GUIDELINES

FOR

SANITARY SEWER LOW PRESSURE PUMP STATION AND FORCE MAIN DESIGN

WASTEWATER COLLECTIONS AND RECLAMATION

DIVISION OF

FULTON COUNTY DEPARTMENT OF PUBLIC WORKS

Adopted January 21, 2026

1.01 General

A. Low-pressure sewer systems are wastewater systems consisting of multiple, privately owned small pump stations located at individual structures pumping into a common low pressure force main system which conveys the combined flows from these pump stations to a single discharge location Low pressure sewer may be installed only if approved in writing by the Director of FCDPW or the Designee. The low-pressure sewer system shall be reviewed and approved by the Deputy Directors of Water Distribution, Wastewater, and Technical Services or their Designee within the Department of Public Works. The Director of Public Works or the Designee shall issue the final approval. Low pressure sewers should only be approved in cases where gravity sewer installation is not feasible. For the Director to determine if low pressure sewer is a viable option an engineering package shall be provided to the Director for review. This submittal shall be made through the normal project submittal process. The review package should include:

1. A topographic plan showing the development property and the surrounding properties.

2. All adjacent upstream and downstream wastewater connection locations with invert elevations. Map will show distance from farthest development point to closest viable gravity sewer tie-in location.

3. As part of the review process, the Developer is to show the reasons why sewer is unavailable. Additional information may be requested to support the Developer's position on why a gravity sewer option is unavailable if the submitted information is not sufficient for the Director to approve the system.

B. If the Director approves a low pressure system, the Homeowner / Developer shall furnish and install a complete factory-built and tested Grinder Pump Stations, each consisting of grinder pump(s) suitably mounted in a basin constructed of Fiberglass Reinforced Polyester Resin for simplex or duplex stations, NEMA 6P electrical quick disconnect (EQD), pump removal system, shut-off valve, anti-siphon valve, check valve, each part assembled in the basin, electrical alarm panel, and all necessary internal wiring and controls. The basin shall have a minimum volume of 140 gallons to provide storage volume in case of an emergency. Component type grinder pump systems that require field assembly will not be acceptable due to the potential problems that can occur during field assembly. The Homeowner / Developer shall own, maintain, and operate all system piping and valves to the right-of-way up to the backflow preventer and plug valve assembly. The grinder pump station including all controls, valves and piping outside of the easement, shall be owned, maintained and operated by the Homeowner / Developer.

C. The Developer shall install the HDPE low pressure force main, including all piping, County isolation / check valve at the property line, low pressure mains, valves, flushing stations and related components.

D. At the completion of the warranty period, the County shall own, maintain and operate all low-pressure system piping and valves within the right-of-way and / or sewer easement, including the combination isolation / check valve at the connection to the customer lateral.

E. The Homeowner, Developer or Business Owner will own and maintain all components of the low pressure system on private property, including the private side service connection to the isolation / check valve, the low-pressure sewer service lateral, the low-pressure grinder pump system and its components such as the pump well, connection to the low-pressure sewer service lateral, control panel, cabling and electrical connections, connection to the house gravity inlet pipe and related components and the electrical components from the control panel to the house electrical system, including the disconnect breaker at the control panel.

F. Low Pressure Force Main Requirements

1. The minimum inside diameter of a low-pressure sewer public force main shall be 2-inches and the maximum inside diameter shall be 6-inches.

2. The minimum low-pressure sewer public force main velocity shall be 2.0 fps. The maximum force main velocity shall not exceed 8.0 fps.

3. Pipe and tubing used for low-pressure sewer force main under this standard shall be of high-density polyethylene (HDPE) with designation code PE3608 or higher and shall be of the nominal diameter indicated in the hydraulic analysis. Fittings shall be of HDPE unless specified otherwise.

4. The quick connect coupling and isolation valve shall be may accessible by a HDPE utility box a min. 13” x 24” x 15” deep. A HDPE lid shall be provided with each utility box.

5. Isolation valves shall be provided at a maximum spacing of every 1,000 feet along the low-pressure force main and at every point where a branch force main joins the force main.

6. Flushing stations shall be installed at maximum of 1,000 linear foot intervals and at each terminal end. Flushing stations shall also serve as emergency truck connections.

7. Each flushing station shall be constructed in accordance with standard details for an in-line or end-of-line station. The flushing station shall consist of a 2-inch, full port meter stops isolation valve, with locking wings, and a quick connect coupling.

8. Force mains shall be designed to include air release or combination air release/vacuum valve(s) at each high point.

9. Location and sizing of air release or combination air release / vacuum valves shall be determined by the Engineer through hydraulic modeling of the force main and shall be

verified by the valve manufacture. An approved odor control system shall be required for any air release / vacuum valves.

10. Force mains shall be designed to minimize the number of air release / vacuum valves.

11. At the point of connection between a proposed low-pressure force main and the public gravity sewer system, the receiving gravity sewer is to be protected against the potential for increased corrosion. The forcemain should discharge into an epoxy coated manhole that will discharge by gravity to the existing sewer system. In lieu of an odor control system, the lid may be sealed to prevent odors from releasing.

12. The Contractor/Installer shall install 3M™ Electronic Marking System (EMS) Warning Tape 7904-XT, Green, 4 in, WasteWater, shall be placed a minimum of 6 to 12 inches above the low-pressure force main line but no more than 4-feet deep from the discharge manhole to the shut-off isolation valve at the right of way line or easement boundary. The warning tape shall be installed simultaneously with the HDPE piping. Warning tape shall be properly spliced at each end connection and each service connection.

    The warning tape shall extend along the top of the force main to each flushing station and emergency truck connection, shut-off isolation valves, air relief valve, and force main discharge.

    Warning tape shall be installed by the Contractor / Installer once backfill has been placed and compacted to 6 to 12-inches above the top of the pipe and not more than 18 inches above the top of the pipe. Tapes shall be color-coded in accordance with APWA Uniform Color Codes with the following legends: Sewer Systems, Safety Precaution Green, “Caution Wastewater Line Buried Below”. Tape shall be permanently printed with no surface printing allowed. Tape width shall be a minimum of 4 inches.

13. No Warning tape will be required where pipe is installed using a directional boring machine, but a locate wire will be required. The Contractor / Installer shall install 12-gauge, green-coated locating wire along the length of the directional bore. The locator wire shall be installed simultaneously with the HDPE piping. Wire shall be properly spliced. Care shall be taken to adequately wrap and protect the wire at all splice locations. No bare wire shall be accepted. Locating wire shall be brought up to the surface at the end of each bore. Enough wire shall be coiled and stored near the surface to allow the tracer wire to be extended 12-inches above ground. The tracer wire shall be placed in a standard cleanout box.

G. Low Pressure Sewer Design Submittal to Include:

1. Engineering Review Package with FCDPW Director approval

2. Pump submittal with shop drawings and specifications.

3. Manufacturer approved system hydraulic analysis (including but not limited to pipe sizes, flows, velocities, retention times, etc…) of entire system. Calculations shall use Hazen Williams coefficient of 130 for the HDPE pipe. Include all minor losses with analysis.

4. Number and location of proposed valves and cleanouts.

5. Size and dimensions of proposed wetwell volumes and dimensions

6. Capacity calculations of receiving gravity system

7. Stamped by a Professional Engineer registered in the State of Georgia

8. Site development plan and profile, and construction details.

9. Plan of development topography demonstrating the inability to install a gravity sewer collection system.

H. Acceptable Low Pressure Sewer Manufacturers:
   1. Barnes Pressure Systems,
   2. Environment One Corporation,
   3. Liberty Pumps,
   4. Zoeller, or
   5. Approved Equal

Manufacturers shall have at least ten (10) years of experience in the design and manufacture of low-pressure sewer systems, as well, not less than one hundred (100) successful installations utilizing grinder pumps of like type. An installation is defined as a minimum of ten (10) pumps discharging into a common force main which forms a low-pressure sewer system.

1.02 Product Requirements

1. Each house shall have its own forcemain and grinder pump station. Sharing of pumps and service lines is not allowed.

2. Each grinder pump station shall include a NEMA 4X, UL listed ALARM PANEL suitable for wall mounting. The NEMA 4X enclosure shall be manufactured of thermoplastic or fiberglass to assure corrosion resistance. The enclosure shall include a hinged, lockable cover, padlock, and secured dead front.

3. The Alarm Panel shall include the following features: audio & visual alarm, push-to-run switch, and high level (redundant) pump starting control. The alarm sequence is to be as follows:

a. When liquid level in the sewage wet-well rises above the alarm level, visual and audio alarms will be activated. The contacts on the alarm pressure switch will close. The redundant pump starting system will be energized.

b. The audio alarm may be silenced by means of the externally mounted, push-to-silence button.

c. Visual alarm remains illuminated until the sewage level in the wet-well drops below the “off” setting of the alarm pressure switch.

4. During a high-level alarm condition on a duplex station, the appropriate light will illuminate to indicate which pump core requires servicing. The audio alarm shall be a printed circuit board in conjunction with an 86-90 dB buzzer with quick mounting terminal strip mounted in the interior of the enclosure. The audio alarm shall be capable of being deactivated by depressing a push-type switch which is encapsulated in a weatherproof silicone boot and mounted on the enclosure.

5. Level detection for controlling pump and alarm operation shall be accomplished by use of a detection device specifically designed for use in a sewage grinder station. Level detection device shall not require any regular preventative maintenance. The level detection device shall consist of two independent switches, one for each function (High Water Alarm and On / Off actuation). In addition, the devices shall include a solid-state relay for directly controlling the pump motor.

6. The pumps shall be capable, at a minimum, of delivering 9-28 GPM against a rated total dynamic head of 0 feet (0 PSIG), 9-25 GPM against a rated total dynamic head of 100 feet and minimum head capability of 25 feet. The exact size, capacity and discharge head shall be determined by the Engineer. The pump(s) must also be capable of operating at negative total dynamic head without overloading the motor(s). Under no conditions shall inline piping or valving be allowed to create a false apparent head.

7. The grinder pump Manufacturer shall provide each low-pressure sewer pump station shall come with a five-year 100% parts, labor and travel warranty against manufacturing defects or failure of the equipment caused by normal wear and tear. The warranty period shall start from the date of the customer’s final acceptance of the equipment. Any manufacturing defects found during the warranty period will be reported to the Manufacturer by the customer and will be corrected by the Manufacturer at no cost to the customer.

8. The bulkhead penetration shall be factory installed and warranted by the Manufacturer to be watertight.

9. The grinder pump station shall be free from electrical and fire hazards as required in a residential environment. As evidence of compliance with this requirement, the completely

assembled, factory wired and tested grinder pump station shall be U.L. listed. Grinder pump stations without U.L. listing will not be acceptable.

10. A push-to-run feature will be provided for field trouble shooting. All motor control components shall be mounted for ease of field service.

11. All electrical cables penetrating or passing through the silhouette of the pump station must be guaranteed to be water-tight by the Manufacturer and must be installed at the factory prior to shipment.

12. All necessary controls, including motor and level controls, may be located in the top housing of the core unit. The top housing may be attached with stainless steel fasteners.

13. The grinder pump / core unit shall have lifting hooks. All mechanical and electrical connections must provide easy disconnect capability for core unit removal and installation.

14. All grinder pump units will be delivered to the job site 100 percent completely assembled, including testing, ready for installation.

15. Each grinder pump installation shall also include one separate check valve for installation in the 1 ¼-2" service lateral between the grinder pump station and the sewer main, preferably next to the curb stop.

16. The access way shall include a single NEMA 6P electrical quick disconnect (EQD) for all power and control functions, factory installed with access way penetration warranted by the Manufacturer to be watertight. Plug-type connections of the power cable onto the pump housing will not be acceptable as a station disconnect due to the potential for leaks and electrical shorts.

17. The pump discharge shall be equipped with a factory installed, gravity operated, flapper-type integral check valve. The check valve will provide a full-ported passageway when open and shall introduce a friction loss of less than 6 inches of water at maximum rated flow.

18. The pump discharge shall be equipped with a factory-installed, gravity-operated, flapper-type integral anti-siphon valve built into the discharge piping prior to the check valve.

19. Plug valve and backflow assembly shall be in accordance with Section 33 30 65 Part 2.01 and Part 2.02 of the Fulton County Wastewater Specifications or approved equivalent.

    A. Manufacturers: Acceptable Manufacturers are listed below. The manufacturer's standard product may require modification to conform to specified requirements:
        1. DeZurik
        2. Val-Matic
        3. Or approved equal

20. Backflow prevention assemblies shall be among those listed on the list below for the size of the wastewater force main service line.

    A. Double Check Assemblies
        1. Watts LF007 Double Check Assembly for 5/8 inch to 2 inch.
        2. Watts 774 Double Check Assembly for 2-1/2 inch to 12 inch.
        3. Or approved equal.

21. Plug valve and backflow assembly housing shall be a valve box is accordance with Fulton County Detail 819 with the lid labeled “Sewer”.

22. All materials exposed to wastewater shall have inherent corrosion protection.

23. The discharge piping shall include a 304 stainless steel ball valve with a minimum rated pressure of 200 psi. All valves shall be operable from ground level.

24. All pipes shall be high performance, high molecular weight, high density polyethylene pipe, as referenced in ASTM D 3350.

25. Pipe within water and sewer easement to be DR11 HDPE.

26. A backup power generator will be required. The generator shall be sufficient to operate the pump station in an event of a power outage and functions according to manufacturer’s specifications. Generators shall be capable of powering the pump motors’ starting current, electrical systems, instrumentation / controls and alarm systems and other auxiliary equipment as may be necessary to provide for the safe and effective operation of the pump station. The Engineer shall supply generator details, specifications, and shop drawings, along with automatic transfer switch specifications and shop drawings to the County for approval. The generator shall be capable of running for a minimum of 24 hours without refueling.

27. The pump station and generator shall be installed a minimum of one- (1-) foot above the 500-year flood elevation.

28. The engine generator set shall be a factory-assembled unit that is a standard production model with existing torsional analysis data. Mixing and matching engine and generator by a third-party supplier is not acceptable. Generators are to be run on natural gas, otherwise diesel or gasoline is acceptable. A spill containment system must be provided for gas or diesel generators. All gas piping and connecting equipment shall be installed in accordance with the Georgia State Amendments to the Standard Gas Code, latest edition. All gas supply lines must include a drip loop as well as all other equipment required for a safe and complete hook-up. All conduits and gas lines shall be installed underground. If gas is unavailable, a letter of exception must be obtained from FCPW.

29. Generators shall meet all applicable, current U.S. Environmental Protection Agency (USEPA) air emission standards. Generators shall be supplied with all auxiliary systems necessary for operation (i.e., batteries, battery charger, block heater, etc.) installed. Generators shall be properly grounded. A generator ground grid must be provided. Design

of the grounding system shall comply with NEC, IEEE and all other applicable codes and ordnances.

30. All generators shall be equipped with the quiet run package, including sound attenuating weather enclosure and critical grade muffler. The generator shall be housed in a weatherproof enclosure. Quiet site soundproofing shall be capable to reduce noise to sixty (60) db at a distance of 23 feet from the generator.
31. Generators shall be provided with special sequencing controls to delay lead and lag pump starts. Pumps shall start with a minimum 15 second lag time. Simultaneous starting of two (2) pumps shall be prevented. A connection shall be provided so that the generator can power an external, portable load bank for maintenance purposes.
32. Generators shall be placed on a reinforced concrete pad to be designed by Developer's Design Engineer based on the specific generator selected.
33. Generator control system shall include a programmable control device to allow automatic start-up and test functions.
34. Automatic Transfer Switch
    1. The standby power system shall include an automatic transfer switch to automatically start the generator in the following events:
    2. Loss of any phase of power
    3. Reverse power
    4. Low voltage brownout.
    5. The standby power transfer switch shall not engage until after thirty (30) seconds of continuous power loss or low voltage, occurs.
    6. Automatic transfer switch shall be rate for 100% of full load.
    7. The transfer switch shall be selectable for load or no load.
    8. The transfer switch shall be provided with three phase voltage and frequency sensors with adjustable settings.
    9. Exercise clock shall be provided as a configurable function.
    10. The transfer switch shall be provided with indicators for all phases of operation and be equipped with a fully programmable timer for exercising the equipment.
    11. The automatic transfer switch shall be configured to switch back when power is restored to the pump station.
    12. Automatic transfer switches shall be in a NEMA 4X Stainless Steel enclosure.
35. A demonstration that the generator is capable of providing the required power with all installed equipment operating simultaneously must be performed at the time of start-up. Provide power failure test on the system.
36. Provide 3 sets of Operation & Maintenance Manuals, 2 hard copies and 1 searchable electronic copy, to the owner for the Pump Station, Control Panel, Generator, and Automatic Transfer Switch.
37. Note is leu of a standby generator, a battery backup system can be installed. The battery backup system shall be capable of running a minimum of 24 hours. A charging system will be required.

1.03 **Installation**

1. The contractor shall mount the NEMA 4X alarm device in a conspicuous location, as per national and local codes.

2. Installation of pump station shall be accomplished so that 2” to 4” of access way, below the bottom of the lid, extends above the finished grade line. The finished grade shall slope away from the unit. The diameter of the excavated hole must be large enough to allow for the concrete anchor.

3. A 6” inch (minimum) layer of naturally rounded aggregate, clean and free flowing, with particle size of not less than 1/8” or more than 3/4” shall be used as bedding material under each grinder pump station unit.

4. A concrete anti-flotation collar sized according to the Manufacturer’s instructions may be required and shall be pre-cast to the grinder pump or poured in place.

5. Backfill of clean native earth, free of rocks, roots, and foreign objects shall be thoroughly compacted in lifts not exceeding 12” to a final Standard Proctor Density of not less than 85 percent. Improper backfilling may result in damaged access ways. The Grinder Pump Station shall be installed at a minimum depth from grade to assure minimum frost protection. Final grade shall slope away from the Grinder Pump Station.

6. A 15-foot private easement (minimum) owned by Fulton County within the Homeowners Association (HOA) property is required for low pressure sewer system installation. This easement shall run from the discharge manhole to the service lateral connection to the forcemain.

7. Sewers shall be designed with sufficient clearance from water and other existing utilities. A 10-foot separation is required from sewer and water laterals. Sewer lines may be no closer than 4’ to each other. No sewer may be installed between homes. Each lateral requires a separate connection to the county force main.

8. A valve box must be located within the easement owned by Fulton County. The valve box shall contain additional shut off for county control and connect directly to the forcemain line.

9. The Contractor/Installer shall install 3M™ Electronic Marking System (EMS) Warning Tape 7904-XT, Green, 4 in, WasteWater, shall be placed a minimum of 6 to 12 inches above the low-pressure force main line but no more than 4-feet deep from the discharge manhole to the shut-off isolation valve at the right of way line or easement boundary. The warning tape shall be installed simultaneously with the HDPE piping. Warning tape shall be properly spliced at each end connection and each service connection.

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11. Warning tape shall be installed by the Contractor/Installer once backfill has been placed and compacted to 6 to 12-inches above the top of the pipe and not more than 18 inches above the top of the pipe. Tapes shall be color coded in accordance with APWA Uniform Color Codes with the following legends: Sewer Systems, Safety Precaution Green, “Caution Wastewater Line Buried Below”. Tape shall be permanently printed with no surface printing allowed. Tape width shall be a minimum of 4 inches.

12. No Warning tape will be required where pipe is installed using a directional boring machine, but a locate wire will be required. The Contractor/Installer shall install 12-gauge, green-coated locating wire along the length of the directional bore. The locator wire shall be installed simultaneously with the HDPE piping. Wire shall be properly spliced. Care shall be taken to adequately wrap and protect wire at all splice locations. No bare wire shall be accepted. Locating wire shall be brought up to the surface at the end of each bore. Enough wire shall be coiled and stored near the surface to allow the tracer wire to be extended 12-inches above ground. The tracer wire shall be placed in a standard cleanout box.

13. A four (4) foot piece of four-inch SCH 40 PVC pipe with watertight cap shall be provided to locate the stub-out inlet for the property owners’ installation contractor, or as depicted on the contract drawings.

14. Force main line shall be located within the main road (under the pavement), located approximately 4 feet from the curb and at a depth of 6 feet to the top of the pipe. The force main shall not be installed between houses.

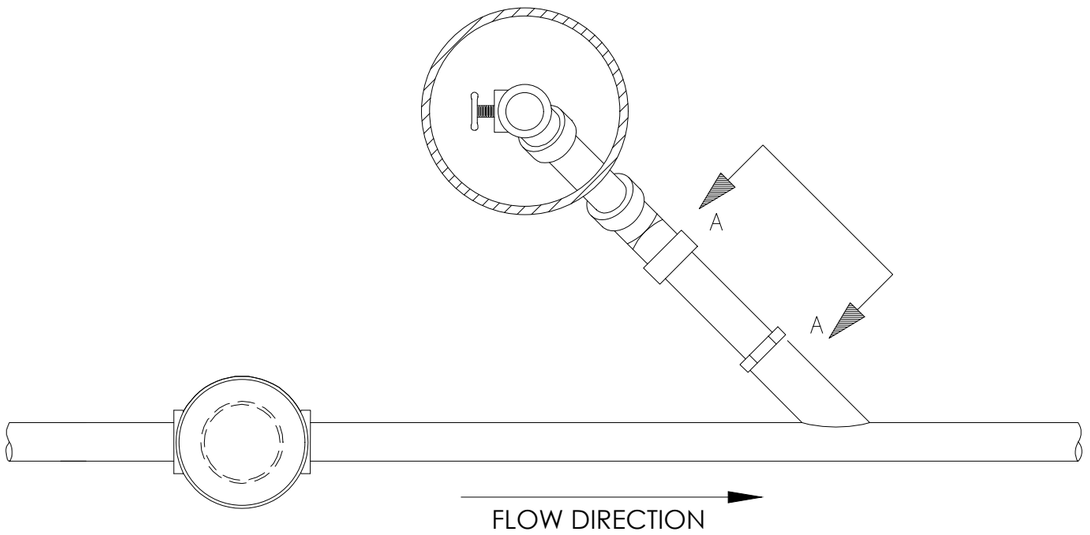
15. Receiving manholes shall be epoxy coated with sealed composite lids, or an odor control insert or system to be approved by the Director of FCDPW. A maximum of 4 community force main lines may discharge into the existing tie-in manhole.

1.04 Start-Up and Field Testing

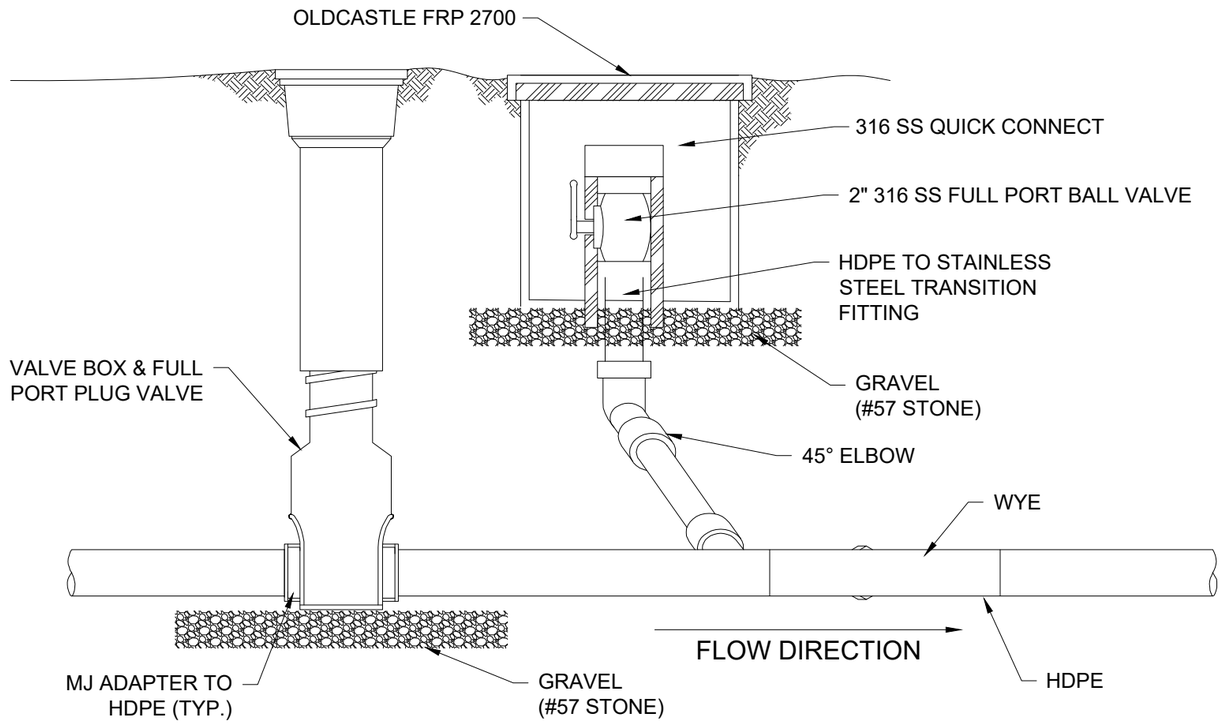
1. Upon completion of the start-up and testing, the Manufacturer shall submit to the County the start-up authorization form describing the results of the tests performed for each grinder pump station. Final acceptance of the system will not occur until authorization forms have been received for each pump station installed and any installation deficiencies corrected.

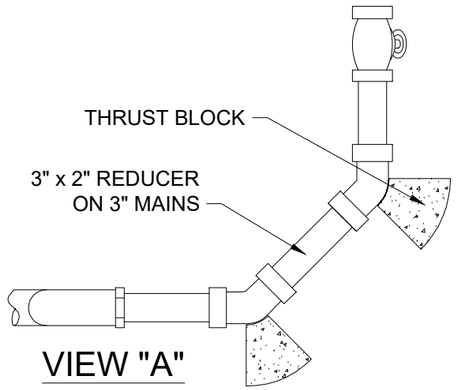
NOTES:

1. FULTON COUNTY PUBLIC WORKS REPRESENTATIVE SHALL INSPECT TRENCH BEFORE INSTALLATION AND SUBMIT INSPECTION REPORT FOR COMPACTION OF TRENCH.
2. FULTON COUNTY PUBLIC WORKS REPRESENTATIVE SHALL OBSERVE AND REPORT MARKING TAPE INSTALLATION.
3. FULTON COUNTY PUBLIC WORKS REPRESENTATIVE SHALL STAMP AND SIGN ALL INSPECTION REPORTS.
4. 3M™ ELECTRONIC MARKING SYSTEM (EMS) CAUTION TAPE 7904, GREEN, 6 IN, WASTE WATER, SHALL BE INSTALLED AT A DEPTH OF 3-FEET FROM FINAL GRADE CENTERED OVER THE FORCEMAIN AND SERVICE LATERALS. THE ENCASEMENT AND MARKING TAPE SHALL BE INSTALLED ALONG THE PUBLIC SYSTEM FROM THE BACKFLOW CHECK VALVES TO DISCHARGE MANHOLE.
5. FINAL PLAT MUST SHOW AND RECORD A 15-FOOT EASEMENT TO BE DEDICATED TO FULTON COUNTY PUBLIC WORKS FOR THE COMMON LOW-PRESSURE FORCEMAIN. EASEMENT SHOULD EXTEND 7.5-FEET ON EACH SIDE OF THE COMMON FORCEMAIN CENTERLINE, AND 1-FOOT PAST THE BOX FOR THE FLUSHING CONNECTION. FULTON COUNTY MAINTENANCE RESPONSIBILITY STARTS AT THE PUBLIC MANHOLE AND ENDS 1-FOOT OUTSIDE OF THE BOX FOR THE FLUSHING CONNECTION ASSEMBLY.
6. EACH SYSTEM SHALL BE INDIVIDUALLY APPROVED BY THE DIRECTOR OF PUBLIC WORKS OR DESIGNEE.
7. ADDITIONAL CONDITIONS MAY BE ADDED TO THE SYSTEM BASED ON THE DESIGN AND TOPOGRAPHY



PLAN VIEW

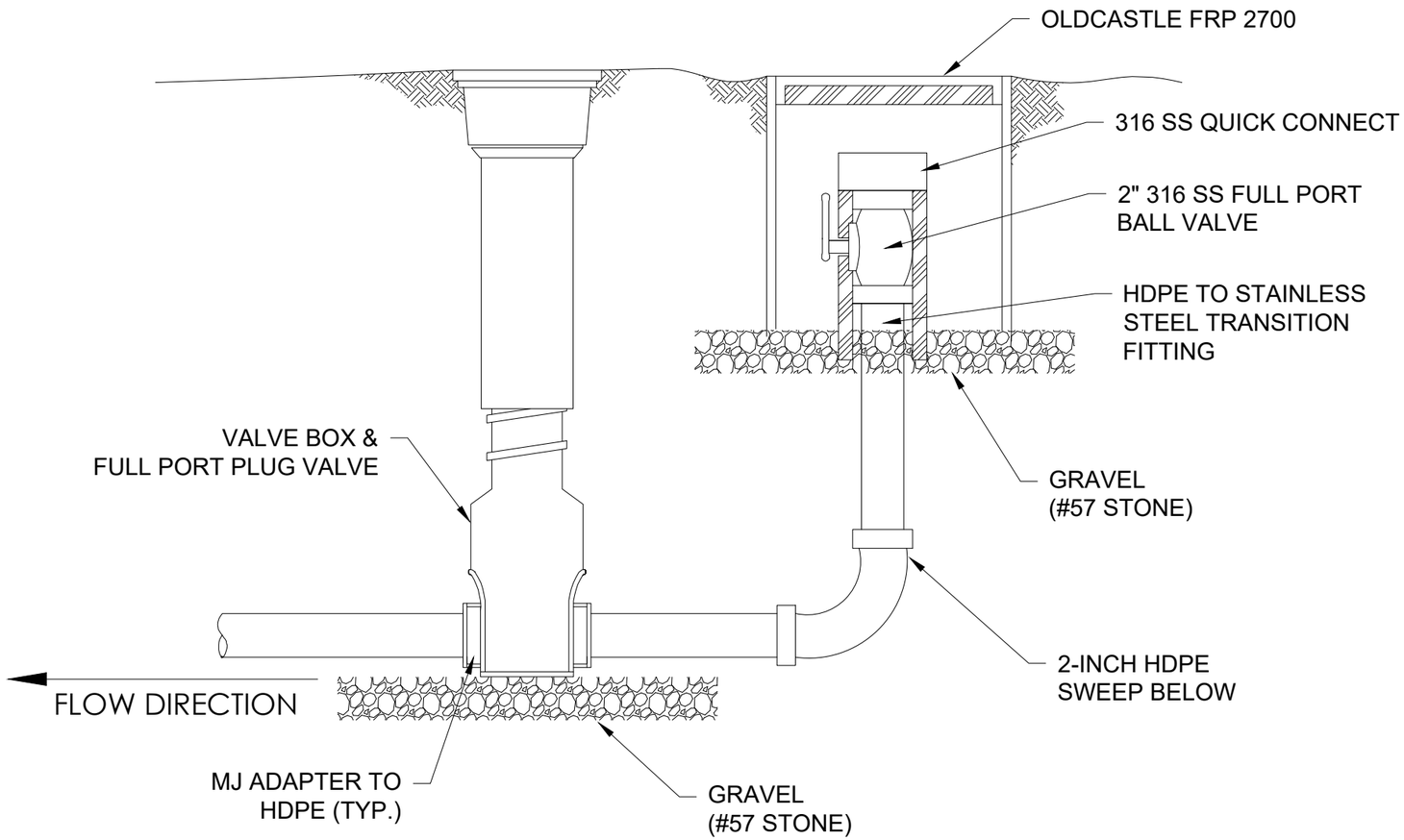


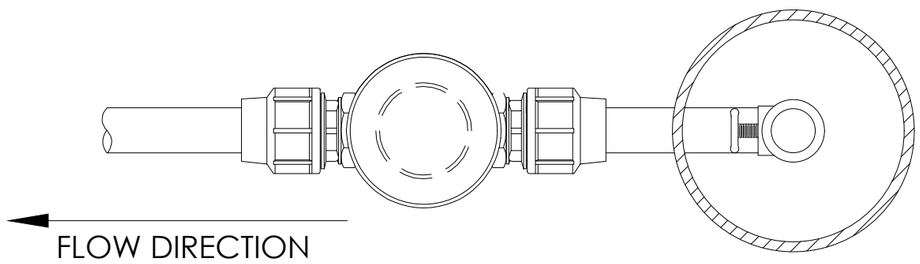


VIEW "A"

FULTON COUNTY STANDARD DETAIL 715 TYPICAL IN-LINE FLUSHING CONNECTION LOW PRESSURE SEWER SYSTEM		DATE	REVISIONS	DATE	REVISIONS	DGS/DRN/CHKD: HM/HM/-- APPROVED: -- DATE: 01-21-2026	FULTON COUNTY PUBLIC WORKS 141 PRYOR ST. ATLANTA, GA. 30303 404-612-7400 FAX: 404-224-0498	DRAWING NO. 715

715-S.dwg December 08, 2025 - 9:41am





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5. FINAL PLAT MUST SHOW AND RECORD A 15-FOOT EASEMENT TO BE DEDICATED TO FULTON COUNTY PUBLIC WORKS FOR THE COMMON LOW-PRESSURE FORCEMAIN. EASEMENT SHOULD EXTEND 7.5-FEET ON EACH SIDE OF THE COMMON FORCEMAIN CENTERLINE, AND 1-FOOT PAST THE BOX FOR THE FLUSHING CONNECTION.
6. EACH SYSTEM SHALL BE INDIVIDUALLY APPROVED BY THE DIRECTOR OF PUBLIC WORKS AND DESIGNEE.
7. ADDITIONAL CONDITIONS MAY BE ADDED TO THE SYSTEM BASED ON THE DESIGN AND TOPOGRAPHY

716-S.dwg December 08, 2025 - 9:41am

FULTON COUNTY STANDARD DETAIL 716

TYPICAL END-OF-LINE FLUSHING CONNECTION
LOW PRESSURE SEWER SYSTEM

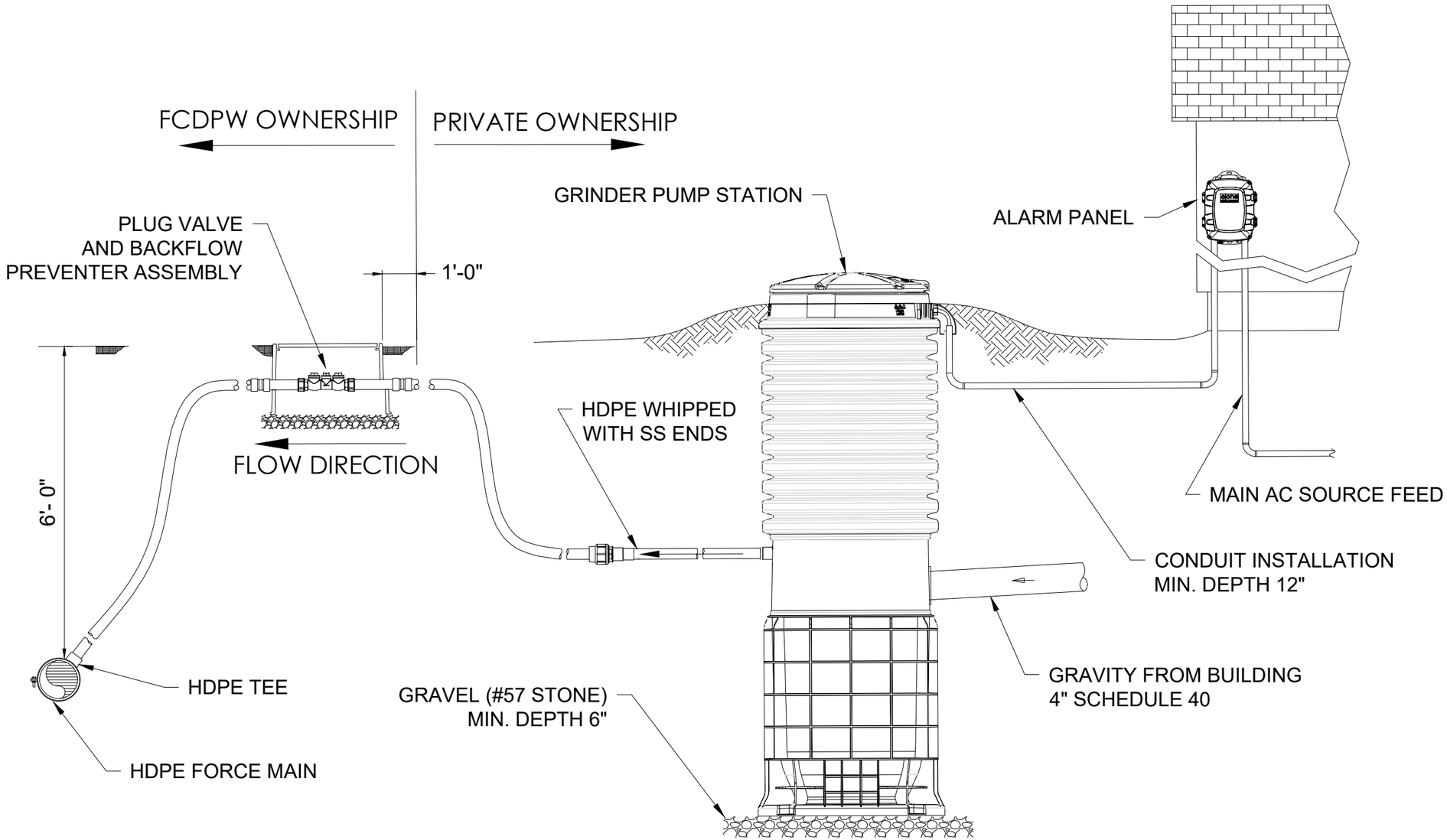
DATE	REVISIONS	DATE	REVISIONS

DGS/DRN/CHKD: HM/HM/KK
APPROVED: TM
DATE: 01-21-2026

FULTON COUNTY

FULTON COUNTY PUBLIC WORKS
141 PRYOR ST. ATLANTA, GA. 30303
404-612-7400 FAX: 404-224-0498

DRAWING NO.
716



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5. FINAL PLAT MUST SHOW AND RECORD A 15-FOOT EASEMENT TO BE DEDICATED TO FULTON COUNTY PUBLIC WORKS FOR THE COMMON LOW-PRESSURE FORCEMAIN. EASEMENT SHOULD EXTEND 7.5-FEET ON EACH SIDE OF THE COMMON FORCEMAIN CENTERLINE. EASEMENTS SHALL ALSO EXTEND ALL THE WAY UP TO AND INCLUDE THE SERVICE CONNECTION AND VALVE BOX. THE EASEMENT SHOULD EXTEND 1-FOOT PAST THE BOX FOR THE PLUG VALVE AND BACKFLOW PREVENTER ASSEMBLY.
6. FULTON COUNTY PUBLIC WORKS WILL APPROVE THE PRIVATE LOW-PRESSURE SYSTEM PROVIDED THAT THE DEVELOPER/HOMEOWNERS ASSOCIATION (HOA) PROVIDES A SIGNED MAINTENANCE AGREEMENT WITH A QUALIFIED, LICENSED CONTRACTOR OR PLUMBER. FULTON COUNTY MAINTENANCE RESPONSIBILITY STARTS AT THE PUBLIC MANHOLE AND ENDS JUST OUTSIDE OF THE BOX FOR THE PLUG VALVE AND BACKFLOW PREVENTER ASSEMBLY.
7. EACH SYSTEM SHALL BE INDIVIDUALLY APPROVED BY THE DIRECTOR OF PUBLIC WORKS OR DESIGNEE.
8. ADDITIONAL CONDITIONS MAY BE ADDED TO THE SYSTEM BASED ON THE DESIGN AND TOPOGRAPHY.

FULTON COUNTY STANDARD DETAIL 717

TYPICAL SERVICE CROSS SECTION
LOW PRESSURE SEWER SYSTEM

DATE	REVISIONS	DATE	REVISIONS

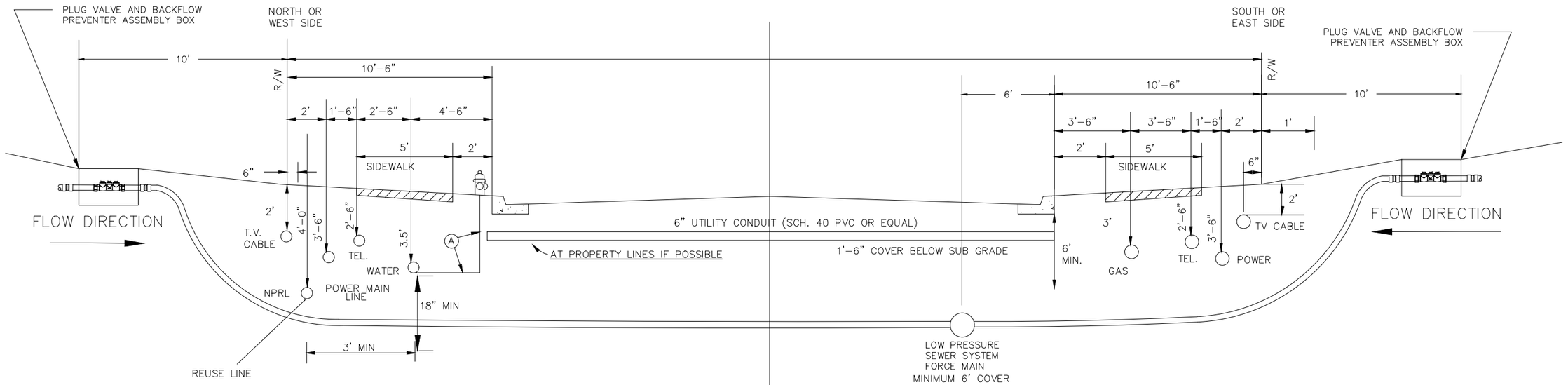
DGS/DRN/CHKD: HM/HM/KK
APPROVED: TM
DATE: 01-21-2026

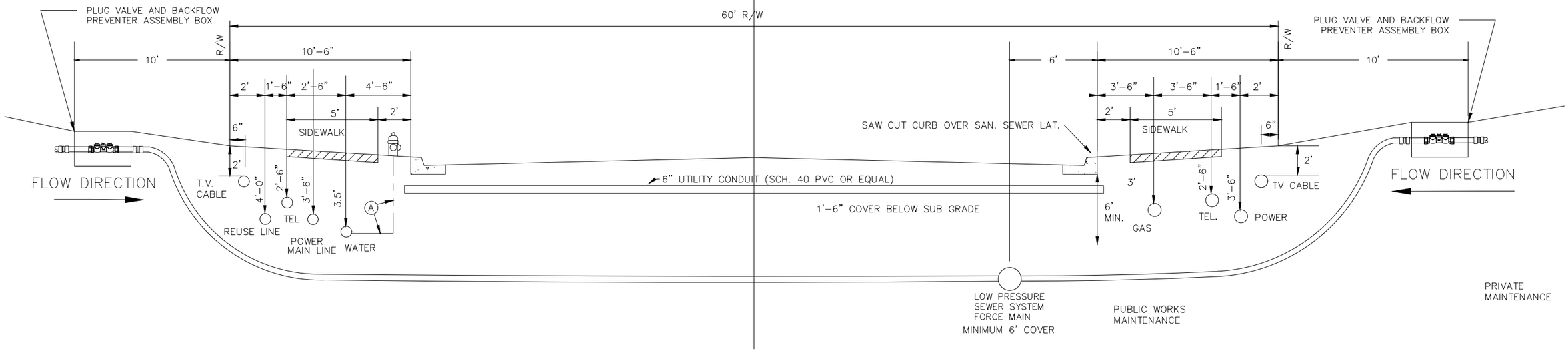
FULTON COUNTY

FULTON COUNTY PUBLIC WORKS
141 PRYOR ST. ATLANTA, GA. 30303
404-612-7400 FAX: 404-224-0498

DRAWING NO.
717

717-S.dwg December 08, 2025 - 9:41am





FULTON COUNTY STANDARD DETAIL 718
TYPICAL SERVICE CROSS SECTION
UTILITY LOCATION
LOW PRESSURE SEWER SYSTEM

DATE	REVISIONS	DATE	REVISIONS

DGS/DRN/CHKD: HM/HM/KK

APPROVED: TM

DATE: 01-21-2026

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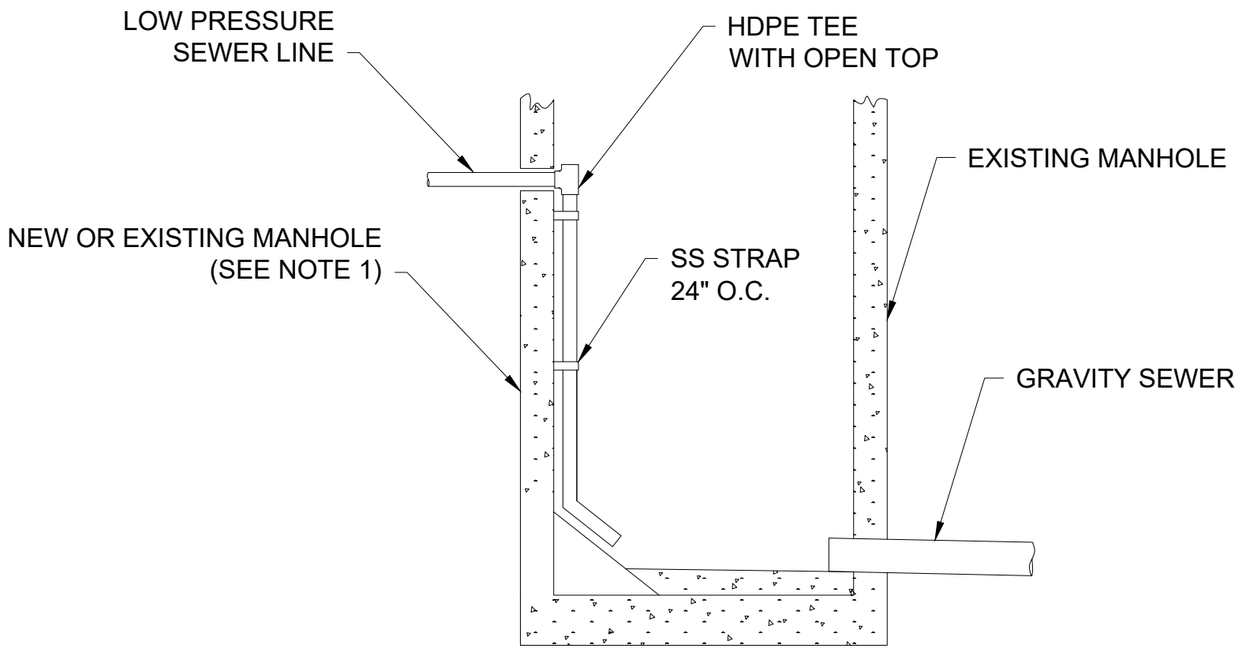
718-S.dwg December 08, 2025 - 9:41am



NOTES:

1. FOR NEW MANHOLE INSTALL PER DETAIL 114-A OR 114-B STANDARD HDPE MANHOLE. FOR TIE-IN TO EXISTING MANHOLE, CORE FROM INSIDE. CORE SHALL BE AWAY FROM BARREL JOINTS.
2. EXISTING MANHOLE SHALL BE PREPARED AND LINED WITH COATING CAPABLE OF RESISTING CORROSION CAUSED BY HYDROGEN SULFIDE GASES AND OTHER CONSTITUENTS FOUND IN WASTEWATER.
3. NEW MANHOLE SHALL BE HDPE.
4. THE INSTALLED PIPE SHALL BE ALLOWED TO REST A MINIMUM OF 12 HOURS BEFORE TIE-IN TO THE DISCHARGE MANHOLE.
5. HDPE PIPE ENTERING A MANHOLE SHALL BE INSTALLED PER MANHOLE STANDARD DETAIL WITH FLEXIBLE RUBBER CONNECTOR, OR BOOT, TO NEW MANHOLE.
6. DROPS TO BE CONSTRUCTED OF SCHEDULE 80 PVC.
7. USE $\frac{1}{2}$ INCH DIAMETER EXPANSION TYPE STAINLESS STEEL CINCH BOLTS WITH STAINLESS STEEL WASHER AND NUTS TO ATTACH STRAPS.
8. MINIMUM OF TWO STRAPS REQUIRED.
9. MINIMUM SIZE OF MANHOLE WITH INSIDE DROP SHALL BE 60-INCH.

FULTON COUNTY STANDARD DETAIL 719

TYPICAL DROP CONNECTION
LOW PRESSURE SEWER SYSTEM IN MANHOLE

DATE	REVISIONS	DATE	REVISIONS

DGS/DRN/CHKD: HM/HM/KK
APPROVED: TM
DATE: 01-21-2026

FULTON COUNTY

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DRAWING NO.
719

719-S.dwg December 10, 2025 - 12:55pm