

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
 - 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

1.03 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner, Engineer, occupants of Project, testing agencies, and authorities having jurisdiction.
- B. Sewer Service: Contractor will pay sewer-service use charges for sewer usage by all entities for construction operations.
- C. Water Service: Contractor will pay water-service use charges for water used by all entities for construction operations.
- D. Electric Power Service: Contractor will pay electric-power-service use charges for electricity used by all entities for construction operations.

1.04 ACTION SUBMITTALS

- A. Traffic Control Plan (TCP): Submit traffic control plan for entire project two weeks prior to the start of construction.

1.05 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Erosion- and Sedimentation-Control Plan: Show compliance with requirements of ADEC Construction General Permit or authorities having jurisdiction, whichever is more stringent.

1.06 QUALITY ASSURANCE

- A. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.07 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10-mil minimum thickness, with flame-spread rating of 15 or less per ASTM E 84 and passing NFPA 701 Test Method 2.
- B. Plastic Safety Fencing: Use 4-foot-high construction orange fence manufactured by one of the following companies, or an approved equal:
 - 1. "Warning Barrier" by Tensar Earth Technologies, Inc., 5833 Glenridge Drive, Suite 200, Atlanta, Georgia, 30328. Phone (404) 214-5343
 - 2. "Flexible Safety Fencing" by Carsonite, 1301 Hot Springs Road, Carson City, Nevada, 89706. Phone (800) 648-7974.
 - 3. "Warning Barrier Fence" by Plastic Safety Systems, Inc., P.O. Box 20140, Cleveland, Ohio, 44120. Phone (800) 662-6338.

2.02 TEMPORARY FACILITIES

- A. Common-Use Field Office: Of sufficient size to accommodate needs of Owner, Engineer and construction personnel office activities and to accommodate Project meetings specified in other Division 01 Sections. Keep office clean and orderly. Furnish and equip offices as follows:
 - 1. Conference room of sufficient size to accommodate meetings of 10 individuals. Provide electrical power service and 120-V ac duplex receptacles, with no fewer than one receptacle on each wall. Furnish room with conference table, chairs, and 4-foot-square tack and marker boards.
 - 2. Drinking water and toilet.
 - 3. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F.
 - 4. Lighting fixtures capable of maintaining average illumination of 20 fc at desk height.

2.03 TRAFFIC CONTROL DEVICES

- A. Traffic Control Devices: All traffic control devices shall conform to the requirements of the "Manual of Uniform Traffic Control Devices" (MUTCD) with the Alaska Supplement and the applicable utility/excavation/construction permit.

PART 3 - EXECUTION

3.01 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with City, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

- B. Water and Sewer Service: If connecting to CBY's existing facilities, clean and maintain service facilities in a condition acceptable to Utility. At Substantial Completion, restore these facilities to condition existing before initial use.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel.

3.02 SUPPORT FACILITIES INSTALLATION

- A. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 - 1. Protect existing site improvements to remain including drainage ditches, culverts, pavement, and utilities.
 - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- B. Parking: Provide temporary parking areas for construction personnel.
- C. Storm Drainage: Dispose of rainwater in lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
- D. Waste Disposal Facilities: Comply with requirements specified in Division 01 Section "Construction Waste Management and Disposal."
- E. Lifts and Hoists: Provide facilities necessary for hoisting materials.
 - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

3.03 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - 1. Comply with work restrictions specified in Section 011000 "Summary."
- C. Temporary Erosion and Sedimentation Control: Comply with requirements of ADEC Construction General Permit and requirements specified in Section 310000 "Erosion, Sediment and Pollution Control."
- D. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- E. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- F. Barricades, Warning Signs, and Lights: Comply with standards and code requirements (including the MUTCD with Alaska Supplement and the plans) for erection of structurally

adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed, provide lighting, including flashing red or amber lights.

3.04 TRAFFIC CONTROL

- A. Traffic Controls: Provide temporary traffic controls. Include traffic control devices and warning signs for public traffic. Comply with this specification or the requirements of authorities having jurisdiction as required in the applicable utility/excavation/construction permit, whichever is more stringent.
- B. General:
 - 1. All traffic control devices and signs used on this project shall meet the requirements of the Alaska Traffic Manual Supplement (ATMS) to the MUTCD.
 - 2. Contractor shall continuously monitor the site under the varying conditions of traffic volume, light, and weather to insure that traffic control measures are operating effectively and that all devices used are clearly visible, clean, and in good repair.
 - 3. All traffic control devices shall be removed immediately when no longer needed.
 - 4. Contractor shall store construction equipment, materials, and debris in such a manner as to present the least possible hazard for the traveling public.
 - 5. Existing signs and markings which conflict with construction signing shall be covered or removed.
 - 6. Parking lots and driveways adjacent to excavations shall be barricaded as necessary to protect the public.
 - 7. All signs shall be constructed of high intensity sheeting.
 - 8. All signs shall be securely mounted.
 - 9. All barricades shall have an operable steady-burn light except for barricades used for channeling traffic.
 - 10. Contractor shall provide flagmen to assist large truck turning movements as necessary.
 - 11. The safety of the traveling public shall remain the sole responsibility of the Contractor. It is emphasized that this Traffic Control Plan represents the minimum desirable standards, and that additional protection must be provided when special complexities and hazards prevail.
 - 12. Warning lights shall be used to mark channelizing devices. The first device in a taper shall have a Type "B" flashing light, the remaining Type "C" steady burn.
 - 13. When "High Level Warning Device" is specified, it shall include a Type "B" high intensity flashing warning light, and shall meet MUTCD/Alaska Supplement specifications.
 - 14. The maximum spacing between channelizing devices in a taper should be approximately equal in feet to the posted speed limit.
 - 15. When a reduction in pavement width is involved, the channelization taper minimums specified in the MUTCD shall be used.
 - 16. Contractor shall coordinate and adjust traffic control measures to be compatible with other construction in the area.
 - 17. Two weeks prior to the preconstruction conference, the Contractor shall submit a detailed Traffic Control Plan to the Engineer for approval. This plan shall be specific to his schedule and construction methods. It shall include how he proposes to maintain safe traffic lanes throughout the Work and shall address critical crossings on an individual basis.

18. Contractor shall install advisory speed plates in conjunction with warning signs when directed by the Engineer. Except in emergencies, and advisory speed plate shall not be erected until the recommended speed has been determined by the Engineer.
19. Traffic control for lane closures shall follow MUTCD Figure TA-11.
20. Traffic control for work on or adjacent to shoulders shall follow MUTCD Figure TA-3.

3.05 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
- C. Termination and Removal: Remove each temporary facility when need for its service has ended, no later than Substantial Completion. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

PART 4 - MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Traffic Control: Shall not be measured it is a lump sum item.

4.02 BASIS OF PAYMENT

- A. Payment for traffic control bid item shall include furnishing all necessary material, personnel, equipment, transportation, and supplies to perform the work as shown and specified.

<u>Pay Item Number</u>	<u>Pay Item</u>	<u>Pay Unit</u>
015000-1	Traffic Control	Lump Sum

END OF SECTION

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