## CONSTRUCTION OBSERVATION CHECKLIST SWDC

(NOT ALL INCLUSIVE)

2/12/2024

Fittings (must be observed by SWDC)

- 1. Thrust blocks.
- 2. All nuts and bolts greased.
- 3. Wrapped with polyethylene wrap.

Thrust blocks (must be observed by SWDC)

- 1. Concrete has correct bearing area.
- 2. Concrete has correct strength (6 bag mix 4,000 psi). Not from bags.

Fire Hydrants (must be observed by SWDC)

- 1. Thrust blocks.
- 2. Drain rock under hydrant.
- 3. Poly wrap barrel of hydrant to bury line.
- 4. Correct barrel length.
- 5. All fire hydrants must be painted for final walk through.
- 6. No extensions on hydrants.
- 7. Flange on hydrants must be 6" above top of curb or 4" above finish grade.
- 8. All hydrants must be Mueller.
- 9. Hydrants marked with marker approved by SWDC.
- 10. Valves are to be flanged directly tee.

Pipeline (random observation by SWDC)

- 1. No rock  $1 \frac{1}{2}$ " diameter within 6" of pipe.
- 2. Pipe bedded correctly, with sand or fines for pipe zone.
- 3. Pipe joint deflections no greater than 3 degrees.
- 4. Chlorine put in pipe approximately every other joint.
- 5. Pipeline is surveyed with cuts on stakes to locate pipeline vertically and horizontally.
- 6. Observed all locations where waterline is closer than 2' of any utility, pipe, or structure.
- 7. Compaction of bedding and pipe zone material.
- 8. Compaction above the pipe zone.
- 9. No water allowed in trench.
- 10. Approved plug-in end at all times.
- 11. Tracer wire on all pipe w/ gel connectors, run wire up outside of valve box.
- 12. Buried warning and I.D. tape, approximately 3' above pipe.
- 13. Correct pipe material, size, and class (350).
- 14. Maintain 4'6" minimum and 5' maximum bury.

Survey

1. Every fitting (mechanical joint), valve (main line valve, hydrant valve, corp valve and curb stop valve) and fire hydrant must be located by surveyor with GIS. This is to include latitude, longitude and elevation, using the following coordinate system:

Utah North State Plane NAD 1983 U.S. Survey Feet

## CAD/As-built drawings MUST be created from this information by surveyor/engineer at the geo-referenced location and coordinate system.

Services (must be observed by SWDC)

- 1. Check corp stops turned ON, curb stops turned OFF.
- 2. Curb stop box stored at SWDC.
- 3. Check all 2 x 4's at curb stops.
- 4. Laterals to maintain 5' of cover from finish grade.
- 5. Laterals must be blue poly with trace wire and blue water tape 3' above pipe.

Testing and sampling in following order:

Chlorine test (must be taken by SWDC)

1. Test multiple locations if possible.

Charging line (notify SWDC)

1. Fill line slowly to ensure proper distribution of chlorine. Must sit 24 hours.

Flushing (must be observed by SWDC)

- 1. Safe flushing of chlorine to protect environment.
- 2. Adequate velocity of flushing (2.5 fps) to flush debris.

Bacteria tests (taken by SWDC)

- 1. Pipeline must be closed off from main line until successful results of BT.
- 2. Bacteria sample from multiple locations if possible.
- 3. Copies of results sent to SWDC if test is not done by SWDC operator.

Pressure test (must be observed by SWDC)

1. Pressure test must be 50 psi over static pressure or minimum of 200 psi. 2-hour test, zero drop.

Final walk through (SWDC, contractor, owner)

- 1. Request for final walk through.
- 2. As-built drawings required for walkthrough.
- 3. Check painting of hydrants.
- 4. Operate all hydrants.
- 5. Valve boxes plumb and clean.
- 6. Operate all valves, check extension nuts to be within and not more than 2' of surface.
- 7. Concrete collars on valve box 18" from center of lid.
- 8. All areas finish graded, paved, or seeded as required.
- 9. Contractor's warranty period starts as soon as as-builts in Mylar are accepted by

SWDC.

Notes:

1. The presence of the SWDC inspector(s) shall not relieve the contractor of the responsibility of proper execution of the work in accordance with all requirements of the SWDC standards and specifications. Compliance is a duty of the contractor and said duty shall not be avoided by any act or omission on the part of the SWDC inspector(s).

2. The contractor is solely responsible for job site safety. SWDC inspector(s) have no authority to exercise any control over the contractor or any of the employees of the contractor in connection with their work or any health or safety.

3. The Contractor and Developer shall indemnify and hold harmless SWDC inspector(s) from and against all claims, damages, losses and expense including attorney's fees resulting from the performance of the contractor's work.