

1. ALL OPENINGS IN MANHOLES & STRUCTURES SHALL BE SEALED WITH WATERPROOF NON-SHRINK GROUT, EXCEPT AS OTHERWISE INDICATED IN THE PLANS OR SPECIFICATIONS. NO BOOTS.
2. ALL VALVE BOXES, MANHOLE FRAMES AND COVERS ARE TO BE FLUSH WITH PROPOSED FINISHED GRADES OF WALKS, PAVEMENTS, SWALES, ETC. THEY SHALL HAVE CONCRETE PADS POURED IN UNPAVED AREAS, IN ACCORDANCE WITH VALVE, AIR RELEASE & MANHOLE SETTING DETAILS.
3. ALL PIPE SIZES 12" AND SMALLER TO BE DUCTILE IRON CLASS 52. LARGER THAN 12" ARE TO BE DUCTILE IRON CLASS 51. ALL PIPE GREATER THAN 24" TO BE GUAGED.
4. PRESSURE AND LEAKAGE TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE ENGINEER OR AN APPOINTED REPRESENTATIVE.
5. THE CONTRACTOR WILL PROVIDE ALL NECESSARY APPARATUS INCLUDING A PUMP, MEASURING DEVICE, PIPING CONNECTIONS, FITTINGS AND THE NECESSARY LABOR TO CONDUCT THE TEST.
6. THE TEST SHALL BE A MINIMUM 2 HOUR DURATION. DURING THE TEST, THE PIPE BEING TESTED SHALL BE MAINTAINED AT A PRESSURE OF NOT LESS THAN 150 psi FOR WATER MAINS AND 100 psi FOR FORCE MAINS. THERE SHALL NOT BE A LOSS OR GAIN OF MORE THAN 5 psi DURING THE TEST.
7. LEAKAGE IS DEFINED AS THE QUANTITY OF WATER ADDED TO THE PIPE AFTER THE TESTING PERIOD. NO PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE EXCEEDS THE QUANTITIES SPECIFIED IN AWWA C-600 SECTION 4.2.
8. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE PROPOSED TESTING PATTERN TO FOLLOW. THIS SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER TO THE CITY PRIOR TO TESTING. UNLESS APPROVED BY THE ENGINEER, THE CONTRACTOR SHALL NOT TEST MORE THAN 1,500' OF THE PIPE IN A SINGLE TEST, AND ALL SERVICES MUST BE INSTALLED.
9. THE CITY PUBLIC UTILITIES DEPARTMENT SHALL BE GIVEN A MINIMUM OF 48 HOURS NOTICE TO ENABLE THE UTILITY DEPARTMENT'S REPRESENTATIVE TO BE PRESENT FOR OBSERVATIONS.
10. TAPS SHALL NOT BE MADE CLOSER THAN 8" OR TWICE THE PIPE DIAMETER, WHICHEVER IS GREATER.

REVISED: SEPT-2009	GENERAL NOTES - APPLICABLE TO PRESSURE PIPE SYSTEMS.	STANDARD DETAIL
ISSUED: SEPT-2009	CITY OF WEST PALM BEACH ENGINEERING SERVICES DEPT.	GN-4