

**NOTE:**  
ALL MANHOLES MUST BE DAMP PROOF PER IDOT SPECIFICATIONS 1060 "WATER PROOFING MATERIALS"  
DRAIN FOR VALVE VAULT SHALL BE CONSTRUCTED ONLY WHEN SHOWN ON THE PLANS.  
FRAME AND RING(S) TO BE SET IN MORTAR BED OR SEALED WITH A PREFORMED BITUMEN SEAL (E-Z-STICK OR APPROVED EQUAL).  
FOR PRESSURE CONNECTION, SEE DETAIL UW-2.  
ALL LIDS TO BE USED ON WATER SYSTEM STRUCTURE SHALL BEAR THE WORDS "CITY OF CRYSTAL LAKE WATER".  
NOTE: ALL VALVE HARDWARE MUST BE STAINLESS STEEL INCLUDING NUTS, BOLTS & WASHERS.

DIAMETER OF WATER MAIN	D	T
8 INCHES AND OVER	5 FT.	5"
10 INCHES AND OVER	6 FT.	5"

- 1 CONCENTRIC CONES REQUIRED
  - 2 1" PREFERRED (3/4" MIN.) MUELLER, A.Y. McDONALD, OR FORD CORPORATION STOP EACH SIDE OF VALVE MUST BE INSTALLED.
  - 3 MUELLER 2380-23-9020 OR AMERICAN FLOW CONTROL 2500-1 RESILIENT SEAT GATE VALVE
  - 4 PRECAST CONCRETE MANHOLE SECTIONS WITH A MINIMUM THICKNESS OF 5"
  - 5 WATERTIGHT JOINTS
  - 6 GASKET-TYPE WATERSTOP COLLAR FOR ALL WATER MAIN CONNECTIONS
  - 7 CAST IRON MANHOLE FRAME & COVER SIMILAR TO NEENAH R-1712, OR EQUAL WITH STANDARD DUTY, NON-ROCKING TYPE LIDS WITH "CITY OF CRYSTAL LAKE WATER" CAST INTO LID. (NEENAH R-2535, OR EQUAL MAY BE USED IN GRASSY AREAS)
- ADJUSTING RING HEIGHT NOT TO EXCEED 8" WITH A MAXIMUM OF THREE (3) ADJUSTMENT RINGS.

Approved: City Engineer

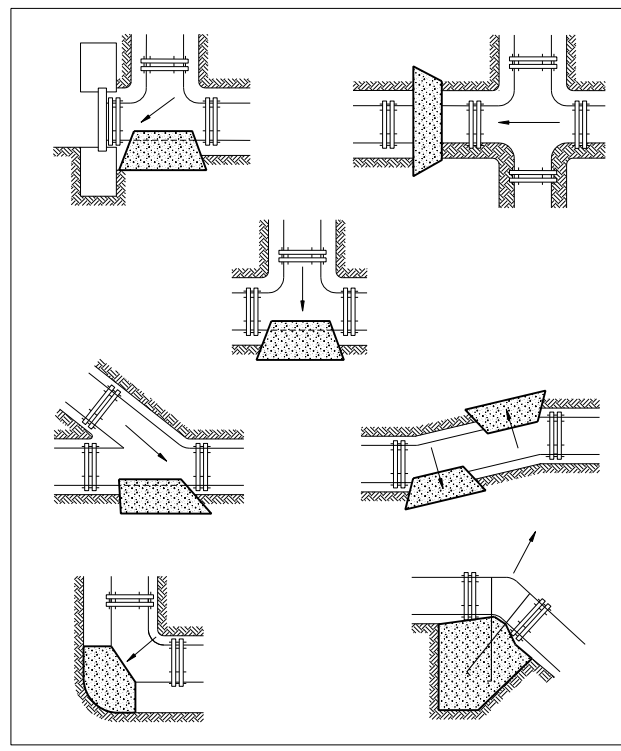
Drawing Name: **STANDARD VALVE VAULT**

Drawing Number: **UW-01**

Date: 4/15/2007

Drawn: EM, Checked: JN

CRYSTAL LAKE ILLINOIS Engineering Division



**BEARING AREA (SQ. FT.)**

PIPE SIZE	TEE/PLUG	90°	45°	21 1/2°	11 1/4°
6	4	2	1	1	1
8	6	4	3	1	1
10	7	5	3	2	1
12	8	6	4	3	2
14	12	9	6	4	3
16	15	12	7	5	3
18	18	15	9	5	4
24	40	30	15	10	5

**NOTES:**  
ALL BLOCKING SHALL BE POURED CLASS SI CONCRETE AGAINST UNDISTURBED EARTH.  
ALL BENDS OR ELBOWS GREATER THAN 11 1/4° SHALL HAVE THRUST BLOCKING. FORM AS TO NOT COVER BOLTS.  
IN LEU OF THRUST BLOCKING "MEGA LUG" JOINT RESTRAINTS OR APPROVED EQUAL CAN BE USED AS APPROVED BY THE ENGINEER.

Approved: City Engineer

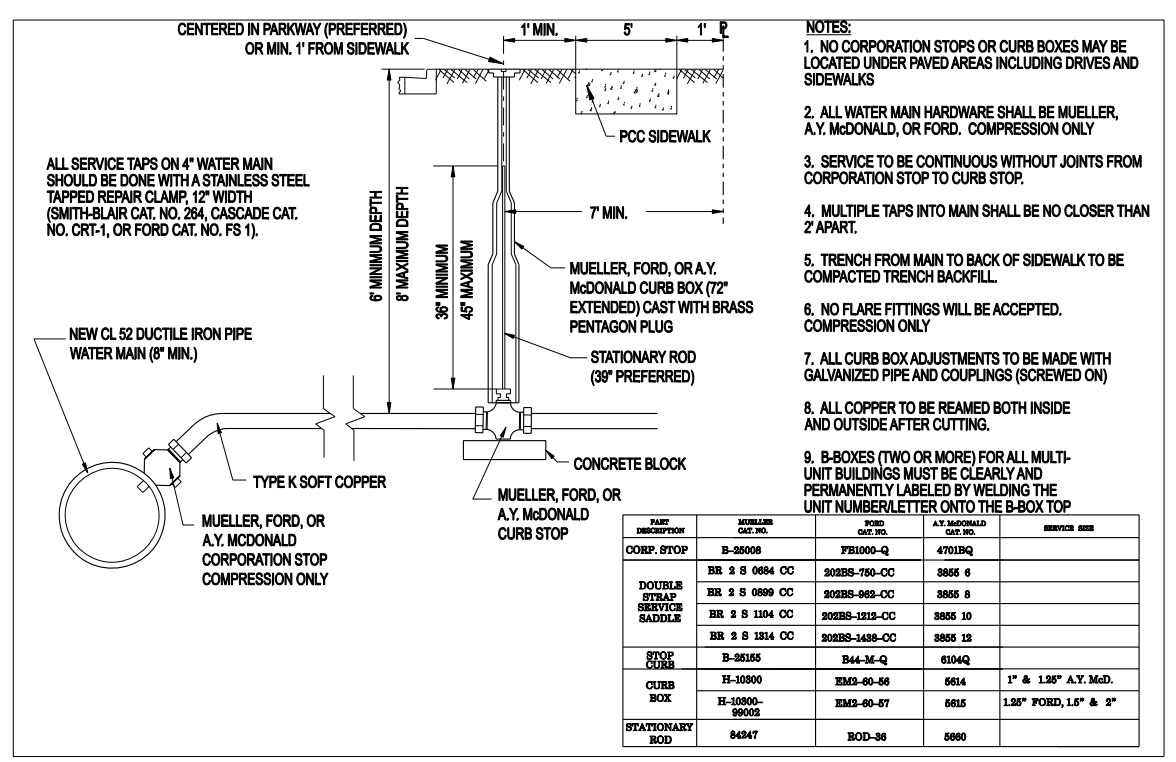
Drawing Name: **THRUST BLOCK INSTALLATION**

Drawing Number: **UW-03**

Date: 4/15/2007

Drawn: EM, Checked: JN

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**NOTES:**  
1. NO CORPORATION STOPS OR CURB BOXES MAY BE LOCATED UNDER PAVED AREAS INCLUDING DRIVES AND SIDEWALKS  
2. ALL WATER MAIN HARDWARE SHALL BE MUELLER, A.Y. McDONALD, OR FORD. COMPRESSION ONLY  
3. SERVICE TO BE CONTINUOUS WITHOUT JOINTS FROM CORPORATION STOP TO CURB STOP.  
4. MULTIPLE TAPS INTO MAIN SHALL BE NO CLOSER THAN 2' APART.  
5. TRENCH FROM MAIN TO BACK OF SIDEWALK TO BE COMPACTED TRENCH BACKFILL.  
6. NO FLARE FITTINGS WILL BE ACCEPTED. COMPRESSION ONLY  
7. ALL CURB BOX ADJUSTMENTS TO BE MADE WITH GALVANIZED PIPE AND COUPLINGS (SCREWED ON)  
8. ALL COPPER TO BE REAMED BOTH INSIDE AND OUTSIDE AFTER CUTTING.  
9. B-BOXES (TWO OR MORE) FOR ALL MULTI-UNIT BUILDINGS MUST BE CLEARLY AND PERMANENTLY LABELED BY WELDING THE UNIT NUMBER/LETTER ONTO THE B-BOX TOP

PART DESCRIPTION	MUELLER CAT. NO.	FORD CAT. NO.	A.Y. McDONALD CAT. NO.	SERVICE SIZE
CORP. STOP	B-55008	FB1000-Q	4701BQ	
DOUBLE STRAP SERVICE SADDLE	BR 2 S 0684 OC	202BS-750-OC	3855 6	
	BR 2 S 0899 OC	202BS-982-OC	3855 8	
	BR 2 S 1104 OC	202BS-1212-OC	3855 10	
	BR 2 S 1214 OC	202BS-1438-OC	3855 12	
STOP CURB	B-95125	B44-3E-Q	6104Q	
CURB BOX	H-10800	EM3-60-56	5614	1" & 1.25" A.Y. McD.
	H-10800-99002	EM3-60-57	5615	1.25" FORD, 1.6" & 2"
STATIONARY ROD	84247	ROD-36	5680	

Approved: City Engineer

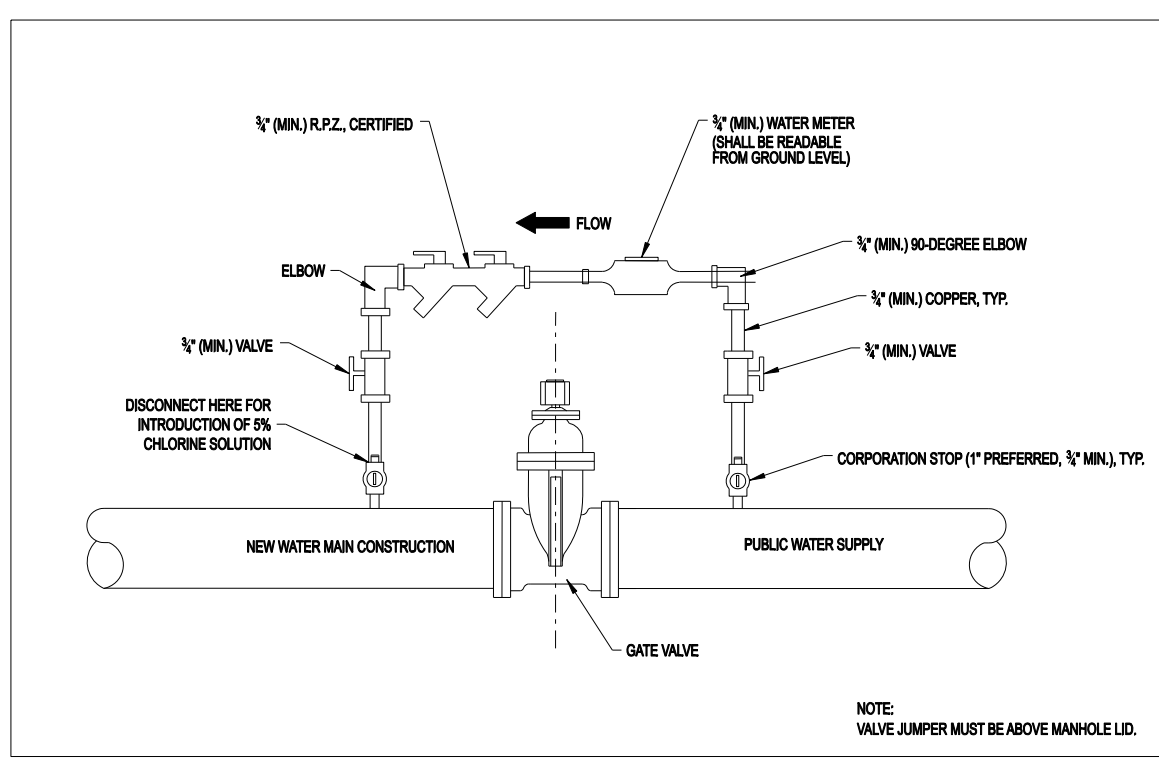
Drawing Name: **WATER SERVICE INSTALLATION**

Drawing Number: **UW-04**

Date: 4/15/2007

Drawn: EM, Checked: JN

CRYSTAL LAKE ILLINOIS Engineering Division



**NOTE:**  
VALVE JUMPER MUST BE ABOVE MANHOLE LID.

Approved: City Engineer

Drawing Name: **WATER VALVE JUMPER**

Drawing Number: **UW-05**

Date: 4/15/2007

Drawn: EM, Checked: JAM

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