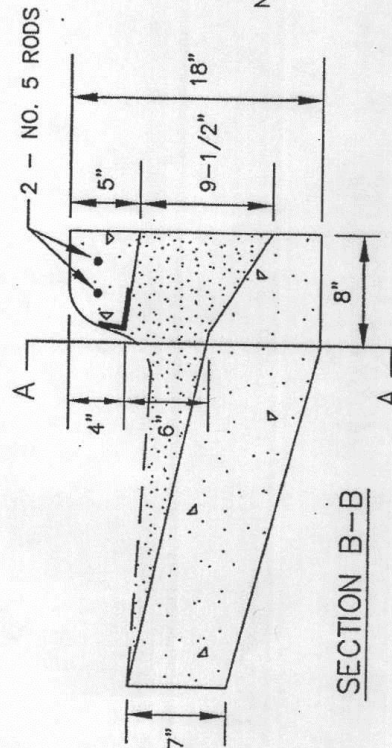


SECTION A-A



SECTION B-B

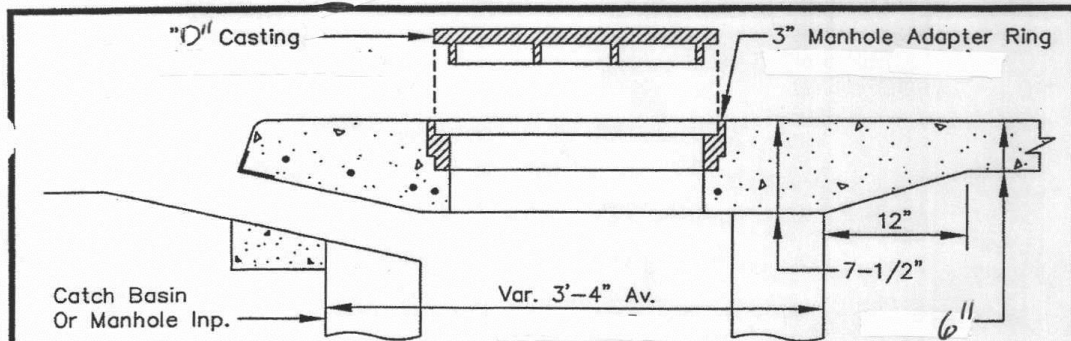
NOTE: REINFORCING STEEL TO BE GRADE 60 FUSION BONDED EPOXY COATED PER ASTM A775.

APPROVED _____
CITY ENGINEER

CITY OF ST. PAUL
DEPARTMENT OF PUBLIC WORKS
SIDE INLET OPENING
FOR B-624 CURB & GUTTER

Date of
Revision
JULY
2002

Standard
Plate
No.
3103B



SIDE ELEVATION

Angle Iron 2" x 3" x 5/16"
Galvanized Per ASTM A123
(Place 2" Leg Vertical)



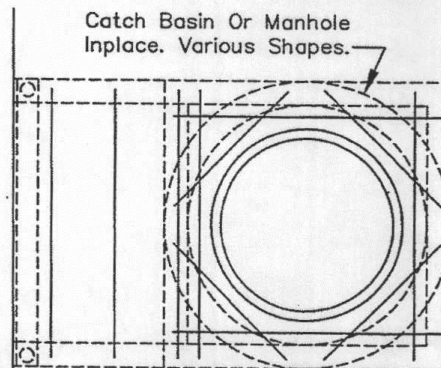
FRONT ELEVATION

NOTE:

1. 2" Clearance From Bottom Of Concrete To Reinforcing.
2. Do Not Carry Reinforcing Beyond Edge Of Structure.
3. Existing Cover Castings Shall Not Be Reused.
4. Existing Cover Castings Shall Not Be Reused.
5. All Form Work And Construction Materials Due To Contractor's Operation Shall Be Removed From Catch Basin Or Manhole.
6. Reinforcing Steel To Be Grade 60 Fusion Bonded Epoxy Coated Per ASTM A775.

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Daniel A. Haak
DANIEL A. HAAK
Date 8/30/02 Lic. No. 17274



No. 6 Bars

DESIGN C

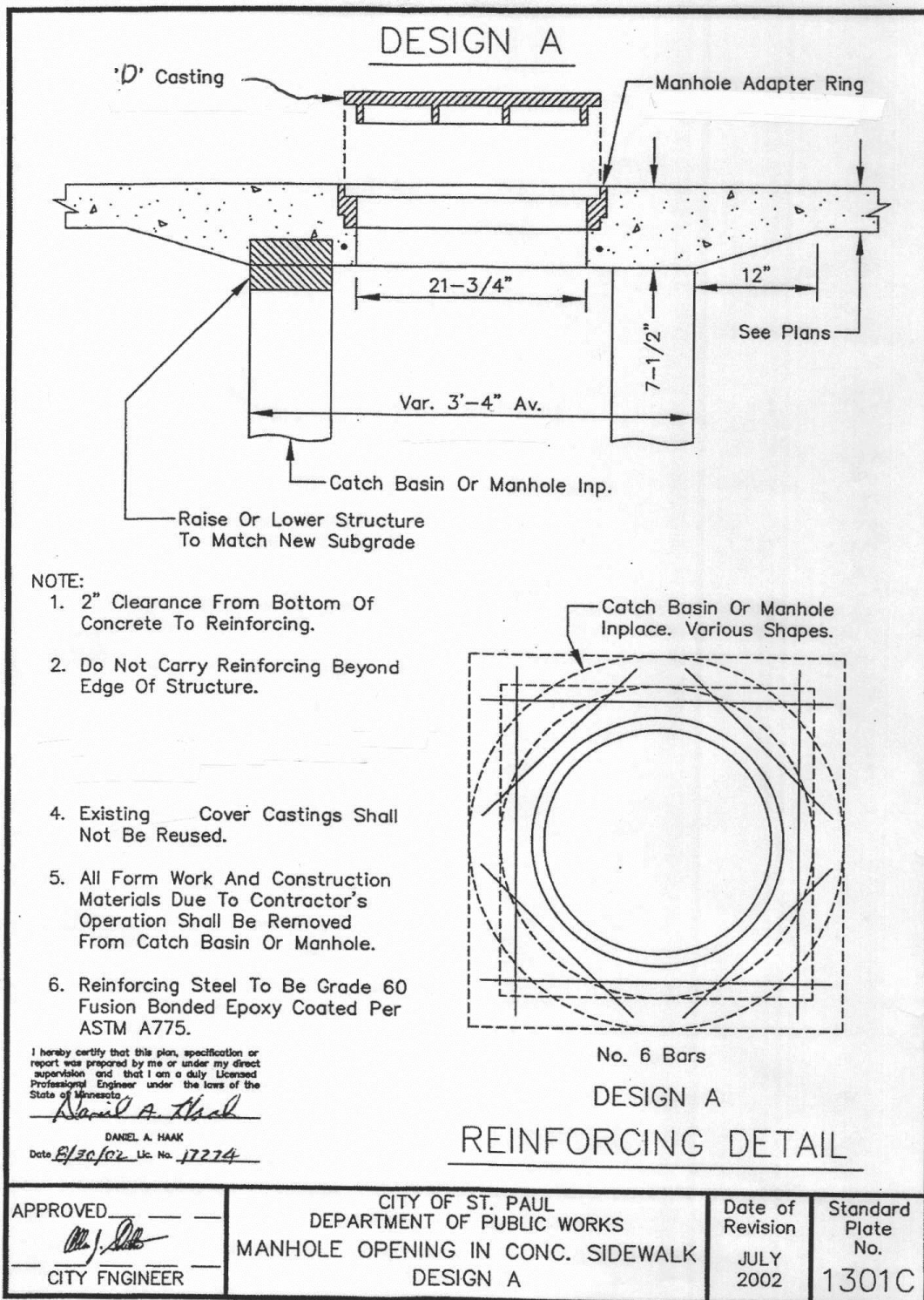
REINFORCING DETAIL

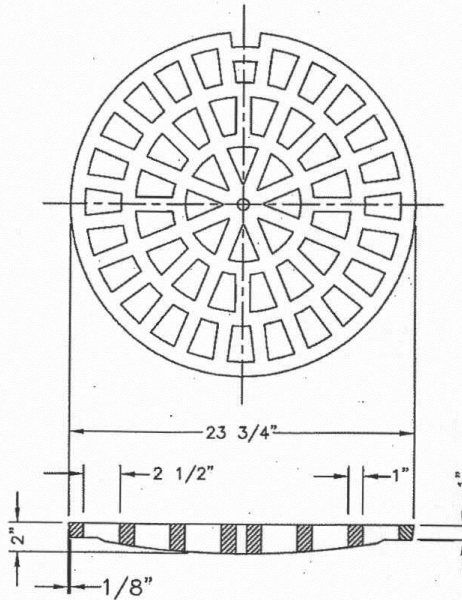
APPROVED _____
[Signature]
CITY ENGINEER

CITY OF ST. PAUL
DEPARTMENT OF PUBLIC WORKS
MANHOLE OPENING IN CONC. SIDEWALK
DESIGN C

Date of Revision
JULY
2002

Standard Plate No.
1303C





NOTE:
OPENINGS IN COVER
TO BE ALIGNED RADIALLY

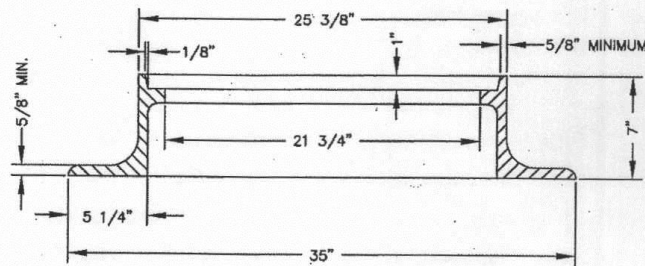
NOTES:

1. CASTING "D" SHALL BE USED WITH FRAME CASTING "A" (STD. PLATE 2201E).
2. CASTING SHALL BE CONSTRUCTED OF UNPAINTED GRAY IRON MEETING ASTM A-48, CLASS 35B OR BETTER AND SHALL CONFORM TO AASHTO DESIGNATION M306-89 AND MHDOT SPECIFICATION 3321.
3. EACH CASTING SHALL BEAR AN IDENTIFICATION MARK, RECESSED FLUSH, INDICATING THE SOURCE OF MANUFACTURE, WHICH MARK SHALL EITHER BE A SYMBOL NOT OVER 1 1/2 INCHES IN GREATEST DIMENSION OR IN LETTER FORM NO GREATER THAN 3/4 INCH IN HEIGHT AND 2 INCHES IN LENGTH. LOCATION OF IDENTIFICATION MARKS BY THE ENGINEER.

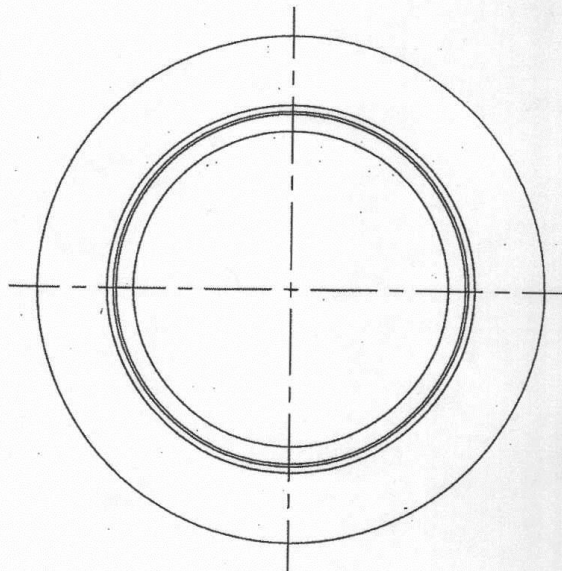
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Joseph J. Mueller
JOSEPH J. MUELLER
Date 5-4-10 Lic. No. 13942

APPROVED <i>Joseph J. Mueller</i> CITY ENGINEER	CITY OF ST. PAUL DEPARTMENT OF PUBLIC WORKS COVER CASTING "D"	Date of Revision MAY 2010	Standard Plate No. 2203
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SECTION



PLAN

NOTES:

1. FRAME CASTING 'A' TO BE USED WITH COVER CASTINGS 'B' OR 'D', SEE STANDARD PLATES 2202D AND 2203.
2. CASTING SHALL BE CONSTRUCTED OF UNPAINTED GRAY IRON MEETING ASTM-A-48, CLASS 35B OR BETTER AND SHALL CONFORM TO AASHTO DESIGNATION M306-89 AND MnDOT SPECIFICATION 3321.
3. THE MANUFACTURERS NAME SHALL BE CAST ON AN EXPOSED SURFACE OF THE CASTING.
4. CASTING SHALL BE NEENAH FOUNDRY CO. NO. R-1678-A OR APPROVED EQUAL.

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

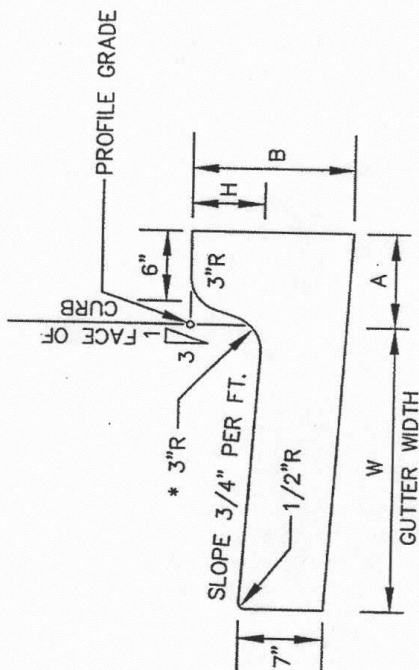
Joseph J. Mueller
JOSEPH J. MUELLER
Date 5-4-10 Lic. No. 13942

APPROVED
Joseph J. Mueller
CITY ENGINEER

CITY OF ST. PAUL
DEPARTMENT OF PUBLIC WORKS
FRAME CASTING "A"

Date of
Revision
MAY
2010

Standard
Plate
No.
2201E



* USE 2-5/8\"/>

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Daniel A. Haak

DANIEL A. HAAK

Date 8/30/02 Lic. No. 17274

APPROVED _____
[Signature]
 CITY ENGINEER

CITY OF ST. PAUL
 DEPARTMENT OF PUBLIC WORKS
 CONCRETE CURB AND GUTTER
 DESIGN B

Date of
 Revision
 JULY
 2002

Standard
 Plate
 No.
 3100C

DIMENSIONS			W = 12"			W = 18"			W = 24"			W = 30"		
			DESIGN NO.	CONCRETE	CU. YDS. PER LIN. FT.	DESIGN NO.	CONCRETE	CU. YDS. PER LIN. FT.	DESIGN NO.	CONCRETE	CU. YDS. PER LIN. FT.	DESIGN NO.	CONCRETE	CU. YDS. PER LIN. FT.
H	A	B												
4	7-3/8"	11-1/2"	B412	0.0421	23.8	B418	0.0529	18.9	B424	0.0637	15.7	B430	0.0745	13.4
6	8"	13-1/2"	B612	0.0474	21.1	B618	0.0582	17.2	B624	0.0690	14.5	B630	0.0798	12.5
8	8-5/8"	15-1/2"	B812	0.0529	18.9	B818	0.0637	15.7	B824	0.0745	13.4	B830	0.0853	11.7
9	9"	16-3/8"	B912	0.0559	17.9	B918	0.0667	15.0	B924	0.0775	12.9	B930	0.0883	11.3
10	9-3/8"	17-5/8"	B1012	0.0589	17.0	B1018	0.0697	14.4	B1024	0.0805	12.4	B1030	0.0913	11.0

END