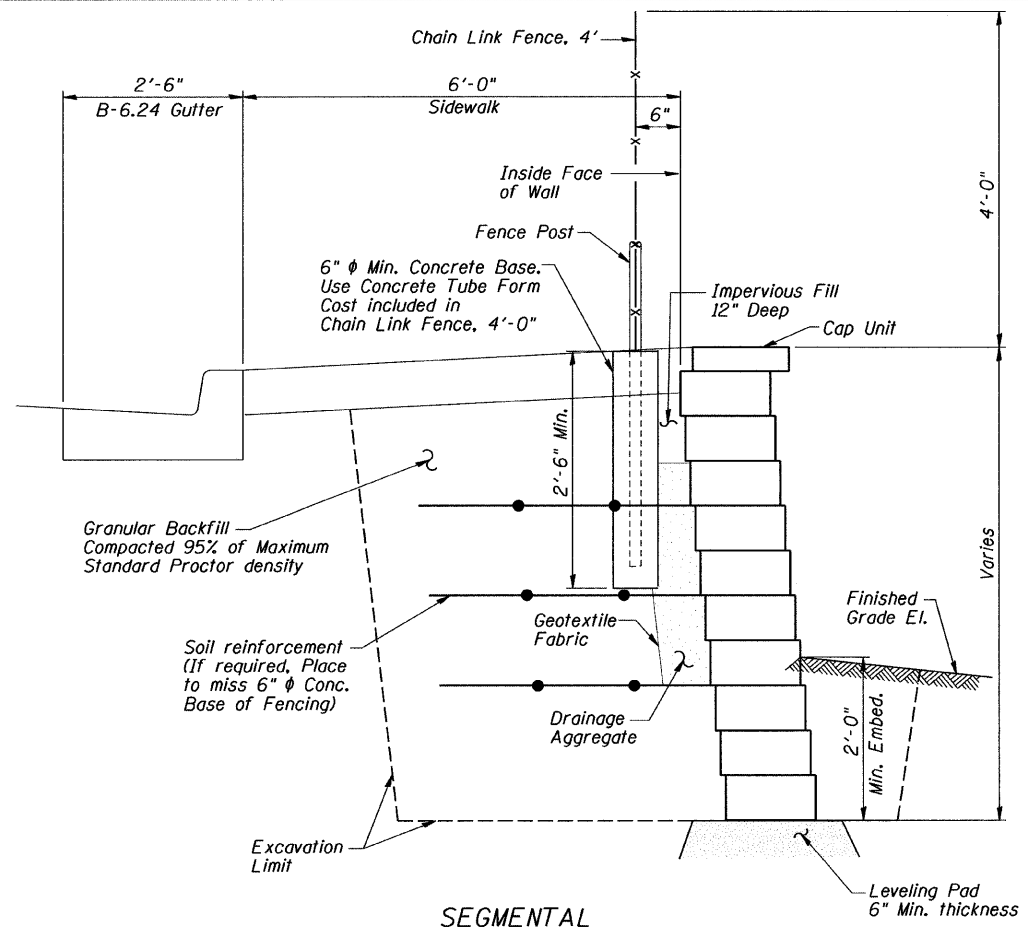
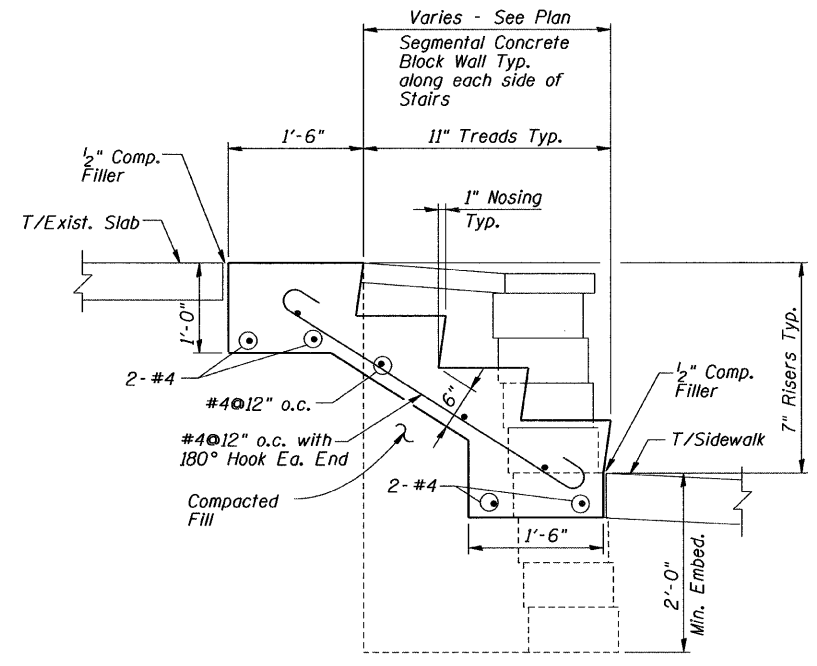


|                            |              |                |   |                  |                         |
|----------------------------|--------------|----------------|---|------------------|-------------------------|
| ROUTE NO.<br>F.A.P.<br>866 | SECTION<br>* | COUNTY<br>LAKE | TOTAL SHEETS<br>554                               | SHEET NO.<br>316 | SHEET NO. 4 OF 4 SHEETS |
| FED. ROAD DIST. NO. 7      |              | ILLINOIS       | FED. AID PROJECT<br>*(L-2EW,R)6,6A & 6 EXT) WRS-1 |                  |                         |

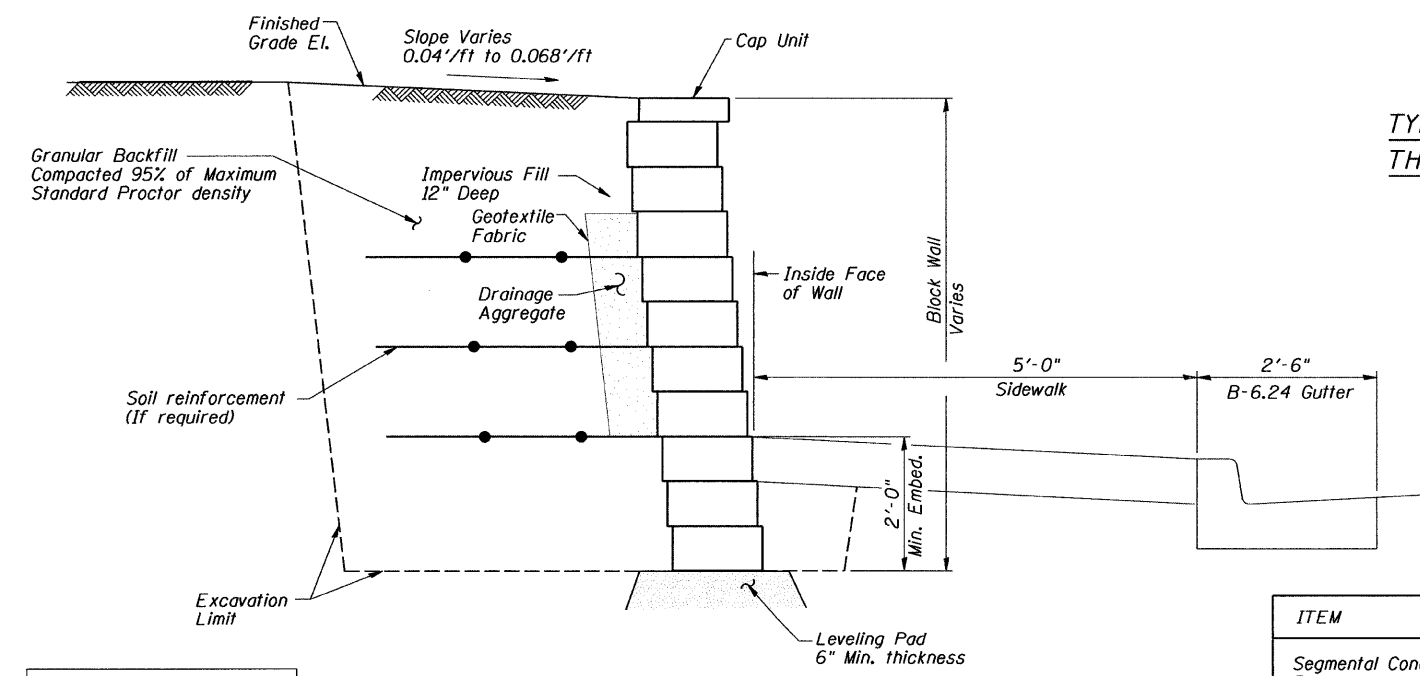
|  |               |             |   |
|--|---------------|-------------|---|
| ROUTE  | FAP Route 866 | DESCRIPTION | IL Route 83 Retaining Wall Improvements             |
| SECT.  | 5VB-BR        | STRUCT. NO. |   |
| COUNTY   | Laurel        | LOCATION    | 175'S of First Street S. B., TWP. 46 N., RNC. 10 E. |
| Boring No.   | RW-6          | D           | B   |
| Station  | 453+50        | L           | L   |
| Offset   | 23.00ft LT    | P           | O   |
| Surface Elev.  | 792.00 ft     | H           | S   |
|  |               | Qu          | W   |
|  |               | tsf         | %   |
| Surface Water Elev. _____                              |               |             |   |
| Groundwater Elev. when drilling _____                  |               |             |   |
| at Completion _____                                    |               |             |   |
| after _____ Hrs. _____                                 |               |             |   |
| FILL - Dark brown CLAY LOAM                            |               |             |   |
|  |               | HA          | B   |
|  |               | 5.0         | 13.5  |
|  |               | 15Z         |   |
| Hard to very stiff brown CLAY, trace gravel, moist A-6 |               |             |   |
|  |               | HA          | B   |
|  |               | 4.2         | 15.6  |
|  |               | 15Z         |   |
|  |               | HA          | B   |
|  |               | 3.8         | 15.3  |
|  |               | 15Z         |   |
|  |               | HA          | B   |
|  |               | 3.3         | 13.7  |
|  |               | 15Z         |   |
| End of Boring at 10.0 feet                             |               |             |   |
| Boring performed by Hand auger methods.                |               |             |   |



SEGMENTAL CONCRETE BLOCK WALL NO. 5 CROSS SECTION



TYPICAL SECTION THRU CONCRETE STEPS



SEGMENTAL CONCRETE BLOCK WALL NO. 2 THRU 4 & NO. 6 THRU 12 CROSS SECTION

|          |        |
|----------|--------|
| DESIGNED | S.S.T. |
| CHECKED  | J.A.Z. |
| DRAWN    | E.B.   |
| CHECKED  | S.S.T. |

TOTAL BILL OF MATERIAL

| ITEM                          | UNIT    | Wall No. 2 | Wall No. 2A | Wall No. 3 | Wall No. 4 | Wall No. 5 | Wall No. 6 | Wall No. 7 | Wall No. 8 | Wall No. 9 | Wall No. 10 | Wall No. 11 | Wall No. 12 | TOTAL |
|-------------------------------|---------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------|
| Segmental Concrete Block Wall | Sq. Ft. | 342        | 30          | 533        | 311        | 607        | 476        | 224        | 139        | 292        | 308         | 370         | 335         | 3,967 |
| Chain Link Fence, 4'          | Foot    | -          | -           | -          | -          | 134        | -          | -          | -          | -          | -           | -           | -           | 134   |
| Concrete Steps                | Cu. Yd. | 0.4        | -           | 1.2        | 0.5        | -          | 1.2        | 0.8        | -          | 0.8        | 1.1         | 0.5         | 1.0         | 7.5   |

Note:  
1. Cost of Excavation, Geotextile Fabric & Drainage Aggregate included in the Segmental Concrete Block Wall.

**RETAINING WALL SECTION, DETAILS & B.O.M.**

ILLINOIS ROUTE 83  
F.A.P. ROUTE 866  
LAKE COUNTY  
Sta. 407+50 to Sta. 454+96.21

DATE: 1/30/09  
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC  
CHICAGO ILLINOIS