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CIVIL GENERAL LEGEND

----- s -----	EXISTING SANITARY SEWER		PROPOSED HYDRANT
=====	EXISTING STORM DRAIN		PROPOSED GATE VALVE
----- w -----	EXISTING WATER MAIN		PROPOSED MANUAL AIR RELEASE
x-x-x-x-x-x-x-x-x-x	EXISTING WOODEN FENCE	MJ	MECHANICAL JOINT
	EXISTING TREE/SHRUB LINE	RG B1	RETAINER GLAND
	EXISTING HYDRANT		TEST BORING
	EXISTING IRON PIN	-----	PROPOSED WATER MAIN
	EXISTING SEWER MANHOLE (SMH)		
	EXISTING SINGLE POLE SIGN		
	EXISTING STUMP		
	EXISTING CONIFEROUS TREE		
	EXISTING DECIDUOUS TREE		
	EXISTING UTILITY POLE		
	EXISTING GATE VALVE		
	EXISTING SURVEY POINT		
	EXISTING CATCH BASIN (SQUARE)		

GENERAL NOTES

1. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION TO LOCATE THE EXISTING WATER, SEWER, STORM DRAIN SYSTEMS, AND SERVICES, PRIOR TO INSTALLATION OF ANY SEGMENT OF NEW WATER MAIN. EXPLORATORY EXCAVATION IS REQUIRED TO LOCATE UNDERGROUND UTILITIES. CONTRACTOR SHALL USE EXTREME CAUTION TO PREVENT DAMAGE TO EXISTING UTILITIES.
2. THE LOCATIONS OF PIPES, DUCTS, CONDUITS, AND OTHER UNDERGROUND STRUCTURES SHOWN ON THESE PLANS ARE NOT WARRANTED TO BE EXACT NOR IS IT WARRANTED THAT ALL UNDERGROUND STRUCTURES ARE SHOWN.
3. ALL WORK TO BE DONE SHALL BE WITHIN THE PUBLIC RIGHT OF WAY OR EASEMENT.
4. ALTHOUGH NOT SHOWN, EXISTING WATER SERVICES SHALL BE REPAIRED OR RELOCATED AS NECESSARY IN ORDER TO MAINTAIN SERVICE. THE DANVILLE FIRE DISTRICT #1 WILL ASSIST IN THE LOCATION AND MARKING OF THESE SERVICES, HOWEVER, THE ACTUAL LOCATION OF SOME SERVICES IS UNKNOWN.
5. THE CONTRACTOR SHALL INSTALL 50 MM RIGID INSULATION AT ALL STORM DRAIN/CULVERT CROSSINGS AS DIRECTED BY THE ENGINEER.
6. EXISTING WATER MAINS SHALL BE PLUGGED AND ABANDONED AFTER TESTING AND CHLORINATION OF THE NEW WATER MAIN AND ALL SERVICE CONNECTIONS ARE COMPLETED. NEW PIPE SHALL BE PUT INTO SERVICE ONLY AFTER VERBAL PERMISSION OF THE ENGINEER, AND THE DANVILLE FIRE DISTRICT #1.
7. WHERE WATER MAIN CROSSES OVER OR UNDER A STORM DRAIN, A FULL LENGTH OF D. I. WATER PIPE SHALL BE PLACED WITH THE MID-LENGTH CENTERED UNDER THE STORM DRAIN.
8. LISTINGS OF NIPPLES, FITTINGS, ADAPTERS, ETC. ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. ADDITIONAL MATERIAL MAY BE REQUIRED.
9. MINIMUM CLEARANCE BETWEEN NEW WATER MAINS AND ALL EXISTING UTILITIES, EXCEPT SEWERS, SHALL BE 150MM AT CROSSING LOCATIONS.
10. ALL BURIED FITTINGS SHALL BE MECHANICAL JOINT WITH MEGALUG RETAINER GLANDS AND THRUST RESTRAINTS. SEE MISCELLANEOUS DETAIL SHEET.
11. WHEN SERVICE INTERRUPTION IS DEEMED NECESSARY BY THE ENGINEER, THE CONTRACTOR SHALL NOTIFY THE CUSTOMERS AND DANVILLE FIRE DISTRICT #1 24 HOURS IN ADVANCE. AT NO TIME SHALL A CUSTOMER BE WITHOUT WATER FOR MORE THAN 4 HOURS.
12. SOLID SLEEVE COUPLINGS WILL BE REQUIRED TO CONNECT PREVIOUSLY INSTALLED PIPE WITH NEW PIPE.
13. CONTRACTOR SHALL HAVE VITON OR NITRILE, JOINT GASKETS ON SITE TO BE UTILIZED AS DIRECTED BY THE ENGINEER.

LOCAL VALVE OPERATIONS

1. PROPOSED GATE VALVES OPEN LEFT OR COUNTERCLOCKWISE.
2. PROPOSED CURB STOPS OPEN LEFT OR COUNTERCLOCKWISE.

WATER AND SEWER SEPARATION

1. PARALLEL INSTALLATION: MAINTAIN 1.52M MINIMUM LATERAL DISTANCE BETWEEN STORM DRAIN AND WATERLINES. MAINTAIN 3.05M MINIMUM LATERAL DISTANCE BETWEEN SEWER AND WATER LINES. THESE DISTANCES SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN THESE SEPARATIONS, THE REVIEWING AUTHORITY MAY ALLOW DEVIATION ON A CASE BY CASE BASIS.
2. WATER MAIN CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 450MM BETWEEN OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. IF THE SEWER MAIN IS OVER THE WATER MAIN, THE FIRST SEWER PIPE JOINTS ON EACH SIDE OF THE WATER MAIN MUST BE CONCRETE ENCASED. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND SEWER PIPES MAY BE REQUIRED.
3. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE, BOTH WATER MAIN AND SEWER MUST BE CONSTRUCTED OF PRESSURE TYPE PIPE AND BE PRESSURE TESTED TO 200 PSI TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING. REFER TO WATER/SEWER CROSSING DETAIL 2.

**REPLACEMENT SHEETS
ISSUED 10/5/11**

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FIRE DISTRICT WATER PLAN FD-01 SHEET 290 OF 306