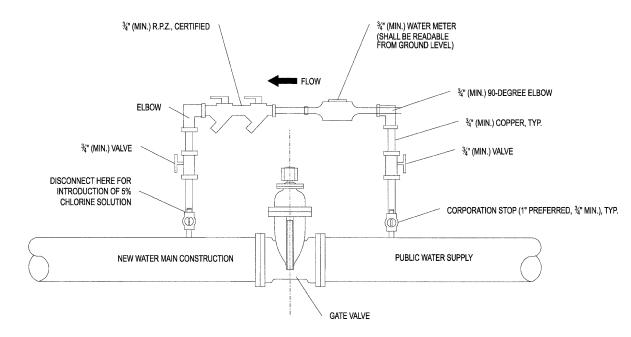
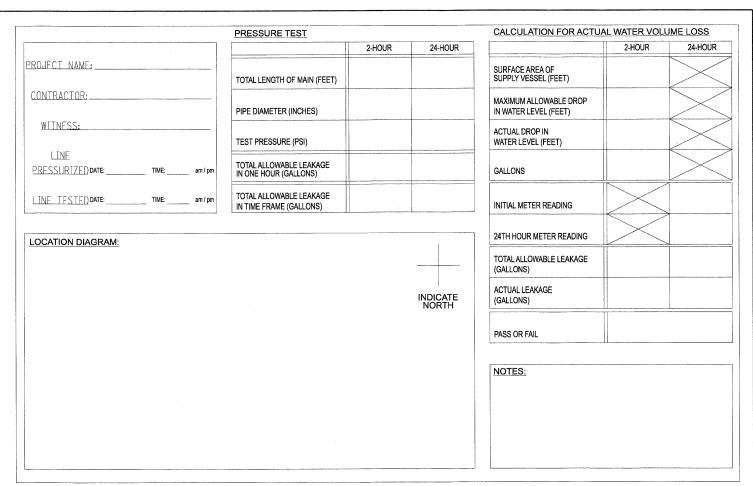


WATER MAIN PRESSURE CONNECTION



NOTE: VALVE JUMPER MUST BE ABOVE MANHOLE LID.

WATER VALVE JUMPER



WATER MAIN TEST REPORT

CITY OF CRYSTAL LAKE WATER MAIN CHLORINATION SPECIFICATIONS:

- DISINFECTION OF WATER MAINS SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS
 STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION, CURRENT EDITION
- THE CITY ENGINEERING DIVISION AND WATER DIVISION SHALL BE NOTIFIED 48 HOURS IN ADVANCE FOR SCHEDULING OF ANY TESTING CHLORINATING, FLUSHING, OR SAMPLING.
- 3. ONLY CITY WATER DIVISION PERSONNEL MAY OPERATE WATER VALVES ON LIVE MAINS.
- 4. A WATER VALVE JUMPER IS REQUIRED TO MAINTAIN PRESSURE ON THE CHLORINATED LINES DURING THE SAMPLING PROCEDURE FOR PROPER INSTALLATION AND REQUIREMENTS SEE THE STANDARD WATER VALVE JUMPER DETAIL.
- 5. WATER MAINS SHALL BE FLUSHED WITH A MINIMUM VELOCITY OF 2.5 FPS.
- 6. THE INITIAL CHLORINE CONCENTRATION SHALL BE 50 mg/L WITH A MINIMUM 24 HOUR RESIDUAL OF 25 mg/l
- THE METHOD OF CHLORINE APPLICATION SHALL BE APPROVED BY THE CITY:
 A. LIQUID CHLORINE WICHLORINATING DEVICE WITH BACKFLOW PREVENTER.
 C. TABLET DISINFECTION.
- 8. ALL NEW VALVES AND HYDRANTS SHALL BE OPERATED WHILE LINE IS BEING CHLORINATED.
- 9. THE CITY ENGINEERING DIVISION SHALL DETERMINE LOCATION AND QUANTITY OF CORPORATION STOPS FOR FLUSHING AND CHLORINATING.
- 10. THE FINAL FLUSHING RESIDUAL IN THE NEW CHLORINATED LINES SHALL BE BETWEEN 0.2 AND 2.0 mg/L.
- 11. ALL WATER SAMPLES SHALL BE COLLECTED ON TWO (2) CONSECUTIVE DAYS AND PASS BACTERIOLOGICAL TEST RESULTS. IN THE EVENT THAT THE FIRST SET OF SAMPLES TAKEN TWO (2) CONSECUTIVE DAYS APART FAIL TO PASS, ANOTHER SET OF SAMPLES MAY BE TAKEN TWO (2) DAYS APART (PER STATE SPECS). IF THE SECOND SET FAILS TO PASS TESTING, THEN THE PROCEDURE MUST BE REPEATED WITH THE MAIN BEING RECHLORINATED, REFLUSHED, AND RESAMPLED.
- 12. STATE CERTIFIED LAB MUST BE USED FOR SAMPLES.

NUMBER OF 5-GRAIN HYPOCHLORITE TABLETS REQUIRED FOR A DOSAGE OF 50mg/L PER LENGTH OF PIPE SECTION

CHLORINE REQUIREMENTS TO PRODUCE 50 mg/L CONCENTRATION IN 100 FEET OF PIPE-BY DIAMETER

PIPE SIZE IN INCHES	100% CHLORINE, LB	1% CHLORINE SOLUTION, GALS.		
4	0.027	0.33		
6	0.061	0.73		
8	0.108	1.30		
10	0.170	2.04		
12	0.240	2.88		

CHLORINATION SPECIFICATIONS

TO STA.



USER NAME = jmacke(Chicago_R)	DESIGNED	-	D.DOERFLER	REVISED	
PLOT CONFIG= PDF(Grey_Large).plt	DRAWN	-	D.DOERFLER	REVISED	
PLOT SCALE = 1:50	CHECKED	-	E.CHOW	REVISED	-
PLOT DATE = 7/29/2010	DATE	-	8/2/2010	REVISED	-



MCHENRY COUNTY DIVISION OF TRANSPORTATION

RAKOW	ROAD	ACKMAN DRAINAGE		ILLINOIS	ROUTE	31

SHEET NO. DU 33 OF 47 STA.

F.A.P. SECTION						COUNTY	TOTAL	SHEET NO.	
0336		05-00308-00-WR				MCHENRY	606	216	
							CONTRAC	T NO. 6	3398
FED. R	ROAD	DIST.	NO.	ILLINOIS	FED.	AID	PROJECT		