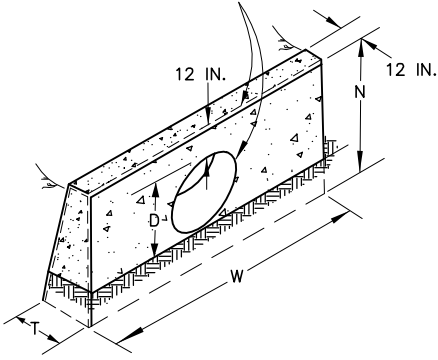
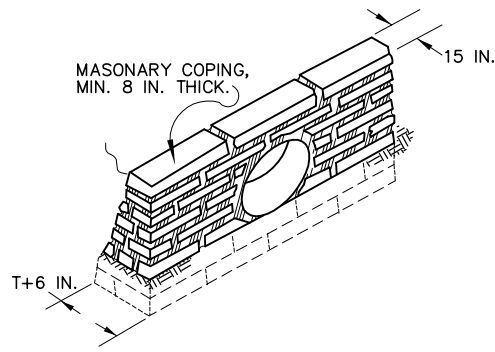


CHAMFER AROUND PIPE 1/2 D
3/4 IN. OTHER EXPOSED CORNERS

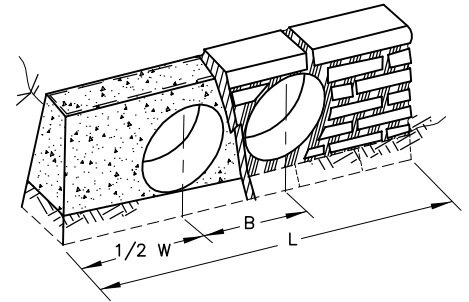


CONCRETE

SINGLE PIPE



MASONRY



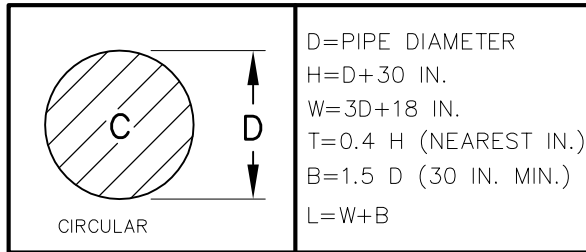
CONCRETE - MASONRY

DOUBLE PIPE

HEADWALL INSTALLATIONS

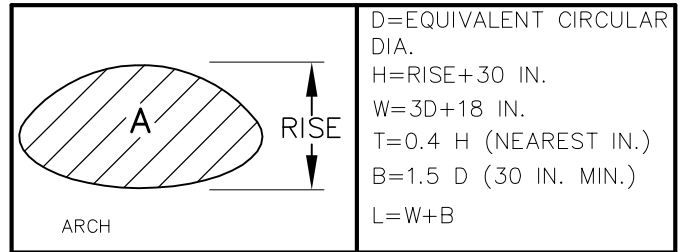
TYPE OF PIPE

HEADWALL DIMENSIONS



TYPE OF PIPE

HEADWALL DIMENSIONS



NOTE: VOLUME OCCUPIED BY PIPE HAS BEEN DEDUCTED.

QUANTITIES FOR ONE CONCRETE HEADWALL

(CUBIC YARDS)

PIPE		DIAMETER (AND EQUIVALENT DIAMETER) INCHES						(S=SPAN)		(R=RISE)					
		15		18		24		30		36		42		48	
TYPE	MAT'L	SGL.	DBL.	SGL.	DBL.	SGL.	DBL.	SGL.	DBL.	SGL.	DBL.	SGL.	DBL.	SGL.	DBL.
C	RCP	0.8	1.2	1.0	1.3	1.5	2.0	2.0	2.7	2.8	3.6	3.6	4.6	4.6	6.0
	CSP	0.9	1.2	1.1	1.4	1.6	2.1	2.2	3.0	3.0	4.0	3.9	5.0	5.0	6.8
A	RCP	-	-	0.9	1.2	1.3	1.8	1.7	2.3	3.1	3.1	2.9	3.9	3.1	4.4
	CSP	-	-	0.9	1.3	1.4	1.9	1.8	2.4	2.4	3.4	3.2	4.4	3.4	5.0
		N/A		S	R	S	R	S	R	S	R	S	R	S	R
				22	13	29	18	36	22	43	27	50	31	58	36

QUANTITIES FOR ONE MASONRY HEADWALL

(CUBIC YARDS)

TYPE	MAT'L	SGL.	15	DBL.	SGL.	18	DBL.	SGL.	24	DBL.	SGL.	30	DBL.	SGL.	36	DBL.	SGL.	42	DBL.	SGL.	48	DBL.
C	RCP	1.1	1.6	1.3	1.7	1.9	2.5	2.6	3.4	3.5	4.5	4.4	6.1	5.6	7.2							
	CSP	1.1	1.6	1.3	1.4	2.0	2.7	2.8	3.7	3.8	5.0	4.8	6.8	6.1	8.2							
A	RCP	-	-	1.4	1.9	2.1	2.8	2.9	3.9	3.9	5.3	5.0	7.2	6.4	8.8							
	CSP	-	-	1.4	1.9	2.1	2.9	3.0	4.1	4.0	5.5	5.2	7.6	6.6	9.2							
		N/A		S	R	S	R	S	R	S	R	S	R	S	R							
				22	13	29	18	36	22	43	27	50	31	58	36							

GENERAL NOTES:

1. REVISED CDOH-M-601-12

HEADWALLS FOR PIPES (15 IN. TO 48 IN. DIM.)



CITY OF
FORT COLLINS
UTILITIES
FORT COLLINS, CO.
(970) 221-6700

STORMWATER
CONSTRUCTION DETAILS

APPROVED:

DATE: 01/18/01

DRAWN BY: NBJ

DETAIL

D-17