

2015; WATERMAINS
SPECIFICATIONS FOR WATER SERVICE LINE PROTECTION PROGRAM
SECTION C6.0

1. General

1.1. Background: The Water Service Line Protection Program (WSLPP) provides owners of residential properties an option for affordable protection against the significant costs of repair or replacing leaking, damaged or frozen water service lines. In addition to providing a valuable service to Owatonna Public Utilities (OPU) customers, the program is intended to minimize disruption and public hazard due to leaks which would not otherwise be repaired in a timely manner.

1.2. See OPU Policies for additional information of Eligibility and Coverage information.

1.3 Purpose: The purpose of this specification is:

1.3.1. To establish and communicate working parameters and expectations for the Contractor, OPU and the property owner in regards to the WSLPP.

1.3.2. To provide Contractors with information to properly fulfill the requirements of the WSLPP.

1.4 Responsibility: The Owatonna Public Utilities at 208 South Walnut Street, Owatonna, Minnesota, the authority having jurisdiction in charge of the “municipal” water system, shall be responsible for administering and coordinating the WSLPP.

2. Definitions: The following definitions shall apply to this specification. These definitions shall be used in conjunction with definitions and guidelines of the Minnesota Plumbing Code “Chapter 4715”.

2.1. Contractor: The term “contractor” shall mean the business or entity that has entered into a contract to complete the quoted scope of work.

2.2. Customer: The term “customer” shall mean the person(s) that are purchasing the water that is supplied by the Owatonna Public Utilities.

2.3. Emergency Repair: The term “emergency repair” shall mean the repair of a defective water service line necessary to relieve immediate danger to health, safety or welfare of the public. OPU has the discretion to determine if an emergency exists.

2.4. Private Property: The term “private property” shall mean the land area on the house side of the property line. Also, items under the ownership of the property owner.

2.5. Property Owner: The term “property owner” shall mean the actual owner of the property as indicated in the County Recorder’s Office.

- 2.6. **Public Property:** The term “public property” shall mean the land area on the street side of the property line. Also, items under the ownership of OPU or another public entity.
- 2.7. **Subcontractor:** The term “subcontractor” shall mean any business or entity that has entered into a contract to complete all or part of the scope of work that is the Contractor’s responsibility.
- 2.8. **Water Service Line:** The term “water service line” shall mean the water line that extends from the water main to the water inlet side of the water meter. This shall include the water corporation stop and/or saddle on the main, curb stop and box and the inlet meter valve.
- 2.9. **Water Service Owner:** The term “water service owner” shall mean the property owner in which the water service line supplies water to.
- 2.10. **Water User:** The term “water user” shall mean the person(s) that will be consuming or using the water at the point of use, (i.e., consumer).

3. **Requirements**

3.1. **Property Owner Requirements**

3.1.1. **Access -**

The Owner shall make the property where the work needs to take place available for access at all reasonable times during construction to authorized representatives of the Contractor and OPU.

3.1.2. **Owner Utilities -**

The Owner shall mark the location of private utility lines, in ground irrigation systems and electronic pet fences prior to excavation. This includes systems that are on private property as well as within the public property.

3.1.3. **Water Service Line Repair Application -**

The Owner shall submit a Water Service Line Repair Application to the OPU Engineering Department prior to work being allowed to start on the property.

3.1.4. **Account Status –**

The account(s) for which the affected service is attached to must be current on their payments for the Program to be in effect.

3.1.5. **Restoration on Private Property –**

The Owner is responsible for the restoration of all surface and sub-surface improvements that are affected by the replacement or repair work of the water service that is located on private property.

For areas located on private property the Contractor shall backfill the excavation area to a finished grade level.

3.2 Program Contractor Requirements

3.2.1. The following are minimum requirements:

3.2.1.1. Plumbers shall have a completed a minimum amount of training as required by the State of Minnesota Department of Labor and Industry.

3.2.1.2. Plumbers shall hold a valid license from the State of Minnesota Department of Labor and Industry.

3.2.1.3. Plumbers shall furnish evidence to show that he/she has available the necessary tools and equipment to properly repair water lines.

3.2.1.4. Installation, maintenance and repair work on water lines shall have to be performed by a licensed master plumber, or licensed journeyman plumber under the supervision of a master plumber (MN Statute 326).

3.2.1.5. Contractors shall fill out and submit an annual Registration and Memo of Understanding to OPU to be considered for inclusion into the WSLPP. This Registration shall be updated and resubmitted any time additional employees or capabilities/qualifications are added.

3.2.1.6. Minnesota Plumbing Code, Chapters 4715 and 326 shall apply to all aspects of this specification.

3.2.2. Subcontractors -

OPU shall receive notification in advance of any Subcontractors that are employed for contracted work. All subcontractors shall adhere to all specification requirements. Insurance, Registration and all submittals must be received by OPU prior to any work taking place.

3.2.3. OPU Contractor Safety Program -

All Contractors and Subcontractors shall complete the OPU Contractor Safety Program annually prior to Program registration and completing any work for this Program. Please contact OPU Safety Manager at 507-451-2480 to coordinate the completion of the Safety Program.

3.2.4. Insurance -

When performing work for OPU, the contractor shall take out, pay for and maintain at all times during the performance of work under this contract, through companies and agencies approved by OPU and containing provisions satisfactory to OPU, the following insurance minimums:

Coverage	Limits
A. Worker's Compensation	
Employer's Liability	\$100,000 per employee \$100,000 per disease \$500,000 per accident
B. General Liability	

	\$2,000,000 general aggregate
Bodily Injury	\$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence

Bodily Injury Liability to include:

- Personal injury, including claims related to employment
- Operation of contractors
- Operation of subcontractors
- Completed operations/products
- Contractual liability (broad form)

Property Damage Liability to include:

- XCU coverage
- Broad form property damage including completed operations

C. Automobile Liability

Bodily Injury	\$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence

Coverage to be provided for all owned, hired and non-owned vehicles.

Please have your agent forward a certificate of insurance to us naming Owatonna Public Utilities as an additional insured before you start work. We request a 30 day prior notice in the event of cancellation or non-renewal. Please send to the Human Resources Department.

3.2.5. Project Quotes -

For service line repairs; Service line repair and replacements shall be paid for on a time, labor and material basis. The Contractor shall submit “Fixed Cost Quotes” for hourly rates for Labor and Excavation Time on their Annual Registration form. The quote items shall cover all time, equipment and tools required to complete their work. Labor and Excavation Time shall be for the actual working time only. Down time while waiting for other operations to be completed shall not be paid. Materials shall be paid at actual cost plus a 35% mark up. Award of the quote will be based off of low quote, capabilities/qualification of the Contractor, and Customer request of Contractor. OPU reserves the right to award the project to any of the Contractors on the Registered Contractor list.

For meter valve repairs; The Contractor shall submit “Fixed Cost Quotes” for an emergency and scheduled meter valve repair on their Annual Registration form. The quote shall cover all time, materials and equipment required to complete the repair. Award of the quote will be based off of low quote, capabilities/qualification of the Contractor, and Customer request of Contractor. OPU reserves the right to award the project to any of the Contractors on the Registered Contractor list.

For service line thawing; The Contractor shall submit a “Fixed Cost Quote” for service line thawing on the their Annual Registration form. The quote shall cover all time, materials and equipment required to complete the thawing. Award of the quote will be based off of low quote, capabilities/qualification of the Contractor, and Customer request of Contractor. OPU reserves the right to award the project to any of the Contractors on the Registered Contractor list.

3.2.6. Invoice Package -

The Contractor must include the following items when submitting for payment:

3.2.5.1. A detailed invoice of time, materials and equipment used on the project.

3.2.5.2. A WSLPP Daily Construction Diary for all days worked on the project. This document includes an as-built of the location, depth, and materials used on service line repairs and notes on work that took place. The measurements shall be to permanent features such as curb lines, foundations, curb stops, valves, property lines, etc.. The Diary should also include a list of follow-up repairs and anticipated schedule required to complete the project.

3.2.5.3. A Water Line Thawing Acknowledgement form (if applicable).

3.2.7. Payment -

For service line repairs; The Contractor shall receive a partial payment of 75% within 30 days of receipt of a complete and accurate Invoice Package and OPU preliminary approval of the work. The remaining 25% will be held until the Project has been completed and approved. OPU will do a field assessment of the project within 30 days of notification of final completion to determine if there are any punch list items that need to be addressed prior to releasing the final payment.

For meter valve repairs; The Contractor shall receive full payment within 30 days of receipt of a complete Invoice Package and OPU approval of the work.

For service line thawing; The Contractor shall receive full payment within 30 days of receipt of a complete Invoice Package and OPU approval of the work.

3.2.8. Guarantees and Warranty –

The Contractor shall hold himself responsible for any and all defects of materials and workmanship which may develop within three (3) years from and after the date of final acceptance of the work furnished by him. Upon receipt of written notice from OPU or the Engineer he shall immediately replace and make good, without expense to the OPU, such faulty part or parts and the damage done by reason of such faulty parts.

The Contractor shall remedy any defect and pay for any damage to other work resulting there from within a period of one (1) year from the date of substantial completion of the correction work or through the remainder of the time allotted above, whichever is greater. OPU shall give notice of observed defects with reasonable promptness. All questions arising under this article shall be decided by the Owner.

3.2.9. Work Completion Deadlines -

The Contractor shall complete the Work in the timeline as indicated on the Service Line Repair Work Order or as outlined elsewhere within these Specifications.

3.2.10. Extra Time -

Delays caused by the property owner or other extraordinary circumstances may warrant extra time being added for the completion of work for the Contractor. The Contractor shall make OPU aware of any delay issues within 24hrs for consideration of any extra time.

3.2.11. Liquidated Damages -

The Contractor shall complete the work in the timeline as indicated on the Service Line Repair Work Order or as outlined elsewhere within these Specifications. Failure to complete the work within these time lines shall cause liquidated damages to accrue at a rate of 10% of the quote total per calendar day. At OPU's sole discretion, they may waive all or part of the liquidated damages if conditions warrant and the Contractor has exercised diligent effort and resources in completing the project on time. Liquidated damages shall be deducted from Invoice payment. OPU may remove any Contractor from the Registered Contractor list for failure to complete work on time, poor workmanship, poor customer relation, etc..

3.2.12. Scope of Work -

OPU will make a pre-excavation general assessment of the project and include a proposed scope of work on the Service Line Repair Work Order. The Contractor shall notify OPU if the field conditions are different from the original scope of work. OPU will make a field assessment of the pipe or field condition to determine if the scope of the repair or replacement needs to be modified. OPU must authorize work to occur that is outside the scope of work.

3.3 Contractor Construction Requirements

3.3.1. Coordination and Scheduling of Work -

Upon award of the Contract the Contractor shall be responsible for coordinating and scheduling the required work to be completed. The Contractor is responsible for coordinating access onto and into the property.

3.3.2. Interruption of Water Service-

No interruption of water service will be allowed unless approved by OPU. The Contractor shall coordinate water system shut downs with OPU. The exact date, time and length of the outage must be approved by OPU. It is the Contractor's responsibility to give written notice to customers of the required shut down. The Contractor shall provide the date, time and proposed length of the outage to the customer along with a 24-hour contact for them to call. All valves that are required to be opened or closed shall be operated by OPU or under the direction of OPU only except in the case of emergency, in which case OPU must be immediately notified of such actions.

3.3.3. Existing Utilities-

Prior to any excavation the Contractor shall notify "Gopher State One Call" in advance of proposed excavations and have the project area field located for utility presence.

The Contractor shall have sole responsibility for providing temporary support and for protecting and maintaining all existing utilities in the project area during the entire period of construction, including but not limited to the period of excavation, backfill and compaction. The Contractor shall contact the affected utility owner prior to providing the temporary support to receive permission and requirements for support. In carrying out this responsibility, the Contractor shall exercise particular care, whenever gas mains or other utility lines are crossed, to provide granular compacted backfill or other stable support for such lines to prevent any detrimental displacement, rupture or other failure.

It shall be the Contractor's responsibility to determine and verify the location and elevation of existing pipes, valves or other underground structures as necessary to progress with the work.

The Contractor shall make contact with the Owner to have them mark private utility lines, in ground irrigation systems and electronic pet fences. The Contractor shall take reasonable precautions to protect marked locations of these systems. All costs associated with protection, repair or replacement of these systems shall be borne by the property owner. This includes systems that are on private property as well as within the R/W.

3.3.4. Installation / Repair of Water Service Lines-

Water service lines, curb stops and boxes shall be installed / repaired as required by the City of Owatonna, following current State Plumbing Codes.

Corporation stops shall be tapped into the main only when full of water under pressure. No taps shall be made into a dry pipe. Corporation stops shall be turned into the pipe until tight and shall not be turned back to facilities having the operation nut on the top. See section on Tapping of Water Mains.

Locations and routes are to be set so as to minimize pipe length, to limit destruction of existing surface and subsurface improvements, existing vegetation and landscaping, and to avoid conflicts with other structures. The Contractor shall be responsible for coordination with the homeowner for the protection of private property, including trees.

All pipe, fittings and appurtenances shall be kept in a clean disinfected state until it's placement into the water distribution system. All new piping must be chlorinated during installation. At no time may ground water, trench water, or backfill be allowed to enter the inside of the clean pipe. All tools, containers, rags, etc. shall be clean and sanitary prior to use.

The Contractor shall furnish OPU with ties to the services (curb stop and corporation stop) relating to building corners, manholes, hydrants and etc.

3.3.5. Pipe Alignment and Grade -

All new/replacement water lines shall have a minimum of 7-0' of cover to finish grade. OPU may waive this depth requirement if it is more feasible to pull a new line in with the old line. The Contractor must get approval from OPU prior to deviating from the 7-0' depth requirement. The Contractor shall satisfactorily maintain the specified cover by the use of grade boards, levels or other accepted means. Any pipes, fittings or appurtenances that are incorrectly placed at a location or elevation shall be removed and replaced at the correct location at the Contractors cost. If site conditions do not allow the pipe to be installed to the minimum cover the Contractor shall notify OPU to determine if the installation of insulation may be required.

3.3.6. Excavation -

The trench shall have a bottom conforming to the grade to which the pipe is to be laid. The pipe shall be laid upon sound soil, cut true and even so that the barrel of the pipe will have a bearing for its full length. If the excavation is inadvertently made below the bottom conforming to grade, it shall be backfilled with well-tamped pit run sand or fine gravel.

Ledge rock boulders, and large stones shall be removed to provide a clearance of at least twelve (12) inches below outside barrel of the pipe, valves, or fittings, and to a clear width of twelve (12) inches on each side of all pipe and appurtenances.

The Contractor shall adequately brace and sheet excavations wherever necessary to prevent caving or damage to nearby property. The cost of this temporary sheeting and bracing shall be considered as part of the excavation costs without additional compensation to the Contractor.

3.3.7. Dewatering of Trenches -

No water pipe or appurtenances shall be placed in any trench containing standing water. The pipe bed shall be made water free prior to pipe placement by means of pumping, shoring, well points, replacements of saturated soils, or other approved methods. The Contractor shall be required to contain silt runoff to the project area. Proper erosion control measures approved by the City of Owatonna shall be implemented prior to the start of dewatering. The cost of dewatering shall be considered as part of the excavation costs without additional compensation to the Contractor.

3.3.8. Insulation -

Insulation shall be used for service lines as directed by OPU. Sheets shall be staggered to prevent joints from being aligned when thickness is greater than 2". No broken sheets or pieces may be used. 3" of leveled and compacted sand cushion shall be placed below the insulation. Insulation shall be paid for on a time and material basis.

3.3.9. Tapping of Water Mains -

Taps 1" diameter on ductile iron and cast iron mains are to be direct taps. OPU will make available its corporation stop tapping tool for use by Contractors. Tapping clamps or saddles will be required on all PVC mains and on all taps larger than 1" on cast iron and ductile iron mains. All clamps or saddles will be cast iron O.D. in size.

3.3.10. Corporation Cocks -

All corporation cocks shall conform to A.W.W.A. Standards with A.W.W.A. threaded inlet and A.W.W.A. copper service pipe outlet. Corporation cocks shall be Mueller #HI5000, Ford F 600 or approved equal. Corporation cocks on six inch (6") ductile iron pipe shall be a maximum one inch (1") in size.

Tapping clamps and saddles used must be one of the following (or equal determined by OPU):

Approved clamps or tapping saddles for 1", 1-1/4", 1-1/2", 2" taps:

Ford Meter Box Company Inc.

Style FS303W for standard and/or 900 PVC pipe w/ cc threads.

Flush Body Tapered Gasket Only

Cascade Mfg. Co.

Style C.S.C.2 for standard and/or 900 PVC pipe-double bolt saddle clamp w/ cc threads.

Approved large clamps for 4", 6", 8", 10", 12", 16" taps:

Ford Meter Box Company Inc.

Style F.A.S.T. Ford tapping sleeves
Cascade Mfg. Co.
Style CST-E.X. Extra Heavy
Mueller Co.
Style H-615 mechanical joint tapping sleeve

All taps, clamps, or saddles must be wrapped in plastic before filling ditch.

The Contractor shall give OPU a 24 hour notice prior to any water tap. This notice allows OPU to schedule the inspection of a tap being made by the Contractor.

3.3.11. Material Handling and Storage -

The Contractor shall be responsible for the safe storage of material furnished by or to the Contractor, and intended for the work, until it has been incorporated in the completed project.

The interior of all pipes, fitting and appurtenances shall be kept free from dirt and foreign matter at all times. Pipe shall be handled in such a manner to protect all coatings and linings from damage. No pipe, fitting or appurtenances shall be dropped any distance while handling the item. Items shall be carefully lowered into the trench.

3.3.12. Backfilling -

All trenches or excavations shall be backfilled to the original surface of the ground. A bed of Granular Borrow shall be placed a minimum of 4" below the bottom pipe grade, a minimum of 6" each way from the sides of the pipe and a minimum of 12" above the top of the pipe.

The remaining portion of the ditch to the subgrade of the pavement shall be backfilled with selected materials free from rocks, boulders, cinders, ashes, refuse, frozen material, clay lumps larger than 1/3 cubic foot in volume, organic materials or any item that would cause excess settlement of the subgrade. In that portion of the subgrade that is within 6 inches of the road subgrade, there shall be no stones, which would be retained on a 3-inch sieve.

The maximum loose thickness of each backfill layer shall be 8 inches except that 12 inches will be permitted for granular materials placed above an elevation one foot above the top of pipe. Each layer of backfill material shall be compacted effectively, by approved mechanical or hand methods, until there is no further visual evidence of increased consolidation. Compaction of each layer shall be completed acceptably before placing material for a succeeding layer thereon. All valves and tight areas shall be hand tamped with a jumping jack type compactor.

3.3.13. Backfilling Under Utilities -

All backfill materials placed under the Utilities that are exposed during excavation operations shall be thoroughly tamped in place in 6" layers to avoid any future settlement of these utilities.

3.3.14. Water Valve Operations -

The Contractor shall not operate any valves on the existing OPU water distribution system. All valves that are required to be opened or closed shall be operated by OPU or

under their direction only except in the case of emergency, in which case OPU must be immediately notified of such actions. The Contractor may operate service valves within their project Scope.

3.3.15. Flushing of Water Lines -

The Contractor shall flush the new and existing lines as necessary to remove debris and dirty water. The Contractor's plumber shall flush the water within the property until it is in a clean state, this shall be completed in a location before the meter if possible. The plumber shall take all necessary precautions to by-pass customer equipment and ensure all end uses are protected and operating properly.

3.3.16. Restoration of Surface Improvements – Located in the R/W -

Wherever any surface improvements such as pavement, driveways, curbing, pedestrian walks, retaining wall, fencing, landscaping or turf have been removed, damaged or otherwise disturbed by the Contractor's operations, they shall be repaired or replaced to abide by all City of Owatonna Right of Way permit requirements. The Contractor shall take reasonable precautions for the protection of these items and limit the extent of the work area. The cost of items damaged or disturbed due to negligence or excess working limits shall be borne by the Contractor. Each item of restoration work shall be done as soon as practical after completion of installation and backfilling operations and as outlined by the City R/W permit. No excavation shall be allowed to stay open overnight, all excavations shall be brought flush to existing conditions upon completion of the work. If restoration items need to be delayed due to weather and site conditions the Contractor shall be responsible to monitor and maintain surface conditions to a passable condition. The City of Owatonna Public Works Department shall be used for bituminous pavement replacements. Restoration payment shall be on a time and material basis.

3.3.17. Restoration of Subsurface Improvements – Located in the R/W -

Existing sewers, tiles or other items damaged or otherwise disturbed by the Contractor's operations broken during construction shall be reported to the City and OPU. The Contractor shall take reasonable precautions for the protection of these items and limit the extent of the work area. The cost of items damaged or disturbed due to negligence or excess working limits shall be borne by the Contractor. The items shall be replaced in the same kind and structure as the pre-existing condition and/or as directed by the Owner and/or City of Owatonna Right of Way permit requirements. The soil shall be tamped below, around and above the item to the satisfaction of the City. It may be required to bed and backfill the replaced section with aggregate material. Restoration payment shall be on a time and material basis.

3.3.18. Restoration – Located on Private Property -

Restoration of both surface and subsurface items that are located on private property that are damaged or disturbed during the course of a water service repair or replacement shall be borne by the property owner. The Contractor shall take reasonable precautions for the protection of these items and limit the extent of the work area. The cost of items damaged or disturbed due to negligence or excess working limits shall be borne by the Contractor.

For areas located on private property the Contractor shall backfill the excavation area to a finished grade level.

3.3.19. Private Utility Lines, In-ground Irrigation Systems and Electronic Pet Fence -

Private utility lines, in ground irrigation systems and electronic pet fence replacement or repair is not covered under this Program. All costs associated with protection, repair or replacement of these private items shall be borne by the Owner. This includes items that are on private property as well as within the R/W. The Owner shall mark and make the Contractor aware of the location of these items prior to excavation.

3.3.20. Curb Stop Boxes -

Curb stop boxes that are bent, buried, too high or filled with dirt are not covered under the Program. However, the Program will cover their repair, adjustment or cleaning if it is in conjunction with an actual covered service line repair. Payment shall be on a time and material basis.

3.3.21. Traffic Control -

To protect persons from injury and to avoid property damage, adequate barricades, advanced warning signs, construction signs, detours, torches, barrels, flaggers, flashers, and guards as required shall be placed and maintained during the progress of the construction work and until it is safe.

The rules and regulations of the local authorities respecting safety provisions shall be observed. All traffic control shall be in conformance with Appendix B of the Minnesota Manual on Uniform Traffic Control Devices. Work inside the R/W shall be conducted in such a manner as to limit the interruption to the public and traffic patterns of an area. Detour routes and plans shall be approved by the City of Owatonna Engineering Department prior to its implementation. The cost of traffic control shall be considered as part of the excavation costs without additional compensation to the Contractor.

3.3.22. Erosion Control -

Pollution of natural resources of air, water, and land by operation under this contract shall be prevented, controlled, and abated by the Contractor. The Contractor shall employ the necessary erosion control devices and measures as required by state and local rules and regulations. The cost of erosion control shall be considered as part of the excavation costs without additional compensation to the Contractor.

3.3.23. Work Zone Safety -

The Contractor shall be responsible for adherence to all OSHA and OPU Contractor Safety Program safety requirements for all operations and employee activities under their direction and control. The Contractor shall take the necessary precautions to protect the public and employees from injury by open excavations or other hazardous circumstances by providing temporary fences, shoring, trench boxes, barricades, warning signs, flashers, and other safety aids as required. All personnel shall have the proper personal protection equipment in use while on the project; including at minimum high visibility safety vest, safety glasses and hard hat. OPU will allow Contractors to borrow their trench box for use on projects. OPU reserves the right to be in direct contact with all personnel on a project in regard to safety concerns and/or requirements. Any worker that fails to complete work in a safe manner shall be asked to leave the work site. OPU may issue a stop work order at any time they feel there is an unsafe work condition. The Contractor shall not receive any compensation for any delays or scheduling conflicts caused by the stop work order. No trench may be left open overnight unless approved in writing by

OPU. The cost of work zone safety shall be considered as part of the project costs without additional compensation to the Contractor.

3.3.24. Permits -

All state and local permits that are required to complete the work shall be the responsibility of the Contractor. The cost of permits shall be considered as part of the project costs without additional compensation to the Contractor.

3.3.25. Lead Services -

When lead services are encountered the Contractor shall notify OPU and the Property Owner. The Program does not cover the replacement of lead services unless its condition warrants a replacement. OPU will make a field assessment of the pipe condition to determine the scope of the repair or replacement. OPU encourages Property Owners to replace any lead services encountered and the Property Owner may enter into a private contract with the Contractor to replace the service above what is required of the Program.

3.3.26. Pre-Existing Conditions -

Properties having water service lines which OPU determines in its sole discretion are improperly installed, are in a state of disrepair, or have adverse pre-existing conditions (e.g. existing leaks, habitually freeze, etc.) shall not be covered under this Program. An on premise survey/inspection shall be completed prior to the Program taking effect.

3.3.27. On-Premise Survey/Inspection -

The Owatonna Public Utilities shall require an on premise survey prior to being able to be allowed to participate in the Program. The Customer must make available the property for inspection during OPU's normal business hours. Access into the water meter area will be required. This survey is required to evaluate the presence of any pre-existing conditions. This requirement is waived for all customers prior to January 1, 2016.

4. Thawing of Frozen Water Lines -

4.1. Occurrences -

Water lines may be unthawed a maximum of 1 occurrence per calendar year for each Customer. It is the Customers responsibility to run water to a level and time frame that prevents a future frozen water line. In the event of a second occurrence within a calendar year it is the Customers responsibility to privately coordinate and pay for the thawing of the water line.

4.2. Pipe Fitting -

All pipe fitting shall be completed by a licensed plumber as required within the Minnesota State Plumbing Code.

4.3. Electric Current Thawing -

Thawing via electric current is not a permitted method and shall not be covered under this Program.

4.4. Cross Connection Water Thawing Methods -

Frozen water line thawing methods that employ the use of a direct cross connection of a non-potable source into the potable water line are considered a direct cross connection to the public

water supply and are in violation of our Cross Connection and Backflow Prevention Policy. Two such known methods are either a flow of heated water through the line to melt the ice or one that utilizes high pressure jetting equipment to cut through the ice. As we have determined this to be an emergency condition, we have waived these methods as a violation to our policy if the following guidelines and conditions are met. If additional methods are employed the plumber shall contact OPU prior to completing the work for approval.

OPU has outlined the following minimum guidelines that shall be followed when creating a cross connection in efforts to re-establish a frozen water line. The contractor completing the work is ultimately responsible to assure that they are not introducing materials into the public potable water supply that may be detrimental to public health. If you choose to complete this work you must be aware of the responsibility and liability that you are taking on.

- 1.) OPU shall be notified **prior** to the work taking place to inform us that you are going to be creating a cross connection. **You can call 507-451-1616 – 24hrs/day.**
- 2.) The water that is being injected into the water line must be sanitary and come from a potable water source. The water may not contain any chemicals other than a chlorine bleach solution. The water must be chlorinated to a level of 200ppm with standard 5% household bleach. The 200ppm may be achieved by using 1gal of household bleach to 200 gallons of water. Please refer to manufactures directions for exact mixing directions, precautions and protective equipment that may be necessary when working with this chemical and at these elevated levels.
- 3.) The hose and nozzles that are used for this process must be dedicated for use with water lines. The hose and nozzles must not have ever been used for other applications including sanitary and storm sewers.
- 4.) The hose and nozzles must be sanitized with 100% household bleach in a clean tote or tub by either a complete immersion or by a course spray from a pump sprayer. This hose shall be sanitized immediately prior to insertion into the pipe and shall remain in the tote at all times. The hose shall not be allowed to be fed from the floor or ground.
- 5.) The technician shall wear disposable plastic gloves while handling the sanitized hose and take care in maintaining the gloves sanitary condition. New clean gloves shall be put on anytime that the technician is required to handle unsanitary tools or equipment.
- 6.) After the line has been de-iced and the line is flowing, the water line shall be flushed for a minimum of 10 minutes to remove the concentrated chlorine solution and ice particles. The line shall be flushed before the meter to avoid damage to the meter and the customer equipment.

It is your responsibility to take the necessary precautions while working with the equipment and chemicals. You must follow all manufactures recommendations and safety requirements. OPU does not assume any liability for damage to either person or property in the use of these guidelines.

4.5. Water Line Thawing Acknowledgement -

The Contractor shall be responsible for completing and submitting the Water Line Thawing Acknowledgement form prior to payment as part of the invoice packet. This includes obtaining a property owner signature.

4.6. Completion Timelines -

The Contractor shall respond to and start thawing operations within 24 hours of being awarded the work. The Contractor shall demonstrate a reasonable effort to thaw the water line. If thawing operations exceed 4 hours the Contractor may contact OPU to discuss how to proceed and if a change of scope is warranted.

5. Replacement of Meter Shut Off Valves -

5.1. Emergency/Scheduled Meter Valve Repair -

OPU shall indicate within the Scope of Work whether the work is an emergency or a scheduled repair. The Contractor shall complete the work for emergency repairs within 24 hours and for scheduled repairs within 7 days.

5.2. Inlet/Outlet Meter Valve -

This program only covers the replacement of the meter valve on the inlet side (water service side) of the water meter. The downstream valve is the customers and is part of the house piping.

5.3. Materials -

Meter valves shall be of the same size as the water service line. The valves shall be a quarter turn, full port ball valve meeting the current lead free plumbing standards. All piping between the water service and the meter shall be new meeting the MN Plumbing Codes. All pipe and fittings shall be kept in a clean disinfected state until it's placement into the water system. All tools, containers, rags, etc. shall be clean and sanitary prior to use.

5.4. Completion Timelines -

The Contractor shall complete the valve replacement within 24 hours of being awarded the work for Emergency Meter Valve Repair and within 7 calendar days for Scheduled Meter Valve Repair.

5.5. Meter Location -

The Owner shall keep the meter in a readily accessible location that allows for free and unencumbered pipe fitting. The meter shall not be built into an enclosure or behind an access panel. The Program does not pay for the relocation of the water meter in instances that do not meet the above requirements. This relocation shall be the responsibility of the owner. OPU will pay for the meter valve replacement portion only.

5.6. Curb Stop Operation -

The Contractor shall be responsible for the operation of the curb stop. Care shall be taken in the operation of the curb stop to prevent damage. The Contractor shall have his own curb stop wrench.

5.7. Licensed Plumber -

All work shall be completed by a licensed plumber as required within the Minnesota State Plumbing Code.