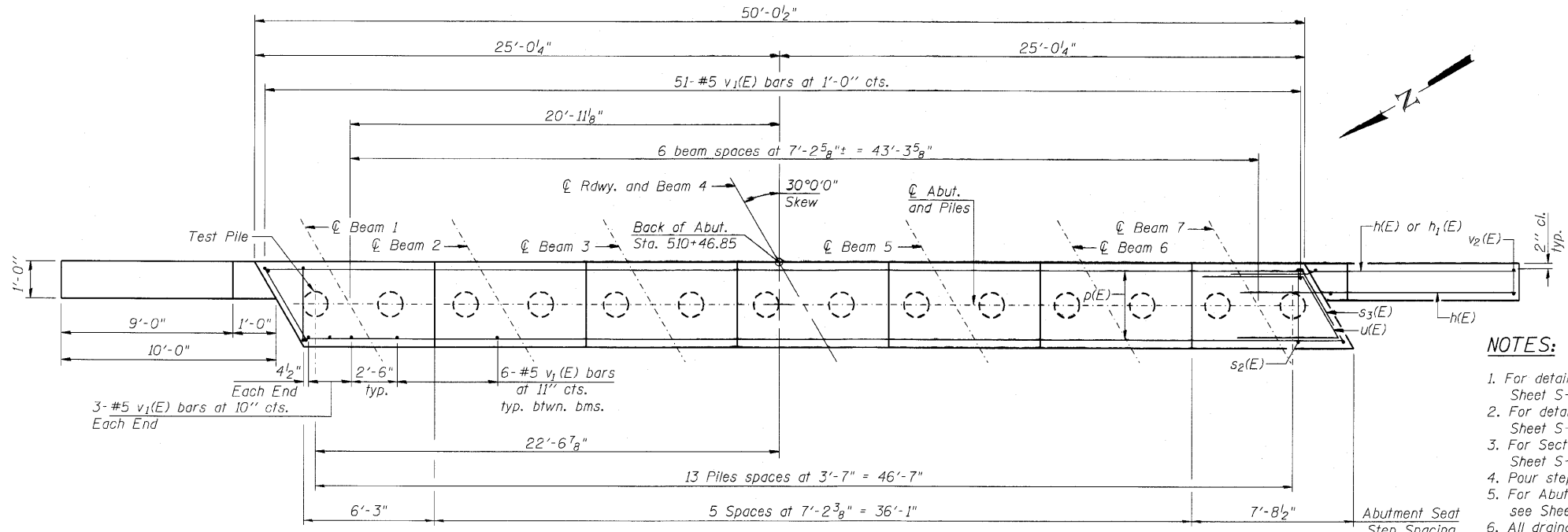
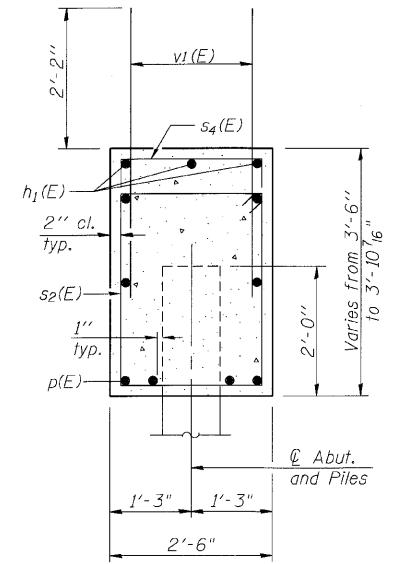
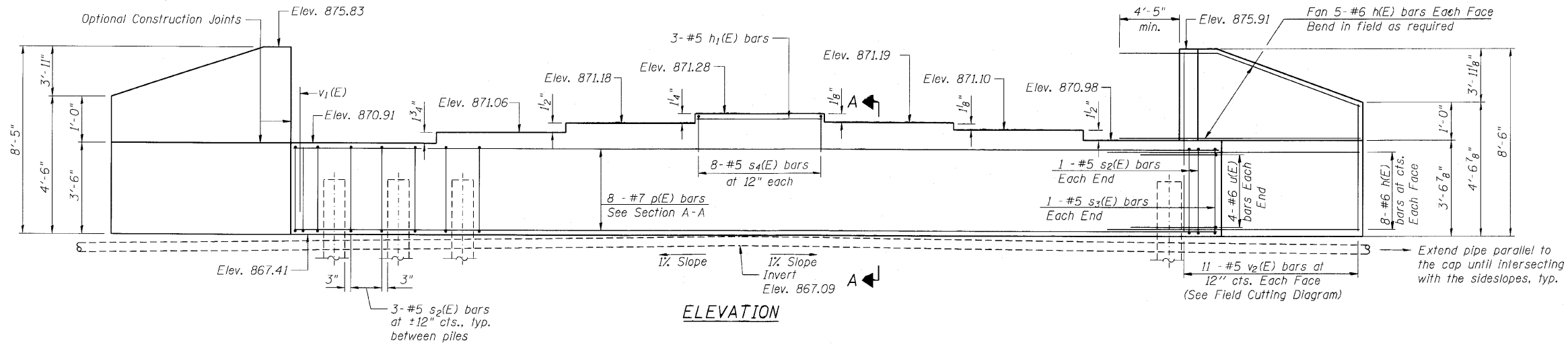
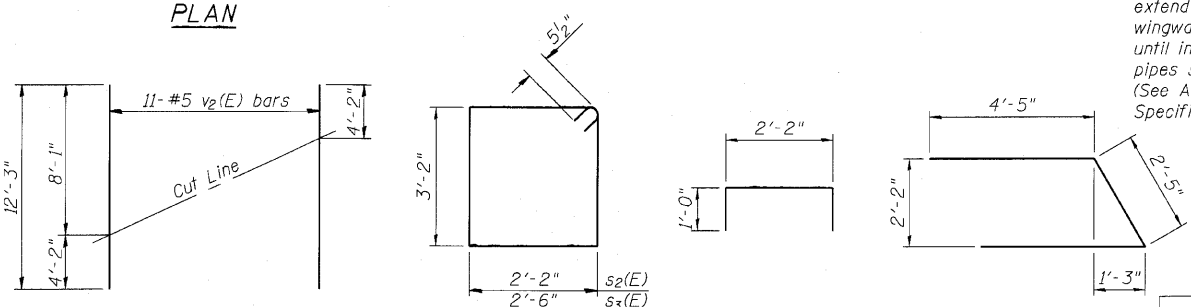


McHENRY COUNTY
DIVISION OF TRANSPORTATION



PILE DATA
Type: Metal Shell - 14in. dia. X 0.25 in walls
Nominal Required Bearing: 272k
Factored Resistance Available: 150k
Est. Length: 31'
No. Production Piles: 13
No. Test Piles: 1



- NOTES:**
- For details of Bar Splicers, see Sheet S-18.
 - For details of piles, see Sheet S-17.
 - For Section thru Abutment, see Sheet S-15.
 - Four steps monolithic with cap.
 - For Abutment diaphragm details, see Sheet S-8.
 - All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standards 601101)

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|--|-----|------|---------|-------|
| h(E) | 52 | #6 | 14'-3" | — |
| h1(E) | 3 | #5 | 6'-10" | — |
| p(E) | 8 | #7 | 49'-8" | — |
| s2(E) | 41 | #5 | 11'-7" | □ |
| s3(E) | 2 | #5 | 12'-3" | □ |
| s4(E) | 8 | #5 | 4'-2" | □ |
| u(E) | 8 | #6 | 11'-3" | △ |
| v1(E) | 93 | #5 | 4'-4" | — |
| v2(E) | 22 | #5 | 12'-3" | — |
| Porous Granular Embankment (Special) | | | Cu. Yd. | 80 |
| Structure Excavation | | | Cu. Yd. | 96 |
| Concrete Structures | | | Cu. Yd. | 22.1 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 3,340 |
| Furnishing Metal Shell Piles, 14"x 0.25" | | | Foot | 403 |
| Driving Piles | | | Foot | 403 |
| Test Pile Metal Shells | | | Each | 1 |
| Geocomposite Wall Drain | | | Sq. Yd. | 57 |
| Pipe Underdrain for Structures, 4" | | | Foot | 89 |

**EAST ABUTMENT
STRUCTURE NO. 056-3179**

| | |
|------------|-----|
| DESIGNED - | AMK |
| CHECKED - | EKM |
| DRAWN - | RD |
| CHECKED - | EKM |

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

| | | | | | |
|-------------------------------|-------------|----------------|---------|---------------------------|-----------|
| SHEET NO. S-16 S-21 SHEETS | F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | 1233 | 06-00321-00-BR | McHENRY | 48 | 34 |
| CONTRACT NO. 63516 | | | | ILLINOIS FED. AID PROJECT | |

8/2/2010 rdenley m:\pro\13381\3381.01.krh\design\structural\lead\3381.01.16 East Abutment.dgn