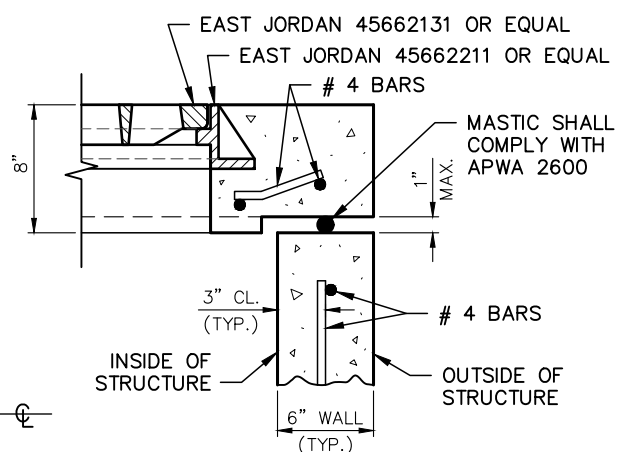
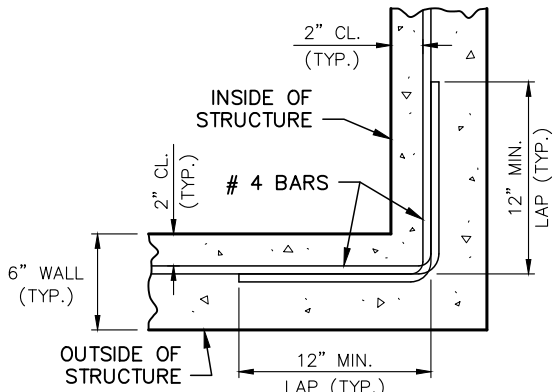


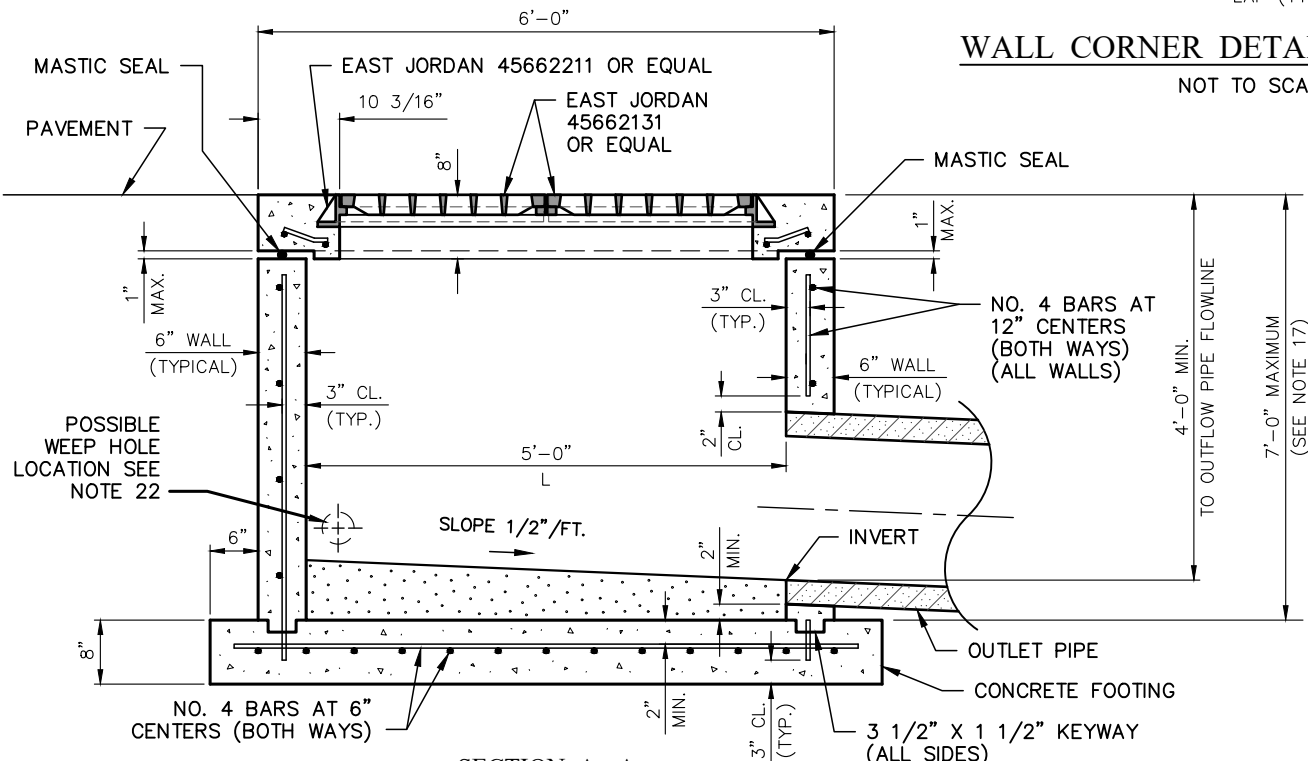
PLAN VIEW
SCALE: 1/2" = 1'-0"



TOP - WALL DETAIL
NOT TO SCALE

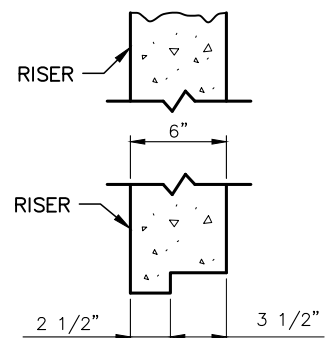


WALL CORNER DETAIL - PLAN VIEW
NOT TO SCALE

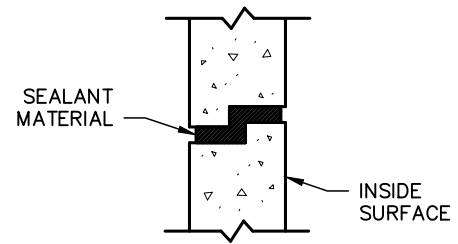


SECTION A - A
DOUBLE GRATE INLET
SCALE: 1/2" = 1'-0"

DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY PRIOR TO CONSTRUCTION.



RECTANGULAR STRUCTURE 6" WALLS OPEN JOINT DETAIL
NOT TO SCALE



RECTANGULAR STRUCTURE CLOSED JOINT DETAIL
NOT TO SCALE

* IF THERE ARE PROJECTS THAT REQUIRE ADDED STRUCTURAL SUPPORT, THE DESIGNER OF RECORD SHALL BE REQUIRED TO DESIGN THE WALL THICKNESS AND STEEL REQUIREMENTS AS NECESSARY WITH PRIOR APPROVAL FROM KCMO.

NOTES:

1. ALL WORK SHALL MEET THE REQUIREMENTS OF APWA-KCMO 2600 AS MODIFIED HEREIN.
2. GRATE INLET TYPE 2, GI-2, IS THE PREFERRED INLET TYPE ON UNIMPROVED STREETS.
3. INLETS SHALL BE SET LEVEL.
4. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
5. BEVEL ALL EXPOSED EDGES WITH 3/4" CHAMFER OR 1/2" TOOLED EDGE.
6. STORM SEWER STRUCTURES MAY BE POURED IN PLACE AS APPROVED BY WATER SERVICES. MIX A511 - 3/4 - 2 SHALL BE USED.
7. BOXOUTS SHALL NOT PROJECT THROUGH THE STRUCTURE CORNERS. REINFORCING IS BE BENT AROUND PIPE OPENINGS WHEN POSSIBLE. WHEN REINFORCING IS CUT, # 4 DIAGONAL BARS SHALL BE USED TO TIE ALL CUT ENDS TOGETHER.
8. FLOOR OF INLET SHALL BE SHAPED WITH INVERT TO PROVIDE SMOOTH FLOW. MIX NON-SHRINK GROUT ASTM C1107, GRADES B AND C, 4,000 PSI IN 24 HOURS SHALL BE USED.
9. REINFORCING STEEL SHALL BE NEW BILLET, MINIMUM GRADE 40 AS PER ASTM A615, AND SHALL BE BENT COLD. WELDING OF REINFORCING STEEL WILL NOT BE PERMITTED.
10. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS. 2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE. TOLERANCE OF +/- 1/8" SHALL BE PERMITTED.
11. ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 40 BAR DIAMETERS IN LENGTH.
12. PIPE CONNECTIONS TO PRECAST STRUCTURES SHALL HAVE A MINIMUM OF 6" OF CONCRETE AROUND THE ENTIRE PIPE WITHIN 2 FEET OF THE STRUCTURE, UNLESS SEALED WITH APPROVED FLEXIBLE WATERPROOF GASKETS IN PRECAST OPENINGS. MINIMUM CLEARANCE BETWEEN PIPE BOXOUTS AND BARREL JOINTS IS 8 1/4" WITHOUT SPECIAL DESIGN.
13. BACKFILL AROUND STRUCTURES SHALL BE CLASS II GRANULAR BACKFILL MATERIAL CONFORMING TO ASTM D2321 AND 24" THICK AROUND STRUCTURE.
14. THE STRUCTURE ELEVATION SHOWN ON THE PLANS IS THE TOP SURFACE OVER THE LOCATING POINT.
15. ALL SURFACES CONTACTING SIDE AND BACK OF INLET SHALL MATCH AT TOP EDGE OF LID AT EACH CORNER.
16. CONCRETE APRONS MAY BE REQUIRED TO PROVIDE POSITIVE FLOW TO INLET.
17. FOR DEPTH GREATER THAN 7 FEET AND LESS THAN 12 FEET:
 - A. WALLS SHALL BE 8" THICK WITH # 5 VERTICAL BARS AT 9" O.C. AND # 5 HORIZONTAL BARS AT 12" O.C.
 - B. BASE SHALL BE 12" THICK WITH # 5 BARS EWTB AT 6" O.C.
18. MASTIC WILL PROVIDE WATER SEAL BETWEEN TOP AND WALL AND BETWEEN JOINTS.
19. ALL CONCRETE SHALL BE 4,000 PSI MINIMUM.
20. THE DESIGN PROFESSIONAL (DP)/ ENGINEER OF RECORD (EOR) FOR THE PROJECT SHALL EVALUATE STRUCTURE FOR WITHSTANDING PRESSURE AND BUOYANCY IN AREAS WITH POTENTIAL FOR HIGH GROUND WATER AND RECOMMEND CHANGES ACCORDINGLY. BASE EXTENSIONS SHALL BE PROVIDED WHEN SPECIFIED BY THE DP/ EOR FOR THE PROJECT.
21. A 1/2" JOINT FILLER SHALL BE PLACED BETWEEN ADJOINING CONCRETE SURFACES AND INLET.
22. INLETS IN SUMP CONDITION OR PER DP/ EOR RECOMMENDATION SHALL HAVE A MINIMUM OF ONE 4" DRAIN OPENING LOCATED A MINIMUM OF 6" BELOW THROAT. LOCATION OF DRAIN(S) TO BE DETERMINED BY DP/ EOR. 4" DRAIN OPENING(S) SHALL BE COVERED WITH AN APPROVED 1/4" GALVANIZED SCREEN AND FILTER FABRIC PRIOR TO PLACEMENT OF 3/8" CLEAN ROCK, A MINIMUM OF 15" IN ALL DIRECTIONS.

NO.	DATE	BY	NATURE
REVISIONS			

GRATE INLET - 2
STANDARD - TYPE DETAILS

WATER SERVICES
CITY OF KANSAS CITY, MISSOURI

DRAWING NO. **GI - 2**

DEVELOPED BY: STORMWATER STANDARDS
APPROVED BY: _____
DATE: 1/18/2022

1 OF 1