

## **Section 60 Existing Structures**

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### Section 60 Existing Structures

#### 4-6001 General

Section 60, "Existing Structures," of the *Standard Specifications* provides requirements for structure removal, structure rehabilitation, modifying structures, abandoning structures, and abandoning pedestrian undercrossings.

For guidance on existing structures, refer to Structure Construction's *Bridge Construction Records and Procedures* manual, *Bridge Deck Construction Manual*, and *Falsework Manual* at:

<https://dot.ca.gov/programs/engineering-services/manuals>

For guidance specific to removal or demolition of existing structures, refer to Bridge Construction memos 124-2, "Demolition Plan Review," and 124-3, "Demolition Over and/or Adjacent to Union Pacific Railroad Company Tracks," in *Bridge Construction Records and Procedures* manual, Vol. 2.

For guidance specific to structure joint rehabilitation, refer to Bridge Construction memo 135-2, "Bridge Deck Expansion Joints and Joint Seals," in *Bridge Construction Records and Procedures* manual, Vol. 2, and the *Bridge Deck Construction Manual*.

#### 4-6002 Before Work Begins

Before work begins, do the following:

- Inspect existing structures that are to be removed, rehabilitated, modified, or abandoned. Document existing conditions with photos or video.
- When structures to be removed belong to a city, county, or other agency, check with the applicable agency before disturbing the structure.
- The district Maintenance Unit maintains existing highway facilities. Keep the maintenance area supervisor or area superintendent informed of specific needs or changes to structures.
- Discuss the requirements to ensure consistent practices of placing and maintaining a longitudinal temporary joint taper when a transverse joint greater than 0.4 foot cannot be avoided before opening to traffic. Refer to Section 7-1.03, "Public Convenience," of the *Standard Specifications* for requirements that vary based on height of taper and length of time the longitudinal temporary joint taper will be in place.

#### 4-6003 During the Course of Work

During the work, take the following steps for removing concrete and structures.

#### 4-6003A Removing Concrete

Observe concrete removal to ensure the work complies with contract requirements. Pay particular attention to items that can be observed only during the work. These items include the following:

- Removal to the specified minimum depth below finished grade. Record your observations in the daily report and note that the minimum depth requirements have been met.
- Disposal into adjacent embankments. Refer to Section 19-6, "Embankment Construction," of the *Standard Specifications*. Verify and note that both lateral and vertical limitations are met. Include disposal locations on the as-built plans.
- Breakage of floors of concrete basements, pits, and structures to prevent entrapment of water. Note the inspections in the daily report.

#### 4-6003B Removing Bridges

Do the following for removing bridges:

- The contractor must submit bridge removal work plans. Structure Construction's representative on the project has complete responsibility and authority for reviewing and authorizing bridge removal work plans and overseeing bridge removal work. On projects that do not have a structure representative, consult with the structure construction area manager or senior bridge engineer assigned to the area. Further information on bridge removal oversight is contained in Bridge Construction Bulletins 124-2, "Demolition Plan Review," and 124-3, "Demolition Over and/or Adjacent to Union Pacific Railroad Company Tracks," in *Bridge Construction Records and Procedures* manual, Vol. 2.
- When bridge removal occurs over or adjacent to public traffic or railroad property, review the contractor's submittal of bridge removal and handling of traffic around or through the area. Refer to the requirements in Section 60-2, "Structure Removal," of the *Standard Specifications* and the contract special provisions.
- Verify the contractor will have sufficient resources on hand and has planned in sufficient detail to ensure the work will be completed within specified time limits.
- Review shielding plans to ensure the contractor meets specified requirements and that shielding serves its intended purpose.
- Ensure the contractor conducts all bridge removal in a manner that protects pavement and other facilities from damage. Verify the contractor has addressed this requirement in planning the operation.

#### 4-6003C Polyester Concrete Overlays

Ensure that the contractor constructs temporary joint tapers on bridge decks and approach slabs using polyester concrete under Section 60-3.04B, "Polyester Concrete Overlays," of the *Standard Specifications*. Check the constructed temporary joint taper surface with a 12-foot straightedge to ensure that the surface is uniform and meets the straightedge requirements specified.

**4-6004          Quality Control**

For bridge removal work, verify the registered engineer that signed the bridge removal work plan does the following in compliance with the specifications:

- Is present at all times during bridge removal activities.
- Prepares a daily inspection report for removal activities that is available at the job site.

**4-6005          Payment**

Review the payment clauses for removing existing structures. Determine whether necessary measurements must be taken before or during removal.