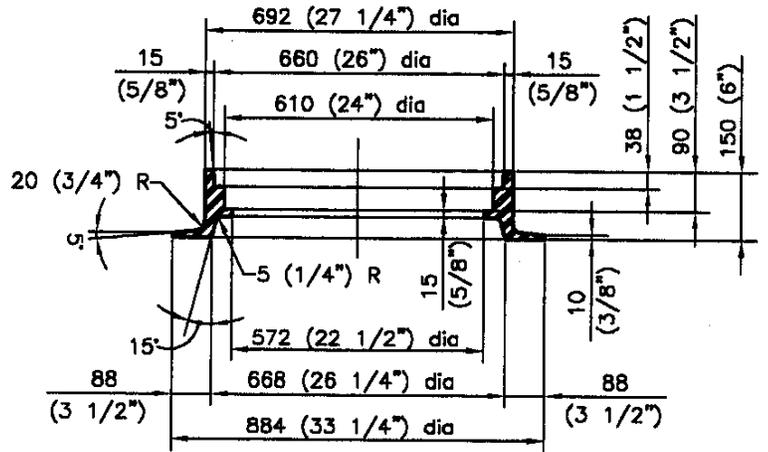
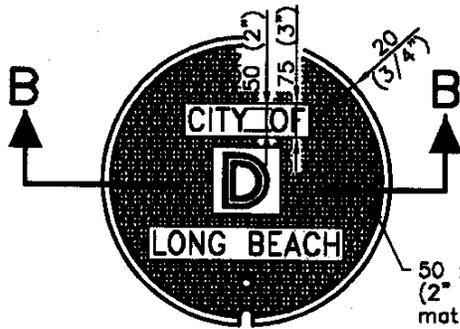


PLAN VIEW



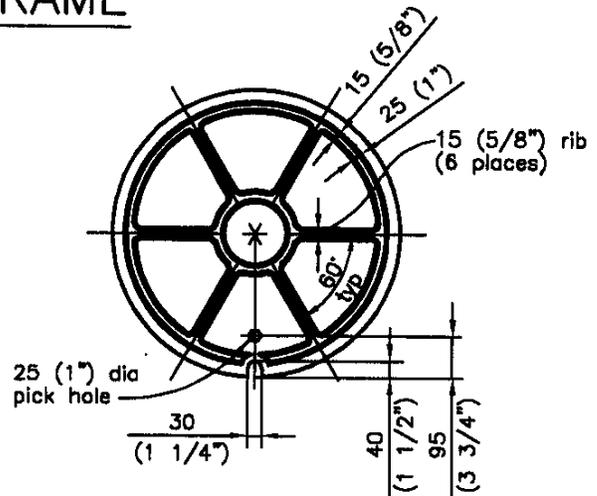
SECTION A-A

MANHOLE FRAME

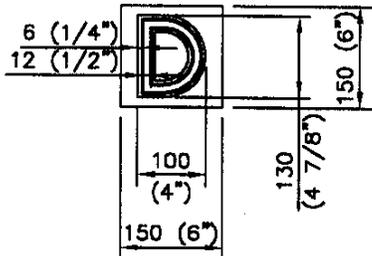


PLAN OF TOP
FOR STORM DRAIN COVER

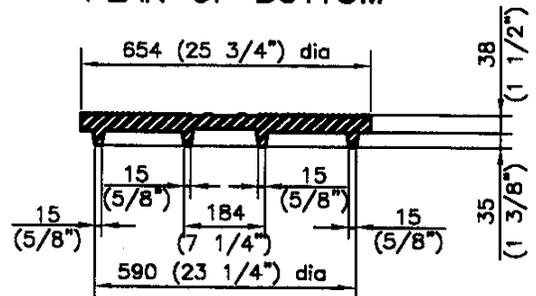
50 x 25 mm
(2" x 1") diamond
mat 3 mm (1/8")
deep



PLAN OF BOTTOM



PLAN OF LETTER



SECTION B-B

MANHOLE COVER

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	12/26/97	MANHOLE FRAME AND COVER	METRIC 616
2	12/23/02		
3			
4			
APPROVED BY: <i>Max Chiffel</i>		DATE: <i>1/10/03</i>	SHEET
CITY ENGINEER R.E. No. 40599		EX. DATE: <i>03/31/03</i>	1 OF 2

1. The cast iron used shall conform with ASTM A-48 Class 35B.
2. The frame and cover shall be coated with asphaltum or bituminous paint after testing and inspection.
3. All letters shall be flush with the finished surface of the cover.
4. Foundry indentifying mark, heat and date shall be cast on the bottom of the cover and on the inside of the frame.
5. Imported covers and frames shall have the country of origin marking in compliance with Federal Regulations.
6. Weight of frame shall be 120 kg (260 pounds). Weight of cover shall be 80 kg (175 pounds). Actual weights shall be within a range of 95% to 110%.
7. The manhole frame and cover shall be inspected by the engineer prior to shipment to the job site. Acceptance will be indicated by the agency's mark.
8. The Proof-Load for Test Method B of the Standard Specifications is 180 kN (40,700 pounds).
9. Covers for manholes located in easements, alleys, parkways and all other places except paved streets shall be provided with socket set screw locking devices. Drill and tap two holes to a depth of 25 mm (1") at 90 degrees to pick hole and install 20 mm dia x 20 mm long (3/4" x 3/4") stainless steel socket set screws with 10 mm (3/8") recessed hex head. All threads shall be N.C.

Dimensions are in millimeters, except as noted

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1	12/26/97	MANHOLE FRAME AND COVER	METRIC 616
2	12/23/02		
3		APPROVED BY: <i>Mal Chiffel</i> CITY ENGINEER R.E. No. 40589	SHEET
4			
		DATE: <u>1/10/03</u> EX. DATE: <u>03/31/03</u>	2 OF 2