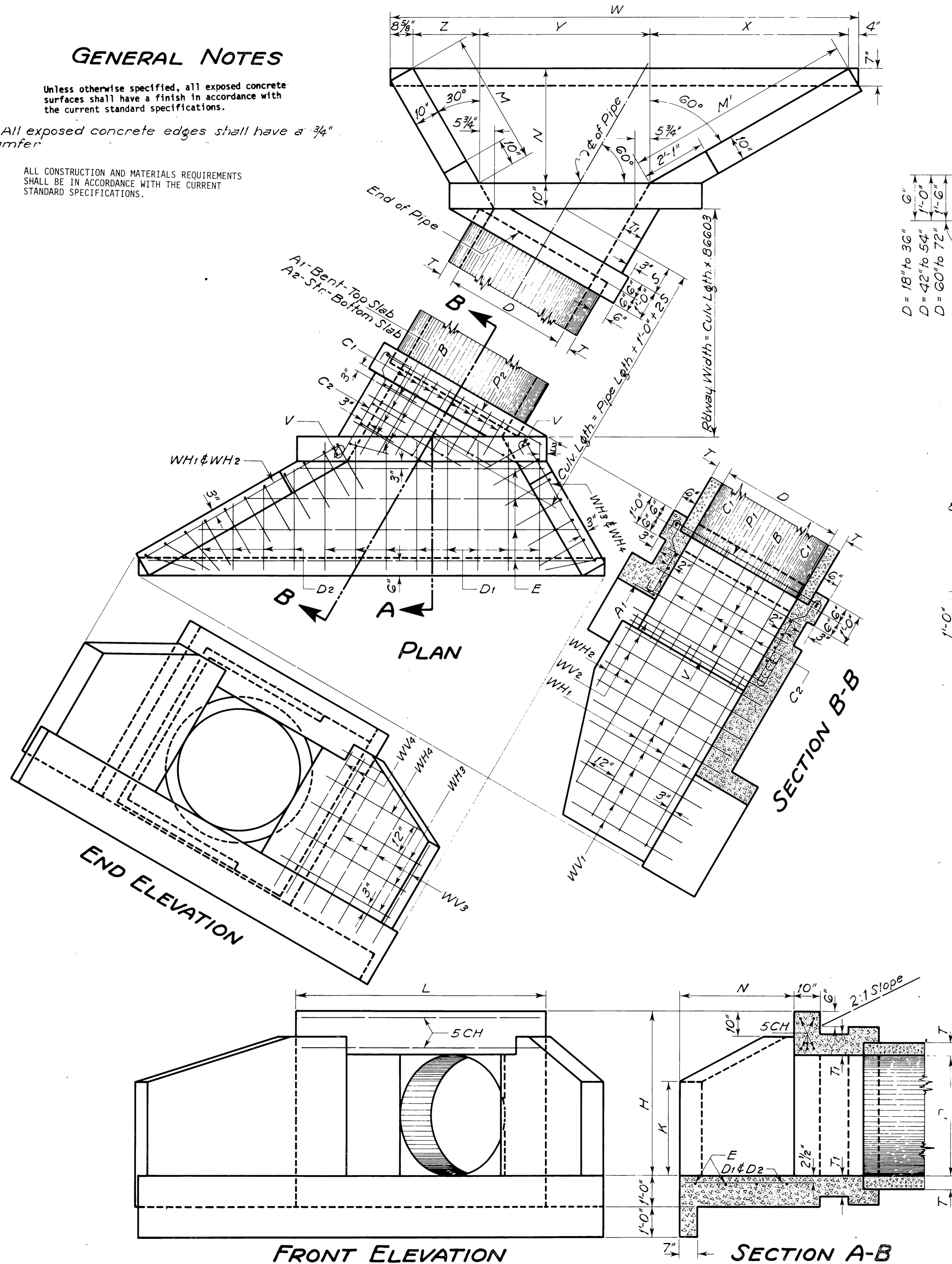


GENERAL NOTES

Unless otherwise specified, all exposed concrete surfaces shall have a finish in accordance with the current standard specifications.

All exposed concrete edges shall have a 3/4" chamfer

ALL CONSTRUCTION AND MATERIALS REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS.



DIMENSIONS

| D | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" |
|---------------|-----------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| Area, Sq. Ft. | 1.77 | 3.14 | 4.91 | 7.07 | 9.62 | 12.57 | 15.90 | 19.63 | 23.76 | 28.27 |
| T | 2 1/2" | 3" | 3 1/2" | 4" | 4 1/2" | 5" | 5 1/2" | 6" | 6 1/2" | 7" |
| Ti | 5 1/2" | 6" | 6 1/2" | 7" | 7 1/2" | 8" | 8 1/2" | 9" | 9 1/2" | 10" |
| H | 2'-8 1/2" | 3'-3" | 3'-9 1/2" | 4'-4" | 4'-10 1/2" | 5'-5" | 5'-11 1/2" | 6'-6" | 7'-0 1/2" | 7'-7" |
| K | 1'-6" | 1'-10" | 2'-5" | 2'-9" | 2'-9" | 3'-1" | 3'-5" | 3'-9" | 4'-1" | 4'-5" |
| L | 5'-3 3/4" | 5'-10 3/4" | 6'-5 5/8" | 7'-0 5/8" | 7'-7 1/2" | 8'-2 3/8" | 8'-9 3/8" | 9'-4 1/4" | 9'-11 1/4" | 10'-6 1/8" |
| M | 1'-8 3/4" | 2'-3 3/4" | 2'-10 3/8" | 3'-5 3/8" | 3'-10 1/8" | 4'-4" | 4'-9 3/4" | 5'-3 1/2" | 5'-9 1/4" | 6'-4 1/4" |
| M' | 3'-0" | 4'-0" | 5'-0" | 6'-0" | 6'-8" | 7'-6" | 8'-4" | 9'-2" | 10'-0" | 11'-0" |
| N | 1'-6" | 2'-0" | 2'-6" | 3'-0" | 3'-4" | 3'-9" | 4'-2" | 4'-7" | 5'-0" | 5'-6" |
| S | 5/8" | 2 5/8" | 4 5/8" | 6 3/4" | 8 3/4" | 10 3/4" | 1'-0 3/4" | 1'-2 3/4" | 1'-4 3/4" | 1'-6 3/8" |
| W | 7'-2 3/8" | 8'-11 3/8" | 10'-8 1/8" | 12'-4 7/8" | 13'-9" | 15'-3 1/2" | 16'-10" | 18'-4 3/8" | 19'-10 7/8" | 21'-7 3/4" |
| X | 2'-7 1/8" | 3'-5 5/8" | 4'-4" | 5'-2 3/8" | 5'-9 1/4" | 6'-6" | 7'-2 5/8" | 7'-11 1/4" | 8'-7 7/8" | 9'-6 3/8" |
| Y | 2'-8 1/2" | 3'-3 1/4" | 3'-10 1/8" | 4'-5 1/8" | 5'-0" | 5'-6 3/8" | 6'-1 7/8" | 6'-8 3/4" | 7'-3 3/4" | 7'-10 5/8" |
| Z | 10 3/4" | 1'-1 7/8" | 1'-5 3/8" | 1'-8 3/4" | 1'-11 1/4" | 2'-2" | 2'-4 7/8" | 2'-7 3/4" | 2'-10 3/8" | 3'-2 1/8" |

REINFORCING STEEL

| Description | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length | | |
|---------------------------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|----|--------|
| A1 - Bent 1/2" @ 6'cts. | 1 | 2'-9" | 2 | 3'-6" | 2 | 3'-11" | 3 | 2'-10" | 3 | 3'-4" | 4 | 3'-9" | 5 | 2'-9" | 6 | 3'-4" | 6 | 3'-10" | 7 | 2'-10" |
| A2 - Str. 1/2" @ 6'cts. | 1 | 2'-9" | 2 | 3'-6" | 2 | 3'-11" | 3 | 2'-10" | 3 | 3'-4" | 4 | 3'-9" | 5 | 2'-9" | 6 | 3'-4" | 6 | 3'-10" | 7 | 2'-10" |
| B - Bent 1/2" @ 9'cts. | 2 | 3'-2" | 3 | 3'-9" | 3 | 4'-4" | 3 | 4'-11" | 4 | 6'-6" | 4 | 7'-1" | 5 | 7'-8" | 5 | 9'-3" | 5 | 9'-10" | 6 | 10'-5" |
| C1 - Bent 1/2" @ 6'cts. | 6 | 2'-5" | 8 | 2'-5" | 10 | 2'-6" | 12 | 2'-6" | 14 | 2'-7" | 16 | 2'-7" | 18 | 2'-8" | 20 | 2'-8" | 22 | 2'-9" | 24 | 2'-9" |
| C2 - Bent 1/2" @ 9'cts. | 2 | 3'-5" | 3 | 3'-9" | 4 | 4'-1" | 5 | 4'-5" | 5 | 4'-9" | 6 | 5'-1" | 6 | 5'-5" | 7 | 5'-8" | 8 | 6'-0" | 9 | 6'-4" |
| CH - Str. 5/8" @ | 5 | 4'-11" | 5 | 5'-6" | 5 | 6'-1" | 5 | 6'-8" | 5 | 7'-3" | 5 | 7'-10" | 5 | 8'-5" | 5 | 9'-0" | 5 | 9'-7" | 5 | 10'-2" |
| D1 - Str. 1/2" @ 12'cts. | 6 | 2'-0" | 6 | 2'-6" | 7 | 3'-0" | 7 | 3'-6" | 8 | 3'-10" | 8 | 4'-3" | 9 | 4'-8" | 9 | 5'-1" | 10 | 5'-6" | 11 | 6'-0" |
| D2 - Str. 1/2" @ 12'cts. | | | | | 1 | 1'-8" | 2 | 1'-10" | 2 | 2'-0" | 4 | 1'-8" | 4 | 1'-8" | 5 | 1'-11" | 5 | 2'-2" | 5 | 2'-4" |
| E - Str. 1/2" @ | 2 | 5'-2" | 2 | 5'-6" | 3 | 6'-4" | 3 | 6'-8" | 3 | 7'-4" | 4 | 8'-4" | 4 | 8'-8" | 5 | 9'-4" | 5 | 10'-0" | 6 | 10'-6" |
| P1 - Bent 1/2" @ | 1 | 4'-0" | 1 | 4'-7" | 1 | 5'-2" | 1 | 5'-9" | 1 | 6'-4" | 1 | 6'-11" | 1 | 7'-6" | 1 | 8'-1" | 1 | 8'-8" | 1 | 9'-3" |
| P2 - Str. 1/2" @ | 2 | 3'-3" | 2 | 3'-9" | 2 | 4'-3" | 2 | 4'-9" | 2 | 5'-4" | 2 | 5'-10" | 2 | 6'-4" | 2 | 6'-10" | 2 | 7'-5" | 2 | 8'-0" |
| V - Str. 1/2" @ | 2 | 1'-10" | 2 | 2'-5" | 2 | 3'-0" | 2 | 3'-6" | 2 | 4'-0" | 2 | 4'-7" | 2 | 5'-2" | 2 | 5'-8" | 2 | 6'-2" | 2 | 6'-9" |
| WH1 - Bent 1/2" @ 12'cts. | 2 | 3'-7" | 2 | 4'-7" | 2 | 5'-7" | 3 | 6'-7" | 3 | 7'-3" | 3 | 8'-1" | 4 | 8'-11" | 4 | 9'-9" | 4 | 10'-7" | 5 | 11'-7" |
| WH2 - Bent 1/2" @ 12'cts. | | | 1 | 3'-1" | 1 | 4'-6" | 1 | 3'-0" | 1 | 5'-0" | 2 | 3'-3" | 1 | 5'-3" | 2 | 3'-10" | 2 | 5'-8" | 2 | 4'-1" |
| WH3 - Bent 1/2" @ 12'cts. | 2 | 2'-8" | 2 | 3'-3" | 2 | 3'-9" | 3 | 4'-4" | 3 | 4'-9" | 3 | 5'-3" | 4 | 5'-9" | 4 | 6'-2" | 4 | 6'-8" | 5 | 7'-3" |
| WH4 - Bent 1/2" @ 12'cts. | | | 1 | 1'-11" | 1 | 3'-1" | 1 | 2'-1" | 1 | 3'-3" | 2 | 2'-2" | 1 | 3'-6" | 2 | 2'-5" | 2 | 3'-8" | 2 | 2'-9" |
| WV1 - Bent 1/2" @ 9'cts. | 1 | 3'-3" | 3 | 3'-7" | 4 | 4'-6" | 5 | 5'-0" | 6 | 5'-4" | 7 | 5'-8" | 8 | 6'-2" | 10 | 6'-6" | 11 | 7'-0" | 12 | 7'-4" |
| WV2 - Bent 1/2" @ 9'cts. | 4 | 3'-7" | 3 | 4'-1" | 3 | 4'-8" | 4 | 5'-2" | 3 | 6'-3" | 4 | 6'-9" | 4 | 7'-4" | 3 | 8'-4" | 3 | 8'-11" | 3 | 9'-5" |
| WV3 - Bent 1/2" @ 9'cts. | 1 | 3'-3" | 2 | 3'-7" | 3 | 4'-1" | 4 | 4'-8" | 4 | 5'-2" | 5 | 5'-8" | 5 | 6'-2" | 6 | 6'-6" | 7 | 7'-0" | 7 | 7'-4" |
| WV4 - Bent 1/2" @ 9'cts. | 2 | 3'-7" | 2 | 4'-1" | 2 | 4'-8" | 2 | 5'-2" | 2 | 6'-3" | 2 | 6'-9" | 2 | 7'-4" | 2 | 8'-4" | 2 | 8'-11" | 2 | 9'-5" |

QUANTITIES

| Class "A" Conc. C.Y. | 1.44 | 2.05 | 2.77 | 3.61 | 4.40 | 5.38 | 6.46 | 7.65 | 8.96 | 10.52 |
|---------------------------------------|------|------|------|------|------|------|------|------|------|-------|
| Reinf. Steel, Lbs. | 102 | 138 | 179 | 227 | 268 | 333 | 385 | 464 | 524 | 610 |
| 1/4" Add. C. Wall, Class A Conc. C.Y. | .156 | .193 | .231 | .268 | .297 | .330 | .364 | .397 | .430 | .468 |

Note: Quantities shown are for One Headwall.
Note: Bend C1-Bars in pairs.

ASIS OF PAYMENT
Class A Concrete C.Y.
Reinforcing Steel LB.

| REVISIONS | | | | RECORD | | OKLAHOMA DEPARTMENT OF TRANSPORTATION | |
|-----------|-----------------|------|------|----------|--------|---------------------------------------|---------------------|
| NO. | DESCRIPTION | BY | DATE | ITEM | BY | DATE | OKLAHOMA CITY OKLA. |
| 1 | Rev. 1967 Spec. | LED. | | DESIGNED | | | |
| | | | | DETAILED | F.R.C. | 3-47 | |
| | | | | TRACED | F.R.C. | 3-47 | |
| | | | | CHECKED | A.W.V. | 3-47 | |
| | | | | APPROVED | | | |
| | | | | SCALE | | | |

STANDARD
CONCRETE PIPE, CULVERTS
CONCRETE HEADWALLS
18" TO 72" REINF. CONC. PIPE
60° SKEW