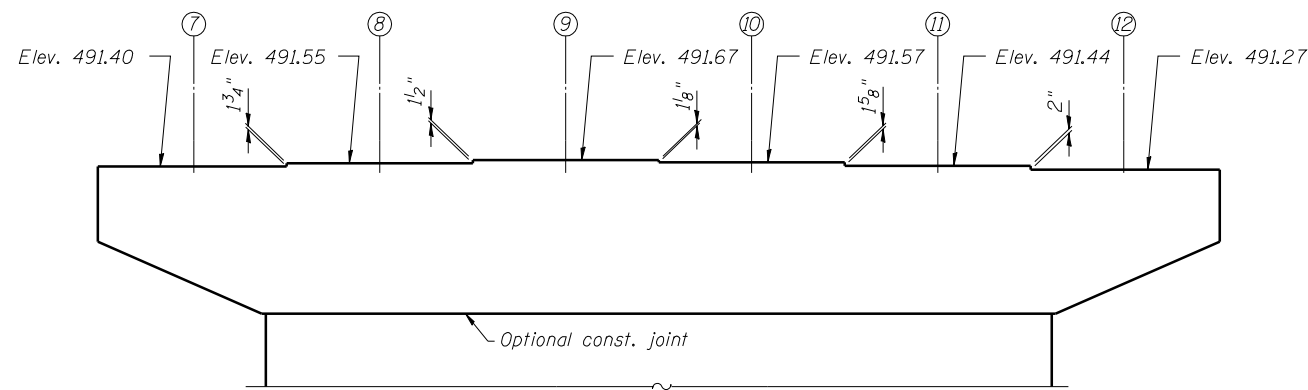


PIER 3
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|-----------------------------------|-----|---------|---------|-------|
| h ₁₀ (E) | 32 | #5 | 26'-9" | — |
| h ₁₁ (E) | 98 | #6 | 30'-6" | — |
| h ₁₂ (E) | 40 | #5 | 11'-3" | — |
| h ₁₃ (E) | 40 | #5 | 11'-2" | — |
| h ₁₄ (E) | 20 | #5 | 30'-0" | — |
| h ₁₅ (E) | 7 | #5 | 7'-5" | — |
| n ₆ (E) | 66 | #11 | 18'-6" | — |
| n ₇ (E) | 66 | #10 | 12'-7" | — |
| p ₃ (E) | 7 | #9 | 49'-5" | — |
| p ₄ (E) | 12 | #10 | 20'-6" | — |
| p ₅ (E) | 10 | #7 | 9'-9" | — |
| p ₆ (E) | 2 | #7 | 33'-2" | — |
| s ₃ (E) | 4 | #5 | 14'-7" | □ |
| s ₄ (E) | 4 | #5 | 15'-0" | □ |
| s ₅ (E) | 4 | #5 | 15'-5" | □ |
| s ₆ (E) | 4 | #5 | 15'-10" | □ |
| s ₇ (E) | 4 | #5 | 16'-3" | □ |
| s ₈ (E) | 4 | #5 | 16'-9" | □ |
| s ₉ (E) | 4 | #5 | 17'-2" | □ |
| s ₁₀ (E) | 4 | #5 | 17'-7" | □ |
| s ₁₁ (E) | 96 | #5 | 13'-0" | □ |
| s ₁₂ (E) | 70 | #5 | 14'-2" | □ |
| s ₁₃ (E) | 11 | #5 | 7'-6" | □ |
| s ₁₄ (E) | 596 | #4 | 5'-3" | □ |
| t ₃ (E) | 136 | #10 | 22'-10" | — |
| u ₄ (E) | 98 | #6 | 11'-2" | — |
| u ₅ (E) | 10 | #6 | 11'-10" | — |
| u ₆ (E) | 32 | #5 | 7'-11" | — |
| v ₉ (E) | 66 | #10 | 25'-1" | — |
| w ₁ (E) | 19 | #8 | 49'-4" | — |
| w ₂ (E) | 56 | #10 | 19'-10" | — |
| w ₃ (E) | 21 | #10 | 50'-4" | — |
| Cofferdam Excavation | | Cu. Yd. | 1470 | |
| Cofferdam (Type 2) (Location - 3) | | Each | 1 | |
| Seal Coat Concrete | | Cu. Yd. | 183.0 | |
| Concrete Structures | | Cu. Yd. | 340.3 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 59080 | |
| Furnishing Steel Piles HP14x89 | | Foot | 2176 | |
| Driving Piles | | Foot | 2176 | |

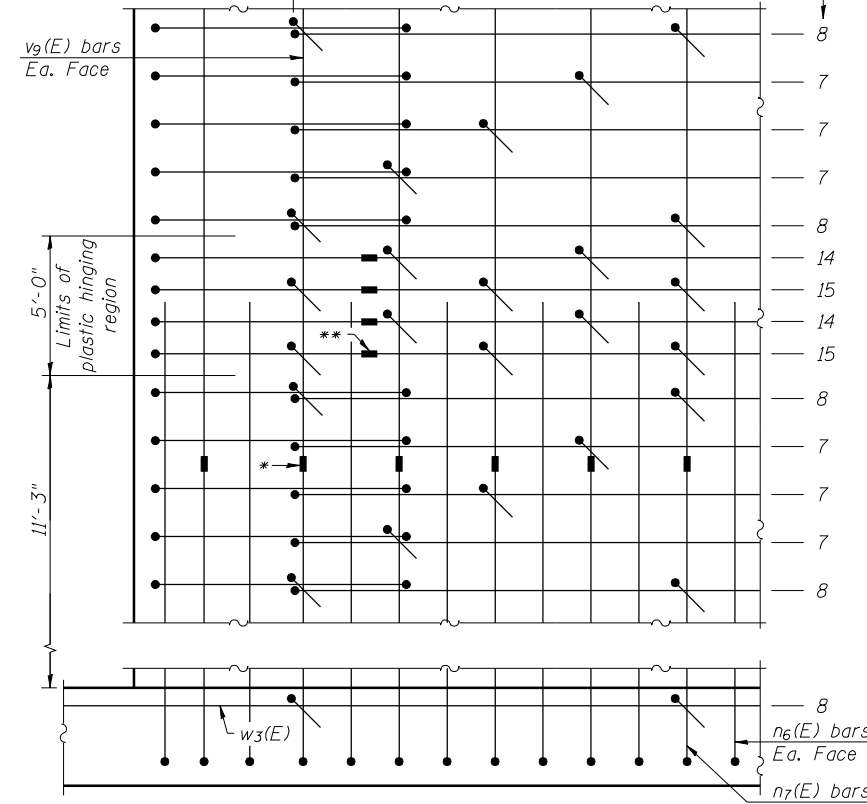
For cofferdam details, see sheet 105 of 113.



TOP OF PIER

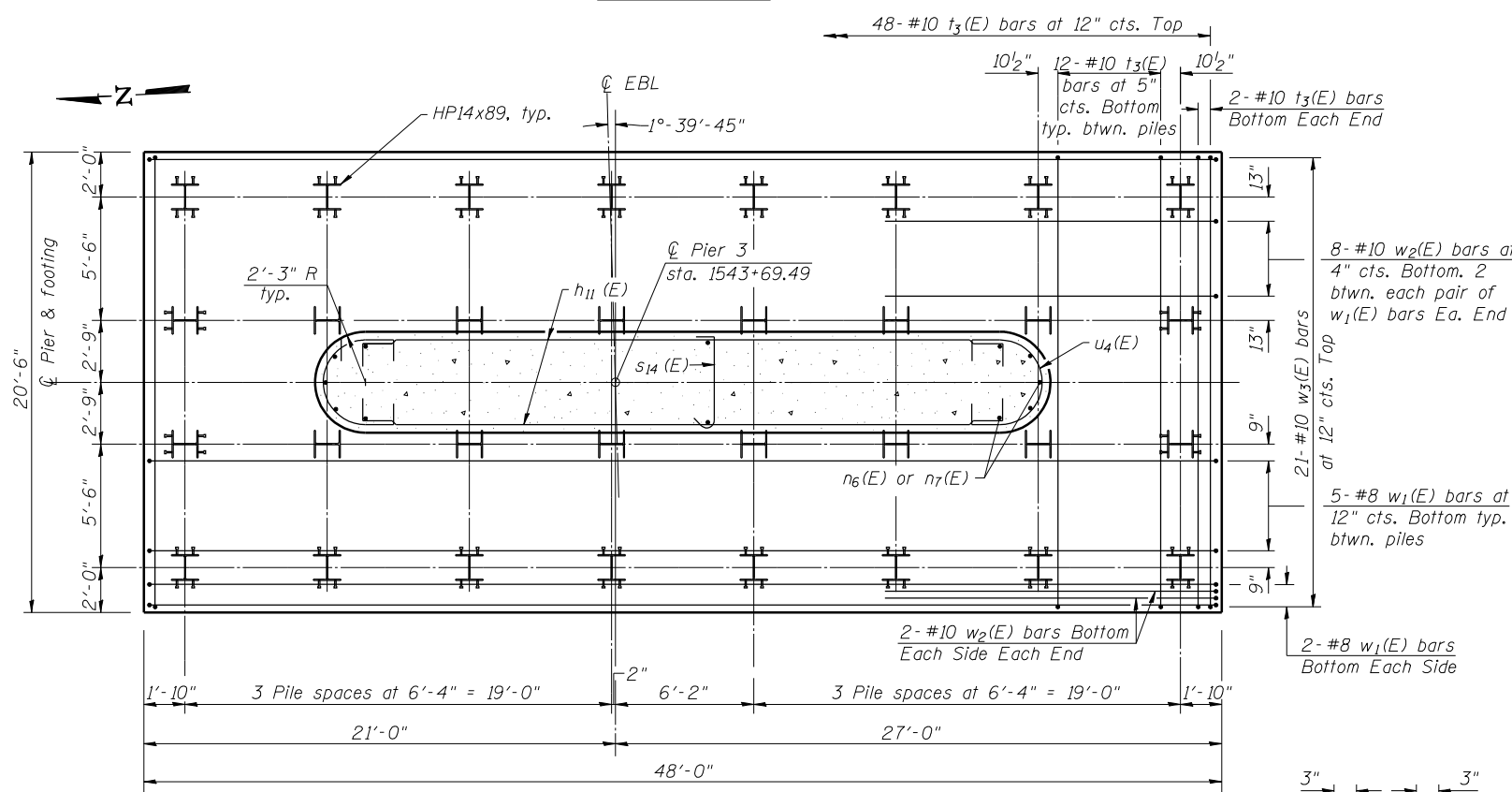
* Mechanical splice on vertical bars.
** Mechanical splice or shop welded splice per AWS D1.4 on horizontal bars.

#4 s₁₄(E) bars at 4'-0" cts. max. outside limits of plastic hinging region and top of footing, 2'-0" max. inside limits of plastic hinging region. Stagger as shown full height of pier shaft.

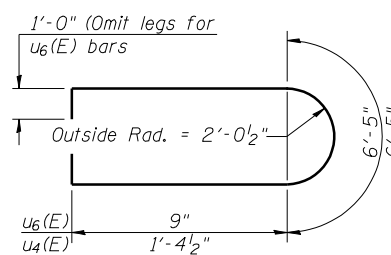


PARTIAL ELEVATION
(Showing s₁₄(E) bar pattern)

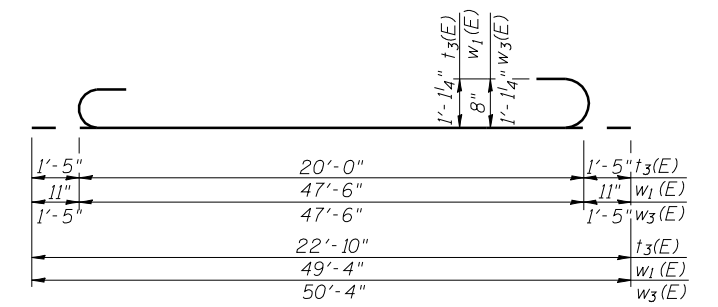
Note:
Not all lines of horizontal reinforcement bars are shown. Total number of s₁₄(E) bars in Bill of Materials is based on applying the pattern shown to the actual pier dimensions and horizontal reinforcement spacing.



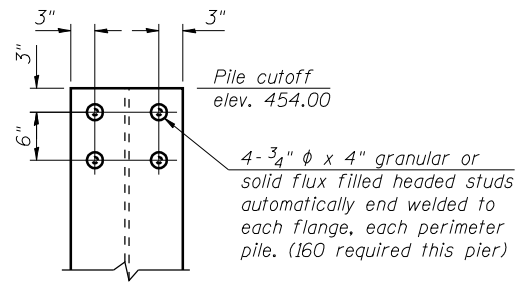
FOOTING PLAN



BARS u₄(E) & u₆(E)

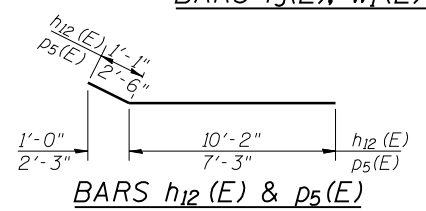


BARS t₃(E), w₁(E) & w₃(E)

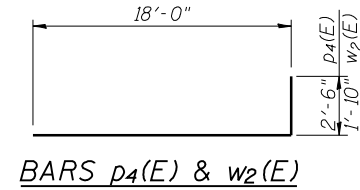


TOP OF PERIMETER PILE DETAIL

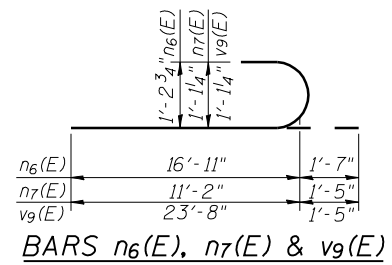
PILE DATA
Type: HP14x89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 388 kips
Est. Length: 68 feet
No. Production Piles: 32
No. Test Piles: 0



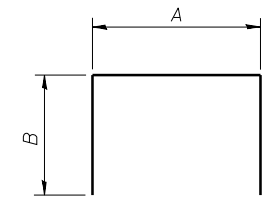
BARS h₁₂(E) & p₅(E)



BARS p₄(E) & w₂(E)

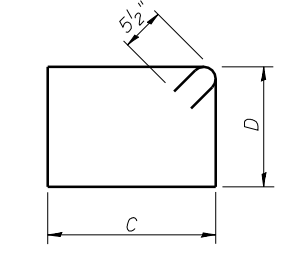


BARS n₆(E), n₇(E) & v₉(E)



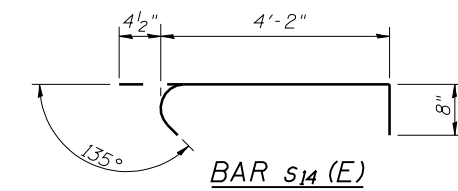
A & B DIMENSIONS

| Bar | A | B |
|---------------------|--------|-------|
| h ₁₁ (E) | 28'-6" | 1'-0" |
| p ₃ (E) | 46'-3" | 1'-7" |
| s ₁₁ (E) | 4'-0" | 4'-6" |
| s ₁₂ (E) | 5'-2" | 4'-6" |
| s ₁₃ (E) | 5'-2" | 1'-2" |
| u ₅ (E) | 5'-0" | 3'-5" |



C & D DIMENSIONS

| Bar | C | D |
|---------------------|-------|-----------|
| s ₃ (E) | 4'-0" | 2'-10" |
| s ₄ (E) | 4'-0" | 3'-0 1/2" |
| s ₅ (E) | 4'-0" | 3'-3" |
| s ₆ (E) | 4'-0" | 3'-5 1/2" |
| s ₇ (E) | 4'-0" | 3'-8" |
| s ₈ (E) | 4'-0" | 3'-11" |
| s ₉ (E) | 4'-0" | 4'-1 1/2" |
| s ₁₀ (E) | 4'-0" | 4'-4" |



BAR s₁₄(E)



| | | | |
|----------------------------------|----------------|-------|-----------|
| USER NAME = has | DESIGNED - RDP | 08/13 | REVISED - |
| ESCA PROJECT NO. 1070.09 | CHECKED - MTD | 08/13 | REVISED - |
| | DRAWN - DWH | 08/13 | REVISED - |
| PLOT DATE = 1/28/2014 3:04:19 PM | CHECKED - ELH | 01/14 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 - EB
STRUCTURE NO. 026-0107

SHEET NO. 100 OF 113 SHEETS

| | | | | |
|--------------------|----------------------|---------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 70 | (26-3B-1, 3B-1(3))BR | FAYETTE | 277 | 180 |
| CONTRACT NO. 74175 | | | ILLINOIS FED. AID PROJECT | |