

Chapter 7 Field Review

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EXHIBITS

Exhibits applicable to this chapter can be found at:

<http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/lapmforms.htm#goHere8>

[Exhibit 7-A: Instructions for Field Review Form](#)

[Exhibit 7-B: Field Review Form](#)

[Exhibit 7-C: Roadway Data](#)

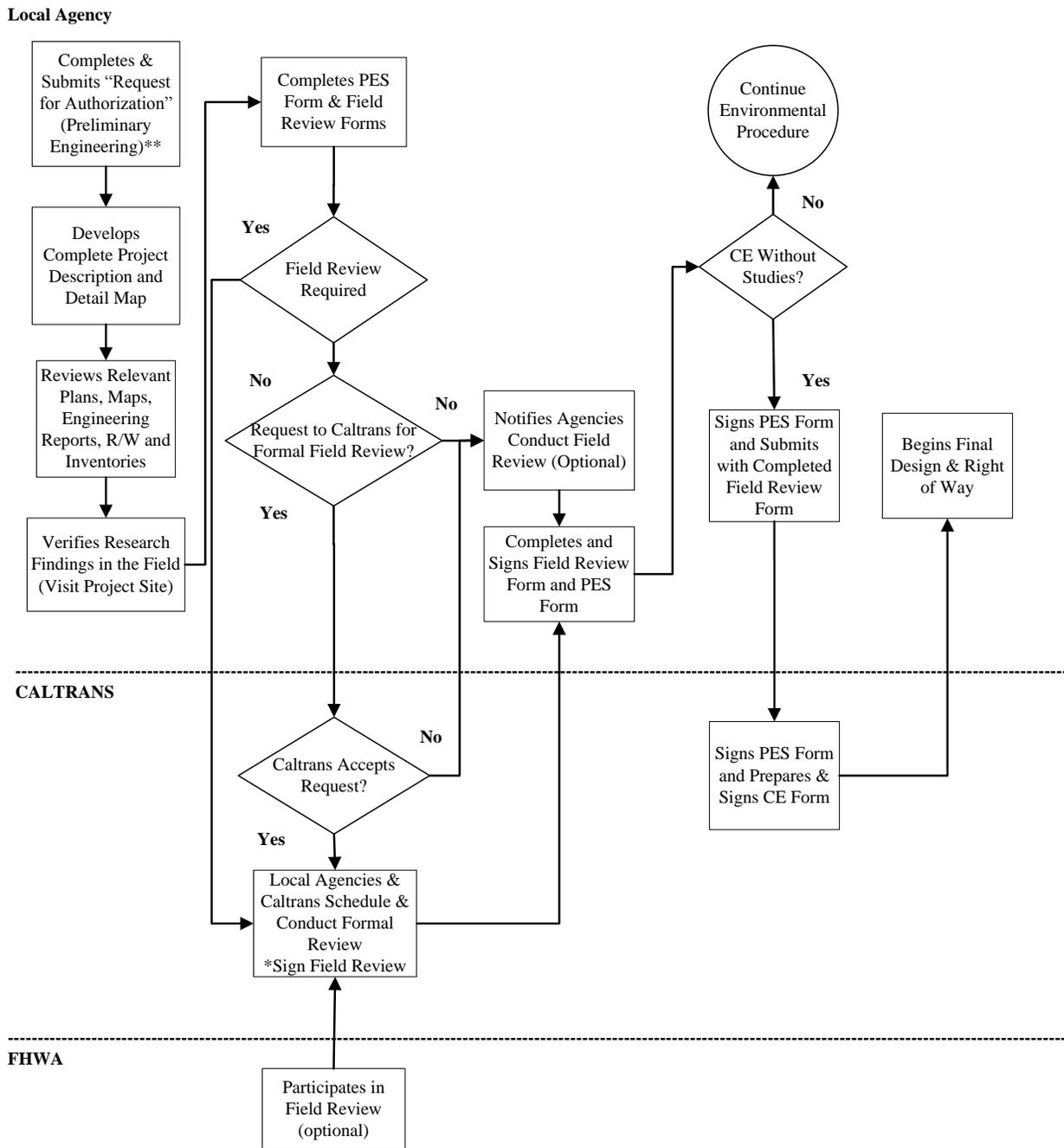
[Exhibit 7-D: Major Structure Data](#)

[Exhibit 7-E: Railroad Grade Crossing Data](#)

[Exhibit 7-F: Airport Data](#)

[Exhibit 7-G: Field Review Attendance Roster](#)

[Exhibit 7-I: Systems Engineering Review Form](#)



***For all state highway projects, consult the Caltrans *Project Development Procedures Manual*, the DLAE and project manager to fully coordinate development responsibilities. Projects on or impacting the Interstate require FHWA project-by-project review.**

**** Authorization(s) must precede any federally reimbursable work. Agency may self-fund field review and delay Authorization for later activities.**

Figure 7-1: Field Review Procedures for Developing Local Federal-Aid Projects

CHAPTER 7 FIELD REVIEW

7.1 INTRODUCTION

In conjunction with the preliminary environmental investigation, an important early action in developing a local transportation project financed with federal-aid funds is the methodical and systematic collection of initial engineering and related project data and information. For this manual, this data gathering project-scoping step is called the Field Review.

Each agency should establish a process for clearly defining the location, scope, cost, and the other parameters considered when developing a project. This step is very important in guiding the project development team to the successful production of the Plans, Specifications and Estimate (PS&E).

The field review for local agency transportation projects off the State Highway System (SHS) serves the same purpose as the Project Study Report serves for state highway projects. It is intended to bring together all interested parties and come to an agreement on the project requirements necessary to comply with federal and state laws and regulations.

For local agency projects on the SHS, consult the Caltrans [Project Development Procedures Manual \(PDPM\)](http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm), (<http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm>), the District Local Assistance Engineer (DLAE), and the project manager to coordinate development responsibilities.

The field review process considers and documents the following actions:

- Assigns a local agency project manager to oversee the project studies, PS&E development and/or construction.
- Brings together representatives from various involved or interested agencies, including, but not limited to, the agency, Caltrans, other regional and local agencies, transit districts, other state or federal permitting agencies, public utilities, and railroads. FHWA may also be represented.
- Affords an opportunity for discussions of alternative proposals.
- Secures agreement on general design features and exceptions to [American Association of State Highway and Transportation Officials \(AASHTO\)](#) standards, or 3R, or local standards selected for the project.
- Identifies pedestrian facilities within the project area that will or may need to be brought up to current federal, state and/or local standards to be Americans with Disabilities Act (ADA) compliant.
- Determines if the project is a federal-aid Intelligent Transportation Systems (ITS) project. If so, determines if it is a High-Risk (formerly Major), Low-Risk (formerly Minor) or Exempt ITS project.
- Determines timing and costs associated with preparing and processing required technical studies and the NEPA document (see [LAPM Chapter 6: Environmental Procedures](#) and [Caltrans Standard Environmental Reference \(SER\)](#) at this website: <http://www.dot.ca.gov/ser/>).
- Determines right of way and relocation assistance requirements.

- Discusses and evaluates proposed funding, eligibility requirements, and federal or state participation.
- Determines who advertises, awards, administers (AAA), and maintains the proposed project.
- Defines the project schedule and target advertising date.
- Discusses value engineering analysis, for each federal-aid project on the National Highway System (NHS) with an estimated total cost of \$50 million or more and bridge projects on the NHS with an estimated total cost of \$40 million or more. For more information on this subject, please see [LAPM Chapter 12: Plans, Specifications & Estimate](#), Section 12.5: Value Engineering Analysis.

7.2 TYPE AND REQUIREMENT FOR FIELD REVIEW

The type of field review chosen for a project depends on many factors including: highway system, project type (Delegated or High Profile), project complexity, total cost, and type of funds. The two types of field reviews are formal and informal.

Formal Field Review

A formal field review can be accomplished by:

- A site (field) inspection, or
- An office meeting or both.

All parties involved in the project development decisions should be invited to a formal field review. The DLAE should take the lead in the field reviews, take Minutes of the Field Review and circulate the notes to all affected parties afterward.

Informal Field Review

Informal field reviews can be accomplished by:

- Small group meetings
- Interagency correspondence
- Phone discussions
- Individual research and data gathering

Exception: Emergency Relief (ER) projects use the FHWA Damage Assessment Form (DAF) in lieu of any other field review form. An on-site field assessment is required for all these projects.

Required Review

Caltrans will determine if a field review is required for all projects on the National Highway System (NHS). Generally, a field review will only be required for significant NHS projects. A project will be considered to be significant if:

- The total cost is over \$10 million, or
- It involves an unusual structure (see definitions in [LAPM Chapter 2: Roles and Responsibilities](#), Section 2.4 Delegated Projects), or

- It involves multiple projects on a corridor involving more than one agency, or
- Any other complicating factors require a field review.

All required reviews would be formal. In consultation with the local agency, the Caltrans DLAE determines how the formal field review will be accomplished.

Exceptions to the above are as follows:

- A site visit, or early coordination meeting may be required, on the grounds of environmental sensitivity for protected resources, controversy, or consequences (impacts) of the proposed action (see [LAPM Chapter 6: Environmental Procedures](#)). This meeting may be part of the formal or informal field review discussed in this chapter or held separately.
- For seismic safety retrofit projects, a field review is mandatory as described in the [Local Assistance Program Guidelines \(LAPG\)](#), Section 7.8: PS&E and Construction Administration Procedures.

When Caltrans requires a field review for significant NHS projects, PS&E and construction administration procedures (standards, agencies involved, use of consultants, project management, value engineering analysis, specifications, materials testing, etc.) will be discussed. The PS&E procedures will be put in writing for Caltrans' and FHWA's approval before the local agency starts final design (see [LAPM Chapter 12: Plans, Specifications & Estimate](#)).

The construction administration procedures will also be put in writing. The procedures must be approved by Caltrans and FHWA before construction will be authorized (see [LAPM Chapter 15: Advertise and Award Project](#)).

NHS projects that are not considered significant will not require these approvals.

Optional Review

A field review is optional for all projects off the NHS (non-NHS). The field review is also optional for all NHS projects determined by Caltrans to be minor in nature. It is a suggested practice for all projects.

7.3 NOTIFICATION

The local agency contacts the DLAE to discuss when and how they wish to proceed with project implementation, if this was not already done as part of the initial project authorization process.

Required Reviews

For required field reviews, the DLAE determines the type of field review required and coordinates, as appropriate, with the local agency on scheduling. The DLAE notifies Caltrans and FHWA attendees. The local agency is responsible for making other review preparations and notifying other interested parties. Each attendee should receive a copy of the draft Field Review Form before the actual field review. In addition to the District Local Assistance (DLA) representative, Caltrans attendees, when applicable, should include an environmental reviewer, a right of way reviewer, and a representative from the Office of Structure Design (if a structure is involved). In order to optimize their value to the local agencies, these Caltrans specialists should become familiar with the project prior to attending the field reviews. Others may attend

as appropriate. If the project involves a state highway, a representative from the appropriate District Project Development or Traffic Branch must be contacted to determine their involvement in the project development, and the need for a Project Report and encroachment permit.

A representative from FHWA should be consulted for all High Profile projects. Request for FHWA consultation should be coordinated through the DLAE (see [LAPM Chapter 2: Roles and Responsibilities](#) and [LAPM Chapter 6: Environmental Procedures](#), for further details).

Optional Field Reviews

For projects that Caltrans has determined a field review is not required, the local agency is responsible for deciding whether to perform a field review (formal or informal) and for notifying all potentially affected agencies, utility companies, etc. and making arrangements for any on-site or office meetings. In deciding whether and how to conduct a review, an agency should consider the following factors: functional classification, project type and Delegated/High Profile status, project complexity, total cost, interested, and affected parties and type of funds.

If a local agency wishes Caltrans (or FHWA) staff to participate in the field review process, a request must be made to the DLAE. Caltrans participation is based on the following factors:

- Availability of Caltrans staff and time requirements
- Experience of local agency staff
- Complexity of project, type of structures
- Funding program
- Right of way and design issues

For railroad crossing projects, the PUC participates in the review process.

Discussions with the DLAE should also indicate whether Caltrans participation in any subsequent phases of the project is expected. This is especially important if PS&E reviews are needed for structures. Caltrans and the agency should reach a clear agreement early in the process on the extent of Caltrans staff participation in any phase of project development.

7.4 TENTATIVE PLANS

The local agency should have a tentative plan as well as horizontal and vertical alignment sketches available for review by participants, either prior to, or at the field review. On projects that involve bridges, the agency should also provide preliminary hydrologic and hydraulic data. This information need not be in great detail, but sufficient to make an engineering review of the proposal.

7.5 Preparation of Field Review Form

The local agency shall prepare and complete [Exhibit 7-B: Field Review Form](#) or DAF for ER projects for all federal-aid projects, even if a Field Review were not required. (For ER projects, the DAF is used in lieu of the [Exhibit 7-B](#), see [LAPG Chapter 11: Emergency Relief](#).) The field review form documents the results and decisions of the field review and other initial project research. It also provides data necessary to prepare the Request for Authorization and the Program Supplement Agreement.

The field review process and documents should be completed, as early as possible. For Highway Bridge Program (HBP) funded (Bridge) projects, the field review documents, including major structure data sheets, must be completed prior to any request for authorization. For other types of projects, authorization for preliminary engineering may be granted prior to submittal of the field review to Caltrans when federal reimbursement is needed, to hire consultants or others in order to obtain information needed to complete the field review. The field review document must be completed and submitted prior to, or concurrently with the first occurrence of either step below:

- Initial submittal of the PES form (completed and with supporting information attached) for Caltrans review and approval see [LAPM Chapter 6: Environmental Procedures](#).
- Submittal of the Agreements Checklist requesting a Supplemental Agreement.

Field Reviews Attended by Caltrans and the FHWA

For projects on the NHS, early review and discussions should be held with the DLAE and the FHWA engineer. Similar early discussions should occur for HBP funded (Bridge) projects to ensure funding eligibility.

If a field review is required, Caltrans and the FHWA will attend. Caltrans and the FHWA may also attend optional field reviews, if requested. The local agency shall fill out [Exhibit 7-B](#) as completely as possible prior to the field review and send a copy with a location map to each of the interested parties attending the field review. This allows the participants to come to the meeting prepared to discuss the specific issues and methodologies, which can lead to successful project implementation. The earliest date for the field review should be two weeks after the receipt of the drafted [Exhibit 7-B](#) by the district. Copies for the FHWA, DLA, and Office of Structure Design must be submitted to the district for further transmittal.

Caltrans has delegated design exception approval authority for projects off the SHS to the City/County Public Works Director see [LAPM Chapter 11: Design Guidance](#). However, proposed design exceptions should be identified and discussed at the field review.

The Field Review Form should be updated and signed by the local agency, district, and FHWA representatives, as appropriate, at the field review even if some of the questions remain unanswered. Information determined after the field review is to be provided by the local agency as a supplement to the Field Review Form and may require FHWA concurrence.

Optional Field Reviews Not Attended by Caltrans or the FHWA

If the field review is optional and Caltrans and the FHWA will not be attending, the local agency may complete [Exhibit 7-B: Field Review Form](#) without a formal or informal review or meeting. An on-site visit by the project engineer and project manager is recommended as good practice to verify the data and information used to complete the forms. The forms should be transmitted to the DLAE as soon as they are complete.

7.6 FIELD REVIEW DATA

Scope

The project must be defined in sufficient detail to accurately specify where it is, why it is necessary and what will be done. This process of project definition began with the planning and programming process. Now, further details are needed to clarify the limited FSTIP information with the specific project location, system and conditions as they currently exist and as they will be upon project completion. If the scope changes significantly from the approved FSTIP description, now or at any time during project development, a FSTIP amendment may be necessary. Items 1 to 5 on [Exhibit 7-B](#) and LAPM [Exhibit 7-C: Roadway Data](#), [Exhibit 7-D: Major Structure Data](#), [Exhibit 7-E: Railroad Grade Crossing Data](#), vicinity maps, typical section(s), alternative sketches, signal warrants, and collision diagrams, as appropriate, provide data related to the general scope of the project. For non-roadway projects, [Exhibit 7-B](#) and attachments would be modified as appropriate for the project activity and scope, e.g., site plans, work plans, and building sketches.

Environmental Process

All federal-aid projects must follow the federal environmental process (NEPA) described in [LAPM Chapter 6: Environmental Procedures](#). NEPA approval, Caltrans signed Categorical Exclusion (CE), Finding of No Significant Impact (FONSI) or Record of Decision (ROD) must be obtained prior to commencing with final design, Right of Way acquisition or construction. The Preliminary Environmental Study (PES) Form documents the requirements for technical studies and the NEPA Class of Action (CE, EA, EIS) and is equally as important as the environmental approval. Environmental requirements and procedures for processing required technical studies and the NEPA document are discussed in [LAPM Chapter 6](#). Specific information regarding the format and content of required technical studies and NEPA documents (CE, EA, EIS) is contained in the SER.

[Exhibit 6-A: Preliminary Environmental Study \(PES\) Form](#), is designed to identify:

- The scope of the project
- The existing condition of the project area
 - The potential existence of sensitive environmental resources within the project area
- Required technical studies
- The responsible or regulatory agencies where early coordination or consultation is necessary or where approvals and permits are needed
- NEPA Class of Action

Right of Way

The need to acquire right of way or relocate utilities can significantly affect project development, especially costs and scheduling. Activity within Caltrans right of way requires coordination and an encroachment permit. Federal laws and regulations must be followed if there is FHWA participation in any project phase, whether in R/W phase or only in the construction phase. The acquisition and relocation program will be conducted in accordance

with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended (42 US Code 4801, et. seq.). Item 7 of [Exhibit 7-B: Field Review Form](#) highlights the possible right of way activities with a cost estimate breakdown. The need for utility relocation should be identified.

Project Cost

Good initial estimates are needed to define whether there are sufficient funds available to implement the project. Item 7 of [Exhibit 7-B](#) provides for an overview by phase and anticipated federal participation. Item 8 can be used to further break this down by federal fund type and state funding. State or local funds are normally required to match the federal funds. To the greatest extent possible, FHWA funded projects should be funded at the full federal participating ratio (see [LAPM Chapter 3: Project Authorization](#), Section 3.6: Underfunded Policy).

Project Administration

The agency submitting the request is normally responsible for administering all phases of the project. If another arrangement is expected, this should be noted. If the agency plans to hire a consultant to assist with any phase, this should be noted. This allows the agency to work sufficient time into their schedule for consultant selection see [LAPM Chapter 10: Consultant Selection](#). If the state is expected to administer any phase or to review the PS&E, hold early discussions with the appropriate Caltrans district to ensure that the required staff is available when needed. A cooperative agreement is needed to define work and cost sharing responsibilities.

Project Schedule

A federal project is normally scheduled for a specific year in the FHWA-approved FSTIP document. While the funds are usually carried forward into new FTIP and FSTIP adoptions, this is at the discretion of the MPO. For State funded projects, the specific program guidelines define the year or years the program funds are available. The delivery schedule for advertising should be reviewed to see if the project could be developed in a timely manner. The items discussed above define some of the critical steps in this effort. For federally funded projects, if there will be significant delays, the agency should work with the MPO to reschedule the work through a current FSTIP amendment or into the next FSTIP. State program guidelines define the appropriate actions for the State funded projects. In non-MPO areas, contact the Caltrans District FSTIP coordinator for necessary amendments.

7.7 SUBMITTAL OF FIELD REVIEW FORM

As soon as formal or informal discussions and review are complete, the local agency prepares the final [Exhibit 7-B: Field Review Form](#) and attachments (see [Section 7.5: Preparation of Field Review Form](#) above for the latest times for completion). If a field review is required for NHS projects, all appropriate forms and attachments shall be completed. If the field review is optional, two page of [Exhibit 7-B](#) summary must be completed, as a minimum. See the brackets ([]) notation under Item 12 of [Exhibit 7-B: Field Review Form](#) for additional attachments.

The local agency consults with the district regarding the number of copies to be sent. The district forwards [Exhibit 7-B: Field Review Form](#) (two if a bridge is involved) with the required

attachments to the Division of Local Assistance. The local agency may wish to provide copies to their MPO and other interested parties.

The project engineer and project manager should periodically review [Exhibit 7-B](#) and data to ensure that the project development is proceeding as initially proposed or that significant changes have been approved.

The field review document must be completely filled out and submitted prior to or concurrently with the first occurrence of either step below:

- Initial submittal of the PES form (completed and with supporting information attached) for Caltrans review and approval (see [LAPM Chapter 6: Environmental Procedures](#))
- Submittal of the Agreements Checklist requesting a Supplemental Agreement