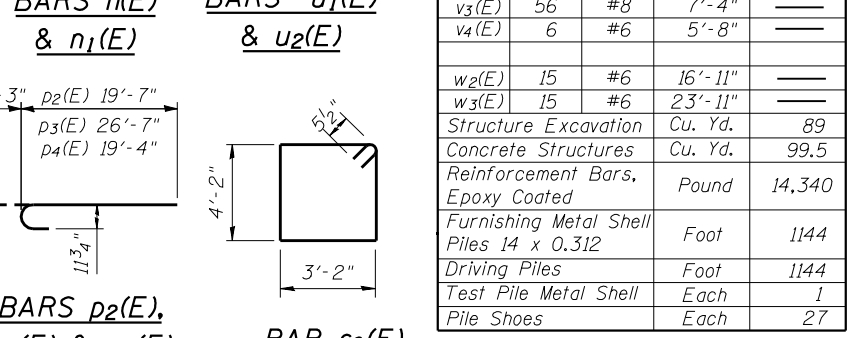
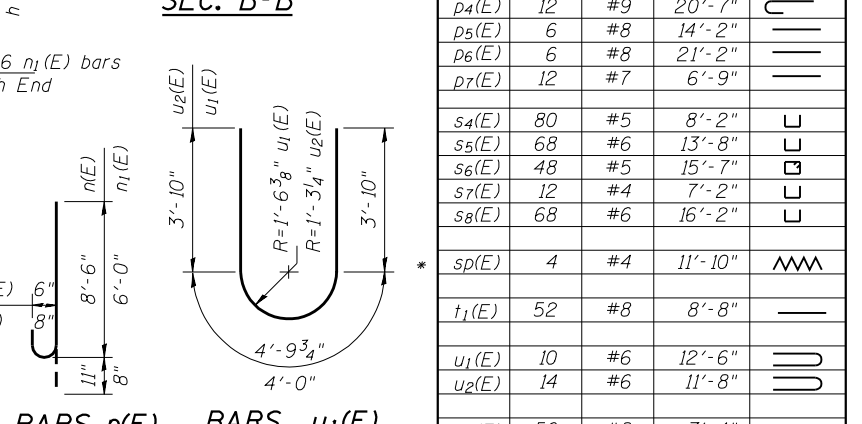
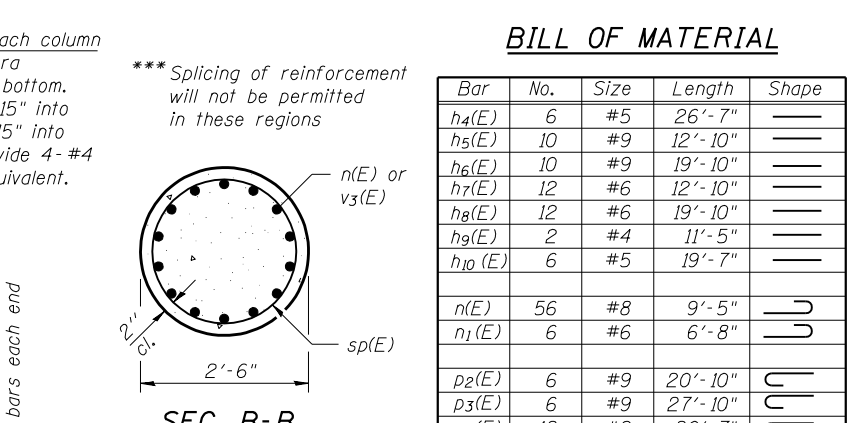
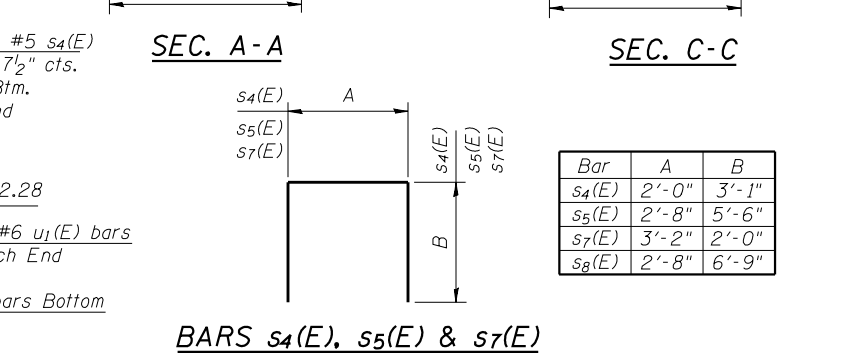
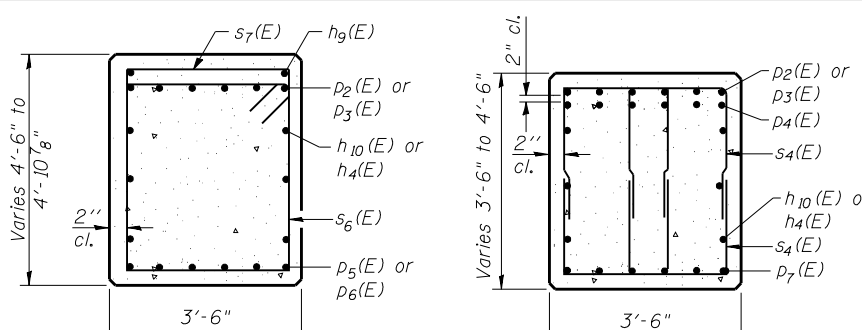
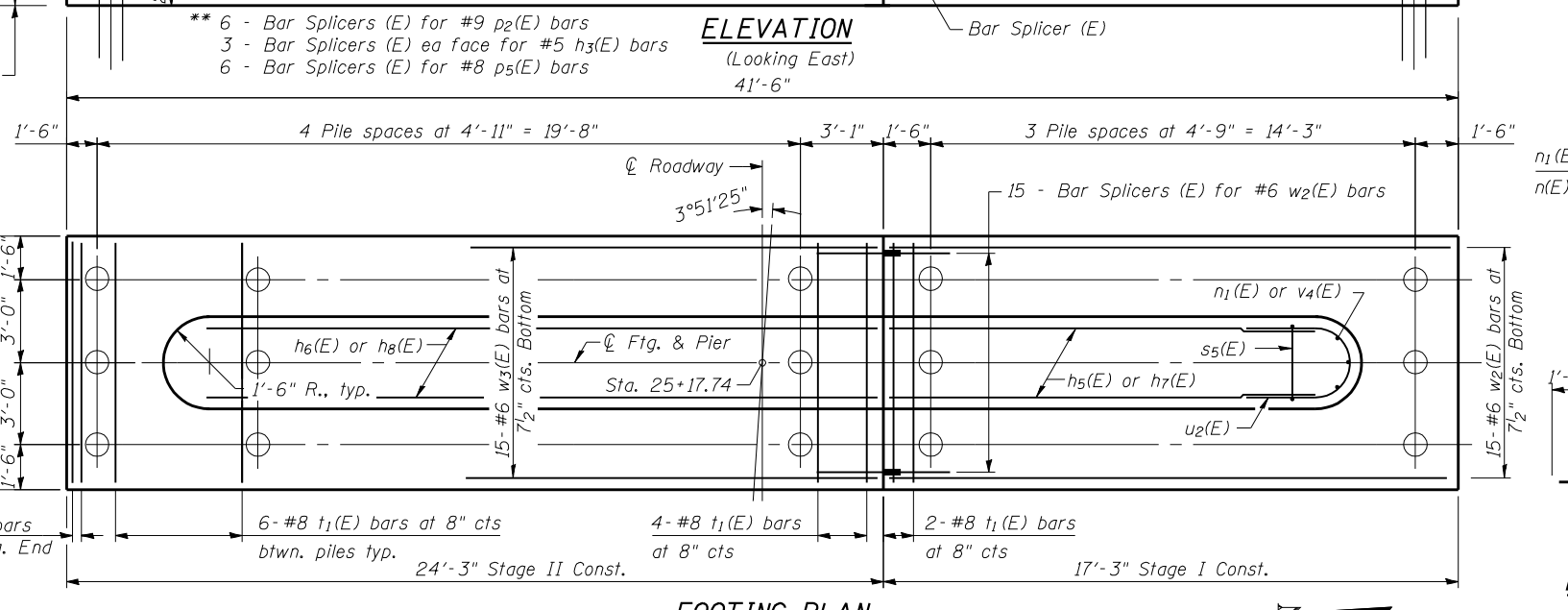
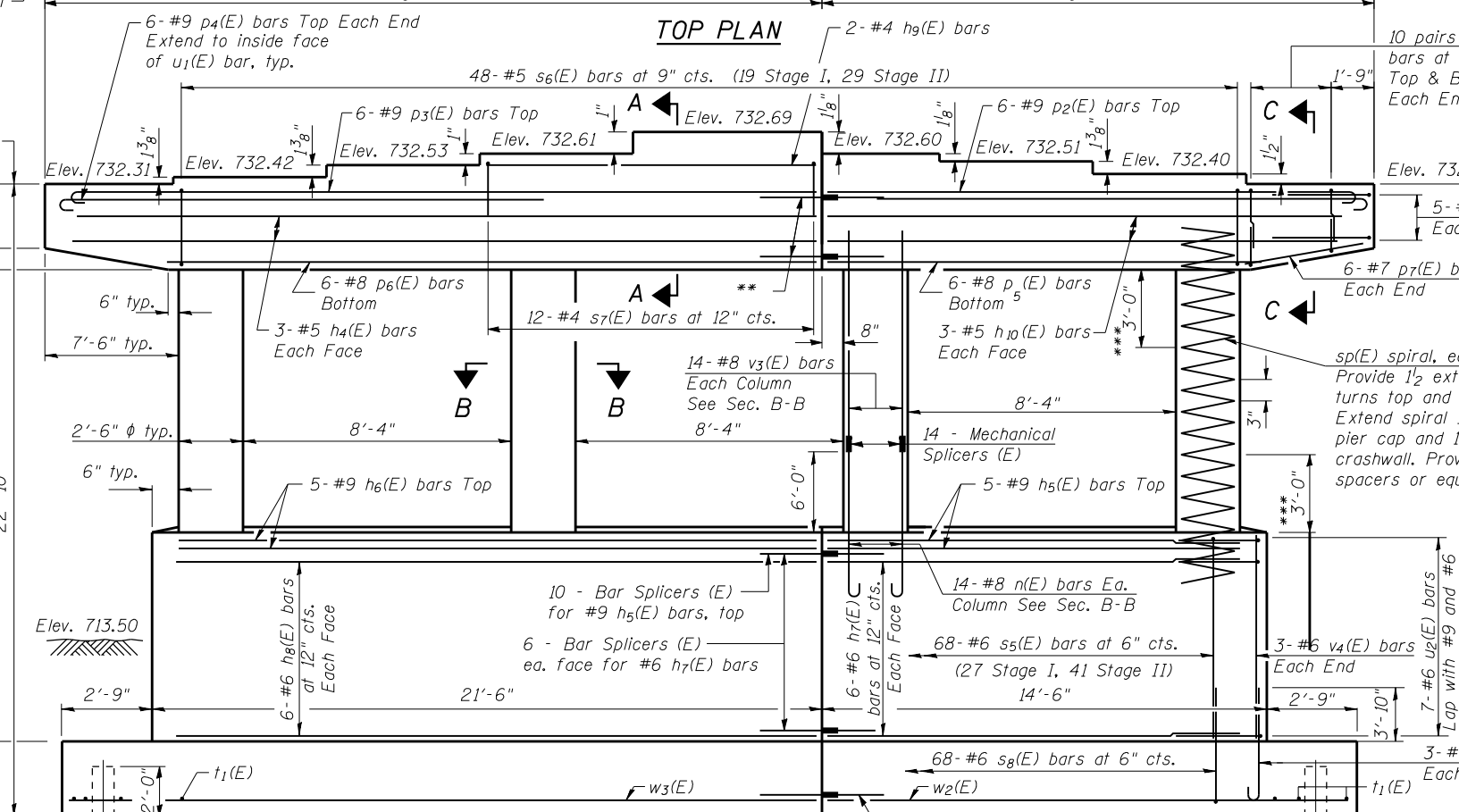
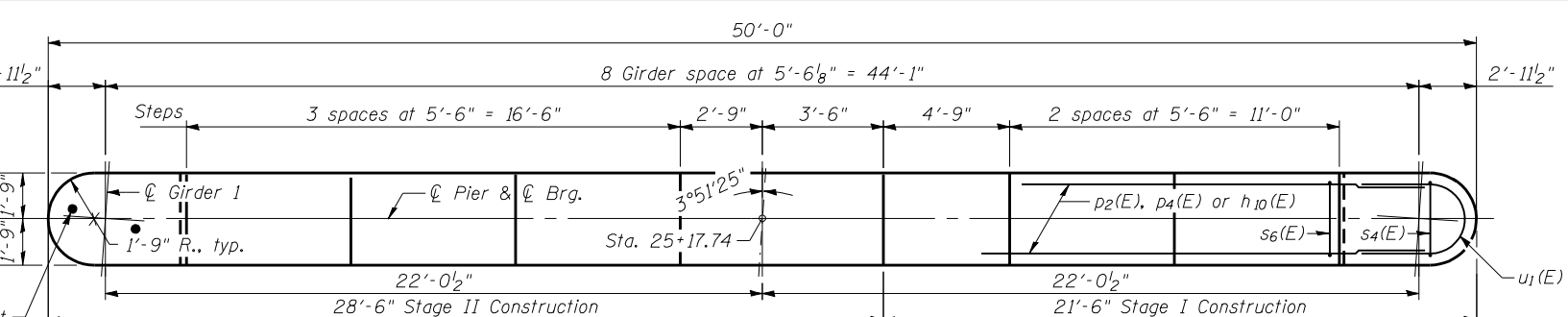
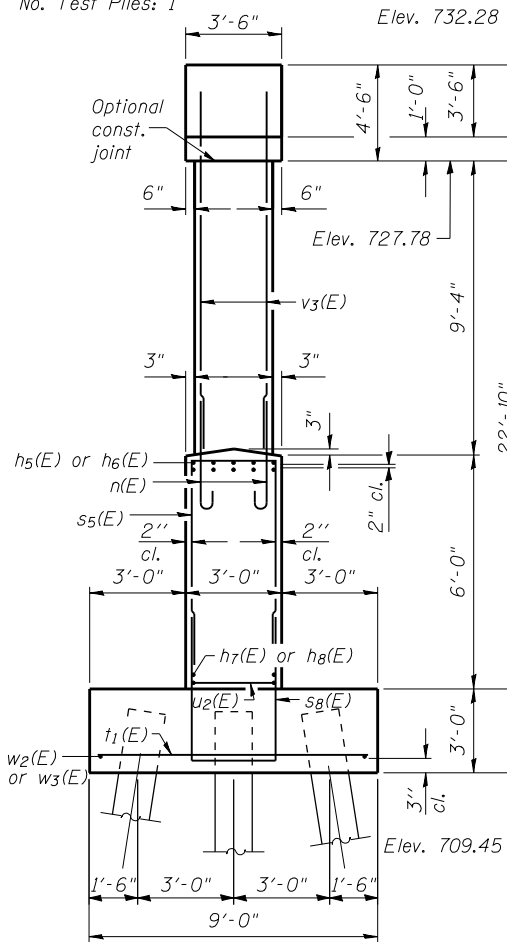


Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 24 of 27.  
 See Sheet 23 of 27 for bar splicer and mechanical splicer details.  
 When splicing of spiral reinforcement is necessary, the spirals shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.

**PILE DATA**

Type: Metal Shell 14 x 0.3125  
 See Anchor Bolt Location Sketch  
 Nominal Required Bearing: 477 kip  
 Factored Resistance Available: 262 kip  
 Est. Length: 44'  
 No. Production Piles: 26  
 No. Test Piles: 1



**BILL OF MATERIAL**

| Bar                                     | No.     | Size | Length  | Shape  |
|---|---------|------|---------|--------|
| h4(E)                                   | 6       | #5   | 26'-7"  | —      |
| h5(E)                                   | 10      | #9   | 12'-10" | —      |
| h6(E)                                   | 10      | #9   | 19'-10" | —      |
| h7(E)                                   | 12      | #6   | 12'-10" | —      |
| h8(E)                                   | 12      | #6   | 19'-10" | —      |
| h9(E)                                   | 2       | #4   | 11'-5"  | —      |
| h10(E)                                  | 6       | #5   | 19'-7"  | —      |
| n(E)                                    | 56      | #8   | 9'-5"   | —      |
| n1(E)                                   | 6       | #6   | 6'-8"   | —      |
| p2(E)                                   | 6       | #9   | 20'-10" | —      |
| p3(E)                                   | 6       | #9   | 27'-10" | —      |
| p4(E)                                   | 12      | #9   | 20'-7"  | —      |
| p5(E)                                   | 6       | #8   | 14'-2"  | —      |
| p6(E)                                   | 6       | #8   | 21'-2"  | —      |
| p7(E)                                   | 12      | #7   | 6'-9"   | —      |
| s4(E)                                   | 80      | #5   | 8'-2"   | —      |
| s5(E)                                   | 68      | #6   | 13'-8"  | —      |
| s6(E)                                   | 48      | #5   | 15'-7"  | —      |
| s7(E)                                   | 12      | #4   | 7'-2"   | —      |
| s8(E)                                   | 68      | #6   | 16'-2"  | —      |
| sp(E)                                   | 4       | #4   | 11'-10" | —      |
| t1(E)                                   | 52      | #8   | 8'-8"   | —      |
| u1(E)                                   | 10      | #6   | 12'-6"  | —      |
| u2(E)                                   | 14      | #6   | 11'-8"  | —      |
| v3(E)                                   | 56      | #8   | 7'-4"   | —      |
| v4(E)                                   | 6       | #6   | 5'-8"   | —      |
| w2(E)                                   | 15      | #6   | 16'-11" | —      |
| w3(E)                                   | 15      | #6   | 23'-11" | —      |
| Structure Excavation                    | Cu. Yd. |      |         | 89     |
| Concrete Structures                     | Cu. Yd. |      |         | 99.5   |
| Reinforcement Bars, Epoxy Coated        | Pound   |      |         | 14,340 |
| Furnishing Metal Shell Piles 14 x 0.312 | Foot    |      |         | 1144   |
| Driving Piles                           | Foot    |      |         | 1144   |
| Test Pile Metal Shell                   | Each    |      |         | 1      |
| Pile Shoes                              | Each    |      |         | 27     |

\* Length is height of spiral.

P-24 11-1-09

**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

|                                 |                   |           |
|---------------------------------|-------------------|-----------|
| USER NAME = .MML.               | DESIGNED - GJB    | REVISED - |
| PLOT SCALE = 0:2.000000 ' / IN. | CHECKED - RKM     | REVISED - |
| PLOT DATE = 8/10/2012           | DRAWN - CFC       | REVISED - |
|                                 | CHECKED - RKM/MCB | REVISED - |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PIER**  
**STRUCTURE NO. 010-0291**  
 SHEET NO. 22 OF 27 SHEETS

| F.A.I. RTE.               | SECTION       | COUNTY    | TOTAL SHEETS | SHEET NO.          |
|---------------------------|---------------|-----------|--------------|--------------------|
| 57                        | (10-32HB-2)BY | CHAMPAIGN | 81           | 60                 |
|                           |               |           |              | CONTRACT NO. 70109 |
| ILLINOIS FED. AID PROJECT |               |           |              |                    |