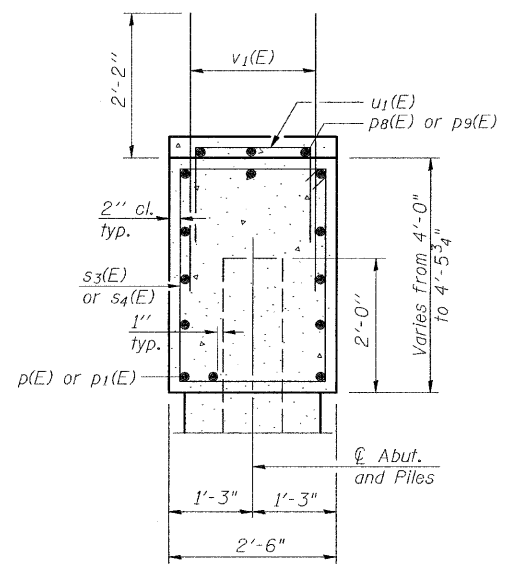
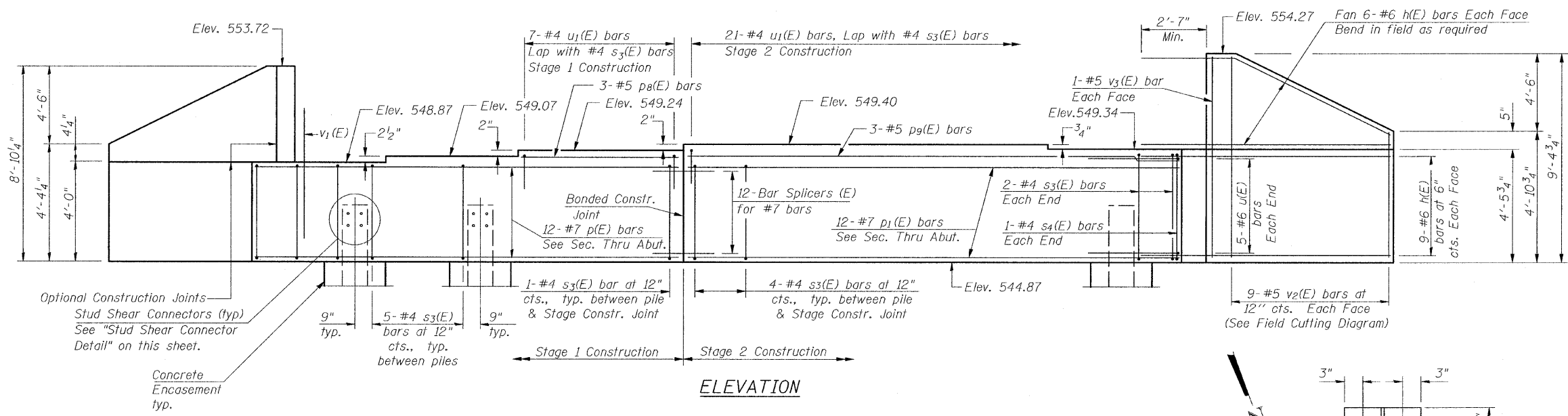
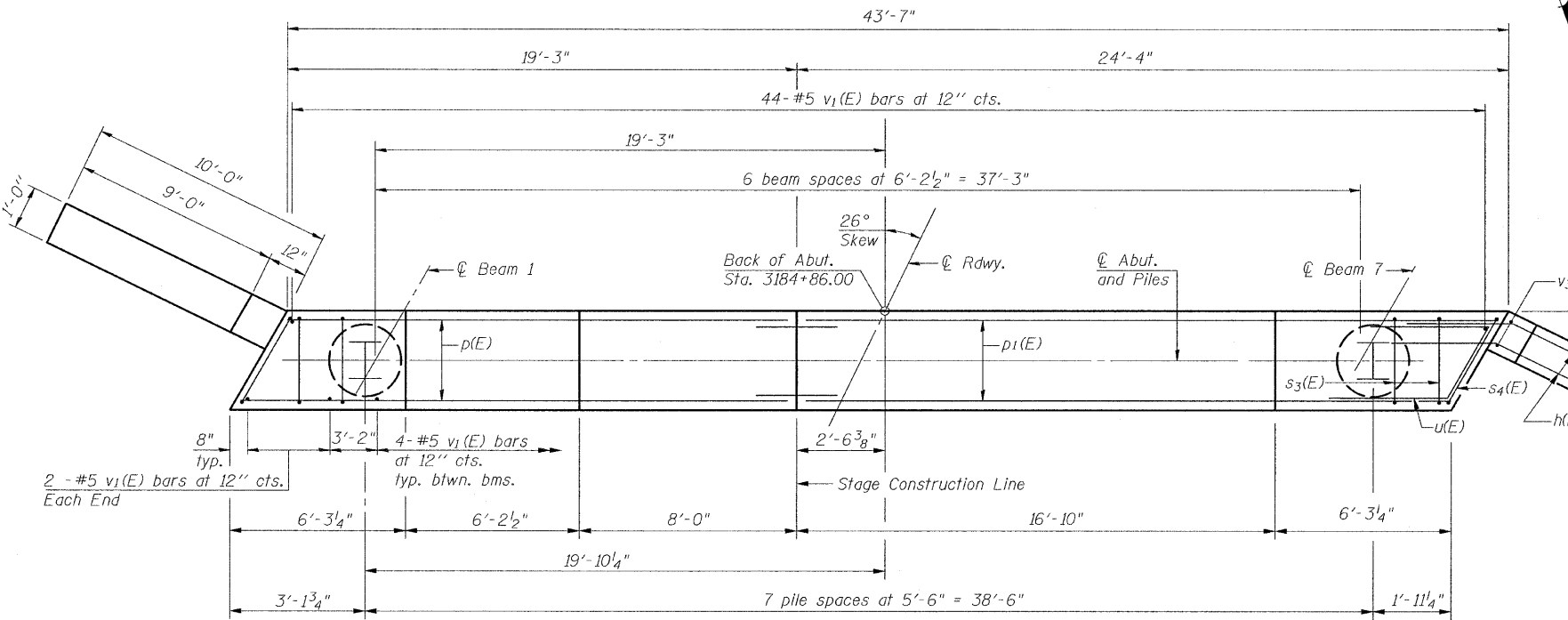


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

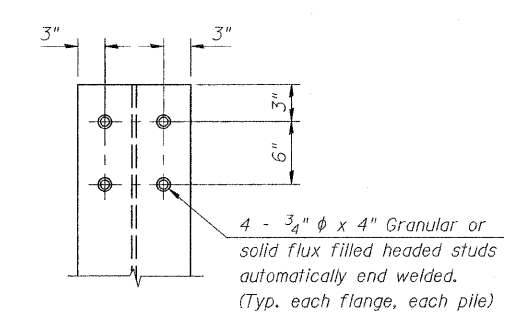
Notes:  
Four steps monolithically with cap.



SEC. THRU ABUT.



PLAN



STUD SHEAR CONNECTOR DETAIL

Typical at all piles in abutment and piers.

BILL OF MATERIAL

| Bar                              | No. | Size    | Length  | Shape |
|----------------------------------|-----|---------|---------|-------|
| h(E)                             | 60  | #6      | 12'-6"  | —     |
| p(E)                             | 12  | #7      | 19'-0"  | —     |
| p1(E)                            | 12  | #7      | 22'-11" | —     |
| p8(E)                            | 3   | #5      | 7'-6"   | —     |
| p9(E)                            | 3   | #5      | 22'-9"  | —     |
| s3(E)                            | 39  | #4      | 12'-5"  | □     |
| s4(E)                            | 2   | #4      | 12'-11" | □     |
| u(E)                             | 10  | #6      | 10'-8"  | ┌     |
| u1(E)                            | 28  | #4      | 8'-2"   | ┌     |
| v1(E)                            | 56  | #5      | 4'-4"   | —     |
| v2(E)                            | 18  | #5      | 13'-6"  | —     |
| v3(E)                            | 4   | #5      | 9'-0"   | —     |
| Structure Excavation             |     | Cu. Yd. | 10.0    |       |
| Concrete Structures              |     | Cu. Yd. | 22.9    |       |
| Reinforcement Bars, Epoxy Coated |     | Pound   | 3450    |       |
| Furnishing Steel Piles, HP 10x42 |     | Foot    | 217     |       |
| Driving Piles                    |     | Foot    | 217     |       |
| Test Pile, Steel HP 10x42        |     | Each    | 1       |       |
| Concrete Encasement              |     | Cu. Yd. | 2.8     |       |
| Bar Splicers                     |     | Each    | 12      |       |
| Stud Shear Connectors            |     | Each    | 64      |       |

For details of Bar Splicers, see sheet 26 of 29.  
For details of piles and Concrete Encasement, see sheet 25 of 29.

WEST ABUTMENT  
STRUCTURE NO. 012-0073

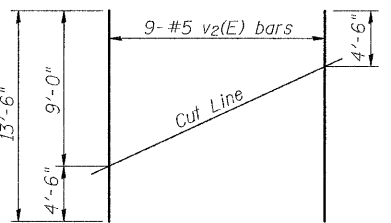
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|-------------------------------------------------|--------------------|-----------|--------|--------------|-----------|
| SHEET NO.<br>21 OF<br>29 SHEETS                 | F.A.S. RTE.        | SECTION   | COUNTY | TOTAL SHEETS | SHEET NO. |
|                                                 | 1707               | (BX-B)B-1 | CLARK  | 44           | 30        |
|                                                 | CONTRACT NO. 74169 |           |        |              |           |
| FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT |                    |           |        |              |           |

PILE DATA

Type: HP 10x42  
Nominal Required Bearing: 335 k  
Factored Resistance Available: 167 k  
Est. Length: 31'  
No. Production Piles: 7  
No. Test Piles: 1

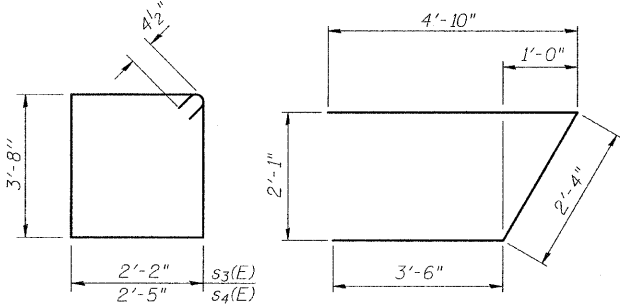
|          |     |
|----------|-----|
| DESIGNED | SCD |
| CHECKED  | DRB |
| DRAWN    | THW |
| CHECKED  | SCD |

**ie** consultants  
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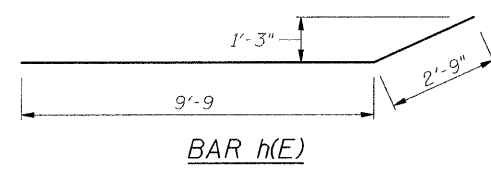
FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s3(E) & s4(E)

BAR u(E)



BAR h(E)