SECTION 7: BUILDING SEWERS

7.01 Building Sewer Standards:

A. These building sewer criteria shall govern the installation of an individual building sewer upper lateral.

B. The requirements for a building sewer lower lateral shall generally conform to Sections 3 and 5 of these Standard Specifications except where otherwise provided in this Section.

C. In the case of development projects, the building sewer lower lateral is installed normal to the installation of the development's sewer improvements and shall conform to the Standard Specifications.

7.02 Permit Required:

A. Prior to performing any work that would alter in any way the building sewer or any sewer appurtenance, a written permit must be obtained from the District.

7.03 Costs Borne by Owner/Applicant:

A. All costs and expenses incidental to the installation and connection of any building sewer to the District's facilities shall be borne jointly and severally by the owner/applicant thereof and said owner/applicant shall indemnify the District from loss or damage that may directly or indirectly be occasioned to any party by the installation of the building sewer.

7.04 Use of Existing Building Sewers:

A. Existing building sewers may be used in connection with new structures only when they are found, after examination and test, to meet all of the requirements of the Standard Specifications.

B. All examinations and testing shall be done by the record owner of the real property under District inspection.

1. Said owner shall be responsible for all associated costs for such examinations and testing and shall be responsible to correct all deficiencies at his/her expense prior to making connection; provided however, that in cases when the building sewer lower lateral has previously been in service with the District, the District may opt to perform repairs on the lower lateral at its expense.

7.05 Separate Building Sewer Required:

A. A separate and independent building sewer shall be provided for every structure on a parcel; provided, however, that the provisions of this Section may be waived by the General Manager.

1. If waived by the General Manager, two or more structures on a single parcel, under one ownership, may be served by the same common upper lateral if it is unlikely, under local agency zoning and general plans, that the parcel can be subdivided in the future.

2. If for any reason, the property is subsequently divided, each building is required to then be separately and independently connected to the public sewer.

   a) It shall be unlawful for the owner(s) of the subdivided property to thereafter continue to use in common the same building sewer.

7.06 Material:

A. Upper Lateral:

1. The building sewer upper lateral shall be ductile iron pipe 431 conforming to ANSI/AWWA Standard C151/A21.51 with ceramic epoxy lining, vitrified clay pipe ASTM designation C700, or ABS Schedule 40 ASTM designation D2661, PVC SDR 26 ASTM designation D3034, or DWV Schedule 40 ASTM designation D1785-15e.

   a) DWV pipe shall have marking tape, clearly labeled “sewer”, securely fastened to the top of the pipe.

2. The building sewer upper lateral shall be laid on a firm bedding consisting of native soil free of debris and rocks larger than 1-inch which meets the approval of the District. Other suitable material such as sand, pebble rock/pea gravel, or 3/4-inch crushed rock may be used in lieu of native soil.

3. Pinning, wedging, blocking or alternative methods to support the pipe shall not be permitted.

B. Lower Lateral:

1. The building sewer lower lateral materials shall be in accordance with Section 2.1 of these Specifications.

2. The lower lateral shall be bedded in accordance with Section 5.12 of these Specifications.

C. All joints on the building sewer shall be gas tight and waterproof. No paint, varnish or other coating materials shall be permitted on the joints.

7.07 Size and Slope:

A. Single Family Residential:

1. Building sewers shall be four inches (4”) in diameter.

2. Slope shall not be less than 1/4-inch per foot unless otherwise approved by the District.

B. Commercial:

1. Commercial building sewers and multi-family residential building sewers shall be not less than six inches (6”) in diameter.

2. Slope shall not be less than 1/8-inch per foot unless otherwise approved by the district.

7.08 Installation:

A. The installation of building sewers shall be as follows unless otherwise permitted by the District:

1. Excavation:

a) Open Trench Required

1) All excavation required for the installation of a building sewer shall be open trench work unless otherwise approved by the District, and shall be in conformance with all applicable rules, regulations, and laws of any city, county, state, or federal agency having jurisdiction.

b) Safety

1) All excavations for sewer installations shall be adequately guarded in accordance with current California Occupational Safety and Health Administration (Cal OSHA) regulations and local governing agency requirements so as to protect the public from hazard.

c) Restoration

1) Streets, sidewalks, parkways, utilities, and other public property disturbed in the course of work shall be restored to the satisfaction of the District and to the satisfaction of the governing body of the entity in which the public property affected may be situated.

d) Trench Foundation

1) Whenever the bottom of the trench is soft or rocky or in the opinion of the District, otherwise unsuitable as a foundation for the pipe, the unsuitable material shall be removed and replaced with crushed rock or other material as directed by the District, so as to provide a stable and satisfactory base.

2) Ductile Iron pipe may be required as determined by the District.

2. Pipe Laying:

a) Elevation

1) Whenever possible, the building sewer shall be brought to the building below the lowest floor elevation.

b) Grade and Alignment

1) The building sewer shall be laid at a uniform grade and in straight alignment.

2) Changes in direction shall be made only as necessary and with properly curved pipe fittings.

3) Ninety-degree fittings shall be the long-sweep type.

4) No building sewer shall be laid parallel to or within three feet (3') of any bearing wall.

c) Utility Separation

1) Upper laterals shall maintain a minimum clearance of 12" horizontal and 12" vertical from water lines unless otherwise approved by the District. Water lines shall be approved by water utility company and/or local jurisdictional agency.

2) Upper laterals shall maintain a minimum clearance of 12" horizontal and 6" vertical from dry utilities unless otherwise approved by the District. Dry utilities shall be approved by dry utility company and/or local jurisdictional agency.

3) All utility crossings shall be designed with the crossing being perpendicular, unless a variance is approved by the District. In no case shall pipes cross at less than a 45° angle.

4) Common utility trenching shall be in accordance with the Uniform Plumbing Code (UPC) and approved by the District on a case-by-case basis.

d) Depth

1) The depth of cover shall be in accordance with the latest edition of the Uniform Plumbing Code (UPC).

2) If the depth of cover of any portion of the pipe within the public right-of-way is less than three feet (3') as measured from the finish surface to the top of pipe, the entire pipe within the right-of-way shall be ductile iron pipe.

3. Cleanouts:

a) Cleanout Boxes

1) Property Line Cleanouts (PLCO) for residential development, shall be an F-8 Christy or approved equal concrete valve box with cast iron lid marked "S" or "Sewer".

2) Property Line Cleanouts (PLCO) for commercial development shall be traffic rated G-5 Christy or approved equal concrete valve box with cast iron lid marked "S" or "Sewer".

3) Building cleanouts in high traffic areas shall be traffic rated G-5 Christy or approved equal concrete valve box with cast iron lid marked “S” or “Sewer”.

4) Building cleanouts in landscape areas may be a plastic landscaping box marked with “Sewer”.

b) Property Line Cleanout

1) A Property Line Cleanout (PLCO) shall be required on the building sewer at the property line /easement/right-of-way line.

c) Building Cleanout

1) A two-way cleanout shall be installed within two feet of the building footing, unless otherwise approved by District.

2) Single stack two-way cleanouts may be installed when depth of cover is less than 36-inches and shall conform to Detail Drawing C of these Specifications.

3) Building cleanouts installed in excess of 36-inches shall conform to Detail Drawing C of these Specifications.

d) Other Cleanouts

1) In-line cleanouts shall have a maximum spacing of 100-feet.

2) Other cleanouts such as change in alignment cleanouts and in-line cleanouts shall be required and installed in accordance with the latest addition of the UPC.

e) Accessibility

1) All cleanouts shall be extended to finished grade, properly fitted with appropriate cap/plug and be readily accessible for the purpose intended.

2) The surrounding area shall be graded to drain away from any cleanout.

4. Backwater Valves:

a) Elevations Requirement

1) A backwater valve shall be provided on any building sewer where the building pad elevation is lower than the top of manhole immediately up stream on the collector sewer serving the parcel or in instances where the manhole immediately up stream will not provide relief.

b) Installation

1) The backwater valve shall conform to and be installed in accordance with the latest edition of the UPC and as otherwise required by the District.

The backwater valve shall be readily accessible and have an integral gate retrieval device conforming to Detail Drawing B.

5. Private Sewage Pump Systems:

a) Where Required

1) In all buildings in which any building drain is too low to permit gravity flow to the collector sewer, wastewater carried by such drain shall be lifted by artificial means and discharged to the back of the property line cleanout or where gravity flow can be achieved along the upper lateral.

2) Such artificial means and discharge facility shall be in accordance with the latest edition of the UPC and the following:

(a) Residential Sewage Pump Systems

(1) The residential pump system and its components shall be designed for the purpose intended and shall be of such design as to provide the most optimum number of pump cycle times throughout the day and/or night so as to prevent a septic waste discharge to the public sewer.

(2) Prior to installation, the owner/applicant/contractor shall submit, for District approval, the pump design parameters demonstrating that it is appropriate for the application.

(b) Commercial Sewage Pump Systems

(1) Complete improvement plans for the design of a commercial sewage pump system shall be submitted to the District for review and approval.

(c) General Requirements

(1) The building sewer discharge line from the building drain shall be gravity flow to the sewage pump tank and must include a two-way cleanout within two feet (2;') of the building footing.

(2) No sewage pump tank shall be located within five feet (5') of any exterior wall or any structure.

(3) Private force mains shall not be constructed within the public right-of-way.

(4) The electrical connections and tank venting shall be inspected by and meet the codes and regulations of the building department of the jurisdiction issuing the building permit.

(5) Pumps shall have an alarm system with a visual component. All electrical components shall be inspected by the local jurisdictional

agency. Prior to installation, the owner/applicant/contractor shall submit for District approval, the pump design parameters demonstrating that it is appropriate for the application.

(6) Tank operating capacity shall not exceed 100 gallons unless approved by the District.

6. Taps into Collector Sewer:

a) When the installation of an individual building sewer requires a connection of the lower lateral to the collector sewer, the tap will be made by the District unless otherwise authorized.

1) Field Meet Required

(a) The owner/applicant/contractor shall contact the District to arrange a field meet prior to the tap and sewer installation. The owner and contractor are required to attend the field meeting with District representatives.

2) Payment of Fees

(a) The Tap Fee, in accordance with the District's Fee Schedule Resolution, shall be paid prior to the tap.

3) Owner/Applicant/Contractor Responsibility

(a) The owner/applicant/contractor responsibilities generally include, but are not limited to, all excavation, necessary safety devices, acquisition of any permits required by other agencies, exposing the collector sewer, providing pipe, bedding and backfill materials, and backfilling and surface restoration.

4) District Responsibility

(a) The District will provide the tap fitting/material and make the connection to the collector sewer.

(b) The District will install the lower lateral to the property line/right-of-way line using the owner/applicant/contractor supplied pipe and bedding materials.

(c) The District will install the property line cleanout (PLCO) provided the materials are supplied by the owner and onsite at the time the tap occurs.

7.09 Inspections:

A. All sewer work related to the installation and/or repair of a building sewer shall be subject to District inspection.

1. "Rough Inspection"

a) Open trench inspection of pipe and fittings bedded to springline from building two-way to property line cleanout (PLCO).

2. "Final Inspection"

a) CCTV inspection of installed pipe after all improvements and construction is complete, including landscaping, over the top of the pipe.

B. The applicable inspection fee, in accordance with the District's Fee Schedule Resolution, shall be paid prior to inspection. The District reserves the right to apply additional inspection fees for excessive inspections due to non-compliance with District Standards.

C. No backfill shall be placed until the work has been inspected by the District.

1. In the event of a violation of this requirement, the sewer facilities must be uncovered at the owner/applicant's expense, and the District shall have the right to disconnect the property from the District sewer system until such violation is corrected. The owner of the property shall pay to the District a reconnection charge in accordance with the District's Fee Schedule Resolution prior to the reconnection, together with all costs and expenses incurred by the District in making such reconnection.

7.10 Testing:

A. Testing of the building sewer is required and will be inspected by the District as part of the "Rough Inspection".

B. Temporary pipe fittings for testing purposes (e.g., "test tees" and "test wyes") shall only be used for connections to an existing sewer upper lateral and as approved by the District.

C. Either a water test or air test is acceptable and shall be performed as follows:

1. <u>WATER TEST</u>

a) The test shall be performed in accordance with the latest edition of the UPC.

2. <u>AIR TEST</u>

a) The air test shall be performed in accordance with Section 5 of these specifications.

D. Sewer test plugs shall be of the inflatable or mechanical type. Test plugs shall be fully removable and retrievable of all components.

7.11 Water, Dirt and Debris Entering the System:

A. At no time shall any water, dirt or debris be allowed to enter the existing system.

B. The only exception to this is clean water used for testing the building sewer.

C. It is the owner's responsibility to ensure compliance by use of appropriate cap or plug over pipe ends at any time work is not in progress.

D. If it becomes necessary for the existing sewer system to be cleaned, because of owner's non-compliance, the owner will be required to perform the cleaning work under District inspection, at the owner's expense.

E. In some instances, the District may perform the work and will require that the owner reimburse the District for labor, equipment, materials, etc. prior to acceptance.

F. A CCTV inspection may be required, at the discretion of the District, at the owner's expense.

7.12 Abandonment:

A. Any building sewer to be abandoned or that will be unused, including building sewers from structures to be demolished, shall be done in the following manner:

1. The Building sewer upper lateral shall be physically disconnected from the building sewer lower lateral immediately behind the Property Line Clean Out (PLCO) or disconnected at that point in cases where there is no PLCO, by removing a short section of the upper lateral and securely capping both ends of the exposed building sewer.

2. The point of disconnection shall be properly backfilled.

3. If there is no PLCO, the pipe end shall be marked with a 4" x 4" x 4' (long) redwood post, painted green, and a #8 copper wire attached to both the post and the pipe end.

4. The District may, in certain cases, require that the building sewer lower lateral be physically removed up to the collector sewer, and the Wye, Tee or connection fitting securely plugged off.

5. The abandonment of a building sewer shall be done in the presence of the District and all work is subject to District inspection and approval.

7.13 Building Sewer Repairs:

A. Repairs made to existing building sewers shall conform to applicable provisions of this Section including, but not limited to, permits, costs, materials, excavation, inspection and backfill.

B. Trenchless repairs made to existing building sewers shall be installed only after the correction of defects such as sags and offsets are made via a point or spot repair. Trenchless repairs shall conform to applicable provisions of this Section including, but not limited to, permits, costs, materials, excavation, inspection and backfill.

7.14 Damage to Existing Facilities:

A. Any damage to the District sewer facilities or lower lateral caused as a result of the installation of a building sewer shall be the responsibility of the owner/applicant, and the owner/applicant shall be responsible for all costs incurred by the District.

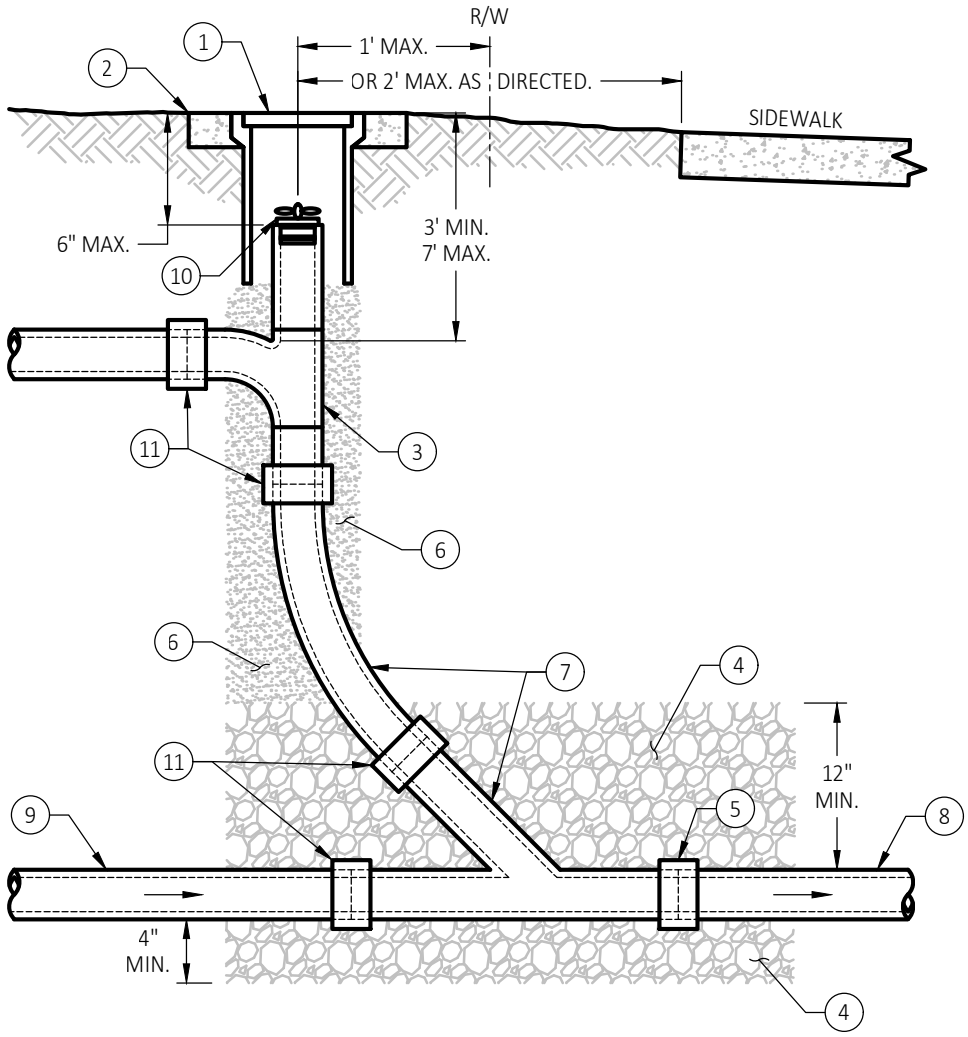
7.15 Building Sewer Detail Drawings:

A. Detail drawings related to the installation of a building sewer are contained in this section as follows:

1. Drawing “A”—Property Line Cleanout to Grade
2. Drawing “B”—Backwater Valve, Typical
3. Drawing “C”—Building Sewer
4. Drawing “D”—Residential Pump System
5. Drawing “E”—Typical ADU and Outdoor Kitchen Layout

KEYNOTES:

1. F-8 CHRISTY (OR APPROVED EQUAL) CONCRETE VALVE BOX WITH CAST IRON LID MARKED "S" OR "SEWER," INSTALLED BY BUILDING CONTRACTOR.
2. 4-INCHES x 18-INCHES x 18-INCHES CONCRETE PAD IN REMOTE LOCATIONS AS DIRECTED.
3. ALTERNATE CONNECTION USING COMBINATION WYE FITTING. ABS MATERIAL ONLY - ONLY AS APPROVED BY THE DISTRICT.
4. ¾-INCH CRUSHED A.B. BEDDING MATERIAL EXTEND 1-FOOT BEYOND WYE (BOTH DIRECTIONS).
5. FOUR BAND SHIELDED REPAIR COUPLING AT MATERIAL TRANSITIONS AS APPROVED BY THE DISTRICT.
6. BACKFILL MATERIAL, SEE STANDARD DRAWING NO. 4.
7. WYE 45° WITH LONG RADIUS 45° BEND.
8. BUILDING SEWER LOWER LATERAL.
9. BUILDING SEWER UPPER LATERAL.
10. CAP SHALL BE NON-CORROSIVE. CHERNE INDUSTRIES "END OF PIPE GRIPPER PLUG", MODEL 270245, OR APPROVED EQUAL, INSIDE WING-NUT TWIST PLUG.
11. GLUE JOINT.



NOTES:

1. ALL DRAWINGS ARE NOT TO SCALE.
2. ALL CLEANOUT PIPE AND FITTINGS SHALL BE THE SAME SIZE AS THE LOWER LATERAL TO WHICH IT CONNECTS, UNLESS OTHERWISE DIRECTED BY THE DISTRICT. MATERIALS TO CONFORM TO SECTION 7.06 OF THESE SPECIFICATIONS
3. STACK SHALL BE STRAIGHT AND VERTICAL (PLUMB).

SPMUD
SOUTH PLACER MUNICIPAL UTILITY DISTRICT

PROPERTY LINE CLEANOUT (PLCO) TO GRADE

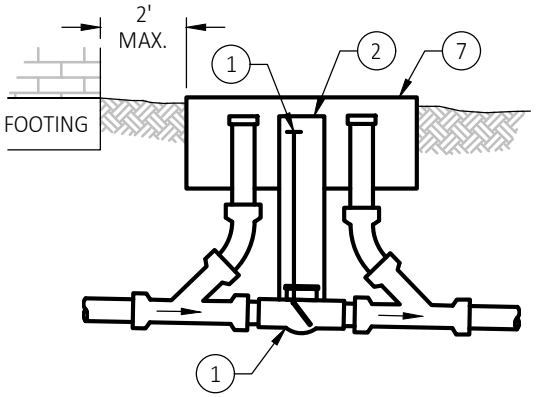
APPROVED BY:
CARIE HUFF, P.E.
DISTRICT ENGINEER

REVISION DATE: 5/6/21

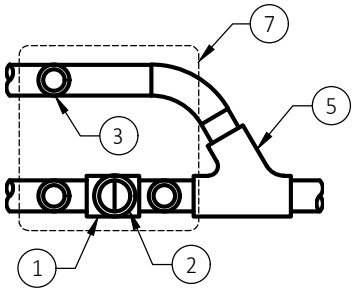
DRAWING: A

KEYNOTES:

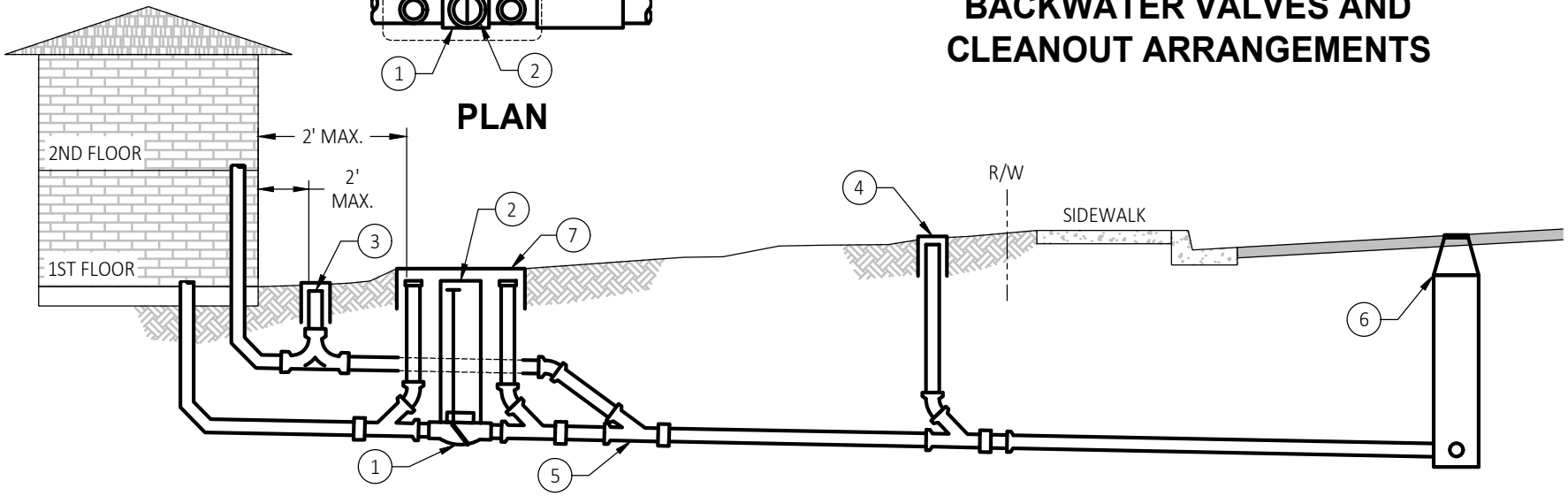
1. BACKWATER VALVES SHALL HAVE AN INTEGRAL GATE RETRIEVAL DEVICE - MAINLINE BACKFLOW PRODUCTS "ADAPT-A-VALVE" OR APPROVED EQUAL. SEE DETAIL FOR CLEANOUT AND VALVE ARRANGEMENT.
2. PVC ACCESS SLEEVE TRIM OR SHAPE TO FIT AGAINST BACKWATER VALVE. CAP REQUIRED FOR ABOVE GROUND APPLICATION.
3. TWO WAY CLEAN OUT AS REQUIRED BY LOCAL AUTHORITY FOR SECOND FLOOR, SEE STANDARD DRAWING C FOR TWO WAY CLEANOUT DETAIL.
4. PROPERTY LINE CLEANOUT, SEE DRAWING DRAWING A.
5. WYE 45° WITH LONG RADIUS 45° BEND.
6. UPSTREAM MANHOLE.
7. UTILITY BOX. MINIMUM 3" CLEARANCE ALL SIDES FROM RISERS.



BACKWATER VALVES AND CLEANOUT ARRANGEMENTS



PLAN



ELEVATION

NOTES:

1. ALL DRAWINGS ARE NOT TO SCALE.
2. CLEANOUT BOX(ES) MARKED WITH "S" OR "SEWER" SET TO GRADE. TRAFFIC RATED BOX(ES).

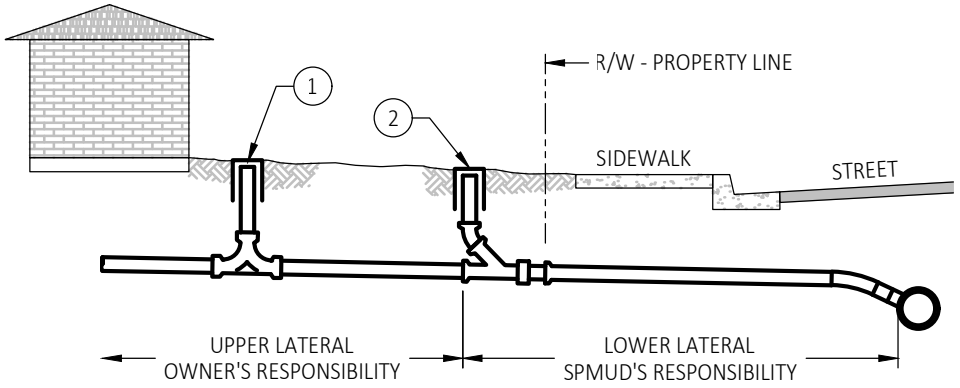
SOUTH PLACER MUNICIPAL UTILITY DISTRICT

TYPICAL BACKWATER VALVE

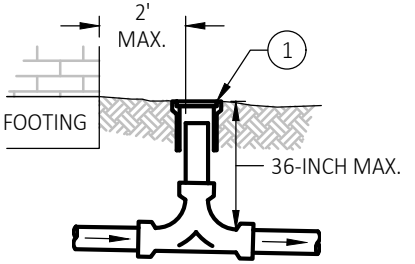
APPROVED BY:	REVISION DATE:	DRAWING:
CARIE HUFF, P.E. DISTRICT ENGINEER	5/6/21	B

KEYNOTES:

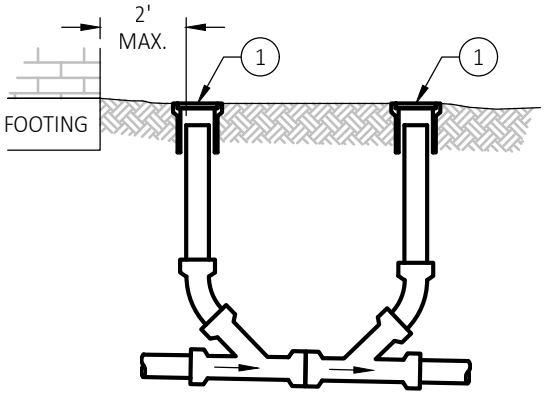
1. TWO WAY CLEAN OUT. CLEANOUT BOX FLUSH WITH FINISHED SURFACE FOR BELOW GROUND APPLICATION. CLEANOUT BOX(ES) MARKED WITH "S" OR "SEWER" SET TO GRADE.
2. PROPERTY LINE CLEANOUT, SEE STANDARD DRAWING A.



BUILDING SEWER



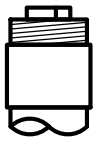
OPTIONAL CONFIGURATION FOR LATERALS THAT ARE 36-INCHES OR SHALLOWER



REQUIRED CONFIGURATION FOR LATERALS THAT ARE DEEPER THAN 36-INCHES.

TWO WAY CLEANOUT

INSIDE WING NUT TWIST PLUG
CHERNE® END-OF-PIPE GRIPPER® PLUGS MODEL 270245 OR APPROVED EQUAL (FOR ANY CLEANOUT).



THREADED ABS PLUG WITH SLIP x THREAD COUPLING (FOR TWO WAY & IN-LINE CLEANOUTS ONLY).

CLEANOUT CAPS AND PLUGS

NOTES:

1. ALL DRAWINGS ARE NOT TO SCALE.

SOUTH PLACER MUNICIPAL UTILITY DISTRICT

BUILDING SEWER DETAILS

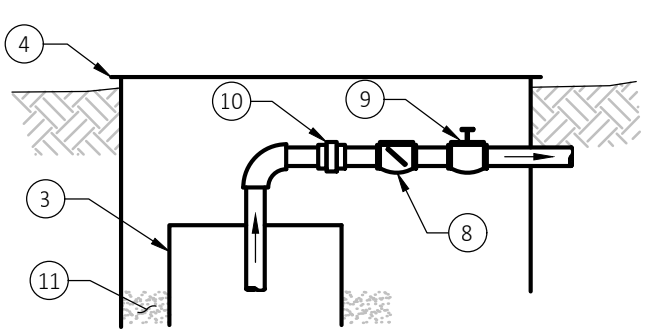
APPROVED BY:
CARIE HUFF, P.E.
DISTRICT ENGINEER

REVISION DATE: 5/6/21

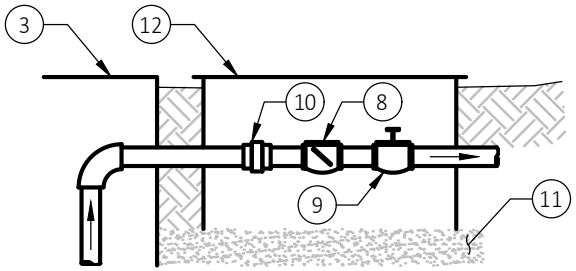
DRAWING: C

KEYNOTES:

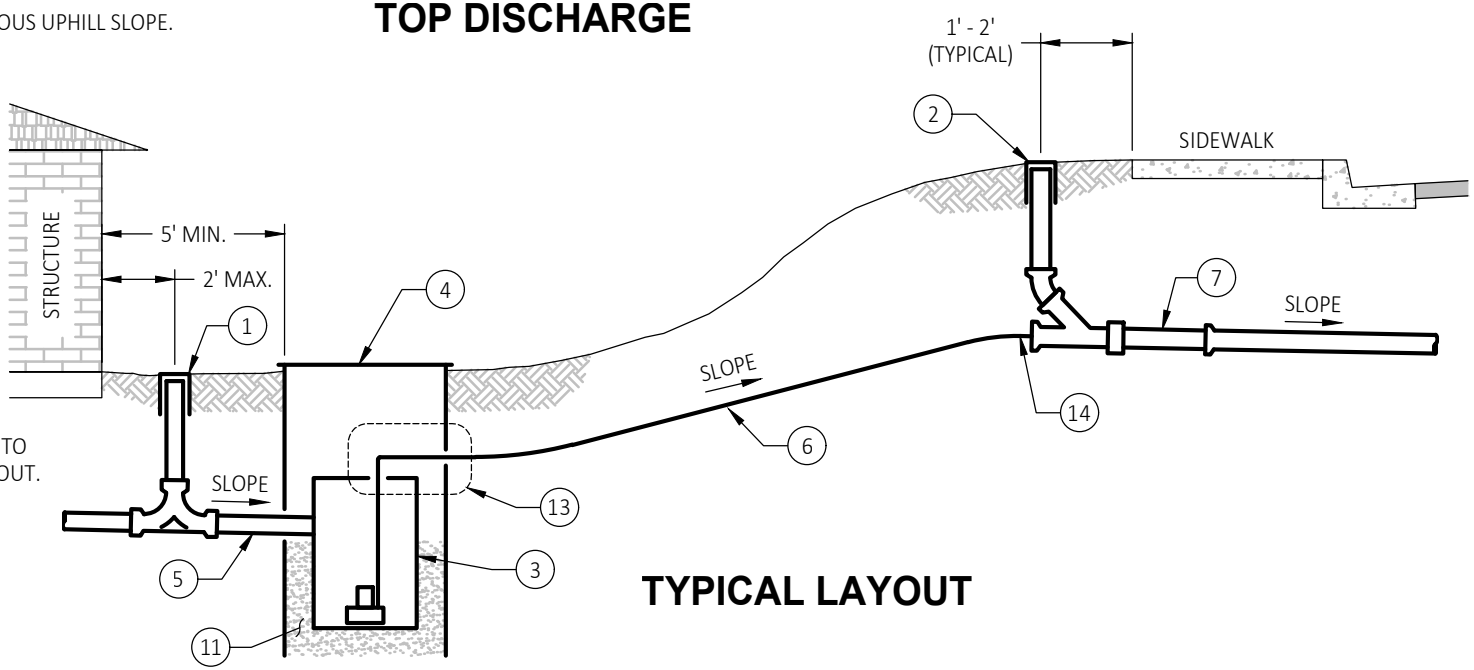
1. TWO WAY CLEAN OUT, SEE STANDARD DRAWING C.
2. PROPERTY LINE CLEANOUT, SEE STANDARD DRAWING A.
3. STORAGE TANK WITH SEWER PUMP. TANK SHALL NOT EXCEED 100 GALLONS. TANK TO BE INSTALLED IN SUCH A MANNER THAT IT WILL NOT RECEIVE STORM OR OTHER WATER NOT INTENDED.
4. TANK VAULT FOR ACCESS TO PUMP AND TANK . THE VAULT SHALL HAVE OPENINGS FOR PIPES TO PASS THROUGH WITHOUT THE VAULT RESTING ON THE PIPES.
5. 4-INCH GRAVITY BUILDING SEWER.
6. FORCE MAIN HALL HAVE A CONTINUOUS UPHILL SLOPE.
7. 4-INCH GRAVITY LOWER LATERAL.
8. CHECK VALVE.
9. SHUT-OFF VALVE.
10. UNION.
11. 3/4-INCH CRUSHED ROCK GRAVEL BEDDING.
12. VALVE BOX.
13. SEE APPLICABLE DISCHARGE DETAIL ABOVE.
14. SEWER FORCE LINE SHALL CONNECT TO THE BACK OF PROPERTY LINE CLEANOUT.



TOP DISCHARGE



SIDE DISHCARGE



TYPICAL LAYOUT

NOTES:

1. ALL DRAWINGS ARE NOT TO SCALE.
2. PUMP AND TANK MUST BE PLACED IN AN ACCESSIBLE LOCATION.
3. ELECTRICAL PUMP ALARM REQUIRED.
4. ELECTRICAL CONNECTIONS AND TANK VENTING TO BE INSPECTED AND APPROVED BY GOVERNING LAND JURISDICTION.
5. PRIOR TO INSTALLATION, THE OWNER/APPLICANT/CONTRACTOR SHALL SUBMIT FOR DISTRICT REVIEW AND APPROVAL, THE PUMP DESIGN PARAMETERS DEMONSTRATING THAT THE PUMP IS APPROPRIATE FOR THE APPLICATION.
6. TANK CAPACITY SHALL NOT EXCEED 100 GALLONS UNLESS APPROVED BY THE DISTRICT.
7. IN THE CASE OF PUMPS FOR A SECONDARY DWELLING UNIT, THE PRIMARY RESIDENCE SHALL HAVE A BACKWATER VALVE INSTALLED AT THE EXISTING TWO-WAY CLEANOUT.

SOUTH PLACER MUNICIPAL UTILITY DISTRICT

RESIDENTIAL PUMP SYSTEM

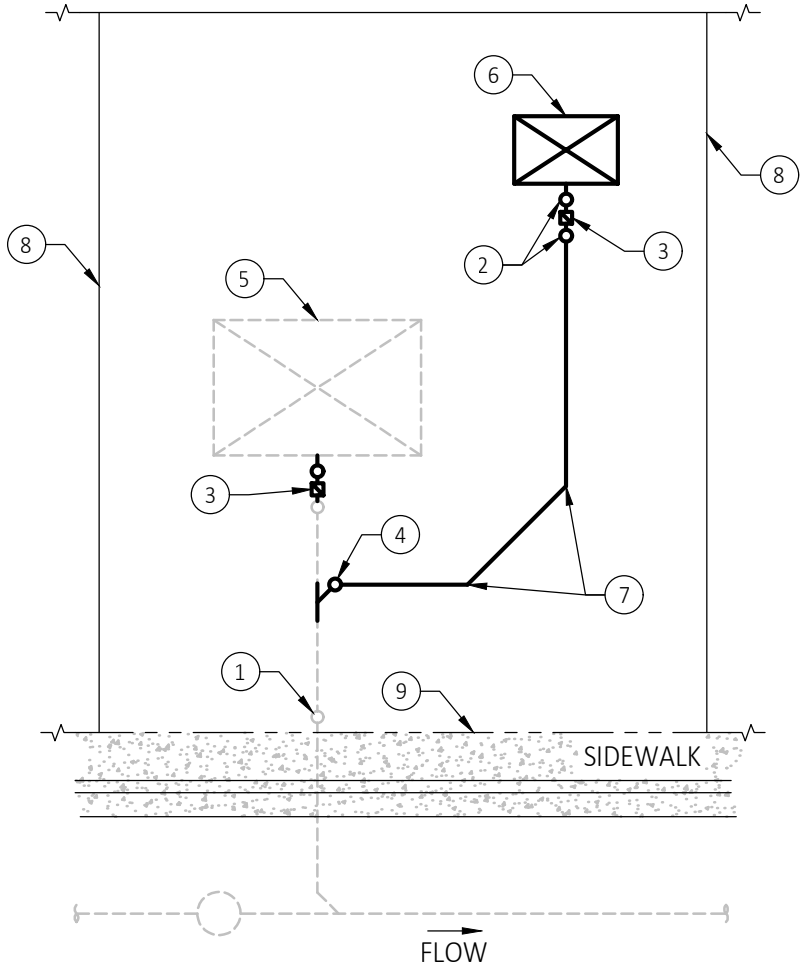
APPROVED BY:
CARIE HUFF, P.E.
DISTRICT ENGINEER

REVISION DATE: 5/6/21

DRAWING: D

KEYNOTES:

1. PROPERTY LINE CLEANOUT, REFERENCE DRAWING DRAWING A.
2. TWO WAY CLEAN OUT WITHIN 2 FEET OF BUILDING FOOTING, REFERENCE STANDARD DRAWING C.
3. BACKWATER VALVE REQUIRED UNLESS APPROVED BY THE DISTRICT, REFERENCE STANDARD DRAWING B.
4. CLEANOUT WITH 45° WYE.
5. PRIMARY STRUCTURE.
6. ADU OR OUTDOOR KITCHEN.
7. ANGLE FITTINGS ONLY AS NECESSARY. 45° FITTINGS SHALL BE THE LONG-SWEEP TYPE.
8. PARCEL LINES, TYPICAL.
9. BACK OF WALK.



NOTES:

1. ALL DRAWINGS ARE NOT TO SCALE.
2. SEE SECTION 7 OF THESE SPECIFICATIONS FOR LATERAL SPECIFICATIONS.
3. CLEANOUT BOX(ES) MARKED WITH "S" OR "SEWER" SET TO GRADE.
4. AN ACCESSORY DWELLING UNIT (ADU) SHALL TO BE A MAXIMUM OF 1,200 SF AND NO GREATER THAN 50% OF THE PRIMARY UNIT SIZE. SEE SECTION 2.03.005 OF THE DISTRICT'S SEWER CODE FOR PARTICIPATION FEE REQUIREMENTS.
5. IF FOR ANY REASON, THE PROPERTY IS SUBSEQUENTLY DIVIDED, EACH BUILDING IS REQUIRED TO THEN BE SEPARATELY AND INDEPENDENTLY CONNECTED TO THE PUBLIC SEWER.
6. A RESIDENTIAL PUMP SYSTEM MAY BE USED IF GRAVITY FLOW CANNOT BE ACHIEVED. SEE STANDARD DRAWING D.

SOUTH PLACER MUNICIPAL UTILITY DISTRICT

TYPICAL ADU AND OUTDOOR KITCHEN LAYOUT

APPROVED BY:

CARIE HUFF, P.E.
DISTRICT ENGINEER

REVISION DATE: **5/6/21**

DRAWING: **E**