



WOODMOOR

Water & Sanitation District No. 1

P. O. Box 1407 • Monument, Colorado 80132

Phone (719) 488-2525 • Fax (719) 488-2530

TAP APPLICATION & PERMIT FOR RESIDENTIAL STRUCTURES

(Appendix A – Rules and Regulations)

1. General Information:

The undersigned applicant requests the authority to tap the water and sewer lines of the Woodmoor Water and Sanitation District No. 1. The tap is for a (check one):

Single Family Residence, Multi Family Residence, Irrigation, Other

Street address: _____ Monument, CO 80132

Legal Description: Lot # _____, Block # _____, Subdivision _____.

Sewer tap size requested: _____, Water tap size requested: _____ Meter size requested: _____

Name of Prime Contractor

Name of Owner

Mailing Address

Mailing Address

City, State, Zip Code

City, State, Zip Code

Telephone

Telephone

2. Fees and Deposits: (to be filled in by District)

Application Deposit (refundable): _____, Meter Fee: _____,

Processing / Inspection Fee: _____,

Tap Fees: Water: Tap Size: _____, Fee: _____,

Sewer: Tap Size: _____, Fee: _____,

Total Fees and Deposit: _____.

3. GENERAL PERMIT TERMS AND CONDITIONS:

- a. Owner agrees to pay the water and sewer monthly fees and abide by the rules, regulations and policies of the District as may be amended from time to time. A copy of these rules and regulations are available for inspection at the District office.
- b. Installation of taps, service lines and associated equipment shall be in accordance with all District rules and regulations and system specifications.
- c. Owner shall be responsible for calling and scheduling inspections of the tap and service line installations as well as the meter and associated equipment installations prior to covering up any work. Partial inspections may be requested as the work commences. Once all tap, service line, meter and associated service equipment has been installed and has passed inspection by the District (final inspection), the District will install the meter register(s) necessary to read water usage.
- d. If construction is not completed and final inspection by the District is not made within 12-months from the date this permit is issued, the permitted premises will be subject to any increase in tap fees that takes effect prior to the time that final inspection is made. If a tap has not been made within the 12-month period, no tap will be allowed until any applicable increase in tap fees has been paid. Any tap fee prepaid prior to March 15, 1995, is not affected by this provision.
- e. A water hammer arrester and a pressure reducing valve that complies with District system specifications must be installed before each water meter. An approved cross connection control device must be installed after each water meter and at each fire suppression service line entry into the building. The cost of installation, maintenance and testing in accordance with the Districts rules and regulations shall be the responsibility of the property owner.
- f. All residential water meters, whether newly installed or retrofitted by the District, are owned and maintained by the District. Owner shall be liable to the District for any damages to or loss of a meter caused by Owner.
- g. Exclusive of the water curb stop box, the water service line from the main to the Owners property line or curb stop box, whichever is closer to the water main, is owned and maintained by the District. Owner shall be liable to the District for any damages or obstructions to this reach of service line caused by Owner.
- h. The Woodmoor Water and Sanitation District No. 1 is not responsible for any cost of installation, operation or maintenance of any private water service lines or sewer service lines.
- i. The owner is responsible for contacting the District for water/sewer main locates.
- j. After the water tap is completed, the District will charge the minimum monthly water and sewer service fees as well as any other applicable fees. A meter reading will be taken by the District as of occupancy date, and the District will continue to read the meter and provide the occupant this reading on the monthly bill. The District has increasing block rates to discourage excessive water use.
- k. Owner shall be responsible for verifying that a final inspection has been performed by the District prior to any request and subsequent issuance of a certificate of occupancy (CO) or temporary certificate of occupancy (TCO) by the regional building department or building authority having jurisdiction. If a CO/TCO is issued prior to the District conducting a final inspection and installation of the water meter register(s), no refund of the tap fee deposit will be made and the District may disconnect service.
- l. This permit is valid for the permitted property only and shall transfer ownership upon sale of the property. Water and sewer fees and charges also run with the property rather than the person. The owner understands and agrees

that the District will bill any tenant occupying the premises as a matter of courtesy to owner, however, if the tenant does not pay, the owner of the property is responsible for payment of any outstanding bills.

m. Site Specific Provisions:

The undersigned certifies that he has read the Rules and Regulations of the District and will construct all facilities to conform to the Rules and Regulations.

I acknowledge having received a cross connection control device.

I acknowledge having received a Model_____ Kamstrup Meter (body only) from the District.

Signature

Date

RESIDENTIAL TAP P E R M I T

Approved this ____ day of _____, 20____.

WOODMOOR WATER AND SANITATION DISTRICT NO. 1

By _____
For secretary

This Permit Form is effective this day of _____, 20____ and supersedes all previous Application for Permit Forms issued by this District.

WATER AND SEWER SERVICE LINE MATERIAL, METERS AND MINIMUM REQUIRED EQUIPMENT

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes
 - 1. Piping material, tapping saddles, corporation stops, curb stops & boxes, water and sewer service line material, fittings, anti-hammer devices, meters, ball valves, check valves and associated water and sewer service line accessories.

1.2 REFERENCES

- A. Referenced Standards
 - 1. ANSI B31.9-Building Service Piping
 - 2. NSF 61-Drinking Water System Components-Health Effects
 - 3. ASTM D1784 – Rigid Polyvinyl Chloride (PVC) Compounds and Chlorinated Polyvinyl Chloride (CPVC) Compounds
 - 4. ASTM D2321 – Practice for Underground Installation of Flexible Thermoplastic Sewer Pipe
 - 5. ASTM D3034 – TYPE PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings
 - 6. ASTM D3212 – Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
 - 7. ASTM F477 – Elastomeric Seals (Gaskets) for Joining Plastic Pipe
 - 8. AWWA C509-Resilient Seated Gate Valves 3 in through 12 in NPS, for Water and Sewage Systems
 - 9. AWWA C515-Reduced-Wall, Resilient-Seated Gate Valves for Water Supply Service
 - 10. AWWA C504-Rubber Seated Butterfly Valves

1.3 ACTION SUBMITTALS

- A. For items specified as “or equal”, owner/contractor shall determine if the product being installed meets the minimum requirements specified herein and no product submittals are required by the District.
- B. For products without an “or equal” statement or that are listed herein with specific model or manufacturer’s numbers, only those products specifically listed shall be installed. Owner/contractor may submit product data on alternate materials desired that illustrates the product desired to be used meets or exceeds the specified products attributes in all respects for approval or rejection by the District prior to installation.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with all applicable codes and regulations.

1.5 REGULATORY REQUIREMENTS

- A. Conform to all municipal codes and ordinances, laws, and regulations of the State.
- B. In case of apparent conflict, state and local requirements govern over these specifications.
- C. In absence of state and local regulations, International Plumbing Code applies.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products according to manufacturer's recommendations.
- B. Deliver and store valves and accessories in shipping containers with labeling in place in accordance with AWWA C509/515.
- C. Provide temporary end caps and closures on all fittings. Maintain in place until installation.
- D. Seal valve ends to prevent entry of foreign materials into valve body
- E. During loading, transporting, and unloading, exercise care to prevent damage to material.

PART 2 PRODUCTS (WATER SERVICE LINES)**2.1 SERVICE LINE PIPING & FITTINGS (2" AND SMALLER)**

- A. Manufacturer and Product
 - 1. Type "K" soft copper, coils or standard 10 and 20 foot lengths, Mueller Streamline Co, or equal. Copper or lead free brass fittings in accordance with NSF 61.
- B. Water tubing: Buried, ASTM B88; FS WW-T-799, Type K soft (annealed); or FS WW-T-775
- C. Water tubing: Exposed or above grade, ASTM B88; Type L, hard drawn
- D. Flanges: Cast bronze, 150 psig, brazed joints, ANSI B16.24:
 - 1. Flange bolts and nuts: As specified for steel pipe
 - 2. Flange gaskets: As specified for steel pipe, except full face
 - 3. 1/16-inch-thick preformed neoprene gaskets

2.2 SERVICE LINE PIPING & FITTINGS (2-1/2" AND 3")

- A. Manufacturer and Product
 - 1. Type "K" soft copper, Mueller Streamline Co, or equal. Copper or lead free brass fittings in accordance with NSF 61.
 - 2. PVC pipe, gasketed bell and spigot, ASTM D2241, IPS size, SDR 21 with 200 psi working pressure rating, JM Eagle "IPS Pressure" pipe or equal.
 - 3. Ductile Iron gasketed push on fittings (i.e. PVC ends), IPS size, ASTM A536, AWWA C153, 250 psi pressure rated, Harrington Corporation or equal. All fittings and valves must be restrained using ductile iron fitting restraints, Harrington Corporation Ductile Iron IPS restraints or equal.
 - 4. Ductile Iron or PVC pipe material and fittings in accordance with section 33 11 00 Water Utility Distribution Piping.

2.3 SERVICE LINE PIPING & FITTINGS (4" AND LARGER)

- A. Manufacturer and Product
 - 1. Ductile Iron or PVC pipe material and fittings in accordance with section 33 11 00 Water Utility Distribution Piping.

2.4 GATE VALVES (2" THROUGH 12")

- A. Manufacturers:
 - 1. American AVK – Series 45 or 65
 - 2. American Flow Control – Series 2500
 - 3. Or equal.
- B. AWWA C515 or AWWA C509, minimum working pressure of 250 psi., ductile iron body, lead free, stainless steel stem, two O-ring stem seals, non-rising stem with square nut, single wedge fully encapsulated with EPDM rubber, resilient seat, mechanical joint ends, control rod, and extension box.
- C. Rotation: Open left (counter clockwise) with the word "OPEN" and an arrow indicating the direction to open cast on valve body.

2.5 ISOLATION VALVES (BALL)

- A. Manufacturers
 - 1. Nibco - T-595-CS-R-66-LL
 - 2. Velan V3P-1000
 - 3. Or accepted substitution.
- B. Description
 - 1. For use on 4 inch and smaller non-buried piping.

2. Three-piece, carbon steel body, threaded ends, full port with blowout proof stem.
3. 316 SS trim w/vented ball, certified to NSF 61.
4. 300 lbs minimum working pressure rating.

2.6 ISOLATION VALVES (BUTTERFLY – OPEN ACCESS)

- A. Manufacturers
 1. Nibco
 2. Apollo
 3. Or equal
- B. Description
 1. For use as isolation valves on 3 inch and larger non buried piping.
 2. 200 lbs minimum working pressure rating.
 3. Lead free, certified to NSF 61

2.7 TAPPING SADDLES

- A. Manufacturers and Products
 1. Romac Stainless Steel Repair Clamp with Tapping Saddle.
 2. PowerSeal Model 3450AS Stainless Steel SaddleCorp.
 3. Or accepted substitution.
- B. Description
 1. Stainless Steel.
 2. Minimum dual 304 stainless steel straps, washers, and nuts.
 3. Rubber seating gasket.
 4. 250 psi minimum pressure rating.
- C. No direct taps.

2.8 CORPORATION STOPS

- A. Manufacturer and Products (2" and smaller)
 1. Ford ball corporation valve, Model FB600-X- XX, AWWA taper inlet X Flare, Ford quick joint compression or pack outlet, 300 psi. working pressure.
 2. Mueller 300 ball corporation valve, AWWA taper X Flare, Mueller 110 compression or pack outlet, 300 psi. working pressure
 3. Or accepted substitution.

2.9 CURB STOPS

- A. Manufacturers and Products (2" and smaller)
 1. Ford "B" Series Ball Curb Valve (Non Minneapolis style), Flare inlet X Flare, ford quick joint compression or pack outlet 300 psi. working pressure
 2. Mueller 300 Ball Curb Valve (Non Minneapolis style), Flare inlet X flare,

- Mueller 110 compression or pack outlet, 300 psi. working pressure
3. Or accepted substitution.

2.10 CURB STOP BOXES (2" AND SMALLER CURB VALVES)

- A. Manufacturers and Products
1. Tyler Union 6500 series, 3/4" through 1 1/2" curb valves: Arched style base, cast iron sections, slip or screw type extensions, with asphalt bituminous coating, 27/32" standard lid with pentagon head plug. For curb stop valves 2" in size, use "enlarged" box base.
 2. Or accepted substitution.

2.11 CURB STOP BOXES (2-1/2" AND LARGER GATE VALVES)

- A. Manufacturers and Products
1. Tyler Union 6500 series, 3/4" through 1 1/2" curb valves: Arched style base, cast iron sections, slip or screw type extensions, with asphalt bituminous coating, 27/32" standard lid with pentagon head plug. For curb stop valves 2" in size, use "enlarged" box base.
 2. McDonald Manufacturing Co Arch Pattern with brass cotter pin and pentagon bolt lid with tracer wire terminal, 3/4" to 1" curb valves: Model 5607. For 1 1/2" to 2" curb valves: Model 5606.
 3. Or accepted substitution.
- B. Description
1. Threaded type.
 2. Cast iron box, base, extensions, and lid.
 3. Minimum inside diameter 5 inches.
 4. Minimum wall thickness 3/16 inch.
 5. All parts coated by dipping in asphalt varnish.
 6. Minimum lid depth 3".
 7. Lid is drop type and marked with "WATER".

2.12 WATER METERS

- A. Manufacturers and Products
1. Kamstrup Meters
 2. AquaCell End Points
- B. Supplied by District, size shall be as indicated on tap permit.

2.13 ANTI-HAMMER ARRESTORS

- A. Manufacturers and Products
1. Precision Plumbing Products, Inc.
 2. Watts

3. Or equal
- B. Metallic body, NSF 61 certification with 0-200 psi static pressure rating.
- C. Size and surge pressure rating: Per manufacturer's recommendations for specific pressure and flow application

2.14 BACKFLOW PREVENTION DEVICES

- A. Manufacturers and Products
 1. Watts
 2. Febco
 3. Or equal
- B. $\frac{3}{4}$ " Residential Configurations
 1. Copper or lead-free brass
 2. Two positive seating dual check modules
 3. Test cocks not required
 4. 150 psi. minimum working pressure rating
 5. One (1) supplied by District
 6. Larger than $\frac{3}{4}$ " residential application– See non health hazard configurations below
- C. Non-Health Hazard Configurations
 1. Copper or lead free brass
 2. AWWA C510
 3. Two positive seating check modules
 4. Minimum of three test cocks
 5. 150 psi. minimum working pressure rating
 6. Size: per tap permit
 7. Commercial application – supplied by Owner
- D. Health Hazard/Potential Health Hazard Configurations
 1. Copper or lead free brass
 2. AWWA C511
 3. Two positive seating check modules with internal pressure differential relief valve
 4. Minimum of three test cocks
 5. 150 psi. minimum working pressure rating
 6. Size: per tap permit
 7. Commercial application – supplied by Owner

2.15 PRESSURE REDUCING VALVES

- A. Manufacturers and Products
 1. Wilkins

2. Watts
 3. Or equal
- B. Metallic body, NSF 61 certification
1. Lead free
 2. 200 psi. minimum upstream working pressure rating
 3. Size: per tap permit
 4. Adjustable pressure range downstream : 0 psi. minimum to 75 psi. maximum. or if plumbing code requires more stringent standards, per plumbing code.

PART 3 PRODUCTS (SEWER SERVICE LINES)

3.1 SERVICE LINE PIPING & FITTINGS

- A. Products
1. Cast Iron Soil Pipe, ASTM A74, extra heavy or service type, bell and spigot or plain end.
 2. Cast Iron Soil Pipe Fitting – ASTM C564 or CISPI Standard 310
 3. Plastic Pipe and fittings – ASTM D3034, type PSM, Poly Vinyl Chloride (PVC) material, bell and spigot or glue joint style, SDR 35, Schedule 40 or 80
- B. Sanitary Sewer Service Connection
1. “In Line” Wye
 - a. Wye fitting with gasketed joint per Section 33 31 00.
 - b. Schedule
 - 1) For use when installing proposed service line connections to proposed mains. (New Construction)
 2. Saddle Tap
 - a. Manufacturer
 - 1) Geneco
 - 2) Or Accepted Substitution
 - b. Product
 - 1) Sealite Multi Range Sewer Saddle
 - 2) Configuration: Wye or Tee
 - 3) Model:
 - a) Wye: Type E
 - b) Tee: Type U
 - 4) Base: ASTM A-48 Class 30 Cast Iron dip-coated in water-based bituminous coating
 - 5) Gasket: O-Ring ASTM C-367-77 Tubular Polyisoprene
 - 6) PVC Adapter: ASTM D-3034 SDR-35 gasketed bell cemented to cast iron base with two-part urethane adhesive
 - 7) Strap: One 24 gauge 2.5 inch wide Type 304 Stainless Steel
 - 8) Strap Pins: 0.75 inch diameter Type 303 Stainless Steel

- 9) T-Bolts: 0.375 inch diameter-16 Type 304 Stainless Steel
- 10) Nuts and Washers: Type 18-8 Stainless Steel
- c. Schedule
 - 1) For use when connecting to existing mains.

3.2 TRACER WIRE

- A. Manufacturers and Products
 1. Material: # 10 AWG copper clad steel, high strength with minimum 600 lb. break load.
 2. Coating: Minimum 30 mil HDPE insulation thickness for direct bury.
 3. Color: Blue
 4. Connectors: Moisture displacement and corrosion resistant connectors.
 - i. Copperhead Snakebite
 - ii. 3M DBR
 - iii. Or approved substitution
- B. Terminal Stations
 1. Copperhead 2" two-terminal switchable lid, model SP-SWLID-*2 or approved substitution
 2. Color: Blue
 3. Text: WATER
 4. Installed at minimum every 500 feet along pipeline, and at all fire hydrants and water valves.
- C. Grounding
 1. Magnesium anode, 1.5 pounds minimum, securely grounded and connected to terminal lid

PART 4 EXECUTION

4.1 INSTALLATION

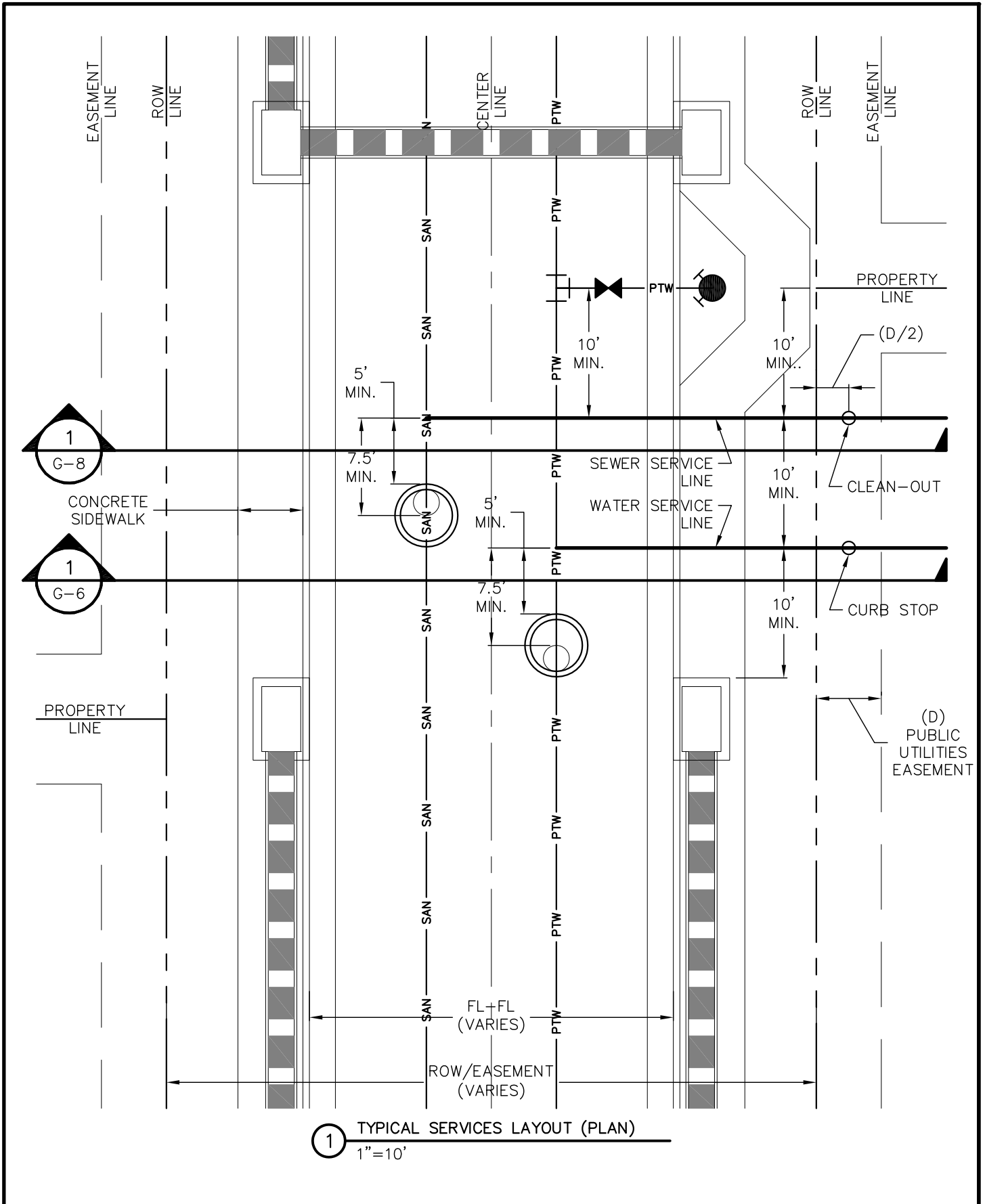
- A. Install all components per manufacturers recommendations.
- B. All water and sewer service lines must be visible for inspection. Directional boring is not allowed on service lines.
- C. Install 1-1/2" plastic pipe insert, minimum 5 feet in length, into curb stop valve cans, centered on curb stop valve.
- D. For buried underground water service lines utilizing type K soft copper, use brass compression or flare fittings to connect/couple joints, no sweating, soldering or brazed connection permitted underground.
- E. For interior or non-buried copper, soldering, brazing and sweating of copper fittings is permitted in accordance with the local plumbing code.


- F. No backflow prevention device shall be installed in such a configuration that would allow for submergence of the device (i.e. non-draining underground vaults, non-draining basements below grade, etc.). All backflow prevention devices shall be installed at locations where the area in and around the installed device is free draining.

4.2 FIELD QUALITY CONTROL

- A. Service lines from (and including) the curb stop valve/service line shut off valve to the building are the property of the lot owner. Field quality control shall be as provided/mandated by International Plumbing Code or Owner. The District performs inspections on service lines and equipment only to verify location, proper configuration of mandatory components, size of service lines and associated appurtenances. The District does not assume any responsibility or liability for product or installation quality, integrity, or longevity of private system components. Manufactures and products for private system improvements and components listed herein are listed in general and/or generic format with minimum attributes that must be complied with.
- B. Service lines from the water main up to (but not including) the curb stop valve to the property are installed at the expense of owner but are owned and maintained by the District. Field quality control shall be as provided/mandated by International Plumbing Code or the District. The District performs inspections on this portion of service lines and equipment to verify location, material, proper configuration and installation of equipment and associated appurtenances. Products in this reach of service line(s) are specifically listed by manufacturer's part number and shall be used unless a substitute item is otherwise approved (in writing) by the District,

END OF SECTION

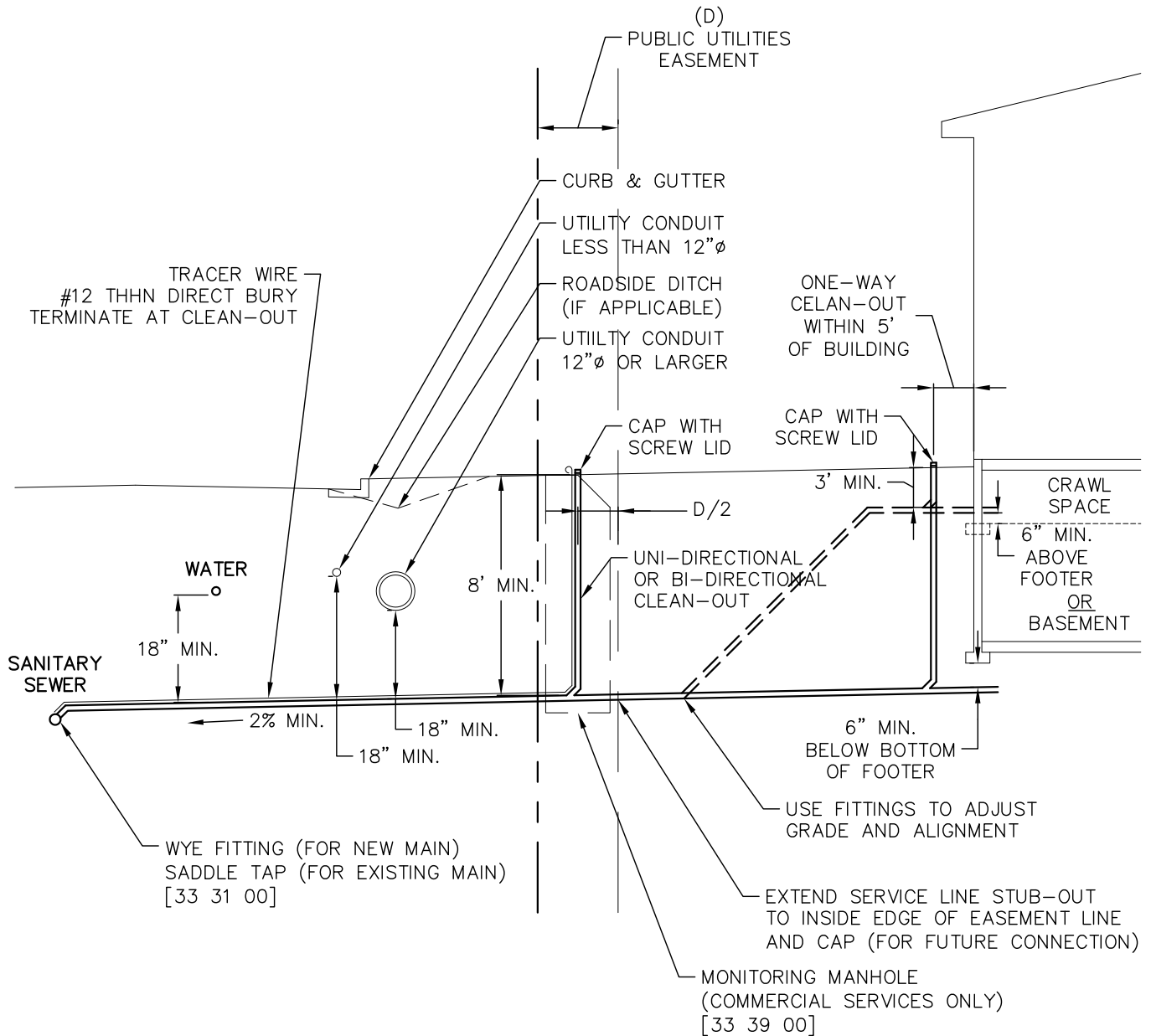


 WOODMOOR WATER & SANITATION DISTRICT NO. 1	TYPICAL SERVICES LAYOUT (PLAN)	G-5
	GENERAL	-
	THIS CONSTRUCTION DETAIL SHOWS GENERAL CONFORMANCE TO SYSTEM SPECIFICATIONS AND MAY NEED TO BE ADJUSTED FOR SPECIFIC APPLICATIONS.	MAY 13, 2014

REFER TO WATER & SEWER SERVICE LINE EQUIPMENT SPECIFICATIONS FOR SUPPLEMENTAL INFORMATION
(APP C OF THE SYSTEM SPECIFICATIONS)

GENERAL NOTES:

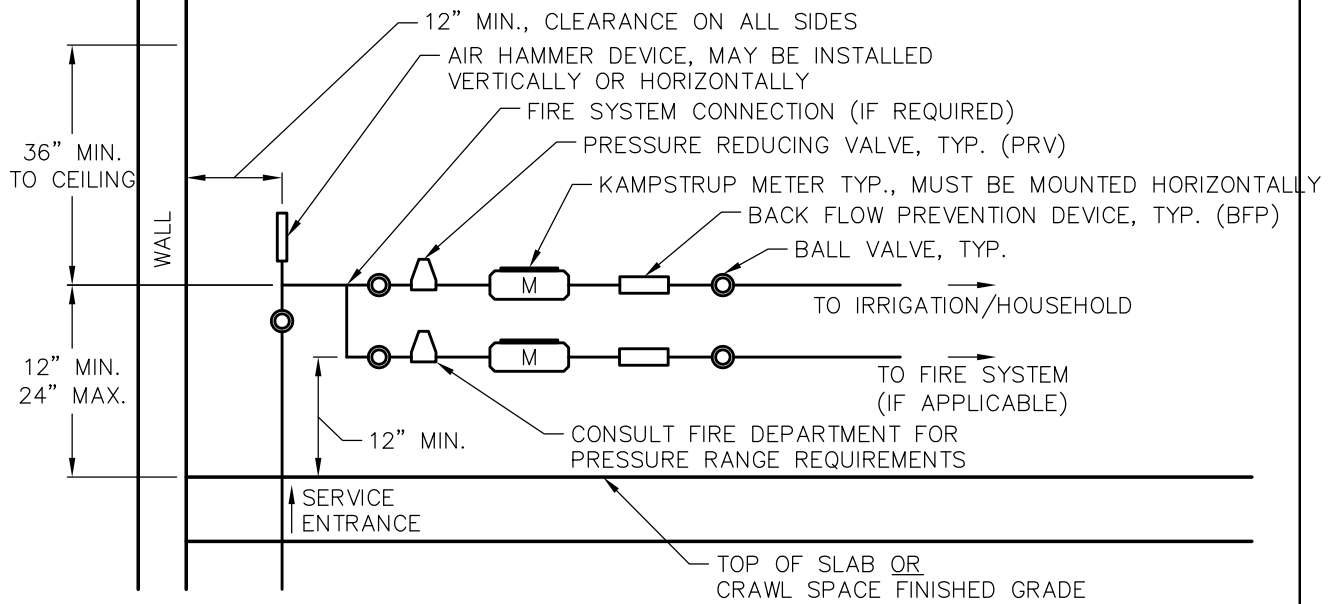
- PROVIDE METAL T-POST AT CURB STOP WHEN CONSTRUCTION OF STUB-OUT TO LOT IS COMPLETE. T-POST MAY BE REMOVED AFTER CONNECTION TO SERVICE STUB.
- INTERMEDIATE CLEAN-OUT ASSEMBLIES REQUIRED AT 100' INTERVALS (FOR UNI-DIRECTIONAL) OR 200' INTERVALS (FOR BI-DIRECTIONAL) BETWEEN PROPERTY LINE CLEAN-OUT AND BUILDING CLEAN-OUT..



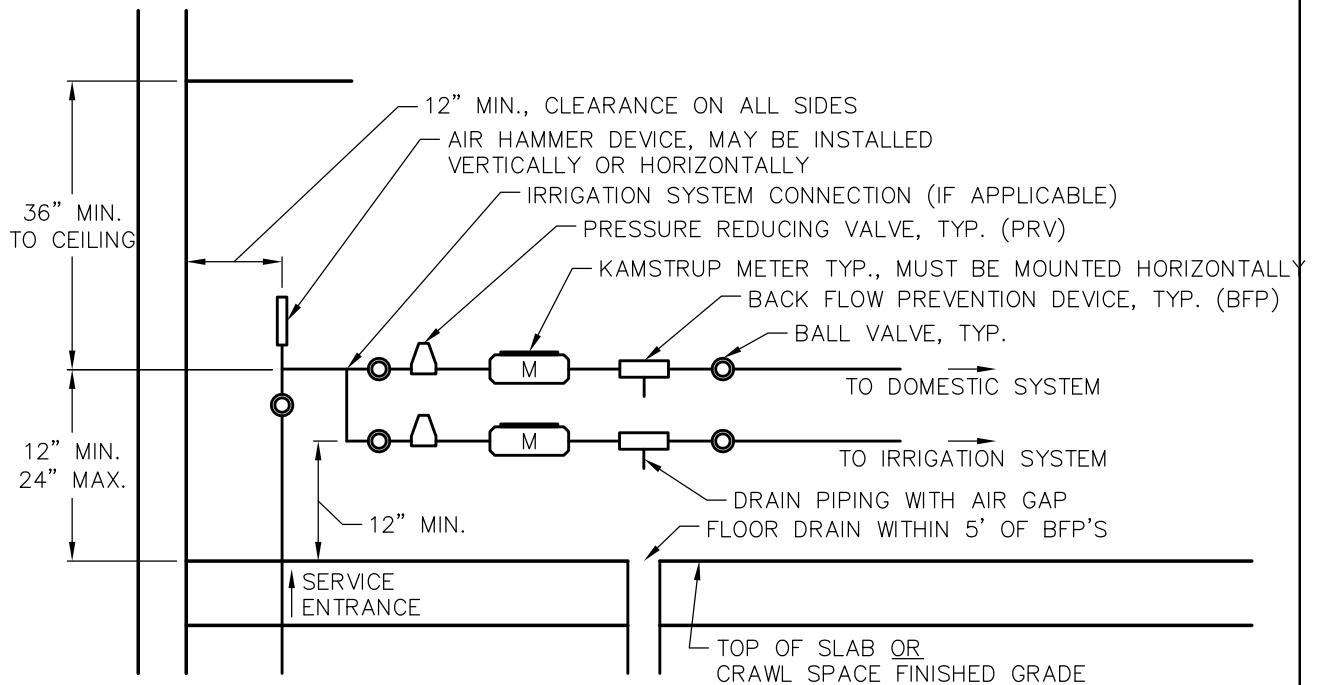
1 TYPICAL SEWER SERVICE (SECTION)
1"=10'

	TYPICAL SEWER SERVICE (SECTION)	G-8
	GENERAL	-
	<small>THIS CONSTRUCTION DETAIL SHOWS GENERAL CONFORMANCE TO SYSTEM SPECIFICATIONS AND MAY NEED TO BE ADJUSTED FOR SPECIFIC APPLICATIONS.</small>	
		MAY 13, 2014

REFER TO WATER & SEWER SERVICE LINE EQUIPMENT SPECIFICATIONS FOR SUPPLEMENTAL INFORMATION
(APPENDIX C OF THE SYSTEM SPECIFICATIONS)



1 WATER METER SETTING (RESIDENTIAL)
NOT TO SCALE



1 WATER METER SETTING (COMMERCIAL)
NOT TO SCALE



WOODMOOR
WATER & SANITATION DISTRICT NO. 1

WATER METER SETTING DETAIL

GENERAL

THIS CONSTRUCTION DETAIL SHOWS GENERAL CONFORMANCE TO SYSTEM SPECIFICATIONS AND MAY NEED TO BE ADJUSTED FOR SPECIFIC APPLICATIONS.

G-9

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MAY 13, 2014