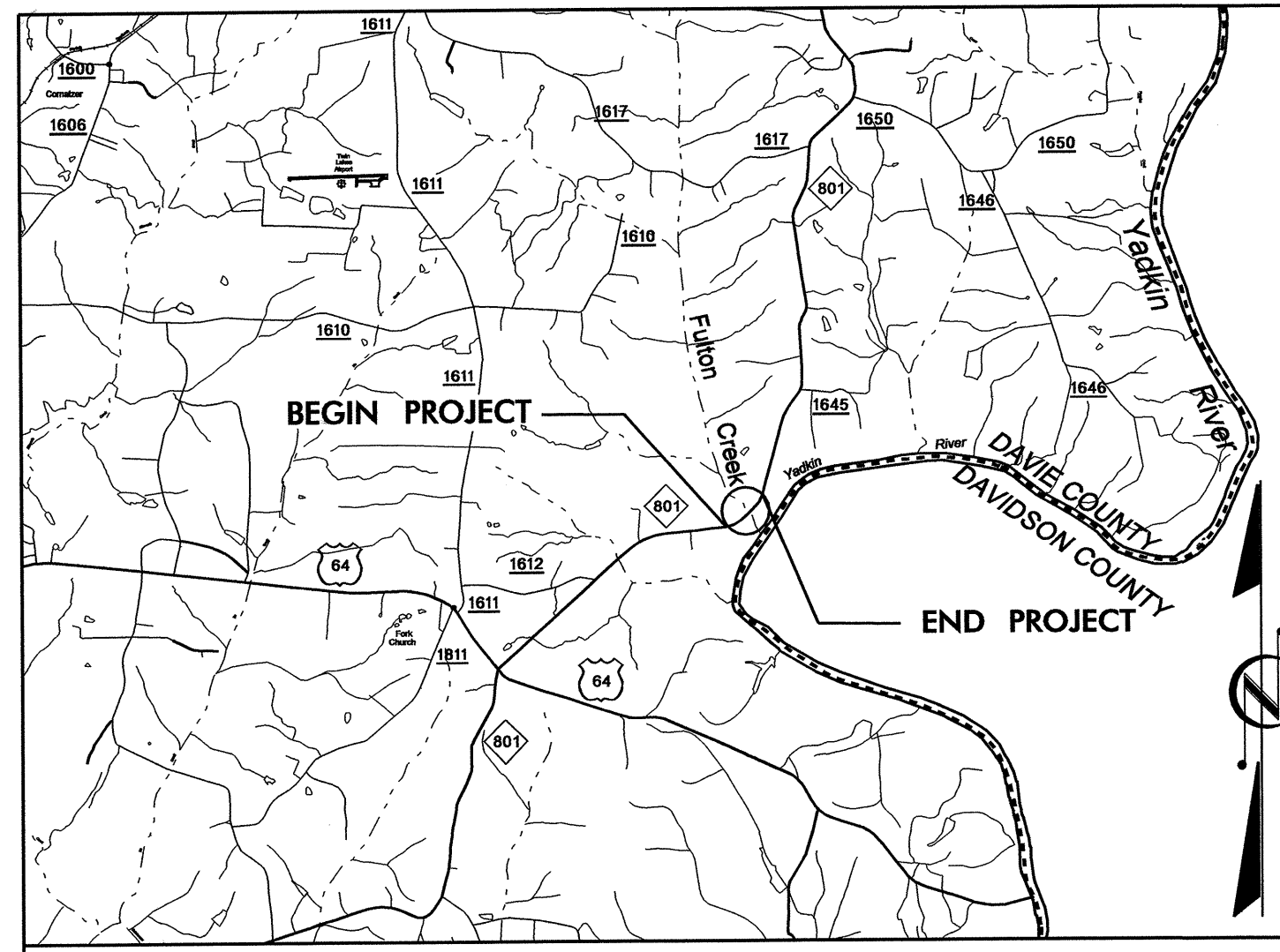


09/08/99

See Sheet 1-A For Index of Sheets  
See Sheet 1-B For Conventional Symbols



**VICINITY MAP**

90% Plans

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**DAVIE COUNTY**

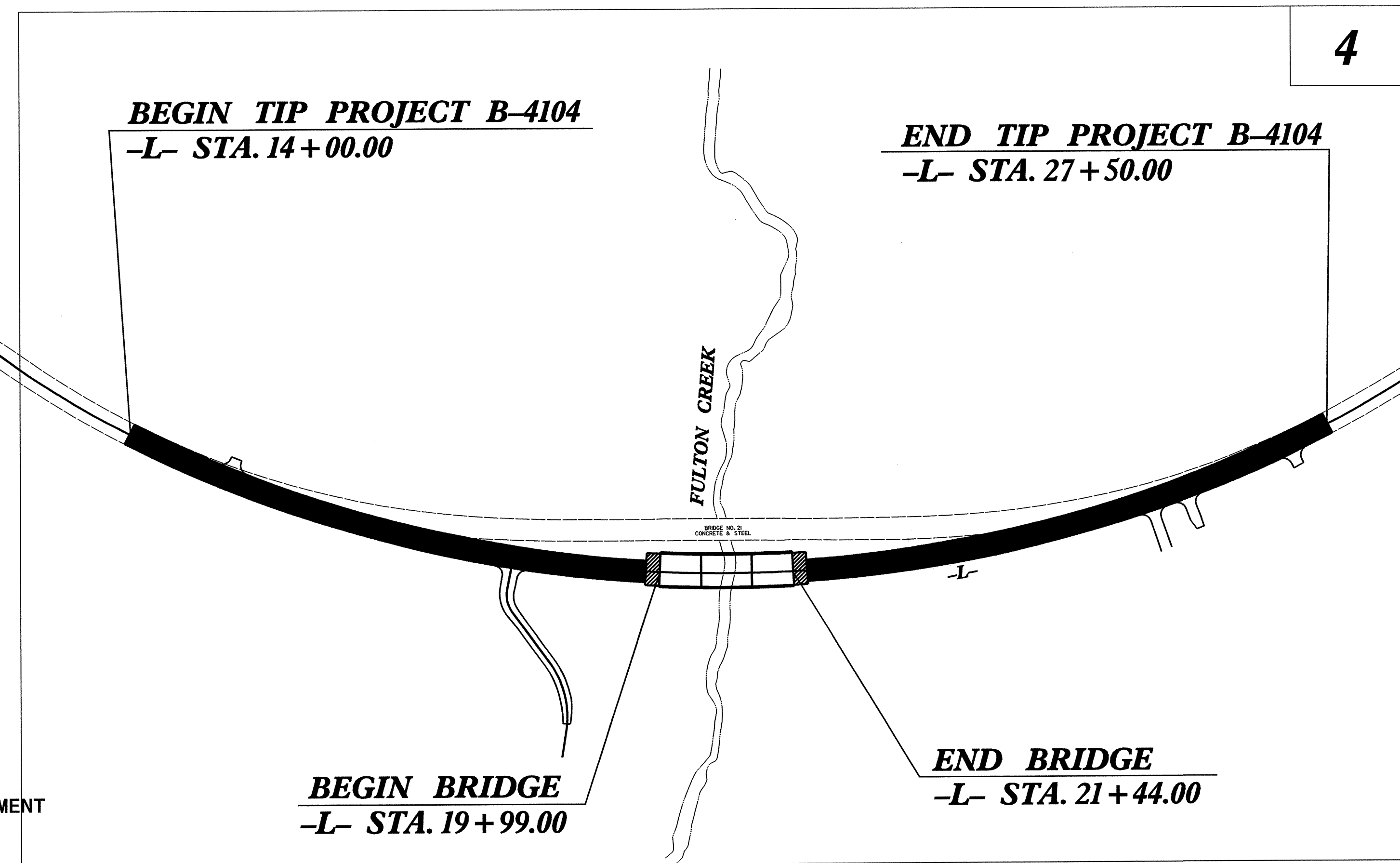
**LOCATION: BRIDGE NO. 21 OVER FULTON CREEK  
ON NC 801.**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING  
& STRUCTURE**

|           |                             |             |              |
|-----------|-----------------------------|-------------|--------------|
| STATE     | STATE PROJECT REFERENCE NO. | SHEET NO.   | TOTAL SHEETS |
| N.C.      | <b>B-4104</b>               | EC-1        |              |
| WBS NO.   | F.A. PROJ. NO.              | DESCRIPTION |              |
| 33460.1.1 | BRSTP-801(5)                | P.E.        |              |
| 33460.2.1 | BRSTP-801(5)                | RW, CONST   |              |
|           |                             |             |              |
|           |                             |             |              |
|           |                             |             |              |
|           |                             |             |              |

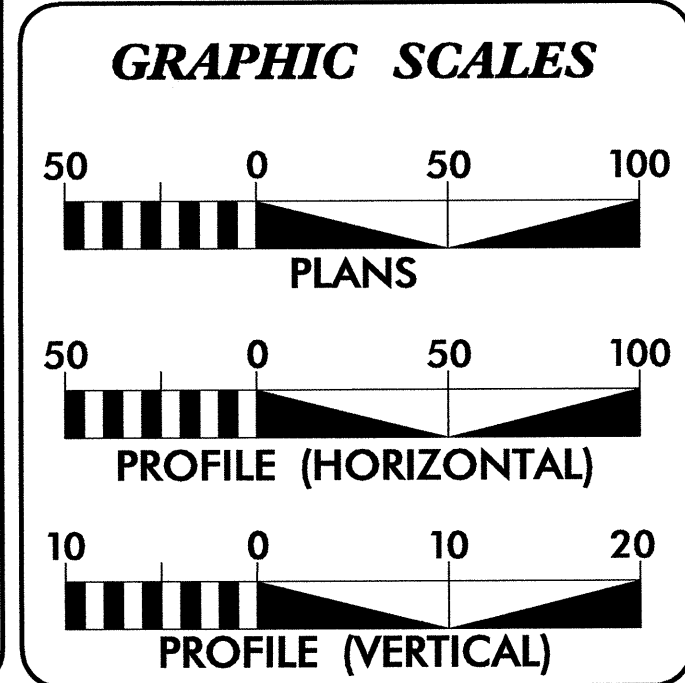
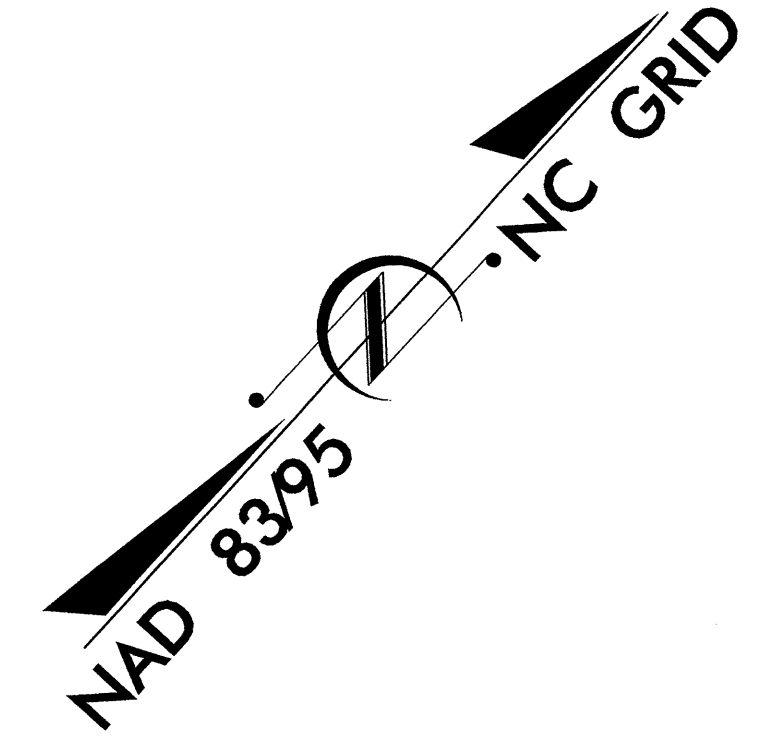
**TIP PROJECT: B-4104**

**CONTRACT:**



\*\* DESIGN EXCEPTION REQUIRED FOR VERTICAL ALIGNMENT  
& HORIZONTAL STOPPING SIGHT DISTANCE

NCDOT CONTACT: CATHY HOUSER, P.E.  
ROADWAY DESIGN - ENGINEERING COORDINATION



**DESIGN DATA**

|            |         |
|------------|---------|
| ADT 2007 = | 3,180   |
| ADT 2027 = | 4,980   |
| DHV =      | 10 %    |
| D =        | 65 %    |
| T =        | 4 % *   |
| ** V =     | 60 MPH  |
| * TTST 1%  | DUAL 3% |

**PROJECT LENGTH**

|                                      |   |           |
|--------------------------------------|---|-----------|
| LENGTH ROADWAY TIP PROJECT B-4104    | = | 0.229 MI. |
| LENGTH STRUCTURES TIP PROJECT B-4104 | = | 0.027 MI. |
| TOTAL LENGTH OF TIP PROJECT B-4104   | = | 0.256 MI. |

Prepared in the Office of:

**KO & ASSOCIATES, P.C.**  
Consulting Engineers  
1011 Schaub Dr., Suite 202, Raleigh NC 27606  
(919) 851-6082

2006 STANDARD SPECIFICATIONS

**RIGHT OF WAY DATE:**  
AUGUST 18, 2006

**LETTING DATE:**  
JANUARY 15, 2008

**DAVID C. WALLER, PE**  
PROJECT ENGINEER

**BRIAN A. WILES, PE**  
PROJECT DESIGN ENGINEER

**HYDRAULICS ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

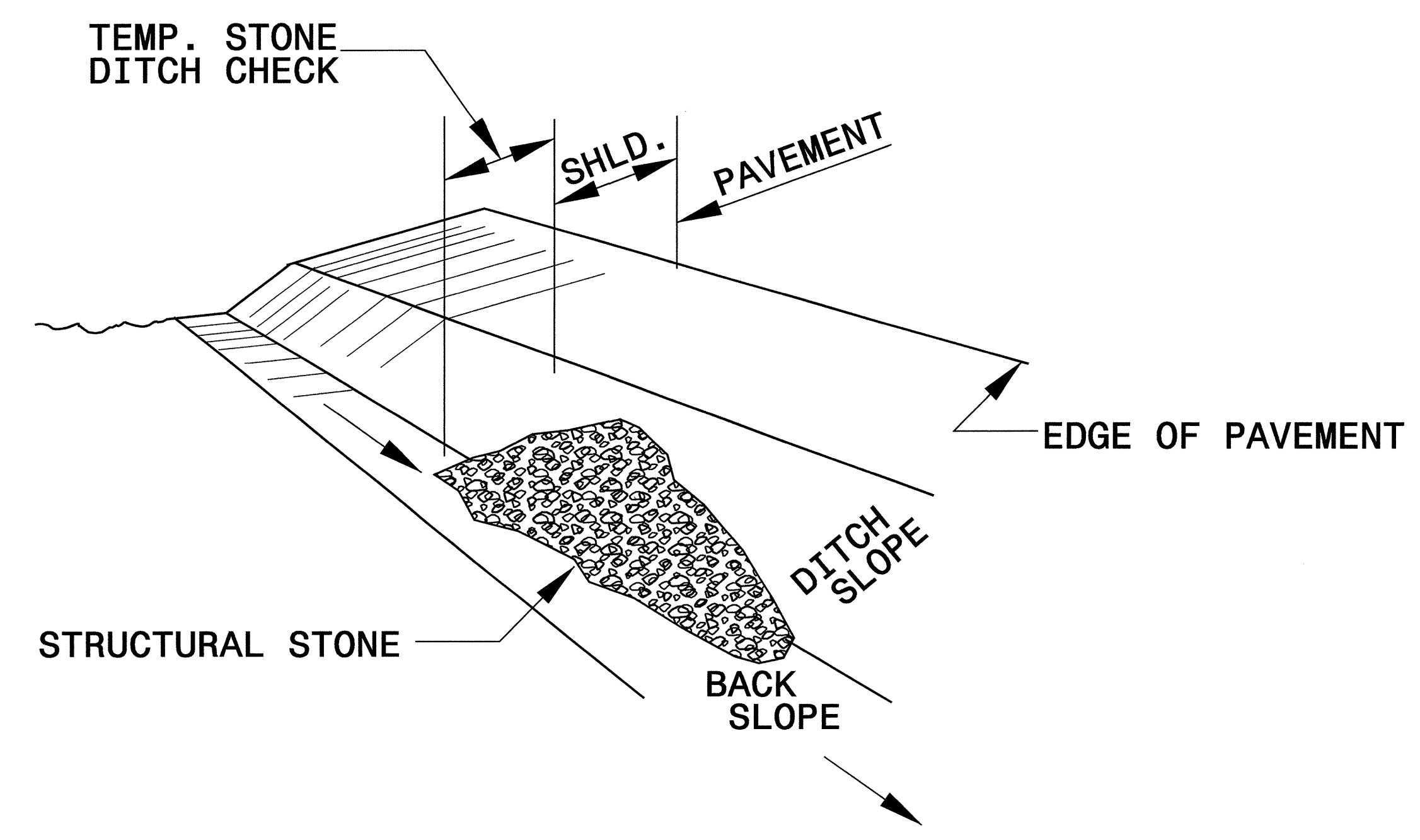
**DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA**

STATE HIGHWAY DESIGN ENGINEER

28-SEP-2007 08:54  
c:\tip\projects\b4104\environmental\details\b4104\_rdy\_tsh.dgn  
richan AT RENY23182

|  |                          |
|--|--------------------------|
| PROJECT REFERENCE NO.<br><i>B-4104</i> | SHEET NO.<br><i>EC-2</i> |
| RW SHEET NO.                           |                          |
| ROADWAY DESIGN ENGINEER                | HYDRAULICS ENGINEER      |

# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

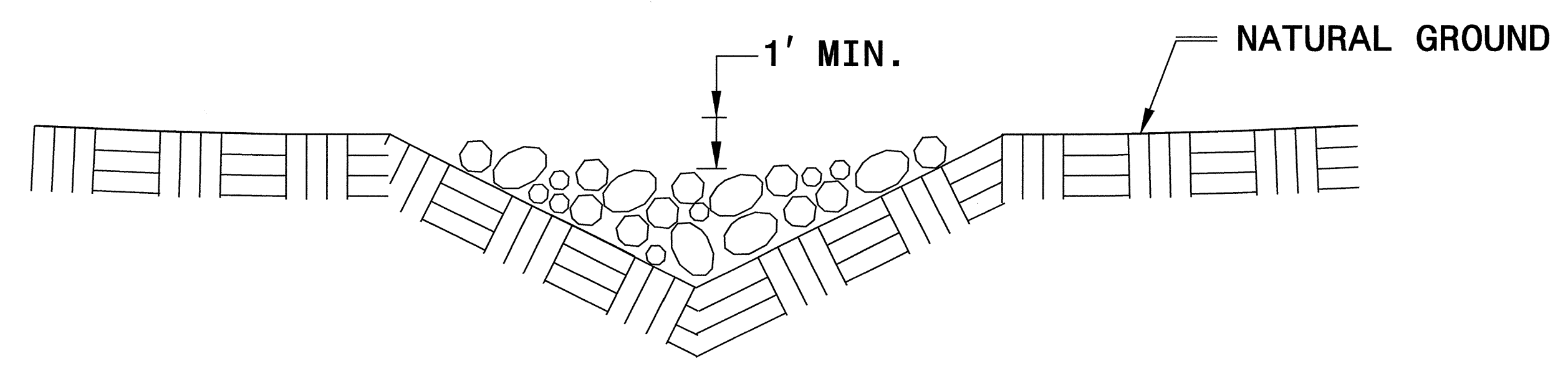


**ISOMETRIC VIEW**

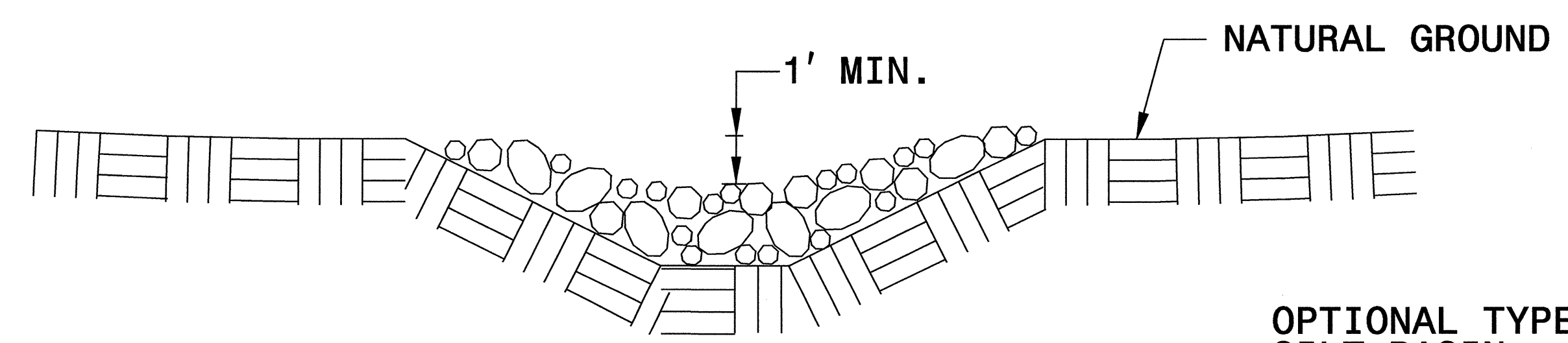
**NOTES:**

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

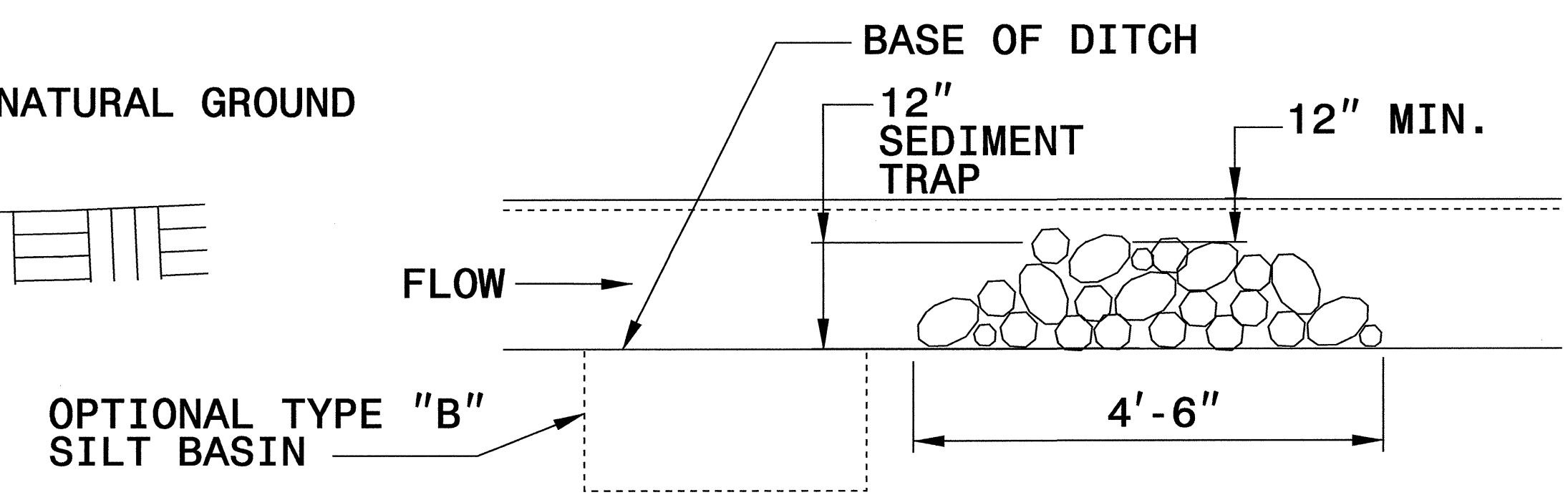
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION VEE DITCH**



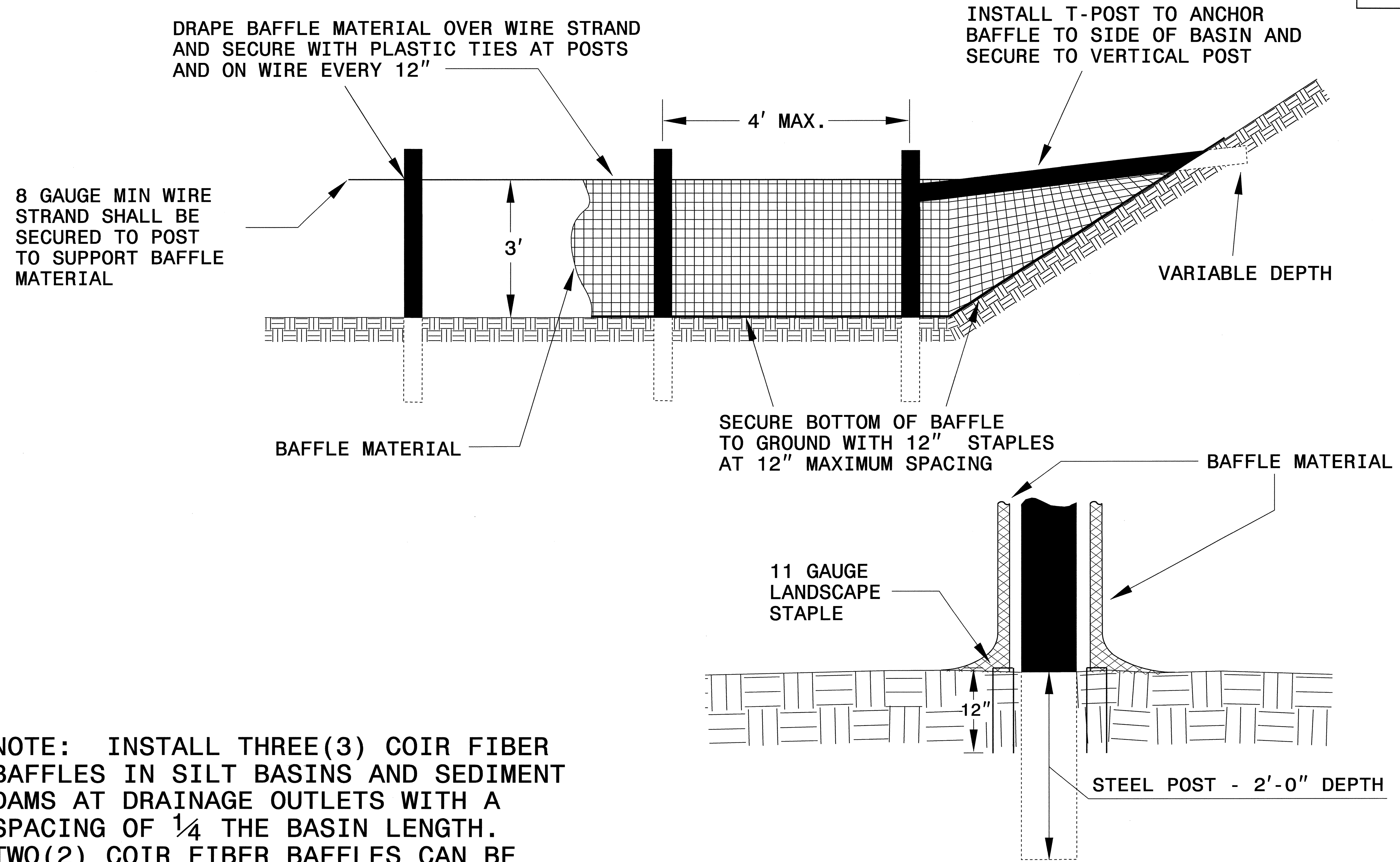
**CROSS SECTION TRAPEZOIDAL DITCH**



**ELEVATION VIEW**

|                                 |                     |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>B-4104 | SHEET NO.<br>EC-2A  |
| 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



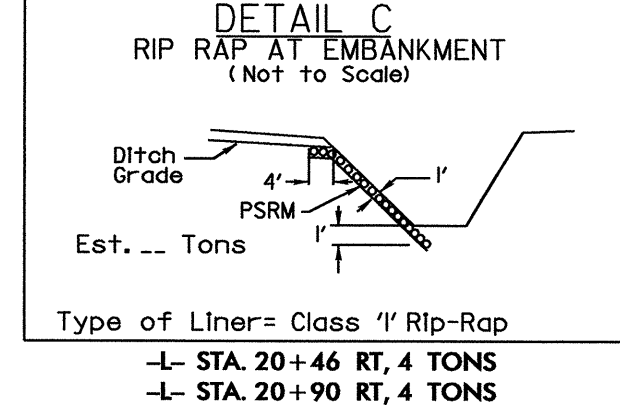
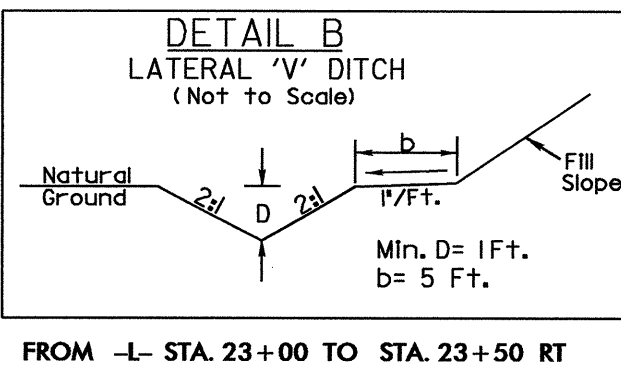
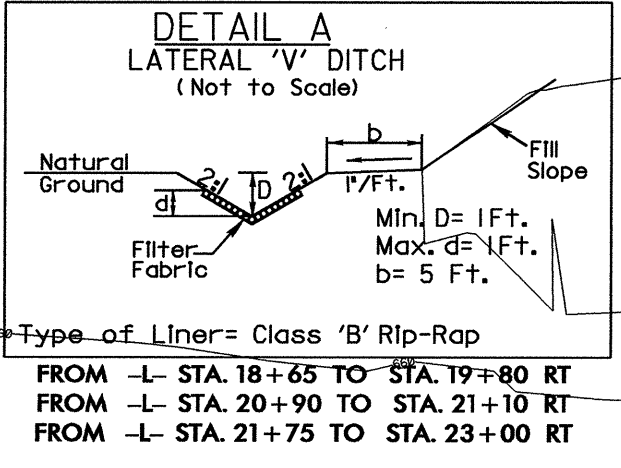
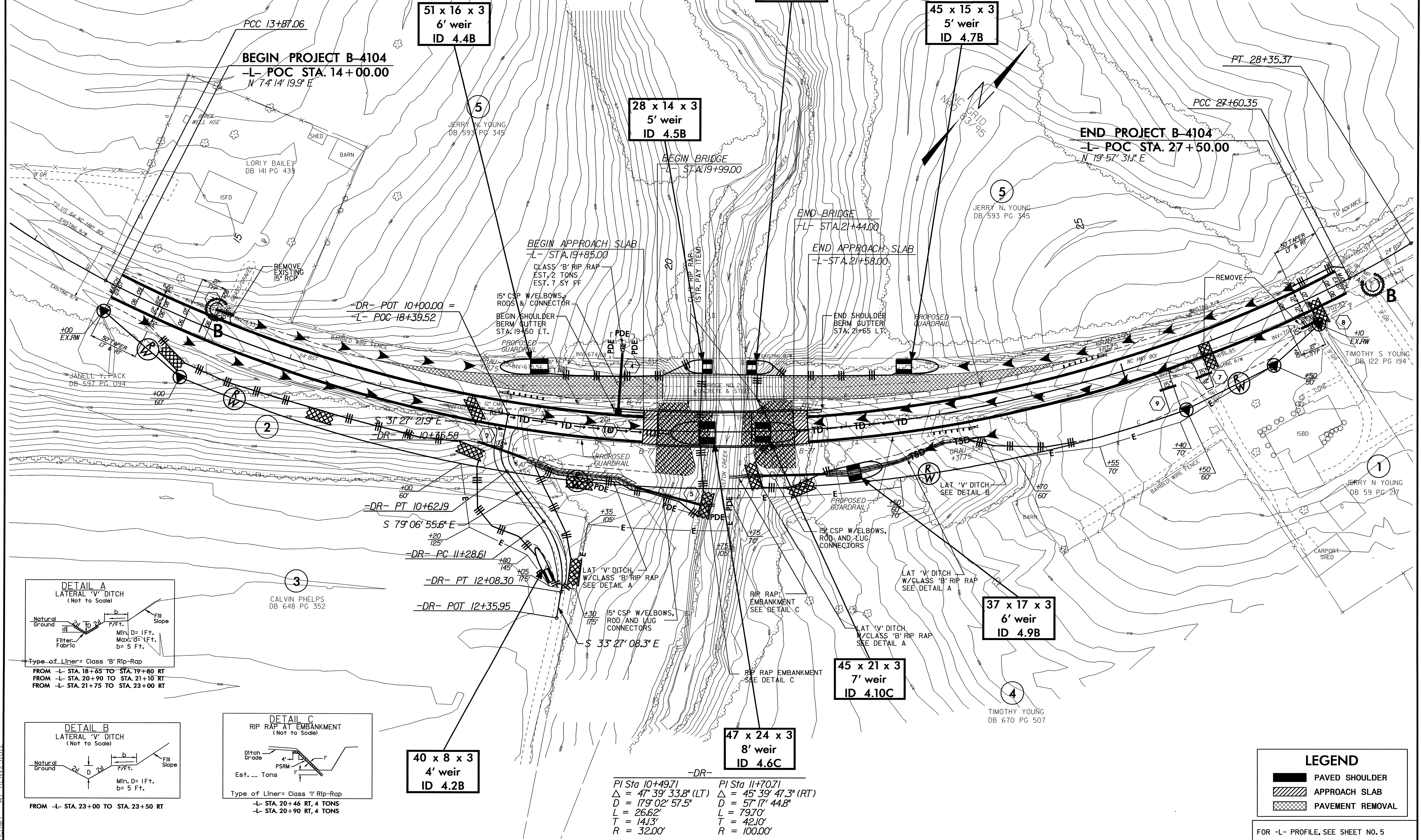
28-SEP-2007 08:55 G:\projects\2007\4104\environmental\design\4104\_rdy\_psh\_04.dgn

**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 SPECIAL STILLING BASIN  
WHERE APPLICABLE.

|                                 |                           |
|---------------------------------|---------------------------|
| PROJECT REFERENCE NO.<br>B-4104 | SHEET NO.<br>EC-4/CONST.4 |
| ROADWAY DESIGN ENGINEER         | HYDRAULICS ENGINEER       |



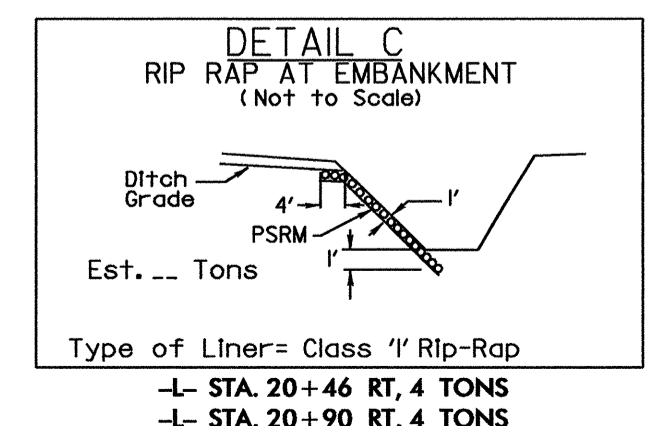
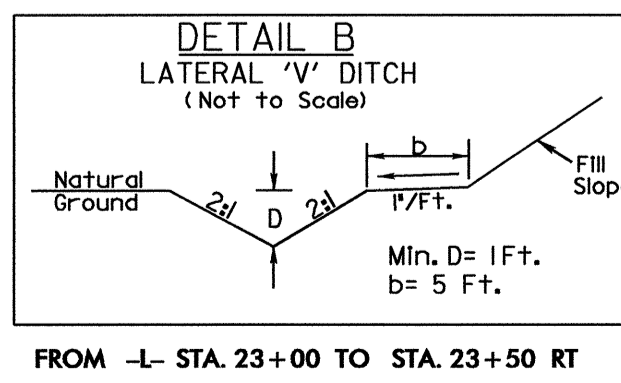
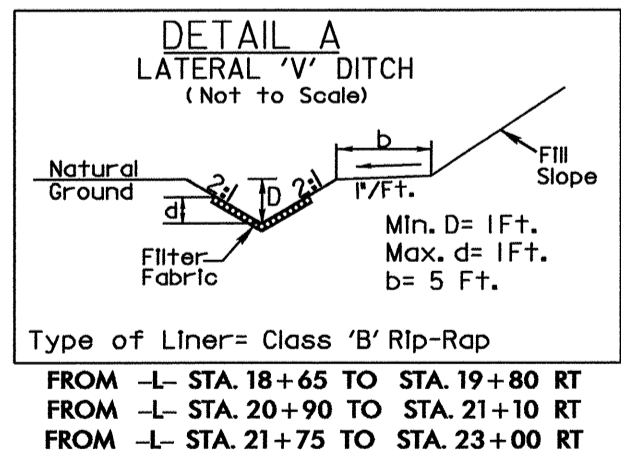
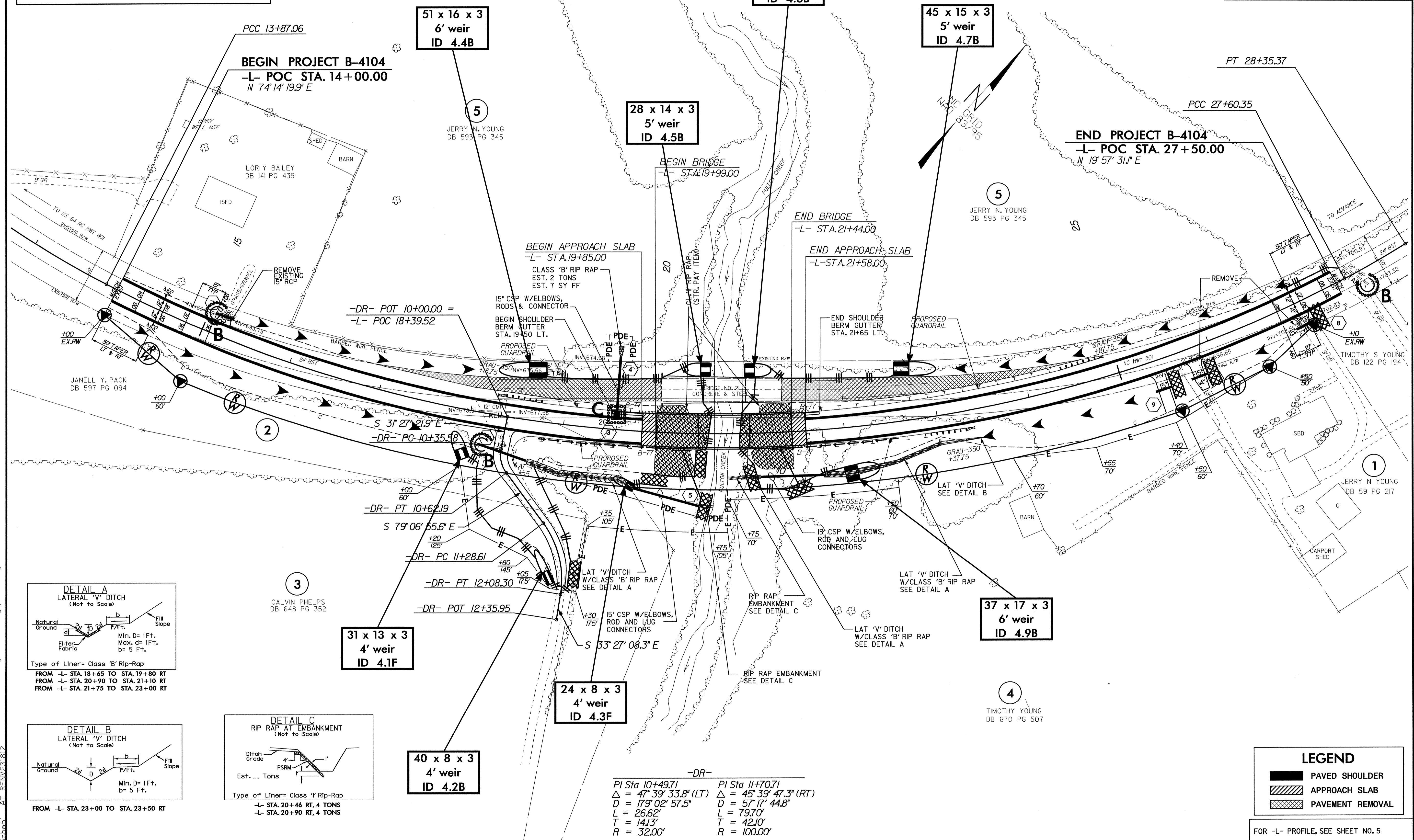
**LEGEND**

- PAVED SHOULDER
- APPROACH SLAB
- PAVEMENT REMOVAL

FOR -L- PROFILE, SEE SHEET NO. 5

|                                 |                           |
|---------------------------------|---------------------------|
| PROJECT REFERENCE NO.<br>B-4104 | SHEET NO.<br>EC-5/CONST.4 |
| RW SHEET NO.                    |                           |
| ROADWAY DESIGN ENGINEER         | HYDRAULICS ENGINEER       |

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



-DR-

|                        |                        |
|------------------------|------------------------|
| PI Sta 10+49.71        | PI Sta 11+70.71        |
| Δ = 47° 39' 33.8" (LT) | Δ = 45° 39' 47.3" (RT) |
| D = 179' 02' 57.5"     | D = 57' 17' 44.8"      |
| L = 26.62'             | L = 79.70'             |
| T = 14.13'             | T = 42.10'             |
| R = 32.00'             | R = 100.00'            |

**LEGEND**

|  |                  |
|--|------------------|
|  | PAVED SHOULDER   |
|  | APPROACH SLAB    |
|  | PAVEMENT REMOVAL |

FOR -L- PROFILE, SEE SHEET NO. 5

8/17/99  
 28-SEP-2007 08:15:52 b:\4104\environmental\design\b4104\_rdy\_psh\_04.dgn  
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