

## SECTION 01 51 00

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 - GENERAL

##### 1.1 SUMMARY

###### A. Section Includes:

1. Temporary Electricity
2. Temporary Telephone
3. Temporary Water
4. Temporary Sanitary Facilities
5. Temporary Barriers and Enclosures
6. Tree and Plant Protection
7. Water Control
8. Noise Control
9. Traffic Control
10. Storm Water Pollution Prevention Plan
11. Removal of Temporary Facilities and Controls

##### 1.2 DEFINITIONS

- A. Dripline: The area on the ground from the trunk of any tree to the point directly below the outermost tips of the foliage of that tree.
- B. Root Protection Zone (RPZ): The areas enclosed with tree protection fencing as indicated.
- C. Tree damage: Tree damage shall include, but not be limited to, the following: significant injury to the root system or other parts of a tree including burning, application of toxic substances, damaging through contact with equipment or machinery, changing the natural grade within the Dripline, compacting the soil within the Dripline, interfering with the normal water requirements of the tree, unauthorized trenching or excavating within the Dripline, or unauthorized removal of more than 1/3 of the live wood, foliage, or roots.

##### 1.3 SUBMITTALS

A. See also Section 01 33 00 (Submittal Procedures)

B. Tree Protection Plan

#### 1.4 TEMPORARY ELECTRICITY

A. Provide, maintain, and pay for electrical power at the Site for construction purposes.

#### 1.5 TEMPORARY TELEPHONE

A. Provide, maintain, and pay for telephone service to field office at time of Project mobilization.

#### 1.6 TEMPORARY WATER

A. Provide, maintain, and pay for suitable quality water service required for construction operations.

B. Contractor may use City-provided water from nearby fire hydrants for use on this Project. Contact City three Days prior to commencement of Work to coordinate using City's water. City will provide and install a backflow prevention device and water meter if City determines it to be necessary. This water will only be available from 8:00 a.m. to 5:00 p.m. Mondays through Fridays (excluding holidays). Should City determine, in its sole discretion, that Contractor's use of City's water is excessive, City may terminate water delivery.

#### 1.7 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required temporary buildings with sanitary toilets for use of all workers.

B. Comply with all minimum requirements of the Health Department or other public agency having jurisdiction; maintain in a sanitary condition at all times.

#### 1.8 TEMPORARY BARRIERS AND ENCLOSURES

A. Provide barriers to prevent unauthorized entry to construction areas, to allow for City's use of Site, and to protect existing facilities and adjacent properties from damage from construction operations.

B. Provide barricades required by governing authorities for public access to existing buildings.

C. Provide barricades as necessary to protect vehicular traffic, stored materials, Site, and structures from damage.

#### 1.9 TREE AND PLANT PROTECTION

- A. Root protection: No storage of materials or equipment will be allowed within the Dripline. Whenever possible, excavation shall be on a radial line, diverging from the tree trunk.
- B. Exposure to harmful substances: No storage or dumping of any substances that may be harmful to trees shall occur at any location on the Site.
- C. Where construction is to be performed in the vicinity of trees and shrubbery, the Work shall be carried on in a manner that will cause minimum damage. City will designate any trees that are to be removed. Under no circumstances are additional trees to be removed without written permission from City. Trees and shrubbery that are not to be removed shall be protected from injury or damage resulting from Contractor's operations.
- D. All damage shall be immediately reported to City, who will file a report so that penalties may be determined.
- E. Any tree that is removed without City's permission or is irreparably damaged, in the opinion of City, shall cost Contractor \$27.00 per square inch of cross section, measured at 4 ½ feet above ground, but not less than \$250.00, such cost to be deducted from monies due or to become due under the Contract. If tree protection is not performed or is not performed adequately, and City determines that a tree has been irreparably damaged, City will impose the same penalty as for unauthorized removal of a tree.

#### 1.10 WATER CONTROL

- A. Grade Site to drain.
- B. Maintain excavations free of water.
- C. Protect Site from ponding or running water.
- D. Provide water barriers as required to protect Site from soil erosion.

#### 1.11 NOISE CONTROL

- A. When required by OSHA Standards, construction workers shall be provided with ear protection to operate equipment.
- B. Work that produces noise levels above ambient will not be permitted prior to 8:00 a.m.

## 1.12 TRAFFIC CONTROL

### A. Notification:

1. One week prior to commencement of Work, notify residents along the Project roadway(s), in writing, that traffic flows may be subject to detours and/or delays, and that access to individual driveways may be disrupted during working hours. Provide City with a copy of the notice for review prior to distribution.
2. At least one (1) week prior to commencement of Work, post the Project area to inform drivers of impending construction Work and likely delays and detours. Provide City with a copy of the notice for review prior to distribution.
3. Notify the property occupants, in writing, at least three (3) Days in advance of the trenching across property occupants' driveways. Provide City with a copy of the notice for review prior to distribution.
4. The Contractor shall maintain private entrances and shall construct such detours as may be necessary to properly conduct the work and to provide ingress and egress to private property at all times.
5. The Contractor shall make all arrangements with property owners for the use of private land for detours and for any other purpose, and shall save the City free from any liability incurred through the use or nonuse of such private property.
6. Coordinate vehicular access with other agencies, police, fire, garbage, USPS, etc. at least three (3) Days prior to commencement of Work.
7. If any applicable permits require Contractor to notify residents or any organization of traffic detours or delays, provide City a copy of all such notices for review prior to distribution.
8. Coordinate parking, storage, staging, and Work areas with City. No-Parking signs shall be posted, at least 3 Days, prior to start of work.

### B. Traffic Control Measures:

1. Traffic control and safety precautions shall conform with the current edition of Caltrans "Manual of Uniform Traffic Control Devices," all provisions of the City of San Bruno encroachment permit, and with these Specifications.
2. The Contractor shall submit a traffic control plan to the Engineer for approval prior to commencing the work. Unless otherwise approved by the Engineer, the traffic control plan shall be wet stamped by either a Registered Civil or Traffic Engineer.
3. Pay for all costs for traffic signage, including flagging.

4. Provide safe passage for vehicular and pedestrian traffic through the Work at all times.
5. Traffic on two-lane streets may be reduced to one lane provided that, with all restriction of traffic flow, flaggers, cones, signs, and barricades are furnished as required by City. Permit the traffic equal flow time in each direction.
6. Maintain access to public and private buildings, businesses and driveways. Provide approved metal "bridge" or temporary backfill for access when and where required within ½ hour after request by City except that emergency vehicles and personnel shall be provided immediate access at all times.
7. Restore access to all residences for all non-working hours, holidays, and weekends.

C. Maintain traffic control measures:

1. Maintain traffic control through the Site and provide local access as specified herein regardless of rain or other causes, either within or beyond the control of Contractor, that may force suspension or delay of the Work. At all times keep on the Site such materials, labor forces, and equipment as may be necessary to keep the streets and driveways within the Site open to traffic and in good repair. Expedite the passage of such traffic, using such labor forces and equipment as may be necessary.

### 1.13 STORM WATER POLLUTION PREVENTION PLAN

- A. Prior to commencement of Work at the Site, provide City a Storm Water Pollution Prevention Plan (SWPPP) prepared in accordance with NPDES General Permit No. CAS 000002 (Water Quality Order 99-08-DWQ) issued by the State Water Resources Control Board.
- B. Prepare the SWPPP in accordance with the requirements of Section A of the NPDES General Permit. Develop and implement a monitoring program in accordance with requirements set forth in Section B of the NPDES General Permit to verify compliance with the NPDES General Permit.
- C. Submit SWPPP to City for review in accordance with Section 01 33 00 (Submittal Procedures). The SWPPP shall be reviewed by City prior to commencement of Work at the Site.
- D. The SWPPP shall include a Site map. Geometric equations, notes, details, and all data not related to water pollution control work shall be removed to improve clarity. A copy of the Drawings shall be used as a base sheet with the pertinent stage of construction drawn in as an overlay to accurately reflect Site conditions at various phases of construction.

- E. Revise and update the SWPPP whenever there is a change in construction operations that may affect the Site drainage patterns or discharge of pollutants to surface waters, groundwaters, or a separate municipal storm sewer system.
- F. Failure to fully comply with the requirements of the NPDES General Permit shall subject Contractor to all fines, damages, and job delays incurred due to failure to implement the SWPPP.
- G. A copy of the approved SWPPP, together with updates and revisions, shall be kept at the Site. Contractor shall furnish copies of the SWPPP at the request of City.
- F. At City's option, failure by Contractor to fully comply with the approved SWPPP shall subject the Contractor to a stoppage of work or fines of \$250 per day until compliance as determined by the Engineer is achieved.

#### 1.14 REMOVAL OF TEMPORARY FACILITIES AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, and materials prior to final inspection.
- 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.

#### **PART 2 – PRODUCTS** NOT APPLICABLE

#### **PART 3 – EXECUTION** NOT APPLICABLE

-END OF SECTION-