

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:

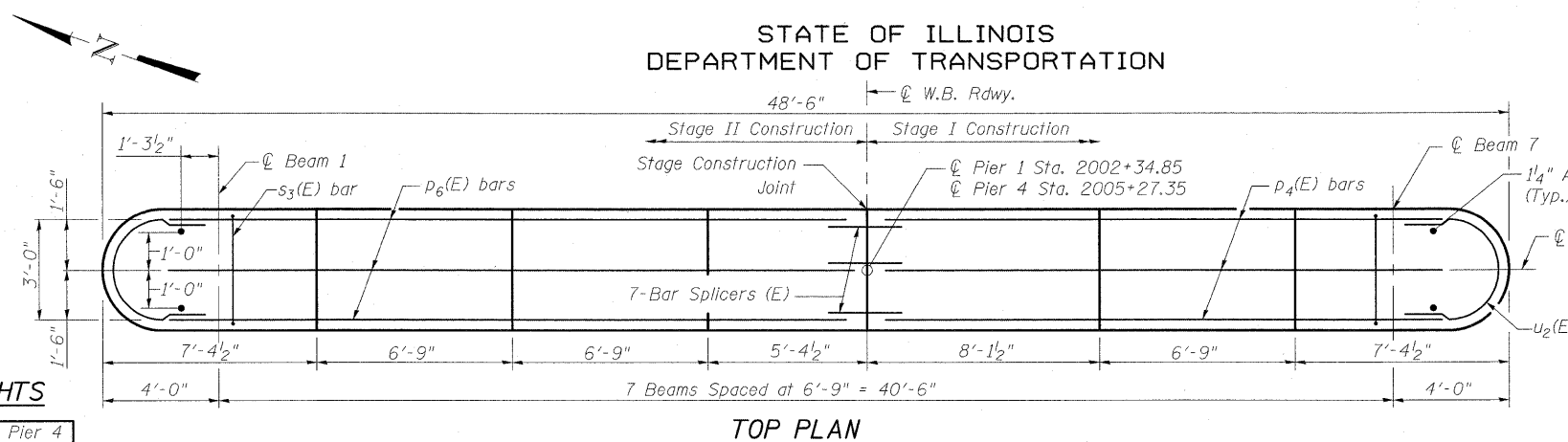
For Anchor Bolt & Side Retainer details, see sheet 34 of 58.
Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.
For details of piles, see sheet 50 of 58.
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.
See sheet 49 of 58 for Bar Splicer and Mechanical Splicer details.
For Pile Encasement Details see sheet 50 of 58.

PILE DATA

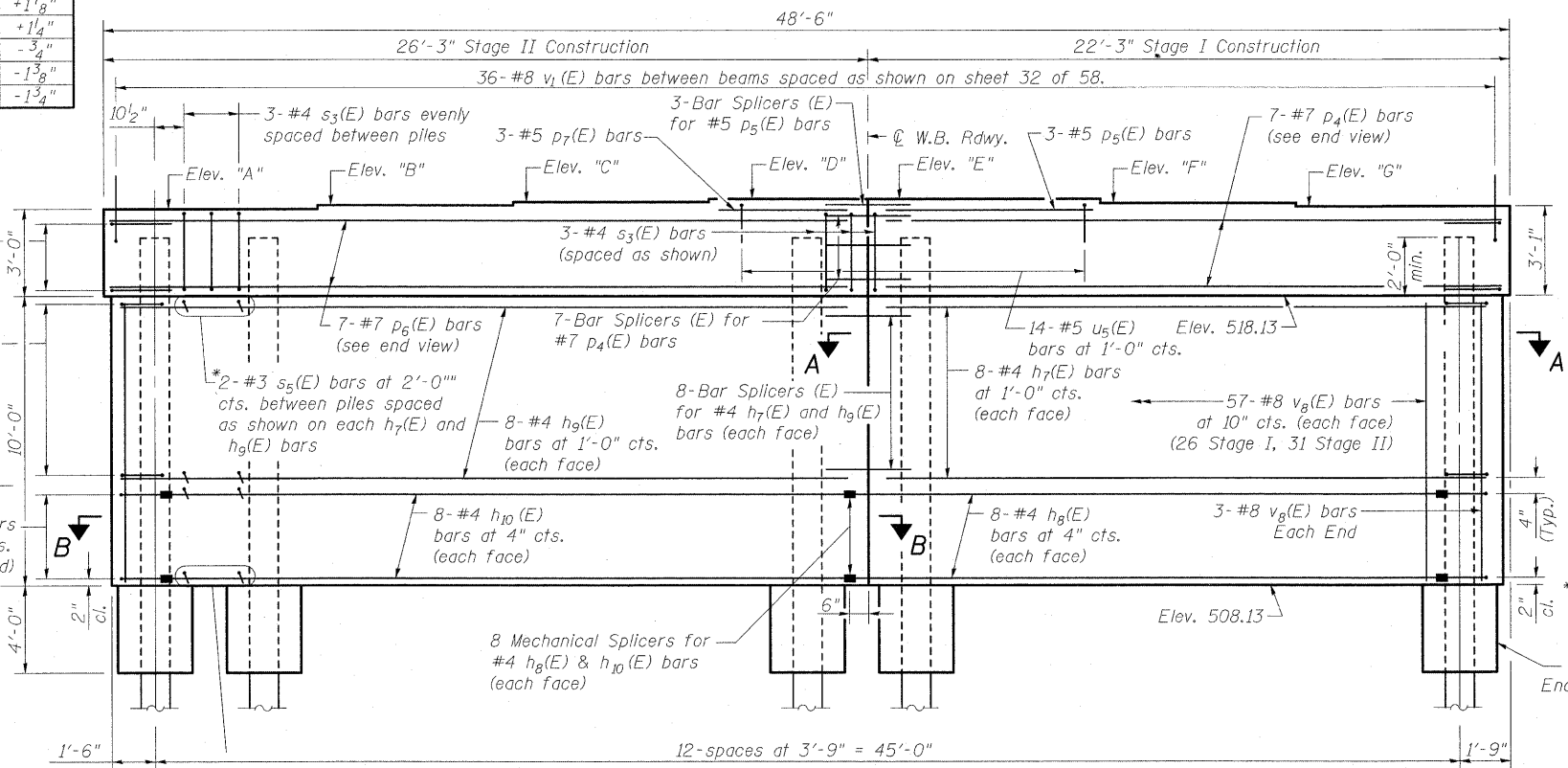
Type: HP 14x73
Nominal Required Bearing: 578 k
Factored Resistance Available: 289 k
Est. Length: 94 Pier 1
81 Pier 4
No. Production Piles: 12 per pier
No. Test Piles: 1 per pier

STEP HEIGHTS

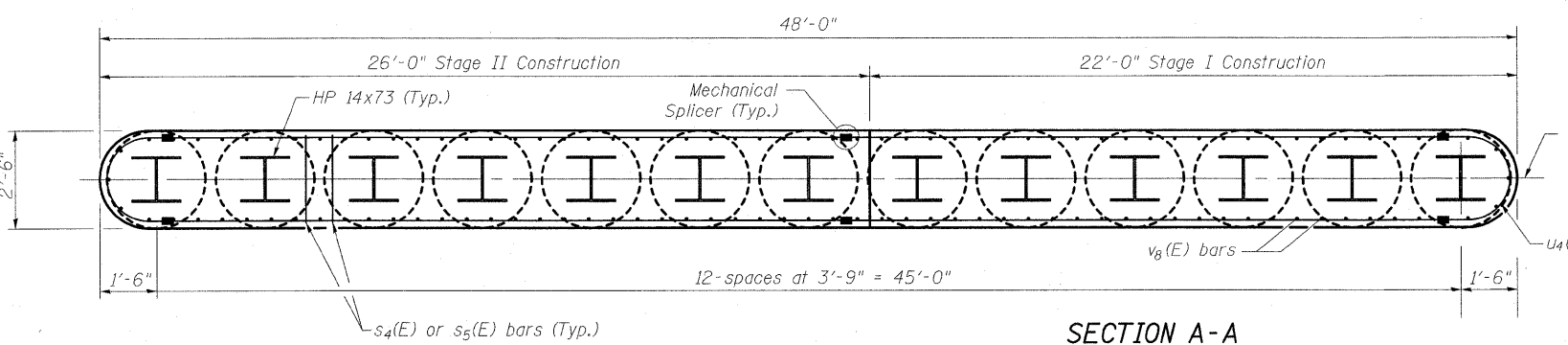
| Elev. | Pier 1 | Pier 4 |
|--------|----------------------------------|----------------------------------|
| A to B | +1 ⁵ / ₈ " | +1 ³ / ₄ " |
| B to C | +1 ³ / ₈ " | +1 ¹ / ₈ " |
| C to D | +1 ¹ / ₄ " | +1 ¹ / ₄ " |
| D to E | 0" | -3 ³ / ₄ " |
| E to F | -1 ³ / ₄ " | -1 ³ / ₄ " |
| F to G | -1 ¹ / ₂ " | -1 ³ / ₄ " |



TOP PLAN



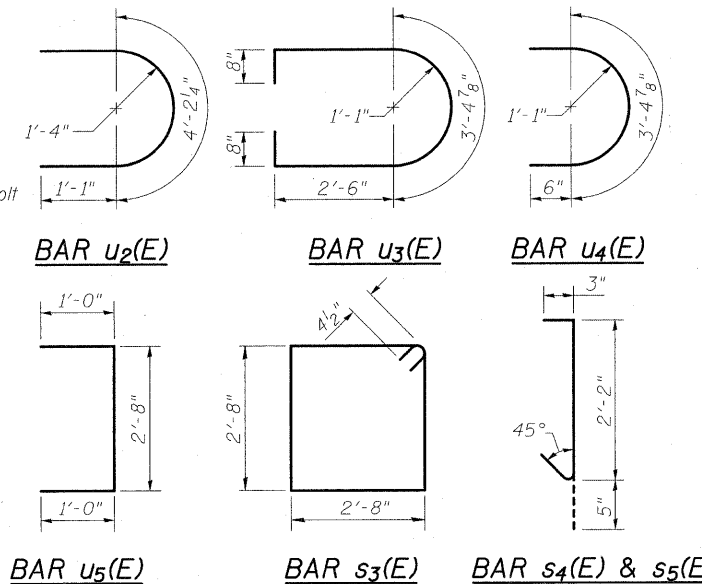
ELEVATION
(Looking East)



SECTION A-A



SECTION B-B



ELEVATION DATA

| Elev. | Pier 1 | Pier 4 |
|-------|--------|--------|
| A | 521.13 | 521.13 |
| B | 521.27 | 521.28 |
| C | 521.38 | 521.43 |
| D | 521.48 | 521.54 |
| E | 521.48 | 521.47 |
| F | 521.34 | 521.36 |
| G | 521.21 | 521.21 |

BILL OF MATERIAL FOR FOUR PIERS

| Bar | No. | Size | Length | Shape |
|---|-----|---------|--------|-------|
| h7(E) | 64 | #4 | 20'-6" | — |
| h8(E) | 64 | #4 | 20'-9" | — |
| h9(E) | 64 | #4 | 24'-6" | — |
| h10(E) | 64 | #4 | 23'-9" | — |
| p4(E) | 28 | #7 | 20'-6" | — |
| p5(E) | 12 | #5 | 7'-10" | — |
| p6(E) | 28 | #7 | 24'-6" | — |
| p7(E) | 12 | #5 | 5'-1" | — |
| s3(E) | 144 | #4 | 11'-5" | □ |
| s4(E) | 768 | #4 | 2'-10" | — |
| s5(E) | 768 | #3 | 2'-10" | — |
| u2(E) | 24 | #4 | 6'-5" | — |
| u3(E) | 64 | #4 | 9'-9" | — |
| u4(E) | 64 | #4 | 4'-5" | — |
| u5(E) | 56 | #5 | 4'-8" | — |
| v1(E) | 144 | #8 | 4'-2" | — |
| v8(E) | 480 | #8 | 9'-8" | — |
| Structure Excavation | | Cu. Yd. | 152 | |
| Concrete Structures | | Cu. Yd. | 243.8 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 24910 | |
| Furnishing Steel Piles, HP 14x73 | | Foot | 4200 | |
| Driving Piles | | Foot | 4200 | |
| Test Piles, Steel HP 14x73 | | Each | 4 | |
| Bar Splicers | | Each | 104 | |
| Mechanical Splicers | | Each | 192 | |
| Concrete Encasement | | Cu. Yd. | 38.0 | |
| Anchor Bolts, 1/4" | | Each | 16 | |
| Underwater Structure Excavation Protection Location 1 | | Each | 1 | |
| Underwater Structure Excavation Protection Location 2 | | Each | 1 | |
| Underwater Structure Excavation Protection Location 3 | | Each | 1 | |
| Underwater Structure Excavation Protection Location 4 | | Each | 1 | |

*Alternate the placement of 3" leg for s4(E) and s5(E) bars.
**Lap splicing of reinforcement shall not be allowed in this region.
Concrete Encasement (Typ.)

END VIEW
Note: Top of Pile Elev. = 520.14

| | |
|----------|---------------|
| DESIGNED | B.B. |
| CHECKED | A.C.S. |
| DRAWN | W.J.S. |
| CHECKED | C.J.F. & B.B. |

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Fax 618-288-4666

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|--|----------------|-----------------|--------------------|-------------------|--------------|
| SHEET NO. 44 | F.A.I. RTE. 70 | SECTION (25-3)B | COUNTY EFFINGHAM | TOTAL SHEETS 1416 | SHEET NO. 76 |
| 58 SHEETS | SN 025-0108 | | CONTRACT NO. 74296 | | |
| FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 70 | | | | | |

PIER 1 & 4 (W.B.)
STRUCTURE NO. 025-0108