

TIP PROJECT: B-3406

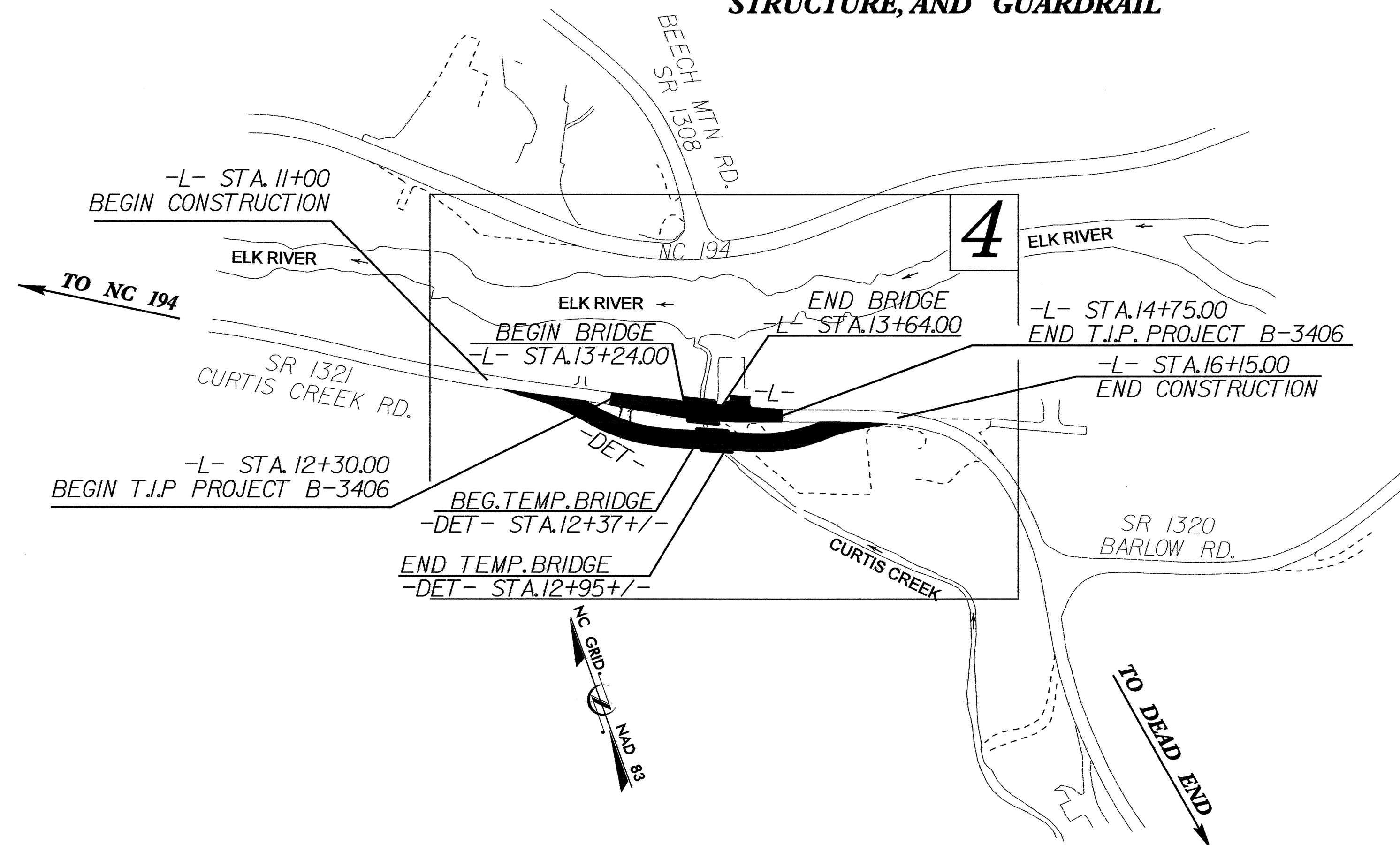
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

AVERY COUNTY

**LOCATION: BRIDGE NO. 28 OVER CURTIS CREEK
ON SR 1321**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING,
STRUCTURE, AND GUARDRAIL**



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3406	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

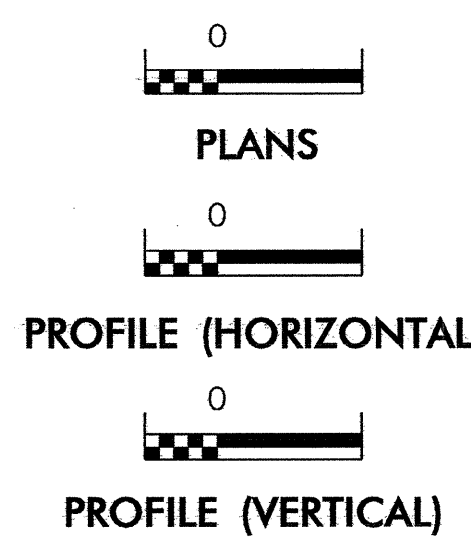
Std. #	Description	Symbol
	Streambank Reforestation	
1630.05	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.01	Riser Basin	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check 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	

**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



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 |
| 1607.01 Gravel Construction Entrance | 1633.01 Temporary Rock Silt Check Type A |
| 1630.05 Temporary Diversion | 1634.02 Temporary Rock Sediment Dam Type B |

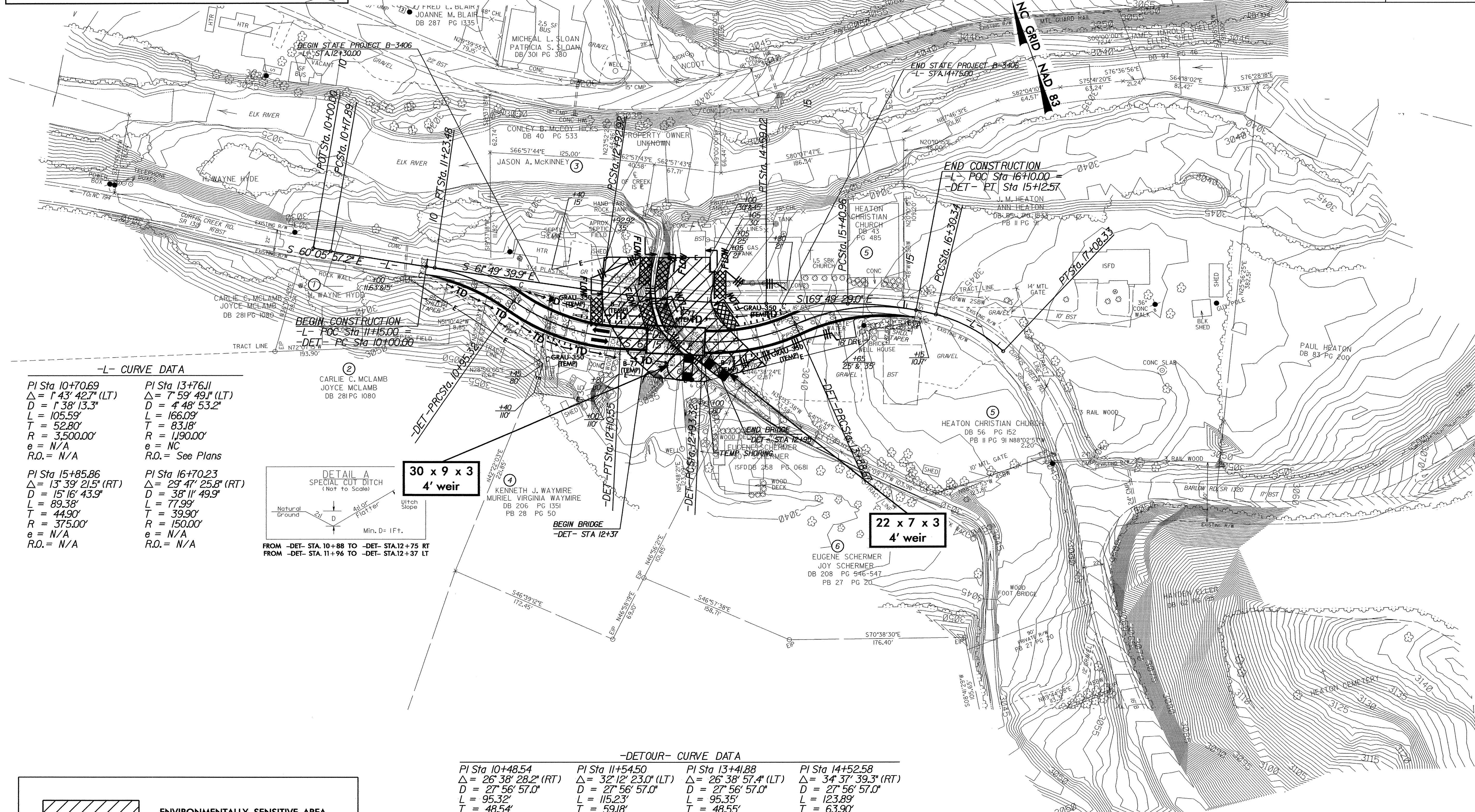
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 2B

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

NOTE:
UTILIZE TEMPORARY ROCK SILT CHECK TYPE A OR TEMPORARY
ROCK SEDIMENT DAM TYPE - B AS STILLING BASIN WHERE APPLICABLE.

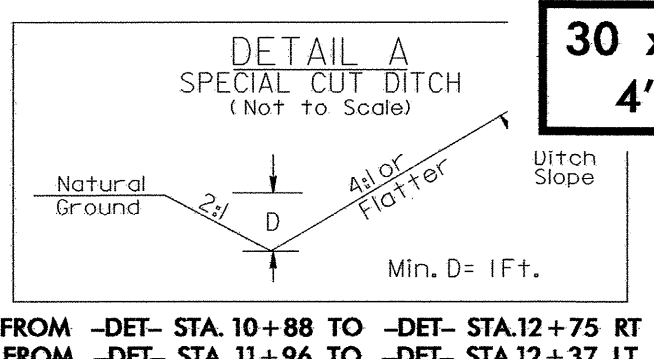
DETOUR PLAN

PROJECT REFERENCE NO. B-3406		SHEET NO. EC-2/CONST.2B	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



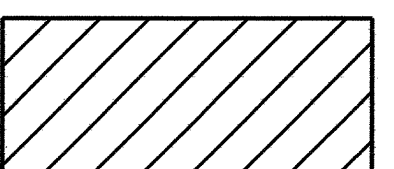
-L- CURVE DATA

<p>PI Sta 10+70.69 $\Delta = 1^{\circ} 43' 42.7''$ (LT) $D = 1^{\circ} 38' 13.3''$ $L = 105.59'$ $T = 52.80'$ $R = 3,500.00'$ $e = N/A$ $R.O. = N/A$</p>	<p>PI Sta 13+76.11 $\Delta = 7^{\circ} 59' 49.1''$ (LT) $D = 4^{\circ} 48' 53.2''$ $L = 166.09'$ $T = 83.18'$ $R = 1,190.00'$ $e = NC$ $R.O. = \text{See Plans}$</p>
<p>PI Sta 15+85.86 $\Delta = 13^{\circ} 39' 21.5''$ (RT) $D = 15^{\circ} 16' 43.9''$ $L = 89.38'$ $T = 44.90'$ $R = 375.00'$ $e = N/A$ $R.O. = N/A$</p>	<p>PI Sta 16+70.23 $\Delta = 29^{\circ} 47' 25.8''$ (RT) $D = 38^{\circ} 11' 49.9''$ $L = 77.99'$ $T = 39.90'$ $R = 150.00'$ $e = N/A$ $R.O. = N/A$</p>



-DETOUR- CURVE DATA

<p>PI Sta 10+48.54 $\Delta = 26^{\circ} 38' 28.2''$ (RT) $D = 27^{\circ} 56' 57.0''$ $L = 95.32'$ $T = 48.54'$ $R = 205.00'$ $e = \text{SEE PLANS}$ $R.O. = \text{SEE PLANS}$</p>	<p>PI Sta 11+54.50 $\Delta = 32^{\circ} 12' 23.0''$ (LT) $D = 27^{\circ} 56' 57.0''$ $L = 115.23'$ $T = 59.18'$ $R = 205.00'$ $e = 0.04 \text{ FT/FT}$ $R.O. = \text{SEE PLANS}$</p>	<p>PI Sta 13+41.88 $\Delta = 26^{\circ} 38' 57.4''$ (LT) $D = 27^{\circ} 56' 57.0''$ $L = 95.35'$ $T = 48.55'$ $R = 205.00'$ $e = 0.04 \text{ FT/FT}$ $R.O. = \text{SEE PLANS}$</p>	<p>PI Sta 14+52.58 $\Delta = 34^{\circ} 37' 39.3''$ (RT) $D = 27^{\circ} 56' 57.0''$ $L = 123.89'$ $T = 63.90'$ $R = 205.00'$ $e = \text{SEE PLANS}$ $R.O. = \text{SEE PLANS}$</p>
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 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

FOR -DET- PROFILE, SEE SHEET 5

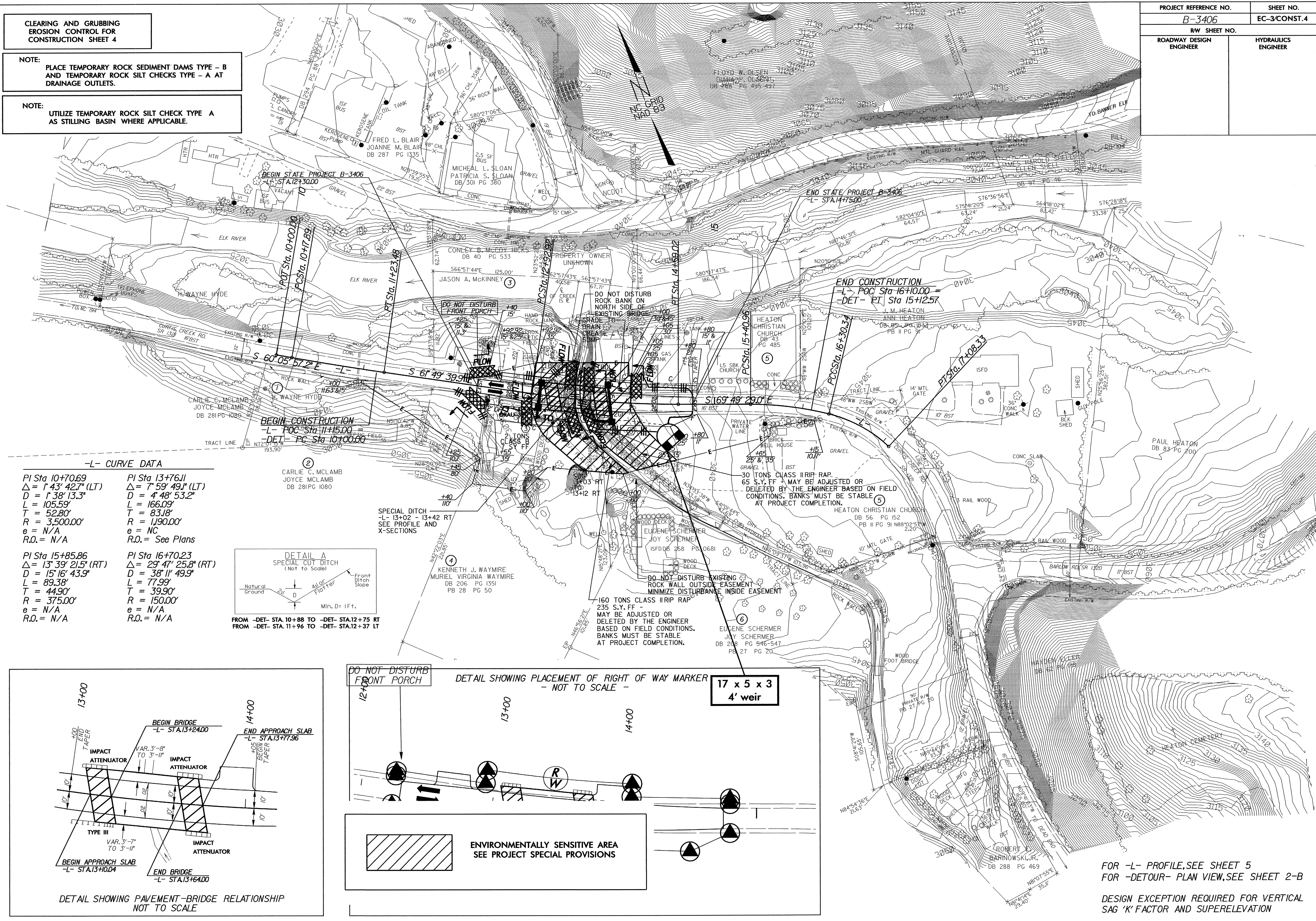
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DRAWN: JSE

**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.

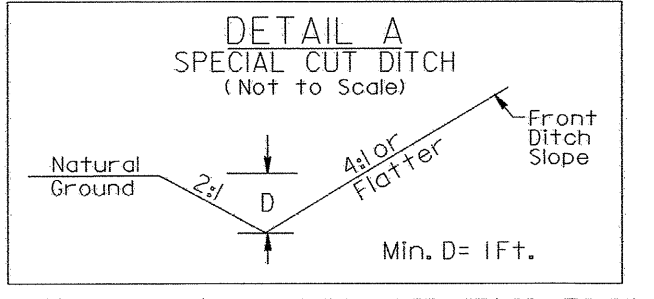
NOTE:
UTILIZE TEMPORARY ROCK SILT CHECK TYPE A
AS STILLING BASIN WHERE APPLICABLE.

PROJECT REFERENCE NO. B-3406		SHEET NO. EC-3/CONST.4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

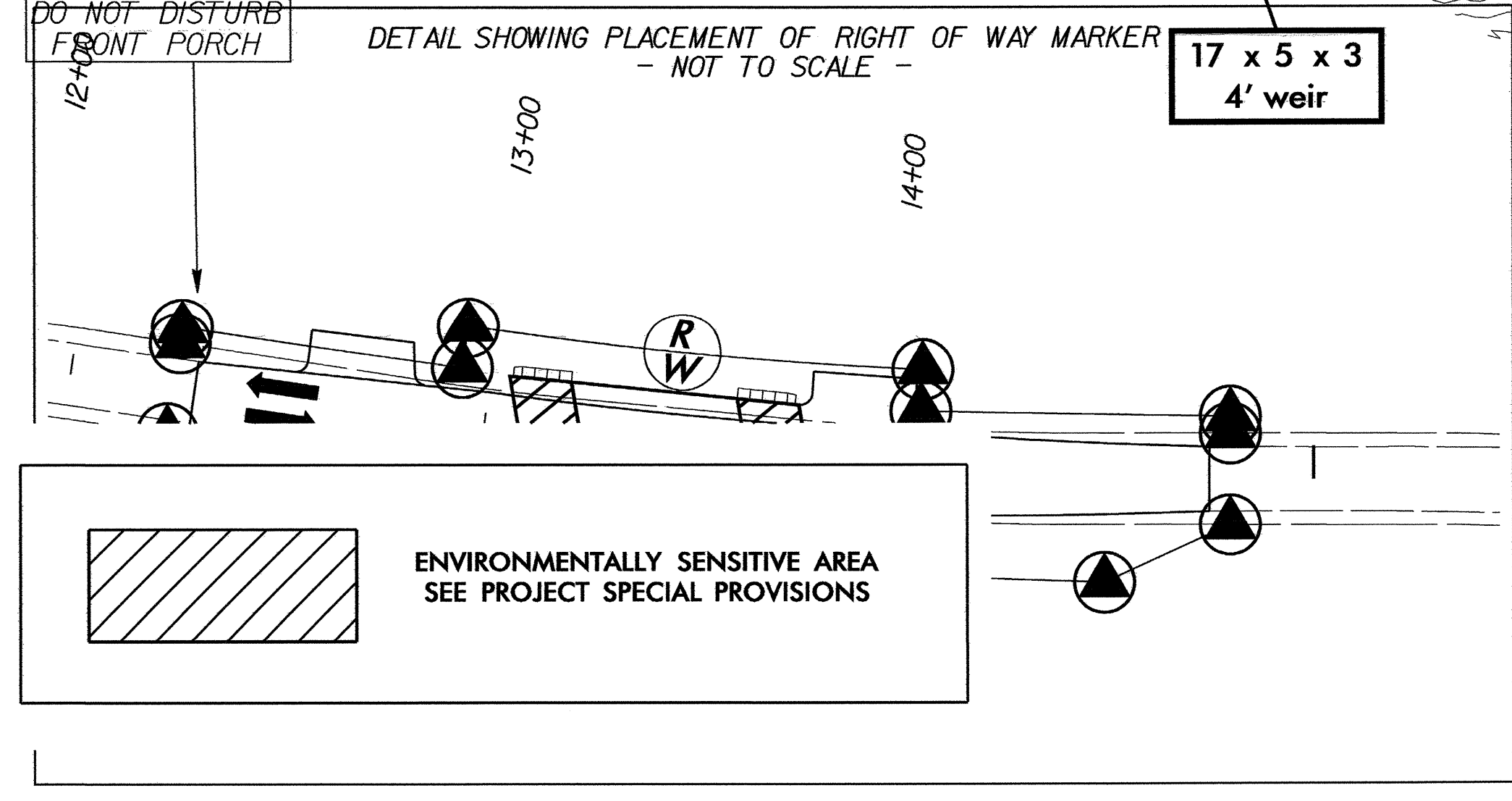
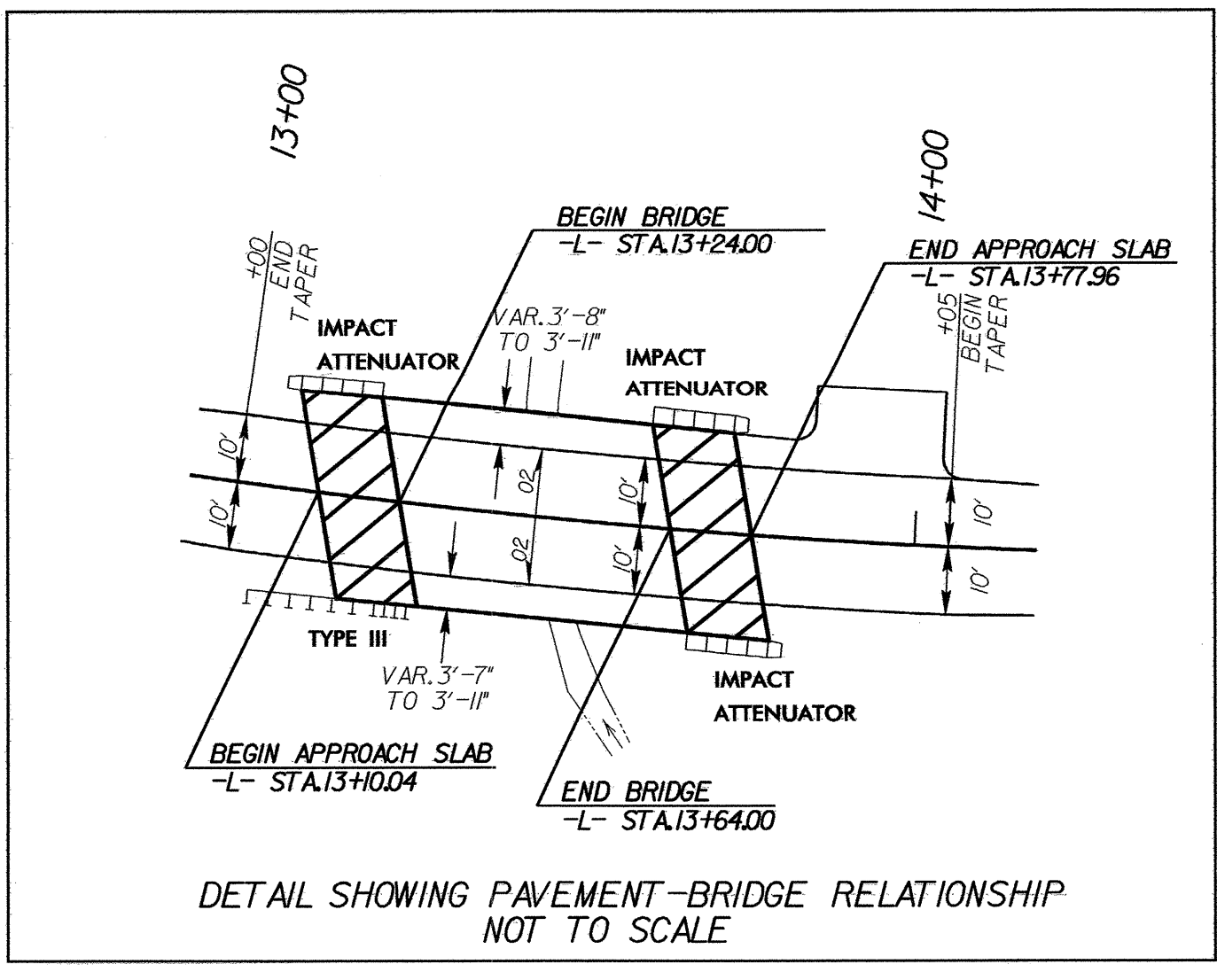


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<p>PI Sta 15+85.86 $\Delta = 13' 39' 21.5''$ (RT) $D = 15' 16' 43.9''$ $L = 89.38'$ $T = 44.90'$ $R = 375.00'$ $e = N/A$ $R.O. = N/A$</p>	<p>PI Sta 16+70.23 $\Delta = 29' 47' 25.8''$ (RT) $D = 38' 11' 49.9''$ $L = 77.99'$ $T = 39.90'$ $R = 150.00'$ $e = N/A$ $R.O. = N/A$</p>



FROM -DET- STA. 10+88 TO -DET- STA. 12+75 RT
 FROM -DET- STA. 11+96 TO -DET- STA. 12+37 LT



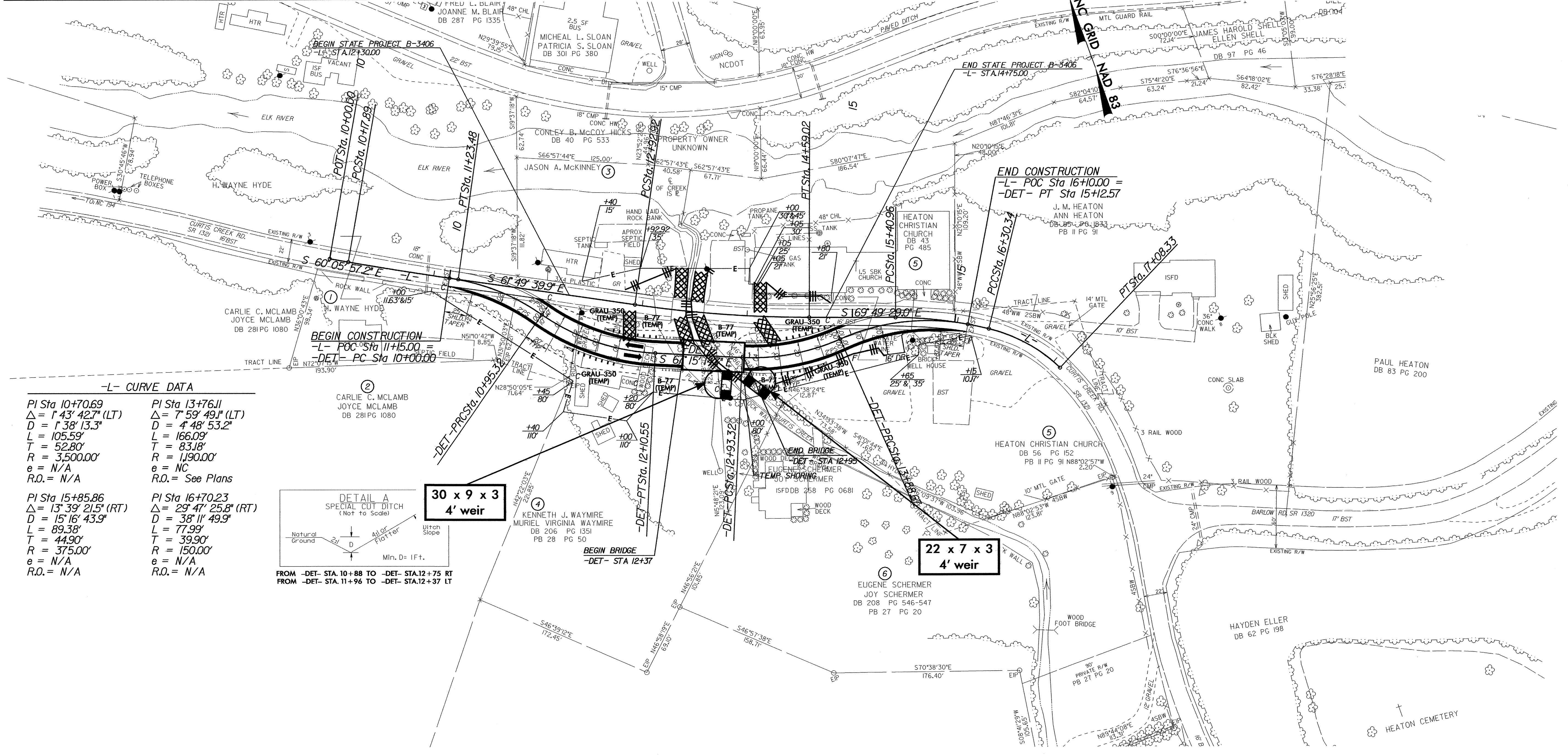
FOR -L- PROFILE, SEE SHEET 5
 FOR -DETOUR- PLAN VIEW, SEE SHEET 2-B
 DESIGN EXCEPTION REQUIRED FOR VERTICAL
 SAG 'K' FACTOR AND SUPERELEVATION

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 USER: 81052858
 DATE: 8/26/2015
 TIME: 8:17:55 AM
 USER: 81052858

PROJECT REFERENCE NO.		SHEET NO.	
B-3406		EC-4/CONST.2B	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

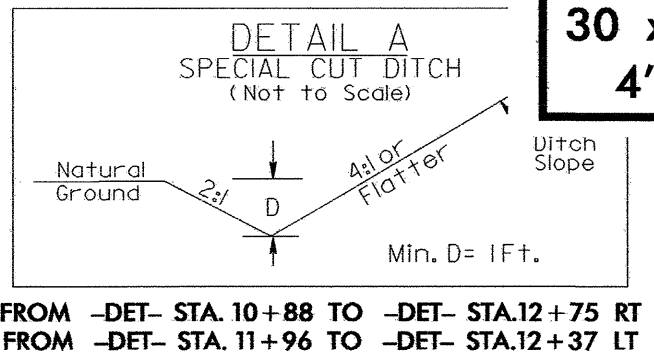
DETOUR PLAN

NOTE:
UTILIZE TEMPORARY ROCK SILT CHECK TYPE A OR TEMPORARY ROCK SEDIMENT DAM TYPE - B AS STILLING BASIN WHERE APPLICABLE.



-L- CURVE DATA

PI Sta 10+70.69 Δ = 1° 43' 42.7" (LT) D = 1' 38' 13.3" L = 105.59' T = 52.80' R = 3,500.00' e = N/A R.O. = N/A	PI Sta 13+76.11 Δ = 7° 59' 49.1" (LT) D = 4' 48' 53.2" L = 166.09' T = 83.18' R = 1,190.00' e = NC R.O. = See Plans
PI Sta 15+85.86 Δ = 13° 39' 21.5" (RT) D = 15' 16' 43.9" L = 89.38' T = 44.90' R = 375.00' e = N/A R.O. = N/A	PI Sta 16+70.23 Δ = 29° 47' 25.8" (RT) D = 38' 11' 49.9" L = 77.99' T = 39.90' R = 150.00' e = N/A R.O. = N/A



**30 x 9 x 3
4' weir**

**22 x 7 x 3
4' weir**

-DETOUR- CURVE DATA

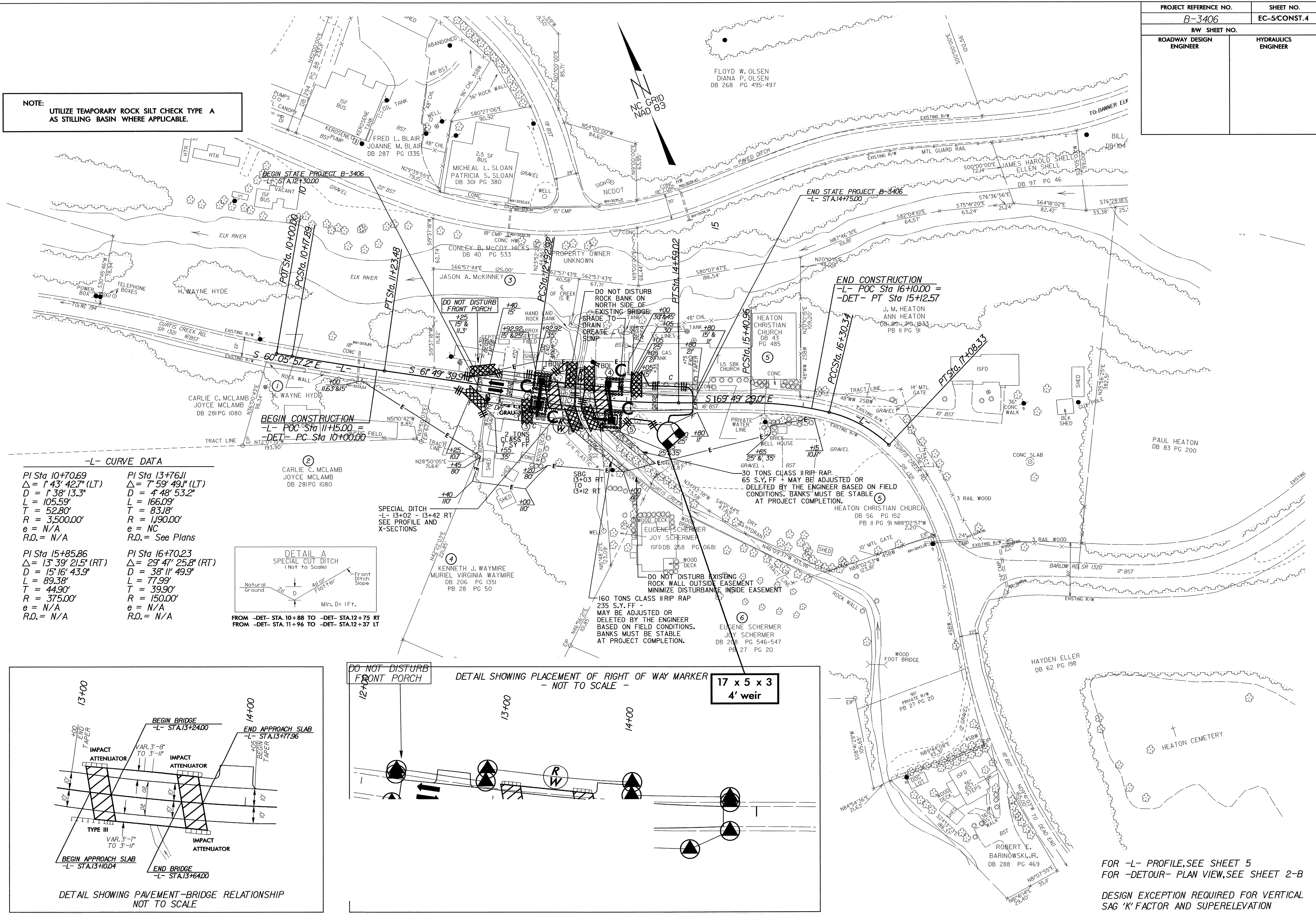
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FOR -DET- PROFILE, SEE SHEET 5

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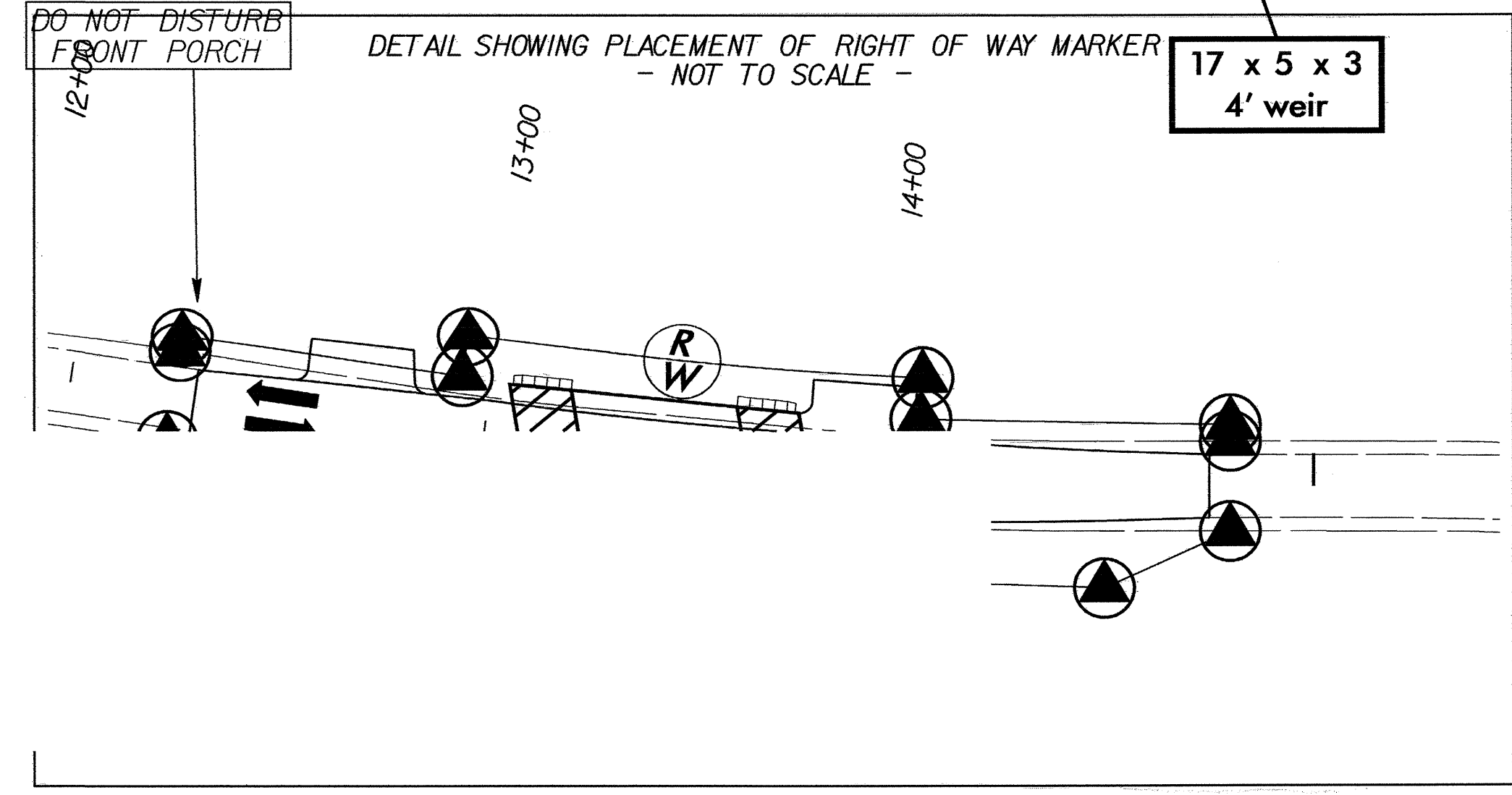
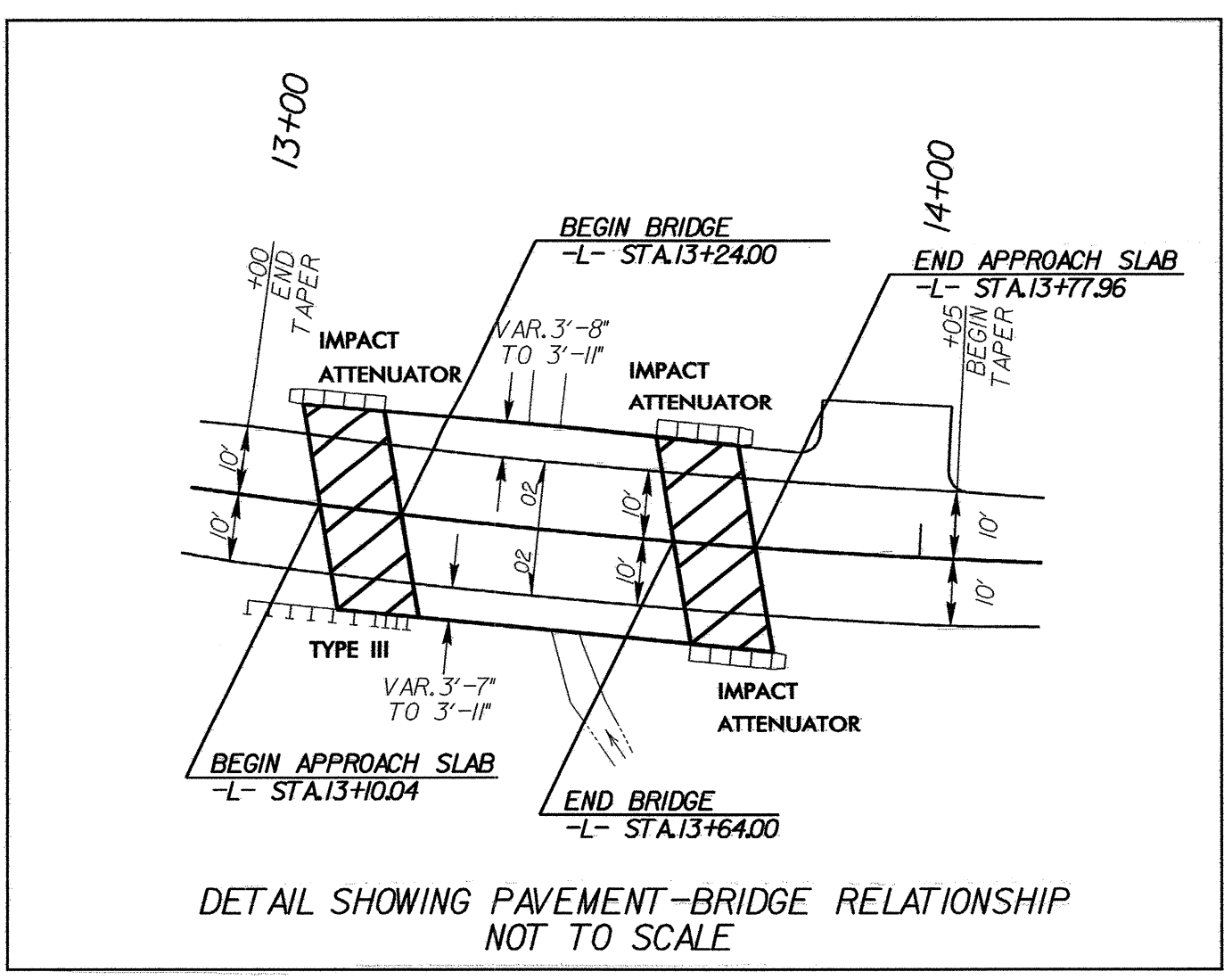
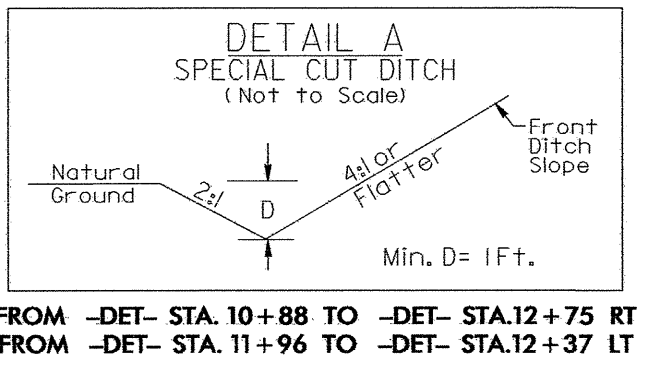
PROJECT REFERENCE NO.		SHEET NO.	
B-3406		EC-5/CONST.4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

NOTE:
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FOR -L- PROFILE, SEE SHEET 5
 FOR -DETOUR- PLAN VIEW, SEE SHEET 2-B
 DESIGN EXCEPTION REQUIRED FOR VERTICAL SAG 'K' FACTOR AND SUPERELEVATION

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