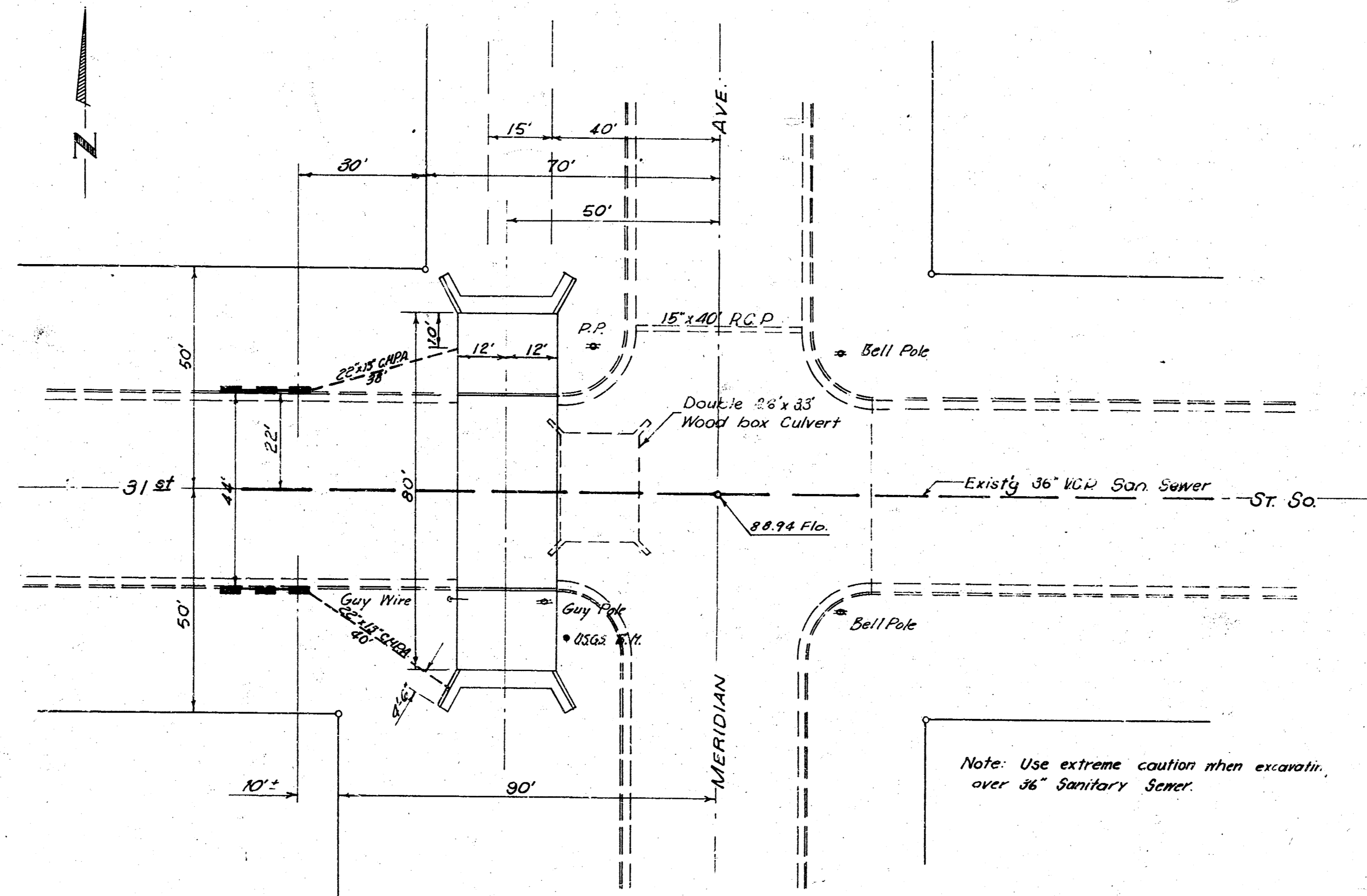


B.M. 97605 USGS. Std. bench on SW cor. Meridian & 31st St.

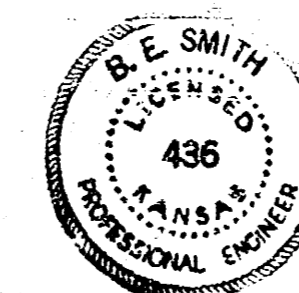
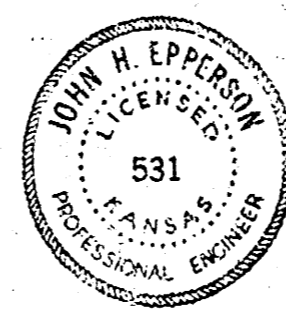
3 - 7' x 2' R.C.B.C. MERIDIAN & 31ST ST. SO.

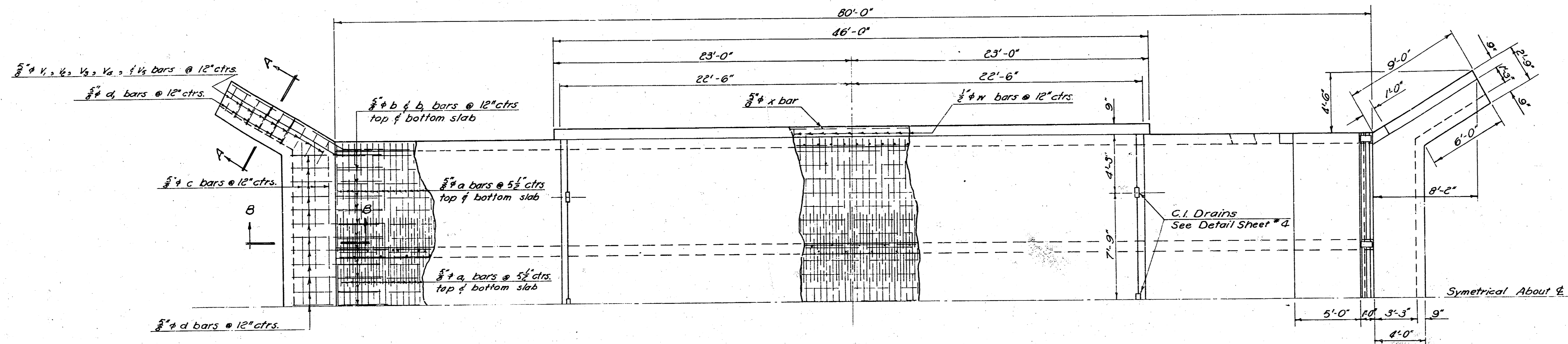
PROJ. NO. C16-79



Note: Use extreme caution when excavating over 36" Sanitary Sewer.

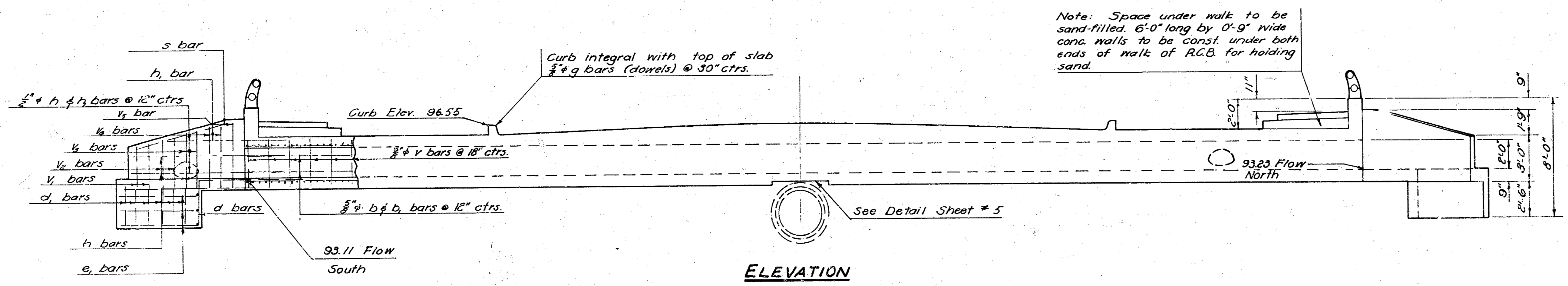
REINFC CONG BOX CULVERT
MERIDIAN AVE.
SL 31st ST SO. TO NL PANNEE AVE.
CITY OF WICHITA, KANSAS
B. E. SMITH CITY ENGINEER
JULY 1959 PROJ. No. C16-79





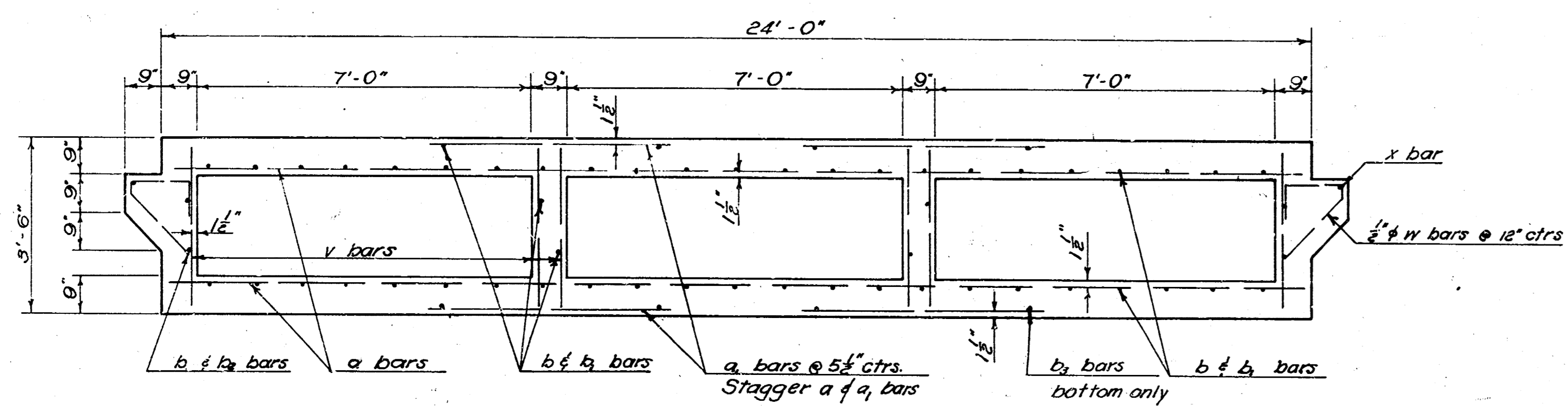
PLAN

Scale: 1/4" = 1'-0"

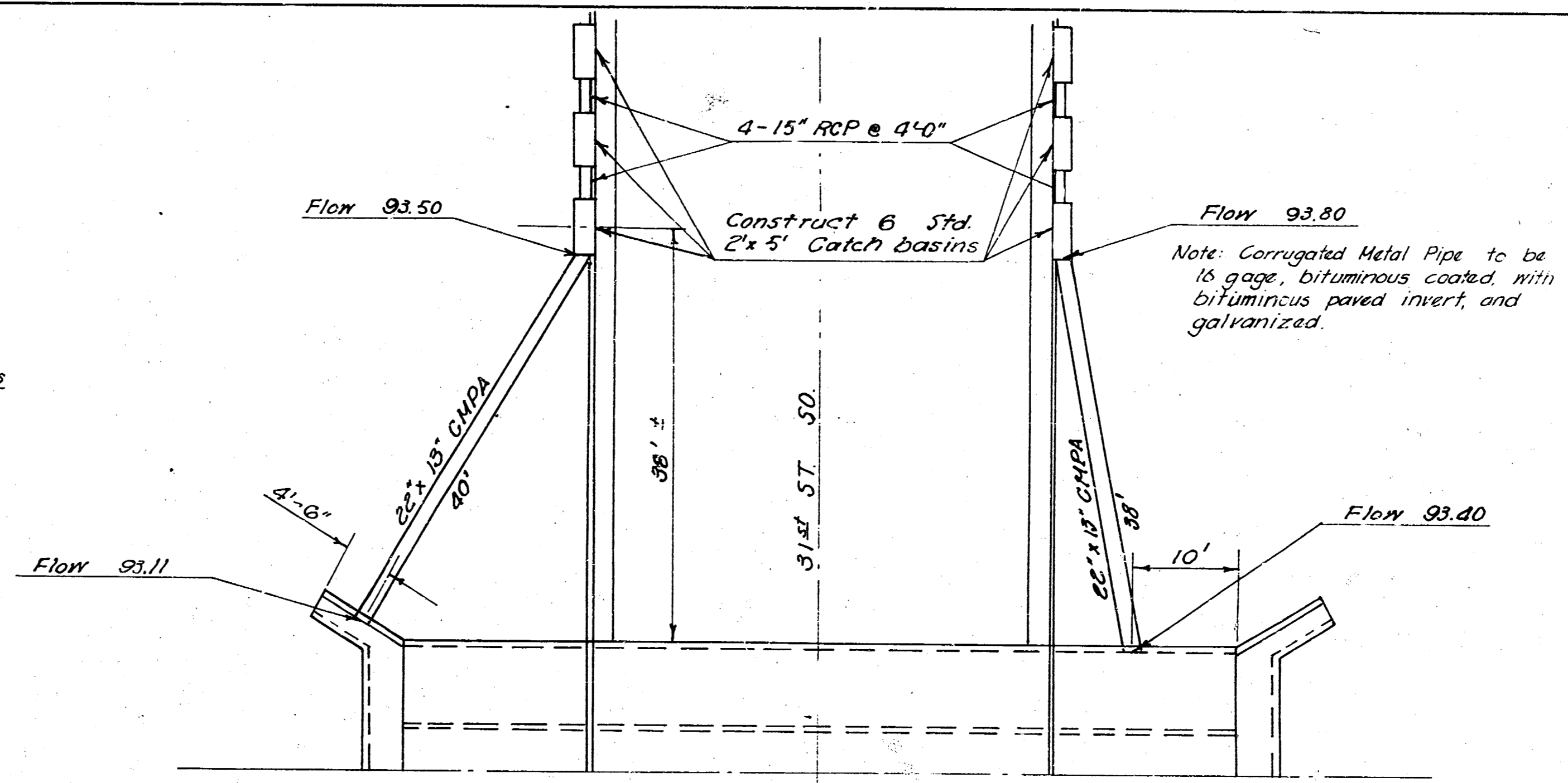


ELEVATION

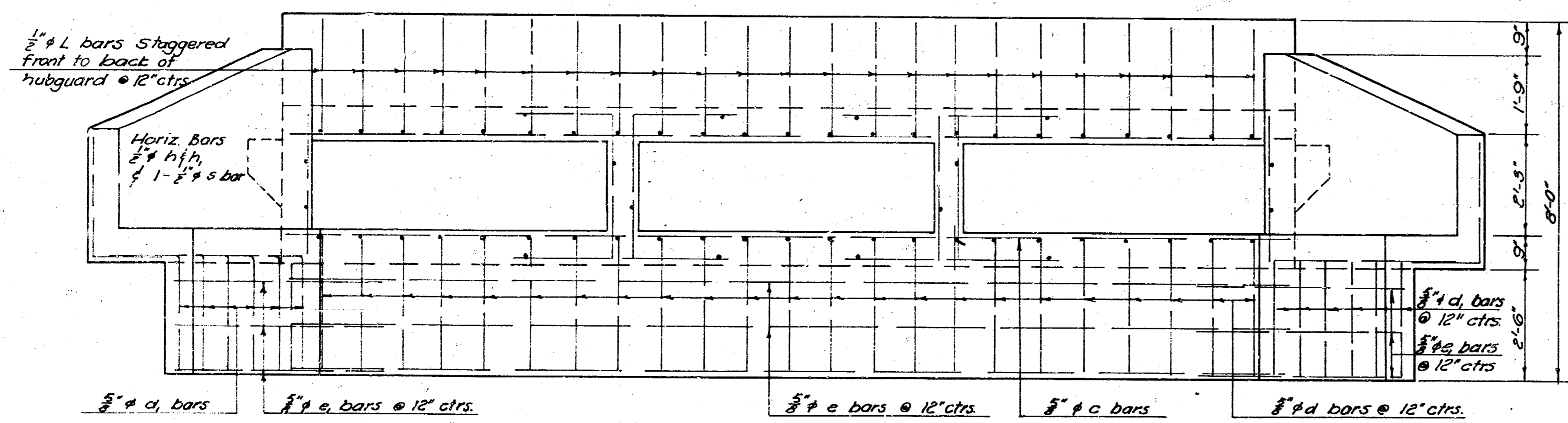
Scale: 1/4" = 1'-0"



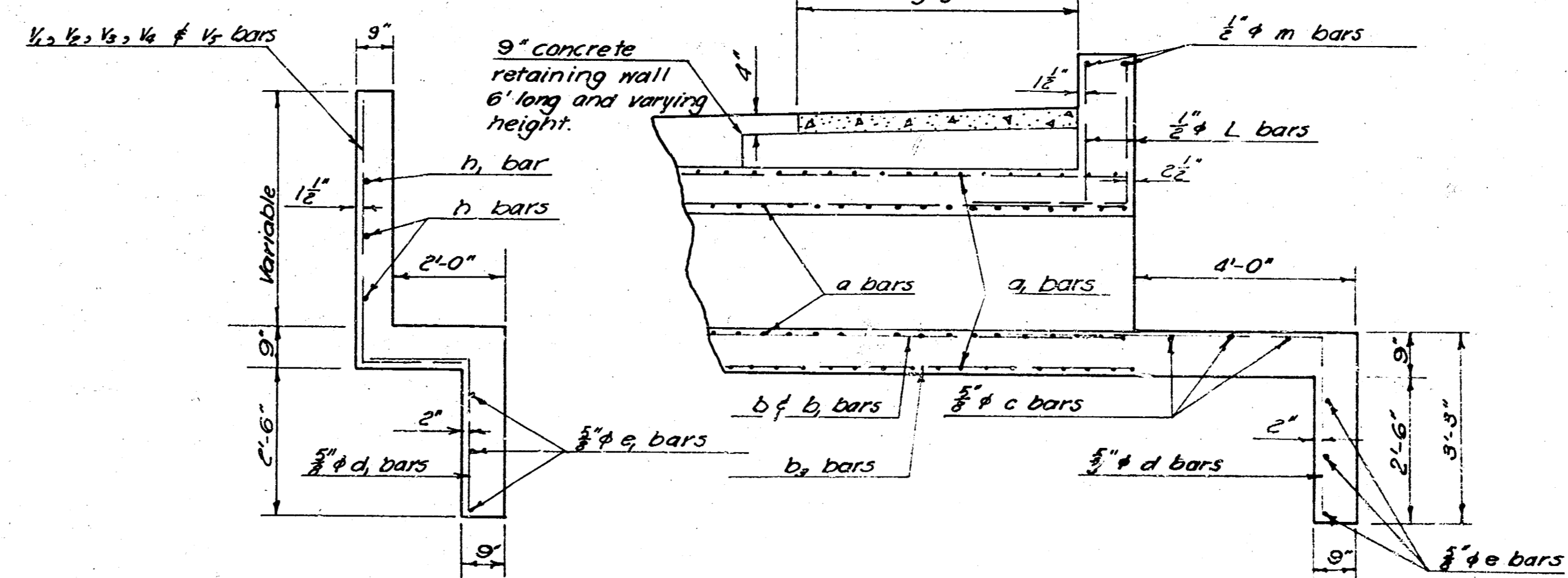
CROSS SECTION OF BOX
Scale: 1/2" = 1'-0"



DRAINAGE DETAILS
Scale: 1" = 10'

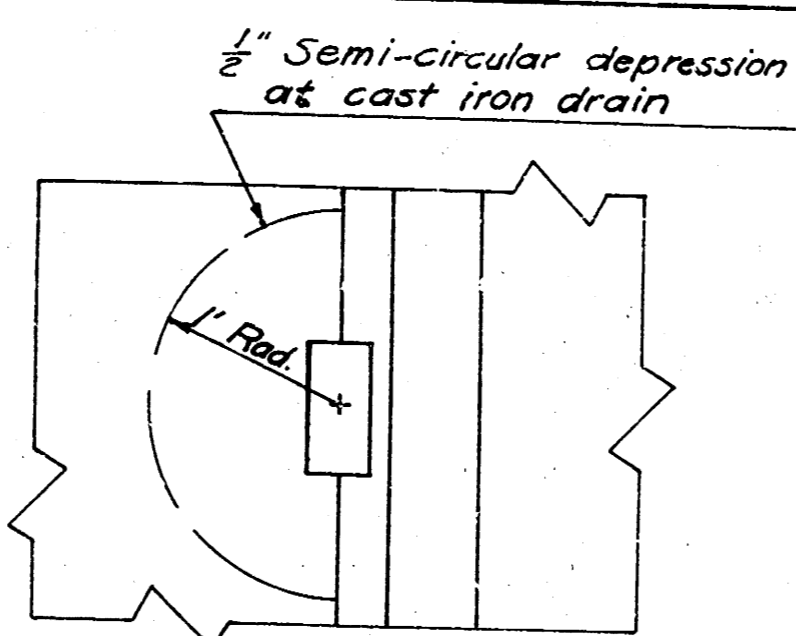
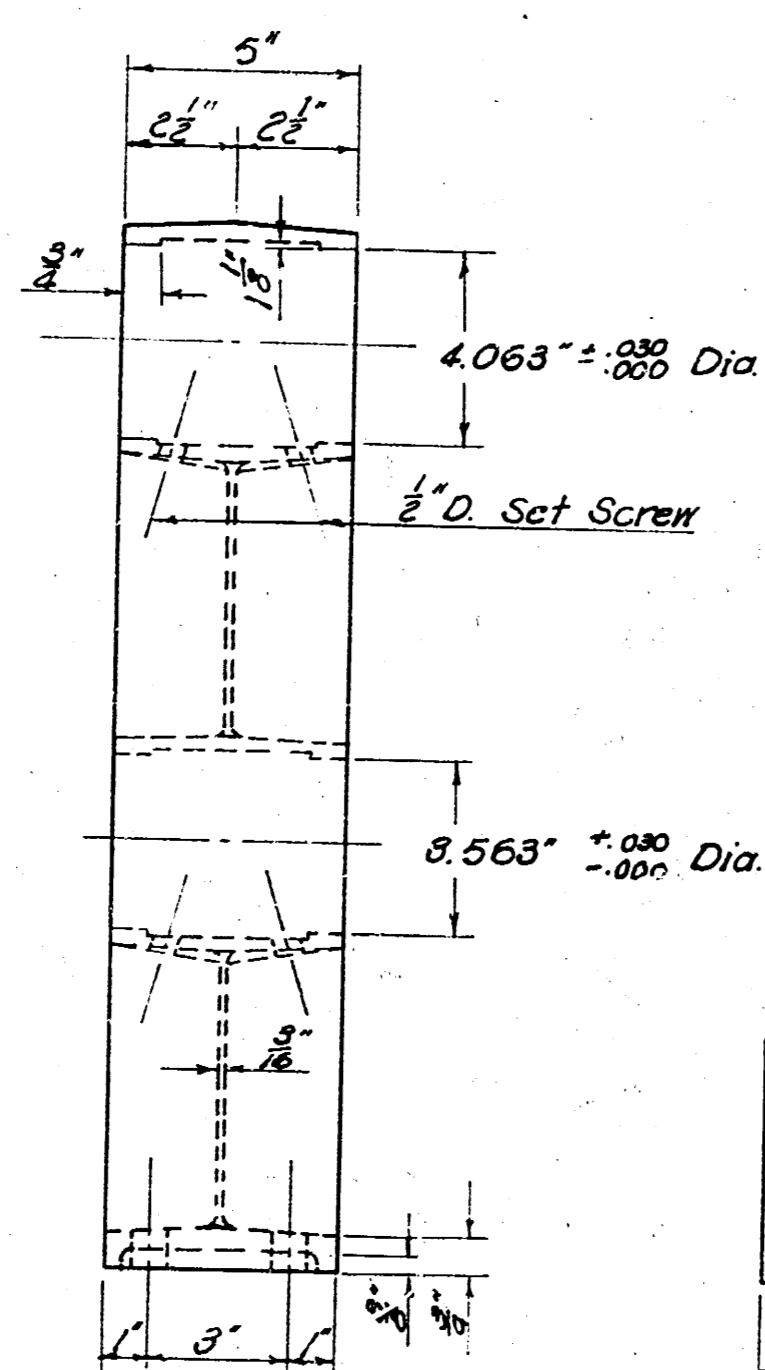
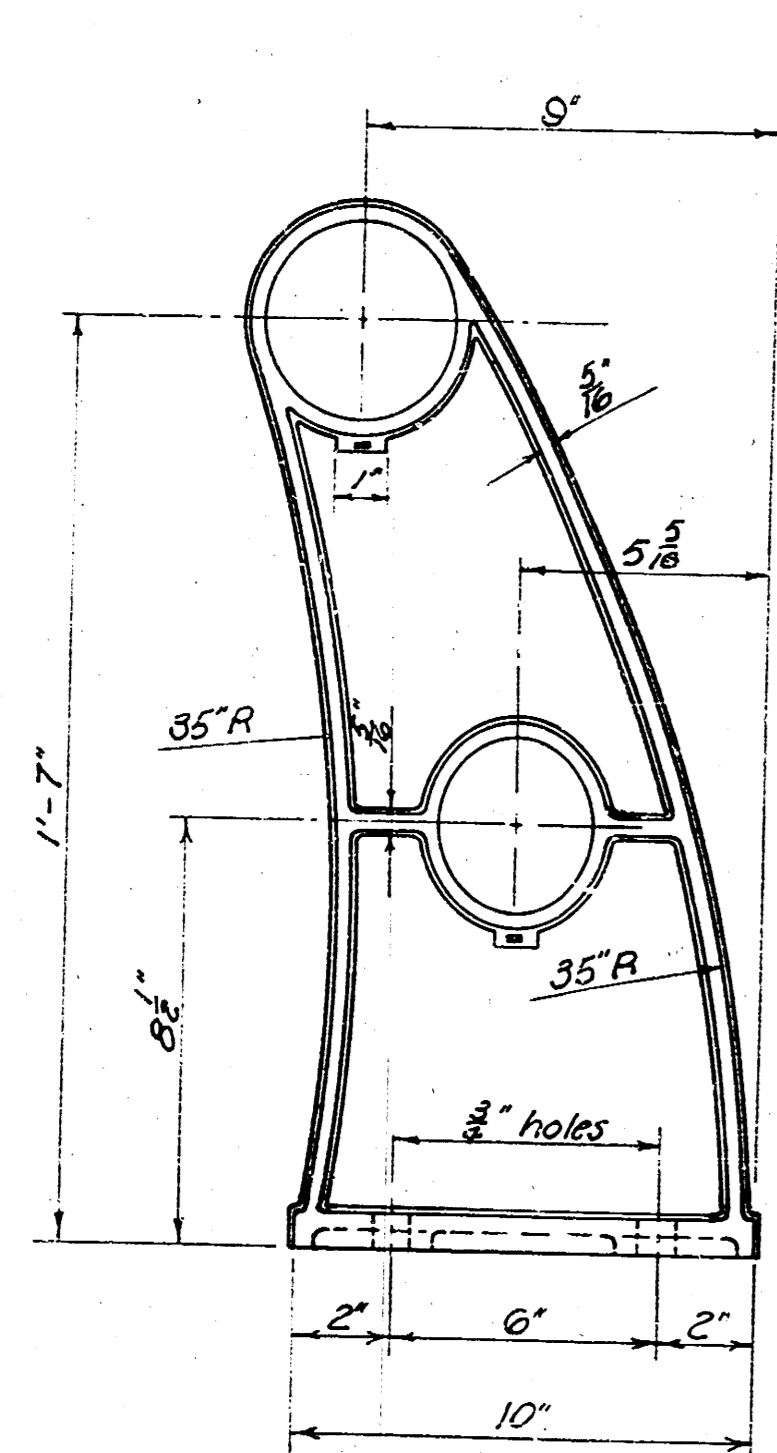


END ELEVATION
Scale: 1/2" = 1'-0"

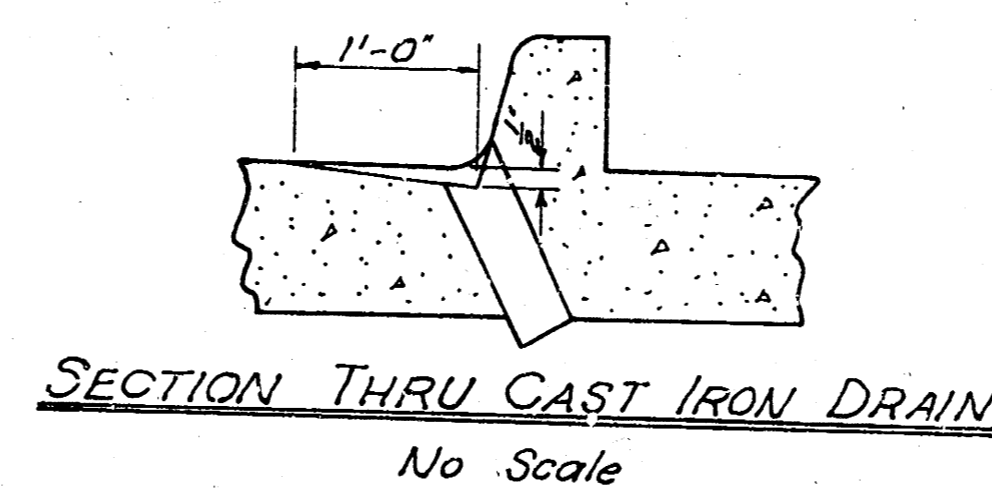
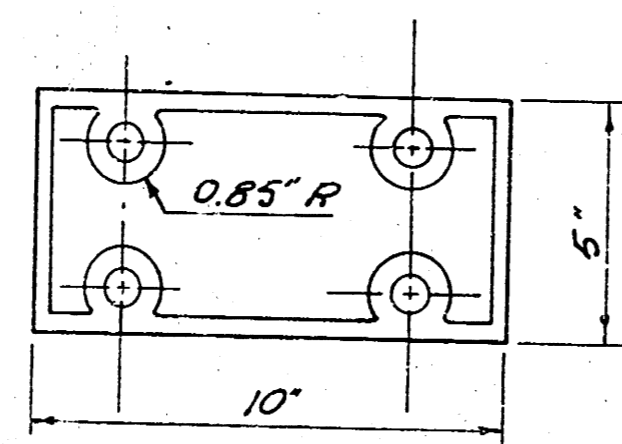


SECTION A-A
DIMENSIONS TYPICAL
FOUR WINGWALLS
Scale: 1/2" = 1'-0"

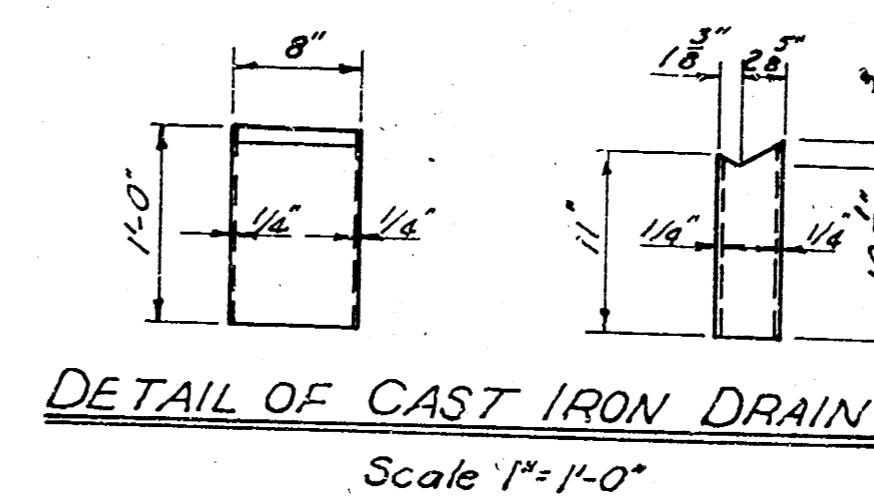
SECTION B-B
DIMENSIONS TYPICAL
BOTH ENDS
Scale: 1/2" = 1'-0"



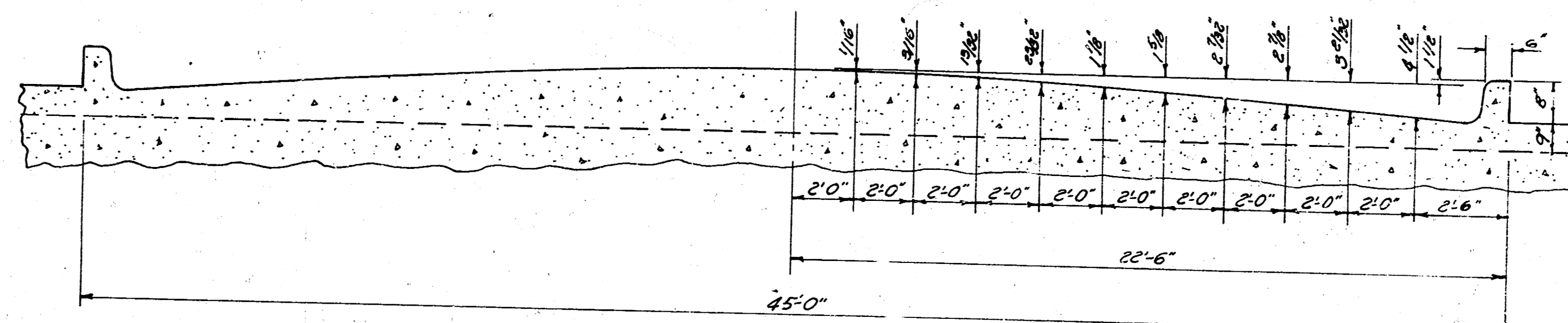
PLAN SHOWING
CAST IRON DRAIN
No Scale



SECTION THRU CAST IRON DRAIN
No Scale



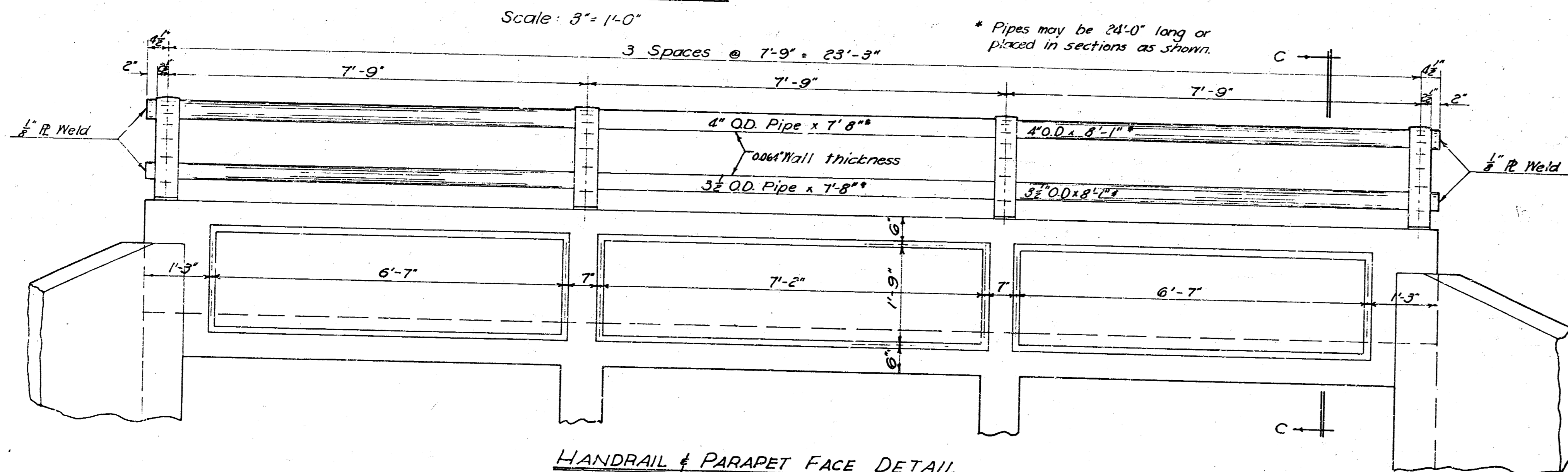
DETAIL OF CAST IRON DRAIN
Scale: 1/2" = 1'-0"



CULVERT CROWN
No Scale

HANDRAIL POST DETAIL

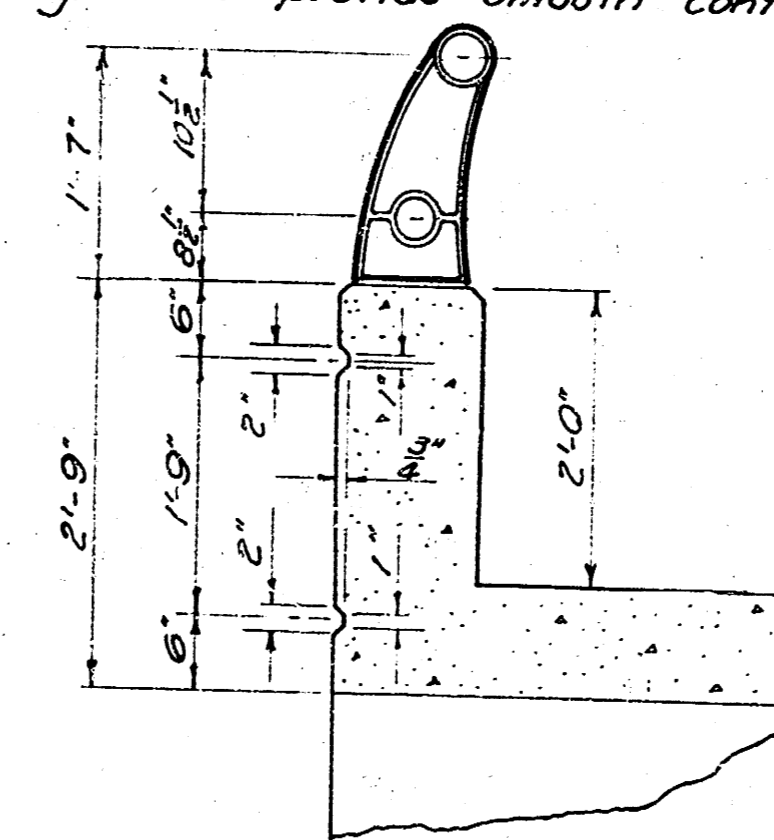
Scale: 3/4" = 1'-0"



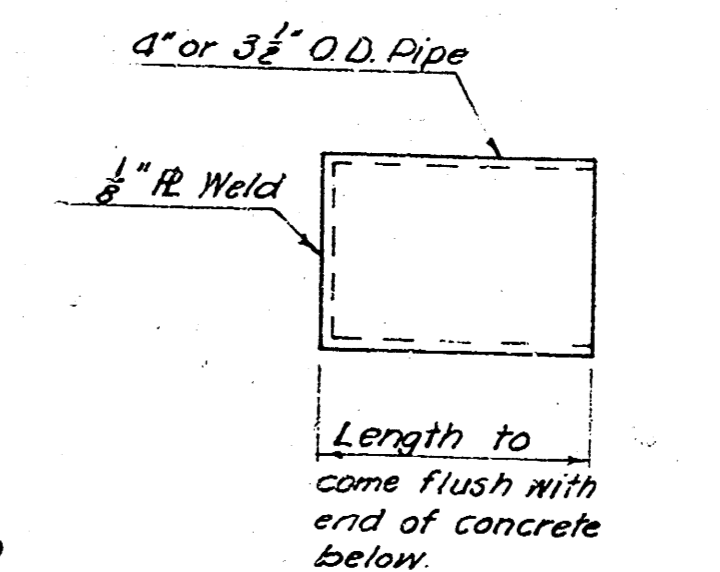
HANDRAIL & PARAPET FACE DETAIL

Scale: 3/4" = 1'-0"

Notes: Unit price bid for Metal Handrail shall include installation of handrail anchor bolts and complete fabrication and erection of posts and railing, as shown.
All handrail anchor bolts and nuts shall either be galvanized or cadmium plated steel. All other parts of rail shall be aluminum tubing, Alloy 61S-T6, mill finish; cast posts, Alloy 214, sandblast finish. All aluminum shall have a protective coating prior to erection as shown in the Specifications.
Aluminum surfaces in contact with concrete shall be painted with a heavy coat of bituminous paint, Inertol brand or equal.
The top surface of the parapet wall shall be given a troweled finish with special care given to provide smooth contact surfaces under posts.

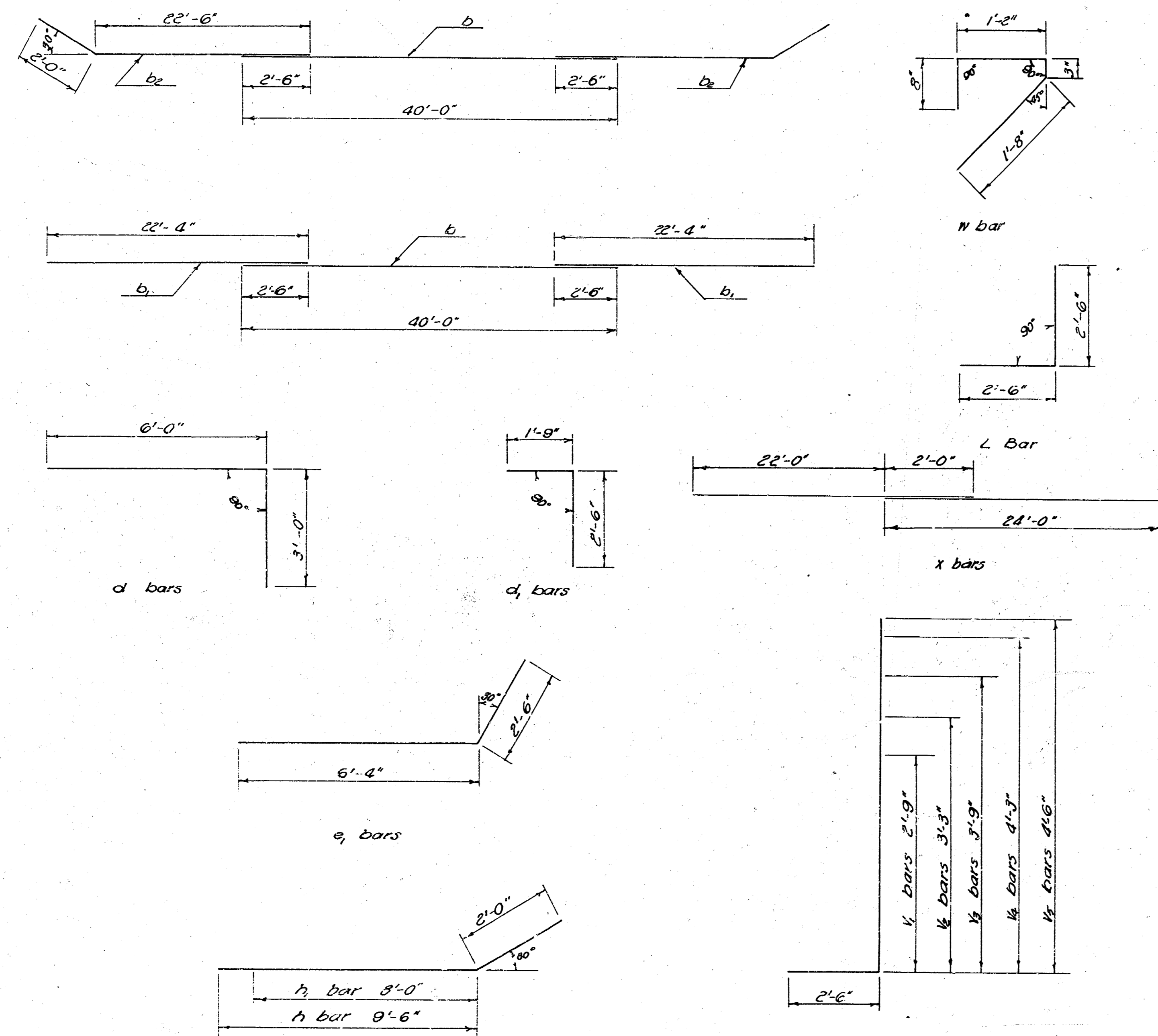


SECTION C-C
Scale: 3/4" = 1'-0"



RAIL CAP DETAIL

No Scale

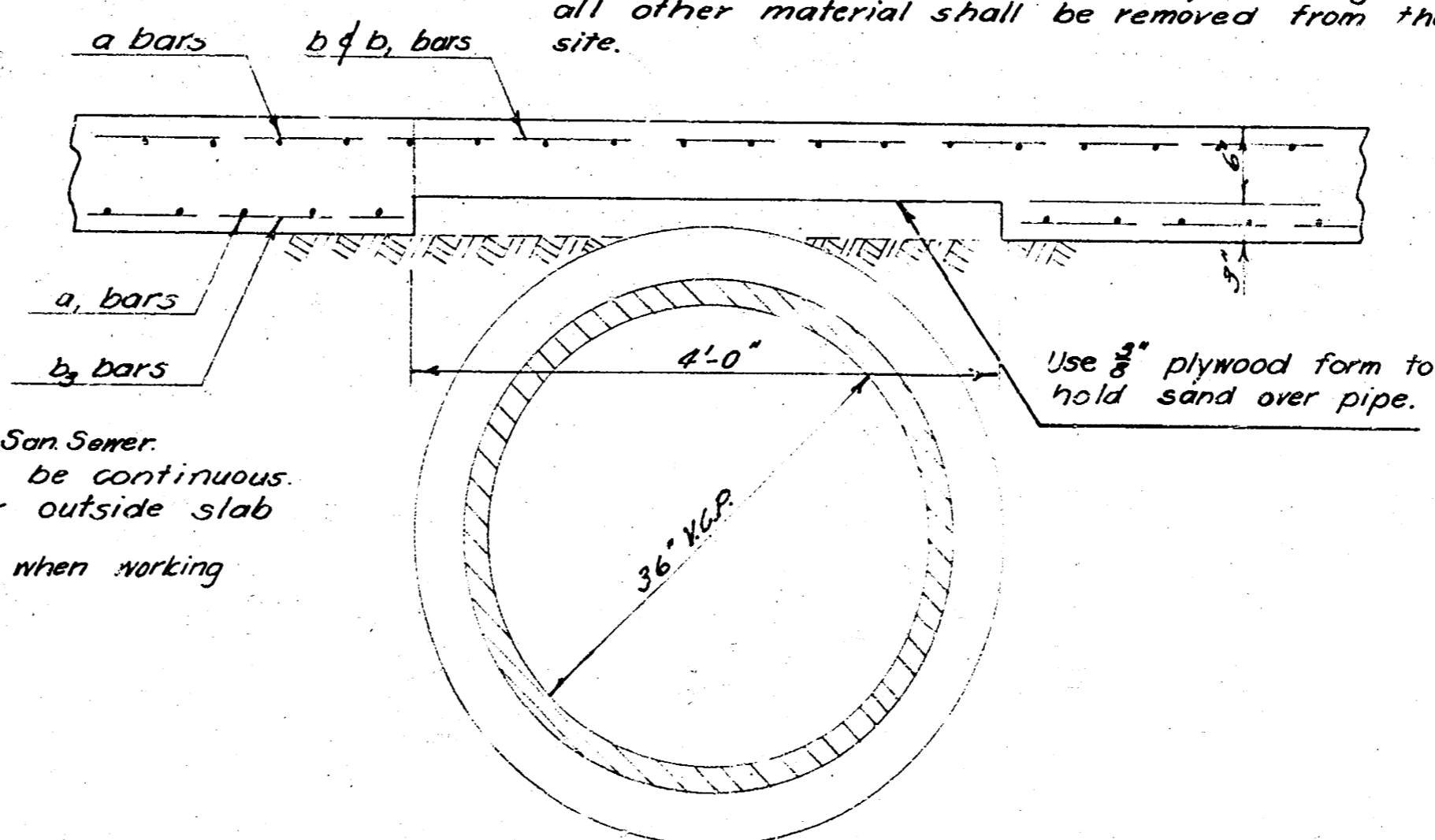


BAR BENDING DIAGRAMS
No Scale

| STEEL SCHEDULE | | | | |
|----------------|------|-----|--------|-------|
| BAR | SIZE | NO. | LENGTH | SHAPE |
| a | 1/2" | 350 | 23'-7" | — |
| a | 3/4" | 680 | 5'-0" | — |
| b | 1/2" | 50 | 40'-0" | — |
| b | 3/4" | 100 | 22'-4" | — |
| b ₁ | 1/2" | 0 | 24'-6" | — |
| c | 1/2" | 6 | 24'-0" | — |
| d | 1/2" | 46 | 9'-0" | — |
| d ₁ | 1/2" | 24 | 4'-3" | — |
| e | 1/2" | 6 | 23'-0" | — |
| g | 1/2" | 12 | 8'-10" | — |
| g | 3/4" | 20 | 11'-0" | — |
| h | 1/2" | 8 | 11'-8" | — |
| h | 3/4" | 4 | 10'-0" | — |
| L | 1/2" | 46 | 5'-0" | — |
| m | 1/2" | 4 | 23'-8" | — |
| s | 1/2" | 4 | 8'-6" | — |
| v | 1/2" | 324 | 3'-2" | — |
| v | 3/4" | 0 | 5'-3" | — |
| v | 3/4" | 0 | 5'-9" | — |
| v | 3/4" | 0 | 6'-3" | — |
| v | 3/4" | 0 | 6'-9" | — |
| v | 3/4" | 4 | 7'-0" | — |
| w | 1/2" | 92 | 3'-9" | — |
| x | 1/2" | 4 | 24'-0" | — |
| z | 1/2" | 8 | 37'-8" | — |

| BILL OF MATERIALS | | |
|-------------------------|----------|---------|
| ITEM | QUANTITY | UNITS |
| Class "A" AE Concrete | 1650 | Cu Yds. |
| Reinf. Steel | 20550 | Lbs |
| Aluminum Handrail | 480 | Lin Ft |
| General Excavation | 455 | Cu Yds. |
| Hand Excavation | 5 | Cu Yds. |
| Compacted Backfill | 50 | Cu Yds. |
| Integral Curb | 48 | Lin Ft |
| 4" sidewalk | 240 | Sq. Ft. |
| Cast Iron Drains | 6 | Each |
| Remove Exist. Box | 1 | Each |
| 22" x 15" CMPA | 78 | Lin Ft. |
| 5' x 2' Std Catch Basin | 6 | Each |
| 15" RCP | 16 | Lin Ft. |

GENERAL NOTES:
 General excavation is to be extended 2' each side of box & wingwalls.
 All fill is to be sand stabilized. Backfill at sides of box to be mechanically tamped. Fill is to be carried to approx. original ground elev., but in no case above the top of culvert.
 Bevel all exposed edges with a 3/8" triangular molding unless otherwise indicated.
 The Contractor shall salvage all reusable material from existing timber structure and stockpile at the site as directed by the Engineer; all other material shall be removed from the site.



Note: Box out 4'-0" over San Sewer.
 Steel in upper face to be continuous.
 Pour 4' section after outside slab is complete.
 Use extreme caution when working over existing 36" Sewer.

SECTION OVER SAN SEWER
Scale: 1/4" = 1'-0"