

CALIFORNIA DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL REQUIREMENTSⁱ

Introduction

The California Department of Transportation (Caltrans) maintains a list of approved retaining wall systems on their Authorized Material List (AML); available at <https://dot.ca.gov/programs/engineering-services/authorized-materials-lists>. Wall vendor submittal requirements for requesting approval are stated in the Caltrans Authorization Procedures and Acceptance Criteria for New Earth Retaining Systems document; and is available at the website noted above. The following listing of supplemental requirements is based upon that document. Caltrans can contact the IDEA webmaster and update their report when their policies, etc. change. Users should contact the IDEA webmaster if they find this document needs updating. This supplemental requirements report is readily updateable, and a revision number and date should be noted.

Caltrans requires an Authorized Material List (AML) Submittal Package for each new product proposed for inclusion in the AML for Earth Retaining Systems (ERS). The submittal package must be submitted in the following three-part format. Part 1 must be completed for the initial evaluation. Parts 2 and 3 may be delayed until after the initial evaluation has been completed. Approval for listing on the AML for ERS requires all three parts to be current.

Caltrans requires a HITEC Evaluationⁱⁱ or equivalent (i.e., an IDEA Evaluation report) as a specific item within Part 1 of a vendor approval request submittal. Specifically, Caltrans requires submittal of the information listed below in the respective three parts. The items are presented with the listed Caltrans numbering.

Generally, the agency requested items under Parts 2 and 3 are more specific or detailed than that the IDEA protocol specifically requests and/or requires stamping by a California Professional Engineer. An IDEA report may contain some or portions of the information required under Parts 2 and 3. In such cases, the wall system supplier may wish to pull information from their IDEA report for their Part 2 and Part 3 Caltrans specific submittal.

Submittal Requirements for Earth Retaining Systems (ERS)

PART 1: New Products Assessment Package

The following items must be submitted.

1. Earth Retaining Systems New Product Submittal Form (NPSF), with appropriate signatures.
2. Product literature and photographs (brochures, cut sheets, specifications, etc.).
3. HITEC Evaluationⁱⁱⁱ or equivalent (i.e., an IDEA Evaluation report).
4. Contact list, if applicable, identifying other entities that have utilized the product.
5. Other pertinent information about the product and/or product use.

PART 2: Design Evaluation Package

The following items must be submitted.

1. Standardized Plans and Typical Construction Details Standard or typical plans must include all details necessary to construct the system at the size ranges and loading configurations desired for future consideration. Future project-specific shop plans will be checked against this set of pre-approved plans and details. Plans and details must also include:
 - a. Tolerances and limitations of standard sections.
 - b. Material specifications shown or noted on drawings.
 - c. Specifications for construction sequencing and performance testing.
 - d. Reference to current QMP (see below) and date.
2. Design Calculations, stamped by a California registered PE, including:
 - a. One complete set of calculations demonstrating methodology used is in accordance with AASHTO LRFD Bridge Design Specifications and the current California amendments.
 - b. The engineer's contact information, computer software used (if applicable), equations, data sources, references and any testing of unique parts or pieces of the system not lending themselves to standard theoretical analysis.
 - c. Summary of full range of design heights and backfill configurations to be considered for future use.
3. System Evaluation and/or Product Testing, stamped by a California registered PE:
 - a. Testing procedure and results including data description of testing strategy and variables.
 - b. Testing shall demonstrate adequate performance and should be performed by a certified lab. ISO 17025 is an acceptable standard.
4. System Revisions. The Department must be notified of system design updates, improvements and revisions before they can be used on project work. Review for approval may be required prior to listing on the AML.

PART 3: Quality Management Plan

The following items must be submitted.

1. Description of How Materials will be Tracked and Records Retained, such as
 - a. Mill Certifications.
 - b. Certified Testing Reports.
 - c. Certificates of Compliance Template
2. Quality Control Plan for Fabrication, Production and/or Field Construction. This is a generalized plan. It must describe all inspection and testing including:
 - a. Sources of materials.
 - b. Roles and responsibilities

- c. Frequency of inspection and testing for each product by the plant and system owner's representative.
- d. The Department must be notified of major updates and revisions.
- e. Quality Control Plans shall expire three years after date of approval.

ⁱ Report Ver 1, August 2021.

ⁱⁱ The IDEA program has replaced the HITEC program and any new system reports, and re-evaluation or updates to prior HITEC reports, will be an IDEA Evaluation report.

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