PROJECT: B-3621

TIP B

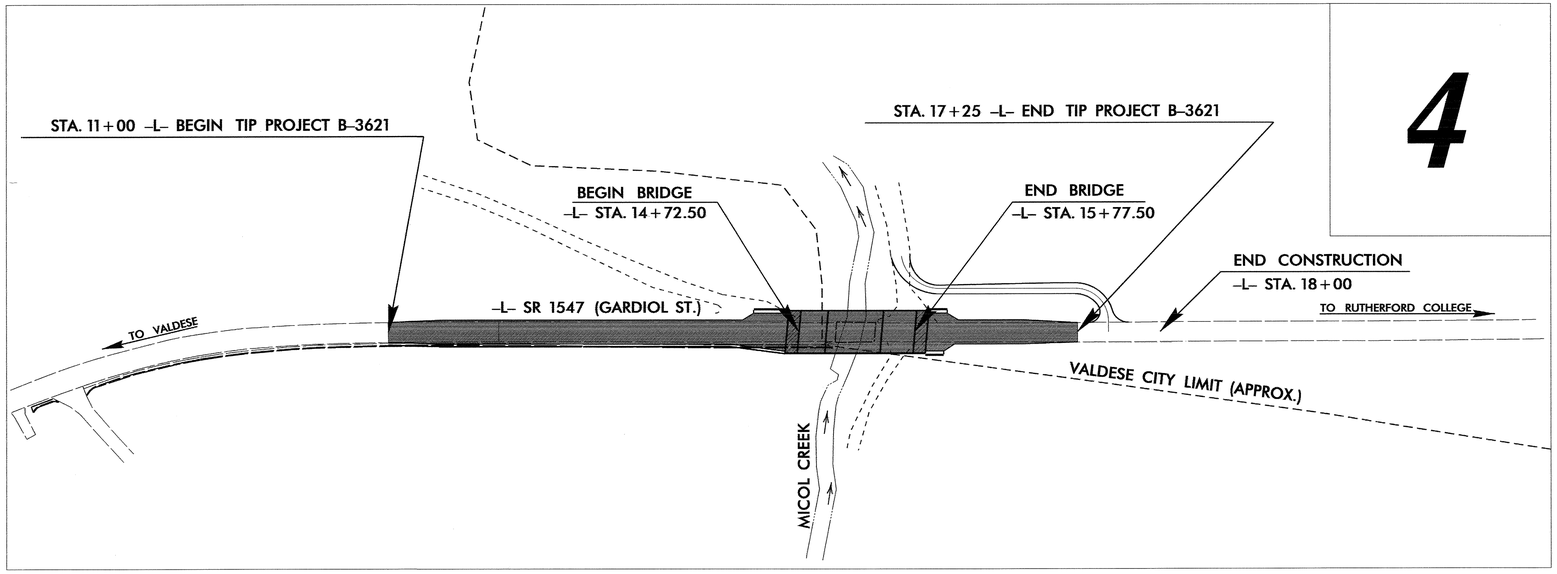
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

BURKE COUNTY

LOCATION: Bridge No. 148 over Micol Creek on SR 1547

TYPE OF WORK: Grading, Paving, Drainage, and Structure



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3621	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

4

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
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	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer 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

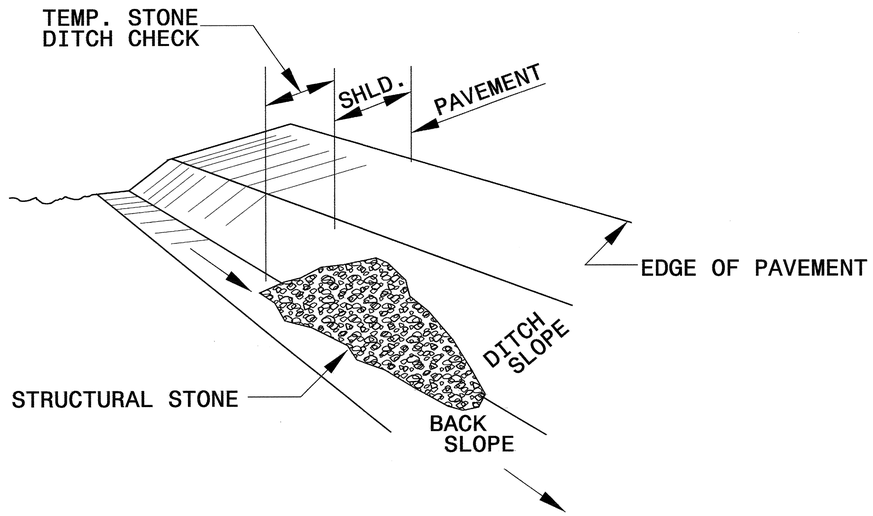
Roadway Standard Drawings

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 revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence
1607.01 Gravel Construction Entrance
1630.02 Silt Basin Type B
1630.03 Temporary Silt Ditch
1630.06 Special Stilling Basin
1632.03 Rock Inlet Sediment Trap Type C
1633.01 Temporary Rock Silt Check Type A
1634.02 Temporary Rock Sediment Dam Type B

PROJECT REFERENCE NO.	SHEET NO.
B-3621	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

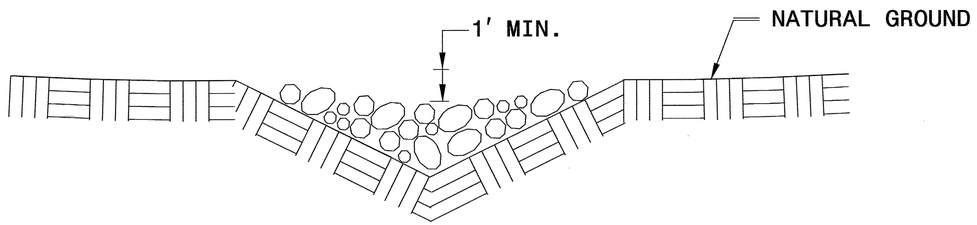


ISOMETRIC VIEW

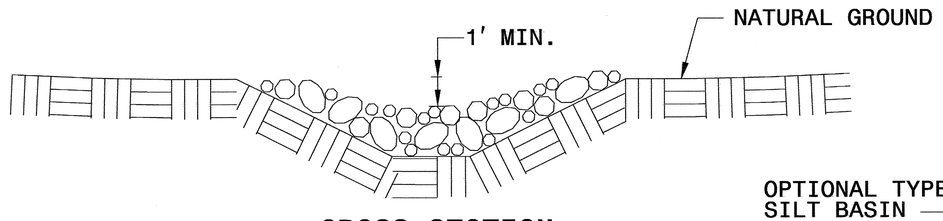
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

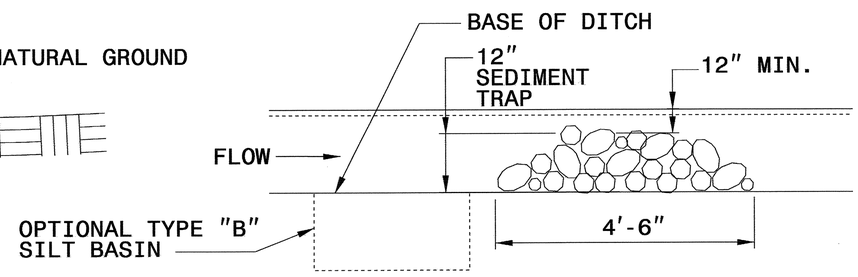
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



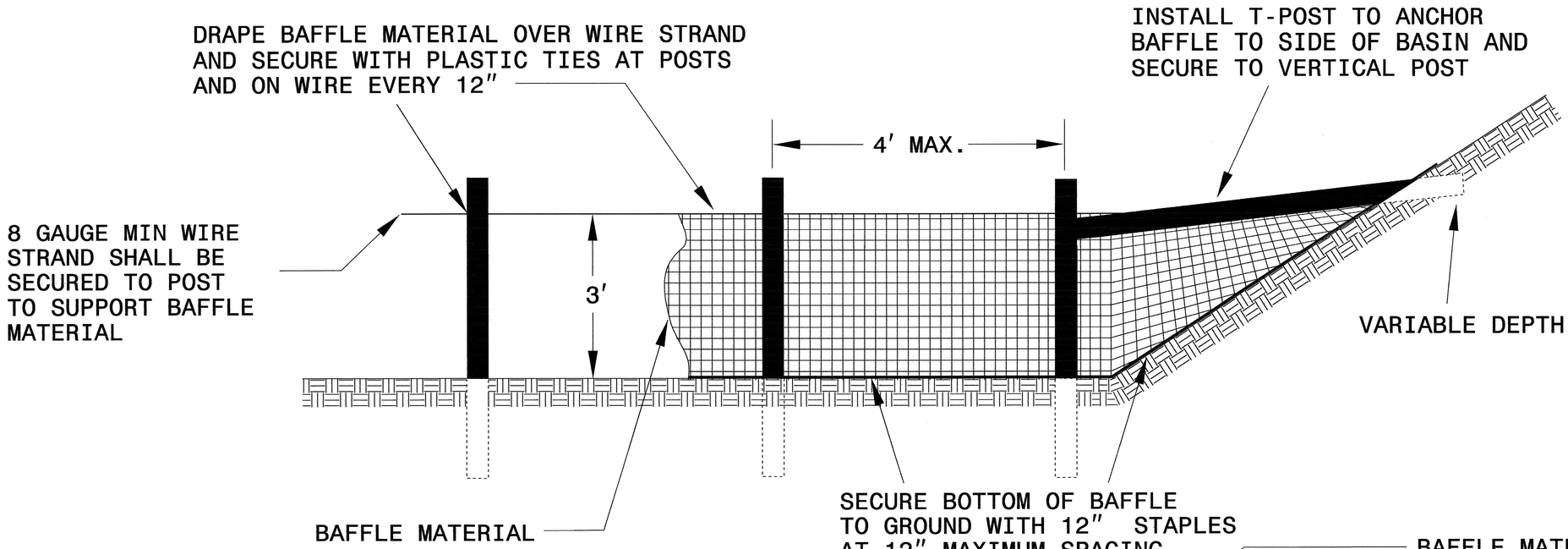
CROSS SECTION TRAPEZOIDAL DITCH

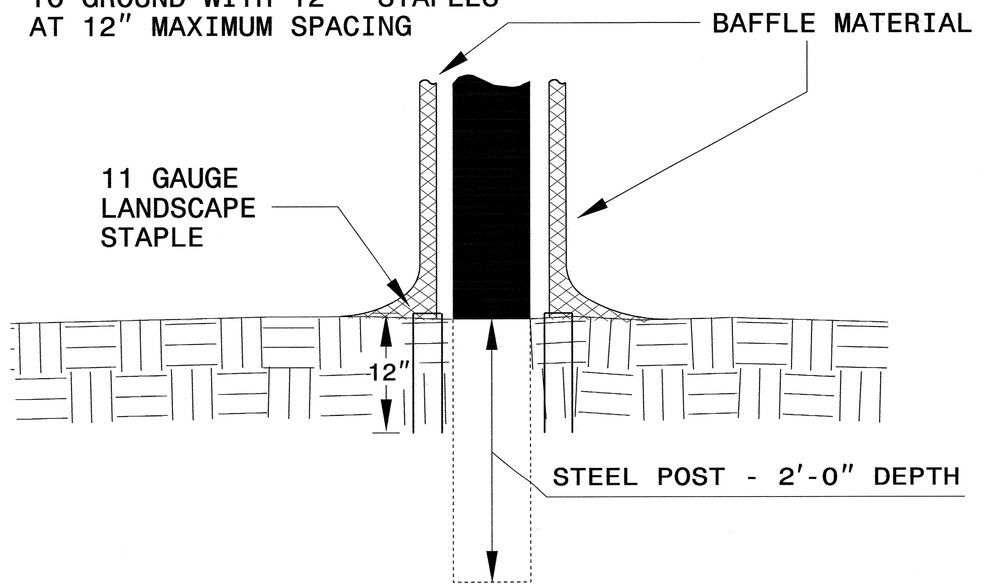


ELEVATION VIEW

PROJECT REFERENCE NO.	SHEET NO.
B-3621 >>	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL





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

NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AT DRAINAGE OUTLETS WITH A SPACING OF ¼ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

PROJECT REFERENCE NO.	SHEET NO.
B-3621	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

PERMANENT SOIL REINFORCEMNT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	DR-1	16+00	17+00	RT	50
4	4	4	17+50	LT	75
				SUBTOTAL	125
	ADDITIONAL PSRM TO BE INSTALLED				0
				TOTAL	125
				SAY	125

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)

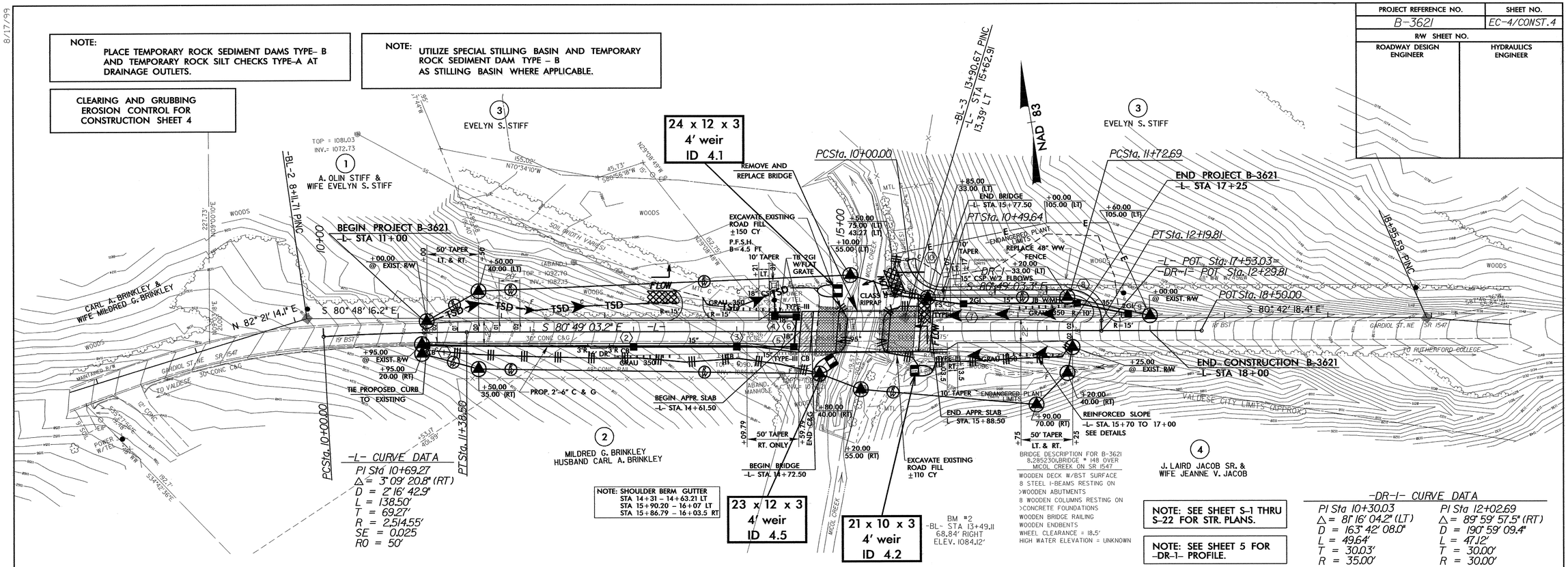
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
B-3621	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 AND TEMPORARY ROCK SEDIMENT DAM TYPE – B AS STILLING BASIN WHERE APPLICABLE.

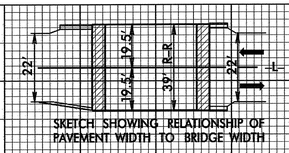
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4



-L- CURVE DATA
PI Sta 10+69.27
△ = 3° 09' 20.8" (RT)
D = 2° 16' 42.9"
L = 138.50'
T = 69.27'
R = 2,514.55'
SE = 0.025
RO = 50'

-DR-1- CURVE DATA

PI Sta 10+30.03	PI Sta 12+02.69
△ = 81° 16' 04.2" (LT)	△ = 89° 59' 57.5" (RT)
D = 163° 42' 08.0"	D = 190° 59' 09.4"
L = 49.64'	L = 47.12'
T = 30.03'	T = 30.00'
R = 35.00'	R = 30.00'



BEGIN GRADE
-L- STA 11+00
EL = 1119.86'

STA 15+22.78
@ ℄
ELEV. = 1091.26'

END GRADE
-L- STA 17+25
EL = 1099.31'

BEGIN BRIDGE
-L- STA 14+72.50
EL=1091.01'

END BRIDGE
-L- STA 15+77.50
EL=1091.58'

xx DESIGN EXCEPTION REQUIRED

STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	= 1715 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 1084.0 FT
BASE DISCHARGE	= 1975 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 1084.5 FT
OVERTOPPING DISCHARGE	= 3500+ CFS
OVERTOPPING FREQUENCY	= +500 YRS
OVERTOPPING ELEVATION	= 1090.96 FT

DITCH LEGEND
RIGHT DITCH ----------

1,130
1,120
1,110
1,100
1,090
1,080
1,070
1,060
1,050

BM #1
N 738006.6860 E 1244383.24
ELEV. 1146.68'
-BL- STA 4+85 43.6' LEFT

BM #2
N 737859.6710 E 1245281.1220
ELEV. 1084.12'
-BL- STA 13+49.11 68.84' RIGHT

BM #3
N 737859.7950 E 1246274.6000
ELEV. 1178.25'
-BL- STA 23+20.77 126.59' LEFT

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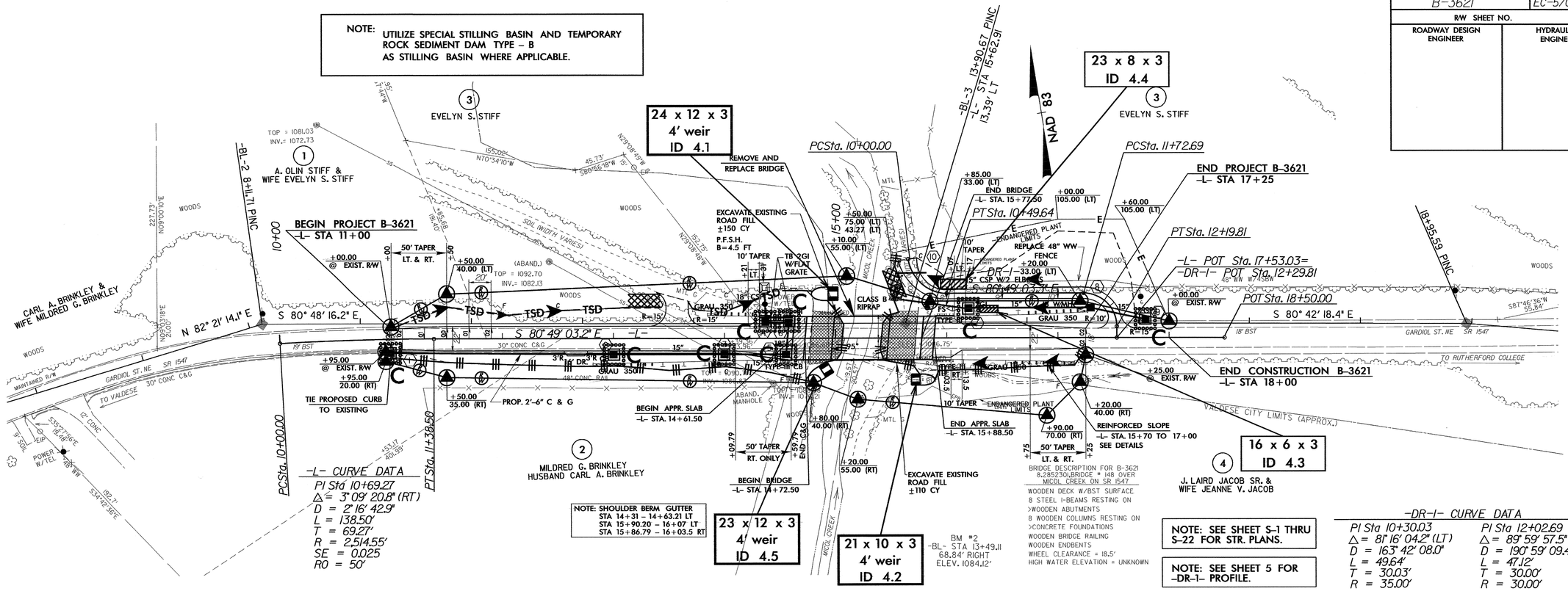
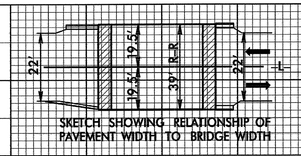
PROJECT REFERENCE NO.	SHEET NO.
B-3621	EC-5/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: UTILIZE SPECIAL STILLING BASIN AND TEMPORARY ROCK SEDIMENT DAM TYPE – B AS STILLING BASIN WHERE APPLICABLE.





SKETCH SHOWING RELATIONSHIP OF PAVEMENT WIDTH TO BRIDGE WIDTH

STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	= 1715 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 1084.0 FT
BASE DISCHARGE	= 1975 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 1084.5 FT
OVERTOPPING DISCHARGE	= 3500+ CFS
OVERTOPPING FREQUENCY	= +500 YRS
OVERTOPPING ELEVATION	= 1090.96 FT

xx DESIGN EXCEPTION REQUIRED

DITCH LEGEND

RIGHT DITCH ----------

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