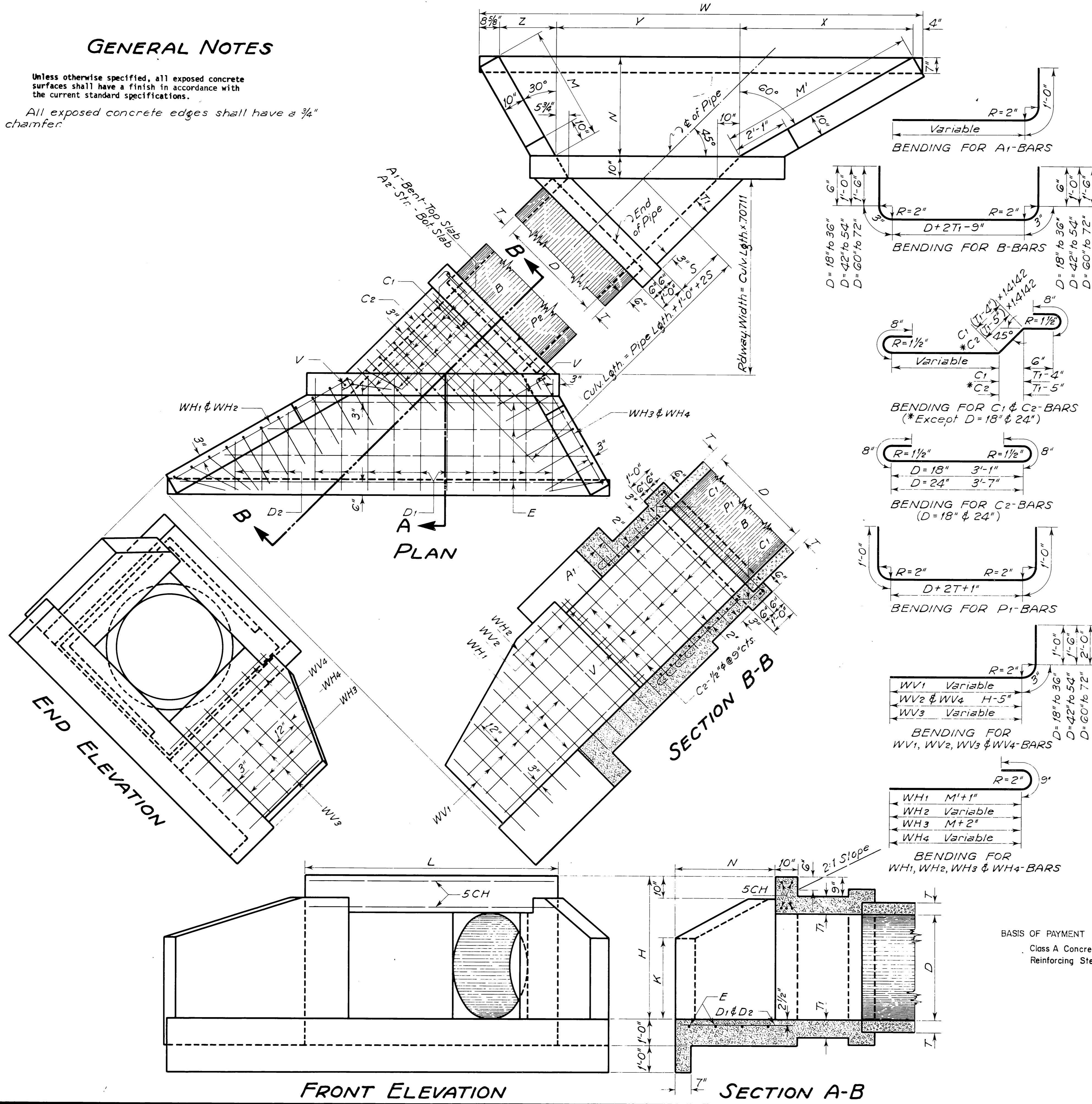


GENERAL NOTES

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.



DIMENSIONS & QUANTITIES

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"
T1	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'-1"	2'-5 1/2"	2'-9"	3'-1"	3'-5"	3'-9"	4'-1"	4'-5"
L	6'-0 3/4"	6'-9 1/4"	7'-5 3/8"	8'-2 1/8"	8'-10 5/8"	9'-7 3/8"	10'-3 5/8"	11'-0 1/8"	11'-8 3/8"	12'-5 1/8"
M	1'-8 3/4"	2'-3 3/4"	2'-10 3/4"	3'-5 3/4"	3'-10 3/4"	4'-4"	4'-9 1/2"	5'-3 1/2"	5'-9 1/2"	6'-4 1/2"
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 1/2"	9"	1'-0 1/2"	1'-4"	1'-7 1/2"	1'-11"	2'-2 1/2"	2'-6"	2'-9 1/2"	3'-1"
W	7'-11 3/8"	9'-9 7/8"	11'-8 1/8"	13'-6 3/8"	15'-0 1/8"	16'-8 1/4"	18'-4 1/4"	20'-0 1/4"	21'-8 1/4"	23'-6 3/4"
X	2'-7 1/8"	3'-5 3/8"	4'-4"	5'-2 3/8"	5'-9 3/8"	6'-6"	7'-2 3/8"	7'-11 3/8"	8'-7 3/8"	9'-6 3/8"
Y	3'-5 1/2"	4'-1 3/4"	4'-10 1/4"	5'-6 3/4"	6'-3 3/4"	6'-11 3/4"	7'-8 1/4"	8'-4 3/4"	9'-1 1/4"	9'-9 3/4"
Z	10 3/8"	1'-1 7/8"	1'-5 3/8"	1'-8 3/4"	1'-11 1/2"	2'-2"	2'-4 7/8"	2'-7 3/4"	2'-10 1/2"	3'-2 1/8"
A1-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 6' cts.	3 2'-0" to 3'-0"	4 2'-3" to 3'-6"	5 2'-6" to 4'-0"	7 2'-9" to 5'-0"	8 2'-12" to 6'-0"	9 2'-3" to 6'-6"	10 2'-6" to 7'-0"	11 2'-9" to 7'-6"	12 2'-12" to 8'-0"	13 2'-3" to 8'-6"
A2-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 6' cts.	3 3'-2" to 3'-3"	4 3'-6" to 3'-9"	5 3'-9" to 4'-3"	7 4'-3" to 4'-9"	8 4'-6" to 5'-0"	9 4'-9" to 5'-3"	10 5'-0" to 5'-6"	11 5'-3" to 5'-9"	12 5'-6" to 6'-0"	13 5'-9" to 6'-3"
B-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 9' cts.	3 3'-2" to 3'-9"	4 3'-9" to 4'-3"	5 4'-3" to 4'-9"	6 4'-6" to 5'-0"	7 4'-9" to 5'-3"	8 5'-0" to 5'-6"	9 5'-3" to 5'-9"	10 5'-6" to 6'-0"	11 5'-9" to 6'-3"	12 6'-0" to 6'-6"
C1-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 6' cts.	6 2'-0" to 3'-0"	8 2'-6" to 4'-0"	10 3'-0" to 4'-6"	12 3'-6" to 5'-0"	14 4'-0" to 6'-0"	16 4'-6" to 7'-0"	18 5'-0" to 8'-0"	20 5'-6" to 9'-0"	22 6'-0" to 10'-0"	24 6'-6" to 12'-0"
C2-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 9' cts.	2 4'-5" to 4'-11"	3 4'-11" to 5'-4"	4 5'-4" to 6'-0"	5 6'-0" to 6'-7"	6 6'-7" to 7'-1"	7 7'-1" to 7'-8"	8 7'-8" to 8'-3"	9 8'-3" to 8'-9"	10 8'-9" to 9'-4"	11 9'-4" to 9'-10"
CH-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
3/8" @ 6' cts.	5 5'-8" to 6'-5"	5 6'-5" to 7'-1"	5 7'-1" to 7'-10"	5 7'-10" to 8'-2"	5 8'-2" to 8'-11"	5 8'-11" to 9'-3"	5 9'-3" to 9'-11"	5 9'-11" to 10'-4"	5 10'-4" to 11'-2"	5 11'-2" to 12'-0"
D1-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 12' cts.	6 2'-0" to 3'-0"	7 2'-6" to 3'-6"	8 3'-0" to 4'-0"	8 3'-6" to 4'-6"	9 4'-0" to 5'-0"	10 4'-6" to 6'-0"	11 5'-0" to 7'-0"	12 5'-6" to 8'-0"	13 6'-0" to 9'-0"	14 6'-6" to 10'-0"
D2-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 12' cts.	No. Lgth.	No. Lgth.	1 1'-6" to 2'-0"	3 2'-0" to 3'-0"	3 2'-6" to 3'-6"	3 3'-0" to 4'-0"	4 3'-6" to 4'-6"	5 4'-0" to 5'-0"	5 4'-6" to 5'-6"	6 5'-0" to 6'-0"
E-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 6' cts.	2 6'-0" to 6'-6"	2 6'-6" to 7'-0"	3 7'-0" to 7'-6"	3 7'-6" to 8'-0"	3 8'-0" to 8'-6"	4 8'-6" to 9'-0"	4 9'-0" to 9'-6"	5 9'-6" to 10'-0"	5 10'-0" to 10'-6"	6 10'-6" to 11'-0"
P1-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 6' cts.	1 4'-0" to 4'-7"	1 4'-7" to 5'-2"	1 5'-2" to 5'-9"	1 5'-9" to 6'-4"	1 6'-4" to 6'-11"	1 6'-11" to 7'-6"	1 7'-6" to 8'-1"	1 8'-1" to 8'-8"	1 8'-8" to 9'-3"	1 9'-3" to 9'-10"
P2-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 6' cts.	2 3'-0" to 3'-6"	2 3'-6" to 4'-0"	2 4'-0" to 4'-6"	2 4'-6" to 5'-0"	2 5'-0" to 5'-6"	2 5'-6" to 6'-0"	2 6'-0" to 6'-6"	2 6'-6" to 7'-0"	2 7'-0" to 7'-6"	2 7'-6" to 8'-0"
V-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 6' cts.	2 1'-10" to 2'-5"	2 2'-5" to 3'-0"	2 3'-0" to 3'-6"	2 3'-6" to 4'-0"	2 4'-0" to 4'-6"	2 4'-6" to 5'-0"	2 5'-0" to 5'-6"	2 5'-6" to 6'-0"	2 6'-0" to 6'-6"	2 6'-6" to 7'-0"
WH1-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 12' cts.	2 3'-10" to 4'-10"	2 4'-10" to 5'-10"	2 5'-10" to 6'-10"	3 6'-10" to 7'-6"	3 7'-6" to 8'-4"	3 8'-4" to 9'-2"	4 9'-2" to 10'-0"	4 10'-0" to 10'-10"	5 10'-10" to 11'-10"	5 11'-10" to 12'-0"
WH2-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 12' cts.	1 3'-4" to 3'-9"	1 3'-9" to 4'-3"	1 4'-3" to 4'-9"	1 4'-9" to 5'-3"	2 5'-3" to 5'-9"	2 5'-9" to 6'-3"	2 6'-3" to 6'-9"	2 6'-9" to 7'-3"	2 7'-3" to 7'-9"	2 7'-9" to 8'-3"
WH3-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 12' cts.	2 2'-8" to 3'-3"	2 3'-3" to 3'-9"	2 3'-9" to 4'-4"	3 4'-4" to 4'-9"	3 4'-9" to 5'-4"	4 5'-4" to 5'-9"	4 5'-9" to 6'-4"	4 6'-4" to 6'-9"	5 6'-9" to 7'-4"	5 7'-4" to 7'-9"
WH4-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 12' cts.	No. Lgth.	No. Lgth.	1 1'-11" to 2'-1"	1 2'-1" to 2'-11"	1 2'-11" to 3'-3"	2 3'-3" to 3'-11"	2 3'-11" to 4'-3"	2 4'-3" to 4'-11"	2 4'-11" to 5'-3"	2 5'-3" to 5'-11"
WV1-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 9' cts.	1 3'-3" to 3'-11"	3 3'-11" to 4'-3"	4 4'-3" to 4'-11"	5 4'-11" to 5'-3"	6 5'-3" to 5'-11"	7 5'-11" to 6'-3"	8 6'-3" to 6'-11"	10 6'-11" to 7'-3"	11 7'-3" to 7'-11"	12 7'-11" to 8'-3"
WV2-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 9' cts.	4 3'-7" to 4'-1"	3 4'-1" to 4'-8"	3 4'-8" to 5'-2"	3 5'-2" to 5'-9"	3 5'-9" to 6'-3"	4 6'-3" to 6'-11"	4 6'-11" to 7'-3"	3 7'-3" to 7'-11"	3 7'-11" to 8'-3"	3 8'-3" to 8'-11"
WV3-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 9' cts.	1 3'-3" to 3'-11"	2 3'-11" to 4'-3"	3 4'-3" to 4'-11"	4 4'-11" to 5'-3"	4 5'-3" to 5'-11"	5 5'-11" to 6'-3"	5 6'-3" to 6'-11"	6 6'-11" to 7'-3"	7 7'-3" to 7'-11"	7 7'-11" to 8'-3"
WV4-Bars	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.	No. Lgth.
1/2" @ 9' cts.	2 3'-7" to 4'-1"	2 4'-1" to 4'-8"	2 4'-8" to 5'-2"	2 5'-2" to 5'-9"	2 5'-9" to 6'-3"	2 6'-3" to 6'-11"	2 6'-11" to 7'-3"	2 7'-3" to 7'-11"	2 7'-11" to 8'-3"	2 8'-3" to 8'-11"
Class "A" Conc. C.Y.	1.61	2.30	3.12	4.08	5.03	6.18	7.48	8.92	10.51	12.40
Reinf. Steel, Lbs.	119	162	210	278	331	410	465	566	646	748
1' Add. C. Wall Class "A" Conc. C.Y.	.172	.212	.252	.292	.324	.360	.396	.433	.469	.509

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

All construction and materials requirements shall be in accordance with the current standard specifications.

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

REVISIONS				RECORD			
NO.	DESCRIPTION	BY	DATE	ITEM	BY	DATE	
1	Rev. 1967 Spec.	L.S.D.		DESIGNED			
				TRAGED	F.R.C.	2-47	
				CHECKED	A.W.V.	3-47	
				APPROVED			
				SCALE			

OKLAHOMA DEPARTMENT OF TRANSPORTATION
OKLAHOMA CITY, OKLA.

**STANDARD
CONCRETE PIPE CULVERTS
CONCRETE HEADWALLS
18" TO 72" REINF. CONC. PIPE
FILE 45° SKEW**