CURRENT HOMER CITY CODE CHAPTERS 13.24 & 13.28

Chapter 13.24
SANITARY SYSTEMS

Sections:

13.24.010 Applicability and definitions.

13.24.020 Materials – Gravity line.

13.24.030 Materials – Pressurized line.

13.24.040 Construction and installation – Gravity line.

13.24.050 Construction and installation – Pressurized line.

13.24.010 Applicability and definitions.

a. This chapter is limited to sewer service installations within public easements and rights-of-way.

b. Definitions. For the purposes of this chapter, the following words and phrases shall have the meanings set forth below:

Directly Adjacent. A sewer main is “directly adjacent” to a lot when the sewer main is located in an easement or right-of-way that is adjacent to the lot, and either (1) the sewer main extends the entire length of the frontage of the lot along the easement or right-of-way; or (2) the sewer main extends at least 10 feet into the easement or right-of-way adjacent to the lot, and the Public Works Director has determined that at no time will the sewer main be extended to serve additional lots.

“Temporary connection” means a line that connects a lot to a sewer main that is not directly adjacent to the lot.

13.24.020 Materials – Gravity line.

This section is limited to utility sewer service connections and does not apply to sewer mains.

a. Ductile iron sewer pipe (DIP) class 50 conforming to ASTM A-746, AWWA STD. C-151 and AWWA STD. C-104; or

b. Cast iron soil pipe and fittings conforming to ASTM A-746; or

c. No-hub cast iron soil pipe and fittings conforming to AA group 022;

d. U.S. Tyton joints systems (TYSEAL) U.S. Pipe Co. or equal are approved;

e. All Tyton joints seals must be made with tools specifically designed for that purpose;

f. No-hub sewer service couplings: size four-inch approved only;

g. Cast iron flanges and saddles, male or female, with either single stainless steel band or double band clamp are approved.

13.24.030 Materials – Pressurized line.

This section is limited to utility sewer service connections requiring pressurized flow or life and does not apply to sewer mains.

a. No galvanized pipe shall be used.

b. Standard size two-inch HDPE socket fused polyethylene plastic pipe and fittings are approved. Qualified as type III, category 5, class C, grade P34 in ASTM D-1248 with a design pressure rating of 100 psi minimum. Pipe shall be SCLAIRCOR series 100 or equal.

13.24.040 Construction and installation – Gravity line.

This section is limited to gravity sewer service installation.

a. Five-foot minimum bury unless specifically allowed by the Public Works Inspector; except, that in roadway, the minimum bury is seven feet. In cases allowed, rigid board insulation of two-inch thickness minimum by 24 inches wide shall be placed six to 12 inches above the component on top of the bedding/backfill and centered in line with the component.

b. The service line stubouts shall be placed on the property line or utility line as applicable. No service shall be placed closer than five feet to any property line not parallel to the main line.

c. The sewer service line must have a minimum horizontal separation of 10 feet from any water service line, fire hydrant, or main line valve.

d. The contractor shall install the service at 90 degrees to the street main line whenever possible.

e. The service line may not cross property lines, except where the line comes from the main line in the public rights-of-way to the property being served, except with the written permission of the Public Works Director.

f. A lot may be connected only to a sewer main that is directly adjacent to the lot.

g. Within the time provided in this subsection, a temporary connection shall be disconnected at the sewer main and replaced with a connection to a sewer main that is directly adjacent to the lot, at the expense of the lot owner. Upon connecting to the directly adjacent sewer main, the lot shall bear a portion of the cost of constructing the directly adjacent sewer main on the same basis as other lots that receive access to sewer service through the construction.

1. If there is no sewer main directly adjacent to the lot as of the effective date of the ordinance codified in this subsection, the temporary connection shall be replaced no later than one year after a sewer main directly adjacent to the lot is placed in service; provided, that the replacement shall be made during construction of the directly adjacent sewer main when necessary to maintain sewer service to the lot. The City shall notify a lot owner of the owner's obligations under this subsection before commencing construction of the sewer main.

2. If there is a sewer main directly adjacent to the lot as of the effective date of the ordinance codified in this subsection, the temporary connection shall be replaced no later than one year after the effective date of the ordinance codified in this subsection. The City shall notify a lot owner of the owner's obligations under this subsection within 60 days after the effective date of the ordinance codified in this subsection.

h. All taps into the main line must be made with tools designed specifically for that purpose and must be sized correctly for the specific sewer service connection. Only hole-cutter type tools such as manufactured by Pilot may be used to tap the main. Cutoff saws will not be allowed.

i. The City of Homer will not rent or loan any tools for sewer service installation except in the case of emergency as determined by the Public Works Director or his appointed agent.

j. The tap into the main shall be at approximately 45 degrees above horizontal.

k. A sweep of 22.5 degrees to 45 degrees shall be installed above the main to attain the proper elevation and grade.

l. The pipe shall continue at a continuous grade of one percent to three percent until under the foundation of the structure served. In some cases, 22.5-degree drops may be approved as determined by the Public Works Inspector.

m. No floor drains, drain tile systems nor other devices may be connected to the sewer system by a service or directly which would allow the entry of rain water or runoff water into the system.

n. Grease traps and sand traps shall be installed by the most recent State-accepted Uniform Plumbing Codes.

o. Cleanouts shall be installed at bends greater than 45 degrees. No service line may continue over 100 feet without a cleanout being installed as measured from the main line.

p. Backflow-prevention devices shall be installed where the potential for backflow exists as the result of flooding or blockage of the sewer system.

q. Cleanouts shall be covered with the appropriate cap.

r. The work must be free of leaks and flaws.

s. The bottom of the excavation and/or bedding must be uniformly graded, and free of dips, bumps and large rocks.

t. The trench shall be kept free of water at all times by pumping if required.

u. In the event that ductile iron pipe is used for the service pipe, it shall be carried into position and not dragged. It shall be lowered into the excavation by means of a sling in such a manner that it is not dropped nor the pipe or fitting coating injured. The full length of the pipe shall rest on the bottom of the excavation with a recess allowed for the joint. While work is in progress, the open ends of the pipe shall be kept plugged so no trench water, dirt or foreign matter enters the pipe. Where the pipe coating or lining are damaged, they shall be repaired by the contractor in a satisfactory manner. All pipe joints shall be lubricated with Johns-Manville pipe joint lubricant or an Inspector-approved equal.

v. The backfilling shall be done in such a manner as to assure that neither large rocks nor frozen lumps fall on the pipe. All sewer lines and components shall be bedded, backfilled and compacted to 95 percent of maximum material density. Only classified material shall be used for bedding and backfill as determined by the Public Works Inspector. In some cases, suitable bedding and/or backfill material may be encountered in the excavation and imported material may not be required as determined by the Public Works Inspector.

w. No extension of a sewer service line may be made even on private property without the approval of the Public Works Inspector so that appropriate sizing, inspection and as-built records can be made.

x. The public rights-of-way must be restored to their original condition before a service is accepted.

y. No service will be accepted without copies of the required as-built plans, records and test data.

13.24.050 Construction and installation – Pressurized line.

This section is limited to utility sewer service connections with pressurized flow from a private service requiring a lift station.

a. The plans and specifications for the lift station must be reviewed and approved by the Public Works Inspector and the requirement for any specific lift station installation must be approved by the Public Works Director.

b. Seven-foot minimum bury unless specifically allowed by the Public Works Inspector. In cases allowed, rigid four inches wide shall be placed six to 12 inches above the component on top of the bedding/backfill and centered in line with the component.

c. The service line shall be placed on the property line or utility easement line as appropriate. No service shall be placed closer than five feet to any property line not parallel to the main line.

d. The sewer service line must have a minimum horizontal separation of 10 feet from any water service line, fire hydrant or main line valve.

e. The contractor shall install the service at 90 degrees to the street main line whenever possible.

f. The service line may not cross property lines, except where the line comes from the main line in the public rights-of-way to the property being served.

g. Service to property that does not have a main directly adjacent to it will require a design review, a special permit and an installation agreement approved by the Public Works Director. Generally this applies to property where no other main line will be considered to serve the property.

h. The sewer service line shall be minimum of two-inch diameter polyethylene pipe. Larger sewer service lines shall be required as the Public Works Inspector determines necessary.

i. All taps into the main line must be made with tools designed specifically for that purpose and must be sized correctly for the specific sewer service connection. Only hole-cutter type tools such as manufactured by Pilot may be used to tap the main. Cutoff saws will not be allowed.

j. The City of Homer will not rent or loan any tools for sewer service installation except in the case of emergency as determined by the Public Works Director or his appointed agent.

k. The tap into the main shall be at approximately 45 degrees above horizontal.

l. Saddles shall be cast iron male for female with either single stainless steel band or double clamp.

m. Use flanged couplings for terminating polyethylene service line at the sewer main service saddle arrangement.

n. Grease traps and sand traps shall be installed by the most recent State-accepted Uniform Plumbing Codes.

o. The work must be free of leaks and flaws.

p. The bottom of the excavation and/or bedding must be uniformly graded, and free of dips, bumps and large rocks.

q. The trench shall be kept free of water at all times by pumping if required.

r. The backfilling shall be done in such a manner as to assure that neither large rocks nor frozen lumps fall on the pipe. All sewer service lines and components shall be bedded, backfilled and compacted to 95 percent of maximum material density. Only classified material shall be used for bedding and backfill as determined by the Public Works Inspector.

s. No extension of a sewer service line may be made even on private property without the approval of the Public Works Inspector so that appropriate sizing, inspection and as-built records can be made.

t. The public rights-of-way must be restored to their original condition before a service is accepted.

u. No service will be accepted without copies of the required as-built plans, records and test data.

Chapter 13.28
WATER SYSTEMS

Sections:

13.28.010 Applicability and definitions.

13.28.020 Materials.

13.28.030 Water service construction and installation.

13.28.040 Operation of water valves, fire hydrants and curb stops.

13.28.050 Water meter installation.

13.28.060 Backflow and cross-connection prevention.

13.28.010 Applicability and definitions.

a. This chapter is limited to:

1. Water service installations;

2. Water service meter installations; and

3. Backflow and cross-connection prevention.

b. Definitions. For the purposes of this chapter, the following words and phrases shall have the meanings set forth below:

Directly Adjacent. A water main is “directly adjacent” to a lot when the water main is located in an easement or right-of-way that is adjacent to the lot, and either (1) the water main extends the entire length of the frontage of the lot along the easement or right-of-way; or (2) the water main extends at least 10 feet into the easement or right-of-way adjacent to the lot, and the Public Works Director has determined that at no time will the water main be extended to serve additional lots.

“Temporary connection” means a line that connects a lot to a water main that is not directly adjacent to the lot.

13.28.020 Materials.

a. Water Line. This subsection is limited to utility water service connections and does not apply to water mains.

1. No galvanized pipe shall be used.

2. Three-fourths-inch to two-inch service lines shall be Schedule K, flexible soft copper, conforming to ASTM B-88.

3. Four-inch and larger service lines shall be ductile iron water pipe (DIWP), class 52, conforming to AWWA STD. C-151 and AWWA STD. C-104.

b. Water Service Valves.

1. No galvanized parts shall be used.

2. Corporation stops shall be flare-type brass only; Mueller Co. only are approved.

3. Curb stops shall be flare-type brass only; Mueller Co. only are approved.

4. Curb boxes: Mueller Co. only are approved (must be furnished with stationary operating rods).

5. Valves four inches and larger shall be mechanical joint, 250 pound test pressure rated. Mueller Co. only are approved.

c. Fittings.

1. No galvanized fittings shall be used. Use brass, stainless steel, cast iron or ductile iron only, 250 pound test pressure rated.

2. Three-part unions must be flare-type brass. Mueller Co. only are approved.

d. Thaw Wire. Thaw wire shall be solid or braided, rubber-covered or plastic-covered No. 2 copper cable.

13.28.030 Water service construction and installation.

This section is limited to water service installations.

a. Seven feet is minimum bury unless specifically allowed by the Public Works Inspector. In cases allowed, rigid board insulation with two-inch thickness minimum by 24 inches wide shall be placed six to 12 inches above the component on top of the bedding/backfill and centered in line with the component.

b. The service line may not be placed within five feet of any property line not parallel to main line.

c. The water service line must have a minimum horizontal separation of 10 feet from any sewer service line.

d. The contractor shall install the service at 90 degrees to the street main line whenever possible.

e. The service line may not cross property lines, except where the line comes from the main line in the public rights-of-way to the property being served.

f. A lot may be connected only to a water main that is directly adjacent to the lot.

g. Within the time provided in this subsection, a temporary connection shall be disconnected at the water main and replaced with a connection to a water main that is directly adjacent to the lot, at the expense of the lot owner. Upon connecting to the directly adjacent water main, the lot shall bear a portion of the cost of constructing the directly adjacent water main on the same basis as other lots that receive access to water service through the construction.

1. If there is no water main directly adjacent to the lot as of the effective date of the ordinance codified in this subsection, the temporary connection shall be replaced no later than one year after a water main directly adjacent to the lot is placed in service; provided, that the replacement shall be made during construction of the directly adjacent water main when necessary to maintain water service to the lot. The City shall notify a lot owner of the owner's obligations under this subsection before commencing construction of the water main.

2. If there is a water main directly adjacent to the lot as of the effective date of the ordinance codified in this subsection, the temporary connection shall be replaced no later than one year after the effective date of the ordinance codified in this subsection. The City shall notify a lot owner of the owner's obligations under this subsection within 60 days after the effective date of the ordinance codified in this subsection.

h. The water service line shall be a minimum of three-fourths-inch diameter. Larger water service lines shall be required as the Public Works Inspector determines necessary.

i. No three-part union will be allowed closer than 60-foot intervals either side of the curb box.

j. A curb box shall be installed at the property line adjoining the public rights-of-way or on the utility easement line as appropriate.

k. Curb box shall extend zero to three inches above the finish grade.

l. All taps into the main line must be made with tools designed specifically for that purpose and must be sized correctly for the specific water service connection.

m. The City of Homer will not rent or loan any tools for water service installation except in the case of emergency as determined by the Public Works Director or his appointed agent.

n. The bottom of the excavation and/or bedding must be uniformly graded, and free of dips, bumps and large rocks.

o. The trench shall be kept free of water at all times by pumping if required.

p. The service line must be laid in the ditch with slack for expansion if required.

q. A thaw wire shall be attached to the corporation stop if such stop is designed for this attachment. If the corporation stop is not designed for direct attachment, a brass or copper grounding clamp shall be installed on the copper tubing as close as possible to the corporation stop and the thaw wire attached to the ground clamp.

r. The thaw wire shall be laid in the ditch with slack for expansion or ground movement and surface at the curb box with enough excess to permit easy location and attachment of an electric thawing device.

s. There shall be no breaks or splices in the thaw wire.

t. The work must be free of leaks and flaws.

u. The water service connections, corporation stops, curb stops and all joints will be pressure tested at static main line pressure for 10 minutes and inspected by the Public Works Inspector before backfilling is allowed.

v. All water service lines and components shall be bedded, backfilled and compacted 95 percent of maximum material density. Only classified material shall be used for bedding and backfill as determined by the Public Works Inspector. In some cases, suitable bedding or backfill material may be found in the excavation and imported material may not be required as determined by the Public Works Inspector.

w. Backfilling shall be done in such a manner as to assure that no large rocks or frozen lumps fall on the pipe or components.

x. No extension of a water service line may be made even on private property without the approval of the Public Works Inspector so that appropriate sizing, inspection and as-built records can be made.

y. In the event that ductile iron pipe is used for the service, pipe shall be carried into position and not dragged. It shall be lowered into the excavation by means of slings in such a manner that it is not dropped, nor are the pipe or fitting coating injured. The full length of the pipe shall rest firmly along the bottom of the excavation with a recess allowed for the joint. While work is in progress, the open ends of the pipe shall be kept plugged so no trench water, dirt or other foreign substance enters the pipe. Where pipe coating or lining are disturbed, they shall be repaired in a satisfactory manner. A valve shall be located at the property line or utility easement line as applicable to shut off the service in place of a curb box. No thaw wire shall be required. The valve shall be securely tied back to the main, using two runs of three-fourths-inch all thread, coated with a galvanized spray or

bituminous material. The main shall be joined using a cast iron tee and, if necessary, a cast coupling. The tee shall be property thrust block against the undisturbed ditch using only property sized concrete thrust blocks. Wooden blocks shall not be permitted. If a poured-in-place block is used, all fittings shall be wrapped in sheet plastic and care taken to see that all bolts are accessible. The valve box top shall be flush with the finish grade. All pipe and fittings shall be sanitized during installation. After installation, the line is to be flushed in the presence of the Inspector to his satisfaction. All joints shall be lubricated with Johns-Manville pipe joint lubricant or Inspector-approved equal.

z. The public rights-of-way must be restored to their original condition before a service is accepted.

aa. No service will be accepted without copies of the required as-built plans, records, and test data.

13.28.040 Operation of water valves, fire hydrants and curb stops.

Only authorized City personnel shall operate water valves, fire hydrants or curb stops.

13.28.050 Water meter installation.

a. The meter shall be the size and model indicated by the Public Works Inspector.

b. Fittings on the meter shall be screw-type bronze or brass for brass meters and screw-type plastic for plastic meters.

c. The meter shall be installed in a horizontal and upright position.

d. The meter shall be in a warm dry place above groundwater, easily accessible, preferably inside the building structure.

e. The shutoff valve shall be installed immediately before the meter on the incoming service line for customer use.

A pressure regulator provided by the City must also be installed between this valve and the meter on all installations with a distribution system pressure of more than 80 pounds per square inch (P.S.I.) and the pressure must be regulated at 60 pounds per square inch (P.S.I.) or less.

f. An appropriate backflow-prevention device shall be installed immediately after the meter on the outgoing service line.

g. Water meters shall be installed prior to providing any service to a water utility customer.

h. The City of Homer shall have the right to install a meter remote on the building in any location the City deems most appropriate.

i. Water meters remain the property of the City of Homer. The initial fee for the meter is a one-time rental fee. The customer is responsible for normal protection of the meter and/or generator from external damage and freezing. Internal wear and failure of the meter and/or generator due to normal use will be the responsibility of the City. Customers shall provide reasonable access for City personnel and to make necessary repairs.

j. All water sold must be metered.

k. All plumbing parts, processes, and installation and workmanship shall be in accordance with current State-approved Uniform Plumbing Codes (UPC).

13.28.060 Backflow and cross-connection prevention.

a. All connections to the public potable water system shall have an approved backflow-prevention device where required in accordance with the minimum requirements listed below.

b. All devices recommended in this section are minimum standards and thus the requirements for backflow-prevention may be made more stringent should the Public Works Director deem it necessary or appropriate.

c. The location and type of the backflow-prevention devices shall be approved by the Public Works Inspector.

d. All backflow-prevention devices or the installation of the devices, excepting residences (single-family and duplex), shall include test cocks and shutoff valves for testing the device for correct and continuous function. Annual tests shall be made to verify that the device is functioning correctly and continuously. The owner shall be responsible for making these tests and for the maintenance of the device and shall maintain a record of these tests in a form suitable to the City and shall submit the records to City upon request.

e. The City has the right to inspect all installations and structures, and to review plumbing plans to determine compliance with the backflow and cross-connection prevention requirements. The City has the right to reject the devices or installations not in compliance with the requirements and has the right to disapprove the plumbing plans if not in compliance with the requirements.

f. All boiler make up water feed systems must have an approved reduced-pressure type backflow-prevention device.

g. Minimum Requirement for Backflow-Prevention.

	Structure of System	Recommended Device
1.	Residences	(Single-family and duplex) Single check valve at meter and a reduced-pressure/air break vented device (Watts series 9D or equal), at boiler feed line.
2.	Hotels, apartments, public and private buildings	Air-gap separation or reduced-pressure device.
3.	Canneries, packing houses and reduction plants	Air-gap separation or reduced-pressure device.
4.	Chemical plants	(Same as above)
5.	Chemically contaminated water systems	(Same as above)
6.	Civil works	Air-gap separation or reduced-pressure device or double check valve, depending on the situation.
7.	Dairies and cold storage plants	(Same as above)
8.	Film laboratories	Air-gap separation or reduced-pressure device.
9.	Fire systems	Air-gap separation or reduced-pressure device or double check valve, depending on the situation.
10.	Hospitals, medical buildings, sanitariums, morgues, mortuaries, autopsy facilities, nursing and convalescent homes and clinics	(Same as above)
11.	Waterfront facilities and industries	(Same as above)
12.	Oil and gas production storage or transmission properties	Air-gap separation or reduced-pressure device.
13.	Plating plants	(Same as above)
14.	Power plants	(Same as above)
15.	Radioactive materials or substances plants or facilities handling	(Same as above)
16.	Restricted, classified or other closed facilities	(Same as above)
17.	Schools and colleges	(Same as above)

Structure of System	Recommended Device
18. Sewage and storm drain facilities	(Same as above)

h. All devices must be approved by the State and the Public Works Department.

i. All installations shall be done to conform to all applicable City and State building and plumbing codes.