



PIPE SHALL REST ON UNDISTURBED EARTH AND SHALL NOT BEAR DIRECTLY ON SLAB

NOTES:

1. FOR CONSTRUCTION OF STORM SEWERS 36" I.D. OR LESS AT DIRECTION CHANGES OR WHERE STRUCTURE DEPTH TO INVERT EXCEEDS 9'
2. PRECAST RISER SECTIONS TO MEET ASTM C-487
3. JOINTS BETWEEN PRECAST SECTIONS SHALL USE O-RING RUBBER GASKET CONFORMING TO ASTM C-443 EXCEPT AS NOTED.
4. POURED CONCRETE INVERT SHALL BE CONCRETE MIX 3G52 AND SHAPED TO DRAIN
5. FILL SPACE BETWEEN PRECAST KNOCK-OUT AND PIPE WALL WITH MORTAR AND CONCRETE MASONRY.
6. THIS PORTION OF MANHOLE MAY BE CONSTRUCTED OF 8" SOLID CONCRETE MANHOLE BLOCK (SEE SPECIFICATIONS). ALL JOINTS SHALL BE COMPLETELY FILLED WITH MORTAR 3/8" THICK.
7. NO BELLS OR SPIGOTS SHALL PROTRUDE INTO ROUND STRUCTURES. SAWCUT PROTRUSIONS TO BE LESS THAN 3". IN RECTANGULAR STRUCTURES PIPES MUST BE CUT FLUSH TO THE INSIDE WALL. PIPE PROTRUSIONS SHALL NOT RESTRICT ENTRY TO MANHOLE.
8. EACH JOINT SHALL BE SEALED WITH AN EXTERNAL RUBBER SLEEVE SIMILAR TO THE INFI-SHIELD GATOR WRAP OR APPROVED EQUAL
9. NO STEPS ON STRUCTURES WHERE DEPTH TO INVERT EXCEEDS 20'

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

Aaron D. Hass
AARON D. HASS

Date 01-21-2026 Lic. No. 26424

APPROVED *2-19-2026*
Nick O'toole
CITY ENGINEER

CITY OF ST. PAUL
DEPARTMENT OF PUBLIC WORKS
MANHOLE, TYPE III & III-S

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Standard Plate No.
2103G