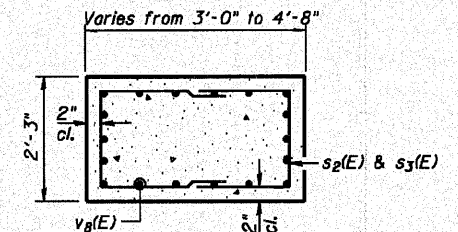
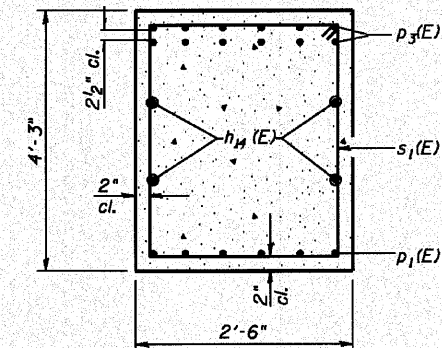
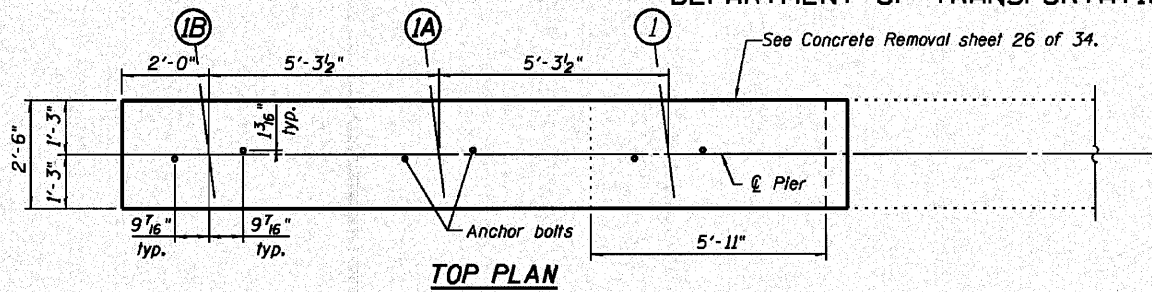


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

See Concrete Removal sheet 26 of 34.

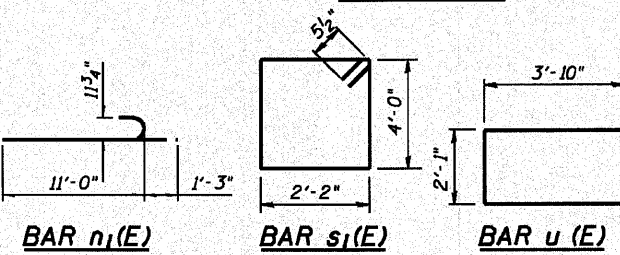
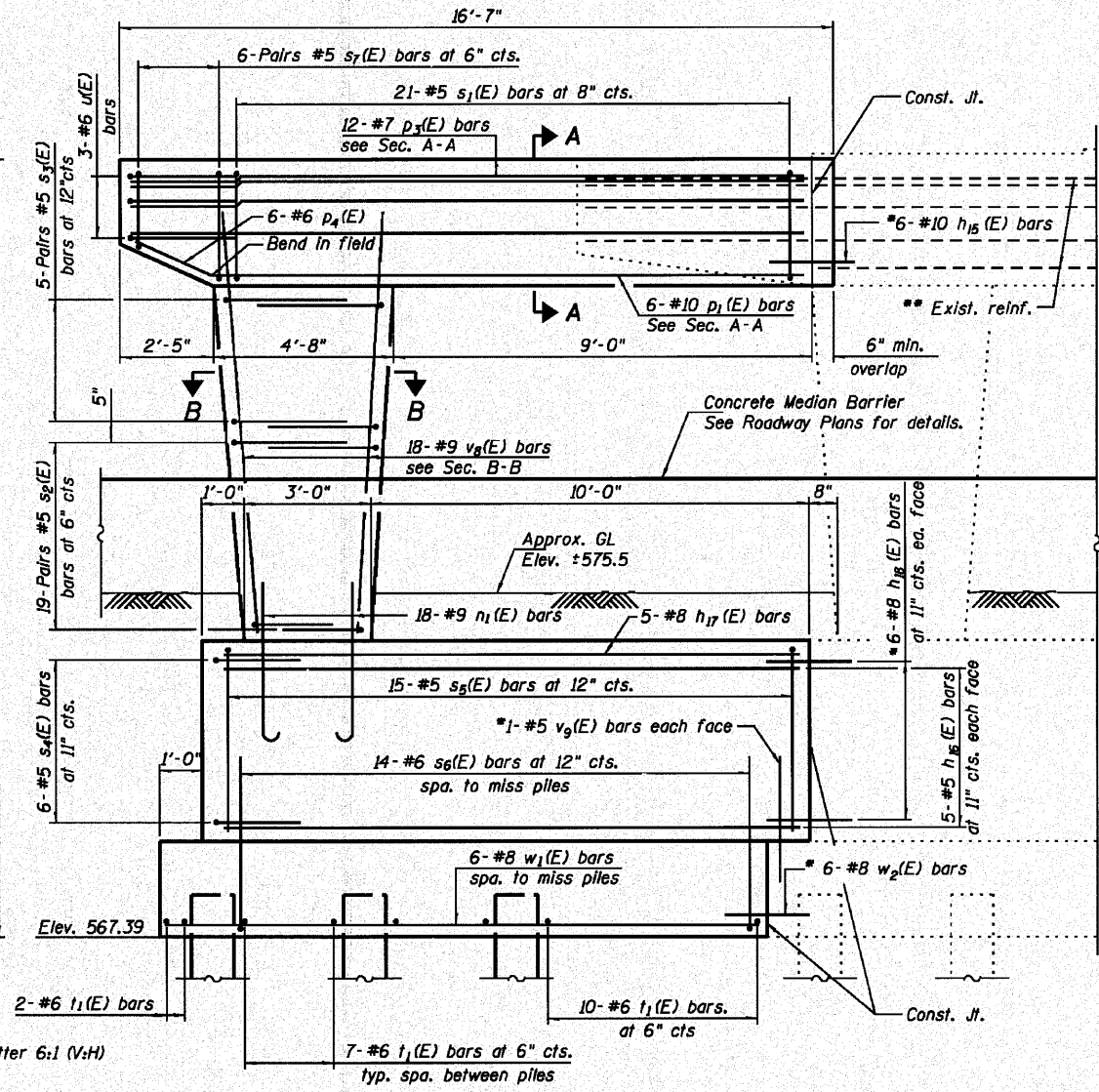
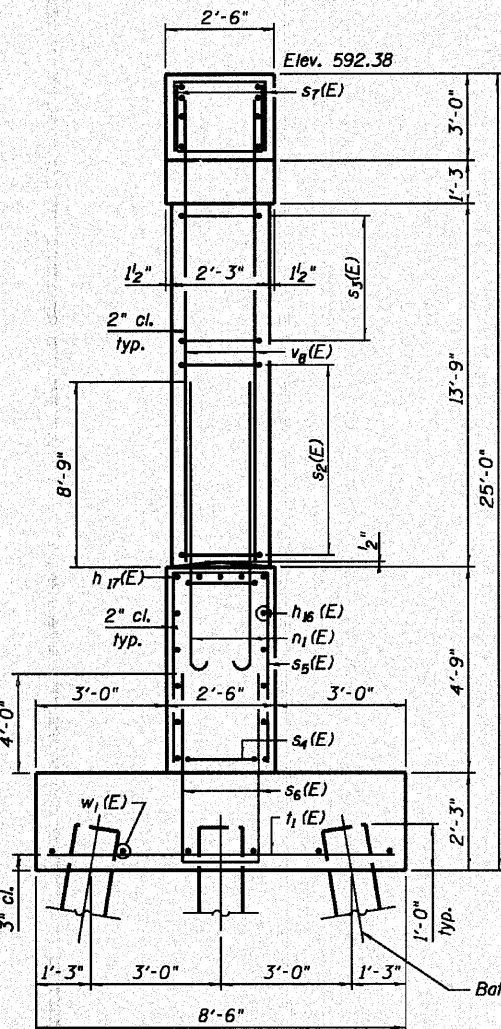
Notes:

Space reinforcement in cap to miss anchor bolts.
Concrete Sealer shall be applied to all exposed
areas of the proposed column and cap.
For details of piles, see sheet 19 of 34.



PILE DATA

Type: Metal Shell Piles 12" x 0.250" Walls
Nominal Required Bearing: 180k
Allowable Resistance Available: 60k
Est. Length: 40'
No. Production Piles: 8
No. Test Piles: 1

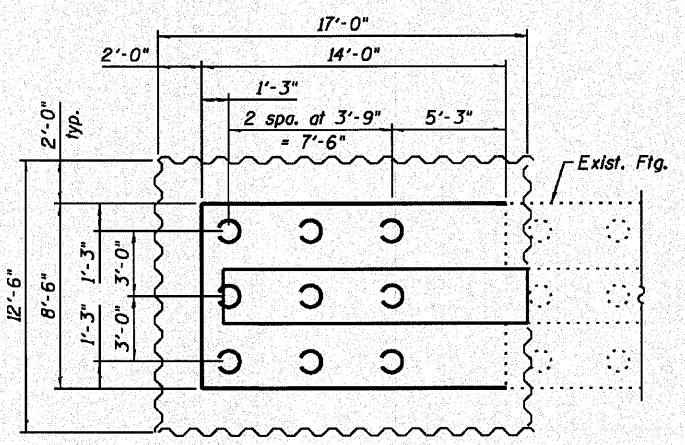
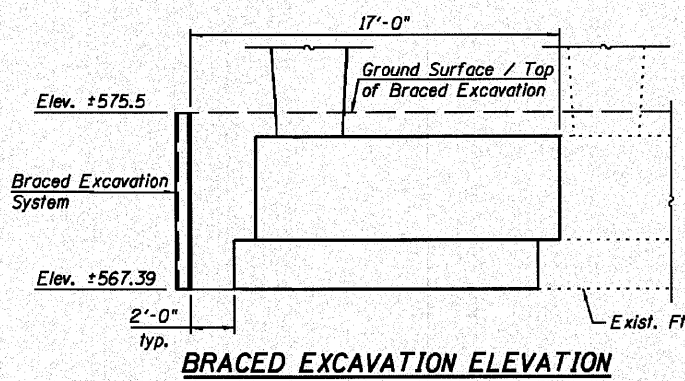


A & B DIMENSIONS

| Bar | A | B |
|--------------------|--------|-------|
| s ₂ (E) | 1'-11" | 2'-8" |
| s ₃ (E) | 1'-11" | 3'-9" |
| s ₄ (E) | 2'-2" | 3'-3" |
| s ₅ (E) | 2'-2" | 4'-5" |
| s ₆ (E) | 2'-2" | 6'-1" |
| s ₇ (E) | 2'-2" | 3'-0" |

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---------|-------|--------|-------|
| h ₄ (E) | 4 | #5 | 16'-3" | --- |
| h ₅ (E) | 6 | #10 | 7'-3" | --- |
| h ₆ (E) | 10 | #5 | 13'-8" | --- |
| h ₇ (E) | 5 | #8 | 13'-8" | --- |
| h ₈ (E) | 12 | #8 | 7'-8" | --- |
| n ₁ (E) | 18 | #9 | 12'-3" | --- |
| p ₁ (E) | 6 | #10 | 14'-0" | --- |
| p ₂ (E) | 12 | #7 | 16'-3" | --- |
| p ₃ (E) | 6 | #6 | 8'-0" | --- |
| s ₁ (E) | 21 | #5 | 13'-3" | --- |
| s ₂ (E) | 38 | #5 | 7'-3" | --- |
| s ₃ (E) | 10 | #5 | 9'-5" | --- |
| s ₄ (E) | 6 | #5 | 8'-8" | --- |
| s ₅ (E) | 15 | #5 | 11'-0" | --- |
| s ₆ (E) | 14 | #6 | 14'-4" | --- |
| s ₇ (E) | 12 | #5 | 8'-2" | --- |
| t ₁ (E) | 26 | #6 | 8'-2" | --- |
| u(E) | 3 | #6 | 9'-9" | --- |
| v ₈ (E) | 18 | #9 | 17'-0" | --- |
| v ₉ (E) | 2 | #5 | 4'-2" | --- |
| w ₁ (E) | 6 | #8 | 13'-8" | --- |
| w ₂ (E) | 6 | #8 | 7'-8" | --- |
| Concrete Structures | Cu. Yd. | 26.7 | | |
| Reinforcement Bars, Epoxy Coated | Pound | 5,470 | | |
| Furnishing Metal Shell Piles 12" x 0.250" | Foot | 320 | | |
| Driving Piles | Foot | 320 | | |
| Test Pile Metal Shells | Each | 1 | | |
| Concrete Sealer | Sq. Ft. | 378 | | |
| Braced Excavation | Cu. Yd. | 64 | | |



PIER

STRUCTURE NO. 082-0176

| SHEET NO. 18 | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|---------|-----------|--------------|-----------|
| 34 SHEETS | 64 | 82-5K-2 | ST. CLAIR | 162 | 101 |
| CONTRACT NO. 76D59 | | | | | |
| ILLINOIS FED. AID PROJECT | | | | | |

| |
|------------------------|
| DESIGNED - T.J.Z |
| CHECKED - C.W.C |
| DRAWN - D.L.H |
| CHECKED - C.W.C, S.D.S |

WHKS & CO. ENGINEERING
7018 KINGSMILL CT., SPRINGFIELD, ILL. (217) 483-9457
DESIGN FIRM #184001036

- #5 v₉(E) bars drilled and epoxy grouted into 7/8" φ by 9" holes (min.)
 - #8 h₁₆(E) and w₂(E) bars drilled and epoxy grouted into 1/4" φ by 9" holes (min.)
 - #10 h₁₅(E) bars drilled and epoxy grouted into 1/2" φ by 9" holes (min.)
- The grout and method of application shall be according to Section 584 of the Standard Specifications.

** Existing reinforcement shall be cleaned, straightened and incorporated in new construction. Cost included with "Concrete Removal".