

SECTION 02100

DEMOLITION

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Section includes regulatory and general requirements for demolition.

1.02 REFERENCE STANDARDS

- A. State of California, Department of Transportation Standard Specifications (Caltrans):
Section 15 Existing Highway Facilities

1.03 RESTRICTIONS

- A. Do not sell or burn removed materials on-site.
- B. Do not use explosives.

1.04 SUBMITTALS

- A. Demolition Plan: Submit demolition plan for approval: Indicate methods to be employed, sequence, equipment, procedures, disposal sites, and proposed haul routes. Indicate safety measures in accordance with applicable codes, including signs, barriers and temporary walkways.

1.05 DELIVERABLES

- A. Submit permits and notices authorizing demolition, as required.
- B. Submit copies of manifests showing delivery of disposed materials in accordance with permit conditions within 24 hours from time of delivery.

1.06 REGULATORY REQUIREMENTS

- A. Perform work of this Section in accordance with applicable laws, ordinances, and requirements of the agencies having jurisdiction.
- B. Unless otherwise specified, perform work in accordance with the following:
 - 1. California Code of Regulations, Title 24: Part 2, California Building Code, Chapter 33, Site Work, Demolition and Construction.
 - 2. American National Standards Institute (ANSI): ANSI A 10.6 – Safety Requirements for Demolition Operations.
 - 3. State of California Code of Regulations, Title 8: Cal/OSHA Construction Safety Orders

1.07 PROJECT CONDITIONS

- A. Provide and maintain all required temporary construction and facilities for the support and protection of the existing structures to remain.
- B. Protection and Interruption of Utilities: Refer to Specification Section 01047, Utilities and Systems Coordination, for location, notification, and protection requirements in regard to existing utilities and systems facilities.
- C. Refer to Specification Section 01560, Temporary Controls, for requirements for dust control. Provide continuous dust abatement as required.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Provide temporary or permanent materials as required for the proper execution of the Work of this Section.

2.02 DUNNAGE

- A. Provide pallets, sills and other materials for packaging and stacking salvaged items which are clean, free of decay or other defects, and sufficiently sturdy for the service intended.

2.03 MARKING PAINT

- A. Marking Paint: Spray marking paint or paint marker, suitable for duration of service required.

PART 3 – EXECUTION

3.01 PREPARATION

- A. Inspect existing conditions and note dimensions, clearances, access, utilities, shoring and protection required.
- B. Have in place, before demolition begins, required protection measures, protective and regulatory devices, and personnel. Protective measures include barricades, warning and temporary routing signs, lights and similar devices.
- C. Where an abutting structure or a part of a structure is to be left in place, make clean, smooth, vertical cuts with a saw or other approved cutting device to lines indicated. If not indicated or otherwise required, demolish structure to a minimum of 18 inches below subgrade.
- D. The Contractor may salvage materials from demolition for use in temporary facilities but shall not use the salvaged materials in the Work unless approved in writing by the Engineer for each specific case, or unless specifically called for in the Contract Documents.
- E. Obtain utility shut off to safely execute the work.
- F. Verify that structures to be removed are cleared of utilities.

- G. Provide temporary construction for the maintenance, support and protection of existing adjacent structures and facilities that are to remain.

3.02 DEMOLITION

A. General:

1. Perform work of this Section in conformance with Caltrans Standard Specifications Section 15, Existing Highway Facilities.
2. Do not place demolished material or demolition equipment where it will create excessive loads on any structure.
3. If unforeseen obstructions are encountered, obtain instructions from the Engineer before proceeding with the work.
4. Promptly repair, restore or replace damage, disturbance, or impairment of existing facilities to remain.
5. Repair or replace items to remain or to be salvaged which are damaged during demolition to the satisfaction of the Engineer or private property owner(s).
6. Refer to Specification Section 20200, Track Removal and Salvage, for related requirements in regard to track demolition, as applicable.

B. Salvage:

1. Salvage existing facilities as shown on the Contract Drawings and transport to location designated by the Engineer within 30 miles of the work site.
2. Take necessary precautions to disconnect, remove, protect, transport, and store salvaged items in a manner that will prevent damage.

C. Removal:

1. Remove existing facilities as shown on the Contract Drawings.
2. Wet down concrete materials during demolition to prevent spread of dust and dirt. Do not use water in a manner that would cause damage or contaminate runoff. Refer to Special Conditions Section 01560, Temporary Control, in regard to control or erosion and pollution prevention.
3. Fill below grade areas and voids resulting from removal of below-grade structures and utilities, and compact to indicated grade in accordance with Specification Section 02300, Earthwork.
4. Remove abandoned conduit, wiring and piping to the source of supply, or Limit of Work.
5. Saw cut concrete or asphalt pavement to 3 inches depth, with saw designed for cutting pavements, prior to pavement removal. Cuts shall be straight and free of ragged edges.
6. Remove traffic stripes, pavement markings, and pavement markers in

conformance to Caltrans Standard Specifications, Section 15-2.02B and 15-2.02C.

- D. Disposal: Refer to General Provisions 7.16, Disposal of Material Outside of the Work Site.
 - 1. Do not store or stockpile on Caltrain property material designated for disposal, except as indicated in the Contract Documents.
 - 2. Removed items that are not scheduled or shown on the Contract Drawings to be salvaged or re-used shall become the property of the Contractor and shall be disposed of outside of the work site.
 - 3. Keep the project area clear of refuse and rubbish, and maintain the area in a neat condition.
- E. Relocation:
 - 1. Remove and install existing facilities in a new location.
- F. Reconstruction:
 - 1. Remove and disassemble existing facilities as shown on the Contract Drawings and construct again at the existing location or a new location.
 - 2. Provide new parts or alteration to the existing facility as required.
 - 3. Protect items removed for reconstruction from damage during removal, disassembly and final construction. Repair or replace any damaged facilities.
- G. Modification:
 - 1. Modify existing facilities as indicated on the Contract Drawings.

3.03 PRESERVATION OF REFERENCE MARKERS

- A. Refer to Specification Section 01050, Field Engineering. Make arrangements with the Engineer to replace any survey markers and monuments missing or damaged during construction.
- B. Store removed markers and monuments during demolition work.

END OF SECTION