THE JERSEY CITY MUNICIPAL UTILITIES AUTHORITY

REQUIREMENTS FOR FIRE AND DOMESTIC WATERLINE AND METER INSTALLATIONS

BACKFLOW PREVENTER UPGRADE PROGRAM 2017 (FOR EXISTING SYSTEMS)

1) For a regular fire suppression system without additives a double check detector assembly (DCDA) type of backflow preventer with OS & Y gate valves shall be installed on the main fire line. The device must have a bypass meter location with a double check valve (DCV) assembly. A double check valve assembly with OS & Y gate valves must be installed on the full size fire line bypass. The attached figure 1 shows the layout.

2) For a fire suppression system containing additives, a reduced pressure detector assembly (RPDA) with OS & Y valves shall be installed on the main fire line. The device must have a meter location with a reduced pressure zone (RPZ) assembly. A reduced pressure zone assembly with OS & Y valves must be installed on the full size bypass. The attached Figure 2 shows the layout.

3) For domestic service, an approved reduced pressure backflow preventer (RPZ) is required when the JCMUA determines that there might be a cross connection hazard. All commercial buildings are required to have an RPZ type backflow preventer(s) on their domestic service(s).

4) Current manufacturers of approved backflow prevention assemblies:

- Ames: http://www.amesfirewater.com/
- Appollo/Conbraco: http://www.apollovalves.com
- Febco: http://www.febcoonline.com
- Watts: http://www.watts.com
- Wilkins: http://www.zurn.com

5) If a reduced pressure backflow preventer is not required on the domestic service, a dual check valve should be installed downstream of the test tee.

6) Fire line meters and radio read devices (MXU) must be purchased at the JCMUA. The same MXU can be used for fire and domestic.

7) All fire service applications and all domestic service applications two (2) inches and larger must be submitted to the JCMUA's Bureau of Water Engineering for approval. Three (3) sets of plans and calculations shall be submitted for approval. All plans and calculations shall be signed and sealed by a Professional Engineer or Registered Architect licensed to practice in New Jersey. A hydrant flow test and an internal flow test (performed on the existing service line) are required.

THE FOLLOWING ONLY APPLIES IF A NEW SERVICE LINE IS NECESSARY:

8) Submitted plans shall be standard engineering drawings, 24 inches X 36 inches in size. Included shall be a site plan showing adjacent streets with water main, service and details indicated. Also include a key map showing general location within the City.

9) Indicated on the submitted plans shall be the size of tap, location of tapping and curb gate valves, detailed meter set-up and size of facility's meter. Also indicated on the plans shall be the type of occupancy of the facility receiving the water service i.e. hospital, warehouse, apartment building etc.

10) All existing water service lines to be abandoned shall be cut and capped at the main in accordance with JCMUA standards and witnessed by Suez. The maximum of one (1) tap shall be made for both domestic and fire service per facility. The tap shall be the minimum of one (1) size smaller than the City's water main. No tapping shall be done by anyone except Suez Jersey City unless specifically approved by the JCMUA.

11) Only one (1) combined domestic / fire service is allowed for each facility. Applicant may install check meters on individual branch connections downstream of the domestic meter setup where there is more than one owner/tenant for a facility however only one (1) water bill will be issued for the facility.

12) A solid ductile iron tapping sleeve such as a Mueller H-615 or approved equal shall be utilized for all taps four (4) inches and larger. The tapping sleeve shall pass pressure testing based on AWWA standards before tap is made.

13) For all services two (2) gate valves are required that are to be installed by the applicant. A tapping valve located at the tap and curb valve located in the sidewalk before the meter. Tapping valves shall be furnished open right. Tapping valves sixteen (16) inches and above shall be double disc type. All valves must meet AWWA standards.

14) For taps off mains sixteen (16) inches and larger, the applicant shall furnish and install an additional gate valve to the tapping valve. No taps shall be permitted on mains sixteen (16) inches or larger unless there is no alternative water source and special written approval is issued by the JCMUA.

15) Valve box parts for all valves shall be provided by the applicant. All tapping gate valves larger than 2-inches and all curb valves / stops regardless of size require a valve box with the word "water" cast in the cover. Buried corporation valves / stops shall be used at the tap for Class K copper services 2 -inches and smaller.

16) All service line pipes, sizes 4-inches through 12-inches shall be Pressure Class 350 P.S.I., cement lined ductile iron pipe with mechanical joints.

17) The applicant shall install the meter inside the building. If the building line is more than 75ft from the main, the applicant shall place the meter in a pit near the sidewalk or street near the tap.

18) All meters shall be adequately restrained with metal brackets fastened to the floor or wall. Meters shall be installed approximately 36" above the finished floor.

19) All meter installations in a pit or vault shall be pre-approved by the JCMUA and have proper access openings for meter reading and replacement.

20) All meters two (2) inches and larger shall be furnished with Sensus ECR/WP remote touch pad modules and radio MXU units for both types of reading capabilities.

21) Remote touch pad module wire shall be connected to the meter register utilizing a gel cap for watertight sealing of all terminal connections. Touch pads may be wall mounted or lid mounted where a meter pit is utilized. Touch pads are to be installed on the exterior of a building facing the street and located as close as possible to the street. The radio MXU unit must be installed with a mounting bracket and likewise is to be installed in proximity to the street.

22) All installations of equipment and components shall be performed in accordance with manufacturer's recommendations.

23) After obtaining the required permits (street opening, tap and meter), the applicant shall call Suez, Jersey City at 201-459-1826 to schedule the tap. The excavation shall be completed twenty-four (24) hours prior to the scheduled tap. Excavation shall be constructed in accordance with OSHA requirements for sheeting and safety.

24) Upon completion of the installation, the applicant shall submit three (3) sets of "as built" plans to the JCMUA's Bureau of Water Engineering.

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