

12/10/2007 12:07:59 PM

Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Work this sheet with sheets 39 & 40 of 48.  
 Pour steps monolithically with cap.

|                       |         |                    |         |                  |
|-----------------------|---------|--------------------|---------|------------------|
| ROUTE NO.             | SECTION | COUNTY             | STATION | SHEET            |
| F.A.P. 310            | *       | MADISON            | 239     | 160              |
| FED. ROAD DIST. NO. Y |         | ILLINOIS           |         | FED. AID PROJECT |
| * 60-15HB-1           |         | CONTRACT NO. 76635 |         |                  |

**S.B. WEST ABUTMENT**  
**BILL OF MATERIAL**

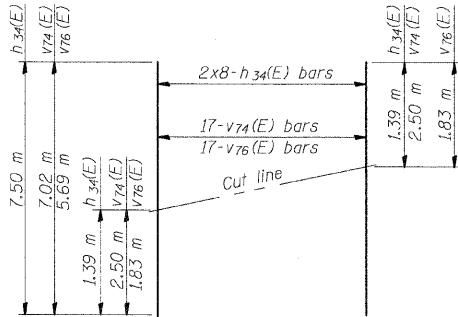
| Bar                                | No.            | Size  | Length (m) | Shape |
|------------------------------------|----------------|-------|------------|-------|
| n(E)                               | 22             | #15   | 13.00      |       |
| h1(E)                              | 12             | #15   | 3.10       |       |
| h2(E)                              | 2              | #15   | 8.82       |       |
| h3(E)                              | 4              | #15   | 4.00       |       |
| h4(E)                              | 4              | #15   | 1.60       |       |
| h5(E)                              | 6              | #15   | 12.81      |       |
| h6(E)                              | 10             | #15   | 4.01       |       |
| h7(E)                              | 2              | #15   | 1.74       |       |
| h8(E)                              | 18             | #15   | 2.54       |       |
| h9(E)                              | 18             | #15   | 2.54       |       |
| h10(E)                             | 16             | #15   | 1.01       |       |
| h11(E)                             | 23             | #15   | 1.35       |       |
| h20(E)                             | 6              | #15   | 1.05       |       |
| h21(E)                             | 25             | #15   | 1.35       |       |
| h22(E)                             | 6              | #15   | 1.05       |       |
| h23(E)                             | 6              | #15   | 0.78       |       |
| h24(E)                             | 6              | #15   | 0.78       |       |
| h26(E)                             | 12             | #15   | 9.67       |       |
| h27(E)                             | 16             | #15   | 10.28      |       |
| h28(E)                             | 4              | #15   | 3.35       |       |
| h29(E)                             | 2              | #15   | 3.47       |       |
| h30(E)                             | 8              | #15   | 4.03       |       |
| h31(E)                             | 6              | #25   | 4.70       |       |
| h32(E)                             | 4              | #25   | 8.30       |       |
| h34(E)                             | 16             | #15   | 7.50       |       |
| n(E)                               | 104            | #25   | 2.33       |       |
| p(E)                               | 6              | #20   | 13.80      |       |
| p1(E)                              | 11             | #20   | 3.20       |       |
| p2(E)                              | 2              | #20   | 9.11       |       |
| p3(E)                              | 3              | #20   | 2.21       |       |
| v68(E)                             | 8              | #25   | 3.17       |       |
| v69(E)                             | 8              | #25   | 3.30       |       |
| v70(E)                             | 8              | #25   | 3.42       |       |
| v71(E)                             | 8              | #25   | 3.54       |       |
| v72(E)                             | 6              | #25   | 3.67       |       |
| v73(E)                             | 8              | #15   | 5.72       |       |
| v74(E)                             | 17             | #15   | 7.02       |       |
| v75(E)                             | 8              | #15   | 5.05       |       |
| v76(E)                             | 17             | #15   | 5.69       |       |
| k(E)                               | 47             | #25   | 3.16       |       |
| h1(E)                              | 48             | #20   | 2.60       |       |
| u(E)                               | 12             | #15   | 3.16       |       |
| Concrete Structures                | m <sup>3</sup> | 109.4 |            |       |
| Reinforcement Bars (Epoxy Coated)  | kg             | 7190  |            |       |
| Structure Excavation               | m <sup>3</sup> | 225   |            |       |
| Furnishing Metal Pile Shell 356 mm | m              | 542   |            |       |
| Driving Piles                      | m              | 542   |            |       |
| Concrete Sealer                    | m <sup>2</sup> | 10    |            |       |
| Form Liner                         | m <sup>2</sup> | 85    |            |       |
| Textured Surface                   | m <sup>2</sup> | 85    |            |       |
| v12(E)                             | 6              | #15   | 3.29       |       |
| v13(E)                             | 8              | #15   | 3.41       |       |
| v14(E)                             | 8              | #15   | 3.53       |       |
| v15(E)                             | 8              | #15   | 3.66       |       |
| v16(E)                             | 8              | #15   | 3.78       |       |
| v17(E)                             | 6              | #15   | 3.90       |       |
| v18(E)                             | 6              | #15   | 3.36       |       |
| v19(E)                             | 37             | #15   | 3.56       |       |
| v20a(E)                            | 96             | #15   | 0.90       |       |
| v41(E)                             | 42             | #15   | 2.52       |       |
| v44(E)                             | 42             | #15   | 1.85       |       |
| v61(E)                             | 6              | #20   | 3.05       |       |
| v62(E)                             | 8              | #20   | 3.17       |       |
| v63(E)                             | 8              | #20   | 3.30       |       |
| v64(E)                             | 8              | #20   | 3.42       |       |
| v65(E)                             | 8              | #20   | 3.54       |       |
| v66(E)                             | 6              | #20   | 3.67       |       |
| v67(E)                             | 6              | #25   | 3.05       |       |

**APPR. BENT-PILE DATA**

Type & Size: Metal Shell - 356 mm dia. x 6.35 mm walls  
 Nominal Required Bearing: 900 KN  
 Allowable Resistance Available: 300 KN  
 Est. Length: 18.5 m  
 No. Req'd.: 12

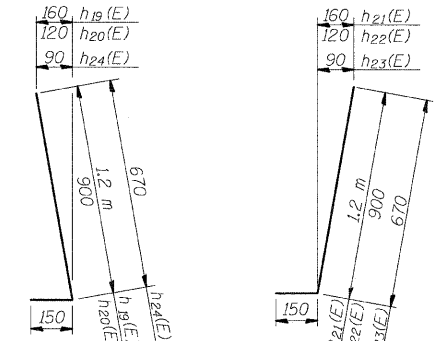
**ABUT.-PILE DATA**

Type & Size: Metal Shell - 356 mm dia. x 6.35 mm walls  
 Nominal Required Bearing: 1500 KN  
 Allowable Resistance Available: 500 KN  
 Est. Length: 16.0 m  
 No. Req'd.: 20



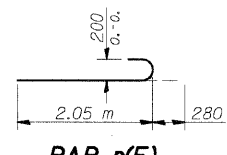
**FIELD CUTTING DIAGRAM**

Order h34(E), v74(E) and v76(E) bars full length. Cut to fit and use remainder of bars in opposite face of curtain wall.

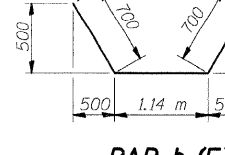


**BARS h19(E), h20(E) & h24(E)**  
**BARS h21(E), h22(E) & h23(E)**

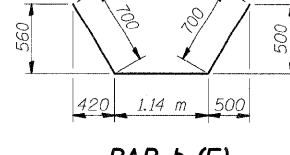
|          |         |
|----------|---------|
| DESIGNED | ADL     |
| CHECKED  | WLW     |
| DRAWN    | ADL/DGM |
| CHECKED  | WLW     |



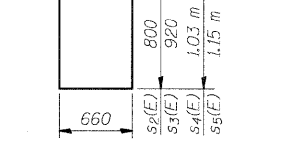
**BAR n(E)**



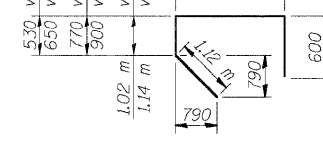
**BAR h8(E)**



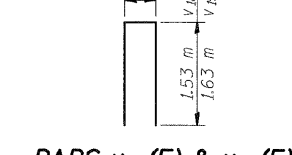
**BAR h9(E)**



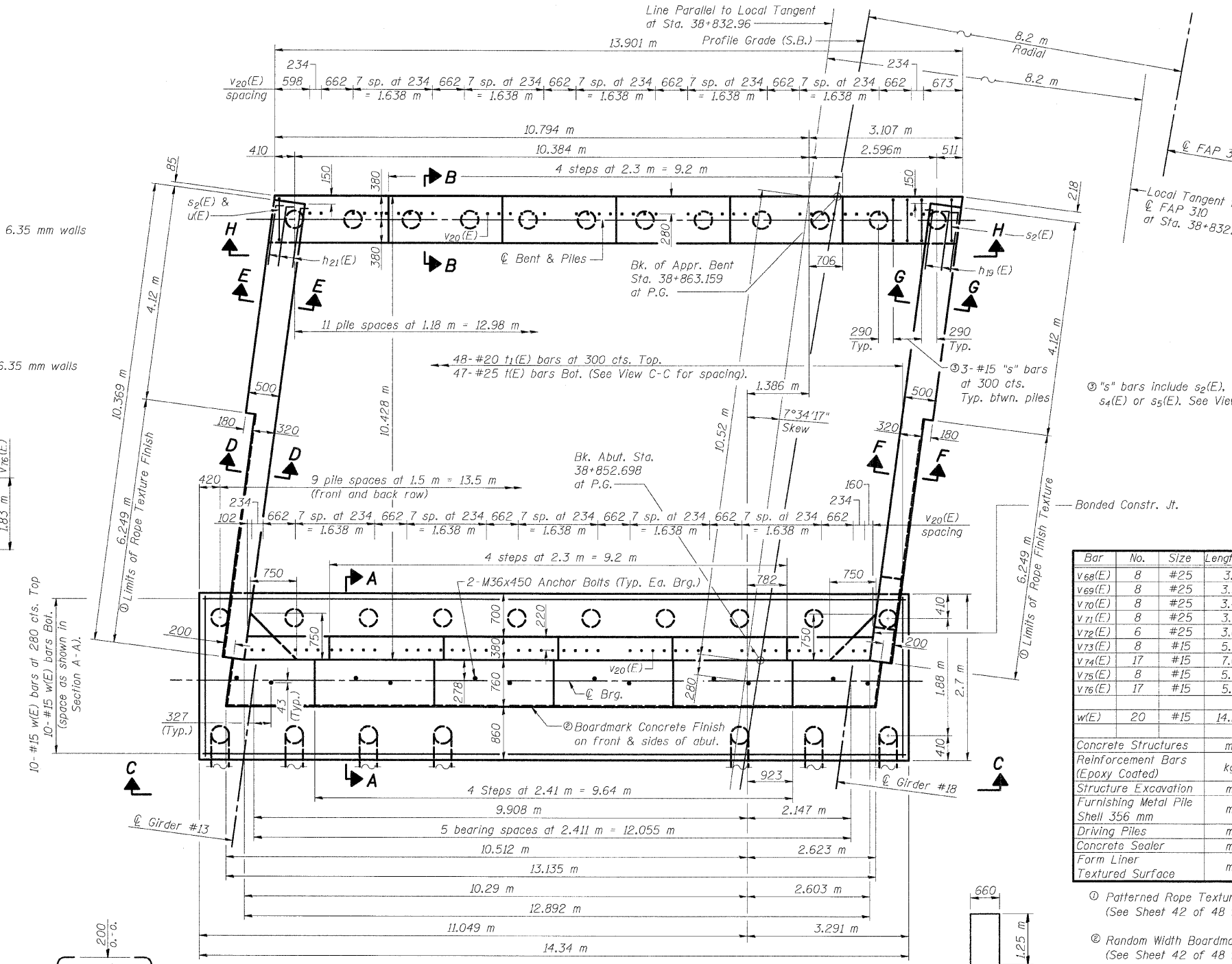
**BARS s2(E) thru s5(E)**



**BARS v12(E) thru v17(E)**



**BARS v18(E) & v19(E)**



**PLAN**

**BAR u(E)**

**S.B. WEST ABUTMENT (1 OF 3)**  
**FAP RTE. 310 (IL RTE. 255) OVER**  
**CH ROUTE 4 (HUMBERT ROAD)**  
**SECTION 60-15HB-1**  
**MADISON COUNTY**  
**STATION 38+829.909**  
**SN 060-0308 (NB) & 060-0309 (SB)**