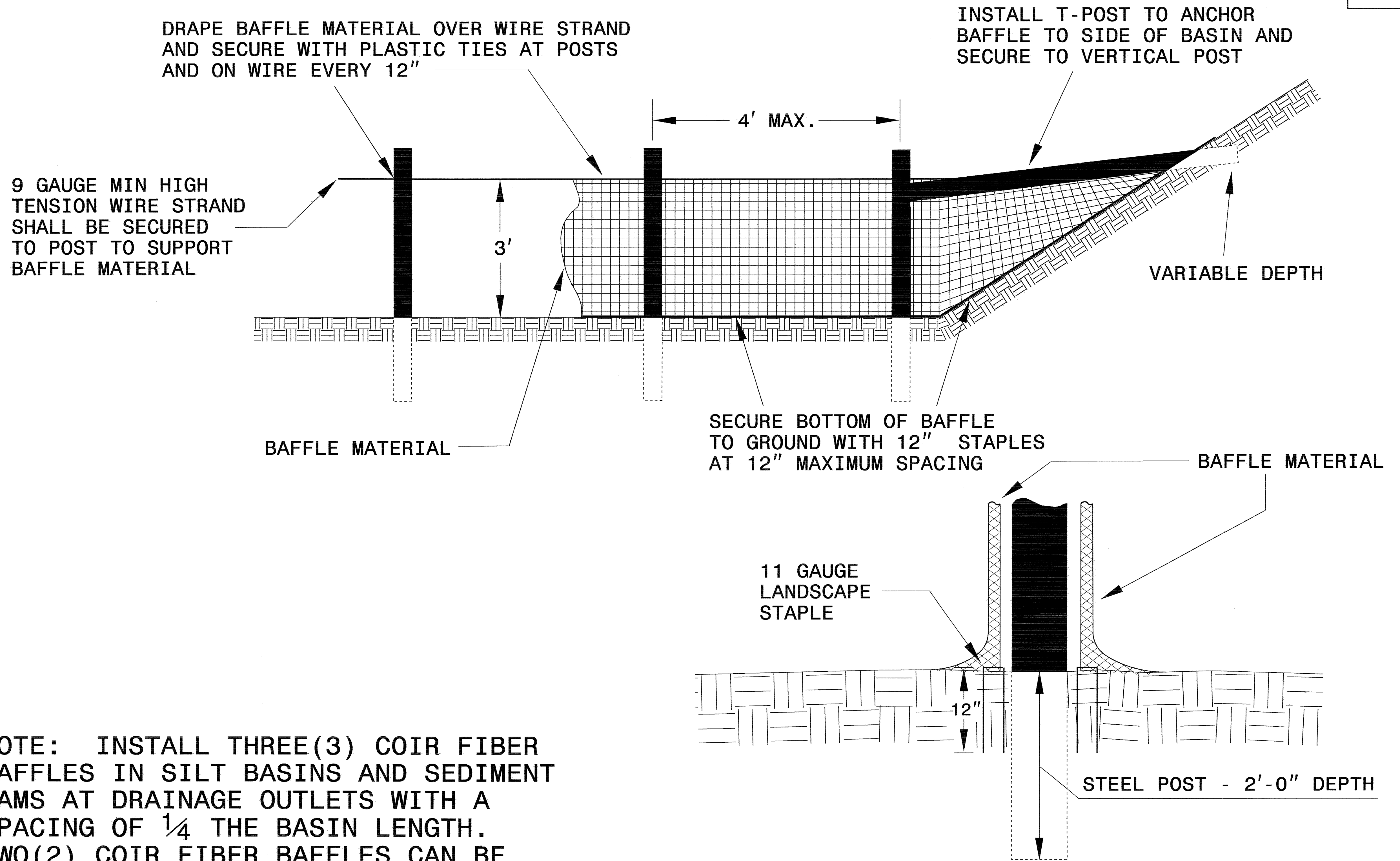
The following roadway english standards as appear in "Roadway Standard Drawings"— Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1632.03 Rock Inlet Sediment Trap Type C
1606.01 Special Sediment Control Fence	1633.01 Temporary Rock Silt Check Type A
1607.01 Gravel Construction Entrance	
1622.01 Temporary Berms and Slope Drains	

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PROJECT REFERENCE NO. B-4030	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# COIR FIBER BAFFLE DETAIL

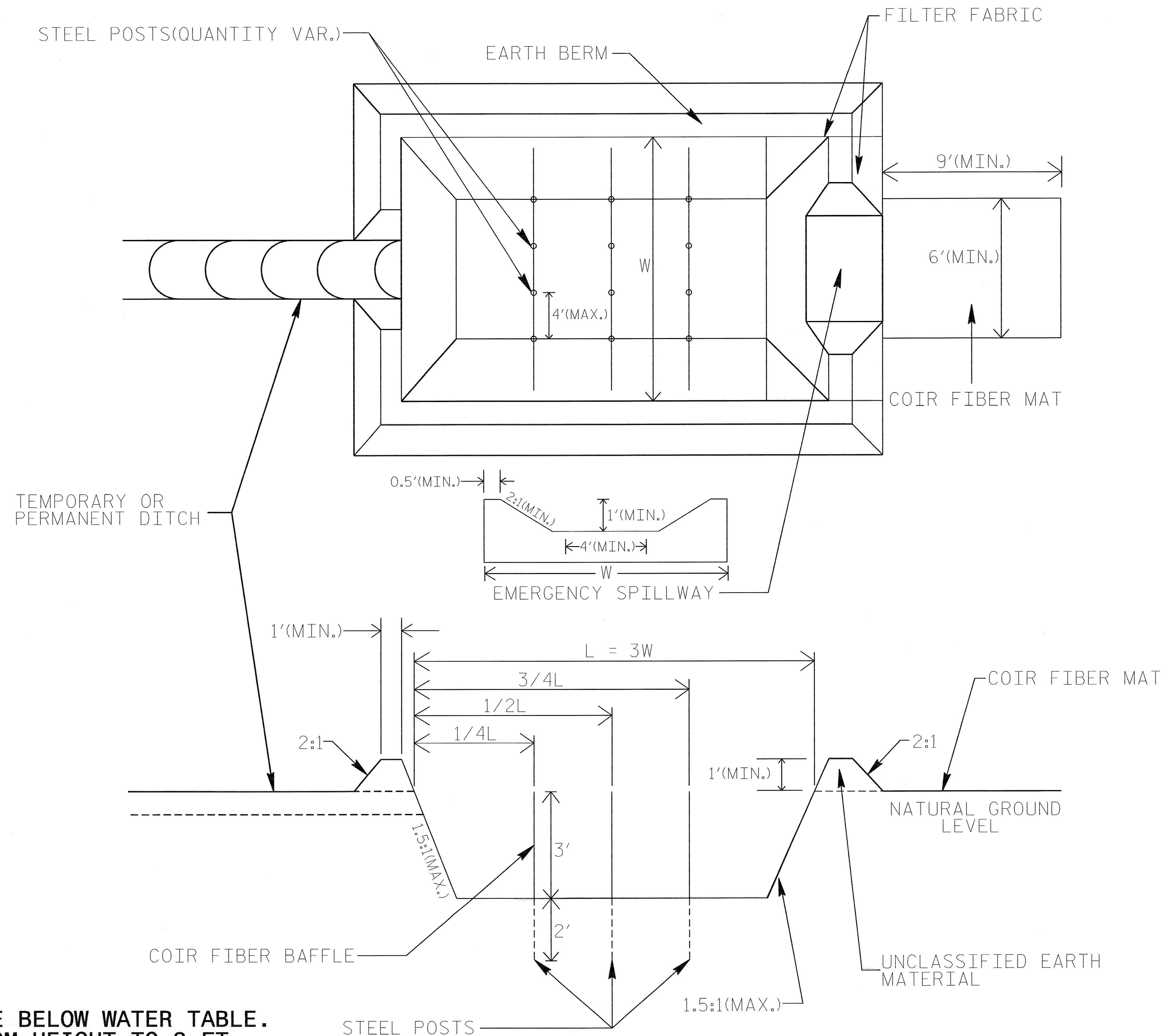


NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF  $\frac{1}{4}$  THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF  $\frac{1}{3}$  THE BASIN LENGTH.

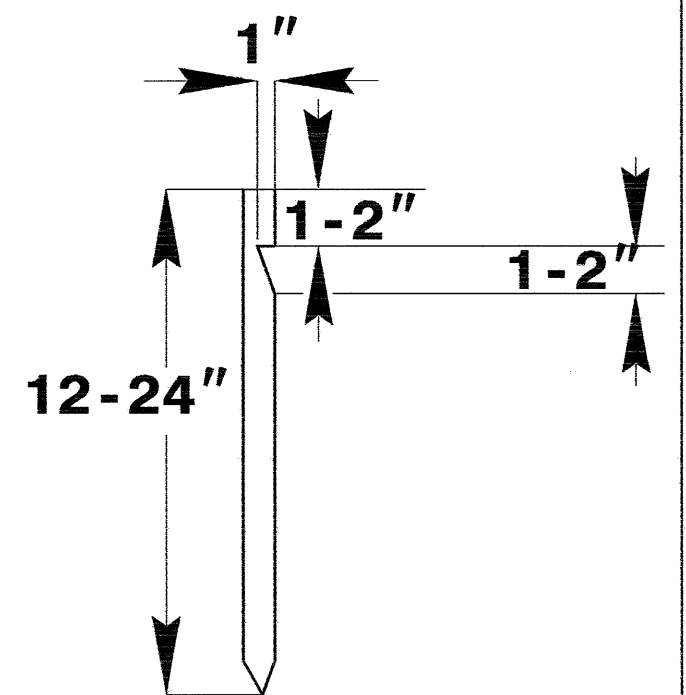
BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

# INFILTRATION BASIN WITH BAFFLES DETAIL

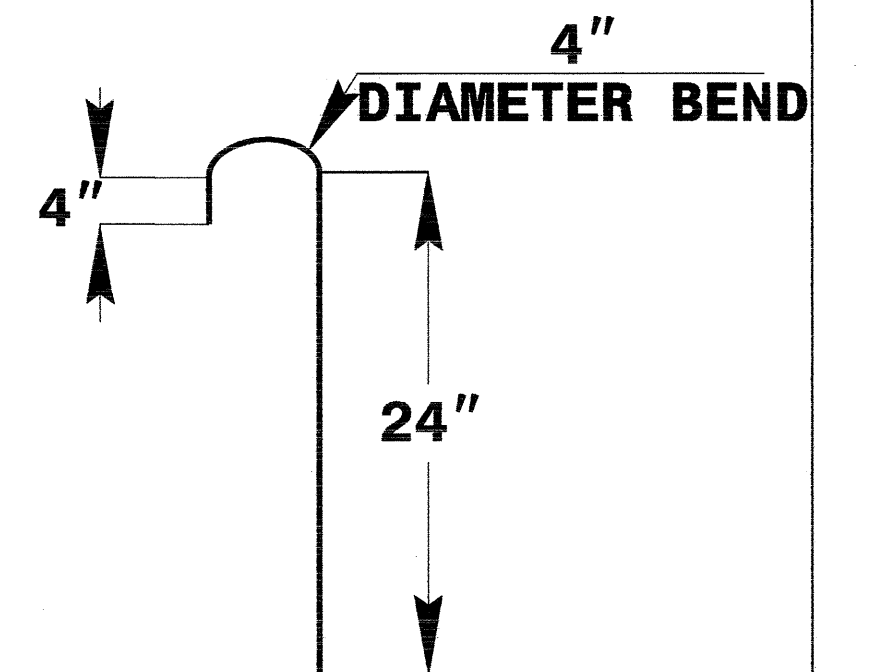
PROJECT REFERENCE NO. B-4030	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



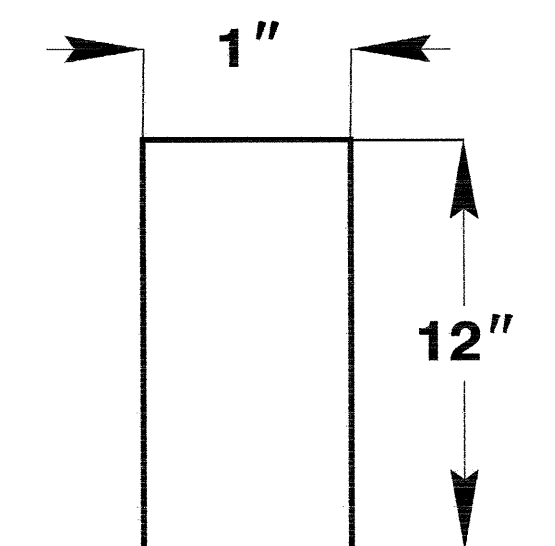
**2" x 2" (nominal) WOODEN STAKE**



**#10 STEEL REINFORCEMENT BAR**



**1" (nominal) STAPLE**



**COIR FIBER MAT ANCHOR OPTIONS**

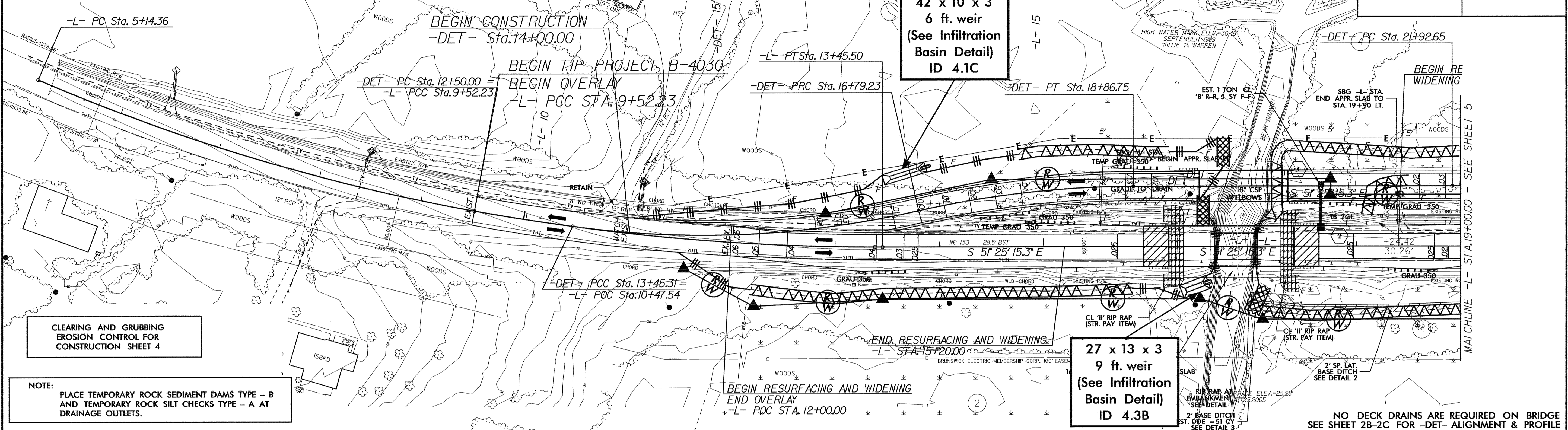
**NOTES:**

1. DO NOT EXCAVATE BELOW WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.
4. THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
5. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING  $Q/0.8$ , WHERE Q IS FLOW RATE INTO BASIN.

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PROJECT REFERENCE NO. B-4030		SHEET NO. EC-3/CONST.4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

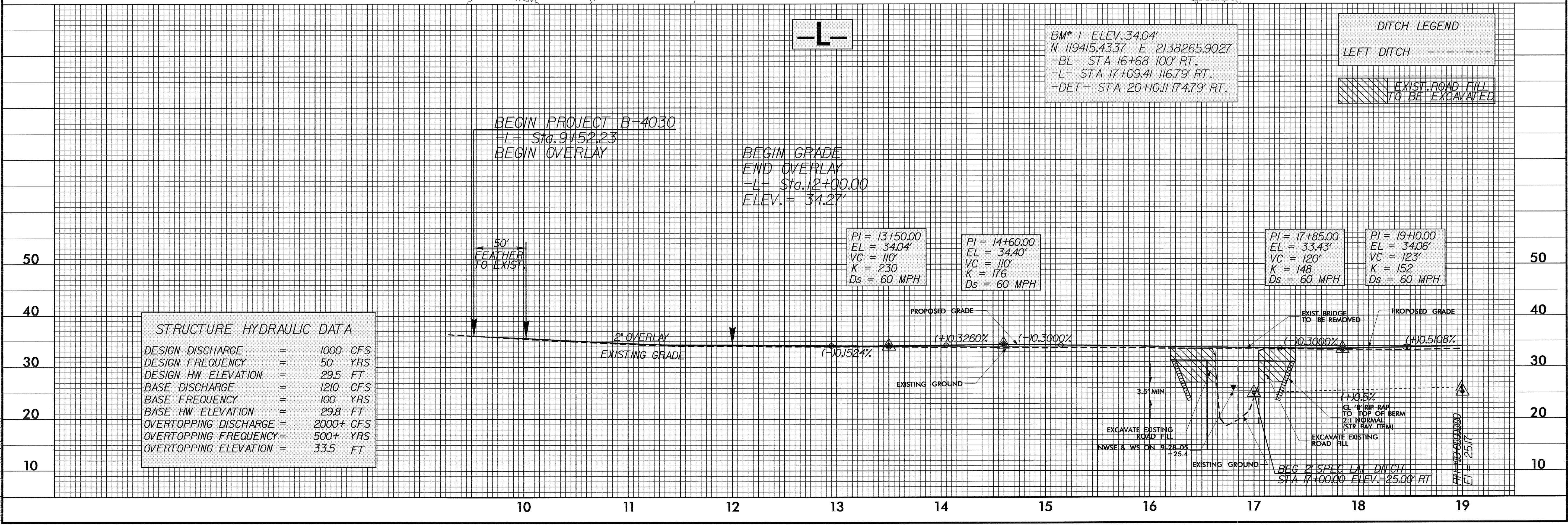
**NOTE:**  
UTILIZE TEMPORARY ROCK SILT CHECK TYPE - A AND INFILTRATION BASIN AS STILLING BASIN WHERE APPLICABLE.



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.

NO DECK DRAINS ARE REQUIRED ON BRIDGE  
SEE SHEET 2B-2C FOR -DET- ALIGNMENT & PROFILE



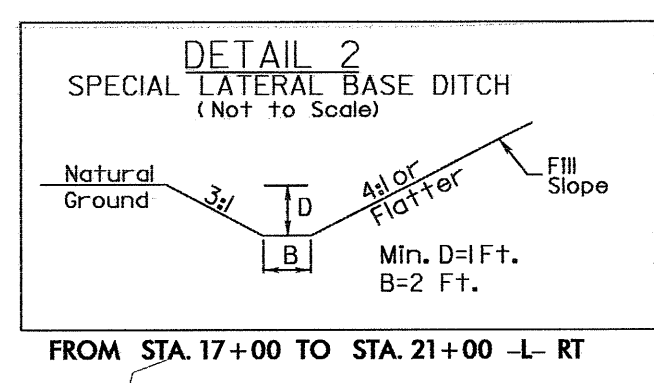
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 11/23/18

8/17/99

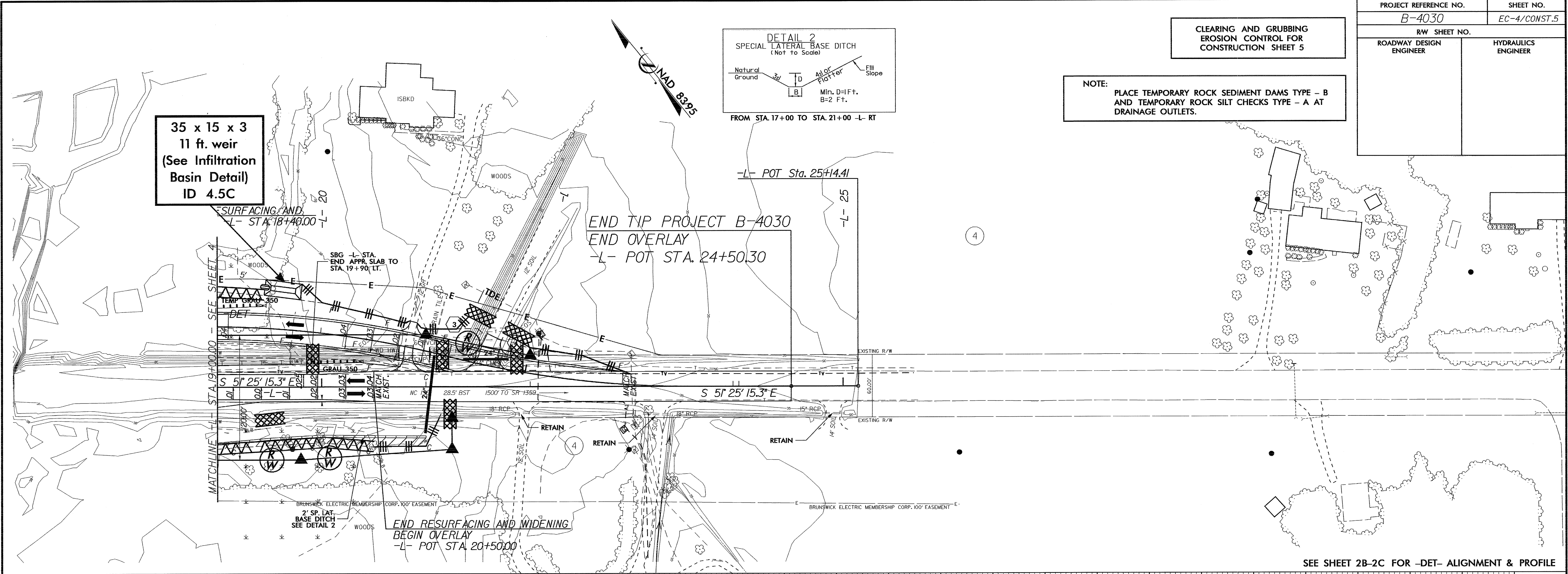
PROJECT REFERENCE NO. B-4030	SHEET NO. EC-4/CONST.5
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 5

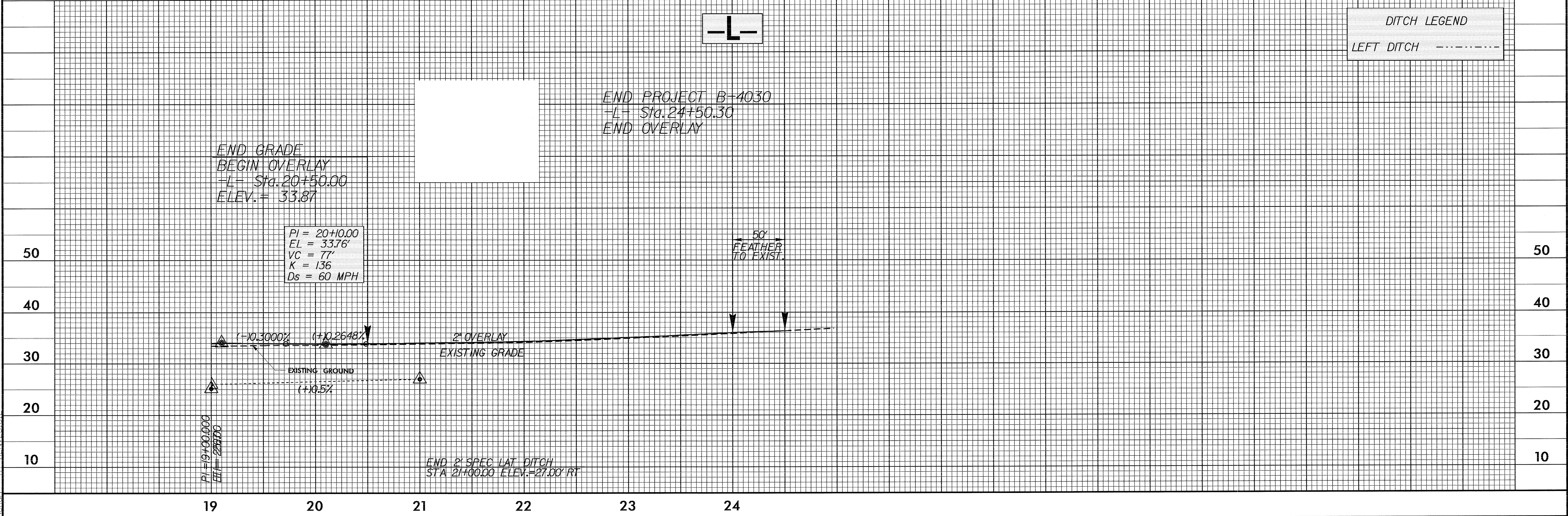
NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
DRAINAGE OUTLETS.



35 x 15 x 3  
11 ft. weir  
(See Infiltration  
Basin Detail)  
ID 4.5C



SEE SHEET 2B-2C FOR -DET- ALIGNMENT & PROFILE



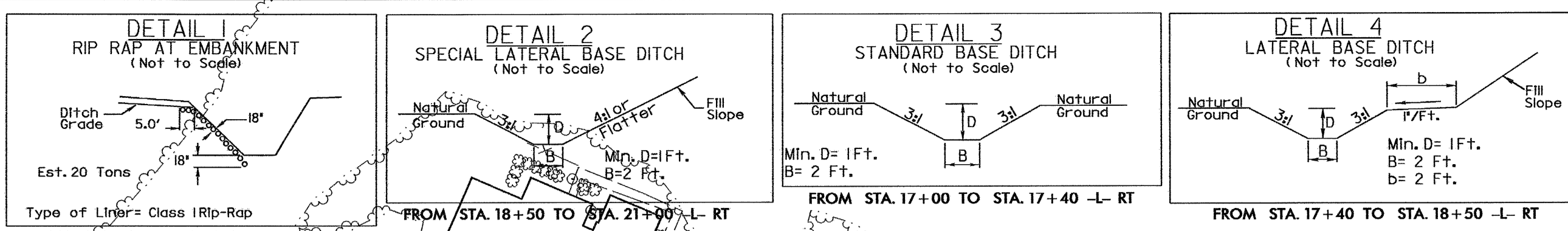
DITCH LEGEND  
LEFT DITCH

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PROJECT REFERENCE NO. B-4030	SHEET NO. EC-5/CONST.4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

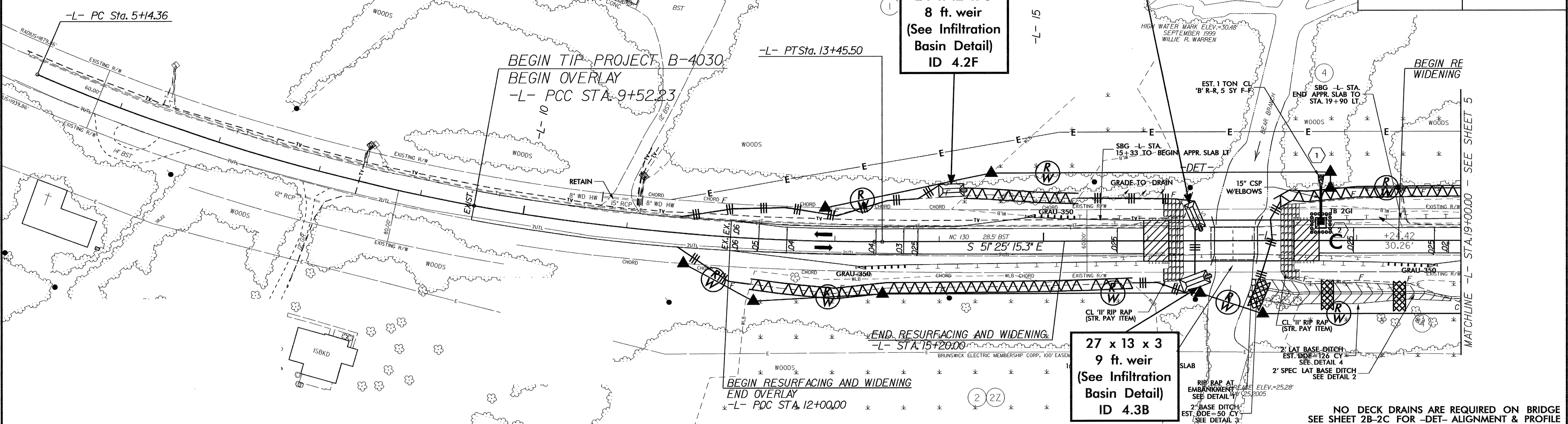
**NOTE:**  
UTILIZE TEMPORARY ROCK SILT CHECK TYPE - A AND INFILTRATION BASIN AS STILLING BASIN WHERE APPLICABLE.



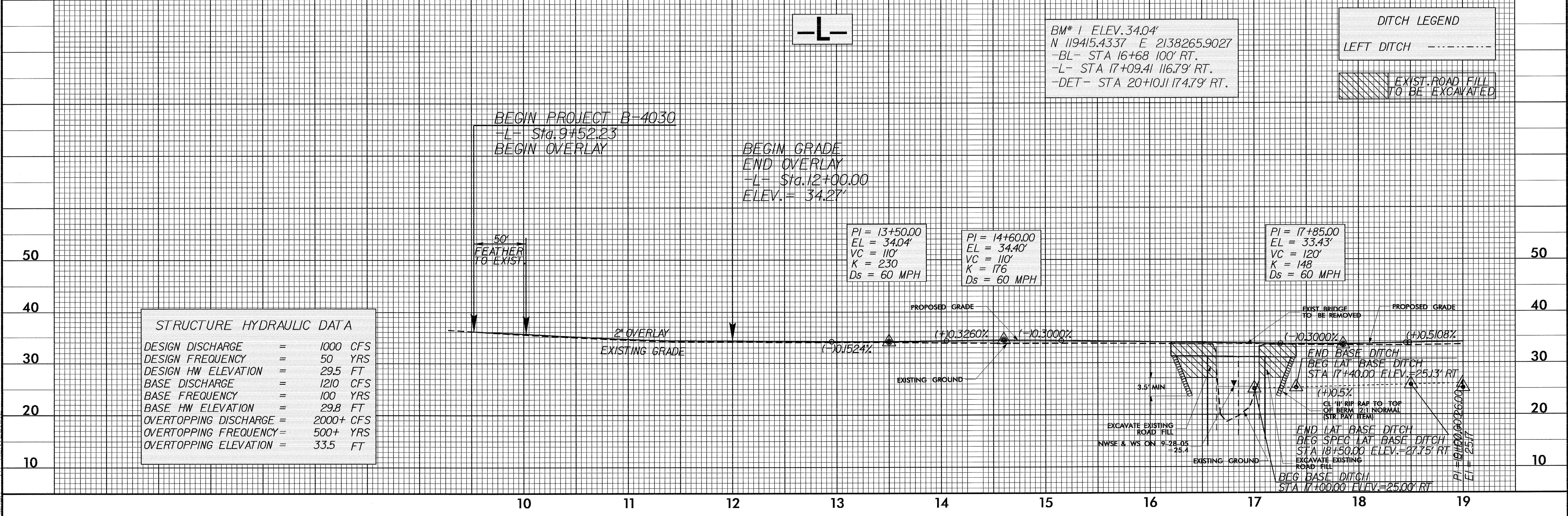
**26 x 11 x 3**  
**7 ft. weir**  
(See Infiltration Basin Detail)  
**ID 4.4F**

**24 x 12 x 3**  
**8 ft. weir**  
(See Infiltration Basin Detail)  
**ID 4.2F**

**27 x 13 x 3**  
**9 ft. weir**  
(See Infiltration Basin Detail)  
**ID 4.3B**

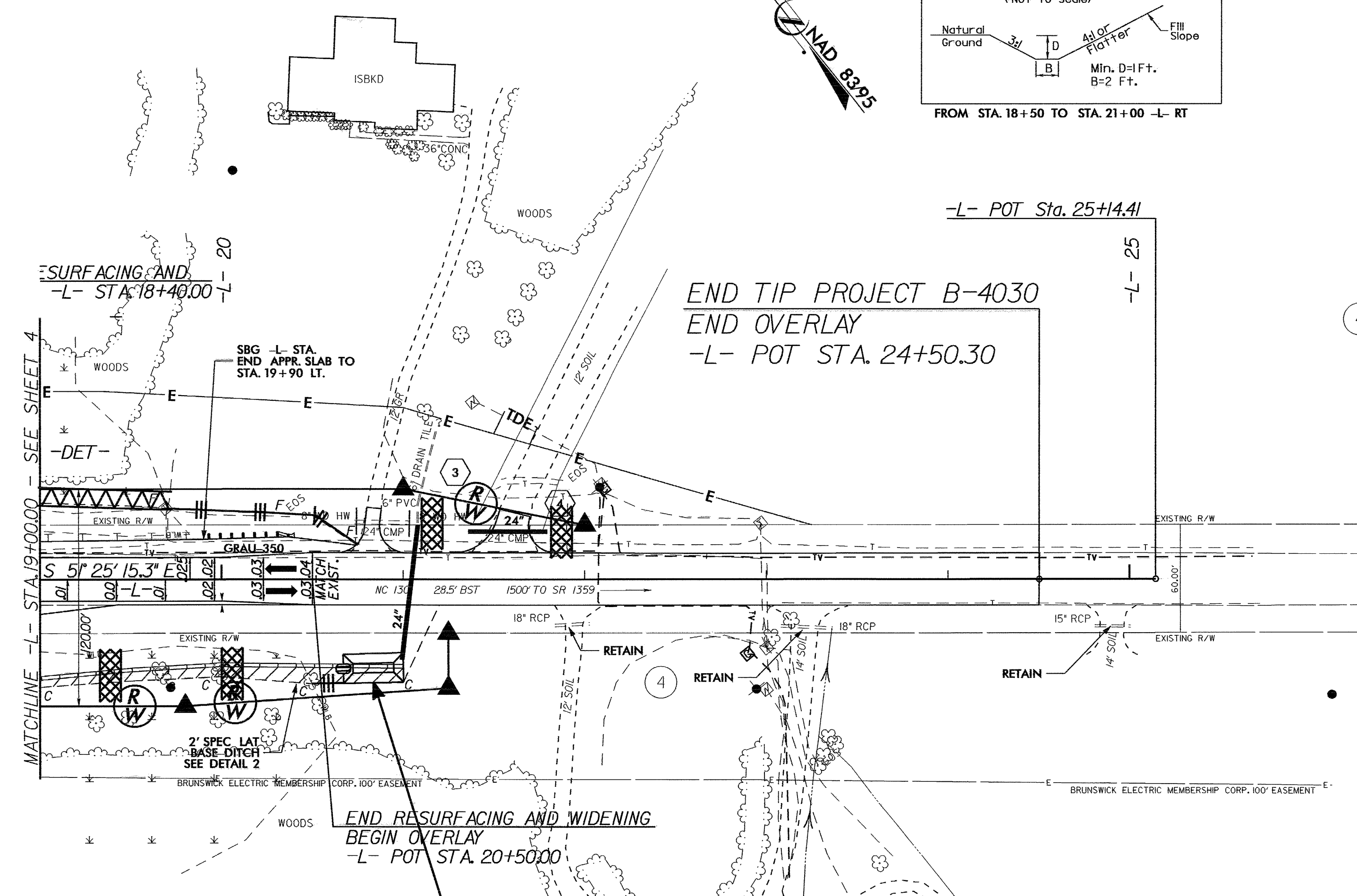
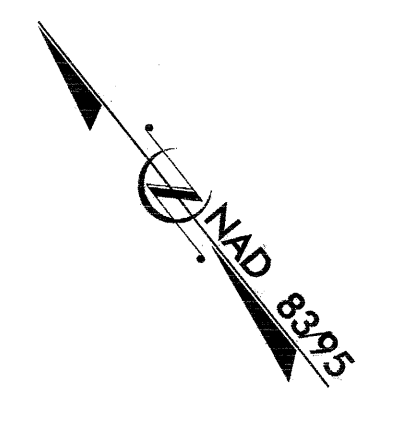
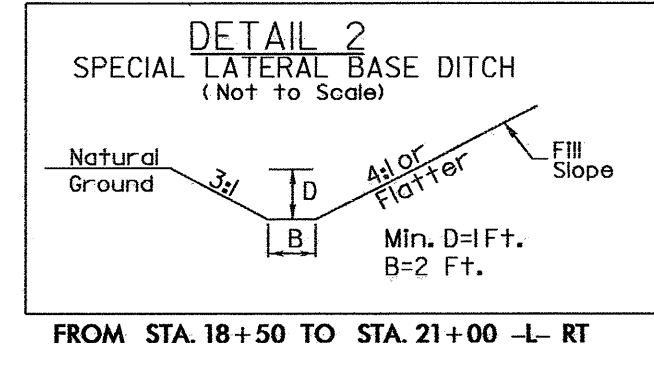


NO DECK DRAINS ARE REQUIRED ON BRIDGE  
SEE SHEET 2B-2C FOR -DET- ALIGNMENT & PROFILE

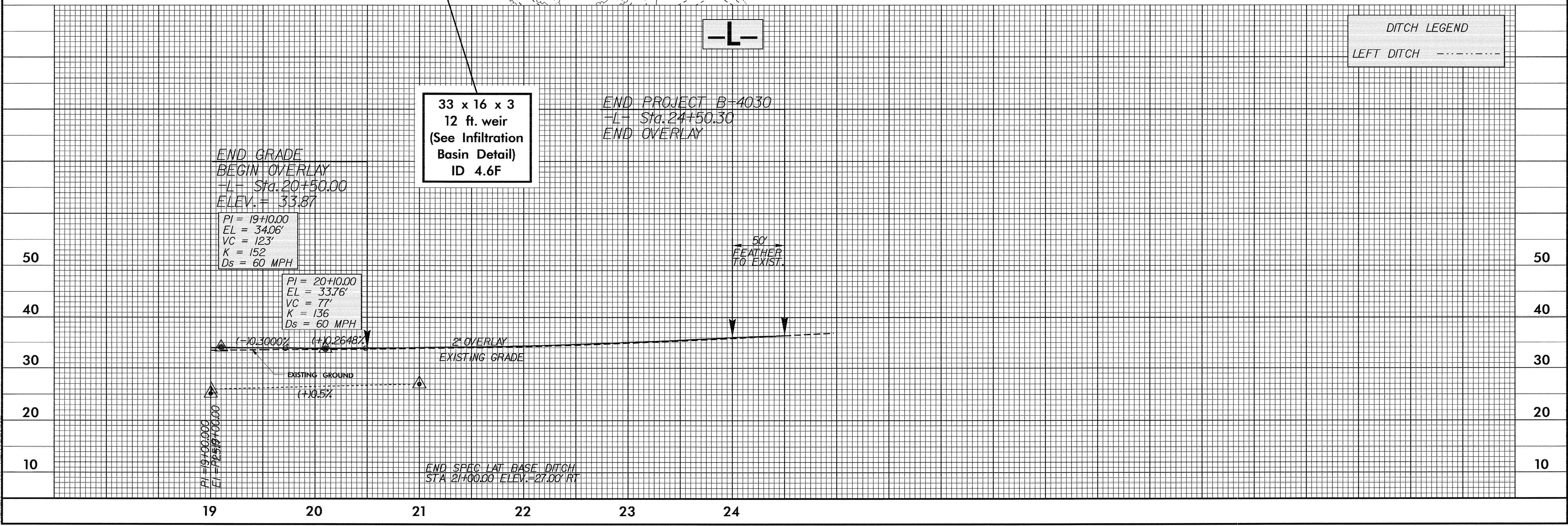


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PROJECT REFERENCE NO.	SHEET NO.
B-4030	EC-6/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



SEE SHEET 2B-2C FOR -DET- ALIGNMENT & PROFILE



DITCH LEGEND	
---	LEFT DITCH

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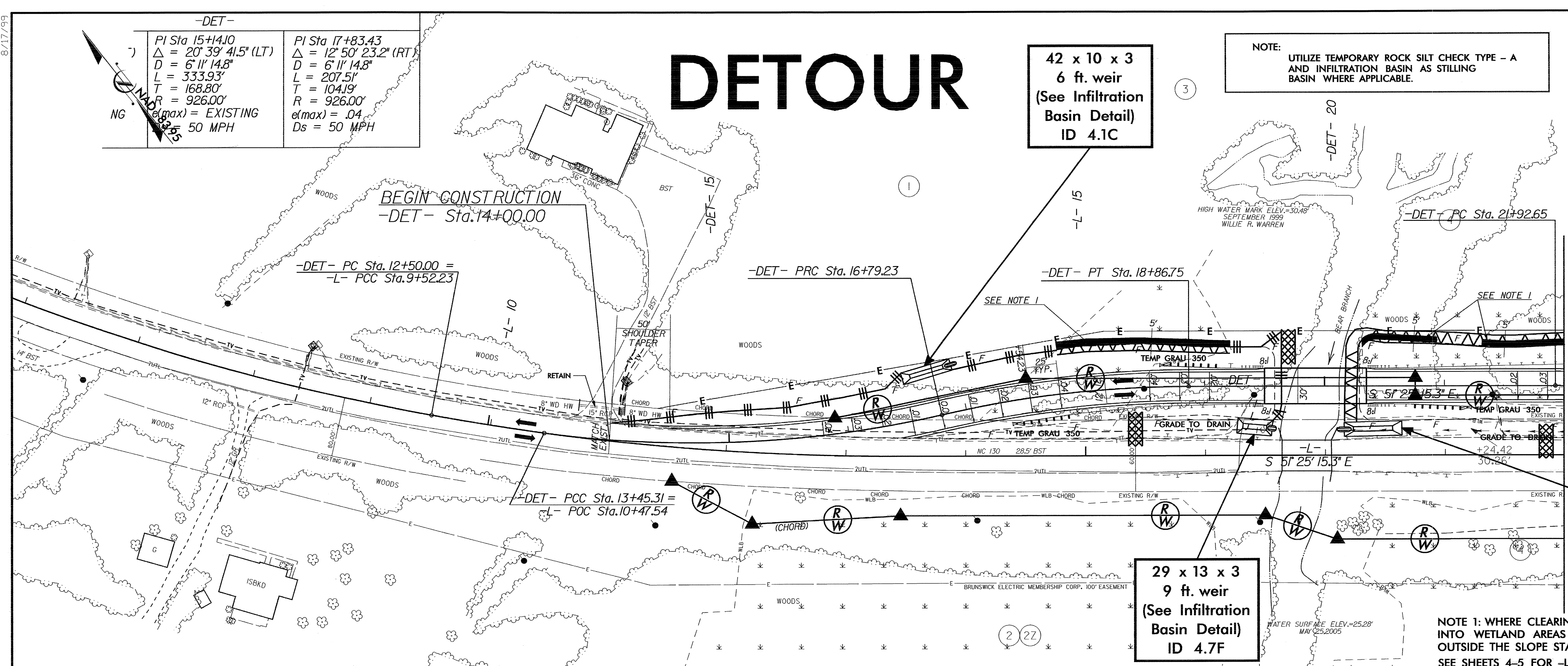
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-DET-	
PI Sta 15+14.10	PI Sta 17+83.43
$\Delta = 20' 39" 41.5" (LT)$	$\Delta = 12' 50" 23.2" (RT)$
D = 6' 11" 14.8"	D = 6' 11" 14.8"
L = 333.93'	L = 207.5'
T = 168.80'	T = 104.19'
R = 926.00'	R = 926.00'
e(max) = EXISTING	e(max) = .04
Ds = 50 MPH	Ds = 50 MPH

# DETOUR

PROJECT REFERENCE NO.	SHEET NO.
B-4030	EC-7/CONST.2-B
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

NOTE:  
UTILIZE TEMPORARY ROCK SILT CHECK TYPE - A  
AND INFILTRATION BASIN AS STILLING  
BASIN WHERE APPLICABLE.

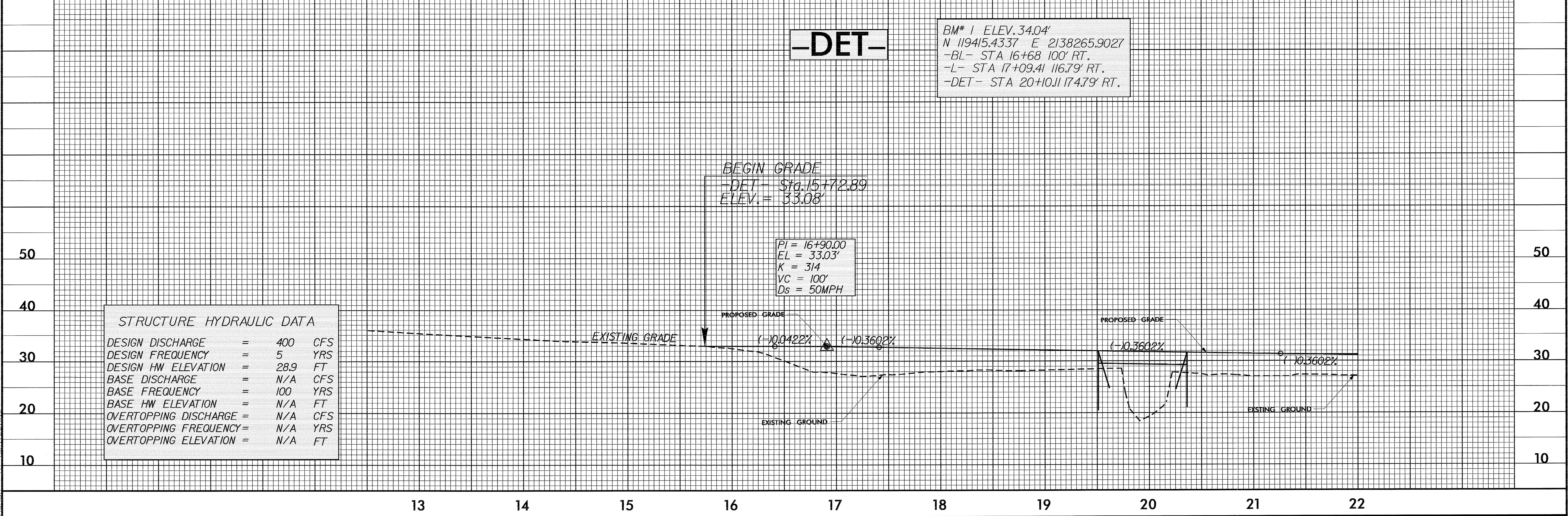


MATCH LINE -DET- STA. 22+00 SEE SHEET 2C

NOTE 1: WHERE CLEARING AND GRUBBING OPERATIONS EXTEND INTO WETLAND AREAS THIS ACTIVITY WILL BE LIMITED TO 5' OUTSIDE THE SLOPE STAKES (PARCELS 1,3 AND 4). SEE SHEETS 4-5 FOR -L- ALIGNMENT & PROFILE

## -DET-

BM# 1 ELEV. 34.04'  
N 119415.4337 E 2138265.9027  
-BL- STA 16+68 100' RT.  
-L- STA 17+09.41 116.79' RT.  
-DET- STA 20+10.11 174.79' RT.



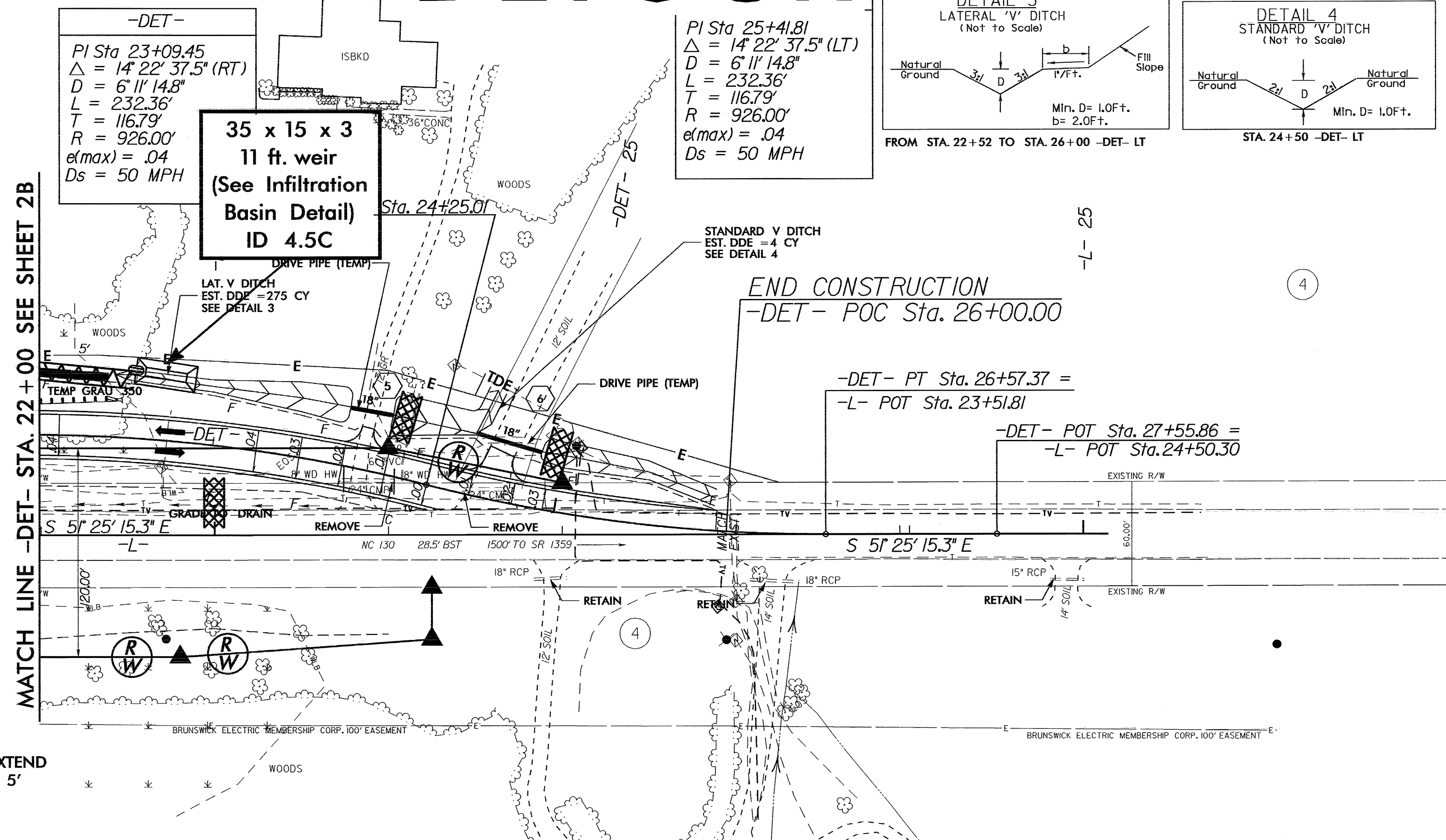
STRUCTURE HYDRAULIC DATA	
DESIGN DISCHARGE	= 400 CFS
DESIGN FREQUENCY	= 5 YRS
DESIGN HW ELEVATION	= 28.9 FT
BASE DISCHARGE	= N/A CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= N/A FT
OVERTOPPING DISCHARGE	= N/A CFS
OVERTOPPING FREQUENCY	= N/A YRS
OVERTOPPING ELEVATION	= N/A FT

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# DETOUR

PROJECT REFERENCE NO. B-4030	SHEET NO. EC-8/CONST.2-C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTE 1: WHERE CLEARING AND GRUBBING OPERATIONS EXTEND INTO WETLAND AREAS THIS ACTIVITY WILL BE LIMITED TO 5' OUTSIDE THE SLOPE STAKES (PARCELS 1,3 AND 4).  
SEE SHEETS 4-5 FOR -L- ALIGNMENT & PROFILE

## -DET-

DITCH LEGEND  
LEFT DITCH - - - - -

