City of Port Townsend
PLANNING & COMMUNITY DEVELOPMENT
250 Madison Street, Suite 3 | Port Townsend, WA 98368 | 360.379.5095 | www.cityofpt.us

# Water Main Installation Inspection Checklist

**Public Works Inspection Hotline: (360) 390-4039**

| | |
|---|---|
| **Permit #:** | **Pre-Construction Meeting Date:** |
| **Project Description:** | |
| **Contractor:** | **Contractor Phone Number:** |

| | **A. PRIOR TO BEGINNING CONSTRUCTION** | **Contractor Initials/Date** | **Inspector Initials/Date** |
|---|---|---|---|
| 1 | Check to be sure that the contractor has the final approved plans signed by the Engineer at the job site. | | |
| 2 | Check to be sure the contractor has notified 811, and locates have been marked the areas in which construction is to be performed. | | |
| 3 | Check materials against submittals standard details and shop drawings. | | |
| 4 | If advanced posting of "No Parking" signs are needed, coordinate directly with the police department. | | |
| 5 | Check the approved traffic control and drive the lane closures and or detours to be sure they work. | | |
| 6 | If outside inspection for compaction testing or certification is required for material be sure this is arranged in advance. Provide the name of the special inspection/material testing company. | | |
| 7 | Ensure the contractor has an inspection checklist. | | |
| | **B. TRENCHING** | **Contractor Initials/Date** | **Inspector Initials/Date** |
| 1 | The pipeline must be staked for line and grade prior to the start of the trenching operation. The inspector to review elevations staked for compliance with the plans. A surveyor may be required to stake the pipeline at the discretion of the inspector. | | |
| 2 | All required SWPPP measures must be in place prior to the start of excavation. | | |
| 3 | Check to see that the trench is centered on the plan centerline, and that the trench width conforms to the specifications. | | |
| 4 | Contractor to lay out saw cut lines for inspection. | | |
| 5 | During the trenching operation, ensure the specified trench width and depth is maintained. | | |
| 6 | Check to be sure that all loose material in the bottom of the trench is removed prior to placement of pipe bedding. If the trench bottom has unstable material, replace it with gravel borrow. | | |
| 7 | Shoring required per L&I regulations. | | |
| 8 | Contractor shall have access to a steel plate for road crossings. The steel plate shall be secured properly. | | |
| 9 | Contractor shall maintain backfilled trenches that are under traffic at all times or use temporary patching during construction until permanent patch is installed. | | |

City of Port Townsend
DEVELOPMENT SERVICES
250 Madison Street, Suite 3 | Port Townsend, WA 98368 | 360.379.5095 | www.cityofpt.us

# Water Main Installation Inspection Checklist

| C. DEWATERING | | Contractor Initials/Date | Inspector Initials/Date |
|---|---|---|---|
| 1 | The project specifications must be followed when dewatering is necessary. Water will not be pumped to the storm drain system without approval. Ensure no silt or sand is pumped while dewatering. | | |
| 2 | If unexpected trench dewatering is required during construction, inspector approval is required. Check with the foreman to verify the crew understands the discharge procedures and the equipment is available if pumping is required. | | |
| 3 | If cleanup is required the inspector shall approve adequacy of cleanup. | | |
| **D. EXISTING UTILITIES** | | **Contractor Initials/Date** | **Inspector Initials/Date** |
| 1 | It is the responsibility of the contractor to protect any utilities encountered. Ensure minimum clearances are met between the new construction and existing utilities per the project specifications. Any unforeseen utilities or other structures that are found must be reported to the inspector. | | |
| 2 | The contractor shall note on the record drawings any utilities or structures that are uncovered during construction. | | |
| **E. PIPE BEDDING** | | **Contractor Initials/Date** | **Inspector Initials/Date** |
| 1 | The pipe zone bedding shall meet WSDOT standard specifications section 9-03.12(3) | | |
| **F. PIPE LAYING** | | **Contractor Initials/Date** | **Inspector Initials/Date** |
| 1 | The line and grade of the trench according to the cut sheet. | | |
| 2 | Observe the pipe while being laid to ensure the pipe bedding fully supports the pipe, and is centered in the trench. | | |
| 3 | Check that granular chlorine has been added to each stick of pipe. | | |
| 4 | Check each pipe length for cracks or imperfections. | | |
| 5 | Check maximum deflection of joints. | | |
| 6 | All gaskets must be lubricated prior to pipe insertion. | | |
| 7 | Inspect all valve materials, size, orientation, plumbness, and blocking. | | |
| 8 | If the plans require restrained joints, check that restraints are in place (i.e. Field Lok gaskets). | | |
| 9 | All fittings have been torqued properly. | | |
| 10 | Thrust blocks have been inspected prior to being buried. | | |
| 11 | Ensure the pipe ends are clean. | | |
| 12 | Ensure that each pipe joint is pushed to the home mark (Bell & Spigot). | | |
| 13 | All service line taps have been inspected. | | |
| 14 | Inspect all water meter services including shut-offs and boxes. | | |

City of Port Townsend
DEVELOPMENT SERVICES
250 Madison Street, Suite 3 | Port Townsend, WA 98368 | 360.379.5095 | www.cityofpt.us

# Water Main Installation Inspection Checklist

| | | | |
|---|---|---|---|
| 15 | Any pipe left exposed overnight shall have the ends plugged. | | |
| 16 | Tracer wire is taped to the pipe, splices are avoided, any splices that do occur have been inspected. | | |
| 17 | Tracer wire includes sufficient length at valves. | | |
| 18 | Perform a final check of the pipeline prior to allowing backfill. | | |
| 19 | Ensure haunches of the pipe zone bedding are compacted. | | |
| **G. FIRE HYDRANTS/BLOW-OFFS/AIR RELEASE VALVES** | | **Contractor Initials/Date** | **Inspector Initials/Date** |
| 1 | Check material specifications. | | |
| 2 | Check horizontal and vertical placement. | | |
| 3 | Inspect thrust blocking and secondary restraint. | | |
| 4 | Inspect drain rock. | | |
| 5 | Check horizontal clearance (5 feet around hydrants). | | |
| 6 | Fire hydrant protection (bollards). Yellow paint on the bollards has been completed by the contractor. | | |
| 7 | Chains are removed, and 4” NST Storz adapter installed. | | |
| 8 | Temporary blow-off meets standard detail for testing only. | | |
| 9 | Temporary blow-off is removed/replaced with permanent blow-off. | | |
| **H. TRENCH BACKFILL** | | **Contractor Initials/Date** | **Inspector Initials/Date** |
| 1 | Check pipe zone bedding material meets WSDOT specifications and covers 12” above the top of pipe. Anything up to one (1) foot over the pipe should be placed and compacted by hand using the approved backfill material. Trench backfill starts one (1) foot over the top of the pipe. | | |
| 2 | Compaction equipment can be used for trench backfill. | | |
| 3 | Check that the specified backfill material is being used. | | |
| 4 | Prior to beginning the backfill check the extent of undermining, backfill and compact any voids. | | |
| 5 | Ensure underground caution detection tape is placed 12" above the pipeline during backfilling. | | |
| 6 | Check valve boxes and valve box extensions. Valve boxes to be centered on the valve. | | |
| 7 | Ensure that existing utilities are marked on the pavement surface and are backfilled carefully so that they are protected during the backfill operation. | | |
| 8 | Ensure the testing agency performing compaction tests every 25-50 feet at the beginning of each lift until a passing compaction method is established. Thereafter testing can be random as determined by the Inspector. In the event of failed tests, re-compaction and re-testing should be accomplished immediately if possible, or at least by the following day. | | |
| 9 | Backfill should be placed in lifts according to the method of compaction specified. | | |

City of Port Townsend
DEVELOPMENT SERVICES
250 Madison Street, Suite 3 | Port Townsend, WA 98368 | 360.379.5095 | www.cityofpt.us

# Water Main Installation Inspection Checklist

| | | | |
|---|---|---|---|
| 10 | After placing and compacting the trench backfill material, steel plates or a minimum section of 1 - 4 inches of temporary cold mix must be placed and compacted as a temporary driving surface for all arterial and collector streets. For low volume residential streets the contractor shall coordinate with the inspector for temporary driving surface. | | |
| 11 | Temporary driving surfaces must be maintained until such time that testing and flushing is completed. Once complete, temporary surfacing may be removed and replaced with permanent asphalt. | | |
| 12 | Permanent pavement restoration date to be scheduled with the inspector. | | |
| 13 | Asphalt patch shall be 3" minimum depth or match existing pavement thickness, whichever is greater. | | |
| 14 | All structure lids (valve boxes, meter boxes, sewer lids, catch basin grates, etc.) shall be flush with pavement, and secured prior to opening to traffic. | | |
| **I. TESTING AND FLUSHING – CITY WATER DEPARTMENT SHALL BE THE ONLY ENTITY TO OPERATE VALVES** | | **Contractor Initials/Date** | **Inspector Initials/Date** |
| 1 | Coordinate with City for filling new water mains for a minimum 24 hours of disinfection. | | |
| 2 | Coordinate with City for flushing new water mains. | | |
| 3 | Coordinate with City for pressure testing. | | |
| 4 | Coordinate with City for bacteriological testing. | | |
| 5 | Schedule with the inspector for the contractor to make final connection to the water system. | | |
| 6 | Schedule with City to turn on new system. | | |

ALL ITEMS MARKED N/A SHALL BE VERIFIED WITH THE INSPECTOR

| **Punch List Items** | | | |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |