THE CITY OF
COLUMBUS
ANDREW J. GINTHER, MAYOR

DEPARTMENT OF
PUBLIC UTILITIES

Water Service Plan Design Manual

April 2026

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Preface

The following document shall serve as a guideline for water service design within the Division of Water (DOW) service area. This includes the City of Columbus and communities with Full Service Water Agreements with the City of Columbus. These communities include: Brice, Brookside Estates, Dublin, Grandview Heights, Grove City, Groveport, Hamilton Meadows, Hilliard, Marble Cliff, Minerva Park, New Albany, Ridgewood Estates, Riverlea, Urbancrest, Upper Arlington, Valleyview, Village Park, Whitehall and Worthington.

It was prepared to assist engineering consultants in the development of water service plans. These guidelines are not all inclusive and do not replace best engineering judgment. Any deviation from these guidelines shall be reviewed and approved by the Division of Water. All technical details shall remain the responsibility of the design engineer preparing the plans.

The Division reserves the right to modify any or all of these guidelines at any time.

For the purposes of this manual, the following definitions shall be used for tap and service line:

“Tap” means the connection to the water main and the necessary pipes or lines extending from the water main to and including the curb stop or control valve and box. (City owned)

“Service line” means the line extending from the tap onto the premises to be served and shall include all the necessary pipes, lines and appurtenances from the tap to and including the meter and backflow device. This also includes lines that are outside the footprint(s) of the building(s) on the site. This includes domestic lines between buildings, fire lines, private hydrants, fire department connections, etc. (Privately owned)

1.0 Water Service Plans

1.0.1 All additions, extensions, demolitions, and modifications of a new or existing water tap or service line for all properties that require backflow regardless of the size of the tap or service line may require a water service plan. (See section 4.0 for plan type)

1.0.2 All water service plans submitted for approval to the City of Columbus – Division of Water shall be prepared, signed, and sealed by a Professional Engineer who is licensed in the State of Ohio.

1.0.3 It is the responsibility of the design engineer to know and follow the latest edition of the City of Columbus Construction and Material Specifications (CMSC), the City of Columbus, the Department of Public Utilities Rules and Regulations, and Division of Water Standard Drawings. The latest editions of these items can be found in the Department of Public Utilities "Document Library" on the City of Columbus website:

https://www.columbus.gov/Services/Columbus-Water-Power/Information-for-Customers/Document-Library

1.0.4 Water service plans are for water service work only. Public water main or fire hydrant installations, relocations or abandonments shall be prepared on a separate plan. This can be done under a street improvement plan or a water line only plan. A separate plan will not be required in the following situations:

- If DOW approves a new public hydrant to be installed using the fire tap, and the hydrant lead is no more than 15 feet, it can be shown as part of the water service plan.
- If DOW approves the relocation of an existing public fire hydrant to allow for new water taps and the hydrant lead is no more than 15 feet, it can be shown as part of the water service plan.

- If a public fire hydrant is being installed or relocated in a contract community, the written approval of the fire hydrant from the contract community shall be provided.

1.0.5 Water service plans shall be separate, stand-alone plans. They shall not be part of a larger plan (i.e., street improvement plan, site development plan, etc.).

1.0.6 Water service plans shall follow the "Computer Aided Drafting (CAD) Standards for Creation and Submittal of Digital Drawings". The standards document can be found in the Department of Public Utilities "Document Library" on the City of Columbus website:

https://www.columbus.gov/Services/Columbus-Water-Power/Information-for-Customers/Document-Library

1.0.7 All water service plans shall be prepared on 22"x 34" sheets, unless otherwise approved by the Division of Water (DOW).

1.0.8 All line work shall be black and white. Aerial imagery shall not be permitted.

1.0.9 A water service plan will require all of the following sections: overall site plan, profile view, meter setting and backflow setting detail, and water service notes. The requirements for each are as follows:

1.1 Overall Site Plan

1.1.1 Border: Use the format for the border found in the Appendix of this manual

Information in border shall include the following blocks:

- Easement Reference
- Revisions
- Name and address of engineering firm that includes design engineer's signature and seal.

- Signature line for DOW water service plan approval (sheet 1 only)
- Project title, certified address, and parcel identification number (PID) of the property being served by the water service plan.
- Assigned water service plan number (provided by DOW)
- Sheet number

1.1.2 North Arrow: Plans shall be oriented so that the north arrow is toward the top or left margin of the sheet.

1.1.3 Location Map: This map shall show the relative location of the project to arterial streets and/or highways so as to determine the location of the project at a quick glance. No scale is required on the location map.

1.1.4 **Project summary**: This shall include a brief description of the proposed work, i.e. sizes of proposed services, sizes and locations of the meter and backflow settings, and any tap abandonment details (if applicable).

1.1.5 Overall site plan shall be prepared in an engineering scale (i.e., 1”=10’, 20’, 30’, etc.) appropriate for the size of the project.

1.1.6 All work should be designed on the Ohio State Plane Coordinate System (South), unless otherwise approved by DOW.

1.1.7 Overall site plan shall show the entire parcel. Label all property lines and surrounding streets.

1.1.8 Show and label corporate boundaries.

1.1.9 Show all street edges, curbs, right-of-way lines, and building setback lines. This also includes any existing or proposed easement lines.

1.1.10 Label the right-of-way width. If the right-of-way is proposed, supporting documents from the agency responsible for the right-of-way acquisition need to be included with the water service plan submittal to ensure proposed right-of-way lines are accurate and definite.

1.1.11 Label each parcel with the street address and parcel identification number.

1.1.12 Water service plan shall include a certified address of the property being served. If the site has multiple addresses, a certified address for the meter shall be required. The water service plan will not be approved until a certified address is obtained. If an existing tap or building is being reused, verify the address with DOW. (Upload as separate document)

1.1.13 All existing and proposed utilities within, or adjacent to, the project site shall be shown on the plan and clearly identified as to type, size, location, and ownership. Email DPU_GIS_MAPPING@columbus.gov to obtain City of Columbus public utility records.

1.1.14 Existing water mains and appurtenances (valves, hydrants, etc.) shall be shown and labeled with record plan number, size, and material. All existing water taps shall be shown and labeled by tap ID# or related record plan number. Distinguish between field located valves and valves located per records by adding a label in the plan view.

1.1.15 Show the footprint of all existing buildings to remain, proposed buildings, trees and shrubs, utility boxes, and other permanent structures.

1.1.16 Label the building type per the Use and Occupancy Classification from Section 302 of the Ohio Building Code on the site plan if the following groups apply: H-1, H-2, H-3, H-4, and H-5.

1.1.17 Appropriate line weights are to be used for the various items shown on the plan. All items shown on the plan are to be labeled and clearly distinguishable from each other. For ease of distinction, the proposed water tap and service lines should be the heaviest line weight used.

1.1.18 Show the proposed water service(s) from the water main thru the designated water meter and backflow setting, whether that is a meter vault, meter box, heated enclosure, in the building (in the meter room

footprint) or other DOW approved arrangement. The proposed service(s) shall have their sizes and materials labeled.

Note: A tapping detail showing a close-up view from the water main to 5' past the right-of-way (and/or to the meter and backflow location if within reasonable distance) may be required on the plan for clarity of the taps, depending on scale and other utilities near the tap and curb boxes.

1.1.19 For proposed 4" and larger water services from the water main thru the designated water meter and backflow setting, all horizontal bends and deflections shall be shown and labeled in the plan view.

1.1.20 For proposed 2" and smaller water services from the water main thru the designated water meter and backflow setting, all horizontal deflections shall be shown and labeled in the plan view only. No bend fittings are allowed for 2" and smaller services.

1.1.21 The water service plan shall show all underground service lines up to the meter riser. Also show all private domestic lines between buildings, fire lines, private hydrants, fire department connections, etc.

1.2 Profile View

1.2.1 Profile view shall show the proposed water service(s) from water main to the meter and/or backflow setting. This shall include the riser into the building if applicable.

1.2.2 For proposed 4" and larger water services from the water main thru the designated water meter and backflow setting, all vertical and horizontal bends shall be shown and labeled. Provide slopes of the pipes and label fitting with centerline elevation.

1.2.3 Scale: The horizontal scale of the water service shall always be the same as the scale of the corresponding plan view, unless approved otherwise by DOW. The vertical scale for profile shall be sufficient size to show

necessary detail. Vertical scale shall be 1”=5’ or 1”=10’ unless otherwise approved by DOW.

1.2.4 Plan view and profile view shall follow the same direction.

1.2.5 Utility and Other Crossings: All utility crossings, whether existing or proposed, shall be shown as accurately as possible (based on available records) on the water service profile and identified as to their type and size. Other crossings such as right-of-way, property lines, building lines, etc. shall also be shown and identified on the water service profile.

1.2.6 Building foundation walls and footings shall be shown. Service lines shall be a minimum of 12” above or below the footing.

1.2.7 Ground Surfaces: Existing and proposed ground surfaces shall be shown and clearly marked. Existing surfaces shall be shown as a dashed line. Proposed ground surfaces shall be shown as a solid line.

1.2.8 All elevations shown on the plan shall be based on the North American Vertical Datum of 1988 (NAVD 88) with 2011 adjustments, unless otherwise approved by DOW.

1.2.9 Control Valve: All control valves installed with the water service shall be shown and identified as to their type and size on the water service profile.

1.3 Meter and Backflow Setting Detail

1.3.1 Water meters should be installed in above ground structures whenever practical. If it is not practical to get the water meter in an above ground structure, the water meter can be placed in a meter vault.

1.3.2 If the water meter is placed in a structure, it can be shown as part of the overall site plan.

1.3.3 The backflow preventer shall be placed after the meter and prior to any other connection. Whether a backflow preventer is located above ground

or below is dependent on the type of containment required as prescribed in the current Rule and Regulation for Cross-Connection Control.

- A double check valve assembly can be placed in a vault.
- A reduced pressure backflow assembly (RP) shall not be installed in a vault or any area subject to flooding.
- All services on the parcel, whether proposed or existing, must be in compliance.

1.3.4 The water meter and backflow preventer (if required) shall not be located within a living unit.

1.3.5 It is the responsibility of the design engineer to determine the most appropriate location for the meter and backflow preventer based on the site and DOW requirements. Location shall require the approval of DOW.

1.3.6 If the water meter is placed in a vault, the design engineer shall show the meter and vault according to the latest edition of the DOW Standard Drawings. Any backflow prevention required shall be shown as well.

1.3.7 MEP plans are required if the meter and backflow preventer information is not shown on the overall site plan due to responsibilities of the respective engineer.

1.3.8 If a MEP plan is utilized, it is the responsibility of the design engineer submitting the water service plan to ensure that the MEP plan matches the overall site plan in regards to the water service size, material, and where it enters the building. If the plans do not match, they will be returned to the design engineer with no further review completed.

1.3.9 If a MEP plan is used, it does not need to include the plumbing for every floor behind the meter.

1.3.10 The MEP plan can be prepared in an architectural scale. If no scale is used, all dimensions must be shown to ensure meter and backflow setting meets DOW access and spacing requirements.

1.3.11 The meter room must be shown in plan and profile view. Both views must show the meter and/or backflow setting to ensure meter and/or backflow setting meets DOW access and spacing requirements.

1.3.12 If the meter room is designed with a RP backflow assembly, DOW recommends that a floor drain be installed and sized per the RP manufacturer's discharge specifications. The location and size of the floor drain is subject to the approval of the local building department.

1.3.13 The meter room shall meet all code provisions required by the local building department.

1.3.14 If a separate, dedicated meter building or above ground heated enclosure is used, the heat source shall be shown on the plan for the building or enclosure.

1.3.15 A vertical fire backflow assembly (DCDA only) may be approved on a case-by-case basis. Design engineer shall ensure the device specified is manufacturer approved to be installed in a vertical alignment. The plans shall include the make and model of the backflow assembly. The detector meter assembly must be configured in a horizontal alignment and must be modified by the manufacturer (cannot be modified by the plumbing contractor). **For new construction, vertical fire backflow assemblies will not be permitted.**

1.3.16 For the plan view of meter and/or backflow setting:

- Show that meter and/or backflow setting meets DOW access and spacing requirements. Dimension from the nearest existing or proposed wall, and dimension proper clearances from any other utilities or mechanical devices that may be in the same room.
- Show the access to the meter and/or backflow setting, and show the door swing to ensure the door is able to open fully.
- If a site has both the fire and domestic meters in the same meter room, they shall both be shown on the same detail.

- Show fire and domestic pumps if they are needed:
- Fire pumps must be labeled with a low pressure throttling valve or a variable speed suction limiting control
- Domestic pumps must be labeled with a low pressure cut off switch

1.3.17 For the profile view of meter and/or backflow setting:

- If the meter is in a vault and the backflow is in an above ground heated enclosure, the profile shall show both the vault and the heated enclosure.
- In all cases, show the dimension from the floor to the center of pipe.
- If a site has domestic and fire services, a profile of each meter and/or backflow setting is required.
- The size and type of each backflow preventer must be labeled.
- If an ASSE 1015 (DC) or 1048 (DCDA) device is being used the following note shall be provided with the call out for the backflow preventer: Fire protection system uses water only, the site does not have access to an auxiliary water system, and the system is not subject to chemical additives.

1.4 Water Service Notes

1.4.1 Water Service Notes shall be included on all plans. The latest edition of these notes can be found in the Department of Public Utilities "Document Library" on the City of Columbus website:

https://www.columbus.gov/Services/Columbus-Water-Power/Information-for-Customers/Document-Library

1.4.2 Notes relevant to the site must be on the site plan. Not all of these notes may apply to every specific site; use the relevant ones and adjust as necessary.

1.4.3 The Water Service Notes shall be in the same order as provided.

1.4.4 If the design engineer determines that additional notes are required due to circumstances of the particular project, the notes should be separate and come after the Water Service Notes. Any additional notes shall not conflict with the Water Service Notes. The design engineer preparing the plans is responsible for making sure that all notes required to construct the project are provided on the plan.

2.0 Water Service Design

2.0.1 The site shall be annexed into the City of Columbus or within the corporate limits of a suburban community that has a water service agreement with the City of Columbus.

2.0.2 It is the responsibility of the design engineer to ensure that the size of the water service will meet the needs of the proposed development. The City of Columbus Division of Water does not size water services; however, for residential buildings there are minimum sizes prescribed by Rule and Regulation regarding Water Service Sizing for Residential Units.

2.0.3 If available water pressure or flow information is needed, or a flow test is required, contact the Division of Water at 614-645-7677.

2.0.4 A single service cannot serve more than one parcel, but one parcel may have multiple services as prescribed by Rule & Regulation regarding Water Service Tap Requirements. If parcels need merged or split, they shall be merged or split prior to receiving plan approval. A copy of the approved form from the County Auditor's office may be necessary to receive water service plan approval.

2.0.5 A new service may pass through up to 2 other parcels between the water main and the parcel to be served. An easement/deed of restrictive covenant will be required to allow the service to pass through the neighboring parcel(s).

2.0.6 When a property within the corporation limits of the City of Columbus is to be served with water by tapping a water main owned by another

suburban community, it is the responsibility of the design engineer to notify the owner of the water main to make them aware of the proposed development and the intentions to tap their water main. The DOW plan reviewer may request documentation that demonstrates the suburban community's acknowledgement of these intentions.

2.0.7 Water taps shall be perpendicular to the water main. No tap or service line shall run parallel to the right-of-way while within the right of way or water main easement area.

2.0.8 Water taps should be located as to minimize the impact on existing trees.

2.0.9 A minimum of 5' shall be maintained between fittings on the public water main and 3' between fittings shall be maintained on the water tap and service, unless otherwise approved by DOW.

2.0.10 Water services shall maintain 10' horizontal and 18" vertical separation from sanitary and storm sewer piping (outside diameter to outside diameter) unless otherwise approved by DOW. Maintain 3' horizontal and 12" vertical separation from all other utilities unless otherwise required by the applicable utility company.

2.0.11 Water service pipe shall be the same size from the main to the meter, unless otherwise approved by DOW.

2.0.12 Water taps and service lines 4" and larger shall be ductile iron from the water main through the meter setting including the meter bypass.

2.0.13 Water taps 2" and smaller shall be Type K copper tubing as prescribed by Rule and Regulation regarding Materials for Water Service Taps.

2.0.14 Water service lines 2" and smaller shall either be Type K copper tubing or ultra-high molecular weight polyethylene tubing as prescribed by DOW's approved materials list.

Note: If there are underground vessels being used or having previously been used for storage of petroleum product of other health hazard, water

service lines 2” and smaller must be Type K copper tubing as prescribed by Rule & Regulation regarding Water Service Material on Properties with Underground Storage Facilities.

2.0.15 If connecting to an existing service line, the contractor shall connect using the same material as the existing service line so long as it is copper or a DOW approved polytubing material. If the existing service line is not copper or DOW approved polytubing, the service must be replaced back to the control valve.

2.0.16 If connecting into a CIPP lined water main, additional details and notes shall be required and provided by the DOW plan reviewer.

2.0.17 Proposed water taps and service lines of all sizes shall be shown a minimum of 42” below grade. For projects where final grading has not occurred, provide required cover for the proposed water service.

2.0.18 All control valves shall have a maximum depth of 60” from proposed grade, unless otherwise approved by DOW.

2.0.19 Ensure that tees, bends and valves are not located below existing or proposed utilities.

2.0.20 Taps and services should not be located under detention basins, underground storage systems, or other green infrastructure, unless otherwise approved by DOW.

2.0.21 There shall be no connections (i.e. private hydrants, fire department connections, post indicator valves, etc.) prior to the meter and only 1 valve shall be permitted upstream of the meter as prescribed in the Rule and Regulation for Water Metering Systems.

2.0.22 There shall be no more than 150’ of service line from the control valve to the meter (including the fire backflow with meter), unless otherwise approved by DOW.

2.0.23 For vaults or above ground heated enclosures, water service pipe may change size and/or material type 5’ from the outlet side of the vault or heated enclosure footprint.

2.1 Tapping Valves and Control Valves

2.1.1 Ensure that the size of the proposed tapping sleeve does not exceed the size of the existing water main.

2.1.2 If there are separate fire and domestic services:

- One tap may be made on the water main; it will be the size of the larger of the two services. Near the right-of-way line, this line will be split into the two separate service lines (3’ apart) such that the control valves are still within 2’ of the right-of-way. (See Standard Drawing L-6317E, Dual Meter Setting)
- If the water main is outside of the pavement on the near side of the right-of-way, a separate tap may be made for each service.

2.1.3 Tapping the back side of a water main due to utility conflicts shall only be permitted with prior approval by DOW. If the backside of the water main must be tapped, multiple profile views and/or an isometric view may be required on the plans to adequately show how the tap will be installed.

2.1.4 A tapping valve is not typically the control valve. In most circumstances, a second control valve will be required near the right-of-way.

2.1.5 For services 4” and larger, if the tapping valve is outside of the pavement, close to the near side of the right-of-way, it may be used as the control valve. A second valve would not be required.

2.1.6 Taps 4” and larger on a 16” or larger water main will require two valves, unless otherwise approved.

2.1.7 For 4” and larger connections on water mains 20” and larger installed after 2000, provide a flange isolation kit after the connecting valve. Reference L-2102 and CMSC 801.02.

2.1.8 All control valves must be located in the right-of-way or easement line per Standard Drawing L-9901 and CMSC 805.05.

2.1.9 If valves cannot be located per L-9901 or CMSC 805.05, consideration will be given to the following (i.e. valves should be easy to find):

- 2' from back of curb if the right-of-way or easement is significantly wider than the roadway and is undeveloped
- Center of sidewalk if the only available location for the curb box is in the sidewalk

2.1.10 Any valve box must be installed per CMSC Section 802.08.

2.2 Abandonments

2.2.1 It is the design engineer's responsibility to do the tap research to ensure that all of the services that need to be abandoned are shown on the plan.

2.2.2 All tap abandonments shall be identified on the plan. Abandonments are to be completed per the CMSC Section 808.

2.2.3 If there are 3 or more taps to be abandoned, then a table with tap ID#s and sizes shall also be added to the plan for ease of reference.

2.3 Meter and Backflow Prevention

2.3.1 Backflow requirements shall meet the current Rule and Regulation for Cross-Connection Control.

2.3.2 Included in the backflow requirements, is the requirement that for all non-residential properties, an approved backflow prevention assembly shall be installed on each domestic service line and each combined domestic and fire service line to a consumer's water system.

Note: Upon written request by the customer, an exception to this requirement may be granted by the Administrator if the customer can demonstrate

that the site meets all of the conditions identified in the current Rule and Regulation for Cross-Connection Control.

2.3.3 Any structure or portion of structure that has a fire department connection and meets the following Use and Occupancy Classification from Section 302 of the Ohio Building Code will be required to have an RP backflow assembly on the fire service line:

- High Hazard: Groups H-1, H-2, H-3, H-4 and H-5

2.3.4 Meter size can be same size or one size smaller than the service line as prescribed by Rule and Regulation regarding Water Meter Systems. If the meter size is smaller than the service line, reduce above the finished floor or in the meter vault, prior to the inlet tee.

2.3.5 Meter bypass shall be sized to match the meter size and be the same material as the service line.

2.3.6 For domestic, fire and combined services, refer to Rule and Regulation for Cross-Connection Control for backflow preventer size requirements.

2.3.7 Strainers are not required, but are permitted before the backflow preventer on fire lines and between the meter and backflow preventer on domestic lines.

2.3.8 Backflow prevention assemblies are provided by the owner of the property. The property owner is responsible for the installation, maintenance and replacement of all backflow assemblies. This includes double check detector assemblies and reduced pressure detector assemblies used on fire lines.

2.3.9 No backflow prevention assembly shall be subject to excessive heat or freezing. Above grade exterior installations that remain in service through the winter shall be installed within an ASSE 1060 Class I heated enclosure as prescribed by Rule and Regulation regarding Cross Connection Control.

2.3.10 If a heated enclosure is used, the concrete slab shall extend 24” on access side of the enclosure.

2.3.11 If a heated enclosure is used, show the dimensions of the footprint of the enclosure or list a manufacturer model# with “(or approved equal)”. It is the design engineer’s responsibility to properly size the heated enclosure given DOW spacing requirements:

- 6” minimum separation from all interior walls to the meter setting.
- 12” minimum separation from the interior access door(s) to the meter setting.
- See DOW standard Drawings for all other spacing requirements.

2.3.12 Above ground heated enclosures will require the Department of Building and Zoning’s written approval to be located within a building setback. (Columbus only)

2.3.13 Heat tape and/or heat rods shall not be permitted around any meter setting or backflow prevention assembly.

2.3.14 No meter vault or meter box shall be installed in any paved area without the expressed approval of DOW as prescribed in the Standard Drawing L-6317B, Meter Vault Setting Section View.

2.3.15 The meter vault floor shall be a minimum of 18” above the flow line of the storm sewer or drainage ditch. Use of a sump pump in lieu of providing adequate drainage is not permitted. This is further described in the Standard Drawing L-6317B, Meter Vault Setting Section View.

Vault drains shall drain to property’s private storm sewer system, unless otherwise approved by the Authority having jurisdiction over the storm sewer system. Vault drain shall be shown on the plan and labeled with the inverts and slope.

2.3.16 When water meters are located in a vault, a 1” conduit shall be provided for the meter remote wire(s) with the following requirements:

- Conduit shall be for the remote wires only. Any other wiring shall have a separate conduit.
- Conduit shall extend 6” into the vault and clear of all access portals.
- Conduit shall contain 1 drawstring for each meter requiring a remote.
- Conduit shall have a minimum bury of 24” from the vault to the heated enclosure.
- Conduit shall extend 18” up into the slab for the heated enclosure along the heater wall.

2.3.17 When water meters are located in a basement or lower level with poured concrete walls, a 1” conduit shall be provided for the meter remote wire(s) with the following requirements:

- Conduit shall be for the remote wires only.
- Conduit shall extend 6” into the meter area.
- Conduit shall contain 1 drawstring for each meter requiring a remote.
- Conduit shall exit an exterior wall between 1’ and 5’ above finished grade and shall extend 6” outside of the exterior wall.

2.3.18 Where there are tanks to be filled with city supplied water, a profile view of proper air gaps shall be shown per the current Rule and Regulation of Backflow Prevention and Cross-Connection Control.

2.3.19 1.5” meters shall only be installed in a building or a heated enclosure.

2.4 Underground Private Services Downstream of Meter (Columbus only)

2.4.1 Additional reviews by Department of Building and Zoning may be required if the site is within City of Columbus corporation limit.

2.5 Fire Services and Private Fire Hydrants

2.5.1 It is the design engineer’s responsibility to work ahead of time with the local fire department (having jurisdiction) to ensure that the fire service

size, number of private fire hydrants, private fire hydrant spacing and any other fire appurtenances are acceptable to the local fire department prior to water service plan approval.

2.5.2 If a backflow is being retro-fitted on an existing fire system, the design engineer shall work with Building and Zoning and Division of Fire to ensure that the required fire flows and pressures are maintained.

2.5.3 If reducing the size of the meter impacting the fire service, the local fire department must grant approval prior to water service plan approval.

2.5.4 No private fire structure shall be within the Right of Way, including FDC's or private fire hydrants.

2.5.5 Within Columbus, a new public hydrant shall not be installed off the proposed fire service tap if there is an existing hydrant within 200', unless direction is given from the Division of Fire.

2.5.6 Yard hydrants shall meet ASSE 1057 standards and not have weep holes, per the current Rule and Regulation of Backflow Prevention and Cross-Connection Control, unless the yard hydrant is installed on a private service, labeled as non-potable, and shall be protected by a reduced-pressure principle backflow preventer (ASSE 1013) in accordance with Ohio plumbing Code.

2.6 Irrigation

2.6.1 Irrigation may be shown as a part of the site plan or it may be submitted as separate irrigation plans.

2.6.2 If the domestic tap is being using for irrigation, then the irrigation tap must be made downstream of the domestic meter and backflow.

2.6.3 Irrigation lines must have proper containment as prescribed in the current Rule and Regulation for Cross-Connection Control.

2.6.4 If irrigation is being used to serve public R/W, the following note shall be provided with the plan: “Irrigation lines must remain within the public R/W and may not encroach onto private property.” Ensure all other departments who are responsible for the R/W have granted approval of the irrigation system.

2.6.5 If irrigation is being proposed downstream of the domestic meter and backflow, irrigation plans may not be required to be part of the water service plan approval. In lieu of irrigation plans, a separate note must be included that states: “Irrigation lines must remain on site and shall not cross parcel lines or into the Right-of-Way.”

3.0 Submittals

3.0.1 The City of Columbus Department of Public Utilities only accepts plans electronically for review. Plans can be submitted by email to DPUDigitalSubmittal@columbus.gov. All files shall be in flattened PDF format.

3.0.2 All Submittal will include:

- Assigned WSP number in the subject line of the email, if assigned previously.
- PDF of the site Water Service Plan
- PDF of the MEP plans (If applicable)
    - If MEP plan is not submitted, the next submittal will be classified as a first review
- PDF of the Irrigation plans (if applicable)

3.0.3 Every subsequent submittal shall include the previous DOW comments, with the design engineer’s responses directly on the PDF plan.

3.0.4 Please submit the following to DPUDigitalSubmittal@columbus.gov for final approval:

- Plan set single file with all sheets (MEP plans if applicable, irrigation plans if applicable, certified address if applicable) (final version) (PDF format – flattened). If the total file size is 25 MB or higher, submit separately a PDF of the title sheet only, in addition to the complete plan set file.
- Drawing files individual pages (final version) (TIFF format) (TIFF file format is to be in 300 or 400 DPI, CCITT t.6 format aka group 4 fax encoding.).
- AutoCAD base map.
- Documentation all review comments have been addressed (email messages etc.).

4.0 Revisions and Addendums to Approved Plans

4.0.1 All revisions to the approved water service plan shall be approved by DOW.

4.0.2 Each revision shall be shown with a numbered triangular box inserted next to the revised work. A numbered triangular box and revision date shall then be placed in the revision block of the drawing border with a brief and concise description of the change.

4.0.3 Only 3 relatively small revisions shall be permitted on a water service plan (within the 12 month plan approval window). Any major revisions, or more than 3 minor revisions, may require the submission of a new plan.

4.0.4 As-built plans may be required and shall be submitted as a revision. The cover sheet shall include a note stating this work is “as-built” in red text.

4.0.5 A plan addendum shall be submitted when there are any additions or extensions to a previously approved and constructed Water Service Plan.

4.0.6 A plan addendum shall be a completely new plan with the same plan number showing the existing work and detailing the additions and/or extensions to the site.

5.0 Water Service Plan Expiration

5.0.1 Water service plans are valid for 1 year from the date of plan approval. If the water permit has not been issued within this 12-month period, the design engineer may be required to resubmit for approval. The design engineer may request an extension be granted. This extension must be approved by DOW.

5.0.2 If submitting for re-approval after the 12-month window, the water service plan should be treated as a revision unless there are major changes to the design. The revision block and description should reference “re-approval.”

Appendix

PROJECT VICINITY MAP

PROJECT SUMMARY

EASEMENT REFERENCE	REVISIONS		ENGINEERING FIRM ADDRESS AND PHONE NUMBER PE STAMP PE SIGNATURE DATE:	CITY OF COLUMBUS DIVISION OF WATER APPROVAL SIGNATURE BELOW SIGNIFIES ONLY CONCURRENCE WITH THE GENERAL PURPOSE AND GENERAL LOCATION OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLANS. DATE	JOB TITLE ADDRESS **PID**	WSPXXXX SHEET: 1/X