

CITY OF HAYWARD
Department of Public Works
Engineering Division

DIG ONCE POLICY
(For open trench construction only)

PURPOSE:

The purposes of implementing a Dig Once policy include:

- Protecting newly and recently paved roads and sidewalks;
- Ensuring efficient, non-duplicative placement of infrastructure in the Public Rights-of-Way (PROW);
- Minimizing the impact of construction on residential and commercial communities;
- Reducing the overall costs of all underground work in the PROW by capitalizing on significant economies of scale;
- Enhancing the uniformity of construction; and
- Leveraging construction for the deployment fiber within the City's Industrial Corridor and deployment of a public communications network.

BACKGROUND:

Coordinating the underground installation and co-location of infrastructure within the PROW benefits communities, businesses, and the City. The excavation of roads and cutting of sidewalks substantially reduces the service life, quality, and performance of those surfaces. Furthermore, each underground installation reduces the space available for future infrastructure. While aerial installation methods requiring attachments to utility poles are usually less expensive than underground installation, aerial installations have significant drawbacks. Those drawbacks include negatively impacting the aesthetics within the PROW, limited space on existing utility poles in more crowded areas, dealing with a lack of ownership of overhead infrastructure, and reliability issues as a result of exposure to outside conditions. Underground installation using protective conduit generally provides scalable, flexible, and durable long-term infrastructure.

POLICY DIRECTIVE:

1. Unless waived by the Public Works Director because of undue burden, or an unfavorable cost-benefit analysis, or the consideration of other relevant factors, the PROW Excavator/Permittee shall install two 3-inch diameter conduits for the following types of projects that have a minimum continuous open trench or directional bore length of 300 feet:
 - a) Excavations for the purpose of installing utilities, including but not limited to

- communications, electrical, gas, water, wastewater, or storm drainage; and
- b) Other excavations, or work on public property or in the public right-of-way that provide a similar opportunity to install conduit for future use.

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2. Unless the Public Works Director determines otherwise, the typical standard installation requirements are listed below:
 - a) 3-inch nominal diameter conduit.
 - b) Made of high density polyethylene (HDPE) with a standard dimension ratio (SDR) of 11.
 - c) Conduit will be laid to a depth of not less than 18 inches below grade in concrete sidewalk areas, and not less than 24 inches below finished grade in all other areas when feasible, or the maximum feasible depth otherwise.
 - d) When feasible and needed, install minimum 3-foot radius sweeps and bends.
 - E) Composite anti-theft vaults having dimensions of 30" x 48" x 36" (W x L x D), placed in the sidewalk or available green space within the city or municipality ROW, as close to the curb or gutter as possible and spaced at 600-foot intervals or less typically at street intersections.
 - F) Pull-rope shall be installed within each conduit or inner duct if required by the Public Works Director.
 - G) When practicable, furnish with 10 AWG insulated tracer wire inside at least one pipe and an external "warning" ribbon tape a minimum of 3-inches above the conduit.
 - H) All conduit couplers and fittings shall be installed to be watertight. Conduits shall be sealed with endcaps upon installation.
3. Conduits installed will be owned by the City.
4. A record of all City-owned conduits will be documented and transferred to the City for geographic information system (GIS) entry.
5. The PROW Excavator/Permittee should make a documented effort to work with other utility agencies to co-locate infrastructure in the same trench whenever feasible to minimize construction costs, minimize future public disruptions, and encourage efficient use of the PROW.
6. Each utility shall participate in periodic coordination meetings as requested by the City with other utilities and affected public agencies. The purpose of these meetings shall be to coordinate activity between public works projects and utility projects in the PROW. Refer to the City of Hayward Dig Once Policy Manual for more details on this requirement.

Effective Date: XXX, 2018