PROJECT REFERENCE NO.	SHEET NO.
R-5861	UC-3B

DESIGNED BY:	KTC
DRAWN BY:	ATL
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UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

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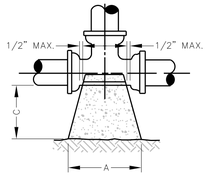
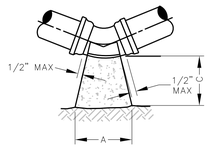
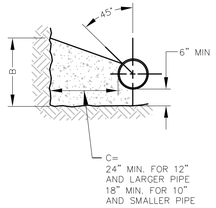






THRUST BLOCK FOR TEES & PLUGS				
	TEES			S.F. BEARING SURFACE
SIZE	A	B	C	
4"	16"	16"	18"	1.78
6"	20"	24"	18"	3.33
8"	26"	32"	18"	5.78
10"	32"	40"	18"	8.89
12"	36"	48"	24"	12.00
14"	40"	56"	24"	15.56
16"	48"	60"	24"	20.00
18"	56"	64"	24"	24.89
20"	60"	76"	24"	31.67
24"	72"	90"	24"	45.00
30"	86"	102"	24"	60.67
36"	116"	108"	24"	86.11

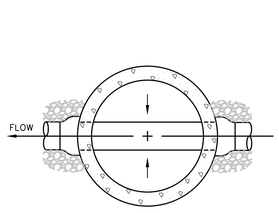
NOTES:

1. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.
2. THESE TABLES SHOW MINIMUM SIZES FOR THRUST BLOCKS IN GOOD SOIL (A-1 THRU A-3, CLEAN SANDS AND GRAVELS) WITH MINIMUM BEARING CAPACITY OF 2000 psi.
3. POOR SOILS A-4 THRU A-8, SILTY SOILS, CLAYS, MUCK AND PEAT WILL REQUIRE LARGER THRUST BLOCKING.
4. BOTH CONCRETE THRUST BLOCKS AND TIE RODS/RESTRIANED JOINTS MUST BE USED WHEN, IN THE JUDGEMENT OF THE ENGINEER, THE NATURE AND CRITICALITY OF AN INSTALLATION IS SUCH AS TO REQUIRE POSITIVE ASSURANCE OF STABILITY.
5. THE USE OF THRUST BLOCKS SHALL BE LIMITED TO SITUATIONS SUCH AS POINT REPAIR WHERE EXPOSING SEVERAL JOINTS OF PIPE IS NOT FEASIBLE DUE TO EXISTING GROUND CONDITIONS.
6. MAXIMUM TEST PRESSURE TO BE 150 PSI.

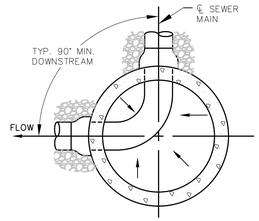
THRUST BLOCK FOR BENDS																
	90° BEND			S.F. BEARING SURFACE	45° BEND			S.F. BEARING SURFACE	22-1/2° BEND			S.F. BEARING SURFACE	11-1/4° BEND			S.F. BEARING SURFACE
SIZE	A	B	C		A	B	C		A	B	C		A	B	C	
4"	16"	16"	18"	1.78	14"	16"	18"	1.56	14"	16"	18"	1.56	14"	16"	18"	1.56
6"	22"	32"	18"	4.89	16"	18"	18"	2.00	14"	16"	18"	1.56	14"	16"	18"	1.56
8"	32"	36"	18"	8.00	24"	28"	18"	4.67	16"	18"	18"	2.00	14"	16"	18"	1.56
10"	36"	46"	18"	11.50	26"	36"	18"	6.50	20"	24"	18"	3.33	14"	18"	18"	1.75
12"	44"	56"	24"	17.11	32"	40"	24"	8.89	24"	30"	24"	5.00	16"	20"	24"	2.22
14"	52"	62"	24"	22.39	36"	48"	24"	12.00	26"	36"	24"	6.50	20"	24"	24"	3.33
16"	58"	72"	24"	29.00	40"	54"	24"	15.00	32"	38"	24"	8.44	22"	26"	24"	3.97
18"	64"	80"	24"	35.56	46"	60"	24"	19.17	36"	42"	24"	10.50	24"	32"	24"	5.33
20"	72"	88"	24"	44.00	52"	66"	24"	23.83	38"	48"	24"	12.67	26"	36"	24"	6.50
24"	96"	96"	24"	36.89	64"	78"	24"	34.67	46"	56"	24"	17.89	32"	40"	24"	8.89
30"	122"	102"	24"	86.11	72"	94"	24"	47.00	56"	62"	24"	24.11	36"	48"	24"	12.00
36"	166"	104"	24"	123.33	88"	108"	24"	66.00	64"	78"	24"	34.67	44"	54"	24"	16.50

THRUST BLOCK SIZE CHART AND DETAIL

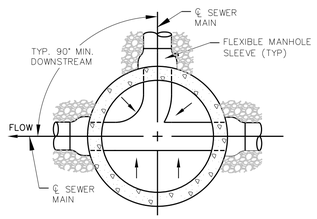
NOT TO SCALE



STRAIGHT



TWO-WAY INTERSECTION



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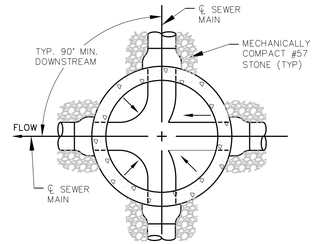
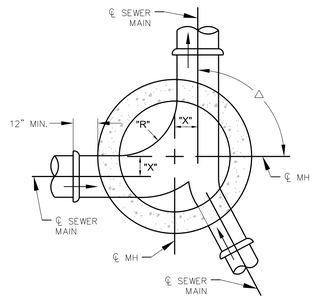


FOUR-WAY INTERSECTION



TYPICAL STANDARD MANHOLE PLAN

STANDARD MANHOLES SCHEDULE OF GOVERNING DIMENSIONS				
PIPE SIZE	ANGLE △	INSIDE DIAMETER	"R"	"X"
8" TO 15"	0° TO 90°	4'-0"	2'-0"	0" *
16" TO 30"	0° TO 90°	5'-0"	2'-0"	6"
36" TO 42"	0° TO 60°	6'-0"	3'-0"	9"
36" TO 42"	60° TO 90°	6'-0	3'-0"	1'-2"
48" OR LARGER	0° TO 45°	7'-0	4'-0"	6"
48" OR LARGER	45° TO 90°	8'-0	3'-0"	1'-3"

*MANHOLE DEEPER THAN 12' SHALL BE 5' MIN.

MANHOLE PLAN AND INVERT DETAIL

NOT TO SCALE

NOTES:

1. TROWEL SHAPE INVERTS TO BE UNIFORM AND SMOOTH.
2. ARROWS INDICATE DIRECTION OF SLOPE.

9/25/2023
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mcarey