

JERSEY CITY MUNICIPAL UTILITIES AUTHORITY



RULES AND REGULATIONS FOR FURNISHING WATER SERVICE

**City of Jersey City
Hudson County
New Jersey**

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ARTICLE I. INTRODUCTION

The Jersey City Municipal Utilities Authority ("JCMUA") operates both the Sewerage and Water Systems of Jersey City. A Board of Commissioners, consisting of five regular appointees and two alternates, governs JCMUA. The Mayor of the City of Jersey City (the "City" or "Jersey City"), with the consent of the City Council, appoints the Commissioners.

SECTION 1.01 HISTORY OF JCMUA

JCMUA is the successor of the Jersey City Sewerage Authority ("JCSA") which was created in 1949. JCSA built two sewage treatment plants for treating wastewater prior to discharging into the rivers. These treatment plants served the residents of Jersey City until 1990, when more stringent rules required the treatment system to be upgraded. With a \$21 million grant from the United States Environmental Protection Agency, JCSA converted its two treatment plants to pumping stations, constructed a transmission line and began pumping wastewater under the Newark Bay to the Passaic Valley Sewerage Commissioners wastewater treatment plant in Newark.

JCSA was reorganized into JCMUA in 1998. JCMUA took over the responsibility of the Jersey City Water System under a franchise agreement with the City. Previously, a department within the City had operated or been responsible for operation of the Water System. The 2005 Amended and Restated Franchise Agreement provides for JCMUA operation of the Water System through December 31, 2027 and mandates that JCMUA adopt its own regulations for operation of the Water System during the term of the franchise. JCMUA has contracted the operation of the Water System to a private entity. The City continues to own the Water System.

SECTION 1.02 MISSION STATEMENT OF JCMUA

JCMUA pledges to operate and maintain its sewerage and the City's water facilities in a fashion that will protect the public health and environment of all its constituents. JCMUA will always strive to accomplish this goal in the most competent, economical and compassionate manner possible.

SECTION 1.03 OFFICE HOURS AND LOCATION

The official office of JCMUA is located at 555 Route 440, Jersey City, New Jersey 07305, and is open for business Monday through Friday from 8:30 a.m. to 4:00 p.m. Regular meetings of JCMUA are ordinarily held the last Thursday of each month at 5:00 p.m. at JCMUA offices. Special meetings can be called by the Chairman. All meetings are conducted in accordance with the provisions of the Open Public Meetings Act, N.J.S.A. 10:4-6 et seq.

SECTION 1.04 APPLICABILITY OF RULES AND REGULATIONS

This document sets forth the rates, procedural rules, standard terms and conditions of service, standard technical specifications and other regulations under which water service will be supplied by JCMUA to its customers. Every person who shall construct, connect to, alter or use any part of the Water System and every consumer of water and owner, occupant or person in possession, charge or control of any building, structure or premises having service there from, shall be governed by and subject to the provisions of the Rules and Regulations for Furnishing of Water Service ("Rules and Regulations") governing the use of water as may from time to time be adopted and approved by JCMUA. It is the duty of JCMUA to enforce the provisions of these Rules and Regulations governing the use of water and also any other applicable rules and regulations.

ARTICLE II. DEFINITIONS

As used in these Rules and Regulations, the words and terms which follow shall be construed as set forth in these definitions:

"Applicant" shall mean the Person applying for a permit, approval or other action by JCMUA including the Owner or an agent of the Owner.

"AWWA" shall mean the American Water Works Association.

"Backflow" shall mean the flow of water or other liquids, mixtures or substances in the Water Mains, Water Services or other facilities of the Water System from any source other than its intended source.

"Back-siphonage" shall mean the backflow of water or other liquids, mixtures or substances into the Water Mains, Water Services or other facilities of the Water System from any source other than its intended source caused by the sudden reduction of pressure in the potable water supply system.

"Backflow Preventer" shall mean any device or means designed to prevent Backflow or Back-siphonage. Specific types include a double check valve assembly and a reduced pressure principle backflow preventer, and the type required will be specified by JCMUA.

"Bulk Water" shall mean water sold to other municipalities, governmental agencies, regulated utilities, or other entities who serve the water supply needs of all customers within a municipality or geographic portion thereof located outside of Jersey City.

"City Department" shall mean the various municipal departments of the City of Jersey City.

"Cross-Connection" shall mean any actual or potential connection between the public water supply and a source of possible contamination or pollution. "Curb Stop" or "Curb Valve" shall mean a valve typically located near the property line on the Water Service Line which can be used to discontinue or allow the flow of water to a property.

"Customer" shall mean the Person contracting for water service to a property.

"DIP" shall mean ductile iron pipe.

"Double Check Valve Assembly" or "Double Check Valve" shall mean an assembly of two (2) independently operating spring-loaded check valves with tightly closing shut off valves on each side of the check valves, plus properly located test cocks for the testing of each check valve.

"Domestic Service" shall mean a Water Service whose flow is not used for fire protection.

"EPA" shall mean the United States Environmental Protection Agency.

"Executive Director" shall mean the representative designated by the Board of Commissioners of JCMUA to act in administrative and operational matters.

"F" shall mean Fahrenheit.

"Fire Service" shall mean a Water Service whose flow is used to provide fire protection.

"Inspector" shall mean an inspector or any authorized representative or agent of JCMUA.

"GPM" shall mean gallons per minute.

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"JCMUA" shall mean The Jersey City Municipal Utilities Authority, a public body formed pursuant to and in accordance with the Municipal Utilities Authorities Law, N.J.S.A. 40:14B-1 et seq.

"NJDEP" shall mean the New Jersey Department of Environmental Protection.

"Operator" shall mean any entity JCMUA contracts with to operate the Water System.

"Owner" shall mean the owner or owners of the freehold of the premises or of a lesser estate therein, a vendee in possession or the lessee or joint lessees of the whole thereof.

"Patent Sleeve and Valve Connection" shall mean all wet connections over and above the two-inch size made to city water mains under pressure and shall consist of a sleeve installed on this main to which a valve (tapping gate, corporation valve) of a given size is attached and to which the service pipe is connected.

"Person" shall mean any individual, association, corporation (municipal or private) or firm acting either directly or through a duly authorized agent.

"Potable Water" shall mean the water supplied by JCMUA from the Water System for purposes of human, commercial and industrial use and consumption.

"Premises" when used in these Rules and Regulations, includes a lot or part of a lot, a building or part of a building or any parcel or tract of land whatever.

"PSI" or "psi" shall mean pounds per square inch.

"Reduced Pressure Principle Backflow Preventer" or "Reduced-Pressure Principle Backflow-Prevention Assembly" or "RPZ" shall mean an assembly consisting of two (2) independently operating approved check valves with an automatically operating differential relief valve located between the two (2) check valves, tightly closing shut-off valves on each side of the check valves plus properly located test cocks for the testing of the check valves and relief valve.

"RPZ" shall mean a Reduced Pressure Principle Backflow Preventer.

"Secondary Water" is defined in Section 9.01.

"Senior Engineer" shall mean the Senior Engineer of JCMUA in charge of the operation and maintenance of the Water System or a designated representative.

"Suez" shall mean Suez Water Jersey City, JCMUA's current Water System operator, or its successor.

"Tap" shall mean the fitting installed by Tapper in a Water Main to connect a Water Service Line.

"Tapper" shall mean the employee of JCMUA or his or her authorized representative whose duty it is to install the tap in the Water Main.

"Water Box" shall mean a housing used for the purpose of access and protecting a Curb Stop.

"Water Main" shall mean the pipes, valves, taps, including corporation cocks, or tapping valve owned by Jersey City, through which potable water from the Jersey City Water System is transported and distributed to any and all Water Services, fire hydrants and fire service sprinkler systems.

"Water Main Extension" shall mean the installation of new Water Mains.

"Water Meter" shall mean the mechanical instrument of a type approved by JCMUA and owned by Jersey City, required to be used on all domestic and all fire service lines for measuring the quantity of water passing a given point.

"Water Service" or "Water Service Pipe" or "Water Service Line" shall mean all pipes, fixtures, Water Meter and associated appurtenances from the Water Main to the whichever of the following is farthest downstream (outlet side) of the Water Meter: a) the downstream Domestic Service Water Meter service valve if a Backflow Preventer is not required, b) the downstream Domestic Service Backflow Preventer if a Backflow Preventer is required, c) the Fire Service RPZ or double detector check Backflow Preventer downstream bypass connection tee if there is a bypass, or d) the Fire Service RPZ or double detector check backflow preventer if there is no bypass. The Water Service includes the service line from the Water Main including the tap and tapping valve, Curb Stop, water service pipe, strainer, Water Meter, test tee, inlet and outlet Water Meter valves, and dual check device or Backflow Preventer. Refer to Figures 1-3 in Appendix II.

"Water Supply Pipe" or "Water Supply Line" shall mean all pipes and fittings located between the Water Meter outlet service valve and the various water consuming appliances, devices and fixtures throughout the Premises or property, which are owned and maintained by the Owner.

"Water System" shall mean all reservoirs, treatment facilities, Water Meters, Water Mains and all other facilities and appurtenances connected with the supply treatment and distribution of potable water owned by Jersey City.

"Wet Connection" shall mean the same as Patent Sleeve and Valve Connection.

ARTICLE III. GENERAL REQUIREMENTS

SECTION 3.01 ACCESS BY JCMUA INSPECTORS

The officers and employees of JCMUA, its Operator or other agents, or anyone authorized to act for it, shall have free entry and access to any new or existing Premises or part thereof, whether completed or in the process of erection, for the purpose of determining whether the provisions of these rules and regulations are complied with. Whenever any Person, in possession, charge or control of any such Premises, into which any such officers, employees, Operator or other agents, or anyone authorized to act for JCMUA desires entry or access, shall refuse to permit such entry or access, or shall do or cause to be done any act or thing for the purpose of preventing such entry or access, JCMUA may turn off the Water Service to said Premises until notice shall have been given to JCMUA in writing by the Person that entry or access will be permitted or provided, and until such entry or access shall have been accomplished. JCMUA shall issue a Failure to Allow Access Fee in accordance with Appendix I, herein.

SECTION 3.02 ACCESS BY CITY DEPARTMENT INSPECTORS

The officers of the City Departments and their officials, employees and agents delegated or authorized with respect to inspection of Water Services, Water Main Extensions, or Water Supply Pipes shall have free entry and access to every part of any existing or new Premises whenever such entry or access is deemed necessary or advisable. Whenever any Person, in possession, charge or control of any such Premises, into which any such officer, employee or agent desires entry or access, shall refuse to permit such entry or access, or shall do or cause to be done any act or thing for the purpose of preventing such entry or access, the City Department may request JCMUA to turn off the Water Service to said Premises until notice shall have been given the City Department in writing that entry or access will be permitted or provided, and until such entry or access shall have been accomplished.

SECTION 3.03 APPLICATION AND ENFORCEMENT OF THESE RULES AND REGULATIONS

Every person who shall construct, enter, alter or use any part of the Water System and every consumer of water and Owner, occupant or person in possession, charge or control of any building, structure or Premises having service there from, shall be governed by and subject to the provisions of these Rules and Regulations and any revisions to these Rules and Regulations as may from time to time be duly adopted and approved by JCMUA. JCMUA will enforce the provisions of these Rules and Regulations. The City shall also have the right to enforce these Rules and Regulations.

SECTION 3.04 OPENING OR CLOSING WATER MAIN VALVES PROHIBITED

No person other than an Operator, employee or authorized agent of JCMUA shall open or close any valves in any Water Mains or transmission mains or aqueduct of the Water System or disrupt or interfere with any valve or valve-box cover thereof.

SECTION 3.05 ABANDONMENT OR DEMOLITION OF PREMISES

No building, structure or Premises shall be abandoned, wrecked, destroyed or demolished without first giving notification to JCMUA Senior Engineer in order that the water service may be cut and capped and the Water Meter read and recovered. Such notification shall be given in writing by the person in charge of the demolition, abandonment, wrecking or destroying of the building or by Owner of the building, structure or premises. Owner shall pay for the cost of cutting and capping the Water Service (see Appendix I.).

SECTION 3.06 RESPONSIBILITY OF OWNER TO REPORT DAMAGED/BROKEN/MISSING WATER METER

Owner shall immediately notify the Operator or JCMUA upon learning of any stoppage or other irregularity of Owner's Water Meter or any leak in Owner's Water Service between the Water

Meter and the Water Main. It shall be the duty of the Owner of any Premises required to be metered for water in which there is no such approved Water Meter to report such fact to the Operator or JCMUA. Where a water meter has been stolen, in order to receive a replacement meter, the Property Owner shall furnish a police report to JCMUA. All meter fees shall be paid before a replacement meter is issued.

SECTION 3.07 NO VACANT PROPERTY REBATE

No rebate shall be allowed for Water Metered vacant Premises. Owners shall be held responsible for all charges accruing for water service, until written notice has been given to the Department to discontinue the supply, the Water Service has been cut and capped, the Water Meter is returned to JCMUA or Operator, and the Owner has paid all amounts owed including the cost of cutting and capping the Water Service.

SECTION 3.08 UNLAWFUL CONSUMPTION

It shall be a violation of these rules and regulations and otherwise unlawful for any Owner to cause or allow water from the Water System to be consumed without any approved Water Meter to register the amount of water consumed. In addition to any fees imposed under these rules and regulations, the Owner shall be rebilled for the estimated amount of unmetered water consumed. Unlawful consumption includes users of the Jersey City sanitary sewer system whose water is partially or totally supplied from sources that are not metered by Water Meters approved by JCMUA.

SECTION 3.09 PRIVATE WATER MAINS AND WATER SERVICES

Privately owned water mains (see Water Main definition) and Water Services must comply with these rules and regulations.

SECTION 3.10 MATERIALS OF CONSTRUCTION

All materials used to construct Water Mains, Water Services, Water Supply Pipes, water storage vessels, or any other facility that comes in contact with or may come in contact with the water from the Water System must a.) be approved by ANSI/NSF Standard 61 b.) conform to the specifications of all applicable AWWA manuals, and c.) conform to these rules and regulations.

SECTION 3.11 SALE OF WATER PROHIBITED

No Customer, purchaser, or user of the water from the Water System may contract, sell or barter the water to another Property, Person, or entity without the express written permission of JCMUA. An Owner may submeter the Property's water supply to tenants of that Property but may not charge each tenant more than the tenant's proportional share of JCMUA's charges to the Owner for the Retail Water Consumption Rate and Fixed Monthly Meter Charge for that Property exclusive of interest and penalties.

SECTION 3.12 ESTIMATION OF CONSUMPTION

Whenever there is reasonable evidence Water Meter readings are inaccurate for any reason, JCMUA may estimate the actual consumption during the period of inaccurate readings. If JCMUA replaces an inaccurate Water Meter with a new or reconditioned Water Meter, the average monthly consumption for the period of estimation shall be based upon the average monthly consumption for twelve months of which at least two months are measured by the new or reconditioned meter and the remaining months by the replaced meter during a period when JCMUA judges the replaced meter to have been reading accurately. If there was a change in use or other mitigating circumstance that prevents using the above procedure, JCMUA shall use any reasonable method for the particular circumstances to estimate the consumption for the period of inaccurate readings.

ARTICLE IV. OBTAINING NEW OR MODIFYING EXISTING SERVICE

SECTION 4.01 AVAILABILITY OF SERVICE

It is the policy and intent of JCMUA to provide Potable Water to Persons owning or occupying properties located in Jersey City and who have received approvals from the relevant Jersey City Department(s), consistent with applicable laws, regulations and practices. In the event that an extension or improvement of the Water Mains or Water System is necessary to provide service to a customer, it shall be the Applicant's obligation to pay for such extension(s) or improvements. From time to time the capacity of the Water System may be limited due to physical limitations, resulting in a prohibition of additional connections until an increase in capacity has been approved and constructed or due to regulatory requirements, promulgated by federal and/or state agencies. At such times, applications for such connections will be postponed until the limitations or restraints have been removed.

The determination of available capacity and the processing and approval of applications for connections shall be within the sole discretion of JCMUA, who shall have the right to reserve a sufficient supply of water at all times in storage to provide for fire and other emergencies and may restrict or regulate the quantity of water used by its customers in case of scarcity or whenever public welfare may require.

SECTION 4.02 PERMITS

No permit for the installation of any Water Service or Water Main Extension or portions thereof shall be granted, or Water Meter issued until a plan of such Water Service or Water Main Extension has been submitted in accordance with all the requirements herein and reviewed and approved by JCMUA. Where a Water Service Pipe has been previously installed from the Water Main and subsequently cut and capped or otherwise turned off and the Water Meter removed, an application for a Water Service must be made to re-establish that Water Service.

SECTION 4.03 FEES AND CHARGES FOR NEW OR CHANGED WATER SERVICES

Applicant must pay the following fees or charges as set forth in Appendix I before obtaining approvals or a Water Meter:

- a) Water Service Application Fee (for Water Services 2-inches and larger).
- b) Water Main Inspection Fee
- c) Deposit for Record Drawings (for Water Services 3-inches and larger). Returned upon submission of record drawings.
- d) Water Connection Fee. An impact fee for the use of the Water System, whose construction was paid for by previous users.
- e) Water Meter Permit Fee. Pays for the Water Meter and strainer.
- f) Water Tap Permit Fee. Pays for the tap.
- g) Cutting and Capping a Water Service. Needed only if an existing Water Service is being abandoned.

SECTION 4.04 OTHER UTILITIES DURING CONSTRUCTION

The attention of the Applicant is directed to the existence of underground utilities. The notification of utility companies is the responsibility of the Applicant and the Applicant shall be solely responsible for any direct or indirect damage to such utilities in the installation of the service line or lateral. The Applicant is instructed to call the "One Call" system at 1-800-272-1000. No Water

Service Line or lateral of JCMUA shall be installed in the same trench with any other utility service unless specifically authorized, in writing, by JCMUA.

SECTION 4.05 STREET OPENING PERMIT

Applicant must obtain a Street Opening Permit from the City Department; Division of Construction Code Official in accordance with the applicable Jersey City ordinance, Chapter 296 (Streets and Sidewalks) Article VII (Excavations).

SECTION 4.06 INSTALLATIONS, SUBMISSION OF RECORD DRAWINGS.

Installation of all Water Services must be done by a Plumber. For Water Services 3-inches and larger, Applicant shall submit record drawings that are in conformance with standards provided in Appendix III. Water meters will not be issued until such time as "As-Builts" of Water Service have been submitted and approved by JCMUA.

SECTION 4.07 SMALL WATER SERVICES

Plans for installation of Water Services for single-family and two-family residences of less than 2-inches, whether for fire service, domestic service or both, must be installed in accordance with the specifications and requirements of these Rules and Regulations. If JCMUA receives a plan for a less than two-inch Water Service to a single-family or two-family residence for review from the Planning/Zoning Department, JCMUA will send a letter to the applicant's architect if water service is not available.

SECTION 4.08 LARGE WATER SERVICES

Application for installation of Water Services of 2-inches or greater, whether for fire service, domestic service or both, and for all Water Services, regardless of their size, for two-family or larger residences must be submitted to JCMUA Bureau of Water Engineers for approval. The plans must contain:

- a) Three (3) sets of plans must be submitted with the application (one for the record, one to the Building Department, one to the Owner). Also, a CD with the drawing in PDF format is to be submitted with the application.
- b) All plans shall be signed and sealed by a licensed professional engineer or registered architect licensed to practice in New Jersey.
- c) Submitted plans shall be standard engineering drawings, size 24-inches x 36-inches.
- d) The plans shall include and clearly show:
 - i. Site plan showing the adjacent streets with water mains and any existing Water Service Pipes to the Premises,
 - ii. Key map showing the general location with Jersey City,
 - iii. The complete Water Service including:
 - A. Location and size of tap into the water main and tapping valve and adjacent gate valve (if the water main is 8-inches or greater),
 - B. Location of curb gate valve,
 - C. Location and size of Water Meter,
 - D. Location of Water Meter isolation gate valves,
 - E. Location of check valve(s) or backflow preventer, as required, near the Water Meter,
 - F. Location of test tee connection, and

G. Any other detail including all fixtures and connections.

iv. Water Supply Pipe schematic showing the location of connections to backflow preventers and check valves, surge tanks, storage tanks, pressure tanks, filters, swimming pools, bathing and display pools, sterilizers, condensers, compressors, reservoirs, boilers or other heating equipment using water, humidifiers, and washers.

v. Plans shall be drawn to a scale of not less than 1/8 inch to the foot; provided, however, that detailed plans shall be drawn to a scale and may be presented in either horizontal or vertical plane or isometric form.

- e) State on the plans the type of occupancy of the facility receiving the Water Service (i.e. hospital, warehouse, apartment building, etc.).
- f) Such plan or plans shall be presented with the application for permit to JCMUA.
- g) All plans shall conform to the specification, rules, and regulations of JCMUA.
- h) The average and peak water demand in GPD shall be provided with the application. If plans are approved, demand for new building or facility will be included on the next Master Permit Application filed by JCMUA to NJDEP on an annual basis. No new demands shall come on-line unless approval from the State is received and confirmed by JCMUA.
- i) JCMUA shall respond in writing to all inquiries about water service availability. These inquiries shall be accompanied with a general location plan for the proposed building, average water demand in GPD, and an anticipated schedule for construction of said building. Following issuance of a Will-Serve letter, JCMUA shall reserve water for a period of one (1) year. After a period of one year, water will continue to be reserved for the proposed building only if site plans are approved by JCMUA and associated fees are paid in full.

SECTION 4.09 NUMBER OF WATER SERVICES ALLOWED

Only one (1) tap, which shall supply both domestic and fire service, is allowed for each facility unless required by applicable codes. Exceptions may be allowed for specific Properties including for high-rise buildings, large industrial facilities, hospitals and other critical care facilities subject to the approval of the Senior Engineer. If one Water Service serves multiple facilities on a Property or multiple Properties and an Owner or tenant renovates one of those facilities or Properties, then the Owner shall install a separate Water Service for that renovated facility or Property and disconnect its water system from the Water Service supplying the multiple Properties/facilities.

When two Water Services are installed to the same facility, they shall be of equal size and both constructed in accordance with the requirements of these Rules and Regulations including Figures 1 and 2. If both services can independently supply both the domestic and the fire service requirements to the entire facility, the requirement for a bypass on the fire line detector check may be waived, subject to the approval of the Senior Engineer. The two services must be connected to two different Water Mains or, if connection to two different mains is not possible, connected to the same main provided the main is valved such that an interruption can be isolated so that water supply will continue without interruption through at least one of the services.

SECTION 4.10 NUMBER OF METERS READ AND BILLED

Owner is allowed one domestic Water Meter, one fire line detector check bypass meter and one irrigation Water Meter for each Water Service. Owner may install check meters on individual branch connections downstream of the Water Meter where there is more than one owner/tenant for a facility; however, only one water bill will be issued for each Water Service.

SECTION 4.11 IRRIGATION WATER METER

Water Meters for measuring irrigation water consumption must be installed downstream of the

domestic Water Meter within close proximity to the domestic Water Meter and, because they are located downstream from the domestic Water Meter, will not be billed by JCMUA.

SECTION 4.12 TAPPING

No tapping shall be done by anyone except by an employee of JCMUA or its authorized agent.

SECTION 4.13 CUT AND CAPPING ABANDONED WATER SERVICES

All Water Service Pipes to be abandoned shall be cut and capped at the water main in accordance with JCMUA standards and inspected within twenty-four (24) hours after installation of the new Water Service.

SECTION 4.14 APPLICANT'S RESPONSIBILITIES

The Applicant shall be liable for the amount of water used in conformity with the schedule of rates, fees, and charges as provided for by JCMUA.

SECTION 4.15 SCHEDULING TAP

After obtaining permits for street opening, Water Tap, and Water Meter including review and approval of plans as required, and payment of all applicable charges and fees, the applicant shall call Suez Water Jersey City at (201) 239-1108 to schedule the tap, which tap shall be verified by JCMUA or its authorized agent before the tap is installed. Excavation shall be constructed in accordance with OSHA requirements for sheeting and safety.

SECTION 4.16 INSPECTIONS

It shall be the duty of JCMUA and City Departments to inspect installation of new or modified Water Services and Water Main Extensions. Those inspections and the entities currently responsible are:

- a) **Tap**
Installation of the tap is carried out by JCMUA or its Operator.
- b) **New Water Service Pipe**
City Department; Division of Construction Code Official, Plumbing Subcode Official.
- c) **New Water Meter and Associated Plumbing Fixtures**
City Department; Division of Construction Code Official, Plumbing Subcode Official and JCMUA or its Operator.
- d) **Modified and New Water Meters 2-inch and Larger**
JCMUA, Bureau of Water Engineers.
- e) **Water Meter Touchpad**
Touchpad and wiring are installed by JCMUA Operator at the time of inspection and initial reading of the Water Meter to establish a billing account.
- f) **Backfill of Water Service Pipe**
City Department; Neighborhood Improvement District, Neighborhood Manager.
- g) **Street Opening/Closing**
City Department; Neighborhood Improvement District, Neighborhood Manager.
- h) **Water Main Extensions**
Owner's construction engineering manager and, after installation, JCMUA, Bureau of Water Engineers.

i) **Backflow Preventers**

JCMUA Bureau of Water Engineers, NJDEP official, or a certified tester who holds a valid backflow prevention device tester certificate issued by a certifying agency approved by the NJDEP.

INSTALLATION AND MAINTENANCE OF WATER SERVICE

SECTION 4.17 WATER SERVICE SPECIFICATIONS

Installation of new or size-changed Water Services shall conform to all of the specifications of these Rules and Regulations, including that shown on the following diagrams:

- a) Requirements for Installation of Water Line and Meter WITH Fire Service for Connections Greater than Two-Inches Using DIP Push-on of Flanged Pipe - See Figure 1 in Appendix II.
- b) Requirements for Installation of Water Line and Meter WITH Fire Service for Connections 1.5-Inches and 2-Inches Using Rolled Soft K Copper Pipe – See Figure 2 in Appendix II.
- c) Requirements for Installation of Water Line and Meter WITHOUT Fire Service for Connections up to 2-Inches Using Rolled Soft K Copper Pipe – See Figure 3 in Appendix II.

SECTION 4.18 TAPPING AND TAPPING GATE VALVES

No person shall tap or connect to any water main of the Water System or insert a tap therein except employees or authorized agents of JCMUA. The tap into the Water Main shall be a maximum of one size smaller than the water main. No taps shall be permitted on water mains 20-inches and larger unless there is no alternative water main to source the water supply from and the Senior Engineer has confirmed such and approved the tap. A solid ductile iron tapping sleeve such as Mueller H-6I 5 or approved equal shall be utilized for all taps 2-inches and larger. The tapping sleeve shall have passed AWWA pressure testing standards prior to installation. For all taps, a tapping valve shall be installed as part of the tap installation. If the tap is two inches or larger, the tapping valve must be a gate valve with a valve box with the word "Water" cast into the cover. If tap is less than two-inches, the tapping valve may be a buried corporation valve (corporation stop). JCMUA or its agent will perform the tap and install the tapping valve. If the tap is into a water main that is 16-inches or larger, a second gate valve with a valve box with the word "Water" cast into the cover must be installed immediately downstream from the tapping valve during installation of the Water Service Pipe by the applicant's Plumber. Tapping valves shall be a double disc gate valve that meets AWWA standards furnished to open right. In any building, structure or premises where the consumption of water requires a larger service than can be supplied by the existing tap or connection, a new tap or connection shall be made with the Water Main to correspond to the size of the service desired. The joining of two or more smaller Water Service Pipes for the purpose of connection to one larger service is prohibited. Where the proposed connection is equal to or more than half the diameter of the existing water main, no tap is permitted. A tee fitting conforming to JCMUA and Jersey City standards shall be installed.

SECTION 4.19 WATER SERVICE PIPE

a) **Minimum Size**

The minimum Water Service Pipe shall be 3/4-inches in diameter.

b) **2-Inches and Less**

All Water Service Pipes 2-inches or less shall be rolled soft Class K copper pipe approved for 350psi. Copper Water Service Pipe shall be laid with no connections between the tapping valve and curb valve and between the curb valve and foundation entry pipe. Copper connections may only be by flare fittings.

c) **3-Inches and Greater**

All Water Service Pipes 3-inches and larger shall be cement lined, corrosion protection coated, ductile iron pipe with mechanical joints and Pressure Class 350 psi. Ductile iron Water Service Pipe shall be laid continuously rodded with thrust blocks at all bends.

d) **Prohibited Fittings/Risers/Connections**

The use of stainless-steel transition riser to enter the building is prohibited. Victaulic fittings are not allowed for Water Service Pipes. When a Water Service Pipe has been laid to the Water Meter, it must not be used to supply Premises other than the particular Premises that was the subject of the application. No standpipes or other appliances, connections, bypasses, valves, or tees for any purpose shall be allowed to be attached to the Water Service Pipe, except as specified herein. Only standard full-sized fittings may be used. Compact fittings are prohibited.

e) **Pipe Laying Location/Depth**

Each new Water Service Pipe shall be laid in a straight line from the Water Main to the property line or to within the building line at right angles to the street Water Main to which it is connected except for the loop off the gooseneck for copper Water Services and where the subsurface conditions make it impracticable the Water Service Pipe may be otherwise laid upon the approval of JCMUA of the plans submitted by a Plumber showing the proposed location of the Water Service Pipe. The Water Service Pipe shall be laid at a depth of at least four feet below grade. Water Service Pipes and a sewer pipes (lateral) may not be installed in the same trench and must be installed in separate trenches.

f) **Frost Protection**

Where the Water Service Pipe has less than four feet of cover, because of subsurface condition preventing the Water Service Pipe being laid at this depth, it shall be protected by suitable insulating material approved by JCMUA.

g) **Attachment to Water Main**

The Water Service Pipe shall be extended to the Water Meter before any attachment shall be made

h) **Connections to Aqueduct**

New water services shall not be connected directly to the aqueduct which conveys water supply from the water treatment plant to Jersey City. JCMUA may require customers to remove existing services from the aqueduct during system shutdowns periods and customer will need to find an alternate water supply. Removal and reconnection to another water supply shall be at the customer's expense.

SECTION 4.20 CURB VALVE (CURB STOP)

The curb valve must be a valve that meets AWWA standards. For 3/4-inch to 2-inch Water Service Pipes, the curb stop shall be Mueller or approved equal. For 3-inch and above Water Service Pipes, the curb valve shall be a ductile iron gate valve made by Clow or approved equal. The curb box shall be cast iron. For Water Service Pipes 3/4-inch up to 2-inches the curb box shall be Mueller or approved equal. For Water Service Pipes 3-inches and larger, the curb box shall be Bingham Taylor or approved equal and the diameter of the shaft opening shall be 9.5-inches.

SECTION 4.21 METER LOCATION

The Water Meter with its inlet gate valve and other fittings and appurtenances shall be installed inside of the building as close to the front wall as may be possible in order to provide for the shutting off of water, in case of accident or mishap to the inside service or Water Supply Pipe. The applicant shall install Water Meters inside the building in a location that is and will remain accessible for JCMUA to

inspect, read, or service or replace the Water Meter, which location must be free from moisture and dampness that may cause deterioration of the Water Meter or its associates appurtenances possibly including wiring to external reading devices, batteries, radio transmitters, and registers. If the building line is in excess of seventy-five (75) feet from the street, the Water Meter shall be located in a Water Meter pit near the sidewalk or street in a location that does not accumulate water during rain storms.

SECTION 4.22 METER PITS OR VAULTS

Any installation of a Water Meter in a pit or vault shall be approved by the JCMUA Bureau of Water Engineers using the approval procedure for Large Water Services stated herein regardless of the size of the Water Meter. Vaults shall be required to provide a sump pump with discharge to an approved location if groundwater infiltration could result in the meter becoming submerged. Vault covers and/or lids shall be watertight to prevent stormwater runoff from entering the vault.

SECTION 4.23 WATER METERS, STRAINER

All Water Meters along with any required strainer, touchpad and MXU must be purchased from JCMUA or its authorized agent. All Water Meters shall be specified by JCMUA. All Water Meters must be installed within ninety (90) days of the tapping of the water main for their supply. All compound Water Meters and each turbine Water Meter that is 2-inches or larger shall have a strainer installed on the inlet side immediately before the Water Meter. If a strainer is built into the meter an additional strainer is not required. All strainers must be purchased from JCMUA or its authorized agent. All Water Meters 2-inches and larger shall be furnished with a Sensus ECR/WP Remote Touch Pad Modules and Radio MXU units for both types of reading capabilities. The Remote Touchpad Module wire shall be connected to the Water Meter register utilizing a gel cap for watertight sealing of all terminal connections. Each and every Water Service put in service for supplying water from the Water System for any purpose shall be equipped with a Water Meter. Thereafter all charges for the use of water through such Water Service shall be based upon the water rates and charges prescribed. Applicants for new Water Services or enlarged or decreased Water Services shall pay for and obtain the Water Meter and, for compound Water Meters 2-inches and larger, a strainer from JCMUA. The City shall maintain ownership of the Water Meter. Once a Water Meter is installed and correctly operating to the satisfaction of JCMUA, repair and replacement of the Water Meter shall be the responsibility of JCMUA with the exception that the customer shall pay for the replacement of all Water Meters that have been tampered with or damaged. JCMUA may install upstream or downstream valves, test tees, and make other plumbing changes necessary to replace or properly re-install Water Meters and may remove un-allowed Water Meter bypasses or other unauthorized connections or plumbing fixtures and charge the customer for the cost thereof. Such charges shall be based on preset fees or, if no preset fees have been established, based on time and materials.

SECTION 4.24 WATER SERVICE INSTALLATIONS

All Water Meter installations shall be made in accordance with the Water Meter Manufacturer's recommendations. Touch pads shall be wall mounted if the Water Meter is located inside the building and lid mounted when the Water Meter is located in a pit or vault. All Water Meters shall be adequately restrained with metal brackets fastened to the floor or wall or other approved means such as uniflanges where internal pipe pressure and flow warrant such restraints. Water Meters, detector checks, and valves may be seated on concrete block and tapered shims to provide adequate support. Meters shall be installed approximately 36-inches above the floor grade.

The Water Service including the Water Service Pipe and Water Meter as well as Water Supply Pipes in buildings shall be located in such parts thereof as are best protected from frost. Each new Water Service or repair to a Water Service of shall be subjected by the Plumber to a pressure test. If the Water Service is 2-inches or larger the pressure test procedure in Section 4.38 shall be used. All pipes and appurtenances shall remain uncovered for the duration of the test and shall show no sign of leakage and may be subject to the inspection of the City Department and or JCMUA or its Operator. In all locations where the Water Service or Water Supply Pipes may be exposed to freezing temperatures, they shall be properly insulated or, if inside a building, heat traced, if necessary, to protect from freezing.

All Water Services of 2-inches or larger shall be disinfected in accordance with Section 4.39.

All rolled soft K copper Water Service Pipes shall have an excess of three feet of pipe formed into a loop at the gooseneck to the tap and laid to the right hand, facing the tap. The loop shall be installed in such a manner as will completely absorb all strain to Water Service Pipe and main which may be caused by any shock, strain or vibration to which said Water Service Pipe or main may be subjected. It shall be the duty of the Plumber performing labor in and about any Water Service to protect same from frost. The Plumber shall not be released from the responsibility thereof by having the Owner of the premises or others do the work for him. After installation of the Water Service, valves at the inlet side of Water Meter shall be left closed, and in no case shall the water be turned on except by any employee of JCMUA (or its Operator). Plumbers shall not leave any valve or stop cock at inlet side of the Water Meter location open, nor water turned on in the premises after connection or the Water Meter to the Water Service Pipe, longer than is required to test their work, without permission of the JCMUA Water Engineers. A gooseneck connection is required on all copper Water Service Pipes. The size of the tap (connection), the size of the Water Pipe, and the minimum size of the gooseneck between the Water Service Pipe and the tap shall all be the same size. Any exceptions to these requirements must be approved in writing by the JCMUA Water Engineers.

JCMUA shall refuse to supply water to Premises wherein the installation of the Water Service has not been done in accordance with the provisions of these rules and regulations or City Department requirements, including the Plumbing Code. The Owner must be in compliance with all applicable regulations of the Department of Health and Labor, OSHA, Department of Environmental Protection, and any other regulatory agencies and Departments. This includes without limit, the securing of a road opening permit from local, state or county agencies, where applicable. Any work, excavation, traffic controls and restoration shall conform to any ordinances, laws, and regulations which may be imposed by such agencies for this work.

SECTION 4.25 METER BACKFLOW PREVENTER OR DUAL CHECK DEVICE

For Domestic Service, an approved reduced pressure principle backflow preventer (such as Ames 4000 SS, Watts 909 or approved equal) is required when JCMUA determines that there is a potential cross-connection hazard or the facility is required to have such a device by the Plumbing Subcode of the New Jersey State Uniform Construction Code, N.J.A.C. 5:23-3.15, or the New Jersey Safe Drinking Water Act, N.J.A.C. 7:10-10 Physical Connections and Cross Connections Control by Containment. Some facilities which are required to have reduced pressure principle backflow preventers are hospitals, schools, fire sprinkler systems, chemical plants, factories, wastewater treatment plants, and facilities with sewage ejectors. If a reduced pressure principle backflow preventer is not required on a Domestic Service, then a dual check device shall be installed downstream of the test tee before the gate valve Refer to Figures 1-3 of Appendix II.

SECTION 4.26 LARGE FIRE SERVICE

For fire suppression system using a Water Service Pipe of 3-inches or greater, a combined reduced pressure detector check assembly (such as Ames 5000 SS, Ames 5000 RPDA or Watts 909 RPDA) shall be installed on the main fire service line and a reduced pressure principle backflow preventer on the bypass (such as Ames 4000 SS or Watts 909). Refer to Article VIII, Figure I of Appendix II, and Appendix IV. Plans submitted must specify a device that is approved by the American Society of Sanitary Engineers (ASSE). JCMUA has the right to disallow devices that in its experience have malfunctioned or have not provided adequate protection for the water system.

SECTION 4.27 SMALL FIRE SERVICE

For fire suppression system using a Water Service Pipe of 2-inches or less, a fire line detector check with single check valve (such as Ames 1000 DCV) shall be installed on the main fire service line and a reduced pressure principle backflow preventer (Ames 4000 SS or Watts 909 or approved equal) shall be installed on the bypass. Refer to Article VIII, Figure 2 of Appendix II, and Appendix IV.

Devices specified shall at a minimum be approved by the ASSE as stated in above Sec. 4.26.

SECTION 4.28 ALL FIRE SERVICES

All fire services must have OS&Y valves installed as shown on Figures I and 2 of Appendix II. The fire unit shall be furnished with 5/8-inch by 3/4-inch bypass Water Meter. The bypass Water Meter must be the make and model specified by JCMUA, a standard single displacement Sensus Water Meter with touchpads and radio read capabilities. The same radio MXU unit shall be used for a combined domestic and fire service. A fire line bypass may be one size smaller than the fire line.

SECTION 4.29 OWNER'S MAINTENANCE RESPONSIBILITIES

The Owner owns the Water Service. The Owner of the property into which water is introduced by a Water Service shall be required to maintain in perfect working order at his or her own expense including the cost of street openings said Water Service from the Tap to the Water Main to his or her Premises, including all fixtures therein provided for delivering or supplying water for any purpose. The Owner and, at the Owner's direction, the occupants of a building or structure with a Water Meter located inside the building or structure are required to keep the Water Meter and its associated valves and appurtenances easily accessible for inspection, reading, and service including for the replacement of the Water Meter, which requires enough room for the use of long wrenches and other tools.

The Owner and, at the Owner's direction, the occupants of a building or structure with a Water Meter located inside the building or structure are required to keep the area where the Water Meter is located free from water, flooding, and moisture from condensation, seepage through foundation walls and other sources. If the Water Meter is located in a pit or vault outside of the building or structure, the Owner, and at his direction, the occupants are required to keep the meter pit/vault accessible and the pit/vault's lid free from stormwater runoff and snow. The Curb Valve box, typically located near the property line or in or near the sidewalk should be kept visible and accessible. Once a Water Meter is installed and correctly operating to the satisfaction of JCMUA, repair and replacement of the Water Meter shall be the responsibility of JCMUA with the exception that the customer shall pay for the replacement of all Water Meters that have been tampered with or damaged.

The Owner of any Premises where a Water Meter is installed shall be held responsible for its care and protection from freezing and from injury or interference by any person or persons. If the Owner is required to install a Backflow Preventer in its Water Service or elsewhere within its Premises, the Owner must maintain each Backflow Preventer in accordance with the Cross-Connection Control Program (Appendix IV.). A lead service line must be completely replaced in accordance with the City's Plumbing Code and these Rules and Regulations whenever the lead service line needs repair or whenever the property is undergoing a renovation regardless of whether the lead service line needs repair at the time of the renovation.

b.) Reporting and Repairing Water Service Leaks

If Owner observes evidence of a leak from its Water Service, Owner must notify JCMUA or its Operator within one business day of first observing the leak. If JCMUA verifies that there is a leak in a Water Service, the Owner must have the leak repaired by a New Jersey licensed plumber at Owner's expense within three business days of being given written notice by certified mail that the leak was verified by JCMUA or its Operator. If the Water Service leak results in or is reasonably judged by JCMUA or its Operator to potentially result in flooding, frozen water on roads or walkways, street collapse, or undermining of sidewalks or other areas, the leak shall be considered an Emergency Water Service Leak and JCMUA or its designee shall immediately shut off the Water Service. Owner must notify JCMUA or its Operator when the repair is completed. Owner is responsible for the cost of collateral damage caused by the Water Service leak including but not limited to the removal of water on roadways and walkways from November 1st to March 30th, the removal of ice, and the satisfactory repair of undermined areas including roads and walkways. If Owner's Water Service Line is lead and is leaking, the entire lead service line must be replaced from the Water Main to the Water Meter. If Owner fails to repair the leak within three business days, JCMUA may repair the leak, install a curb stop if none is present, replace the entire Water Service Line if it is lead, and charge the Owner for these services in accordance with the

fees set forth in Appendix I of the Rules and Regulations. If Owner is given notice that a leak has been verified and its repair must be made and in the process of making that repair Owner's plumber determines that the leak is not coming from Owner's Water Service, Owner shall immediately notify JCMUA's Operator and cease further work. The Operator will immediately send an inspector. If Operator's inspector verifies that the leak is not coming from Owner's Water Service, have your plumber submit a claim to the Operator to be paid for his justified costs. JCMUA shall charge a fee in accordance with the fees set forth in Appendix I of these Rules and Regulations for turning on or off the Water Service.

SECTION 4.30 CONTINUOUS SUPPLY, NO WATER METER BYPASS EXCEPT FIRE SERVICE

Bypasses of Fire Service detector checks are required as shown in the diagrams in Appendix II. Bypasses of Water Meters for domestic use are prohibited unless written exception is granted by the JCMUA Senior Engineer. If a prohibited bypass of domestic Water Meter is present, it shall be removed by the Owner. If the Owner fails to remove a prohibited bypass, JCMUA has the right to block or remove the bypass and charge the Owner for the cost of doing this. Wherever a continuous supply of water is deemed indispensable by Owner or occupant in any building, structure or Premises, the Owner or occupant shall provide a tank or other receptacle of capacity which he deems sufficient to supply the needs of such building, structure or Premises during the period that the pipe section to which the Water Service Pipe is connected is shut off for repairs, connections, extensions or testing purposes; or else provide for the water supply through an auxiliary or emergency connection to the Water Main and Water Service Pipe with separate Water Meter and valves so that each Water Service Pipe shall have an independent source of supply so arranged as to ensure a continuous supply of water in case of such contingency.

SECTION 4.31 EXPANSION TANK / HEATING SYSTEMS

Wherever there is a Backflow Preventer or check valve at the Water Meter to prevent water from entering the Water System from the Owner's Water Supply Pipe, an expansion tank should be installed on the Water Supply Pipe to accommodate expansion of the water due to heating of the water or any other reason. Every device for heating water or for storing heated water in tanks or boilers shall be so designed and constructed and shall be installed in such manner in any building or structure that any condition which would cause or contribute to the cause of any excess pressure, strain, stress or explosions therein, or leakage in any pipe or system of piping connected thereto, shall be eliminated. No water in any plumbing system shall be heated to a higher temperature than 200° F by any water heating device or shall be stored at a temperature higher than 200° F in any tank, boiler or reservoir or shall be discharged into or conveyed into any heated Water Supply Pipe or system of heated water supply piping to any plumbing fixture. See Plumbing Code.

SECTION 4.32 CONNECTIONS BETWEEN WATER SERVICES PROHIBITED

Connections between houses, buildings, structures or other Premises that each have separate Waster Services are strictly prohibited.

INSTALLATION OF WATER MAIN EXTENSIONS

SECTION 4.33 WATER MAINS

All water mains constructed shall comply with the requirements and standards of NJAC 7:10-11.10 and standards listed below. If one standard is more stringent than the other standard, the more stringent of the two shall govern and is to be followed. New water mains shall be subject to a final inspection by JCMUA and Suez. Only mains that have passed this inspection shall be formally accepted by JCMUA. A two-year maintenance bond shall be provided on all new mains installed equal to 120% of the engineer's construction cost estimate once the final inspection is passed.

- a) **Type**

Water Mains shall be Thickness Class 54, cement lined, ductile iron pipe with mechanical joints or push-on joints used for straight runs and mechanical joints used for all bends all of which shall be in conformance with the most recent ANSI/AWWA standards. All Water Mains will be a minimum of 8" in diameter. Water Mains must be of the following sizes (in inches): 8, 12, 16, 20, 24, 30, 36, 48, 60.

b) **Installation Depth**

Except at points indicated on the site plans, all water mains shall have a minimum burial depth of 4' and a maximum burial depth of 6'. Excavations shall be made to a point at 6" below both the pipe barrel and coupling.

c) **Crossing Utilities Lines**

New Water Mains that cross existing utilities shall:

i. When crossing over an existing pipe, conduit etc. the new Water Main shall be encased inside a casing pipe made of corrosion protected steel.

ii. When a New Water Main crosses under an existing Water Main, the existing Water Main shall be cradled or supported by other means.

iii. In all cases, the New Water Main shall be brought to the original grade gradually and with a smooth transition.

d) **Separation Between Water Mains and Sewer Lines**

i. Whenever possible, Water Mains shall be laid at least 10 ft horizontally from any existing or proposed sewer. If this separation is not possible, water and sewer mains shall be laid in separate trenches and the top of the sewer main shall be at least 18" below the bottom of the water main.

ii. Whenever Water Mains must cross over sewer lines, the Water Main shall be laid at such an elevation that the top of the sewer is at least 18-inches below the bottom of the Water Main. This separation should be maintained over a minimum distance of 10 ft on either side of the sewer line. If this separation is not possible, the sewer line shall be of watertight construction (ductile iron or reinforced concrete pipe) with watertight joints that are a minimum of 10 feet from the water main.

d) **Fittings.**

Only full-bodies ductile iron fittings are allowed. Compact ductile iron fittings are not allowed.

SECTION 4.34 ABANDONMENT OF WATER MAINS

Where the existing Water Main is to be abandoned, it shall be shut-off, cut, and capped. Abandoned Water Mains shall be cut and plugged with required fittings, rods and concrete as close to the existing Water Main in service as possible. Abandoned water mains shall be filled with flowable grout.

The grounding of electric circuits or systems to any Water Service Line or Water Supply Line shall conform to the provisions of the electrical section of the Jersey City Code. The Senior Engineer shall reserve the right to order the removal of the grounding of an electrical circuit to a Water Supply Line when it has been demonstrated that such grounding is having a deleterious effect on the potable water supply. Such order shall be served on the Owner of the Premises involved or on his or her legal representative or other responsible person, either through the City Electrical Inspector or by the Senior Engineer or his or her authorized representative.

SECTION 4.35 VALVES

a) **Gate Valves**

Gate valves shall be in conformance with ANSI/AWWA Standard C500-80 and shall be

Mueller, Clow or American R/D double disc valve or approved equal. Valves shall be non-rising stem, mechanical joint shall be furnished with a (2") square operating nut shall open by turning to the right. Gate valves (16") and over shall be furnished with by-pass. Valve shall be 100% solid heat cured epoxy coated holiday-free in the waterway. Resilient wedge valves may be used for sizes 12" and under.

b) **Butterfly Valves**

Butterfly valves shall be in conformance with ANSI/AWWA Standard C504-80. Butterfly valves shall be Class 1508, mechanical joint, with rubber seat mounted on the disc, shall be furnished with a (2") inch square operating nut and shall open by turning to the right. The valve shall be 100% solid heat cured epoxy coated holiday-free in the waterway. The use of butterfly valves will not be permitted in mains (16") and under.

c) **Valve Operation**

All valves shall be operated by JCMUA personnel or approved representatives. The contractor shall not be permitted to operate any valves. The contractor shall notify the Engineer, in writing, five (5) days in advance of valve operating requirements.

d) **Air Release valves**

Air release valves shall be installed at the high points of the water mains.

e) **Valve Boxes**

Valve boxes shall be Bingham and Taylor, or approved equal. Boxes shall have a minimum of 9.5-inch diameter and shall be an adjustable screw type with the box extending from the surface to (3") inches above the valve bonnet base. Valve box shall be cast iron with a standard coal tar foundry dip with cast iron water drop cover and the word "water" cast in cover. Valve box cover shall be installed flush with the existing grade elevation.

f) **Concrete**

Concrete for valve seats and thrust blocks shall have a minimum 28-day strength of 3000 psi.

g) **Tie Rods**

Tie rods shall be three quarter (3/4) inch diameter threaded steel bars. Rods shall have a minimum yield stress of 36,000 psi. Thrust blocks and tie rods shall be installed at all bends and fittings.

h) **Couplings**

Couplings shall be Dresser Style Number 153 for pipe sizes through (30") inch diameter. For larger diameter pipe, Dresser Style Number 38 steel couplings shall be used.

j) **Retainer Glands**

On all mechanical joint connections/fittings, retainer glands shall be used and they shall have set screws. Mega lugs may be used instead of retainer glands; however, rodding, thrust blocks and concrete pads will still be required.

SECTION 4.36 BACKFILL

a) Select granular backfill material shall be virgin Dense Grade Aggregate (conforming to Subsection 901.08 of the NJDOT, Standard Specifications for Road and Bridge Construction) obtained from dry sources and shall be free from stumps, brush, weeds, roots, rubbish, wood and other material that may decay. Graduation shall conform to subsection 901.08 paragraph A-1 of the New Jersey Department of Transportation ("N.J.D.O.T.") Standard Specifications. Backfill material shall be placed and compacted in twelve (12) inch lifts and compacted to 95% of the modified proctor for the backfill.

b) Broken or crushed stone bedding shall be placed under and around the water main to the top of the water main. The bedding shall be a minimum of 6" thick below the pipe and 12" of both sides of the pipe. Bedding for water main 3" and larger shall be NJDOT #57 or #67 from virgin stone conforming to NJDOT Standard Specification for Road and Bridge Construction section 901.04 and Table 901.20. Bedding for water lines less than 3" in diameter shall be NJDOT I-8 from virgin stone and conforming to NJDOT Standard Specification for Road and Bridge Construction section 901.09 and Table 901-2.

c) NJDOT - recycled Concrete Aggregate is NOT an acceptable backfill or bedding for any water mains.

SECTION 4.37 CONSTRUCTION METHODS

a) The contractor/excavator/plumber shall be responsible to provide adequate excavation support in conformance with Occupation Safety and Health Administration regulations. When necessary the excavation support shall be designed by a New Jersey Licensed Professional Engineer.

b) The shoring bracing system utilized by the contractor/plumber/excavator shall be wide enough to allow 12" of bedding material as described in section 4.36 (b) on both sides of pipe.

c) Where sheeting is to be left in place, the excavation shall be backfilled in a control manner such that when bracing is removed the sheeting does not move or shift.

d) Where directed by the Director of the Engineering Department has deemed the existing soil conditions warrant geotextile fabric shall be placed to line the excavation to prevent migration of fine soil particles.

e) When groundwater is encountered in the excavation the groundwater shall be controlled by dewatering methods and done in conformance with NJDEP and/or Hudson Passaic and Essex County Soil Erosion Control District standards. When necessary the contractor/plumber/excavator shall file all appropriate dewatering permits from JCMUA and Passaic Valley Sewerage Commission.

SECTION 4.38 PRESSURE TESTING

After the Engineer has inspected the completed installation of valves, and water main, and before backfilling the excavations, the contractor shall furnish all labor, materials and equipment required to pressure test the main. The main shall be pressurized to 1.5 times or 150 psi, whichever is greater, the working pressure for a period of two (2) hours during which there shall be no measurable decrease in pressure. The working pressure, which will be specified by the Water Engineers, will be based on the field conditions at the specific location. The valved section of pipe shall be filled with water slowly, and the test pressure shall be applied by means of a pump connected to the pipe in a manner satisfactory to the Construction Engineer. Before applying the test pressure, air shall be expelled completely from the pipe by installing corporation cocks at such points so that the air can be expelled as the line is filled with water. If the joints leak, repairs or replacements shall be made. Testing shall be in conformance with AWWA Standard C600-77, most recent edition. Pressure testing of mains shall be witnessed by JCMUA or its authorized representative.

SECTION 4.39 DISINFECTION

The Contractor shall disinfect all water mains in accordance with AWWA. Standard for "Disinfecting Water Mains" designation C-651-14. Calcium hypochlorite granules shall be placed at the upstream end of the first section of pipe, at the upstream end of each branch main, and at 500-foot intervals. The initial concentration chlorine dose shall be 50 mg/L or ppm. For an 8" and 12" main, the required minimum quantity at each placement location is 13 oz and 30 oz respectively of calcium hypochlorite granules. If the main to be disinfected is less than 500 feet, the above quantities may be reduced to achieve the same initial chlorine concentration. After 24 hours of contact time, the residual free chlorine shall be at least 25 ppm.

Methods other than the use of calcium hypochlorite granules, such as the continuous feed, spray and slug methods may be used with prior approval from JCMUA. If a hydrant is used to supply water during disinfection process, an approved backflow preventor shall be installed on the hydrant.

After satisfactory disinfection of the test section, the line shall be continuously flushed until the resultant chlorine residual equals one ppm or the residual of the water in the Water System, whichever is greater. After final flushing and before the water main is placed in service samples shall be collected from each end of the main and tested for bacteriologic quality. If the initial disinfection fails to produce satisfactory samples, disinfection shall be repeated until satisfactory samples have been obtained.

SECTION 4.40 HYDRANTS

a) **Type**

Hydrants shall be Mueller Super Centurion 250 hydrant or approved equal. Hydrant spacing shall be a maximum 300 feet measured center to center.

b) **Installation**

For either new construction or relocation of an existing hydrant following shall be required:

- i. Hydrants shall be located no closer than 20 feet from the point of tangency or curvature at intersections.
- ii. All one-piece hydrants or hydrants not manufactured by U.S. Pipe/Mueller that are to be relocated shall be removed and delivered to a location specified by the JCMUA Water Engineers. A new hydrant will be supplied by JCMUA for installation.
- iii. Hydrants shall be no closer than ten (10') feet from the edge of a residential driveway or (20') feet from the edge of commercial driveway. In the case where driveways are expanded or newly constructed, the owner shall be responsible for the relocation of an existing hydrant if above requirements are violated.
- iv. All single gated hydrants on (16") inch or larger mains shall require a new valve at the base of the relocated hydrant.
- v. New gate valves and boxes are required at the base of relocated hydrants when more than (10') feet of pipe are required.
- vi. New Hydrants shall be equipped with magnetic tamper proof caps and operator if required by the Senior Engineer.
- vii. New Hydrants shall be equipped with 5" Storz hose connection
- viii. New Hydrants shall be painted in accordance with the exact specifications provided by JCMUA. Private fire hydrants shall be painted yellow and shall be installed downstream of a meter.

c) **Abandonment of Existing Hydrant Water Connection**

Where the existing water service line to the hydrant is to be abandoned, the existing water service line shall be shut-off, cut, and capped as close to the existing Water Main as possible prior to the installation of new hydrant water service. Prior to new hydrant water service tap, the JCMUA Bureau of Water Engineers or its Operator shall inspect and certify the abandoned service. When cutting and capping an existing fire hydrant water service line, utilize required fittings, rods and concrete.

d) **Miscellaneous**

JCMUA shall provide maintenance for public fire hydrants such as painting and operation of each hydrant and lubrication of the stem and caps, as necessary. Private

Hydrants are those installed on private property being supplied water after the Water Meter and Backflow Preventer.

SECTION 4.41 FINAL INSPECTIONS

After mains are installed, a signed and sealed as-built drawing shall be provided to JCMUA that shall be used by JCMUA and Suez for a final inspection. During the final inspection, all field assets shall be checked and compared to those shown on as-built drawings for their type and location. In addition, Suez shall operate all new valves, count the number and turns for each valve and flow test all new hydrants. Water mains shall not be accepted unless all punch list items from the final inspection are addressed.

SECTION 4.42 CONTRACTOR USED FOR MAIN EXTENSION /REPLACEMENT

Prior to start of construction, the applicant shall provide information on the contractor be used for the work, including years of experiences installing water mains, construction equipment used and at least three references. If JCMUA is already familiar with the contractor to be used, the above submission is not required. JCMUA has the right to disallow any contractor from performing work on the water system if in its reasonable judgement the contractor represents an acceptable risk to the water system.

Before start of any construction project, JCMUA will hold a preconstruction meeting to discuss contractor's means and methods and schedule of the project.

ARTICLE V. SURGE, SUCTION, GRAVITY AND COMPRESSION TANKS

SECTION 5.01 WATER SERVICES USING BOTH CITY WATER AND NON-CITY OR USED WATER

Any water system within any building, structure or Premises that is supplied by the Water System through a Domestic Service may not also be supplied or connected to any other source or potential source of water supply including Secondary Water or sources of potable water from other water utilities unless a reduced pressure principle backflow preventer (RPZ) has been installed to prevent Backflow of non-Water-System water into the Water System and that RPZ has been inspected and approved by the Senior Engineer as being in accordance with the JCMUA's Cross-Connection Control Program.

SECTION 5.02 GRAVITY STORAGE TANK STANDARDS

Gravity storage tanks for the storage of potable water shall be constructed with all vents screened for protection against intrusion by animals and insects using a highly corrosion resistant fine-mesh screen capable of stopping mosquitoes. All hatch seals shall be watertight and locked to protect against vandalism.

SECTION 5.03 SURGE AND SUCTION TANKS FOR PUMPS

When a pump is used a surge or suction tank shall be installed if required to prevent undue lowering of the street main pressure and as directed by the JCMUA Senior Engineer. To minimize water hammer, a Water Service Pipe directly supplying the surge or suction tank or other similar appliance which is controlled by a quick-closing device shall be connected to an air chamber of approved type placed where and as directed by the Senior Engineer of the Department.

SECTION 5.04 TALL BUILDINGS

All buildings that exceed four (4) stories or fifty-five (55) feet in height in various areas throughout the city, and where pressure from the city main is insufficient to furnish an adequate supply above fifty-five (55) feet, shall be equipped with either an automatic compression pressure-increasing device or a high-level gravity storage tank may be installed. Each such compression device or high level gravity tank shall be provided with all the regulating and control appurtenances and devices which are necessary to ensure complete automatic operation and for gravity or surge tanks protection from contamination, insects, animals, and vandalism.

SECTION 5.05 GRAVITY STORAGE TANK CONNECTIONS

Wherever any pipe which is a part of the water supply system of any building or structure receives its service from a gravity storage tank, it shall be connected thereto in such a manner as will prevent any water stored within four inches of the bottom of such tank from entering such Water Supply Pipe. Every gravity storage tank shall be provided with an overflow pipe of a cross area of not less than twice that of the pipe which supplies water to such tank. Said overflow pipe shall discharge through an open connection into the drainage system. Every gravity storage tank shall be supplied with water through an approved slow-acting automatic control valve or control cock, the discharge outlet of which shall be installed at a distance not less than six inches above the top of the overflow pipe connection to such gravity storage tank.

SECTION 5.06 GRAVITY STORAGE TANK DRAINS

Each gravity storage tank shall be provided with a sludge drainpipe which shall be connected thereto at the lowest level (bottom 4-inches) of the bottom section thereof, and shall not extend above such level and be capable of draining the entire tank including the bottom 4-inches. Such drainpipe shall be provided with a control valve with a clear waterway equal in area to that of the sludge drainpipe and shall discharge through an indirect connection into the drainage system of the building.

SECTION 5.07 COMPRESSION TANKS

Each compression tank shall be so constructed and connected that the air content thereof shall be not less than 25% of its total capacity. Each compression tank shall be provided with a sludge drainpipe which shall be connected to such tank at the lowest level (bottom 4-inches) of the bottom section thereof and shall discharge through an open connection into the drainage system of the building and be capable of draining the entire tank including the bottom 4-inches. Each sludge drainpipe shall be provided with a control valve with a clear waterway equal in area to that of the sludge drainpipe. No water shall enter into any Water Supply Pipe at a lower level than four inches above the bottom of such compression tank.

SECTION 5.08 PROHIBITION OF WATER HAMMER / VIBRATIONS

Any water pipe connection to any pump or other appliance through which any vibration, shock, strain, stress or pulsation which may originate or develop a water hammer or any excess noises or sounds in the water supply system of any building or structure and which may be communicated through such connection or Water Service Pipe of the Water System is prohibited.

SECTION 5.09 WATER SYSTEM IMPACT STUDY

In the event any building requires a pump to provide water to floors for Potable Water and/or fire protection, the Senior Engineer may require a Water System Impact Study of the draw down impact on the Water System. The study shall be done in conjunction with JCMUA's existing hydraulic model of the Water System to test what the impacts on system are when the proposed building's Potable Water and/or fire flow pumps are operating.

ARTICLE VI. RATES, FEES, CHARGES, PAYMENT FOR SERVICE

SECTION 6.01 RATE SCHEDULES

The rates, fees, and charges for the various services provided by JCMUA along with the payment schedule, interest for late payments, and other related terms are set forth in detail at Appendix I. to these Rules and Regulations.

SECTION 6.02 BACKBILLING

Existing fire services that were previously unrecorded and/or unbilled will be subject to a six (6) year back bill of existing fees. Billing errors shall be corrected/rebilled for no more than six (6) years.

Adjustment of charges for meter error

- (a) Whenever a meter is found to be registering fast by more than two percent, or in the case of water meter, more than one and one-half percent, an adjustment of charges shall be made in accordance with this section. No adjustment shall be made if a meter is found to be registering less than 100 percent of the service provided, except under (d) below.
- (a) If the date when the meter first became inaccurate is known, the adjustment shall be determined as follows:
 - 1. Determine the percentage by which the meter was in error at the time of the test, adjusted to 100 percent. This figure is not the amount in excess of the tolerance allowed under (a) above, but is the difference between 100 percent accuracy and the actual accuracy of the meter. For example, if the meter was found to be three percent fast, this percentage is three percent;
 - 2. Determine the total charges for metered service that accrued during the entire period that the meter was in error; and
 - 3. The amount of the adjustment shall be the percentage determined under (b) 1 above, applied to the charges determined under (b) 2 above.
- (c). If the date when the meter first became inaccurate is not known, the adjustment shall be determined as follows:
 - 1. Determine the percentage by which the meter was inaccurate at the time of the test adjusted to 100 percent. This figure is not the amount in excess of the tolerance allowed under (a) above, but is the difference between 100 percent accuracy and the actual accuracy of the meter. For example, if the meter was found to be three percent fast, this percentage is three percent;
 - 2. Determine the applicable time period as follows:
 - i. Determine the time between the test that found the meter inaccuracy and the most recent previous test of the meter. This time period may be longer than the time the meter has served the existing customer;
 - ii. Divide the time determined under (c) 2i above in half;
 - iii. If the time determined under (c) 2ii above is longer than the time the meter has served the existing customer, the applicable time period is the time the meter has served the existing customer.
 - iv. If the time determined under (c) 2ii above is shorter than the time the meter has served the existing customer, the applicable time period is the time determined under (c) 2ii above.
 - 3. Determine the total charges that accrued during the applicable time period determined under (c) 2 above; and

4. The amount of the adjustment shall be the percentage determined under (c) 1 above, applied to the charges determined under (c) 3 above.

(d) If a meter is found to be registering less than 100 percent of the service provided, the utility shall not adjust the charges retrospectively or require the customer to repay the amount under-charged, except if:

1. The meter was tampered with;
2. The meter failed to registered at all; or
3. The circumstances are such that the customer should reasonably have known that the bill did not reflect the actual usage.

(e) If a meter is found to be registering less than 100 percent of the service provided because of theft or tampering under (d), 1 above, the utility may require immediate payment of the amount the customer was undercharged.

(f) In cases of a charge to a customer's account under (d) 2 or 3 above, the customer shall be allowed to amortize the payment for a period of time equal to that period of time during which the customer was undercharged.

ARTICLE VII. CROSS-CONNECTION CONTROL

SECTION 7.01 PUMP CHECK VALVE

Check valves which are noiseless in their operation and air chambers of sufficient air cushion capacity shall be installed in the suction pipe and the discharge pipe of each house pump or fire pump or other water pressure increasing device; provided, however, that where such check valves are of the slow-acting type, and the operation thereof entirely eliminates the shocks, strains, stresses and excess noises caused by the operation of such pump or device, the installation of air chambers may be dispensed with. No check valve shall be installed as herein provided unless the design and construction thereof shall first have been approved by the JCMUA Bureau of Water Senior Engineer.

SECTION 7.02 PRESSURE RELIEF VALVE

Where a Water Service supplying a hot water heater, steam boiler, or any other equipment capable of heating the water to 180° F or greater is check-valved anywhere between the boiler/heater/equipment and the Water Main, an approved relief valve which will open when the pressure or temperature, if appropriate, in the system reaches a predetermined maximum value shall be installed at the outlet side of the check valve, dual check device or Backflow Preventer.

SECTION 7.03 WATER SERVICES AT BULKHEADS, WARVES, PIERS, AND DOCKS

All outlet connections from any of the potable Water Supply Pipes on ship piers, wharves, docks or bulkheads adjacent to or projecting into any of the streams or navigable waters that may be used or are available for use as a ship or boat supply, including fire line connections, that are receiving water supply from the Water System, shall be equipped with a Backflow Preventer approved by the Senior Engineer to prevent the possible backflow of water from a secondary source of supply, contaminating the City's water supply.

SECTION 7.04 BUILDINGS SUPPLIED BY MULTIPLE WATER SERVICES AND MAINS

Where more than one Water Service Pipe supplies a building and the services are supplied from different Water Mains, each Water Service shall install a Double Check Valve Assembly Backflow Preventer installed immediately downstream of the Water Meter in accordance with the applicable figure in Appendix II.

SECTION 7.05 CROSS-CONNECTION CONTROL PROGRAM

JCMUA's Cross-Connection Control Program is located in Appendix IV. It contains the requirements for installing and maintaining Backflow Preventers and other cross-connection control measures for new and existing Domestic and Fire Services. Its Addendum contains requirements for the installation of dual check devices and strainers on Domestic Services. The fees and charges for this program are located in Appendix I.

ARTICLE VIII. FIRE AND SPRINKLER SYSTEMS

SECTION 8.01 LIMITATION OF LIABILITY

In providing fire service, JCMUA does not assume any liability as insurer of properties or persons and JCMUA does not guarantee any special service, water pressure, capacity or facility.

SECTION 8.02 USE OF FIRE HYDRANTS

a) It shall be unlawful for any person other than an employee of JCMUA or other duly authorized personnel or representatives to open or otherwise operate, use or take water from any fire hydrant owned by Jersey City without first obtaining a permit from JCMUA. The charges for the use of fire hydrants shall be fixed from time to time by JCMUA. In operating a hydrant, a wrench of a design approved by JCMUA shall be used. The use of any other type of wrench or operating device will not be permitted. The use of the large nozzle is restricted to the Fire Department only. No specially designated hydrant shall be opened or used except by JCMUA or Fire Department. Regular nozzle caps shall be replaced after use of hydrant. The use of a defective hydrant is prohibited. Access to hydrants shall not be obstructed. Connections with hydrants shall be of a type that can easily and quickly be detached. Hydrants shall be protected by the user from freezing or other damage, and if damage to a hydrant results from the use thereof, repairs shall be made at the expense of the user. To prevent freezing, hydrants used at any time during the period from November 1 to April 1 shall in every instance be pumped out immediately after use. No hydrant shall be used when the temperature is less than 32° F. except in emergency and under special permission from JCMUA

b) When the use of a hydrant is authorized for construction or other purposes, the permittee shall assume the obligation for the payment of wages of the inspector designated by JCMUA to supervise its use during the period covered by the permits. The permittee shall also be obliged to provide Workman's Compensation Insurance in a form satisfactory to JCMUA. Prior to taking water from the hydrant, a special hydrant meter shall be installed on the hydrant to measure the water used and to prevent backflow of any contaminants into the water system. Upon return of the hydrant meter, Suez shall test meter for accuracy and check the correct functioning of the backflow preventer. Any damage to the meter shall be charged to the deposit provided by the permittee. A drawdown account shall also be set up by the applicant for Suez to bill for water consumption charges. Any unused portion of the above deposit shall be returned to the permittee by Suez once meter is returned.

c) Any person violating this Section shall be punished by a fine not exceeding \$1,250 per day or imprisonment not exceeding 90 days, or both, pursuant to Jersey City Code § 1-25. JCMUA shall further have the right to take other appropriate actions pursuant to Jersey City Code § 1-25.

d) In addition to the above penalties, JCMUA may take appropriate action to secure reimbursement for any damage to fire hydrants, Water Mains, other property or equipment, loss of water caused directly or indirectly by a violation.

e) Above permits for use of hydrants in the field shall only be issued by JCMUA for demolition of buildings or other structures or other uses authorized by the Senior Engineer. For all short-term water requirements, permittee shall use designated hydrant at JCMUA facilities to fill their tanker truck for use at the site. In these cases, the permit shall be valid for one week and permittee shall be charge fixed fees for no limit on number of tanker truck fill ups. See Appendix I Section 5 for details on rates and charges.

SECTION 8.03 NONAPPLICABILITY TO FIRE COMPANIES

These Rules and Regulations shall not apply to the use of any fire hydrant by a fire company or fire department rendering public fire service.

SECTION 8.04 PUBLIC FIRE SERVICE

Fire hydrants on the Water System are solely for the purpose of providing water in the event of fire. Only persons authorized by JCMUA shall operate or take water from a fire hydrant, or the authorized members of a fire department in the case of fire. No fire hydrant shall be used for fire drills unless prior notification and approval has been obtained from JCMUA opening a hydrant without a JCMUA permit constitutes a violation of these Rules and Regulations and is subject to fines and penalties.

JCMUA shall provide maintenance for public fire hydrants such as painting and operation of each hydrant and lubrication of the stem and caps, as necessary.

SECTION 8.05 ALLOWABLE HYDRANT USES

No water shall be taken from any fire hydrant, public or private, other than for fire purposes or for use of the fire department in case of fire without the written approval of JCMUA. No fire hydrant, public or private, shall be used for sprinkling streets, flushing storm sewers or gutters or for any other purpose other than fire, except with written approval and consent of JCMUA. Permits for hydrant use other than the aforementioned will designate a specific hydrant location. Only persons authorized by JCMUA or authorized members of a fire department in the case of fire shall operate or take water from a fire hydrant. No fire hydrant shall be used for fire drills unless prior notification and approval has been obtained from JCMUA. Opening a hydrant without a JCMUA permit constitutes a violation of these Rules and Regulations and is subject to fines and penalties.

SECTION 8.06 WATER SUPPLY PIPE SIZE LIMITS

The largest size connection for fire and sprinkler systems allowed shall be of eight-inches in diameter and the street main for such connection shall be of ten-inches diameter or larger. For a six-inch main, no connections larger than four-inch shall be allowed. Larger connections may be made by written permission of the Senior Engineer.

SECTION 8.07 VALVES

All street main connections for fire and sprinkler systems or for any other purposes shall be provided with valves inside the building line, in order that the same may be shut off in case of a leak or bursting of pipe or other cause. Said valves shall be set in conspicuous places, easily accessible, and left entirely open for fire purposes. If required by the fire insurance representatives, the same may be sealed.

SECTION 8.08 FLUSHING OF FIRE SYSTEMS OR EQUIPMENT

All fire protective equipment including sprinkler systems that are supplied with water from the Water System shall be drained and flushed at least every six months and kept free from accumulations of sand, silt and stagnant water which would nullify the action of the chlorine content of city water.

SECTION 8.09 PROHIBITED CONNECTIONS

No city water pipelines in any building, premises, material or storage yard on railroad property which receives service from the Water System shall have for fire-extinguishing purposes a Siamese or other connection that is or has been installed near any river or waterway where a city fire boat or city fire engine or pump may pump river water into the city water pipes through a cross-connection of any kind. No stationary pump or privately owned fire equipment shall be maintained for emergency use as described above in any premises adjacent to the rivers, nor shall they use cisterns or wells adjacent to the rivers for cross-connections to city water supplied pipes for emergency fire-extinguishing purposes. Any water system within any building, structure or Premises that is supplied by the Water System through a Fire Service may not also be supplied or connected to any other source or potential source of water including Secondary Water or potable water from other water utilities unless a reduced pressure principle backflow preventer (RPZ) has been installed to prevent

Backflow of non-Water-System water into the Water System and that RPZ has been inspected and approved by the Senior Engineer as being in accordance with the JCMUA's Cross-Connection Control Program.

SECTION 8.10 FIRE SYSTEM UPGRADES

When an Owner is required by NJDEP and/or DCA-Building Code/Fire Sub-Code to install a Backflow Preventer on a Premises, the Owner shall engage the services of a New Jersey Licensed Professional Engineer to evaluate the system and submit calculations and plans showing the installation of the device and an interior flow test on the Premises' service line up to the backflow/meter assembly. If the engineer determines that the installation of a backflow prevention device will not impact the fire protection system's ability to function, Owner's engineer shall submit a signed and sealed letter stating that the device will not impact the Premises' existing fire protection system. If the engineer determines improvements are required, an application for an upgrade shall be made to JCMUA in conformance with its Rules and Regulations including Appendix II's Figures 1-3 and Appendix IV, Cross Connection Control Program.

SECTION 8.11 EXISTING WATER SERVICES AND FIRE SYSTEM UPGRADES

When an Owner of a property applies to upgrade the existing fire protection system in their respective building a water service flow test shall be conducted by the Property Owner's engineer. The flow test shall be done on the water service from the water main to immediately downstream of the Backflow prevention device inside the building. The flow test shall be signed and sealed by the Owner's engineer certifying that there is adequate flow in the service line to meet the fire flow demand of the fire system design.

SECTION 8.12 HYDRANT FLOW TEST LIMITATION

JCMUA in conjunction with the Fire Sub Code Official have developed a policy regarding the pressure results from Hydrant Flow Tests to account for peak demand on the water system. Hydrant flow tests are conducted between 9:00 AM and 3:00 PM Monday through Friday. The Jersey City water system experiences peak demands from 6:00 AM to 8:00 AM and again 4:00 PM to 8:00 PM. To allow for peak demand in the fire protection system design the pressure reading for the hydrant flow test shall be reduced by 30%.

SECTION 8.13 HYDRANT FLOW TEST & TIME PERIOD

Hydrant Flow Tests conducted on the Water System shall be considered valid for a period of six (6) months from the time that the flow test was conducted. If an Applicant has obtained a flow test from JCMUA, but has not submitted design drawings and calculations, as well as satisfying all comments, and the flow test is older than six (6) months by one day or more, the Applicant will be required to apply for a new flow test.

SECTION 8.14 HYDRANTS STRUCK BY VEHICLES

When a hydrant is accidentally struck by a vehicle leading to damage to the hydrant, a police report shall be obtained by JCMUA or the City. All costs for repairs to damaged hydrant, hydrant lateral or water main shall be borne by the person responsible for the accident or their insurance company. For assistance with the reimbursement of funds expended, JCMUA may forward repair costs and other details to the City Law Department. If Suez performs the repairs, a cost estimate, including labor and materials, for all work completed shall be prepared and sent to the responsible entity for payment.

ARTICLE IX. SECONDARY WATER

SECTION 9.01 DEFINITION

Secondary Water is any water from a private water system of pipes or piping which receives its water supply from the rivers or bays or streams bounding the shoreline of Jersey City, or from any well or cistern or any groundwater or rainwater reservoirs or other water systems. Secondary Water is also water from the mains of the Water System which has been used for any purpose within any building, structure or premises or which has been discharged from any type of condenser coils, or cooling systems, drinking fountains, hydraulic lifts, boilers, Linotype machines, dye casting machines, metal rolling, pressing, crushing machines or apparatus or water which has been stored in such a manner as to expose it to possible contamination.

SECTION 9.02 PROHIBITED CONNECTIONS

No secondary water shall overflow into or be discharged into any surge tank, storage tank or reservoir or shall in any way be piped or conveyed into the water supply system of any building, structure or premises to become a part of or be mixed with the fresh water supply from the Water System either inside of the Premises or in the Water Service Pipe unless such mixing occurs downstream of an approved, reduced pressure principle backflow preventer that has been tested and found to be working properly by a certified tester in accordance with all state, county and local regulations. Should the reduced pressure principle backflow preventer be found to not be functioning correctly or fail to pass a test of its performance, the Owner shall immediately shut down the secondary water source and rely solely on water supply from the Jersey City Water System. Secondary water shall not be piped to or used for cooling crushers, rollers or mixers where foods, candies, liquids or materials are manufactured for human or animal consumption. No connection, tap or opening shall be made into the Water System including into Water Mains unless the connection, tap or opening has been permitted in accordance with these Rules and Regulations. Wherever the fire protective equipment in any building, structure or premises has service from the Water System, no pipe or other conduit which conveys secondary water shall be cross-connected to the fire protective equipment. All fire protective equipment connected to the Water System shall be constructed in such manner that all tanks, pipes, pumps, surge tanks and fire hydrants can be thoroughly drained, flushed and cleaned by the Owners of such equipment and premises, and there shall be no direct connections from the tanks, pipes and other equipment to any drainage pipes or sewers.

SECTION 9.03 HYDRANT PROTECTION

Every pump or hydrant for providing drinking water supply shall be protected from surface water and contamination.

SECTION 9.04 PROHIBITED AND REQUIRED CONNECTIONS

No pipe or system of piping which receives its supply from the Water System shall be directly connected to any processing tank, vat, mixer, heater, cooker, washer, pump appliance or equipment used for storing, holding or conveying fluids or materials or for manufacturing or food processing or washing purposes. Such appliances and equipment shall be supplied from the Water System through an open funnel connection or an open tank which shall be located not less than six inches above the overflow rim of such container, appliance or equipment. No pipe or system of piping in any building, structure or premises, which receives its supply from the Water System, shall be directly connected to any device, appliance or apparatus in which such water supply is used to provide power through a water jet or other device to create vacuum or partial vacuum with which to operate any aspirator, siphon, cellar drainer, ejector, cleaner, sweeper, conveyer or washer of any kind or description.

SECTION 9.05 PLUMBING FIXTURE INSTALLATION SPECIFICATIONS

No plumbing fixture shall be installed unless the water supply enters said fixture at least two inches above any overflow connections. All submerged water supply inlet connections are hereby

prohibited, and no tanks, vats, utensils or other water supply devices used for other than drinking purposes and having submerged water supply inlets shall be directly connected to city water supply; except any water heating device or heated water storage tank or low pressure boiler.

SECTION 9.06 METERS ON SECONDARY WATER SOURCES

Users of the Jersey City sanitary sewer system whose water is partially or totally supplied by secondary water must have each secondary water supply metered by Water Meters that are approved by and read by JCMUA for the purpose of assessing sewer rates. If such a user does not have a Water Meter on a secondary water source and is, therefore, committing Unlawful Consumption, JCMUA has the right to require the Owner to install a Water Meter and any ancillary plumbing or, if the Owner fails to do so within ninety (90) days of notification by JCMUA, JCMUA shall have the right to install the Water Meter and ancillary plumbing and charge the owner for such in accordance with these Rules and Regulations.

ARTICLE X. ENFORCEMENT OF RULES AND REGULATIONS

SECTION 10.01 RIGHTS AND REMEDIES GENERALLY

JCMUA may avail itself of any and all rights and remedies allowable at law, but in any event the enforcement provisions or any other provisions of these Rules and Regulations shall not be exclusive nor in derogation of New Jersey law.

SECTION 10.02 CHARGES FOR FAILURE TO REMEDIATE UNSATISFACTORY CONDITION

JCMUA reserves the right to remedy any use of the Water System that is inconsistent with these Rules and Regulations if any Customer shall fail or refuse, upon receipt of written notice from JCMUA, to remedy any such unsatisfactory condition. Violators will be charged for all costs incurred in correction of the unsatisfactory condition and for all other related expenses incurred by JCMUA.

SECTION 10.03 REIMBURSEMENT FOR ACTUAL FINES

JCMUA shall have the right to seek reimbursement from any Person who it deems responsible for any penalty or fine imposed upon JCMUA by a regulatory agency.

SECTION 10.04 CUMULATIVE AND CONCURRENT RIGHTS AND REMEDIES

All rights and remedies of JCMUA herein provided shall be cumulative and concurrent, and the exercise by JCMUA of any one of them shall not be deemed a waiver of its rights to exercise any other one of them.

SECTION 10.05 CRIMINAL AND CIVIL ACTIONS NOT PROHIBITED

None of the above shall be deemed to prevent the imposition of such criminal and civil penalties as may be imposed by the Municipal Court of the City under the applicable ordinances of the City.

ARTICLE XI. DISCONTINUANCE OR CURTAILMENT OF SERVICE

SECTION 11.01 REASONS FOR DISCONTINUATION OF SERVICE

JCMUA or its designee may, upon reasonable notice, when such notice can be reasonably given, suspend, curtail, or discontinue service for the following reasons:

- a) For the purpose of making permanent or temporary repairs, changes, or improvements in any part of its system;
- b) For compliance in good faith with any governmental order or directive, notwithstanding that such order or directive subsequently may be held to be invalid;
- c) In the event of an emergency including but not limited to the following:
 - i. JCMUA shall have the right to provide for fire and other emergencies, or may restrict or regulate the quantity of water used by the customer in case of scarcity, or whenever the public welfare or order of any local, county, state, or federal agency may so require.
 - ii. In the event of a declaration by the City, Mayor, Governor, NJDEP, or JCMUA of an emergency situation with respect to the availability of potable water, JCMUA shall have the right to require any customer to cease and desist using water for the purposes of watering lawns, shrubbery or gardens, washing motor vehicles, or filling swimming pools.
 - iii. In the event of a declaration by JCMUA of an existing or anticipated state of low water pressure, JCMUA shall have the right to regulate water usage by limiting or eliminating water usage for the purposes of watering lawns or gardens, washing motor vehicles, or filling swimming pools.
 - iv. In the event any customer violates the restrictions set forth in any emergency measures relating to water consumption including emergency measures adopted by JCMUA relating to water consumption, including measures related to low pressure, may discontinue the water service to that customer for the duration of the emergency or state of low pressure.
 - v. In the event of a condition of threat to the safety or quality of water from known or suspected contamination or the potential for contamination including, but not limited to, failure to install an approved backflow preventer, failure to maintain an operating backflow preventer, the existence of cross-connections, and the deliberate or accidental introduction of known or unknown contaminants.
- d) For any of the following acts or omissions on the part of the customer, subject to notice under section 11.02.
 - i. Nonpayment of any valid bill due for service furnished at any present or previous locations;
 - ii. Connecting to or disconnecting a meter or in any way tampering or interfering with a meter or remote meter reading device or tampering with any other facility owned by the City or by JCMUA without permission;
 - iii. Fraudulent representation in relation to the use of service;
 - iv. Moving from the premises, unless JCMUA is notified that the service is to be discontinued;
 - v. Providing water services to others without the written approval of JCMUA;
 - vi. Failure to make any payment due to JCMUA;
 - vii. Connecting or operating any piping or other facility in such manner as to adversely affect the safety or adequacy of service provided to present or prospective customers;

- viii. Failure to remove any nonconforming temporary or permanent physical connection or interconnection to any unapproved source of supply;
- ix. Willful waste of water through improper or imperfect pipes, fixtures, or otherwise;
- x. Failure to maintain in good order all piping, connections, fixtures, owned by the customer, or approved physical connection installations;
- xi. Failure to install, test, or maintain a backflow prevention device in accordance with the requirements of these Rules and Regulations and N.J.A.C. 7:10-10 (NJDEP's cross connection regulations).
- xii. Where the condition of the customer's installation presents a hazard to life or property;
- xiii. For refusal to allow reasonable access to the customer's premises for any necessary purpose in connection with rendering of service, including without limit, Meter installation or reading; or
- xiv. For a violation of any of these Rules and Regulations.

SECTION 11.02 NOTICE OF DISCONTINUANCE FOR NONPAYMENT

- a) Single Family Dwellings and Commercial Establishments
 - i. Service will not be terminated for nonpayment of bills for consumption of water until the expiration of thirty (30) calendar days following the date on which the payment is due.
 - ii. After the thirty (30) day period has elapsed, notice of discontinuance will be sent by JCMUA or its designee, and the customer will have fifteen (15) calendar days to respond to the notice and/or make payment.
 - iii. If the customer remains delinquent after the fifteen (15) calendar days has expired, a collector will visit each property to attempt to collect payment, or set up a payment plan. This visit is subject to a service charge as listed in Appendix I.
 - iv. If the customer is not present, or does not set up a payment plan, the collector shall post a notice that shut-off procedures will begin in fifteen (15) calendar days unless there is customer contact or payment.
 - v. Upon the expiration of the fifteen (15) calendar days, JCMUA or its designee will terminate service.
 - a) Before termination, an adult occupant shall be notified as to how the customer's service may be restored by JCMUA. If no adult is present, a sealed note will be left on the premises with this information.
 - b) If a residential customer offers payment of the full amount or a reasonable portion of the amount due at the time of termination, a JCMUA representative will accept payment without discontinuance of service. When such payment is made, the customer will be provided with a receipt showing the date, account number, customer's name and address and amount received.
 - vi. A list of dwellings posted for shut-off will be sent to the City Health Department.
 - vii. If customer has a medical condition, JCMUA or its designee will not terminate service if the customer gives reasonable proof of inability to pay. Customer will have one hundred fifty (150) days to submit a physician's statement, in writing, to JCMUA, or its designee, as to the nature and probable duration of the medical condition. In this situation, deferred payment will be arranged.

b) Multiple Family Dwellings

- i. No action will be taken for nonpayment of bills for consumption of water until the expiration of thirty (30) calendar days following the date on which payment is due.
- ii. After the thirty (30) calendar days have elapsed and no contact or payment have been made, JCMUA or its designee will give written notice to the landlord/owner that if there is no response within fifteen (15) calendar days, an application for the appointment of a receiver will be filed with the Superior Court of New Jersey, pursuant to N.J.S.A. 40:48-2.12h and New Jersey Court Rule 4:53-1.
- iii. If a receivership is inappropriate, notice of discontinuance will be sent by JCMUA or its designee and the landlord will have fifteen (15) calendar days to respond to the notice and/or make payment. JCMUA or its designee shall use its best efforts to provide copies of the discontinuance notice to all tenants.
- iv. If the landlord remains delinquent after the fifteen (15) calendar days has expired, a collector will visit the property and post a notice in a conspicuous area of the premises and in the common areas of the multi-family premises that shut-off procedures will begin in fifteen (15) calendar days unless there is contact from the landlord or payment.
- v. Upon the expiration of the fifteen (15) calendar days, JCMUA or its designee will terminate service.
 - A. Upon termination of service, JCMUA or its designee will post a notice explaining how the service can be reconnected.
 - B. If the landlord/owner offers payment of the full amount or a reasonable portion of the amount due at the time of termination, a JCMUA representative will accept payment without discontinuance of service. When such payment is made, the customer will be provided with a receipt showing the date, account number, customer's name and address and amount received.
- vi. A list of dwellings posted for shut-off will be sent to the City Health Department.

SECTION 11.03 VACANT OR ABANDONED PROPERTIES

- a) If all attempts have been made to collect payment and the customer remains delinquent, a collector will be sent to the property to post a notice that shut-off procedures will begin in fifteen (15) calendar days unless there is customer contact or payment.
- b) If there is no response at the end of the fifteen (15) calendar days, JCMUA or its designee will remove the meter and cut and cap the service line in addition to the regular shut-off procedures.
- c) If the property is abandoned or boarded up, and every attempt has been made to collect the outstanding debt, the account will be subject to the Jersey City Lien Sale process.

SECTION 11.04 SHUT-OFF PROCEDURES

- a) Shut-offs will only be conducted Monday through Thursday. No shut-offs will be conducted on Fridays, Saturdays, or Sundays, or on the day before a holiday or on a holiday absent an emergency.
- b) No shut-off shall occur unless the customer's arrearage is more than \$50.00 or the account is more than ninety (90) days in arrears.
- d) There will be a fee applied to the customer's account for all shut-offs. See Appendix I for amount of shut-off fee.
- e) Fire lines will be included in the shut-off, and the City Fire Department will be notified.

- f) If a Curb Stop is present, shut-off will occur at the curb.
- g) In order to shut off the Water Service, if there is no Curb Stop present, JCMUA may, at JCMUA's sole discretion, undertake the following actions and charge the customer the applicable fees in accordance with Appendix I:
 - i. Install a new Curb Stop, or
 - ii. Excavate the street to turn off the corporation stop valve or tapping valve or adjacent gate valve where the Water Service Line connects to the Water Main, or
 - iii. Install a corporation stop valve or tapping valve or adjacent gate valve where the Water Service Line connects to the Water Main, or
 - iv. Install a new Curb Stop and Water Service Line if the existing Water Service line is made of lead.

Installation of a shut-off valve or similar device at the curb or at the Water Main will facilitate future restoration or termination of service, whether such termination is voluntary or involuntary, when and if such termination becomes necessary. JCMUA shall charge the customer for the cost of shutting off the Water Service at the rates specified in Appendix 1 or, if not stated in Appendix 1, at the actual cost of installation as determined by the Senior Engineer.

h) If there is no Curb Stop present, and one is necessary for termination, JCMUA may install a new Curb Stop and shut-off valve or similar device in the street, curb or sidewalk area within the right-of-way. Installation of a shut-off valve or similar device at the curb will facilitate future restoration or termination of service and will reduce the costs thereof, whether such termination is voluntary or involuntary, when and if such termination becomes necessary.

i) The customer will bear the cost of the termination, including the cost of excavation, backfilling, installation, and pavement restoration and will bear the cost of the labor and materials required, including the cost of repair of the street and/or sidewalk and of any Curb Stop, including the cost of its installation.

j) Although the customer will be charged for the Curb Stop, and shut-off service, only JCMUA or its designee, as well as the City, shall have the right to operate the same.

k) The charges for service shut off, road opening, pavement restoration, sidewalk and property restoration, and installation of a curb stop, valves, shut-off device, Water Service Line and any other direct costs are listed in Appendix I.

l) The cost of repairs shall become a lien upon the house, tenement, building or lot until paid and satisfied.

m) The customer shall not directly or through others, turn the water on or off at any Curb Stop, or meter valve, or disconnect or remove the Meter, or permit its disconnection or removal, without the written consent of JCMUA, or its designee.

n) In the event that water service shall be turned on by anyone other than JCMUA or its designee at any Curb Stop, meter valve after water service has been turned off by JCMUA or its designee, or before service has been authorized by JCMUA, or its designee, the customer and/or property shall be charged for all expenses incurred by JCMUA, or its designee, in re-terminating the water service, including wages, overhead, supplies and expenses, and further, JCMUA, or its designee, shall require the customer and/or owner to pay in advance an estimated water and sewage bill for the ensuing twelve (12) month period for all properties which the customer and/or owner have connected to any system of JCMUA

o) If a customer with a lead service line is delinquent and JCMUA's contractor is directed to cut the line off, customer is required to replace the entire lead service line with a copper line.

SECTION 11.05 RESTORATION OF SERVICE

- a) Water service shall be restored when the conditions for which such service was discontinued are corrected. Where water service is discontinued for nonpayment of any bill or charge owed to JCMUA, service will not be resumed until full payment or satisfactory arrangements for payment have been made. In addition, as a condition of resumption of service, any charges due for disconnection or reconnection of service must be paid or satisfactory arrangements for payment made.
- b) Restoration of service will be conducted between 12:00 p.m. and 4:00 p.m.
- c) If the customer contacts JCMUA before 2:30 p.m., the service will be restored that day.
- d) If the contact is after 2:30 p.m., the service will be restored the next business day, unless the supervisor approves the after-hours turn-on.
- e) There must be an adult occupant present at the Premises at the time of turn-on.
- f) If there is no adult available to be present at the Premises, the Customer can leave a signed note authorizing the water to be turned on without an adult present. The note must state that JCMUA, its operator, agents and the City will not be held responsible for damages if any are caused by the turn-on, including, but not limited to flooding and fire.
- g) A Turn-on Fee will be charged in accordance with Appendix I.
- h) A Water Clearance may be granted when the customer's unpaid balance is \$10.00 or less.

APPENDIX I. WATER RATES, FEES AND CHARGES

1. RETAIL WATER CONSUMPTION RATE

Rate for water consumption for all customers except Bulk Water customers: \$4.58 per hundred cubic feet (748 gallons) as of Oct.1, 2020. This rate is subject to changes from time to time that the JCMUA Board of Commissioners deem appropriate.

2. FIXED MONTHLY METER CHARGES

Fixed monthly meter charge for all customers where the City owns the meter except fire meters:

Meter Size (Inches)	Monthly Meter Charge
5/8	\$6.62
3/4	\$9.92
1	\$16.54
1 1 /4	\$26.45
1 1 /2	\$33.06
2	\$52.90
3	\$105.81
4	\$165.32
6	\$330.74
8	\$529.02
10	\$760.47
12	\$1421.75

This charge shall be initiated on the date the meter is installed and the inspected by JCMUA.

3. PRIVATE FIRE SERVICE CHARGES

Monthly fee for private fire service:

Detector Check or Service Size (Inches)	Monthly Charge
5/8	\$12.44
1 1/2	\$18.66
2	\$37.32
3	\$74.64

4	\$ 124.41
6	\$248.81
8	\$447.87
10	\$696.70
12	\$995.28

Charge is based on the fire line detector check device size or, if there is no fire line detector check, the fire line Water Service Pipe size. The detector check water meter's size is not a factor. This charge shall be initiated on the date the tap to the water main is made for the provision of water to the building's fire suppression system.

Pursuant to N.J.S.A. 40:14B-21, no monthly fee for private fire service will be charged to a residential customer served by a water fire line of two (2) inches or less in diameter. If more than one Water Service supplies fire service to a facility, each Water Service shall be charged a Monthly Charge.

4. BULK WATER CONSUMPTION RATE AND OUTSIDE JCMUA SERVICE AREA POLICY

Consumption rate for wholesale water contracts entered into, amended, or modified on or after December 1, 2007, with entities located outside the JCMUA service area, the charge of \$2,450.32 per million gallons for consumption during 2007, which rate may be increased as determined to be appropriate and necessary by the Board of Commissioners of JCMUA.

5. FIRE HYDRANT USE PERMIT

Fee for a fire hydrant use permit and consumption of water from the hydrant(s) shall be determined by one of the following rate structures chosen by JCMUA. Requests should be directed to JCMUA. The two hydrant permits types that may be issued by JCMUA are use of designated field hydrant(s) with special hydrant meter or use of on-site hydrant at JCMUA Westside Facilities.

Depending on the use, JCMUA may provide water from the fire hydrant located at the Northeast corner of the JCMUA West Side Operations Building ("JCMUA Fill Up Hydrant"). The filling of trucks from hydrants around the city is prohibited and maybe subject to fines. Water taken from the JCMUA Fill Up Hydrant shall be based on a minimum fee of \$272.50 per week for an unlimited number of tanker truck fills. Meter readings shall be taken on the water meter connected to the above hydrant and recorded in the JCMUA permit office. Should the water taken in each week exceed \$250.00 minimum fee the company using the hydrant shall pay the overage. If the overage is not paid at the beginning of the next 7-day construction water period, then person or company will not be allowed to take water from JCMUA.

For dust control during building demolition and other authorized uses, JCMUA shall allow use of a designated field hydrant by the permittee. If appropriate, JCMUA may mandate the use of a field hydrant instead of the Fill Up Hydrant. A special hydrant meter, issued by Suez meter shop, shall be installed by permit. Charges for use of a designated field hydrant at or near the site include meter charge of \$2200 of which \$1700 is a deposit and \$500 is for a drawn down account for water consumption charges, \$1500 application fee and \$350 per day operator fee. For use periods exceeding 8 hours on any given day, an operator fee of \$65 per hour shall be charged. All fees, except for meter deposit, shall be waived for JCMUA projects. Meter deposit and drawn down fee shall be payable to Suez at time of meter pickup. The application fee and hourly charges, including any overtime, shall be charged to JCMUA.

6. APPLICATION FOR NEW OR CHANGED WATER SERVICES

A. Water Service Application Fee.

- i. For Water Service Lines less than 2-inches: None.
- ii. For Water Service Lines 2-inches or larger: \$55 per EDU. The number of EDUs a Water Service Line size represents is given in the table of Water Connections Fees in this Appendix.

B. Water Main Inspection Fee.

For inspection of installed new Water Mains for projects with projected flows of 6,000 GPD or greater: \$4.36 per foot of water main installed. This fee does not apply to Water Service Lines.

C. Deposit for Record Drawings.

Applicants for Water Main Extensions and Water Services must provide a deposit with JCMUA that will be returned upon verification of submission of a complete set of record drawings in the formats required of the new Water Mains or Water Service:

- i. For Water Services less than 3-inches: None
- ii. For Water Services 3-inches and greater. \$1,100.00 per Water Service

D. Water Connection Fee.

Fee for the right to connect to the Water System for the first time or to enlarge an existing Water Service: \$200.00 per Equivalent Dwelling Unit ("EDU"). An EDU is defined as the average water flow of the average 5/8-inch meter in Jersey City, which is 310 gallons per day. For meters larger than 5/8-inch, the Water Connection Fee shall be determined by the number of EDUs that the larger meter represents times the Water Connection Fee for one EDU. The number of EDUs that meters larger than 5/8-inch represent is determined by the ratio of the average flow of the larger meter in Jersey City (for meters up to 6-inches) to the average flow of an Equivalent Dwelling Unit. For 8, 10, and 12-inch meters, where there was insufficient usage to determine average flows, the ratio of the rated maximum capacity of the larger meter to the rated maximum capacity of a 5/8-inch meter was used. The following table provides the number of EDUs and the Water Connection Fee for different sized meters.

Meter Size (Inches)	Meter Capacity Ratio (Ratio to 5/8-inch Meter) (EDUs)	Water Connection Fee
5/8	1.00	\$200.00
3/4	1.45	\$290.00
1	2.55	\$510.00
1 1/4	3.79	\$758.00
1 1/2	4.84	\$968.00
2	9.97	\$1,994.00
3	19.2	\$3,840.00
4	29.6	\$5,920.00
6	60.1	\$12,020.00
8	80.0	\$16,000.00

10	115	\$23,000.00
12	215	\$43,000.00

For enlargement of an active Water Service, a connection fee is charged only for the difference between the connection fee for the new meter and the connection fee for the replaced active meter. If two 4-inch meters are used for an 8-inch Water Service Pipe, two 4-inch connection fees are charged. If another water meter such as irrigation Water Meter is downstream of the main domestic Water Meter (downstream meter's water flows through the main domestic Water Meter), no connection fee is charged for the downstream water meter(s). A connection fee is not charged for fire service including the detector check Water Meter. When a combination fire and domestic meter is installed, the water connection fee is charged based upon the size of the domestic meter.

In accordance with N.J.S.A. 40:14B-22.3 connection fees for public housing authorities and non-profit organizations building affordable housing projects shall be fifty percent (50%) of the rates set forth hereinabove.

If more than one Water Service of the same size provides service to a facility for the sole purpose of redundant supply and if the multiple Water Services do not result in the facility being able to receive water at a greater rate (GPM) than any one of the services can supply, then only one Connection Fee shall be charged. The Senior Engineer shall have sole discretion over determining whether more than one Water Service provides water at a greater rate than a single Water Service provides, and if so, how many Water Connection Fees or shall be charged.

E. Water Meter Permit Fee.

Fee for the cost of a new or different sized water meter, which meter shall remain the property of Jersey City:

Meter Type	Meter Size (Inches)	Water Permit Fee for Water Meter
iPerl	5/8 or 5/8 by 3/4	\$126
iPerl	3/4	\$142
iPerl	1	\$184
R2 OMNI	1 1/2	\$529
C2 OMNI	1 1/2	\$1196
C2 OMNI	2	\$1380
C2 OMNI	3	\$1747
C2 OMNI	4	\$3035
C2 OMNI	6	\$5241
C2 OMNI	8	\$8144

C2 OMNI	10	\$10,509
F2 Compact	4	\$6944
F2 Compact	6	\$9242
F2 Compact	8	\$13,836
F2 Compact	10	\$19,791
F2 Standard	4	\$7211
F2 Standard	6	\$9366
F2 Standard	8	\$14,800
F2 Standard	10	\$20,842

In addition to the fee for the meter in the table above, those meters that are designated by JCMUA to be read by radio signal (radio-read) shall be charged an additional Water Permit Fee of \$152.00 for an MXU, the radio signal unit. All meters 2-inches or larger shall be radio-read and require an MXU. JCMUA shall indicate which meters less than 2-inches in size require a MXU.

The meter and MXU fees listed above include a 30% handling/application charge added to the cost of the item.

F. Water Meter Installation Delay Fee.

A fee in the amount as shown in the table in this section will be charged each day following ninety (90) days after a water main is tapped for a new or enlarged water service or replaced and a domestic water meter has not been installed. If a construction meter is installed before the ninetieth (90th) day and an escrow account has been set up with JCMUA to pay for water during construction, no charge for meter delay will be charged. However, prior to JCMUA issuing an approval letter for a Certificate of Occupancy, the Domestic Meter and, where applicable, Fire line Detector Check and its bypass meter shall be installed. For construction meters, the delay fee of \$20 per day will apply after seven (7) days from the date of the tap. No installation delay fees shall be charged on fire meters.

Meter Size (Inches)	Delay Fee Per Day
5/8, 3/4	\$ 1.09
1	\$2.18
1 1/2	\$3.27
2	\$5.45
3	\$8.18
4	\$10.90

6	\$16.35
8 & larger	\$21.80

G. Water Tap Permit and Tapping Fee.

Water Tap Permits are required for all new taps into a Water Main or a change in the size of an existing tap into a Water Main. Water Tap Permits are effective for one year. A Water Tap Permit will not be issued until applicant has applied for and paid the drawdown deposit for any construction meter needed to supply water during construction. JCMUA will decide whether JCMUA will perform the tap or the Tap Permit holder must hire and pay for a qualified tapping firm to perform the tap. The Tapping Fee for having a tap installed by JCMUA into a Water Main:

Main Size (inches)	Tap Size (inches)	Water Tapping Fee*
Any	3/4	\$437.00
Any	1	\$460.00
Any	1 1/2	\$600.00
Any	2	\$689.00
6	4-6	\$1212.00
8	4-8	\$1248.00
10	4-10	\$1430.00
12	4-12	\$1466.00
16	4-12	\$1539.00
20	4-12	\$1684.00
24	4-12	\$2047.00

* All fees are for ductile iron and cast-iron mains. Fees for mains made from other materials must be obtained from the JCMUA Water Engineering Bureau. Applicant for Water Tap Permits of 2-inches and larger must supply their own tapping sleeve and tapping gate. The sleeves and gates must conform to the specifications of JCMUA.

H. Construction Meter, Construction Meter Delay Fee.

The applicant shall install a construction meter for all proposed buildings with service lines 2-inches or larger. JCMUA shall supply the construction meter. The construction meter shall be installed with a reduced pressure principle backflow preventer (“RPZ”) indoors or in a protected meter pit or meter box that prevents the RPZ from freezing and shall be connected by a temporary line that is tapped into or connected to the service line for the proposed building downstream from the curb gate valve. The Applicant shall pay \$1100 for the construction meter’s use. Of the \$1100, \$600 will be a deposit for the meter and the other \$500 shall be deposited in a drawdown account for billing purposes. The drawdown account, and when necessary, the deposit shall be charged for water use and for any damages to the construction meter. Once construction is completed, the meter shall be returned to JCMUA, the temporary line and RPZ completely removed, and any temporary tap into the service line closed with a stainless-steel clamp with rubber gasket and stainless-steel bolts or other apparatus approved by JCMUA. Upon approval, the \$600 deposit will be returned plus any unused balance in the drawdown account.

If a property is found to have tapped into the service line or other Water System source without a JCMUA supplied construction meter connected, the property owner shall be charged a delay fee of \$60 per day back to the date the service line for that property was tapped into the Water Main

7. MISCELLANEOUS FEES

A. Return Check.

Return check charge: \$25; returned checks of \$200 or more must be satisfied with a certified check, cash or money order.

B. Water Meter Accuracy Test.

Fee for water meter accuracy test:

- i. Five-eighths (5/8) inch and three-quarter (3/4) inch meters: \$50
- ii. One-inch meter: \$75
- iii. One- and one-half inch meter to two-inch meters: \$100

Fees for Water Meter Accuracy tests for Water Meters larger than 2-inches must be obtained from the JCMUA Bureau of Water Engineers. A Water Meter Accuracy Test fee is charged when a customer requests a meter-accuracy test and the test's results, on a flow-weighted basis, are more than plus or minus 3.00%. The flow-weighting formula shall be 15% at high flow rate, 70% at medium flow rate, and 15% at low flow rate.

C. Blueprints.

Copies of blueprints:

- i. 2 feet by 3 feet or smaller: \$10.00
- ii. Larger than 2 feet by 3 feet: \$20.00

D. Intersection Maps.

Copies of intersection maps: \$10.00

E. Fire Hydrant Flow Test.

Fee for a fire hydrant flow test: \$220.00

F. Shutting Off or Turning On Service.

Fees for shutting off a Water Service and for turning on a Water Service:

- i. Where no excavation is required during normal business hours: \$100.00
- ii. Where no excavation is required during all other hours: \$150.00
- iii. Where excavation in the street is required to operate an existing valve at or near the point where the Water Service line connects to the Water Main: \$2561.50
- iv. Where excavation requires installation of a curb box (valve): \$2561.50
- v. Where excavation in the street to shut off or turn on the Water Service requires installation of a corporations stop valve, or adjacent gate valve, or tapping valve: \$3542.50
- vi. Where, in conjunction with installation of a Curb Stop (or valve or tapping valve or gate valve), the Water Service Line is determined by JCMUA to be unsuitable for further use and a new Service Line is installed: Fee to be set by the Senior Engineer.
- vii. For a visit to the customer's premises to make a collection or post shutoff notice: \$60.00

Separate fees are charged for turning on and turning off a service. If, for example, the street had to be excavated for both the turn off and the turn on (F.ii.), two \$2561.50 fees would be charged.

G. Relocating Fire Hydrant.

Fee for relocating a fire hydrant, at the customer's request:

- i. Where the existing water line from the main to the hydrant is used: \$4360.00
- ii. Where a new water line from the main to the hydrant is installed: \$8175.00 Applicant shall submit engineering plans for the relocation of the hydrant to the JCMUA Water Engineering Bureau who must approve the plans before work will be planned.

H. Failure to Allow Access.

Fee for failure to allow access to a Water Service for purposes of service or installation of the Water Meters or associated appurtenances or inspection of the Water Service or for access to the Water Supply Line or Water Service for inspection or testing of backflow prevention devices: \$218.00 per occurrence per Equivalent Dwelling Unit of meter capacity. Failure to allow access includes a customer not responding within thirty (30) days to a request for access delivered by certified mail or a customer's refusal to set and honor a date for access when contacted in person or by phone.

Meter or Service Size (Inches)	Failure to Allow Access Fee
5/8	\$218.00
3/4	\$218.00
1	\$218.00
1 1/4	\$218.00
1 1/2	\$263.78
2	\$543.37
3	\$1,046.40
4	\$1,362.50
6	\$1,362.50
8	\$1,362.50
10	\$1,362.50
12	\$1,362.50

I. Cutting and Capping a Water Service.

Fee for cutting and capping an unused, inactive, abandoned, or un-repaired Water Service or an active Water Service that is in violation of the Rules and Regulations herein: \$3542.50

J. Tampering, Illegal Connection, Theft of Service, Failure to Protect Water Service.

Fee for unauthorized tampering with a Water Service, including without limit, illegal connections, tampering with the meter, breaking a meter seal or coupling seal, a backwards meter, unauthorized turning on of service after JCMUA has turned it off,

removal of a meter, bypass of the meter, bypass of any required reduced pressure zone backflow preventer, failure to protect the Water Service from freezing or to protect the Water Meter from flooding, and theft of service by any means: \$1,090.00 for each offense. The assessment of such fee shall be considered in the quantum of penalty to be assessed and shall not in any way limit JCMUA's rights to pursue additional enforcement of any kind including the assessment of additional fees, fines, or penalties, assessment for the cost of Meter installation, and assessment of estimated past unrecorded consumption during the past six (6) years. JCMUA's failure to enforce a fee or its decision to waive a fee shall not be considered a waiver of customer's compliance with any term of these rules and regulations and shall not preclude JCMUA from any future enforcement rights.

K. Charges for Labor, Plumber, Other Services.

- i. Labor Charges for personnel of JCMUA or its authorized agents per regular business hour: \$91.56 per hour.
- ii. Labor Charges for personnel of JCMUA or Its authorized agents during non-regular business hours including weekends and holidays: \$ 137.34 per hour.
- iii. The above labor charges are subject to increase without notice as a result of JCMUA increasing its labor rates and or inflation.
- iv. If JCMUA or its authorized agents employs a plumber or other services by persons or firms not in the employment of JCMUA or its authorized agents, then the cost of those services shall be charged without mark-up.

L. Installation of a Water Service Line.

Fee for installing a Water Service Line shall be determined by the Senior Engineer.

M. Permit Re-issuance Fee.

All permits shall expire one (1) year after they are issued by JCMUA. A permit re-issuance fee of \$25.00 per permit shall be charged to replace expired permits.

N. Certified Mail Fee.

Fee for certified mail: \$5.00.

O. Site Plan Review Fees

Site Plans for developments and/or project outside of Jersey City will be charged a review fee based on time expended to review and approve plans at a rate of \$120.00 per hour. If JCMUA hires a consultant for the review, charges shall be based on actual charges incurred.

P. Non-Compliance Fee

Meter Size (inches)	Non-Compliance Fee
5/8	\$218.00
¾	\$218.00
1	\$218.00
1 ¼	\$218.00
1 ½	\$218.00
2	\$545.00
3	\$981.00
4	\$1,362.50
6	\$1,362.50
8	\$1,362.50
10	\$1,362.50
12	\$1,362.50

8. INTEREST ON LATE PAYMENTS/ALLOCATION OF PARTIAL PAYMENTS.

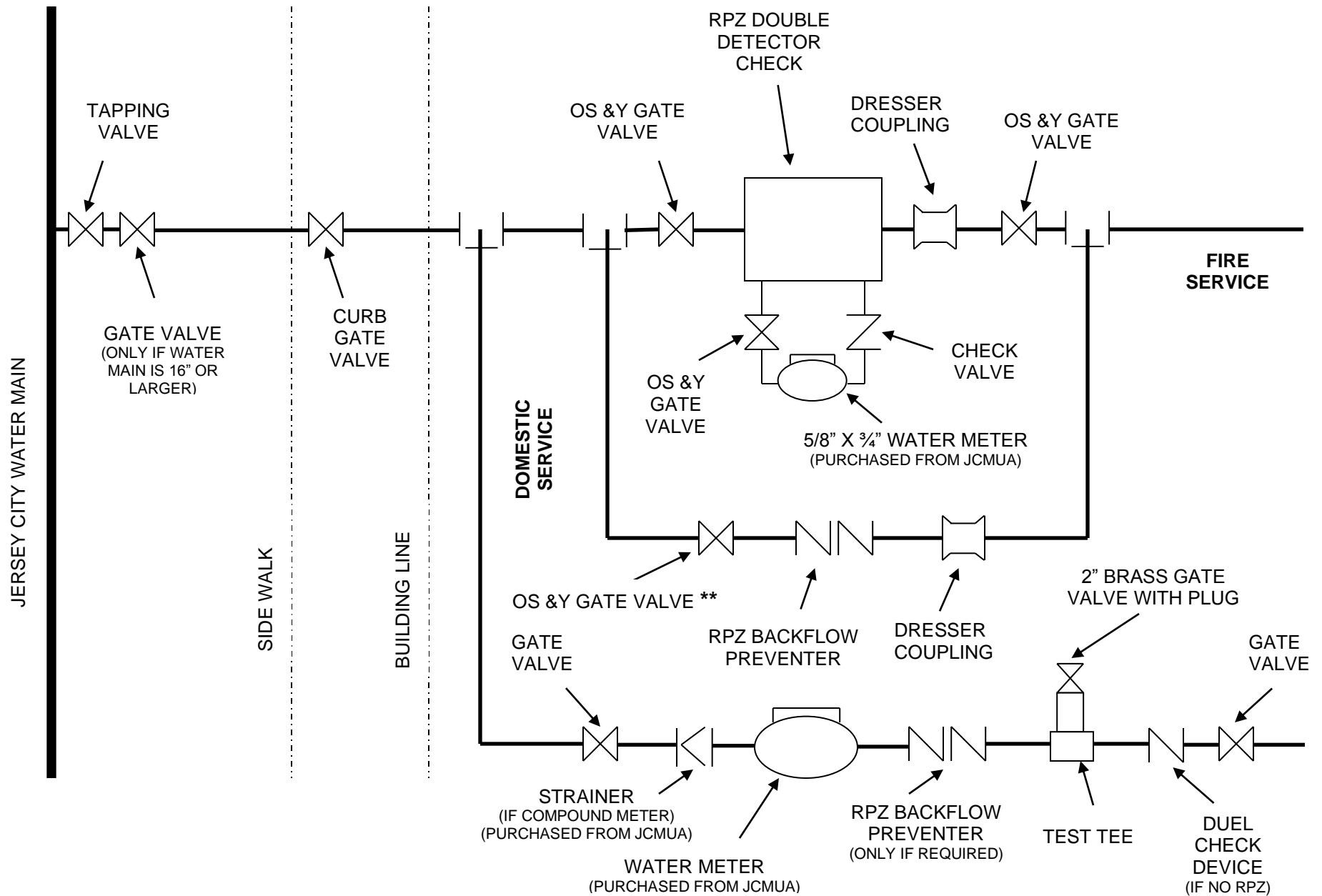
Full payment must be made within thirty (30) days from the date of the invoice. All amounts outstanding more than thirty (30) days from the date of the invoice shall be charged interest at a rate of 1.5% per month subject to applicable law. Interest shall begin to accrue on the day payment is due, or thirty (30) days from the date of the invoice. If there is more than one account (meter), payment will be equally allocated amongst all the accounts that have amounts outstanding. Within an account, payments will be allocated first to interest, then to the oldest balance owed.

9. CROSS-CONNECTION CONTROL PROGRAM FEES AND CHARGES

- A. Initial permit fees: \$55.00.
- B. Permit renewal fee: \$30.00
- C. Fee for re-inspection: \$70.00
- D. Charges for after-hours inspections or tests: \$110.00
- E. Administration fee for NJDEP physical connection permits: \$70.00

APPENDIX II.
REQUIREMENTS FOR FIRE AND DOMESTIC
WATER LINE AND METER INSTALLATIONS

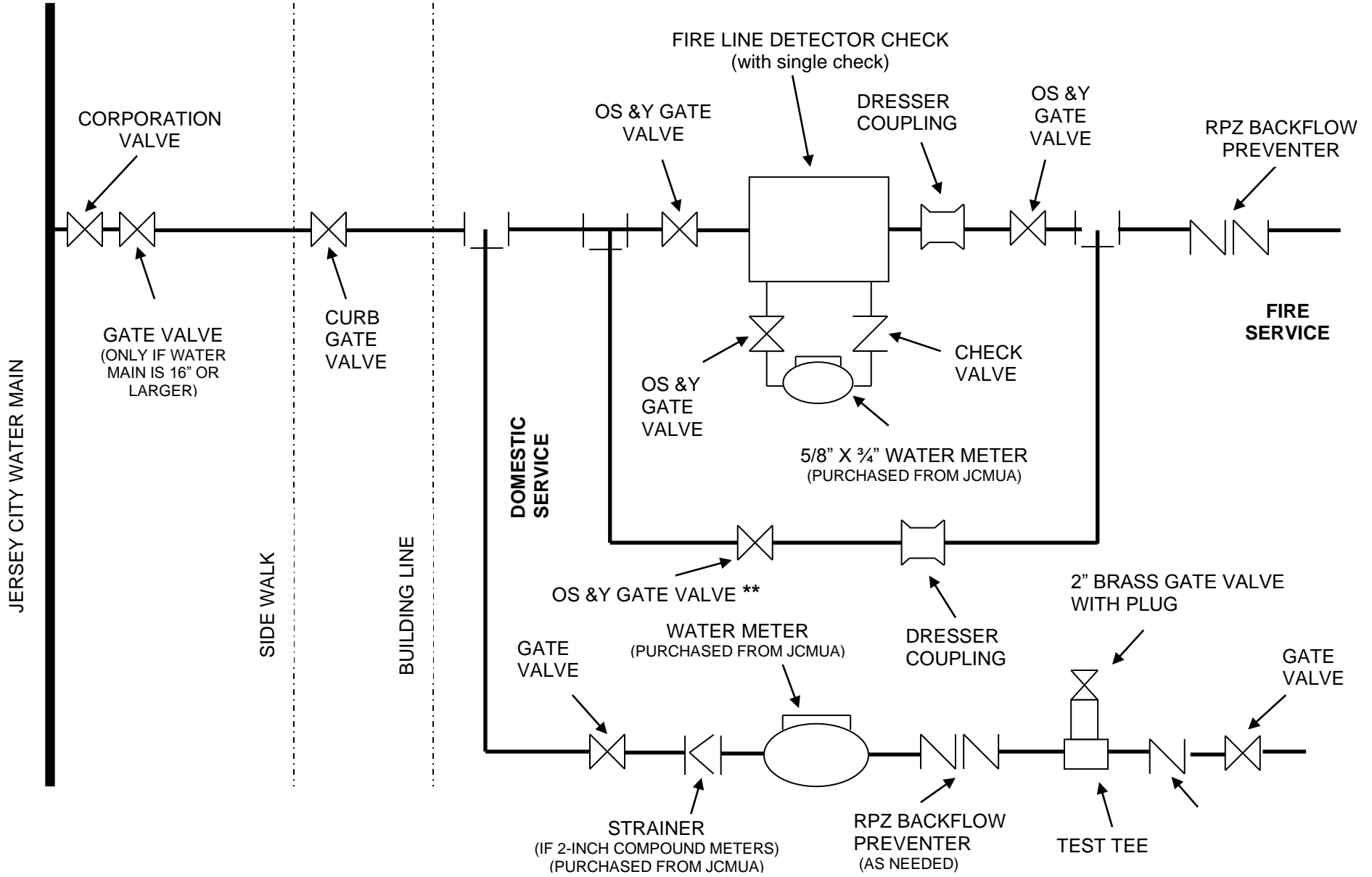
FIGURE 1.
J.C.M.U.A. REQUIREMENTS FOR FIRE AND DOMESTIC WATER LINE AND METER INSTALLATIONS
FOR CONNECTIONS GREATER THAN 2-INCHES USING DIP PUSH-ON OR FLANGED PIPE.



** Gate Valve Sealed by JCMUA.

Revised 1/28/10

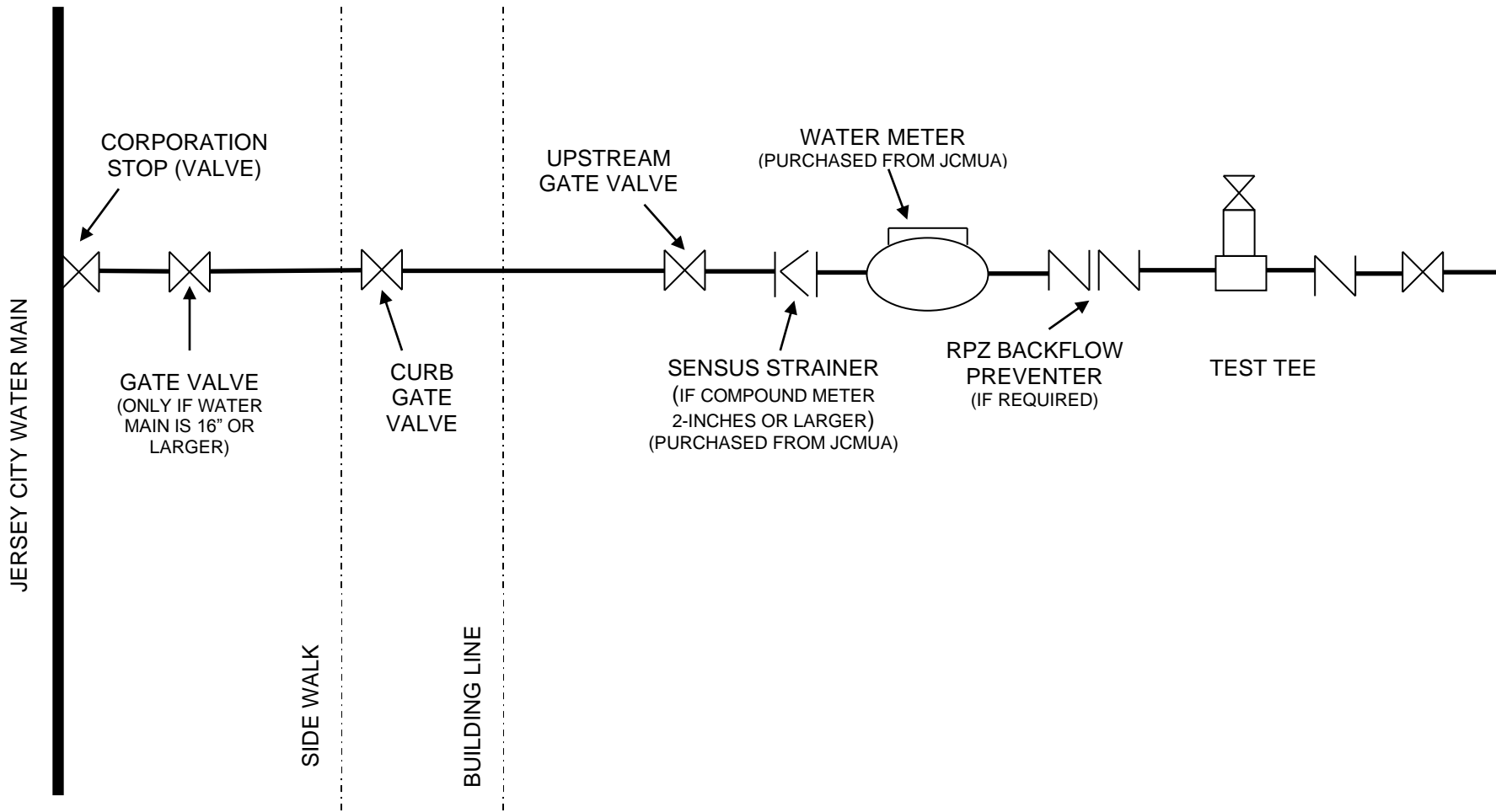
FIGURE 2.
J.C.M.U.A. REQUIREMENTS FOR FIRE AND DOMESTIC WATER LINE AND METER INSTALLATIONS FOR CONNECTIONS 1.5-INCHES AND 2-INCHES USING ROLLED SOFT K COPPER



** Gate Valve Sealed by JCMUA.

Revised 1/28/10

FIGURE 3.
J.C.M.U.A. REQUIREMENTS FOR DOMESTIC (With No Fire Service) WATER LINE AND METER INSTALLATION
FOR ANY CONNECTION UP TO 2-INCHES USING ROLLED SOFT K COPPER PIPE



Revised 1/28/10

**APPENDIX III. SUBMISSION OF RECORD DRAWINGS FOR
WATER MAIN EXTENSIONS AND WATER SERVICES**

Record Drawings for Water Services 2-inches and larger and all Water Main Extensions, signed and sealed by a New Jersey licensed Professional Engineer or Land Surveyor shall be submitted for review and acceptance by JCMUA. To make the drawing readable, it may be necessary to put water information on separate sheets (from sewer information) and/or use a table to show coordinate information. If multiple sheets are submitted, each sheet shall be signed and sealed. Drawings must be to scale and no smaller than 1-inch = 30 feet unless another scale is more appropriate for representing the information and is approved by JCMUA.

Each sheet shall include the Engineer's or Surveyor's name, license number, business name, address and telephone number and fax number. It shall also include the following statement: "I certify that these record drawings have been reviewed by me or by individual (s) under my direct supervision. To the best of my knowledge and belief these record drawings reflect the water facilities as constructed."

The minimum record drawing contents are as follows:

1. Indicate street curb lines, driveways, sidewalks, building outlines, lot lines, and street names so that location of water and sewer facilities with respect to other facilities is clear.
2. Show all easement locations for water and sewer facilities and indicate the name of party to whom the easement is granted. The dimensions and bearings must be shown on the record drawings.
3. Indicate material, length and size of water pipe between valves or at least every 300 ft.
4. Show all non-pipe facilities including valves, reducers and hydrants. Indicate the distance from any reducer to the nearest valve.
5. Show all abandoned in place facilities including the extent and method of abandonment.
6. Indicate distance from face of curb to centerline of water main.
7. Provide elevations to the nearest 1/10 ft for the following: top of valve operating nut for water mains
8. Provide horizontal coordinates, accurate to 1/10 ft for three control points that are located as far apart as possible and not all on the same side of the site. A control point can be a center of a valve operating nut or the top of a hydrant. The valve and hydrant can be new or existing.

The horizontal positions must be supplied in the New Jersey State Plane Coordinate System, based on the North American Datum of 1983 (NAD 83), in the U.S. survey feet. The vertical elevations must be supplied in U.S. survey feet based on the North American Vertical Datum of 1988 (NAVD 88).

Initially two paper record drawings, 24" x 36" in size, must be submitted. If the drawings do not meet the above standards, the JCMUA will provide comments either on the drawings themselves or on a separate letter. Once record drawings are accepted by the JCMUA Engineer, the applicant shall submit two 24" x 36" paper drawings and a CD-ROM with AutoCAD (DWG format) or ESRI (version 8.0 or higher) for the Authority's records.

APPENDIX IV. CROSS-CONNECTION CONTROL PROGRAM

I. Purpose

- A. To protect the public potable water supply from the possibility of contamination by isolating possible contaminants in a customer's building or facility that could backflow or back-siphon into the public water system.

II. Authority

- A. Federal Safe Drinking Water Act of 1974 states that a water purveyor has the primary responsibility for preventing water from unapproved sources or other substances from entering the public water system.
- B. New Jersey Safe Drinking Water Regulations, N.J.A.C. 7:10-10.9 states that the Owner of the public community water system may require any of its customers to install backflow prevention devices if the Owner of the public water system has a cross connection control plan in effect developed in accordance with EPA guidelines.
- C. Provisions in this program are not to supersede the National or NJ State Fire Protection or Plumbing Codes.
- D. The NJDEP approved the JCMUA's Cross-Connection Control Program on November 20, 2009.

III. Responsibility

- A. JCMUA will be responsible for the protection of the public potable water distribution system from contamination due to backflow or back-siphonage through the water service connection. If, in the judgment of the Senior Engineer of JCMUA, an approved backflow device is required at a customer's premises, the Senior Engineer, or his agent, shall provide written notice to the customer for the installation of such a device. Failure, refusal or inability on the part of the customer to install such device shall constitute grounds for discontinuation of water service to the customer premises until such device is installed.

IV. Definitions for the Cross-Connection Control Program

- A. *Approved* – Accepted by the Senior Engineer of JCMUA as meeting an applicable specification stated or cited in this regulation, or as suitable for the proposed use.
- B. *Backflow* – The flow of water or other liquids, mixtures or substances in the distribution pipes of the potable water supply from any source other than its intended source.
- C. *Back-siphonage* – The backflow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by the sudden reduction of pressure in the potable water supply system.
- D. *Backflow Preventer* – A device or means designed to prevent backflow or back-siphonage. Specific types include a double check valve assembly and a reduced pressure principle backflow preventer and the type required will be specified by JCMUA.
- E. *Containment* – A method of backflow prevention which requires a backflow prevention device at the water service entrance in order to protect the public water supply.
- F. *Contaminant* – A substance that will impair the quality of the water to a degree that it creates or could create a serious health hazard to the public leading to poisoning or the spread of disease or a substance that, as determined by JCMUA, leads to an unacceptable impact on the characteristics of the water supply, including but not limited to color, odor, and taste.
- G. *Cross-Connection* – Any actual or potential connection between the public water supply and a source of possible contamination or pollution.

- H. *Double Check Valve Assembly* – An assembly of two (2) independently operating spring-loaded check valves with tightly closing shut off valves on each side of the check valves, plus properly located test cocks for the testing of each check valve.
- I. *Fixture Isolation* – A method of backflow prevention in which a backflow preventer is located to correct a cross connection at an in-plant location rather than at a water service entrance.
- J. *Owner* – shall mean the owner or owners of the freehold of the premises or of a lesser estate therein, a vendee in possession or the lessee or joint lessees of the whole thereof.
- K. *Permit* – A document issued by JCMUA or New Jersey Department of Environmental Protection (NJDEP) which allows the use of a backflow preventer.
- L. *Reduced Pressure Principle Backflow Preventer* – An assembly consisting of two (2) independently operating approved check valves with an automatically operating differential relief valve located between the two (2) check valves, tightly closing shut-off valves on each side of the check valves plus properly located test cocks for the testing of the check valves and relief valve.

V. Administration

- A. JCMUA will operate a cross-connection control program, including keeping of all necessary records in accordance with this program.
- B. The Owner shall be responsible for providing access to his property for inspections of possible cross-connections and shall comply with all provisions of this program if a cross-connection is permitted.
- C. The Owner shall be responsible for water quality beyond the outlet end of the containment device and should utilize Fixture Isolation for that purpose.

VI. Requirements

- A. JCMUA
 - 1. For new or renovated facilities, JCMUA will conduct on-site evaluation and/or review of drawings/plans to determine if any backflow preventer required, the type of device required, and will issue a permit and perform inspection of installed devices.
 - 2. For facilities existing prior to the start of this program, JCMUA will perform evaluations that may include on-site inspection, and inform the Owner in writing of any corrective action necessary. The Owner will have ninety (90) days to comply, however this period may be shortened depending on degree of hazard involved and history of any existing device(s) in question.
 - 3. JCMUA shall inform the Owner by letter of any failure to comply by the time of the first re-inspection. JCMUA will allow an additional fifteen (15) days for the correction. After this period, if the Owner is still not in compliance then JCMUA may be terminate water service to his premises or impose fines until corrections are made. In the event that the Owner informs JCMUA of extenuating circumstances, JCMUA may grant a time extension of up to a maximum of 30 days.
 - 4. If JCMUA determines at any time that a serious threat to public health exists, then water service will be terminated immediately. JCMUA also has the right to install and/or test devices itself and bill the Owner for all material and labor cost incurred if the Owner fails to do so himself in the allotted time.
- B. Owner Responsibilities
 - 1. The Owner shall be responsible for the elimination or protection of all cross-connections on his premises.
 - 2. The Owner, after being informed by letter from JCMUA, shall at his expense install, maintain, or repair any or all backflow preventers on his premises.
 - 3. The Owner shall correct any malfunction of the backflow preventer which is revealed during periodic testing.

4. The Owner shall obtain the written approval of JCMUA prior to any modifications to an existing device including replacement of device with another device not of the same size or type, model, or addition of other backflow preventers.
5. The Owner shall inform JCMUA in writing of any change or proposed change in use of the facility or any modified or proposed cross-connections that may affect the degree of hazard of the facility.
6. The Owner shall not install a bypass around any backflow preventer unless there is a backflow preventer of the same type on the bypass. Owners who cannot shut down operation for testing of the device must supply additional devices necessary to allow testing to take place.
7. The Owner shall install and test backflow preventers in accordance with N.J.A.C. 7:10-10.4 and 10.6 respectively and JCMUA standards.
8. Only backflow preventers approved by JCMUA shall be installed by the Owner.
9. Any Owner with an unapproved water supply as stated in N.J.A.C. 7:10-10.2 shall obtain a NJDEP physical connection permit if the source is cross-connected to the public water system or if the source is located in a building also being served by the public water supply. The owner shall notify the NJDEP of the presence of this cross-connection within five (5) days of its creation or discovery. A copy of the NJDEP permit applications along with test results shall be submitted to JCMUA for its records.
10. The Owner must receive JCMUA approval on any proposed plumbing connection(s) on the side of the public water supply of the backflow preventer and may be required, as part of the approval, to install another backflow preventer to protect this additional connection(s).
11. The Owner shall be responsible for the payment of all fees for permits, device testing, retesting in the case that the device fails to operate correctly and re-inspections for non-compliance with JCMUA requirements.
12. The Owner may contact the NJDEP to obtain a list of private contractors who are certified backflow device testers by an approved agency. All charges for tests will be paid by the Owner.
13. The Owner is responsible for the installation of an expansion tank or relief valve downstream of the backflow preventer to provide for thermal expansion in the plumbing system in accordance with the National Plumbing Code.
14. The Owner shall be responsible for compliance with all other applicable codes, rules and regulations.
15. The Owner shall engage the services of a licensed NJ Professional Engineer to certify that the system is able to operate properly with a backflow device in place.
16. The Owner shall make all necessary modifications necessary for backflow preventer to be installed.

VII. Degree of Hazard

- A. JCMUA recognizes the threat posed by cross-connections to the public water system. All threats will be classified by the degree of hazard and will require the installation of a Reduced Pressure Principle Backflow Preventer or Double Check Valve Assembly by the Owner. Facilities that may be required to install Backflow Preventers include those listed in N.J.A.C. 7:10-10 Appendix A and those facilities that contain a substance, process, or utilize water in a manner that may contaminate the public water supply system.

VIII. Permits

- A. Cross-connection permits that are required for each backflow prevention device shall be issued by JCMUA. A fee will be charged for the initial permit and for the renewal of each permit.
- B. Permits must be renewed annually and are non-transferable. The fee schedule for permits is attached as Appendix A. With each renewal application, the Owner must submit device inspection and test results to JCMUA.
- C. To effect an administrative change to an existing permit, including a change of the Owner's name or mailing address, a change in Ownership of the facility, a change in the manufacturing process

that may have an impact on the threat to the public water supply or a change in the tenancy of the facility, the Owner must notify JCMUA in writing within fourteen (14) days of this change.

- D. Permits become immediately revoked if the Owner changes the type of device installed without JCMUA's approval or the degree of hazard of the facility, as determined by JCMUA, has changed since the permit renewal date without JCMUA being informed.

IX. Existing In-use Backflow Prevention Devices

- A. Any existing backflow preventer shall be allowed by JCMUA to continue in service unless the degree of hazard associated with the premises is deemed to exceed the effectiveness of the present backflow preventer or presents an unreasonable risk to the public health. Single check devices shall not be considered adequate means of backflow prevention. If the degree of hazard increases, as in the case of the residential building converting to a commercial facility, any existing backflow preventer must be upgraded to a reduced pressure principle device or one must be installed in the event that no backflow device was present.

X. Periodic Testing and Inspection

- A. All backflow prevention devices shall be tested at least annually. As per N.J.A.C. 7:10-10, devices requiring a NJDEP physical connection permit shall be tested quarterly.
- B. All double check valves assemblies shall be internally inspected annually. An internal inspection shall consist of the dismantling of the backflow prevention device to visually inspect the integrity of the internal mechanism including the clappers, discs, and facing rings. A reduced pressure backflow preventer shall be internally inspected if required for investigating a malfunction or if recommended by the manufacturer for routine maintenance.
- C. Testing and inspection shall be conducted by a private contractor certified by an agency that is approved by NJDEP pursuant to N.J.A.C. 7:10-10.8(f) and shall be done at the Owner's expense.
- D. Upon request of JCMUA, the Owner shall provide JCMUA notice of three (3) business days prior to testing or inspection of a device. When such a request is made, testing and inspection shall be conducted during normal business hours.
- E. Any backflow preventer which fails during periodic testing will be repaired or replaced and subsequently re-tested to ensure correct operation. In a high hazard situation, if a malfunctioning device cannot be replaced or repaired immediately, water service may be terminated due to the risk of contamination of the public water system. In other situations, a compliance date of not more than thirty (30) days after the test date will be established. Parallel installation of two (2) devices is recommended if the Owner desires uninterrupted service while testing or repairing a backflow preventer.
- F. Backflow prevention devices will be tested more frequently than specified in A above if there is a history of test failures or JCMUA feels that additional tests are warranted due to the nature of the hazard. Cost of the additional tests will be borne by the Owner.

XI. Records and Report

JCMUA will initiate and maintain the following records:

- A. Master files on customer backflow preventer tests and/or inspections and facility surveys.
- B. Master files on cross-connection permits issued.
- C. Copies of permit applications.
- D. Copies of lists or summaries submitted to JCMUA executives and commissioners.
- E. Copies of NJDEP physical connection permits.

X. Fees and Charges

Appendix I. lists the fees or charges for the following services or permits:

- F. Initial permit fees.
- G. Permit renewal fees.
- H. Fee for re-inspection.
- I. Charges for after-hours inspections or tests.
- J. Administration fee for NJDEP physical connection permits.

XII. Addendum

- A. Domestic Service dual check device. If a reduced pressure principle backflow preventer is not required on a Domestic Service, then a dual check device shall be installed downstream of the test tee before the gate valve. Refer to Figures 1-3 of Appendix II.
 - B. Strainers. JCMUA may require the installation of a strainer upstream of a backflow device to reduce fouling of the backflow device if a strainer of sufficient capacity is not already present.
-
- B. Strainers. JCMUA may require the installation of a strainer upstream of a backflow device to reduce fouling of the backflow device if a strainer of sufficient capacity is not already present.