

1-3.2 Common Usage.

ADAAmericans with Disabilities Act of 1990
(Public Law 101-336, 104 Stat. 1990, 42 USC 12101-12213 (as amended))
MSDS..... Material Safety Data Sheet

7-10 PUBLIC CONVENIENCE AND SAFETY.

7-10.1 ~~Traffic and Access~~ Access.

7-10.1.1 General. ~~The Contractor’s operations shall cause no unnecessary inconvenience to the public or businesses in the vicinity of the Work. The Contractor shall have no greater length or quantity of Work under construction than can be properly prosecuted with a minimum of inconvenience to the public and other contractors engaged in adjacent or related work. The access rights of the public shall be considered at all times. Unless otherwise authorized, traffic shall be permitted to pass through the Work, or an approved detour shall be provided~~

~~The Contractor shall conduct its operations so as to provide continuous and unobstructed access to the adjacent properties unless otherwise specified in the Special Provisions or approved by Engineer. Access shall be continuous and unobstructed unless otherwise specified in the Special Provisions or approved by the Engineer.~~

~~Work requiring traffic lane closures shall only be performed between the hours specified in the Special Provisions or shown on the TCP. Traffic shall be permitted to pass through the Work site, unless otherwise specified in the Special Provisions or shown on the TCP.~~

~~Safe and adequate pedestrian zones and public transportation stops, as well as pedestrian crossings of the Work at intervals not exceeding 90m (300 feet), shall be maintained unless otherwise approved by the Engineer.~~

7-10.1.1.1 Vehicular Access. Vehicular access to residential driveways shall be maintained to the property line except when necessary construction precludes such access for reasonable periods of time. If backfill has been completed to the extent that safe access may be provided, and the street is opened to local traffic, the Contractor shall immediately clear the street and driveways and provide and maintain access.

~~The Contractor shall cooperate with the various parties involved in the delivery of mail and the collection and removal of trash and garbage to maintain existing schedules for these services.~~

~~Grading operations, roadway excavation and fill construction shall be conducted by the Contractor in a manner to provide a reasonable satisfactory surface for traffic. When rough grading is completed, the roadbed surface shall be brought to a smooth, even condition satisfactory for traffic.~~

~~Unless otherwise authorized, work shall be performed in only half the roadway at one time. One half shall be kept open and unobstructed until the opposite side is ready for use. If one half a street only is being improved, the other half shall be conditioned and maintained as a detour.~~

~~The Contractor shall include in its Bid all costs for the above requirements.~~

7-10.1.1.2 Pedestrian Access. Safe, adequate, and ADA compliant pedestrian access shall be maintained unless otherwise approved by the Engineer.

7-10.2 Work Area Traffic Control Not Used.

7-10.2.1 General. Unless otherwise, traffic shall be permitted to pass through the Work, or an approved detour shall be provided. Work area traffic control shall conform to 215, 313, and the California MUTCD, WATCH, or as specified in the Special Provisions. The total length of the traffic control zone shall include a buffer space, advance signing, striping transitions in advance of the Work site, existing striping, signing, and raised medians.

7-10.2.2 Traffic Control Plan.

7-10.2.2.1 General. If so specified in the Special Provisions or on the permit, the Contractor shall submit a TCP in accordance with 2-5.3.

The sheets of the TCP shall display the title, phase identification, name of the firm preparing the TCP, name and stamp of the Registered Traffic or Civil Engineer, approval block for each jurisdictional agency, north arrow, sheet number, and number of sheets comprising the TCP. General notes and symbol definitions shall be included when required. Adequate dimensioning shall be provided to allow for proper field installation.

The TCP shall be drawn to a 1 inch = 40 feet scale on common size sheets, either 8-1/2 inches x 11 inches, 8-1/2 inches x 14 inches, 11 inches x 17 inches, or 2-foot x 3-foot plan sheets as dictated by the length of the Work.

The requirements in the Special Provisions shall govern the design of the proposed TCP.

7-10.2.2.2 Payment. Payment for preparation of the TCP shall be included in the appropriate lump sum Bid items. If no Bid items have been provided, payment shall be included in the various Bid items unless otherwise specified in the Special Provisions.

7-10.3 Street Closures, Detours and Barricades Haul Routes. The Contractor shall comply with all applicable State, County and City requirements for closure of streets. The Contractor shall provide barriers, guards, lights, signs, temporary bridges, flagpersons, and watchpersons. The Contractor shall be responsible for compliance with additional public safety requirements which may arise. The Contractor shall furnish and install signs and warning devices and promptly remove them upon completion of the Work.

As least 48 hours in advance of closing, partially closing or reopening, any street, alley, or other public thoroughfare, the Contractor shall notify the Police, Fire, Traffic and Engineering Departments, and comply with their requirements. Deviations must first be approved in writing by the Engineer.

The Contractor shall secure approval, in advance, from authorities concerned for the use of any bridges proposed by it for public use. Temporary bridges shall be clearly posted as to load limit, with signs and posting conforming to current requirements covering "signs" as set forth in the Traffic Manual published by the California

~~Department of Transportation. This manual shall also apply to the street closures, barricades, detours, lights and other safety devices required.~~

~~All costs involved shall be included in the Bid.~~

Unless otherwise specified in the Special Provisions, the haul route(s) shall be determined by the Contractor.

7-10.4 Safety.

7-10.4.1 Work Site Safety.

7-10.4.1.1 General. The Contractor shall provide safety measures as necessary to protect the public and workers within, or in the vicinity of, the Work site. The Contractor shall ensure that its operations will not create safety hazards.

The Contractor shall provide safety equipment, material, and assistance to Agency personnel so that they may properly inspect all phases of the Work.

When asbestos is being removed, the requirements of the CCR Title 8, Div. 1, Chapter 4, Subchapter 4 and Subchapter 7 shall be implemented.

7-10.4.1.2 Work Site Safety Official. The Contractor shall designate in writing a “Project Safety Official” who shall be at the Work site at all times, and who shall be thoroughly familiar with the Contractor’s Injury and Illness Prevention Program (IIPP) and Code of Safe Practices (CSP). The Project Safety Official shall be available at all times to abate any potential safety hazards and shall have the authority and responsibility to shut down an unsafe operation, if necessary.

7-10.4.2 Use of Explosives, Safety Orders.

7-10.4.2.1 General. The Contractor shall have at the Work site, copies or suitable extracts of Construction Safety Orders, Tunnel Safety Orders, and General Industry Safety Orders issued by the State Division of Industrial Safety.

Prior to beginning any excavation 5 feet in depth or greater, the Contractor shall submit to the Engineer, the name of the “Competent Person” as defined in CCR, Title 8, Section 1504, Title 8, Section 1504 of the California, Code of Regulations in accordance with 2-5.3. The “Competent Person” shall be present at the Work site as required by Cal-OSHA.

7-10.4.2.2 Shoring Plan. Before excavating any trench 5 feet (1.5m) ~~1.5 m (5 feet)~~ or more in depth, the Contractor shall submit in accordance with 2-5.3 a detailed working drawing (shoring plan) to the Agency showing the design of the shoring, bracing, sloping, or other provisions used for the workers’ protection ~~from the hazard of caving ground during the excavation of such trench.~~ If the shoring plan varies from the shoring system standards, the shoring plan shall be prepared by a registered Structural or Civil Engineer. The shoring plan shall accommodate existing underground utilities. No excavation shall start until the Engineer has accepted the shoring plan and the Contractor has obtained a permit from the State Division of Industrial Safety. A copy of the permit shall be submitted to the Engineer in accordance with 2-5.3. If the Contractor fails to submit a shoring plan or fails to comply with an accepted shoring plan, the Contractor shall suspend work at the affected location(s) when directed to do so by the Engineer. Such a

directive shall not be the basis of a claim for Extra Work and the Contractor shall not receive additional compensation or Contract time due to the suspension.

7-10.4.2.3 Payment. Payment for performing all work necessary to provide safety measures shall be considered as included in the bid for other items of work except where separate bid items for excavation safety are provided, or required by law. Payment for shoring shall be included in the Bid item provided therefore. Payment for compliance with the provisions of the safety orders and all other laws, ordinances, and regulations shall be included in the various Bid items.

7-10.4.3 Special Hazardous Substances and Processes. Use of Explosives. Explosives may be used only when authorized in writing by the Engineer, or as otherwise stated in the Specifications specified in the Special Provisions.

Explosives shall be handled, used, and stored in accordance with all applicable regulations.

Prior to blasting, the Contactor shall comply with the following requirements:

- a) The jurisdictional law enforcement agency shall be notified 24 hours in advance of blasting.
- b) The jurisdictional fire department shall be notified 24 hours in advance of blasting.
- c) Blasting activities and schedule milestones shall be included in the Contractor's construction schedule per 6-1.

For a Private Contract, specific permission shall be obtained from the Agency in writing, prior to any blasting operations in addition to the above requirements.

The Engineer's approval of the use of explosives shall not relieve the Contractor from liability for claims caused by blasting operations.

7-10.4.4 Confined Spaces. Hazardous Substances and Processes. Materials that contain hazardous substances or mixtures may be required on the Work. An Material Safety Data Sheet MSDS as described in CCR, Title 8, Section 5194, Title 8 CCR, Section 5194 of the California Code of Regulations shall be requested by the Contractor from the manufacturer of any hazardous products used maintained at the Work site for all hazardous material used by the Contractor.

Material usage shall be accomplished with strict adherence to California Division of Industrial Safety requirements and all manufacturer warnings and application instructions listed on the MSDS Material Safety Data Sheet and on the product container label.

The Contractor shall notify the Engineer if a specified product cannot be used under safe conditions.

7-10.4.5 Confined Spaces.

7-10.4.5.1 Confined Space Entry Program (CSEP). The Contractor shall be responsible for implementing, administering and maintaining a ~~confined space entry program~~ (CSEP) in accordance with CCR, Title 8, Sections 5156, 5157 and 5158, ~~Title 8, CCR.~~

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Prior to ~~the start of starting~~ the Work, the Contractor shall prepare and submit ~~a its comprehensive CSEP to the Engineer~~ in accordance with 2-5.3. The CSEP shall address all potential physical and environmental hazards and contain procedures for safe entry into confined spaces such as the following:

- a) Training of personnel
- b) Purging and cleaning the space of materials and residue
- c) Potential isolation and control of energy and material inflow
- d) Controlled access to the space
- e) Atmospheric testing of the space
- f) Ventilation of the space
- g) Special hazards consideration
- h) Personal protective equipment
- i) Rescue plan provisions

The ~~Contractor's~~ submittal shall include the names of ~~its~~ the Contractor's personnel, including each Subcontractor's personnel, assigned to the Work project who that will have CSEP responsibilities, their CSEP training, and their specific assignment and responsibility in carrying out the CSEP.

~~(b)7-10.4.5.2 Permit-Required Confined Spaces.~~ **Permit-Required Confined Spaces.**

Entry into permit-required confined spaces as defined in CCR, Title 8, Section 5157, ~~Title 8, CCR~~ may be required as a part of the Work. Manholes, tanks, vaults, pipelines, excavations, or other enclosed or partially enclosed spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise. The Contractor shall implement a ~~permit-space program~~ permit-required CSEP prior to performing any work in a permit-required confined space. A copy of the permit shall be available at all times for review by the Contractor and Agency personnel the Engineer at the Work site.

~~(c) 7-10.4.5.3 Payment.~~ **Payment.** Payment for the CSEP shall be included in the ~~bid~~ Bid items for which the CSEP is required.

7-10.5 Protective and Security and Protective Devices Fencing.

7-10.5.1 General. Security and protective devices shall consist of fencing, steel plates, or other devices as specified in the Special Provisions to protect open excavations.

7-10.5.2 Security Fencing. The Contractor shall completely fence open excavations. Protective and Security fencing shall conform to 304-3.5. Security fencing shall remain in place unless workers are present and construction operations are in progress during which time the Contractor shall provide equivalent security.

7-10.5.36 Steel Plate Covers. The Contractor shall provide steel plate covers as necessary to protect from accidental entry into openings, trenches, and excavations.

SECTION - 206 MISCELLANEOUS METAL ITEMS

206-6 CHAIN LINK FENCE.

206-6.9 Protective and Security Fencing. Security fencing shall be 5 feet (1.5m) high. Security fencing material shall be chain link fabric or welded wire fabric (6x6-W9xW9 minimum) and constructed using:

- a) Tensioned fencing material with top and bottom tension wires securely fastened to driven steel posts or other equally rigid elements at a maximum spacing of 12 feet (3.7m); or
- b) Untensioned fencing materials securely fastened to extended trench shoring elements at a maximum spacing of 8 feet (2.4m) and fastened to continuous top and bottom rails including toe plates constructed of nominal 2-inch x 4-inch (50mm x 100mm) lumber or equally rigid material.

Framed panels with suitable supporting elements fastened together to form a continuous fence may also be used.

SECTION - 304 METAL FABRICATION AND CONSTRUCTION

304-CROSS REFERENCES

Chain Link Fence.....206-6

304-3 CHAIN LINK FENCE.

304-3.5 Protective and Security Fencing. ~~Protective and~~ Security fencing shall conform to 206-6.9, the Plans, and the Special Provisions. Security fencing shall completely enclose all open excavations and remain in place until backfill has been placed to the approximate level of the adjacent ground.

304-3.5.1 Payment. Unless otherwise specified in the Special Provisions, payment for security fencing shall be included in the various Bid items that require security fencing.