### **GENERAL INSTALLATION NOTES:**

- INSTALL WATER MAIN WITH 3.0 FEET OF MINIMUM COVER UNLESS OTHERWISE NOTED. DEPTH MAY INCREASE AT UTILITY AND CULVERT CROSSINGS.
- 2. LOCATE WIRE SHALL BE COATED (BLUE INSULATED), NO. 12 GA. SOFT DRAWN SOLID COPPER. USE WATERPROOF CONNECTORS AT ALL WIRE SPLICES.
- 3. NEW AND REPAIRED WATER MAINS SHALL BE DISINFECTED PER AWWA C651 PRIOR TO BEING PLACED INTO SERVICE. CONNECTION TO AN EXISTING WATER MAIN MAY ONLY BE DONE AFTER PROPER DISINFECTION, TESTING, FLUSHING AND APPROVAL BY CPU.
- 4. WHENEVER A PIPE IS CUT AND NOT RECONNECTED, THE CUT ENDS SHALL BE GROUT FILLED OR REMOVED, AS DIRECTED BY THE CPU INSPECTOR.
  PUBLIC WATER FACILITIES WITHIN THE PUBLIC RIGHT-OF-WAY SCHEDULED TO BE ABANDONED SHALL BE FILL WITH AN APPROVED CDF SLURRY OR
  SAND AND CAPPED AT BOTH ENDS. REFER TO THE GOVERNING BODY FOR GROUT FILLING SPECIFICATIONS. ALL VALVE BOX TOPS ASSOCIATED
  WITH THE ABANDONED WATER LINES SHALL BE REMOVED AND FILLED WITH CONTROLLED DENSITY (CDF) OR CONCRETE.
- 5. WATER MAINS BEING INSTALLED NEAR TELEPHONE/CABLE COMMUNICATIONS SHALL HAVE A MINIMUM 12" HORIZONTAL AND 6" VERTICAL CLEARANCE.
- REQUIRED SEPARATION BETWEEN WATER LINES AND SANITARY SEWER LINES SHALL BE AS FOLLOWS:

# **HORIZONTAL SEPARATIONS (PARALLEL)**

A MINIMUM SEPARATION OF TEN (10) FEET (MEASURED EDGE TO EDGE) BETWEEN SANITARY SEWER LINES AND WATER LINES SHALL BE MAINTAINED WHENEVER POSSIBLE. WHEN CONDITIONS PREVENT THE MINIMUM TEN (10) FOOT HORIZONTAL SEPARATION THE ENGINEER SHALL BE NOTIFIED.

### **VERTICAL SEPARATION (PERPENDICULAR)**

WATER LINES CROSSING SANITARY SEWER LINES SHALL BE LAID ABOVE THE SEWER LINES TO PROVIDE A SEPARATION OF AT LEAST 18" BETWEEN THE INVERT OF THE WATER PIPE AND THE CROWN OF THE SANITARY SEWER PIPE. A LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING AND SHALL BE THE LONGEST STANDARD LENGTH AVAILABLE FROM THE MANUFACTURER.

7. REQUIRED SEPARATION BETWEEN WATER LINES AND UNDERGROUND PRIMARY ELECTRICAL LINES SHALL BE AS FOLLOWS:

#### **HORIZONTAL SEPARATIONS (PARALLEL)**

A MINIMUM SEPARATION OF FIVE (5) FEET (MEASURED EDGE TO EDGE) BETWEEN UNDERGROUND ELECTRICAL LINES AND WATER LINES SHALL BE MAINTAINED WHENEVER POSSIBLE. WHEN CONDITIONS PREVENT THE MINIMUM FIVE (5) FOOT HORIZONTAL SEPARATION THE ENGINEER SHALL BE NOTIFIED.

## **VERTICAL SEPARATION (PERPENDICULAR)**

WATER LINES CROSSING UNDERGROUND ELECTRICAL LINES SHALL BE LAID ABOVE THE ELECTRICAL LINES TO PROVIDE A SEPARATION OF AT LEAST 12" BETWEEN THE INVERT OF THE WATER PIPE AND THE CROWN OF THE UNDERGROUND ELECTRICAL LINE.

- 8. THE CONTRACTOR SHALL USE CONSTRUCTION METHODS THAT PROTECT THE PIPE INTERIORS, FITTINGS AND VALVES AGAINST CONTAMINATION.
- 9. ANY PIPE, FITTINGS OR VALVES THAT CANNOT BE DISINFECTED WITH THE MAIN LINE BY CHLORINE FOR 24 HOURS SHALL HAVE THE INTERIORS SWABBED WITH A 1% HYPOCHLORITE SOLUTION BEFORE INSTALLATION.
- 10. CONCRETE THRUST BLOCKS SHALL BE CONSTRUCTED AT ALL TEES, BENDS, DEAD ENDS AND WHERE INDICATED ON THE PLANS.
- 11. ALL MJ FITTINGS SHALL BE RESTRAINED USING MJ MECHANICAL RESTRAINT FOLLOWER GLANDS APPROPRIATE FOR THE PIPE MATERIAL.
- 12. 6" WATER PIPE LEADING TO FIRE HYDRANTS SHALL BE DIP AND SHALL BE ONE CONTINUOUS PIECE OF PIPE. IF THE RUN IS LONGER THAN ONE PIECE OF PIPE, THEN ALL PIPE JOINTS SHALL BE MECHANICALLY RESTRAINED WITH CPU APPROVED RESTRAINTS.
- ALL PIPE GREATER THAN 12" SHALL BE FULLY RESTRAINED DUCTILE IRON PIPE.
- 14. IF 3 OR MORE LOTS ARE IN A FLAG LOT, AN EXTENSION OF THE MAIN SHALL BE REQUIRED.

**REVISED JANUARY 2026** 

O-GI GENERAL INSTALLATION NOTES

Clark Public Utilities

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**FILE NAME** 

STANDARD DETAILS