Plainview Water District

Procedures for New Water Service Connections

February 2014

Revised April 2019

WATER AVAILABILITY

1- Developer/Owner submits letter requesting, "water availability".

a. See list of requirements in Exhibit A.

2- District confirms that all required information and supplemental documentation has been provided (refer to Exhibit A).

a. If submission is incomplete, the District provides a letter to submitter indicating what items are missing.

b. If existing service is to be replaced, a service disconnect is also required. Complete Service Disconnection Procedure before continuing to 3.

c. If complete go to 3.

3- Superintendent reviews the water availability request with respect to existing facilities (i.e. mains, hydrants, etc.) and prepares a memo to the Board of Commissioners assessing the application and recommending one of the following:

a. That the request be forwarded to the engineer:

i) Residential applications which includes developments and all commercial applications involving large scale use and/or multiple commercial uses should be forwarded to the engineer for review.

ii) If the Board agrees to forward the request to the engineer, the District sends copies of all submitted info to the engineer.

iii) The Superintendent sends a letter to the developer explaining that the request has been forwarded to engineer.

iv) The engineer will review and submit a recommendation letter to the Superintendent.

v) The Superintendent will then proceed with either 3b or 3c, below.

b. Granted

i) If the request for water service is granted, then:

1- The Superintendent issues a water availability letter (refer to Exhibit B) to the developer requiring the submission of the following:

(a) Final Site Plan.

(b) Plumbing Plans

(c) Project Schedule

(d) Plan Review Fee

(e) For residential applications for services larger than 1", all commercial, and all fire service connections, the Superintendent's letter will also require the developer submit a backflow plan and application.

2- District sets up a checklist (refer to Exhibit C) and file for this project.

ii) If the request for a service 6" or larger is granted, the Superintendent forwards the Engineer's recommendation letter to the developer/owner. The Engineer's letter will include subsequent procedures to follow.

c) Denied

i) Superintendent prepares a denial letter indicating reasons for the denial.

Plan Review

1) Developer/Owner submits:
   a. Final Site Plan. - 4 copies
   b. Plumbing Plans - 4 copies
   c. Backflow plan and application - 4 copies if required (refer to Exhibit D)
   d. Project Schedule - 2 copies
   e. Plan Review Fee
   f. </= 1" service: Residential – refer to current Water Rates and Charges as approved by the Board of Commissioners
   g. =/> 2" service: Residential - refer to current Water Rates and Charges as approved by the Board of Commissioners

2) District confirms that all required information and supplemental documentation has been provided.

3) District transmits 3 copies of plans to engineer for review (for all residential and commercial).

4) Engineer reviews and provides comments or approval letter to the Superintendent.

5) Superintendent will issue an approval letter to developer/owner (refer to Exhibit E). Approval letters shall include a request for the submission of the following at least twenty-one (21) days prior to the water service connection:
   a. Payment for the required installation / inspection / development fees (refer to current Water r Rates and Charges as approved by the Board of Commissioners).
   b. Insurance certificates (refer to Exhibit G).
   c. Water service installation schedule.
   d. Plumbing contractor data *(for 2" commercial, large residential, and fire service connections).* Contractor must be on the District's Pre-Approved Plumbing Contractor List (refer to Exhibit H).

6) If a backflow prevention application is submitted, once plans are approved and the District endorses the backflow prevention application, the District will return three (3) copies of the application to the developer, along with the Superintendent's approval letter. The developer must submit the three application copies to the Nassau County Cross Connection Control Unit (NCCCC); along with their required fees (refer to Exhibit **D, D.5).** Upon approval, the developer must forward a copy of the NCCCC approved plans to the District at least twenty-one (21) days prior to the water service connection.

7) The Superintendent confirms receipt of the information requested in "5" above, in addition to NCCCC approval if required in "6", prior to the water service connection.

WATER SERVICE CONNECTION INSTALLATION

1) Developer/Owner submits the following at least twenty-one (21) days prior to the water service connection:
   a) Payment for the required installation I inspection / development fees (refer to current Water Rates and Charges as approved by the Board of Commissioners).
   b) Insurance certificates (refer to Exhibit G).
   c) Water service installation schedule.
   d) Plumbing contractor data *(for 2" commercial, large residential, and fire service connections)*. Contractor must be on the District's Pre-Approved Plumbing Contractor List (refer to Exhibit H).
2) District confirms that all required submissions have been provided.
3) For 1" - District (or authorized representative) performs the installation of 1" tap and corporation.
4) For 2" - District is present for approved contractor's tapping of main.
5) District (or authorized representative) performs the final inspection and completes a sketch and inspection report prior to backfill. The report and sketch are submitted to the Superintendent for review and insertion into the project file.

Exhibit "A"

Water Availability Request Checklist

Request for Water Availability

Information Checklist

(A letter of request must accompany the following information and/or documents)

1. Proof of property ownership.
2. If the owner is not filing the request, a "letter of authorization" must be provided by the owner which designates and permits the second party to file for water availability.
3. Street address of the project.
4. Nassau County designation tax map data (Section, Block and Lot numbers).
5. Number and size of domestic and fire service connections.

Exhibit "B"

B.1 – Sample Water Availability letter for typical single family dwellings – 1" service(s)

B.2 – Sample Water Availability letter for large residential, commercial and fire projects – 2" service(s)

B.1 - Sample letter for single family dwellings – 1" service(s)

Date

Address

Re: Request for Water Availability Project street address

Nassau County Tax Map; Section ___, Block ___, Lot ___

Dear :

This letter is to advise you that the Board of Commissioners of the Plainview Water District will grant water availability to the above referenced parcel. It is understood that this request is for ___ 1-inch water service(s) and that each service line will be connected to a single family home. It should be noted that you will be responsible for all costs associated with providing water service to the proposed home(s). These costs will include the water service lines, taps, and appropriate administration and inspection fees. Other costs may include the expense of a water main extension for domestic water use and / or fire protection if deemed necessary by the Water District. Please be advised that the plumbing of the facility must meet all plumbing codes set by the Town of Oyster Bay. This includes using lead free solder and water conservation plumbing fixtures.

Please submit four (4) copies of your final site plan along with four (4) copies of the plumbing plans, and two (2) copies of your project schedule to our office when they become available. A plan review fee of $, ___ services at $ each, must be paid via certified check payable to the Plainview Water District at the time of final plan submission. Following approval of the final site plan, we will request the appropriate service installation, inspection, & development fees.

It should also be noted that based on our review of your final site plan, you may be responsible for other costs associated with providing water to the site as deemed necessary by the Water District. You will receive further information and specific instructions from our office or consulting engineer if our review determines that modification to our supply, transmission and distribution system is required in order to provide water service to your project.

If you have questions regarding this water availability letter or further submissions, please contact our office at (516) 931-6469.

Sample letter for residential, commercial, fire projects-2" service(s)

Date

Insert Address

Re: Request for Water Availability Project street address

Nassau County Tax Map; Section ___, Block ___, Lot ___

Dear :

This letter is to advise you that the Board of Commissioners of the Plainview Water District will grant water availability to the above referenced parcel. It is understood that this request is for 2-inch *(domestic/fire)* water service(s). It should be noted that you will be responsible for all costs associated with providing water service to the proposed facility. These costs will include the water service lines, taps, and appropriate administration and inspection fees. Other costs may include the expense of a water main extension for domestic water use and / or fire protection if deemed necessary by the Water District. Please be advised that the plumbing of the facility must meet all plumbing codes set by the Town of Oyster Bay. This includes using lead free solder and water conservation plumbing fixtures.

Please submit four (4) copies of your final site plan along with four (4) copies of the plumbing plans, four (4) sets of backflow prevention plan applications, and two (2) copies of your project schedule to our office when they become available. A plan review fee of $, ___ services at $ each must be paid via certified check payable to the Plainview Water District at the time of final plan submission.

It should be noted that based on our review of your final site plan, you may be responsible for other costs associated with providing water to the site as deemed necessary by the Water District. You will receive further information and specific instructions from our office or consulting engineer if our review determines that modification to our supply, transmission and distribution system is required in order to provide water service to your project.

If you have questions regarding this water availability letter or further submissions, please contact our office at (516) 931-6469.

Exhibit "C"

New Water Service Request Checklist

Plainview Water District
New Water Service Request Checklist

Property Location:	
Owner / Developer:	
Date of Consulting Engineer water availability recommendation (if applicable)	
Date Water Availability was granted by board or Engineering recommendation forwarded to Owner/Developer:	
Number, size and type of service connections:	
Final site and plumbing plan submission (give date / indicate plan review fee amount paid):	
Review of Final Site Plan:	
• **By Superintendent (Indicate date and comments)**	
• **By Consulting Engineer (Indicated if required or not / date forwarded for review)**	
(If applicable) Date Consulting Engineer complete final review and issues escrow letter:	
Are funds required to be placed into escrow account for main extension / system modification? (Indicate yes or no / escrow amount)	
For 2" connections - Copy of the water district specifications and insurance requirements must be sent to the property owner or designated representative (Indicate date sent)	
Payment of Water Service Connection / Tapping Charge (1" connections, only), Inspection, and Development fees (Indicate date / amount paid)	
Date insurance certificate(s) were received. Must conform to PLWD Specs.	
Date NCCCC Backflow Prevention Plan Approval received (2" connections and larger)	
Scheduled tapping / connection date	
Final inspection of service connections (indicate date / inspected by / comments)	
Notes / observations / comments:	

Exhibit "D"

D.1 – Backflow Prevention Device Plan and Application Requirements

D.2 – Nassau County department of Health Form 347 – Application for Approval of Backflow Prevention Devices

D.3 - New York State Department of Health Approved Backflow Prevention Assemblies

D.4 - New York State Department of Health Report on Test and Maintenance of Backflow Prevention Devices

D.5 - Nassau County Department of Health Cross Connection Control Plan Review Fees

Backflow Prevention Device Plan and Application Requirements

a. Application: NYSDOH Form DOH-347 – Application for Approval of Backflow Prevention Devices. Sections 1 through 13 must be completely filled out. The water district completes section 14 if the application and plan are approved. Four copies of the application with original licensed engineer or architect stamp and signatures are required.

b. Plan: must be sealed by a licensed engineer or registered architect and conform to the requirements of the New York State Sanitary Code, Nassau County Public Health Ordinance. Plan must detail at a minimum the device in plan and section view and required regulatory agency notes. Four sets of plans are required. The Plan shall include the following:

I. Required Reduced Pressure Zone (RPZ) Device Design Notes and Comments:

- All connections on the domestic and fire service lines shall be down stream of RPZ. Bypassing a backflow prevention device is a violation of Part 5 of the New York State Sanitary Code.
- Backflow device installations shall be in accordance with Article VI of the Nassau County Public Health Ordinance, Part 5 of the New York State Sanitary Code and Town of Oyster Bay Plumbing Code. Backflow devices must be listed on the New York State Health Department list of approved devices. *Plan must state the backflow device manufacturer and model.*
- A New York State certified backflow prevention device tester shall test the RPZ on an annual basis with the results reported to the Plainview Water District on NYSDOH form Gen 215.
- The device must be installed by a plumber who is licensed by the Town of Oyster Bay.
- Device shall be protected from freezing and flooding.
- All hose bibs must be installed / retrofitted with vacuum breakers.
- Provide 30 inch minimum clearance from any obstruction in order to facilitate testing and maintenance. Provide 8 inch minimum clearance from any obstruction from sides and rear of device. Provide 12 inch minimum clearance from any obstruction from top of device.
- Shutoff valves on devices must be resilient seat type.

- Provide 12 inch minimum clearance from top of drain funnel to RPZ drain discharge and 18 inch minimum clearance from RPZ drain discharge to finished floor. Drainage must be positive with the effluent visible.
- **Notification to the Plainview Water District:** The plumber shall notify the Superintendent or Assistant Superintendent at least 24 hours prior to the commencement of any work. Telephone number: 516-931-6469.

II. Required Dimensions and Clearances:

- Thirty (30") inch minimum from centerline of RPZ device to floor.
- Thirty (30") inch minimum from test cocks to any obstructions.
- Eight (8") inch minimum from centerline of device to wall.
- Eighteen (18") inch minimum from relief spout to floor.
- All building dimensions.
- Room dimensions for interior applications.
- Vault dimensions for exterior applications.

III. Additional Plan Requirements:

- P.E. or R.A. seal on plans.
- State manufacturer, model number and size of device.
- Identify premises on plans.
- Show two (2) views of device-plan and section.
- Show accurate test cock location.
- Indicate grade on all plans.
- RPZ must be above grade. Give specific drainage details.
- Provide site plan indicating street name, location of water main and all services, location of meter and RPZ device. Show all service lines and indicate sizes.
- Give adequate (3"x5") space for Health Department approval stamp.
- All material must be submitted to this office in quadruplicate.

c.) Other important information for the developer / property owner pertaining to RPZ installations:

- The water district must receive health department approval before device installation can commence. Approved application and plan are maintained on file by the district.

- After completion of the installation, the Plainview Water District will make a physical inspection of the device and water service. **The installation of the device MUST match the approved drawings**. The contractor must submit to this office a copy of a certified test of this device on form number **DOH 1013** before water service can be provided.
- Plumbers or contractors must be licensed by the Town of Oyster Bay and file all permits required by the Town. All work must comply with prevailing state, county and water district requirements.
- After installation, the property owner is responsible for an annual test. The test results must be sent to the Plainview Water District on form **DOH 1013**.

EDWARD P. MANGANO
COUNTY EXECUTIVE

LAWRENCE E. EISENSTEIN, M.D., F.A.C.P.
COMMISSIONER

NASSAU COUNTY
DEPARTMENT OF HEALTH
106 CHARLES LINDBERGH BLVD.
UNIONDALE, NEW YORK 11553
VOICE: 516.227.9692
FAX: 516.227.9613

Cross-Connection Control Plan Review Fees

Fee Schedule
(Effective August 1, 2012)

Project Type	Fee Amount
Double Check Valve (Residential)	- $140 per device
Double Check Valve (Non-Residential)	- $275 per device
¾A to 2" Reduced Pressure Zone Device	- $275 per device
Greater than 2" Reduced Pressure Zone Device	- $485 per device
Expedited Review of Cross- Connection Control Plans	
Typical Plans	- $125 additional
Custom Plans	- $250 additional

All plans received must be accompanied by a check made out to "Nassau County Department of Health" for the appropriate dollar amount.

Exhibit "E"

E.1 – Sample Requirements Letter for 1-inch service installations

E.2 – Sample Requirements Letter for large service installations with specification attachment

E.1 - Sample Requirements Letter for 1-inch Service Installations

Date

(Contact Name and Address)

Re: Project Name / reference

Dear :

Please find enclosed the following documents as it relates to water service work for the above captioned project:

- 1-inch Water Service Installation Charge Summary (including inspection).
- Contractor's Insurance Requirements.

Payment for the actual water service connection installation and inspection (attached), payment for development ($ _____), and submission of the proposed installation schedule and required liability insurance certificate must be provided to the Water District at least twenty-one (21) days prior to the scheduled tapping date. The total cost for each connection is $ _____. Therefore based on ____ connections payment in the total amount of $ _____ is required. All payments must be made by certified check to the "Plainview Water District".

Water district personnel will perform the installation of the tap. All other materials shall be purchased through the water district and be installed at the cost of the developer/ property owner. All work must be performed by a licensed plumber and strictly comply with the Ordinances of the Plainview Water District, Nassau County Public Health Ordinance, New York State Sanitary Code and the Plumbing Code of the Town of Oyster Bay.

All water service installation excavation work shall be performed by the developer/ property owner and shall conform with the following requirements:

A. Utility Mark-Out and Protection: Prior to excavation, investigation shall be made to the extent necessary to determine the location of existing underground utilities, structures and conflicts. This Contractor and all other excavators must comply with Industrial Code Part 53 and 16NYCRR Part 753 - Protection of Underground facilitates. Care shall be exercised by the Contractor during excavation to avoid damage to existing structures.

B. Traffic Control and Protection: All traffic shall be maintained with appropriate traffic control devices and flag persons to regulate, warn and guide traffic at the work site, in accordance with Part VI of the Manual on Uniform Traffic Control Devices as published by the U. S. Department of Transportation and as required by the proper local, county and state road authorities.

C. Road Opening permits: The developer / property owner must secure permits required to open trench and cut road surfaces from the proper local, county and state authorities.

D. Barriers and Caution Signs: Suitable barriers and caution signs shall be placed and maintained around all excavation and parked equipment, and sufficient caution lights are to be maintained at night as precaution against accidents and unauthorized entry.

E. Excavation safety: All pits and trenches shall conform to all OSHA and New York State safety regulations to prevent water district personnel from cave-ins and unauthorized entry.

Should you have any questions or require any additional information, please feel free to contact our office at (516) 931-6469.

Very truly yours,

E.2 - Sample Requirements Letter for Large Service Installations-2"

Date

(Contact Name and Address)

Re: Project Name / reference

Dear ____:

Please find enclosed the following documents as it relates to water service work for the above referenced project:

- Detailed Material and Installation Specifications for Domestic and Fire Water Service Connections and Repairs.
- Final Site and Plumbing Plans approved for construction
- Endorsement of Backflow Prevention Device Application
- List of Pre-Approved Plumbing Contractors
- Contractor's Insurance Requirements

All work must strictly comply with the enclosed specifications, Ordinances of the Plainview Water District, Nassau County Public Health Ordinance, New York State Sanitary Code and the Plumbing Code of the Town of Oyster Bay. In addition, all work must be performed by a competent water main contractor pre-approved by the Water District. Submission of the proposed plumbing contractor is required when payment for the final connection inspection fee is made to the Water District.

Payment for the water service inspection (refer to current Water Rates and Charges as approved by the Board of Commissioners) and submission of the proposed water main contractor, installation schedule, and the required liability insurance certificate must be provided to the Water District at least twenty-one (21) days prior to the scheduled installation date. In addition you will be responsible to purchase the water meter(s) from the district. The cost of a 2 -inch meter is $ _____ less tax. The meter must be installed at your cost by a licensed plumber. Therefore based on ____ connections and ___ meters, payment in the total amount of $ is

required.

All payments must be made by certified check to the "Plainview Water District".

Should you have any questions or require any additional information, please feel free to contact the undersigned at (516) 931-6469.

Very truly yours,

Plainview Water District

Detailed Material and Installation Specifications for

Domestic/ Fire Water Service Connections, Relocations and Repairs

PART 1 - GENERAL

1.0 - SCOPE AND INTENT

A. This specifications applies to the requirements of the Plainview Water District for the installation, relocation and repair of water service connections, lines and appurtenances.

B. The intent of these specifications is to provide a measure of quality control in order to ensure that public health and safety is protected to fullest possible extent.

1.1 - REFERENCES

All work shall be performed and furnished materials shall strictly conform with this specification and in accordance with the ordinances, codes and specifications listed below:

A. Ordinances of the Plainview Water District

B. Nassau County Public Health Ordinance - Article VI - Public Drinking Water Supply

C. New York State Sanitary Code - Part 5

D. Plumbing Code of the Town of Oyster Bay.

E. ANSI / AWWA B301 - Standard for Liquid Chlorine.

F. ANSI/AWWA C104 / A21.4 - Standard for Cement-mortar Lining for Ductile Iron Pipe and Fittings for Water.

G. ANSI/AWWA C110 / A21.10 - Standard for Ductile Iron and Gray Iron Fittings for Water.

H. ANSI/AWWA C111 / A21.11 - Standard for Rubber Gasket Joints for Ductile Iron Pressure Pipe and Fittings.

I. ANSI/AWWA C150 / A21.50 - Standard for the Thickness Design of Ductile Iron Pipe.

J. ANSI/AWWA C151 / A21.51 - Standard for Ductile Iron Pipe Centrifugally Cast for Water.

K. AWWA C502 - Standard for Dry-Barrel Fire Hydrants.

L. AWWA C509 - Standard for Resilient-Seated Gate Valves for Water Supply.

M. AWWA C600 - Standard for the Installation of Ductile Iron Water Main and Their Appurtenances.

N. AWWA C651 - Standard for Disinfecting Water Mains.

O. AWWA C800 - Standard for Underground Service Line Valves and Fittings

1.2 - SUBMITTALS

A. Provide manufacturer's data and specification sheet for water service connection materials for approval by the Water District.

1.3 - QUALITY ASSURANCE

A. Provide manufacturer's name and pressure rating marked on piping, valve, fitting and hydrant and bodies.

1.4 - DELIVERY, STORAGE AND HANDLING

A. Deliver and store materials in shipping container (when applicable) with labeling in place.

B. Prevent foreign matter from entering valves, fittings, piping and hydrants.

1.5 - NOTIFICATION

A. Provide the Water District with a minimum of 48 hours notice prior to commencing with the work.

1.6 - QUALIFICATIONS

A. Service connections and repairs must be performed by a qualified water main contractor. The contractor must be approved by the Water District. Submission of the proposed water main contractor and along with the appropriate references must be made to the Water District 14 days prior to commencing with the work.

1.7 - INSURANCE

A. The water main contractor will be required to provide insurance in strict accordance with the provisions of the requirements in Attachment A.

PART 2 - PRODUCTS

2.1 - DUCTILE IRON PIPE

A. Material: Cement-lined ductile iron pipe conforming to ANSI/AWWA C151 and ANSI/AWWA C104.

B. Joints: ANSI/AWWA C111, rubber gasket, mechanical joint.

C. Lubricant for Joints: Nontoxic; shall not support the growth of bacteria; shall have no deteriorating effects on the gasket or pipe material.

D. Thickness Class: 4 through 12 inches, Class 52 and for 16 through 24 inches Class 51.

E. Manufacturer: U.S. Pipe and Foundry Co.; Griffin Pipe Products Co.; or specifically approved equal.

2.2 - FITTINGS AND MECHANICAL JOINT RETAINER GLANDS

A. Material: Ductile iron Class 250 conforming to ANSI/AWWA C110/A21.10 and ANSI/AWWA C111/A21.1. Fittings shall be cement lined conforming to ANSI/AWWA C104 / A21.4.

B. Manufacturer: U.S. Pipe and Foundry Co., Griffin Pipe Products Co., or specifically approved equal.

2.3 - REPAIR SLEEVES

A. Type: Ductile iron C110 full body mechanical joint, standard solid long sleeve.

B. Manufacturer: Tyler No. 5-144L or approved equal.

2.4 - REPAIR CLAMPS

A. Type: Full seal stainless steel for cast and ductile iron pipe

B. Minimum length: 12-inches.

C. Accessories: Bolts and nuts to conform with ANSI/AWWA C111/A21.11.

D. Manufacturer: Mueller Company, Decatur, Illinois or approved equal.

E. Model: Series 500 with the following attributes and specific model numbers:

Pipe Size (Inches)	Mueller Clamp Size Number	Maximum Water Working
6	500-12-0684	250
8	500-12-0899	200
10	500-12-1104	175
12	500-12-1314	150

2.5 - GATE VALVE

A. Type: Resilient wedge conforming to AWWA C504 – latest revision.

B. Size: As required.

C. Material: Cast iron body conforming to ASTM A126, Class 40 with nominal 10- mil fusion epoxy coated interior and exterior surfaces. Epoxy coating shall comply with ANSI/AWWA C550 and ANSI/NSF 61 standards.

D. Wedge: Iron wedge shall be symmetrically and fully encapsulated with rubber.

E. Stem: Forged bronze non-rising stem.

F. Stuffing box: Triple O-ring seal (2 upper and 1 lower O-ring).

G. Joint ends: Standard mechanical joint ends conforming to ANSI / AWWA C111.

H. Maximum working pressure: 250 psig

I. Operator: Two-inch square (at base) cast iron wrench nut opening to the left (counter clockwise).

J. Manufacturer: Mueller Company, Decatur, Illinois.

K. Model: Catalog number A-2360-20 MJ x MJ ends or specifically approved equal.

2.6 - VALVE BOXES

A. General: Valve boxes shall be three-piece cast iron, 5-1/4 inch shaft, sliding type, with cast iron covers with "WATER" cast on the covers.

B. Sizes and base dimensions: Valve boxes shall have the following sizes and base dimensions.

Gate Valve Size	Valve Box Size
Up to 4-inch	No. 4 round (10-7/8 inch diameter, 8 inches high)
6-inch and 8-inch	No. 6 round (14-3/8 inch diameter, 11 inches
10-inch and 12-inch	No. 8 round (17-1/4 inch diameter, 11 inches
16-inch	No. 160 round (20-1/2 inch diameter, 12 inches high)

C. Manufacturer: Valve boxes shall be supplied by CLOW or specifically approved equal.

2.7 - HYDRANTS

A. Type: dry barrel break flange compression-type fire hydrant conforming to AWWA C502. Hydrant features and attributes must include the following:

1) Safety or break flange design including stem safety coupling and safety sleeve so that when the hydrant is subjected to a severe impact, it will shear at the safety or break flange and the main valve shall remain closed and tight against leakage.

2) All hydrants shall have permanent markings identifying the manufacturer by name, initials, insignia or abbreviations in common usage, and designating the size of the main valve opening and the year of manufacture. Markings shall be so placed as to be readily discernible and legible after hydrants have been installed.

3) Hydrant top or bonnet shall be free-draining with 0-ring packing and of a type that will maintain the operating mechanism.

4) Operating and outlet nozzle cap nuts shall be pentagonal (5 sides) in shape (I1/2 inches) point to flat at the base and open to the left or counterclockwise. A clearly visible arrow and the word "OPEN" shall be cast in relief on the top of the hydrant. Nozzle caps shall be attached with non-kinking chains.

5) Five-foot depth of bury with the lower barrel tar coated to resist corrosion below the ground.

6) A positive operating drain valve to drain the hydrant properly by opening as soon as the main valve is closed. The drain valve shall close when the main valve is open.

7) Valve opening size shall be 4-3/4 inches minimum.

8) Six-inch inlet with mechanical joint end complete with all joint accessories including rubber gaskets.

9) A primer and second coat of paint shall be applied to each hydrant top section. The barrel shall be red with aluminum tops and caps.

10) Two 2-1/2-inch hose nozzles shall be NEW YORK CORPORATION dimensions and threads with 8 threads per inch.

11) One 4-1/2-inch pumper nozzle shall be NATIONAL STANDARD dimensions and threads with 4 threads per inch.

B. Manufacturer and Model: CLOW VALVE COMPANY, Eddy Compression Type No. F-2640, or specifically approved equal.

2.8 - COPPER PIPING

A. When approved for use, copper piping shall be type "K" conforming to ASTM B88.

2.9 - OTHER MATERIALS

A. Materials not listed within this specification shall be purchased through the Water District or approved vendor. All materials shall conform with Water District standards and must be approved prior to installation.

PART 3 - EXECUTION

3.1 - PIPE INSTALLATION

A. Pipe Cutting: Ductile cast iron may be cut using an abrasive pipe saw, rotary wheel cutter, guillotine pipe saw, milling wheel saw or oxyacetylene torch. Cut ends and rough edges shall be ground smooth; for push-on joint connections, the cut end shall be beveled.

B. Pipe Protection: When work is not in progress the contractor shall close all exposed pipe ends with a watertight plug.

C. Deflection: The joint deflection for mechanical joints shall not exceed 5 degrees (either 19-inch offset for an 18-foot length of pipe or 21-inch offset for a 20-foot length of pipe) for sizes 6-inch through 12-inch diameter. Assembled joints should not be deflected.

D. Pipe cover: Pipe shall be laid to provide a minimum cover of 4 feet 6 inches.

E. Clearances from Drain Pipes and Sanitary Sewers: Pipe shall be installed to provide a minimum 10-foot horizontal clearance and 18-inch vertical clearance between the water pipe and all sanitary sewers, storm drains, manholes and drainage structures. Center one length of water main at all

sewer and storm drain crossings and where passing adjacent to sewer manholes and drainage structures where 10-foot minimum clearance cannot be maintained.

3.2 - VALVE INSTALLATION

A. Set valve in a plumb position.

B. Perform operating test on valve to determine it is in satisfactory operating condition and does not leak.

C. Leave valve in open position unless otherwise directed by the Water District.

3.3 - HYDRANT INSTALLATION

A. All hydrants shall be set in a plumb position.

B. The hydrant shall be located off the roadway to protect it from traffic. When placed behind the curb, the hydrant shall be set so that no portion of the pumper nozzle cap will be less than 6 inches nor more than 12 inches from the face of the curb unless directed otherwise.

C. The hydrant shall be installed such that the hose nozzles are parallel with or at right angles to the curb or pavement edge, with the pumper nozzle facing the curb or pavement edge unless directed otherwise. The minimum distance from the center of the pumper nozzle to finished ground surface shall be 17 inches, or as directed by the Water District. The break or safety flange shall be located approximately 2-3/4 inches above the ground line.

D. The bottoms of all hydrants shall be surrounded with well-graded washed gravel (approximately 1/3 cubic yard) to a point one foot above the bottom flange to allow for proper drainage. The stone should be covered with roofing or tar paper prior to backfilling.

E. Each hydrant elbow or shoe shall be braced by means of concrete with a minimum bearing area of 3 square feet against unexcavated earth. Wood wedges shall not be allowed.

F. Apply pressure to hydrant seat and barrel to make sure all joints are pressure-tight. Check draining of hydrant by removing nozzle cap and placing palm of hand over nozzle outlet. Drainage rate should be sufficiently rapid to create a suction.

G. All hydrants shall be strapped or rodded to hydrant valves and hydrant anchoring tee.

3.4 - PROTECTION AND ROAD OPENING PERMITS

A. Utility Mark-Out and Protection: Prior to excavation, investigation shall be made to the extent necessary to determine the location of existing underground utilities, structures and conflicts. This Contractor and all other excavators must comply with Industrial Code Part 53 and 16NYCRR Part 753 - Protection of Underground facilitates. Care shall be exercised by the Contractor during excavation to avoid damage to existing structures.

B. Traffic Control and Protection: All traffic shall be maintained with appropriate traffic control devices and flag persons to regulate, warn and guide traffic at the work site, in accordance with Part VI of the Manual on Uniform Traffic Control Devices as published by the U. S. Department of Transportation and as required by the proper local, county and state road authorities.

C. Road Opening permits: The developer / property owner must secure permits required to open trench and cut road surfaces from the proper local, county and state authorities.

D. Barriers and Caution Signs: Suitable barriers and caution signs shall be placed and maintained around all excavation and parked equipment, and sufficient caution lights are to be maintained at night as precaution against accidents and unauthorized entry.

E. Excavation: All excavation shall conform to all OSHA and New York State safety regulations.

3.5 -DISINFECTION

A. Procedure:

- Piping shall be thoroughly flushed to remove loose dirt, and other foreign material.
- Any of the following methods of procedure shall be followed, subject to the approval of the Water District:
  - ⇒ Direct chlorine feed.
  - ⇒ Calcium or sodium hypochlorite and water mixture.
  - ⇒ Chlorinated lime and water mixture.

B. Chlorine solution shall be a minimum strength of 50 parts per million (ppm). Chlorine compound shall be NSF certified and conform with ANSI/AWWA B301.

C. The contractor shall provide backflow protection to ensure that the strong chlorine solution in the line being treated will not flow back into the line supplying the water.

D. Treated water shall be retained in the pipe long enough to destroy all nonspore-forming bacteria. This period should be at least 24 hours or longer, as directed by the Water District. After the chlorine-treated water has been retained for the required time, the chlorine residual at the pipe extremities and at other representative points should be at least 25 ppm (mg/L) after 24 hours.

E. Neutralize residual chlorine with a suitable quantity of sodium bisulfide, sodium sulfide or sodium thiosulfate prior to disposal.

F. Following chlorination, all treated water shall be thoroughly flushed from the newly laid pipeline at its extremities until the replacement water throughout its length shall, upon test, be proven comparable to the quality of water served the public from the existing water supply system. Water shall be properly disposed to prevent flooding and in accordance with prevailing regulatory requirements.

G. Bacteriological Testing: Upon completion of chlorination and final flushing, the Contractor shall provide approved sampling points (including taps and copper tubing) for the collection of water samples from locations as directed on the new piping installation and from the supply well. The contractor shall make appropriate provisions to allow the Water District to obtain the required samples.

H. Positive Samples: If positive samples are obtained after chlorination, the Contractor shall re-chlorinate and samples shall be recollected until negative coliform bacteria tests are obtained.

3.6 - PRESSURE AND LEAK TESTING

A. When directed by the Water District comprehensive pressure and leak testing shall be performed in accordance with AWWA C600.

B. Test pressure shall not be less than 1.25 times the working pressure at the highest point along the test section.

C. The hydrostatic test shall be of at least a 2 hour duration. The specific time shall be determined by the Water District.

D. The test pressure shall not vary by more than 5 psi (plus or minus) for the duration of the test.

Exhibit "F"

F.1 – 1" Water Service Installation Charge Summary (including inspection and 30% material markup)
Note: the summary is an estimate utilizing 2014 costs. Charges will be as per the current "Water Rates and Charges" and the material costs as per the latest Distribution Materials Bid as approved by the Board of Commissioners.

1" Water Service Installation Charge Summary (including inspection and 30% material markup) January 2014		
Item No.	**Item Description**	**Unit Cost**
1	Ford cover with touch read hole	$83.69
2	Ford #2 ring	$72.55
3	24" x 48" pit	$234.61
4	Setter with double check valve	$695.89
5	Corporation	$60.97
6	Curb stop	$135.72
7	1" radio read meter	$422.50
8	Curb box and rod	$37.14
9	Tap (labor)	$1,350.00
10	Initial backflow test	$150.00
11	Final water service inspection fee (1" Domestic service) connections)	$300.00
	TOTAL COST PER CONNECTION:	$3,543.07

Exhibit "G"

District Insurance Requirements

Plainview Water District

Contractor's Insurance Requirements

Contractors performing work within the Plainview Water District service area or on behalf of the Water District, at its own expense, will be required to procure the following insurance to be effective throughout the life of the project, covering any operations by itself or by any subcontractor. The required insurance certificates must be submitted within ten (10) days of the issuance of notification of the award of the bid or ten (10) days prior to the scheduled date of the work, and the Water District shall not be obligated to make any payments to the contractor pursuant to this agreement until such time as the Water District has received such insurance certificates.

1. Workers' Compensation Insurance in accordance with the laws of the State of New York. Failure to comply with this provision shall make the contract void.
2. Liability insurance for property damage (including but not limited to, coverage for injury or death of any person or damage to property occurring with respect to the work) shall consist of a policy or policies containing the following minimum coverage and limits and shall be maintained throughout the life of the contract:

   a.) Commercial General Liability:

   - $2,000,000.00 Products/Completed Operations Aggregate;
   - $2,000,000.00 Products/Combined Single Limit for bodily injury and property damage liability;
   - $1,000,000.00 Any One Occurrence; and
   - $1,000,000.00 Any One Person or Organization.

   b.) Automobile Liability (Comprehensive Coverage):

   - $1,000,000.00 Any One Occurrence, for bodily injury and property damage liability, including but not limited to, personal injury protection.

   c.) Premises/Operations, Contractor's Protective, Contractual Liability, covering any liability assumed by the agreement, including but not limited to personal injury ("Umbrella Coverage"):

   - $2,000,000.00 Products/Completed Operations Aggregate;
   - $2,000,000.00 General Aggregate;
   - $1,000,000.00 Any One Occurrence; and
   - $1,000,000.00 Any One Person or Organization.

d.) Employer's Liability:

- $1,000,000.00 Per Occurrence;
- $1,000,000.00 Per Employee or Per Occurrence for Injury or Disease; and
- $500,000.00 Aggregate for Injury by Disease.

3. Builders' Risk Insurance shall consist of a policy or policies containing the following types of minimum coverage and limits:

   a.) Prior to commencing the Work, the Contractor shall supply the Owner with a certificate of insurance providing evidence of insurance coverage for the Owner for Builder's Risk/Installation Floater "All Risk" insurance protecting the Contractor, the Contractor's subcontractors, the Architect / Engineer and the Construction Manager from losses resulting from, but not limited to, natural disasters, fire, extended coverage perils, vandalism, malicious mischief or collapse during the course of construction. The amount of such insurance shall be not less at any time that the total value of the work in place, on site, in transit or in storage off site and the loss under such policies shall be made payable to the Owner and/or the Contractor or other insured's, as their respective interest may appear. The policy shall cover all property to be used in, or incidental to, the fabrication and/or erection and/or completion of the project. It shall include all materials, machinery, equipment and supplies intended to become part of such property and false work, temporary trestles and similar structures. It shall not include tools, Contractors' equipment and any other property not a part or destined to become part of the project, The Owner should be advised of the amount, if any, of a deductive on the policy. In no case should the deductible amount exceed $5,000.00 for the "All Risk" policy.

The District and the Architect / Engineer shall be named as additional insured on all of the liability policies of the contractor. The District and the Architect / Engineer shall be a Named Insured on the Builders Risk policies (in addition to the contractor).

All policies are to be issued by insurance companies licensed to do business in the State of New York and to have a policy holder's rating of at least "A" and an "FPR" rating of at least "7" as listed at the time of issuance by AM Best Insurance Reports or such other ratings as agreed to by the District.

The contractor is required to maintain products and completed operations coverage for a period of two years after final acceptance of the contractor's work.

The Insurance Policies required for the work shall not in the aggregate have deductibles in excess of $10,000.

All policies must include an endorsement, if not clearly set forth in the policy, to the effect that the insurance of the type afforded by the policy applies to all of the operations on and off the site of the project, which are undertaken by the insured during the performance of his contract or subcontract. The Contractor shall provide the Water District upon request with copies of any of the insurance policies required to be maintained pursuant to this Article.

All policies must be endorsed to provide thirty (30) days notice to the Plainview Water District and the Architect / Engineer (H2M architects and engineers) prior to change in or Cancellation of said policies.

Exhibit "H"

Pre-Approved Plumbing Contractor List

Pre-Approved Contractor Listing

For Residential Service Installations:

Merrick Utility Associates, Inc.
91 Marine Street
Farmingdale, NY 11735
(631) 249-2560

Bancker Construction Corp.
218 Blydenburgh Road
P.O. Box 970
Islandia, NY 11749-0970
(631) 582-8880

Orchid Sewer Contracting
11 Dennis Street
Garden City Park, NY 11040
(516) 747-1311

Terry Gallagher, Inc.
50 Sprague Avenue
Amityville, NY 11701
(631) 789-9540

G&F Plumbing, Inc.
8 Borroughs Avenue
Dix Hills, NY 11746
(631) 586-4410

Adjo Contracting Corp.
207 Knickerbocker Ave
Bohemia, NY 11716
(631) 589-0800

Pat Noto, Inc.
30 Wisconsin Court
Bay Shore, NY 11706-2213
(631) 231-4343

Alessio Pipe & Construction Co. Inc.
102 Fairground Avenue
Huntington Station, NY 11746
(631) 423-0234

Approved Contractors to work on District Water Mains and For Large Commercial Service Installations:

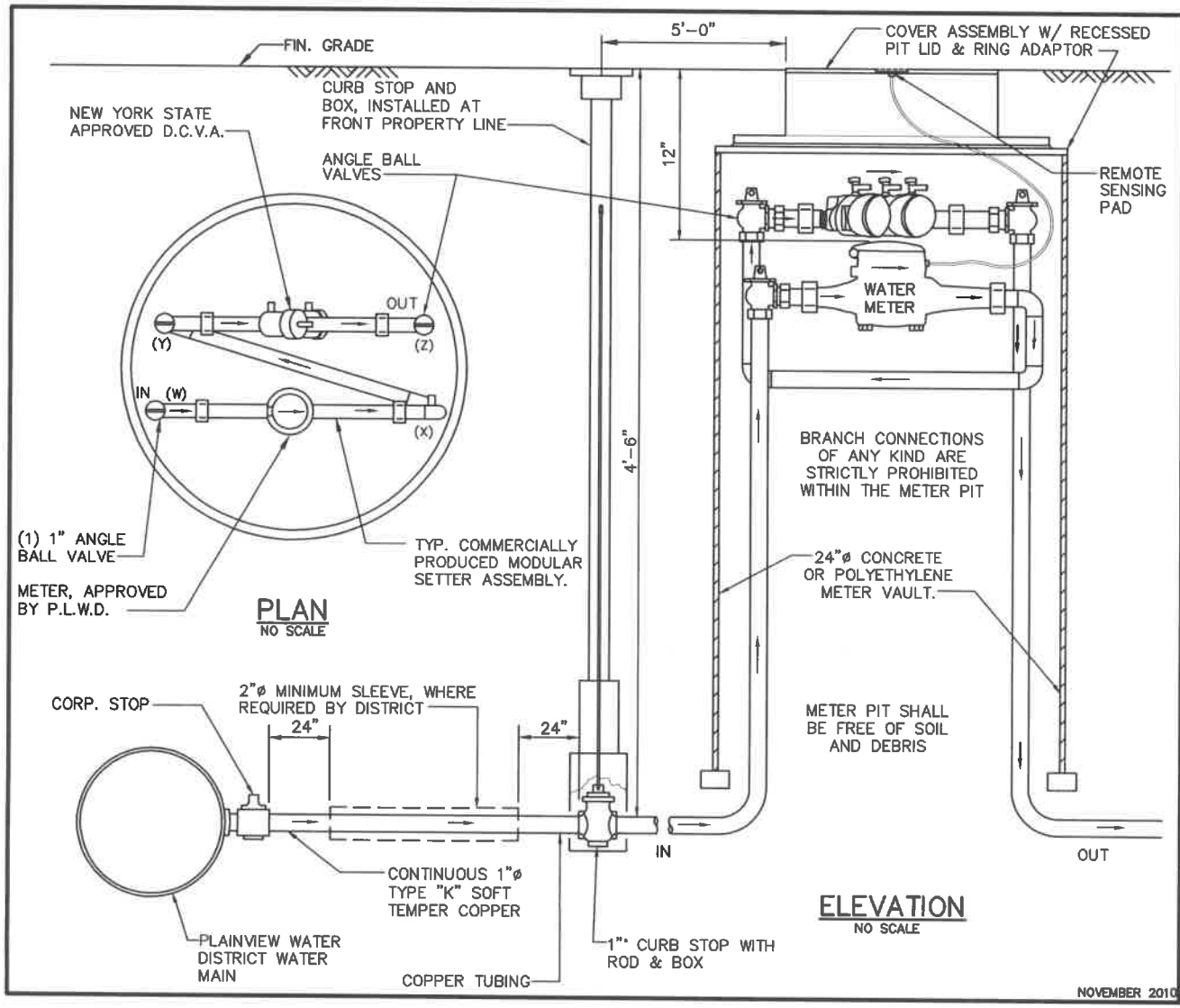
Merrick Utility Associates, Inc.
91 Marine Street
Farmingdale, NY 11735
(631) 249-2560

Bancker Construction Corp.
218 Blydenburgh Road
P.O. Box 970
Islandia, NY 11749-0970
(631) 582-8880

Orchid Sewer Contracting
11 Dennis Street
Garden City Park, NY 11040
(516) 747-1311

Adjo Contracting Corp.
207 Knickerbocker Ave
Bohemia, NY 11716
(631) 589-0800

Alessio Pipe & Construction Co. Inc.
102 Fairground Avenue
Huntington Station, NY 11746
(631) 423-0234



NOTIFICATION TO WATER REQUIREMENT:

THE PLUMBER SHALL NOTIFY THE SUPERINTENDANT OF THE PLAINVIEW WATER DISTRICT. AT LEAST 24 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.

GENERAL NOTES:

1. THE CORPORATION STOP, CURB STOP, STREET SIDE ANGLE BALL VALVE, CURB BOX, ROD, COVER ASSEMBLY WITH ADAPTER RING AND THE METER SHALL BE PURCHASED FROM THE DISTRICT.
2. THE SERVICE LINE SHALL BE TYPE "K" SOFT TEMPER COPPER TUBING. THE SERVICE MUST BE ONE CONTINUOUS LENGTH FROM THE CORPORATION STOP TO CURB STOP AND ONE CONTINUOUS LENGTH FROM THE CURB STOP TO THE FIRST METER PIT FITTING. THE SERVICE SHALL HAVE 4'-6" OF COVER. SOLDERED JOINTS ARE STRICTLY PROHIBITED.
3. BRANCH CONNECTIONS OF ANY KIND ARE STRICTLY PROHIBITED IN THE METER PIT AND/OR PRIOR TO THE BACKFLOW DEVICE.
4. WATER PIPING SHALL BE INSTALLED IN UNDISTURBED SOIL. NO OTHER UTILITIES WILL OCCUPY WATER TRENCHES. HORIZONTAL SEPARATION DISTANCES OF 3'-0" SHALL BE MAINTAINED BETWEEN FIRE AND DOMESTIC SERVICES, 10'-0" BETWEEN WATER PIPING AND SANITARY SEWER, 10'-0" BETWEEN WATER PIPING AND DRAINAGE, 5'-0" BETWEEN WATER PIPING AND GAS,ELECTRIC, ETC., AND 5'-0" BETWEEN WATER PIPING AND OTHER UTILITIES OR STRUCTURES, UNLESS OTHERWISE SPECIFIED. SHARING OF TRENCHES WITH OTHER UTILITIES WILL NOT BE PERMITTED.
5. METER PITS SHALL BE INSTALLED INSIDE THE FRONT PROPERTY LINE AND A MINIMUM OF 5' INSIDE THE SIDE PROPERTY LINES, OR AS OTHERWISE DETERMINED. METER PITS SHALL NOT BE INSTALLED IN DRIVEWAYS OR PARKING AREAS.
6. THE PLUMBER SHALL BE LICENSED BY THE TOWN OF OYSTER BAY, AND SHALL BE APPROVED BY THE PLANVIEW WATER DISTRICT. THE BACKFLOW PREVENTION DEVICE MUST BE TESTED BY A NEW YORK STATE CERTIFIED BACKFLOW DEVICE INSPECTOR AND THE RESULTS FORWARDED TO THE DISTRICT WITHIN 30 DAYS OF INSTALLATION.
7. NO NATURAL OR MANMADE OBSTRUCTIONS (SUCH AS SHRUBBERY, RETAINING WALLS, FENCES, ETC.) SHALL BE PLACED CLOSER THAN 24" TO THE METER PIT COVER RIM.
8. UNUSUAL CIRCUMSTANCES MAY PREVENT INSTALLATION AS PRESENTED HERE. SPECIAL PERMISSION MUST BE GRANTED IN ADVANCE BY THE DISTRICT FOR ANY DEVIATION FROM THIS STANDARD DETAIL.
9. ALL WATER SERVICE WORK FROM THE DISTRICT'S DISTRIBUTION MAIN UP TO AND INCLUDING THE METER PIT SHALL BE PERFORMED ONLY BY A LICENSED WATER MAIN/WATER SERVICE INSTALLER WHO IS SPECIFICALLY APPROVED BY THE WATER DISTRICT AND WHO HAS FILED A CURRENT BOND WITH THE DISTRICT. NO WATER SERVICE WORK MAY PROCEED PRIOR TO THE OWNER FILING ALL PREVAILING DISTRICT APPLICATIONS AND THE PAYMENT OF THE ASSOCIATED FEES. THE DISTRICT IS NOT RESPONSIBLE FOR INSPECTION OF THE WATER SERVICE BEYOND THE METER VAULT. THE CONTRACTOR SHALL CHECK WITH OTHER REGULATORY AGENCIES REGARDING THESE REQUIREMENTS.

PLAINVIEW WATER DISTRICT

STANDARD SERVICE DETAIL
1" WATER SERVICE
(METER PIT)