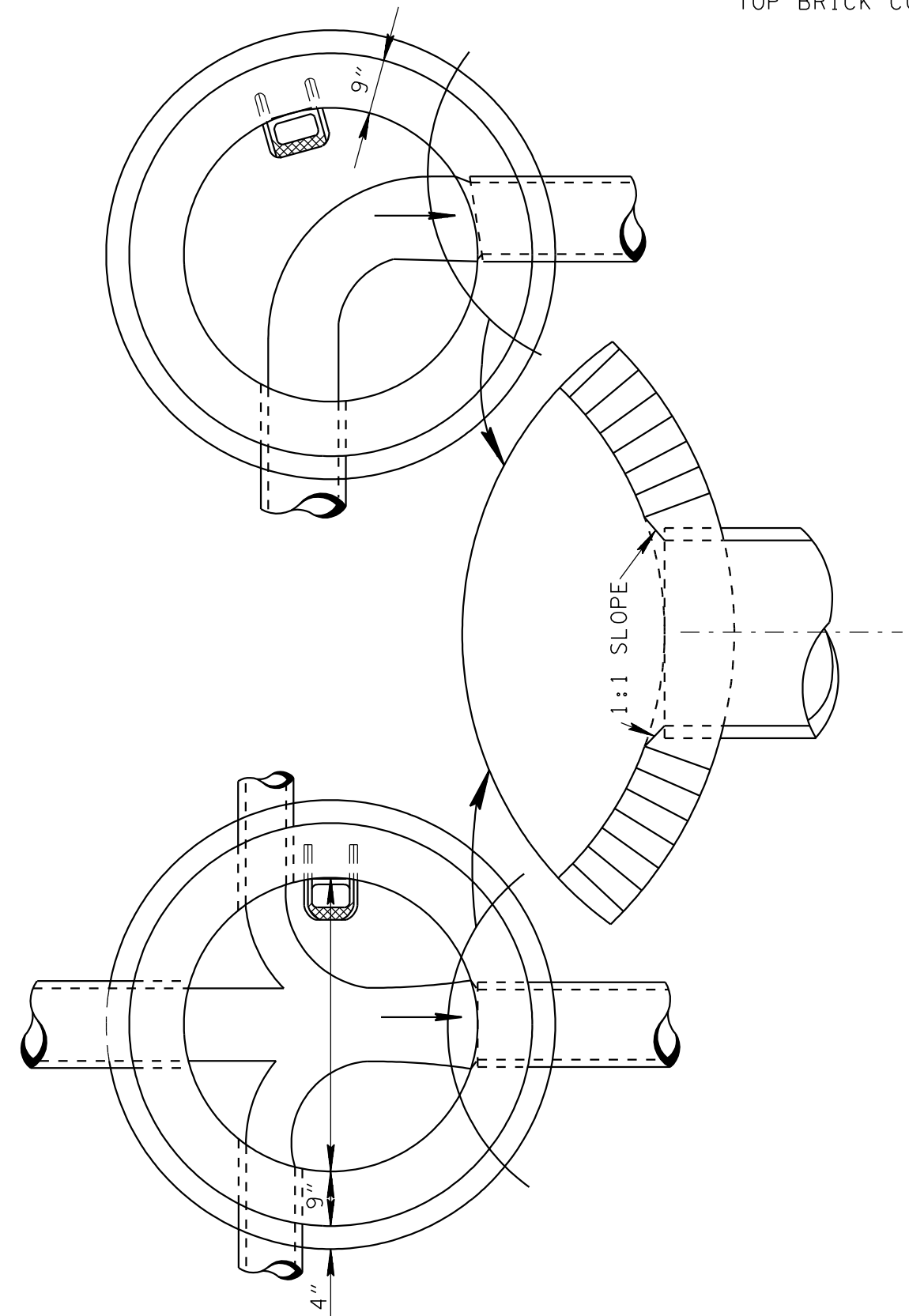


NOTE: PIPE OFF CENTER. EXACT LOCATION TO BE DETERMINED IN FIELD.

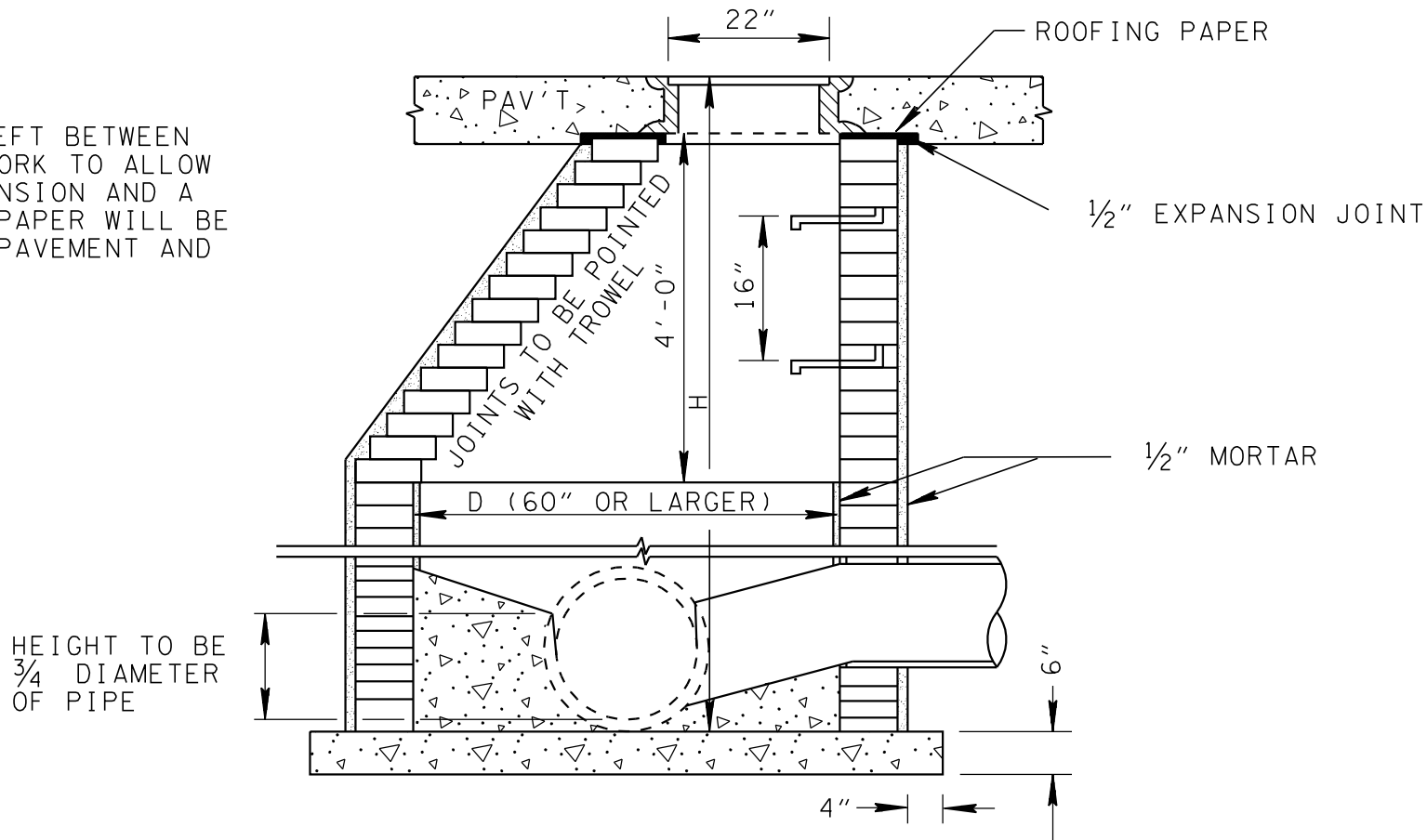


TYPICAL PLANS

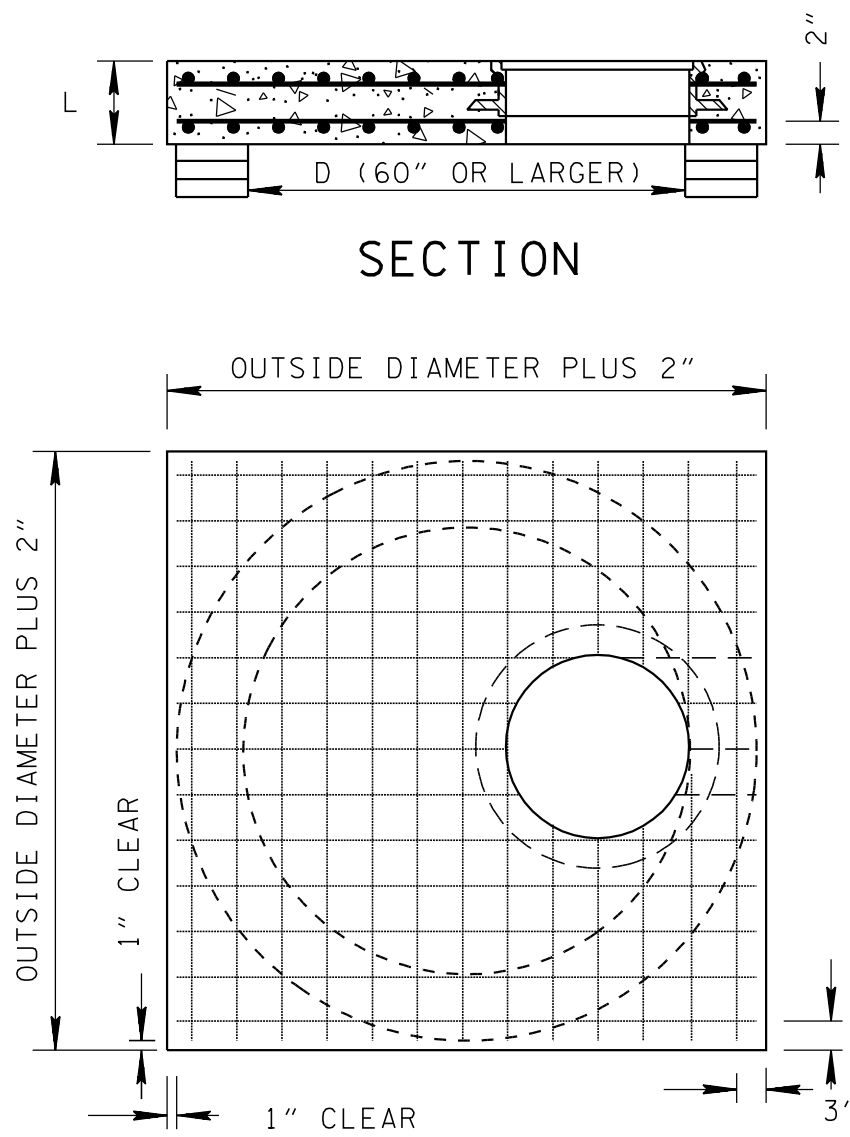
CUT-OUT HOLES FOR INLET & OUTLET PIPES			
INSIDE DIAMETER (X) OF PIPE (INCHES)	DIAMETER OF CUT-OUT HOLES (INCHES)		
	CONCRETE PIPE	CORRUGATED METAL PIPE	POLYETHYLENE PIPE
18	26	21	24
24	32	27	31
30	40	33	39
36	47	40	45
42	54	46	50
48	61	52	56
54	68	58	—
60	75	64	—
66	82	70	—
72	90	76	—
78	96	82	—

CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE CORED OR FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UN CUT WILL NOT BE PERMITTED.

NOTE:
1/2" SPACE TO BE LEFT BETWEEN FRAME AND BRICK WORK TO ALLOW FOR PAVEMENT EXPANSION AND A LAYER OF ROOFING PAPER WILL BE REQUIRED BETWEEN PAVEMENT AND TOP BRICK COURSE.



SECTION
BRICK MANHOLE WITH ECCENTRIC TAPER

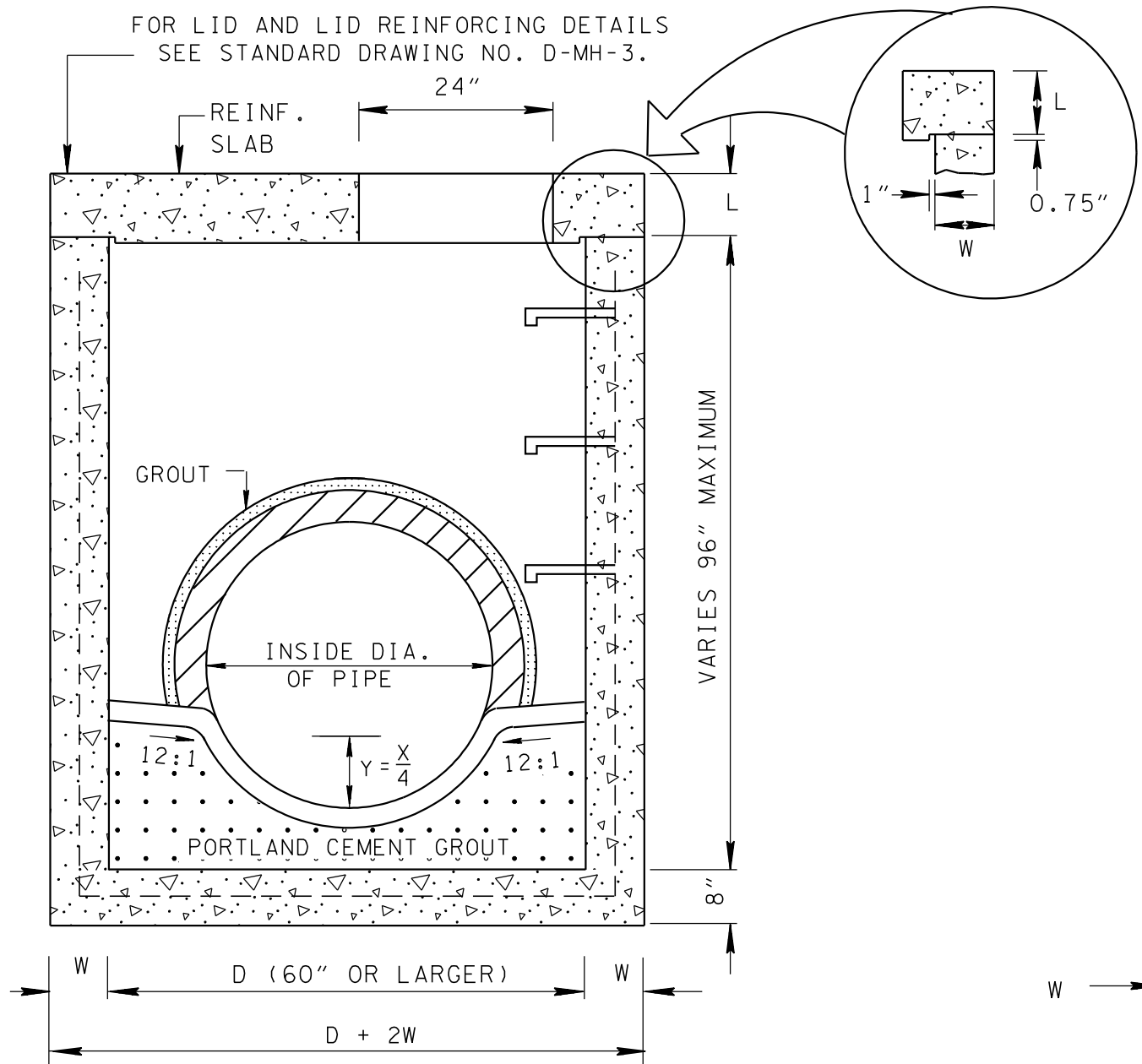


PLAN FOR 8" THICK REINFORCED
CONCRETE SLAB

COST OF REINFORCED CONCRETE SLAB TO BE INCLUDED IN PRICE BID FOR MANHOLE OF REQUIRED DEPTH.

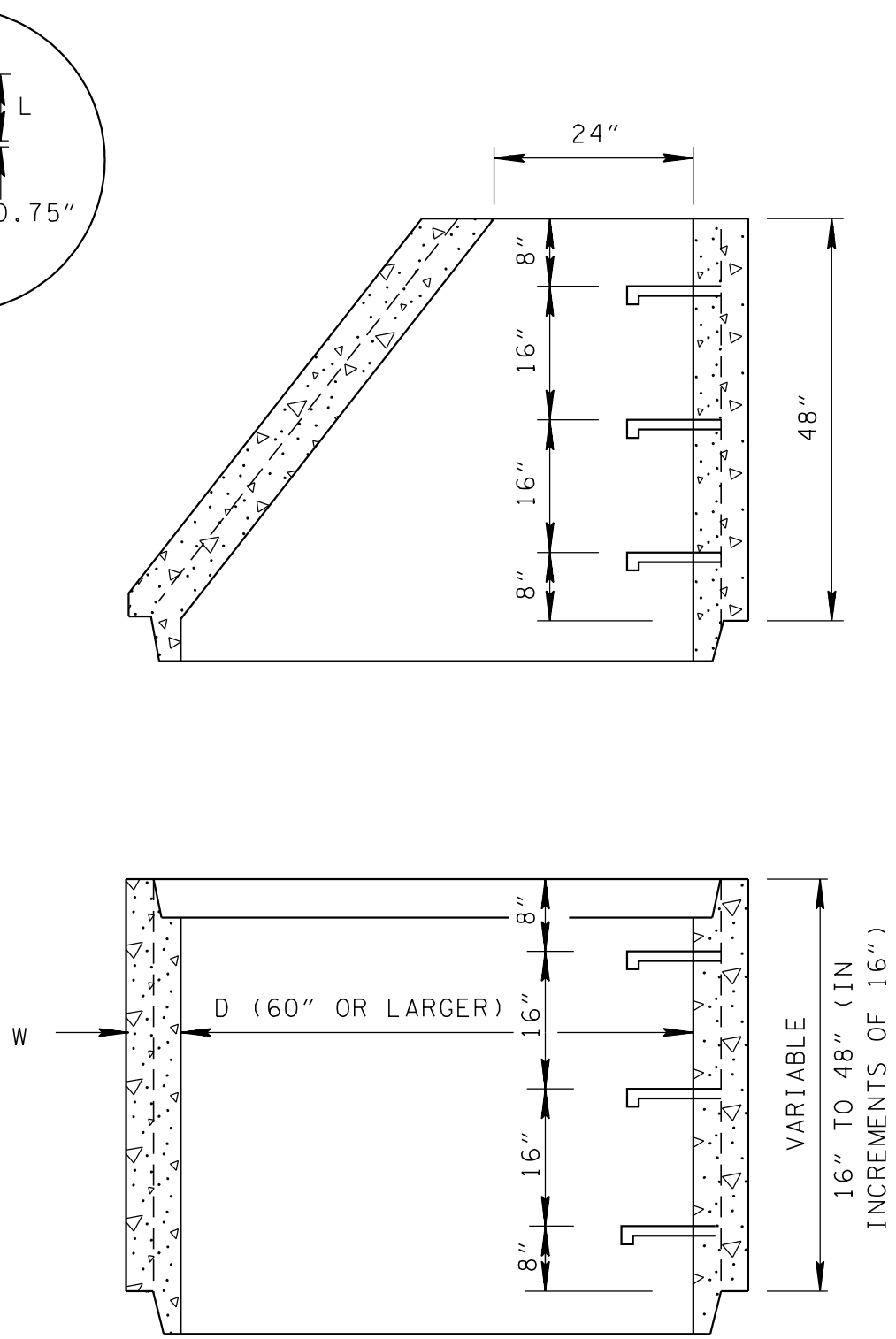
MANHOLE DIMENSIONS					
INSIDE DIA. OF MANHOLE D (INCHES)	WALL THICKNESS W (INCHES)	LID THICKNESS L (INCHES)	OUTSIDE DIA. OF MANHOLE D + 2W (INCHES)	MAX. INLET OR OUTLET CONC. PIPE SIZE - STR. (INCHES)	MAX. INLET OR OUTLET CONC. PIPE SIZE - 90° (INCHES)
60	6	8	72	36	24
72	7	9	86	48	30
84	8	9	100	60	36
96	9	10	114	66	42
108	10	10	128	72	48
120	11	10	142	78	54

GENERAL NOTES	
(A)	THIS MANHOLE WILL CONFORM TO THE STANDARD DRAWING UNLESS OTHERWISE SHOWN OR DIRECTED BY THE ENGINEER TO MEET SPECIAL CONDITIONS. THERE WILL BE NO VARIATION FROM THE CONTRACT PRICE DUE TO SUCH CHANGES. IN ALL CASES IT MUST BE BUILT LARGE ENOUGH TO ACCOMMODATE INLET AND OUTLET PIPES.
(B)	THE PRECAST CONCRETE MANHOLE SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS SET OUT IN ASTM-C478 LATEST REVISION.
(C)	ALL CONCRETE FOR MASONRY MANHOLE TO BE CLASS "A".
(D)	FOR MASONRY MANHOLES, ALL WALLS WILL BE LAID IN COURSES CONSISTING OF HEADERS ONLY.
(E)	THE COST OF CASTINGS FOR COVERS AND RIMS AND OF MANHOLE STEPS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR MANHOLES.
(F)	THE PLACING OF CONCRETE AND FORMING OF INVERTS AS INDICATED FOR BRICK MANHOLES SHALL APPLY IN LIKE MANNER FOR PRECAST MANHOLES. COST OF FURNISHING AND PLACING THE CONCRETE TO BE INCLUDED IN UNIT PRICE BID PER MANHOLE.
(G)	PAYMENT FOR BRICK MANHOLES WILL BE MADE UNDER ITEM NUMBERS 611-01.02 MANHOLES, > 4'-8' DEPTH AND 611-01.03, MANHOLES, > 8'-12' DEPTH PER EACH.
(H)	PAYMENT FOR PRECAST CONCRETE CIRCULAR MANHOLES WILL BE MADE UNDER ITEM NUMBERS 611-01.02 MANHOLES, > 4'-8' DEPTH THROUGH 611-01.07, MANHOLES, > 24'-28' DEPTH PER EACH. PAYMENT FOR MANHOLES DEEPER THAN 28' WILL BE MADE UNDER ITEMS NUMBERS 611-01.10 THROUGH 611-01.19, MANHOLE ____' TO ____' DEPTH PER EACH.

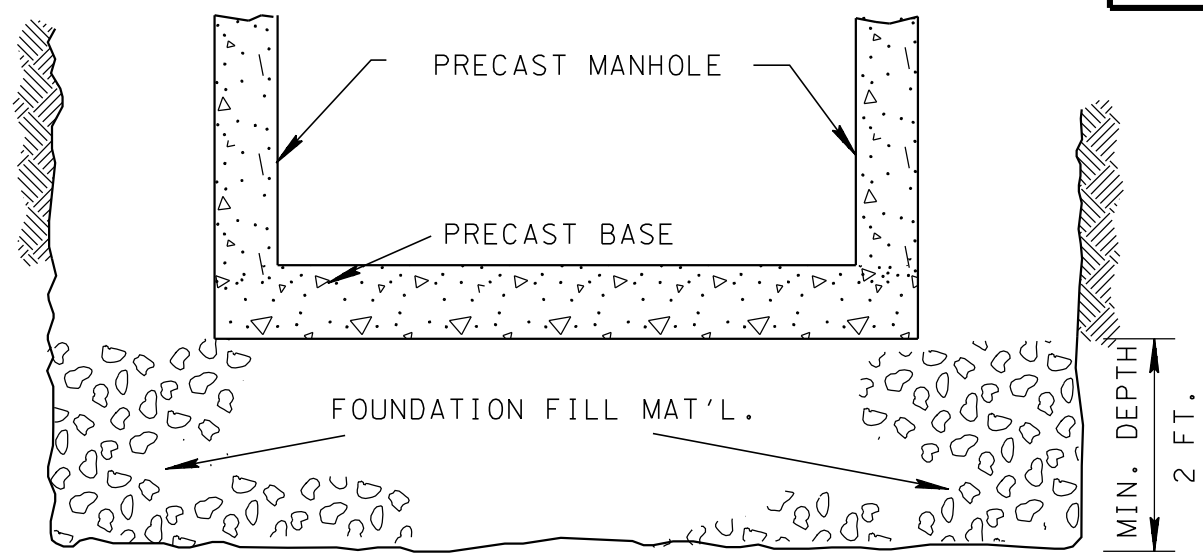


STANDARD FLAT TOP MANHOLE

WHEN MANHOLES OF BRICK ARE TOO SHALLOW TO SECURE PROPER BATTER, THE WALLS SHALL BE BUILT VERTICALLY AND THE STRUCTURE CAPPED WITH A CLASS "A" CONCRETE SLAB - SEE TABLE FOR THICKNESS, (WITH MANHOLE FRAME LOCATED ECCENTRICALLY IN SLAB) REINFORCED WITH 5/8" DIA. DEFORMED STEEL BARS 2" FROM BOTTOM AND TOP OF SLAB AND SPACED 6" CENTER TO CENTER BOTH LONGITUDINALLY AND TRANSVERSELY. SLAB TO BE BUILT TO BASE OR PAVEMENT GRADE.



STANDARD ECCENTRIC CONCRETE
RISER SECTION
AND BASE SECTION



FOUNDATION DETAIL FOR PRECAST BASE

NOTE:
COST OF FURNISHING AND PLACING FOUNDATION FILL MATERIAL TO BE INCLUDED IN UNIT PRICE BID FOR 611-02, MANHOLES. FOUNDATION FILL MATERIAL SHALL BE IN CONFORMANCE WITH SECTION 204 OF THE T.D.O.T. SPECIFICATIONS.

- REV. 11-20-72: WALL THICKNESS DELETED ON PRECAST SECTIONS.
- REV. 1-15-73: ENTRANCE TO OUTLET PIPE BEVELED.
- REV. 2-1-73: SKETCH ADDED SHOWING BEVELED ENTRY.
- REV. 1-1-76: CHANGED DWG. NO. FROM S-M-3 TO D-MH-3 (MASONRY DETAILS ADAPTED FROM OLD DWG. NO. S-M-2a).
- REV. 7-2-84: ADDED NOTE TO FOUNDATION DETAIL.
- REV.7-29-96: REDREW SHEET ON CADD AND MADE MINOR CHANGES.
- REV. 1-19-97: ADDED GENERAL NOTE (A). ADDED CUT-OUT HOLE TABLE. ADDED MANHOLE DIMENSION TABLE.
- REV. 4-15-97: CHANGED MANHOLE DIMENSION TABLE.
- REV. 5-1-97: CHANGED DRAWING NO. FROM D-MH-3 TO D-MH-2. CHANGED BASE SECTION TO MONOLITHIC BASE SECTION.
- REV. 5-27-97: ADDED 108 AND 120 INCH DIAMETER MANHOLES.
- REV. 5-27-01: CHANGED GENERAL NOTE (A) AND ADDED GENERAL NOTE (B). ADDED MANHOLE MAXIMUM DEPTH NOTES.

MANHOLE MAXIMUM DEPTH NOTES	
①	MAXIMUM DEPTH FOR BRICK MANHOLES IS 12.00'.
②	MAXIMUM DEPTH FOR PRECAST CONCRETE CIRCULAR MANHOLES IS 40.00'.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.