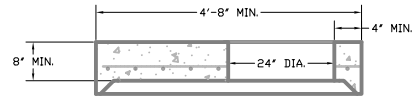


SECTION DIA.	'D'
60"	6'-0"
72"	7'-2"
96"	9'-6"
102"	10'-1"
108"	10'-8"

MINIMUM STEEL AREA OF 0.12 SQ.IN./LINF.T. OF WIDTH IN BOTH DIRECTIONS. (REBAR OR WIRE MESH EQUIVALENT).

ALTERNATE - 24" DIA. OPENING TO BE PROVIDED IN CAPS WHERE COVER LIMITATIONS PROHIBIT USE OF STANDARD 48" DIA. RISER. TOP SURFACE OF CAP SHALL BE LEVEL TO ACCEPT PLACEMENT OF CONCRETE ADJUSTING RINGS. SUPPLEMENTAL REINFORCEMENT SHALL BE INSTALLED AS REQUIRED TO MAKE THE CAPS CAPABLE OF WITHSTANDING STD. H-20 TRAFFIC LOADS.

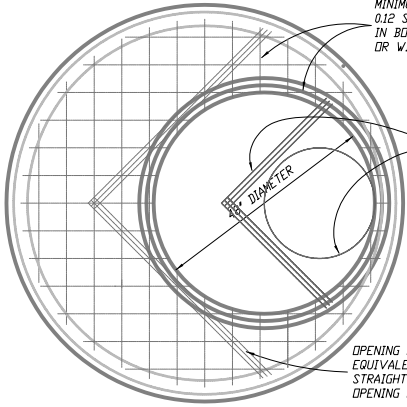


SECTION

MINIMUM STEEL AREA OF 0.12 SQ.IN./LINF.T. OF WIDTH IN BOTH DIRECTIONS. (REBAR OR WIRE MESH EQUIVALENT).

OPENING ADDITIONALLY REINFORCED WITH EQUIVALENT OF 0.20 SQ.IN./FT. @ 90° STRAIGHT RODS, MINIMUM LENGTH = DIA. OF OPENING PLUS 2 INCHES.

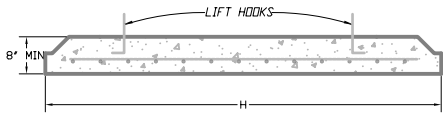
DETAIL 'A'
PRECAST COVER CAP



DETAIL 'B'
REDUCER CAP

OPENING ADDITIONALLY REINFORCED WITH EQUIVALENT OF 0.20 SQ.IN./FT. @ 90° STRAIGHT RODS, MINIMUM LENGTH = DIA. OF OPENING PLUS 2 INCHES.

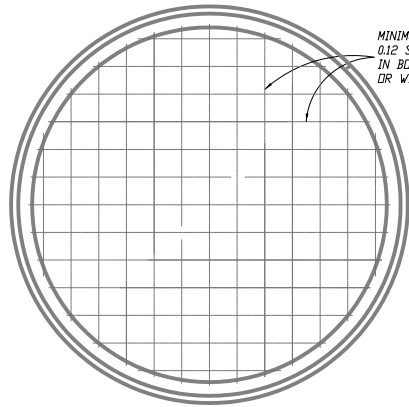
PRECAST CONCRETE ADJUSTING RINGS. 12" TOTAL HEIGHT ON UNIMPROVED STREETS AND 4" MIN. ON IMPROVED STREETS. ALL JOINTS BETWEEN RINGS, COVER, AND CASTING SHALL BE GROUTED.



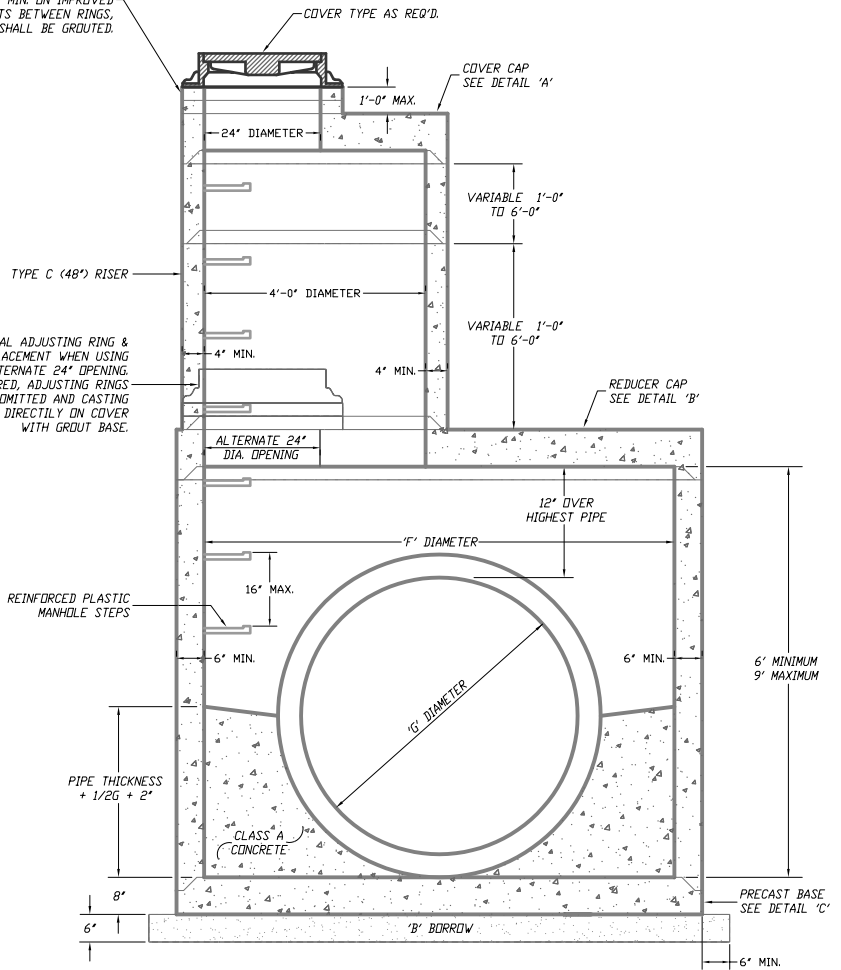
SECTION

CONCRETE COMPRESSIVE STRENGTH = 4,000 psi

MINIMUM STEEL AREA OF 0.12 SQ.IN./LINF.T. OF WIDTH IN BOTH DIRECTIONS. (REBAR OR WIRE MESH EQUIVALENT).



DETAIL 'C'
PRECAST BASE



TYPICAL ADJUSTING RING & COVER PLACEMENT WHEN USING ALTERNATE 24" OPENING. WHERE REQUIRED, ADJUSTING RINGS TO BE OMITTED AND CASTING PLACED DIRECTLY ON COVER WITH GROUT BASE.

MANHOLE TYPE J,K,L,M, & N

GENERAL NOTES

- ALL PRECAST MANHOLE MATERIAL SHALL CONFORM TO ASTM C-478 AND THE I.D.D.T. STANDARD SPECIFICATIONS.
- A 6-IN. CUSHION OF 'B' BORROW SHALL BE REQUIRED WHEN THE PRECAST BOTTOM SECTION IS USED AND SHALL BE PAID FOR IN THE CONTRACT UNIT PRICE PER MANHOLE.
- JOINTS BETWEEN SECTIONS OF PRECAST MANHOLES SHALL BE IN ACCORDANCE WITH ASTM C-443.
- IF THE CONTRACTOR ELECTS TO USE A PRECAST INLET, CATCH BASIN, OR MANHOLE, AND THE ADJOINING PIPE(S) IS(ARE) FIELD CONNECTED DIRECTLY TO THE PRECAST UNIT, THE CONNECTION SHALL BE MADE USING A CLASS 'A' CONCRETE COLLAR OF 6" MINIMUM LONGITUDINALLY AND RADIAL THICKNESS, THE COST OF THE COLLAR SHALL BE INCLUDED IN THE COST OF THE PRECAST INLET, CATCH BASIN, OR MANHOLE.

TYPE	'G'	'F'	MAXIMUM PIPE SIZE RT. ∠ TO MAINLINE	MAXIMUM PIPE SIZE FOR MAINLINE
H	24" TO 36"		30"	36"
J	24" TO 36"	60"	33"	36"
K	36" TO 48"	72"	36"	48"
L	48" TO 54"	96"	48"	54"
M	54" TO 72"	102"	66"	72"
N	72" TO 84"	108"	72"	84"