

WATER SERVICE PIPE CONNECTIONS CODE FOR THE TOWN OF BLADES

Table of Contents

Section 1: Administration

- (a) Title
- (b) Scope
- (c) Purpose
- (d) Licensing, Bonding and Insurance
- (e) Permits
- (f) Application
- (g) Permit Fees
- (h) Installation by Homeowner
- (i) Penalties

Section 2: Water Service Pipe

- (a) Material and Construction
- (b) Disinfection of Water Service Pipe
- (c) Trenching, Installation and Backfill

Section 3: Protection of Potable Water Supply

Section 4: Backflow Protection

Section 5: Permanently Abandoned Wells

Section 6: Inspection and Testing

- (a) Water Service Pipe

Section 7: Legal

- (b) Invalidity
- (c) Definitions

Section 1: Administration

(a) Title

This article may be cited as Interim Code for water service pipe connections in the Town of Blades.

(b) Scope

The provisions of this code shall apply to every water service pipe connected to The Town owned system including alterations, repairs, and replacements.

(c) Purpose

The purpose of this Code is to preserve the health, sanitation, safety and welfare of the public regulating installation and maintenance of that plumbing in its scope and to promote an installation of durable materials, free from defects in workmanship or material and sufficient to provide adequate service for a reasonable life.

(d) Licensing, Bonding and Insurance

Before any person, firm or corporation shall engage in the business of installation, alteration or maintenance of any plumbing under the scope of this code, he shall obtain a proper license from the town hall. The license period shall be One (1) year beginning January 1st. To obtain a license from the Town, the person, firm, or corporation shall:

1. Show proof that he has been duly registered as a plumber by The State Board of Plumbing Examiners and that he is licensed to do business as a plumber in the State of Delaware.
2. Obtain and deposit with the Town of Blades' Office a bond in the amount of Five Thousand Dollars (\$5000.00) conditioned that the person, firm or corporation engaged in the plumbing business will faithfully observe all the laws and regulations pertaining to that business and that The Town of Blades as the local governing body shall be indemnified and saved harmless from all claims arising from accidents and damage of any character whatsoever caused by the negligence of such person, firm or corporation

engaged in the plumbing business, or by any other unfaithful, inadequate work done either by themselves or their agents or employees and that such person, firm or corporation will maintain in a safe condition which may be opened in the performance of any plumbing work, and further that all dirt and other material excavated will be replaced in a good condition with similar materials.

3. Show proof that he has bodily injury liability and property damage liability insurance to protect him from claims for damages for personal injury, including accidental death, as well as from claims for property damage which may arise from operations under the work whether such work is done by himself or by anyone directly or indirectly employed by him. The insurance should so state that The Town of Blades Office will be notified Ten (10) days prior to the expiration of the insurance. Such insurance shall not be less than:

I. Bodily injury liability insurance, in an amount not less than One Hundred Thousand Dollars (\$100,000.00) for injuries, including wrongful death to any one person, and subject to the same limit for each person in an amount not less than Three Hundred Thousand Dollars (\$300,000.00) on account of one accident.

II. Property damage insurance in an amount not less than Twenty-Five Thousand Dollars (\$25,000.00) for damages on account of any one accident, and in an amount not less than Fifty Thousand Dollars (\$50,000.00) doe damages on account of all accidents.

(e) Permits

Any duly licensed plumber who desires to install and connect any work covered under the scope of this Code shall first make application to The Town of Blades and obtain the required permit.

(f) Application

Application for a permit shall be made in person and on application forms provided by the Town. Such information as required shall be provided to complete the application. The application shall be signed by the licensed plumber and the owner of the buildings to be connected.

If the Town of Blades or its authorized representative, is satisfied that the work described in the application and attached exhibits conform to the requirements of this Code, and other pertinent laws and Ordinances, he shall sign the application and in doing so grant a permit, which shall be a license to proceed with the work as detailed and specified on the application.

When the application is approved and the permit granted one (1) set shall be returned to the applicant and be kept at the job while work is in progress and one (1) set shall be retained by the Town as a permanent record.

(g) Permit Fees

The permit fee for each water service pipe connection to the public main shall be Five Hundred Dollars (\$500.00).

(h) Installation by Home Owner

Nothing in this Code shall prevent any building owner or occupant from installing or maintaining a water service pipe within his own property boundaries, providing such water service pipe installation and maintenance is done by himself and is used exclusively by him or his family and is installed and inspected in accordance with the requirements of this Code and providing also that he shall:

1. Obtain a proper permit from the Town of Blades.
2. Have a plumber who is licensed by The State of Delaware install and connect the water service pipe to the facilities of the Town of Blades to comment in the appropriate space on the permit application on the suitability of the building's plumbing system and make the final connection to the Town water meter.

(i) Penalties

Whoever willfully makes any misrepresentation in any application or makes or maintains any connection with any water main contrary to the authority granted by permits issued therefore by The Town of Blades, or without a permit therefore in accordance with the provisions of this Code, shall be fined not less than One Hundred Dollars (\$100.00) nor more than Five Hundred Dollars (\$500.00) and shall pay the cost of prosecution.

Section 2: Water Service Pipe

(a) Material and Construction

The water pipe shall be either:

1. Ultra high molecular weight polyethylene tubing per ASTM D-2737 (SDR-9) meeting the requirement of Type III CLASS C Category p34 Polyethylene as defined in ASTM D-1248 and rate at 160 psi at 73.4° F. and approved by the National Sanitation Foundation for use as a carrier of potable water.
2. The polyethylene tubing joint system shall be equal to The Ford Meter Box Company “Pack Joint”, the Hays Manufacturing Company (“Hays-Tite”) or the Mueller Company (“110 Compression Connection”). The connection shall be brass and assembled with a stainless steel pipe line as specified and furnished by the connector manufacturer.
3. Type K or L copper water tube per ASTM B88-66. The copper water tube joint system shall be bronze fittings for flared copper tube per ANSI B-16.26.

Size – The water service tubing shall be 1 inch, 1-1/2 inch or 2 inch as required for the service and not less than the water meter outlet connection.

(b) Disinfection of Water Service Pipe

The Town or its authorized representative shall require that the water service piping be disinfected before it is place in service. One of the following disinfecting methods shall be used:

1. The water service pipe shall be filled with a solution of 50 ppm available chlorine and allowed to stand 6 hours before flushing and placing in service.
2. The water service pipe shall be filled with a solution of 100 ppm available chlorine and allowed to stand 2 hours before flushing and placing in service.

(c) Trenching, Installation and Backfill

The water service pipe shall not be less than Five (5) feet horizontally apart from the building sewer and shall be separated by undisturbed or compacted earth unless all of the following conditions are met:

1. The bottom of the water service pipe at all points shall be at least Twelve (12) inches above the top of the sewer line at its highest point.
2. The water service pipe shall be placed on a shelf excavated at one side of the common trench.
3. The number of joints in the water service pipe shall be kept to a minimum.

Where the water service pipe must cross the sewer line the bottom of the water service pipe, within Five (5) feet of the point of crossing, shall be at least Twelve (12) inches above the top of the sewer line. Joints shall not be used within Five (5) feet of the sewer line.

The building sewer shall be at least Ten (10) feet removed from all wells unless such wells are permanently abandoned.

Excavate to desired depth and tamp to a uniform surface. When mud or water are encountered in the trench, such as may be found by excavation below ground water, additional precautions shall be taken appropriate to the trenching conditions encountered to insure that the pipe has a uniform and continuous support from a firm base. Where excessive ground water conditions exist the Town may require trench pumping, well pointing or other trench stabilizing methods.

The pipe shall be uniformly supported throughout the trench by tamped fill. Plastic pipe shall be snaked into the trench to allow for expansion and contraction.

Backfill with a pipe at a temperature approximating normal operating temperatures of 40 to 60° F. run cool water through pipe if necessary; backfill with clean fill free of sharp stones, objects or heavy material.

Section 3. Protection of Potable Water Supply

The potable water shall be protected from contamination from any source.

There shall be no cross connection between the potable water service pipe and distribution system and any source of water.

Any building supplied with water from The Town of Blades supply shall have no other source outlet located within the building.

Section 4: Backflow protection

A backflow prevention device shall be installed in the water service pipe to every building served by the Town of Blades water district. The device shall be located immediately as the water service pipe enters the building and shall be accessible for service. As a minimum requirement, the backflow prevention device shall consist of a manual shut off valve followed by a spring loaded check valve and a pressure relief valve on the downstream side of the check valve. The pressure relief valve drain shall be piped full size with no valve or trap, to a location where emergency water spillage will create no problem.

Section 5: Permanently Abandoned Wells

Permanently abandoned wells shall be filled and sealed in accordance with the regulations of the State of Delaware Division of Environmental Control.

Section 6: Inspection and Testing

All plumbing work installed under the scope of this code shall be inspected to insure compliance with the Code and assure that the installation is in accordance with the approved plans and permit. It shall be the duty of the installing plumber to give reasonable advance notice to the Town of Blades when plumbing work is ready for inspection and test. The plumbing shall be deemed ready for inspection and test when the pipe is laid on proper fall and bedded $\frac{1}{4}$ to $\frac{1}{3}$ of its diameter, with joints properly made and connected to the building. Prior to inspection and test the service water pipe shall not be connected to the water meter house connection. The equipment, material and labor necessary for the inspection and test shall be furnished by the installing plumber. The plumbing shall not be covered until it has been inspected, tested and approved, it shall be uncovered upon direction.

Upon the satisfactory completion and final test of the plumbing, a certificate of compliance will be issued to the owner by the Town.

(a) Water Service Pipe

The water service pipe shall be tested and proved tight under pressure not less than the working pressure under which it is to be used. The water used for test shall be potable water from the house service connection and shall be supplied to the water service pipe only in the presence of and at the direction of the authorized Town inspector.

If the water service pipe is approved, the pipe shall be covered.

1. The Town, or its duly authorized employee bearing proper credentials and identification shall be permitted to enter all properties for the purpose for inspection, observation, measurement, sampling, and testing in accordance with the provisions of this Ordinance.
2. While performing the necessary work on private properties , the Town or its duly authorized employee shall observe all safety rules applicable to the premises established by the company and the company shall be held harmless for injury or death to the Town employee and the Town shall indemnify the company against loss or damage to its property by Town employees and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe condition as required.
3. The Town, its duly authorized employee bearing proper credentials and identification shall be permitted to enter all private properties through which the Town holds a duly negotiated easement for the purpose of, but not limited to, inspection, observation, measurement, sampling, repair, and maintenance of any portion of the water works lying within said easement. All entry and subsequent work, if any, on said easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

Section 7: Legal

Any person violating any of the provisions of this Ordinance shall become liable to the Town for any expense, loss, or damage occasioned the Town by reason of such violation.

(a) The invalidity of any section, clause, sentence, or provision of this Ordinance shall not affect the validity of any other part of this Ordinance which can be given effect without such invalid part or parts.

(b) Definitions:

Approved: Accepted or acceptable under an applicable specification cited in this Code, or accepted as suitable for the proposed use under procedures and powers of the Town.

Backflow: The flow of water or other liquids, or substances into the distribution pipes of potable supply of water from any source or sources.

Backflow preventer: A device or means to prevent backflow.

Back Siphon age: The flowing back of used, contaminated or polluted water from a plumbing fixture or vessel into a water supply pipe due to a negative pressure in such pipe.

Building: A structure built, erected and framed of component structural parts designed for the housing, shelter, enclosure or support of persons, animals or property of any kind.

Building sewer: That part of the drainage system which extends from the end of the building drain and conveys its discharge to a public sewer, private sewer, individual sewage disposal system or other point of disposal.

Cesspool: A lined and covered excavation in the ground which receives the discharge of domestic sewage or other organic wastes from a drainage system, so designed as to retain the organic matter and solids, but permitting the liquids to seep through the bottom and sides.

Code: When used alone shall mean these regulations, subsequent amendments, or any emergency rule or regulation which the Town may lawfully adopt.

Cross Connection: Any connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other water of unknown or questionable safe, whereby water may flow from one system to the other.

Customer: Any person, firm, corporation or organization supplied with water by The Town of Blades.

Drainage System: Drainage system includes all the piping within public or private remises, which conveys sewage or other liquid wastes to a point of disposal. It does not include the mains of a public sewer or sewage treatment plant.

May: May is a permissive word.

Person: Any individual, firm, company, association, society, corporation, or group.

Potable Water: Water which is satisfactory for drinking, culinary and domestic purposes, and meets the requirement of the Health Authority having jurisdiction.

Sanitary Sewer: A sewer which carries sewage and to which storm, surface, and groundwater are not intentionally admitted.

Septic Tank: A watertight receptacle which receives the discharge if a drainage system and is designed and constructed so as to separate solids from the liquid, digest organic matter through a period of detention, and allow the liquids to discharge into the soil outside of the tank through a system of open-joint or perforated piping or disposal pit.

Sewage: A combination of the water carried wastes from residences, business buildings, institutions, and commercial and industrial establishments.

Sewer: A pipe or conduit for carrying sewage.

Shall: "Shall is a mandatory term."

Town: Town of Blades.

Water Main: A water supply pipe for public use.

Water Service Pipe: The pipe from the water main or other source of potable water supply to the water distribution system of the building served.

HUD GUIDELINES – WATER AND SEWER CONNECTION:

Sewer-

1. Must conform to County specs. And be inspected by County.
2. All Lines must be connected to one main line and then connected to the sewer.
3. Vents must be installed if necessary for proper functioning-exterior venting is permissible.

Water-

1. Must conform to the Amended Town Water Code.
2. The owner has the option to retain their outside hydrants on their pump for car washing or gardening. The cost of this re-piping would be included in the bid. At least one outside hydrant must be connected to the town supply.
3. The contractor must certify that there is no cross connection between the well and the public water system.
4. Water service pipe must be insulated where exposed.

It is suggested that any bid that is not a direct hook-up be accompanied by a break-down with HUD funds.