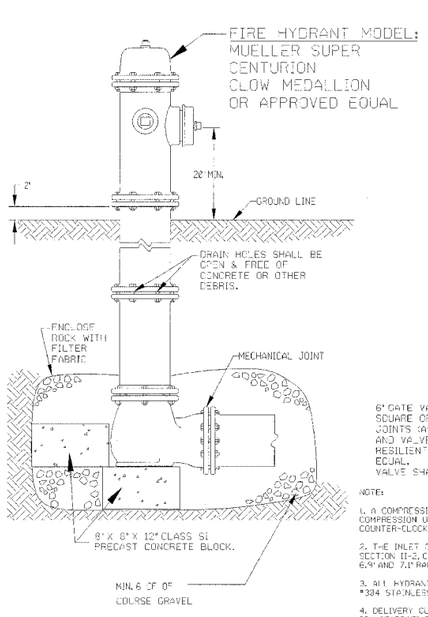
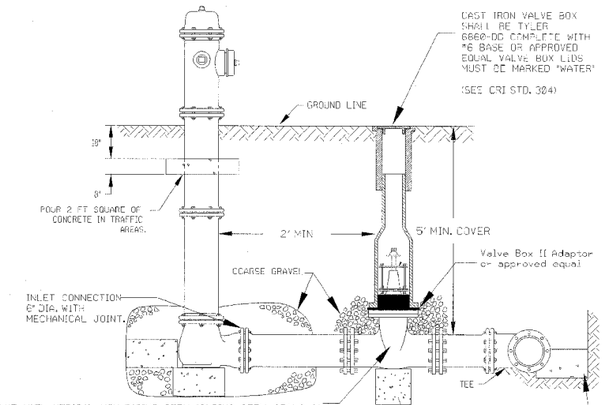
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	1 - 1	ROCK ISLAND	239	158
STA 75+60.93		TO STA 79+00		
FED. RD DIST. NO.	ILLINOIS	FED. AID PROJECT		
				CONTRACT # 84986





6" GATE VALVE WITH VETICAL NON-RISING STEM, "O" RING STEM SEALS, 2" SQUARE OPERATING NUT, OPEN COUNTER CLOCK WISE & MECHANICAL JOINTS (AWWA C509). ALL BOLTS AND NUTS FOR THE VALVE BONNET AND VALVE THRUST PLATE SHALL BE #304 STAINLESS STEEL. CLOW RESILIENT WEDGE, MUELLER A-2360 RESILIENT WEDGE, OR APPROVED EQUAL.
VALVE SHALL BE INSTALLED AS CLOSE TO THE MAIN AS POSSIBLE.

NOTE:

1. A COMPRESSION TYPE MAIN VALVE, CLOSING WITH STREAM FLOW. THE VALVE WILL BE DESIGNED TO BE HELD CLOSED IN COMPRESSION UNDER STATIC WATER PRESSURE. THE VALVE OPENING WILL BE 5.25" MINIMUM NOMINAL DIAMETER AND OPEN COUNTER-CLOCKWISE. OPERATING NUT SHALL BE 7/8" SQUARE IN SIZE.

2. THE INLET CONNECTION WILL BE 6" DIA. "CUT-IN" MECHANICAL JOINT (AS DESCRIBED IN SECTION II-2, C10 WITH RESTRAINING LUGS. FOOT PIECE BELL WILL ACCEPT PIPE OUTSIDE DIAMETERS IN THE 6.9" AND 7.1" RANGE.

3. ALL HYDRANT BOLTS AND NUTS FROM THE GRADE LINE MARK ON THE BARREL TO THE SHOE BOLTS AND NUTS SHALL BE #304 STAINLESS STEEL.

4. DELIVERY CLASSIFICATION - ONE PUMPER AND TWO HOSE NOZZLES. THESE NOZZLES SHALL BE 4.5" & 2.5" NOMINAL INSIDE DIA. RESPECTIVELY. THREADS SHALL BE OF NATIONAL STANDARD FIRE HOSE COUPLING SCREW DESIGN.

5. THE HYDRANTS WILL BE OF "TRAFFIC BREAKAWAY DESIGN," WITH GROUND LINE FLANGE AND SAFETY STEM OPERATOR COUPLING. GRADE LINE SHALL BE POSITIVELY MARKED ON THE LOWER BARREL. THE CENTER LINE OF ALL PORTS SHALL BE A MINIMUM OF 18" ABOVE ESTABLISHED GRADE LINES.

6. HYDRANTS WILL BE PROVIDED WITH BRONZE-LINED OUTLETS TO ALLOW CORROSION RESISTANT DRAINAGE OF THE BARREL SECTIONS. SEAT AND DRAIN RINGS WILL BE OF BRONZE COMPOSITION AS PROVIDED IN THE STANDARD RECOMMENDATIONS.

7. NOZZLE CAPS WILL OPEN COUNTER-CLOCKWISE, HAVE NATIONAL STANDARD THREADS, AND BE PROVIDED WITH A SECURITY CHAIN. OPERATING NUT SHALL BE 7/8" SQUARE IN SIZE.

8. POSITIVE O-RINGS SEALS WILL BE PROVIDED TO PROTECT STEM AND OPERATING NUT THREADS, AND ALL BEARING SURFACES FROM THE ATMOSPHERE AND THE WATERWAY. THE TOP WILL HAVE AN AN OIL RESERVOIR OR GREASE CHAMBER TO INSURE AUTOMATIC LUBRICATION OF THE STEM THREADS DURING OPERATION.

9. PRIMARY COATING AND PAINTING MUST COMPLY WITH THE STANDARD RECOMMENDATIONS. AND A SAFETY FINISH COAT WILL BE APPLIED ABOVE THE GRADE LINE. FINISH COAT MUST BE SAFETY YELLOW IN COLOR.

NOT TO SCALE

REVISION	BY	DATE
REVISED	MDW	07/15/25
REVISED	WLC	04/12/05
REVISED	CAM	04/03/02
REVISED	PJK	03/25/02
REVISED	MDW	01/05/00
REV. HYD. MODEL STD.	PMCJ	06/25/99
METRIC	PMCJ	01/27/97
REVISED	MDW	08/22/94
STAND301.DWG	MDM	03/91

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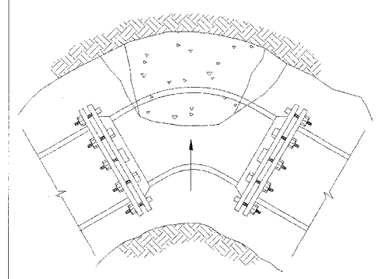
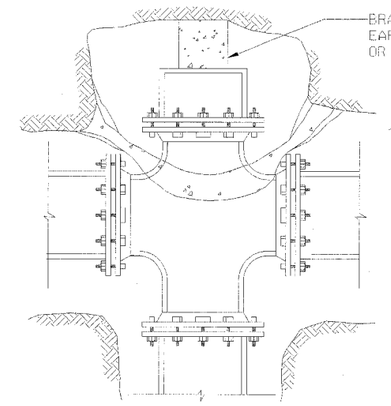
FIRE HYDRANT DETAIL

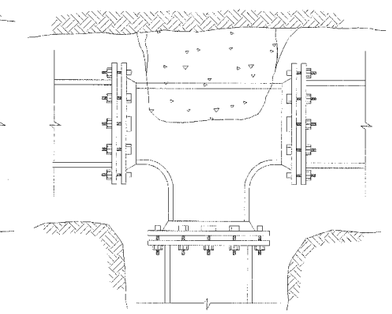
CITY OF ROCK ISLAND ENGINEERING DIVISION | STANDARD NO. 301



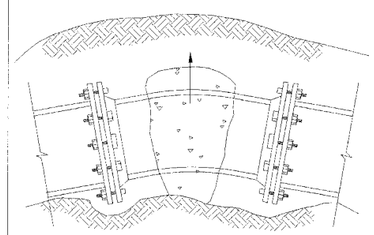
90°/45° ELBOW



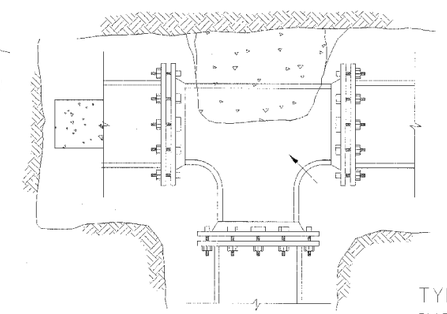
PLUGGED CROSS



TEE



VERTICAL BEND



PLUGGED TEE

NOTES:

1. ALL BLOCKS BEAR AGAINST UNDISTURBED EARTH.
2. ARROWS INDICATE DIRECTION OF THRUST.
3. ALL THRUST BLOCKS TO BE 3000 PSI CONCRETE.
4. ALL FITTING SHOWN IN PLAN EXCEPT VERTICAL BEND.
5. FRESH CONCRETE SHALL NOT TOUCH FLANGE OR FLANGE BOLTS.

NOT TO SCALE

REVISION	BY	DATE
STANDARDIZED	PMCJ	10/03/94

TYPICAL THRUST BLOCK INSTALLATIONS

CITY OF ROCK ISLAND ENGINEERING DIVISION | STANDARD NO. 302

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SPECIAL UTILITY DETAILS

SCALE: VERT. HORIZ.

DATE

DRAWN BY

CHECKED BY