

## **Section 74 Pumping Equipment and Controls**

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### Section 74 Pumping Equipment and Controls

#### 4-7401 General

Section 74, "Pumping Equipment and Controls" of the *Standard Specifications* includes specifications for furnishing and installing drainage pumping equipment and pumping plant electrical equipment. For additional information regarding pumping equipment, refer to Bridge Construction Memo 74, "Pumping Equipment," of the *Bridge Construction Records and Procedures Manual, Vol. 2*:

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

#### 4-7402 Before Work Begins

In accordance with Section 5-1.23, "Submittals," Sections 74-1.01C(2), "Shop Drawings," and 74-1.01C(3), "Product Data," of the *Standard Specifications*, the contractor must submit for review and approval shop drawings and a list of proposed materials. Confirm that copies of certificates of compliance material specified in Section 74-2.01C(3), "Certificates of Compliance," have been submitted to Structure Design, Documents Unit. Structure Design and Structure Construction have the primary responsibility for reviewing and approving the shop drawings and materials list.

#### 4-7403 During the Course of Work

During the work, take the following steps:

- Verify that the equipment and materials installed by the contractor are the same as those approved on the materials list.
- Before the final acceptance of the work, the contractor must test the pumping plant equipment. Notify Electrical, Mechanical, Water, and Wastewater Engineering of the upcoming tests so representatives from the office may be present to witness the testing.
- When the work nears completion and just before contract acceptance, coordinate the transfer of electrical service to Caltrans.
- At the end of the project, deliver the required contractor-submitted maintenance and operation manual to the district-designated Maintenance personnel.

#### 4-7404 Quality Control

Verify that drainage pumps and electrical equipment have the specified certification.

Witness operational test of the completed pump plant.

Verify compliance with the performance testing work plan during performance testing and drainage pump final inspection.

Witness booster pump testing.

Verify that field quality control, by a factory-authorized representative, is performed on the pump controller.

Verify compliance of training requirements as specified in Section 74-3.01D(5), "Training," of the *Standard Specifications*.

**4-7405      Payment**

For the basis of measurement and payment, refer to the appropriate sections of the special provisions and *Standard Specifications*.