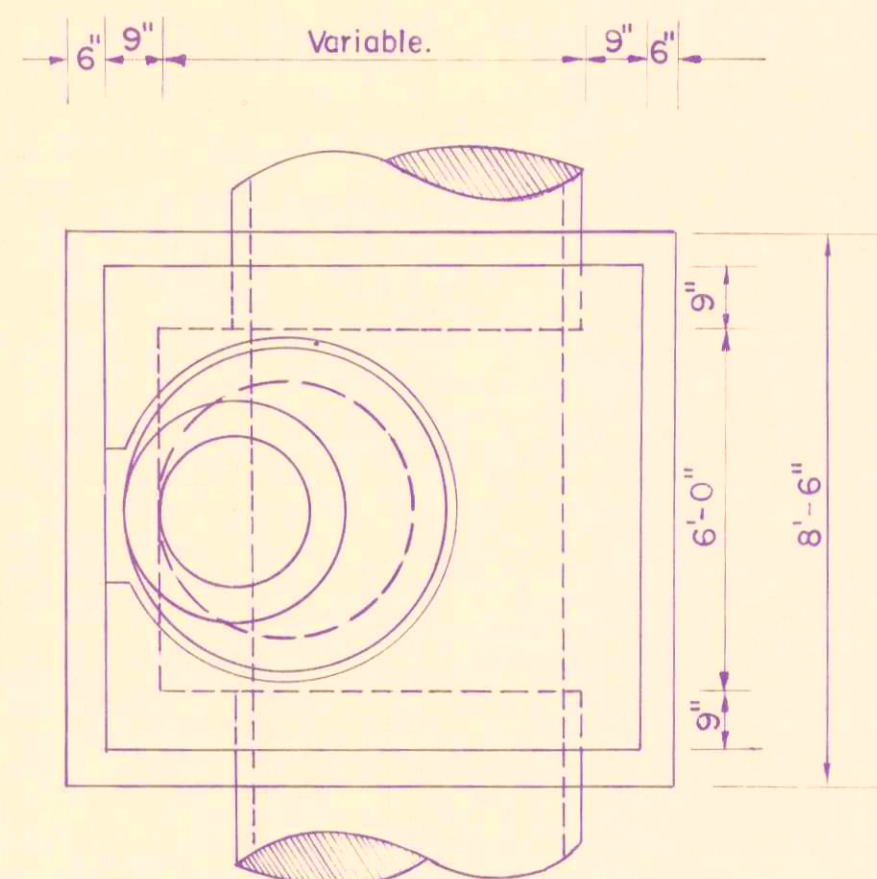
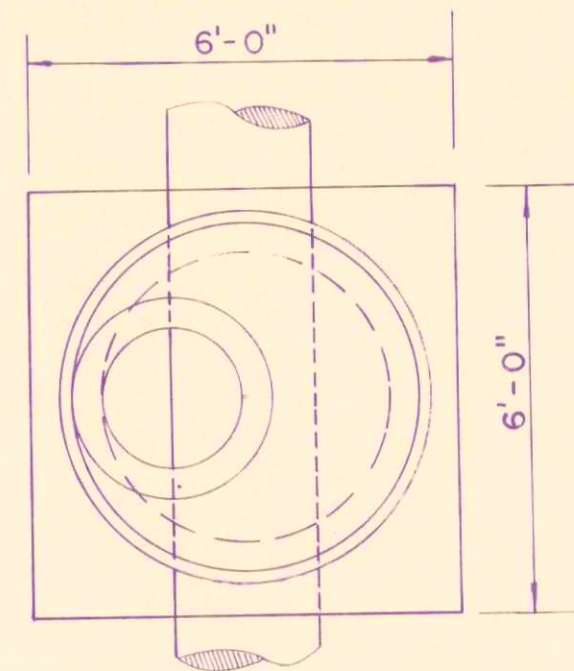




CONE HEIGHTS *	
ECCENTRIC	CONCENTRIC
2'-6"	2'-6"
3'-0"	3'-0"
3'-2"	3'-2"
3'-6"	4'-0"



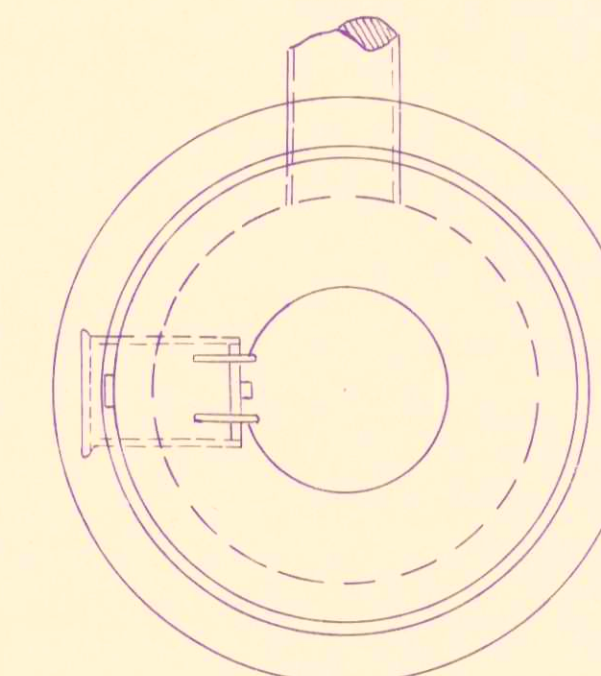
GENERAL NOTE
BOTTOM SHALL BE CONSTRUCTED OF PRECAST BOTTOM SECTION OR CLASS "A" CONCRETE FORMED IN PLACE AND INCLUDED IN THE CONTRACT UNIT PRICE FOR MANHOLE OR CATCH BASIN AS THE CASE MAY BE.

ALL PRECAST MANHOLE AND CATCH BASIN MATERIAL SHALL CONFORM TO A.S.T.M. C-478 AND THE STANDARD SPECIFICATIONS (MIN. SQ. IN. OF REINFORCING STEEL PER LINEAL FOOT SHALL BE 0.12)

A 6" CUSHION OF B BORROW SHALL BE REQUIRED WHEN THE PRECAST BOTTOM SECTION IS USED AND SHALL BE PAID FOR IN THE CONTRACT UNIT PRICE FOR MANHOLE OR CATCH BASIN AS THE CASE MAY BE.

WATERPROOFING MATERIAL SHALL CONFORM TO A.A.S.H.O. M115 AND THE STANDARD SPECIFICATIONS.

BASIS OF PAYMENT FOR MANHOLES AND CATCH BASIN SHALL BE AS SET OUT IN THE STANDARD SPECIFICATIONS.

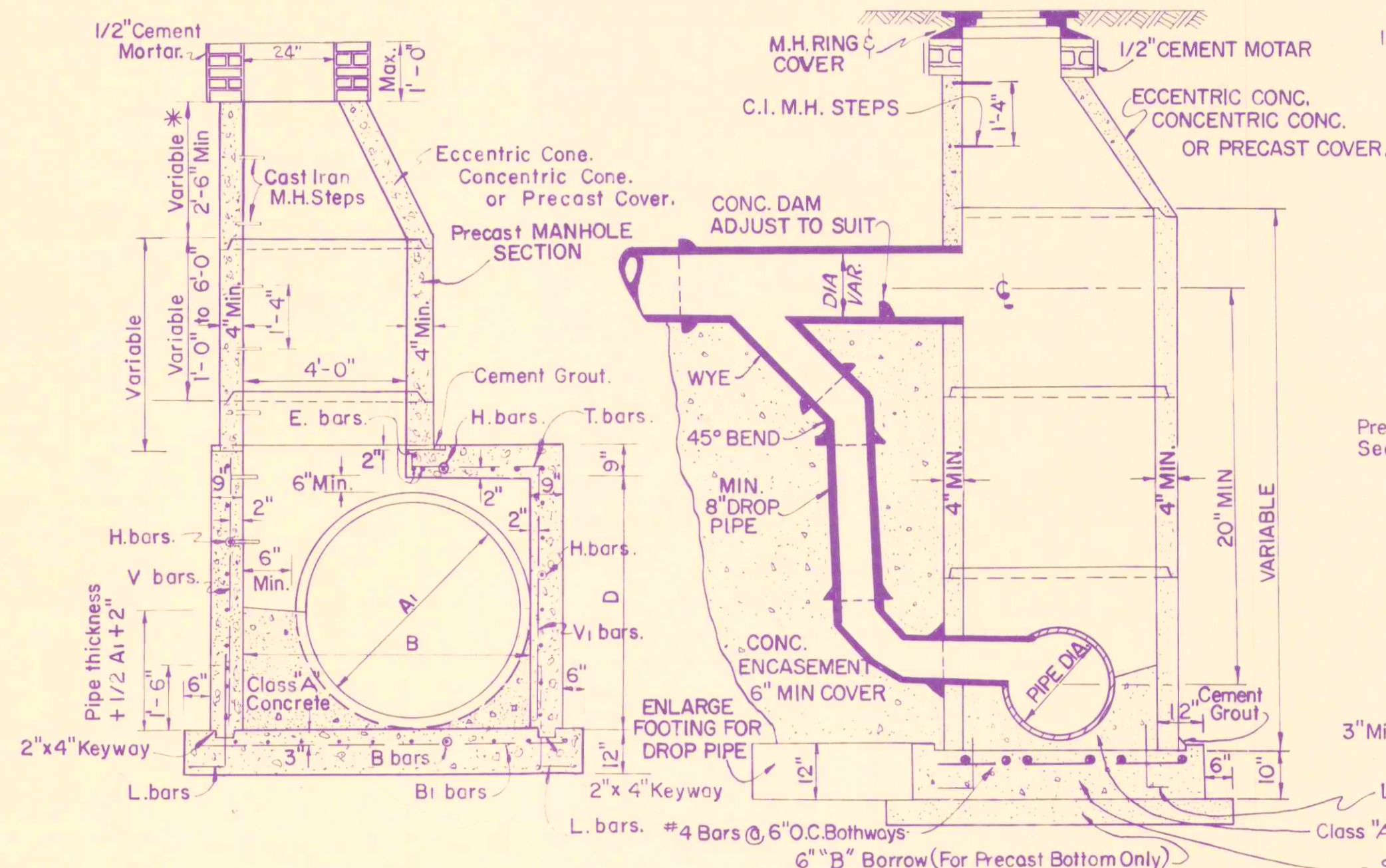


GENERAL NOTES
CONCENTRIC CONCRETE SECTION WILL NOT BE PERMITTED ON ANY MANHOLE THAT WILL BE UNDER THE JURISDICTION OF THE INDIANAPOLIS SANITARY DISTRICT.

THE CONTRACTOR WILL BE PERMITTED TO SUBSTITUTE PRECAST MANHOLE TYPE "C" FOR MANHOLE TYPE "A" OR "B" AND PRECAST CATCH BASINS TYPE "W" FOR CATCH BASIN TYPE "A".

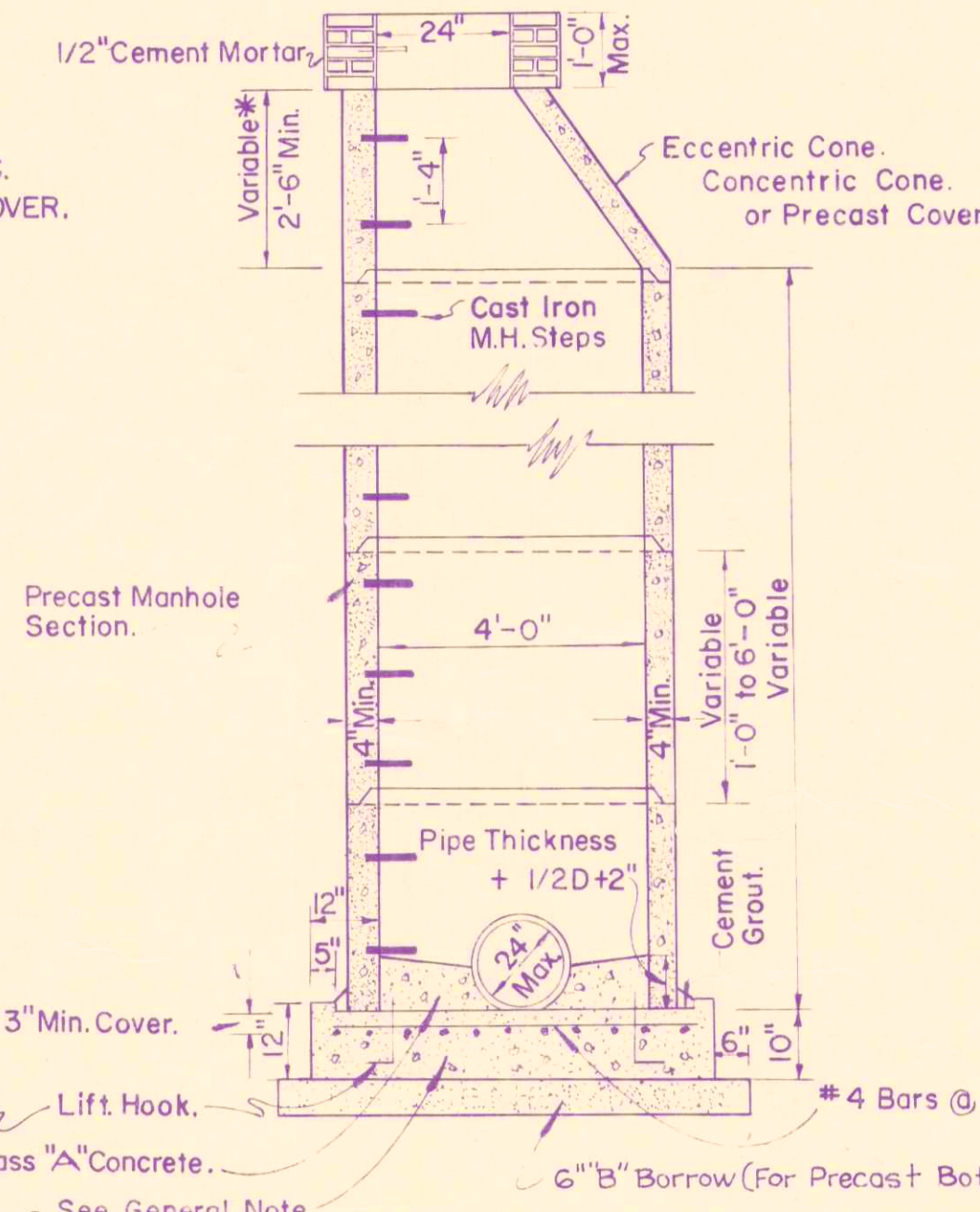
JOINTS BETWEEN SECTIONS OF PRECAST MANHOLES AND PRECAST CATCH BASINS SHALL BE IN ACCORDANCE WITH ASTM C-443.

AIR-ENTRAINED CONCRETE WILL NOT BE REQUIRED IN THE PRECAST PORTION OF THE CONCRETE MANHOLE AND CATCH BASIN.

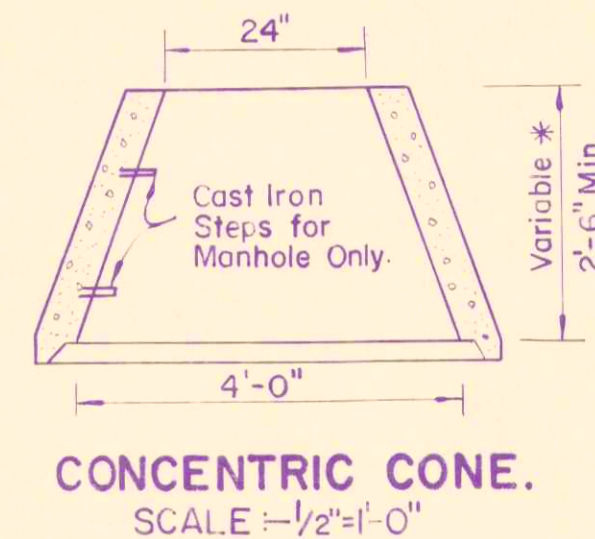


MANHOLE TYPE D, E, F, or G
(See Table)
SCALE: $\frac{3}{8}" = 1'-0"$

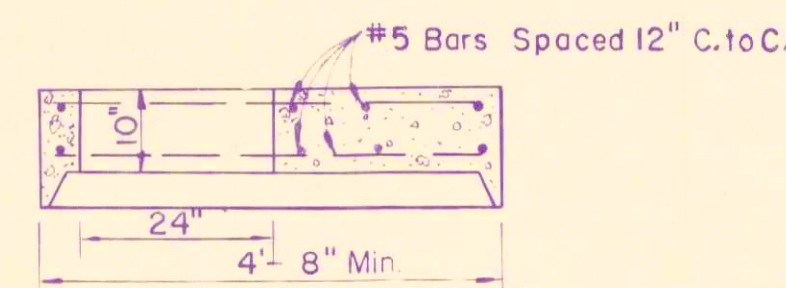
SECTION DROP MANHOLE TYPE "C"
SCALE: $\frac{3}{8}" = 1'-0"$



SECTION MANHOLE TYPE "C"
SCALE: $\frac{3}{8}" = 1'-0"$

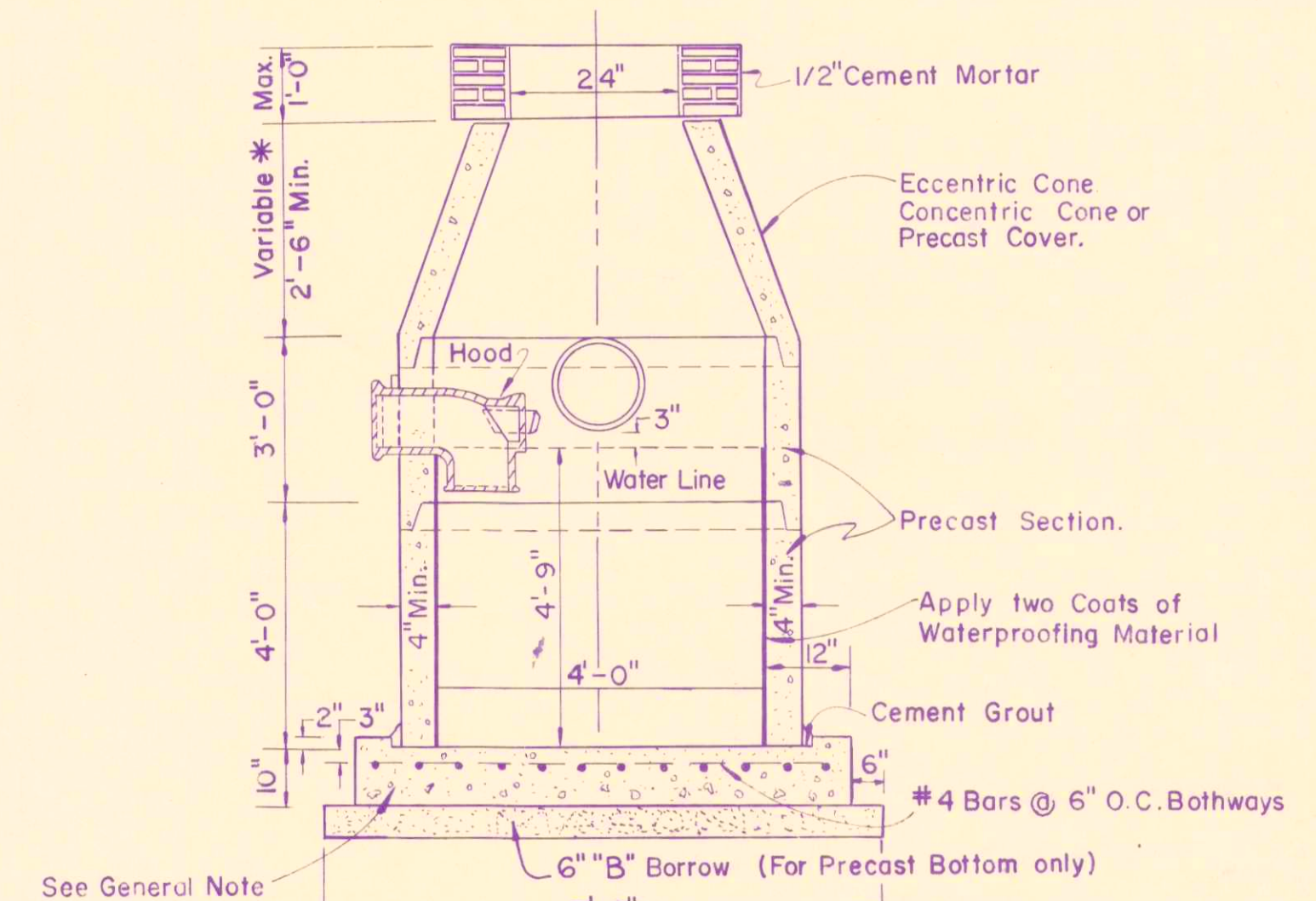


CONCENTRIC CONE
SCALE: $\frac{1}{2}" = 1'-0"$

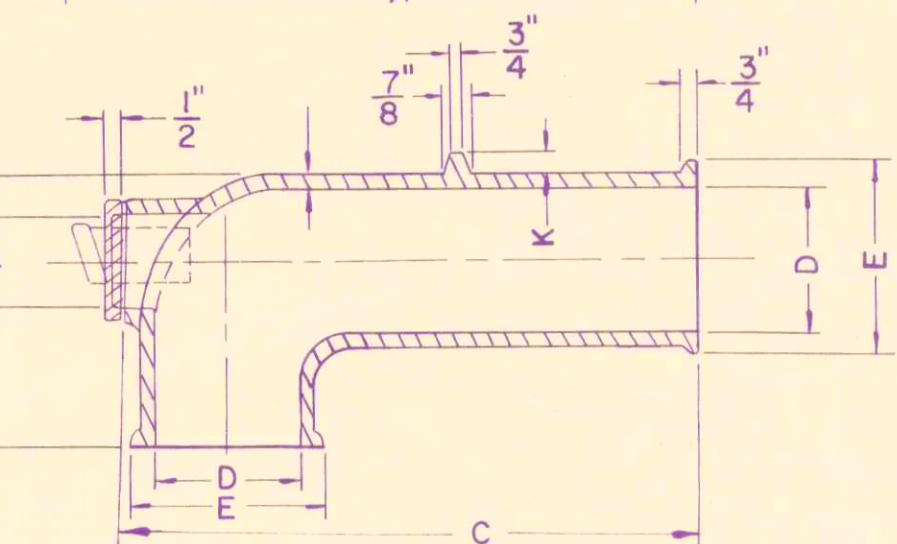
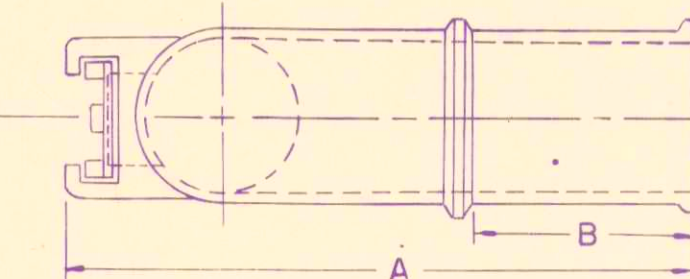


PRECAST COVER
SCALE: $\frac{1}{2}" = 1'-0"$

NOTE: PRECAST COVER SHALL BE USED WHERE HEADROOM IS LIMITED.

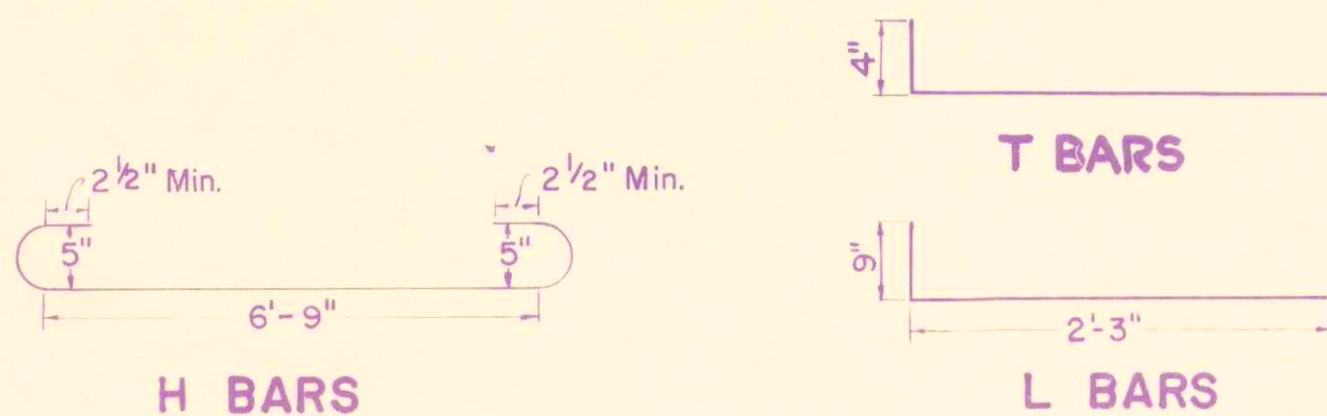


CATCH BASIN TYPE "W"
SCALE: $\frac{1}{2}" = 1'-0"$

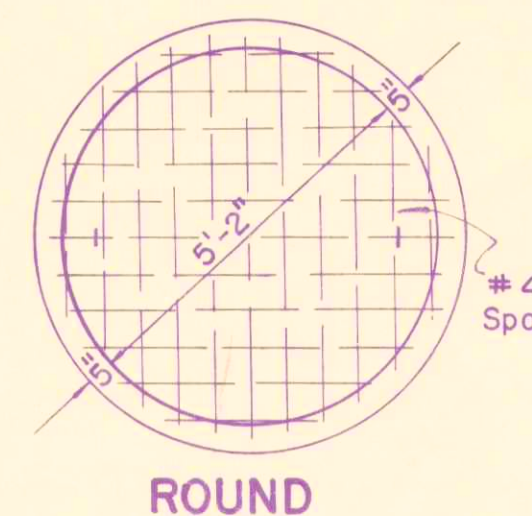
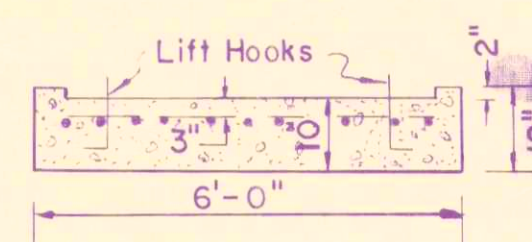


CATCH BASIN HOOD SHALL BE MADE FROM GRAY CAST IRON AND CONFORM TO A.A.S.H.O. M105 AND THE STANDARD SPECIFICATIONS.

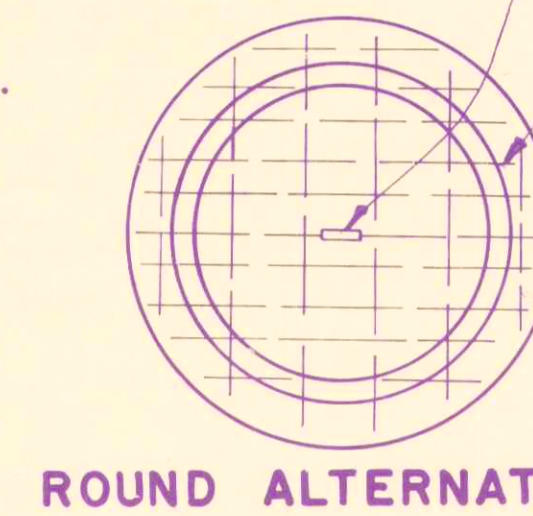
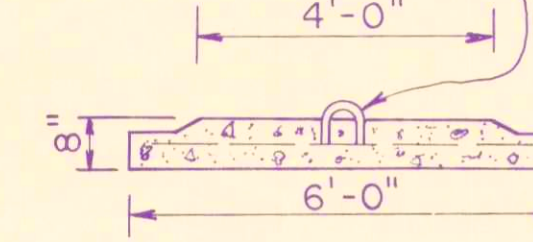
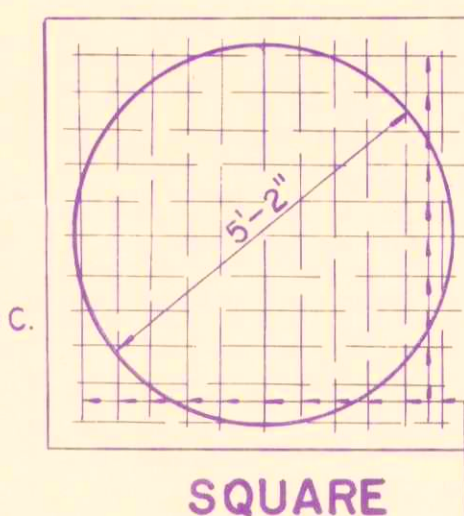
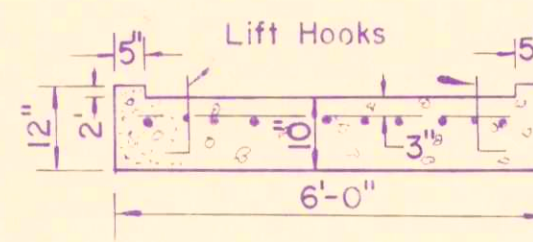
REINFORCING STEEL FOR MANHOLES															
Manhole Type "D"				Manhole Type "E"				Manhole Type "F"				Manhole Type "G"			
Bars	Length	No.	Spa.	Size	Length	No.	Spa.	Size	Length	No.	Spa.	Size	Length	No.	Spa.
B	8'-0"	10	9"	#5	8'-0"	12	9"	#5	8'-0"	16	9"	#5	8'-0"	19	9"
Bl	6'-9"	12	9"	#5	8'-6"	12	9"	#5	11'-0"	12	9"	#5	13'-3"	12	9"
E	7'-3"	3	2"	#5	7'-3"	3	7"	#5	7'-3"	3	2"	#5	7'-3"	3	2"
H	8'-6"	22	6"	#5	8'-6"	33	6"	#5	8'-6"	41	6"	#5	8'-6"	58	6"
L	3'-0"	16	12"	#5	3'-0"	16	12"	#5	3'-0"	16	12"	#5	3'-0"	16	12"
T	1'-3"	16	6"	#5	3'-0"	16	6"	#5	5'-3"	16	6"	#5	7'-6"	16	6"
V	5'-0"	16	6"	#5	6'-9"	16	6"	#5	9'-0"	16	6"	#5	11'-6"	16	6"
Vi	4'-9"	16	6"	#5	6'-6"	16	6"	#5	8'-9"	16	6"	#5	11'-3"	16	6"



MANHOLE DIMENSIONS		
TYPE	A-I PIPE SIZE DIA (INCHES)	B & D
D	27" to 42"	4'-9"
E	48" to 60"	6'-6"
F	66" to 84"	8'-10"
G	90" to 108"	11'-2"



PRECAST BOTTOM SECTION
SCALE: $\frac{3}{8}" = 1'-0"$



LIFTING RING
 $\frac{1}{2}"$ Cable tied to wire fabric. To be cut off by contractor in field.

LIFTING RING
Pipe Mesh - Welded wire fabric (W-11 min.)

SIZE	A	B	C	D	E	F	G	H	J	K
12"	31 1/4"	6"	28 5/8"	12"	13 5/8"	8"	17"	4"	—	—
15"	34"	6"	31 1/2"	15"	16 5/8"	8"	21 1/4"	4"	16"	2"
18"	36 5/8"	6 1/2"	34"	18"	19 5/8"	8"	24 1/2"	4"	20"	2"

DETAIL OF PRECAST CATCH BASIN HOODS
NOT TO SCALE

MISCELLANEOUS STANDARDS

RECORD DRAWING

REVISIONS	
4-4-66	General Notes
1-1-66	Drop Manhole
6-26-68	Gen. Notes
7-16-68	Gen. Notes
4-1-69	1969 Spec.
1-4-71	1971 Specs.
3-1-71	Precast Bottom
1-2-74	1974 Specs.

SHEET MD3

SHEET NO. 96