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Explanation of Application

• "Residential" shall be defined as a one, two, three, or four family, owner-occupied housing unit.

The purpose of these instructions:

- Provide Property Owners, Developers, Consultants, and Contractors with a complete explanation of
 the requirements associated with Obtaining Commercial Water Service. Please note that in many
 instances several of the forms in this packet will NOT be applicable for your service application. If
 you find sections or forms in this manual that does not apply to your service, simply skip them and
 go to the next section.
- Provide Cleveland Water with all the necessary information about the applicant, owner, and property seeking water service so that one or more accounts can be established properly in Cleveland Water's Billing System.
- Provide Cleveland Water with all the necessary information about the water service needed in order to
 properly size and configure the domestic, irrigation and fire service piping, metering, and backflow
 prevention devices.
- Provide the Owner/Applicant with necessary information required to navigate through the process of
 establishing water service including Cleveland Water's rules, regulations, polices, details, specifications
 and procedures.

No other distribution system water work shall be reviewed or approved with this submittal. The review and approval shall be for water service only.

If at any time you are unclear about any information in this packet, contact: Engineering at (216)664-2444 x5526.

Please read through this application and submit it along with drawings to:

Engineering-2nd floor 1201 Lakeside Ave. Cleveland, OH 44114

Drawing Requirements and Processing Time

In addition to the submittal of this application, applicants proposing water service to a Residential facility should submit site utility drawings for our review. Site utility drawings will clarify issues and minimize problems. Review times are based upon the number of service applications submitted for review at any point in time, however, we estimate we will either approve your service or address any deficiencies in your submittal within 5 business days from the day we receive the submittal and will approve the plans within 5 business days of a complete submittal. A complete submittal is defined as a submittal that includes site utility drawings meeting all stated requirements and an application that is not missing any information pertinent to setting up an account and completing our review.

The Property Owner, Property Manager, Architect, Engineer, and all contractors working for the owner or involved with the project need to clearly understand this point: Cleveland Water will review this submittal and specify the appropriate sizes, materials, configuration and requirements for all water components including the service piping, fittings, valves, valve boxes, meters, meter piping/assemblies, backflow prevention devices, and vaults (for meters and/or backflow prevention devices).

The following are the drawing requirements:

- 1. Drawings or Sketches may be submitted in a scaled or dimensioned format.
- 2. All drawings should include a directional arrow indicating north.
- 3. Drawings should include a location map that indicates the nearest intersection.
- 4. Lot lines should be shown on drawing with frontage dimensions given.
- 5. The following water related items should be included on the drawing:
 - a. Existing water mains along the frontage of the property seeking water service.
 - b. The proposed tap location(s).
 - c. The distance from the nearest hydrant or valve to the proposed tap location. Taps must be a minimum of 18" away from a joint on water main, and five foot from any valve, fire hydrant, or other water appurtenance. Taps must be installed on "distribution" mains and may not be installed on a "transmission" main. Transmission Mains, generally speaking are 20-inch in diameter or greater but can sometimes be as small as 16" in diameter. Before planning to tap a 16" main, contact Cleveland Water to ensure that particular main is not a transmission main.
 - d. Show any existing service connections, meters, and/or meter vaults.
 - e. Proposed Meter and note the size and type of meter desired. If proposed meter is located in a vault, show the vault. If Vault is on private property, show the vault easement.
 - f. If a Backflow Prevention Device is needed, please indicate type, size and location on drawing.

General Information about Property and Owner

Cleveland Water will require general information about the property receiving water service and the respective property owner(s). This is the case for each new water service request. Each water service can be viewed as the water service piping attached to the public water main in the street and extending on to the property for service. It is a requirement to submit **FORM G1** entitled **"GENERAL INFORMATION ABOUT PROPERTY AND OWNER – DATA ENTRY FORM"**

Wells or Other Water Sources

If you currently have another source of water for your property, such as a well, pond, or cistern, etc..., then prior to obtaining a permit from the Cleveland Water, you must obtain either an:

- Alteration Permit If you intend to keep your well as a supplementary source of water
- Abandonment Permit If you intend to completely eliminate your well.

Either way, Cleveland Water will **NOT** issue a permit without a permission from the County if you have another source of water for your property such as a well, pond, or cistern.

For more information regarding such permits, please contact the County as shown below:

County	Phone Number
Cuyahoga	(216) 201-2001 x1265
Medina	(330) 723-9523
Summit– Board of Health	(330) 926-5600
Summit – Building Department	(330) 630-7302
Geauga	(440) 279-1900

To further process your request for new water service, you must furnish us with a copy of the referenced permit from your respective County. If you intend to keep you private water system available for any reason, in addition to a copy of the alteration permit, Cleveland Water will require the installation of an Ohio E.P.A. approved reduced pressure type backflow assembly on your service line.

To document this you must fill out the following forms:

- PRIVATE WATER SYSTEM, CUSTOMER SURVEY, also known as the "WELL WATER FORM" to state that you intend to keep your well or secondary source of water. (See FORM W1 entitled "PRIVATE WATER SYSTEM, CUSTOMER SURVEY").
- BACKFLOW LETTER OF INTENT to state that you will install the proper Backflow Prevention Device and keep in working order as prescribed by City's Codified Ordinance Number 531.23. (See FORM B1 entitled "BACKFLOW LETTER OF INTENT".

If you have secured a well abandonment permit, neither form is required by Cleveland Water. Only the abandonment permit is required.

Backflow Prevention

A backflow prevention device prevents water that has entered your property from flowing back into the distribution piping system in the street. Since there are certain risks that Cleveland Water cannot control on your private property, we may require that you install such a device. An example of such a risk is as follows. Suppose you have a lawn irrigation system and you are treating your lawn with chemicals. These chemical can mix with the water and puddle around the sprinkler heads. If an event, such as a water main break occurs, and the pressure drops substantially in the mains and it is possible the water will be pulled through the sprinkler heads back into the piping system and be ingested by you or your neighbors. A backflow device will prevent this from ever occurring. Backflow Prevention Devices must be tested annually to ensure they are working properly. It is the owner's obligation to have the device tested and report its status. The owner must hire a State Certified Tester. All owners are to exercise caution and good judgment when hiring a contractor to install and/or test their backflow. We suggested asking for references and checking credentials before deciding on a contractor.

Once the backflow is installed it must be tested. Tests are to be submitted online to at https://www.bsionlinetracking.com/

For any questions related to filing backflow test, contact Backflow Solutions Inc. (BSI) at 1-800-414-4990.

During Cleveland Water's review, the type of a Back Flow Prevention Device as well as its location will be assessed based on the degree of hazard. You will be required to install a Backflow Prevention Device for every service line entering your premises. It will be necessary for you to fill out **FORM B1 "BACKFLOW – LETTER OF INTENT"** form. This form must be filled out and signed by the owner of the property and notarized. It is a legal document stating that you will install a Backflow Prevention Device and abide by the requirements set forth in the City's Codified *Ordinance Number 531.23*.

Existing Conditions

It will be the applicant's responsibility to thoroughly research and survey the existing conditions at the property requesting water service and indicate all existing water service connection information on your drawing submittal.

When seeking new service, it is a customer's obligation to be informed of their options and methods by which they obtain water service whether a new tap must be made or if an existing connection may be utilized. If your facility has many connections along its frontage, it should not be a surprise when Cleveland Water requires you to pay to plug all these additional, unused connections. It is a property owner's right and responsibility to research the existing conditions associated with their property. Cleveland Water, upon request, will provide you with maps and records of the connections available along your property. To obtain a map showing the location of services along or near your property frontage, you may contact Engineering at 216-664-2444 ex. 5526.

To aid you in researching and assessing the existing connections along the frontage of the property seeking water service, please fill out **FORM E1** entitled **"EXISTING WATER SERVICE CONNECTIONS WORKSHEET"**.

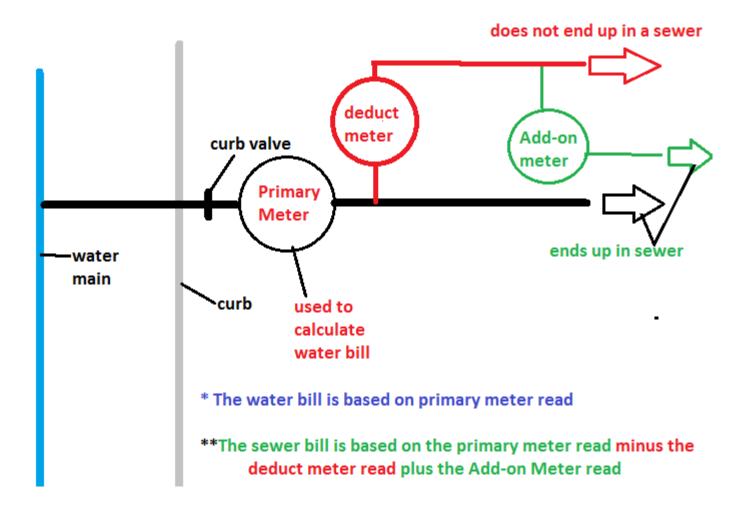
Sewer Exemption

Cleveland Water, measures how much water our customers use. Cleveland Water bills for 100% of the water you use for cooking, consumption, bathing, sanitary purposes, etc. The Cleveland Water provides billing services for various sewer departments in the Greater Cleveland Area. In general, it is assumed that your water consumption equals the water you put into your drains and into the sewer.

CLEVELAND WATER CANNOT WAIVE ANY SEWER CHARGES WITHOUT AUTHORITY FROM A CUSTOMER'S SEWER AGENCY.

If a customer believes that a substantial portion of their water use does not end up in the sewer, they may contact their sewer authority and see if they have a program to deal with the matter. If the Sewer Agency notifies Cleveland Water in writing that a portion of the consumption may be "deducted" from the total consumption, such that the sewer bill would only be based on the water entering the sewer, Cleveland Water will allow for this arrangement.

Specifically, the sewer agency will need to specify how to modify your interior plumbing and where to install the deduct meter(s) [and/or add-on meters where applicable] which will measure the water that does not end up in a sewer. Add-on meters may be installed downstream of deduct meter to add consumption back in, if a portion of the deducted water ends up in a sewer.



Once the letter specifying the authority and mechanism by which to deduct some of the water consumption from your sewer bill is received by Cleveland Water, we will sell you additional meters as necessary, install them, and read them for the purpose of calculating your sewer bill. For more information, contact your local sewer authority. If you are within NEORSD's sewer system, you may contact them at 216-641-6000 ext. 2218. The following information is given to assist in the installation of a Deduct or Add-on meter which will be installed downstream of the primary meter. Accessing Cleveland Water's website and following the instructions below will ensure a more accurate installation and eliminate unnecessary delays in scheduling.

- 1. A permissions letter from the local sewer jurisdiction must be obtained before Cleveland Water will review an application for sewer exempt meters.
- 2. All sewer exemption requests require a sketch of the piping configuration and an engineering plan review.
- 3. All additional meters must be purchased from Cleveland Water.
- 4. The customer must arrange to have the plumbing modified to accept the new meter(s) and call 24 hours in advance to schedule an inspection.
- 5. Cleveland Water Permits & Sales must approve an inspection of the meter setting before installation. Once the plumbing has passed inspection, the customer may call for a meter installation appointment.

Sizing and Specifying Water Service

In order to properly size and configure connections, meters and backflow devices, Cleveland Water must know some information about your water service such as:

- How much water do you need?
- What are your pressure requirements?
- *What is the property's setback distance (the length of the piping servicing your site)?
- *The proposed sizes and material types of the piping, fittings, meter and backflow devices servicing the residence(s).

Domestic Water Service Flow and Pressure Requirements

The most water you will use at any point in time for your domestic consumption is called your "Peak Instantaneous Demand". We measure it in gallons per minute. It is important that the applicant furnish Cleveland Water with complete and accurate data with regard to flow requirement. Likewise, it is important that any specific pressure requirements are also communicated to us. Pressures in Cleveland's water system may range from 40 psi to upwards of 175psi. We advise that you install a pressure regulator in cases where the pressures exceed 85 psi. If you have any domestic water fixtures that require a minimum pressure it will be necessary for you to indicate these requirements to us. To aid the applicant in assessing the flow and pressure requirements, please fill out FORM D1 entitled "DOMESTIC WATER SERVICE FLOW AND PRESSURE REQUIREMENTS DATA ENTRY FORM".

Lawn Irrigation Water Service

If your water service will include lawn irrigation, it will be necessary to complete **FORM L1** entitled **"LAWN IRRIGATION SYSTEM – DATA ENTRY FORM"**.

^{*} A meter vault is required when the size of the meter is 3-inches and greater or if the distance between the existing right-of-way and the domestic service point of entry into the building is more than 150 feet. The meter vault should be located in the public right-of-way or within an easement contiguous to the right-of-way. If the meter meets these criteria and is proposed to be installed within an easement, Cleveland Water will require the submittal of the referenced easement. The easement form is available within this packet (see FORM V1 entitled, "EASEMENT FOR WATER METER VAULT").

Fire Protection Water Service

If the proposed home does not requires Fire Protection Water Service, you may skip this section. If water service for Fire Protection is required at the proposed home, it will be necessary to determine if is intended to install an independent Fire Service line or a "limited area fire suppression system"?

An **independent fire service line** is not metered. Cleveland Water bills a flat fee on a **quarterly basis** for the privilege of having fire protection available to your property at all times. There should be no consumption taken off this water line.

A **limited area fire suppression system** is defined by Section 907.0 of the Ohio Basic Building Code. In general it is an automatic sprinkler system consisting of not more than 20 sprinklers within an area.

A limited area fire suppression system allows you to use the same piping as is used for domestic water supply. It is important to note that if a limited area fire suppression system is authorized:

- All water for fire protection purposes whether for testing, false alarms or actual firefighting shall register on the meter and be considered a billable consumption.
- Your meter and service line may need to be sized and specified based on your fire system demands. Fire systems demands varying significantly from typical domestic demands and may require compound meters which are more expensive. Also, fixed water bill charges increase as the meter sizes increase.
- The building may require internal isolation backflow prevention devices to protect the drinking water from stagnant water in the fire protection water system branches.

If Fire Protection Water Service is required at the proposed facility, please fill out **FORM F1** – entitled **"FIRE PROTECTION WATER SERVICE REQUIREMENTS – DATA ENTRY FORM"**

Summary of Water Services

Cleveland Water is responsible for sizing and specifying all items listed below. Please note that although the property owner/owner's contractor is responsible for furnishing and installing all these materials with the exception of meters which are purchased from Cleveland Water, the long term maintenance is divided such that Cleveland Water is responsible for the maintenance of items 1, 2, 3, 7, 8, and 9 and the property owner is responsible for all others.

- 1. The Domestic Water Service Connection piping from the Public Water Main along the frontage of your property to the curb valve which is to be located approximately three feet from curb or edge of pavement. ("Domestic Public Side")
- 2. The Fire Water Service Connection piping from the Public Water Main along the frontage of your property to the curb valve which is to be located approximately three feet from curb or edge of pavement. ("Fire Public Side")
- 3. The Irrigation Water Service Connection piping from the Public Water Main along the frontage of your property to the curb valve which is to be located approximately three feet from curb or edge of pavement. ("Irrigation Public Side")
- 4. The Domestic Water Service Connection piping from the curb valve which is to be located approximately three feet from curb or edge of pavement to the point of use (house/building). ("Domestic Private Side")
- 5. The Fire Water Service piping from the curb valve which is to be located approximately three feet from curb or edge of pavement to the point of use (house/building). ("Fire Private Side")
- 6. The Irrigation Water Service piping from the curb valve which is to be located approximately three feet from curb or edge of pavement to the point of use (house/building). ("Irrigation Private Side")
- 7. The Meter for the Domestic Service ("Domestic Meter")
- 8. The Meter for the Irrigation Service ("Irrigation Meter")
- 9. A deduct/sewer exempt meter if authorized by your local sewer agency ("Deduct Meter")
- 10. The Backflow Prevention Device for the Domestic Service ("Domestic Backflow")
- 11. The Backflow Prevention Device for the Irrigation Service ("Irrigation Backflow")
- 12. The Backflow Prevention Device for the Fire Service ("Fire Backflow")

Your proposed home may not have all these components. You may mark items as N/A (not applicable) if the item does not apply to you. You may propose to install these items based on your best assessment of your needs, however, Cleveland Water will review all the information and perform calculations as necessary to determine the suitability of you proposal. We will inevitably determine the proper sizes, specification and requirements. To summarize all the components required to provide your water service, please complete **FORM S1** entitled **"WATER SERVICE SUMMARY TABLE"**

Meter Location and Piping Arrangements

In general, if your house is less than 150 feet as measured from the right-of-way, you may place the meter in the house unless the owner prefer to install the meter in a vault/manhole. In all other instances the meter must be placed in a vault/manhole.

Details for connection configurations, meter assemblies for meters in vaults, interior meter installations, and vault arrangement can be found on our website at www.clevelandwater.com.

If a vault is required for your service and the vault cannot go in the public right-of-way, an easement, adjacent to the public right-of-way must be furnished with this application. The easement form is available within this packet.

Make sure to identify which apply to your specific circumstances and include the appropriate notes and details in your drawings and application submittal.

Again, if your house is less than 150 feet as measured from the right-of-way, then you may place the meter in your house. Otherwise, the meter must be placed in a vault. The Right-of-Way line is the boundary between the private and public property. In most cases it is at or near the line formed between your front yard and the sidewalk. If no vault is required, use the following details to help you with your water service:

- STD-C15
- STD-M17

These details show all that is needed to complete your service. Note that if you require a pressure regulator, it may be installed just "downstream" of the valve after the meter. (Not shown in details) The direction of the flow of water is from the upstream end to the downstream end. Flow direction is indicated on **STD-M17** If a vault is required, use the following details to help you with your water service:

- STD-C14
- STD-M30
- STD-M31

These details show all that is needed to complete your service. Use STD-M31 if no regulators are required and STD-M30 if a regulator is required.

Note that in both cases you must furnish ALL the materials to complete this work as indicated on STD-C14 and STD-C15.

If a vault is required for your service and the vault cannot go in the public right-of-way, an easement adjacent to the public right-of-way must be furnished. The easement form is in this packet. (See **FORM V1** entitled, **"EASEMENT FOR WATER METER VAULT"**).

Street Opening Permits/Hold-Harmless Letters

In all cases when a new water service connection must be tapped or any excavation, tunneling or boring is required in the public right-of-way, the applicant will need to secure a street opening permit or a "hold-harmless" letter from the local community in which water service is being requested and submit it to Cleveland Water. No water service permit shall be approved without the referenced letter/permit. If an existing water service is available and no excavation is required in the public Right-of-Way, no street opening permit or hold-harmless letter will be required. It is typical to provide the street opening permit or a "hold-harmless" letter to Cleveland Water at the time payment is made for the tap and meter fees.

In some cases the water main that the applicant wished to connect to was installed by the local community, a private developer or another party who seeks compensation for the main they paid to install. These water mains are considered "Restricted" mains and fees may be required by your local community. Cleveland Water does not restrict connections in this case. As long as the applicant provides Cleveland Water with a signed Street Opening Permit/Hold Harmless letter, Cleveland Water will process the application.

Approving your service

Once all the appropriate submittals have been made and Cleveland Water has reviewed and approved the water service application, a quote will be prepared to summarize the associated fees. Payments can be made in the forms of cash, credit cards or checks payable to Cleveland Water. Once these fees are paid and a Street Opening Permit/Hold Harmless letter has been submitted, the following items will occur:

- 1. An account will be created in our Billing System based on the Information provided on your application.
- 2. If a new tap is required, a work order will be issued to Cleveland Water's Tap Unit to inform them that you have paid for a tap on the public water main and that they may schedule a tap with you or your contractor.
- 3. A work order will be issued to Cleveland Water Meter Installation Unit to inform them that you have paid for a meter and that they may schedule an appointment to install the meter.
- 4. A work order will be issued to Cleveland Water's Permit and Sales Service Inspector to inform them that you have paid for new service so they can expect to travel to your site to inspect your work in the near future.

Next Steps

At this point, all application, review and approval procedures are complete. If you would like information regarding steps required to complete the process of obtaining water service see "Detail Explanation of the Installation of Water Service Piping, Meter, and Backflow Devices"

DETAIL EXPLANATION OF THE INSTALLATION OF WATER SERVICE PIPING, METER, AND BACKFLOW DEVICES

The purpose of this document is to explain the procedures necessary to complete the installation of new water service at a new or repurposed facility. This document includes information regarding:

- Material Requirements
- Service Connection Piping Information
- Portion of the Service Connection Piping within the Public Right-of-Way
- Portion of the Service Connection Piping on Private Property

Material Requirements

The property owner or owners' contractor must secure all the materials necessary to complete the installation of the water service. This generally includes the following:

- Tapping Sleeves or saddles
- Tapping Valves
- Curb Valves
- Piping and Fittings
- Retaining Glands/Joint restraint
- Adjustable tap and curb valve boxes
- All meter assembly materials as required in the meter detail and bill of material list (see web site for detailed list of materials) or a meter setter if the meter is 1" or smaller
- Contractor must provide a pump if one is needed to dewater the excavation(s).
- If the tap is 3" or larger, the contractor must also supply a compressor.

Service Connection Piping

There are 2 distinct portions of the service connection to install. One portion is commonly called the "Public Portion" and is defined as the portion of the service connection from the public water main to the curb valve. The other is called the "Private Portion" and is the section from the curb valve to the building/facility. These portions can be installed in either order after your service has been approved and your fees have been paid.

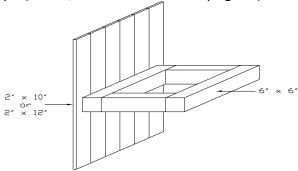
It is possible to install these two portions in either order. If the public portion is performed first, then a firm tap location is identified, the connection in installed at a right angle to the main and is extended to the curb valve. Afterwards the private section may be installed by connected to the curb valve at its location and extended from that point on. Alternatively it is feasible to install the private portion first. However, this is conditional to the following:

- The service must be approved by Cleveland Water's Plan Review Unit.
- All associated tap and meter fees must be paid.
- It is understood by the owner and all owners representatives that the tap location may need to be
 adjusted based on the requirements of Cleveland Water's Tapping Unit and if the tap location
 needs to be adjusted because it is not directly across from the location at which the private service
 line was installed, that the public portion of the service line will be installed with the connection at
 a right angle to the main, extended to the curb and any alignment adjustment will be made
 downstream of the curb valve such that there are no additional fittings on the public portion of the
 service connection.

Further installation requirements for each portion of the service connection are summarized below:

Requirements for the Public Portion of the Service Connection(s) in the public right-of-way between the public main and curb valve

- All openings must be dug or shored to OSHA Standards.
 - o An excavation may not have any vertical walls higher than 5 ft.
 - An opening without shoring must be stepped on all 4 sides
 - o If a shoring box is used it must be four-sided and OSHA approved.
 - If wood shoring is used; we require 6"x 6" wales and cross-braces (2 sets for every 5 ft. of depth). Also, 2"x 10" or 2"x 12" uprights (close sheeted).



Requirements for Installation of tap

- Openings must be a minimum of 4 ft. x 4 ft.
- O Clearance around the water main must be a minimum of 1-inch behind the main, 6-inches below the main, and 4-feet minimum from front of the main our in direction of tap.
- o A tap may not be made within 18-iches of a joint on the main.
- A tap may not be within 5 feet of a valve, hydrant tee, or other fitting.
- A tap may not be within 5 feet of another connection on the same side as the proposed tap or within 18-inches of a connection on the opposite side of the main.
- Contractor is to thoroughly clean the pipe where tap is to be made.
- The service connection must have 5-feet of cover over it.
- Curb valves must be placed within 3 feet of curb or edge of road (exceptions can be made due to underground utilities in the way).
- For 1-inch long-side connections (where the water main is on the far side of the street with respect to the property it is servicing).
 - Copper must be in the ground when tap is made. (PVC Casing is allowed in New Developments ONLY).
 - Copper must run straight across the street from tap to curb valve.
 - If there is a swale or drainage ditch along the road, the curb valve is to be placed between the road and ditch. If it cannot be done, then it is to be set just beyond the ditch.
- For short-side 1-inch Connections (where the water main is on the same side of the street as the proposed service)
- If the water main is in the tree lawn, the curb valve is to be set 3 ft. from the main.
- If the water main is in the street, see above requirements for long-side connections.
- If the taps are being made on a NON-DEDICATED Street, the curb valves are to be set 3 ft. from the main for both long and short sided connections. Cleveland Water will only maintain 3 ft. on either side

of the main; because of this, connection boxes may end up in the street on some long-sided connections).

Requirements for the portion on private property between the curb valve and the building

The portion of the service connection piping on private property between the curb valve and the building/facility may be installed once the application is approved and the fees have been paid. The owner or owners' contractor must install the connection in compliance with our service connection polices, as stated on our website at:

http://www.clevelandwater.com/system_overview/serviceconnections.aspx

The owner or owners' contractor contact is required to contact our Permits and Sales Unit at 216-664-2444 to schedule an appointment for an inspection. Inspections must be scheduled 24 hours in advance, so please figure at least that much lead time. We suggest in all cases to take digital pictures of the installation. The pictures should unambiguously reflect the type of material used, the bury depth of the service line, and the types of joints used. Pictures do not exempt you from an inspection but may be taken into consideration.

The inspector that arrives on site will:

• Assure compliance with standard details specific to your project as shown on our website.

Inspection list of items outside the building/facility are as follows:

- Assure proper depth (5 ½' minimum)
- Assure Proper materials are used
- Assure box is centered over valve
- Assure box is plum in all directions
- Assure curb valve and box placement is approximately two to three feet from face of curb.
- Assure box is set on compacted ground or brick
- Assure proper backfill (Clean sand or limestone screenings)
- If a vault is required
 - Inspect and assure new meter setting for proper plumbing and meter installation prior to that installation
 - Assure compliance with standard details
 - Assure a proper vault is used
 - If backflow is required to go in a vault, assure backflow device is the correct size, type, and location as specified by Engineering

Inspection list of items inside the building/facility are as follows:

- Inspect and assure new building meter setting has proper plumbing for specified meter installation prior to that installation
- Assure compliance with standard details
- Assure a 3-strand, 18 gauge wire is installed from the meter setting to the location of the "End Point". The End Point is the Remote read device, touchpad, or soon to AMR (Automatic Meter Reading) transmitter.
 - Assure Backflow is the correct size, type, and location as specified by Engineering
 - Assure owner has submitted Test and Maintenance form

Meters

All meter assemblies located in vaults will be built and tested by Cleveland Water. In such cases, it is necessary to furnish Cleveland Water's Meter Shop with all the necessary materials as specified on the Bill of Materials which are associated with each detail. Contact our Meter Shop at 216-664-3120 to arrange delivery of the meter assembly materials. Meters designated to go inside the building/facility are to be built by the owner/owner's contractor based on the applicable detail based on the meter and meter setting. If a meter 1" or smaller is specified to service your facility, only a meter setter is required if the meter is designated to go in a vault. In this case there is no assembly to build.

Getting your Meter Installed

If the tap has been made and the service line with all its components have been installed and passed inspection, you may call customer services at 216-664-2444 to have your meter installed. Any Cleveland Water Customer Service Representative will be able to schedule your meter installation.

If the meter is planned to go inside the building, the owner is required to run a 3-strand, 18 gauge wire from the location where the meter is being installed inside the house to the location of the "End Point". The End Point is the Remote read device, touchpad, or Cleveland Water AMR (Automatic Meter Reading) transmitter. This wire should be in place by the time that the meter is scheduled for installation.

If the meter is planned to go in a vault, the owner need not be present for the meter installation but Cleveland Water cannot turn the water on if no one is present because we cannot risk flooding a building/facility if the water is on inside.

Cleveland Water urges our customers to call in to have meters scheduled for installation at the earliest possible time. Prior to have the meter installed, Cleveland Water may begin billing at an estimated rate.

Backflow Prevention Summary of Instructions, Testing, and Inspection

It is the owner's obligation to have the backflow device properly installed and tested.

- The owner must hire a State of Ohio Certified Tester to test the backflow. All owners are to exercise caution and good judgment when hiring a contractor to install and/or test their backflow. We suggested asking for references and checking credentials before deciding on a contractor.
- Once the backflow is installed, it must be tested. Tests are to be submitted online to at https://www.bsionlinetracking.com/

For any questions related to filing backflow test, contact: **Backflow Solutions Inc. (BSI) at 1-800-414-4990**.

Additional notes:

- It will be the owner's responsibility to ensure the backflow device remains operable at all times by performing the annual test.
- Each year a notification will be sent to the owner that it is necessary to perform the annual test.
- Each year the owner must hire a State of Ohio Certified Tester to test the backflow.
- Each year the State of Ohio Certified Tester must to test the backflow and submit the test on line at https://www.bsionlinetracking.com/

For questions regarding backflow devices or the annual tests, contact: **Backflow Solutions Inc. (BSI) at 1-800-414-4990**.

FORMS

To obtain commercial water service, please fill out and submit all applicable forms and submit with three or four sets of sit utility plans. The following is a list of forms contained in this document:

- FORM G1 GENERAL INFORMATION ABOUT PROPERTY AND OWNER DATA ENTRY FORM
- FORM W1 PRIVATE WATER SYSTEM CUSTOMER SURVEY
- FORM B1 BACKFLOW LETTER OF INTENT
- FORM B2 FACILITY CLASSIFICATION DATA ENTRY FORM
- FORM E1 -EXISTING WATER SERVICE CONNECTIONS WORKSHEET— DATA ENTRY FORM
- FORM V1 EASEMENT FOR WATER METER VAULT
- FORM D1 DOMESTIC WATER SERVICE FLOW AND PRESSURE REQUIREMENTS DATA ENTRY FORM
- FORM D2 RESIDENTIAL FIXTURE DATA TABLE DATA ENTRY FORM
- FORM L1 LAWN IRRIGATION WATER SERVICE DATA ENTRY FORM
- FORM F1 FIRE PROTECTION WATER SERVICE REQUIREMENTS DATA ENTRY FORM
- FORM S1 "WATER SERVICE SUMMARY TABLE"

FORM G1 - GENERAL INFORMATION ABOUT PROPERTY AND OWNER - DATA ENTRY FORM

1.	JOB/PROJECT NAME (EXAMPLE: - "SMI	TH RE	ESIDENCE")				
	Job/Project Name:						
2.	SERVICE ADDRESS INFORMATION: (THE ADDRESS OF THE PROPERTY AT WHICH YOU ARE SEEKING WATER SERVICE)						
	Street Number:	reet N	Name:				
	City:			Stat	e:	Zip:	
3.	. PARCEL NUMBER: (OF PARCEL(S) SEEKING WATER SERVICE)						
	Parcel Number:						
4.	SEWER DISTRICT INFORMATION (IF ON A SE (THE SEWER DISTRICT (PROVIDER OF SEWER SERVICE, CONSUMPTION IS METERED, BUT SEWER USE IS NOT. AS NEORSD AND MUNICIPAL SEWER SYSTEMS SUCA A SERVICE FOR THE SURROUNDING SEWER AGENCIES Sewer District:	AT TH CLEVE H AS EL	HE PROPERTY FOR WHICH VELAND WATER PROVIDES I EUCLID, STRONGSVILLE, NO	YOU ARE S BILLING SE ORTH ROY	ERVICES FOR MANY SU	RROUNDING SEWER SYSTEMS SUC	
5.	BILLING INFORMATION:						
	(PROVIDE THE CURRENT FULL BUSINESS NAME, PHONE NUMBER, FAX NUMBER AND E-MAIL ADDICOMMUNICATION PLEASE READ: This is the name that will property, if the property is owned by a Conof a managing partner or employee auth named party on the property deed. All inspections, meter set/meter piping inspectionstallations will not be authorized to be in home is identified as having water service to establish accounts in their name, account which may be the developer or builder. It the properties legally transfer. Upon transfer the referenced responsibilities to the new of	be position a stalled but no nts an is the fer of	placed in our billing y, corporation or LLC, ed to make decisions onsibilities associated and the meter installed until all inspections no meter has been insund their associated bie responsibility of the f property, seller of pr	system please on this with e lation sl shave b stalled. Ils will r new ow	and will be accoprovide the busing account. The own account water service hall be the response completed. If new owners do emain in the name of the contraction of th	untable for all billing at the ess name as well as the name of the considered the considered the considered the considered the considered the concluding, the owner significant owner. Met estimated bills may ensue if not contact Cleveland Wat the of our last owner of reconcounts into their name who	
	Business/Company Name:						
	Last Name:		First Name:				
	Street Number:		Street Name:				
	City:			Sta	te:	Zip:	
	Phone Number: ()			Fax Nu	ımber: ()		
	E-mail address:						

Relationship to Owner (if not the owner):

PRIMARY CONTACT FOR THIS APPLICATION PROCESSING (INDICATE THE PRIMARY CONTACT. IT MAY BE THE OWNER OR A CONTRACTOR, ARCHITECT, ENGINEER, BUILDER, OR OTHER PERSONS RELATED TO THE OWNER IN SOME WAY) Business/Company Name: Last Name: First Name: Street Number: Street Name: City: State: Zip: Phone Number: (Fax Number: (E-mail address: Relationship to Owner (if not the owner): Roles/Duties of Primary Contact: 7. OTHER CONTACT INFORMATION (IF AN ARCHITECT, ENGINEER, CONTRACTOR, OR PLUMBER IS HAS BEEN INVOLVED IN PREPARING THE PLANS OR FILLING A PORTION OF THE APPLICATION, STATE THEIR RESPECTIVE TELEPHONE, FAX NUMBERS, AND E-MAIL ADDRESSES.) Business/Company Name: First Name: Last Name: Street Number: Street Name: City: State: Zip: Phone Number: (Fax Number: (E-mail address: Relationship to Owner (if not the owner): Roles/Duties of Primary Contact: Signature of Property Owner: By signing this form, the owner attests that he/she has understands the responsibilities associated with establishing an account and obtaining water service. Signature: _____ Date: _____

Print: _____

FORM W1 - PRIVATE WATER SYSTEM SURVEY FORM

The following must be completed by the owner/agent of the property which is to receive new water service from the Cleveland Water to determine whether or not a possible cross-connection between your private water system and the public water system could exist.

THIS FORM AND THE COUNTY BOARD OF HEALTH APPROVAL LETTER/PERMIT MUST BE

SUBMITTED WITH YOUR APPLICATION FOR WAT! Please check one:	ER SERVICE!			
Private System to Remain: Enter County Alteration	Permit Number:			
Private System to be eliminated: Enter County Abandonment Permit Number:				
If you intend to keep you private water system available for any reason, the Cleveland Water will require the installation of an Ohio E.P.A. approved reduced pressure type backflow assembly on your city service line. NOTE: If you have already tied into city water, please call for an inspection.				
Name:				
Address:				
City:	Zip:			
Phone Number: ()				

Signature:

FORM B1 - BACKFLOW LETTER OF INTENT

Please complete the following if a Backflow Prevention Device is required (Typical for all commercial applications, irrigation lines, and properties with well water)

<u>City of Cleveland</u> Cleveland Water - Backflow Prevention Unit

JOB/PROJECT NUMBER:	
·	(Assigned by Cleveland Water)
JOB/PROJECT ADDRESS:	
MUNICIPALITY:	
	REBY AGREE TO INSTALL THE REQUIRED BACKFLOW DEVICE(S), AS DEEMED /OR INSPECTION BY AUTHORIZED AGENT(S) OF THE COMMISSIONER OF
	SHALL BE PER SECTION 531.23 OF THE CODIFIED ORDINANCES OF THE JLES AND REGULATIONS OF CLEVELAND WATER.
Signatur	e:
Print Nam	ne:
	PROPERTY OWNER
SWORN TO AND SUBSCRIBED IN	MY PRESENCE THIS
DAY OF	
	

NOTARY PUBLIC

FORM B2 - FACILITY CLASSIFICATION - DATA ENTRY FORM

To aid us in identifying the correct type of backflow device required for your service, please indicate which of the following best classifies the use associate with your facility. You may select more than one:

Car wash	Nursing Homes			
Chemical Plant	Paper product manufacturing			
Convenience Store	Party Centers			
Film-laboratory or development	Petroleum processing plants			
Food or beverage processing plant	Petroleum storage plant or yard			
Funeral Home-Mortuary	Piers, Docks, or Waterfront facility			
Gas Station	Power Plant			
General Office Building	Radioactive material plant			
Laundry-Dry Cleaner	Rendering plant			
	Restaurants			
Lawn Irrigation Machine Tool plant (degree of hazard) Hospital Medical Clinic Veterinary Facility Medical Offices Metal Processing or productions Metal plating plant	Sand and Gravel plant			
Hospital	School with Food preparation			
Medical Clinic	School without Food preparation			
Veterinary Facility	Strip/shopping malls			
Medical Offices	Swimming pools			
Metal Processing or productions	Sewage treatment plants			
Metal plating plant	Sewage Pumping station			
Multi-residential facilities	0 1 0			
				
If your use is not indicated above, please describe your facilities use:				
Please indicate if boilers will be used in the building and indicated if the	e boiler system will utilize chemical treatment?			
	·			
If you are installing a Fire Protection Systems, please indicate the following	owing:			
Is the system Wet or Dry?				
Does fire protection system contain on-site hydrants? Yes/No	If so, does the property front water (a Lake,			
Stream, River, etc) Yes/No				
Does fire protection system contain Booster Pumps? Yes/No				
s your protection system chemically treated? Yes/No				

FORM E1 -EXISTING WATER SERVICE CONNECTIONS WORKSHEET- DATA ENTRY SHEET

The purpose of this form is to aid the applicant in researching and assessing existing water service connections located at the property seeking new water service. Please answer the following questions to the best of your ability.

Are there one or more existing wate service? (Yes/No)	r service connections installed along th	ne frontage of the property seeking	
If more than one connection is prese	ent, indicate the total number of conne	ections present:	
What is/are the size(s) of the existing water service connection(s)? Inches in diameter. If more than one exists, write in sizes of each in the space provided below.			
than one exists, write in sizes of each	Till the space provided below.		
Connection Number	Connection Size	Propose to re-use	
<u> </u>		Propose to re-use	
<u> </u>		Propose to re-use	
<u> </u>		Propose to re-use	
<u> </u>		Propose to re-use	

FORM V1 - EASEMENT FOR WATER METER VAULT

KNOW ALL MEN BY THESE PRESENTS	
THAT	, herein for consideration of the sum of one dollar (\$1.00)
and other valuable consideration, rec	eipt of which is hereby acknowledged, do(es) hereby give, grant, bargain
and convey to the City of Cleveland, r	municipal corporation of the State of Ohio, the Grantees herein, the
Right-of-way and easement for the po	urpose hereinafter mentioned is the following premises, to-wit:

Be the same more or less but subject to all legal highways.

The Grantor(s) convey the right and easement to enter upon said premises and to install, repair and maintain therein the water meter(s), also to turn off the water of any service or main, or to do any other thing that may be necessary or advisable in the judgment of said Grantees, its successors or assigns, in order to maintain or operate said meters in accordance with the ordinances, rules and regulations for the management of said Grantees now in force or that may hereafter be adopted.

The Grantor(s) further in consideration of the acceptance of the easement above mentioned, by the Grantee does hereby agree to pay the entire cost of installing and maintaining a water meter vault and appurtenances within the above described easement, constructed and maintained in accordance with the provisions, rules, regulations and requirements of the Grantee, its successors or assigns.

Whenever the Grantor(s) is notified by the Grantee that the water meter vault or its appurtenances are in need of maintenance, said maintenance shall be performed by the Grantor(s). In the event the Grantor(s) fails to perform said maintenance within a reasonable period of time as determined by the Grantee, the Grantee reserves the right to perform said maintenance and charge the expense thereof to the Grantor(s).

The Grantor(s) hereby restrict said premises within the limits of the above described easement against the construction thereon of any buildings of a temporary or permanent type, excepting any sidewalks and/or pavements.

TO HAVE AND TO HOLD THE above described easement and right-of-way for the purpose above mentioned unto said Grantee forever.

It is the intent of this conveyance that neither the filling of this deed or conveyance, its acceptance by the Grantee nor any other circumstance shall be construed as a dedication of or as an agreement by the Grantee to accept for dedication the premises herein described for public use as a street.

It is agreed that whatever party is named in this instrument there shall be intended and included in each case that party, his or her heirs, administrators, successors and/or assigns.

Signed in the presence of: ———————————————————————————————————	Grantors:
, , ,	
TATE OF OHIO } } SS:	
COUNTY OF}	
Before me, a Notary Public in and for said County and Grantor(s) who acknowledged that the signing of the foregoing instrument authorized act and deed.	
IN WITNESS WHEREOF, I have hereunto set my hand and official seal this	day of
he City of Cleveland by its Director of Public Utilities does h	
Vitness:	City of Cleveland
E	Ву:
The legal form and correctness of the within instrument is he	By:

FORM D1 - DOMESTIC WATER SERVICE FLOW AND PRESSURE REQUIREMENTS - DATA ENTRY FORM

The most water used at any point in time for domestic consumption Demand" (PID). PID is measure it in gallons per minute. If you know state it here: gal/min.	
Otherwise, complete FORM D2 entitled, " FIXTURE DATA TABLE " peak instantaneous demand.	to enable Cleveland Water to estimate your
Domestic Water Service Pressure Requirements Pressures in Cleveland's water system may range from 40 psi to a pressure regulator in cases where the pressures exceed 85 psi. have any domestic water fixtures that require a minimum pressur minimum pressure requirement, indicate as N/A for not applicable.	We will inform you if this is the case. If you are, please indicate. If you do not have a
Minimum Pressure Requirement psi. (If no minimum pressure is indicated, 35 psi will be used for eval	uation purposes.)
If the desired pressures exceed our pressure at the propert alternatives.	y location, we may be able to recommend
The length of the service line impacts your pressure losses.	
State the distance between the public water main in the street a	nd the point at which the water service will
enter the building? Feet	_
What is the finished first floor elevation?	Feet ahove sea level

FORM D2 - FIXTURE DATA TABLE - DATA ENTRY FORM

Fill out this table by multiplying the Fixture Values by the Number of Fixtures for each Fixture Category and Place them in the Column named Fixture Value Product. When complete, sum the Fixture Value Product column and place on the Total line.

FIXTURE DATA TABLE FOR COMMERCIAL PROPERTIES						
Fixture Category	PLUMBING SIZE/NOTES	Fixture Value @ 35 psi		Number of Fixtures		Fixture Value Product
BATHTUBS		8	Х		II	
BATHROOM SINKS	3/8" CONNECTION	2	х		=	
	3/4" CONNECTION	4	х		=	
DENTAL UNIT		1	х		=	
DENTAL LAVATORY		2	х		=	
DISHWASHER	1/2" CONNECTION	3	х		=	
	3/4" CONNECTION	7	х		=	
DRINKING FOUNTAIN	COOLER	1	х		=	
	PUBLIC	2	х		=	
HOSE CONNECTION	1/2" CONNECTION	6	х		=	
	3/4" CONNECTION	10	х		=	
LAUNDRY TRAY (UTILITY WASH TUB)	1/2" CONNECTION	5	х		=	
	3/4" CONNECTION	10	х		=	
SERVICE SINKS	(EACH SET OF FAUCETS)	4	х		=	
SHOWER HEAD		4	х		=	
TOILET	WALL MOUNT FLUSH VAVLE	35	х		=	
	TANK TYPE FLUSH VAVLE	3	х		=	
URINAL	Pedestal Flush Valve	35	х		=	
	WALL FLUSH VAVLE	3	х		=	
WASHING MACHINE	1/2" Connection	5	х		=	
	3/4" Connection	12	х		=	
	1" Connection	25	х		=	

TOTAL:	

FORM L1 - LAWN IRRIGATION WATER SERVICE - DATA ENTRY FORM

The intent of this form is to identify the flow and pressure requirements as well as the pipe, meter and backflow configuration for lawn irrigation water service.

It is possible to provide irrigation water utilizing the same meter that measures the domestic consumption or through a separate meter. Note: A lawn irrigation system requires a PVB (pressure vacuum breaker) backflow device or a Reduced Pressure Backflow Device. If the same metered line is used, the irrigation system may dictate the type of backflow device and may constrain the meter location.

Please indicate the proposed metering configuration by checking one of the following:
Irrigation to be metered using same meter that measures the domestic consumption
Irrigation to be metered using a separate meter and/or deduct meter (Circle one)
It is important to quantify the highest flow rate you may experience for the lawn irrigation system? (Typically, lawn irrigation systems are zoned. If all the sprinkler heads will be in use at the same time, then the peak flow will be based on the full system flow requirements. If the system is zoned, the peak irrigation demand will be based upon the flow rate required by the largest zone.
Enter the Lawn Irrigation System Peak Instantaneous Demand - gal/min
Enter the Minimum Pressure Requirement- psi. (This is the lowest pressure at which the Lawn Irrigation System will function properly)

FORM F1 - FIRE PROTECTION WATER SERVICE REQUIREMENTS DATA ENTRY FORM

The intent of this form is to provide information necessary to allow Cleveland Water to properly size and configure the fire service piping and associated backflow devices(s). If the property requires fire protection, it will be necessary to complete this form.

Please indicate if the fire protection service proposed is an independent fire service or a limited area fire suppression system
an independent fire service is proposed. If selected, indicated the following:
Fire service will feed an internal Fire Suppression System (sprinkler heads) only
Fire service will feed yard hydrant(s) only
Fire service will feed an internal Fire Suppression System (sprinkler heads) and yard hydrant(s)
a limited area fire suppression system is proposed and will comply with OBBC 907.0
Will any portion of your fire protection system contain any chemical additives and/or antifreeze line (Note: if this is the case, a reduced pressure backflow device will be required on your fire services.)
Fire System Flow and Pressure Requirements Indicate the peak flows and minimum pressure requirements to properly extinguish a fire at the proposed facility.
Maximum required fire flow - gal/min
Maximum fire pump rating - gal/min (Note: many fire departments will require testing at 150% of the maximum flow requirements. Furthermore, a fire pump is utilized, the fire department will require the test to be performed at 150% of the pumps rated capacity. Please consider these additional demands in the Maximum required fire flow demand stated above
Minimum Pressure Required (at street)psi
Cleveland Water Fire flow Test Data Used- Test # Date

FORM S1 – WATER SERVICE SUMMARY TABLE - DATA ENTRY FORM

Please complete the table below

Type of Connection	Size/ Diameter	Length	Material Type	Bury Depth
Domestic Connection Public				
Property Side				
Fire Connection Public Property Side				
Irrigation Connection Public Property Side				
Domestic Connection Private Property Side				
Fire Connection Private Property Side				
Irrigation Connection Property Side				

Function of Meter	Size	Type of Meter*	Location*
Domostic Motor		DETERMINED BY	
Domestic Meter		CLEVELAND WATER	
Irrigation Meter		DETERMINED BY	
		CLEVELAND WATER	
Deduct Meter		DETERMINED BY	
		CLEVELAND WATER	

^{*} Types of Meters are Displacement, Turbine, Compound, or UL/FM Rated Compound, all but the UL/FM Rated Compound are supplied but Cleveland Water

^{**} UL/FM Rated Compound is to be furnished by the owner but must comply with Cleveland Water Standard Details.

Service Requiring Backflow	Size	Location	Type of Backflow*
Domestic Service		DETERMINED	DETERMINED BY
		BY CLEVELAND	CLEVELAND
		WATER	WATER
Irrigation Service		DETERMINED	DETERMINED BY
		BY CLEVELAND	CLEVELAND
		WATER	WATER
Fire Service		DETERMINED	DETERMINED BY
		BY CLEVELAND	CLEVELAND
		WATER	WATER

^{*} Types of Backflow Prevention Devices are Double Check Valves (DCV), Double Check Detector Check (DCDCV), Reduced Pressure Principle Devices (RP), Pressure Vacuum Breaker (PVB)

^{*} Location shall either be in the home/building or in a properly sized vault.