

TIP PROJECT: B-3119

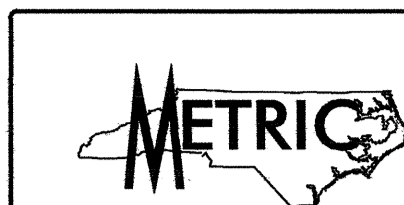
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

BUNCOMBE COUNTY

**LOCATION: BRIDGE NO. 653 OVER THE BROAD RIVER ON SR 2804
AND BRIDGE NO. 654 OVER SAND BRANCH CREEK ON
SR 2786**

TYPE OF WORK: GRADING, DRAINAGE, PAVING, CULVERT, AND STRUCTURE

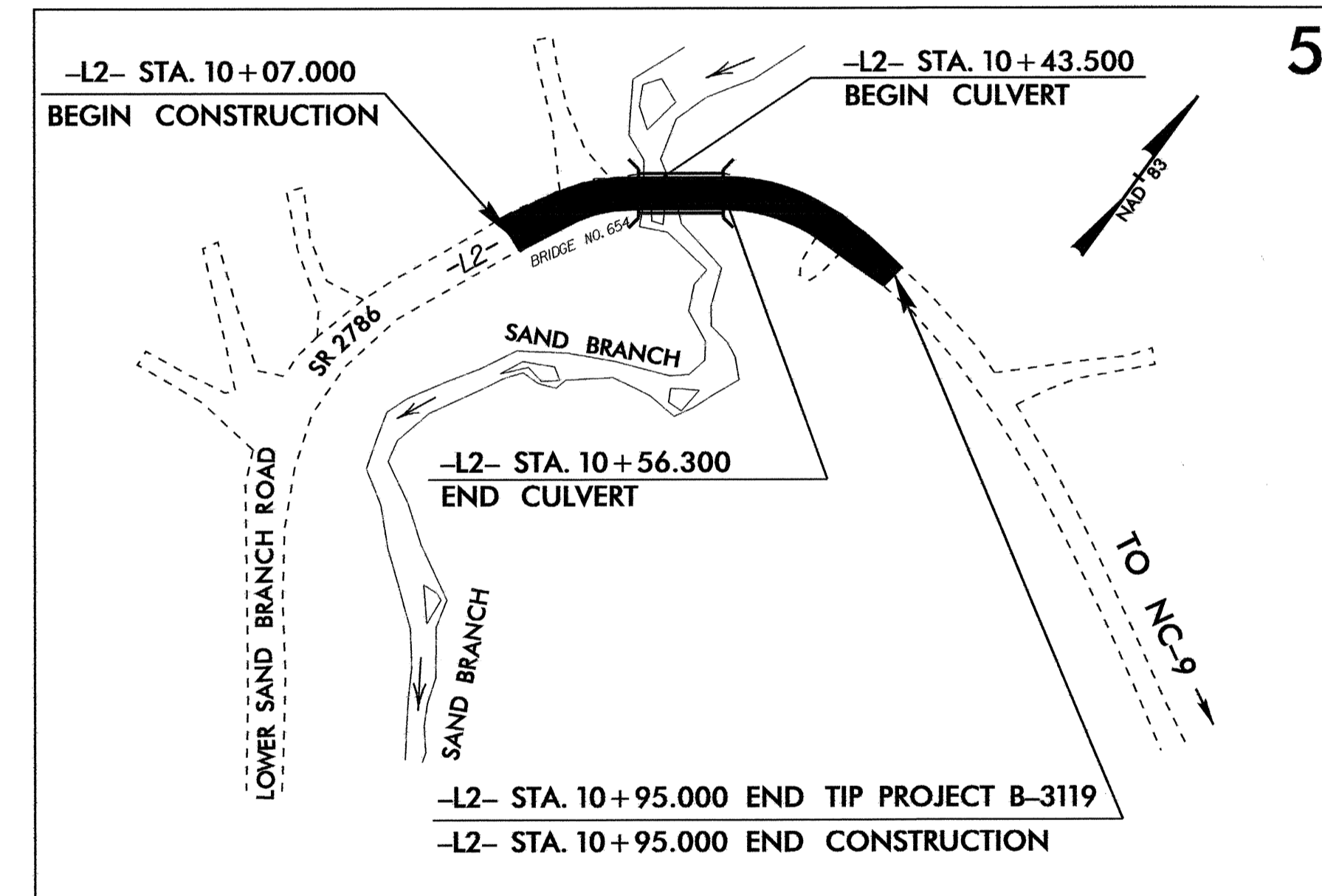
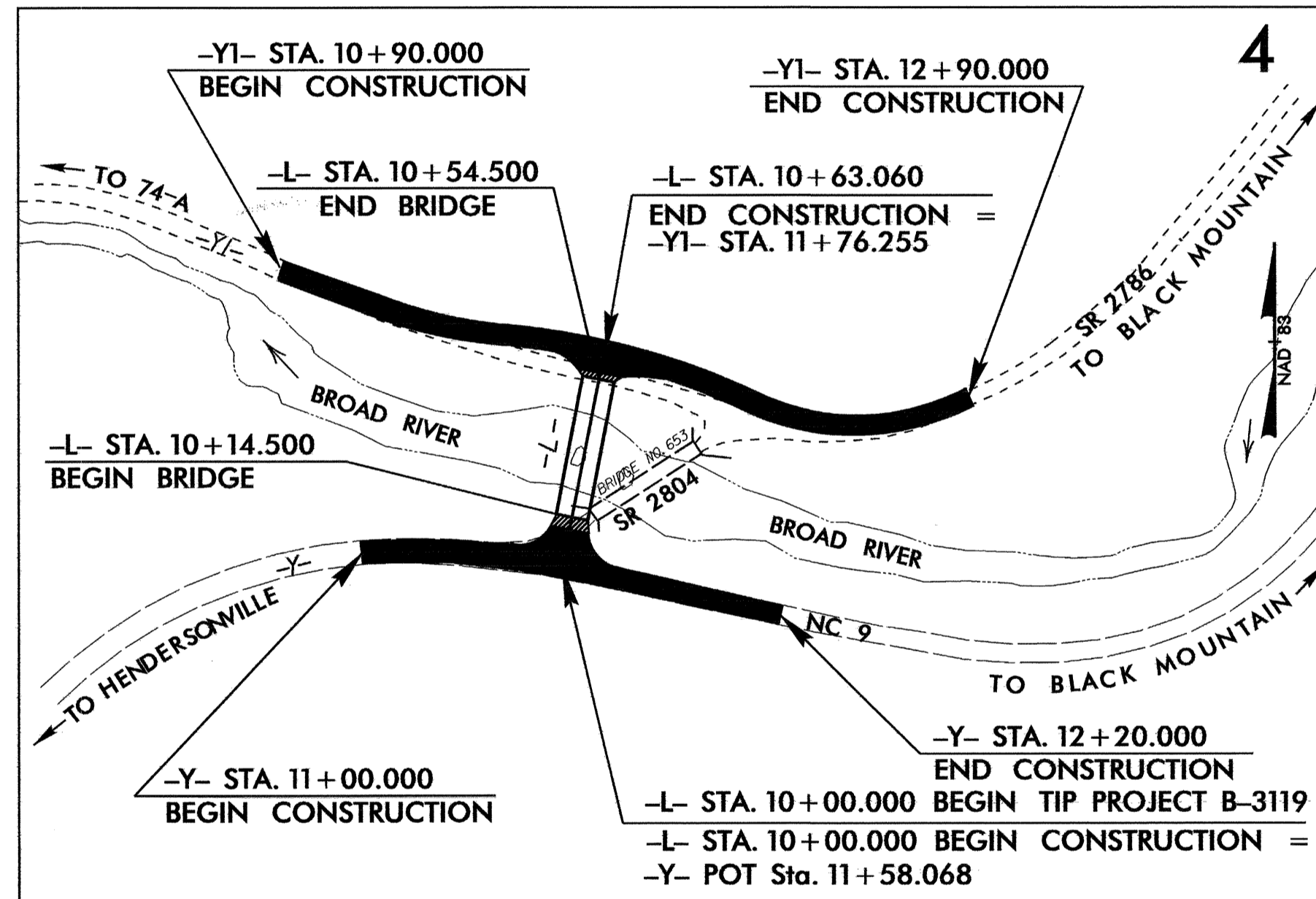


ALL DIMENSIONS IN THESE PLANS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3119	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation.....	
1630.03	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.....	
1633.02	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.....	

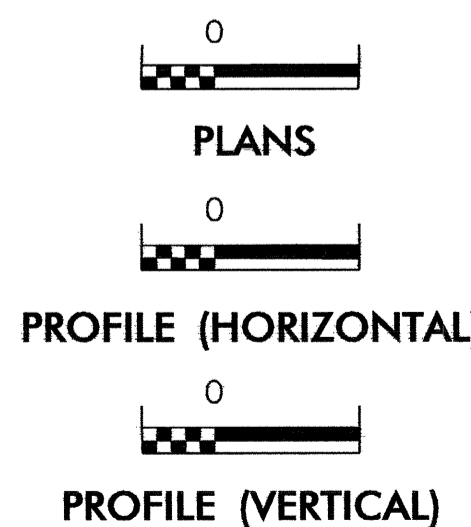


**THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.**

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

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

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
2002 STANDARD SPECIFICATIONS

Roadway Standard Drawings

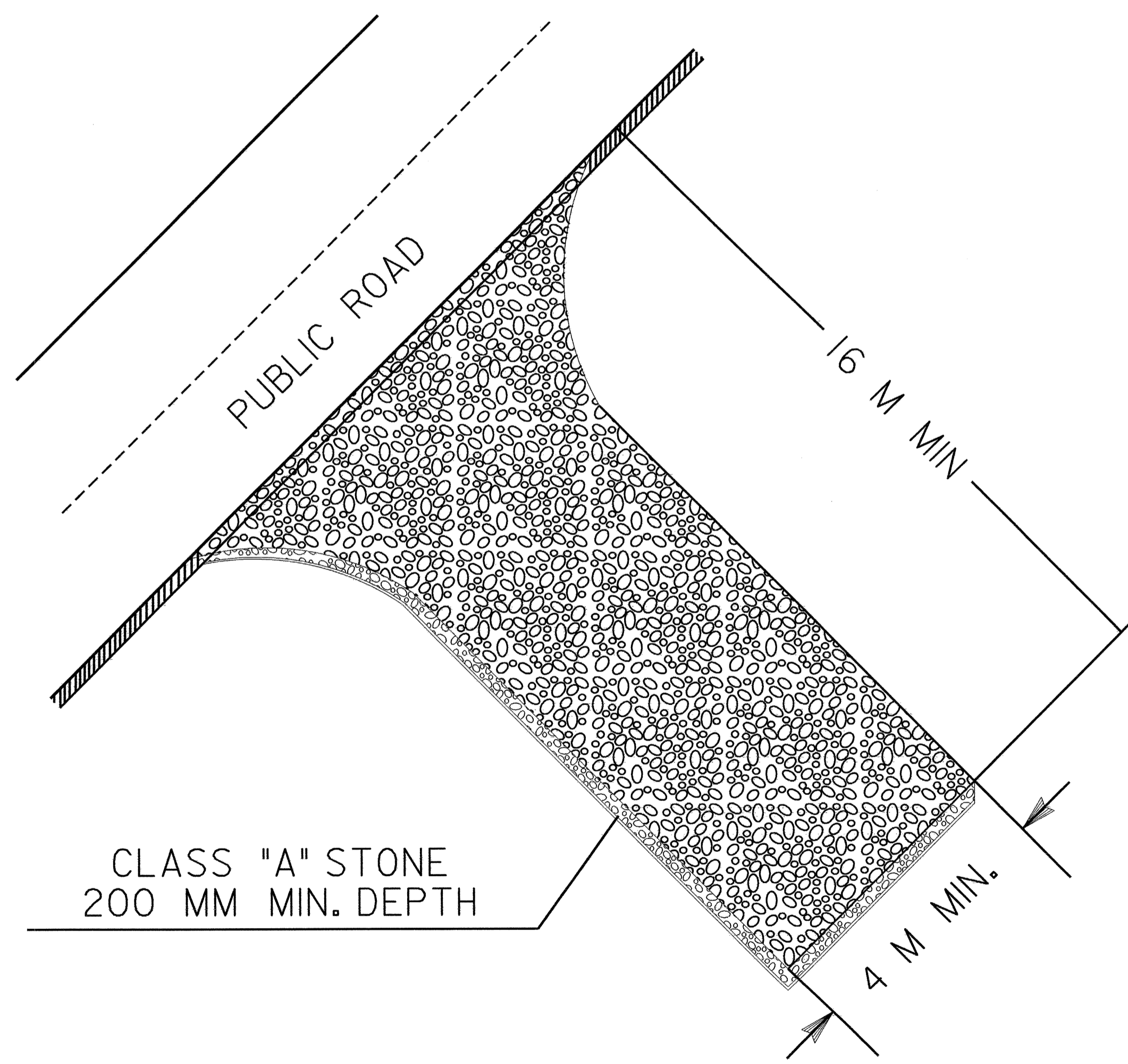
The following roadway metric standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 20, 2002 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1630.02 Silt Basin Type B	1633.01 Temporary Rock Silt Check Type A
1630.05 Temporary Diversion	1635.01 Rock Pipe Inlet Sediment Trap Type A



PROJECT REFERENCE NO. B-3119	SHEET NO. EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



NOTES:

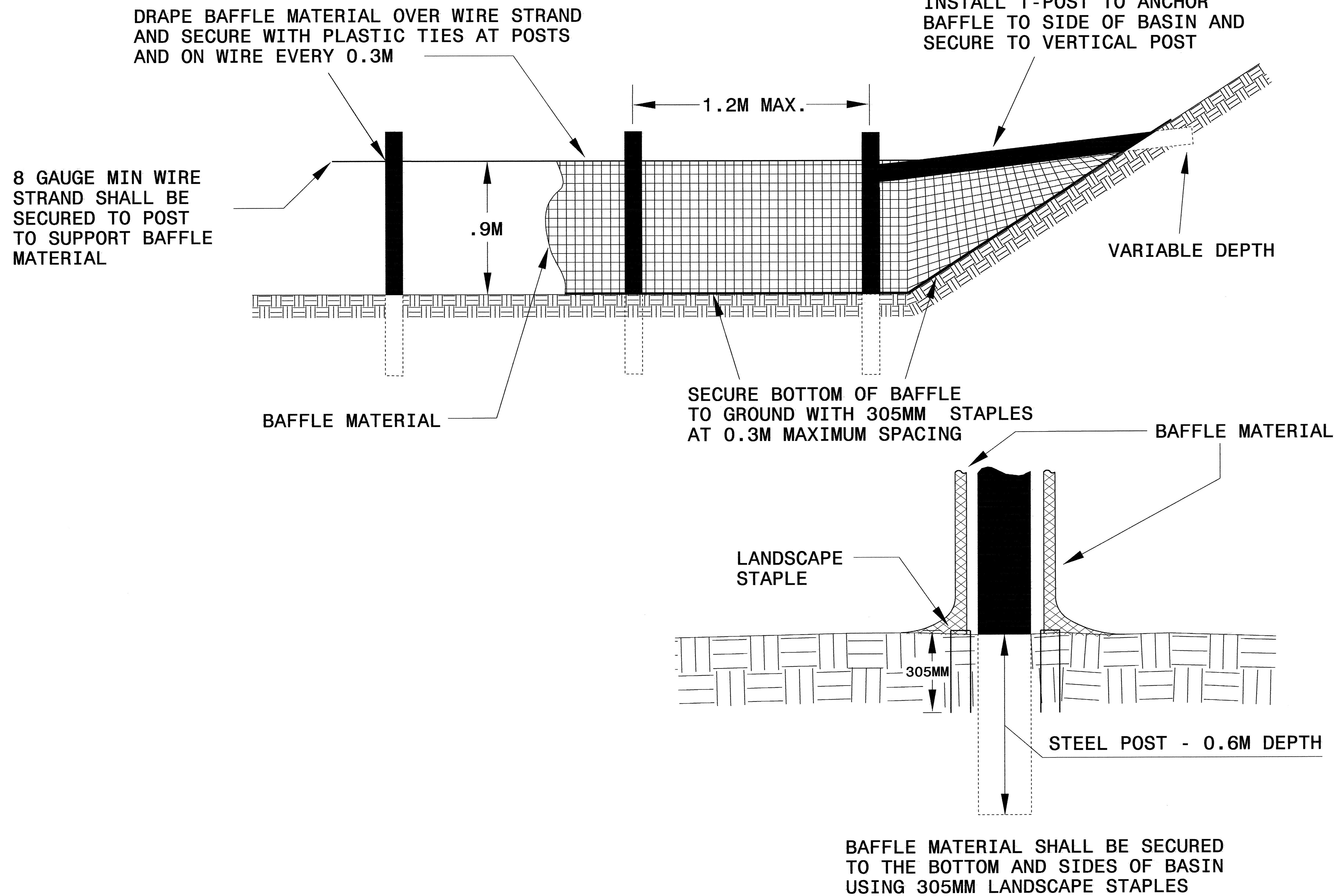
1. TURNING RADIUS SUFFICIENT TO ACCOMODATE LARGE TRUCKS SHALL BE PROVIDED.
2. ENTRANCE(S) SHOULD BE LOCATED TO PROVIDE FOR UTILIZATION BY ALL CONSTRUCTION VEHICLES.
3. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOPDRESSING WITH STONE WILL BE NECESSARY.
4. ANY MATERIAL TRACKED ONTO THE ROADWAY MUST BE CLEANED UP IMMEDIATELY.
5. GRAVEL CONSTRUCTION ENTRANCE SHALL BE LOCATED AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE MUST BE PROVIDED.
6. NUMBER AND LOCATION OF CONSTRUCTION ENTRANCES TO BE DETERMINED BY THE ENGINEER

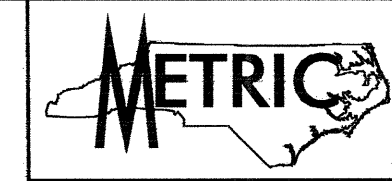
NOTE: FILTER FABRIC TO BE PLACED BENEATH STONE

COIR FIBER BAFFLE DETAIL



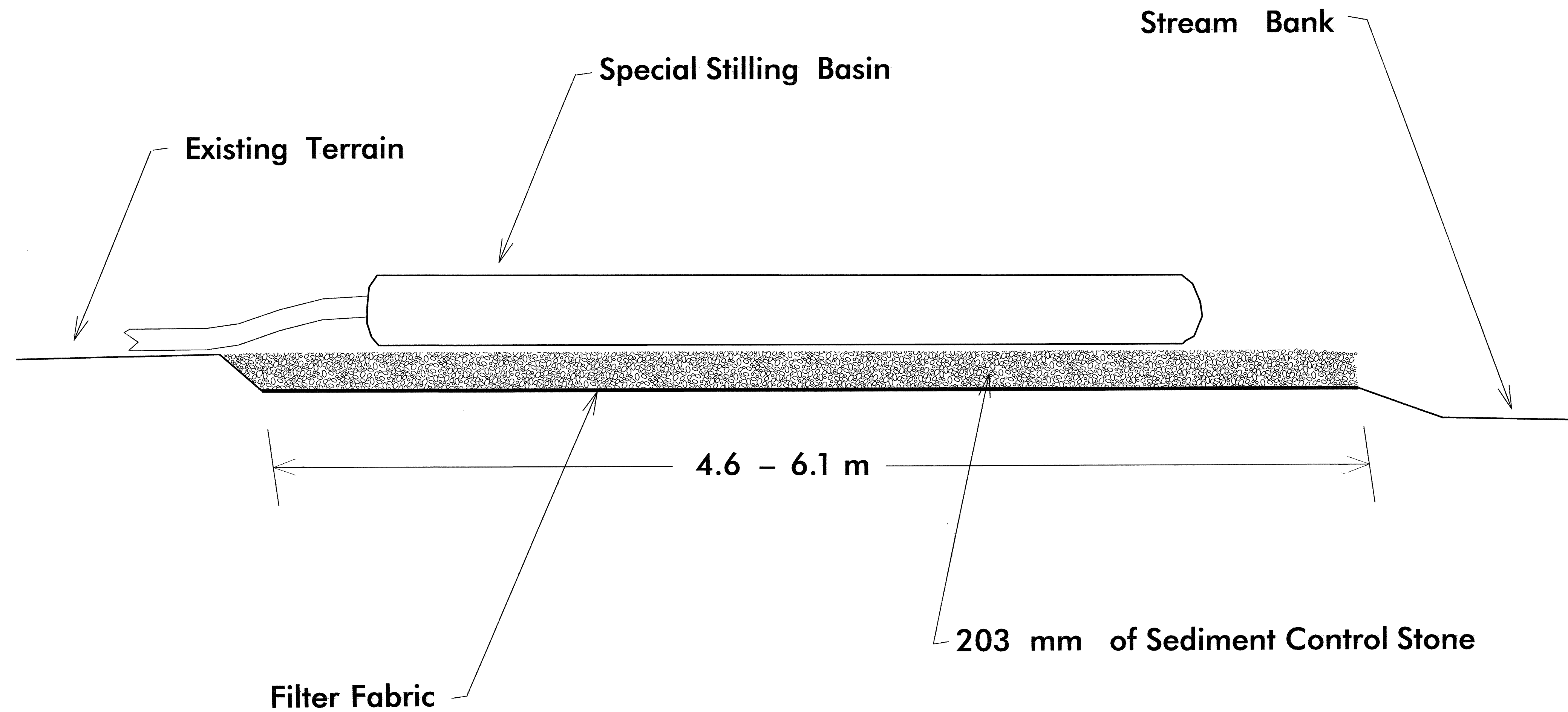
PROJECT REFERENCE NO. B-3119	SHEET NO. EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER





PROJECT REFERENCE NO.	SHEET NO.
B-3119	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SPECIAL STILLING BASIN WITH ROCK PAD



Not To Scale

Note: Provide Stabilized Outlet to Streambank

** Design Exception required for the design speed from 90 km/h to 30 km/h.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4



PROJECT REFERENCE NO. SHEET NO.

B-3119 EC-4/CONST.4

R/W SHEET NO.

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

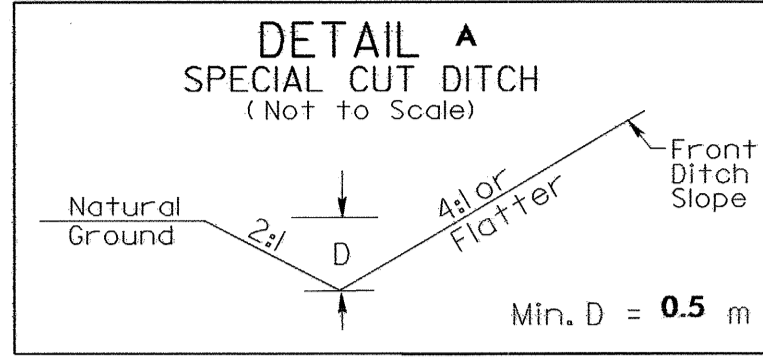
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE-B AND TEMPORARY ROCK SILT CHECKS TYPE-A AT DRAINAGE OUTLETS.

NOTE: UTILIZE SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.



CONST.REV.

R/W REV.



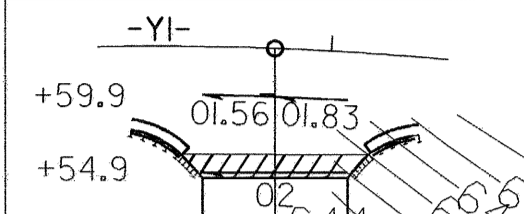
PI Sta 11+27.704
 $\Delta = 17' 21'' 12.2'' (LT)$
 $L = 39.979$
 $T = 20.144$
 $R = 132.000$
 $SE = \text{See Plans}$
 $Runoff = \text{See Plans}$

PI Sta 11+84.460
 $\Delta = 19' 40'' 03.1'' (RT)$
 $L = 73.115$
 $T = 36.921$
 $R = 213.000$
 $SE = \text{See Plans}$
 $Runoff = \text{See Plans}$

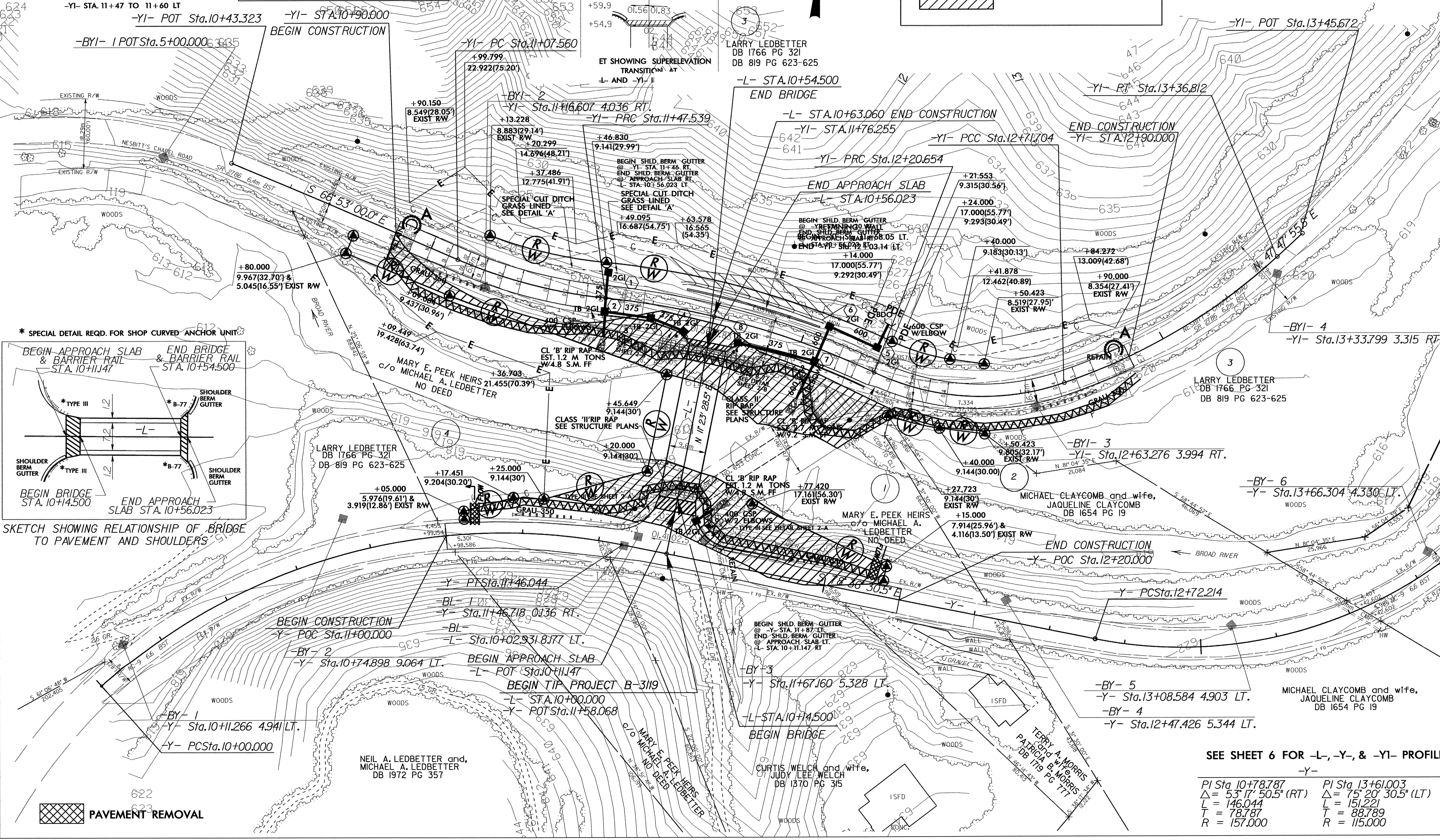
PI Sta 12+47.533
 $\Delta = 44' 19'' 00.8'' (LT)$
 $L = 51.049$
 $T = 26.878$
 $R = 66.000$
 $SE = \text{See Plans}$
 $Runoff = \text{See Plans}$

PI Sta 13+04.715
 $\Delta = 23' 18'' 54.4'' (LT)$
 $L = 65.108$
 $T = 33.011$
 $R = 160.000$
 $SE = \text{See Plans}$
 $Runoff = \text{See Plans}$

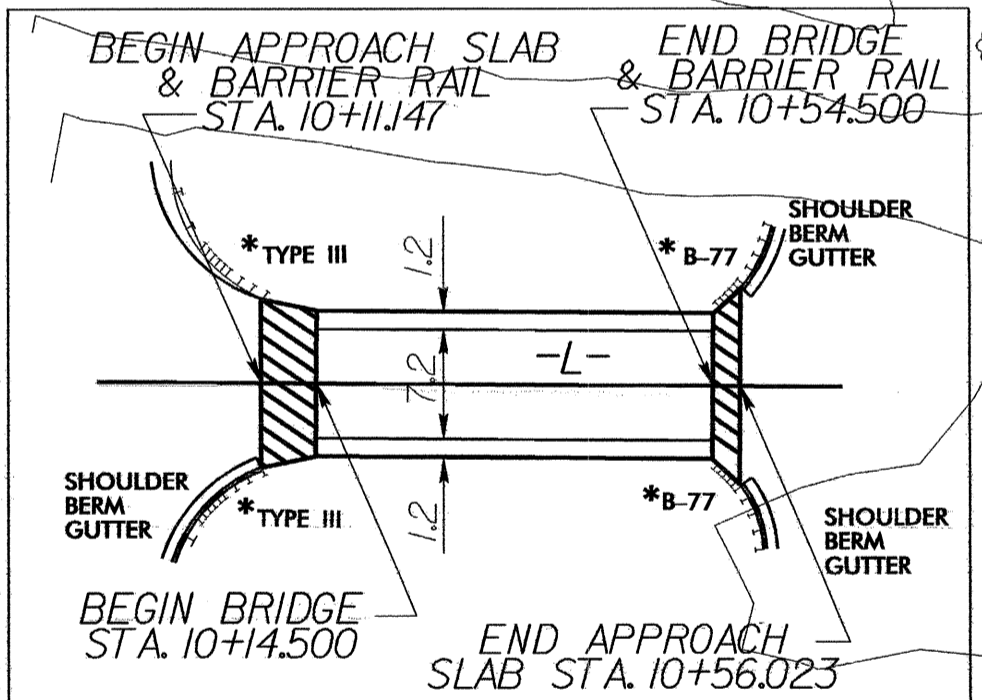
TBM-7 RAILROAD SPIKE SET IN 24" WATER OAK
 EL. 620.565
 (-L2- STA. 10+37.351) 25.618 RT.)



ET SHOWING SUPERELEVATION TRANSITION AT -L AND -YI



* SPECIAL DETAIL REQD. FOR SHOP CURVED ANCHOR UNIT



SKETCH SHOWING RELATIONSHIP OF BRIDGE TO PAVEMENT AND SHOULDERS

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 8/17/06



SEE SHEET 6 FOR -L-, -Y-, & -YI- PROFILE

PI Sta 10+78.787 $\Delta = 53' 17'' 50.5'' (RT)$ $L = 146.044$ $T = 78.787$ $R = 157.000$	PI Sta 13+61.003 $\Delta = 75' 20'' 30.5'' (LT)$ $L = 151.221$ $T = 88.789$ $R = 115.000$
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** Design Exception required for the design speed from 90 km/h to 30 km/h.

-L2-

PI Sta 10+34.883 Δ = 28° 50' 22.2" (RT) L = 15.100 T = 7.714 R = 30.000 RO = 6 SE = 02 V = 30 KM/H	PI Sta 10+67.508 Δ = 36° 14' 10.4" (RT) L = 18.973 T = 9.816 R = 30.000 RO = 6 SE = 02 V = 30 KM/H	PI Sta 11+13.652 Δ = 30° 53' 46.4" (RT) L = 62.013 T = 31.780 R = 115.000
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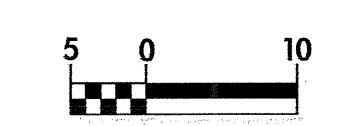
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5



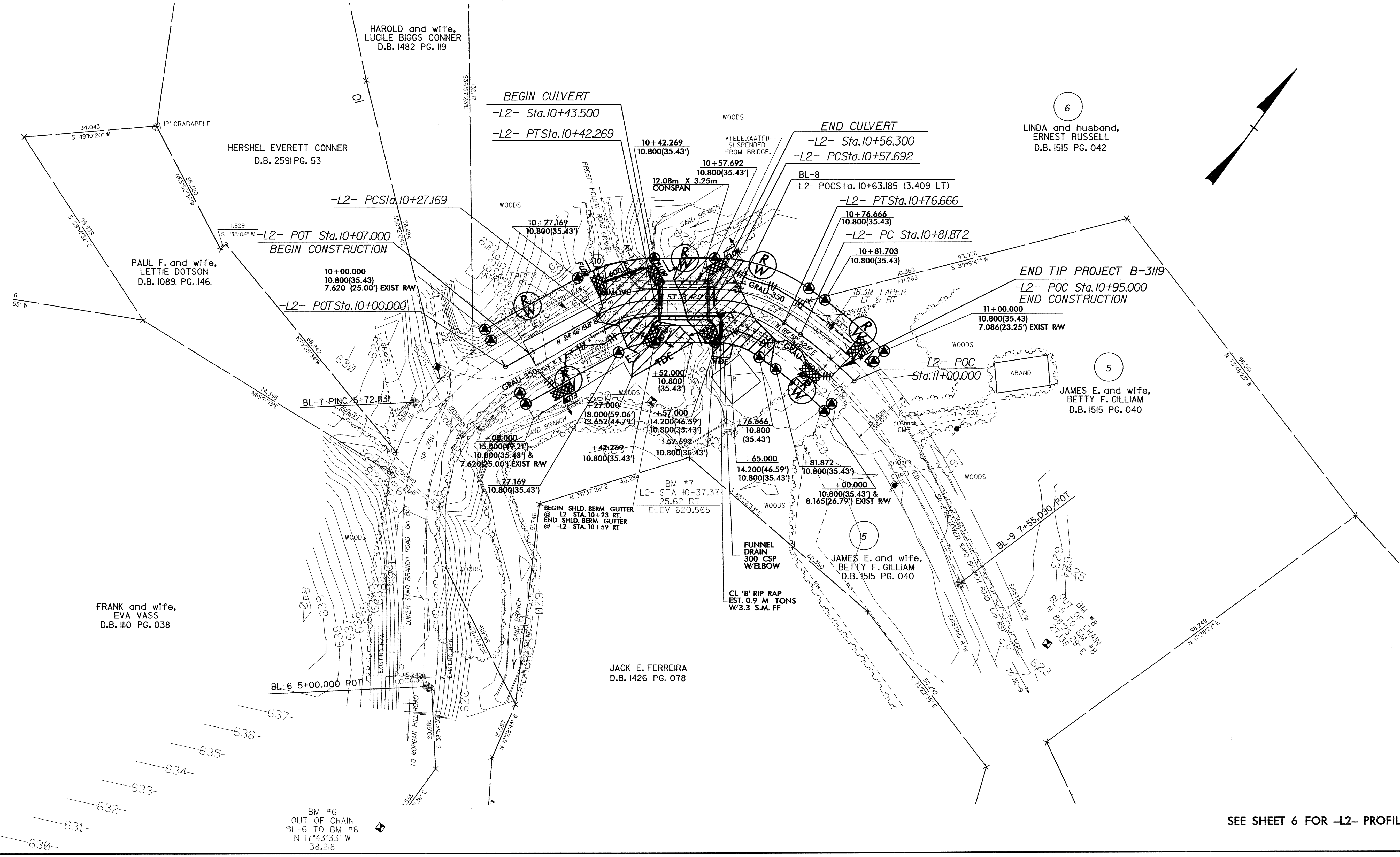
PROJECT REFERENCE NO. B-3119	SHEET NO. EC-5/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST.REV.	
R/W REV.	

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

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS



FOR -L2- PROFILE SEE SHEET 6



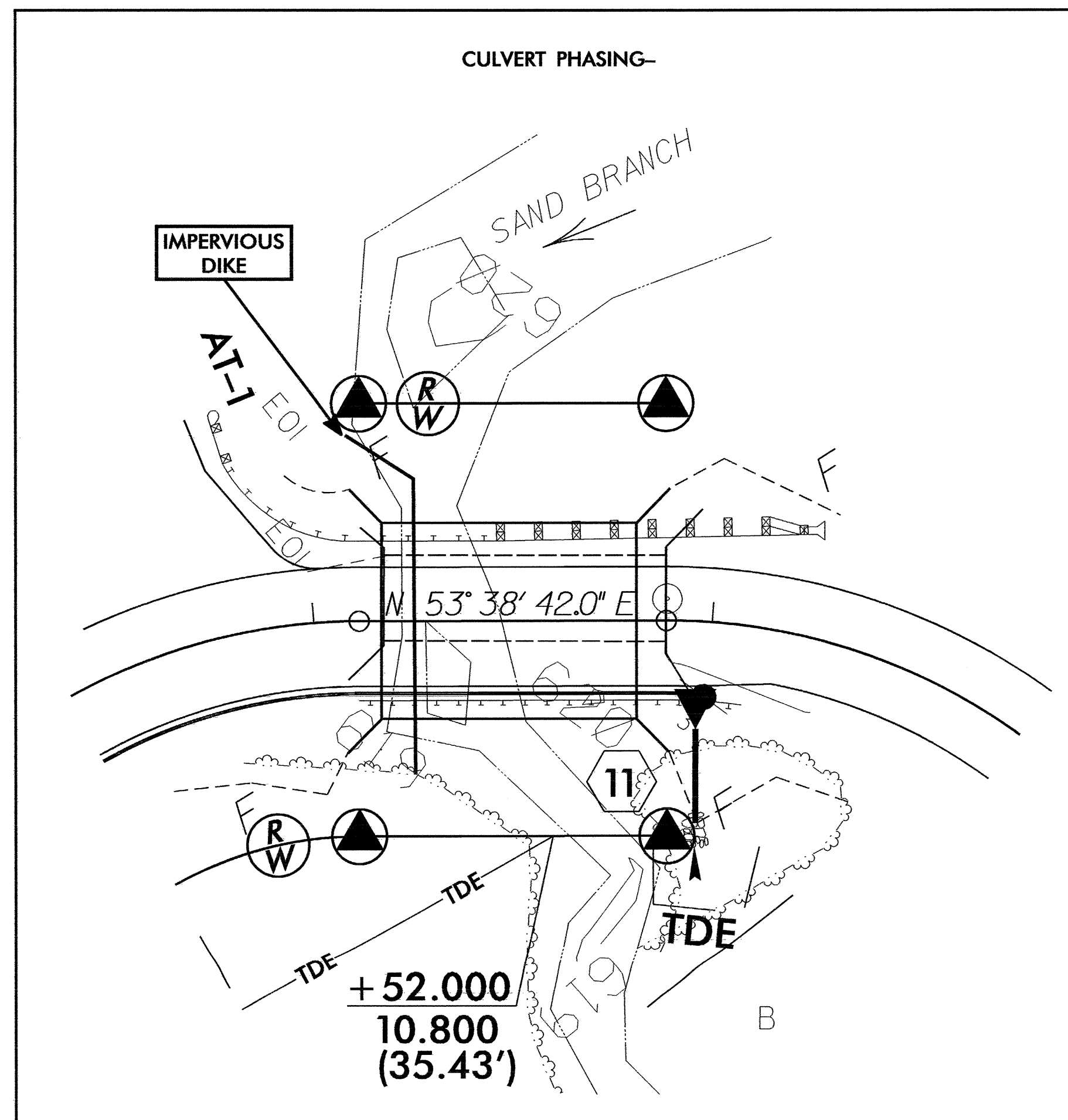
SEE SHEET 6 FOR -L2- PROFILE



PROJECT REFERENCE NO. B-3119	SHEET NO. EC-5A/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER


CULVERT CONSTRUCTION SEQUENCE STA. 10+42 -L-

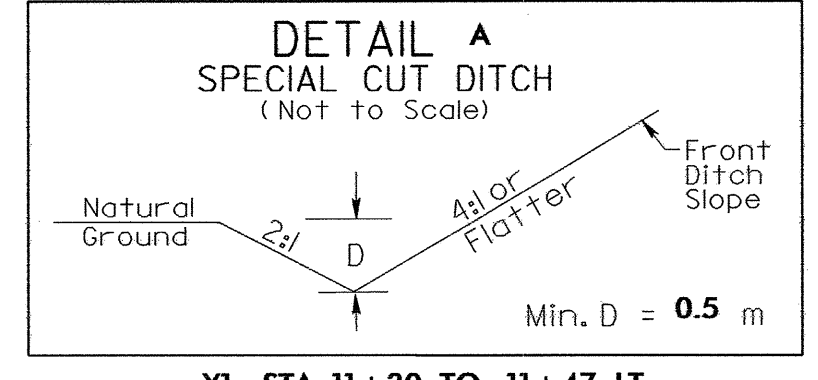
1. INSTALL IMPERVIOUS DIKE
2. CONSTRUCT FOOTINGS AND PUMP ALL EFFLUENT INTO SPECIAL STILLING BASIN
3. INSTALL CONSPAN
4. REMOVE IMPERVIOUS DIKE



12-OCT-2006 12:49:51 (1/2) environmental\design\55119\park4.dgn

**** Design Exception required for the design speed from 90 km/h to 30 km/h.**

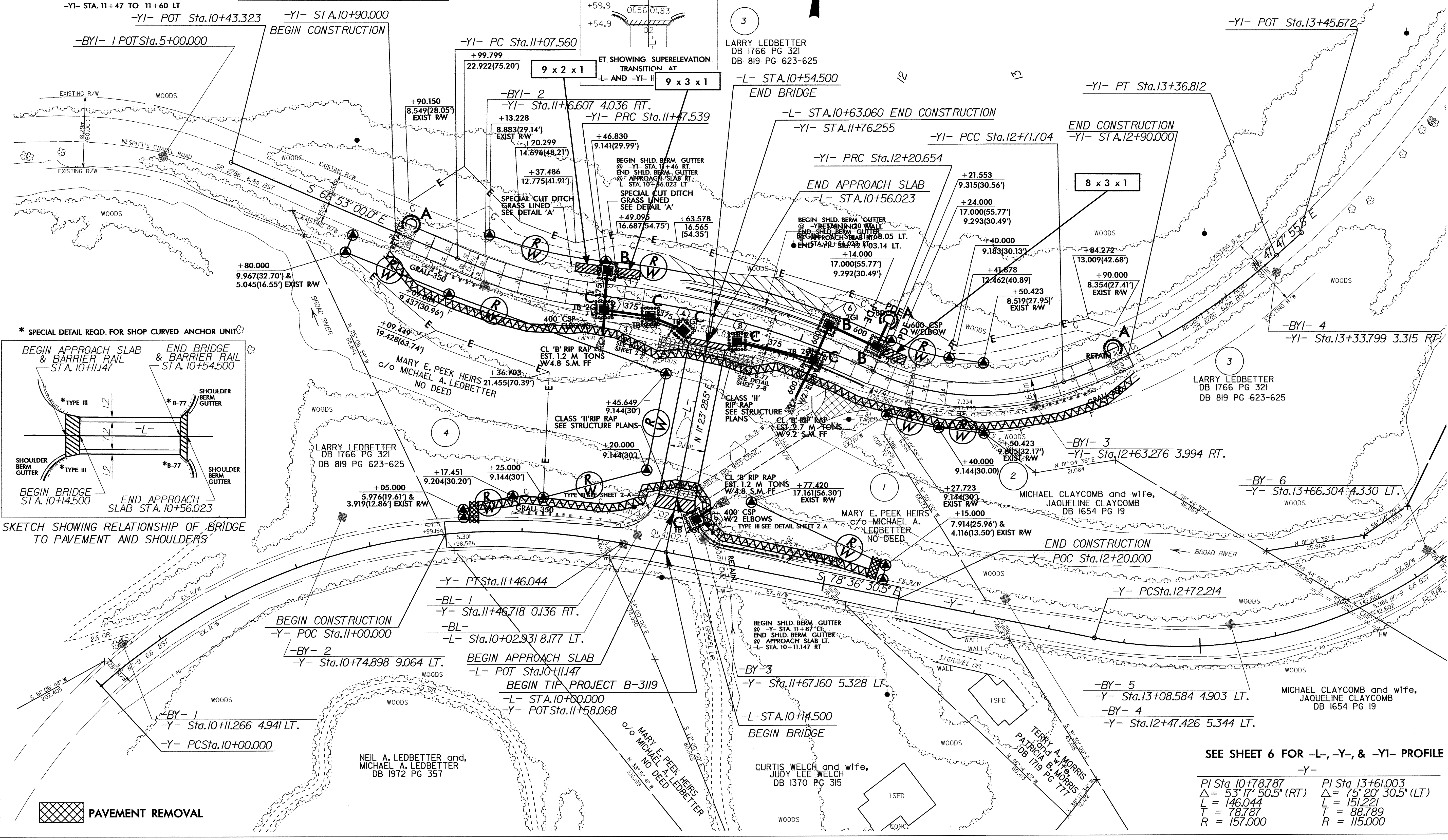
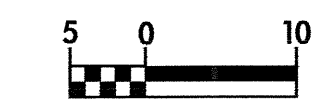
 ROADWAY DESIGN ENGINEER	PROJECT REFERENCE NO. B-3119	SHEET NO. EC-6/CONST.4
	R/W SHEET NO.	
HYDRAULICS ENGINEER		
CONST. REV.		
R/W REV.		



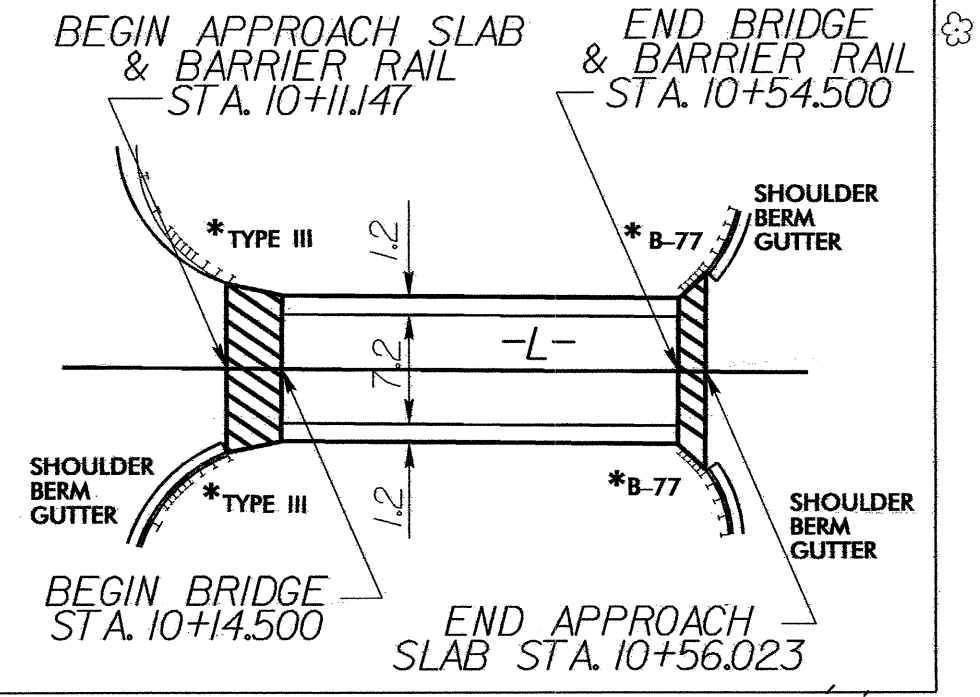
PI Sta 11+27.704 $\Delta = 17' 21'' 12.2''$ (LT) $L = 39.979$ $T = 20.144$ $R = 132.000$ SE = See Plans Runoff = See Plans	PI Sta 11+84.460 $\Delta = 19' 40'' 03.1''$ (RT) $L = 73.115$ $T = 36.921$ $R = 213.000$ SE = See Plans Runoff = See Plans	PI Sta 12+47.533 $\Delta = 44' 19'' 00.8''$ (LT) $L = 51.049$ $T = 26.878$ $R = 66.000$ SE = See Plans Runoff = See Plans	PI Sta 13+04.715 $\Delta = 23' 18'' 54.4''$ (LT) $L = 65.108$ $T = 33.011$ $R = 160.000$ SE = See Plans Runoff = See Plans
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TBM-7 RAILROAD SPIKE SET IN 24" WATER OAK EL. 620.565 (-L2- STA. 10+37.351 25.618 RT.)

NOTE: UTILIZE SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.



* SPECIAL DETAIL REQD. FOR SHOP CURVED ANCHOR UNIT



SKETCH SHOWING RELATIONSHIP OF BRIDGE TO PAVEMENT AND SHOULDERS

 PAVEMENT REMOVAL

SEE SHEET 6 FOR -L-, -Y-, & -YI- PROFILE


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 8/11/06

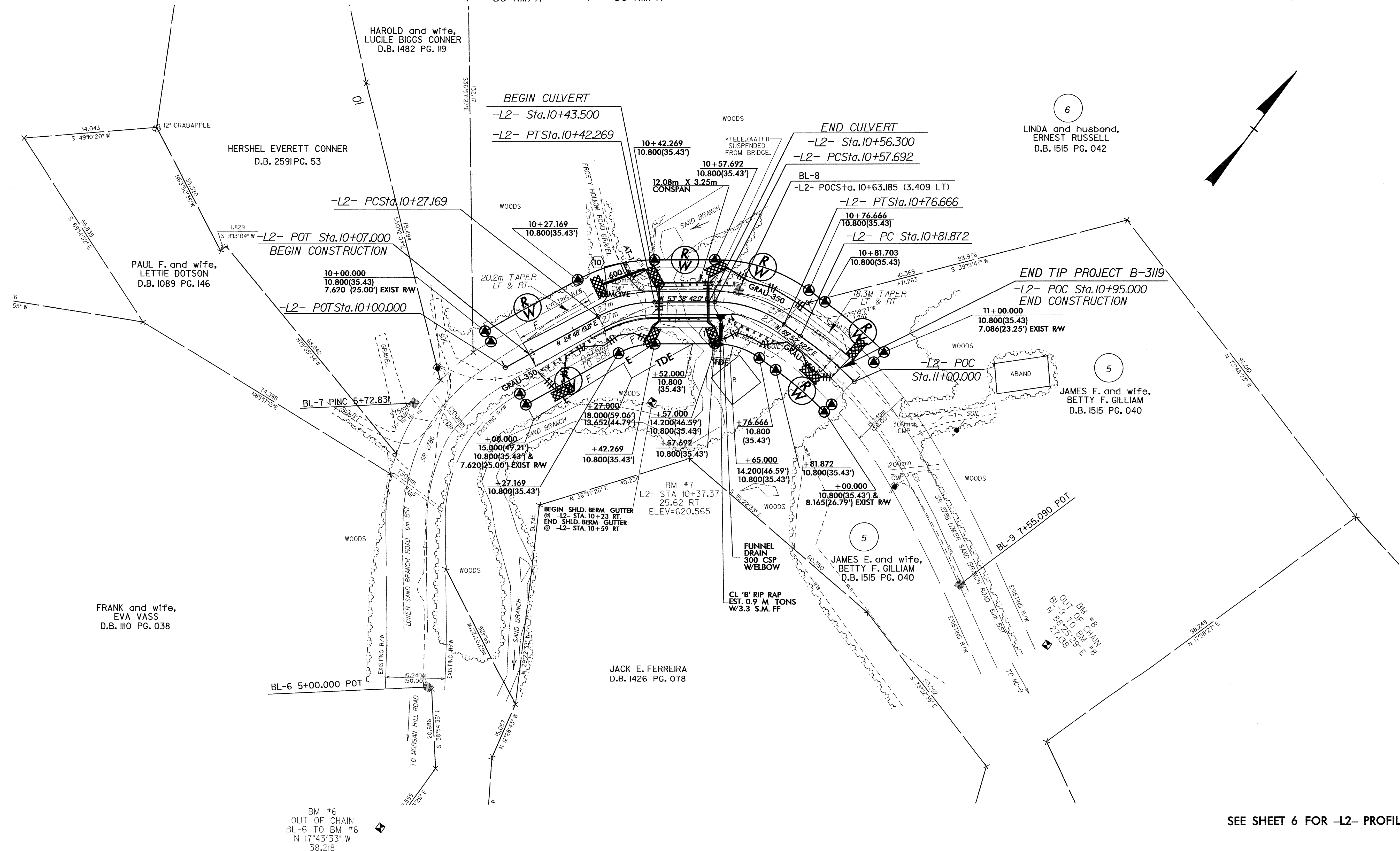
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-L2-

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 5 0 10 CONST.REV. R/W REV.	PROJECT REFERENCE NO. B-3119	SHEET NO. EC-7/CONST.5
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FOR -L2- PROFILE SEE SHEET 6



SEE SHEET 6 FOR -L2- PROFILE