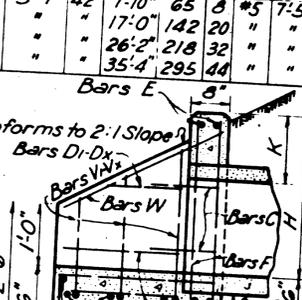
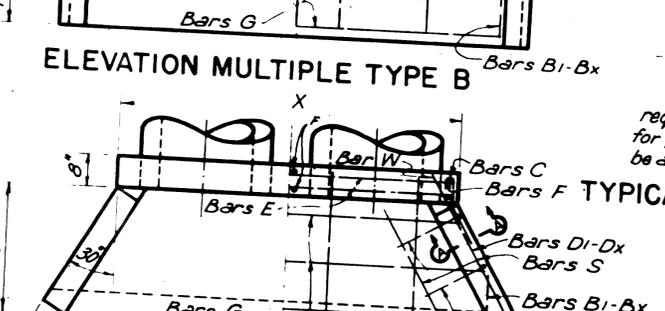
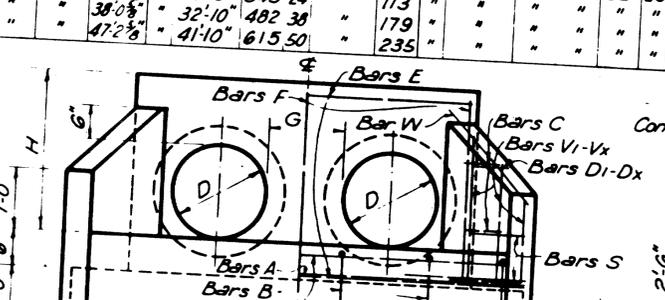
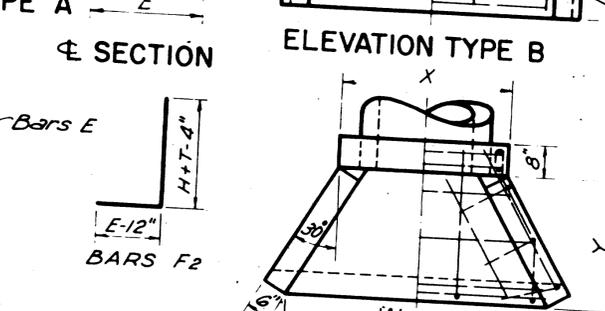
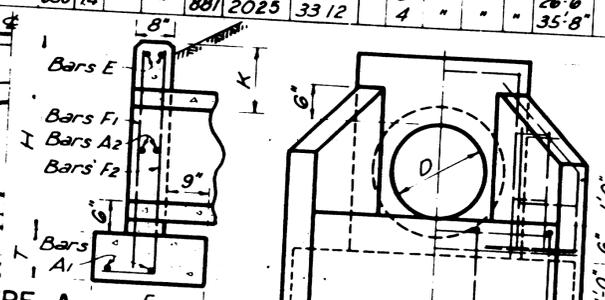
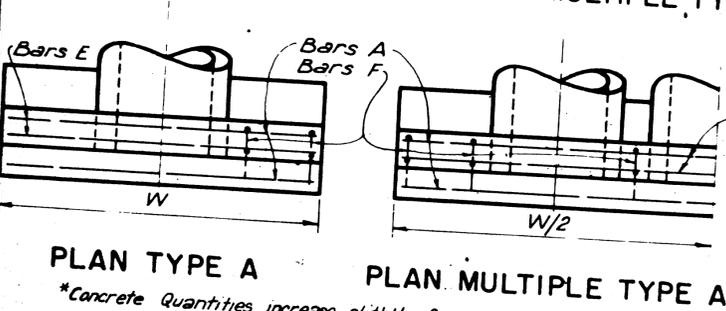
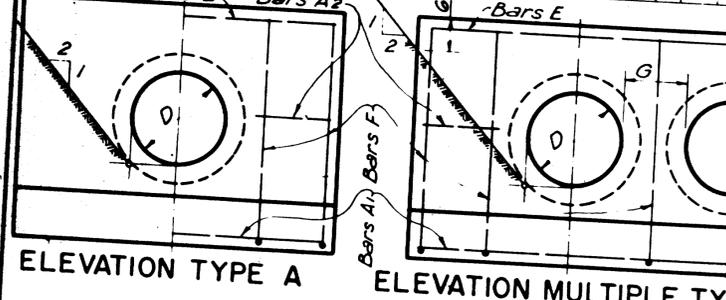


TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE A HEADWALLS

| NO. OF PIPES | DIAM. OF PIPES | REINFORCING STEEL AND QUANTITIES FOR TWO TYPE A HEADWALLS | | | | | | | | | | TOTAL QUANTITIES STEEL CONC. LBS. C.Y. | | | | | | | |
|--------------|----------------|---|-----|------------|-------|--------|----------|--------|-----|----------|-------|--|----------|-------|-----|----------|-------|-----|----|
| | | DIMENSIONS | | BARS A1-A2 | | BARS B | | BARS C | | BARS D | | | BARS E | | | | | | |
| G | K | H | W | No. Size | Lgth. | Wt. | No. Size | Lgth. | Wt. | No. Size | Lgth. | Wt. | No. Size | Lgth. | Wt. | No. Size | Lgth. | Wt. | |
| 1 | 12" | 12" | 10" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" |
| 2 | 15" | 12" | 10" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" |
| 3 | 18" | 12" | 10" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" |
| 4 | 24" | 12" | 10" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" |

TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE B HEADWALLS

| NO. OF PIPES | DIAM. OF PIPES | REINFORCING STEEL AND QUANTITIES FOR TWO TYPE B HEADWALLS | | | | | | | | | | TOTAL QUANTITIES STEEL CONC. LBS. C.Y. | | | | | | | |
|--------------|----------------|---|-----|------------|-------|--------|----------|--------|-----|----------|-------|--|----------|-------|-----|----------|-------|-----|----|
| | | DIMENSIONS | | BARS A1-Ax | | BARS B | | BARS C | | BARS D | | | BARS E | | | | | | |
| G | K | H | W | No. Size | Lgth. | Wt. | No. Size | Lgth. | Wt. | No. Size | Lgth. | Wt. | No. Size | Lgth. | Wt. | No. Size | Lgth. | Wt. | |
| 1 | 12" | 12" | 10" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" |
| 2 | 15" | 12" | 10" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" |
| 3 | 18" | 12" | 10" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" |
| 4 | 24" | 12" | 10" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" | 10" | 8" |



GENERAL NOTES:
 This dimension reduced 1-1/8" for each successive bar.
 This dimension increased 2-7/8" for each successive bar.
 All exposed corners shall be chamfered 1/4".
 Reinforcing steel shall be placed with the center of the outside layer of bars 2" from the surface of the concrete. Total quantities include one 20 diameter lap for all bars over 60'-0" in length.

**TEXAS HIGHWAY DEPARTMENT
 CONCRETE HEADWALLS
 FOR
 PIPE CULVERTS
 12 TO 72 INCHES IN DIAMETER
 CH-II**

| | | | | |
|--------|----------|-----------|----------|-------------------------|
| DATE | DRAWING | DATE | STATE | FEDERAL AID PROJECT NO. |
| 1-1-50 | Original | Feb. 1950 | TEXAS | |
| CK DW | K.M.A. | Rev. 1-67 | CONCRETE | |
| TR | CKR | | | |

