

STANDARD SPECIFICATIONS

SECTION 01045

EXISTING FACILITIES

PART 1 - GENERAL

A. Description

This section includes requirements for connection to and abandonment of existing District facilities.

B. Related Work Specified Elsewhere

All related work specified elsewhere, or in other codes or standards, will be as last revised, unless a specific date of issuance is called out in opposition to later revision date(s).

Other sections of the technical specifications, not referenced below, shall also apply to the extent required for proper performance of this work.

- 1. Trenching, Backfilling, and Compacting: 02223
- 2. Chlorination of Domestic Water Mains and Services for Disinfection: 15041
- 3. Hydrostatic Testing of Pressure Pipelines: 15042
- 4. Manual Valves: 15100
- 5. Hot Tap Connections 15050

C. Condition of Existing Facilities

The District does not warranty the condition, size, material, and location of existing facilities.

D. Location

The contractor shall be responsible for potholing and verifying in advance the location of all existing pipelines as shown on the plans. Discrepancies shall be reported to the project engineer, prior to the fabrication of, or purchase of material affected by the discrepancy.

E. Protection of Existing Utilities and Facilities

- 1. The contractor shall be responsible for the care and protection of all existing sewer pipe, water pipe, gas mains, culverts, power or communications lines, sidewalks, curbs, pavement, or other facilities and structures that may be encountered in or near the area of the work.

2. It shall be the duty of the contractor to notify Underground Service Alert and each agency of jurisdiction and make arrangements for locating their facilities prior to beginning construction.
3. In the event of damage to any existing facilities during the progress of the work and of the failure of the contractor to exercise the proper precautions, the contractor will pay for the cost of all repairs and protection to said facilities. The contractor's work may be stopped until repair operations are complete.

F. Protection of Landscaping

1. The contractor shall be responsible for the protection of all the trees, shrubs, irrigation systems, fences, and other landscape items adjacent to or within the work area, unless they are directed to do otherwise on the plans.
2. In the event of damage to landscape items, the contractor shall replace the damaged items in a manner satisfactory to the District representative and the owner, or pay damages to the owner as directed by the District.
3. When the proposed pipeline is to be within planted or other improved areas in public or private easements, the contractor shall restore such areas to the original condition after completion of the work. This restoration shall include grading, a placement of 5 inches of good topsoil, resodding, and replacement of all landscape items indicated.
4. If the contractor does not proceed with the restoration after completion of the work or does not complete the restoration in a satisfactory manner, the District reserve the right to have the work done and to charge the contractor for the actual cost of the restoration including all labor, material, and overhead required for restoration.

G. Permits

All work shall conform to the specifications and requirements of the State of California Department of Transportation, the Orange County PFRD, the city having jurisdiction, or the other affected agencies involved. The contractor shall keep a copy of all the required permits in the job site and comply with all the terms and conditions of said permits.

PART 2 - MATERIALS

All materials used in making the connection or removing the facility from service shall conform to the applicable sections of these specifications.

A. Grout

Grout shall consist of Portland cement and water or of Portland cement, sand, and water; and all grout mixtures shall contain 2% of bentonite by weight of the cement. Grout shall be a pump mix with a minimum of six sacks cement (564 lbs) per cubic yard.

Portland cement, water and sand shall conform to the applicable requirements of the concrete section (Section 03300), except that sand to be used shall be of such fineness that 100% will pass a standard 8-mesh sieve and at least 45%, by weight, will pass a standard 40-mesh sieve.

B. Concrete

Concrete used for the replacement of damaged or removed facilities shall be in accordance with Section 03300 and shall match the mix design of the existing facility and per the requirement of the jurisdictional agency.

PART 3 - EXECUTIONA. Connection to Existing Facilities

1. All connections shall be made by the contractor unless shown otherwise on the plans or specified herein.
2. The contractor shall notify the District a minimum of two working days before the time of any proposed shutdown of existing mains or services. The District inspector may postpone or reschedule any shutdown operation if for any reason he feels that the contractor is improperly prepared with competent personnel, equipment, or materials to proceed with the connection work.
3. Connections shall be made only in the presence of the District, and no connection work shall proceed until the District has given notice to proceed. If progress is inadequate during the connection operations to complete the connection in the time specified, the District shall order necessary corrective measures. All costs for corrective measures shall be paid by the contractor.
4. The contractor shall furnish all pipe and materials including furnishing all labor and equipment necessary to make the connections, all required excavation, backfill, pavement replacement, lights, and barricades, and may be required to include a water truck, high line hose, and fittings as part of this equipment for making the connections. In addition, the contractor shall assist the District in alleviating any hardship incurred during the shutdown for connections. Standby equipment or materials may be required by the District representative.
5. The contractor will de-water existing mains, as required, in the presence of the District representative.
6. Connections shall be made with as little change as possible in the grade of the new main. If the grade of the existing pipe is below that of the new pipeline, a sufficient length of the new line shall be deepened so as to prevent the creation of any high spot or abrupt changes in grade of the new line. Where the grade of the existing pipe is above that of the new pipeline, the new line shall be laid at specified depth, except for the first joint adjacent to the connection, which shall be deflected as necessary to meet the grade of the existing pipe. If sufficient change in direction cannot be obtained by the limited deflection of the first joint, a fitting of the proper angle shall be installed. Where the connection creates a high or low spot in the line, a standard air release or blow off assemble shall be installed as directed by the District representative.
7. Where connections are made to existing valves, the contractor shall furnish and install all temporary blocking, steel clamps, shackles, and anchors as required by the District, and he shall replace the valve riser box and cover and adjust the valve cover to the proper grade in accordance with these specifications. The District will operate all existing valves. All valves, existing or newly installed, shall be readily accessible at all times to the District for emergency operation.

8. New pipelines shall not be connected to existing facilities until the new pipelines have been successfully tested, disinfected and accepted by the District.
9. Tapping connection can be made to the existing system while it is either in service or shut down depending on the District's prior direction. A tapping valve shall be used when the existing system is maintained in service during connection. Tapping shall be in accordance with the specification requirements for the pipe being tapped.
10. All saddle connections into existing sewerlines shall be made with a wye saddle. Saddles shall conform to the applicable provisions of the section for the existing sewerline material.

B. Removal from Service of Existing Mains and Appurtenances

1. Existing mains and appurtenances shall be removed from service at the locations shown on the plans or as directed by the District representative.
2. Abandoned pipe shall be filled with grout.
3. Existing pipe and appurtenances removed from the ground will require backfill and repair of surface in accordance with Section 02223.
4. Removed pipe and appurtenances shall be temporarily stockpiled on the job in a location that will not disrupt traffic or be a safety hazard, disposed of in a proper manner (as determined by the District representative). The contractor shall remove and dispose of all removed pipe at his own expense.
5. Before excavating for installing mains that are to replace existing pipes and/or services, the contractor shall make proper provisions for the maintenance and continuation of service as directed by the District representative unless otherwise specified.
6. If the meter box is to be removed from an abandoned water service, the service line is to be removed and the corporation stop closed and capped. If there is no corporation stop on the service, the adapter is to be removed and a brass plug is to be installed in the service saddle.
7. Asbestos Cement Pipe (ACP) shall be cut, removed and disposed of in a proper manner. The contractor will be responsible for the proper manifesting of the ACP at an authorized disposal site. See Section 15072 for additional requirements.

C. Cutting and Restoring Street Surfacing.

1. In cutting or breaking up street surfacing, the contractor shall not use equipment that will damage adjacent pavement.
2. All asphalt and/or portland cement concrete surfaces shall be scored with sawing equipment of a type meeting the approval of the District; providing however, that any cement concrete base under an asphaltic mix surface will not be required to be scored by sawing. Existing paving surfaces shall be saw cut back beyond the edges of the trenches to form neat square cuts before repaving is commenced.
3. Pavement, sidewalks, curbs, or gutters removed or destroyed in connection with performance of the work shall be saw cut to the nearest score marks, if any, and shall be

replaced with pavement sidewalks, curbs, or gutters of the same kind, or better by the contractor in accordance with the latest specifications, rules, and regulations and subject to the inspection of the agency having jurisdiction over the street or highway.

4. Aggregate base shall be placed beneath the restored pavement to the thickness required by the agency having jurisdiction.

END OF SECTION