

**Napa Sanitation District**  
**Sanitary Sewer and Recycled Water Standards**  
**Update 2022 – Summary Sheet**

This document notes changes, effective June 30, 2022.

**Volume II – 3.08 – SEWER THROUGH CASING**

The sewer pipe shall be securely supported through the casing as shown on the Standard Details. After the sewer pipe is installed, it shall be given a preliminary air test in the presence of the Engineer (see Volume II, Section 7 - Testing) and internally inspected by closed circuit television (see Volume II Section 8 – Television Inspection). After the test ~~is has been~~ satisfactorily completed, and the television inspection has been favorably reviewed, the annular space between the pipe and the casing shall be filled, either with dry sand mechanically blown in or ~~with filled with~~ grout so as to completely fill all voids, after which the space between the end of the casing and the pipe shall be sealed to a watertight condition. The pipe shall be anchored and secured to prevent movement during the filling of the annular space. If full-circumference, non-floating Calpico skids (or equal) are utilized, then filling the casing with sand or grout is not necessary. However, watertight end seals are still required.

**Volume II – 6.11 – GREASE AND OIL COLLECTION SYSTEMS**

**B. GREASE INTERCEPTORS**

Food service facilities shall have an outside grease interceptor installed per the requirements of the current edition of the Uniform Plumbing Code.

1. An external gravity grease interceptor per Standard Drawing SS-22 shall be required if the food service facility uses any of the following equipment or practices:

- Broiler
- Burner
- Char broiler
- Char broiler w/grease burner
- Deep fryer
- Garbage disposal/grinder
- Griddle
- Grill
- Kettle
- Oven (excluding toaster ovens, microwave ovens, and combi-ovens)
- Reusable dish use/washing

- Rotisserie
- Skillet
- Smoker
- Stove/range
- Tilt skillet
- Wok

## Volume II – 10.12 – HORIZONTAL AND VERTICAL CLEARANCE REQUIREMENTS

A minimum outside-to-outside horizontal clearance of five (5) feet ~~should~~shall be maintained between the sewer mains and structures and adjacent non-potable water and stormwater underground utility mains and structures. Provide eight (8) feet outside-to-outside separation from planter strips and six (6) feet separation from continuous sidewalk and concrete curbs, unless approved by the engineer.

~~Meet separation requirements set by California Department of Public Health (CDPH), Section 64572 – Water Main Separation, dated February, 2008. Horizontal and vertical clearances less than the required dimensions require District approval.~~

A minimum vertical clearance between the sewer main and adjacent, non-potable water underground utility mains shall be six (6) inches. Greater clearance may be required by the District.

## Volume II – 10.13 – WATER MAIN SEPARATION

Horizontal and vertical separation between sewer and water mains shall be in accordance with the State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW) and the local water purveyor.

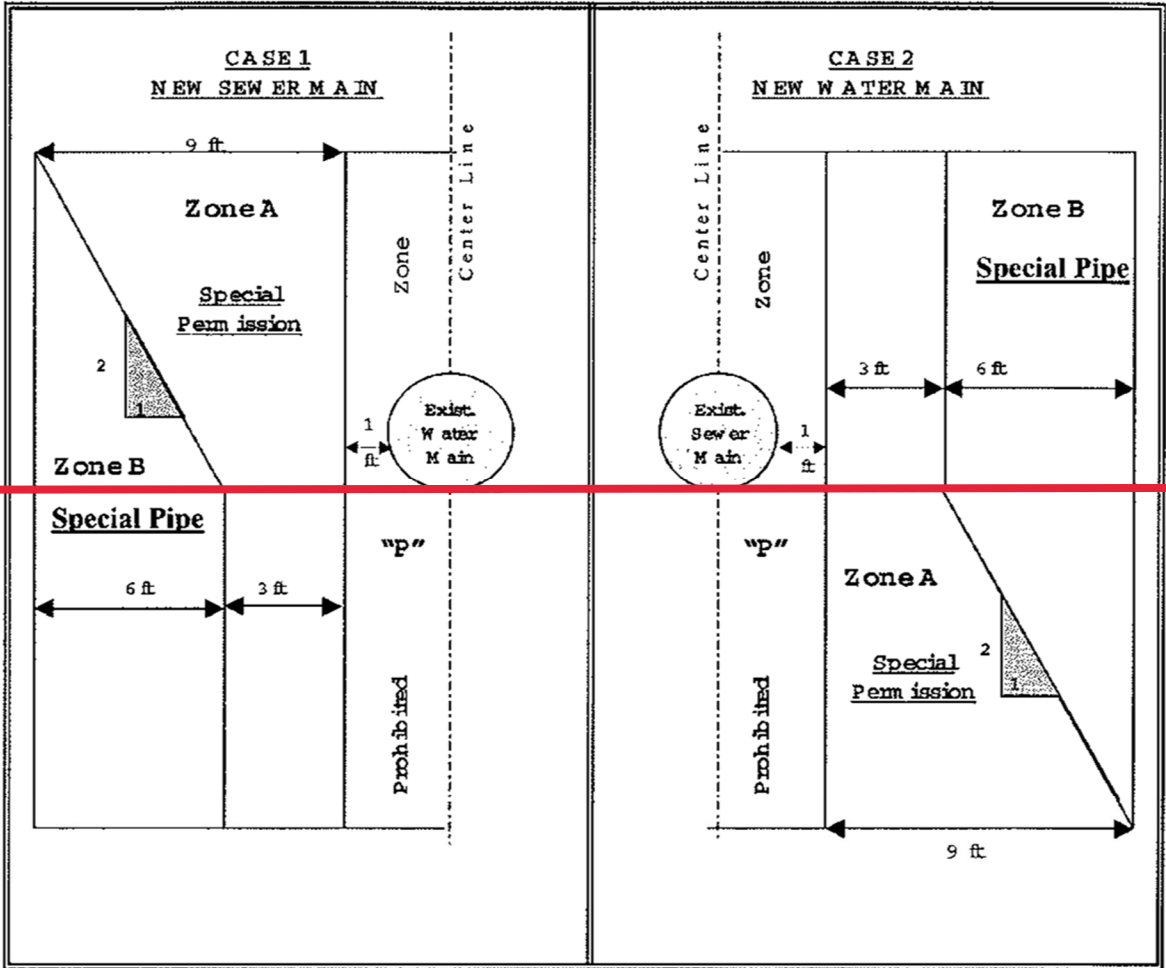
~~The following list provides separation criteria of water mains and sewer lines:~~

- ~~A. New water mains shall not be installed in the same trench as, and shall be at least ten (10) feet horizontally from and one foot vertically above, any parallel pipeline conveying untreated sewage.~~
- ~~B. New water mains and new water service lines shall be installed at least four (4) feet horizontally from, and one foot vertically above, any parallel pipeline conveying disinfected tertiary recycled water (defined in Section 60301.230 of Title 22 CCR).~~
- ~~C. If crossing a pipeline conveying a fluid listed in subsection (A) or (B), a new water main shall be constructed no less than 45 degrees to and at least one foot above~~

~~that pipeline. No connection joints shall be made in the water main within eight horizontal feet of the fluid pipeline.~~

- ~~D. The vertical separation specified in subsections (A) and (B) is required only when the horizontal distance between a water main and pipeline is less than or equal to ten (10) feet.~~
- ~~E. New water mains shall not be installed within 100 horizontal feet of the nearest edge of any wastewater disposal pond or within 25 horizontal feet of the nearest edge of any cesspool, septic tank, sewage leach field, seepage pit, underground hazardous material storage tank, or groundwater recharge project site.~~
- ~~F. The minimum separation distances set forth in this section shall be measured from the nearest outside edge of each pipe barrel.~~
- ~~G. With City Water Division approval, newly installed water mains may be exempt from the separation distances in this section, except subsection (E). Water mains should be installed in a manner that minimizes the potential for contamination, including, but not limited to sleeving the newly installed main, or utilizing upgraded piping material.~~

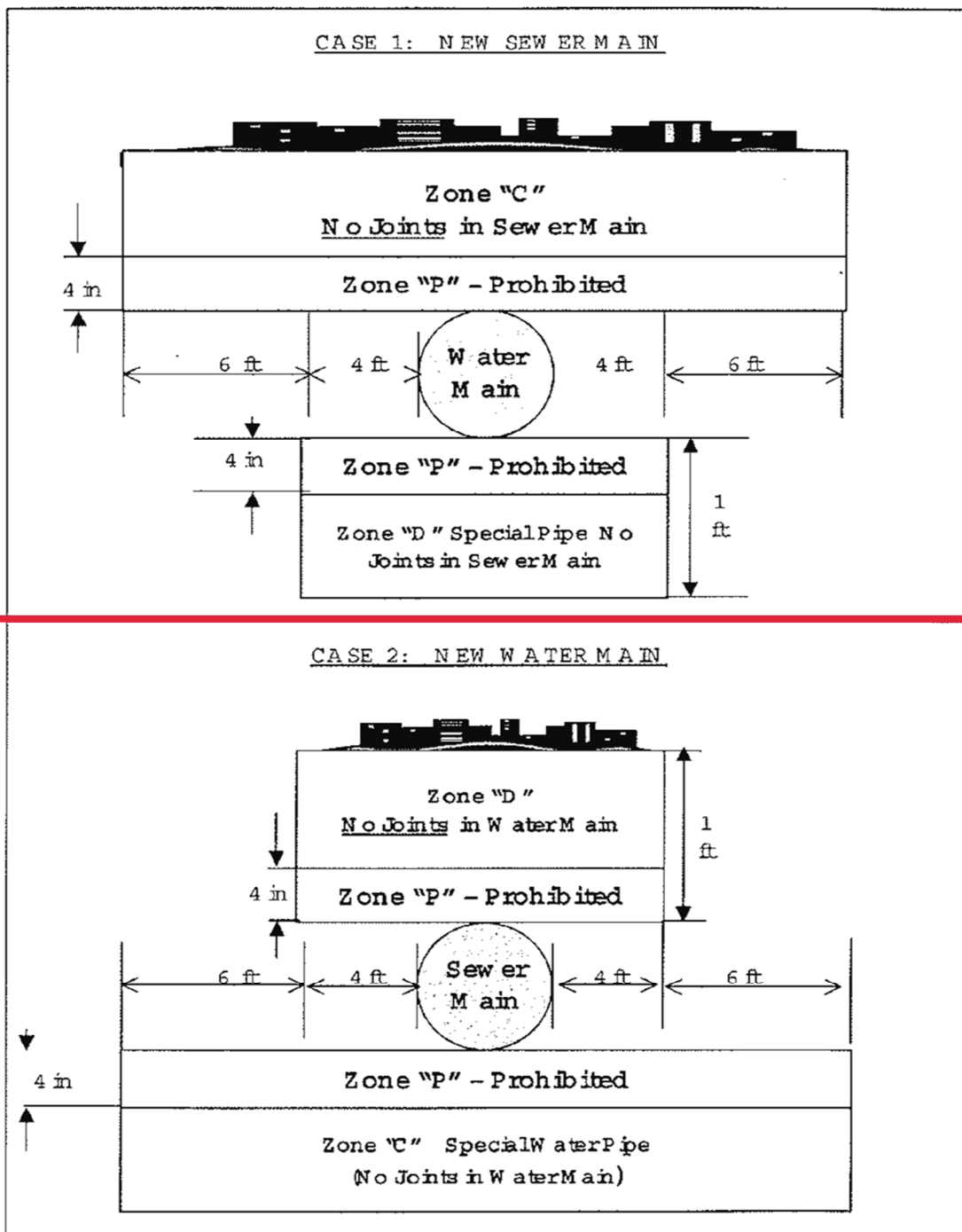
**FIGURE 1 PARALLEL CONSTRUCTION**



Note: Zones identical on either side of center lines

Zones "P" is a prohibited zone, Section 64630 (e) (2) California Administrative Code, Title 22

FIGURE 2 CROSSINGS



### Volume III – 1.02 – RESTRAINED JOINTS

- A. For pipes with diameters twelve (12) inches and greater, restrained joints shall be used at horizontal and vertical bends, at curves and at flanges. Restrained joints will also be used on piping on either side of a restrained or blocked bend to provide restraint utilizing soil friction. A rational method, such as the DIPRA design program, or Smith-Blair Restraint joint calculator, will be utilized to determine restrained lengths. Submit plans and calculations for restrained joints to the District.
- B. Restrained joints shall be ductile iron in accordance with the applicable requirements of the ANSI/AWWA C111/A21.11 and ANSI/AWWA C153/a21.53 of latest revision and shall be compatible with the type and pressure class of pipe used.
- B.C. External bolts, nuts, and washers shall be 316 stainless steel.
- C.D. Restrained joints are the preferred method for restraining the pipeline.

### Volume III – 3.01 – ALIGNMENT CRITERIA

#### A. HORIZONTAL

The separation of utilities as identified in the State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW) California Department of Public Health (DPH) Criteria for the separation of water mains and not-potable pipelines shall be used unless approved by the District and the potable water purveyor.

In general the ~~horizontal~~ pipe separation shall be as follows:

- ~~1.A.~~ Except for crossings, a minimum horizontal distance of ten (10) feet clear shall be maintained between potable water mains and the recycled water mains and service laterals. If a 10-foot horizontal separation is not feasible, a separation of at least four (4) feet may be allowed subject to special construction conditions. Designers should consult the District for specific design requirements. In no case is horizontal separation of less than four (4) feet or construction in the same trench as potable facilities allowed. Horizontal and vertical separation between recycled water mains and water or sewer mains shall be in accordance with the SWRCB DDW and the potable water purveyor.
- ~~2.B.~~ The minimum horizontal separation from sanitary sewer, storm drains, gas, electrical, telephone and communications lines shall be ~~four (4)~~ five (5) feet clear except at perpendicular crossings.

~~3.C.~~ Recycled water mains shall be designed a minimum of five (5) feet clear from all structures, such as manholes or drop inlets.

~~4.D.~~ Recycled water mains shall be designed a minimum of three (3) feet clear from the lip of gutter and five (5) feet clear from the edge of easements.

~~5.~~ In the event that it is not possible to maintain the required separations and relative positions between recycled water mains and service laterals, potable water lines and sanitary sewer lines, special design shall be required and approved by the District.

~~6.E.~~ Recycled water main crossings over or under other underground facilities will be designed as close to 90 degrees to the facility as possible with 12 inches of minimum clearance.

~~F.~~ Recycled water mains shall be designed with service laterals perpendicular to the main.

7.

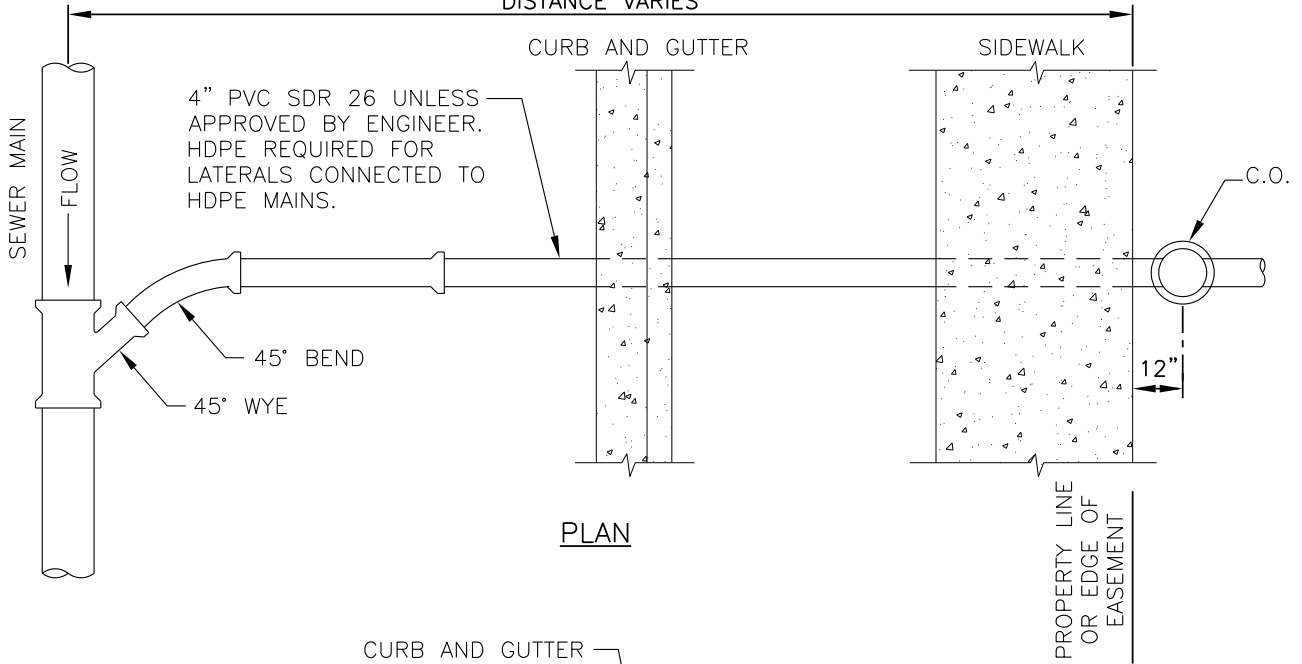
~~B. VERTICAL~~

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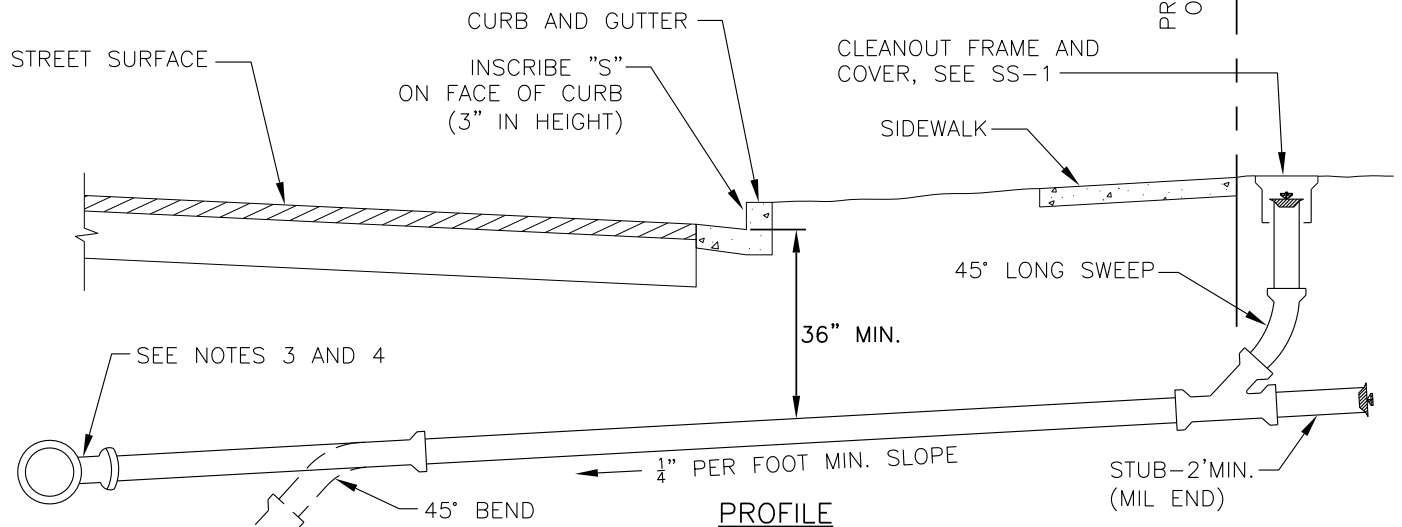
~~In general the vertical pipe separation shall be as follows:~~

- ~~1. Provide a minimum of six (6) inches vertical separation from sanitary sewer, storm drains or other underground utilities such as telephone, communication, gas, or electrical conduit.~~
  - ~~2. Pothole and survey utilities or other structures critical to vertical alignment.~~
  - ~~3. Where it is necessary to lower or raise either the recycled water main or the existing potable water main because of a vertical conflict, the main that is smaller shall be chosen for the deviation; however, the deviation shall be such that the potable water main is placed above the recycled water main. If the recycled water main must go over an existing potable water main, approval from the District is required, and a continuous (no joints or valves) section shall be used. It shall clear the potable water main by twelve (12) inches and shall extend to ten (10) feet clear on either side of the potable water main.~~
- ~~4.1. Recycled water mains over or under other utilities shall be in accordance with District Standards, except that PVC pipe shall be allowed with ductile iron fittings~~

PUBLIC LATERAL DISTANCE VARIES



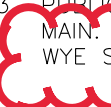
PLAN



PROFILE

NOTES:

1. WHEN DIRECTED BY THE ENGINEER OR AS SHOWN ON THE PLANS, THE PUBLIC LATERAL SHALL BE LOWER WHERE NECESSARY TO SERVE EXISTING PLUMBING OR LOW LOTS.
2. THE PUBLIC LATERAL SHALL BE INSTALLED WITH A STRAIGHT GRADE AND ALIGNMENT FROM THE SEWER MAIN TO THE PROPERTY LINE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. PUBLIC LATERAL SHALL BE FUSED HDPE PIPE WHEN CONNECTED TO AN HDPE MAIN. CONNECTION TO THE MAIN SHALL BE MADE WITH AN HDPE ELECTRO-FUSED WYE SADDLE.
4. LATERAL CONNECTIONS TO EXISTING CIPP LINED MAINS SHALL BE MADE WITH "TAP-TITE" SADDLE, FERNCO TAP SADDLE WITH PRESSURE KIT, OR APPROVED EQUAL.



ALTERNATE FOR DEEP SEWER UPON APPROVAL FROM ENGINEER

SEE NOTES 3 AND 4

STREET SURFACE

CURB AND GUTTER

INSCRIBE "S" ON FACE OF CURB (3" IN HEIGHT)

CLEANOUT FRAME AND COVER, SEE SS-1

SIDWALK

45° LONG SWEEP

36" MIN.

1/4" PER FOOT MIN. SLOPE

STUB-2' MIN. (MIL END)

PROPERTY LINE OR EDGE OF EASEMENT

12"

C.O.

45° BEND

45° WYE

4"

SEWER MAIN

FLOW

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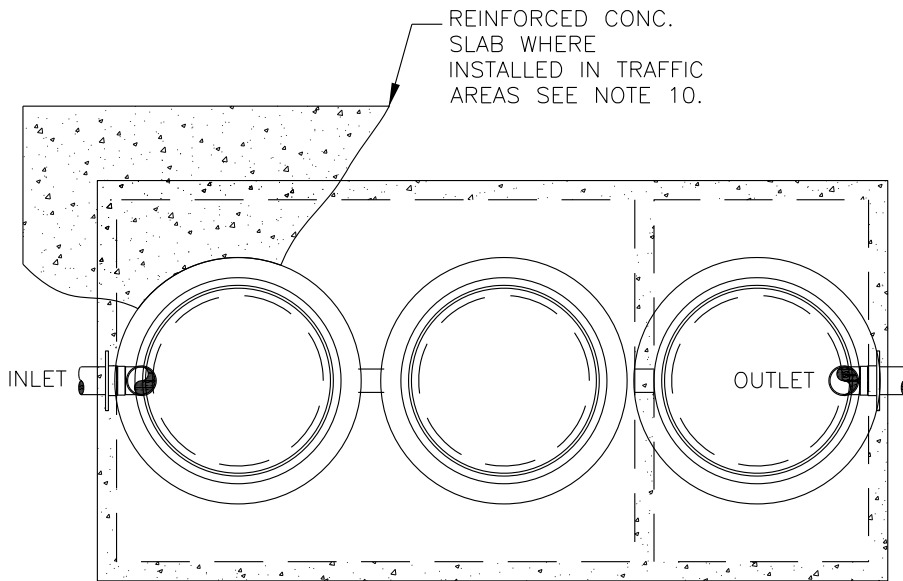
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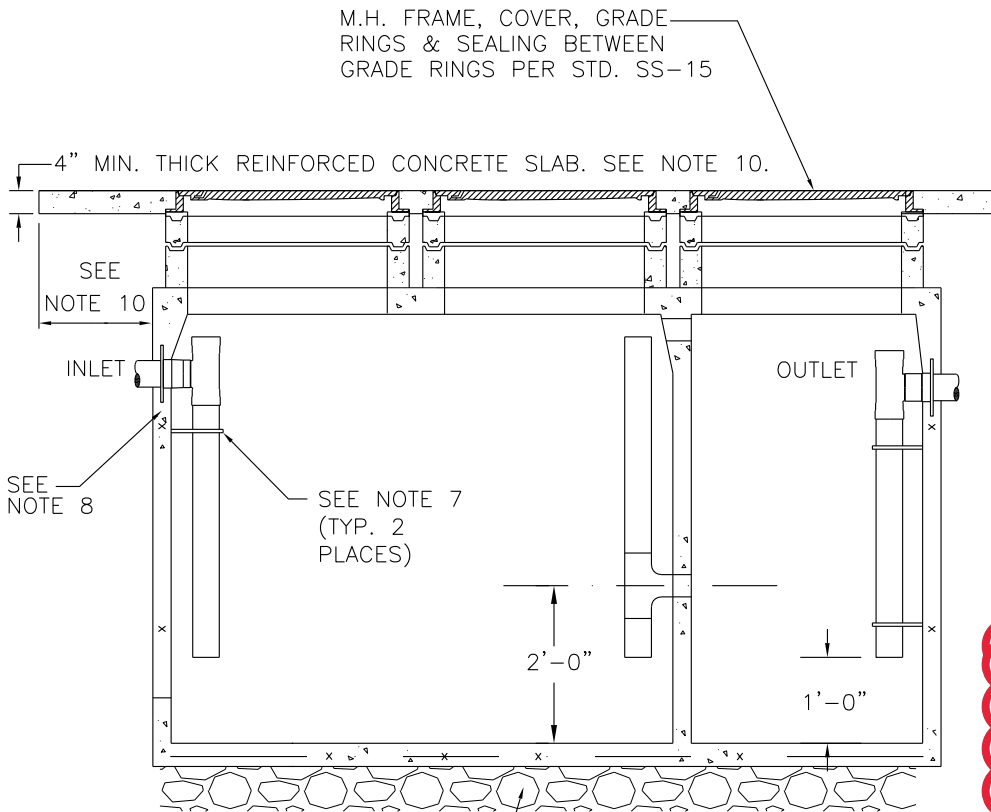
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45° WYE





PLAN



SECTION

NOTES:

1. PRE MANUFACTURED TANK SHALL BE PER STANDARDS.
2. ALL GREASE INTERCEPTORS SHALL BE LOCATED OUTSIDE PUBLIC RIGHT-OF-WAY EXCEPT WITH WRITTEN APPROVAL OF THE DISTRICT.
3. GREASE INTERCEPTORS SHALL BE LOCATED OUTSIDE OF BUILDINGS IN A LOCATION ACCESSIBLE TO WASTEHAULER PUMPER. LOCATION SUBJECT TO THE APPROVAL OF DISTRICT.
4. TANK CAPACITY TO BE DETERMINED AT THE TIME OF PERMIT APPLICATION.
5. ALTERNATE DESIGN BY A REGISTERED ENGINEER MAY BE SUBMITTED FOR REVIEW BY THE DISTRICT.
6. INTERCEPTOR TO BE USED IN CONJUNCTION WITH "SAMPLING MANHOLE", DETAIL SS-23.
7. STAINLESS STEEL CLAMP AND BOLTS 3'-0" O.C. MAX. (TYP.). MIN. 2 REQUIRED.
8. A WATERSTOP CONSISTING OF A STANDARD MANHOLE ADAPTER GASKET AS SUPPLIED BY THE PIPE MANUFACTURER SHALL BE GROUTED INTO THE INTERCEPTOR WALL NEAR THE CENTER OF THE INLET AND OUTLET WALLS.
9. PLACE 6" MIN. 3/4" X 1/2" CLEAN CRUSHED ROCK.
10. CONCRETE SLAB TO EXTEND MIN. 24" BEYOND ALL SIDES OF TANK IN TRAFFIC AREAS. SLAB SHALL BE DESIGNED AND APPROVED FOR HS20 RATING FOR TRAFFIC AREAS.
11. INSTALL INTERCEPTOR PER MANUFACTURER'S SPECIFICATIONS.
12. PIPE AND FITTINGS TO BE SCHEDULE 40 PVC AND MATCH LATERAL SIZE.
13. ALL SURFACE WATER MUST DRAIN AWAY FROM MANHOLES.
14. ALL WASTE MUST ENTER THROUGH INLET FITTINGS ONLY.
15. PROTECTIVE COATING SHALL COVER ALL INTERNAL SURFACES AND MEET THE CRITERIA OF ASTM D1315.
16. IF VENTING IS REQUIRED, VENT PIPING SHALL BE CONNECTED TO THE INLET PIPING OUTSIDE THE INTERCEPTOR VAULT. VENT PIPING SHALL NOT BE CONNECTED TO THE VAULT OR CORED INTO THE VAULT.

NAPA SANITATION DISTRICT



TITLE

**TWO STAGE  
GREASE  
INTERCEPTOR**

DATE: JUN 2022

CHECKED BY: AD

APPROVED BY: TH

SCALE: NONE

DRAWING NO.

**SS-22**