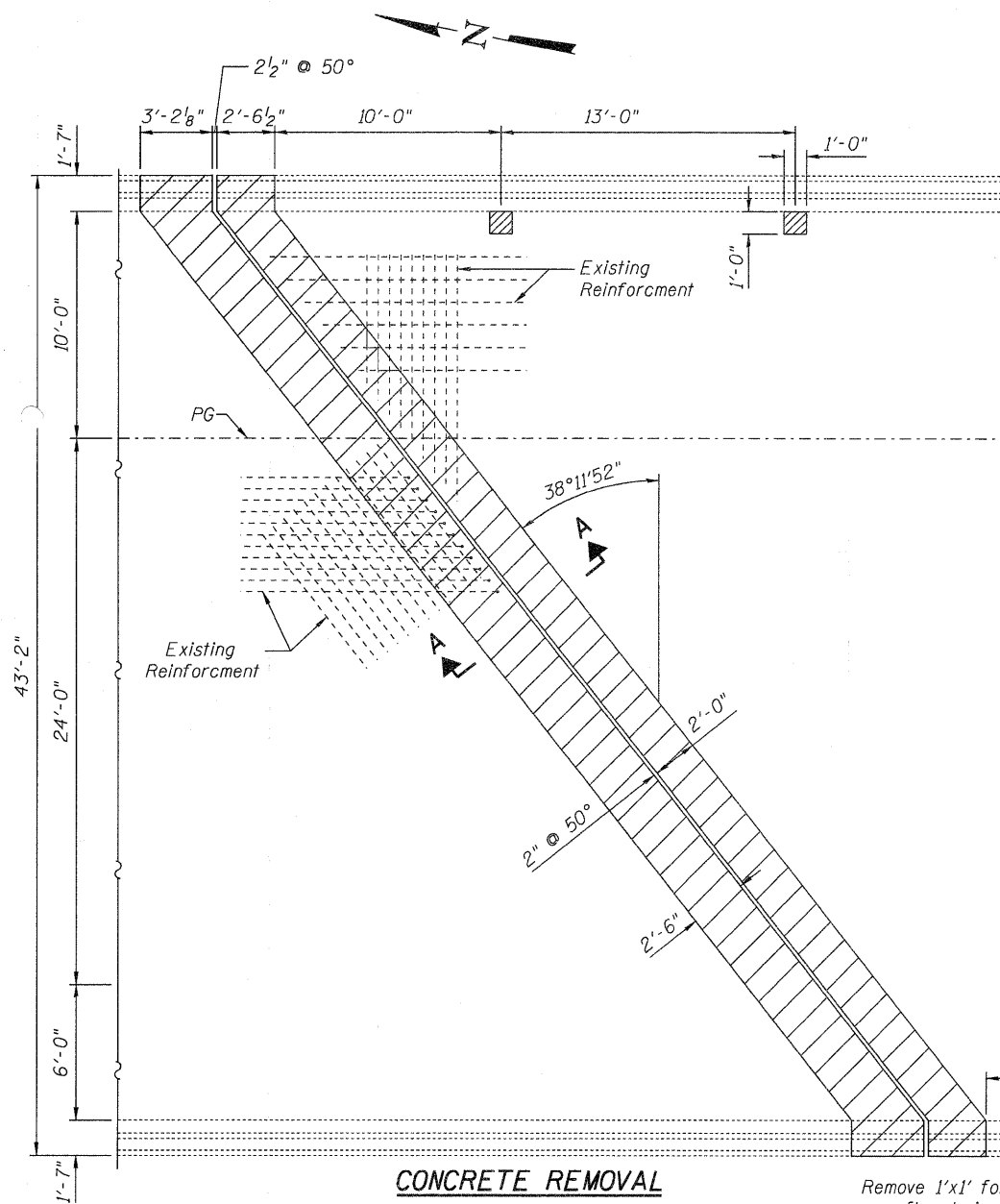
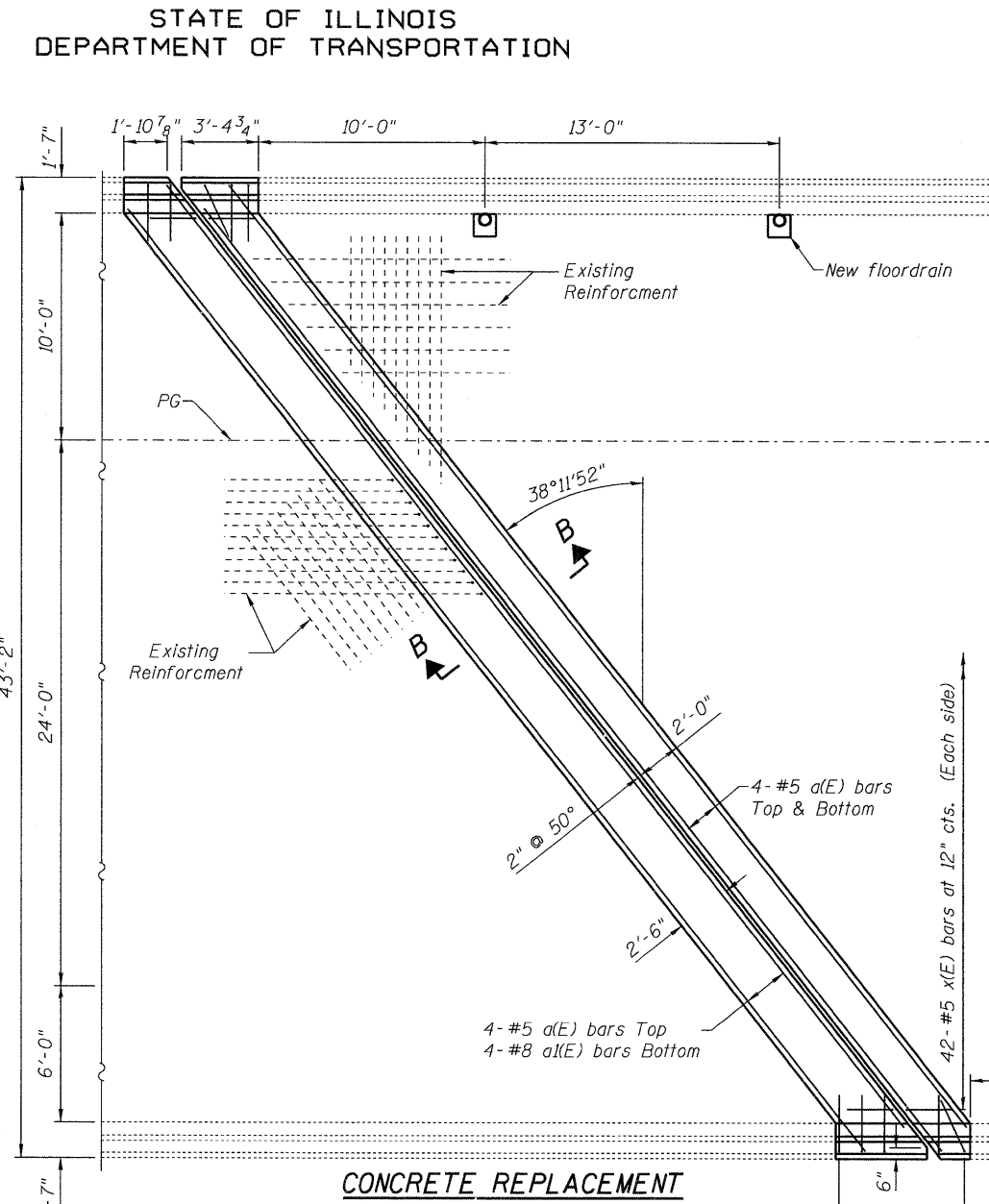


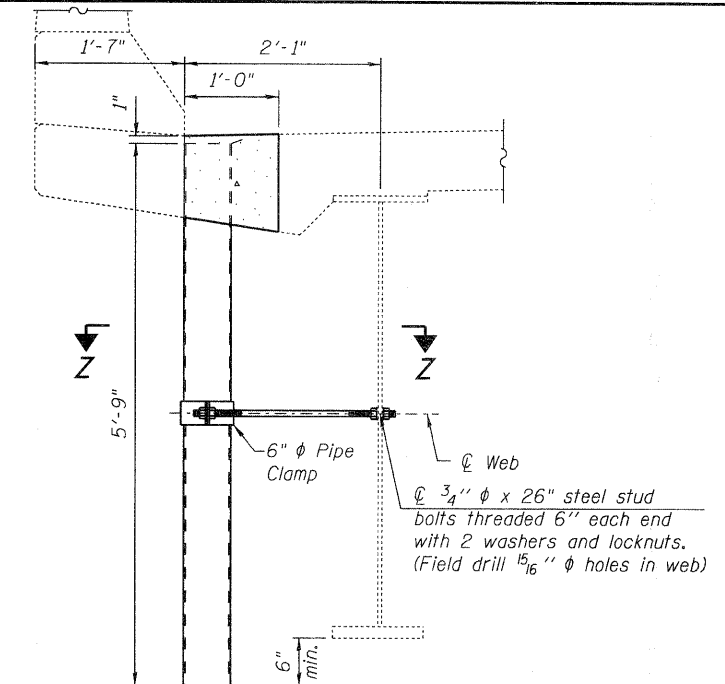
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CONCRETE REMOVAL

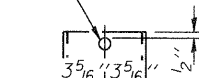


CONCRETE REPLACEMENT



SECTION THRU NEW DRAIN

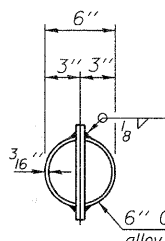
1/2" φ x 8" Fiberglass Reinf. Plastic Rebar



FIBERGLASS PIPE

Fill slot with weld
1/2" φ x 8" Alum. Bar ASTM B 211 alloy 6061-T6

ALUMINUM TUBE



TOP PLAN
(Showing Aluminum Tube)

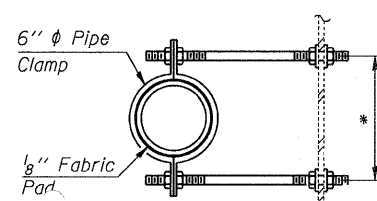
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|----------|--------|-------|
| a(E) | 12 | #5 | 52'-3" | — |
| a(E) | 4 | #8 | 48'-0" | — |
| d(E) | 10 | #5 | 5'-8" | L |
| d(E) | 10 | #5 | 3'-11" | L |
| x(E) | 84 | #5 | 2'-7" | — |
| Reinforcement Bars, Epoxy Coated | | Pound | 1490 | |
| Concrete Superstructure | | Cu. Yds. | 13.7 | |
| Concrete Removal | | Cu. Yds. | 13.7 | |

Bars indicated thus 4x2 - #5 etc. indicates 4 line of bars with 2 lengths per line.

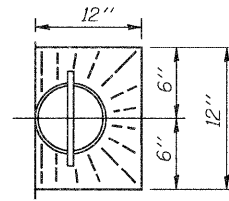
See sheet 4 of 16 for parapet sections and bar details.

RAMP E
N. ABUTMENT CONCRETE REPLACEMENT
082-0217 & 0218



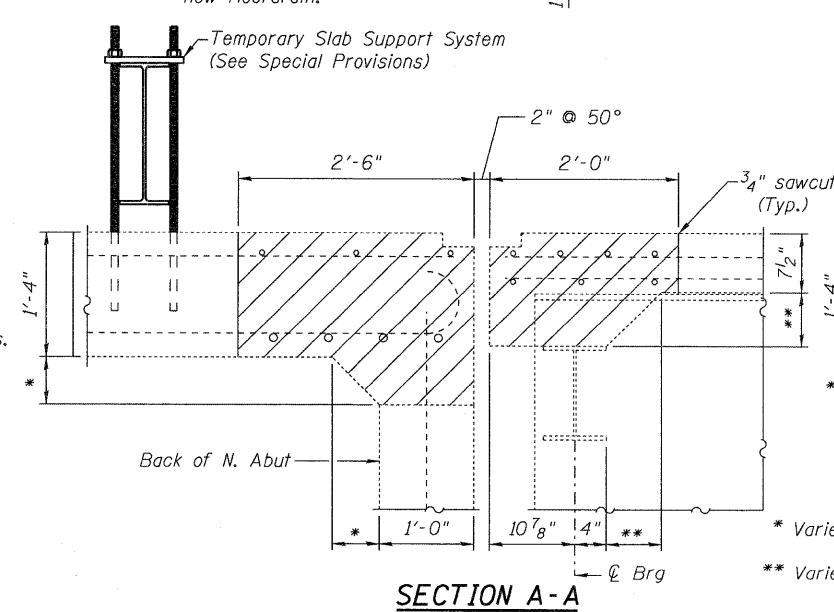
SECTION Z-Z

*Dimension as required by Pipe Clamp

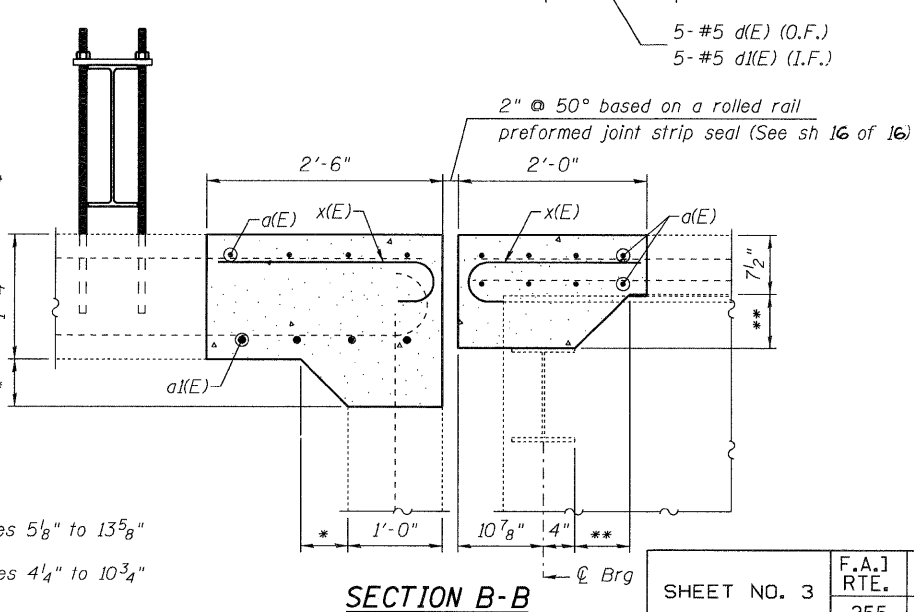


TOP PLAN

Notes:
The floor drains shall be painted to match the outside of the fascia beams.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
Galvanize clamping device according to AASHTO M232.
Cost of clamping device and inserts is included with Floor Drains.



SECTION A-A



SECTION B-B

| | |
|----------|------------|
| DESIGNED | J. Uehle |
| CHECKED | A. Hallway |
| DRAWN | J. Uehle |
| CHECKED | A. Hallway |

November 5, 2010
EXAMINED *J. Cal Perry*
PASSED *Ralph E. Anderson*
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

| | | | | | |
|---------------------------|-------------|----------|-----------|--------------------|-----------|
| SHEET NO. 3 16 SHEETS | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | 255 | 82-7HB-1 | ST. CLAIR | 43 | 10 |
| | | | | CONTRACT NO. 76C33 | |
| ILLINOIS FED. AID PROJECT | | | | | |