

**CITY OF SUNNYVALE
PUBLIC WORKS DEPARTMENT/ENGINEERING DIVISION**

ABANDONMENT NOTES:

SEWERS:

1. Abandon in-place any un-used existing sanitary sewer lateral pipe from back of the curb to the sewer main.
2. Any existing pipe occupying the same trench that will be used by a new line must be removed and cannot be abandoned in place.
3. Any pipe to be abandoned, main line or service lateral, is to be separated to create a minimum of three feet separation from the nearest active main line segment.
4. In the event of a service lateral disconnection from an active main, or an inactive main disconnection from an active main in the absence of a manhole, the active main shall be repaired as follows:
 - (a) If the original lateral connection was made with a factory "wye", then the "wye" is intact and undamaged shall be sealed appropriately to prevent material or water intrusion.
 - (b) If the original lateral connection was made in any other fashion besides a factory "wye" or the factory "wye" is damaged, then the active sewer main section shall be replaced to eliminate the existing connection point in order to adequately seal the main.
 - (c) The main section to be replaced shall extend to the **nearest factory pipe "bell" or joint** as applicable.
5. Fill abandoned pipe with backfill material: sand, or controlled density fill (CDF) such as flowable fill, controlled low-strength material (CLSM), flowable mortar, plastic soil-cement, soil-cement slurry, or K-Krete. CDF must have unconfined compressive strength of 100 psi or less to allow for future excavation of the area.
6. If sand is used to fill abandoned pipe, securely close each pipe end by installing a watertight plug of concrete, controlled density fill (CDF), controlled low-strength material (CLSM), flowable mortar, plastic soil-cement, soil-cement slurry, or K-Krete not less than two feet in length.
7. Pipes to be abandoned that are non-continuous or broken by construction activity are to be repaired sufficiently to contain the selected abandonment backfill material. If such repairs are impractical or infeasible, the pipe(s) shall be removed and disposed.
8. Seal un-used pipe(s) at the back of the curb per Green Book section 306-5 or to the city's satisfaction.
9. Un-used pipes between the curb and the right-of-way are to be removed and disposed (not abandoned in place).
10. Salvage and arrange the existing facilities (i.e., manhole covers, manhole frames, etc.) to be picked up by the City's Environmental Services Department by prior arrangement.

WATER LINES:

1. Coordinate with Environmental Services Department/Water Operations at 408-730-7900 for written notifications of water service interruption to all affected addresses 48-hours in advance.
2. Excavate to expose water mains and/or service lines as needed for work to be performed by the City. City crews to perform all actual disconnection and repair work on active City water mains, including operation of isolating necessary valves. Coordinate with Public Works Inspector in advance to schedule City's work.
3. Remove the valve can and riser pipe 18-inches below grade. If the valve operating nut is less than the 18-inches below grade then the valve bonnet must be removed to acquire the necessary clearance for proper abandonment.

4. Backfill and restore the roadway in accordance with City standards when work on the water main, valve or service is complete. Prior approval by the City is required for any after-hour inspections and/or shut downs.
5. For fire hydrant abandonment: remove the hydrant bury, breakoff rise, and any other spools or pipe 24-inches below grade. The bury is to be capped or plugged. Abandonments of fire hydrants to be approved by the City's fire protection engineer prior to abandonment.
6. Fill all water mains to be abandoned-in-place with sand/CLSM/concrete mix within the public right-of-way.
7. For service lines less than 4" diameter:
 - (a) Remove or abandon unused existing water service lines in place. Any portion of the service line that is less than 18" below grade shall be removed to the city's satisfaction.
8. For service lines 4" and larger in diameter:
 - (a) Remove or abandon unused existing water service lines in place. Any portion of the service line that is less than 18" below grade shall be removed to the city's satisfaction.
 - (b) Any service to be abandoned in place shall be filled with CLSM or other equivalent material and plugged with one-foot long concrete in both ends.
9. Ensure that all pipelines to be abandoned have a minimum of a three foot separation from the live portion of the water main (a section removed) line for pipes 4" and larger in diameter. The end of the pipe shall be securely sealed at the pipe ends by installing a watertight plug of concrete not less than one foot thick.
10. Coordinate with Public Works Inspector to ensure all domestic, fire and irrigation meters shall be removed and salvaged EXCLUSIVELY by the City and protected in place until City crews have removed them. After City removed the meters, remove entire box/vault and properly complete the backfill in accordance with City standards and requirements.

GENERAL:

1. Coordinate with City to properly remove or abandon in place unused existing City utility service lines discovered that were left in place by others.
2. Contact utility companies for removal, abandonment, adjustment or relocation of their facilities.
3. See demolition plans for removal of on-site improvements.
4. Contractor is responsible for verifying the location of any existing utilities.
5. Maintain and provide redline improvement plans to the engineer of record to identify all facilities that have been abandoned in place or removed for record drawings.