

## SECTION 01 50 00

## TEMPORARY FACILITIES AND CONTROLS

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Provide and maintain construction facilities and temporary controls as required to perform the Work; relocate as required by the progress of the Work.
  - 2. Unless otherwise required by the City, materials for construction facilities and temporary controls may be new or used, and shall be suitable for the purposes intended.
  - 3. Materials, installation and maintenance of construction facilities and temporary controls shall be in compliance with applicable regulatory requirements.
  - 4. Maintain construction facilities in sound, neat and clean condition. Remove any graffiti and repair any vandalism to the satisfaction of the City.
  - 5. Remove construction facilities and controls, including associated utilities and equipment, when their use is no longer required.
- B. Related Sections:
  - 1. Section 01 71 33 - Protection of Adjacent Construction.
  - 2. Section 01 77 00 - Closeout Procedures.

## 1.2 OPERATION HOURS FOR TEMPORARY CONTROLS

- A. Provide and maintain temporary pumping, piping, power, lighting, controls, instrumentation, alarms, security devices, and all required safety devices at all times. Such items shall be made available for immediate use when Contractor's operations impact existing systems.

## 1.3 TEMPORARY ELECTRICITY

- A. Provide and pay for electrical service and weatherproof, grounded distribution system of sufficient size, capacity, and power characteristics during the construction period. Existing on-site City electrical facilities are not available for contractor's use.

## 1.4 TEMPORARY LIGHTING

- A. Provide and maintain lighting for construction operations, including power to distribution boxes. Required illumination may be provided by approved cord sets with lamp guards. Provide and maintain temporary lighting whenever new permanent lighting fixtures are switched over from existing lighting.

## 1.5 TELEPHONE SERVICE

- A. The Contractor shall provide, maintain and pay for telephone service to Contractor's field office from the time of project mobilization.
- B. Provide and pay for telephone service for the City Representative's use as specified in Section 01 52 13 – Field Offices and Sheds.

## 1.6 TEMPORARY WATER SERVICE

- A. Potable Water: Arrange with the San Francisco Water Department to provide potable water obtained by connecting to City water systems.
  - 1. Contact the Water Department at 415-923-2400 for arranging such water service.
  - 2. Water is available from fire hydrants located in the streets. Obtain permission from the San Francisco Fire Department to use hydrants.
  - 3. Pay the costs of connection fees, meters, and all water furnished by the San Francisco Water Department under the water service account established above.
- B. The Contractor is advised that Ordinance # 175-91, Article 21, Section 1100 to 1107 of the San Francisco Municipal Code (Public Works Code), restricts the use of potable water for soil compaction or dust control activities, to the extent not directly in conflict with any applicable federal, state and local law.
  - 1. In consideration for potential health concerns, an exemption may be allowed for the use of potable water for soil compaction or dust control activities when human contact and exposure exists. Such exemption will be considered and may be granted on a case by case basis.
  - 2. Should the Contractor seek to use potable water for soil compaction or dust control activities, the Contractor, shall apply for, and obtain an exemption pursuant to Ordinance #175-91, Article 21, prior to its use. The application for such use of potable water is to be sent to the Department of Public Health, Environmental Health Section, 1390 Market St., Room 910, San Francisco, CA 94102, Telephone 415-252-3945. Permission for such use may be granted by the General Manager of the Water Department, pursuant to Ordinance #175-91, Article 21.
- C. Reclaimed Water: Arrange with the SEWPCP to provide reclaimed water for soil compaction and dust control which is available at no cost to Contractor at the SEWPCP from 8:00 A.M. to 5:00 P.M. on weekdays and Saturdays.
  - 1. Arrangements can be made for access to reclaimed water at other times.
  - 2. A permit is required to obtain reclaimed water from the City. Contact [mfisher@sfwater.org](mailto:mfisher@sfwater.org) and/or (415) 695-7378 at least three (3) days prior to the date that reclaimed water is required. See <http://sfwater.org/modules/showdocument.aspx?documentid=7234> for more information.
- D. The Contractor shall be required to provide his own water tanker and hoses. Contractor's hoses crossing traveled roadways shall be buried beneath the roadway or ramped over.
- E. Provide and maintain distribution piping, water tankers, hoses, and all appurtenances necessary to supply water at the job site.
  - 1. Bury pipe crossing traveled roadways beneath the roadway. Use hose or ramp over temporary piping on roadway surfaces.

## 1.7 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required toilet facilities and enclosures. Location of facilities shall be a minimum of 50 feet away from City Representative's Field Office or approved by the City Representative in the field.
- B. The Contractor shall be responsible to provide and maintain all construction facilities, temporary controls, and temporary utilities as required to perform the work of this Contract. The Contractor shall arrange with the utility agencies to provide and pay for

such utility services required, including furnishing, installing and removing on completion of all work all temporary connections to said utilities.

- C. The Contractor shall provide and maintain temporary toilet facilities and enclosures as required at no cost to the City.

#### 1.8 TEMPORARY CONSTRUCTION FENCE

- A. The Contractor shall furnish and install a temporary 6'-0" chain link construction fence with lockable gates at the limit of work and at areas to isolate and protect the public from hazardous conditions during construction.
- B. Provide fencing as needed to prevent unsafe entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
- C. Protect vehicular traffic, stored materials, site and structures from damage.

#### 1.9 TEMPORARY ENCLOSURES

- A. Provide temporary enclosure for protection of construction in progress and completed, from exposure, foul weather, other construction operations and similar activities.
  - 1. Where heat is needed and the permanent building enclosure is not complete, provide temporary enclosures where there is no other provision for containment of heat. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
  - 2. Install tarpaulins securely, with incombustible wood framing and other materials. Close openings of 25 square feet or less with plywood or similar materials.
  - 3. Close openings through floor or roof decks and horizontal surfaces with load-bearing wood-framed construction.

#### 1.10 MAINTENANCE OF THE WORK AREA

- A. Maintain the work areas in a safe condition, remove all accumulations of rubbish (Contractor's waste and public refuse) and surplus materials at the end of each working day, restore them to a condition equal to that which existed prior to the start of work, and leave them at completion of the contract in a clean, orderly fashion.
- B. Demolished concrete, deteriorated masonry, cleared vegetation, and excavated material not indicated for reuse shall be removed from the site at the end of each working day without delay and disposed of in a legal manner.
- C. Cleaning During Construction: Control accumulation of waste materials and rubbish; collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly.
  - 1. Clean interior spaces prior to the start of finish work; maintain areas free of dust and other contaminants during finishing operations.
  - 2. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material off-site in a lawful manner.
  - 3. Maintain the site and all adjacent public areas in a clean and orderly condition. Maintain the site, equipment, fences and signs free of graffiti. Remove all graffiti daily using methods which cause no damage to the work or existing facilities.
  - 4. Sweep all pedestrian walkways and dispose of debris around the site perimeter on a daily basis.

### 1.11 DRAINAGE CONTROL

- A. Grade site to drain. Maintain excavations free of standing water.
- B. Provide, operate, and maintain pumping equipment as needed to control water at the site.
- C. Protect site from erosion caused by flowing water.

### 1.12 CONFINED SPACE ENTRY

- A. It is the responsibility of the Contractor to provide all equipment or assistance to make the confined space safe for entry by the Engineer or his representative per The California Administration Code, Title 8, and General Industry Safety Orders Entitled "Confined Spaces".

### 1.13 TEMPORARY PROJECT SIGN(S)

- A. Project sign image and layout shall conform to the graphical layout and color approved by the City. Refer to the draft project sign appended to this Section 01 50 00 for sample layout and image. The City will provide the final graphical image of the project sign(s) in digital format to the Contractor prior to Notice to Proceed.
  - 1. The Contractor shall install **a total of 4 projects signs** at the limits of work facing traffic with **2** project signs in accordance with Paragraph H and and **2** project signs in accordance with Paragraph I below, respectively.
  - 2. For paving and utility construction projects, project sign(s) shall not obstruct or interfere with the operation of all traffic control devices. Project sign(s) shall be placed as directed by the City Representative and shall follow these general guidelines:
    - a. At each location of the Work not exceeding 5 adjacent blocks, place one sign at either end of the block facing oncoming traffic, or facing away from the limit of work on one-way streets.
    - b. At each location of the Work exceeding 5 adjacent blocks, place one sign at either end of the limit of work facing oncoming traffic, and at intermediate locations not to exceed 5 block intervals with one sign placed on either side of the street facing oncoming traffic, or at opposite directions on one-way streets.
- B. The Contractor shall obtain the City Representative's approval of the proposed location(s), height, and mounting details for each project sign. The project sign(s) may be mounted on construction fence, face of wall, or on posts.
- C. Contractor shall submit a mock-up of the project sign in color, on bond paper, 11x17 size, to the City Representative for approval prior to fabrication.
- D. After approval of the mock-up sign by the City, the Contractor shall install the required project sign(s) within 14 days, or as directed by the City Representative.
- E. The Contractor shall maintain project sign(s) in good condition for the duration of the contract.

- F. After substantial completion, Contractor shall remove each project sign from the site as its property, and restore area per plans or as directed by the City Representative at no additional cost to the City.
- G. Damaged project sign that cannot be repaired on site shall be replaced at no additional cost to the City.
- H. **ONESF Project Sign Fabrication**
1. Size: Project sign shall be 4-feet by 6-feet.
  2. Printing Specifications and Digital File: Project sign(s) shall match the final graphical layout provided by the City, including the colors and fonts. For more information, refer to the latest Sign Guidelines available from the following website: <http://onesanfrancisco.org/> (Click on "Data + Resources > Signage and Style Guide")
    - a. The design of the Contractor furnished project sign(s) shall be in strict accordance with the 'ONESF' Guidelines established by the City.
    - b. For further assistance, contact Heather Green of the Office of Resilience and Capital Planning at (415) 554-5162 or [heather.green@sfgov.org](mailto:heather.green@sfgov.org).
  3. Mounting Material: Project sign shall be mounted on Medium Density Overlay board (MDO), at least 3/4-inch thick.
  4. Printing: Project sign shall be printed on a 4-color CMYK printer.
  5. Coating: Use UV and Anti-Graffiti coatings.
  6. Quality: Project sign shall last the entire construction duration.
- I. **Caltrans SB-1 Project Sign Fabrication**
1. Size: Project sign shall be 48-inch by 30-inch for Local Roadways and 2-Lane Conventional Highways. <https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/sign-specifications/c/c48-ca-a11y.pdf>
  2. Printing Specifications and Digital File: Project sign(s) shall match the final graphical layout provided by the Caltrans, including the colors and fonts. For more information, refer to the latest Sign Guidelines available from the following website: <https://dot.ca.gov/programs/traffic-operations/pfi>
    - a. The design of the Contractor furnished project sign(s) shall be in strict accordance with the 'SB1' Guidelines established by the Caltrans.
    - b. For further assistance, contact Ashad Iqbal of Caltrans at (916) 654-2843 or [arshad.iqbal@dot.ca.gov](mailto:arshad.iqbal@dot.ca.gov).
  3. Mounting Material: Project sign shall be mounted on Medium Density Overlay board (MDO), at least 3/4-inch thick.
  4. Printing: Project sign shall be printed on a 4-color CMYK printer.
  5. Coating: Use UV and Anti-Graffiti coatings.
  6. Quality: Project sign shall last the entire construction duration.

#### 1.14 TEMPORARY TOW AWAY/NO-PARKING SIGNAGE

- A. On January 1, 2017, temporary occupancy permits and all other permits that include tow-away signage, aside from excavation permits activated through 311, will not be activated and permittees will not have tow away rights unless and until time and date stamped photos evidencing that signage was posted in the correct location a minimum of 72 hours prior to the time at which the parking restrictions are to become effective under the permit have been uploaded to the San Francisco Public Works, Bureau of Street Use and Mapping (SFPW/BSM) Tow-Away Sign Database. See Appendix B – Tow-Away Sign Activation and Photo Upload Process.
- B. The Contractor is advised that Sign Ordinance PWC Article 15, Section 724 which will require the applicant (Contractor) to input the amount of right of way they will occupy during construction activities for a specific permit, to be issued by SFPW/BSM for all work in the Public Right-of-Way. The Contractor shall enter times of operation during construction with the proposed start and end times and specific calendar days. This information will be printed on the tow-away signs. Refer to Tow Away Manual at <http://www.sfpublishworks.org/sites/default/files/4506-Tow-Away%20User%20Guide.pdf>.
1. The location of the Construction Zone will be entered as part of the excavation permit, which will include the length of occupancy (distance in linear feet). This information and date. Once a permit has been approved, the applicant is informed off the approval via email and will be provided a hyperlink to create/modify the tow/away signs prior to printing.
  2. The information required at time of permit will update the database and will validate that the total linear footage of construction occupancy does not exceed 1,200 linear feet. Upon completion of any adjustment to the tow-away signs, the applicant can determine which street segment to print out and may choose to either print one of two general tow-away sign template or request the Department of Public Works to print the tow-away signs. The Contractor shall pay for the printing of each sign.
  3. Size: Tow-Away/No-Parking Signs shall be 11' wide x 17' tall.
  4. Digital File: Project sign shall match the final graphical layout provided by the City, including the colors and fonts. The design of the Contractor furnished project signs shall be in strict accordance with the DPW Order for Towaway Signs located at: <http://sfpublicworks.org/sites/default/files/4508-TowAway-2015-Template.pdf>.
    - a. Contract shall use only paper types which shall be waterproof durable; tear resistant' with laser paper labels type and templates: 11 x 17 10 PT CV, 215 grams/m<sub>2</sub>
  5. Printing: Project sign can be printed on a Xerox Phaser 7800, or equivalent that can print 11x17 120-130 lb paper. All Tow-Away/No-Parking Signs shall be secured and paid for by the Contractor.
  6. The Contractor shall maintain Tow-Away/No-Parking Sign (s) in good condition as needed throughout the duration of the Contract.
  7. After substantial completion, Contractor shall remove each Tow-Away/No-Parking Sign from the site as its property.

8. Damaged Tow-Away/No-Parking Sign that cannot be repaired on site shall be replaced at no additional cost to the City.

#### 1.15 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary above grade or buried utilities, construction equipment, temporary structures and facilities, unused materials, rubbish and debris prior to Final Inspection. Restore facilities to conditions prior to construction, to the satisfaction of the City.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.
- D. Remove field offices and temporary utility services from the Site.

#### 1.16 STORAGE AND STOCKPILING

- A. The Contractor shall make its own arrangements for off-site storage or shop areas and off-site construction parking facilities. On-site storage shall be limited to materials and equipment currently being installed or utilized.
- B. If necessary, the Contractor shall arrange for temporary off-site storage of equipment and materials at his discretion. No additional compensation shall be provided from the City.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION