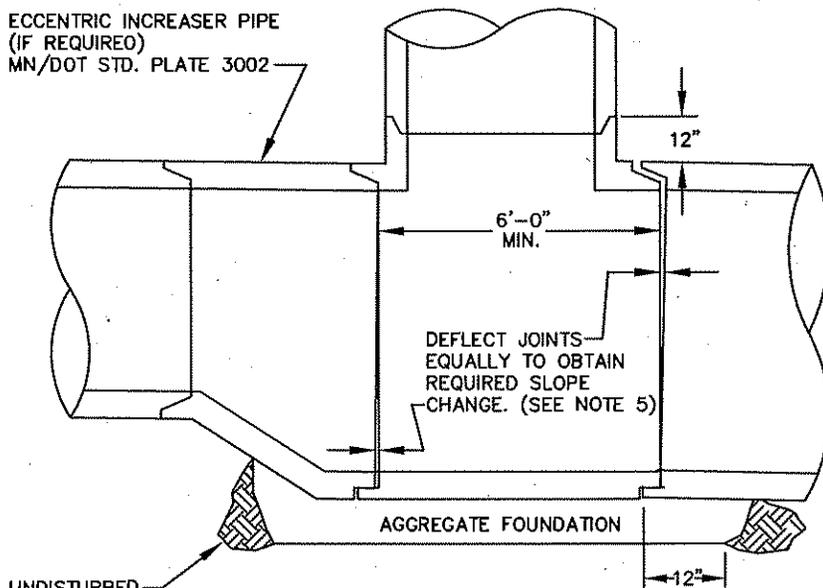


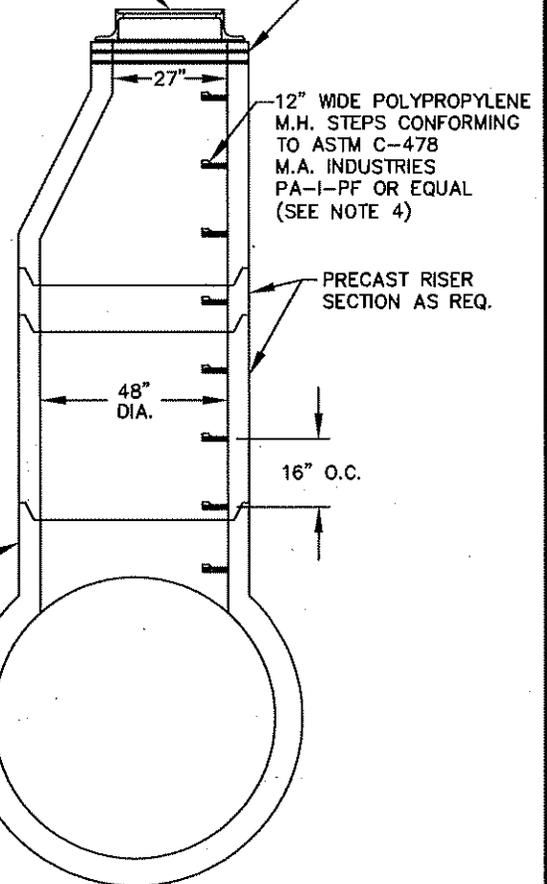
ECCENTRIC INCREASER PIPE  
(IF REQUIRED)  
MN/DOT STD. PLATE 3002



LONGITUDINAL SECTION

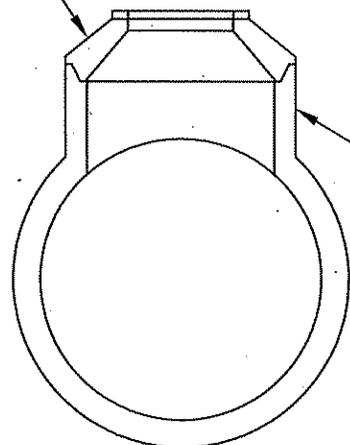
ADJUST TO GRADE  
AS PER STD. PL. 2321

CASTINGS A & B  
(UNLESS NOTED OTHERWISE)  
STD. PLATES 2201E & 2202D



TRANSVERSE SECTIONS

SHORT CONE  
MN/DOT STD. PLATE 4010



PRECAST TEE SECTION, BARREL  
TO BE SAME CLASS  
AS ADJACENT RCP.

NOTES:

1. THIS MANHOLE FOR USE ON STRAIGHT RUNS OF MAINLINE SEWER. 42" AND LARGER SLOPE CHANGE CAN BE ACCOMPLISHED BY DEFLECTING JOINTS AS NOTED HEREIN. DIAMETER CHANGE CAN BE ACCOMPLISHED WITH ASSOCIATED ECCENTRIC INCREASER.
2. PRECAST RISER SECTIONS TO MEET ASTM C-478
3. JOINTS SHALL USE O-RING RUBBER GASKET TO CONFORMING TO ASTM C-443
4. MANHOLE STEPS NOT REQUIRED WHERE DEPTH OF COVER IS LESS THAN 6".
5. MAXIMUM JOINT DEFLECTION FROM "HOME" IS 3/4" FOR 42" I.D. AND 1" FOR 48" I.D. OR GREATER CORRESPONDING MAXIMUM SLOPE CHANGE PER JOINT IS:

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

PIPE I.D.	42"	48"	54"	60"	66"	72"	84"	90"	96"
MAX. SLOPE CHANGE / JOINT	1.78	2.08	1.85	1.66	1.51	1.38	1.19	1.11	1.04 %

APPROVED

*Joseph J. Mueller*  
CITY ENGINEER

CITY OF ST. PAUL  
DEPARTMENT OF PUBLIC WORKS

MANHOLE, TYPE VI

Date of Revision

MAY 2010

Standard Plate No. 2106E