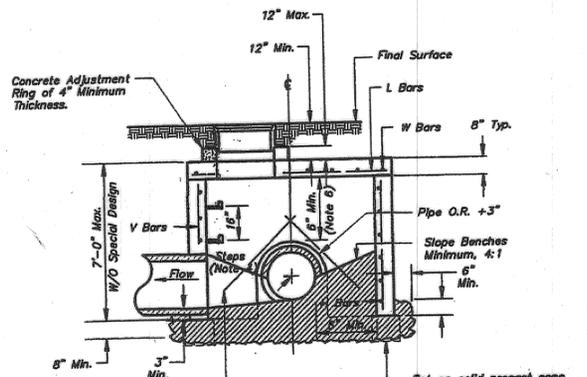
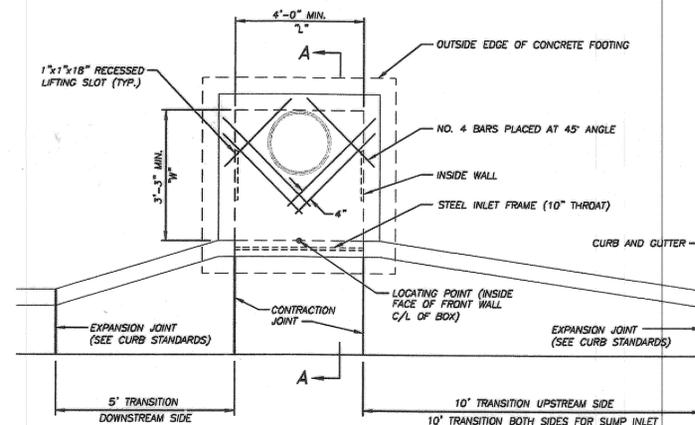


SECTION A-A
(Cast In Place)

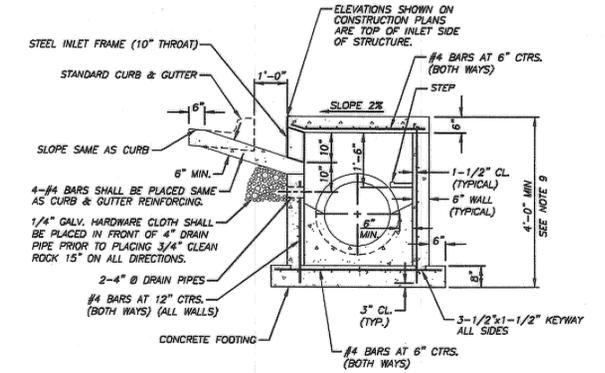


SECTION A-A
(Precast)

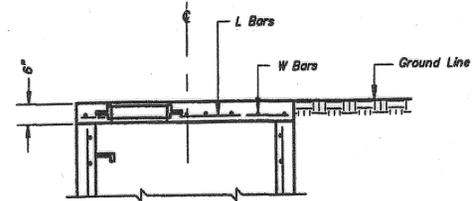
Set on solid precast conc. blocks. Foundation and invert shall be poured monolithic, unless soil conditions require pouring base slab before setting structure.



PLAN

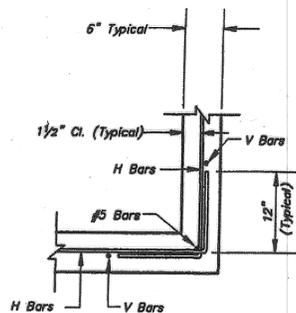


SECTION A-A

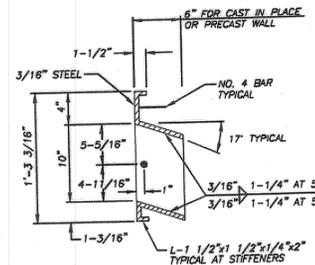


SLAB TOP ALTERNATE FOR JUNCTION BOX (SHALLOW)

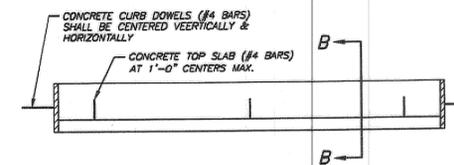
NOTE: Ring & Cover to be Neenah R-1537, Clay & Bailey #2020, Deeter #2016, or approved equal. (Casting may vary by municipality, refer to plans & contract documents.)



CORNER DETAIL



SECTION B-B



TOP VIEW

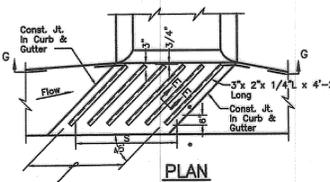
- GENERAL NOTES:**
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTE IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION. FL'S LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
 2. FLOOR OF INLET SHALL BE SHAPED WITH INVERT TO PROVIDE SMOOTH FLOW AND A MINIMUM SLOPE OF 2%.
 3. LOCATE MH RING AND COVER OVER OUTLET.
 4. STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY.
 5. BEVEL ALL EXPOSED EDGES WITH 3/4" CHAMFER OR 1/2" TOOLED EDGE.
 6. ON-GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
 7. THE SUMS OF "L" & "W" SHALL NOT EXCEED 14' WITHOUT SPECIAL DESIGN. (SEE PROJECT PLANS FOR DETAILS)
 8. RING & COVER TO BE NEENAH R-1537, CLAY & BAILEY #2020, DEETER #2016, EAST JORDAN IRON WORKS #1501A COVER W/ 1501Z FRAME OR APPROVED EQUAL. (REFER TO MEDIUM DUTY MANHOLE COVER DETAIL FOR LETTERING REQUIREMENTS).
 9. HEIGHT MAY BE INCREASED IN INCREMENTS OF 0'-6" TO A MAXIMUM HEIGHT OF 7'-0". IF TALLER MANHOLE IS NEEDED A SPECIAL DESIGN IS REQUIRED.
 10. ALL REINFORCING SHALL BE BENT AROUND PIPE OPENING WHEN POSSIBLE. IF STEEL IS CUT, DIAGONAL BARS SHALL BE USED TO TIE ENDS TOGETHER.
 11. EXPANSION JOINT DETAIL AND DOWEL PLACEMENT SAME AS SHOWN ON APPROPRIATE CURB STANDARD DETAIL.
 12. RING AND COVER CASTING SHALL BE LOCATED OVER OUTLET OF CURB INLET.
 13. DEFLECTORS ARE NOT REQUIRED WHEN GUTTER SLOPE IS LESS THAN 4%.

GENERAL NOTES: JUNCTION BOX

1. Locate ring and cover outlet.
2. All work and materials shall conform to Section 2600 APWA.
3. Use "N" chamfer strip or "M" R edger took on all exposed concrete corners.
4. Steps required at 16" O.C. when depth from top of casting to invert exceeds 4".
5. Boxouts will not be allowed to project through the corners of the structure and the minimum distance between boxouts is 6" with 1 corner bar.
6. The minimum reinforcing shall be 1 H-bar over a cast-in place pipe and 2 H-bars over a precast boxout.
7. Limit opening height to 6" with No. 5 galvanized bars extending to corner rebars.
8. Show field inlet orientation on plans plus number and size of openings locating point at center of structure.
9. O.R. = one half outside pipe diameter (O.D.)
10. Reinforcing of covers in streets require special design.

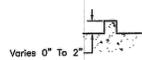
REINFORCING

BARS	BAR SIZE	SPACING (IN.)
H	4	12
V	4	12
L	5	6
W	5	6



PLAN

Deflectors To Be Equally Spaced
 For L=4'; 6 Deflectors-S=4'-6"
 For L=6'; 8 Deflectors-S=6'-6"
 For L=8'; 11 Deflectors-S=8'-6"
 For L=10'; 13 Deflectors-S=10'-6"

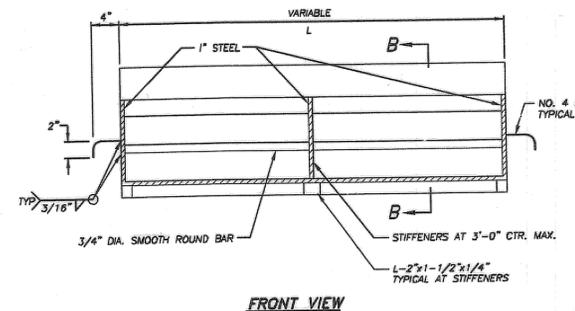


SECTION E-E



SECTION G-G

- Gutter Deflector Notes:**
1. Deflectors To Be Stamped Into Concrete W/ Dimensions Shown.
 2. To Be Used Where Deflector Curb Inlet is Specified
 3. Use Deflectors for S>4%

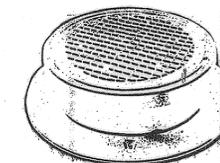


FRONT VIEW

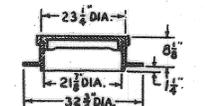
STEEL INLET FRAME NOTES:

1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM-PRIME #37-77 PRIMER (RED) OR EQUAL.

**ALL LIDS TO BE EMBOSSED W/ CITY OF WARRENSBURG IN 2" LETTERS
 STORM CENTERED W/ 3" LETTERS AND EMBOSSED AS SPECIFIED**



No. 2011 (Less Brick Ring)
No. 2011MR (With Brick Ring)
 (Meis Raytown, Mo. Specifications)



Weight
 Lid 110 lbs.
 Ring 180 lbs.
 Brick Ring 190 lbs.

Furnished with solid or vented lid.
 Solid lid furnished unless otherwise specified.
 Machined horizontal bearing surfaces are standard.

NOTE: Ring can be furnished with No. 2012 Grate. If heavier lid required it can be furnished with No. 2008 BC lid.

NOTE: Curb inlets and junction boxes in sidewalk use Clay & Bailey No. 2020, EJIW 1501A cover w/ 1501Z Frame or approved equal, not embossed.

Junction boxes installed in roadway use Clay & Bailey No. 2008BV, EJIW V1383 GS cover w/ V1383-3 Frame or approved equal, embossed as specified.

standard storm MH use Clay & Bailey No. 2011, embossed as specified.

MEDIUM DUTY MANHOLE COVER

CITY OF WARRENSBURG, MISSOURI

STORM DRAINAGE STANDARD DETAIL



SCALE: N/A	APPROVED BY:	DRAWN BY: WDG
DATE:		REVISED 04/15/16
		DRAWING NUMBER