Standard Specifications

Veolia Water New York Division

November 2022



Veolia Water New York Division

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6.1 Suez Water New York Inc. - Effective October 1, 2020

Standard Terms and Conditions



VEOLIA WATER NEW YORK DIVISION STANDARD TERMS AND CONDITIONS FOR WATER SERVICE

GENERAL

These Specifications have been developed and are to be applied in connection with the purchase of water system materials and their installation by an individual or developer (the "Applicant") seeking to provide water service to a specific location. These specifications apply to systems that are intended to be owned, operated and maintained by Veolia Water.

DEFINITIONS

"Contractor" is used to designate the construction firm that the Applicant has hired to install the water system.

"Company" refers to Veolia Water New York Division

"Customer" refers to the individual or business receiving and using water.

"Applicant" refers to the individual requesting the service.

"Approved" refers to Company approved unless otherwise noted.

"System" refers to the distribution facilities.

"VWNY Division" refers to Veolia Water New York Division

"VWWC" refers to Veolia0 Water Westchester.

"Compacted" refers to backfill material being consolidated to within 95 percent of standard proctor maximum density.

"Inspector" is meant to refer to the VWNY Division representative whose purpose is not to direct the installation but to document it.

SERVICE PIPES

The service pipe from the distribution main to the property line, including the curb stop, will be furnished, installed and maintained by the company at its expense, except as follows:

Where water service is not immediately desired, or is desired for temporary use, the customer shall be responsible for the entire cost of installing the service pipe. Additionally, any change requested by the customer in the location or size of the service pipe after the installation and prior to activation and payment of a billing cycle, provided such change is approved by the company, shall be made at the expense of the customer.

The Company will control the size of the opening to be made in the distribution main and the size of the service pipe to be installed. Furthermore, the size of the meter shall be equivalent to the size of the service.

No service pipe will be installed where the connecting pipe is laid or to be laid in the same trench with a sewer pipe, gas pipe, electric conduit or any other utility.

A curb stop will be installed by the Company at or near the property line, in such a manner as to permit the attachment of the customer's connecting pipe. Where the service pipe is 3 – inch or greater in diameter, a valve will be installed at the tap for the purpose of turning on and shutting off water. Only Company employees or persons duly authorized by the company are permitted to operate the curb stop or valve.

CONNECTING PIPES

A connecting pipe to convey the water within the property of the customer shall be attached to the service and installed at the expense of the customer. The connecting pipe is the property of the customer and the customer, at his expense, shall be responsible for its maintenance and repair.

The connecting pipe shall be of such strength and material quality as to conform to Federal, State, local and other applicable codes, and shall be approved by the company. Connecting pipes up to and including 2 inches in diameter shall be type K copper or approved equal. If the connecting pipe is nonmetallic piping, tracer wire is required to be installed between the curb box and the water meter. Connecting pipes 3 – inch or larger shall be cement – lined ductile iron.

The connecting pipe shall be installed by a licensed plumber or licensed plumbing contractor and shall be installed without sharp bends, at a right angle to the line in the street, in a trench not less than four feet in depth, to avoid damage and possible interruption to service caused by freezing. Other utility services pipes, such as sewer, gas or electric shall not be installed in the same trench. No attachments shall be made to the service or connecting pipe, or any branch thereof, between the meter and the main. There shall be no underground connections such as Ts or Ys prior to the water meter.

The company reserves the right to inspect the installation prior to backfilling the trench and to withhold the supply of water service whenever such installation or any part thereof is deemed by the Company to be leaking, unsafe, inadequate or unsuitable for receiving service or to interfere with or impair the continuity or quality of service to the customer or to others.

The customer shall make all changes in the connection pipe due to changes in grade, relocation of mains, or other causes, at his expense. If the need for such change in the connection pipe arises solely as a result of a decision by the company to relocate mains, the Company shall be responsible for the cost of making such change.

Where it is necessary to install a connecting pipe on the property of persons other that the applicant for service, an easement from such property owner, in a form satisfactory to the company, shall be obtained by the applicant.

CUSTOMERS' PREMISES

The company shall have the right of reasonable access to a customer's premises and to all property supplied by it, at reasonable times, for the purpose of inspection incident to the rendering of service, reading meters, or inspecting, testing or repairing its facilities used in connection with supplying service, or duly authorized State regulatory officials.

The customer shall not permit access to the meter or other facilities of the Company to anyone except authorized employees of the Company or duly authorized State regulatory officials.

The customer shall not tamper or interfere with the water meter or reading device, but shall notify the Company immediately of any problems.

Cross Connection Control: if it is determined a potential for contamination exists, including any non-residential premise (all commercial properties), a backflow prevention device is required under the State Sanitary Code. VWNY Division concludes that the existence of a private well, pool, Mikveh or irrigation system on the premise is a hazard for contamination, requiring the installation of a backflow preventer if service is requested.

VWNY Division tariff effective July 4, 2014, allows the customer the right to appeal this ruling with the State Commissioner of Health.

Should proper documentation/permit from the Department of Health for decommissioning a well on said property is presented at time of initial application submission; a backflow prevention device will not be required on the Company service pipe.

In premises where an auxiliary water source is available, the customer shall be responsible for marking the pipes carrying water from the mains of the Company in some distinctive manner for ready identification.

When a water pressure reducing valve is necessary or desired by the customer or applicant to safeguard the plumbing, it should be purchased by the customer or applicant and installed and maintained between the inlet stop valve and the meter. When street pressures are in-excess of 100 p.s.i., the customer or applicant shall provide and maintain a pressure reducing valve at his expense. Where a water pressure reducing valve is used, it is advisable also to install a suitable pressure relief valve with adequate drainage. Where a local building code adopts a more stringent standard, the customer will comply with that standard.

If a premise is to remain unoccupied for an indefinite period, it is the customer's responsibility to drain the interior plumbing to avoid damage to pipes and fixtures. When requested, the Company will suspend service to unoccupied premises temporarily by shutting off the water at the curb and removing the meter. There is a charge for resetting the meter when service is restored to the customer who made the request.

When leakage occurs on pipes and facilities owned by the customer, the customer shall make the necessary repairs without delay. If the customer fails to make said repairs within a reasonable time the Company reserves the right to discontinue water service until such time as the leak is repaired and the customer pays the Company restoration of service charge.

METERS

It is the obligation of the applicant to provide a suitable setting to accommodate the meter installation, including the inlet and outlet valves and other appurtenances as may be required, at the applicant's expense. As stated in Section 1, Veolia Water New York Inc. must approve all meter setups prior to the installation of the meter.

The Customer shall provide a place acceptable to the Company for the location of the meter and any automatic meter reading equipment. The Company reserves the right to establish the location of the meter for new customers, which shall be accessible to the Company and subject to its control. The location of meters and the arrangement of the fittings and piping are subject to the inspection and approval of the Company and shall meet Company's requirements presented herein.

When the Company requires that meters shall be installed outside of a building on a new customer's or private property, the meter shall be placed in a convenient meter pit

or suitable and approved above ground heated meter structure, any and all of which are often referred to as the meter housing. The meter housing shall be located in an accessible place away from the terraces, fences, paved areas, other structures or any location which would create a hazard to vehicles, pedestrians or Company personnel accessing the meters. The meter housing shall be frost-proof and either well drained or watertight and shall be provided with a strong cover fastened with a convenient locking device. The cover shall be kept clear of snow, ice, dirt or any other objects which might prevent easy access for reading, inspecting, testing, changing and making necessary adjustments or repairs of the meter. The installation of the meter housing is subject to the approval of the Company. The cost of installing and maintaining the meter housing is the responsibility of the Customer. When there is evidence of tampering or theft of service associated with a Customer's indoor meter, the Company reserves the right to require that Customer to relocate their indoor meter to an outdoor meter housing at the Customer's cost and in accordance with the provisions of this Tariff.

If the meter housing is to be installed upon property which is not owned or controlled by the customer, the Company will require that the Customer obtain an easement.

Meter Location Standards

- A. ¾ inch and 1 inch domestic service, no backflow preventer required, meter will be located in meter pit near the property line.
- B. ¾ inch and 1 inch domestic service, backflow preventer required, meter and backflow will be located in an above ground heated structure near the property line.
- C. 1.5 inch and above domestic service, with or without a backflow preventer, meter and backflow preventer to be located in an above ground heated structure near the property line.
- D. 3/4 inch to 10 inch fire service, backflow preventer and bypass meter to be located in an above ground heated structure near the property line.
- E. Lock wing domestic service with 2 or more meters, with or without a backflow preventer, the meters and backflow preventers to be located in an above ground heated structure near the property line.
- F. 3/4 inch to 10 inch fire service installed in conjunction with a lock wing domestic service, backflow preventer and bypass meter to be located in an above ground heated structure near the property line.

WESTCHESTER ONLY

- G. 1.5 inch and 2 inch domestic service, no backflow preventer required, meter will be located in meter pit near the property line.
- H. 1.5 inch and 2 inch domestic service, backflow preventer required, meter and backflow will be located in an above ground heated structure near the property line

The Company, in its sole discretion, may permit meters to be installed indoors. Any meters installed indoors shall be located in a private utility room with its own dedicated outside door, with a light and a form of heat, not subject to great variations in temperature, at or within 3' from the entrance of the foundation wall. The room must have a height of 7' 6" with a standard size door. Meters shall be on a support which is free from appreciable vibration and shall be supported firmly, not less than 12 inches nor more than 66 inches above the level of the floor. The location shall be such as to be easily accessible, with no inconvenience to the Customer or to the Company

Fire services require the applicant to supply an approved detector-double check valve. High Hazard fire services require a Reduced Pressure Detector Assembly. The Company will supply the 5/8 inch Detector meter only. A list of approved devices can be found on the Department of Health Department website, http://www.health.state.ny.us/environmental/water/drinking/cross/cross.htm.

There is a charge for a set of couplings or flanges necessary to facilitate the installation of the meter. They can be purchased through our New Business Department or store of choice.

Veolia Water New York Division must approve all meter setups prior to the installation of the meter. A drawing of the above ground heated structure shall be submitted at the time of application for service. The drawing shall show at a minimum:

- the above ground heated structure or meter room and piping dimensions
- meter setups and support
- where the piping enters the structure
- accessibility from the outside

The Company will not provide service to the applicant unless the meter setup is approved. Failure to properly construct the meter setup will result in termination of service.

ALLOWABLE METERS PER SERVICE SIZE - ROCKLAND ONLY

SERVICE	METER SIZE						
	5/8"	3/4"	1"	1 ½"	2"		
3/4"	2	1	-	-	-		
1"	4	3	1	-	-		
1 ½"	13	8	5	2	-		
2"	17	14	8	3	2		

VALVES

The valves to be set on each side of the meter are furnished by the applicant at his expense. The valves for 1-1/2 inch and 2 inch meters should be of an approved type and shall be either bronze body screwed ends split wedge, rising stem, close clockwise, 200 psi working pressure or bronze body ball valve with stainless steel ball, 200 psi working pressure. A pair of oval companion flanges will be required to facilitate the installation of the meter, these flanges can be obtained by our New Business Department.

The valves for meters 3 inches and larger, must be cast iron bronze mounted bond, flanged ends, double disk, parallel seats, outside screw and yoke, rising spindle, close clockwise, 200 pounds water pressure. The drilling of the flanges on the valves must conform to standard drilling on the meter flanges, in accordance, with ASA-B, 16.1-1948 specification.

FIRE SERVICES

For all fire services, a backflow prevention device with test ports is required. Depending on hazard, an approved double detector check valve or reduced pressure zone backflow device (RPZ) must be supplied by the applicant. All backflow prevention devices shall be approved by the State of New York Department of Health prior to installation. A list of approved devices can be found on the State of New York Department of Health's website.

For fire services, the customer will be required to furnish a double detector check valve, or Reduced Pressure Detector Assembly, complete with bypass piping. The 5/8 detector meter shall be furnished and installed by the Company.

In the event that a foreign substance, such as anti-freeze, is added to the system, the Company will also require the customer to install a high hazard reduced pressure zone backflow device with a detector meter.

When the fire official or the applicant requires a hydrant which will be solely owned and operated by the applicant, the hydrant must be installed so that such installation of hydrant is after the backflow preventer and meter.

PLEASE NOTE:

While we endeavor to provide a constant supply of water, it is understood that we do not undertake to render any special service or to maintain a fixed or definite pressure at all times.

It is understood that the Company may restrict water service during certain periods if it deems that such restriction is necessary to protect the public water supply, or otherwise to comply with any regulations, orders or decrees issued by the Governor of New York, the Department of Environmental Protection or the Department of Health.

Material Specifications



VEOLIA WATER NEW YORK DIVISION

Section 2

2.01 Specifications of Materials 2.02 Installation of Water System Appurtenances

DEFINITIONS

"Contractor" is used to designate the construction firm that the Applicant has hired to install the water system.

"Company" refers to Veolia Water New York Division

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"Applicant" refers to the individual requesting the service.

"Approved" refers to Company approved unless otherwise noted.

"System" refers to the distribution facilities.

"VWNY Division" refers to Veolia Water New York Division

"VWWC" refers to Veolia Water Westchester.

"Compacted" refers to backfill material being consolidated to within 95 percent of standard proctor maximum density.

"Inspector" is meant to refer to the VWNY Division representative whose purpose is not to direct the installation but to document it.

GENERAL

These Specifications have been developed and are to be applied in connection with the purchase of water system materials and their installation by an individual or developer (the "Applicant") seeking to provide water service to a specific location. These specifications apply to systems that are intended to be owned, operated and maintained by Veolia Water.

References to any standard or specification shall be the latest revision.

Any products in contact with drinking water shall be certified to NSF/ANSI 61 to ensure compliance with the "No Lead Law".

2.01 Specifications of Materials

PURCHASE SPECIFICATIONS: PIPING AND APPURTENANCES

A. <u>Ductile Iron Pipe</u>

County of Rockland, Orange, & Tioga:

Ductile Iron Pipe, Class 54 with push on joint, centrifugally cast conforming to AWWA C151Standard. Plain rubber gaskets, two bronze wedges per joint, to be placed in bags with joint lubricant to be supplied with pipe, AWWA C111 Standard. Cement lined (Double Thickness) with paint seal coat conforming with AWWA C104. Tar coated on the outside conforming with AWWA C151 Standard.

Manufacturers:

Griffin Pipe Products Co.

Atlantic States Cast Iron Pipe Co.

U.S. Pipe and Foundry Co.

McWane Ductile

County of Westchester & Putnam:

Ductile Iron Pipe, Class 52 with push on joint, centrifugally cast conforming to AWWA C151Standard. Plain rubber gaskets, two bronze wedges per joint, to be placed in bags with joint lubricant to be supplied with pipe, AWWA C111 Standard. Cement lined (Double Thickness) with paint seal coat conforming with AWWA C104. Tar coated on the outside conforming with AWWA C151 Standard.

Manufacturers:

Griffin Pipe Products Co.

Atlantic States Cast Iron Pipe Co.

U.S. Pipe and Foundry Co.

McWane Ductile

B. Pipe Fittings

Ductile Iron and Gray Iron Full Body Fittings conforming to AWWA C110 Standard. Ductile Iron Compact Fittings conforming to AWWA C153 Standard. Plain rubber gaskets conforming to AWWA C111 Specifications. Cement lined (Double thickness) with paint seal conforming with AWWA C104. Tar coated on the outside conforming with AWWA C110 or C153 Standard.

Manufacturers:

Mueller Co.

Tyler Utilities

Star Pipe Products

Infact Corporation (Foster Adaptor only)

C. Gate Valves 4" to 12"

US Pipe Valve & Hydrant Division Resilient Wedge Gate Valve, mechanical joint with 2" square op nut to show the direction of opening. Valves to **OPEN RIGHT or CLOCKWISE**, all bonnet and stuffing box bolts shall be stainless steel. The resilient wedge valves shall fully comply with the latest version of AWWA C509 and shall be UL Listed & FM Approved. Reduced wall valves (AWWA C515) are not acceptable. Valves shall be designed for 350 psi working pressure.

Manufacturers:

US Pipe V & H Catalog #A-USP1 RWGV MJxMJ

Mueller Co. Catalog #A-2361 RWGV MJxMJ

Sloatsburg, Rockland County

US Pipe Valve & Hydrant Division Resilient Wedge Gate Valve, mechanical joint with 2" square op nut to show the direction of opening. Valves to **OPEN LEFT or COUNTER CLOCKWISE**, all bonnet and stuffing box bolts shall be stainless steel. The resilient wedge valves shall fully comply with the latest version of AWWA C509-15 and shall be UL Listed & FM Approved. Reduced wall valves (C-515) are not acceptable. Valves shall be designed for 350 pre working pressure.

Manufacturers:

US Pipe V & H Catalog #A-USP1 RWGV MJxMJ

Mueller Co. Catalog #A-2361 RWGV MJxMJ

D. <u>Tapping Sleeves and Valves</u>

County of Rockland, Orange, & Tioga:

Tapping sleeves for ductile iron and cast iron pipe shall be split sleeve mechanical joint type complying with MSS SP-111 standards. The tapping sleeve shall have a class 125 outlet flange with drilling and dimensions that fully comply with ANSI B16.1. The sleeves shall be suitable for all classes of pipe using Class A/B gaskets or Class C/D gaskets for oversized pipe. The contractor shall dig a test pit over the main to confirm the actual outside diameter of the pipe prior to ordering gaskets or mounting the sleeve. Tapping valves shall conform to all the gate valve standards and shall have an inlet flange class 125 with alignment lip for proper attachment to a sleeve.

Manufacturers:

Sleeves

Mueller Co. Catalog #H-615 or #H-616 Series

Valves

- Mueller Catalog #T-2361-19 RWGV MJXFL
- US Pipe Catalog #T-USP1-19 RWGV MJXFL

County of Westchester & Putnam:

Tapping sleeves for ductile iron and cast iron pipe shall be epoxy coated steel tapping sleeve with a mechanical joint outlet option with stainless steel hardware. The tapping sleeve shall be in compliance with ANSI / NSF Standard 61. The contractor shall dig a test pit over the main to confirm the actual outside diameter of the pipe prior to ordering gaskets or mounting the sleeve. Tapping valves shall conform to all the gate valve standards and shall have be mechanical joint for attachment to a sleeve.

Manufacturers:

Sleeves

Ford Meter Box Company Inc. Model FTSC-XXX*-X*E-MJ

Valves

See section 2.01.C

E. Fire Hydrants

County of Rockland & Orange:

Fire hydrant shall be as supplied by VWNY Division. The hydrant supplied is the Sigelock Systems, LLC. Spartan 5' bury (or approved depth by VWNY).

County of Tioga:

Fire hydrant shall be as supplied by VWNY Division. The hydrant supplied is the Sigelock Systems, LLC. Spartan 5'0" bury (or approved depth by VWNY), 5 ¼" main valve opening, three way with one (1) 4- 1/2" pumper and (2) 2-1/2" hose outlets with national standard threads. Hydrant to OPEN RIGHT or CLOCKWISE, operation nut to be 1-7/32", with six inch MJ shoe. Hydrants to be prime coated with PPG Amercoat 720 and barrel to be painted red and bonnet white with Sherwin Williams Polane SP polyurethane enamel. Hydrants shall conform to the latest requirements of AWWA C502 and shall be UL Listed and FM Approved. The contractor will be responsible to correct any deficiencies to the hydrant after installation including but not limited to, height, paint finish, rotation and position.

County of Westchester & Putnam:

Fire hydrant shall be as supplied by VWW Division. The hydrant supplied is the Sigelock Systems, LLC, Spartan with specifications based on the installation location. Hydrants shall conform to the latest requirements of AWWA C502 and shall be UL Listed and FM Approved. The contractor will be responsible to correct any deficiencies to the hydrant after installation including but not limited to, height, paint finish, rotation and position.

New Rochelle

OPEN RIGHT.

4-1/2' BURY, 2-2-3/8" HOSE NOZZLE GA 8-291 (Or approved depth by VWNY)

1-3-1/2" PUMPER NOZZLE GA 6-424

1-1/4" PENT OPERATING NUT

6" MJ SHOE

YELLOW / SILVER

STENCIL- NEW ROCHELLE

523-2-046-620-1045-00-80291-60424

Pocantico

OPEN LEFT.

4-1/2' BURY, 2-2-3/8" HOSE NOZZLE GA 8-289 (Or approved depth by VWNY)

1-3-1/2" PUMPER NOZZLE GA 6-424

1-1/4" PENT OPERATING NUT

6" MJ SHOE YELLOW / SILVER STENCIL- POCANTICO, NY 523-1-046-620-1085-00-80289-40560-23-000

Port Chester

Sigelock Systems, LLC, Spartan - OPEN LEFT,
4-1/2' BURY, 2-2-3/8" HOSE NOZZLE GA 8-291 (Or approved depth by VWNY)
1-3-1/2" PUMPER NOZZLE GA 6-424
1-1/4" PENT OP NUT
6" MJ SHOE
YELLOW / SILVER
STENCIL- PORT CHESTER, NY
523-1-046-620-1085-00-75298-40560-23-01

Rye Page 1

Sigelock Systems, LLC, Spartan - OPEN LEFT,
4-1/2' BURY, 2-2-3/8" HOSE NOZZLE GA 8-291 (Or approved depth by VWNY)
1-3-1/2" PUMPER NOZZLE GA 4-500
1-1/4" PENT OP NUT
6" MJ SHOE
YELLOW / SILVER
STENCIL- RYE, NY
523-1-046-620-1085-00-80291-40500-23-000

F. Retainer Glands

Retainer glands shall be mechanical joint wedge action restraint for ductile iron pipe. The Glands shall be made from high strength Ductile Iron per ASTM A536, Grade 65-45-12 and shall be compatible with all Mechanical Joints conforming to AWWA C111. The Wedge Assembly shall be designed with a Break-Off Torque Control Nut that will only break off in one direction, ensuring proper installation. The Retainer Gland shall offer a full 5° deflection through 12" size, 3° on 14"-24", 2° on 30"-36" and 1° on 42"-48". The Retainer Glands shall be designed with a minimum safety factor of 2:1 and shall be listed with Underwriters Laboratories Inc. and sizes 3"-12" are approved by Factory mutual Research. The Wedges are heat treated to a minimum of 370 BHN.

Manufacturers:

Star Grip Products/ Star Grip Series 3000

EBAA Iron Inc./Series 1100

Tri Grip Series 1000

G. Field Lok Gasket

Field lok gaskets are to be used as a boltless method for preventing joint separation between pipes. They must conform to AWWA C111Standard and be made up of a sealing bulb, gasket heel, stainless steel teeth, bell ridge, retainer seat and a plain end. The gasket should be made with a factor of safety of four.

Manufacturers:

US Pipe Field Lok 350

Gripper Gaskets

In accordance with The Reduction of Lead in Drinking Water Act of 2014, all small diameter service and associated appurtenances, as applicable, shall be "Lead Free".

H. <u>Pressure/Flushing / Disinfection Taps & Curb Stops</u>

County of Rockland, Orange, & Tioga:

All materials must comply with AWWA C800 Specifications.

Manufacturers:

Mueller Co. Model #B-25204 Curb Stop Flare

Mueller Co. Model #B-25000 Corporation Stops Flare

County of Westchester & Putnam:

All Materials must comply with AWWA C800 Standard.

Manufacturers:

Ford Meter Box Co. Model #B22-33-NL Flare, #B22-777-NL Flare

Ford Meter Box Co. Model #FB600-3-NL, #FB600-7-NL

I. Service Curb Stops and Taps

County of Rockland, Orange, & Tioga:

All materials must comply with AWWA C800 Standard.

Manufacturers:

Curb Stop

Mueller Co. Model #H-15209 Compression

Corporation Stop

Mueller Co. Model #J-15008 Compression

County of Westchester & Putnam:

All materials must comply with ANSI/AWWA C800-14 Specifications.

Manufacturers:

Ford Meter Box Co. Model #B41-444-NL

Ford Meter Box Co. Model #FB1000-NL

J. <u>Copper Pipe</u>

Copper Tubing, U.S. Government Type K, seamless, soft wall, suitable for underground water services. Conforming to ASTM Specification B-88.

Manufacturers:

Cerro

Wieland

Mueller Co.

K. <u>Valve Boxes – 3" Services and Larger:</u>

County of Rockland, Orange, & Tioga:

Valve Boxes: 5-1/4" Shaft 3 Piece Valve Boxes (Genuine Buffalo Style Cast Iron) Fig. No. 4906 Screw Type Size No. B, Extension Range 36" - 48". Consisting of No. 55 Top Section and Cover Marked Water, Base #6.

Manufacturers:

Bingham & Taylor

County of Westchester & Putnam:

Valve Boxes: 5-1/4" Shaft 3 Piece Valve Boxes (Genuine Buffalo Style Cast Iron) Slide type. Consisting of Top Section and Cover Marked Water, Middle Section and Base.

Manufacturers:

Bingham & Taylor

L. Valve Boxes – 1.5" and 2" Services:

County of Rockland, Orange, & Tioga:

Valve boxes for blow off.

Valve 5-1/4" Shaft 2 Piece Valve Boxes (Genuine Buffalo Style Cast Iron) Fig. No. CUL5B64BARC Screw Type #64 Screw Bottom open arch, Astm 48A, class 30 Iron. Consisting of No. 55 Top Section and Cover Marked Water, CUL5B64BARC Base.

Manufacturers:

Bingham & Taylor

County of Westchester & Putnam

Valve Boxes: 5-1/4" Shaft 3 Piece Valve Boxes (Genuine Buffalo Style Cast Iron) Slide type. Consisting of Top Section and Cover Marked Water, Middle Section and Base.

M. Curb Boxes – 1" and Smaller:

2-1/2" N.S. Curb Service Boxes (Genuine Buffalo Style Cast Iron) Fig. No. 4901 Size No. 93-D, Extension Range 33"-48". Consisting of Top Section & Cover Marked Water, Bottom Section and Rod, Ring and Pin.

Manufacturer:

Bingham & Taylor

N. Polyethylene Tubing

Polyethylene Encasement for Ductile Iron Piping conforming to AWWA C105 Standard.

Manufacturers:

US Pipe

Trumbull Manufacturing, Inc.

McWane Ductile

O. Meter Pits

3/4 or 1 Inch

The meter pit shall be of a round style and made from PVC plastic with a minimum wall thickness of .300 to .360, to prevent distortion when backfilling. The meter pit shall have Side locking style lids cast iron or composite pending on the location where it will be installed. The meter pit shall be supplied with a 4" insulation pad. The meter pit shall have a brass 3/4" or 1" male iron pipe connection on the inlet and outlet that shall pass through the pit wall and shall be locked into place by brass hex nuts. The meter pit coiled tubing shall have a pressure rating of 250 psig. The tubing shall be attached to the inlet and outlet connections via a crimping method and utilize an internal stiffener. The tubing shall be permanently coiled to ensure a lifetime of proper functionality. The meter pit shall have a platform for the equipment setting which will contain the meter setting valves, couplings, and pressure reducing valve if required, the platform shall be designed so it can be raised to the top of the box without disconnecting any piping. In the raised position, the platform shall be capable of being set atop the locking brackets at the top of the box, allowing the meter, valves, couplings, and pressure reducing valve (if required) to be serviced at the ground level. A ring shall support the platform and provide additional rigidity to the meter pit. The meter pit shall have the following meter inlet connection on the platform (size is dependent on the actual meter size) Low Lead Lock wing ball angle meter valve with a full port. The meter pit shall have the following meter outlet connection on the platform, dual check valve. Where the street pressure is less than 100psi, the service does not require a pressure reducing valve. However, where the system pressure is greater than 100 psi, the service requires a pressure reducing valve. The meter pit will need to house a pressure reducing in front of the meter. The pit will shall be supplied with a tandem setting. The meter pit interior shall be colored white to aid in the reading of meter. The meter pit shall have no bottom.

Manufacturers:

Ford Meter Box Company

Mueller

County of Westchester & Putnam:

1.5 to 2 Inch

The meter pit shall be of round style and made from High Density Polyethylene with a diameter no less than 36 inches. To reduce lateral movement, the pit shall have a horizontal support at the midpoint and bottom of the pipe. In non-traffic areas, the pit shall be placed on a solid compacted base far enough from obstructions to obtain proper earth protection. In traffic areas, the pit shall be placed on a brick or concrete base to support excessive forces. In all installation locations, the bell of the HDPE pipe must rest on the appropriate base. Neither the pipe nor base shall rest on inlet or outlet pipes of the installation. To avoid freezing, the length of the meter pit shall be greater than three feet. The pit cover shall be made of cast iron and have two lids. The lids shall have a diameter no less than 20 inches and the ability to lock. To properly protect the meter, the cover shall be no less than 10 inches tall and rest at finished grade. Please see the Wabash Double Lid Cover No. 3 from Ford Meter Box Company. Joints between the cover and pipe must be thoroughly sealed with cement to prevent the escape of warm air and the admittance of surface water. Ground surface adjacent to the top of the meter pit shall be leveled off for a sufficient distance to provide adequate earth protection and frost protection. Under no circumstances will the pit barrel or lid be extended to meet finished grade. Piping within pit shall consist of copper tubing and be connected to the service line via a flared or compression connection (refer to local plumbing codes for final type of connection). Inlet valves shall be of the flanged locking angle type, while outlet valves should be flanged dual check valve. The meter shall be placed in the center of the PVC pipe and shall not be more than 12 inches from finished grade. Any meter pit not adhering to criteria will be corrected prior to meter installation or service activation at the expense of the contractor/developer. The meter pit, lid, piping and valves are the property of the customer/developer. It shall be the responsibility of the customer/developer to maintain or repair the pit, piping, and valves. The meter and pit shall be kept accessible at all times in order to facilitate meter readings and repairs by VWNY Division.

P. Utility markers for easements:

When a proposed water main extension is installed in an easement, the location of the main will need to be marked by a permeant marker. The marker shall be made from high impact fiberglass reinforced resins. The marker shall be a three-rib profile design with the ability to flex on impact without cracking or splintering. The marker shall be 3.85" wide and 66" long and shall be blue and buried beyond the minimum depth suggested by the manufacture. The markers shall meet U.S. Department of Transportation regulations. The markers shall be installed at 100-foot intervals along the center line of the pipe.

Manufacturers:

Pro – Mark Utility Supply Inc., Model PM 301

Q. Service saddles for 1/2" and 2" services

County of Rockland, Orange, & Tioga:

Service saddles for pipe sizes 8" through 12" shall have a wrap-around design with ductile iron body coated with a shop primer, a broad pressure activated gasket molded of virgin rubber and a corrosion resistant, forged AISI C-1018 steel straps, zinc plated with dichromate seal. The gasket shall be permanently bonded into a cavity in the saddle body, which provides internal as well as external gasket retention. Service saddles shall meet or exceed AWWA C800 Standard for Underground Service Line Valve and Fittings. Service saddle for pipe sizes 14" through 24" shall have two 2-1/2" wide fabricated steel straps, coated for corrosion resistance, in lieu of the forged steel straps to provide increased stability on service connections, increased corrosion resistance and increased strength for added safety factor on larger sizes of pipe.

Manufacturers:

JCM Industries 401 Single Strap

JCM Industries 402 Double Strap

R. Service saddles for 1", 1 1/2" and 2" services

County of Westchester & Putnam:

Service saddles for pipe sizes 8" through 12" shall have a wrap-around design with ductile iron body coated with a shop primer, a broad pressure activated gasket molded of virgin rubber and two corrosion resistant, forged AISI C-1018 steel straps, zinc plated with dichromate seal. The gasket shall be permanently bonded into a cavity in the saddle body, which provides internal as well as external gasket retention. Service saddles shall meet or exceed AWWA C800 Standard for Underground Service Line Valve and Fittings. Service saddle for pipe sizes 14" through 24" shall have two 2-1/2" wide fabricated steel straps, coated for corrosion resistance, in lieu of the forged steel straps to provide increased stability on service connections, increased corrosion resistance and increased strength for added safety factor on larger sizes of pipe.

Manufacturers:

Ford Meter Box Co. Model #202B

S. <u>Blow Off Assembly Valve:</u>

County of Rockland, Orange, & Tioga:

Manufacturers:

Ford Meter Box Co. Model #B11-777-NL, 2" Ball Curb Valve

Mueller Co. Model #B-20283N, 2" Ball Curb Valve

County of Westchester & Putnam:

Manufacturers:

Kupferle Mainguard #7600

2.02 Installation of Water System Appurtenances

1. <u>SUBMITTAL OF SHOP DRAWINGS AND MANUFACTURERS'</u> CERTIFICATIONS AND SCHEDUCING

Prior to the delivery of any piping materials to the work site, the Applicant shall submit to the Company for its review and approval, shop drawings of the pipe, pipe fittings, valves, hydrants, curb stops, taps, valve boxes, retainer glands, backfill material, and appurtenances specified above. He shall also provide documentation from product manufacturers, foundries, distributors and suppliers certifying that the piping and appurtenances to be furnished have been manufactured and tested in accordance with the Company's specifications. If any submission, or delivery of equipment to the work site is deemed by the Company not to be in accordance with its specifications, the Company will so advise the Applicant. The Applicant shall then resubmit the documents or remove and replace the rejected material. A project schedule shall be submitted as bar graph type based on days required to complete the work etc. and updated once per week.

2. <u>NECESSARY COORDINATION AND SITE CONDITIONS REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION</u>

Before any installation of the water system may begin, the Applicant must have coordinated his construction schedule with the Company and the Companies Inspector and have prepared the site in the following manner:

- a) All shop drawings and submittals for the materials to be furnished, as required in Section 2.01 above, shall have been received and approved by the Company.
- b) To enable the Company to assign personnel to the inspection of the work, the Applicant must provide a minimum of two weeks' notice of his proposed starting date to the Company's New Business Engineer.
- c) Sanitary sewers and storm drainage systems must be installed prior to water main.
- d) Curbs must be installed prior to water main. If no curbs are required by the municipality, the Applicant must stake line and grade the edge of the road.
- e) The road must be graded to within six (6") inches of the finished grade.
- f) Property lines within the subdivision and along the main extension shall be staked by a New York State licensed land surveyor.
- g) Any easement through which a main is to be installed shall be staked for line and grade by a New York State licensed surveyor prior to water main installation.
- h) A material storage site must be provided.
- i) All utilities must be marked out in accordance with "Call Before You Dig" regulations.

- j) The Applicant must furnish the Company written confirmation seven days prior to the proposed start of construction that the above steps have been completed.
- k) Three days prior to the start of construction, the Company will meet with the Applicant to inspect the site and the materials to be installed. Any conditions or equipment found to be unacceptable must be corrected to the Company's satisfaction before construction may begin.
- It is the responsibility of the contractor to verify the location of the main to be tapped, if discrepancies are encountered VWNY DIVISION shall be contacted.

3. <u>INSTALLATION SPECIFICATIONS; OBLIGATIONS AND</u> WORKMANSHIP OF THE APPLICANT AND HIS CONTRACTOR

The Contractor shall furnish competent workmen, organized in one or more separate work crews to complete the work. VWNY Division will define the meaning of all Plans and Specifications.

The Company shall retain a competent, experienced person on site to document the progress of work.

All work must conform to the Department of Health approved plans.

The Contractor shall comply with all Federal, State, County and Municipal laws, ordinances and regulations applying to labor, materials and public safety.

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work, including compliance with OSHA safety regulations and Veolia Water health and safety procedures.

The Contractor shall erect and maintain, as required by existing conditions and the progress of the work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

The Contractor shall comply with all federal and local laws regarding noise control. Mufflers, whisperized compressors, and similar equipment, when required by law, shall be used throughout the Contractor's work.

The Contractor, as well as the Applicant, shall completely indemnify, protect and save harmless the Company, and its inspection company from any and all losses, liens, claims, suits, judgments and proceedings of whatever nature arising out of the conduct of the work or the performance of this Agreement.

The Contractor and the Applicant shall maintain such insurance, in an amount specified by Veolia Water, and with an insurance companies approved by Veolia Water.

4. INSPECTION

The Contractor shall be responsible for all material delivered to and accepted by him, including the safe storage of such material until it has been incorporated in the project and the completed work accepted.

All work shall be subject to inspection by the Company at all times and all places throughout the work site. No pipe or appurtenances may be backfilled unless the Company's representative is present. The Contractor shall provide sufficient, safe and proper facilities at all times for Company personnel. The presence of a Company representative is for the sole benefit of the Company and does not relieve the Contractor of the responsibility of providing quality control measures to assure that the work strictly conforms with the Company's installation Specifications. No inspection or test by the Company shall be construed as constituting or implying acceptance. If any defective material is found after it is incorporated in the work, the Contractor shall remove all such material and shall at his cost replace the defective material immediately. The Veolia Water New York Division on site representative has been retained to observe the installation of facilities. They shall document and report, to Veolia Water, the installation of facilities. Veolia Water representative shall not direct or approve the installation. It is the contractor's responsibility to inform Veolia Water field changes to the approved plans or deviations from VWNY Division standards. If a situation arises where a field change is necessary, the contractor is to inform Veolia Water so a mutually agreed upon solution can be obtained.

5. TRAFFIC DIRECTION

Traffic control devices shall be installed and displayed in accordance with the latest USDOT FHWA Manual on Uniform Traffic Control Devices Revision and NYSDOT Supplement and or local, county, state or federal regulations, whichever is more stringent. Traffic control measures shall be placed and maintained daily by the Contractor during the progress of the work.

6. ROADWAYS, STREETS, HIGHWAYS AND DRIVEWAYS

The Contractor shall remove his equipment, construction materials and excavated material daily so as to interfere as little as possible with the use of sidewalks, roads, streets highways or private rights-of-way.

The Contractor shall not obstruct the gutters of any streets, roads, highways or driveways and shall take measures to insure the free passage of surface and storm waters at all times.

7. <u>ALIGNMENT AND GRADE</u>

All pipe shall be laid and maintained to the required lines and grades; with fittings, valves and hydrants at the approved locations. The main shall be installed parallel to the curb line and the alignment chosen shall follow the convention of maintaining five to six (5' - 6') feet from the face of curb to the centerline of the main or as directed by the approved DOH plans. The main shall be installed on the north side of the street in streets running east to west and on the west side of the street in streets running north and south, where possible.

No deviation shall be permitted from the approved line or grade without the consent of the Company.

All mains and service pipes shall be laid with a minimum cover of four (4) feet and a depth no greater than four and one half (4-1/2) feet without approval from the company. Depth shall be measured from proposed finished grade to the top

of the pipe. Mains installed outside the tolerance given, without approval from Veolia Water, shall be subject to removal at the contractor's expense.

All new water main facility designs shall have redundant feeds or looped systems without dead ends where possible.

8. <u>EXCAVATION AND PREPARATION OF TRENCH</u>

The trench shall be excavated only so far in advance of pipe laying as the conditions may permit. The trench shall have a flat bottom in which the pipe bedding is to be laid. Any part of the trench over excavated, shall be corrected by filling in with NYSDOT Type 304.12 backfill and compacted at the contractors cost.

When the bottom of the trench is found to be instable and cannot properly support the pipe the contractor shall notify Veolia Water. The Company may require that the unstable material be removed and replaced with select backfill material wrapped in geotechnical fabric.

The trench shall be brought to grade with approved compacted backfill.

Unless otherwise directed, all trenches for pipe shall be provided with bell holes at each joint.

9. ROCK EXCAVATION

Blasting for excavation will be permitted only after securing approval from the governing body and only when proper precautions have been taken. The Contractor's method of procedure relative to blasting shall conform to state laws and local municipal ordinances. All necessary precautions shall be taken to preserve the rock outside the lines of excavation in order that it shall remain in its original condition.

10. EXCAVATION SUPPORT

The Contractor shall furnish, place, and maintain sheeting and bracing as may be necessary to support the sides of the trench. The Contractor shall follow all requirements of OSHA and shall be sole responsible.

11. PIPE LAYING

All installations shall be in accordance with VWNY Division Specifications and the manufactures specifications. All pipes, fittings, valves, hydrants and other accessories shall, at all times, be handled with care by the Contractor to avoid shock or damage. All pipe, fittings, valves and hydrants shall be carefully lowered into the trench, piece by piece, in such manner as to prevent damage to pipe or pipe coatings. Before lowering and while suspended, the pipe shall be inspected for defects. Any defective, damaged, or unsound pipe shall be rejected and replaced at the contractor's expense. All foreign matter or dirt must be removed from the inside of pipe, fittings, valves and hydrants before they are lowered into the trench. An approved circular bristle brush, snugly conforming to the inside diameter of the pipe, must be passed through every piece of pipe and all bells and spigots must be wire-brushed and wiped clean. At times when pipe laying is not in progress, the open ends of the pipe in the trench shall be closed

by solidly set tapered wooden plugs so that no trench water or dirt can enter the pipe. All pipes shall be laid upon select bedding, true and even, and compacted, so that the barrel of the pipe will have a bearing for its full length. The pipe shall be laid with bell ends facing in the direction of laying. Whenever necessary to deflect pipe from a straight line, either in the vertical or horizontal plane, the degree of deflection shall not exceed that given below except as may be approved by the manufacturer.

12. JOINTS

Mechanical Joint:

Mechanical joints shall mean that the sealing gaskets are compressed by retainers glands assembled with bolts. The socket and plain end of the pipe shall be wire brushed. While the pipe is suspended, the follower and washed gasket shall be slipped over the plain end prior to inserting into the socket. The small side of the gasket and lip side of the follower shall face the socket. Insert the plain end of pipe into the socket, center the pipe and finger push the gasket into the socket until evenly seated. Slide follower into position and assemble bolts finger-tight. Pipe deflection, if required, should be made at this time. Tighten bolts with wrench, alternately and evenly, bottom, top and so on all around. It is essential that the gland be brought up evenly around the joint.

Push Joint/Rubber Sealed joint:

Rubber sealed joints shall mean that the sealing gaskets are confined in the groove of the bell by inserting the spigot into the bell of the pipe. The sharp leading edge of cut plain ends shall be dulled by filing or grinding.

The socket and plain end of the pipe must be wire brushed, washed with soapy water and dried clean while suspended prior to inserting into the socket. The gasket must be washed clean, flexed, and entered evenly and smoothly into the socket with the groove of the gasket fitting the bead of the socket and the large end of the gasket facing into the pipe. Apply food-grade lubricant, center plain end and push into place until contact is made in the socket. If assembly is not made with reasonable force, remove the pipe and check condition and position of gasket. If the joint is satisfactorily made, the pipe can be deflected if so required. Two bronze wedges shall be inserted at each joint to assure the continuity required by electrical devices used to locate buried mains.

13. POLYETHYLENE ENCASEMENT FOR PIPING AND APPURTENANCES

In areas where soil conditions may be corrosive, encasement is required, or elsewhere as directed by the Company, all piping, fittings and appurtenances shall be installed in a polyethylene pipe wrap sleeve. The pipe wrap shall be 8 mils in thickness and approximately 22 feet long and accommodate one length of pipe with a one-foot overlap. The overlaps are to be secured to the pipe with Scotch Wrap Tape or as directed by manufacturer. All procedures in connection with the installation of the polyethylene sleeve shall conform to AWWA C105.

14. <u>SETTING TAPPING SLEEVES, VALVES, VALVE BOXES, FITTINGS AND BLOWOFFS</u>

The Contractor shall install the tapping sleeves and valves and Company personnel will make the actual cut into the existing main. The procedures shall be carried out as follows:

The Contractor shall give the Company at least one week notice in advance of requiring the main to be tapped to allow for the scheduling of Company personnel.

Prior to installing the tapping sleeve, the Contractor shall clean the pipe thoroughly, with particular care being given to the area where the gaskets will seal. Install and block the back half of the sleeve under the pipe so the side flanges face up. Lubricate the side flange O-ring gaskets with food grade pipe joint lubricant and lay them in the side flange grooves so an equal length of gasket extends beyond each end. Place outlet half on top and bolt both halves together. Tighten side flange bolts from the center out, until iron to iron contact is obtained between the side flanges. Final bolt torque should be 80 to 90 ft/lbs. Cut away the excess gasket material, leaving approximately 1/8" protruding evenly into the mechanical joint gasket seat. Lubricate and install the proper thickness mechanical joint gaskets for the pipe and install the split follower rings. The parting lines of the sleeve, the mechanical joint gaskets and the split follower rings must not coincide. Install bolts and nuts hand tight. Rotate the sleeve into final position, tighten the mechanical joint bolts alternately in pairs 180° apart to 75 to 90 ft-lbs torque and install the tapping valve.

The mechanical joint tapping sleeve and valve assembly shall be field pressure tested by the Contractor in the presence and to the satisfaction of Company personnel. The Contractor shall provide the air pump and pressure gauge required to test the assembly. Pressure test guidelines can be found below in section 18. Company personnel will furnish, operate and retract the cutter and close the tapping valve. The Company will retain subsequent control of the tapping valve at all times.

Gate valves, pipe fittings and blow offs shall be set and jointed to pipe in the manner specified for cleaning, laying and jointing.

Cast iron valve boxes shall be firmly supported, with the bottom of the box at the level of the valve packing gland, maintained centered and plumb over the operating nut of the gate valve. The box cover should be flush with the surface of finished pavement or otherwise specified by the Company.

Blowoffs shall not be connected to any sewer or submerged in any stream or be installed in any other manner that will permit back-siphonage into the distribution system of the Company.

15. SETTING HYDRANTS

Hydrants shall be located as shown on the Contract Plans or as designated by the Company.

They shall be set behind the curb line so that the barrel of the hydrant shall be 18 inches from the curb line or gutter face of the curb. All hydrants shall stand plumb and shall have their large outlet (suction hose connection) facing toward the street at right angles to the curb line or street line. They shall conform to the established grade, with the center of the large outlet 18 inches above the

established grade of the shoulder grade, sidewalk or curb, finished grade being at the barrel marker line, provided by manufacture.

Each hydrant shall be connected to the main pipe with a 6-inch Ductile Iron Pipe, controlled either by a tapping valve or by an independent 6-inch gate valve.

The bowl or elbow shall be well braced against undisturbed surfaces, under the elbow and just above the joint to the hydrant barrel, with substantial blocking. Also, the hydrant barrel shall be blocked one-third down the trench depth. The hydrant elbow, branch and valve shall be tied together by tie rods.

The hydrant shall be set on one (1') foot of crushed stone or screened gravel. Additional screened gravel or crushed stone shall be placed around the barrel to a height one (1') foot above the drop opening.

No hydrant drainage pit or drain shall be connected to a sewer or storm water drain.

16. INSTALLING SERVICES

Services shall be located as shown on the plans or as designated by the Company.

Services are to be tapped on the upper quarter of the main, except as otherwise directed, and looped to the grade of the service trench. Blocking shall be used only near the tap and the balance of the service shall be on firm, undisturbed earth. Should the service be installed in a rock trench, a minimum of four (4") inches of NYSDOT Type 304.12 compacted backfill material (or approved equal) shall be installed. The service shall be terminated on the property line with a curb stop, set vertically, and the curb stop box shall be centered plumb over the stop. The box cover shall be set level with the finished surface and the service number stamped thereon.

No service pipe will be installed where the connecting pipe is laid or to be laid in the same trench with a sewer pipe, gas pipe electric conduit or other facility. Services 3-inches or larger shall be connected to the main with the appropriate

size tee and pipe and controlled by an independent gate valve.

17. <u>BACKFILLING</u>

Only NYSDOT Type 304.12 backfill material shall come in contact with the distribution main or ancillary equipment. The only exception shall be for equipment or areas required to be self-draining, such as hydrants and air vents. The excavation shall be backfilled so that a minimum six (6") inches of compacted base is set below the pipe, fitting or valve. At locations where bells, ancillary equipment and thrust blocks are installed the base material is to be removed. The pipe bell shall hang feely and the remainder of the pipe uniformly supported by the remaining backfill. When placing backfill around mains, layers shall be deposited in lifts not to exceed six (6") inches progressively burying the pipe to equal depths on both sides. A twelve (12") cover of compacted NYSDOT Type 304.12 will be required above the pipe at a minimum. A 90 percent of standard proctor maximum density compaction will be required. The remainder of the excavation shall be backfilled to the satisfaction of Veolia Water, County, and state agencies having jurisdiction or as directed by the approved plans.

It is understood and agreed that the Applicant will assume all responsibility for proper backfilling of the trenches for the water main and service lines and the maintenance of the surface of the streets after backfill and save harmless Veolia Water from any and all claims for damages or otherwise, which may result from the opening and backfilling of such trenches or failure to maintain the surface of the streets. The pavement restoration must be done to the satisfaction of this Company as well as the Municipal, County or State Officials.

18. <u>DISINFECTION, PRESSURE AND LEAKAGE TESTS</u>

Hydrostatic Testing

Pressure testing of new water main installations shall be performed in accordance with AWWA C600 latest revision.

Pressure Test for Tapping Sleeve

The assembly shall be tested by closing the tapping valve and connecting an air pump to the pipe tap on the outlet neck of the sleeve, with a pressure gauge and valve mounted between the tap and the pump. Increase pressure to a point fifty (50) percent greater than the normal operating pressure at that location, but not less than 125 psi. When the test pressure has been reached, close the valve and observe the test gauge. Any loss of pressure is an indication of a leak, which must be located and eliminated. The duration time for the test shall be ten minutes for sleeves up to 20-inch and one-half hour for larger sleeves.

Water Test Pressure Restrictions for main, services and hydrants

Test pressures shall:

- 1. Not be less than 125 psi or 1.25 times the working pressure at the highest point along the test section.
- 2. Not exceed pipe or thrust-restraint design pressures.
- Be of at least 2-hour duration.
- 4. Not vary by more than \pm 5 psi for the duration of the test. In the event of 5 psi pressure lost from starting test pressure, the test shall be pumped back up to test pressure utilizing make up water. The volume of makeup water shall be recorded and shall not exceed the maximum allowable per AWWA C600.
- 5. Not exceed twice the rated pressure of the valves or hydrants when the pressure boundary of the test section includes closed gate valves or hydrants. NOTE: Valves shall not be operated in either direction at differential pressure exceeding the rated pressure.
- 6. Not exceed the rated pressure of the valves when the pressure boundary of the test section includes closed, resilient-seated gate valves or butterfly valves.

7. The contractor and engineering Inspection Company shall be present during the test. They shall certify that the service valves are in the closed position and the system is ready for filling.

<u>Pressurization</u>

Each valved section of pipe shall be filled with water slowly and the specified test pressure, based on the elevation of the lowest point of the line or section under test and corrected to the elevation of the test gauge, shall be applied by means of a pump connected to the pipe in a manner satisfactory to the owner. Valves shall not be operated in either the opening or closing direction at differential pressures above the rated pressure. It is good practice to allow the system to stabilize at the test pressure before conducting the leakage test.

Air Removal

Before applying the specified test pressure, air shall be expelled completely from the pipe, valves, and hydrants. If permanent air vents are not located at all high points, the contractor shall install corporation cocks at such points so that the air can be expelled as the line is filled with water. After all the air has been expelled, the corporation cocks shall be closed and the test pressure applied. At the conclusion of the pressure test, the corporation cocks shall be removed and plugged or left in place at the discretion of the Company.

Examination

Any exposed pipe, fittings, valves, hydrants and joints shall be examined carefully during the test. Any damage or defective pipe, fittings, valves or hydrants that are discovered following the pressure test shall be repaired or replaced with sound material, and the test shall be repeated until it is satisfactory to the Company.

Leakage Test

The leakage test shall be conducted concurrently with the pressure test.

Leakage Defined

Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe, or any valved section thereof, to maintain pressure within 5 psi of the specified test pressure after the air in the pipeline has been expelled and the pipe has been filled with water. If at any point the test pressure falls to 5 psi below the starting test pressure, then the system shall be pressurized utilizing make up water and the quantity of water measured. The measuring device shall be approved by the on-site engineering inspector prior to the test beginning. When hydrants are in the test section, the test shall be made against the closed

hydrant. Allowable leakage shall be as determined by the Company specified engineering inspector prior to the test starting.

Acceptance of Installation

Upon acceptance of the installation, the main shall be disinfected and placed in service at the discretion of the company unless otherwise requested by the applicant. If a period of one-year elapses from the date of acceptance to the start of the warrantee period the company may request that the main be flushed, and pressure tested at the expense of the applicant.

Acceptance shall be determined based on allowable leakage. If any test of pipe laid discloses leakage greater than that specified by the on-site engineering inspector, the contractor shall, at his own expense, locate and make repairs as necessary until the leakage is within the specified allowance. All visible leaks are to be repaired regardless of the amount of leakage.

DISINFECTION

Disinfection of the pipe interior will be done by the Company following hydrostatic pressure testing and the installation of chlorination taps furnished and installed by the Contractor. Disinfection is to be performed in accordance with AWWA C651 standards utilizing liquid sodium hypochlorite solutions. The engineer of record shall be present during Chlorination and flushing of main, services and hydrants.

FLUSHING

Mains should be flushed prior to disinfection in order to remove any foreign material that may interfere with disinfection or reduce water quality. This is done after the pressure and leakage testing.

Flushing should be done through a convenient hydrant or blow-off. It is to be done at a velocity of 3.0 fps to obtain proper flushing action.

Flushing is also to be performed by the company after main disinfection, in accordance with the required contact period of AWWA C651.

19. APPLICANT TO DOCUMENT INSTALLATION COSTS

Following completion of the installation, the Applicant shall submit to the Company a record of the cost of the mains, hydrants and services run to the property lines within the development. The submission shall be broken down into at least four cost categories: piping material costs (mains, fittings, valves, etc.); installation costs for the mains; material and installation costs for the hydrants; material and installation costs for the services run to the property lines. It shall include copies of all invoices, delivery tickets and bills of lading for all pipe, hydrants, valves and appurtenances, crushed stone, concrete, select backfill and

other construction materials used in the work. Invoices from contractors shall indicate all unit prices and unit quantities of work being billed and shall include the dates during which the work took place.

20. <u>APPLICANT TO DOCUMENT WORK</u>

The applicant shall provide as-built drawings showing the installation of the main, hydrants and services as well as daily field reports and complete job sheets. Water shall not be provided until as builts are received and approved by Veolia Water.

21. WARRANTY OF CONSTRUCTION

The Applicant's contractor shall warrant that work performed in installing the main, services, hydrants and appurtenances is free of any defect of equipment, material or workmanship. Such warranty shall continue for a period of two years from completion and approval of the extension or within such longer period of time as may be prescribed by law. Under this warranty, the Applicant's contractor, under Company supervision, shall remedy at his own expense any such failure to conform or any such defect upon receipt of written notice from the Company within a reasonable time after the discovery of any failure, defect or damage. In addition, during the aforesaid warranty period, the Applicant's contractor shall remedy at his own expense, under Company supervision, any damage to Company-owned or controlled real or personal property, when that damage is the result of any such defect of equipment, material or workmanship installed by the Applicant's contractor. The warranty with respect to work repaired or replaced hereunder will run for the greater of one year from the date of such repair or replacement or the remainder of the original two-year period. During the warranty period as defined herein, the Applicant's contractor shall reimburse the Company for the costs of any emergency repairs undertaken by the company to maintain the system in good working order.

22. TAPS AND SERVICE CONNECTIONS

General

Tapping of existing mains shall be conducted by the Company unless written authorization is received by the contractor. No modification of any portion of Veolia Water's system shall be allowed without a representative of Veolia Water being present.

23. INSTALLATION OF METERS

General

Water meters are furnished and installed by the Water Company. The setting for the meter shall be in accordance with the policies of the Water Company. All locations requiring a meter must be meter ready prior to a service being made available for use.

If there are any questions, they should be directed to the Meter Supervisor.

County of Rockland

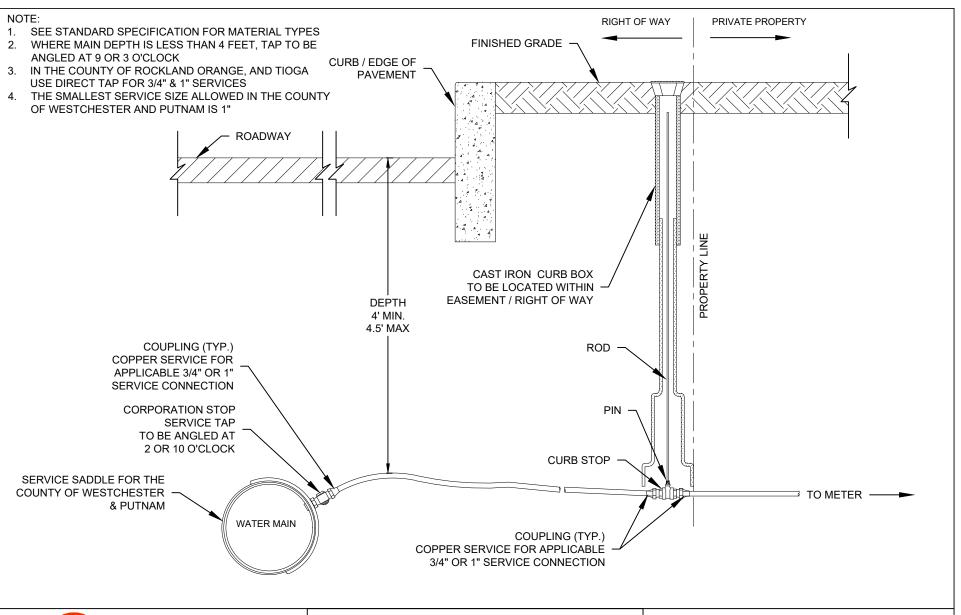
For meters **3**" and greater, the owner will pick up the meter casing at the VWNY Office. Then, once they have been considered meter ready, VWNY will install the meter core

Counties of Westchester and Putnam

For meters **2**" and greater, the owner will pick up the meter casing at the VWWC Office. Then, once they have been considered meter ready, VWWC will install the meter core

Construction Drawings







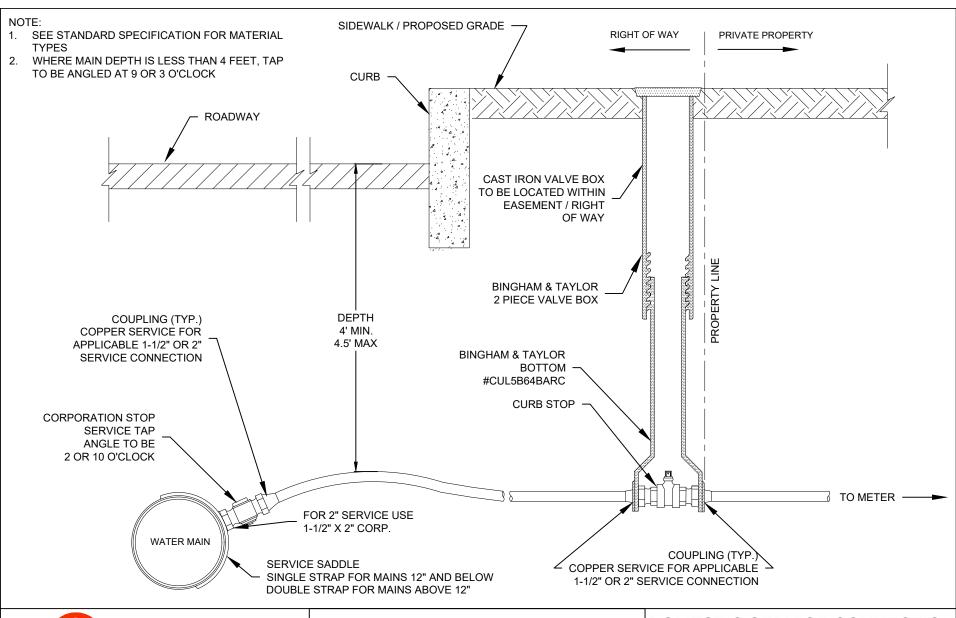
SPECIFICATION DETAILS

INSTALLATION OF WATER SYSTEMS APPURTENANCES

DOMESTIC SERVICE CONNECTION

3/4" & 1" SERVICE CONNECTION

DRAFTED BY: MS FIGURE 3.01 APPROVED BY: VWNY DIV. NB SCALE: NTS

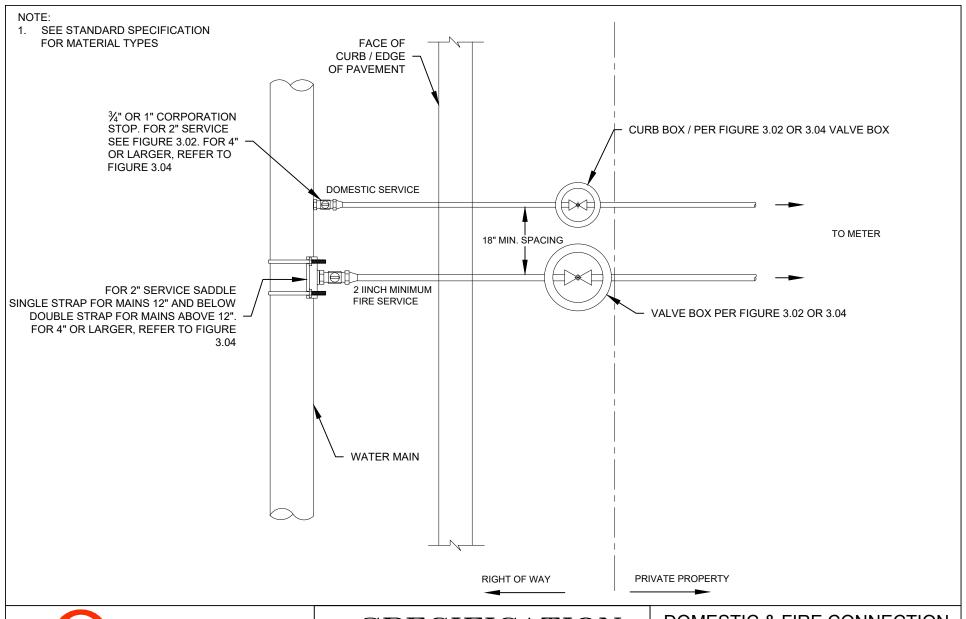




SPECIFICATION DETAILS

INSTALLATION OF WATER SYSTEMS APPURTENANCES

DOMESTIC SERVICE CONNECTION 1-1/2" & 2" SERVICE CONNECTION





SPECIFICATION DETAILS

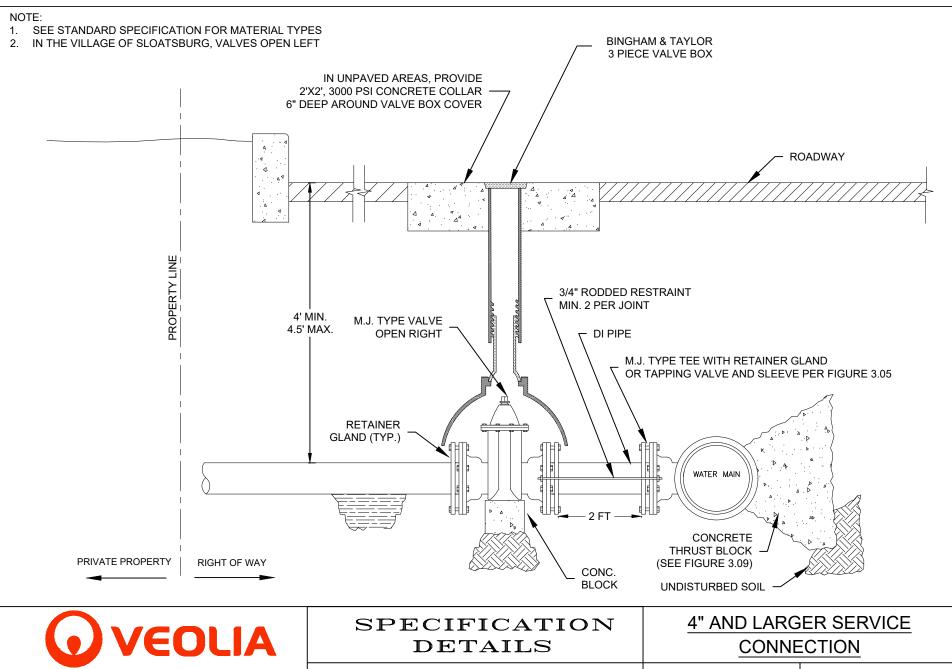
INSTALLATION OF WATER SYSTEMS APPURTENANCES

DOMESTIC & FIRE CONNECTION PLAN VIEW

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB

FIGURE 3.03

SCALE: NTS

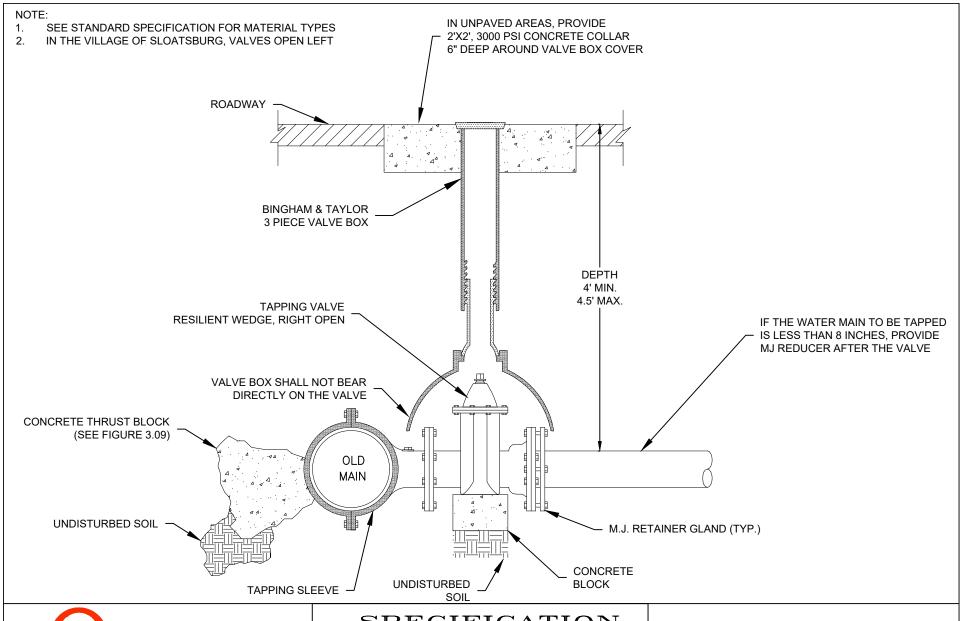


DRAFTED BY : MS APPROVED BY: VWNY DIV. NB

FIGURE 3.04

INSTALLATION OF WATER SYSTEMS APPURTENANCES

SCALE: NTS

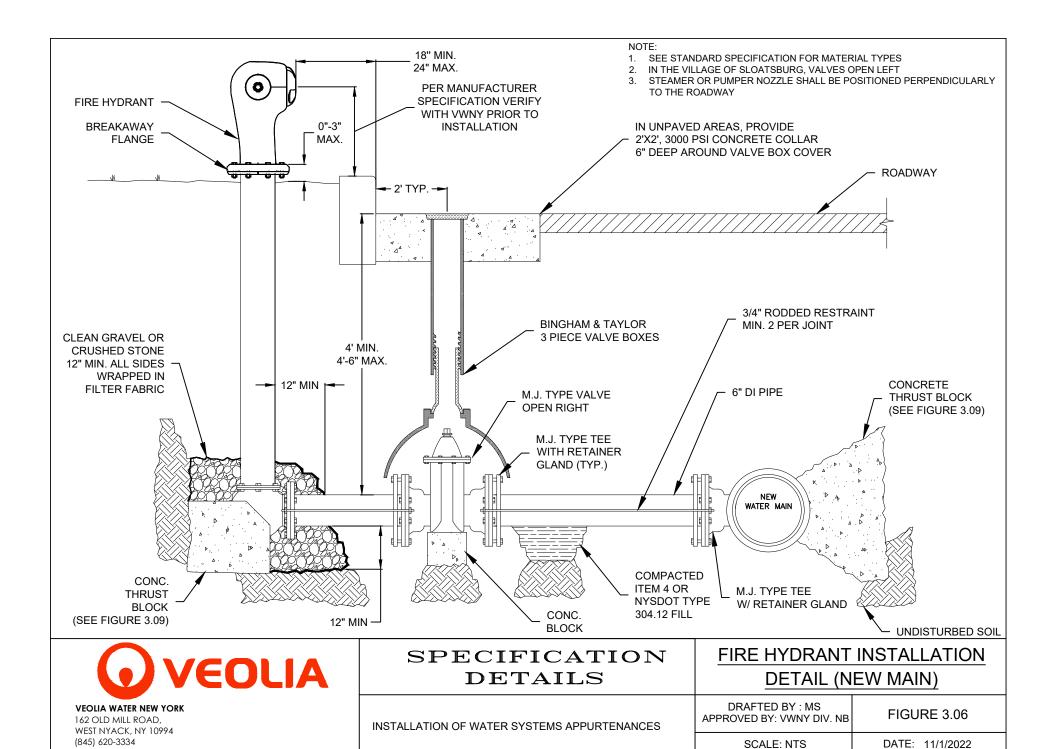


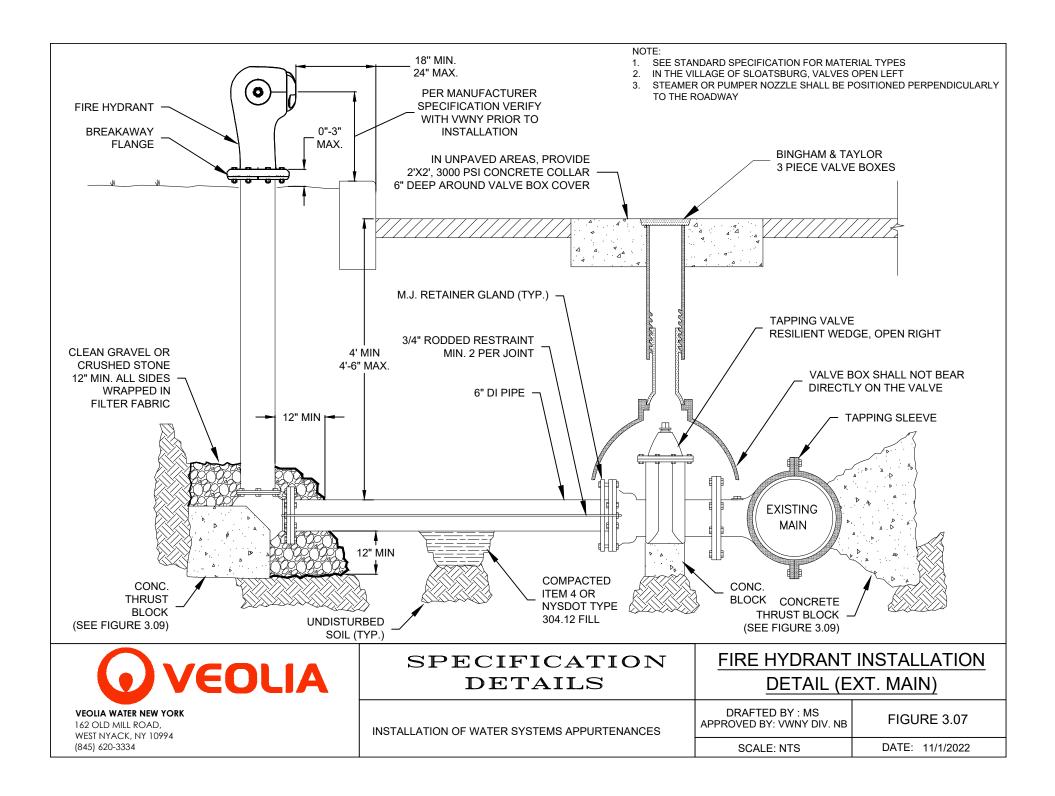


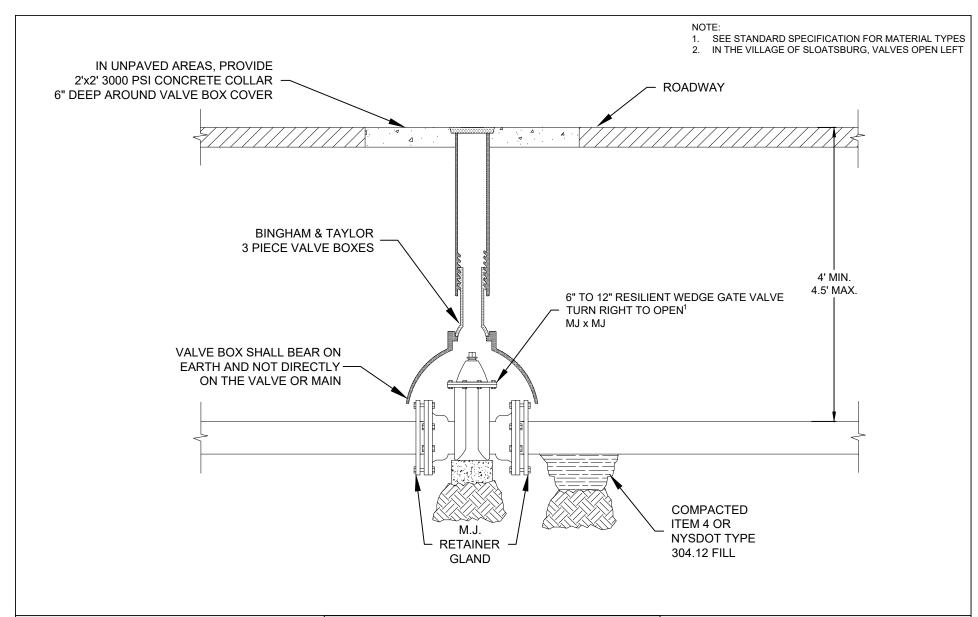
SPECIFICATION DETAILS

INSTALLATION OF WATER SYSTEMS APPURTENANCES

TAPPING EXISTING WATER MAIN









SPECIFICATION
DETAILS

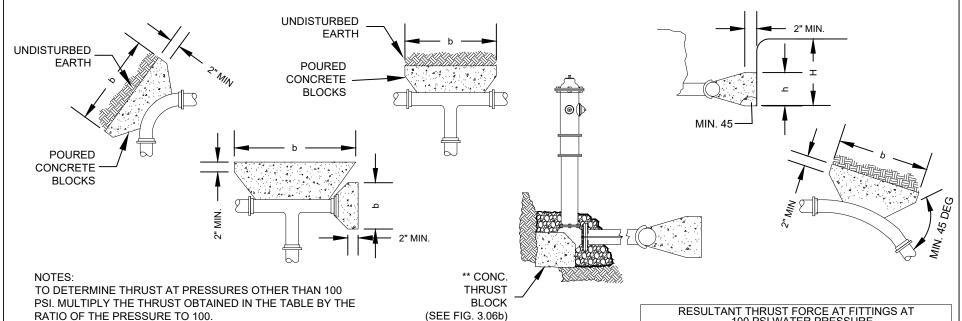
INSTALLATION OF WATER SYSTEMS APPURTENANCES

IN-LINE GATE VALVE INSTALLATION

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB

FIGURE 3.08

SCALE: NTS



BEARING AREA (SF) =

THRUST FORCE AT FITTING (LB.S)

BEARING CAPACITY OF UNDISTURBED SOIL (LB.S/S.F)

THRUST FORCE AT FITTING (LB.S)

GRAVITY BLOCK SIZE (C.F.) =

CONCRETE DENSITY 145 (LB.S/C.F)

NOTES:

PLACE 8 MIL. POLYETHYLENE BETWEEN CONCRETE AND FITTING (CONCRETE SHALL NOT INTERFERE WITH JOINT.)

MINIMUM CONCRETE THICKNESS SHALL BE 12 INCHES.

THE HORIZONTAL DIMENSION (b) OF THE BEARING AREA SHALL BE BETWEEN 1.0 AND 2.0 TIMES THE VERTICAL DIMENSION (h). (h <= b <= 2h)

THE VERTICAL DIMENSION (n) OF THE BEARING AREA SHALL BE EQUAL TO ONE-HALF. THE TOTAL DEPTH (H) TO THE BOTTOM OF THE THRUST BLOCK BUT NOT LESS THAN THE OUTSIDE DIAMETER (Do) OF THE FITTING (Do < h <= H/2).

THRUST BLOCK ORIENTATION SHALL BE SUCH THAT THE CENTER OF FITTING CORRESPONDS WITH THE CENTER OF THE THRUST BLOCK.

THE MINIMUM ALLOWABLE ANGLE (EITHER VERTICAL OR HORIZONTAL) SHALL BE 45 DEGREES.

RESULTANT THRUST FORCE AT FITTINGS AT 100 PSI WATER PRESSURE					
NOM. PIP DIA. (IN)			45" BEND		11 1/4" BEND
3	1,232	1,742	943	481	241
4	1,810	2,559	1,385	706	355
* 6	3,739	5,288	2,862	1,459	733
8	6,433	9,097	4,923	2,510	1,261
10	9,677	13,685	7,406	3,776	1,897
12	13,685	19,353	10,474	5,340	2,683
14	18,385	26,001	14,072	7,174	3,604
16	23,779	33,628	18,199	9,278	4,661
18	29,865	42,235	22,858	11,653	5,855
20	36,644	51,822	28,046	14,298	7,183
24	52,279	73,934	40,013	20,398	10,249
30	80,425	113,738	61,554	31,380	15,766
36	115,209	162,931	88,177	44,952	22,585
42	155,528	219,950	119,036	60,684	30,489
48	202,683	280,637	155,127	79,083	39,733
54	260,214	367,999	199,160	101,531	51,011
60	298,121	42,606	228,172	116,321	58,442
64	338,707	479,004	259,235	132,157	66,398

VEOLIA
VCOCIA

VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334

SPECIFICATION DETAILS

INSTALLATION OF WATER SYSTEMS APPURTENANCES

TYPICAL THRUST BLOCKING

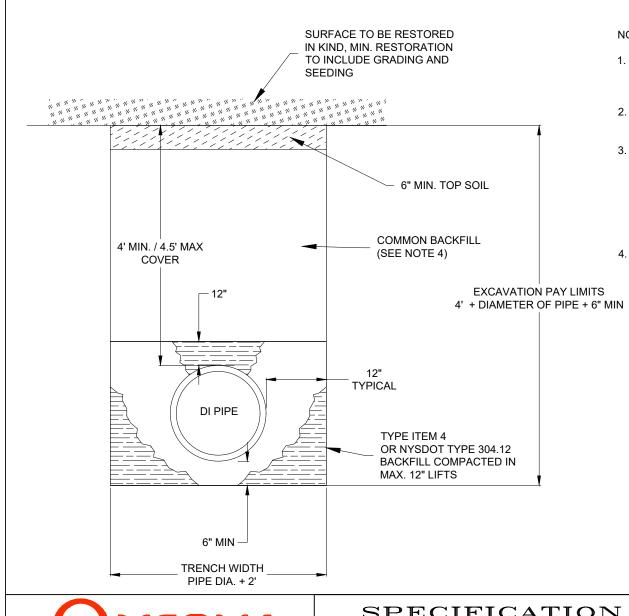
DRAFTED BY : MS APPROVED BY: VWNY DIV. NB	FIGURE 3.09
SCALE: NTS	DATE: 11/1/2022

CHART 1 - ESTIMATED BEARING STRENGTH (UNDISTURBED SOIL)		
TYPE OF SOIL ALLOWABLE SOIL BEARING CAPACITY		
MUCK, PETE, ETC.	0 LB. / FT. SQ.	
SOFT CLAY	500 LB. / FT. SQ.	
FINE SAND	1,000 LB. / FT. SQ.	
DECOMPOSED GRANITE (D.G.)	1,500 LB. / FT. SQ,	
SANDY GRAVEL	2,000 LB. / FT. SQ.	
CEMENTED SANDY GRAVEL	4,000 LB. / FT. SQ.	
HARD SHALE	5,000 LB. / FT. SQ.	
GRANITE	10,000 LB. / FT. SQ.	

- 1. IN MUCK, PEAT OR OTHER INCOMPETENT SOILS, RESISTANCE SHALL BE ACHIEVED BY REMOVAL AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE INTENDED THRUSTS, DESIGN OF THRUST RESTRAINT SYSTEMS IN SUCH CASES SHALL BE PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER AND SHALL BE APPROVED BY THE AGENCY ENGINEER.
- 2. FIRE HYDRANTS THAT DEAD END PIPE RUNS, WILL NEED THRUST BLOCKS. THRUST BLOCKS ARE TO BE DESIGNED BY A NYSPE AND SUBMITTED TO VEOLIA UNDER SHOP DRAWING REVIEW PROCESS



SPECIFICATION DETAILS	TYPICAL THRUST BLOCKING DESIGN CRITERIA	
INSTALLATION OF WATER SYSTEMS APPURTENANCES	DRAFTED BY : MS APPROVED BY: VWNY DIV. NB	FIGURE 3.10
	SCALE: NTS	DATE: 11/1/2022



- BACKFILL SHALL BE PLACED IN MINIMUM 12" LIFTS AND COMPACTED USING MECHANICAL MEANS OF COMPACTION OR AS APPROVED BY VEOLIA WATER.
- 2. WOOD BLOCKING SHALL NOT BE USED BENEATH THE PIPE AS A MEANS OF SETTING GRADE.
- 3. ROCK AND SOIL EXCAVATION PAY LIMITS SHALL BE BASED ON A 4 FEET OF DEPTH, PLUS THE DIAMETER OF PIPE, PLUS 6 INCHES OF BEDDING. THE TRENCH WIDTH SHALL BE BASED ON THE PIPE DIAMETER PLUS 24 INCHES. COSTS ASSOCIATED WITH OVER EXCAVATION SHALL BE AT THE CONTRACTORS EXPENSE.
- 4. COMMON BACKFILL SHALL CONSIST OF COMPACTABLE SOILS FREE OF COBBLES GREATER THAN 4 INCHES, AND JAGGED RIPPED ROCK. THE COST FOR BACKFILLING SHALL BE INCLUDED IN THE N CONTRACTORS COST OF EXCAVATION.



VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334

SPECIFICATION DETAILS

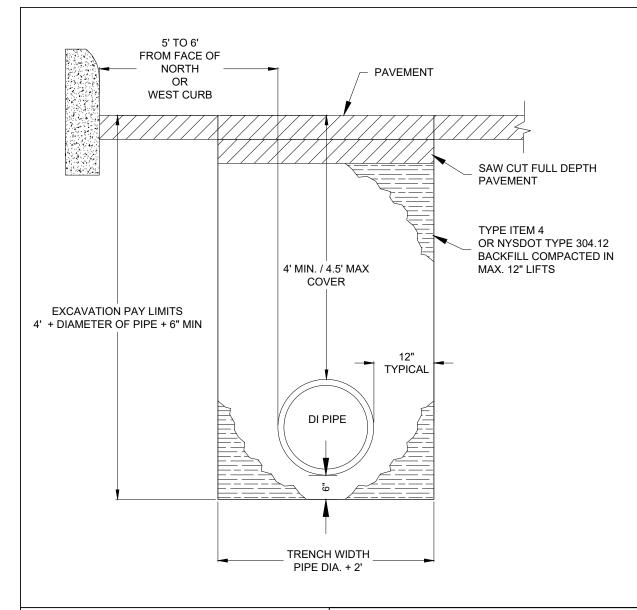
INSTALLATION OF WATER SYSTEMS APPURTENANCES

WATER MAIN TRENCH DETAIL UNPAVED AREAS COUNTY OF ROCKLAND, ORANGE, & TIOGA

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB

FIGURE 3.11

SCALE: NTS



- BACKFILL SHALL BE PLACED IN MINIMUM12" LIFTS AND COMPACTED USING MECHANICAL MEANS OF COMPACTION OR AS APPROVED BY VEOLIA WATER.
- 2. WOOD BLOCKING SHALL NOT BE USED BENEATH THE PIPE AS A MEANS OF SETTING GRADE.
- 3. ROCK AND SOIL EXCAVATION PAY LIMITS SHALL BE BASED ON A 4 FEET OF DEPTH, PLUS THE DIAMETER OF PIPE PLUS 6 INCHES OF BEDDING. THE TRENCH WIDTH SHALL BE BASED ON THE PIPE DIAMETER PLUS 24 INCHES. COSTS ASSOCIATED WITH OVER EXCAVATION SHALL BE AT THE CONTRACTOR'S EXPENSE.
- PAVEMENT SHALL BE RESTORED IN ACCORDANCE WITH LOCAL, STATE, COUNTY PERMIT REQUIREMENTS, OR PRIVATE PROPERTY OWNER.



VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334

SPECIFICATION DETAILS

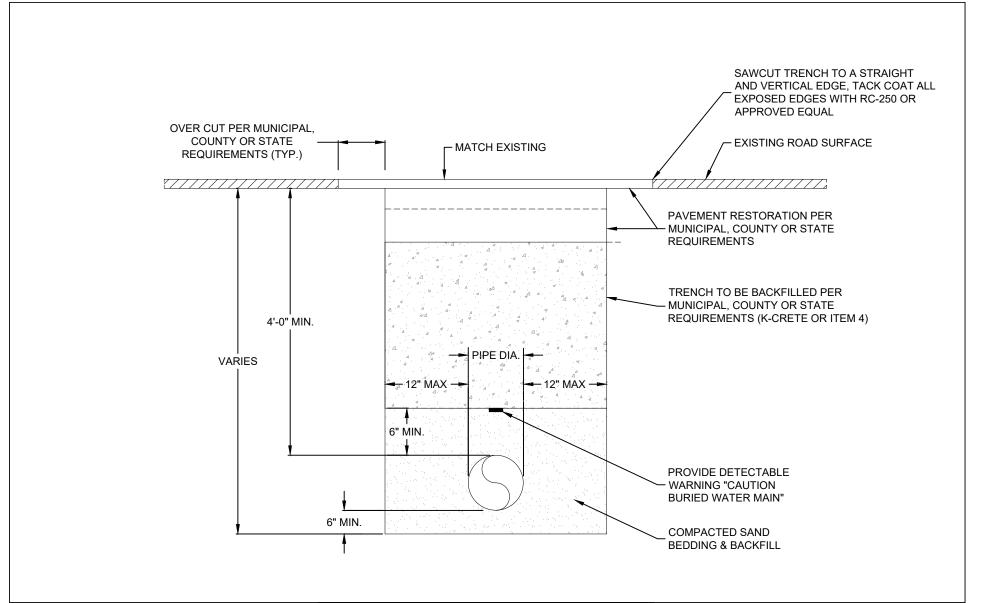
INSTALLATION OF WATER SYSTEMS APPURTENANCES

WATER MAIN TRENCH DETAIL ROADWAY (PUBLIC OR PRIVATE) COUNTY OF ROCKLAND, ORANGE, & TIOGA

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB

FIGURE 3.12

SCALE: NTS





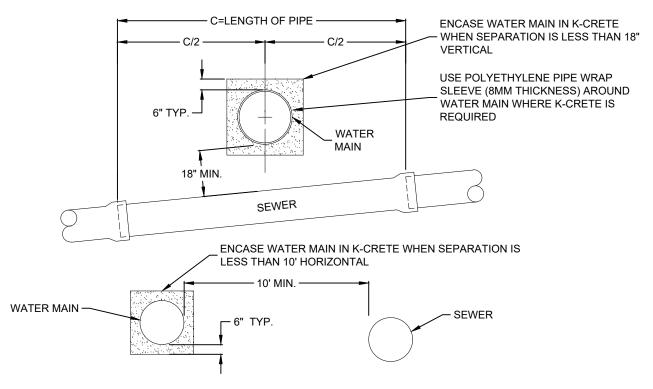
SPECIFICATION DETAILS

INSTALLATION OF WATER SYSTEMS APPURTENANCES

WATER MAIN TRENCH DETAIL COUNTY OF WESTCHESTER & PUTNAM

DRAFTED BY : MS
APPROVED BY: VWNY DIV. NB
FIGURE 3.13

SCALE: NTS DATE: 11/1/2022



- WATER MAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN
 THE OUTSIDE OF THE WATER MAIN & THE OUTSIDE OF THE SEWER. THIS WILL BE THE CASE WHETHER THE WATER
 MAIN PASSES ABOVE OR BELOW THE SEWER.
- 2. AT CROSSINGS ONE FULL LENGTH OF SEWER PIPE SHALL BE LAID SO BOTH JOINTS WILL BE AS FAR FROM THE WATER MAIN AS POSSIBLE. SEE DETAIL. WHERE THE SEWER HAS ALREADY BEEN INSTALLED, THE WATER MAIN SHALL BE PLACED SO THAT THE JOINTS ON THE WATER MAIN ARE EQUIDISTANT FROM THE SEWER.
- 3. WATER MAINS SHALL BE LAID AT LEAST 10' HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWER. IN CASES WHERE THIS IS NOT POSSIBLE, THE REVIEWING AUTHORITY MAY ALLOW ENCASEMENT, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER.
- 4. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY SEWER MANHOLE.
- 5. IN THE EVENT THAT THERE IS A DEVIATION FROM ANY OF THE ABOVE REQUIREMENTS, SAID CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT PRIOR TO COMPLETION OF ANY SUCH CHANGES.

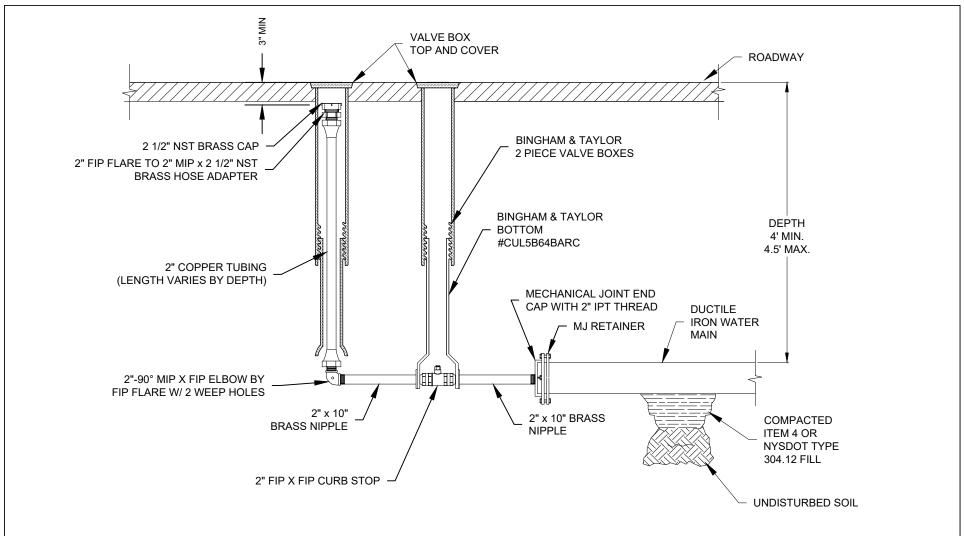


WEST NYACK, NY 10994 (845) 620-3334 DETAILS

SPECIFICATION

TYPICAL WATER & SEWER CROSSING AND SEPARATION

INSTALLATION OF WATER SYSTEMS APPURTENANCES



- 1. THE EXCAVATION SHALL BE BACKFILLED SO VWNY DIVISION FORCES CAN SAFELY USE THE FLUSHING TAP.
- 2. CONTRACTOR TO RESTRAIN JOINTS UPSTREAM OF THE BLOW OFF AS PER DESIGN ENGINEER'S SPECIFICATION OR AS DIRECTED BY ON-SITE VEOLIA REPRESENTATIVE

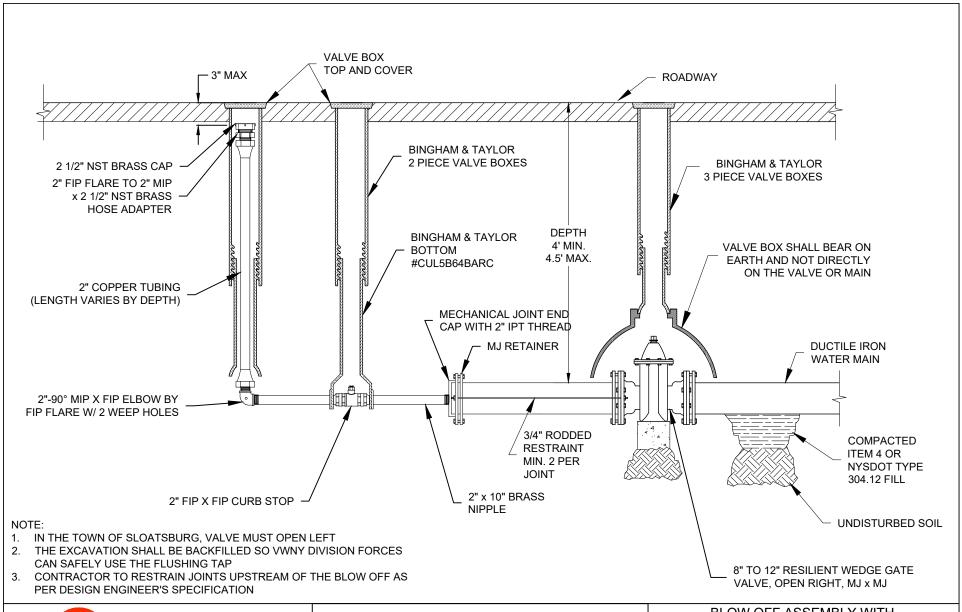


VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334

SPECIFICATION
DETAILS

INSTALLATION OF WATER SYSTEMS APPURTENANCES

PERMANENT BLOW OFF ASSEMBLY COUNTY OF ROCKLAND, ORANGE, AND TIOGA

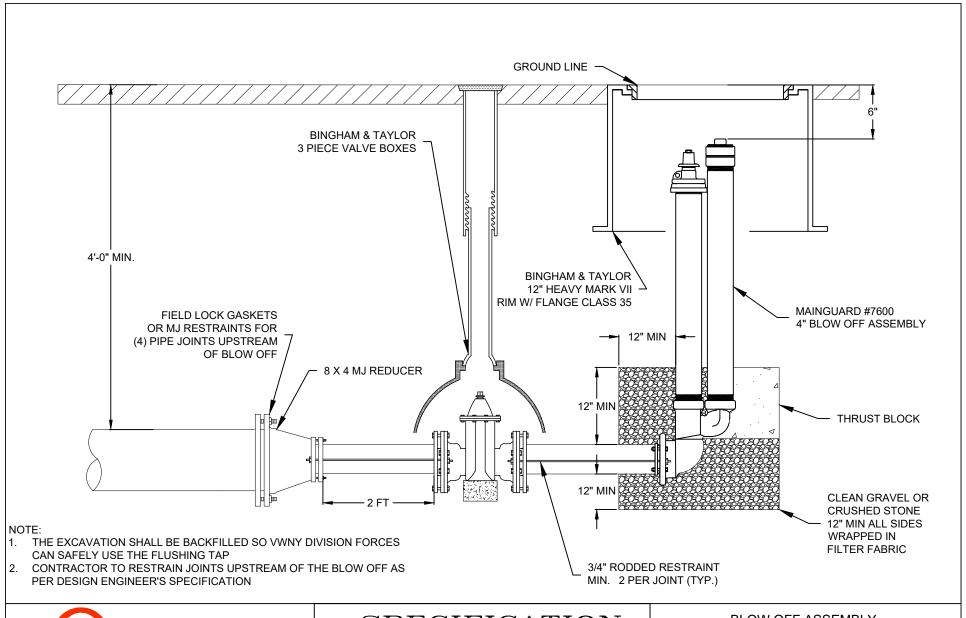




SPECIFICATION DETAILS

INSTALLATION OF WATER SYSTEMS APPURTENANCES

BLOW OFF ASSEMBLY WITH POSSIBILITY OF EXTENSION COUNTY OF ROCKLAND, ORANGE, & TIOGA

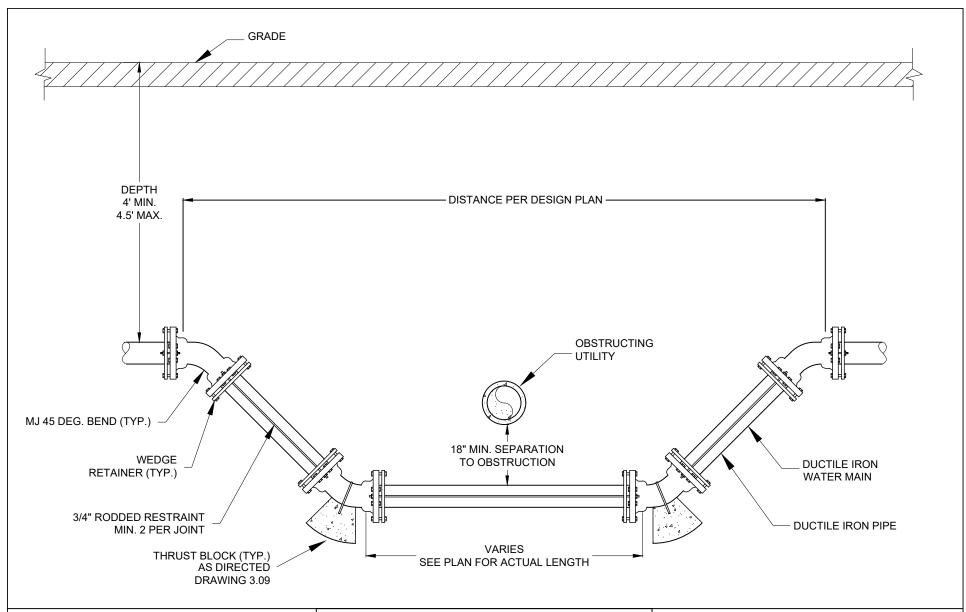




SPECIFICATION DETAILS

INSTALLATION OF WATER SYSTEMS APPURTENANCES

BLOW OFF ASSEMBLY COUNTY OF WESTCHESTER & PUTNAM





SPECIFICATION DETAILS

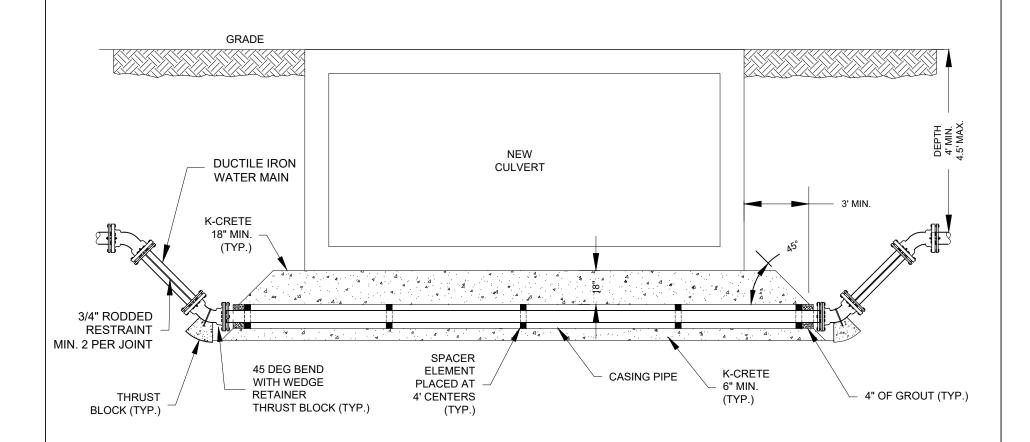
INSTALLATION OF WATER SYSTEMS APPURTENANCES

TYPICAL WATER MAIN OFFSET

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB

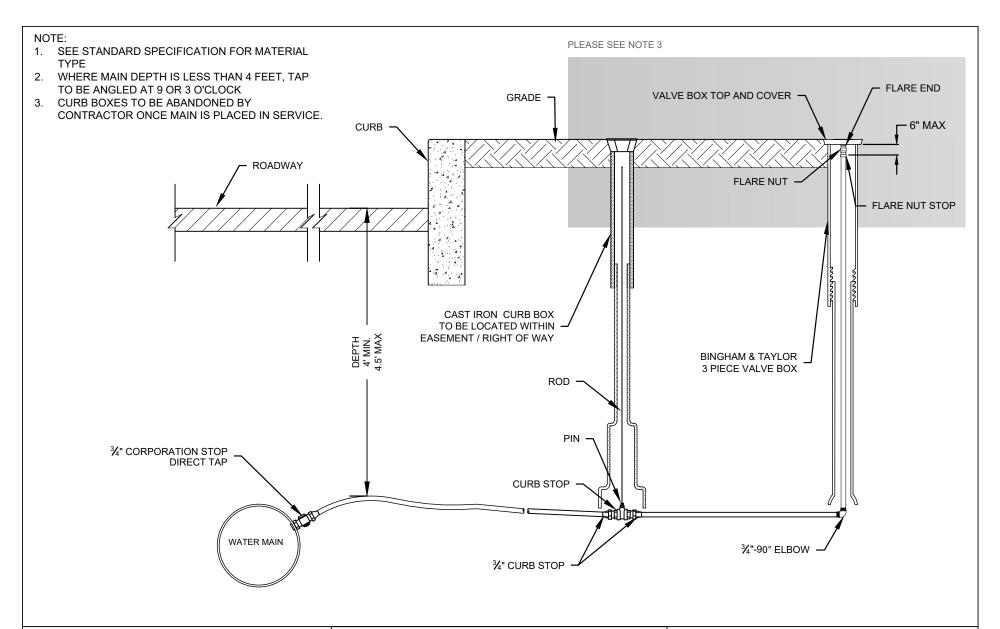
FIGURE 3.18

SCALE: NTS



- 1. THE CASING PIPE TO BE EPOXY COATED SCHEDULE 40 STEEL PIPE.
- 2. CASING TO BE BACKFILLED USING K-CRETE.
- 3. PIPE BEDDING AND BACKFILL TO BE NYSDOT TYPE 304.12 MATERIAL LAID IN THE DRY AND COMPACTED IN MAX. 6" LIFTS.
- 4. SEE TRENCH DETAIL FOR PIPE TRENCH AND BACKFILL REQUIREMENTS.
- 5. IF A PIPE JOINT IS TO BE WITHIN THE CASING, PROVIDE FIELD LOK GASKET.

VEOLIA	SPECIFICATION DETAILS	UNDER NEW CULVERT STREAM CROSSING DETAIL		
VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994	INSTALLATION OF WATER SYSTEMS APPURTENANCES	DRAFTED BY : MS APPROVED BY: VWNY DIV. NB FIGURE 3.19	FIGURE 3.19	
(845) 620-3334		SCALE: NTS	DATE: 11/1/2022	

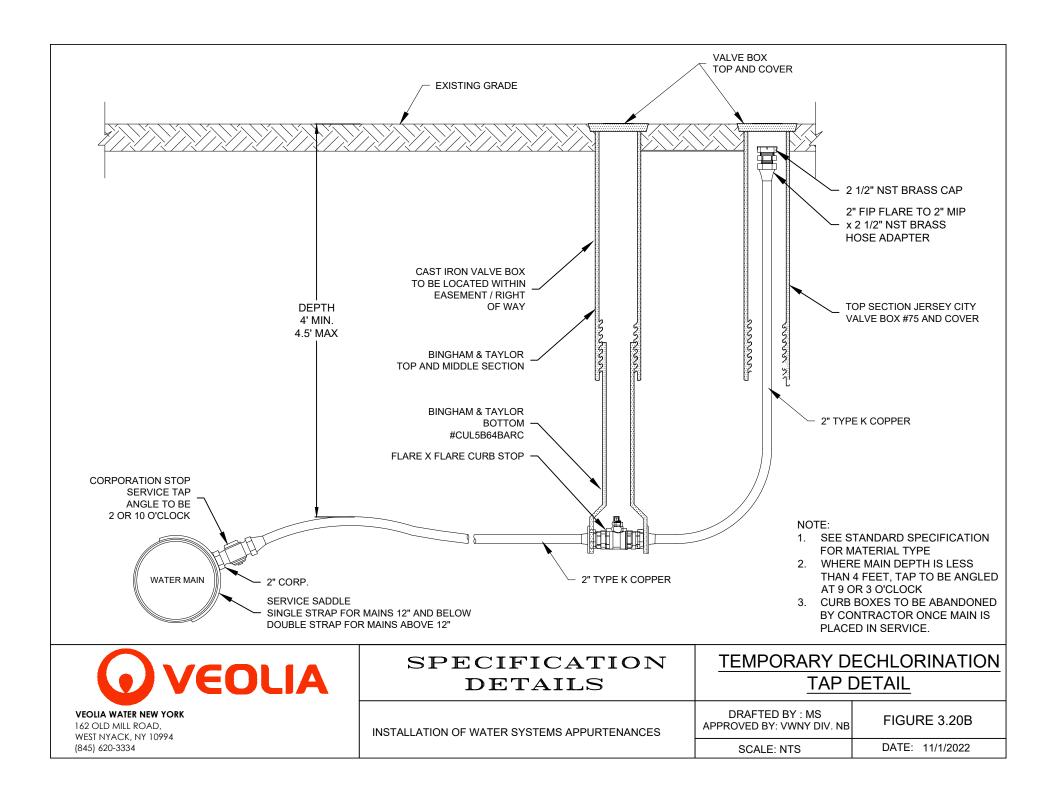


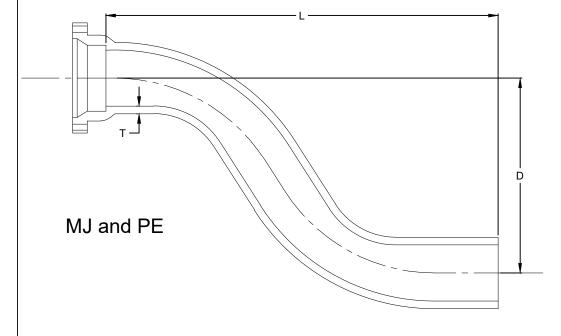


SPECIFICATION DETAILS

INSTALLATION OF WATER SYSTEMS APPURTENANCES

CHLORINATION TAP DETAIL





	PRESSURE				М	J AND PE
SIZE	RATING PSI	D	T	L	WEIGHT	
4	350	6	.52	27	70	
4	350	12	.52	30	80	
4	350	18	.52	38	105*	
4	350	24	.52	31.50	115	
6	350	6	.55	28	105	
6	350	12	.55	34	130	
6	350	18	.55	41	160	
6	350	24	.55	30.25	165	
8	350	6	.60	29	155	
8	350	12	.60	36	195	
8	350	18	.60	43	240	
8	350	24	.60	46.25	275	
10	350	12	.68	38	280	
10	350	18	.68	46	340	
10	350	24	.68	46	420*	

4" TO 10" OFFSET DETAIL

* AVAILABLE AS MJ AND MJ ONLY



162 OLD MILL ROAD, INSTALLATION OF WATER SYSTEMS APPURTENANCES WEST NYACK, NY 10994 (845) 620-3334

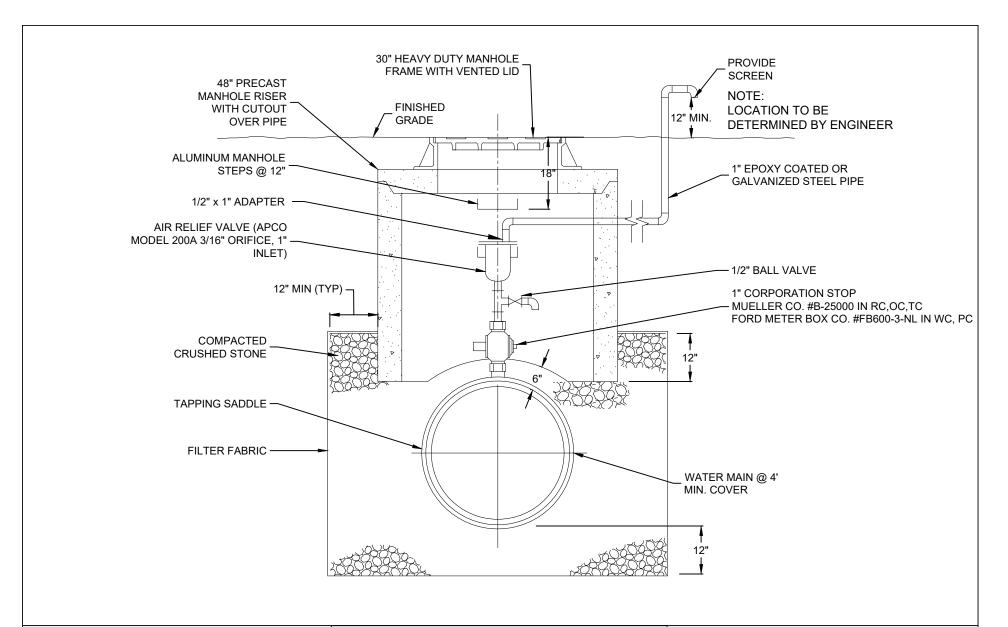
SPECIFICATION

DETAILS

4" TO 10" OFFSET DETAIL

DRAFTED BY: MS APPROVED BY: VWNY DIV. NB SCALE: NTS

FIGURE 3.21





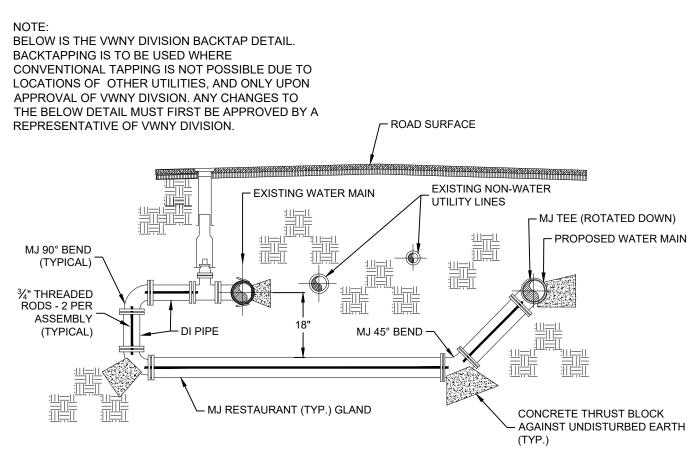
SPECIFICATION DETAILS AIR RELEASE
MANHOLE DETAIL

INSTALLATION OF WATER SYSTEMS APPURTENANCES

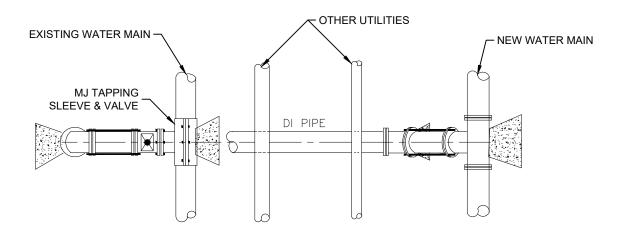
APPROVED BY: VWNY DIV. NB

FIGURE 3.22

SCALE: NTS



BACKTAP DETAIL (ELEVATION)



BACKTAP DETAIL (PLAN VIEW)



BACK TAP DETAIL PLAN AND PROFILE

VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334

APPROVED BY: VWNY DIV. NB	FIGURE 3.23	
SCALE: NTS	DATE: 11/1/2022	

Forms



VEOLIA WATER – NEW BUSINESS

162 Old Mill Road, West Nyack, NY 10994

Tel: 845-620-3334



<u>janet.gonzalez@veolia.com</u> frank.mcglynn@veolia.com

<u>APPLICATION FOR NEW WATER SERVICE CONNECTION</u> SERVICE ADDRESS`

Future Customers Na	me:
Street:	
Town/Zip:	
Nearest Cross Street:	
POINT OF CON	TACT – CORRESPONDENCE WILL BE E-MAILED FOR SIGNATURE:
Name:	
Company:	
Street:	
Town/Zip:	
Cell No.:	
E-mail Address:	

PROPOSED SERVICE INFORMATION

Please circle appropriate item.

METER LOCATION: Meter Pit Above Ground Heated Structure *Meter Room

*THE USE OF A METER ROOM MUST BE APPROVED BY THE NEW BUSINESS DEPT.

YES / NO Swimming Pool Or Well*(rpz) YES / NO Commercial Property*(rpz)

YES / NO Irrigation*(dev)

YES / NO house meter or common area

meter, for multi-family only.*(dcv)

YES / NO Fire Service*(ddcv)

^{*} If the Applicant answers **YES** to any of the above questions, a Backflow Prevention Device is required at the premises. The required type can be found in parenthesis next to the condition.

FIRE SERVICE- Backflow Preventer Required:

Size of Service Requested:	New	Enlargement	Relocation
*3/4", *1", *1-1/2" _ * Not available in Westchester District	, *2", *3"	', 4", 6"	, 8", 10"
* Not available in Westchester District	1 & Owego/Nichols		
DOMESTIC SERVICE:			
Size of Service Requested:	New	Enlargement	Relocation
3/4", 1", 1-1/2", 2"	, 3", 4"	, 6", 8"	
Rockland County Only- (N	-		equire 911 Postal cipt – 845-364-8908)
Single Meter Individu	al LW Meters	Quantity	Size
For more than 3 meters, provi	de meter layout	drawing.	
CMALL DIAMETED CO	MDINIED EID	E AND DOMES	CTIC SEDVICE.
SMALL DIAMETER CO	WIDINED FIR	E AND DOMES	STIC SERVICE:
Westchester County Only-			
Size of Service: 2" only:	New	Enlargement	Relocation
REQUIREMENT: PLEASE INCLUDE ONE (1) COPY PROPERTY. THE PLAN SHALL IN BLOCK AND LOT NUMBERS, LOC WHERE METERS WILL BE HOUSE BE COMING INTO THE PROPERTY	ICLUDE THE FOLI ATION OF METER ED, AS WELL AS TI	LOWING: ADDRESS O PIT OR ABOVE GRO HE LOCATION WHER	OF PROPOSED PROPERTY, UND HEATED STRUCTURE
NOTE: Veolia Water New York between November 1 st and April during this time period.			
For Office Use Only:			
Size of Main:psi Pressure	Material: District:	□ Cast Iron □ Du	ctile IronPressure:
Existing Svc Sizes and No.(s): _			

VEOLIA WATER – NEW BUSINESS

162 Old Mill Road West Nyack, New York 10994 (845) 620-3334



INSTRUCTIONS FOR SERVICE INSTALLATION:

- 1. ALL NEW SERVICE AGREEMENTS MUST BE SIGNED AND RETURNED
- 2. Plumbing ready inside and outside Meter Pit or Above Ground Heated Structure
- 3. Copper water service line marked out and/or visible -3 feet of copper required
- 4. Pre-inspection photographs received, reviewed and approved
- 5. An appointment for an inspection will automatically be scheduled.
- 6. PLEASE CALL THE NEW BUSINESS DEPARTMENT AT 845-620-3334 WITH ANY QUESTIONS REGARDING THE ABOVE.

UPON APPROVED INSPECTION, VEOLIA INSTALLATION PROCESS WILL BEGIN:

- 1. OBTAIN TOWN ROAD OPENING PERMIT APPX. 2 WEEKS
- 2. UTILITY MARK OUTS APPX. 1 WEEK
- 3. SCHEDULE CONSTRUCTION INSTALLATION APPX. 1 WEEK
- 4. METER INSTALLATION APPX. 3 DAYS

PLEASE CALL THE **PROJECT INFORMATION SERVICE** LINE TO CHECK ON THE STATUS OF YOUR PROJECT:

IN THE COUNTIES OF ROCKLAND OR ORANGE

TAP & SERVICE INSTALLATION:

METER INSTALL ONLY - CUSTOMER SERVICE:

845-620-3339

877-426-8969

IN THE COUNTIES OF WESTCHESTER OR PUTNAM

TAP & SERVICE INSTALLATION:

METER INSTALL ONLY – CUSTOMER SERVICE:

914-637-5315

877-266-9101

IN THE COUNTY OF TIOGA:

607-687-1491

PLEASE NOTE: BETWEEN NOVEMBER 1ST AND APRIL 1TH, SERVICE INSTALLATIONS ARE NOT GUARANTEED. PROVIDING SERVICE TO EXISTING CUSTOMERS WILL TAKE PRIORITY DURING THE WINTER SEASON.



Department Of Health Backflow Preventer Application Process

When to apply:

- Installing Fire Service every size in both commercial & residential properties
- Commercial Domestic Water Service
- Irrigation System
- A residential home that has an additional source of water, i.e. private well
- A residential home that has a swimming pool, irrigation

Requirements:

- ✓ Veolia Application For New Water Service Connection
- ✓ Completed DOH Application 347 5 original copies signed & sealed by engineer
- ✓ Backflow drawings 5 original copies signed & sealed by engineer
- ✓ Backflow Engineer's Report 5 original copies
- ✓ County Planning Information Certification Rockland County Only
- ✓ DOH Plan Review Fee See Below
- ✓ Letter of Authorization Westchester County Only
- ✓ Certificate of Resolution Westchester County Only

Please make checks out to the appropriate Department of Health below:

- Rockland County
 - \$130.00 each device
 - Rockland Commissioner of Finance
 Sanatorium Rd., Building D

Pomona, NY 10970

845-364-2605

- Orange County
 - **\$200.00** each device
 - Orange County Dept. of Health 30 Harriman Drive Goshen, NY 10924 845-291-4000
- Tioga County
 - \$144.00 each device
 - Tioga County Dept. of Health 56 Main Street Owego, NY 13827 607-687-8600
- Westchester County
 - \$180 .00 each device
 - Westchester County Dept. of Health 145 Huguenot St.
 New Rochelle, NY 10801 914-813-5000
- Putnam County
 - No fee
 - Putnam County Dept. of Health 1 Geneva Road Brewster, NY 10509 845-808-1390

Please Note: Applicant must submit above listed documents to VWNY Division New Business Department <u>before</u> applying for water service — this will hasten the application process for both Veolia Water and the Department of Health.

Please visit the Department of Health website below for further information regarding the backflow preventer device & installation requirements and application process –

http://www.health.ny.gov/environmental/water/drinking/cross/cross.htm

Any questions, please call Veolia Water at 845-620-3334

NEW YORK STATE DEPARTMENT OF HEALTH Bureau of Public Water Supply Protection

Application for Approval of Backflow Prevention Devices

	Log No.			
1. Name of Facility 2. City, Village, Town	3. County			
Street City 4. Location of Facility	state zip			
4a. Phone Numbers 5. Contact Person	5. Contact Person			
5. Approx. Location of Device(s) 6. Mfg. Model #	Size of Device(s)			
# of Fire Services # of Domestic Services # of Combined Services Total # of S	ervices Total # of Buildings			
7. Name of Owner Title Phone Number 8.	Nature of works Initial Device Installation Replace Existing Device			
Full Mailing Address street 8a Address				
City state zip 8b	☐ Existing ServiceD. ☐ New Building			
Owner's Signature Date// M D Y	Existing Building Major Renovations			
Name of Design Engineer or Architect 10). NYS License #			
Street Address	PE RA Other			
City				
State Zip 10	a. Telephone Number(s)			
	// M D Y			
11. Water System Pressure (psi) at Point of Connection 12. Estimate Installation Cost 12	Pa. Estimate Design Cost			
Max Avg Min List of processes or reasons that lead to degree of hazard checked:				
Hazardous Aesthetically Objectionable				
14. Public water supply name Name of supplier's designation	Name of supplier's designate representative			
Mailing Address Title	Title			
street				
City state zip Signature				

Note: All applicants must be accompanied by plans, specifications and an engineer's report describing the project in detail. The project must first be submitted to the water supplier, who will forward it to the local public health engineer. This form must be prepared in quadruplicate with four copies of all plans, specifications and descriptive literature.

Guidelines for Designing Backflow Prevention Assembly Installations

Supplement to the 1981 Cross Connection Control Manual - January 1992

Purpose

The purpose of these guidelines is to augment and/or clarify those guidelines outlined in the January 1981 Cross Connection Control manual. These guidelines reflect accepted design considerations based on experience in implementing cross connection control programs and policies set forth by the American Water Works Association, Environmental Protection Agency, USC Foundation for Cross Connection Control and Hydraulic Research and state and local health departments. Pending revisions to the manual, these guidelines should clearly outline what an acceptable design and installation constitutes. They are to be reasonably interpreted and will be updated as new design solutions and technologies are offered.

General Installation Details

I. Clearances

All double check valve (DCV) and reduced pressure zone (RPZ) backflow prevention assemblies are designed for in-line service and must be installed to prevent freezing, flooding and mechanical damage with adequate space to facilitate maintenance and testing. Ideally, the installation should not require platforms, ladders or lifts for access. Adequate clearances from floors, ceilings and walls must be provided to access the test cocks and to allow the repair and/or removal of the relief valve and check valves; as follows:

- All assemblies shall be installed with a centerline height from 30 inches to 60 inches above the floor. Any installation at a greater height shall be provided with a fixed platform, a portable scaffold or a lift meeting OSHA standards.
- All RPZ devices must have an 18 inch minimum clearance between the bottom of the relief valve and the floor to prevent submersion and provide access for servicing and relief valve.
- A minimum of 12 inches of clear space shall be maintained above the assembly to allow for servicing check valves and for operation of shut-off valves.
- A minimum of 30 inches of clear space shall be maintained between the front side of the device and the nearest wall or obstruction.
- At least 8 inches clearance should be maintained from the back side of the device to the nearest wall
 or obstruction. This clearance may need to be increased for models that have side mounted test
 cocks or relief valves that would be facing the back wall.

II. Miscellaneous Considerations

- All assemblies shall be adequately supported and/or restrained to prevent lateral movement. Pipe
 hangers, braces, saddles, stanchions, piers, etc., should be used to support the device and should be
 placed in a manner that will not obstruct the function of or access to the relief valve.
- Strainers are recommended prior to each backflow prevention assembly on non-fire fighting water lines. No strainer is to be used in a fire line without the approval of the Insurance Underwriters or the authority having jurisdiction.
- The assembly should be sized hydraulically, taking into account both the volume requirements of
 the service and the head loss of the assembly. The head loss of the assembly is not necessarily
 directed proportional to flow. (Refer to the manufacturers head loss curves).

- Before selection and installation, refer to manufacturers literature for temperature ranges. All
 assemblies must be protected from freezing temperatures and if installed where temperatures will
 reach 100 degrees F or above, a hot water type assembly must be used. Consult manufacturers
 specifications for recommendations.
- Thermal water expansion and/or water hammer downstream of the assembly can cause excessive pressure. To avoid possible damage to the system and assembly, use water hammer arresters, surge protectors or expansion tanks as appropriate.
- All assemblies should be specified and installed with the manufacturer supplied resilient seated shut-off valves integral to the assembly.
- Water lines should be thoroughly flushed before installing the assembly. Most test failures on new installations are the result of debris fouling one of the check valves or the relief valve.
- All assemblies must be installed horizontally unless they are specifically approved for vertical installation. (Ref. Technical Reference PWS-14).
- Parallel installations should be considered at those facilities where water service cannot be interrupted. Manifold installations may also be used on any water line larger than 10 inches.
- Assemblies shall not be installed in areas containing corrosive, toxic or poisonous fumes or gases which could render the assembly inoperable or pose a safety hazard to personnel.
- Because of the inherent design of a reduced pressure backflow assembly, fluctuating supply pressure on an extremely low flow or static flow condition may cause nuisance dripping and potential fouling of the assembly. While not effective in all cases, the installation of a soft seated check valve immediately ahead of the RPZ will often hold the pressure constant to the assembly in times of fluctuating supply pressure.
- Where the distance between the water meter and the device is greater than 10 feet, all exposed piping should be stenciled "Feed Line to Backflow Preventer DO NOT TAP" at 5 foot intervals.

III. Drainage

Drainage for backflow prevention assemblies shall be provided for **all** installations of DCV or RPZ to accommodate discharge during testing or draining of the unit and for RPZ relief valve discharges, as follows:

- For RPZ devices, drainage capacity shall be sized to accommodate both intermittent discharges and
 a catastrophic failure of the relief valve. Refer to manufacturers flow curves to determine maximum
 discharge rate based on supply pressure or on-site pressure; whichever is greater.
- Discharge from relief valves must be readily detectable to maintenance personnel either visually or by means of water level alarms, flow indicator lights, etc.
- All drainage from RPZ's must be by gravity drains. Sump pumps are not allowed unless they are sized to accommodate the maximum discharge rate **and** connected to emergency power supplies.
- An air gap must be maintained between the RPZ relief valve opening and any discharge piping. The air gap must be at least twice the dimension of the effective opening of the relief valve; but in no case less than 1 inch.
- Manufacturer's air gap fittings may be utilized provided that they maintain a proper air gap and do
 not enclose or cover the relief valve. These fittings are only sized to handle intermittent and low
 flow discharges. Additional drainage capacity may be required to accommodate a catastrophic relief
 valve failure.
- Discharge piping from relief valves shall be terminated a minimum of one inch above any floor drain or other receiving receptacle.
- Discharge piping connected to a storm sewer shall be equipped with backwater check valve.
- Discharge piping connected to a sanitary sewer shall be trapped **and** equipped with a backwater check valve.
- o Discharge piping from pits or other structures must be terminated above grade in an area not subject to flooding (generally one foot above the 100 year flood elevation). The terminal end of the discharge piping must have a rodent screen and may need to be supported by a headwall. Flap valves should also be considered to prevent entry of cold air.
- All exterior drains shall be kept free of snow during winter.

IV. Pit Installations

Primarily due to considerations for access, safety and gravity drainage, it is preferred that backflow prevention devices not be installed in pits. Where pit installations are proposed, however, they shall be designed:

- To be watertight with watertight manholes or access doors extending a minimum of 6 inches above grade and located to allow natural light into the pit during testing/maintenance.
- With stairways, ladders or step irons.
- For crane access for installing and removing large assemblies.
- With adequate horizontal and vertical clearances to allow access to the device.
- With a full flow screened gravity drain terminating above grade for all RPZ installations as detailed in the drainage requirements.
- With sump pumps or gravity daylight drains for all DCVA installations.
- With floors pitched to drain.
- With adequate ground cover to prevent freezing.
- With surface grading to divert runoff away from the entrance way.
- Semi-buried pits for berm installations may be necessary to satisfy gravity drainage requirements.

V. Above Grade Installations- Protective Enclosures

An above grade installation is generally necessary to provide gravity drainage from RPZ devices. The additional benefits of improved access and enhanced safety are also realized with an above grade installation. Two companies, "Hot Box" and "Hydrocowl", have designed prefabricated insulated enclosures that provide heat, gravity drainage and removable access panels for servicing and testing. As an alternate, wood frame, fiberglass, steel, masonry or precast concrete structures may be utilized. All enclosures shall be designed:

- With a floor elevation that is at least 6 inches above finished grade.
- To provide adequate clearances around the device to access the test cocks, shutoff valves, check valves and relief valve.
- With electric heaters or heat trace wire for any water service used year round.
- With provisions for natural or artificial light.
- With full flow gravity drains according to the drainage requirements.
- With security measures such as locking doors and panels, flow alarms or flow indictor lights, power indicator lights, etc.

VI. Installation Within a Building

Where containment at the property line cannot be achieved or is waived based on extenuating circumstances, installation within a building is often desirable as the unit can be installed in a mechanical room or other area that has heat and light. Access and drainage considerations must also be satisfied and the devices should be located to avoid electrical panels, areas of excessive heat, etc.

- 1. Above grade installations shall be provided with adequate clearances and discharge can be directed to floor or drains or through a sidewall above grade via screened louvers, scuppers, pipe sleeves with flap valves, etc., in accordance with the drainage requirements.
- 2. Below grade or basement installations are acceptable for DCVA's. RPZ's are only allowed below grade where one or more of the following conditions can be met:
 - Where an adequate gravity drainage system is provided to accommodate a relief valve failure.
 - Where water level alarms are installed to detect flow from the device and alert maintenance or security personnel.
 - Where sump pumps are sized to accommodate a relief valve failure and are connected to emergency power.
 - Where the floor area and volume below the device could accommodate discharge from a relief valve failure. For 2 inch and smaller units, 2,000 cubic feet is generally acceptable. For

larger units, the time to submerge the device based on the maximum discharge rate and floor area/volume should be no less than 8 hours.

In any of the above cases, the property owner must be made aware of the potential for water damage in the event of a discharge.

VII. Submission and Approval of Plans

In accordance with Section 10 of the Cross Connection Control manual, the submission of plans and specifications for the installation of backflow prevention assemblies must include the following:

- 1. A **site plan** (to scale or with dimensions) of the facility containing a general location map, name and address of facility, property lines, buildings, the size and location of public water main(s) and all fire and domestic water services, meter pits, yard piping and hydrants, pumper connection(s), interconnections, and the location of the proposed backflow preventer(s).
- 2. A **plumbing floor plan** (plan view) or **partial floor plan** indicating water services, name and address of facility, water meter layout, proposed backflow preventer(s), booster pump system, floor drain(s) and all nearby objects (examples: electrical panels, boilers, chillers, storage tanks, fire pumps, fire sprinkler risers, etc.). The plan must be drawn **to scale** or **with dimensions** indicated from walls and all nearby objects.
- 3. A **vertical cross section(s)** of the proposed installation with elevations from floor, ceiling, outside grade and all nearby objects.
- 4. All drawings must include the name and address of the facility, be stamped and signed by the designer and have a clear space for approval stamps.

VIII. Engineer's Report

An engineering report must be included with the plan submittal. The report must describe the project in **detail**. Items that should be included or described in the report include:

- 1. General use of water within the facility;
- 2. Size and description of all fire and domestic water services;
- 3. Number of floors within the facility
- 4. Actul or estimated maximum flow demand;
- 5. Pressures existing and after the installation of the backflow preventer;
- 6. Description of the fire fighting system indicate the A.W.W.A. Manual M-14 class of sprinkler service;
- 7. Description of the proposed installation of the backflow preventer indicate the location of backflow preventer, drainage, lighting, heating, access to unit, square footage of the floor level where the backflow preventer is to be located;
- 8. Description of the existing or proposed booster pump system, answering the following questions:
 - A. After the installation of the proposed backflow preventer(s), will the Net Positive Suction Head (NPSH) required for the proper operation of the booster pump system be adequate?
 - B. After the installation of the backflow preventer(s) in the suction line to the booster pump system, will the booster pump system operate properly at peak demand to deliver adequate pressure to the highest elevation and/or most remote fixture unit or any other operation requiring a certain pressure? Note: The New York State Uniform Fire Prevention and Building Code Part 902.4c requires the **minimum** pressure at water outlets at all times to be as follows:

Fixture - non flush valve - 8 psi Fixture - flush valve - 15 psi

C. Does the booster pump system have a pressure cutoff switch in the suction line? What is the pressure setting of the switch? An existing or proposed cutoff switch must be set at the following setting:

For a cutoff switch where the backflow preventer is located upstream of the booster pump(s) - set at 10 psi.

For a cutoff switch where the backflow preventer is located downstream of the booster pump(s) - set at 20 psi.

- 9. The need for dual backflow preventers. Does the facility need a continuous water supply?
- 10. The elevation and location of the 100 year flood plain in relation to the facility. A reduced pressure zone (RPZ) backflow preventer must generally be installed 1 foot above the 100 year flood plain elevation.
- 11. An inventory of any existing containment devices to include the make, model, size and serial number of the device. Current annual test reports must also be submitted. The degree of hazard for these services must be determined to insure that the device provides the correct protection.

IX. Certified Testing and Completed Works Approval

After an approval of plans has been issued and the assembly has been installed, it must be tested by a certified tester. The designer (or water supplier) is then responsible to certify that the installation was done in accordance with approved plans; or describe any changes or submit "As Built" plans as appropriate.

The initial test results and certification are then submitted to the water supplier and approving agent for issuance of a Completed Works Approval. DOH - Form 1013 has been designed for both the certified test results and the designer's certification of the installation.

After issuance of the Completed Works Approval, the assembly must be tested at least annually by a certified tester with the results reported to the water supplier.

Translation Services

This page is available in other languages

•	Translate		
	Translate	Translate	~

Date:	INFOR#
	(To be assigned by VWNY Div.)

Application for Main Extension

Project Name:	· · · · · · · · · · · · · · · · · · ·
Contact Name:	
Contact Address:	
Contact Number:	
Engineer:	
Water Main Contractor:	
Nearest Cross Street:	
Street Type, Please Circle: Pul	olic Private
Easement Required, Please Circle: Yes	No
Size and Length of Main:	
Number of Hydrants:	
Number of Domestic Services:	
Number of Fire Services:	
Projected Demands:	
Average Daily Demand (gpd):	Maximum Daily Demand (gpd):
Peak Hourly Demand (gph):	Required Fire Flows (gpm):
Additional Comments:	
	

Required attachment: proposed site plan, (utility plan if available) Engineer: Signature and Seal Required

NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Water Supply Protection

Application for Approval of Plans for Public Water Supply Improvement

Applicant	Location of works ((C,V,T)	County		Water District (area served)		
Type of Ownership							
☐ Municipal ☐	Commercial	Private	Other Institutional	☐ Authority ☐ Federal	☐Interstate ☐International		
☐ Industrial ☐	Water Works Corp.		f Education	State	Native American Reservation		
☐ Modifications to existing syst	Modifications to existing system. If checked, provide PWS ID# NY						
New System? If checked, pro	vide capacity developr	nent (viability)) analysis*				
☐ If this project involves a new	system, new water distr	rict, or a distric	ct extension pro	ovide boundary o	description location details in		
digital format. If digital boundary	location details are no	t available pro	vide a text des	cription.			
☐ Digital GIS Data Provided Provided	☐Digital CAD Data I	Provided	Other Dig	gital Data provid	ed Text Description		
Funding Source Private	□DWSRF**	□Federal	Othe	r			
If DWSRF is checked, provide D	WSRF#						
Estimated Project Cost							
	reatment \$	_		\$	Distribution \$		
	Ingineering \$		egal/Permitting		Total \$		
Type of Project Source	Corrosion Con	trol	U.V. Dis	sinfection tion	☐ Distribution☐ Storage		
Transmission	Chlorination		Other Ti		Other		
Project Description							
Population Total population	% population			9/2 no	pulation served		
of Service area	actually serv	ved			ected by project		
Latest total consumption data (in	MGD)		NYS Profess				
			Licensed Eng Stamp & Sig				
•	ear ———		F 33 2	,			
	ear						
Peak hrY	ear						
Name of design engineer							
AddressE-Mail		Te	elephone No ox No				
Name and title of applicant or designated representative							
Address							
Signat	ure of Applicant				Date		

NOTE: All applications must be accompanied by 3 sets of plans, 3 sets of specifications and an engineer's report describing the project in detail. The project must first be discussed with the appropriate city, county, district or regional public health engineer. Signature by a designated representative must be accompanied by a letter of authorization

^{*}Additional information regarding capacity development may be found at: https://www.health.ny.gov/environmental/water/drinking/index.htm

^{**}Current DWSRF project listings may be found at: https://www.health.ny.gov/environmental/water/drinking/index.htm
***By affixing the stamp and signature the Design Engineer agrees that the plans and specifications have been prepared in accordance with the most recent version of the recommended standards for water works and in accordance with the NYS Sanitary Code.

		PRELIM	IINARY COST	BREAKDOWN	
Date: NAME & ADDRESS OF C					NB #:
NAME & ADDRESS OF C	ONTRACTOR:				
PROJECT:					
ITEM	SIZE	QUANTITY	LABOR	MATERIALS	TOTAL COST
I I LIVI	SIZE	QUANTITI	LABOR	WATERIALS	TOTAL COST
MAINS:	4				
	6				
	8				
	12				
	16				
\/AL\//EQ-					
VALVES:	4				
	6				
	8 12				
	16	 			
	20				
HYDRANTS:	6" branch				
0ED\((0E0)					
SERVICES:	3/4				
	1-1/2"	 			
	2				
	3	 			
	4				
	6				
	8				
	10				
	12				
GRA	AND TOTAL				
					_
					(Rev. 01/01/19)

		FIN	AL COST BRE	AKDOWN	
Date:					NB #:
NAME & ADDRESS OF C	ONTRACTOR:				
PROJECT:					
ITEM	SIZE	QUANTITY	LABOR	MATERIALS	TOTAL COST
MAINS:	4				
	6				
	8				
	12				
	16				
VALVEC.					
VALVES:	4				
	6	+			
	8 12	+ +			
	16				
	20	+ +			
	20	 			
HYDRANTS:	6" branch				
SERVICES:	3/4				
	1				
	1-1/2"				
	2				
	3				
	4	 			
	6				
	8				
	10	+ +			
	12	 			
GRA	AND TOTAL				\$0.00
		 			
					(Rev. 01/01/19)
					(Kev. 01/01/13)

Information Required for Willingness to Serve

Date:	
Project Name:	
Project Address (Street Name/Town):	
Brief Project Description:	
Size and Length of Main:	
Number of Hydrants:	
Number of Domestic Services:	· · · · · · · · · · · · · · · · · · ·
Number of Fire Services:	· · · · · · · · · · · · · · · · · · ·
Number of Irrigation services:	
Commercial (Type and Number Square Feet):	
Residential (Number of Units and Number of Bedrooms per l	Jnit):
Contact Name: Contact Address: Contact Number: Contact Email:	
Projected Demand Summary (if more than one building, attac	
Domestic Average Daily Demand (gpd):	
Domestic Maximum Daily Demand (gpd):	
3. Domestic Peak Hourly Demand (gph):	
4. Lawn Irrigation Demand (gpd):	(gpm):
5. Required Fire Hydrant Flows (gpm):	
Required Fire Sprinkler System Flows (gpm):	
Additional Comments:	-

Additional Requirements:

- Attach a detailed project description including detailed project demand calculations and back-up information supporting all project demand calculations.
- Attach a copy of site plan calling out the block and lots and local vicinity with elevations in NGVD 1929, if elevations are not in NGVD 1929, please provide conversion factor.
- This form and backup calculations to be signed and sealed by a NYS P.E.

VEOLIA WATER NEW YORK DIVISION

CONTRACTOR PRE-QUALIFICATION QUESTIONNAIRE

FOR THE

INSTALLATION OF WATER SYSTEMS

1.	Company Name:				
	Street Address:				
	City:	State:			Zip:
2.	Mailing Address:				
	City:	State:			Zip:
3.	Telephone: ()	- _		_	
4.	Officers:		Pres.	Yrs. w/Co.	
			V. Pres.	Yrs. w/Co	
			Treas.	Yrs. w/Co	·
5.	Submitted By:				
	Title:				
6.	How many years has your orga	anizatio	n been in	business as	s a general contractor
	under your present business na	ame? _			
7.	Licenses:				
	States:		Catego	ries:	

Construction Services Performed (give approximate percentage of the year					У
	value of your operations that	at each category	comprises -	Total of 100%):	
		General Contr	racting		
		_ Office and cor	mmercial cons	struction	
	,	Home building)		
	,	_ Sewer and dra	ainage constr	uction	
	,	_ Water main co	onstruction		
		Gas main con	struction		
		Electrical Insta	allation		
		_ Civil Contracti	ng		
		Mechanical co	ontracting		
		Paving			
		Site work and	landscape		
9.	Contracts:				
	Annual Dollar Volume of Pa	ast Four Years			
	\$	20	; \$	20	
	\$	20	; \$	20	
10	.Largest Water Project in Pa	ast Three Years:			
	\$				
11	.Bank Reference:				
	Street Address:				
		State:		Zip:	

12	.Contact Person:			Telephone: ()	_
	Line of Credit: _		8	Secured: Yes	No
13	.How many years	s has your or	ganization installe	ed underground wa	ater distribution
	for municipalities	s of public util	lities?		
14	.List the water sy	stems installe	ed by your organi	zation in the last fo	our years.
	of main	Start Date Month/Year	Completion Date <u>Month/Year</u>	Agency)	Phone # of Eng. Or Owner
15	.What is the cons	struction expe	erience of the prin	cipal individuals o	f your
	organization? (In	nclude superi	ntendents and for	remen.)	
	<u>Name</u>	<u>Title</u>	Years of Experience	Magnitude and Type of work	<u>Position</u>

Have you eve	er failed to complete any w	vork awarded to yo	ou?
f so, state wh	ere and why		
			
What equipm	ent do vou own that is ava	ailable for use on t	he installation of wa
	ent do you own that is ava	ailable for use on t	he installation of wa
mains?	Description, Size,		
		ailable for use on t	he installation of wa
mains?	Description, Size,		

18. Location of Equipment and Storage \	Yard:	
Street Address:		
City: State	:	Zip:
19.Are you now a plaintiff or defendant i	n any	
a) Civil litigation? Yes	No	
b) Criminal litigation? Yes	No	_
If yes, furnish details on a separa	te sheet.	

- 20. Please furnish a copy of your most recent financial statement.
- 21. Prospective contractors are advised that they will be required to furnish a signed warranty statement to Veolia Water covering any water system on when they are accepted as the installer, which warranty statement will provide the following terms and conditions:

The Contractor warrants that the completed water system is free of any defect of equipment, material or workmanship performed by the Contractor or any of his

subcontractors or suppliers at any tier. Such warranty shall continue for a period of two years from the date of completion and approval of the Work or within such longer period of time as may be prescribed by law. Under this warranty, the Contractor, under Company supervision, shall remedy at his own expense any such failure to conform or any such defect upon receipt of written notice from the Company within a reasonable time after the discovery of any failure, defect or damage. In addition, the Contractor shall remedy at his own expense any damage to Company-owned or controlled real or personal property, when that damage is the result of the Contractor's failure to conform to the contract requirements or any such defect of equipment, material or workmanship. The Contractor shall also restore any work damaged in fulfilling the terms of this paragraph. The Contractor's warranty with respect to work repaired or replaced hereunder will run for the initial two-year warranty period or until one year from the date of such repair or replacement, whichever is longer. Should the Contractor fail to remedy any failure, defect, or damage described above within a reasonable time after receipt of notice thereof, the Company shall have the right to replace, repair or otherwise remedy such failure, defect or damage at the Contractor's expense.

Signed:	 	 	
Title:			
Date:			

P.S.C. No. 2 – Water VEOLIA Water New York Inc. Initial Effective Date: August 1, 2020

al Effective Date: August 1, 2020

Superseding Revision:

FOURTH: To provide all easements and rights of way, which the Company

FOURTH: To provide all easements and rights of way, which the Company considers necessary either from the Applicant or from third persons, as the case may be, to assure the legal feasibility of the extension, without cost to the Company.

FIFTH: To abide by all the rules and regulations of the Company and the rules and regulations set forth in the Company's Schedule for Water Service (P.S.C. No. 1 - Water), duly filed with the Public Service Commission of the State of New York, as may be amended from time-to-time.

SIXTH: The title to the mains, fire hydrants and service connections furnished and installed by the Applicant shall be and remain the sole property of the Company and the extension shall be and remain a part of the distribution system of the Company for all purposes. The Applicant shall provide the Company with appropriate documentation conveying ownership. Should further or additional longitudinal or lateral extensions be made from any point on this extension, the Applicant shall not by reason thereof, be entitled to any credits or refund therefrom

SEVENTH: To indemnify and hold the Company harmless from and against any and all direct or indirect loss or expense, including without limitations any attorneys' fees or costs, relating to any damage or injury, including death, to any property or any person arising from, or occurring in connection with, its performance of any work contemplated by this Agreement, irrespective of whether any such damage or injury is caused by or results from the negligence of Applicant or any officer, agent, employee or contractor of the Applicant or arising from or occurring in connection with any breach of this Agreement by the Applicant.

EIGHTH: The Applicant agrees to provide, at its own expense, the following insurance coverages:

<u>Types</u>
Worker's Compensation
Employer's Liability
Automobile Liability Insurance
Bodily Injury

Commercial General

Liability Insurance (including broad form contractual liability Insurance, completed operations Insurance, explosion, collapse and Underground (X,C & U) and insurance for bodily injury and property damage)

Minimum Amounts
Statutory
\$100,000
\$500,000 per person
\$500,000 per accident

\$ 1,000,000 ea. Occurrence /\$2,000,000 Aggregate

Leaf No. 71

Revision: 0

P.S.C. No. 2 – Water VEOLIA Water New York Inc.

Leaf No. 72 Revision: 0 Initial Effective Date: August 1, 2020 Superseding Revision:

Certificates of Insurance shall name the Company as an additional insured and shall be furnished to the Company prior to the commencement of work.

NINTH: The Applicant's contractor shall warrant that work performed in installing the main and appurtenances is free of any defect of equipment, material or workmanship. Such warranty shall continue for a period of two years from completion and approval of the extension or within such longer period of time as may be prescribed by law. Under this warranty, the Applicant's contractor, under Company supervision, shall remedy at his own expense any such failure to conform or any such defect upon receipt of written notice from the Company within a reasonable time after the discovery of any failure, defect or damage. In addition, during the aforesaid warranty period, the Applicant's contractor shall remedy at his own expense, under Company supervision, any damage to Company-owned or controlled real or personal property, when that damage is the result of any such defect of equipment, material or workmanship installed by the Applicant. The warranty with respect to work repaired or replaced hereunder will run for the greater of one year from the date of such repair or replacement or the remainder of the original two year period. During the warranty period as defined herein, the Applicant's contractor shall reimburse the Company for the costs of any emergency repairs undertaken by the Company to maintain the system in good working order.

ARTICLE THREE

BOTH PARTIES AGREE THAT:

FIRST: As soon as the actual cost of the main extension, including the cost of the service connections and fire hydrants is known, the Applicant shall notify the Company and provide the cost documentation required by the Company. verification by the Company of the total cost of the installation, the Applicant shall advance to the Company an amount equal to the Federal Income taxes on the total value of the installation, including the cost of fire hydrants, service connections and the Company fees for inspection, testing and disinfection. The Company shall not accept the Applicant installation into service until said tax payments are made. The actual cost of the extension, once known, will be filed with and appended to this document.

SECOND: (a) Except as provided in subparagraph (b) below, no refund of the cost of the installation shall be made to the Applicant before the expiration of one year from the date of the completion and approval of the extension.

P.S.C. No. 2 – Water VEOLIA Water New York Inc. Initial Effective Date: August 1, 2020

At the expiration of one year from the date of completion of the extension aforesaid and annually thereafter, the Applicant shall be entitled to a refund of

the cost of the extension, without interest, proportionate to the number of Customers connected to the extension that year multiplied by seventy-five (75) feet and then divided by the total extension length. The refund shall include a proportionate amount of the taxes advanced to the Company pursuant to Paragraph FIRST hereof.

Leaf No. 73

Revision: 0

(b) The cost of installing the fire hydrants shall be refunded to the Applicant at such time as the hydrants become usable and revenue is collected through hydrant charges.

THIRD: The right to any refunds, partial or total, except such refunds as shall have already accrued pursuant to Paragraph Second (b) hereof, shall expire five years from the date of the completion and approval of the extension. The total amount of all refunds, as hereinabove set forth, shall in no case exceed the Company's original cost estimate for the Applicant performed extension together with associated taxes, or in the event the actual cost is less than the Applicant's estimate, then the refund shall not exceed the actual cost of the extension together with associated taxes.

FOURTH: No interest will be paid on the refund, except that if refunds are not made within sixty (60) days of the date refunds begin to accrue in accordance with Paragraph SECOND of Article THREE, the refund shall begin to accumulate interest beginning on the sixty-first (61st) day at the greater of the unadjusted customer deposit rate or the applicable late payment charge. Such interest obligation shall cease when a reasonable effort has been made by the Company to tender the refund.

FIFTH: The above considerations shall be in addition to and independent of any charges against the Applicant individually as a Customer of the Company, for service or water for which the said Applicant may be charged at the regular rates of the Company.

SIXTH: Should the Applicant for any reason fail to commence installation within ninety (90) days of this Agreement, the Company shall have the right to terminate this Agreement.

VEOLIA WATER

162 Old Mill Road West Nyack, New York 10994 (845) 620-3334



APPROVED LIST OF CONTRACTORS – 5 YEAR RETENTION

Should your preferred contractor not be listed on this document, please contact the New Business Department @ 845-620-3334 for a Contractor Pre-Qualification Questionnaire form which must be approved by Veolia Water New York Division.

Scott Perri Landscaping Inc.

136 Felter Hill Road Washingtonville, NY 10956 Ph: 845-494-1210 Contact: Scott Perri

Deligny Brothers Excavating, LLC

PO Box 110 Bloomingburg, NY 12721 Ph: 845-590-9990 Contact: John Deligny

Eastern Seaboard Pipeline Inc.

560 Princeton Avenue Brick, New Jersey 08724 Ph: 201-615-1417 Contact: Mike Truebeck

Environmental Construction, Inc.

PO Box 563 Stony Point, NY 10980 Ph: 845-429-0497 Contact: Bruce Smith

W. Harris & Sons, Inc.

37 W. Washington Ave. Pearl River, NY 10965 Ph: 845-735-3428 Contact: Bill Harris

Innovative Excavating, LD

15 Conklin Drive Stony Point, NY 10980 Ph: 845-429-1859 Contact: Jeffrey Conklin

Raines & Nagler Contracting Svcs, LLC

32 Elkay Drive, Suite A Chester, NY 10918 Ph: 845-469-1966

Contact: David Nagler, David Rains

Victor P. Zugibe, Inc.

66 West Railroad Avenue Garnerville, NY 10923 Ph: 845-947-2255 Contact: Victor Zugibe

A.B.P. Contracting Corp.

PO Box 545 Washingtonville, NY 10992 Ph: 845-395-0202 Contact: Arthur Parker Robert Parker

J. Fletcher Creamer & Sons, Inc.

101 East Broadway Hackensack, NJ 07601 Contact: Rick DeNicola



FLOW TEST REQUEST

Date	_		
		APPLICANT	
Applicant's Name			
Applicant's Address			
Applicant's Phone Number			
Applicant's Fax Number			
Applicant's Email			
	FLOW T	EST INFORMATION	
Street Address of Hydrant			
Nearest Cross Street			
Hamlet or Village		Town	
Hydrant Tag #		(1" Silver Tag Belo	ow Top of Hydrant)
Reason For Request:			
	Арр	olicant Signature	
Please mail the completed form a	nd the required fee in the form of a	check payable to VEO	LIA in the amount of \$195.00 to:
VEOLIA Water New	York Inc.	VEOLIA Water Westc	hester Inc.
162 Old Mill Ro		2525 Palmer A	
West Nyack, NY : Attn: Planning Sp		New Rochelle, NY Attn: Planning Sp	
Attii. Fiailiilig Sp	Columbi	Attil. Flammig 5p	Columbi
Conditions of Flow Test			
	until the completed form and reque he order in which the requests are		
	ne order in which the requests are March 15 through December 1 (wea		-
- Flow Tests results take 6 to 8 we	•	•	·
- Rockland county inquiries, pleas	se contact - Maria Martinez - (845)	620-6219	
* Flow test results represent pressure	e and flow conditions in the water ma	in at the specified locati	on at the time of the flow test. Please note that
•	•	•	cur in the main due to normal changes in daily
	e note that Veolia Water makes no gud nal problems with fire sprinkler system:		
snan not be nera habie for operation			ormation.
		A NEW YORK USE ONLY	
Date Cor	mpleted Form Received		
	Date Check Received		-
	Check No.		-
,	Work Order (Flow Test)		_



CENTER FOR ENVIRONMENTAL HEALTH

Dr. Robert L. Yeager Health Center 50 Sanatorium Road, Building D Pomona, New York 10970 Phone: (845) 364-2608 Fax: (845) 364-2025



EDWIN J. DAYCounty Executive

PATRICIA S. RUPPERT, DO, MPH, CPE, DABFM, FAAFP

Commissioner of Health

SAMUEL RULLI, PEDirector, Environmental Health

COUNTY PLANNING INFORMATION CERTIFICATION

Pursuant to Rockland County Executive Order No. 1 of 2017 applicants for County approvals for property development reviewed by the County's Commissioner of Planning, must make certain information and documents available to the County before the County will give its approval.

accompanies the A. □ B. □	, D or E. If B, C, D or E is selected, please ensure the proper documentation ne Certification. The matter was NOT required to be the subject of review by the Rockland County Commissioner of Planning.
В. 🗆	
	The Rockland County Commissioner of Planning 'APPROVED' the proposal a copy of the Commissioner's report is attached to this Certification
	The Rockland County Commissioner of Planning 'MODIFIED' or 'DISAPPROVED' the proposal and the Commissioner's report was NOT OVERRIDDEN by the local board a. a copy of the Commissioner of Planning's report is attached to this Certification b. a copy of the minutes of the local board adopting the Commissioner's report or failing to override the Commissioner's report are attached
	The Rockland County Commissioner of Planning 'MODIFIED' or 'DISAPPROVED' the proposal and the Commissioner's report was OVERRIDDEN by the local board a. a copy of the Commissioner of Planning's report is attached to this Certification b. a certified copy of the minutes of the local board overriding the report of the County Commissioner of Planning, in whole or in part, are attached c. a certified written copy of the local board's reasons for the override, as required by GML § 239-m and/or 239-n are attached to this certification.
	I request that the requirement of this Certification be waived because: a. The issues raised by the Commissioner of Planning are not relevant to the application sought. I have provided a copy of the Commissioner of Planning's review with this request; or b. Other
	[Dept use only:granted;denied]
information stat Name of Appli	the penalties for perjury, that I have reviewed this Certification, and that the ted is true, correct and complete. icant: corporation please state the full corporate name)
	pplicant: Date: Date:

Please see the below PWS ID numbers for each water district. This must be included on the DOH-348 form.

Westchester

RD 1: PWS ID: NY5903444

RD 2: PWS ID: NY5903456

New York

PWS ID: NY4303673

Heritage Hills

PWS ID: NY5917221

Archer

PWS ID: NY3905695

Chateau

PWS ID: NY3905685

Geymer (Forest Park Homes)

PWS ID: NY3905686

London Bridge

PWS ID: NY3903647

Mahopac

PWS ID: NY3905707

VEOLIA WATER

2525 Palmer Avenue New Rochelle, New York 10801 Tel (914) 637-5334 Fax (914) 637-5333



APPROVED LIST OF CONTRACTORS – 5 YEAR RETENTION

Should your preferred contractor not appear on this list, please contact the New Business Department @ 845-620-3334 for a Contractor Pre-Qualification Questionnaire form which must be approved by Suez Water.

Calmart Construction Corp.

413 Burts Road Congers, NY 10920 Ph: 845-638-1330

Contact: Marty Wortendyke

Joken Development Corp.

9 Belway Place White Plains, NY 10601 Contact: Ken Lepino

J. Fletcher Creamer & Sons, Inc.

101 East Broadway Hackensack, NJ 07601 Contact: Rick DeNicola

Ben Ciccone. Inc.

151 Daley Road Pouchkeepsi, NY 12603 Contact: Timothy Rabbit, P.E.

Sentrale Contracting Corp.

206 Ferris Avenue White Plains, NY 10603 Copntact: Joe Cerniglia, President

Olivieri Construction Corp.

44 N. Saw Mill River Rd. Elmsford, NY 10523 Contact: Rober Olivieri, President

Montesano Bros. Inc.

76 Plain Avenue New Rochelle, NY 10801 Contact: Dominick Montesano

Northbrook Contracting Corp.

7 Corporate Drive Peekskill, NY 10566 Contact: Joseph P, Guarcello, Jr. Vice President Etre Associates. Ltd. 567 Fifth Avenue New Rochelle, NY 10801 Contact: Nick Schurick

Halmar Construction

160 West Lincoln Avenue Mt. Vernon, NY 10550 Contact: Michael Mallagiero, President

Eastern Excavation Inc.

59 Nepperhan Avenue Elmsford, NY 10523 Contact: Michael J. Gallagher

SAMPLE LETTER OF AUTHORIZATION

Westchester County Department Of Health Bureau of Environmental Quality 145 Huguenot Street, 7111 Floor New Rochelle, New York I 080 I

Dear Sir or Madam:
hereby authorize the installation of (a) Backflow Prevention Device(s) on my property ocated at
as designated by
Signed
ocated atas designated by

Notary (sign & seal)

CERTIFICATE OF RESOLUTION FOR AUTHORIZATION

The undersigned,	of
Name of Corporation	orporation
Duly organized and validly existing under the laws of (State)	
Hereby certifies that the following resolution was duly adopted by the Board Corporation at a meeting duly called and held on the day of	
Be it resolved that the Board of Directors, or President, if there is no Board of Corporation	•
With Offices at:	
Hereby authorized (Name if person authorized):	
To execute and deliver to the Westchester County Department of Health, for Corporation, and application for a permit to operate (type of operation):	
To execute and deliver any and all additional documents which may be approximately connection therewith.	opriate or desirable in
The undersigned further certifies that said resolution has not been revoked, reand remains in full force and effect on the date hereof.	escinded or modified
In WITNESS WHEREOF, the undersigned has duly executed this certifica of, 20	te on this day
OFFICER'S SIGNATURE:	Affix Corporate Seal
TITLE:	
ACKNOWLEDGEMENT	
STATE OF)	
COUNTY OF	
On this day of, 20, before me personally came known to me to be the of the	
Certificate of Resolution, who being by duly sworn did depose and say that (s)he is corporation and that (s)he signed his/her name hereto.	
	Notary Public
	

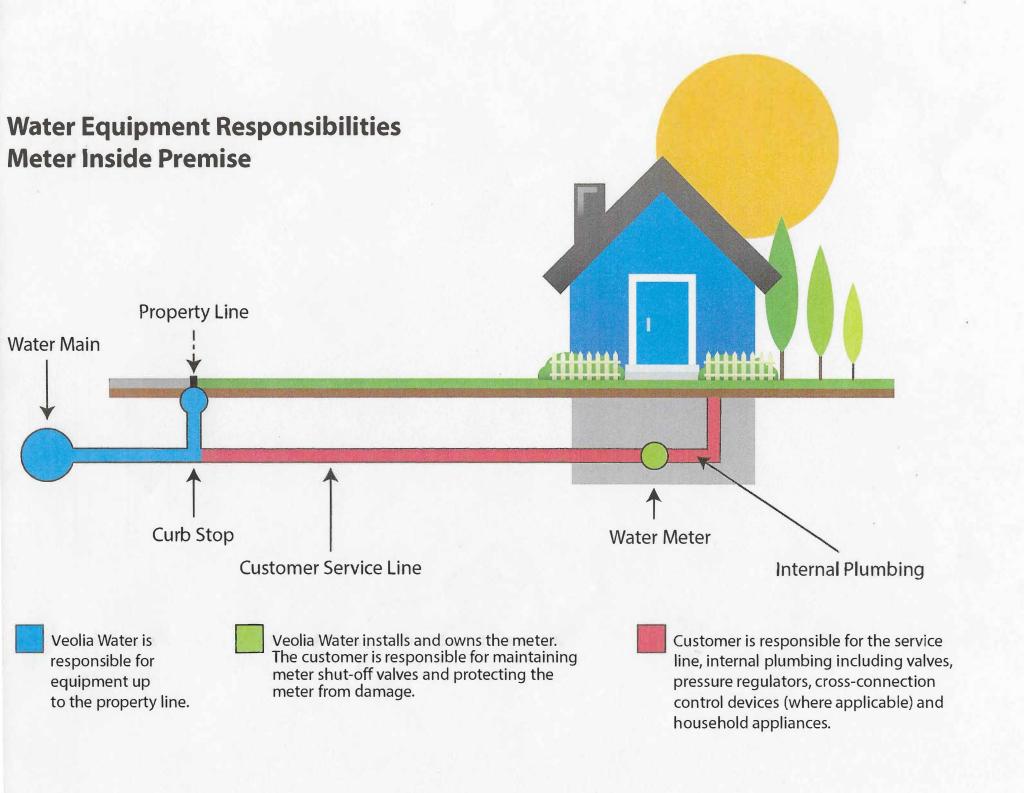
County

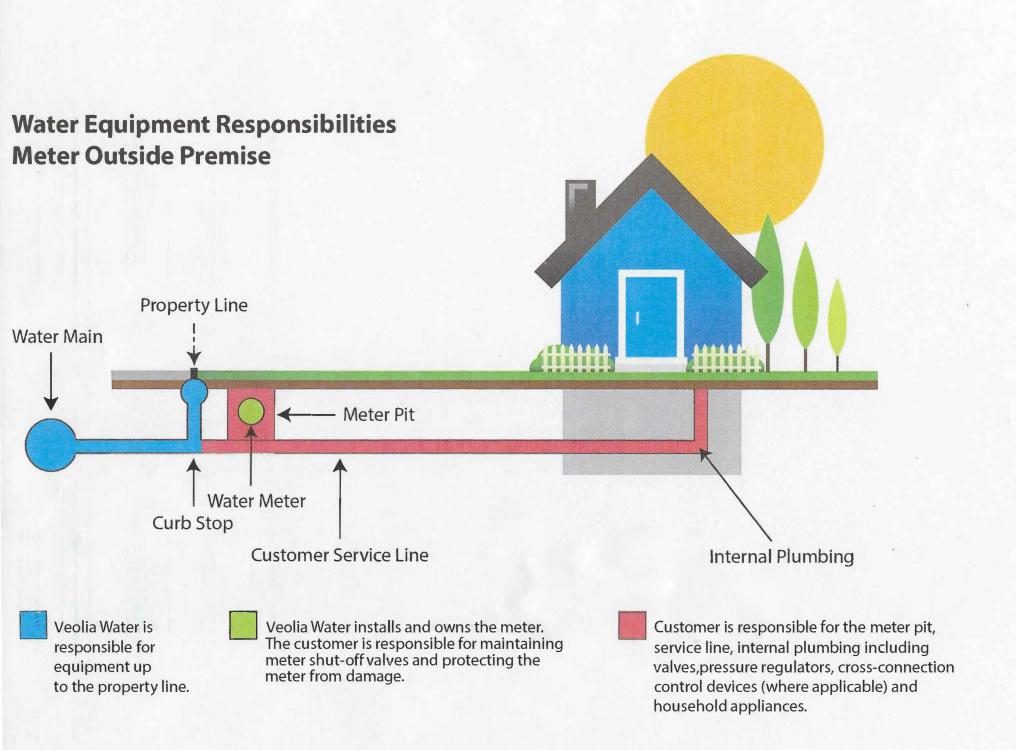
Meter Installation Drawings

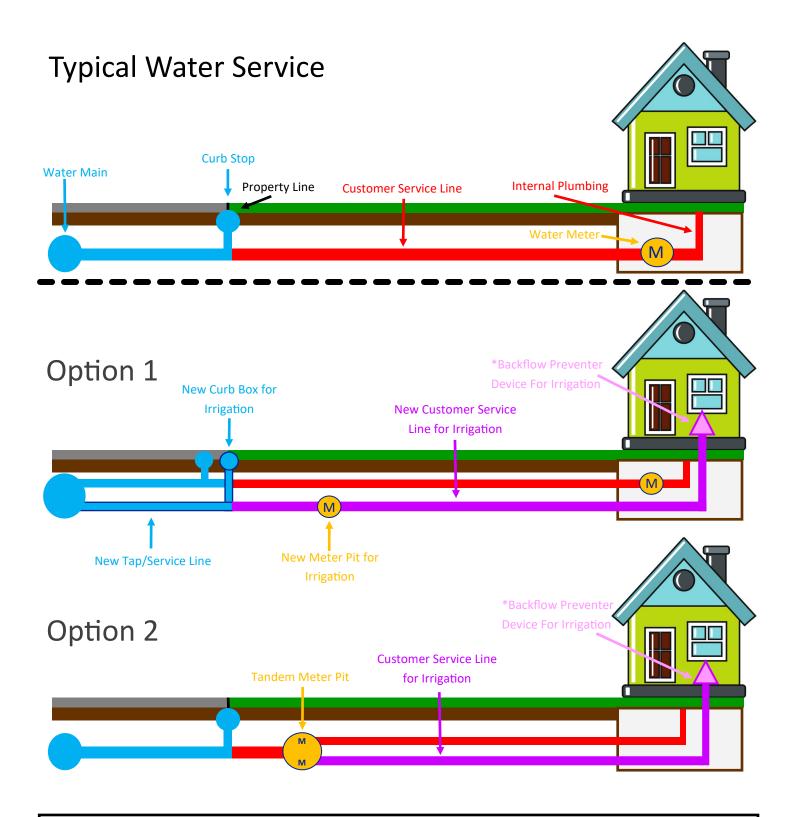


WATER METER SIZING

METER SIZE	METER LENGTH	METER TYPE	MAX GPM
5/8" AND 5/8X3/4"	7 1/2"	COUPLING	20
3/4"	9"	COUPLING	30
1"	10 3/4"	COUPLING	50
1 1/2"	13"	OVAL FLANGE	100
2"	17"	OVAL FLANGE	160
2" COMPOUND - COMBINED SERVICE WESTCHESTER COUNTY AND PUTNAM COUNTY ONLY	15 1/4"	OVAL FLANGE	160
3" COMPOUND	24"	ROUND FLANGE	450
4" COMPOUND	29"	ROUND FLANGE	1000
6" COMPOUND	36 1/2"	ROUND FLANGE	2000
8"	INFORM	ATION AVALIVABLE UPON REQ	UEST







*Backflow Preventer must be designed by an engineer/architect and submitted to Suez and Westchester County Department of Health for approval All work on the customers property is the customers responsibility



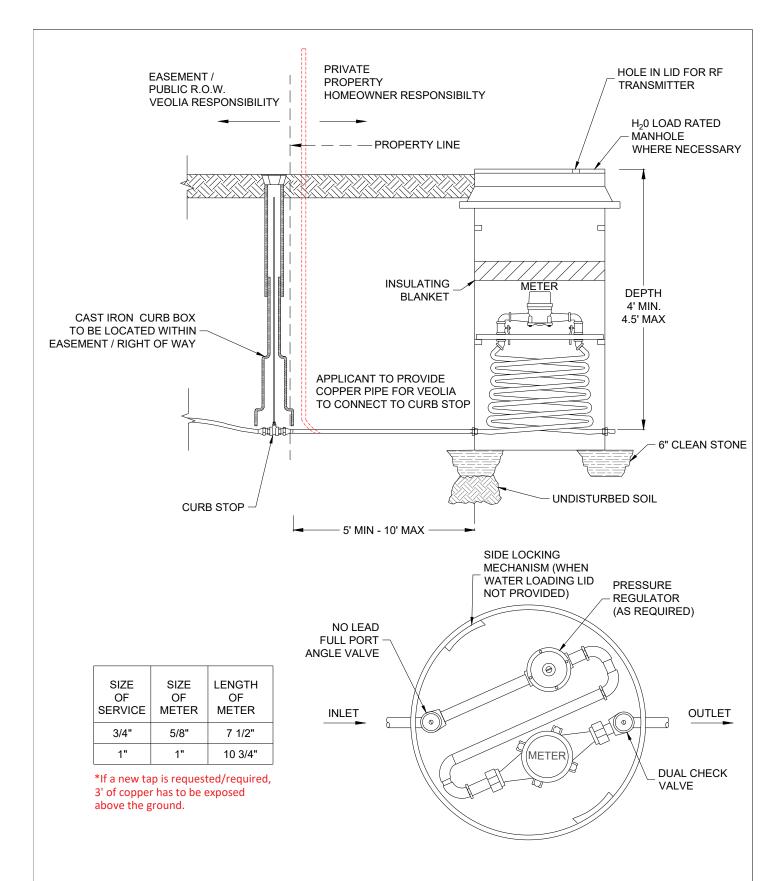
Veolia Water New York Division 162 Old Mill Rod West Nyack, NY 10994 Adding an irrigation water meter and service line to an existing residence. (Westchester Only)

Drafted By: SMC

Approved By: VWNY New Business

DWG: 5.00 D

Date: November 2022

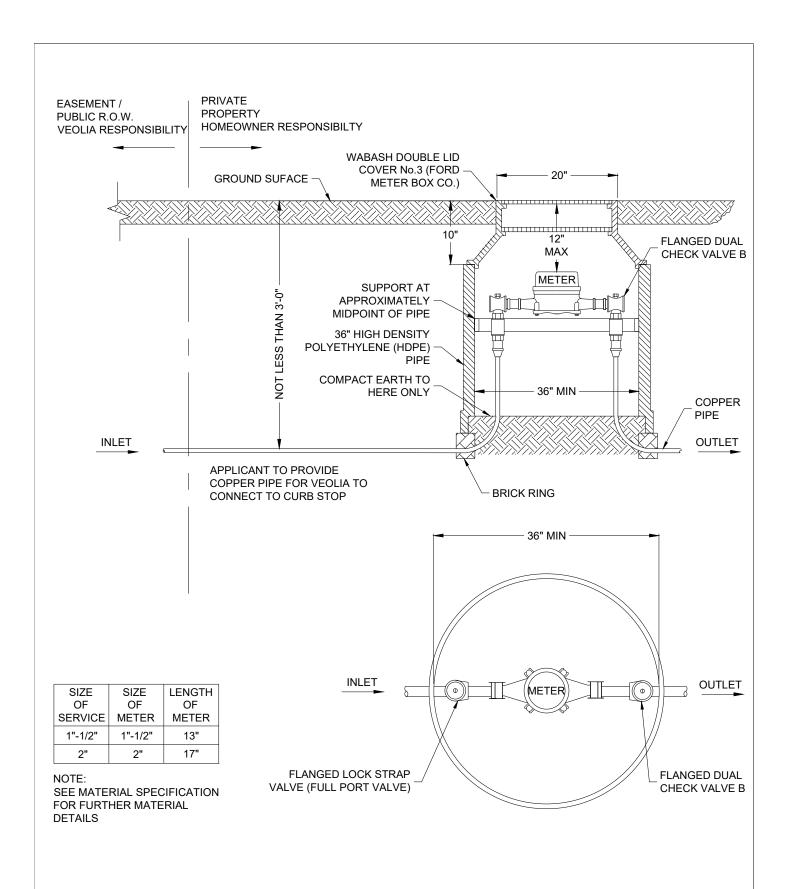




VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334

3/4" TO 1" DOMESTIC SERVICE - METER PIT

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB	DWG 5.01	
SCALE: NTS	DATE: 11/1/2022	



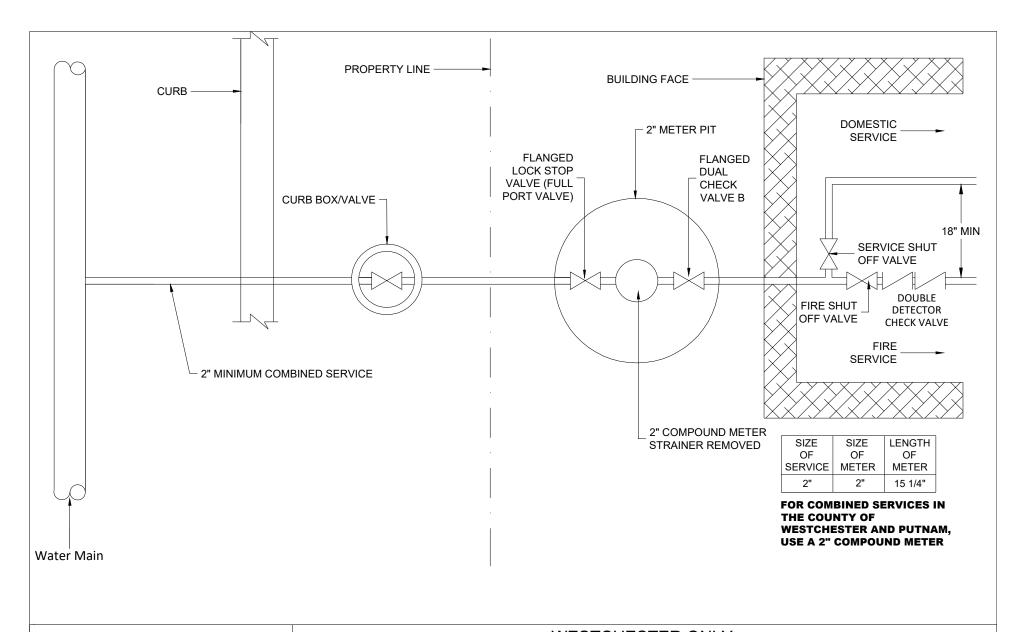


1-1/2" TO 2" DOMESTIC SERVICE - METER PIT COUNTY OF WESTCHESTER AND PUTNAM ONLY

 DRAFTED BY : MS
 DWG 5.02A

 APPROVED BY: VWNY DIV. NB
 DATE: 11/1/2022

VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334

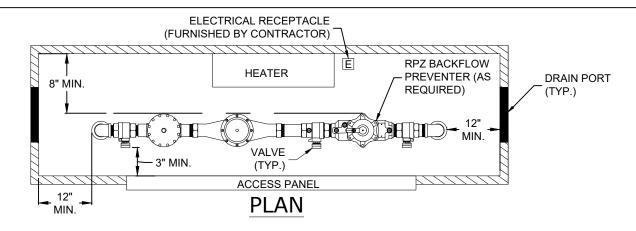




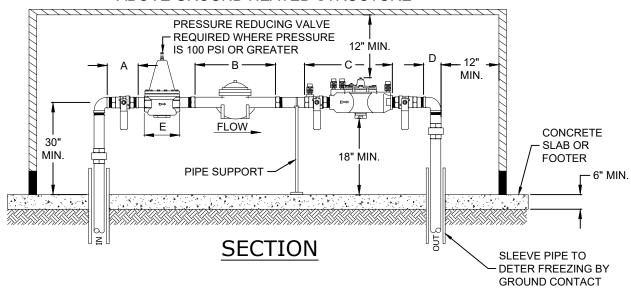
162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334

WESTCHESTER ONLY SMALL DIAMETER COMBINED FIRE AND DOMESTIC SERVICE

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB	DWG: 5.02B	
SCALE: NTS	DATE: 11/1/2022	



ABOVE GROUND HEATED STRUCTURE



NOTE:

- ALL METERING ELEMENTS AND APPURTENANCES SHALL BE INSTALLED HORIZONTALLY.
- THE REQUIREMENTS FOR THE INSTALLATION OF BACKFLOW PREVENTER SHALL BE DETERMINED BY VWNY AND DEPARTMENT OF HEALTH.
- 3. IF A BACKFLOW IS REQUIRED, THE DISTANCE FROM THE FLOOR TO THE RELIEF PORT SHALL BE A MINIMUM OF 18" OR 30" MINIMUM FROM THE FLOOR TO THE PIPE CENTERLINE. ADEQUATE DRAINAGE MUST BE PROVIDED. FREEZE PROTECTION ENCLOSURES SHALL HAVE REMOVABLE ACCESS PANELS THAT ALLOW ADEQUATE SPACE TO PERFORM MAINTENANCE DUTIES ON ALL COMPONENTS WITHOUT COMPLETELY ENTERING THE ENCLOSURE.
- THE ENCLOSURE SHALL BE ANCHORED TO A CONCRETE PAD OR FOOTER TO SECURE ITS LOCATION AND IMPEDE THEFT AND VANDALISM.
- 5. THE JOINT FIRE CHIEFS HAS REQUESTED A POWER INDICATING LIGHT BE INSTALLED ON THE OUTSIDE OF THE HOT BOX.
- CENTERLINE HEIGHT OF VWNY WATER METER TO BE 12" MIN 66" MAX.
- 7. WATER METER TO BE FURNISHED AND OWNED BY VWNY.

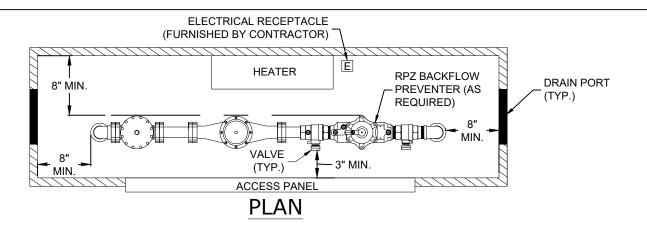
APPROXIMATE DIMENSIONS					
ITEM	VALVE	METER	RPZ	90 BEND	PRV
METER SIZE	Α	В	С	D	Е
5/8" X 3/4"	2 13/16"	7 1/2"	12 1/2"	1 5/16"	4 3/4"
1"	3 7/16"	10 3/4"	12 3/4"	1 1/2"	5 1/2"
1.5"	2 1/2"	13 1/4"	16 3/4"	2"	8 1/2"
2"	4 1/2"	17"	17"	2"	9 1/2"



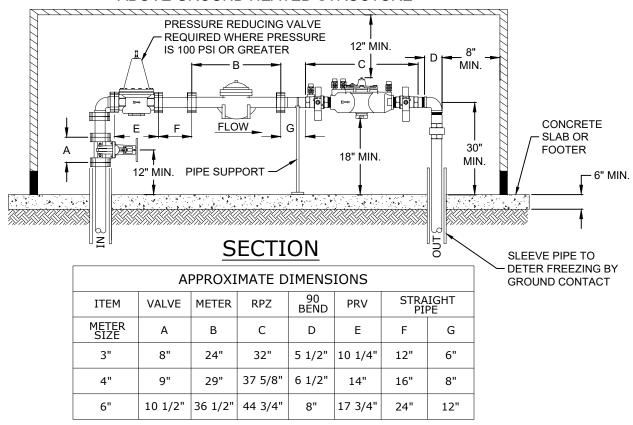
3/4" TO 2" DOMESTIC SERVICE WITH BACKFLOW ABOVE GROUND HEATED STRUCTURE

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB	DWG 5.03A	
SCALE: NTS	DATE: 11/1/2022	

VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334



ABOVE GROUND HEATED STRUCTURE



NOTE:

- 1. ALL METERING ELEMENTS AND APPURTENANCES SHALL BE INSTALLED HORIZONTALLY.
- THE REQUIREMENTS FOR THE INSTALLATION OF BACKFLOW PREVENTER SHALL BE DETERMINED BY VWNY AND DEPARTMENT OF HEALTH.
- 3. IF A BACKFLOW IS REQUIRED, THE DISTANCE FROM THE FLOOR TO THE RELIEF PORT SHALL BE A MINIMUM OF 18" OR 30" MINIMUM FROM THE FLOOR TO THE PIPE CENTERLINE. ADEQUATE DRAINAGE MUST BE PROVIDED. FREEZE PROTECTION ENCLOSURES SHALL HAVE REMOVABLE ACCESS PANELS THAT ALLOW ADEQUATE SPACE TO PERFORM MAINTENANCE DUTIES ON ALL COMPONENTS WITHOUT COMPLETELY ENTERING THE ENCLOSURE.
- THE ENCLOSURE SHALL BE ANCHORED TO A CONCRETE PAD OR FOOTER TO SECURE ITS LOCATION AND IMPEDE THEFT AND VANDALISM.
- 5. THE JOINT FIRE CHIEFS HAS REQUESTED A POWER INDICATING LIGHT BE INSTALLED ON THE OUTSIDE OF THE HOT BOX.
- 6. CENTERLINE HEIGHT OF VWNY WATER METER TO BE 12" MIN 66" MAX.
- 7. WATER METER TO BE FURNISHED AND OWNED BY VWNY.



3" TO 6" DOMESTIC SERVICE WITH BACKFLOW ABOVE GROUND HEATED STRUCTURE

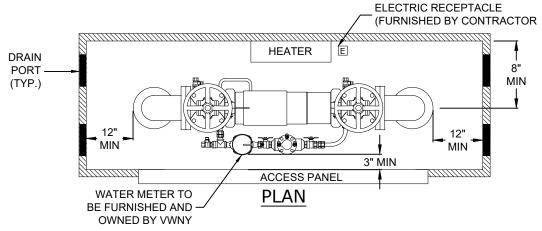
DRAFTED BY : MS
APPROVED BY: VWNY DIV. NB

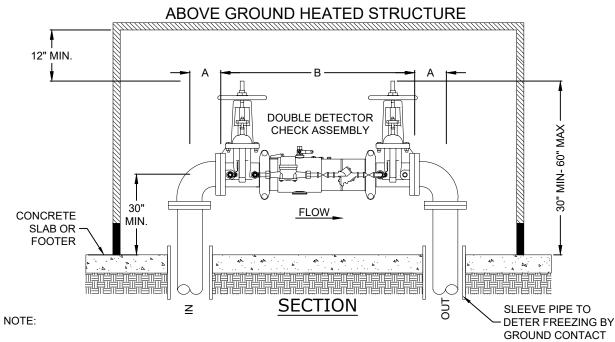
SCALE: NTS

DWG 5.03B

DATE: 11/1/2022

VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334





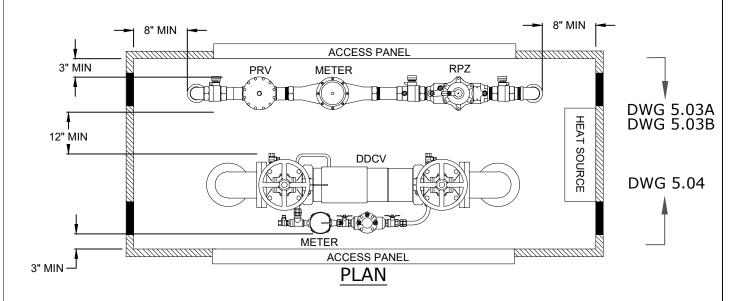
- ALL METERING ELEMENTS AND APPURTENANCES SHALL BE INSTALLED HORIZONTALLY.
- 2. THE 5/8" BYPASS METER SHALL BE FURNISHED AND OWNED BY VWNY. ALL OTHER EQUIPMENT AND APPURTENANCES SHALL BE FURNISHED AND INSTALLED BY THE OWNER.
- 3. THE DISTANCE FROM THE FLOOR TO THE PIPE CENTERLINE SHALL BE A 30" MINIMUM.
- 4. FREEZE PROTECTION ENCLOSURES SHALL HAVE REMOVABLE ACCESS PANELS THAT ALLOW ADEQUATE SPACE TO PERFORM MAINTENANCE DUTIES ON ALL COMPONENTS WITHOUT COMPLETELY ENTERING THE ENCLOSURE.
- THE ENCLOSURE SHALL BE ANCHORED TO A CONCRETE PAD OR FOOTER TO SECURE ITS LOCATION AND IMPEDE THEFT AND VANDALISM.
- THE JOINT FIRE CHIEFS HAS REQUESTED A POWER INDICATING LIGHT BE INSTALLED ON THE OUTSIDE OF THE HOT BOX.

APPROX. DIMENSIONS		DOUBLE DETECTO	R CHECK VALVE
ITEM	90 DEG. BEND	DIAMETER	LENGTH
METER SIZE (IN.)	Α		В
2"	4 1/2"	2"	22 1/2"
3"	5 1/2"	3"	38"
4"	6 1/2"	4"	40"
6"	8"	6"	48 1/2"
8"	9"	8"	52 1/2"
10"	11"	10"	55 1/2"



UP TO 10" FIRE SERVICE ABOVE GROUND HEATED STRUCTURE

VEOLIA WATER NEW YORK 162 OLD MILL ROAD,	DRAFTED BY : MS APPROVED BY: VWNY DIV. NB	DWG 5.04	
WEST NYACK, NY 10994 (845) 620-3334	SCALE: NTS	DATE: 11/1/2022	



NOTE:

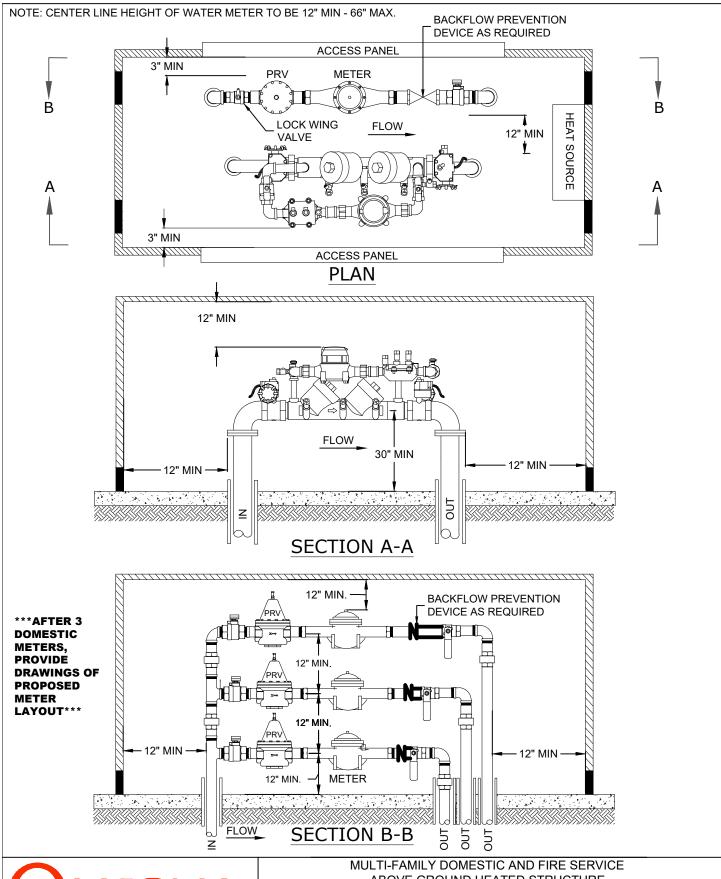
- FOR SECTION DIMENSIONS AND NOTES FOR DOMESTIC SERVICE, SEE DWR 5.03A and DWR 5.03B
- 2. FOR SECTION DIMENSIONS AND NOTES FOR FIRE SERVICE, SEE DWR 5.04
- HEAT AND POWER SOURCE SOURCE SHALL NOT BE LOCATED UNDER PIPING ASSEMBLY

○ VEOLIA

DOMESTIC AND FIRE SERVICE ABOVE GROUND HEATED STRUCTURE

VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334

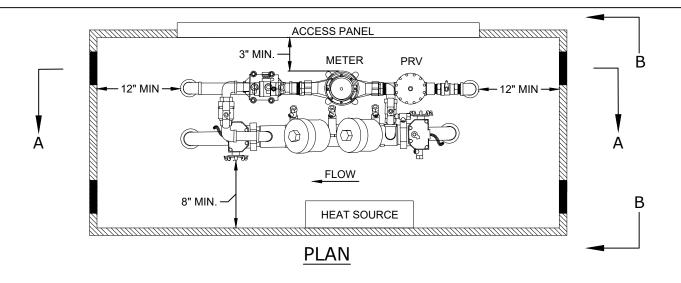
DRAFTED BY : MS APPROVED BY: VWNY DIV. NB	DWG 5.05
SCALE: NTS	DATE: 11/1/2022

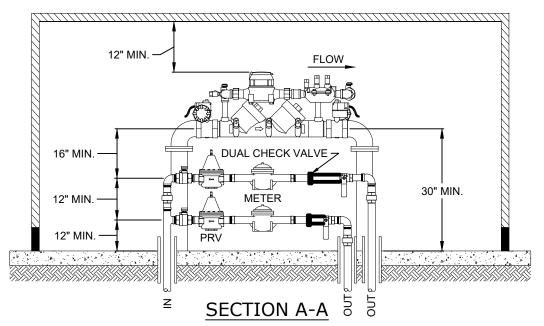


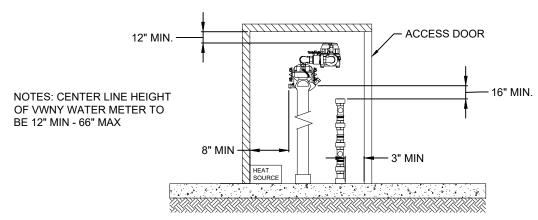


VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334 MULTI-FAMILY DOMESTIC AND FIRE SERVICE ABOVE GROUND HEATED STRUCTURE DUEL ACCESS PANELS COUNTY OF ROCKLAND ONLY

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB	DWG 5.06A
SCALE: NTS	DATE: 11/1/2022







SECTION B-B

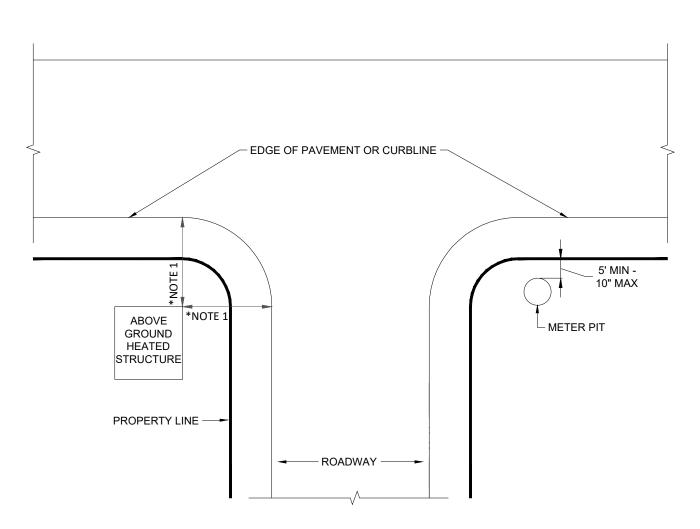


MULTI-FAMILY DOMESTIC AND FIRE SERVICE ABOVE GROUND HEATED STRUCTURE SINGLE ACCESS PANEL COUNTY OF ROCKLAND ONLY

 DRAFTED BY : MS
 DWG 5.06B

 SCALE: NTS
 DATE: 11/1/2022

VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334



NOTE:

- MINIMUM DISTANCE SHALL BE 25' FROM EDGE OF PAVEMENT/CURB OR RESTRICTIONS PRESCRIBED BY LOCAL BULK ZONING REGULATIONS
- 2. DISTANCE SHOWN ARE TO OUTSIDE FACE OF ABOVE GROUND HEATED STRUCTURE

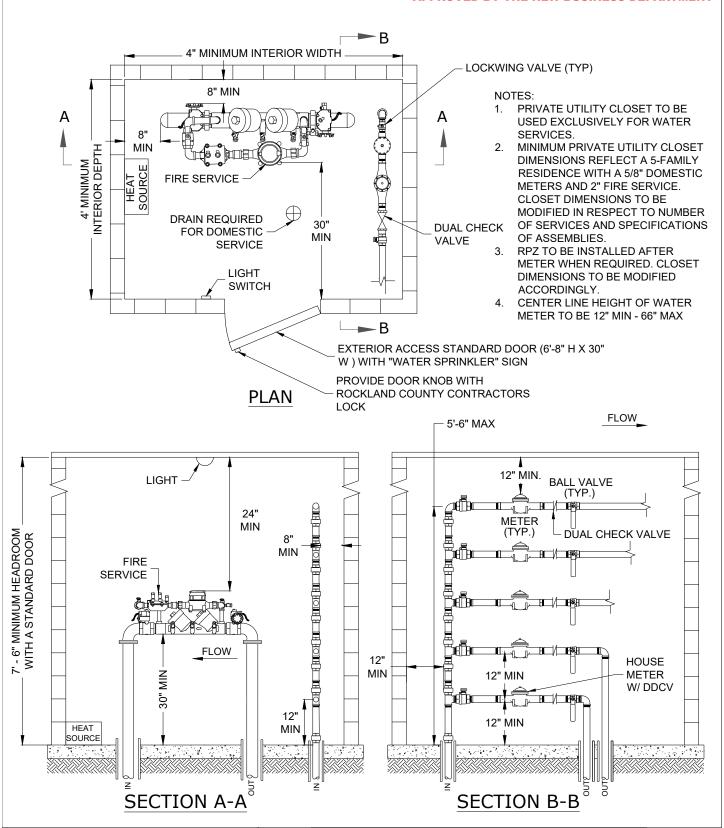


WEST NYACK, NY 10994 (845) 620-3334

ABOVE GROUND HEATED STRUCTURE AND METER PIT LOCATION

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB	DWG 5.07
SCALE: NTS	DATE: 11/1/2022

THE USE OF A METER CLOSET NEEDS TO BE APPROVED BY THE NEW BUSINESS DEPARTMENT

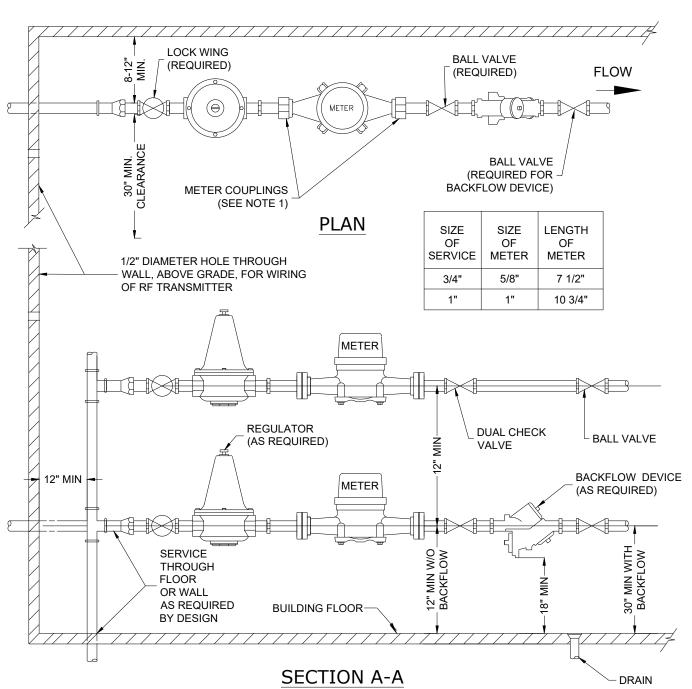




VEOLIA WATER NEW YORK 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334

MULTI-FAMILY DOMESTIC AND FIRE SERVICE PRIVATE UTILITY CLOSET COUNTY OF ROCKLAND ONLY

DRAFTED BY : MS APPROVED BY: VWNY DIV. NB	DWG 5.08
SCALE: NTS	DATE: 11/1/2022



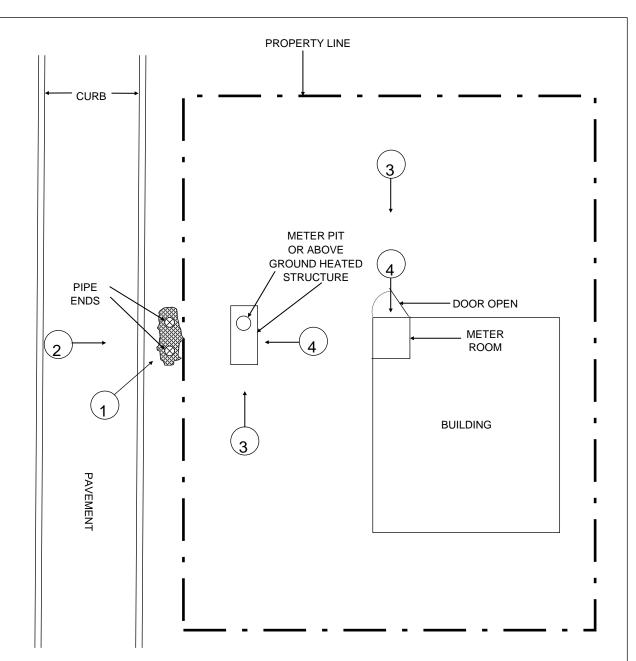
- NOTES:
- THE WATER METER SHALL BE FURNISHED AND OWNED BY THE WATER COMPANY. THE METER COUPLINGS MAY BE PURCHASED FROM THE WATER COMPANY AND PAID FOR BY THE CUSTOMER. ALL OTHER ITEMS SHALL BE SUPPLIED BY THE CUSTOMER.
- 2. THE REQUIREMENTS FOR THE INSTALLATION OF BACKFLOW PREVENTERS SHALL BE DETERMINED BY THE WATER COMPANY AND DEPARTMENT OF HEALTH. ALL COMMERCIAL DOMESTIC ACCOUNTS, PREMISES WITH WELLS OR HIGH HAZARD SHALL REQUIRE RPZ.
- 3. IF A BACKFLOW PREVENTER IS REQUIRED, THE DISTANCE FROM THE FLOOR TO THE RELIEF PORT SHALL BE A MINIMUM OF 18", AND A MINIMUM OF 30" FROM THE FLOOR TO THE PIPE CENTERLINE. ADEQUATE DRAINAGE MUST BE PROVIDED. ALL NON RESIDENTIAL DOMESTIC SERVICES MUST HAVE BACKFLOW RPZ TYPE IF A BACKFLOW PREVENTER IS NOT REQUIRED, THE DISTANCE FROM THE FLOOR TO THE PIPE CENTERLINE SHALL BE 12".
- 4. DUAL CHECK VALVE IS REQUIRED IF SET UP DOES NOT INCLUDE BACKFLOW DEVICE.



TYPICAL LOCKWING DIMENSION COUNTY OF ROCKLAND ONLY

 VEOLIA WATER NEW YORK
 DRAFTED BY : MS APPROVED BY: VWNY DIV. NB
 DWG 5.09

 162 OLD MILL ROAD, WEST NYACK, NY 10994 (845) 620-3334
 SCALE: NTS
 DATE: 11/1/2022



- 1) SHOW COPPER PIPE ENDS IN EXCAVATION, 3' COPPER
- 2 SHOW EDGE OF PROPERTY WHERE VEOLIA SERVICE PIPES CONNECT TO HOME OWNER'S PIPES (MAY BE INDICATED BY BLUE PAINTED STAKES OR COPPER PIPES STICKING OUT OF GROUND)
- 3 SHOW OUTSIDE OF METER PIT/ ABOVE GROUND HEATED STRUCTURE / PRIVATE METER ROOM
- 4 SHOW INSIDE OF METER PIT/ ABOVE GROUND HEATED STRUCTURE / PRIVATE METER ROOM (WITH UNIT LABELS VISIBLE ON PIPES)

NOTE: STAND APPROXIMATELY WHERE CIRCLED NUMBERS ARE SHOWN AND TAKE PHOTOGRAPH IN DIRECTION OF ARROW. EMAIL PHOTOS TO FRANK.MCGLYNN@VEOLIA.COM OR JANET.GONZALEZ@VEOLIA.COM



VEOLIA WATER 162 OLD MILL ROAD WEST NYACK, NY 10994 (845) 623-6215

4 REQUIRED PRE-INSPECTION PHOTOGRAPHS

APPROVED BY: VWNY DIV. NB	DWG 5.10
SCALE: NTS	DATE: 11/01/2022

PHOTO EXAMPLES

PHOTO 1:

Show copper pipe ends in excavation, 3'



PHOTO 3:

Show outside of meter pit/above ground heated structure/private meter room.



PHOTO 2:

Show edge of property where VEOLIA service pipes connect to home to home owners pipes (may be indicated by blue painted stakes or copper pipes sticking out of ground)



PHOTO 4:

Show inside of meter pit/ above ground heated structure/ private meter room (with unit labels visible on pipes)

