

TIP PROJECT: B-4192

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

McDOWELL COUNTY

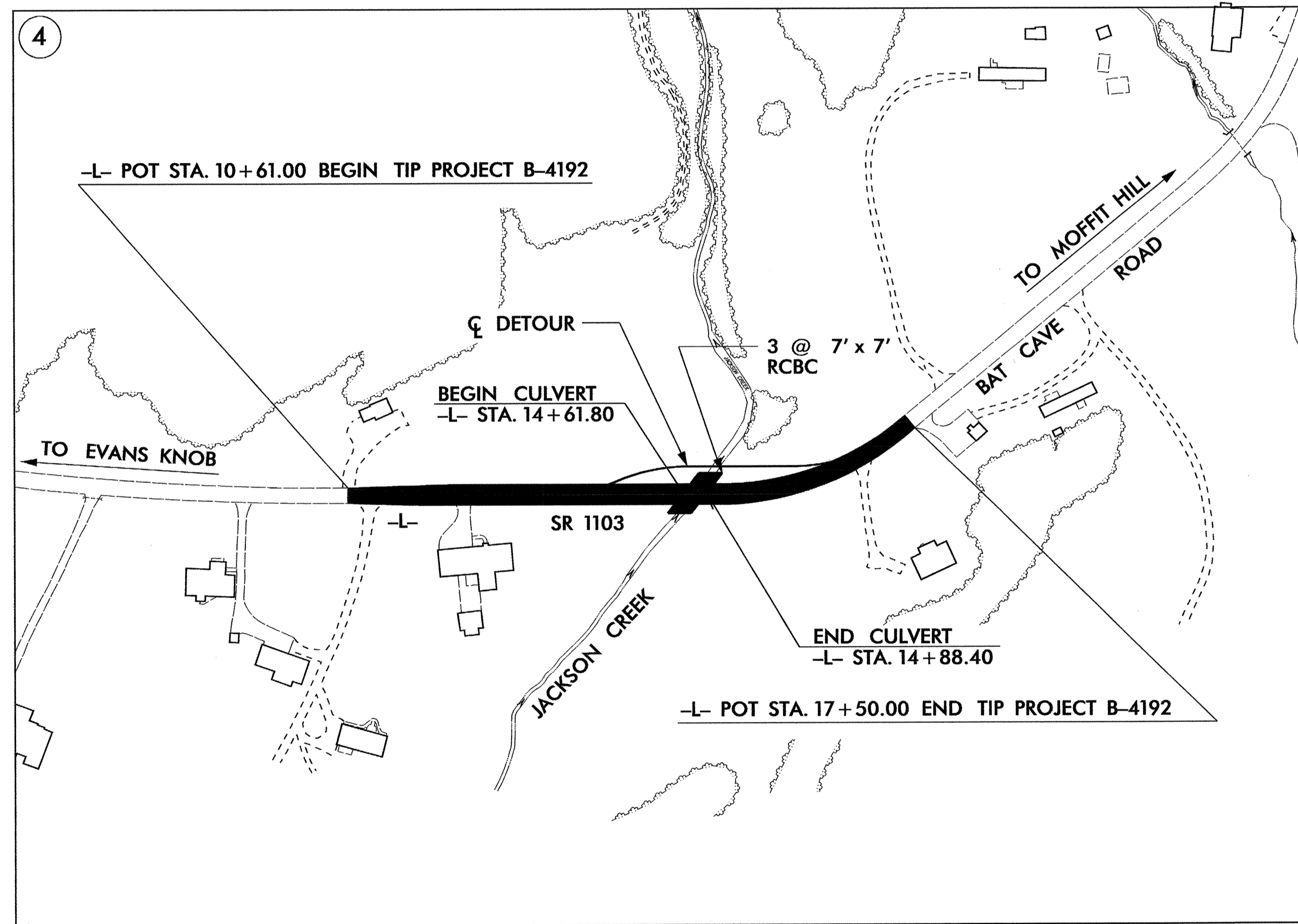
LOCATION: BRIDGE NO. 264 ON SR 1103 (BAT CAVE ROAD) OVER JACKSON CREEK
TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4192	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	
	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	
	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

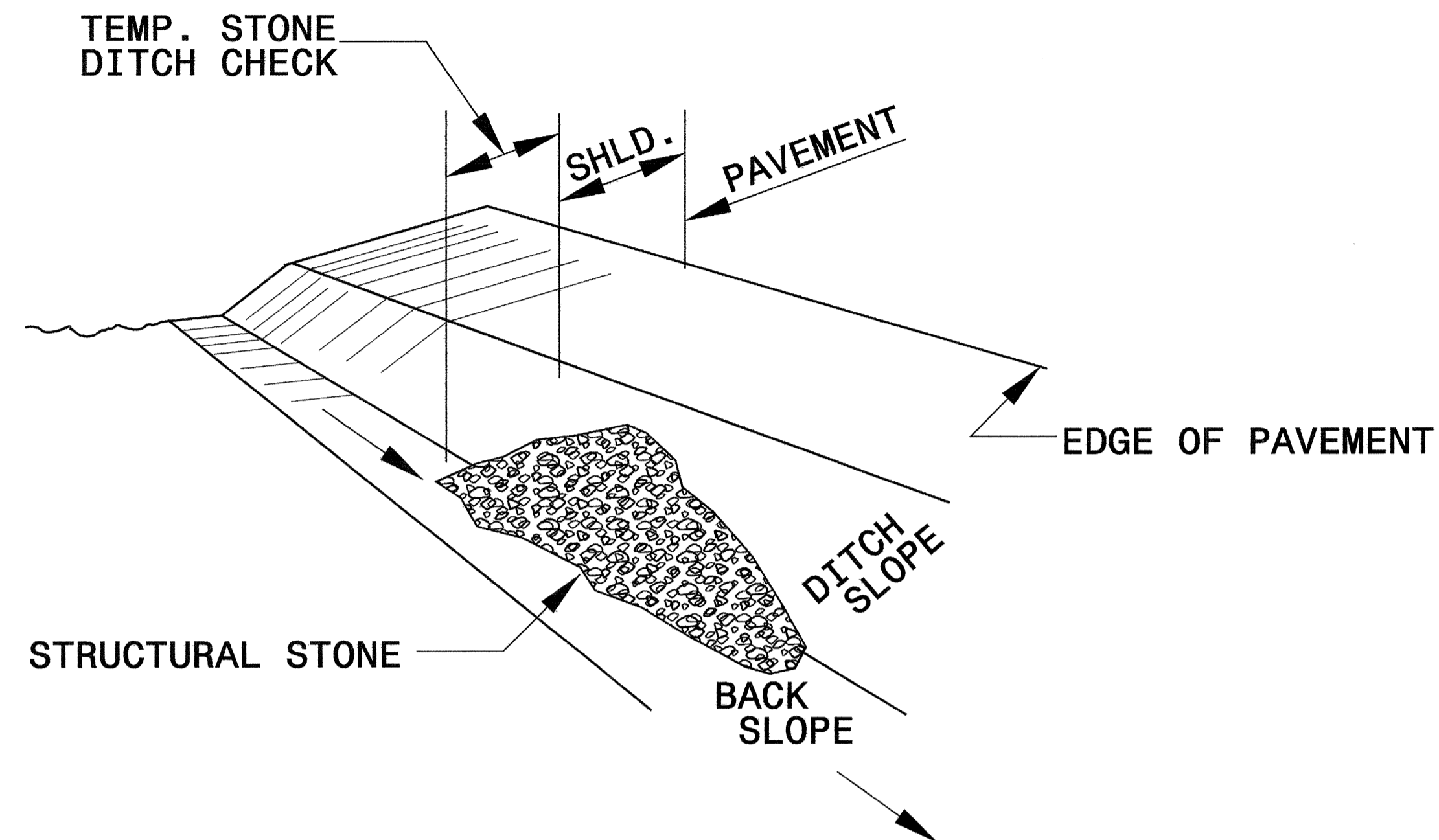
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1630.05 Temporary Diversion
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1630.04 Stilling Basin	1634.02 Temporary Rock Sediment Dam Type B

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PROJECT REFERENCE NO. B-4192	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

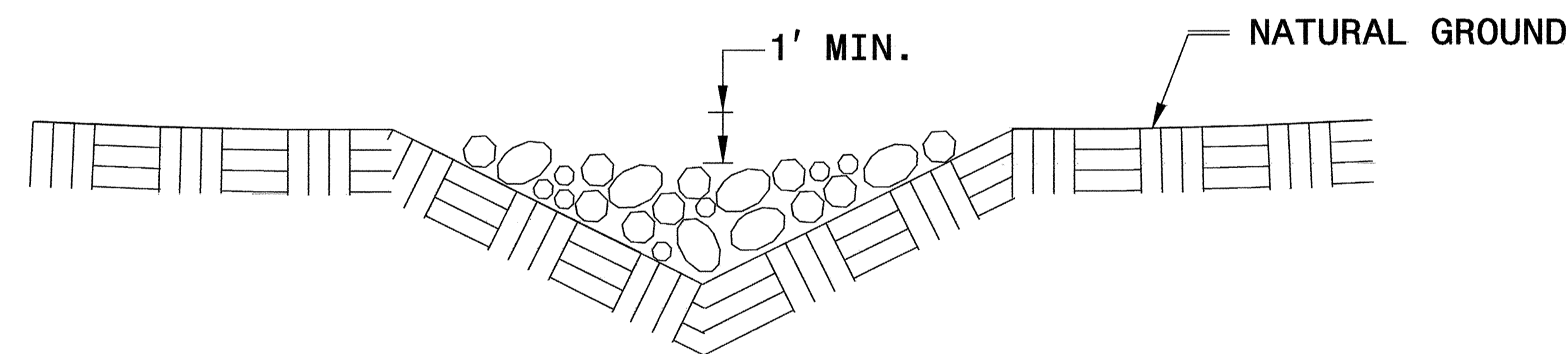


ISOMETRIC VIEW

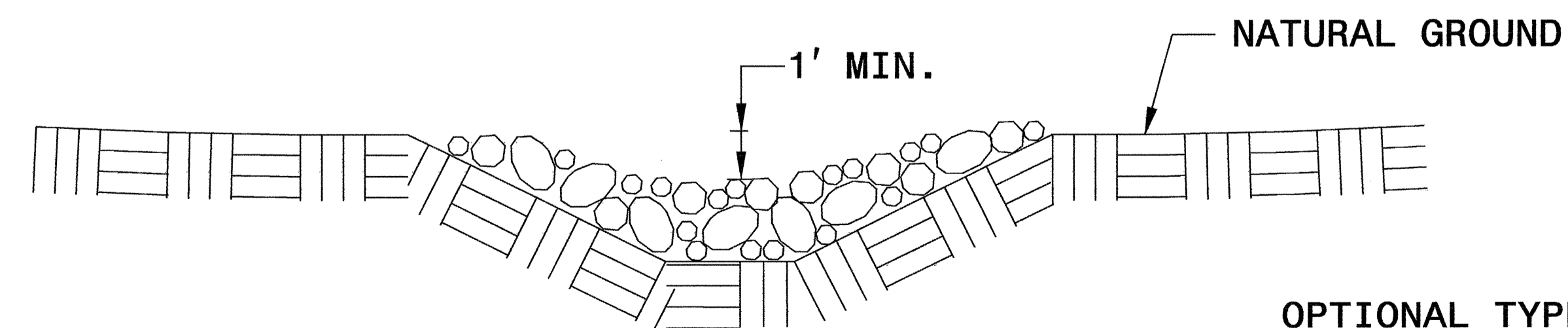
NOTES:

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

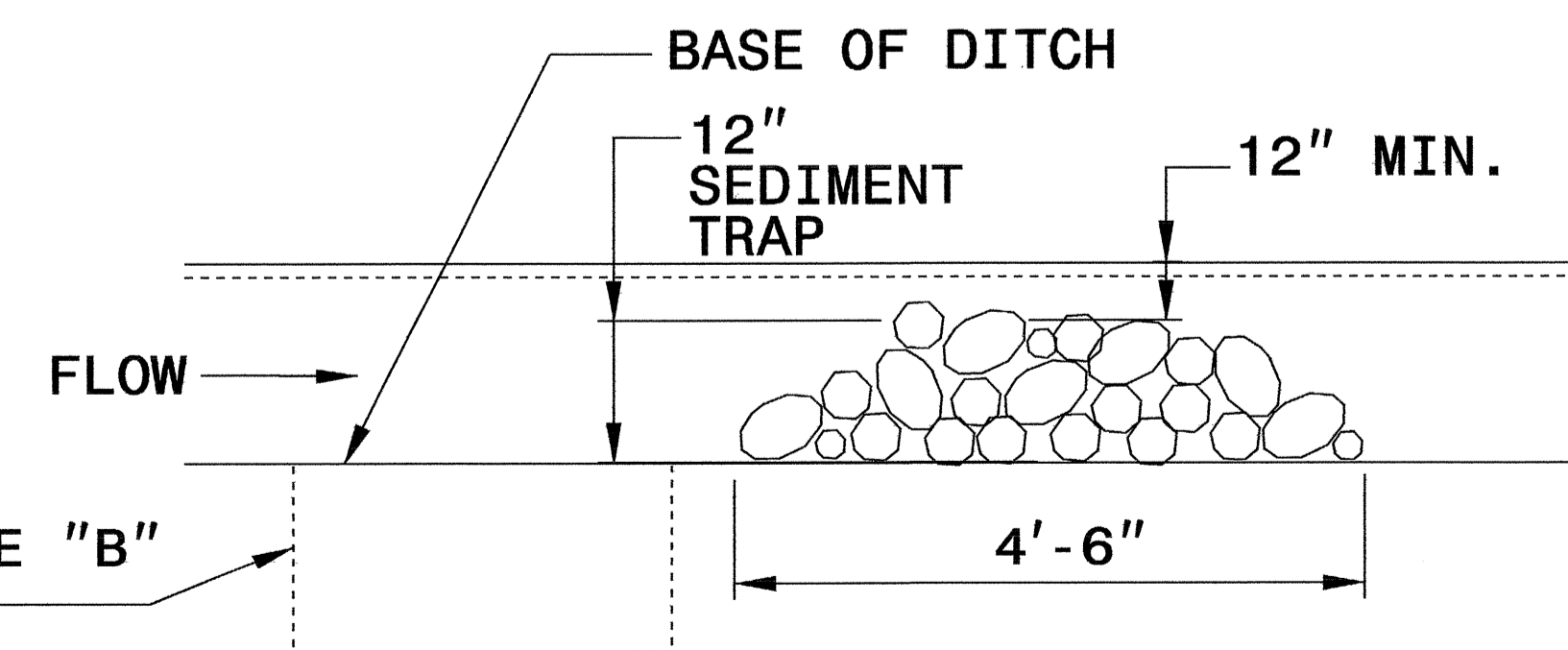
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION
VEE DITCH**



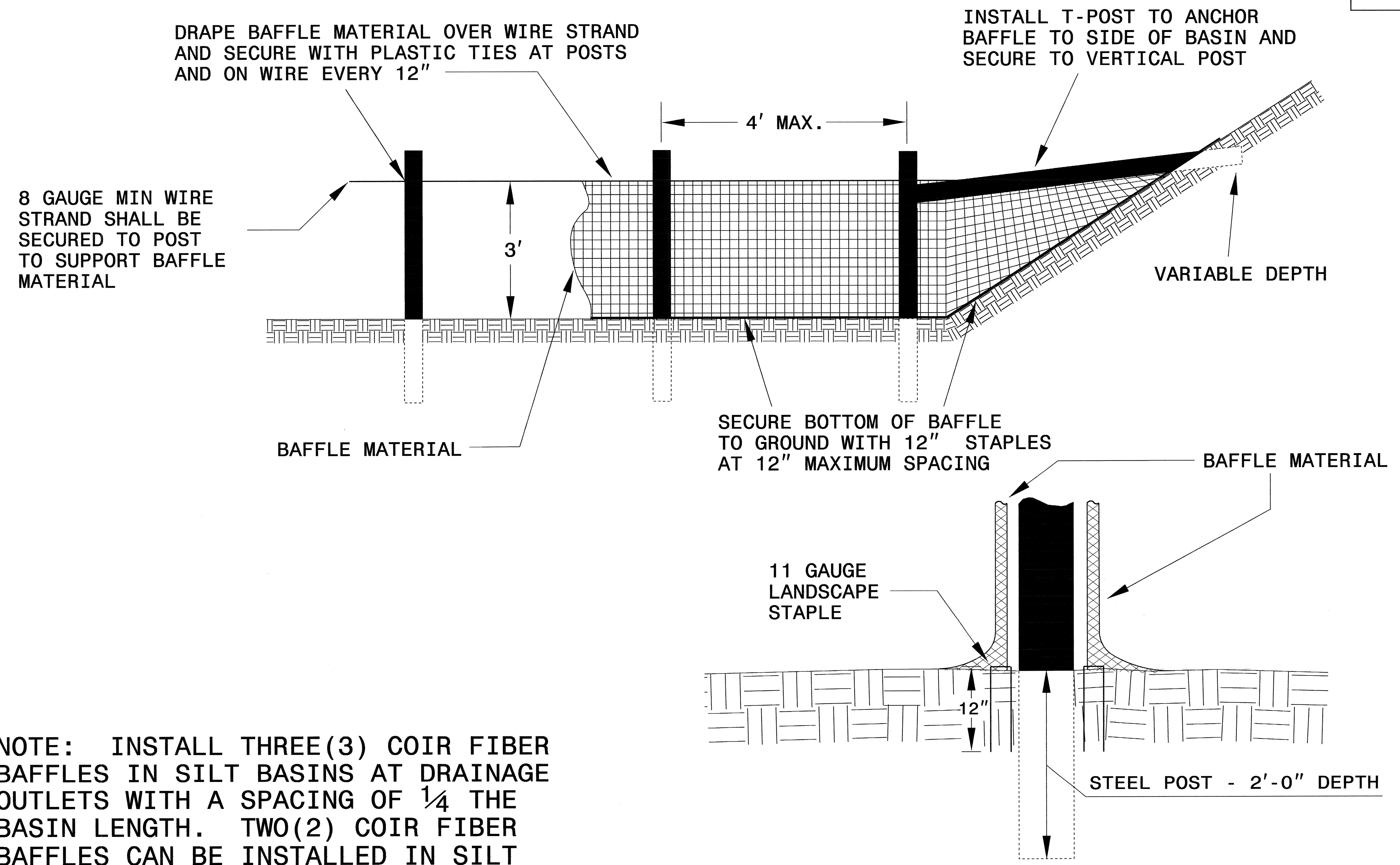
**CROSS SECTION
TRAPEZOIDAL DITCH**



ELEVATION VIEW

PROJECT REFERENCE NO. B-4192	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



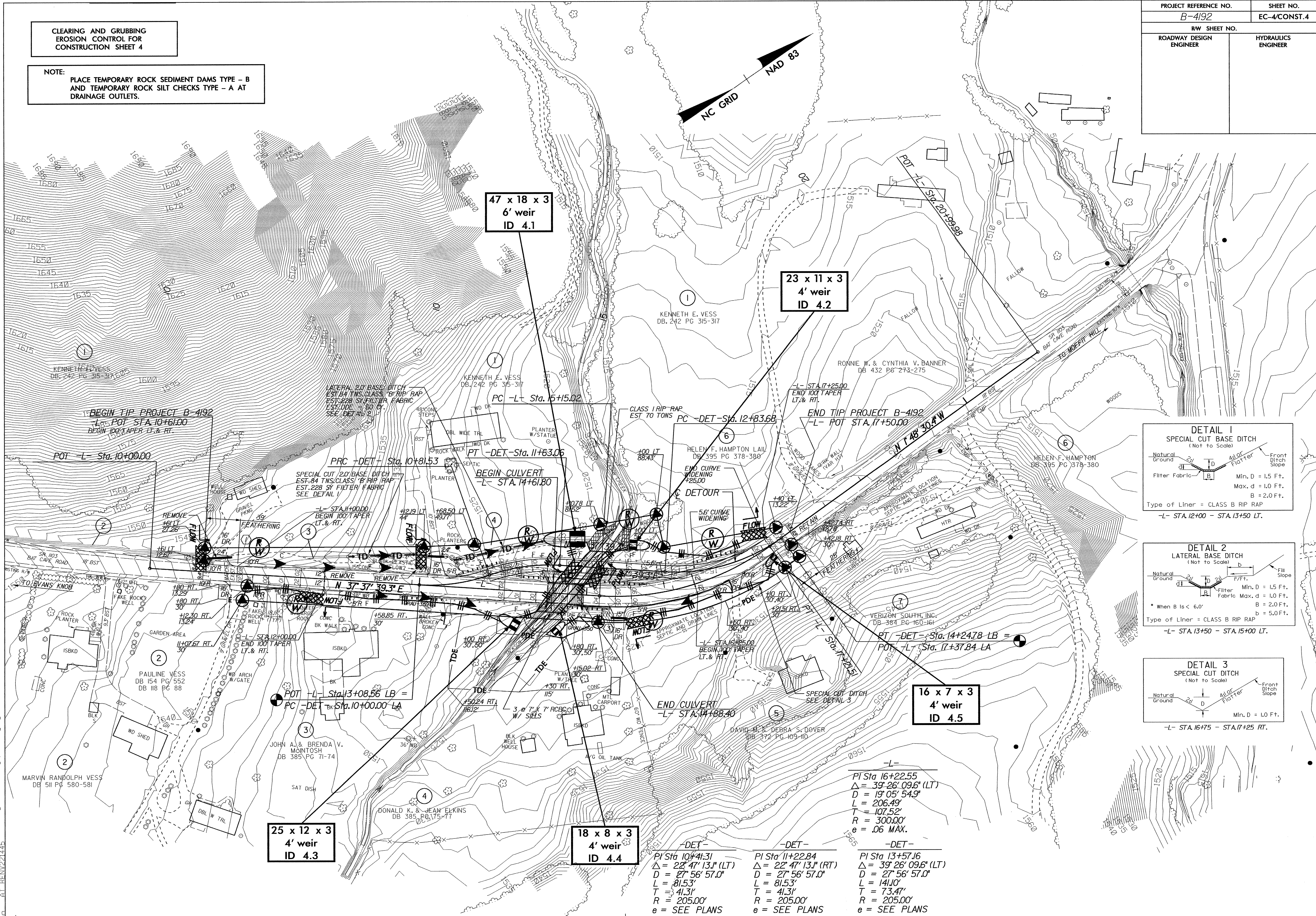
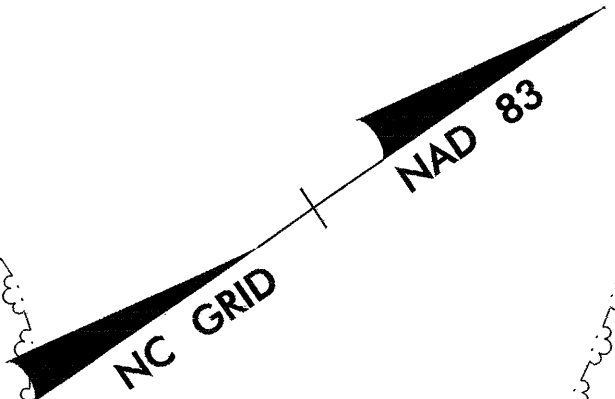
NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.

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

PROJECT REFERENCE NO.	SHEET NO.
B-4192	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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.



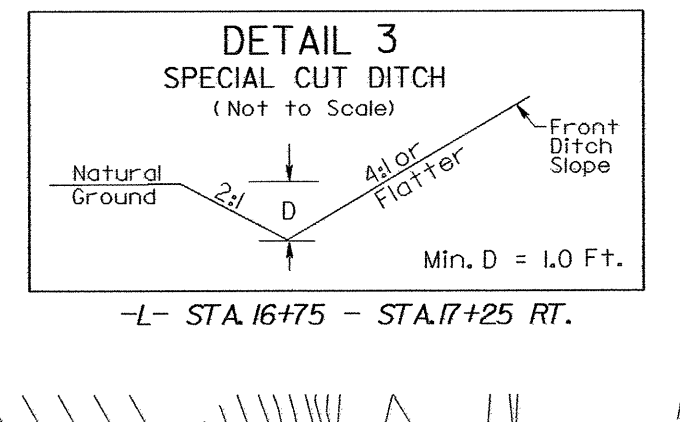
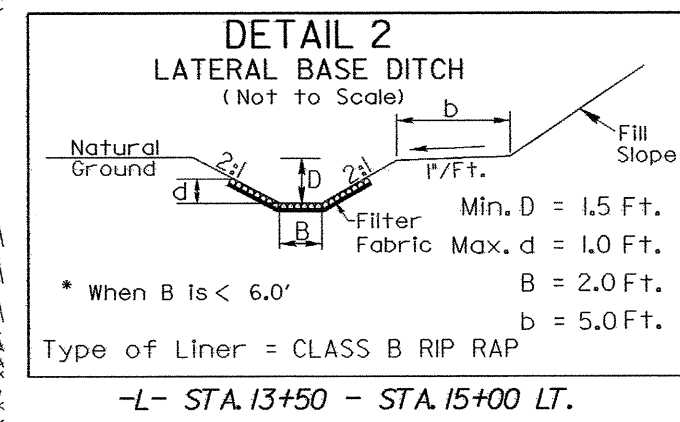
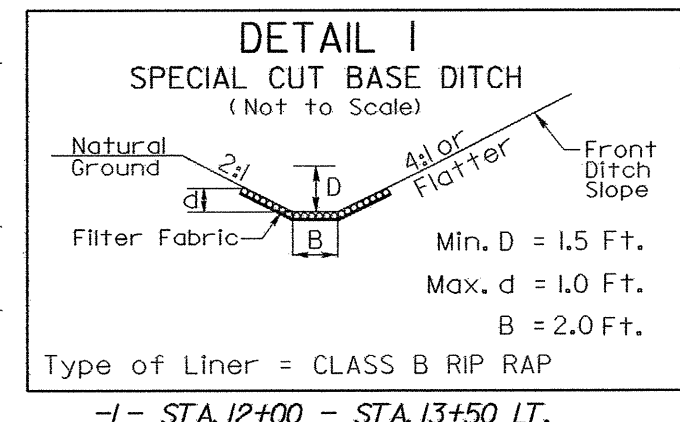
47 x 18 x 3
6' weir
ID 4.1

23 x 11 x 3
4' weir
ID 4.2

16 x 7 x 3
4' weir
ID 4.5

25 x 12 x 3
4' weir
ID 4.3

18 x 8 x 3
4' weir
ID 4.4



-L-
PI Sta 16+22.55
Δ = 39° 26' 09.6" (LT)
D = 19' 05' 54.9"
L = 206.49'
T = 107.52'
R = 300.00'
e = .06 MAX.

-DET-
PI Sta 10+41.31
Δ = 22° 47' 13.1" (LT)
D = 27' 56' 57.0"
L = 81.53'
T = 41.31'
R = 205.00'
e = SEE PLANS

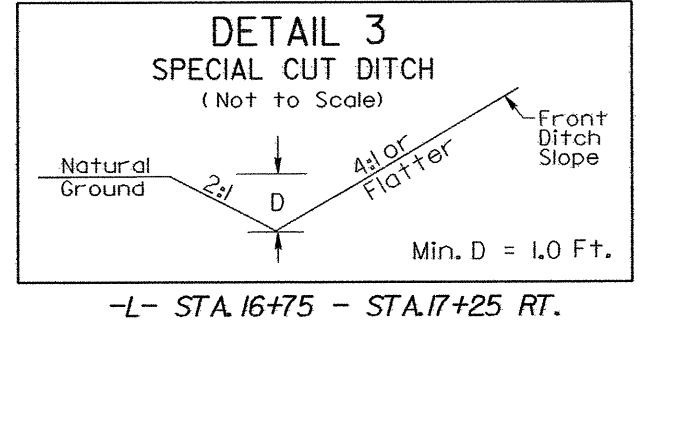
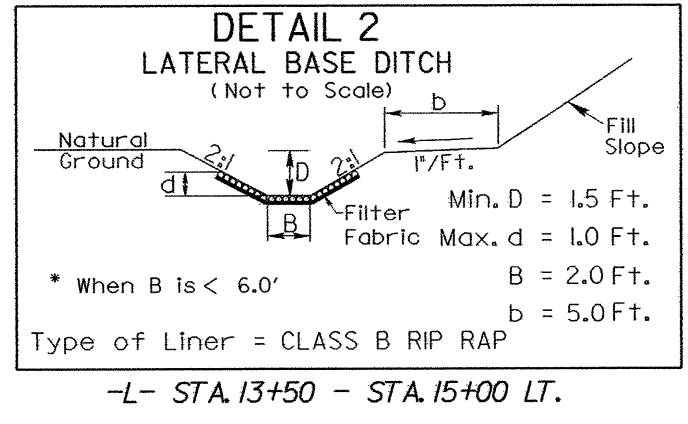
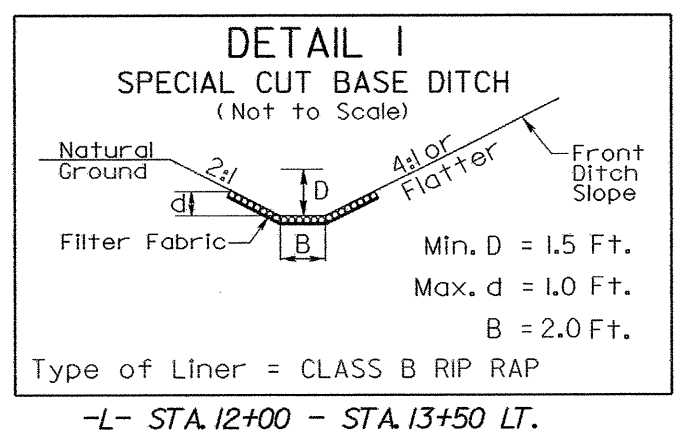
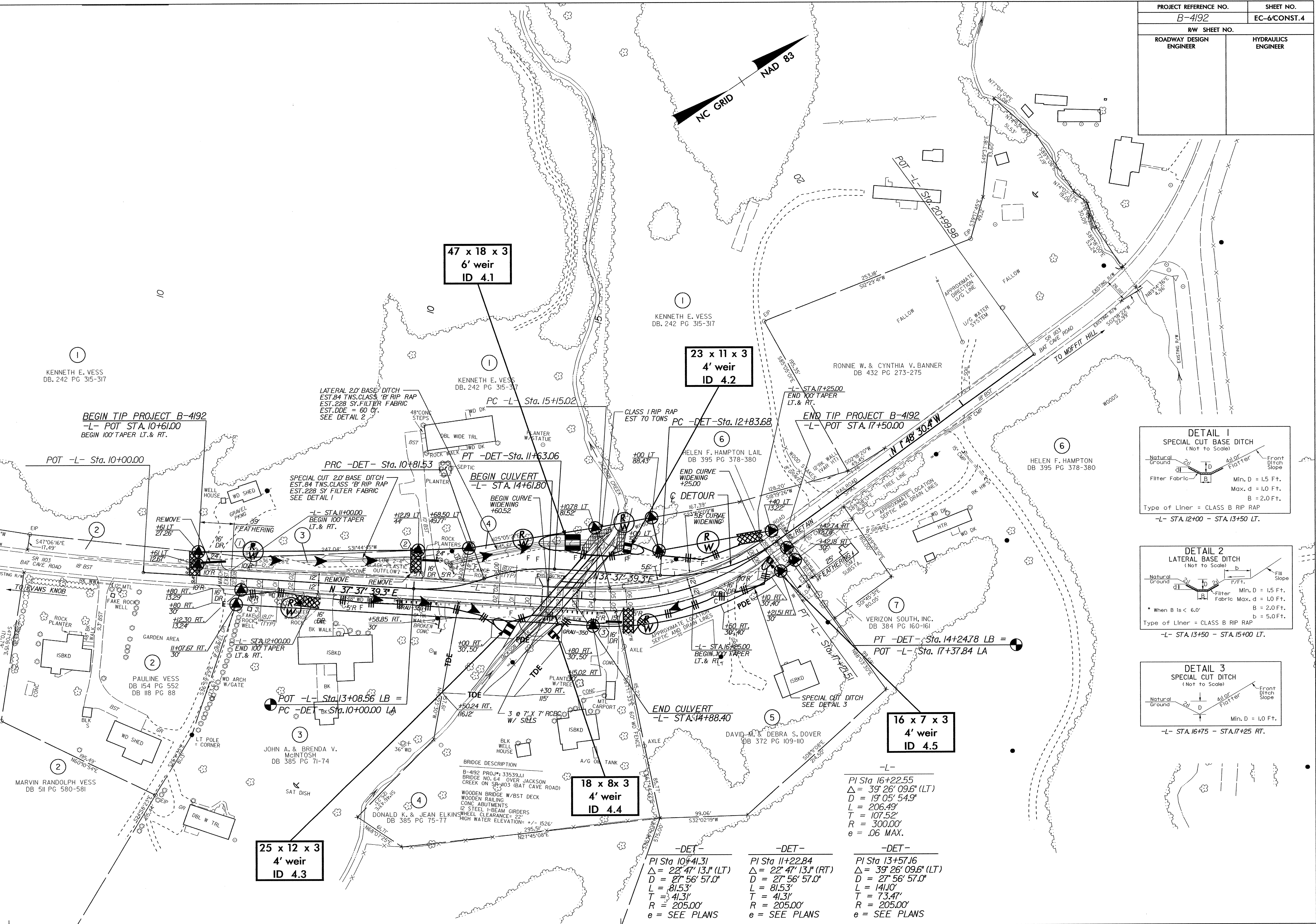
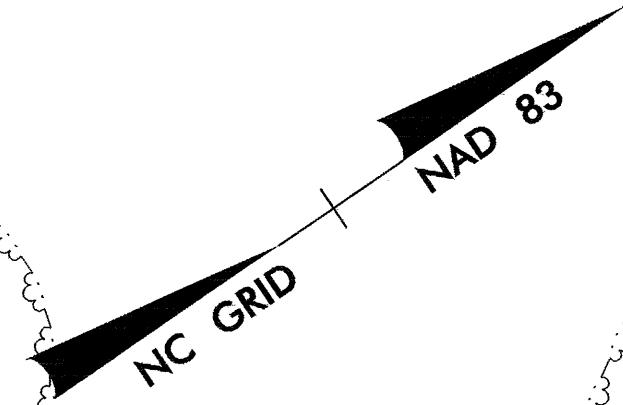
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PI Sta 11+22.84
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-DET-
PI Sta 13+57.16
Δ = 39° 26' 09.6" (LT)
D = 27' 56' 57.0"
L = 141.0'
T = 73.47'
R = 205.00'
e = SEE PLANS

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CULVERT CONSTRUCTION SEQUENCE STA. 14+75 -L-

PHASE I	PHASE II	PHASE III	PHASE IV
<ol style="list-style-type: none"> 1. CONSTRUCT STILLING BASIN 1 (70 CY). 2. CONSTRUCT IMPERVIOUS DIKE A. 3. CONSTRUCT PORTION OF BARREL 1. 	<ol style="list-style-type: none"> 4. REMOVE IMPERVIOUS DIKE A AND CONSTRUCT IMPERVIOUS DIKES B. 5. CONSTRUCT PORTION OF BARRELS 2 AND 3. 6. REMOVE IMPERVIOUS DIKES B. 7. CONSTRUCT OUTLET CHANNEL IMPROVEMENTS. 8. CONSTRUCT DETOUR ALIGNMENT, UTILIZING TEMPORARY BARRIERS AND SHORING, AS NEEDED. 	<ol style="list-style-type: none"> 9. REMOVE STILLING BASIN 1. 10. SHIFT TRAFFIC TO THE DETOUR ALIGNMENT AND REMOVE THE EXISTING BRIDGE. 11. CONSTRUCT STILLING BASIN 2 (100 CY). 12. CONSTRUCT IMPERVIOUS DIKES C. 13. COMPLETE CONSTRUCTION OF BARREL 1. 	<ol style="list-style-type: none"> 14. REMOVE IMPERVIOUS DIKES C AND CONSTRUCT IMPERVIOUS DIKES D. 15. COMPLETE CONSTRUCTION OF BARRELS 2 AND 3. 16. REMOVE IMPERVIOUS DIKES D. 17. CONSTRUCT INLET CHANNEL IMPROVEMENTS. 18. COMPLETE CONSTRUCTION OF THE FINAL ROADWAY ALIGNMENT, REMOVE DETOUR ALIGNMENT, AND SHIFT TRAFFIC TO THE FINAL ALIGNMENT.



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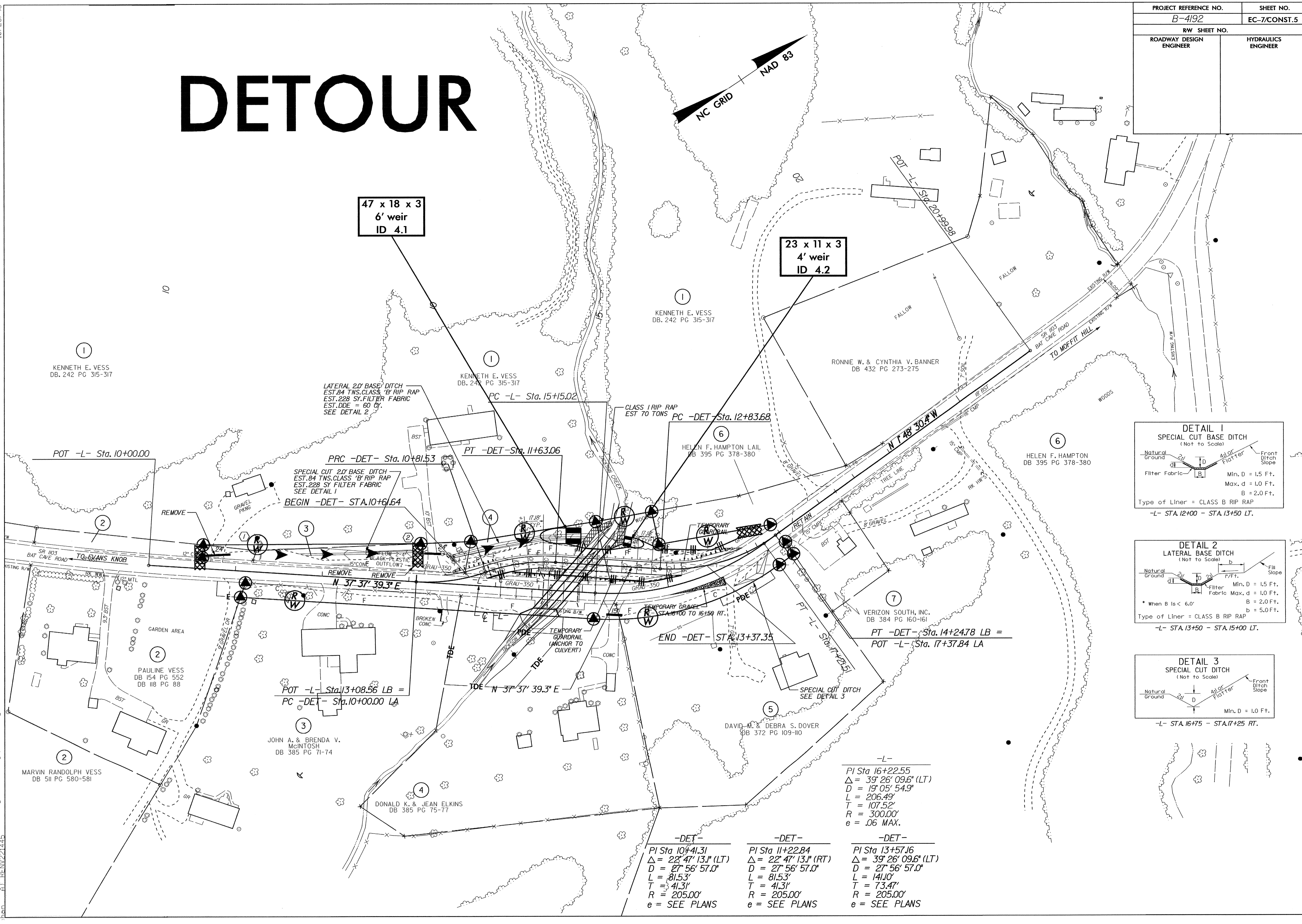
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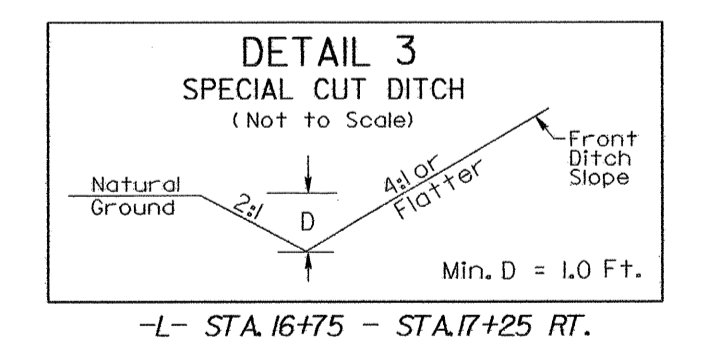
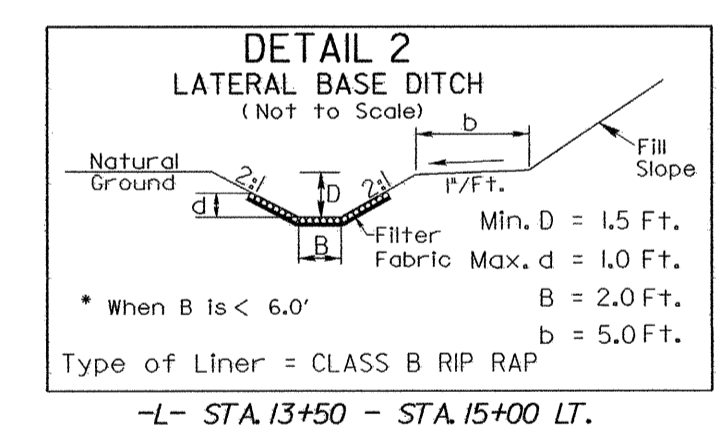
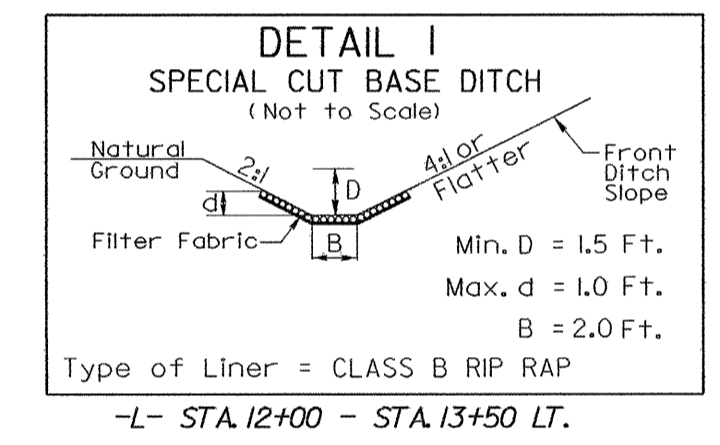
DETOUR

PROJECT REFERENCE NO. B-4192	SHEET NO. EC-7/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



47 x 18 x 3
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ID 4.1

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ID 4.2



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