Appendices Preface

Contents

The appendices contain the preparation guidelines, report templates, and forms for the various procedural documents and reports that serve as either project initiation documents or project approval documents.

Division of Design Document Format

Some of the documents in these appendices are designed and administered by the Division of Design. The Division of Design takes responsibility for seeing that the Project Development Procedures Manual (PDPM) contains current copies of the documents and guidelines for these documents.

Format for Other Documents

Other documents in these appendices were created and are administered by other divisions in Caltrans. While the Division of Design may have written guidelines for some of these documents, Division of Design does not maintain current, computerized files for them; it is recommended that the administering division be contacted for questions regarding availability.

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Appendices A Through Z

Project Development Initiation and Approval Reports

APPENDIX A – Preparation Guidelines for Project Study Report-Project Report

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APPENDIX A – Preparation Guidelines for Project Study Report-Project Report

ARTICLE 1 Overview

Reference Information

Some of the references found in this appendix have hyperlinks that connect to Caltrans intranet pages which are not displayable to the general public. Until such time that the specific reference becomes available on the internet, the user will have to contact their district liaison, Caltrans project manager, or the appropriate Headquarters division to inquire about the availability of the reference.

Use of Project Study Report-Project Report

The project study report-project report (PSR-PR) eliminates the separate processing of a project initiation report (PID) and a project report (PR) and is used to obtain project approval for projects-funded-by-others.

A project-funded-by-others is a highway improvement project that is sponsored by a local agency or private developer and does not use any State or federal funds, nor federal reimbursements. See Chapter 9 – Project Initiation and Chapter 12 – Project Approvals and Changes to Approved Projects for additional considerations.

Preparation of Project Study Report-Project Report

Article 2 "Template" presents the template that can be used for the PSR-PR. Use Appendix L – Preparation Guidelines for Project Study Report and Appendix K – Preparation Guidelines for Project Report for guidance in preparing the PSR-PR. Use checklists discussed in Appendix L – Preparation Guidelines for Project Study Report to properly scope the project.

The template was created for broad application and, as such, portions of the template may not strictly apply to all transportation projects. The template should be modified to include or exclude sections so that pertinent project deficiencies, issues or coordination are clearly presented. The preparer of the report should evaluate the number of the alternatives and the complexity of the issues to determine whether to

organize the information by alternatives or issues. The space for filling in various sections of the template is condensed for practical viewing of the template. As appropriate, each section can be expanded to accommodate necessary information.

Approval of Project Study Report-Project Report

The District Director (or Deputy District Director if identified in Caltrans' delegation of authority) is responsible for approval of the PSR-PR.

ARTICLE 2 Template

This article is a template for the project study report-project report. When using the template, delete any italicized text within the body of the document. The italicized text provides instructions for template users and does not provide any value to the final document.

Appendix A Template

APPENDIX D – Preparation Guidelines for Project Report (New Highway Planting or Roadside Rehabilitation)

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APPENDIX D – Preparation Guidelines for Project Report (New Highway Planting or Roadside Rehabilitation)

ARTICLE 1 Overview

Use of Project Report (New Highway Planting or Roadside Rehabilitation)

The project report (new highway planting) is the project approval document for minor roadside preservation State Highway Operation and Protection Program (SHOPP) projects in the 20.XX.201.220 – New Highway Planting Program.

The project report (new highway planting) is also the project approval document for State Transportation Improvement Program (STIP) projects in the 20.XX.025.700 – Interregional Improvement Program Highway Projects and 20.XX.075.600 – Regional Improvement Program Highway Projects.

The project report (roadside rehabilitation) is the project approval document for roadside preservation SHOPP projects in the 20.XX.201.210 – Roadside Rehabilitation Program.

Preparation of Project Report (New Highway Planting or Roadside Rehabilitation)

These guidelines provide information to be used with the requirements described in Chapter 10 – Formal Project Studies, Chapter 12 – Project Approvals and Changes to Approved Projects, and Chapter 29 – Landscape Architecture.

The following guidance is tailored to highway planting projects. See Appendix K – Preparation Guidelines for Project Report for fundamental guidance on the preparation of project approval documents.

The project report (new highway planting or roadside rehabilitation) should be prepared using the report template associated with this appendix, see Article 3. The report should be similar in organization, but can vary based on features, complexity and issues specific to each project. Modify the report format to include information

that is pertinent to the scope, cost and schedule of project. If a section is not applicable to the project, fill in as "Not applicable."

ARTICLE 2 Outline

General

The project report (PR) outline located in Appendix K – Preparation Guidelines for Project Report was adapted to meet the documentation needs of the New Highway Planting Program and Roadside Rehabilitation Program. Some sections of the standard PR were modified to facilitate the presentation of project information.

Consult with the district program advisor and the Headquarters SHOPP program manager to determine how project-specific issues should be presented.

Not every outline topic is discussed; information is presented when it differs from or is in addition to that found in Appendix K – Preparation Guidelines for Project Report.

Front Matter

Cover Sheet

Vicinity Map

Licensed Landscape Architect Stamp

The licensed landscape architect stamp or seal and number with signature shall be placed on a separate sheet, which shall be part of the report. Also included on this sheet shall be a statement indicating that the licensed landscape architect is attesting to the technical information contained therein and the data upon which recommendations, conclusions, and decisions are based. This seal does not constitute approval of the report. Approval of the report is a management decision and is separate from this technical signature of the person in responsible charge.

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Main Body of Report

1. INTRODUCTION

Include the types of proposed work, gross length and area of the work, and the net length and area for each type of work. The SHOPP performance measure associated with the New Highway Planting Program and Roadside Rehabilitation Program is "Acres." As appropriate, in the table, enter the number of acres for the SHOPP project output.

2. RECOMMENDATION

3. BACKGROUND

Project History

Discuss how the project need was identified and any efforts already expended, including previous relevant work and discussion of deficiencies not corrected by previous projects, and etcetera.

Community Interaction

Existing Facility

Describe pertinent existing facilities within the proposed project limits and those in the adjacent sections of highway. Include the dates of highway construction and previous planting work.

Discuss vegetation, irrigation facilities, and other roadside features, including median and roadside widths, road edge treatments, slopes, drainage facilities, erosive conditions, available utilities—particularly potable water, recycled/nonpotable water, electrical utilities, water line crossovers, and conduits in structures or under the pavement along with their age and condition.

Project Study Report Data Sheet Consistency

Describe deviations from the project study report (PSR) data sheet.

Issues and Commitments

Describe stakeholder interaction, including support or opposition to the proposed project. Discuss any commitments this project makes or fulfills.

4. PURPOSE AND NEED

5. ALTERNATIVES

5A. VIABLE ALTERNATIVES

Identify the alternative recommended for programming purposes.

Proposed Highway Planting Features

Provide a detailed description of proposed planting or planting rehabilitation work, including how it solves deficiencies identified in the purpose-and-need. Be site specific in the discussion of the proposal. Discuss overall design issues to be addressed, including:

- Plant types and the functional purpose of the planting; discuss how planting is used to improve the maintainability, safety, and aesthetics of the area, identify the length of plant establishment period
- Proposed methods of irrigation
- Refer to the preliminary plans that should delineate and describe the following:
  - Form and function of the plant material (such as: broad deciduous trees, mulch, groundcover, shrub screen, grasses, and etcetera)
  - Irrigation mainline routing, bridge supply lines, irrigation crossovers, points of connection, water meter, water and power source, remote control valve cluster locations, irrigation controller locations, and etcetera
  - Gates, access roads, staircases, and maintenance vehicle pullouts locations
  - Additional paving for narrow areas and areas beyond the gore, slope paving, and use of inert materials (such as: rock blanket, mulch, and etcetera)

Traveler and Worker Safety

Describe proposed traveler and worker safety considerations including, but not limited to, the following:

- Relocating roadside facilities to protected areas or adjacent to the right-of-way fence
- Removal or replacement of deteriorating trees or other plant material, and removal of plant material that encroaches upon required sight distances
- Planting of vines on noise barriers and retaining walls to deter graffiti
- Automation of manual irrigation systems, including controllers, valves and control and neutral conductors

- Providing maintenance access roads and access gates for workers on foot or in vehicles, staircases, and maintenance vehicle pullouts
- Placing mulch or installing inert materials to reduce weeds, water use and ongoing maintenance
- Providing vegetation control underneath guardrails and signs
- Providing paving for narrow areas
- Paving of slopes under bridge structures
- Providing additional paving beyond the gore
- Replacing spot locations of frequently damaged guardrail with concrete barrier
- Removing signs that are redundant
- Removing or relocating signs outside of gore areas

Water Conservation

Discuss current and future water consumption. Reference the updated calculations from the water budget calculator located on the California Department of Water Resources, *Water Efficient Landscape Ordinance website*.

Include the calculations as an attachment.

Discuss any local or regional requirements for water conservation and how the proposed design will ensure compliance. Include water capacity fee.

Discuss how the proposed planting design and irrigation design will reduce or minimize water consumption. Discuss if a temporary irrigation system is feasible.

Provide a comprehensive analysis of the feasibility of using recycled/nonpotable water for irrigation including: water source, quality, cost justification (as an attachment), suitability for proposed planting, availability, reliability, quantity, unusual health or environmental considerations, future implications or operational problems, impact on adjacent or nearby planting projects, cooperation with other potential users, and any other appropriate considerations.

When smart irrigation technology is proposed, discuss the water management features to be utilized and how this work will be resourced by district maintenance. If district maintenance will require training to operate the new system, describe how this will be accomplished. Describe the communication protocol and indicate the communication carrier used by the district.

Maintenance

Discuss current and expected future maintenance costs, maintenance needs and potential savings, if any, to be derived from the proposed project.

Discuss how the proposed design concept conforms to Caltrans' chemical reduction goals.

Paybacks

For rehabilitation projects the payback must be 12 years or less. It is calculated by subtracting the following items from the total project cost: traveler and worker safety items, water assessment fees, recycled/non-potable water transmission/supply lines, smart irrigation technology/remote irrigation control systems (RICS), resident engineer's field office, hazardous materials, traffic control, and stormwater pollution prevention.

Nonstandard Design Features

Describe any features that do not comply with planting policies described in Chapter 29 – Landscape Architecture.

Cost Estimate

Provide a project cost estimate as of January 1st of the current fiscal year, including a 15% contingency factor. Refer to the sample cost estimate in Article 4 for items to consider.

Use of Wildflowers

California native wildflowers must be included with all projects with federal funding that include planting work. Highway planting to provide traffic safety improvements, re vegetation, erosion control, and irrigation-only projects are exempt from this requirement.

The project report should discuss any proposed use of wildflowers and compliance with federal wildflower requirements. If wildflowers are not incorporated, the project report must describe the specific reasons why use of native wildflowers is not appropriate and an estimate of the dollar value of the required wildflower element.

5B. REJECTED ALTERNATIVES

6. CONSIDERATIONS REQUIRING DISCUSSION

Summarize all major issues; the template has a list of common issues. Address each item as appropriate or put "Not applicable." The template should be altered to include project-specific issues as needed.

6A. HAZARDOUS WASTE

6B. VALUE ANALYSIS

Typically this section is not applicable. These projects usually do not reach the project cost threshold that requires a value analysis study, however; the principles of value engineering may be applied to ensure cost effectiveness of the project.

6C. RESOURCE CONSERVATION

6D. RIGHT-OF-WAY ISSUES

6E. ENVIRONMENTAL COMPLIANCE

6F. AIR QUALITY CONFORMITY

6G. TITLE VI CONSIDERATIONS

Typically this section is not applicable. These projects usually do not require public presentations, meetings, participation or other involvement where Title VI of the *Civil Rights Act of 1964* could be an issue.

6H. NOISE ABATEMENT DECISION REPORT

Typically this section is not applicable. These projects usually do not require a draft project report to authorize public release of a draft environmental document.

6I. TRANSPORTATION MANAGEMENT PLAN

See Appendix K– Preparation Guidelines for Project Report topic "Transportation Management Plan" in outline item "7. Other Considerations As Appropriate."

6J. STORMWATER COMPLIANCE

An approved storm water data report (SWDR) as described in *Storm Water Quality Handbooks: Project Planning and Design Guide* must be completed during the project approval phase. Discuss any issues that affect the project.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Only include appropriate topics.

8. FUNDING, PROGRAMMING AND ESTIMATE

Support Estimate:

The cost of any specialty contracts or other atypical direct project costs that may be required for the project should also be estimated by the proposed fiscal year.

9. DELIVERY SCHEDULE

10. RISKS

11. EXTERNAL AGENCY COORDINATION

12. PROJECT REVIEWS

The scoping team field review is only required if the project report purpose is to request programming and for project approval.

13. PROJECT PERSONNEL

14. ATTACHMENTS

In addition to the attachments discussed in Appendix K– Preparation Guidelines for Project Report, include the following:

- Design concept
- Water use calculations
- Cost justification for recycled/nonpotable water use
- Project study report data sheet

ARTICLE 3 Template

This article is a template for the project report (roadside safety improvements). When using the template, delete any italicized text within the body of the document. The italicized text provides instructions for template users and does not provide any value to the final document.

The template is located at:

http://www.dot.ca.gov/hq/oppd/pdpm/templates/apdx-d-template.docx

ARTICLE 4 Sample Cost Estimate

Item Description	Unit	Quantity	Unit Price	Estimated Construction Cost
Planting, Irrigation and Year(s) Plant Establishment Costs by Functional Planting Categories Identified in the Proposal				
Roadside Clearing	ACRE			
Linear Screen Planting	MILE			
Tree and Shrub Planting	ACRE			
Groundcover Planting	ACRE			
Vines on Wall or Fence	MILE			
Plant Establishment	LS	Lump Sum		
Irrigation System (for example: supply line, sprinklers, low-voltage conductors, and remote control valves)	LS	Lump Sum		
Irrigation Crossover	LF			
Hang Ductile Iron Pipe on Bridge	LF			
Extend Water Supply Line to Caltrans Right-of-way	LS	Lump Sum		
Jacked or Directional Bored Crossovers	LF			
Water Meter	EA			
Water Assessment Fee	LS	Lump Sum		
Water Cost	LS	Lump Sum		
Convert Potable Water to Recycled/Nonpotable Water	LS	Lump Sum		
Backflow Preventer	EA			
Irrigation Controller Enclosure	EA			
Booster Pump	EA			
Electrical Service (Irrigation)	LS	Lump Sum		
Upgrade Existing Irrigation System	ACRE			
Water Supply	LS	Lump Sum		
Worker Safety				
Relocate Irrigation Controllers	EA			

Relocate Backflow Preventer Assemblies	EA			
Relocate Mainlines	LS			
Relocate Valves	EA			
Relocate Laterals and Sprinklers	LS	Lump Sum		
Remove Hazardous Trees or Vegetation	LS	Lump Sum		
Plant Vines for Graffiti Control	EA			
Maintenance Access Roads	SQYD			
Maintenance Access Gates (Walk)	EA			
Maintenance Access Gates (Drive)	EA			
Maintenance Vehicle Pullouts	EA			
Mulch	SQYD			
Rock Cover/Rock Blanket	SQYD			
Vegetation Control Under Guardrails and Signs	SQYD			
Slope Paving	SQYD			
Contrasting Surface Treatment Beyond the Gore Pavement	SQYD			
Pave Narrow Areas	SQYD			
Remove or Replace Signs	LS	Lump Sum		
Remove or Relocate Pull Boxes	LS	Lump Sum		
Other Items				
Supplemental Work	LS	Lump Sum		
Resident Engineer's Office	LS	Lump Sum		
Storm Water Pollution Prevention	LS	Lump Sum		
Hazardous Materials	LS	Lump Sum		
		SUBTOTAL _____		
		15% CONTINGENCY _____		
		GRAND TOTAL _____		
		CALL (Round to nearest $1000)		

APPENDIX I – Preparation Guidelines for Permit Engineering Evaluation Report

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APPENDIX I – Preparation Guidelines for Permit Engineering Evaluation Report

ARTICLE 1 Overview

The Encroachment Permit Application Review Form

Refer to Chapter 9 – Project Initiation for information about the encroachment permit process. The Encroachment Permit Application Review form (TR-0110) is used by the district permits unit for transmitting encroachment permit proposals that cost up to $1,000,000 within State right-of-way to other Caltrans units for review. The reviewing units must fully detail their comments about the proposal and their number of review hours. The responsible unit as determined by the district permit engineer is designated on this form. The responsible unit must determine whether a permit engineering evaluation report (PEER) is required for encroachment permit projects, and if so, attach it or indicate the estimated completion date. If the unit determines that there will be no adverse impact on highway operations, maintenance, and tort liability, it will indicate so in the appropriate box shown on the Encroachment Permit Application Review form with the signature by at least a senior level person. The unit will then do its usual permit review, fill out the rest of the form, and return it to the district permit engineer. If there will be impacts, a PEER is required and the unit will be responsible for the preparation and review and securing the approval of the PEER. If the project does not meet the eligibility requirements for processing via a combined project study report-project report (PSR-PR), it is not eligible for processing as a PEER. Refer to Chapter 9 – Project Initiation for more information about the PSR-PR.

The PEER process is intended to streamline the processing of projects-funded-by-others by reducing the steps in the project development process. It is not intended to relieve the project sponsor from meeting all Caltrans' other policies, standards and practices. Caltrans may increase the level of documentation and processing for those projects that are deemed complex.

The Permit Engineering Evaluation Report

A project report (PR) or a PEER is required for every action that has a permanent traffic impact and for work that affects the operating capability of a State highway facility. These reports, and their preparation, are the responsibility of either project development or traffic operations. However, the district permit unit must verify that responsible and reviewing units have considered the need for the appropriate report and have correctly completed the Encroachment Permit Application Review form.

Projects-Funded-by-Others if Cost is Over $1,000,000

The district permit engineer determines the magnitude of the work. An encroachment or public transit project that costs more than $1,000,000 and is located within State right-of-way is considered a project-funded-by-others and will require PEER if it costs less than $3 million, a PSR-PR if it qualifies, or a project study report (PSR) and a PR if it does not. The PSR-PR process is described in Chapter 9 – Project Initiation and in Appendix A – Preparation Guidelines for Project Study Report-Project Report.

Projects not Requiring a Permit Engineering Evaluation Report

Projects not requiring a PEER usually are for commercial filming, miscellaneous activities, special events, surveys, and utilities.

Purpose of a Permit Engineering Evaluation Report

A PEER is prepared to document the engineering analysis of proposed work. The analysis includes review of the proposed improvements to determine drainage, maintenance, operation, and environmental impact on the State Highway System. Proposed improvements must conform to Caltrans' current design standards and practices or be justified by an approved design decision document. Additional information may be requested from the applicant if it is needed to perform the reviews. A permit may be denied based upon conclusions of the reviews.

Report Format

The PEER should be prepared and submitted using the Permit Engineering Evaluation Report form (TR-0112). Article 2 provides guidelines for specific items on the form.

ARTICLE 2 Guidelines for Completing the Permit Engineering Evaluation Report

Hours for Preparing

For permit projects: Give the total hours used in investigating and preparing the PEER by all parties. PEER preparation is considered part of the permit review process. The time needed to evaluate and finalize the PEER will depend on the scope and complexity of the work. When it can be done within the review deadline, the PEER should be attached to the review form and returned to the district permit engineer. When more time is needed, the review form should be returned immediately to the district permit engineer, notifying of the estimated date of PEER completion and whether nor not additional information is needed.

For projects-funded-by-others: These projects require a work plan for the independent quality assurance efforts. Project sponsors are required to prepare the PEER and the hours required to prepare the PEER are not required.

Permit Number

Permit number assigned to permit application by district permit office (if appropriate).

Date

Date of completion of the PEER.

District / County / Route/ Post Mile (Dist-Co-Rte-PM)

The post mile should be given to the nearest 0.1 mile; if the project is 0.2 mile or more in length, give both the beginning and ending post mile.

EA Used

The expenditure authorization (EA) used to charge costs for the permit review process as spelled-out in Chapter 2 of the *Encroachment Permits Manual* or the project EA for projects-funded-by-others.

Applicant

Name of individual, agency or organization submitting permit proposal.

1. Describe Proposal, What It Serves, Approximate Cost

   Provide a brief narrative containing statements that are concise but include the information needed to describe the proposed work.

2. Describe Existing Highway - Brief Analysis of Impact on Highway Operation and Maintenance

   Evaluate the impacts of the proposal upon the State highway.

3. Analysis of Proposal for Geometric and Functional Adequacy

   Summarize the findings of the determination of the geometric and functional adequacy of the proposal. All statements should be concise and contain the information needed to justify (or reject) the proposed work.

3a. Nonstandard Design Features

   Check "Yes" or "No" indicating whether nonstandard design features are involved and if they are, provide the rationale for approval of a design standard decision document. If yes, give name of approval authority and date of approval. If Federal Highway Administration (FHWA) approval of a design standard decision document is needed, obtain this on a separate sheet and attach it.

4. Revision in Access Control or Transfer of Right-of-Way to Permittee Involved

   Check "Yes" or "No."

4a. If Yes, Date of District Director Approval

   If the proposal involves a reduction in access control or the transfer of Caltrans right-of-way to the permittee, a request must first be made to the District Director for authorization to decertify and dispose of the property rights involved. See Chapter 26 – Disposal of Rights-of-Way for Public or Private Road Connections for processing instructions. Indicate the date the District Director approved the revision.

4b. If Interstate, Date of FHWA Approval

   If FHWA concurrence is needed for a change in access on the Interstate System, give the date of approval.

5. Signalization Involved

   Check "Yes" or "No." If the answer is yes, answer the next four questions by checking yes, no, or not applicable.

   If the answer to any of the four questions is no, provide an explanation and any comments on an attached sheet.

Proposal Recommended

Check either "Yes, as submitted," "Yes, with conditions described above," or "No, as described above." List conditions in Item 3. Indicate reasons for "No, as described above" in Item 3.

Prepared by Title

- Name of individual who prepared this report and who should be contacted regarding the proposal
- Title of individual preparing the PEER
- For projects-funded-by-others enter the name and title of the individual responsible for reviewing the PEER

Registered Engineer Stamp

The PEER must be prepared by a California registered civil engineer. The stamp or seal and signature and date must be placed on the report, in the space provided for the engineer in responsible charge of the evaluation.

Unit

The unit source code of the registered engineer in responsible charge of the evaluation of the proposal.

Approved by Title Date Approved

- Signature of the District Director or the Deputy District Director to whom approval authority has been delegated
- Title of individual approving the PEER
- Date approved

APPENDIX K – Preparation Guidelines for Project Report

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APPENDIX K – Preparation Guidelines for Project Report

ARTICLE 1 Overview

Reference Information

Some of the references found in this appendix have hyperlinks that connect to Caltrans intranet pages which are not displayable to the general public. Until such time that the specific reference becomes available on the internet, the user will have to contact their district liaison, Caltrans project manager, or the appropriate Headquarters division to inquire about the availability of the reference.

Important Distinctions

The project report (PR) recommends approval of a project. The draft project report (DPR) must be prepared for projects with an environmental document (ED). The DPR approves the release of the draft environmental document (DED) to the public. Throughout this manual, this distinction is maintained.

Projects with Environmental Documents

If the project requires an environmental document, a DPR must be prepared prior to the PR (see Chapter 11 – Public Hearing); unless there is already a satisfactory approved environmental document by Caltrans or others. The draft environmental document must be attached to the DPR.

Following public circulation of a draft environmental document, consideration of public comments, and the selection of a preferred alternative, the DPR is revised accordingly and becomes the PR. The final environmental document (FED) must be attached to the PR.

Projects without Environmental Documents

Only a PR is required for projects that are statutorily exempt or have a categorical exemption/categorical exclusion (CE/CE). A signed Categorical Exemption/Categorical Exclusion Determination Form is a mandatory attachment to

the PR for these projects. See the *Standard Environmental Reference* (*SER*) for details.

Projects Initiated with a Project Study Report-Project Development Support

When a project study report-project development support (PSR-PDS) is used to initiate the project, a PR is used to program the remaining capital outlay support and the capital outlay project right-of-way and construction estimates.

The purpose of the PSR-PDS is to gain approval for the project studies to move into the Project Approval and Environmental Document (PA&ED) phase with minimal time and effort—utilizing existing data and studies. The PSR-PDS is used to estimate and program the capital outlay support budget necessary to complete the studies and work needed during PA&ED only. The level of engineering detail and effort for developing a PSR-PDS is reduced as compared to a project study report (PSR). Since the required information for a PSR-PDS is reduced, much of the engineering detail, analyses and possible additional studies, design standard decision document for nonstandard design features, and other approvals may need to be completed during the PA&ED phase.

Additional Studies

Depending upon the level of detail included in a PSR-PDS, several studies may have to be initiated and completed during the PA&ED phase that would typically be performed in the Project Initiation Document (PID) phase if the initiation document was a PSR.

Exceptions to Design Standards

Approval of proposed nonstandard design features is not required for a PSR-PDS as typically there is not enough information available to prepare the design standard decision document. They should be prepared during the PA&ED phase.

Approvals

Some project approvals may need to be obtained during the PA&ED phase that would normally have been performed during the PID phase, as the PSR-PDS may not include enough detail to make a decision. For example, if the project proposes new or modified Interstate access points, the process to request Federal Highway Administration (FHWA) approval is deferred to the PA&ED phase. When a PSR-

PDS is the PID, the DPR or a supplemental PSR serves as the report to request an FHWA Determination of Engineering and Operational Acceptability for new or modified Interstate access. See Chapter 27 – Access Control Modification, for more information.

Recommendation

Both DPRs and PRs should contain a recommendation to document what is being approved. A PR should recommend approval of the project. A DPR, when required, should recommend proceeding to a public hearing; if there is no federal involvement, it should recommend circulation of the draft environmental document. For further details, see Article 2, outline item 2, "Recommendation."

ARTICLE 2 Outline

General

The purpose of this outline is to identify the key elements to document in a DPR and PR. All headings presented in the template shall be included in the report. Topics listed under outline item 7, "Other Considerations as Appropriate" may not apply to some projects, so these should only be discussed if appropriate.

Subject matter that is thoroughly discussed in a draft environmental document or final environmental document should not be repeated in its entirety in a draft project report or project report. Instead, the environmental information should be summarized and then cross referenced to the appropriate part of the environmental document.

Front Matter

Cover Sheet

The cover sheet provides the project identifiers, in the header, such as the district, county, route, and post mile range, as well as the expenditure authorization (EA), project number, planning program number (PPNO), program code, program name, and month and year of report approval.

The beginning and ending post miles should be rounded to the nearest 0.1 mile that encompasses all of the proposed construction. The project location should be listed as a spot location to the nearest 0.1 mile if the project is less than 0.2 mile in length.

The draft project report limits should use the limits encompassing all alternatives. The project report limits should use the limits of the preferred alternative.

The project number is the 10 digit number used for reporting labor charges.

Enter the program code(s) with program name(s). Information on the program codes and names can be found in the *Coding Manual*, Chapter 7. The program code is typically presented in the format of "20.XX.201.010" where "XX" is entered in the element location to represent both capital outlay support (XX=10) and capital outlay projects (XX=20) when they are funded from the same funding program. Use specific, separate program codes for multiple funding sources.

Modify the type of report to "Draft Project Report" as needed. Modify the purpose of report as needed. Typical entries for the purpose(s) include:

- For Project Approval
- To Request Programming in the 20XX SHOPP and For Project Approval
- To Request Programming in the 20XX STIP and For Project Approval
- To Authorize Public Release of the Draft Environmental Document

See the *Plans Preparation Manual*, Section 2-2.2 for guidance in developing the project legal description. The project legal description is the same as the title sheet project description, such as: "In Los Angeles County…"

The cover sheet must include a statement signed by the district division chief right-of-way indicating review of the right-of-way information contained in the project report or draft project report and the right-of-way data sheet attached to it.

The cover sheet must include endorsement of the project manager.

The District Director or Deputy District Director to whom that authority has been officially delegated approves the recommendations of the project report or draft project report. The draft project report is used to authorize proceeding to a public hearing and must include this recommendation. The signature date on the project report becomes the official date of State project approval and approval of initiation of plans, specifications, and estimate. Edit the signature block as appropriate.

Vicinity Map

The vicinity map is a district, county, or city map showing all State highways and major local roads when pertinent. It should be placed on a separate page and should

include the study limits, major topographic limits listed in the report, and a north arrow.

Registered Professional Stamp

The registered professional stamp or seal and number with signature shall be placed on a separate sheet, which shall be part of the report. Also included on this sheet shall be a statement indicating that the registered professional is attesting to the technical information contained therein and the engineering data upon which recommendations, conclusions, and decisions are based. This seal does not constitute approval of the report. Approval of the report is a management decision and is separate from this technical signature of the person in responsible charge.

Table of Contents

On a separate sheet, place a table of contents that includes all the elements of the report.

Main Body of Report

1. INTRODUCTION

Describe the proposed project and fill out the table with the project limits, number of alternatives, current and escalated capital outlay estimates for support, construction, and right-of-way, funding source, funding year, type of facility, number of structures, State Highway Operation and Protection Program (SHOPP) project output (if appropriate), environmental determination or document, legal description, and project development category.

For a Draft Project Report

Describe the viable alternatives.

For a Project Report

Describe the preferred alternative if appropriate.

2. RECOMMENDATION

Give a recommendation for approval. If cooperative features are described, recommend that the cooperative features be approved and a cooperative agreement be negotiated.

For a Draft Project Report

If this is a DPR with an attached draft environmental document, recommend approval to publicly circulate the draft environmental document and to schedule a public hearing—or recommend that an opportunity for a hearing be offered if appropriate, based on the viable alternatives developed.

For a Project Report

If this is a PR, recommend that the project be approved using the preferred alternative (if applicable), and that the project proceed to the next phase.

For projects with a final environmental document, a statement must accompany the recommendation that attests that (1) the affected local agencies have been consulted with respect to the recommended plan, that (2) their views have been considered, and (3) that the local agencies are in general accord with the plan as presented. Requests for project approval without this assurance shall not be made except under extenuating circumstances, in which case the request shall contain the reasons for not having local agency concurrence.

If necessary, make recommendations for programming changes to cost amounts, fiscal year scheduling, or stage construction.

3. BACKGROUND

Project History

Discuss the history of the project to-date. Discuss how it got to where it is in the project development process.

Answer these questions: Was the project previously approved and is it now being rescoped? How much project development effort has already been expended? Has any right-of-way been acquired? Have any issues been identified? As appropriate, give approval dates of the PSR, etcetera. How does the current proposal differ, if any, from the approved PSR?

Community Interaction

Summarize community interaction and contacts (what was expressed and Caltrans' response). Were meetings held with legislators or local politicians, etcetera? Were any commitments made? Have any issues developed? Is there support or opposition?

Has there been contact with any special interest groups, including contacts with minorities, elderly, physically challenged, non-drivers (transit-dependent), pedestrians, bicyclists, and the economically disadvantaged? Discuss their needs and what can be done to accommodate these needs.

Existing Facility

Describe the existing facility within the proposed project limits, as well as contiguous with each end of the proposal. Note right-of-way widths, access control, capacity adequacy, geometrics, structural section condition, drainage, and any other appropriate information. The level of detail to be given should relate to the proposed alternative project features and existing deficiencies and substandard features and should not give a lot of detail unless it is needed to explain the proposed alternatives.

4. PURPOSE AND NEED

4A. PROBLEM, DEFICIENCIES, JUSTIFICATION

Provide a concise discussion on the purpose-and-need of the project proposal and alternatives, supplemented by attached maps, charts, tables, letters, etcetera. Project "need" should be stated in a factual and professional manner. Adjectives that promote an unsubstantiated opinion such as "dangerous", "hazardous", or phrases such as "this curve caused six accidents" should not be used.

Answer these questions: What is the problem? Does the discussion set the stage to conclude that the project is needed? Be as specific as possible: How much congestion? How many fatalities? How much flooding? How much maintenance effort is needed?

The data from the PSR or other project initiation document should now be updated to reflect new environmental and additional engineering studies. The discussion should make a convincing case that a solution to a problem is needed and that the purpose of the proposed project is to provide a solution that best solves the transportation problem.

4B. REGIONAL AND SYSTEM PLANNING

Identify Systems

Identify the federal and State systems the proposed project is on, including the Interstate System, the National Highway System, the Freeway & Expressway System,

the Scenic Highway System, the Interregional Road System, and Extralegal Load Network. Identify any master plan relating to the proposal.

State Planning

Discuss how the alternatives relate to the State planning documents. Discuss the route concept and concept facility as proposed in the transportation concept report or route concept report. Describe its placement in the transportation system development plan and the district system management plan. Discuss any other pertinent State plan, such as the California Recreational Trails Plan or the State Implementation Plan (SIP) for air quality.

Regional Planning

Discuss how the project alternatives are treated in regional planning documents. Are the proposals consistent with the regional transportation plan (RTP)? If not, what steps are being taken to assure consistency? Where required, state that the regional transportation plan was derived from a congestion management plan that included the project (specify which alternatives or indicate "all" alternatives). Refer to outline item 6F, "Air Quality Conformity" for a statement regarding the regional transportation plan's conformity to the State Implementation Plan for air quality.

Local Planning

Discuss how the project alternatives are treated in local planning documents. Discuss any pertinent local planning documents. Examples: (1) specific area and subdivision plans and their relationship to ultimate development, (2) the nonmotorized master plan: outlining the potential impacts on nonmotorized transportation and pedestrians. Discuss any other planning documents that are pertinent, such as the Coastal Zone Plan, the Air Quality Control Plan, etcetera. Explain any inconsistencies.

For a Project Report with a Final Environmental Document

Discuss the compatibility of the preferred alternative with local and regional plans.

Transit Operator Planning

When appropriate, discuss coordination with transit operators and their planning in the corridor. Discuss opportunities to enhance transit service, as well as the impacts

of project proposals on existing and future transit service (bus stops, ramp metering, by-pass lanes, transit ways, high-occupancy vehicle [HOV] lanes and drop ramps, etcetera).

4C. TRAFFIC

Current and Forecasted Traffic

Give current and forecasted design year values for annual average daily traffic (AADT), peak month average daily traffic (ADT) where significant, peak hour and peak hour directional split—including percentage of trucks, if appropriate. Refer to the *Highway Design Manual (HDM)* Index 103.2 and Index 603.2 for a discussion of design periods. Briefly state the growth assumptions that provided the basis for the forecast.

Collision Analysis

Provide a summary of the collision analysis. The analysis should include, but not be limited to, the primary factors or causes of the collision and the type of collision that can be addressed with the proposed project. Collision diagrams, collision data and reports, and safety index calculations must not be attached to the DPR or PR.

5. ALTERNATIVES

5A. VIABLE ALTERNATIVES

For a Draft Project Report

Discuss project alternatives that have not yet been rejected—including variations that will satisfy project goals, be cost effective, and that will avoid or minimize environmental and right-of-way impacts. The No Build Alternative shall be discussed for project development categories 1 through 4A.

Provide the same detail of discussion for all viable alternatives. Include appropriate attachments for each viable alternative (DPR cost estimate, right-of-way data sheet, etcetera).

If a proposal or a preferred or recommended alternative is to be identified in the DPR, indicate that approval of the DPR does not constitute approval of the proposal or the preferred or recommended alternative, but that approval will occur after a public hearing.

For a Project Report with a Final Environmental Document

For a PR with a final environmental document, if appropriate identify the preferred alternative and describe any changes resulting from the comments received from circulation of the environmental document and the public hearing process, including proposed changes in the project design or any mitigating features. Describe the engineering, environmental, and planning rationale for selection of the preferred alternative. For each of the other viable alternatives, retain the detailed description of each, adding an explanation for why each alternative was not selected. If an alternative that was formerly considered viable was determined to be not viable it should be removed and described under outline item 5B, "Rejected Alternatives."

For Both a Draft Project Report and a Project Report

Where appropriate, discuss the following for each viable alternative: proposed engineering features – nonstandard design features – interim features – high-occupancy vehicle lanes – ramp metering – California Highway Patrol (CHP) enforcement activities – park-and-ride facilities – utility involvement – railroad involvement – highway planting – erosion control – noise barriers – nonmotorized and pedestrian features – needed roadway rehabilitation and upgrading – needed structure rehabilitation and upgrading – current construction and right-of-way cost estimates – effect of special-funded proposal on operation – and other subjects, as needed. The following are descriptions of the information to include in each discussion item:

Proposed Engineering Features

Give a brief description of the engineering features of the alternative. This should include the proposed typical section – horizontal and vertical alignment summary – right-of-way widths – access control requirements – general geometrics of interchanges and intersections – structural section requirements – drainage structures, and any other appropriate information. Give the anticipated hourly and daily capacity and the projected level of service of the proposal for the design year. If at capacity at the design year, also give the year that capacity is projected to occur.

Nonstandard Design Features

For Both a Draft Project Report and a Project Report

When alternatives propose new nonstandard design features or perpetuate existing nonstandard design features, provide the following: a brief description of the nonstandard features; discussion of issues related to each nonstandard feature; and a reference to all approved design decision documents that includes the approval authority and date. Do not repeat all of the background and justification contained in the design decision document. For alternatives meeting all standards, a statement of this fact should be included in the report. See Chapter 21 – Design Standard Decisions, for the conditions and procedures for obtaining approval for deviation from design standards and the *Highway Design Manual* Topic 82, for a discussion of design standards.

For a Draft Project Report

For projects with only one Build Alternative, design decision documents must be approved before approval of the draft project report.

For projects with multiple build alternatives, the alternatives with proposed nonstandard design features must go through a design standards risk assessment to indicate the level of risk associated with the probability of approval for each potential nonstandard design feature. Based on the associated risks and consideration of any previously approved design decision documents, the District Director can then decide if approval of design decision documents should be pursued for specific alternatives to level the engineering risk prior to approval of the draft project report.

For information on the design standards risk assessment, see Chapter 21 – Design Standard Decisions, and see the template in Article 3 for the format of the design standards risk assessment.

For a Project Report

Design decision documents must be approved before approval of the project report.

Interim Features

If improvements to an existing conventional highway are requested by a local agency for the period between the adoption of a freeway route on new alignment and the completion of freeway construction, identify these improvements as interim improvements and discuss whether they are subject to California Transportation Commission (CTC) policies. Provide justification for exceptions requiring CTC approval, including justification for extra width at State expense. It is expected that a local agency's request for an exception will normally be in the form of a resolution, which should be an attachment. See Chapter 8 – Overview of Project Development, for a discussion of interim project policy.

High-Occupancy Vehicle (Bus and Carpool) Lanes

Summarize the features proposed for bus and carpool lanes, including: typical cross section – buffer type and width – ingress and egress provisions – directions of operation or contra flow operation – operating times – and occupancy requirements. When projects propose high-occupancy vehicle lanes, discuss the effects of the high-occupancy vehicle facility on safety, congestion, and capacity as required by *California Vehicle Code*, Section 21655.5 and by *California Streets and Highways Code*, Section 149. See the *High-Occupancy Vehicle Guidelines*.

Ramp Metering

Ramp metering is discussed for any proposals for freeway interchange construction or modification if the freeway segment is included in the ramp metering development plan element of the district's long range operations plan. If capacity is being added to a freeway segment and metering will improve or maintain effective operations on the freeway and parallel arterials, then ramp metering should be included in the project at any urban freeway entrance ramps. Any exceptions must be justified and may be approved as part of a PR approval. The discussion should also include the positions of the involved local agencies and their willingness to commit to ramp metering. Ramp metering policy is outlined in the *Ramp Metering Design Manual*.

California Highway Patrol Enforcement Areas

Where enforcement activities of the CHP are affected or needed, summarize any additional facilities to be incorporated to assist in such enforcement (such as: high-occupancy vehicle lane enforcement areas, ramp-meter enforcement areas, turnouts, special signing, traffic control systems, paving brake check areas, etcetera).

Park-and-Ride Facilities

Describe any proposed park-and-ride facilities. Consideration of park-and-ride facilities is required and should be described on all major transportation construction projects that include, but are not limited to, new freeways, interchange modifications, lane additions, transit facilities, and high-occupancy vehicle lanes. If park-and-ride facilities are not proposed, discuss why. The results of the consultation with the district park-and-ride coordinator should be documented and full justification should be given for proposals that are contrary to the park-and-ride coordinator's recommendations.

Utility and Other Owner Involvement

Discuss known utilities and whether or not relocation may be required. Refer to the right-of-way data sheet. This is an attachment. Give results of any investigation of ownership, prior rights, permit obligations, etcetera performed to date. Discuss possible impact on project delivery.

Discuss the estimated "Determination of Liability" required for publicly owned and privately owned public utilities that will be constructed as a part of the highway project.

Discuss the estimated "Determination of Liability" required for facilities that are not utility-owned. This determination is prepared by the district project development unit after appropriate consultation with affected units such as right-of-way and permits to assist in arriving at a conclusion on cost sharing.

Reference should be made to any approvals for exceptions to Caltrans' policy on encroachments. For more information on this subject, see Chapter 17 – Encroachments and Utilities.

Railroad Involvement

Discuss any railroad involvement and the district railroad liaison agent's determination of what documents or agreements are required to clear the project. Refer to the right-of-way data sheet (an attachment).

Highway Planting

Describe provisions made for replacement planting when existing highway planting must be removed. Describe provisions for revegetation when native plant growth must be removed, particularly through publicly owned parks, U.S. National Forests or State forests, and California Department of Fish and Wildlife or U.S. Fish and Wildlife lands.

Separate planting projects resulting from these proposals should be described and justification for the planting discussed. Highway planting (revegetation, replacement and new planting) is normally accomplished by a separate project after the highway construction is completed—unless it is legally required to be included as part of the highway construction project (for example: by cooperative agreement, environmental document, permit, or court order). The PR for the highway project should state (as determined by the legal document) whether the planting is installed as part of the highway construction contract or if it follows highway construction as a separate contract.

> Note: If the landscape coordinator determines that the discussion of planting is not adequate, a supplemental planting PR may be required.

Highway planting and planting restoration projects that are not derived from a highway project are developed using the "Highway Planting and Restoration" format of the PR. See Chapter 29 – Landscape Architecture and Appendix D – Preparation Guidelines for Project Report (New Highway Planting and Highway Planting Restoration) for more information.

Erosion Control

Erosion control provided on new construction, reconstruction, or where required to protect the transportation facility and to meet water quality discharge requirements, is summarized separately here and included as part of the total project cost estimate.

Noise Barriers

Provisions for noise barriers, berms, and other noise reduction features should be described. See Chapter 30 – Highway Traffic Noise Abatement.

Nonmotorized and Pedestrian Features

Discuss features provided for nonmotorized transportation and pedestrians as well as provisions that are intended to preserve and enhance the opportunity for safe and convenient bicycle travel.

For most projects proposing nonmotorized facilities, a finding or findings must be made. This should be done in the PR. See Chapter 31 – Nonmotorized Transportation Facilities for required findings.

Needed Roadway Rehabilitation and Upgrading

Roadway rehabilitation needs within the alternative limits should be addressed. All projects dealing with widening of existing pavements should include a discussion of the condition of the existing pavements. Discuss the results of a review of the current pavement management system inventory and the field review of the widening project and state if rehabilitation is needed in conjunction with the widening. Include a discussion of deflection study results for asphalt concrete (AC) pavements exhibiting alligator "B" cracking, confirming the rehabilitation need and the rehabilitation strategy thickness.

Rehabilitation work on existing facilities proposed for relinquishment after construction of the proposed facility should be described in accordance with the guidelines in Chapter 25 – Relinquishments. If the need for rehabilitation work is identified but it is determined that it would need to be programmed as part of another project or as a separately funded project, include that recommendation under outline item 2, "Recommendation."

Needed Structure Rehabilitation and Upgrading

For bridge replacement proposals, an analysis of the rehabilitation option must be included.

Cost Estimates

The roadway and structure construction costs and right-of-way costs for the alternative are to be reported. See Chapter 20 – Project Development Cost Estimates for instructions and procedures for preparing cost estimates. Indicate any types of costs that are not included, such as capital outlay support costs. A PR cost estimate (or a DPR cost estimate if appropriate) is to be included as an attachment.

Right-of-Way Data

Right-of-way cost estimates (including utilities relocation costs) are reported on the right-of-way data sheet, see the *Right of Way Manual* for more information. The right-of-way data sheet must be included as an attachment to the PR (this should be an update of the right-of-way data sheet attached to the PID). The form used by the right-of-way unit for preparation of the right-of-way data sheet.

Effect of Projects-Funded-by-Others on State Highway

If the project is funded-by-others, discuss the potential effects the proposal will have on the capacity and operating characteristics of the State highway, as well as what mitigation is required to alleviate adverse impacts. During the PID phase, a thorough analysis should have been made of the proposal. Include an updated discussion of existing and forecasted traffic and of the capacity of the mainline to absorb additional traffic.

5B. REJECTED ALTERNATIVES

Very briefly describe all project alternatives that were considered and rejected, explaining the reasons for the rejection. In order to document all alternatives considered, include any alternatives rejected during the system planning stage and PID phase. Refer to the environmental document for more detail.

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. HAZARDOUS WASTE

If no hazardous waste sites were identified in the initial site assessment (which was initially prepared during the PID phase for projects having potential hazardous waste involvement) a statement to that effect should be included.

For those projects with identified hazardous waste sites, site investigations should have been performed and the results should be included. Describe the type of material and limits, along with the estimate of costs for cleaning and monitoring the site.

Describe a feasible alternative that will avoid any hazardous waste sites.

For more information on hazardous waste, see Chapter 18 – Environmental Contamination.

6B. VALUE ANALYSIS

Recommendations from value analysis (VA) studies should be discussed in all PRs. If the recommendations are not implemented, an explanation should be provided. If a value analysis study was not conducted, a statement must be included that explains why such a study was not conducted.

If one of the project alternatives is the result of the value analysis study, describe it in outline item 5, "Alternatives", and describe it as a value analysis recommendation.

For additional information on value analysis procedures, see Chapter 19 – Value Analysis.

6C. RESOURCE CONSERVATION

Discuss measures taken to conserve energy and nonrenewable resources. These measures should be aimed at reducing wasteful, inefficient, and unnecessary consumption of energy and nonrenewable resources in construction, operations and maintenance. At a minimum, the discussion should address the following items:

- Features affecting energy requirements and energy use efficiencies for the various stages of construction, operation, and maintenance, if applicable, including: incorporation of existing structural section into new work – alignment and grades – high-occupancy vehicle lanes – truck climbing lanes – materials selection – construction techniques – signals and signing to move traffic efficiently – and others.
- Measures proposed to minimize the consumption, destruction and disposal of nonrenewable resources, including: recycling pavement or use of tires in the pavement structural section materials – maximizing the use of in-place facilities on existing highways, through design innovation, reconstruction and relocation of the facilities – preserving existing materials and facilities, through salvaging and/or incorporating previously salvaged materials or facilities – reducing the use of nonrenewable materials, through material selection and substitution – upgrading of local materials – and use of alternative energy technologies.

Address the recycling of existing AC pavement materials. For projects where existing AC is to be removed, it is to be recycled or stockpiled on State property for future use. If an economical and logistic advantage can be demonstrated, it may be conveyed to the contractor as part of the contract. Full justification must be provided if existing AC is not to be recycled or salvaged for future use. Projects should specify the use of State-owned salvaged AC materials where economically available.

6D. RIGHT-OF-WAY ISSUES

Right-of-Way Required

Describe in general the right-of-way requirements and refer to the right-of-way data sheet, which should be an attachment to the PR. Describe any right-of-way issues that influence the design of the project.

For a Draft Project Report

Include a discussion and a right-of-way data sheet for each viable project alternative.

For a Project Report (if appropriate)

Identify the portion of the discussion pertaining to the preferred alternative. Indicate which right-of-way data sheet is for the preferred alternative.

Relocation Impact Studies

Relocation impact documents, prepared in accordance with the procedures outlined in the *Right of Way Manual* Chapter 10 "Relocation Assistance" are required on all projects that displace any person or business, and are often complex and time-consuming, particularly if "Last Resort Housing" or "replacement of affordable housing" are involved.

For a Draft Project Report

Briefly summarize the draft relocation impact study/statement.

For a Project Report

A final relocation impact study/statement (FRIS) will be completed for the preferred alternative and must be summarized with a reference to the full discussion in the final environmental document.

Airspace Lease Areas

Describe the project development team's determination as to whether or not the proposed project is in an area of high land values having potential for future airspace leases. Discuss how the geometric plan can accommodate or was modified to accommodate airspace leases, and the results of the district airspace committee review of the appropriateness of incorporating such provisions into the project. Discuss compatibility of airspace lease areas with local land-use plans, as well as the involved local agency's willingness to make a financial commitment for any added costs that may be required. Unless airspace lease provisions are required to mitigate project impacts, any added costs must be borne by others (either public or private sources).

6E. ENVIRONMENTAL COMPLIANCE

Identify the type of environmental determination/document prepared for the project and briefly discuss the requirements and restrictions enumerated within.

Briefly describe environmental issues that influence the project design, schedule, or cost; include permit requirements, mitigation, and construction work windows. Refer to information in the attached environmental determination/document as needed.

Provided for reference:

- California Environmental Quality Act (CEQA)
  - Categorical Exemption (CE) or Statutory Exemption (SE)
  - Initial Study (IS) and Negative Declaration (ND) or Mitigated Negative Declaration (MND)
  - Environmental Impact Report (EIR)
- National Environmental Policy Act (NEPA)
  - Categorical Exclusion (CE)
  - Environmental Assessment (EA) and Finding of No Significant Impact (FONSI)
  - Environmental Impact Statement (EIS)

For a Draft Project Report

Draft Environmental Impact Report/Draft Environmental Impact Statement Projects: The draft environmental impact report (EIR) and/or environmental impact statement (EIS) is a required attachment, and the following statement must be included:

> "The Draft Environmental Impact Report/Statement has been prepared in accordance with Caltrans' environmental procedures, as well as State and federal environmental regulations. The attached Draft Environmental Impact Report/Statement is the appropriate document for the proposal."

Negative Declaration/Finding of No Significant Impact Projects: The unsigned negative declaration (ND) with the initial study/environmental assessment (IS/EA) is a required attachment, and the following statement must be included:

> "The Negative Declaration has been prepared in accordance with Caltrans' environmental procedures, as well as State and federal environmental regulations. The attached Negative Declaration is the appropriate document for the proposal."

For a Project Report

Environmental Impact Report/Environmental Impact Statement Projects: The final environmental impact report/environmental impact statement is a required attachment. No statement is included in the PR. Instead, a separate

"Certification" sheet is attached to the front of the final environmental impact report/environmental impact statement.

Negative Declaration/Finding of No Significant Impact Projects: The negative declaration with the initial study/environmental assessment is a required attachment, and the following statement must be included:

> "The Negative Declaration has been prepared in accordance with Caltrans' environmental procedures, as well as State and federal environmental regulations. The attached Negative Declaration is the appropriate document for the proposal."

Statutory Exemption Projects: For projects statutorily exempt from the *California Environmental Quality Act of 1970* (CEQA), the following statement must be included:

> "The project is Statutorily Exempt from the California Environmental Quality Act (CEQA)."

Categorical Exemption Projects: For projects categorically exempt from CEQA, the following statement must be included:

> "The project is Categorically Exempt under Class (insert class) of the State CEQA Guidelines."

Categorical Exclusion Projects: When appropriate, the following statement should be included:

> "The project is Categorically Excluded under the National Environmental Policy Act (NEPA)."

Before approving a PR containing a categorical exemption/categorical exclusion statement, the individual having authority to approve the project must have the signed Categorical Exemption/Categorical Exclusion Determination Form in-hand (signed by the environmental unit chief and the project manager), and must review the project to be certain that the project being approved is the same as the one for which the categorical exemption/categorical exclusion determination is made. If there is any question, the environmental unit chief must be consulted. The Categorical Exemption/Categorical Exclusion Determination Form must be

attached to the PR. The *Standard Environmental Reference* identifies the types of projects qualifying for a categorical exemption/categorical exclusion.

Wetlands and Flood Plains

Identify and discuss any impacts on wetlands or encroachment on base flood plains. Describe all efforts taken to avoid these impacts. For further guidelines, consult the *Standard Environmental Reference* and the *Highway Design Manual*, Topic 804.

Other Environmental Issues

Briefly describe any other environmental issues that influence the project design or cost and refer to a fuller discussion in the attached environmental document.

6F. AIR QUALITY CONFORMITY

Under federal law and regulations, Congestion Mitigation and Air Quality (CMAQ) Program recipients must analyze their Federal Transportation Improvement Program (FTIP) to determine if it conforms to approved federal air quality plans, known as the State Implementation Plan. Air quality conformity is a method to ensure federal funding and approval is applied to those transportation activities that are consistent with air quality goals. Conformity applies to transportation plans, transportation improvement programs, and projects funded or approved by the FHWA or Federal Transit Administration (FTA) in areas that do not meet or previously have not met air quality standards.

Consult with the district environmental unit for assistance with air quality conformity determination. Additional information is located at the *Air Quality Conformity* website.

The project scope of work and design concept must be consistent with projects programmed in the Federal Transportation Improvement Program and the current regional transportation plan. Include one of the following statements:

> "Each project alternative is fully compatible with the design concept and scope described in the current regional transportation plan."
>
> Or
>
> "Air quality conformity is not required."

If either of these statements cannot be made, discuss the consequences. For Congestion Mitigation and Air Quality Program eligibility, see outline item 8, "Funding/Programming."

6G. TITLE VI CONSIDERATIONS

Title VI of the *Civil Rights Act of 1964* states:

> No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

More information about Caltrans' adherence to Title VI, including the *Non-discrimination Policy Statement*, is located at the *Title VI Program* website.

For a Project Report with a Final Environmental Document

If not specifically identified in the environmental document, describe the provisions made for low mobility and minority groups. Cite specific considerations given to, and provisions made for, low mobility groups such as the young, aged, handicapped, economically disadvantaged, and minority groups. Specific mention shall be made regarding the effect of alternative route proposals on local street traffic within adjacent minority communities as well as regarding the impacts on minority communities that are being bypassed. In addition, provision of and access to transportation facilities should be discussed with regard to the equality of facilities for minority groups as compared to facilities provided for other community groups similarly located. Such facilities include:

- Locations and accessibility of public transit stops
- Ramped curbs at intersections
- Pedestrian and nonmotorized trails and separations
- Continuation of access to shopping, schools, hospitals
- Recreation areas, etcetera that were served by an access-controlled highway

6H. NOISE ABATEMENT DECISION REPORT

For a Draft Project Report Only

General

This outline item fulfills the function of the noise abatement decision report (NADR), as defined in Chapter 30 – Highway Traffic Noise Abatement and the *Traffic Noise Analysis Protocol*. The noise abatement decision report section presents the noise abatement recommendation based on acoustical and non-acoustical feasibility factors and the relationship between noise abatement allowances and the engineer's cost estimate.

You may elect to use a separate document for the noise abatement decision report; however, the DPR must contain the tables that pertain to the recommended alternative and a summary of the noise abatement recommendation. A separate document is advised if a project has several alternatives and detailing the noise analysis of each alternative in the DPR is not practical. A separate noise abatement decision report includes all elements in this section, signature and seal of a registered engineer, and signature of the design senior which shows that quality control and assurance were performed.

Suggested boilerplate language (include the following three paragraphs):

> This section represents the Noise Abatement Decision Report (NADR) which:
>
> - Is an evaluation of the reasonableness and feasibility of incorporating noise abatement measures into this project;
> - Constitutes the preliminary decision on noise abatement measures to be incorporated into the Draft Environmental Document (DED) (if applicable); and
> - Is required for Caltrans to meet the conditions of *Title 23 Code of Federal Regulations*, Part 772 in accordance with the Federal Highway Administration noise standards.

The noise abatement decision report does not present the final decision regarding noise abatement; rather, it presents key information on abatement to be considered throughout the environmental review process, based on the best available information at the time the draft environmental document is published. If a project is subject to federal review, but does not have a circulated environmental document, the noise abatement decision report section documents the final noise abatement decision.

The noise abatement decision report does not address noise barriers or other noise-reducing treatments required as mitigation for significant adverse environmental effects identified under CEQA.

Results of the Noise Study Report

Provide information to identify the noise study report (NSR) for the project. For example:

> "The Noise Study Report for this project was prepared by ___[author]____ on ___[date]____ and approved by ____ [Office Chief]_____ on _____[date]_____."

Provide a summary of key information presented in the noise study report for all locations with proposed noise abatement. This should include:

- Identification of locations where noise impacts are predicted to occur
- Identification of locations for which noise abatement was evaluated
- A description of evaluated noise abatement, including the type (wall or berm), location, and length of barriers
- A table summarizing acoustical feasibility (such as: noise reduction of at least 5 decibel [5 dB]), number of benefited receivers (receiving 5 dB benefit), and reasonable allowances (see Figure K-1 for example)

Figure K-1 is an example of a table that can be used to summarize information from the noise study report.

Figure K-1 Example of a "Summary of Barrier Evaluation from Noise Study Report"

Barrier	Location	Station	Height (feet)	Acoustically Feasible?	Number of Benefited Residences	Reasonable Allowance per Residence	Total Reasonable Allowance
NB1	R/W	23+91 to 26+72	10	No	0	$0	$0
			12	Yes	3	$50,000	$150,000
			14	Yes	3	$50,000	$150,000
			16	Yes	5	$50,000	$250,000
NB2	EP	34+97 to 38+72	10	Yes	12	$54,000	$648,000
			12	Yes	25	$54,000	$1,350,000
			14	Yes	26	$54,000	$1,404,000
			16	Yes	28	$54,000	$1,512,000
NB3	R/W	26+63 to 29+92	10	Yes	8*	$52,000	$416,000
			12	Yes	8*	$58,000	$464,000
			14	Yes	8*	$58,000	$464,000
			16	Yes	8*	$58,000	$464,000

R/W = right-of-way line
EP = edge of pavement
* Barrier at park based on 800 feet of highway frontage

Factors in the Noise Abatement Decision Report

Provide a summary of key information to be used in making the preliminary noise abatement decision. If information varies, provide information for each alternative to be studied. This information should include:

- An indication of acoustical feasibility
- Number of benefited residences
- The total reasonableness allowance and engineer's cost estimate for the abatement
- The total reasonableness allowance and engineer's cost estimate for each barrier and barrier height evaluated (if a barrier is evaluated)
- Comparison of cost versus allowance
- If known, preliminary information on secondary effects of abatement such as impacts on cultural resources, scenic views, local biology or hazardous material

A summary table may be used, see Figure K-1 for example.

The engineer's cost estimate should include costs required to construct the abatement. For noise barriers, include the cost of the wall or berm, footings, traffic control, drainage, modified or additional plantings, miscellaneous items, and a 10% contingency. Any items required to construct the wall should be included. For example, if a retaining wall is required to construct the wall, but not for the project itself, the cost of the retaining wall should be included; if a wall is constructed on a bridge, the cost of modifying the bridge structure to accommodate the wall should be included. Costs to bring roadways to current design standards, such as shoulder widening should not be included.

Costs associated with the mitigation of secondary effects of the abatement should not be included in the abatement construction cost estimate. Examples include costs for mitigation, such as:

- Mitigation of visual effects, such as planting of vines or use of see-through wall materials
- Mitigation of effects related to hazardous materials (such as removal of materials)
- Mitigation of effects on cultural resources (such as removal of buried artifacts)
- Mitigation of effects on biological resources (such as replacement of endangered plant species or wildlife habitat)

Wall construction cost should be based on masonry construction, in accordance with Caltrans' standard specifications. If the construction cost is higher than the allowance, alternative construction methods should be evaluated and discussed.

Figure K-2 Example for a "Summary of Abatement Key Information"

Barrier	Height (feet)	Acoustically Feasible?	Number of Benefited Residences	Total Reasonable Allowance	Estimated Construction Cost	Cost Less than Allowance?
NB1	10	No	0	$0	NA	NA
	12	Yes	3	$150,000	$132,000	Yes
	14	Yes	3	$150,000	$196,000	No
	16	Yes	5	$250,000	$280,000	No
NB2	10	Yes	12	$648,000	$500,000	Yes
	12	Yes	25	$1,350,000	$660,000	Yes
	14	Yes	26	$1,404,000	$980,000	Yes
	16	Yes	28	$1,512,000	$1,400,000	Yes
NB3	10	Yes	8*	$416,000	$200,000	Yes
	12	Yes	8*	$464,000	$264,000	Yes
	14	Yes	8*	$464,000	$392,000	Yes
	16	Yes	8*	$464,000	$560,000	No

* Barrier at park based on 800 feet of highway frontage.

Nonacoustical Factors Relating to Feasibility

Present the engineer's evaluation of nonacoustical factors relating to the feasibility of noise abatement. These factors could include:

- Geometric standards, such as minimum sight distances
- Safety
- Maintenance
- Security
- Geotechnical considerations
- Utility relocations

Preliminary Noise Abatement Decision

There may be situations where several forms of abatement are feasible and have costs that are less than the allowance. For example, in the case of a barrier, different barrier heights could be feasible and have costs that are less than the allowance. In these cases, a recommendation must be made and, in the case of a barrier, a barrier height must be selected. This decision should be made by the project development team. In the case of a barrier, several factors can be considered in making this recommendation:

- Line-of-sight break between a receiver and an 11.5-foot-high truck stack (per Chapter 1100 of the *Highway Design Manual*)
- Absolute noise level. Note that 5 decibel (5 dB) is a minimum, not a design goal, but a barrier that reduces the absolute noise level to below the severe impact level of 75 dBA (A-weighted decibel)-Leq[h] (1-hour equivalent sound level) could be favored over one that does not.
- Number of benefited receivers
- Cost per benefited receiver
- Degree of noise reduction (a barrier that provides only 1 dB of improved noise reduction over a lower barrier and costs substantially more may not be favored over the lower barrier)

Provide a summary discussion of each barrier and identify the recommended barrier and barrier heights for each alternative. Explain why the barrier height was selected. This is the preliminary noise abatement decision.

Explain that this decision is the preliminary noise abatement decision and is subject to change. Use the following text for this explanation.

> "The preliminary noise abatement decision presented in this report is based on preliminary project alignments and profiles, which may be subject to change. As such, the physical characteristics of noise abatement described herein also may be subject to change. If pertinent parameters change substantially during the final project design, the preliminary noise abatement decision may be changed or eliminated from the final project design. A final decision to construct noise abatement will be made upon completion of the project design."
>
> "The preliminary noise abatement decision presented here will be included in the draft environmental document, which will be circulated for public review."

Secondary Effects of Abatement

The noise abatement recommended in the preliminary noise abatement decision may have the potential to result in secondary effects on cultural resources, scenic views, hazardous materials, biology, or other resources. Present a brief discussion of the potential secondary effects associated with the recommended abatement. Base this discussion on the best information available from technical specialists at the time the DPR is prepared.

6I. LIFE-CYCLE COST ANALYSIS

Deputy Directive DD-107 – Use of Life-Cycle Cost Analyses in Project Decision Making requires the use of life-cycle cost analysis in project initiation and project approval documents.

Discuss how life-cycle cost analysis has been incorporated into the project. For projects with no proposed construction improvements, state that a life-cycle cost analysis is not applicable.

6I. REVERSIBLE LANES

As appropriate, discuss the feasibility of including reversible lanes as required by California Streets and Highways Code, Section 100.15 as discussed in the *Interim Guidance on AB2542 Reversible Lanes Requirement* memorandum.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Public Hearing Process

For a Draft Project Report

Make a recommendation regarding requirements for the public hearing process. For example, recommend that a public hearing be scheduled presenting the developed viable alternatives for public comment—or—recommend that an opportunity for a public hearing be offered, since little public interest has surfaced. For further guidelines, see Chapter 12 – Project Approvals and Changes to Approved Projects, and Chapter 22 – Community Involvement.

For a Project Report with a Final Environmental Document

Give the date of the public hearing, if held, and the general tenor of comments. State the positions of local agencies. Refer to outline item 5A, "Viable Alternatives" for a discussion of any changes in the project design or mitigating features resulting from the environmental document circulation and the public hearing process. If an opportunity for a hearing was offered in lieu of scheduling a hearing directly, include copies of all correspondence received in response to the notice and of any replies. If requests were received and subsequently withdrawn, summarize the events that resulted in the withdrawal. If the requests were not withdrawn, state as factually as possible what useful purpose the hearing may have served or not, as the case may be.

Route Matters

Freeway Agreements and New Connections: Discuss freeway agreements, when involved (See Chapter 24 – Freeway Agreements). Discuss any new-connection approvals required. Discuss denomination as an access controlled highway; if appropriate (See Chapter 23 – Route Adoptions). New public road connections and new access to freeways and controlled access highways are discussed in detail in Chapter 27 – Access Control Modification.

Route Adoptions: Discuss route adoption requirements or support the determination that adoption is not required where there is deviation from the adopted alignment for engineering reasons. (See Chapter 23 – Route Adoptions). For any deviations, obtain review and concurrence from the Headquarters Project Delivery Coordinator and document here.

Relinquishments: If existing facility will be superseded, discuss whether it will be relinquished, vacated, abandoned or retained. Give estimated costs of proposed action. See Chapter 25 – Relinquishments.

Permits

Discuss any permits, licenses, or approvals that are required that may be of special significance or may be a problem to obtain. If special procedures or actions are required, make appropriate recommendations.

Cooperative Agreements

Cooperative features, such as funding responsibilities on any project with proposed transfer of funds, or staffing responsibilities for special funded projects for subsequent design, right-of-way acquisition, or construction, should be clearly outlined in the DPR. Where an environmental impact report/environmental impact statement is involved and approval is not expected for some period of time, these recommendations may be deferred to the PR. The discussion should also include the execution dates of other associated cooperative agreements or memoranda of understanding, along with a brief summary of provisions. Approval of a DPR or PR that recommends approval of cooperative features constitutes authority to finalize negotiations and to prepare a draft cooperative agreement. For more information, see Chapter 16 – Cooperative Agreements and Chapter 2 – Roles and Responsibilities.

Proposed cooperative agreements involving new construction projects must be covered by a PR. Proposed cooperative agreements that come about as part of the design of a previously approved major construction project, such as a cooperative drainage project on a new freeway, are to be covered by a cooperative agreement report. Either a PR or a cooperative agreement report should be prepared, whichever is appropriate.

Other Agreements

Features of other needed agreements, such as interagency agreements or maintenance agreements should be outlined.

Report on Feasibility of Providing Access to Navigable Rivers

This section constitutes the report on the feasibility of providing a means of public access for recreational purposes to any navigable river over which a new bridge is being constructed as required by *California Streets and Highways Code*, Section 84.5. The explanation of this policy is located in Chapter 8 – Overview of Project Development. Justify and document the position taken on public access to the watercourse. All environmental and engineering aspects must be fully considered, as well as the intent of the Legislature to maximize such public access. Items to consider include, but are not limited to:

- Extent of public use of the waterway for recreational purposes
- Existing and/or alternative access
- Access control of the highway facility
- Environmental impacts of providing public access
- Right-of-way impacts and costs
- Construction and support costs
- Pedestrian accessibility

Public Boat Ramps

The explanation of this policy is located in Chapter 8 – Overview of Project Development. Use the Design Scoping Index in Appendix L – Preparation Guidelines for Project Study Report, to document all decisions pertaining to public access. See *Design Information Bulletin 71* – Access Ramps to Public Boat Launching Areas for details to be considered.

Transportation Management Plan

Transportation management plan measures must be considered during project initiation and included for project approval to ensure they are incorporated into construction contracts. See discussion of this topic in Chapter 8 – Overview of Project Development and the *Transportation Management Plan Guidelines* for more information.

Describe the anticipated transportation management plan requirements for the project.

Describe planned detours, rerouting, temporary closures and full closures for roadways and ramps. Discuss any impacts to transit routes, high-occupancy vehicle lanes, school bus routes, emergency vehicle access, and park-and-ride lots. Discuss the bicycle and pedestrian traffic need through the construction area.

Describe any proposed prolonged temporary ramp closures (more than 10 consecutive days) and summarize the results of the economic impact study prepared by the district environmental planning unit. Closures of less than 10 days may require discussion, depending upon circumstances.

Stage Construction

If multiple construction units or stage construction is proposed, describe them and the reasons for them.

Accommodation of Oversize Loads

A discussion should be included relevant to the policy that State freeways be designed to provide passage for vehicles of unrestricted height while moving in and out of an area; to or from airports, harbors, and testing sites; and to or from ultimate destination for use or assembly. Discuss exceptions to this policy when an existing city or county facility allows for bypass of the State-restricted facility. Refer to Chapter 8 – Overview of Project Development.

If it is impractical to follow this policy due to engineering controls, excessive costs, or community values considerations, discuss contacts with the impacted industries and describe the mutually satisfactory solution agreed to. A full discussion of the solution must be presented.

Graffiti Control

Include this section if the project will be in an identified graffiti-prone area. The urban areas of the following counties are considered graffiti-prone: San Diego, Orange, Los Angeles, San Bernardino, Riverside, Ventura, Santa Barbara, Fresno, Santa Cruz, Santa Clara, Alameda, San Mateo, San Francisco, Contra Costa, Marin, Napa, Sonoma, Solano, San Joaquin, and Sacramento. Discuss any special attention given to the design in these areas and describe design features proposed, such as details to prevent vandals from accessing bridges, signs, and walls.

Asset Management

Discuss any carry-over issues from the project initiation that may have not been fully vetted.

Additional information about asset management, is located at the Headquarters Director's Office website at: *Office of Asset Management* website.

Complete-Streets

Discuss any carry-over issues from the project initiation that may have not been fully vetted.

Additional information about complete streets is located at the Headquarters Division of Transportation Planning website at: *Complete Streets Program* website.

Climate Change Considerations

Discuss any carry-over issues from the project initiation that may have not been fully vetted.

Additional information about climate change considerations regarding greenhouse gas emissions, is located at the Headquarters Division of Transportation Planning website at: *PID Guidance* website.

Broadband and Advance Technologies

Discuss any carry-over issues from the project initiation that may have not been fully vetted.

For information on broadband policy, see *Deputy Directive DD-116-R1 Wired Broadband Within State Highway Rights-Of-Way*.

Additional information about broadband issues is located at the *Wired Broadband Facilities on State Highway Right of Way* website.

Other Appropriate Topics

Discuss any other appropriate topic that has a bearing on the approval of the project.

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding

Discuss the project funding.

Special Funding: If the project has special funding, identify the source of funding, the dollar amount, and when funding will be available.

State-Only Funding: If the project will use State-only funding, fully explain the need for the exception and discuss why the project does not qualify for federal participation.

Federal-Aid Funding: Determine if the project is eligible for Federal-aid funding and include one of the following statements:

"It has been determined that this project is eligible for Federal-aid funding."

Or

"It has been determined that this project is not eligible for Federal-aid funding."

Congestion Mitigation and Air Quality Program Funding: If the project is identified as eligible for Congestion Mitigation and Air Quality Program funding, an emission reduction analysis must be completed and attached. California Air Resources Board and Caltrans' approved methodologies for completing the

emission reduction analysis can be obtained from the Headquarters Transportation Programming website at: *Congestion Mitigation and Air Quality* website.

Programming

Proposal Programming Data: If the project is already programmed, include data from the appropriate, latest, official programming document: State Transportation Improvement Program (STIP) or State Highway Operation and Protection Program (SHOPP).

If the project is already programmed, compare the current capital outlay project right-of-way and construction estimates and compare to the programming figures in the current STIP or SHOPP.

If the project was previously initiated with a PSR-PDS, discuss programming the remaining capital outlay support and the capital outlay project right-of-way and construction estimates.

Combined Projects: There are certain occasions where it is cost effective to combine projects from different programs or elements for the purposes of design or construction. This usually occurs where the projects are in proximity to each other. For the project proposed for combining, describe each program or element of the project that is described as a separate line or entry in the programming document.

Multiple Counties: Where work is proposed in multiple counties, an entry is required for each of the counties, so that county minimums can be accurately determined.

Support Estimate: Enter the escalated capital outlay support estimates in the table, in the appropriate fiscal funding year column, in thousands of dollars, for the following components: Project Approval and Environmental Document (PA&ED); Plans, Specifications, and Estimate (PS&E); Right-of-Way; and Construction. Consult with the project manager to determine the fiscal funding year, the escalated support estimates, and the escalation rates.

Project Estimate: Enter the escalated capital outlay support estimates in the table, in the appropriate fiscal funding year column, in thousands of dollars, for the Right-of-Way and Construction components. Consult with the project manager to

determine the fiscal funding year, the escalated project estimates, and the escalation rates.

Support Cost Ratio: State the support cost ratio. Consult with the project manager to determine the support cost ratio.

Estimate

Discuss significant aspects of the construction estimate. See Chapter 20 – Project Development Cost Estimates for further details on estimating.

9. DELIVERY SCHEDULE

Enter the milestone dates in the table and discuss any schedule issues and constraints. The project schedule should be based on functional unit input, available resources, and funding constraints. Consult with the project manager to determine the project schedule. The milestones shown in the table are mandatory except as follows: M030 is only required when there is an environmental impact report environmental document; M035 is only required when there is an environmental impact statement environmental document; M120 is only required if there is a draft environmental document that will be released to the public; and M378 is not required, but optional if there are structures involved, delete rows as needed. Indicate if the milestone date is an actual date or target date, delete column as needed.

10. RISKS

Refer to the *Project Risk Management Handbook: A Scalable Approach* for the requirements and procedures. Discuss the risks and include the risk register as an attachment.

11. EXTERNAL AGENCY COORDINATION

See the latest *Stewardship and Oversight Agreement on Project Assumption and Program Oversight* between the FHWA, California Division and Caltrans for the project actions assumed by Caltrans and the project actions where FHWA has retained their authority as well as the detail associated with the various oversight responsibilities. Project actions are identified in the "Project Action Responsibility Matrix" within the stewardship agreement.

Discuss if the project has been identified as a "Project of Division Interest."

Discuss project actions, as appropriate, assumed by Caltrans and any coordination with the FHWA for review and approval of project actions.

If the project proposes new or modified Interstate access, include a discussion of any issues and the proposed or actual dates for the Determination of Engineering and Operational Acceptability and Final Approval. See Chapter 27 – Access Control Modification, for more information.

Identify potential involvement with outside agencies for necessary coordination, agreements, or permits required for the project. The district environmental division is a resource for determining some of the required permits. The list of agencies and permits in the template is not comprehensive; see Chapter 13 – Project Related Permits, Licenses, Agreements, Certifications, and Approvals for more information.

External agency coordination that causes uncertainty for delivering the project must be included in the risk register.

12. PROJECT REVIEWS

The template includes a list of possible reviews. Modify the list to reflect district review procedures. Include "Completed" or "Not applicable" or the reviewer's name along with the review completion date. Depending on the project aspects and phase, some of the reviews are mandatory.

13. PROJECT PERSONNEL

To facilitate contacts with the project development team members, include their names and telephone numbers in the following general format of:

Name, Title	Functional Unit	Phone number

14. ATTACHMENTS

All attachments shall be clearly labeled and referenced in the text to assist the reader in following the report's content. Sheets wider than 8.5 inches are to be folded to open to the right, with identification shown at the right edge. List each attachment with the corresponding number of pages in parentheses.

Mandatory Requirements: At a minimum, all DPRs and PRs should have the following attachments:

- A draft environmental document for a DPR; a final environmental document or a signed Categorical Exemption/Categorical Exclusion Determination Form for a PR; see *Standard Environmental Reference* for guidelines
- Location map
- Appropriate project detail maps to show existing conditions and proposed improvements
- Typical sections
- DPR cost estimate approved by the project manager for each viable alternative for the DPR. Indicate preferred alternative in attachment to the PR, if appropriate and include the PR cost estimate.
- Right-of-way data sheet for each viable alternative for the DPR. Indicate preferred alternative in attachment to PR, if appropriate.
- Storm water data report-signed cover sheet. The signed cover sheet is mandatory for the PR and optional for the DPR as determined by the district or region storm water coordinator.
- Life-cycle cost analysis
- Risk register

Additional Attachments: The following additional attachments should be included, when appropriate:

- Pavement management system printouts
- Photographs
- Mosaics
- Traffic flow diagrams
- Investigation and signal or median barrier warrant sheets
- Other pertinent items such as resolutions, correspondence

ARTICLE 3 Template

This article is a template for the project report. When using the template, delete any italicized text within the body of the document. The italicized text provides instructions for template users and does not provide any value to the final document.

Appendix K Template

APPENDIX L – Preparation Guidelines for Project Study Report

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APPENDIX L – Preparation Guidelines for Project Study Report

ARTICLE 1 Introduction

Reference Information

Some of the references found in this appendix have hyperlinks that connect to Caltrans intranet pages which are not displayable to the general public. Until such time that the specific reference becomes available on the internet, the user will have to contact their district liaison, Caltrans project manager, or the appropriate Headquarters division to inquire about the availability of the reference.

Project Initiation Documents

This appendix provides concepts and best practices for the preparation of all project initiation documents (PIDs). This appendix and Chapter 9 – Project Initiation provide the foundational knowledge and understanding to prepare any PID and should be reviewed before the preparation of any PID.

Presented in this appendix is an overview of the preparation of PIDs, a description of the information that should be contained in a PID, scoping forms to collect and organize information during the project initiation phase and the template for a project study report (PSR). The PSR template presented in this appendix is the foundation template for all PIDs. All other PID documents are a variation of the PSR.

PIDs expressed through these guidelines should be as simple, timely, and workable as practical, given that a PID must be prepared at the front end of the project development process, before environmental evaluation and detailed design are completed. All templates can be modified to meet this goal. As an engineering document, the PID is written to provide stakeholders, decisions-makers, and "next-phase" project team members with a broad understanding of the transportation deficiency and the proposed project. The PID informs the reader of the key issues and assumptions regarding the commitments on the scope, schedule, and estimated cost of the project. The PID must provide a sound basis for commitment of future state funding.

Project Study Report

This appendix contains specific guidance for one type of PID, the project study report. The preparation of the project study report-project development support (PSR-PDS), another type of PID used for projects funded through the State Transportation Improvement Program (STIP) or for projects-funded-by-others, is discussed in Appendix S – Preparation Guidelines for Project Study Report-Project Development Support Project Initiation Document.

Information about SHOPP PIDs, including long lead SHOPP projects, is located at the Headquarters Division of Transportation Planning-Office of Program and Project Planning *SHOPP Project Initiation Report (PIR) Guidance* website.

Applicability

These guidelines generally apply to all major State and specially funded projects on the State Highway System (SHS) and any segment of a transit project within the State highway right-of-way. The guidelines are not intended for use on transit projects unrelated to the SHS or on STIP projects off the State highway system.

ARTICLE 2 Project Initiation Document Preparation Procedures

This article describes the sequence of key activities and best practices that take place during the project initiation phase. For project teams, the *Project Development Workflow Tasks Manual* provides a comprehensive flow of project delivery tasks and can be used as a structured step-by-step guide for project development tasks performed by project engineers. Although the *Project Development Workflow Tasks Manual* primarily describes design activities performed by the project engineer, it also provides the framework for the flow of tasks by all the functional units.

Guidance on the content of the PSR is discussed in Article 3 "Outline."

For an overview of where the project initiation phase fits into the project development process, see Chapter 8 – Overview of Project Development.

A graphic overview of the project development process is located at: *Project Phase and WBS Level 5 Flow Chart*

1. **Pre-PID meeting**

   Regardless of who prepares the PID, a meeting with Caltrans and the appropriate local entity (or entities) shall be held. Input from all parties is required at the earliest possible stage and continues throughout the process. The project manager should take the lead in coordination activities.

   The purpose of the pre-PID meeting is to communicate a shared view of the project and to establish an understanding of the procedures, roles, and responsibilities before the project initiation process begins:

   - Review the PID development process.
   - Set the framework for getting consensus of purpose-and-need.
   - Set the framework for agreeing on the design concept and scope. Ideally, the design concept and scope will evolve from the transportation system or regional planning process. The engineering specifics of the design scope should be discussed. These include the major features of work such as the number of lanes (current and future), right-of-way requirements, and interchange type and location.
   - Agree on the basic design standards. When the project is on an existing facility, consideration must be given to improving existing features to current standards. Where justified, nonstandard design features may be considered.
   - Identify known design deficiencies. The Design Scoping Index in Article 5 "Scoping Tools" can be used to document known deficiencies and highlight areas requiring further investigation. Examples of deficiencies to consider are: structures with nonstandard vertical or horizontal clearances; inadequate bridge railing; pavement in need of rehabilitation; deteriorated or inadequate drainage systems; narrow or deteriorating shoulders; lack of continuity or the deficiencies of bicycle or pedestrian facilities; replacement landscaping; ramp metering; nonstandard guardrail; maintenance worker safety; and seismic retrofit requirements.
   - Identify the funding sources, and if appropriate identify the cooperative features of the project.

2. **Authorization for PID preparation**

   The project initiation phase begins with the opening of an expenditure authorization. The project manager obtains an expenditure authorization to initiate the project initiation process.

   See Task P01 of the *Project Development Workflow Tasks Manual*.

3. **Form the project development team**

   The Caltrans District Director concurs on the members of a project development team (PDT) for each project, regardless of who is preparing the PID.

   The PDT is comprised of the project manager (PM), a representative of the regional transportation planning agency (if involved), and representatives from district design, environmental, traffic, safety, surveys, construction, and maintenance units, and the right-of-way unit. Representatives from other functional units, local and regional entities are added as needed. See Chapter 8 – Overview of Project Development.

   If the PID is to be prepared by a local entity, the local entity shall furnish Caltrans a list of appropriate PDT members.

   See Task P06 of the *Project Development Workflow Tasks Manual* for further guidance on forming a PDT.

4. **Develop consensus on the project purpose-and-need**

   It is crucial for the PDT to build PIDs on the project purpose-and-need statement early in the project development process. The PDT must identify the transportation deficiencies and describe underlying transportation need. The PDT must agree on the primary objectives that will be fulfilled by constructing the project and define those objectives as the project purpose.

   The project sponsor must concur on the purpose-and-need. Primary stakeholders must have consensus on the project purpose-and-need. Value analysis tools may be helpful in developing consensus on purpose-and-need statements for complex projects.

   Additional information on the development of purpose-and-need statements is located in Chapter 9 – Project Initiation. For additional guidance on project purpose-and-need, refer to Task P02 of the *Project Development Workflow Tasks Manual*.

5. Review of the project site in the field

It is important that the project team make an initial review of the project in the field. This should be an ongoing activity as needed. Field reviews often identify project features that may otherwise not be noticed. The reviews should focus on factors that could affect the project.

In addition, it is important to consider bicycle and pedestrian travel. Bicycles and pedestrians are permitted on all state highways, except for some freeways (see Chapter 31 – Nonmotorized Transportation Facilities); therefore roadway shoulder and sidewalk geometrics and conditions are a part of the scoping process. The preferred way to assess conditions for bicycling and walking is by conducting a field review while bicycling and walking. See *Highway Design Manual (HDM)* Chapter 1000 – Bicycle Transportation Design, for bicycle geometric and surface quality guidance.

If pedestrian facilities do not exist, consideration should be given to them if land conditions are such that pedestrians could be expected to regularly move along the highway. If the existing paved shoulders are narrow, worn paths can be an indicator of where pedestrian travel is occurring. If pedestrian facilities exist, they need to be upgraded to comply with *Design Information Bulletin 82* – Pedestrian Accessibility Guidelines for Highway Projects.

See Task P25 and Task P26 of the *Project Development Workflow Tasks Manual* for further guidance on field reviews.

6. Obtain and review existing reports, studies, mapping or other information

To adequately prepare a PID, it is essential to obtain appropriate mapping. Ideally, aerial contour mapping (3-D MicroStation design files) should be used. This mapping will be used for the development of preliminary alternatives, horizontal and vertical alignment, and other studies. If aerial contour maps cannot be provided at this stage, other mapping such as Digital Highway Inventory Photography Program (DHIPP) images, aerial photography mosaics or as-built plans may be appropriate. If proposed structures cannot be accurately plotted or located on the aerial contour maps, more accurate maps (or larger scale drawings) should be used to show the location and limits of the proposed structures.

The transportation concept report or route concept report, district system management plan, regional transportation plan, Congestion Management Program, current *Ten-Year State Highway Operation and Protection Program Plan (SHOPP Plan)* located at the Headquarters *Division of Transportation Programming-State Highway Operation and Protection Program (SHOPP) and Minor Program* website, the State Implementation Plan, and local and regional pedestrian and bicycle plans should be reviewed. Appropriate information from these reports can serve to document the need and scope of

the project. Further discussion on these documents is located in Chapter 1 – Introduction and Chapter 4 – Programming.

Important background information can often be obtained in previous related or adjacent studies. A search and review of project history files and previously studied but suspended projects can give a historical perspective to the current proposal.

See Task P08 through Task P26 of the *Project Development Workflow Tasks Manual* for further guidance on additional data and input.

7. Identify additional data requirements for project scoping

Refer to the tools in Article 5 "Scoping Tools" to identify data needs and issues that should be considered or studied to properly scope the project. The use of the Design Scoping Index can assist the project team in properly scoping a project. The Design Scoping Index can be used to identify facility deficiencies and the concerns of stakeholders. The Design Scoping Index ties together the Transportation Planning Scoping Information Sheet; *Design Information Bulletin 78* – Design Checklist; Traffic Forecasting, Analysis and Operations Scoping Checklist; preliminary environmental analysis report (PEAR); Headquarters Division of Engineering Services PSR-PDS Scoping Checklist; and right-of-way data sheet. The PDT should evaluate which deficiencies can be addressed given the purpose-and-need, program definition, and funding constraints.

The PDT should use risk management processes to establish assumptions that are made until the data is available.

See Flow Chart P01-P31 and Flow Chart P32-P62 of the *Project Development Workflow Tasks Manual* for further guidance on identifying data requirements.

8. Perform the initial engineering studies

Perform the Initial Engineering Studies – PSR-PDS and Long Lead SHOPP Projects

For PSR-PDS and long lead SHOPP projects, the alternatives may not be well defined. The initial engineering studies may be limited to evaluating the physical characteristics of the project area, major engineering features, and standards. The primary focus of the initial engineering studies for PSR-PDS and long lead SHOPP projects is to establish a reasonable study area for alternative development.

Perform the Initial Engineering Studies – All Other PIDs

The initial studies should focus on the physical characteristics of the project area, engineering features, and standards required to develop a project.

- Floodplain mapping – include an analysis of the potential flood plain impact due to the proposed improvements.
- Traffic Data – existing and forecasted traffic based on up-to-date studies, the level of service, operation analysis based on the up-to-date studies.
- Hazardous material information – analysis needs to be based on well-defined alternatives and preliminary investigations for high-risk alternatives.
- Preliminary material (geotechnical information) – analysis needs to be based on well-defined alternatives and detailed investigations for high-risk alternatives.

See Flow Chart P01-P31 and Flow Chart P32-P62 of the *Project Development Workflow Tasks Manual* for further guidance on engineering studies.

9. Develop alternatives

Alternatives – General

For alternative development, the perimeter of a study area must be delineated, as well as identifying the major work elements of the alternative.

Develop alternatives that will satisfy the project purpose-and-need, are cost effective, and will avoid or minimize environmental and right-of-way impacts. Involve the community early and use context-sensitive-solution principles to develop project alternatives.

In the development of alternatives in PIDs, several key areas must be analyzed: environmental compliance, structures, materials, landscaping, permits, local and regional input, right-of-way, design standards, traffic operations, and alternative transportation modes already in place (such as: mass transit, rail, and bicycle and pedestrian facilities).

If developing alternatives for freeway projects, see Chapter 31 – Nonmotorized Transportation Facilities for the *California Streets and Highways Code* requirements regarding impacts on pedestrian and bicycle transportation routes.

The environmental unit prepares a preliminary environmental analysis report for each alternative. The preliminary environmental analysis report includes:

- A discussion of environmental resources and a description of the potential project issues or impacts, which could delay the project or affect the viability of any project alternative.
- Description of studies that are needed to complete an environmental evaluation (noting as necessary any seasonal constraints for these studies).
- A recommended environmental determination/documentation and a tentative schedule for its completion. If an environmental document is required, specify the lead agency for its preparation.
- An initial site assessment for hazardous waste, if the project includes the purchase of new right-of-way, excavation, and/or structure demolition or modification.
- Permits or approvals.

Refer to the *Standard Environmental Reference (SER)* for further guidance on the preliminary environmental analysis report. The *Standard Environmental Reference* includes information that environmental units need to develop the preliminary environmental analysis report.

See Flow Chart P32-P62 of the *Project Development Workflow Tasks Manual* for further guidance on developing alternatives.

Alternatives – All PIDs except PSR-PDS'

A. Identify Alternatives

Value analysis can be used to develop well-defined alternatives. Value analysis is the systematic application of recognized analytical techniques to identify a project's function, identify alternatives, and analyze the alternatives to identify the one that fully meets the project's function at the lowest overall cost. Other methods for developing alternatives are located in the *Standard Environmental Reference*.

B. Design Standards

During development of projects, various constraints often require deviation from design standards. Identify and document nonstandard design features as discussed in Chapter 21 – Design Standard Decisions.

Design standards are applied equally to all projects on the SHS regardless of the sponsoring agency or the type of funding involved.

See Task P67 of the *Project Development Workflow Tasks Manual* for further guidance on design standards.

C. Structures

As soon as conceptual geometrics have been generated, develop advance planning studies and cost estimates for the various structure alternatives. The advance planning study (APS) must show sufficient detail to allow environmental, permit and traffic management costs to be estimated.

The method of providing these preliminary studies shall be discussed with the Headquarters Division of Engineering Services technical liaison engineer assigned to the district. The technical liaison engineer will provide recommendations on preparation of the preliminary studies. The studies will be prepared by Headquarters Division of Engineering Services, or if prepared by others, will be reviewed by Headquarters Division of Engineering Services during the district review process.

See Task P48 of the *Project Development Workflow Tasks Manual* for further guidance on Advance Planning Studies.

D. Environmental Compliance

Many agencies require permits before a project can be approved for construction. It is essential to identify potential permit requirements at the earliest stage and to include the cost of these requirements in the cost estimate.

E. Materials

Existing materials information (from old projects) should be obtained from Caltrans or other sources. If critical areas, such as slides, erosion, poor foundations, etcetera are noted during field reviews, a preliminary materials investigation should be conducted.

F. Highway Planting and Irrigation

Some projects require significant amounts of highway planting and irrigation work. At the PID stage, efforts should be made to identify any new or replacement planting. Planting and irrigation provisions must be in compliance with Caltrans current planting and water conservation policies.

G. Roadside Design and Management

Conditions and deficiencies of the roadside should be reviewed and documented, and a cost estimate should be developed at this time for design solutions. This should involve roadside items such as miscellaneous paving, maintenance vehicle pull-outs, etcetera requirements at the earliest stage and to include the cost of mitigation in the cost estimate. Identify roadside management issues and permanent vegetation control treatments at this stage. Solutions for vegetation control requirements are available at the

Headquarters Landscape Architecture Program (LAP) *Roadside Management Toolbox* website. These techniques when properly incorporated will improve highway safety for maintenance units, minimize reoccurring maintenance activities, reduce life cycle cost, and improve aesthetics.

H. Traffic

Coordinate with the district traffic unit to obtain transportation management plan (TMP) requirements and any other traffic scoping information. See the *Transportation Management Plan Guidelines* for information about transportation management plan measures and Article 5 "Scoping Tools" to determine what information is provided in a Traffic Forecasting, Analysis and Operations Scoping Checklist.

If a roadway closure is a possibility, review the *Full Closure Guidelines* and coordinate information sharing with the district traffic unit.

Significant items should be discussed in the report and associated costs included in the estimate.

Identify existing vehicle detections systems within the project limits. Additional staging plans to maintain the vehicle detections systems will be required if the duration for outages is in the order of a few hours for traffic signals and spacing between traffic monitoring stations is more than one mile on the mainline. Costs associated with maintenance of operations of existing vehicle detections systems should be included in the PID estimate.

I. Right-of-Way

The right-of-way estimate should be prepared using aerial mapping, mosaics, or as built plans. The mapping for the right-of-way estimate shall show improvements, property ownership, parcel information, proposed right-of-way lines, access control, easements, utilities, and railroad facilities.

See Task P63 through Task P66 of the *Project Development Workflow Tasks Manual* for further information on right-of-way.

J. Local and Regional Input

Local and regional agencies must be given an opportunity to provide input during the preparation of a PID. Local planning (land use) can have a significant effect on the local and regional planning transportation system, which affects the identification of alternatives and project-specific features.

If agreement cannot be reached between Caltrans and the local entity on the programmable project alternative, the PID needs to include a cost estimate and supporting information for all alternates.

Alternatives – PSR-PDS and Long Lead SHOPP Projects

For information regarding developing alternatives for PSR-PDS projects, see Appendix S – Preparation Guidelines for Project Study Report-Project Development Support Project Initiation Document.

Information regarding development of long lead SHOPP projects is located at the Headquarters Division of Transportation Planning-Office of Program and Project Planning *SHOPP Project Initiation Report (PIR) Guidance* website.

10. Develop cost estimates

Cost estimates are developed for:

- The resources needed by Caltrans to either implement or provide independent quality assurance for the remaining project phases, and
- The capital costs needed to acquire right-of-way and construct the project.

Develop a cost estimate for each alternative. Estimates for programming, although preliminary, should be as accurate as possible.

Resource estimates will be developed per the *Workplan Standards Guide, Release 12.0*.

If Federal-aid funds are used on any portion of the project and local agency support costs are used as a "soft" match, then the PID or PR must include local agency support costs.

The PDT and project sponsors should identify funding sources for completing the project. If the project is to be programmed into the STIP or use federal funds, the project sponsor is expected to have reasonable plan for fully funding the project before federal programming can occur. If a project is funded-by-others (as defined in Chapter 9 – Project Initiation), Caltrans must be presented with a reasonable plan for fully funding the project in order to justify expending state resources for independent quality assurance on the project.

Capital costs are to be developed in accordance with Article 4 "Estimates" and Chapter 20 – Project Development Cost Estimates.

See Task P72 of the *Project Development Workflow Tasks Manual* for further information on the development of cost estimates.

11. Develop schedules

A work plan for the proposed programmed activities shall be developed. To increase confidence in the cost estimate and schedule, perform a risk analysis

and develop a risk management plan. The work plan must include a resource cost estimate and schedule for delivery of major components of the project.

12. **Complete PID**
    After developing alternatives and analyzing impacts, prepare the PID in accordance with the outline in Article 3 "Project Initiation Document Preparation Procedures."

ARTICLE 3 Outline

General

The purpose of this outline is to identify the key elements to document in the PSR. As decision-making documents; PIDs must identify the key issues of the transportation deficiency, any major elements that should be investigated, and the effort and resources needed to complete the studies and implement the project. The outline is designed so that important information can be easily obtained from the document text. The attachments should contain detailed information that is needed to support or clarify information in the body of the report. Summarize information from detailed studies in the PID. Actual studies with raw data (such as traffic volumes) and detailed analyses are part of the project files.

Article 6 "Template" presents the template for preparation of the PSR. The report should be similar in organization and may contain similar headings and subheadings, but vary based on project factors.

Front Matter

Cover Sheet

The cover sheet provides the project identifiers, in the header, such as the district, county, route, and post mile range, as well as the expenditure authorization (EA), project number, planning program number (PPNO), program code, program name, and month and year of report approval.

The beginning and ending post miles should be rounded to the nearest 0.1 mile that encompasses all of the proposed construction. The project location should be listed as a spot location to the nearest 0.1 mile if the project is less than 0.2 mile in length. The report limits should use the limits of the programmable project alternative.

The project number is the 10 digit number used for reporting labor charges.

Enter the program code(s) with program name(s). Information on the program codes and names can be found in the *Coding Manual*, Chapter 7. The program code is typically presented in the format of "20.XX.201.010" where "XX" is entered in the element location to represent both capital outlay support (XX=10) and capital outlay projects (XX=20) when they are funded from the same funding program. Use specific, separate program codes for multiple funding sources.

Modify the purpose(s) of report as needed. Typical entries for the purpose(s) include:

- To Request Programming in the 20XX STIP for Capital Support of the Project Approval and Environmental Document
- To Request Programming in the 20XX STIP for Capital Support for:
  - Project Approval and Environmental Document
  - Plans, Specifications, and Estimate
  - Right-of-Way Acquisition
  - Construction Management
- To Request Programming in the 20XX STIP for Right-of-Way and Construction Capital
- To Request Programming in the 20XX SHOPP
- To Request Approval to Proceed with the Formal Studies for a SHOPP Project
- To Authorize a Cooperative Agreement
- For Conceptual Approval for a Project-Funded-By-Others (as defined in Chapter 9 – Project Initiation)

See the *Plans Preparation Manual*, Section 2-2.2 for guidance in developing the project legal description. The project legal description is the same as the title sheet project description, such as: "In Los Angeles County…"

The cover sheet must include endorsement of the project manager.

The District Director or Deputy District Director to whom that authority has been officially delegated approves the recommendations of the report. Edit the signature block as appropriate.

Vicinity Map

The vicinity map is a district, county, or city map showing all State highways and major local roads when pertinent. It should be placed on a separate page and should include the study limits, major topographic limits listed in the report, and a north arrow.

Registered Professional Stamp

The registered professional stamp or seal and number with signature shall be placed on a separate sheet, which shall be part of the report. Also included on this sheet shall be a statement indicating that the registered professional is attesting to the technical information contained therein and the engineering data upon which recommendations, conclusions, and decisions are based. This seal does not constitute approval of the report. Approval of the report is a management decision and is separate from this technical signature of the person in responsible charge.

Table of Contents

On a separate sheet, place a table of contents that includes all the elements of the report.

Main Body of Report

1. INTRODUCTION

The introduction is a summary of the information presented in the report. The introduction should be no more than two paragraphs or a brief opening sentence with the information summarized in tables. The template includes an optional table that can be expanded or condensed to fit the individual project.

In the introduction, identify:

- The proposal
- The range of alternatives and costs
- The Caltrans resources needed to complete the proposed components (for example: Project Approval and Environmental Document phase)
- The schedule for completion of proposed activities
- The proposed funding sources
- The initial project category
- The type of facility as designated on a current or proposed route adoption map
- Any known project approvals anticipated for each alternative (See Chapter 12 – Project Approvals and Changes to Approved Projects)

2. BACKGROUND

The background should briefly describe why this project should go forward at this time.

Information in this section includes:

- A description of the facility
- Project sponsors and project proponents
- A discussion on local and regional agency involvement in the development of purpose-and-need
- A discussion of any actions or commitments that have taken place to date regarding the proposed project

3. PURPOSE AND NEED

These statements together should succinctly answer the question: why this project and why now? The PDT, in conjunction with the project sponsors and key stakeholders, must develop the purpose statement and the need statement. Additional information on the development of purpose-and-need statements is located in Chapter 9 – Project Initiation.

Purpose

The project purpose is the set of project objectives that will be met, which addresses the transportation deficiency (in other words, the project need). It is important to identify the primary and secondary objectives that are met by this project. While the secondary objectives may be a factor in the scoping of the project (for example: minimizing impacts to the environment, meeting *Americans with Disabilities Act of 1990* requirements, etcetera), the purpose statement should focus on the primary objectives of the project.

Need

The project need is an identified underlying transportation deficiency that needs correction. While there may be several associated deficiencies identified in the project area, it is important for the PDT to agree on the primary deficiency or deficiencies that create the need for the project. A need is supported by data that indicates, but is not limited to, a safety issue, reduced mobility, limited capacity for the transportation demand, the lack of reliability, gaps in or between transportation systems, or limited life of the facility. The details of this data are discussed in the "Deficiencies" topic.

4. DEFICIENCIES

This section provides a concise discussion of the data that supports the purpose-and-need of the project as well as identifying data that is important to the scoping of the project.

This section should refer to attached maps, charts, tables, letters, etcetera. When appropriate, discuss existing and forecasted traffic, level of service, capacity adequacy, and safety data.

This section may have two subsections. A subsection on the primary deficiencies would discuss deficiencies that relate directly to the purpose-and-need statements. A subsection on the secondary deficiencies would identify the deficiencies that should be addressed when scoping the project (this subsection would include, but is not limited to: a review of existing roadside area conditions to identify deficiencies and develop a preliminary cost for each improvement, maintenance vehicle pull-outs, access roads, topsoil reapplication, erosion control, slope rounding, nonstandard features, architectural features, landscaping features, maintenance items, etcetera), but are not related directly to the stated purpose-and-need for the project.

5. CORRIDOR AND SYSTEM COORDINATION

This section should address the coordination and consistency of the proposed purpose-and-need with statewide, regional, and local planning efforts such as:

- District system management plan (DSMP)
- Transportation concept reports or route concept reports
- Regional transportation plans (RTP)
- Congestion Management Program (CMP)
- State Implementation Plan (SIP)
- Bicycle and pedestrian master plans

If applicable, identify regional and program objectives, and the project consistency with fulfilling those objectives.

Provide a summary of the information from the Transportation Planning Scoping Information Sheet obtained from the district transportation planning unit to address other State highway improvements, local improvements or any development projects within the immediate project vicinity.

Identify the date that the route was adopted, the California Transportation Commission (CTC) designation of the route or route denominations, and identify any applicable freeway or controlled access agreements, potential freeway or controlled access agreements, and potential relinquishments.

A project that requires a new public road connection must provide a description of the land-use development to be served by the new connection, describe the relationship to the local agency's general plan or other specific area plans, and justification per Chapter 27 – Access Control Modification that existing interchanges or local road systems cannot be improved to handle the deficiencies.

6. ALTERNATIVES

Alternatives – General

Alternatives that should always be considered, as described in Chapter 9 – Project Initiation, are:

- The No Build Alternative
- The alternative that meets current design standards
- The "Minimum Build Alternative" – this alternative must meet the purpose-and-need for the project. This alternative provides a way of addressing the transportation deficiency if there is a shortage of funding

The exclusion of any of these alternatives must be explained. If the alternative that meets current design standards is rejected, approval of nonstandard design features must be obtained and referenced. Rejected alternatives and justification for rejection must be discussed.

Alternative discussions can refer to attachments including: schematic maps of the study area and typical cross-sections, as appropriate.

Alternatives – All PIDs except PSR-PDS'

Alternatives for other PIDs are developed and refined to a higher degree than the alternatives for the PSR-PDS and long lead SHOPP projects. See Appendix S – Preparation Guidelines for Project Study Report-Project Development Support Project Initiation Document for information on PSR-PDS projects. The alternative section for all other PIDs must include a discussion of the design scope, describe the boundary of the study area, and define the key activities for the Project Approval and Environmental Document (PA&ED) phase, Plans, Specifications, and Estimate

(PS&E) phase, and construction for each alternative. Discuss capital construction and right-of-way costs for each alternative.

As appropriate, consider the following topics for each alternative:

- Discuss alternatives in terms of the design scope that will satisfy the project purpose-and-need.
- Describe the boundary of the study area for the alternatives. During the Project Approval and Environmental Document (PA&ED) phase functional units will use this information to determine potential impacts in the area. The boundary should not be limited to just the final right-of-way required for each alternative, but should also include a high level estimate of areas that may be required for construction of the alternative (such as: haul roads, temporary bicycle or pedestrian facilities, detours, material storage, and cut and fill areas).
- The boundary of the study area must be established to include reasonable modification to the alternative. Improper identification of the project study area can result in unanticipated studies and project delays.
- If applicable, discuss whether some or all of the alternatives were developed through the application of the value analysis process and how this process improved the alternative.
- Discuss the type of information needed to evaluate and estimate the scope, cost, and schedule for each alternative. Identify the resources needed to complete the following components: Project Approval and Environmental Document (PA&ED); Plans, Specifications, and Estimate (PS&E); Right-of-Way; and Construction.
- Discuss whether the alternative will require approval of a design standard decision document. Deviations from design standards (see *Highway Design Manual* Index 82.2 – Approvals for Nonstandard Design) must be discussed and must be approved by the appropriate individuals prior to PID approval. Design standard decision documents must be approved following the procedures in Chapter 21– Design Standard Decisions.
- Discuss which studies and actions are required for approval of each alternative (such as: Federal Highway Administration [FHWA], CTC, route matters, etcetera). For further guidance see Chapter 13 – Project Related Permits, Licenses, Agreements, Certifications, and Approvals.
- A summary of the traffic analysis for each alternative is required.
- Transportation Management Plan – Transportation management plan measures must be considered during project initiation and included for project approval to ensure they are incorporated into construction contracts. See discussion of this topic in Chapter 8 – Overview of Project Development and the *Transportation Management Plan Guidelines* for more information.

Describe the anticipated transportation management plan requirements for the project. Describe planned detours, rerouting, temporary closures and full closures for roadways and ramps. Discuss any impacts to transit routes, high-occupancy vehicle lanes, school bus routes, emergency vehicle access, and park-and-ride lots. Discuss the bicycle and pedestrian traffic need through the construction area.

- Discuss the need for staging plans to maintain vehicle detections systems during construction for the programmable project alternative. Identify the temporary vehicle detections system elements (generally microwave video detection) that would be required to maintain the vehicle detections systems and the associated costs.
- A storm water data report (SWDR) shall be prepared for every project. The storm water data report is prepared by the project engineer to document stormwater decisions for any given project. The storm water data report is also used to help identify potential stormwater quality issues for the project. The *Storm Water Quality Handbooks: Project Planning and Design Guide* provides guidance on the appropriate forms to use to develop the storm water data report. The design district or regional stormwater coordinator shall confirm the appropriate storm water data report format to use. The PID shall include a summary of key stormwater elements identified in the storm water data report. The signed cover sheet shall be circulated with the PID for district review and attached to the final PID.
- Discuss any constructability issues. Summarize the results of the constructability review.
- Establish a sequence for data needs to manage risks to scope costs and schedule.
- Summarize the right-of-way impacts for each alternative. At a minimum include the number of parcels for acquisition, the number of relocations and the number of easements. Be sure to include any possible commitment and construction right-of-way requirements.

  Identify exiting utilities and potential points of conflict, and any potholing and relocation activities that are anticipated.

  Identify rail lines in the vicinity of the project and indicate needs for any track relocations, service contracts, or construction and maintenance agreements.

- Discuss high-risk issues that can affect an alternative (for example: local opposition and environmental compliance) or could affect the estimated resources and PA&ED delivery milestone dates.

  For complex projects, there may be limited information at the PID phase. In these cases, it is very important to complete a risk assessment in order to establish the boundary of the study area. If the risks to the delivery commitment are high, it may be prudent to complete some studies during the PID development to increase the confidence in programmed construction

estimates. A summary discussing risk management should be discussed in this section.

- For SHOPP Projects, include the SHOPP Project Output form. Contact the appropriate Headquarters SHOPP program manager for the SHOPP Project Output form and guidance on how to complete the form. Descriptions of the SHOPP programs and the corresponding Headquarters SHOPP program managers and advisors is located at the Headquarters *Division of Maintenance-State Highway Operation and Protection Program (SHOPP)* website.

7. COMMUNITY INVOLVEMENT

Discuss the types of public involvement activities that were used to develop the purpose-and-need statement, and to identify the alternatives to be studied. Discuss community concerns and objectives that were identified during the PID phase.

Discuss the context-sensitive-solutions approach that will be used to obtain community involvement in the identification and evaluation of alternatives.

8. ENVIRONMENTAL COMPLIANCE

Identify the type of environmental scoping information prepared for the project and what may be anticipated, such as:

> A preliminary environmental assessment report (PEAR) was prepared and included with this report. The PEAR indicates that the project will likely receive an environmental determination of a Categorical Exemption (CE) under the California Environmental Quality Act (CEQA) and Categorical Exclusion (CE) under the National Environmental Policy Act (NEPA).

Briefly discuss the requirements and restrictions enumerated in the environmental scoping information. Information about environmental scoping is in the *Standard Environmental Reference*.

Briefly describe environmental issues that influence the project design, schedule, or cost; include permit requirements, mitigation, and construction work windows. Refer to information in the attached assessment as needed.

Provided for reference:

- California Environmental Quality Act (CEQA)
  - Categorical Exemption (CE) or Statutory Exemption (SE)
  - Initial Study (IS) and Negative Declaration (ND) or Mitigated Negative Declaration (MND)
  - Environmental Impact Report (EIR)
- National Environmental Policy Act (NEPA)
  - Categorical Exclusion (CE)
  - Environmental Assessment (EA) and Finding of No Significant Impact (FONSI)
  - Environmental Impact Statement (EIS)

9. FUNDING, PROGRAMMING AND ESTIMATE

Funding

Discuss the project funding.

Special Funding: If the project has special funding, identify the source of funding, the dollar amount, and when funding will be available.

State-Only Funding: If the project will use State-only funding, fully explain the need for the exception and discuss why the project does not qualify for federal participation.

Federal-Aid Funding: Determine if the project is eligible for Federal-aid funding and include one of the following statements:

"It has been determined that this project is eligible for Federal-aid funding."

Or

"It has been determined that this project is not eligible for Federal-aid funding."

Congestion Mitigation and Air Quality Program Funding: Discuss whether or not the project is eligible for Congestion Mitigation and Air Quality Program funding. Review the current Congestion Mitigation and Air Quality Program guidance to determine if an emission reduction analysis must be completed; the California Air Resources Board and Caltrans' approved methodologies for completing the

emission reduction analysis can be obtained from the Headquarters Transportation Programming website at: *Congestion Mitigation and Air Quality* website.

Programming

Proposal Programming Data: If the project is already programmed, include data from the appropriate, latest, official programming document: State Transportation Improvement Program (STIP) or State Highway Operation and Protection Program (SHOPP).

If the project is already programmed, compare the current capital outlay project right-of-way and construction estimates to the programming figures in the current STIP or SHOPP.

If the project was previously initiated with a PSR-PDS, discuss programming the remaining capital outlay support and the capital outlay project right-of-way and construction estimates.

Multiple Counties: Where work is proposed in multiple counties, an entry is required for each of the counties, so that county minimums can be accurately determined.

Support Estimate: Enter the escalated capital outlay support estimates in the table, in the appropriate fiscal funding year column, in thousands of dollars, for the following components: Project Approval and Environmental Document (PA&ED); Plans, Specifications, and Estimate (PS&E); Right-of-Way; and Construction. Consult with the project manager to determine the fiscal funding year, the escalated support estimates, and the escalation rates.

Project Estimate: Enter the escalated capital outlay support estimates in the table, in the appropriate fiscal funding year column, in thousands of dollars, for the Right-of-Way and Construction components. Consult with the project manager to determine the fiscal funding year, the escalated project estimates, and the escalation rates.

Support Cost Ratio: State the support cost ratio. Consult with the project manager to determine the support cost ratio.

Estimate

Discuss significant aspects of the construction estimate. See Chapter 20 – Project Development Cost Estimates for further details on estimating.

10. DELIVERY SCHEDULE

Enter the milestone dates in the table and discuss any schedule issues and constraints. The project schedule should be based on functional unit input, available resources, and funding constraints. Consult with the project manager to determine the project schedule. The milestones shown in the table are mandatory except as follows: M030 is only required when there is an environmental impact report environmental document; M035 is only required when there is an environmental impact statement environmental document; M120 is only required if there is a draft environmental document that will be released to the public; and M378 is not required, but optional if there are structures involved, delete rows as needed. Indicate if the milestone date is an actual date or target date, delete column as needed.

11. RISKS

Refer to the *Project Risk Management Handbook: A Scalable Approach* for the requirements and procedures. Discuss the risks and include the risk register as an attachment.

12. EXTERNAL AGENCY COORDINATION

See the latest *Stewardship and Oversight Agreement on Project Assumption and Program Oversight* between the FHWA, California Division and Caltrans for the project actions assumed by Caltrans and the project actions where FHWA has retained their authority as well as the detail associated with the various oversight responsibilities. Project actions are identified in the "Project Action Responsibility Matrix" within the stewardship agreement.

Discuss if the project has been identified as a "Project of Division Interest."

Discuss project actions, as appropriate, assumed by Caltrans and any coordination with the FHWA for review and approval of project actions.

If the project proposes new or modified Interstate access, include a discussion of any issues and the proposed or actual dates for the Determination of Engineering and Operational Acceptability and Final Approval. See Chapter 27 – Access Control Modification, for more information.

Identify potential involvement with outside agencies for necessary coordination, agreements, or permits required for the project. The district environmental division is a resource for determining some of the required permits. The list of agencies and permits in the template is not comprehensive; see Chapter 13 – Project Related Permits, Licenses, Agreements, Certifications, and Approvals for more information.

External agency coordination that causes uncertainty for delivering the project must be included in the risk register.

13. PROJECT REVIEWS

The template includes a list of possible reviews. Modify the list to reflect district review procedures. Include "Completed" or "Not applicable" or the reviewer's name along with the review completion date. Depending on the project aspects and phase, some of the reviews are mandatory.

14. PROJECT PERSONNEL

To facilitate contacts with the project development team members, include their names and telephone numbers in the following general format of:

Name, Title Phone number

15. ATTACHMENTS

The following table provides examples of the appropriate attachments and files. Each project should be evaluated as to the appropriate inclusion of specific reports and information. Do not include raw data that is used in the analysis in the report or as an attachment. This information should be part of the project file and kept to support engineering recommendations. List each attachment with the corresponding number of pages in parentheses.

Required Attachments	**Optional Attachments**	**Project Files and Supplemental Documents** (Note: key issues should be summarized in the PID)
Location and/or vicinity map	Environmental study checklist or equivalent document	Design Scoping Index or equivalent document
Schematic maps of the study area or alternatives	Traffic Forecasting, Traffic Analysis and Traffic Operations Scoping Checklist or equivalent document	Transportation Planning Scoping Information Sheet
Other appropriate maps	Headquarters Division of Engineering Services PSR-PDS Scoping Checklist	Previous environmental determinations/documents
Approved estimate using the appropriate format	Caltrans or county/city bicycle and pedestrian maps	Biotic assessment
Project support cost estimate.		Level of service calculations
Preliminary environmental analysis report or equivalent report		Collision diagrams, collision data and reports, and safety index calculations
Right-of-way data sheet or equivalent document		Appraisal report
If applicable, an executable cooperative agreement		Complete traffic study
Advance planning study		Initial site assessment (hazardous waste)
For STIP projects, include a project programming request (located at the Headquarters *Division of Transportation Programming-Office of Capital Improvement Programming* website) as an attachment.		Rosters of personnel participating in major reviews such as the district safety review and the constructability review
Typical X-sections, if appropriate		Technical studies
SHOPP Project Output form (only required for SHOPP projects)		Detailed mapping
Storm water data report-signed cover sheet		Storm water data report
Life-cycle cost analysis		Transportation management plan
Risk register		

Functional scoping checklists are worksheets for collecting pertinent information from specified functional units. Scoping checklists also document reviews by Headquarters' liaisons.

ARTICLE 4 Estimates

Capital Estimate Components

General

The PSR capital estimate must be as realistic and accurate as possible. The degree of effort and detail in each study is expected to vary depending upon complexity and sensitivity of the issues.

Additional Information

Additional information that must be obtained includes existing and forecasted traffic, existing and planned bicycle or pedestrian facilities, materials information (particularly where foundation and slope stability problems can be anticipated), advance structure estimates for widening existing structures as well as new facilities, hazardous waste assessment, potential issues related to environmental compliance, right-of-way and utilities, and traffic handling, etcetera.

Because the PSR estimate is used to make programming decisions for the STIP, the importance of an accurate estimate cannot be overemphasized.

Contingencies should be 25 percent at this stage; however, a higher or lower percentage may be used if justified. The contingency is expected to cover unanticipated items of work or cost increases.

Project Cost Estimate

The cost estimate should be prepared using the instructions and procedures located in Chapter 20 – Project Development Cost Estimates. This will identify items that need to be considered and included in the project. It is very important that all known items of work be identified and estimated. It is recognized that not all projects will have each and every item listed in the estimate template. In some instances, not all of the items can be identified at this stage and an appropriate contingency factor should therefore be applied to reflect other possible items. It is also necessary to periodically review and update cost estimates as the project proceeds through the project development process. Any substantial increase in cost should be discussed, as appropriate, with the funding sponsor and regional transportation planning agency (RTPA).

ARTICLE 5 Scoping Tools

General

This article contains some of the tools used by various functional areas to aid the project team in scoping the project. The tools not contained in this article can be obtained from the appropriate functional unit. Also see the *Scoping Tools* website for the tools developed for use with the PSR-PDS.

Upon receiving a request for project information, each functional unit completes the appropriate scoping tool and transmits the information to the unit responsible for developing the PID.

Design Scoping Index

The Design Scoping Index can serve as discussion document to help the design units analyze the highway system and identify design issues that should be addressed during the project initiation phase.

The index can serve to facilitate discussions with other functional units to identify project issues and stakeholder input needed to properly scope the project. It can also facilitate discussions with Headquarter liaisons to identify potential issues and nonstandard design features.

The Design Scoping Index is used with the scoping checklists from other functional units. When filling out the index, indicate if information on the index is based on assumptions. Project information is dynamic and the information in this index should be revised and dated throughout the project initiation process. As the project progresses, information should be verified, updated, and possibly addressed in a risk analysis.

To aid in engineering decision regarding the development of geometric plans, refer to the *Highway Design Manual* and *Design Information Bulletin 78* – Design Checklist.

Transportation Planning Scoping Information Sheet

The PDT should use the Transportation Planning Scoping Information Sheet to verify that the project remains consistent with the planning level purpose-and-need and is consistent with planning concepts, statewide goals, and planning decisions.

The majority of the data requested for the information sheet is compiled at two separate time periods. The initial information is collected by the transportation planning PDT representative at the start of PID development to ensure appropriate stakeholders are included in the process and all pre-planning efforts and commitments are reviewed before any project decisions are made. Explanations of how the requirements were met will need to be finalized by the end of the PID.

The current Transportation Planning Scoping Information Sheet is located at the *Scoping Tools* website.

Traffic Forecasting, Analysis and Operations Scoping Checklist

Traffic Forecasting, Analysis and Operations Scoping Checklist

Project Information

District _____ County _____ Route _____ Post Mile _____ EA _____
Description (include how project was identified: system planning, safety investigation, highway and freeway surveillance, etcetera.)
_____
_____
_____

Project Manager _____
Phone #_____
Project Engineer _____
Phone #_____
Traffic Forecasting Functional Manager _____
Phone #_____
Traffic Operations Functional Manager _____
Phone #_____

Traffic Forecasting, Traffic Analysis Scoping

Describe and identify in the following sections a general description of the existing traffic and forecasted traffic (using existing data and transportation concept reports). Analyze traffic data and determine what traffic operational conditions are anticipated. Identify any additional studies needed to accurately forecast and fully analyze the traffic operations as part of the preparation of the environmental determination/document. Consult with the District Local Development-Intergovernmental Review Planner for applicable local agency studies of land development proposals.

Under traffic modeling assumptions, traffic models should be validated and calibrated. The general plan buildout should be used to incorporate potential land use changes that are probable in the future. An interim year may be selected to incorporate a significant land use change or development.

At the PSR stage, the traffic forecasting and analysis tasks are intended to utilize readily available information and traffic models. At this stage of the project development process, it is not intended that extensive effort be devoted to the generation of traffic data and to the significant updating of traffic models. If necessary, these tasks will occur at later stages of the process. However, exceptions may be necessary in cases where the traffic data or models are highly suspect.

Traffic Operations Scoping

Based on the traffic analysis, describe and identify in the following sections a general description of the traffic operational improvements required (auxiliary lanes, signalized intersections, etcetera) to address the traffic operational conditions and applicable warrants. The traffic operation improvements should be discussed in sufficient detail to identify the project's major geometric features and operations issues. Also discuss in detail traffic management system improvements (ramp metering, CMS, HOV lanes, etcetera) to be incorporated. Discuss any components of the traffic management system that may be controversial during development of the environmental determination/document.

Project Screening

1. Project Features: New right-of-way? _____ Excavation or fill? _____

2. Project Setting

_____

Rural or Urban

_____

Current land uses

_____

Adjacent land uses

_____

(industrial, light industry, commercial, agricultural, residential, etcetera)

Existing Traffic Operational Conditions and Warrants Supporting the Need for the Improvement

Mainline highway

_____

_____

Ramp intersection

_____

_____

Merge / diverge

_____

_____

Street intersection

_____

_____

Weaving / merging (spacing)

_____

_____

Describe facilities for pedestrians and bicycles (such as: marked non-intersection pedestrian crosswalks, intersections with bicycle paths, etcetera)

_____

_____

Traffic Study and Analysis Anticipated

Traffic Modeling Assumptions

o Use Local Model
o Update New Model
o New Model
o Existing Traffic Counts
o New Traffic Counts
o Historical Growth
o General Plan (GP) Buildout
o Pro-Rate GP Growth

o Existing Year ( )
o Design Year ( )
o Interim Year ( )
Other

_____

_____

Traffic Analysis

o Mainline LOS
o Merge/Diverge LOS
o Ramp Int. LOS
o Adjacent IC LOS
o Ramp Metering (open)
o Ramp Metering (later)
o Left/Right Turn Storage
o Accident / Safety Analysis
o Intersection Queues
Other

_____

_____

References: Guide for the Preparation of Traffic Impact Studies, Caltrans January 2001; Highway Capacity Manual: Transportation Research Board

Traffic Operations Scoping

Traffic Operational Improvements

Attach the project location map to this checklist to show location of all traffic operations improvements anticipated.

o Auxiliary Lanes
o Intersection Improvements
o Truck Climbing Lane
o New Signals
o Modify Signals
o Merging Improvements
o Weaving Improvements
o Deceleration / Acceleration Lanes
Other
_____
_____

Traffic Management Systems

Attach the project location map to this checklist to show location of all traffic management systems identified.

o Ramp Meters
o HOV Ramp Bypass
o Mainline HOV Lanes
o Detector Systems
o Detector Loops
o Detector Lead-in-cables
o VDS Staging (temporary microwave monitoring stations
o Communication Networks (fiber optics, telephones, etcetera)
o Closed Circuit Television
o Changeable Message Sign
o Highway Advisory Radio
Other
_____
_____

Discuss strategies (technical analysis, public outreach, etcetera) to secure local agency and public support to implement HOV lanes and ramp metering:

_____
_____

Transportation Management Plan

o Construction Staging
o Full Closure Checklist
o TMP Strategies Identified
Other
_____
_____

Preliminary Traffic Forecasting Evaluation provided by:

Traffic Forecasting_____ Date _____

Preliminary Traffic Operations Evaluation provided by:

Traffic Operation Engineer _____ Date _____

Traffic Electrical Engineer _____ Date _____

ARTICLE 6 Template

This article is a template for the project study report. When using the template, delete any italicized text within the body of the document. The italicized text provides instructions for template users and does not provide any value to the final document.

Appendix L Template

ATTENTION! There are a number of items in this appendix that need to be updated—especially in the areas of funding and programming, delivery schedule, risks, and external agency coordination. Until this appendix is updated, please see Appendix K for the discussion of topics and discuss any issues with the Headquarters SHOPP program manager or advisor.

APPENDIX M – Preparation Guidelines for Project Report (Safety Roadside Rest Area)

Safety Roadside Rest Area Rehabilitation

New Safety Roadside Rest Area

Auxiliary Parking Facility

Safety Roadside Rest Area Closure

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APPENDIX M – Preparation Guidelines for Project Report (Safety Roadside Rest Area)

ARTICLE 1 Overview

Use of Project Report (Safety Roadside Rest Area)

These guidelines provide an outline to be used with the procedures described in Chapter 29 – Landscape Architecture for safety roadside rest area projects. All safety roadside rest area (SRRA) projects funded from the 20.XX.201.250 (SRRA Restoration,) program or 20.XX.201.260 (New SRRA) program require a project report (PR).

The PR-SRRA is used as the primary project reference document by both Headquarters and the district. The need for accurate and complete project information is essential. The district is responsible for the development and presentation of all data required for the PR-SRRA.

ARTICLE 2 Outline

General

The PR-SRRA is prepared and submitted following the outline. The data required is to be provided under the following headings, and arranged and numbered in the sequence shown in the outline. The following headings correspond to specific topics that are to be discussed in the submittal.

Front Matter

Cover Sheet

All PR-SRRAs should have a standard cover sheet to provide project identification information and signatures. Information to be provided includes the following:

- Title
  "Project Report - Safety Roadside Rest Area Rehabilitation"
  "Project Report - New Safety Roadside Rest Area"
  "Project Report - Auxiliary Parking Facility"

"Project Report - Safety Roadside Rest Area Closure"

- File Reference
  District-County-Route-Post Mile (Dist-Co-Rte-PM)
  The post mile should be given to the nearest 0.1 mile; if the project is 0.2 mile or more in length, give both the beginning and ending.

  Expenditure Authorization (EA)
  The multiphase expenditure authorization, using the "0" phase for the project.

  Program Identification
  Program identification indicates which program will fund this task/phase of the project. Currently, SRRA projects are funded in the State Highway Operation and Protection Program (SHOPP). The SHOPP code for the development of PRs for SRRA Rehabilitation and SRRA Closure Projects is 20.XX.201.250; and 20.XX.201.260 for New SRRA and Auxiliary Parking Facilities Projects.

- On Route _____ From _____ To _____ (for New SRRA or Auxiliary Parking Facility), or

  On Route _____ at the _____ Safety Roadside Rest Area (for Rehabilitation or Closure)

  Provide a brief written description of the project limits that corresponds to post mile range and ties the limits to commonly known physical features on the ground that can be identified on available mapping.

- Vicinity Map
  Provide a small map showing the project limits consistent with the brief description and post miles, and a north arrow. The map should be sufficient to locate the project at a glance for a person unfamiliar with the project. It should show the features used to identify the project limits such as roads, streams, junctions or railroads, and the nearest town (unless too distant), and a note indicating the direction to and name of the next town in each direction.

- Right-of-Way Statement
  Provide a statement signed by the district division chief of right-of-way indicating the review of the right-of-way information contained in the PR-SRRA and the right-of-way data sheet attached to it, and a finding that the data is complete, current and accurate.

- Approval Recommended
  The recommendation for approval signed by the project manager (PM), the district landscape architect, and district maintenance indicating concurrence with the project scope and cost.

- Approval
  Approval of the PR-SRRA recommendations is indicated when signed and dated by the District Director or by a Deputy District Director to whom that authority has been officially delegated. The date of signature becomes the official date for project approval.

Licensed Landscape Architect's Stamp and Statement

The second page of the PR-SRRA contains the required seal or stamp and signature of a licensed landscape architect who is the person in responsible charge of the landscape features. The sheet must include a statement indicating that the licensed landscape architect attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based. Approval of the PR-SRRA is a management decision and is separate from this technical signature of the person in responsible charge of the landscape features.

Registered Civil Engineer's Stamp and Statement

The second page of the PR-SRRA also contains the required seal or stamp and signature of a registered civil engineer who is the person in responsible charge of the engineering features. The sheet must include a statement indicating that the registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based. Approval of the PR-SRRA is a management decision and is separate from this technical signature of the person in responsible charge of the engineering features.

Main Body of Report

1. INTRODUCTION

A. Type of Project

Describe the type of project. Provide a description of the complete scope of work. Examples are: new unit; upgrade of existing unit; correct *Americans with Disabilities Act of 1990* (ADA) deficiencies; two units (north and southbound); one unit serving both directions, and etcetera.

B. Scope of Work

Provide a brief description of the scope of work. Include the number of acres if it's a New SRRA or Auxiliary Parking Facility.

C. Project Cost Estimate

Provide the current project cost estimate for the complete project. Contact the Headquarters Division of Engineering Services-Structure Design, Office of Transportation Architecture to obtain cost information for the building.

D. Program Year and Source of Funding

For projects in the SHOPP, use 20.XX.201.250 for SRRA Rehabilitation or SRRA Closure Projects; and 20.XX.201.260 for New SRRA or Auxiliary Parking Facilities Projects.

2. RECOMMENDATION

Give a recommendation for approval. If cooperative features are described, recommend that the cooperative features be approved and a cooperative agreement be negotiated.

3. BACKGROUND

Rehabilitation

Update the information provided in the project study report (PSR).

- Describe why this project was initiated.
- Indicate the type of highway, access control, climate, seasonal road conditions, and use of rest area by trucks and busses. Describe existing parking capacity for cars and long vehicles as well as geometrics of existing ramps, merge and diverge areas.
- Briefly describe the type, age and condition of the comfort station(s) and other major facilities. Describe the condition of the site and amenities (such as: utilities, ramps, parking, lighting, architecture, walks, and landscape).
- Provide the date of initial construction and any subsequent improvement projects.
- Describe who maintains the rest area and the annual cost.
- Identify and describe the characteristic architectural style of the surrounding community for the purpose of developing context appropriate design.
- Discuss any commitments made to local officials, private organizations, or other groups or individuals. Discuss any outside support or opposition to the project.
- Discuss existing or planned vending operations at this SRRA.
- Indicate conformance with SRRA Master Plan.

New SRRAs and Auxiliary Parking Facilities

Update the information provided in the PSR.

- Describe why this project was initiated.
- Discuss distances to nearby SRRAs, other stopping opportunities, and conformance with the SRRA Master Plan.
- Indicate the type of highway, access control, climate and seasonal road conditions.
- Discuss site feasibility including the availability and adequacy of potable water, electrical power and waste water treatment; ingress/egress to the site; and scenic value.
- Identify and describe the characteristic architectural style of the surrounding community for the purpose of developing context appropriate design.
- Address the feasibility of development and operational partnerships.

Closure

Update the information provided in the PSR.

- Indicate the type of highway, access control, climate and seasonal road conditions.
- Briefly describe the type, age and condition of the existing rest area facilities including the comfort station(s), utilities, ramps, parking, lighting, walkways and landscape.
- Provide the date of initial construction and any subsequent improvement projects.
- Describe who maintains the rest area and the annual cost.
- Describe any existing vending operation at this SRRA.

4. CAPACITY ANALYSIS/DESIGN GUIDELINES (for all projects)

Consult with the appropriate units to update the design data sheet submitted in the PSR. Although these sheets will give a reasonable estimate of the numbers of required facilities, the requirements should be carefully analyzed and adjusted, if necessary, to meet the needs of the specific site. Include a brief discussion of the guidelines used in determining the number of required facilities. Refer to the *Highway Design Manual, Topic 903.5,* "Facilities and Features."

5. PURPOSE AND NEED

Rehabilitation

Update information from the PSR. Identify the problems, needs and/or deficiencies that necessitate this project. Consult with the Headquarters Division of Engineering Services-Structure Design, Office of Transportation Architecture for building deficiencies. Supplement, as appropriate, with maps, drawings, charts, tables and/or letters. Following is a checklist of potential deficiencies to consider:

- Compliance with legal or regulatory requirements. Some examples are:
  - *Americans with Disabilities Act of 1990*
  - California Department of Industrial Relations-Division of Occupational Safety and Health
  - Department of Public Health
  - Regional water quality control board
- Safety and security (safe walks, lighting, signs, California Highway Patrol (CHP) facilities, surveillance cameras). Describe contacts with CHP.
- Maintainability and vandalism.
- Parking capacity as well as geometrics of existing ramps, merge and diverge areas.
- Rest room capacity.
- Accident history for rest area and route segment 10 miles in each direction.
- Unauthorized shoulder, roadside, and community parking.
- User amenities including trash bins, picnic tables and shelters, benches, water faucets, restroom fixtures, landscaping, traveler information kiosks, vending and other site amenities.

New SRRAs and Auxiliary Parking Facilities

Update information from the PSR. Identify the problems, needs and/or deficiencies that necessitate this project. Supplement, as appropriate, with maps, drawings, charts, tables and/or letters. Include in your discussion:

- Parking deficiencies at adjacent rest areas.
- Unauthorized parking on shoulders, roadsides or in the adjacent community.
- Accident history for route segment 10 miles in each direction from the proposed location.
- Physical or environmental limitations on expanding adjacent rest areas.
- Gap in rest area spacing.

Closure

Update information from the PSR. Identify the problem, need and justification for closure. Consider the following:

- Mainline and ramp traffic volumes, and vehicle types (automobiles, commercial trucks, busses) for the subject SRRA and the adjacent SRRAs.
- Current and 20-year projected rest area usage (vehicles and number of users) for subject and adjacent SRRA.

- Unauthorized parking on shoulders, roadsides or in the adjacent community.
- Accident history for route segment 10 miles in each direction from the proposed location.

6. PROPOSED PROJECT

Rehabilitation, New SRRA, Auxiliary Parking Facilities

A. Project Description

1) General
Provide a written description of the schematic plan for the proposed project. Discuss pertinent points of your proposal, including conformance with the SRRA Master Plan.

2) Context Appropriateness
Describe how the proposed architecture relates to the characteristic architectural style of the region. Materials used in a project should reflect the character of the area. Discuss community and stakeholder involvement and recommendations.

3) Utilities
- Water system
  Describe the identified source of potable water and related facilities such as storage tanks or treatment plant, and how they will be utilized.
- Sewer system
  Describe the sewage disposal system, with local agency regulations considered, and consideration of a trailer dump station.
- Electrical system
  Describe the electric power source and how it will be utilized.
- Telephone
  Describe the telephone line source and how it will be utilized.

4) Agreements
Discuss any agreements with CHP, sheltered workshops, or Department of Rehabilitation for this site.

B. Schematic Site Plan

A Schematic Site Plan must be prepared for all New SRRA projects and for all SRRA Rehabilitation projects that involve demolition and replacement of existing comfort stations or the placement of new buildings. The schematic site plan must be of a scale sufficient to show the location and arrangement of all buildings, parking areas, walkways, benches, tables, picnic structures, lighting fixtures, public water faucets, trash receptacles, dumpster enclosures, kiosks, trees, lawn areas, and all other site elements that compose the design. Include the following:

- Ramps and Parking
  Ramp, merge and diverge area geometric improvements required by Caltrans' current standard. Number of car and truck parking spaces; number of accessible parking spaces for persons with disabilities; area lighting; and signs (vehicular and pedestrian).

- Architectural Building Features
  Include comfort stations, crew room, CHP facility, picnic tables, picnic tables with shelters, trash receptacles, dumpster enclosures, recycle containers, benches, information kiosks, vending machines, signs, and fencing. Include building footprints and elevations for the comfort stations.

- Pedestrian Facilities
  Include walks, curbs, lighting, drinking fountains, faucet assemblies, accessible features for persons with disabilities, and street washer boxes.

- Planting and Irrigation
  Include turf, ground cover, trees, shrubs, erosion control, and plant establishment period.

- Utilities
  - Water system source and any related facilities.
  - Sewer system facilities and trailer dump station.
  - Electrical system source.
  - Telephone line source.

C. Privatization (New SRRA and Auxiliary Parking Facilities Only)

Describe what privatization efforts will be undertaken. Identify the corridor for the investigation. Include the dollar amount of private sector participation to be solicited and amount of Caltrans proposed participation. Provide the schedule for the investigation.

D. Project Cost Estimate

The PM should, in coordination with the Headquarters Division of Engineering Services-Structure Design, Office of Transportation Architecture, base the project cost estimates on experience with similar projects and available historical data. Unless the particulars of a specific case justify use of a different factor, a 20% contingency factor should be used for project cost estimates at this phase of work.
Include a cost breakdown for each of the major elements of the project. Break costs down as follows:

- Ramps and parking
- Architectural building work. Use a 25% contingency for architectural building work only. Contact the Office of Transportation Architecture to obtain building estimate information.
- Pedestrian facilities
- Utilities and utility connection fees.
- Landscaping
- Right-of-way costs (not included in cost of construction) if applicable
- Other

In addition to the project cost estimate, include a brief analysis and estimate of the annual maintenance costs, including maintenance requirements of permanent stormwater pollution prevention treatment best management practices.

E. Alternatives

Give a brief discussion of alternatives that were considered but not selected.

<u>SRRA Closure</u>

Describe the closure proposal. Update the material provided in the PSR.

Describe the impact on the rest area system and environment including:

- The distance between adjacent rest areas after closure and impact on those rest areas.
- Availability and capacity of alternate safe, free, 24-hour public stopping opportunities for all vehicle types (differentiate between free, for-fee and customer-only opportunities).
- Consistency with current SRRA Master Plan.
- Description of stakeholder input.
- Closure concurrence by the Federal highway Administration (FHWA) and conditions or requirements, including reimbursement, if any.

Provide a project cost estimate for the closure.

Discuss alternatives considered in lieu of closure including: rehabilitation, replacement, relinquishment to other agencies, operation by others, and obliteration.

7. CONSIDERATIONS REQUIRING DISCUSSION

A brief summary of the results of studies made in developing the proposal should be included.

A. Hazardous Materials

Update information from the PSR regarding whether hazardous materials including aerially deposited lead (ADL), naturally occurring asbestos (NOA) are present within both the project site and existing buildings, and recommended actions for avoidance or mitigation.

B. Transportation Management Plan (Rehabilitation Only)

Update information provided in the PSR. Discuss whether the rest area and comfort station building will remain open or be closed during construction. Discuss if there will be temporary facilities and how the temporary facilities will be handled. Discuss how closure will be handled and how the public will be notified if closure is the option.

C. National Pollutant Discharge Elimination System Permit Requirements and Stormwater Pollution Prevention

Update the storm water data report.

D. Utilities

The availability of utilities must be verified. Describe the source and proposed development of water; commercial electrical power; sewage system; and public telephone.

E. Right-of-Way

If right-of-way is required, explain the reasons, cost per acre, and amount required, and future actions necessary to acquire it. If no new right-of-way is needed, the report should so indicate.

F. Environmental Compliance

For New Safety Roadside Rest Areas, Auxiliary Parking Facilities, and Closure, provide a description of environmental compliance issues and any mitigation required as a result of new rest area development, auxiliary parking facilities or the removal and reuse of rest area site.

The PR-SRRA should document any key environmental issues, findings, assumptions, and commitments made to stakeholders during the PA&ED phase of work to ensure these key concepts are incorporated in the built project.

Depending on the scope of work involved, Safety Roadside Rest Area projects may be classified as categorically exempt (CE) under the California Environmental Quality Act (CEQA) and categorically excluded (CE) under the National Environmental Policy Act (NEPA), or may require preparation of an environmental document. The landscape architect should consult the district environmental unit to determine which environmental document, if any, is required for the project. Safety Roadside Rest Area projects not considered CE under NEPA or CEQA must include preparation of an environmental document to complete the PA&ED phase of project delivery. The following statements must be included in the PR-SRRA where appropriate:

- ND Projects
  (Negative Declaration – State Only Funded Projects)

  For projects with a ND the following statement must be included:

  > The ND has been prepared in accordance with Caltrans environmental procedures. The attached ND is the appropriate document for the proposal.

  The ND must be attached to the PR-SRRA.

- ND/FONSI Projects
  (Negative Declaration/Finding Of No Significant Impact)

  For projects with an ND/FONSI the following statement must be included:

  > The ND/FONSI has been prepared in accordance with Caltrans environmental procedures, as well as State and Federal environmental regulations. The attached ND/FONSI is the appropriate document for the proposal.

  The ND/FONSI with the IS/EA must be attached to the PR-SRRA.

- For projects statutorily exempt from CEQA, the following statement must be included:

  > The project is Statutorily Exempt from CEQA.

- For projects categorically exempt (CE) from CEQA, the following statement must be included:

  The project is Categorically Exempt under Class *(identify class)* of the CEQA guidelines.

- When appropriate, the following statement should be included:

  The project is Categorically Excluded under NEPA.

Before approving a report that includes a CE statement, the approving authority must have received the CE form (signed by the environmental unit chief), and must verify:

1) No scope changes have been made that would affect the exemption determination;

2) The project description, included on the CE form, corresponds with the PR.

The environmental unit chief should be consulted with questions regarding this verification.

The *Standard Environmental Reference (SER)* Volume 1, Chapter 30 describes the criteria a proposed project must meet to be considered Categorically Excluded from NEPA, and the preparation and processing of the Categorical Exclusion (CE) documentation.

The *Standard Environmental Reference* Volume 1, Chapters 34, 35 and 36 describe the preparation and processing of CEQA-only Categorical Exemptions, Initial Studies, Negative Declaration and Environmental Impact Reports.

G. Impact to Adjacent Facilities

Discuss the impacts to adjacent rest areas or commercial facilities if the closure, rehabilitation, or construction of new rest areas is not completed.

8. OTHER CONSIDERATIONS AS APPROPRIATE

- Permits and other approvals required.
- Consistency with other planning.
- Railroad involvement.
- Cooperative agreements - Describe cooperative features, participants and responsibilities.

9. FUNDING AND PROGRAMMING

See Appendix K – Preparation Guidelines for Project Report.

10. DELIVERY SCHEDULE

See Appendix K – Preparation Guidelines for Project Report.

11. RISKS

See Appendix K – Preparation Guidelines for Project Report.

12. EXTERNAL AGENCY COORDINATION

See Appendix K – Preparation Guidelines for Project Report.

13. PROJECT REVIEWS

Summarize all major reviews and coordination within Caltrans and with other interested agencies and attach pertinent correspondence to the PR-SRRA.

14. PROJECT PERSONNEL

List the name and phone numbers for the project development team leader, project manager, project engineer, architect, project landscape architect, district landscape architect, Headquarters Landscape Architecture Program safety roadside rest area coordinator, Headquarters Landscape Architecture Program district coordinator, Headquarters Project Delivery Coordinator, project development supervisor and senior, environmental unit chief, right-of-way reviewer, FHWA reviewer, maintenance representative, and others as needed.

15. ATTACHMENTS

- Strip map
  This map should be of large enough scale to show the highway alignment and other human elements and natural features in the immediate vicinity.
- Schematic site plan
- Architectural schematic building plans
- FHWA concurrence memorandum
- FHWA concurrence letter
- Approval letters
  - Certification from utility companies
  - Geometrics
  - Longitudinal encroachment, if applicable
- Basic design data sheet
- Test data
  - Percolation test
  - Test hole data for well, water analysis
- Aerial photographs
- Appropriate correspondence
- Appropriate environmental documentation or determination

- Right-of-way data sheet
- Draft cooperative agreement (if applicable)
- Project cost estimate approved by the project manager
- Storm water data report-signed cover sheet
- Life-cycle cost analysis
- Risk register

ARTICLE 3 Template

Dist - Co - Rte, PM
EA
Program Code

PROJECT REPORT
(Safety Roadside Rest Area Rehabilitation)
(New Safety Roadside Rest Area)
(Auxiliary Parking Facility)
(Safety Roadside Rest Area Closure)

Vicinity Map

Show:

- Project limits
- North Arrow

On Route_____

From _____

To _____

I have reviewed the right-of-way information contained in this report and the right-of-way data sheet attached hereto, and find the data to be complete, current, and accurate:

_____
DISTRICT DIVISION CHIEF– RIGHT OF WAY

APPROVAL RECOMMENDED:

_____
PROJECT MANAGER

_____
DISTRICT LANDSCAPE ARCHITECT

_____
DISTRICT MAINTENANCE

APPROVED:

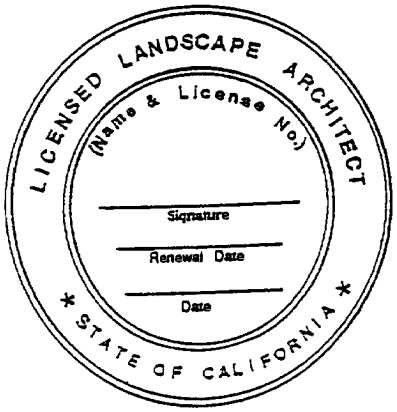
_____ _____
DISTRICT DIRECTOR *DATE*

Dist - Co - Rte, PM

This project report (safety roadside rest area) has been prepared under the direction of the following licensed landscape architect. The licensed landscape architect attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based.

_____ _____

LICENSED LANDSCAPE ARCHITECT *DATE*



This project report (safety roadside rest area) has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

_____ _____

REGISTERED CIVIL ENGINEER *DATE*

Outline for
PROJECT REPORT (Safety Roadside Rest Area)

Safety Roadside Rest Area Rehabilitation
New Safety Roadside Rest Area
Auxiliary Parking Facility
Safety Roadside Rest Area Closure

Refer to Article 2 "Outline for further explanation of the data to be provided in each outline topic.

1. INTRODUCTION

Type of project
Scope of work
Project cost estimate
Program year and source of funding

2. RECOMMENDATION

3. BACKGROUND

SRRA Rehabilitation

Why project was initiated
Highway description
Condition of facilities
Construction history
Maintenance
Context appropriateness
Commitments
Vending operations
Conformance with SRRA Master Plan

New SRRA and Auxiliary Parking Facility

Why project was initiated
Conformance with master plan/spacing
Highway description
Site feasibility
Context appropriateness
Opportunities for partnerships

SRRA Closure
- Highway description
- Condition of facilities
- Construction history
- Maintenance
- Blind vending operations

4. CAPACITY ANALYSIS/DESIGN GUIDELINES (all projects)

Basic design data sheet

5. PURPOSE AND NEED

SRRA Rehabilitation
- Problems, needs, or deficiencies

New SRRA and Auxiliary Parking Facility
- Problems, needs, or deficiencies
- Parking deficiencies at adjacent rest areas
- Unauthorized roadside parking
- Accident history
- Physical or environmental limitations
- Gap in existing system

SRRA Closure
- Justification for closure
- Traffic volume
- Rest area use
- Parking deficiencies at adjacent rest areas
- Unauthorized roadside parking
- Accident history

6. PROPOSED PROJECT

SRRA Rehabilitation, New SRRA and Auxiliary Parking Facility
- Project description
- Schematic site plan
- Privatization efforts (New SRRA and Auxiliary Parking Only)
- Project cost estimate
- Alternatives considered

SRRA Closure
- Description of closure
- Impact of closure
- Project cost estimate
- Alternatives considered in lieu of closure

7. CONSIDERATIONS REQUIRING DISCUSSION

Hazardous material
Transportation management plan (Rehabilitation Only)
National Pollutant Discharge Elimination System Permit permit requirements and stormwater pollution prevention
Utilities
Right-of-way
Environmental impact

8. OTHER CONSIDERATIONS AS APPROPRIATE

- Permits and other approvals required
- Consistency with other planning
- Railroad involvement
- Cooperative agreements - describe cooperative features, participants and responsibilities

9. FUNDING AND PROGRAMMING

10. DELIVERY SCHEDULE

11. RISKS

12. EXTERNAL AGENCY COORDINATION

13. PROJECT REVIEWS

14. PROJECT PERSONNEL

13. ATTACHMENTS

BASIC DESIGN DATA SHEET (Part 1)

LOCATION_____
District County Route PM

SRRA NAME _____ ROUTE DIRECTION _____

Design Data	Current Year	Design Year (20 years)
A. AADT for the Route*	_____	_____
B. Peak Hour ADT for the Route*	_____	_____
C. Ramp Count for SRRA*	_____	_____
D. Stopping Percentage (C/A, above) If AADT for the route is for both directions and the SRRA serves 1 direction, A must be divided by 2 first.	_____	_____
E. Rest Area Design Hourly Volume (B x D, above)	_____	_____
F. Length of stay in rest area (20 minutes)	0.33 hour	0.33 hour
G. Total Parking Spaces (E x F, above)****	_____	_____
H. Long Vehicles Percentage**	_____	_____
I. Long Vehicle Parking Spaces (G x H, above)	_____	_____
J. Auto Parking Spaces (G-I, above)	_____	_____
K. Users per Hour (G x 2.2 people/vehicle)	_____	_____
L. Adjustment for Bus Routes***	_____	_____
M. Design Usage per Hour (K + L, above)	_____	_____

* Traffic and ramp counts are available on Traffic Operations web site at http://www.dot.ca.gov/hq/traffops/
** Usually 30%. Adjust as necessary per District traffic recommendation.
*** Up to 10% increase for rest areas on major bus routes.
**** Maximum 120 parking spaces or reasonable carrying capacity of site.

BASIC DESIGN DATA SHEET (Part 2)

Comfort facilities, domestic water supply, irrigation water requirements should be determined by the sections directly involved in that portion of the work. The estimated demands should be indicated.

Comfort Facilities *(provide name, or example, of section directly involved (as stated in above paragraph) for each requirement and define Ultimate)*

	Design	Ultimate
Water closets and urinals (men)	_____	_____
Lavatories (men)	_____	_____
Water closets (women)	_____	_____
Lavatories (women)	_____	_____

Domestic Water Requirements (Initial Development for water is 100% of Ultimate)*(define Initial Development)*

Peak demand _____ gal/ min

Average Daily Demand (storage required) _____ gal

Peak daily demand _____ gal

Irrigation Water Requirements (Initial Development is 100% of Ultimate)

Turf area (2 inches per week) (1.25 gal/SF/week) _____ gal

Trees and shrubs (15 gal/day) _____ gal

Ground cover (2 inches per week) _____ gal

Initial Development is 100% of Ultimate

Sewage Disposal Requirements (Initial Development of sewers is 100% of Ultimate)

Daily Flow _____ gal

Size piping _____ inches

APPENDIX Q – Preparation Guidelines for Project Report (Roadside Safety Improvements)

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APPENDIX Q – Preparation Guidelines for Project Report (Roadside Safety Improvements)

ARTICLE 1 Overview

Use of Project Report (Roadside Safety Improvements)

The project report (roadside safety improvements) is the project approval document for roadside preservation State Highway Operation and Protection Program (SHOPP) projects in the 20.XX.201.235 – Roadside Safety Improvements Program.

The following guidance is tailored to roadside safety improvements projects where the primary scope is worker safety.

Roadside safety improvements projects improve safety by reducing the frequency and duration of worker exposure to traffic by:

- eliminating the need for workers on foot adjacent to the traveled way.
- increasing worker access from locations off of the traveled way.
- accommodating mechanized maintenance activities.
- minimizing the need for recurrent damage repair by relocating equipment away from traffic or replacing facilities with more appropriate ones that are not as prone to damage.

Common worker safety improvements are described in the Landscape Architecture Program (LAP) roadside toolbox, available at: *Roadside Management Toolbox website*.

Preparation of Project Report (Roadside Safety Improvements)

These guidelines provide information to be used with the requirements described in Chapter 10 – Formal Project Studies, Chapter 12 – Project Approvals and Changes to Approved Projects, and Chapter 29 – Landscape Architecture.

The following guidance is tailored to projects with the primary purpose of improving safety for maintenance personnel. See Appendix K – Preparation Guidelines for Project Report for fundamental guidance on the preparation of project approval documents.

The project report (roadside safety improvements) should be prepared using the report template associated with this appendix, see Article 3. The report should be similar in organization, but can vary based on features, complexity and issues specific to each project. Modify the report format to include information that is pertinent to the scope, cost and schedule of project. If a section is not applicable to the project, fill in as "Not applicable."

ARTICLE 2 Outline

General

The project report (PR) outline located in Appendix K – Preparation Guidelines for Project Report was adapted to meet the documentation needs of the Roadside Safety Improvements Program. Some sections of the standard PR were modified to facilitate the presentation of project information.

Consult with the district program advisor and the Headquarters SHOPP program manager to determine how project-specific issues should be presented.

Not every outline topic is discussed; information is presented when it differs from or is in addition to that found in Appendix K – Preparation Guidelines for Project Report.

Front Matter

Cover Sheet

Licensed Landscape Architect Stamp

The licensed landscape architect stamp or seal and number with signature shall be placed on a separate sheet, which shall be part of the report. Also included on this sheet shall be a statement indicating that the licensed landscape architect is attesting to the technical information contained therein and the data upon which recommendations, conclusions, and decisions are based. This seal does not constitute approval of the report. Approval of the report is a management decision and is separate from this technical signature of the person in responsible charge.

Main Body of Report

1. INTRODUCTION

The SHOPP performance measure associated with the Roadside Safety Improvements Program is "Locations." In the table, enter the number of locations for the SHOPP project output.

2. RECOMMENDATION

3. BACKGROUND

Describe the field maintenance crews in the area, what tasks are performed, and the frequency and duration of tasks performed.

4. PURPOSE AND NEED

5. ALTERNATIVES

5A. VIABLE ALTERNATIVES

Describe the improvements that are necessary to improve worker safety. Describe how the proposed roadside safety improvements address the project purpose-and-need. Identify the alternative recommended for programming purposes.

5B. REJECTED ALTERNATIVES

6. CONSIDERATIONS REQUIRING DISCUSSION

Summarize all major issues, reviews, and coordination efforts within Caltrans and with other interested agencies. The template has a list of common issues. Address each item as appropriate or put "Not applicable." The template should be edited to include project issues that are not on the template. If appropriate, include a discussion of the risks to scope, cost, and schedule.

6A. HAZARDOUS WASTE

6B. VALUE ANALYSIS

Typically this section is not applicable. These projects usually do not reach the project cost threshold that requires a value analysis study, however; the principles of value engineering may be applied to ensure cost effectiveness of the project.

6C. RESOURCE CONSERVATION

6D. RIGHT-OF-WAY ISSUES

6E. ENVIRONMENTAL COMPLIANCE

6F. AIR QUALITY CONFORMITY

6G. TITLE VI CONSIDERATIONS

Typically this section is not applicable. These projects usually do not require public presentations, meetings, participation or other involvement where Title VI of the *Civil Rights Act of 1964* could be an issue.

6H. NOISE ABATEMENT DECISION REPORT

Typically this section is not applicable. These projects usually do not require a draft project report to authorize public release of a draft environmental document.

6I. TRANSPORTATION MANAGEMENT PLAN

See Appendix K– Preparation Guidelines for Project Report topic "Transportation Management Plan" in outline item "7. Other Considerations As Appropriate."

6J. STORMWATER COMPLIANCE

An approved storm water data report (SWDR) as described in *Storm Water Quality Handbooks: Project Planning and Design Guide* must be completed during the project approval phase. Discuss any issues that affect the project.

6K. HIGHWAY PLANTING AND IRRIGATION

Discuss any modifications or additions to existing highway planting and irrigation.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Only include appropriate topics.

8. FUNDING, PROGRAMMING AND ESTIMATE

Support Estimate:

The cost of any specialty contracts or other atypical direct project costs that may be required for the project should also be estimated by the proposed fiscal year.

9. DELIVERY SCHEDULE

10. RISKS

11. EXTERNAL AGENCY COORDINATION

12. PROJECT REVIEWS

The scoping team field review is only required if the project report purpose is to request programming and for project approval.

13. PROJECT PERSONNEL

14. ATTACHMENTS

ARTICLE 3 Template

This article is a template for the project report (roadside safety improvements). When using the template, delete any italicized text within the body of the document. The italicized text provides instructions for template users and does not provide any value to the final document.

The template is located at:

http://www.dot.ca.gov/hq/oppd/pdpm/templates/apdx-q-template.docx

APPENDIX S – Preparation Guidelines for Project Study Report-Project Development Support Project Initiation Document

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APPENDIX S – Preparation Guidelines for Project Study Report-Project Development Support Project Initiation Document

ARTICLE 1 Introduction

Reference Information

Some of the references found in this appendix have hyperlinks that connect to Caltrans intranet pages which are not displayable to the general public. Until such time that the specific reference becomes available on the internet, the user will have to contact their district liaison, Caltrans project manager, or the appropriate Headquarters division to inquire about the availability of the reference.

Project Study Report-Project Development Support Project Initiation Document

The development of a project study report-project development support (PSR-PDS) project initiation document (PID) provides a key opportunity for Caltrans and involved regional and local agencies to achieve consensus on the purpose-and-need, scope, and schedule of a project.

This appendix provides concepts and best practices for preparing a PSR-PDS for projects funded through the State Transportation Improvement Program (STIP) and projects-funded-by-others. This appendix also provides a description of the information that should be contained in the PSR-PDS, and scoping tools needed to collect and organize information during the project initiation phase.

To appropriately apply the guidance described in this appendix, review the intent of policies and procedures in Chapter 9 – Project Initiation, along with Appendix L – Preparation Guidelines for Project Study Report. The PSR-PDS is only one type of PID. While this appendix provides guidance on preparing a PSR-PDS, Chapter 9 – Project Initiation and Appendix L – Preparation Guidelines for Project Study Report provide the foundation for the understanding and knowledge necessary to develop any PID.

Purpose of Project Study Report-Project Development Support Project Initiation Document

The purpose for using the PSR-PDS document is to gain approval for the project studies to move into the Project Approval and Environmental Document (PA&ED) phase.

The PSR-PDS is used to estimate and program the capital outlay support cost necessary to complete the studies and work needed during PA&ED. The PSR-PDS does not provide conceptual approval as defined in Chapter 9 – Project Initiation. If conceptual approval is required, the project sponsor should consider using the project study report (PSR) format as defined in Appendix L – Preparation Guidelines for Project Study Report instead of the PSR-PDS format. The project development team (PDT) should discuss the appropriate format to achieve project sponsor goals during the pre-PID meeting. If appropriate, a local agency may submit a request to the Caltrans District Director for approval to use the PSR in lieu of the PSR-PDS.

The required information is reduced with much of the detail being completed during PA&ED. Because of the reduction in level of effort, specific work which must be completed is listed in this document (for example: pre-PID meeting, risk register, and design standards risk assessment).

Applicability

These guidelines generally apply to all STIP and projects-funded-by-others (specially funded projects) on the State Highway System (SHS) and any segment of a transit project within the State highway right-of-way. These guidelines are not intended for use on transit projects unrelated to the SHS or on STIP projects off the SHS.

ARTICLE 2 Process

General

Project Development Process

The project development process begins with conceptual studies and continues through to the completion of construction. The project development process is tied to legal requirements and melds engineering requirements, a process for stakeholder and community input, and Caltrans approval steps with the environmental process. The

principles of context-sensitive-solutions (CSS) including a focus on community involvement, is integrated into the project development process.

Timing

A completed PID is required before a project is included into either the STIP or SHOPP or prior to getting an approval to move to PA&ED for a project-funded-by-others, as defined in Chapter 9 – Project Initiation. Any agency preparing a PSR-PDS is responsible for developing a reasonable schedule that is necessary to produce a PSR-PDS.

Project Management

A Caltrans project manager is assigned for every capital outlay project including locally implemented projects.

Registered Civil Engineer

The PSR-PDS shall be prepared under the direction of a registered civil engineer or depending on the project scope, other appropriate licensed professional such as a landscape architect.

Purpose and Need

A project must satisfy a clearly defined purpose-and-need. The project sponsors identify the initial transportation deficiency. The project must meet system strategies as defined in State, regional, and local plans, goals, and objectives. The project should reflect values of the community. Caltrans policy is to evaluate alternative solutions that avoid or reduce environmental impacts and to select the alternative that causes the least overall environmental damage and that satisfies the transportation purpose-and-need.

Context-Sensitive-Solutions

The PSR-PDS provides an opportunity to consider the implementation of context-sensitive-solutions from planning through construction. Context-sensitive-solutions implementation offers a process that focuses on community involvement and the flexibility to balance transportation needs with community values. The PSR-PDS also provides an opportunity to address the needs of various modes of transportation (for example: vehicles, mass transit, rail, bicycle, and pedestrian).

Constructability Reviews and Life-Cycle Cost Analyses

Current policy requires constructability reviews and life-cycle cost analyses to be conducted during the development of a PSR-PDS. Project managers should discuss the applicability of these two requirements with their Deputy District Directors for construction and maintenance respectively.

Preparation Procedures

This topic describes the sequence of key activities and best practices that take place during the development of a PSR-PDS.

For an overview of where the PSR-PDS fits into the project development process, see Chapter 8 – Overview of Project Development.

A graphic overview of the project development process is located at: *Project Phase and WBS Level 5 Flow Chart*.

For the PID phase, the *Project Development Workflow Tasks Manual* provides a comprehensive flow of project delivery tasks and can be used by the project teams as a structured step-by-step guide for project development tasks performed by project engineers. Although the *Project Development Workflow Tasks Manual* primarily describes work activities performed by the project engineer, it also provides the framework for the flow of tasks by all the functional units.

The PSR-PDS preparation procedures are summarized in the following list. Guidance on the content of the PSR-PDS is discussed in Article 3.

1. Develop Work Programs for PSR-PDS Development
2. Hold Pre-PID Meeting
3. Obtain Authorization for PID Preparation
4. Obtain and Review Existing Reports, Studies, Mapping or Other Information
5. Form the Project Development Team
6. Develop Consensus on the Project Purpose-and-Need
7. Review the Project Site
8. Identify Additional Data Requirements for Project Scoping
9. Perform the Initial Engineering Analysis and Develop Alternatives
10. Develop Cost Estimates
11. Develop Schedule
12. Identify Risks
13. Perform Quality Management
14. Complete PSR-PDS
15. Perform Caltrans District Review and Obtain Approval

1. Develop work programs for PSR-PDS development

Deputy District Directors for planning develop PID work programs on an annual basis. The work programs are a listing and schedule of proposed projects requiring resources. There is a work program for the STIP (which includes projects-funded-by-others as defined in Chapter 9 – Project Initiation) and SHOPP. Deputy District Directors submit the work programs to the Headquarters Division of Transportation Planning, Office of Program and Project Planning for approval. Office of Program and Project Planning establishes the procedures for opening an expenditure authorization for either the preparation of all PID work to include PSR-PDS PIDs or independent quality assurance (IQA) work. Office of Program and Project Planning monitors the resources and the delivery of all PIDs listed in the work program.

The work program for STIP projects are developed in partnership with local and regional transportation agencies. Either Caltrans or a local agency may prepare a PSR-PDS for STIP projects. If requested by a local agency, *California Government Code*, Section 65086.5 provides that Caltrans shall have 30 days to determine whether it can complete the requested report in a timely fashion (in time for inclusion in the next STIP). If Caltrans determines it cannot prepare the report in a timely fashion, the requesting entity may prepare the report.

The work program for projects-funded-by-others are developed in partnership with local agencies, regional agencies, or developers. Caltrans is responsible for providing independent quality assurance on all projects-funded-by-others.

2. Hold pre-PID meeting

Regardless of who prepares the PSR-PDS, a meeting with Caltrans and the appropriate local entity (or entities) shall be held. This is a required meeting with all entities to develop the project charter, see the *Team Charter Development* website. Input from all parties is required at the earliest possible stage and continues throughout the process. The project manager should take the lead in coordination activities.

The purpose of the pre-PID meeting is to communicate a shared view of the project and to establish an understanding of the procedures, roles, and responsibilities before the project initiation process begins. The following are sample agenda items to be covered during the pre-PID meeting:

- Prepare and finalize the project charter and cooperative agreement for reimbursable work.
- Review the PSR-PDS and PID development processes.
- Set the framework for getting consensus of purpose-and-need.
- Set the framework for agreeing on the design concept and scope. Ideally, the design concept and scope will evolve from the transportation system or regional planning process. The engineering specifics of the design scope should be discussed. These include the major features of work such as the number of lanes (current and future), right-of-way requirements, and interchange type and location.
- Agree on the basic design criteria.
- Identify known deficiencies. The Design Scoping Index located in Appendix L – Preparation Guidelines for Project Study Report can be used to document known deficiencies and highlight areas requiring further investigation. Examples of deficiencies to consider are: structures with nonstandard vertical or horizontal clearances; inadequate bridge railing; pavement in need of rehabilitation; deteriorated or inadequate drainage systems; narrow or deteriorated shoulders; lack of continuity or the deficiencies of bicycle or pedestrian facilities; replacement landscaping; ramp metering; nonstandard guardrail; maintenance worker safety; and seismic retrofit requirements.

  Lead Agency - Discuss when Caltrans is the National Environmental Policy Act (NEPA) and/or California Environmental Quality Act (CEQA) lead agency. Pursuant to the current federal transportation act, Caltrans is the NEPA lead agency. Federal Highway Administration (FHWA) assigned, and Caltrans assumed, all of the United States Department of Transportation Secretary's responsibilities under NEPA. For more information, see the *Standard Environmental Reference* (*SER*), Volume 1 Chapter 38. NEPA lead cannot be delegated. Caltrans is the CEQA lead agency for improvements projects on the State Highway System. In limited cases, and only when it is in the best interests of the State, Caltrans may delegate CEQA lead agency status to a local agency. For more

information, see the memorandum *Department as CEQA Lead Agency for Projects on State Highway System*.

3. Obtain authorization for PID preparation

The project initiation phase begins with the opening of an expenditure authorization. The project manager obtains an expenditure authorization to initiate the project initiation process.

See Task P01 of the *Project Development Workflow Tasks Manual*.

4. Obtain and review existing reports, studies, mapping or other information

To adequately prepare a PSR-PDS, it is essential to obtain the best available and most current maps and plans, including right-of-way maps and as-built plans. Ideally, three dimensional (3-D) digital data; for example: MicroStation design files, digital elevation models (DEMs), digital terrain models (DTMs) should be used. Other resources include Digital Highway Inventory Photography Program (DHIPP) images, aerial photography mosaics, orthophotography, light detection and ranging (LiDAR), and Google EarthTM mapping service. This information serves as the basis for the conceptual design, development of alternatives, quantities and estimates, and exhibits. The use of geographic information system (GIS) and visualization software to collect and view the data is encouraged. Minimal field and office survey activities may be performed to collect new data or transform existing data to the project datum and units. Refer to the Survey Needs Questionnaire discussed in Article 5 for details on datums.

The transportation concept report (TCR) or route concept report (RCR), district system management plan (DSMP), regional transportation plan (RTP), congestion management program (CMP), *2015 Ten-Year State Highway Operation and Protection Program Plan (SHOPP Plan)*, the State Implementation Plan (SIP), local plans, other reports and studies, and complete-streets concepts should be reviewed. Appropriate information from these reports can serve to document the need and scope of the project. Further discussion on these documents can be found in the Transportation Planning Scoping Information Sheet, discussed in Article 5, and Chapter 1 – Introduction, and Chapter 4 – Programming.

Important background information can often be obtained in previous related or adjacent studies. A search and review of project history files and previously studied but suspended projects can give a historical perspective to the current proposal.

See Task P08 through Task P26 of the *Project Development Workflow Tasks Manual* for further guidance on additional data and input.

5. **Form the project development team**

   The Caltrans District Director concurs on the members of a project development team for each project, regardless of who is preparing the PSR-PDS.

   The PDT is comprised of the assigned Caltrans project manager and representatives from the district project delivery, transportation planning, legal, maintenance and traffic operations units, and a regional transportation planning (RTPA) representative. Representatives from other functional units and local and regional entities are added as needed. See Chapter 8 – Overview of Project Development for a discussion of the project development team.

   If the PSR-PDS is to be prepared by a local entity, the local entity shall furnish Caltrans a list of appropriate PDT members.

   See Task P06 of the *Project Development Workflow Tasks Manual* for further guidance on forming a PDT.

6. **Develop consensus on the project purpose-and-need**

   It is crucial for the PDT to build PIDs on the project purpose-and-need statement early in the project development process. The PDT must identify the transportation deficiencies and describe underlying transportation need. The PDT must agree on the primary objectives that will be fulfilled by constructing the project and define those objectives as the project purpose.

   The project sponsor must concur on the purpose-and-need. Primary stakeholders must have consensus on the project purpose-and-need.

   Consider using one or more of the value analysis tools to develop consensus on purpose-and-need for complex projects.

   Additional information on the development of purpose-and-need statements is located in Chapter 9 – Project Initiation. For additional guidance on project purpose-and-need, refer to Task P02 of the *Project Development Workflow Tasks Manual*.

7. **Review the project site**

   It is important that the project team make an initial review of the project in the field. This should be an ongoing activity as needed. Field reviews often identify project features that may otherwise not be noticed. The reviews should focus on factors that could affect the project.

   In addition, it is important to incorporate complete-streets (See *Deputy Directive DD-64-R2 – Complete Streets - Integrating the Transportation System*). Bicycles and pedestrians are permitted on all state highways, except for some freeways (see Chapter 31 – Nonmotorized Transportation Facilities);

therefore roadway shoulder and sidewalk geometrics and conditions are a part of the scoping process. The preferred way to assess conditions for bicycling and walking is by conducting a field review while bicycling and walking. See the *Highway Design Manual* for geometric and surface quality guidance.

If pedestrian facilities do not exist, consideration should be given to them if land conditions are such that pedestrians could be expected to regularly move along the highway. If the existing paved shoulders are narrow, worn paths can be an indicator of where pedestrian travel is occurring. If pedestrian facilities exist, they need to be upgraded to comply with *Design Information Bulletin 82* – Pedestrian Accessibility Guidelines for Highway Projects.

See Task P25 and Task P26 of the *Project Development Workflow Tasks Manual* for further guidance on field reviews.

8. Identify additional data requirements for project scoping

Refer to the tools in Article 5 to identify data needs and issues that should be considered or studied to properly scope the project. The use of the Design Scoping Index located in Appendix L – Preparation Guidelines for Project Study Report can assist the project team in properly scoping a project. The Design Scoping Index can be used to identify facility deficiencies and the concerns of stakeholders. The PDT should evaluate which deficiencies can be addressed given the purpose-and-need, program definition, and funding constraints.

See Flow Chart P01-P31 and Flow Chart P32-P62 of the *Project Development Workflow Tasks Manual* for further guidance on identifying data requirements.

9. Perform the initial engineering analysis and develop alternatives

The primary focus of the initial engineering analysis is to establish a reasonable study area for alternative development utilizing existing data.

The alternative development effort should focus on identifying the project factors that must be studied or resolved. A comprehensive list of these factors is essential in estimating the effort (resources and time) required to complete PA&ED including technical studies, continued development and analysis of alternatives, public outreach, and identifying the preferred alternative.

For alternative development, the perimeter of a study area must be delineated, as well as identifying the major work elements of the alternative.

Develop alternatives that will satisfy the project purpose-and-need, are cost effective, and will avoid or minimize environmental and right-of-way impacts. Involve stakeholders early and use context-sensitive-solutions principles to develop project alternatives. Using the scoping tools in Article 5 will assist in

the development of alternatives that provide for the needs of travelers of all ages and abilities.

In the development of alternatives for the PSR-PDS, several key areas must be considered: environmental compliance, structures, materials, landscaping, permits, local and regional input, right-of-way, compliance with design standards, traffic operations, and alternative transportation modes already in place (such as: mass transit, rail, and bicycle and pedestrian facilities).

If developing alternatives for freeway projects, see Chapter 31 – Nonmotorized Transportation Facilities for the *California Streets and Highways Code* requirements regarding impacts on pedestrian and bicycle transportation routes.

A. Environmental

The environmental unit prepares a preliminary environmental analysis report (PEAR). For projects sponsored by others, the implementing agency assigns/contracts with an environmental team to complete the preliminary environmental analysis report. The preliminary environmental analysis report includes:

- Discussion of potential impacts related to all alternatives capable of functioning adequately per Caltrans policies.
- A discussion of environmental resources and a description of the potential project issues or impacts, which could delay the project or affect any project alternative.
- Description of studies that are needed to complete an environmental evaluation (noting as necessary any seasonal constraints for these studies).
- A recommended environmental determination/document and a tentative schedule for its completion. If an environmental document is required, specify the lead agency for its preparation.
- An initial site assessment (ISA) for hazardous waste, if the project includes the purchase of new right-of-way, excavation, and/or structure demolition or modification.
- Identification of required or anticipated permits or approvals.

Refer to the *Standard Environmental Reference* for further guidance on the preliminary environmental analysis report. See Article 5 for general guidance on the preliminary environmental analysis report scoping tool.

See Flow Chart P32-P62 of the *Project Development Workflow Tasks Manual* for further guidance on developing alternatives.

B. Design Standards

Approval of proposed nonstandard design features is not required for a PSR-PDS. However, there must be a discussion whether the alternative proposes nonstandard design features. Alternatives should be discussed with the Headquarters Project Delivery Coordinator early in the project initiation process to identify potential nonstandard design features. Alternatives with proposed nonstandard design features must go through a design standards risk assessment to indicate a level of risk for conceptual acceptability of the alternative. The design standards risk assessment is a list of design standards that will likely not be met for each alternative and the probability of approval for each proposed nonstandard design feature. See the templates in Article 6 for the format of the design standards risk assessment. Refer to Index 82.3 of the Caltrans *Highway Design Manual* and Chapter 21 – Design Standard Decisions, for further discussion of design standards.

C. Structures

The method of providing the necessary preliminary studies shall be discussed with the Headquarters Division of Engineering Services technical liaison engineer and project liaison engineer assigned to the district. The technical liaison engineer shall use a streamlined estimating process, such as square-footage costs to develop a "Structure PSR-PDS Cost Estimate" for inclusion into the PSR-PDS document when bridge and/or nonstandard retaining wall work is necessary. The project liaison engineer will provide recommendations on the preparation of the Headquarters Division of Engineering Services PSR-PDS Scoping Checklist discussed in Article 5. The scoping checklist is to be prepared by the district and will be reviewed by Headquarters Division of Engineering Services during the district review process.

The level of detail in the scoping checklist and "Structure PSR-PDS Cost Estimate" is limited to information required to develop accurate work plans for the PA&ED phase.

D. Traffic Engineering Performance Assessment (TEPA)

The Traffic Engineering Performance Assessment produces technical findings and recommendations that will:

- Help establish the project purpose-and-need.
- Identify major performance deficiencies within and adjacent to the (initial) project limits.
- Determine the scope and magnitude of the traffic analysis study/report that will be performed/produced during the PA&ED phase to:
  - Produce a complete scope of work.

- Support decision making on the inclusion of critical design features and traffic elements (for example: approval of nonstandard geometric design features).
- Verify that the proposed infrastructure investment will satisfy the project purpose-and-need.

The Traffic Engineering Performance Assessment will be prepared by the district of traffic operations unit. If the PSR-PDS is prepared by a local or regional agency (or their agent) the Traffic Engineering Performance Assessment will be prepared after one or more consultations with the traffic operations functional managers responsible for:

- Electrical and Intelligent Transportation Systems
- Traffic Control Systems and Devices
- Highway and/or Freeway Operations
- Safety Management
- Traffic Management Systems
- Traffic Safety Systems
- Traffic Management Planning (for the construction phase)

See Article 5 for general guidance on the traffic engineering performance assessment. Detailed traffic engineering analysis will be performed during the PA&ED phase.

E. Stormwater

Since a primary purpose of the PSR-PDS is to estimate the resources needed to complete PA&ED, the expected level of stormwater information for a PSR-PDS is going to be much less than a regular project study report. The PSR-PDS evaluation will focus on determining if there will be any significant impacts to the project alternatives, right-of-way needs, or project costs due to the need to incorporate treatment best management practices (BMPs) for compliance with stormwater requirements. See Article 5 for general guidance on the PSR-PDS Stormwater Documentation scoping tool.

F. Right-of-Way

Summarize the anticipated right-of-way, utilities, and railroad impacts for each alternative using the Conceptual Cost Estimate Request - Right-of-Way Component discussed in Article 5. Preliminary estimate mapping showing the property boundaries and project limits will help to estimate the number, area, and magnitude of parcels required for acquisition and the likely number of easements needed. The level of study is intended to develop an order of magnitude cost estimate for potential right-of-way needs to identify additional studies that may be needed during PA&ED.

Utilities
Identify existing utilities and potential relocation activities using existing, available information (for example: permit search, as-built drawings, and field review). The level of study is intended to develop an order of magnitude cost estimate and to identify additional studies that may be needed during PA&ED.

Railroad
Identify rail lines in the vicinity of the project and indicate possible impacts.

G. Local and Regional Input

Use of a context-sensitive-solutions approach promotes community involvement in development of alternatives. Local and regional input is necessary in development of alternatives and in the delineation of the study area. Local planning (for example: current and proposed land use) can have a significant effect on the local and regional planning transportation system, which affects the identification of alternatives and project-specific features. District transportation planning units can facilitate an understanding of community objectives. The Transportation Planning Scoping Information Sheet also serves as a tool to gain understanding of community objectives. See Article 5 for general guidance on Transportation Planning Scoping Information Sheet.

10. Develop cost estimates

A. Capital Outlay Project Estimate

For the PSR-PDS capital outlay project estimate, an order of magnitude cost estimate should be used. For a PSR-PDS prepared by others, the local agency may elect to utilize a more detailed capital outlay project estimate. See the PSR-PDS Cost Estimate information in Article 4 for guidance.

B. Capital Outlay Support Estimate

Estimate the support costs that will be needed to complete PA&ED. If federal dollars are used on any portion of the project and local agency support cost is considered a “soft” match for federal reimbursement, identify and discuss the local agency support cost.

11. Develop schedule

Develop a schedule for delivery including major milestones of the PA&ED phase and the anticipated funding year for construction.

12. Identify risks

Using the PSR-PDS in lieu of a PSR may cause risks to the scope, cost and schedule of the project. Potential risks shall be evaluated and discussed by the PDT, and ownership of the risks shall be identified. A risk register is a risk assessment for the process and potential impacts to the overall project and needs to be completed to identify, classify, and quantify the risk impacts to the various disciplines. For locally implemented projects, the local agency is responsible for creating and maintaining the risk register. This information needs to be summarized within the PSR-PDS. Refer to Article 5 for general guidance on the risk register.

13. Perform quality management

For projects sponsored by others, Caltrans shall provide independent quality assurance per *Deputy Directive DD-90 – Funding of Quality Management Work on State Highway Projects*. Caltrans' independent quality assurance activities can be described as a cross functional review of the supporting documentation which includes: functional reviews of the sub-products such as the preliminary environmental analysis report, providing advice and consultation during the development of the product, and attendance at PDT and other project meetings as needed.

The project sponsor and/or implementing agency must develop and follow a quality management plan. Refer to Article 5 for general guidance on the quality management plan.

14. Complete PSR-PDS

After developing alternatives and evaluating impacts, prepare the PSR-PDS in accordance with the guidance in Article 3.

If funds that are not included in a state programming document are used, cooperative features should be summarized in the PSR-PDS. An executable cooperative agreement could be deferred, but it shall be completed at the beginning of the PA&ED phase. Refer to Chapter 16 – Cooperative Agreements, for policies on cooperative agreements.

15. Perform Caltrans district review and obtain approval

Statutes require Caltrans to review, and if appropriate, approve all PIDs, including the PSR-PDS, prepared by a local agency within 60 days of submittal of the PID as long as the review does not jeopardize the delivery of projects listed in the approved STIP.

If the PSR-PDS is not approved, notification by the district will include the reasons the PSR-PDS is unacceptable, including reference to any inconsistencies with Caltrans policies or standards.

Caltrans will review and approve the revised PSR-PDS within 30 days. However, in the event that the document does not meet with Caltrans

standards or policies, it may be necessary to return the PSR-PDS to the local entity for further revision. The review and approval cycle will then be repeated.

The Caltrans District Director or Deputy District Director, if delegated, is responsible for approving the PSR-PDS scope, schedule, and cost within these established guidelines and may exercise judgment and flexibility in approving the PSR-PDS document. The PSR-PDS must be approved by the District Director, or Deputy District Director, if delegated, after review by the PDT. Project managers are to endorse the decision by signing an "Approval Recommended."

ARTICLE 3 Outline

General

The purpose of this outline is to identify the key elements to document in the project study report-project development support (PSR-PDS). As an initial scoping and resourcing document; the PSR-PDS must identify the key issues of the transportation deficiency, any major elements that should be investigated, and the resources needed to complete the Project Approval and Environmental Document (PA&ED) studies. The attachments should contain summary information only needed to support or clarify information in the body of the report. Article 6 has templates that present a guideline for preparation of the PSR-PDS.

Front Matter

Cover Sheet

The cover sheet provides the project identifiers, in the header, such as the district, county, route, and post mile range, as well as the expenditure authorization (EA), project number, planning program number (PPNO), program code, program name, and month and year of report approval.

The beginning and ending post miles should be rounded to the nearest 0.1 mile that encompasses all of the proposed construction. The project location should be listed as a spot location to the nearest 0.1 mile if the project is less than 0.2 mile in length. The report limits should use the limits that encompass all viable project alternatives.

The project number is the 10 digit number used for reporting labor charges.

Enter the program code(s) with program name(s). Information on the program codes and names can be found in the *Coding Manual*, Chapter 7. The program code is typically presented in the format of "20.XX.201.010" where "XX" is entered in the element location to represent both capital outlay support (XX=10) and capital outlay projects (XX=20) when they are funded from the same funding program. Use specific, separate program codes for multiple funding sources.

Modify the purpose(s) of report as needed. Typical entries for the purpose(s) include:

- To Request Programming in the 20XX STIP for Capital Support of the Project Approval and Environmental Document
- To Request Approval to Proceed to the Project Approval and Environmental Document phase for a Locally Funded Project (as defined in Chapter 9 – Project Initiation
- To Request Scope Approval for a Project-Funded-By-Others (as defined in Chapter 9 – Project Initiation)
- To Authorize a Cooperative Agreement

See the *Plans Preparation Manual*, Section 2-2.2 for guidance in developing the project legal description. The project legal description is the same as the title sheet project description, such as: "In Los Angeles County…"

The cover sheet must include the endorsement of the Caltrans project manager.

For projects sponsored by others, a signature indicating the acceptance of the risks identified in the risk register must be included on the cover sheet.

The District Director or Deputy District Director to whom that authority has been officially delegated approves the recommendations of the report. Edit the signature block as appropriate.

Vicinity Map

The vicinity map is a district, county, or city map showing all State highways and major local roads when pertinent. It should be placed on a separate page and should include the study limits, major topographic limits listed in the report, and a north arrow.

Registered Professional Stamp

The registered professional stamp or seal and number with signature shall be placed on a separate sheet, which shall be part of the report. Also included on this sheet shall be a statement indicating that the registered professional is attesting to the technical information contained therein and the engineering data upon which recommendations, conclusions, and decisions are based. This seal does not constitute approval of the report. Approval of the report is a management decision and is separate from this technical signature of the person in responsible charge.

Table of Contents

On a separate sheet, place a table of contents that includes all the elements of the report.

Main Body of Report

1. INTRODUCTION

The introduction is a summary of the information presented in the report. The introduction should be no more than two paragraphs or a brief opening sentence with the information summarized in tables. The template includes an optional table that can be expanded or condensed to fit the individual project.

In the introduction, identify:

- The problem
- The range of alternatives and magnitude of capital outlay project estimates
- The Caltrans resources needed to complete the proposed components (for example: PA&ED phase and/or independent quality assurance)
- The PA&ED milestone and the anticipated funding year for construction
- The proposed funding sources
- The initial project category
- The type of facility as designated on a current or proposed route adoption map
- Any known project approvals anticipated for each alternative (see Chapter 12 – Project Approvals and Changes to Approved Projects, for more information)
- What work will be completed by non-Caltrans staff, if appropriate

2. BACKGROUND

The background should briefly describe:

- A description of the facility
- Project sponsors and project proponents
- A discussion on local and regional agency involvement in the development of purpose-and-need
- A discussion of any actions or commitments that have taken place to date regarding the proposed project
- Context-sensitive-solutions
- Complete-streets

3. PURPOSE AND NEED

These statements together should succinctly answer the question: why this project and why now? The PDT, in conjunction with the project sponsors and key stakeholders, must develop the purpose statement and the need statement. The purpose-and-need statement shall remain consistent through the entire project development phase. Additional information on the development of purpose-and-need statements is located in Chapter 9 – Project Initiation.

Purpose

The project purpose is the set of project objectives that will be met, which addresses the transportation deficiency (in other words, the project need). It is important to identify the primary and secondary objectives that are met by this project. While the secondary objectives may be a factor in the scoping of the project (for example: minimizing impacts to the environment, meeting *Americans with Disabilities Act of 1990* requirements, complete-streets, etcetera), the purpose statement should focus on the primary objectives of the project.

Need

The project need is an identified underlying transportation deficiency that needs correction. While there may be several associated deficiencies identified in the project area, it is important for the PDT to agree on the primary deficiency or deficiencies that create the need for the project. A need is supported by data that indicates, but is not limited to, a safety issue, reduced mobility, limited capacity for the transportation demand, the lack of reliability, gaps in or between transportation systems, or limited life of the facility. The details are discussed in the "Deficiencies" topic.

4. TRAFFIC ENGINEERING PERFORMANCE ASSESSMENT

The purpose of the Traffic Engineering Performance Assessment is to produce findings and estimates related to existing performance deficiencies, expected performance benefits and impacts, the scope of work and features needed to meet the project objectives, and the resources needed to produce a complete traffic analysis report that will be necessary during the next phase of the project development process. To meet the purpose of the PSR-PDS, this assessment should rely upon an evaluation and macro-level analysis of readily available information and data.

Summarize key findings, recommendations and the (performance, scope and resource) estimates produced or derived from the traffic engineering performance assessment (see Article 5), especially those which:

a) Support the purpose-and-need statements in the "Purpose and Need" section of the PSR-PDS
b) Demonstrate and quantify the items outlined in the "Deficiencies" section of the PSR-PDS
c) Identify the design features and traffic infrastructure (such as: traffic control, operational, safety and management systems, elements, devices and strategies) to be included in the preliminary project scope of work
d) Identify the scope and magnitude of the formal traffic engineering studies (including operational, capacity, safety, warrant, and benefit/cost analysis) that will be necessary during the next phase of the project development process in order to:
    - Identify/confirm the complete scope of work (in other words, infrastructure and strategies)
    - Produce the environmental document
    - Obtain project approval

Items c) and d) facilitate the estimation of the project cost, right-of-way requirements, and the traffic engineering resources required to perform the various traffic studies and analysis that may be needed to produce a complete scope of work and support major design decisions (for example: the safety analysis that can justify design and traffic standard applications).

5. DEFICIENCIES

This section provides a concise discussion of the data that supports the purpose-and-need of the project as well as identifying existing available data that is important to the scoping of the project.

This section should refer to attached maps, charts, tables, letters, etcetera. When appropriate, discuss existing and forecasted traffic, level of service, capacity adequacy, and safety data from existing data.

This section may have two subsections. A subsection on the primary deficiencies would discuss deficiencies that relate directly to the purpose-and-need statements. A subsection on the secondary deficiencies would identify other deficiencies that should be addressed when scoping the project, but are not related directly to the stated purpose-and-need for the project.

6. CORRIDOR AND SYSTEM COORDINATION

This section should address the coordination and consistency of the proposed purpose-and-need with statewide, regional, and local planning efforts such as:

- District system management plan
- Transportation concept reports or route concept reports
- Corridor system management plan
- Regional transportation plans
- Congestion Management Program
- State Implementation Plan
- Bicycle and pedestrian master plans
- Short and long-range transit plans
- Local measure programs
- Complete-streets
- Context-sensitive-solutions
- General plan and circulation elements

Provide a summary of the information from the Transportation Planning Scoping Information Sheet which also includes complete-streets and context-sensitive-solutions to address other State Highway improvements, local improvements or any development projects within the immediate project vicinity.

Identify the date that the route was adopted, the California Transportation Commission (CTC) designation of the route or route denominations, and identify any applicable freeway or controlled access agreements, potential freeway or controlled access agreements, and potential relinquishments.

A project that requires a new public road connection must provide a description of the land-use development to be served by the new connection, describe the relationship to the local agency's general plan or other specific area plans, and justification per Chapter 27 – Access Control Modification, that existing interchanges or local road systems cannot be improved to handle the deficiencies.

7. ALTERNATIVES

All alternatives that address the purpose-and-need will be carried forward to PA&ED as described in Chapter 9 – Project Initiation. A No Build Alternative should always be considered.

Alternative discussions can refer to attachments which may include: schematic maps of the study area and typical cross-sections, as appropriate.

The alternative section includes a discussion of the design scope, describes the boundary of the study area, and defines the activities for the PA&ED phase for each of the alternatives.

As appropriate, consider the following topics for each alternative:

- Discuss the design scope in terms of how it will satisfy the project purpose-and-need.
- Describe the boundaries of the study area required for formal investigations during the PA&ED phase. The project study area for each alternative must be established to include reasonable modification to the alternative. Improper identification of the project study area can result in unanticipated studies and project delays.
- Identify the resources needed to complete the engineering, environmental, and right-of-way studies for all alternatives to achieve PA&ED. Summarize the information for the right-of-way needs and preliminary environmental analysis report.
- Discuss which studies and actions are required for approval of each alternative (such as Federal Highway Administration, CTC, route matters, etcetera). For further guidance on approvals and agreements see Chapter 13 – Project Related Permits, Licenses, Agreements, Certifications, and Approvals.
- Discuss whether the alternative proposes nonstandard design features. Include the design standards risk assessment as needed.
- Discuss the order of magnitude of the capital outlay project estimate for each alternative. The estimates are for long-range planning. The estimates should be presented as a range and are not to be used for programming.

- Discuss stormwater best management practices that could affect the estimated project costs for each alternative. Also discuss potential water quality impacts that would entail additional resource needs during PA&ED.
- Discuss context-sensitive-solutions and complete-streets issues that could affect the estimated resources and PA&ED delivery milestone dates.
- Briefly discuss any constructability issues or concerns such as the need for full road closure and staged construction (refer to Traffic Engineering Performance Assessment, Article 5).

8. RIGHT-OF-WAY

Summarize the anticipated right-of-way, utilities, and railroad impacts for each alternative using the Conceptual Cost Estimate Request – Right-of-Way Component discussed in Article 5. Preliminary estimate mapping showing the property boundaries and project limits will help to estimate the number, area, and magnitude of parcels required for acquisition and the likely number of easements needed. The level of study is intended to develop an order of magnitude cost estimate for potential right-of-way needs to identify additional studies that may be needed during PA&ED.

Utilities

Identify existing utilities and potential relocation activities using existing, available information (such as: permit search, as-built plans, and field review). The level of study is intended to develop an order of magnitude cost estimate and to identify additional studies that may be needed during PA&ED. Positive location is not performed.

Railroad

Identify all rail lines in the vicinity of the project and thoroughly investigate any possible impacts. Due to potential impacts to project cost and schedule, all possible railroad impacts must be listed in the risk register and summarized in this section.

9. STAKEHOLDER INVOLVEMENT

Discuss the types of stakeholder involvement activities that were used to develop the purpose-and-need statement, and to identify the alternatives to be studied. Discuss stakeholder concerns and objectives that were identified during the project initiation document phase.

Discuss the context-sensitive-solutions approach that will be used to obtain stakeholder involvement in the identification and evaluation of alternatives.

10. ENVIRONMENTAL COMPLIANCE

Identify the type of environmental scoping information prepared for the project and what may be anticipated, such as:

> A preliminary environmental assessment report (PEAR) was prepared and included with this report. The PEAR indicates that the project will likely receive an environmental determination of a Categorical Exemption (CE) under the California Environmental Quality Act (CEQA) and Categorical Exclusion (CE) under the National Environmental Policy Act (NEPA).

Briefly summarize the requirements and restrictions enumerated in the environmental scoping information. Information about environmental scoping is in the *Standard Environmental Reference*.

Briefly describe environmental issues that influence the project design, schedule, or cost; include permit requirements, mitigation, and construction work windows. Refer to information in the attached assessment as needed.

Provided for reference:

- California Environmental Quality Act (CEQA)
  - Categorical Exemption (CE) or Statutory Exemption (SE)
  - Initial Study (IS) and Negative Declaration (ND) or Mitigated Negative Declaration (MND)
  - Environmental Impact Report (EIR)
- National Environmental Policy Act (NEPA)
  - Categorical Exclusion (CE)
  - Environmental Assessment (EA) and Finding of No Significant Impact (FONSI)
  - Environmental Impact Statement (EIS)

11. FUNDING

Capital Outlay Project Estimate

> Identify potential or proposed sources of funding and project funding eligibility (for example: Federal-aid eligible) to fully fund the project. Examples of funding sources are a specific local entity, STIP program, or "future county shares." If necessary, expand the table to allow for multiple funding sources.
>
> The capital outlay project estimates are ranges and are not to be used for programming. The order of magnitude estimates are used to estimate future

funding needs. The breadth of the estimate range is project-specific. The estimate should be based on the worst and best-case scenario for high risk factors. For a PSR-PDS prepared by others, the local agency may desire a more comprehensive capital outlay project estimate. Additional information pertaining to the capital outlay project estimate is located in Article 4 and Article 6.

Capital Outlay Support Estimate

Estimate the support costs that will be needed to complete PA&ED. Identify sources(s) of funding to fund the PA&ED phase of the project.

If federal dollars are used on any portion of the project and local agency support costs are considered a "soft" match for federal reimbursement, identify and discuss the local agency support cost.

Congestion Mitigation and Air Quality Program Funding

Discuss whether or not the project is eligible for Congestion Mitigation and Air Quality Program funding. Review the current Congestion Mitigation and Air Quality Program guidance to determine if an emission reduction analysis must be completed; the California Air Resources Board and Caltrans' approved methodologies for completing the emission reduction analysis can be obtained from the Headquarters Transportation Programming website at: *Congestion Mitigation and Air Quality* website.

12. DELIVERY SCHEDULE

Provide a delivery schedule for significant PA&ED milestones and major milestones for future project phases. For practical purposes this schedule shows the amount of time needed to complete the project PA&ED.

Discuss all schedule constraints and assumptions for programmed milestones, and include in the risk register. A tentative schedule is not complete without documentation of the assumptions and constraints. The assumptions and constraints provide decision-makers with the rationale used to develop the schedule and the factors that could have significant impact on the schedule. The assumptions and constraints provide stakeholders with an understanding of critical delivery areas. The resource needs, and estimate must be consistent with the work plan that is submitted to Headquarters Division of Project Management.

Provide the month and year for proposed program delivery milestones for PA&ED. Any milestones that are not proposed for programming and are outside of the programming cycle should be identified by fiscal year in the "Delivery Date Column" and a notation made that these dates are for "planning purposes only." For projects-funded-by-others, local agency should provide critical target dates. The schedule shall be tied to a work plan to assist Caltrans in managing resources for these projects.

13. RISKS

Refer to the *Project Risk Management Handbook: A Scalable Approach* for the requirements and procedures. Discuss the risks and include the risk register as an attachment.

14. EXTERNAL AGENCY COORDINATION

See the latest *Stewardship and Oversight Agreement on Project Assumption and Program Oversight* between the FHWA, California Division and Caltrans for the project actions assumed by Caltrans and the project actions where FHWA has retained their authority as well as the detail associated with the various oversight responsibilities. Project actions are identified in the "Project Action Responsibility Matrix" within the stewardship agreement.

Discuss if the project has been identified as a "Project of Division Interest."

Discuss project actions, as appropriate, assumed by Caltrans and any coordination with the FHWA for review and approval of project actions.

If the project proposes new or modified Interstate access, include a discussion of any issues and the proposed or actual dates for the Determination of Engineering and Operational Acceptability and Final Approval. See Chapter 27 – Access Control Modification, for more information.

Identify potential involvement with outside agencies for necessary coordination, agreements, or permits required for the project. The district environmental division is a resource for determining some of the required permits. The list of agencies and permits in the template is not comprehensive; see Chapter 13 – Project Related Permits, Licenses, Agreements, Certifications, and Approvals for more information.

External agency coordination that causes uncertainty for delivering the project must be included in the risk register.

15. PROJECT REVIEWS

The template includes a list of possible reviews. Modify the list to reflect district review procedures. Include "Completed" or "Not applicable" or the reviewer's name along with the review completion date. Depending on the project aspects and phase, some of the reviews are mandatory.

16. PROJECT PERSONNEL

To facilitate contacts with the project development team members, include their names and telephone numbers in the following general format of:

Name, Title Phone number

17. ATTACHMENTS

The following list provides examples of the appropriate attachments and files. Each project should be evaluated as to the appropriate inclusion of specific reports and information. Do not include raw data that is used in the analysis in the report or as an attachment. This information should be part of the project file and kept to support engineering recommendations. List each attachment with the corresponding number of pages in parentheses.

<u>Required Attachments</u>

- Location and/or vicinity map
- Schematic maps of the study area or alternatives
- Capital outlay project estimate
- Typical cross sections
- Preliminary environmental analysis report
- Transportation planning scoping information sheet
- Right-of-way conceptual cost estimate component
- Life-cycle cost analysis
- Risk register

Required Supplemental Documents for Project Files:
(This information should only be summarized in the PSR-PDS)

- Quality management plan for locally implemented projects on the State Highway System
- Stormwater documentation
- PSR-PDS survey needs questionnaire
- Traffic engineering performance assessment
- Headquarters Division of Engineering Services PSR-PDS scoping checklist
- For STIP projects, include a project programming request (PPR). See the project programming request instructions and template at the Headquarters *Division of Transportation Programming-Office of Capital Improvement Programming* website.
- Design Scoping Index or equivalent document
- Rosters of personnel participating in major reviews
- Capital outlay support estimate

ARTICLE 4 Cost Estimates

Capital Outlay Project Estimate

The level of detail available to develop the right-of-way and construction capital outlay estimate for a project study report-project development support (PSR-PDS) for the State Transportation Improvement Program (STIP) or for projects-funded-by-others is only accurate to within orders of magnitude and is needed for long-range planning purposes only. Examples of ranges than can be considered are "less than $5M", "$5M-$25M," $25M-$75M" or "$50M-$60M." The breadth of range is based on available information and reasonable assumptions. Therefore, the capital outlay project estimates provided in PSR-PDS are not for programming purposes. In addition, there should be a discussion of a financial plan that identifies existing non-STIP funding sources that are being considered to complete the project.

Capital Outlay Project Estimate

	Range of Estimate		STIP Funds		Other Funds	
	Construction	Right-of-Way	Construction	Right-of-Way	Construction	Right-of-Way
Alternative 1						
Alternative 2						
Alternative 3						

Alternative 4						

The level of detail available to develop these capital outlay project estimates is only accurate to within the above ranges and is useful for long-range planning purposes only. The capital outlay project estimates should not be used to program or commit State-programmed funds.

The intent of the table is to provide the following information:

- The capital outlay project estimate range for each alternative
- A list of the main funding sources for each alternative (such as Regional Improvement Program [RIP] or Interregional Improvement Program [IIP])
- Other potential sources of funds (such as: measure funds and developer funds)

Columns may be added to the table for each non-STIP funding source. A description of any specific funding commitment or constraint should be included in text following the table, for example, if a city may be willing to contribute up to a fixed amount for sidewalk improvements. The city's participation must be discussed. Discuss any cooperative agreements that may be needed for various project components. The PSR-PDS capital outlay project estimate template is located in Article 6.

Capital Outlay Support Estimate

Estimate the support cost that will be needed to complete PA&ED. The support cost should be based on a resource-loaded work plan in either Expert Project Manager (XPM) or Project Resource and Schedule Management (PRSM).

If federal dollars are used on any portion of the project and local agency support costs are considered a "soft" match for federal reimbursement, identify and discuss the local agency support cost.

ARTICLE 5 Scoping Tools

General

This article contains some of the tools used by various functional areas to aid the project team in scoping the project. The tools not contained in this article can be obtained from the appropriate functional unit. Also see the *Scoping Tools* website for the tools developed for use with the PSR-PDS.

Upon receiving a request for project information, each functional unit completes the appropriate scoping tool and transmits the information to the unit responsible for developing the PSR-PDS.

Design Scoping Index

The Design Scoping Index can serve as a discussion document to help the design units analyze the highway system and identify design issues that should be addressed during the project initiation phase.

The index can serve to facilitate discussions with other functional units to identify project issues and stakeholder input needed to properly scope the project. It can also facilitate discussions with Headquarter liaisons to identify potential issues and nonstandard design features.

The Design Scoping Index is used with the scoping checklists from other functional units to determine feasibility of the project alternatives. When filling out the index, indicate if information on the index is based on assumptions. Project information is dynamic and the information in this index should be revised and dated throughout the PSR-PDS process. As the project progresses, information should be verified, updated, and possibly addressed in a risk analysis.

To aid in engineering decisions regarding the development of geometric plans, refer to the *Highway Design Manual* and *Design Information Bulletin 78* – Design Checklist.

Stormwater Documentation

The Headquarters Division of Design, Office of Storm Water Management Design developed the *Storm Water Quality Handbooks: Project Planning and Design Guide* to provide guidance on the process and procedures for evaluating project scope and site conditions to determine the need for and feasibility of incorporating stormwater best management practices into a project for compliance with the National Pollutant Discharge Elimination System (NPDES) permits. Within the *Storm Water Quality Handbooks: Project Planning and Design Guide*, the storm water data report (SWDR) is a standardized format to compile pertinent information necessary to evaluate potential stormwater impacts on a project. The storm water data report has a narrative, multiple checklists and attachments that are used to document the stormwater decisions being made on a project, as well as compiling the necessary background information needed to make those decisions. A storm water data report is

required to be completed at each phase of a project. The intent of this process is to document background information and the stormwater decisions made for a project throughout each phase. As a project proceeds, the storm water data report from the previous phase will be used as the starting point so that efforts are not duplicated.

The level of detail in a PID storm water data report should be commensurate with the level of detail in the PID. Since a primary purpose of the PSR-PDS is to estimate the resources needed to complete PA&ED, the expected level of detail for a PSR-PDS storm water data report will be much less than a regular project study report storm water data report. The PSR-PDS evaluation will focus on determining if there will be any significant impacts to the project alternatives, right-of-way needs, or project costs due to the need to incorporate treatment best management practices for compliance with stormwater requirements. The Evaluation Documentation Form (Appendix E of the *Storm Water Quality Handbooks: Project Planning and Design Guide*) will be used to document the need to incorporate treatment best management practices in a PSR-PDS.

The following topics would be considered to be the minimum information necessary to be able to provide an effective stormwater analysis during the PSR-PDS storm water data report documentation process:

- List the regional water quality control board(s) that is within the project limits.
- Determine if a Clean Water Act, Section 401 - Water Quality Certification be required.
- Identify any location specific requirements.
- Determine if there is a potential for the project to create permanent water quality impacts.
- Determine the total estimated disturbed soil area (nearest acre) for each project alternative.
- Determine if the project will need coverage under the Construction General Permit. If so, and if required, determine the estimated project risk level.
- Determine the estimated net post project impervious area (nearest acre) for each project alternative.
- Determine if the project will require the incorporation of treatment best management practices. Complete the Evaluation Documentation Form.
- If treatment best management practices will be required, describe the considered permanent best management practices and any additional right-of-way needs.
- Determine if steep slopes will be created or disturbed. If so, describe any advanced erosion control needs.

- Determine if the project is going to require a notification of aerial deposited lead (ADL) reuse.
- Include the estimated costs for both permanent and temporary best management practices.

It should be noted that while the storm water data report has a number of checklists and attachments, it is understood that much of the information will be gathered and/or determined during PA&ED. To eliminate the potential of expending resources to gather information that may not be required for the PSR-PDS, the project engineer should coordinate with the district/regional design stormwater coordinator during the pre-PID meeting to come to an agreement of the expected level of documentation and to have a better understanding of the potential stormwater impacts within the project area. During this consultation it will also be determined if additional information, other than the previously listed topics, is warranted.

Pertinent information from the storm water data report should be summarized within a stormwater section in the PSR-PDS.

During PA&ED, the normal stormwater documentation process will be followed.

For Statewide consistency, the template for a PSR-PDS storm water data report will be similar to a regular PID-level storm water data report and is located on the Headquarters Division of Design, Office of Storm Water Management Design website at: *Storm Water* website.

Transportation Planning Scoping Information Sheet

The project nomination scoping team or project development team (PDT) should use the Transportation Planning Scoping Information Sheet to verify that the project remains consistent with the planning level purpose-and-need and is consistent with planning concepts, statewide goals, and planning decisions.

The majority of the data requested for the information sheet is compiled at two separate time periods. The initial information is collected by the transportation planning project nomination scoping team or PDT representative at the start of PID development to ensure appropriate stakeholders are included in the process and all pre-planning efforts and commitments are reviewed before any project decisions are made. Explanations of how the requirements were met will need to be finalized by the end of the PID.

The current Transportation Planning Scoping Information Sheet is located at: *Project Nomination Process* website.

Traffic Engineering Performance Assessment

Project related traffic engineering studies produce findings and estimates related to the operational and safety performance of existing and proposed highway infrastructure. The performance related findings and estimates are derived from the:

- analysis of traffic, collision and performance data and forecasted traffic volumes.
- evaluation of existing infrastructure to identify deficiencies and/or omissions.
- evaluation of the proposed infrastructure, including geometric design and traffic features or elements (such as: traffic control, operational, management and safety devices, systems and features).

Performance-related findings and estimates provide the basis for project scoping and design decisions. Ultimately, formal traffic engineering studies inform and advise the PDT as to whether the project scope is complete, and whether the scope will meet the project purpose-and-need.

To meet the purpose of the PSR-PDS, the preliminary traffic engineering studies should be limited to an assessment of readily available information and data, and macro-level analysis and evaluation. This effort will produce preliminary traffic engineering findings and estimates to inform and advise the PDT on:

- the potential scope of work and features (especially the traffic "elements" previously referenced).
- potential performance benefits and deficiencies.
- the scope and magnitude of traffic engineering work (traffic forecasting, modeling, analysis and evaluation) to be performed during the Project Approval and Environmental Document phase.

The traffic engineering effort performed during PA&ED will further define the scope of work and produce reliable estimates of the operational and safety impacts (benefits and disbenefits) of the proposed highway infrastructure.

The information, questions, checklists and report template are intended to guide and advise the engineer and/or traffic analyst who is responsible for the performance and documentation of the traffic engineering assessment.

A summary of the assessment and key findings and estimates should be summarized or incorporated into the PSR-PDS document.

The current Traffic Engineering Performance Assessment is located at: *Scoping Tools* website.

Preliminary Environmental Analysis Report

The preliminary environmental analysis report provides the initial environmental evaluation of a project and alternatives before it is programmed. It anticipates the environmental constraints that may affect project design, alternatives, cost, schedule, and delivery. It estimates the scope, schedule, and costs associated with the subsequent environmental compliance process and it documents the assumptions and risks used to develop those estimates. When a preliminary environmental analysis report is required, it becomes an attachment to the project initiation document.

Since the PSR-PDS is used to estimate and program the capital outlay support cost necessary to complete the studies and work needed during PA&ED, the preliminary environmental analysis report for a PSR-PDS should only estimate costs through PA&ED. The cost of environmental permits and commitments is programmed as part of the right-of-way and construction costs and therefore should not be included in a preliminary environmental analysis report for a PSR-PDS.

The level of detail in a preliminary environmental analysis report should be commensurate with the level of detail in the PID document. The preliminary environmental analysis report should be a concise (approximately 5 to 15 pages) report used to document the issues that are anticipated to be addressed in the NEPA or CEQA documentation and the assumptions that were used to anticipate those issues. The magnitude and complexity of the proposed project dictates the level of effort expended for the preliminary environmental analysis report documentation, nevertheless, the preliminary environmental analysis report is not an environmental document; it is not the equivalent of the Tier 1 NEPA document; and it is not a report of environmental analysis.

The *Standard Environmental Reference* makes it clear that a preliminary environmental analysis report should always include documentation of any assumptions that were made and/or any environmental risks, particular those assumptions and risks that could affect the cost, scope, and schedule of the project.

For additional information and preliminary environmental analysis report templates, see the *Standard Environmental Reference*.

Conceptual Cost Estimate Right-of-Way Component

The conceptual cost estimate for the right-of-way component provides an order-of-magnitude estimate that is intended for planning purposes only. The right-of-way component of the project should not be programmed until a right-of-way data sheet has been completed and approved.

The project engineer completes the Conceptual Cost Estimate Request – Right-of-Way Component and submits it to the district right-of-way office. The district right-of-way office will then complete the Conceptual Cost Estimate – Right-of-Way Component and submit it to the project engineer.

The current Conceptual Cost Estimate Request – Right-of-Way Component is located at: *Scoping Tools* website.

Conceptual Cost Estimate – Right-of-Way Component

The conceptual cost estimate for the right-of-way component will include:

Scope of the Right-of-Way

- Description of required right-of-way
- Right-of-way required
- Number of parcels
- Project setting
- Right-of-way requirements
- Relocation assistance program (RAP) displacements
- Demolition and clearance
- Railroad involvement
- Utility involvement

Cost Estimates

- Capital outlay project cost estimate
- Capital outlay support cost estimate

Schedule

The estimated schedule assumes a right-of-way certification #1.

Areas of Concern

The areas in close proximity to the project, if impacted, could result in major increases to the cost, scope, or schedule of delivering the right-of-way component.

Assumptions and Limiting Conditions

The assumptions and limiting conditions used in the conceptual cost estimate.

Contact

The contact information for the person preparing the conceptual cost estimate.

Survey Needs Questionnaire

The project datums, vertical and horizontal, need to be established as soon as possible.

The current Survey Needs Questionnaire is located at: *Scoping Tools* website.

Quality Management Plan for Locally Implemented Projects on the State Highway System

The purpose of the quality management plan is to facilitate an effective and efficient process for the development, review and approval of PIDs for State Highway System projects sponsored by others. The project sponsor and/or implementing agency must develop and follow a quality management plan that meets the standards of professional practice and satisfies requirements of the project scope and schedule. The project managers from Caltrans and the lead agency shall ensure that all PDT members, including consultants, utilize the quality control/quality assurance (QC/QA) elements as described in this document during the production and review of PIDs. Quality control/quality assurance will be performed before deliverables are submitted to Caltrans for review.

Each team member must understand the project objectives, apply sound engineering principles and is expected to produce quality, accurate, and complete documents within the project schedule and budget. Project documents will be prepared in accordance with current Caltrans regulations, policies, procedures, manuals, and standards including compliance with FHWA requirements.

The information provided in the quality management plan describes the quality procedures that will be implemented for work performed during all phases of development, review and approval of locally sponsored and/or implemented PIDs.

The quality management plan template is to be modified to fit project needs, reporting relationships, and general circumstances.

The current quality management plan for locally implemented projects on the State Highway System is located at: *Scoping Tools* website.

Risk Register

The PSR-PDS PID requires that the project sponsor complete a risk assessment. The reduced amount of data that is required for the PSR-PDS transfers risks to future phases and it is important to identify the risk, define the probability, define the severity, identify who or what the risk will impact, and identify the ownership of the risk. The project manager, project sponsor, and project team members jointly develop a written plan that enables them to identify, assess, quantify, prepare a response to, monitor, and control capital project risks. Refer to the *Project Risk Management Handbook: A Scalable Approach* and use the risk register template in completing the plan.

The risk register template is located at: *Risk Management* website.

Headquarters Division of Engineering Services Scoping Checklist

The Headquarters Division of Engineering Services developed the PSR-PDS scoping checklist to accurately identify the products and services required from Headquarters Division of Engineering Services functional units for STIP projects.

- The district is responsible for completing all sections of the checklist.
- The Headquarters Division of Engineering Services project liaison engineer will provide assistance to the district project manager to complete the checklist and provide the project manager a workload resource estimate.

Sections of the checklist include general project information, project type, alternative descriptions, project schedule, and estimated cost range. Detailed sections on project scope clarify involvement of the following:

- Structure design
- Geotechnical services
- Structure hydraulics
- Preliminary investigations
- Transportation architecture
- Materials and testing services
- Structures and electrical
- Mechanical
- Water
- Wastewater design

Technical specialist design for culverts, barriers, sign and overhead sign structures are also included on the checklist.

The workload resource estimate is prepared for the district project manager and provides the estimate in personnel years (PYs), required for Headquarters Division of Engineering Services products and services up to work breakdown structure task 180 for the project. The Headquarters Division of Engineering Services PSR-PDS Scoping Checklist is summarized in the PSR-PDS document.

The current Headquarters Division of Engineering Services PSR-PDS Scoping Checklist is located at: *Scoping Tools* website

ARTICLE 6 Templates

General

This article contains the templates for the PSR-PDS:

1. Template for STIP projects and projects-funded-by-others, and
2. Template for capital outlay project estimate.

These templates should be modified to include or exclude any applicable deficiencies or issues.

Template for State Transportation Improvement Program Projects and Projects-Funded-by-Others

This sub-article is a template for the PSR-PDS for STIP projects and projects-funded-by-others. Guidance for completing this template is located in Article 3.

When using the template, delete any italicized text within the body of the document. The italicized text provides instructions for template users and does not provide any value to the final document.

Appendix S Template

Template for Capital Outlay Project Estimates

This sub-article is a template for the PSR-PDS capital outlay project estimate. Guidance for completing this template is located Article 4.

When using the template, delete any italicized text within the body of the document. The italicized text provides instructions for template users and does not provide any value to the final document.

Appendix S Estimate Template

Appendix Z – Preparation Guidelines for Relinquishment Approval Report

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Appendix Z – Preparation Guidelines for Relinquishment Approval Report

ARTICLE 1 Overview

Reference Information

Some of the references found in this appendix have hyperlinks that connect to Caltrans intranet pages which are not displayable to the general public. Until such time that the specific reference becomes available on the internet, the user will have to contact their district liaison, Caltrans project manager, or the appropriate Headquarters division to inquire about the availability of the reference.

Use of Report

The relinquishment approval report serves as the project report (PR) and is used for documenting the Project Approval and Environmental Document (PA&ED) phase for relinquishment projects.

This report format may also be used for documenting the Project Initiation Document (PID) phase and programming of relinquishment projects in the State Highway Operation and Protection Program (SHOPP) with approval by the Headquarters Division of Transportation Planning-Office of Program and Project Planning. If this format is used for project initiation, appropriate information must be added for the funding to be programmed in the SHOPP. Additional requirements include:

> See the *Interim Guidance on Complete Streets and Climate Change for SHOPP* memorandum from the Division of Transportation Planning.
>
> See the *State Highway Operation and Protection Program Compliance With Executive Order B-30-15* memorandum from the Chief Deputy Director.

Also note that the latest requirements for SHOPP project initiation are located at the Headquarters Division of Transportation Planning-Office of Program and Project Planning *SHOPP Project Initiation Report Guidance (PIR)* website. The name of the report must be changed to "Relinquishment Project Initiation Report," and the

purpose determined from Appendix L – Preparation Guidelines for Project Study Report.

Important Distinctions

The project report recommends approval of a project. The draft project report (DPR) must be prepared for projects with an environmental document (ED). The DPR approves the release of the draft environmental document (DED) to the public.

Guidance for Preparing Report

This guidance is for completing the project approval report and not for developing the project. While there is obvious overlap between the information needed in the report and project development requirements, the purpose of the report is to provide enough information for management to approve moving forward with the relinquishment.

The report template contains the framework to ensure inclusion of the necessary topics and information to support project approval. Additional topics should be added as necessary.

Guidance for Updating Report

When an approved report must be updated due to programming delay or changed project conditions, a supplemental report must be prepared. The supplemental report must have a new cover sheet and only needs to contain the updated information; the previously approved report must be included as an attachment.

ARTICLE 2 Outline

General

This outline identifies the key elements to document in the report. All headings presented in the template must be included in the report, except as noted in this article. See Chapter 8 – Overview of Project Development, Chapter 9 – Project Initiation, Chapter 10 – Formal Project Studies, Chapter 12 – Project Approvals and Changes to Approved Projects, and Chapter 25 – Relinquishments, for essential procedures and Appendix K – Preparation Guidelines for Project Report, for discussion of individual topics.

Use of the Template

The individual preparing the report should begin with the report template provided. If a section is not applicable to a specific project, fill in section as "Not applicable." Modify the format to include information that is pertinent to the scope, cost and schedule of the project. See Article 3, "Template."

The report outline has been assembled for relinquishment projects that include proposed construction improvements to be completed prior to the relinquishment and those where no construction improvements are proposed.

When construction improvements are not proposed, fill in the section as "Not applicable" for these outline sections:

- 11. Stormwater
- 12. Transportation Management Plan
- 13. Additional Considerations
- 16. External Agency Coordination

For financial contribution only legislative enactment relinquishments, modify the "Life-Cycle Cost Analysis" section name to "Life-Cycle Cost Analysis and Benefit-Cost Analysis."

Front Matter

Cover Sheet

The cover sheet provides the project identifiers, in the header, such as the district, county, route, and post mile range, as well as the expenditure authorization (EA), project number, planning program number (PPNO), program code, program name, and month and year of report approval.

The beginning and ending post miles should be rounded to the nearest 0.1 mile that encompasses all of the proposed construction. The project location should be listed as a spot location to the nearest 0.1 mile if the project is less than 0.2 mile in length. The draft project report limits should use the limits encompassing all alternatives. The project report limits should use the limits of the preferred alternative.

The project number is the 10 digit number used for reporting labor charges.

Enter the program code(s) with program name(s). Information on the program codes and names can be found in the *Coding Manual*, Chapter 7. The program code is typically presented in the format of "20.XX.201.010" where "XX" is entered in the element location to represent both capital outlay support (XX=10) and capital outlay projects (XX=20) when they are funded from the same funding program. Use specific, separate program codes for multiple funding sources.

Modify the type of report to "Draft Relinquishment Approval Report" as needed. Add "Supplemental" to the cover sheet as needed. Modify the purpose of the report as needed. Typical entries for the purpose include:

- For Project Approval
- To Request Programming in the 20XX SHOPP and For Project Approval
- To Authorize Public Release of the Draft Environmental Document

See the *Plans Preparation Manual*, Section 2-2.2 for guidance in developing the project legal description. The project legal description is the same as the title sheet project description, such as: "In Los Angeles County…"

The cover sheet must include a statement signed by the district division chief right-of-way indicating review of the right-of-way information contained in the project report or draft project report and the right-of-way data sheet attached to it.

The cover sheet must include the endorsement of the project manager.

The District Director or Deputy District Director to whom that authority has been officially delegated approves the recommendations of the project report or draft project report. The draft project report is used to authorize proceeding to a public hearing and must include this recommendation. The signature date on the project report becomes the official date of State project approval and approval of initiation of the plans, specifications, and estimate. Edit the signature block as appropriate.

Vicinity Map

The vicinity map is a district, county, or city map showing all State highways and major local roads when pertinent. It should be placed on a separate page and should include the study limits, major topographic limits listed in the report, and a north arrow.

Registered Professional Stamp

The registered civil engineer stamp or seal and number with signature must be placed on a separate sheet, which must be part of the report. Also included on this sheet must be a statement indicating that the registered civil engineer is attesting to the technical information contained therein and the engineering data upon which recommendations, conclusions, and decisions are based. This seal does not constitute approval of the report. Approval of the report is a management decision and is separate from this technical signature of the person in responsible charge.

Table of Contents

On a separate sheet, place a table of contents that includes all the elements of the report. This is not a required element of the report.

Main Body of Report

1. INTRODUCTION, WORK DESCRIPTION AND SUMMARY TABLE

Describe the proposed project and fill out the table. The "SHOPP Project Output" is only needed when there is SHOPP funding.

2. PURPOSE AND NEED

Provide the purpose statement and need statement for the project. Additional information and resources on purpose-and-need statement development is located at the Headquarters *Division of Environmental Analysis-Purpose and Need* website.

3 RECOMMENDATION

Recommend that the report be approved.

4. RISK SUMMARY

Refer to the *Project Risk Management Handbook: A Scalable Approach* for the requirements and procedures. Discuss the most pertinent risks and the risk response from the risk register.

5. BACKGROUND

Project background should include the project history and when applicable, coordination with the community, including local and regional agencies.

The project history discussion should include: if the project was previously programmed or approved and is now being re-scoped (including previous programming and approval dates); how much project development effort has already been expended; right-of-way acquired; and pertinent or notable issues or developments that will affect the project scope, cost, and schedule.

The community interaction discussion should summarize the public involvement with the project.

Discuss the legislation that will allow for the relinquishment for legislative enactment type relinquishments.

If any portion of the route has previously been relinquished, describe the location and state the responsible local agency.

Discuss the status of the relinquishment agreement, and any local agency resolution as appropriate.

Discuss if there is a freeway agreement or controlled access highway agreement authorizing or showing the proposed relinquishment.

Discuss any coordination with the Federal Highway Administration (FHWA) for review and approval of the proposed relinquishment.

6. EXISTING FACILITY CONDITION

This section is used to describe the existing facility within the proposed project limits and the facilities adjacent to the proposed relinquishment project. For relinquishment projects with no proposed construction improvements, the items marked with "**" should only be included when there are relevant issues associated with the topic. This section should describe the appropriate information based upon the project aspects and may include:

- Corridor Geometric Information and Condition plus Topical Attributes
  - Right-of-way
  - Earth retaining systems
  - Utilities**
  - Landscape**
  - Landscape irrigation facilities**
  - Traffic signals**

  - Lights**
  - Traffic volumes**
  - Traffic collisions**
  - Pedestrian facilities
  - Bicycle facilities
  - Railroads
  - Others
- Roadway Geometric Information
  - Traveled way
  - Shoulders
  - Median
  - Others
- Structure Geometric Information
  - Bridge length
  - Width between curbs
  - Others

7. ALTERNATIVES

Identify and describe the alternative(s).

The report must include at least one proposed relinquishment alternative (known as the Build Alternative). Additional alternatives, including the no relinquishment alternative (No Build Alternative), may be required by the environmental process. Consult with the environmental unit to determine the required alternatives based on the project aspects.

In addition to the Build Alternative discussion, describe the consequences of not selecting one of the build alternative; that the need will not be met for the No Build Alternative.

Relinquishment Projects that Propose Construction

This part of the alternatives section is used to document pertinent details of the competing build alternatives. Within this section the differences between build alternatives should also be specified for each relevant topic. The following report sections provide additional detail for the recommended build alternative.

Discuss relevant topics for the alternatives:

- Proposed engineering features
- Design standards and deviations from design standards (*Highway Design Manual*, Topic 82 "Application of Standards")
- Interim features
- High-occupancy vehicle lanes
- Ramp metering
- California Highway Patrol (CHP) enforcement activities
- Highway planting and irrigation
- Erosion control
- Roadside design and management
- Noise barriers
- Earth retaining systems
- Context-sensitive-solutions
- Complete-streets
  - Pedestrian facilities
  - Bicycle facilities
  - Transit facilities
  - Park-and-ride facilities
- Traffic analysis
- Current construction and right-of-way cost estimates
- Other topics as needed

8. LIFE-CYCLE COST ANALYSIS

Deputy Directive DD-107 – Use of Life-Cycle Cost Analyses in Project Decision Making requires the use of life-cycle cost analysis in project initiation and project approval documents.

Discuss how life-cycle cost analysis has been incorporated into the project. For projects with no proposed construction improvements, state that a life-cycle cost analysis is not applicable.

Legislative Enactment Relinquishments

For legislative enactment relinquishments, modify the "Life-Cycle Cost Analysis" section name to "Life-Cycle Cost Analysis and Benefit-Cost Analysis."

For no cost and for financial contribution only legislative enactment relinquishments, state that a life-cycle cost analysis is not applicable and discuss the benefit-cost analysis.

For capital project legislative enactment relinquishments, discuss the life-cycle cost analysis and the benefit-cost analysis.

9. ENVIRONMENTAL COMPLIANCE

Identify the type of environmental determination/document prepared for the project and briefly discuss the requirements and restrictions enumerated within. Briefly describe environmental issues that influence the project design, schedule, or cost; include permit requirements, mitigation, and construction work windows. Discuss any significant aspects addressed in the initial site assessment (ISA), when it was prepared, and if a copy has been provided to the local agency. Refer to information in the attached environmental determination/document as needed.

Provided for reference:

- California Environmental Quality Act (CEQA)
  - Categorical Exemption (CE) or Statutory Exemption (SE)
  - Initial Study (IS) and Negative Declaration (ND) or Mitigated Negative Declaration (MND)
  - Environmental Impact Report (EIR)
- National Environmental Policy Act (NEPA)
  - Categorical Exclusion (CE)
  - Environmental Assessment (EA) and Finding of No Significant Impact (FONSI)
  - Environmental Impact Statement (EIS)

10. RIGHT-OF-WAY

Describe the requirements and restrictions enumerated in the right-of-way data sheet, including any new right-of-way, utility easement, drainage easement, construction easement, permit-to-enter, environmental mitigation, utility relocation, railroad involvement, airspace lease, and Relocation Assistance Program (RAP).

Briefly describe any right-of-way issues that influence the project design or cost, include any commitments and include construction work windows. Refer to information in the attached right-of-way data sheet as needed.

11. STORMWATER

Identify the type of storm water data report (SWDR) prepared for the project. Discuss the requirements and restrictions enumerated in the storm water data report.

12. TRANSPORTATION MANAGEMENT PLAN

Describe the anticipated transportation management plan requirements for the project.

Describe planned detours, rerouting, temporary closures and full closures for roadways and ramps. Discuss any impacts to transit routes, high-occupancy vehicle lanes, school bus routes, emergency vehicle access, and park-and-ride lots. Discuss the bicycle and pedestrian traffic need through the construction area.

Describe any proposed prolonged temporary ramp closures (more than 10 consecutive days) and summarize the results of the economic impact study prepared by the district environmental planning unit. Closures of less than 10 days may require discussion, depending upon the circumstances.

13. ADDITIONAL CONSIDERATIONS

The additional topics for the alternative discussion should be included when they are applicable to the specific project, they may not apply to some projects. When this occurs, include the topic and state that the project does not involve or does not affect the topic. The list of topics includes:

- Complete-streets
- Maintenance and worker safety
- Contaminated material including regulated, designated and hazardous waste
- Material and/or disposal site
- Salvaging and recycling of hardware and other non-renewable resources
- Recycled materials
- Resource conservation
- Value analysis
- Air quality conformity
- Environmental-justice (Title VI considerations)
- Noise abatement decision report
- Public hearing process
- Route adoptions, freeway agreements, relinquishments and modification of access control
- Report on feasibility of providing access to navigable rivers
- Public boat ramps
- Floodplain issues
- Constructability issues

- Construction staging
- Accommodation of oversize loads
- Graffiti control
- Other topics as needed

14. FUNDING, PROGRAMMING AND ESTIMATE

When there is no cost for the relinquishment, fill in this section with "Not applicable."

When the relinquishment is financial contribution only, use the benefit-cost analysis for the cost estimate rather than a construction cost estimate.

Funding

Discuss the project funding.

Special Funding: If the project has special funding, identify the source of funding, the dollar amount, and when funding will be available.

State-Only Funding: If the project will use State-only funding,-explain the need for the exception and discuss why the project does not qualify for federal participation.

Federal-aid Funding: Determine if the project is eligible for Federal-aid funding and include one of these statements:

"It has been determined that this project is eligible for Federal-aid funding."

Or

"It has been determined that this project is not eligible for Federal-aid funding."

Programming

Proposal Programming Data: If the project is already programmed, include data from the latest, official State Highway Operation and Protection Program (SHOPP) programming document. If cost changes are proposed, compare the proposed capital outlay project right-of-way and construction estimates to the programmed figures in the current SHOPP.

Support Estimate: Enter the escalated capital outlay support estimates in the table, in the appropriate fiscal funding year column, in thousands of dollars, for these components: Project Approval and Environmental Document (PA&ED); Plans, Specifications, and Estimate (PS&E); Right-of-Way; and Construction. Consult with the project manager to determine the fiscal funding year, the escalated support estimates, and the escalation rates.

Project Estimate: Enter the escalated capital outlay support estimates in the table, in the appropriate fiscal funding year column, in thousands of dollars, for the Right-of-Way and Construction components. Consult with the project manager to determine the fiscal funding year, the escalated project estimates, and the escalation rates.

Support Cost Ratio: State the support cost ratio. Consult with the project manager to determine the support cost ratio.

Estimate

Discuss significant aspects of the construction estimate. See Chapter 20 – Project Development Cost Estimates for further details on estimating.

15. DELIVERY SCHEDULE

All Relinquishment Projects

Provide the dates, with explanation as needed, for:

- Project Start
- Relinquishment Approval Report
- Relinquishment Agreement
- Federal Highway Administration (FHWA) Approval (when applicable)
- Right-of-Way Mapping
- California Transportation Commission (CTC) Meeting

Relinquishment Projects that Propose Construction

Enter the milestone dates in the table and discuss any schedule issues and constraints. The project schedule should be based on functional unit input, available resources, and funding constraints. Consult with the project manager to determine the project schedule. The milestones in the table are mandatory except:

- M030 is only required when there is an EIR environmental document
- M035 is only required when there is an EIS environmental document
- M120 is only required if there is a draft environmental document that will be released to the public
- M215 is only required if there are structures involved
- M377 is not required, but optional
- M378 is not required, but optional if there are structures involved
- M480 is not required, but optional

Indicate if the milestone date is an actual date or target date, delete column as needed.

16. EXTERNAL AGENCY COORDINATION

See the latest *Stewardship and Oversight Agreement on Project Assumption and Program Oversight* between the Federal Highway Administration, California Division and Caltrans for the project actions assumed by Caltrans and the project actions where FHWA has retained their authority as well as the detail associated with the various oversight responsibilities. Project actions are identified in the "Project Action Responsibility Matrix" within the stewardship agreement.

Discuss project actions, as appropriate, assumed by Caltrans and any coordination with the FHWA for review and approval of project actions.

Identify potential involvement with outside agencies for necessary coordination, agreements, or permits required for the project. The district environmental division is a resource for determining some of the required permits. The list of agencies and permits in the template is not comprehensive; see Chapter 13 – Project Related Permits, Licenses, Agreements, Certifications, and Approvals for more information.

17. PROJECT REVIEWS

The template includes a list of possible reviews. Modify the list to reflect district review procedures. Include "Completed," or the reviewer's name with the review completion date, or "Not applicable." Depending on the project aspects and phase, some reviews are mandatory.

18. PROJECT PERSONNEL

To facilitate contacts with the project development team members, include their names and telephone numbers in the general format of:

Name, Title Phone #

19. ATTACHMENTS (Number of Pages)

Raw data used in analysis and many engineering reports do not need to be attached to the report. Functional scoping checklists are worksheets for collecting pertinent information from specified functional units, which do not need to be attached to the report. This information should be part of the project history file to support the engineering recommendations. See Appendix K – Preparation Guidelines for Project Report, to determine the required attachments. Additionally, the following attachments are required, as applicable.

- Relinquishment map showing the proposed relinquishment
- Benefit cost analysis calculations (only for legislative enactment type relinquishment)
- Copy of authorizing legislation (only for legislative enactment type relinquishment)
- Initial site assessment (ISA)
- Draft relinquishment agreement (if applicable)

ARTICLE 3 Template

This article is a template for the report. When using the template, delete any italicized text within the body of the document. The italicized text provides instructions for template users and provides no value to the final document.

The template is available at:

Appendix Z Template

Appendices BB Through QQ

Project Development Forms and Letters plus Policy and Procedures Documents

APPENDIX BB – Design Standard Decision Documentation

ARTICLE 1 Introduction

Design Standard Decision Document

This appendix provides guidance for documenting engineering decisions made regarding design features that deviate from the design standards in the *Highway Design Manual*. This guidance should be used with the policies and essential procedures discussed in Chapter 21 – Design Standard Decisions.

The outline presented in this appendix is used to collect and organize information, including the standard practice for the information that should be contained in a design standard decision document.

The detail presented for each topic should correlate to the complexity of the project and the relevance of that topical information to the engineering decision. The topical information may be abbreviated or modified with the permission of the appropriate approval authority; discuss with the appropriate Headquarters Project Delivery Coordinator and/or the district design liaison.

The design standard decision document template is set up to process combined approvals for deviation from multiple design standards where the approval authority belongs to the Headquarters Project Delivery Coordinator for some of the nonstandard design features and the District Director for others. The district may prepare separate design standard decision documents and the district can decide the format and content of the document used for the design standards with delegated approval authority.

ARTICLE 2 Outline

General

This outline identifies the key elements to document in the design standard decision document.

Use of the Template

The individual preparing the design standard decision document should begin with the template provided. All headings in the outline must be included in the design standard decision document. If a topic is not applicable to a specific project, fill in as "Not applicable" and explain the reason.

Signature Sheet

Modify the signature blocks as needed to represent the specific district delegation approval authority.

Prepared by:

Typically the project engineer, a Transportation Engineer (Civil), Range D. The design standard decision document must be prepared by a registered civil engineer in responsible charge of the work (as defined by California Business and Professions Code, Section 6703), or other licensed professional practicing within the scope of their license. Include the district and/or region for Caltrans engineers and the company name for consultant engineers.

Submitted by:

Typically the design senior, a Senior Transportation Engineer, Caltrans. The first-line supervisor of the project engineer. For projects-funded-by-others this could be the district oversight engineer or the district permit engineer for encroachment permit projects.

Concurrence by and approved by:

For design standards where the approval authority is the Headquarters Project Delivery Coordinator:

- Concurrence is given by the district office chief, design manager, or deputy District Director for Design. Typically the concurrence is from a Supervising Transportation Engineer, Caltrans (the first-line supervisor of the design senior and second-line supervisor of the project engineer) or could be from a Principal Transportation Engineer, Caltrans.
- Approval is given by the Headquarters Project Delivery Coordinator, a Supervising Transportation Engineer, Caltrans.

For design standards where the approval authority has been delegated to the District Director:

- Use of a concurrence signature block is by district preference.
- Approval is given by the District Director's approval authority; typically from an office chief, design manager, or deputy District Director for Design that has been delegated the approval authority.

Documentation Topics

1. PROPOSED PROJECT

A. Project Description:

Describe the proposed project by the overall type of proposed improvements (safety improvement; operational improvement; roadway widening, rehabilitation, or reconstruction; etcetera) along with the major elements of work to be performed.

Provide the project legal description of the geographic project limits. See the *Plans Preparation Manual*, Section 2-2.2 for guidance in developing the project legal description. The project legal description is the same as the title sheet project description, such as: "In Los Angeles County…"

Attach a project location map and/or project vicinity map (in addition to the title sheet plan, if available) that includes major geographic features along with the post mile range of the proposed project.

B. Existing Highway:

Describe the general highway characteristics, including the classification of the facility (such as: freeway, expressway, or conventional highway), number of lanes, posted speeds, etcetera. Include the design designation (*Highway Design Manual* Topic 103 "Design Designation"), design vehicles (*Highway Design Manual* Topic 404 "Design Vehicles"), and if the route is a designated bike route, the bikeway classification of the facility, when appropriate. State if the project is on the Interstate system and if it is part of the Federal Highway Administration (FHWA) Rural and Single Interstate Routing System. See Chapter 21 – Design Standard Decisions, Article 3 "Policies," sub-article "Vertical Clearance on Department of Defense Rural and Single Interstate Route System."

Describe the highway and structure geometric features near the proposed nonstandard features, including existing nonstandard features. If the features vary on either side adjacent to the proposed nonstandard feature location, describe the geometric features of the adjacent highway segments. The focus

should be on those features specific to the proposed nonstandard design, such as: widths of lanes, shoulders, medians, roadbeds, and structures; horizontal and vertical alignments, and clearances; design speeds; sight distances; grades; cross slopes; sidewalks; superelevations; etcetera.

When relevant, note the structure clear width and lane and shoulder widths across the structure; compare the structure widths with the roadway approach widths.

When relevant, note the bridge-rail type and determine if it meets current standards for structural adequacy. Request this information from the Headquarters Division of Engineering Services-Structure Design district technical liaison engineer representative assigned to the appropriate district.

C. Safety Improvements:

Describe any proposed improvements that would qualify as safety enhancements, such as: median barrier, guardrail upgrade, flattening slopes, adding sidewalks, eliminating roadside obstructions, etcetera.

Briefly discuss if any existing nonstandard features will be brought to standard with the proposed project.

D. Total Project Cost:

Include a concise summary of the estimated project cost segregated by the major elements (Roadway, Structure, and Right-of-Way).

2. FEATURES REQUIRING DESIGN DECISION DOCUMENTATION

A. Design Features with Headquarters Approval Authority

1) Design Feature Number 1

Nonstandard Feature:
Describe the proposed nonstandard feature and identify whether it would be created, maintained, improved, or reduced. Reference the attachment that shows the location, limits, and nature of the proposed nonstandard feature and clearly label the nonstandard feature on the attachment.

Design Standard for Which Documentation is Required:
State the specific design standard and reference the topic and/or index in the *Highway Design Manual*. If more than one standard applies to a feature, such as shoulder width and horizontal clearance, state all that apply.

Reason for not Using Design Standard:

Provide complete, compelling, and objective justification with backup information and calculations as the situation warrants. Clarify how the proposed nonstandard feature will meet the desired performance and why the design standard will not be used. Reasons for which deviation from design standards have been granted include a combination of excessive cost, significant right-of-way acquisition, and environmental and/or social economic impacts. Supportive factors have included low collision frequency, local position, maintaining consistency with adjacent highway segments, and application of alternative design guidance provided in the *Highway Design Manual* when it is impractical to meet the specific standard, see Index 82.3 "FHWA and AASHTO Standards and Policies" for further information. Explain any proposal to mitigate the nonstandard feature. See FHWA's publication *Mitigation Strategies for Design Exceptions* for mitigation options.

State the specific resources used to justify the nonstandard condition, such as:

- *Highway Design Manual*
- *Highway Safety Manual*
- *Roadside Design Guide*
- *California Manual on Uniform Traffic Control Devices* *(California MUTCD)*

Added Cost to Make Standard:
Summarize, by major elements, the added cost above the proposed project cost required to meet the design standard. The estimate must be realistic, but need not be highly developed.

When the design standard decision document includes multiple nonstandard features, provide separate cost summaries for the "standardization" of individual design features. If upgrading a design feature to standard results in the standardization of additional features, note the additional features that upgrade to standard. An example of this would be upgrading shoulders to standard resulting in providing standard horizontal clearance.

2) Design Feature Number 2

For projects with more than one nonstandard feature, add additional sub-headings 2, 3, 4 etcetera, under heading A.

B. Design Features with District Delegated Approval Authority

Repeat the information from heading A instructions for design features with district delegated approval authority under heading B.

3. TRAFFIC DATA

Include traffic data for the area near the design feature. Include both annual average daily traffic (AADT) and design (peak period) hourly volumes. Use current year traffic volumes for pavement rehabilitation, roadway rehabilitation and safety projects. For other projects, use the design year traffic forecasts (usually 20 years after construction is complete) and current year traffic volumes. For an interim project that will be superseded by a programmed future project, provide traffic volumes for both the construction year and the design year of the programmed future project.

4. COLLISION ANALYSIS

Traffic safety is of primary importance to both Caltrans and FHWA when considering approval or rejection of a design standard decision document. To strengthen the justification, the documentation should include analysis of collision data. The analysis should identify prevalent collision types and causes in the area of the design feature, when the applicable design standard can be correlated to existing collision data. The discussion should include an evaluation of the effect of the proposed nonstandard feature on collision types and frequencies. This analysis must include a review of the Highway Safety Improvement Program (HSIP) reports and be completed either by the appropriate district traffic unit or in close coordination with that unit.

When the design feature is located on a new alignment, the collision analysis may be abbreviated when there is sufficient justification on why the existing collision data is not relevant.

Provide a summary table of TASAS Table B collision data for latest 3-year period showing actual versus average collision rates; merely stating actual versus average numbers is insufficient. To enhance the understanding of prevalent collision types and how they relate to existing and proposed highway design features, the TASAS data should be supplemented by a review of collision patterns covering the project area. This review should focus on how the nonstandard feature will not contribute to any increase in collisions.

From the analysis, explain how the proposed project will help alleviate identified safety problems. The collision analysis must include the Traffic Accident Surveillance and Analysis System (TASAS) Table B statistical data regarding both the number and severity of collisions, actual versus statewide average collision rates for a similar facility, and the collision patterns and causes. For nonstandard features related to spot locations (such as a nonstandard horizontal curve) on existing highways, analyze only the collision data within the vicinity of the proposed nonstandard feature. The analysis must include a review of the Highway Safety Improvement Program (HSIP)

reports to determine if any high collision frequency spot locations are within the proposed project limits.

In determining collision causes, terms like "excessive speed," "inattention," "failure to yield right-of-way," "under the influence," etcetera, are valid for the California Highway Patrol (CHP), but are only useful to the highway engineer as they relate to the underlying highway characteristics. The engineer must instead look for other reasons, such as: tight radius curves with inadequate superelevation, high-volume turning movements without separate turn lanes, a concentration of rear-end or side-swipe collisions in a particular lane, etcetera. The collision concentrations detected in this manner are too small for a TASAS Table C printout, but collectively they are the key to understanding the vehicle-highway interactions that are the basic causes of collisions.

5. FUTURE CONSTRUCTION

Describe any planned future projects near the proposed nonstandard feature. If a commitment is made to address the nonstandard feature in a future project, it must be concurred by the Headquarters Project Delivery Coordinator and approved by the Deputy District Director for the design function. Describe the follow-up project's funding source (STIP, SHOPP) and schedule as listed in the appropriate programming document. Identify the ultimate concept from the transportation concept report.

6. REVIEWS AND CONCURRENCE

Note relevant project reviews by the district design liaison, district traffic engineer or designee, and/or FHWA transportation engineer (if appropriate), etcetera. Also indicate any reviews or approval of items listed in *Highway Design Manual* Table 82.1C "Decision Requiring Other Approvals." Provide the date of meeting or discussion, and state the individual's concurrence with the proposed nonstandard feature.

7. ENVIRONMENTAL DETERMINATION/DOCUMENT

Approval of nonstandard features for projects on the National Highway System, including the Interstate System, is a federal administration action that requires compliance with the National Environmental Policy Act (NEPA). Caltrans has developed a "blanket" categorical exclusion for NEPA compliance when approval of nonstandard features is the only relevant federal action on the project. See the *Categorical Exclusion Memorandum* from the Division of Environmental Analysis for more information.

Federal actions include FHWA approval of nonstandard features and changes in access control for Interstate System projects, using Federal-aid funding, and Caltrans approval of nonstandard features for National Highway System

projects and Interstate projects where the approval has been delegated from FHWA.

Consult with the district environmental unit to determine the appropriate federal environmental determination/document for the project and if the "blanket" categorical exclusion is applicable. The circumstances for determining applicability of the "blanket" categorical exclusion include:

- The project is on the National Highway System.
- There is no project-specific federal environmental determination/document.

Construct an appropriate project attribute statement by choosing and modifying:

The project location (is part/is not part) of the National Highway System.

<u>And choose one:</u>

A federal environmental (determination/document) (will be/has been) approved specifically for this project to comply with the *National Environmental Policy Act of 1969* (NEPA).

The project conforms to the conditions for applying the "blanket" categorical exclusion for approval of design exceptions, listed in the memorandum signed by Jay Norvell on March 3, 2008.

Compliance with the *National Environmental Policy Act of 1969* (NEPA) is not applicable to this project.

8. ATTACHMENTS

All attachments should be black and white (no color copies or color photos) and in standard paper sizes of 8.5" x 11", 8.5" x 14", or 11" x 17" per Caltrans Division of Legal request. Clearly label each attachment page and the nonstandard feature number.

Provide the project location map and/or project vicinity map referenced in heading 1A "Project Description." When the design standard decision document covers multiple nonstandard features at various locations, a project strip map may be provided to indicate the general location of each nonstandard feature.

Provide cross sections and/or special details to clearly illustrate the proposed condition for each location that does not meet the standard for horizontal or vertical clearance and lane, shoulder, or bridge clear width. For example, nonstandard vertical and horizontal alignment features must include a layout with existing and proposed horizontal curve data, existing and proposed

profile with vertical alignment data, and existing and proposed superelevation diagram.

Letters, resolutions, traffic study summaries, etcetera should only be attached if requested by the appropriate approval authority, otherwise these documents should be filed in the project binder. While TASAS data and collision rates may be summarized within the "Collision Analysis" heading, TASAS reports, such as Table B and Table C, should never be attached.

Do not attach superfluous materials such as complete project plan sets or engineering reports unless specifically requested by the appropriate approval authority.

ARTICLE 3 Template

This article is a template for the design standard decision document. When using the template, delete any italicized text within the body of the document. The italicized text provides instructions for template users and provides no value to the final document. The template is available at:

Appendix BB Template

APPENDIX CC – Preparation Guidelines for Freeway Agreement

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APPENDIX CC – Preparation Guidelines for Freeway Agreement

ARTICLE 1 Guidelines

Applicability

This appendix presents a description of the information that should be contained in freeway agreement exhibit maps and the format for the freeway agreement text. Refer to Chapter 24 – Freeway Agreements for a full discussion of freeway agreements.

The new freeway agreement may supersede more than one existing freeway agreement. It is recommended to evaluate the need to supersede old freeway agreements (30 years or older) as they may not reflect existing connections or current developments in the area. Old freeway agreements may show a future freeway-to-freeway interchange in a symbolic way. If the freeway-to-freeway interchange has already been constructed it should be shown in a geometric form. Similarly, many streets may have been developed since the original freeway agreement and they should also be shown.

Freeway Agreement Text

All freeway agreement text should be on 8.5 x 11-inch paper. Part of the text should appear on each signature sheet to conform to standard legal practice. On city agreements, “CITY” is substituted for “COUNTY” and “streets” is substituted for “roads” (except in “frontage roads”). The description on the first page header of the agreement text should agree with the description on the title block of the Exhibit A map. In agreements for expressways that were either adopted as a controlled access highway or were adopted freeways that were subsequently denominated to a controlled access highway, “Controlled Access Highway” is substituted for the word “Freeway.”

The format and content of the freeway agreement is scripted and as such, a template has been created to simplify the development of agreements. See Article 2 “Template” for the following sample formats:

- For "Original" freeway agreement for projects funded/sponsored by Caltrans
- For "Original" freeway agreement for projects funded or partially funded/sponsored by a local agency
- For "Superseding" freeway agreement for projects funded/sponsored by Caltrans or projects funded or partially funded/sponsored by a local agency
- For other clauses (not mandatory)

Limits of Agreement

Policies

The limits of a freeway agreement must comply with the requirements in Chapter 24. Refer to requirements for supersession of existing freeway agreements in Chapter 24, Article 5, Procedures and Sequence of Events for Executing a Freeway Agreement.

Determining the Limits of Agreement

1. Obtain and review copies of any existing freeway agreements and route adoption maps for the area.
2. For an original freeway agreement, verify that the environmental document of the project covers the entire limits.
3. Verify where the local agency boundary lines are in relation to the project area and in relation to the existing freeway agreements.
4. While it is preferable to have one freeway agreement per local agency, boundary limit line to boundary limit line, this may not be recommended if:
   - the project covers only a portion of a long section of State highway through a large city or county,
   - the existing freeway agreement is less than 10 years old, or
   - the project is at a specific location such as the modification of one interchange.
5. If the boundaries of the local agency along the State route are not very far apart, say five or six miles apart, and it covers the project modifications to traffic circulation, then make the limits of the freeway agreement same as local agency boundaries.
6. If the project is near a boundary line, make the boundary line either the start of or end of the freeway agreement. If the local agency boundaries are far apart, then determine the other end of the freeway agreement based on factors described in the following points numbered 7 through 12.

7. If the project is at a specific location and the existing freeway agreement would be sufficient to cover the project area, use same limits as the existing freeway agreement to be superseded. If one of the limits of the agreement is close to a boundary line, then extend the one limit of the freeway agreement. Sometimes cities annex areas and extend their limits after an existing freeway agreement has been executed.
8. If the project is at a specific location such as an interchange modification within the limits of a relatively long existing freeway agreement where the boundaries of the city or county are far apart, the limits of the freeway agreement may need to supersede only a segment at the end of the existing freeway agreement.
9. If there are old freeway agreements (30 years or older) adjacent to the freeway agreement to be superseded that covers the project location, try to include the area of the old freeway agreements in the new freeway agreement. In urban areas, it is almost certain that development has occurred and the area has changed since the original freeway agreement. In rural areas this may not be the case.
10. Many times short portions of old freeway agreements have been superseded, try to include the remaining portion of the old freeway agreement in the new freeway agreement and supersede the old freeway agreement in its entirety.
11. Never set the limits of agreement at an interchange unless there is a reason to set the freeway agreement limit to a specific location. Always include the entire interchange and the ramps, within the limits of the freeway agreement.
12. The beginning and ending post miles should be rounded to the nearest 0.1 mile that encompasses all of the proposed area for the limits of the freeway agreement.

Exhibit Map for Agreement

In addition to the information provided in Chapter 24 – Freeway Agreements and in the *Plans Preparation Manual*, these guidelines provide direction when preparing either symbolic or geometric type of freeway agreement exhibit maps. Sample exhibit maps are located in the Plans Preparation Manual.

General

The description on the header of the agreement text should agree with the description on the Exhibit A map title block. The Exhibit A map is usually 11-inch by 4-foot length or less. If a longer exhibit map is needed, additional sheets should be used with labels like “Sheet 1 of 3,” “Sheet 2 of 3,” etcetera added below Exhibit A call out. In agreements for expressways that were either

adopted as a controlled access highway or were adopted freeways that were subsequently denominated to a controlled access highway, "Controlled Access Highway" is substituted for the word "Freeway."

Items to include in Exhibit A

Legend for Symbolic Type Exhibit

- Legend. Standard symbols to be shown, see the *Plans Preparation Manual* Figures 3-2.4B through 3-2.4E:
  - Freeway and connections. Use double thick lines.
  - Roads to be constructed, reconstructed, or relocated. Use cross-hatching.
  - Interchange. Use arrow with circle and larger circle around interchange.
  - Separation. Use arrow, no circle.
  - Road closure and terminus construction as necessary. Use tilde (curly) line.
  - Pedestrian overcrossing. Use arrow with a "P" inserted.

Legend for Geometric Type Exhibit

- Legend. Standard symbols to be shown, see the *Plans Preparation Manual* Figure 3-2.4A:
  - Freeway and connections. Use double thick lines.
  - Roads to be constructed, reconstructed, or relocated. Use cross-hatching.
  - Road closure and terminus construction as necessary. Use tilde (curly) line.
- To avoid confusion, only show symbols that are actually being used. Inclusion of other standard symbols tends to create some doubt as to whether or not a feature may have been omitted.

Apply to Both Symbolic Type and Geometric Type Exhibit

- Use of only English units of measure.
- Limits of agreement. Include leader line with "Limit of Agreement," "Route #" and "PM #" in large-bold text at the begin limit and end limit of agreement.
- Agreement exhibit maps should be drawn with post miles increasing left to right.
- Title block. Indicate if the freeway agreement is with a city or county. Include a simple location description (see *Plans Preparation Manual*).

Do not use only the city limits to specify the limits of the agreement, add a reference street or road. Do not include the expenditure authorization (EA), project number, or dates. The description on the title block of the Exhibit A map should agree with the description on the first page header of the agreement text.

- Do not capitalize any compass direction unless it is part of a name like "East Palo Alto."
- North arrow with correct orientation near center of exhibit map.
- "Exhibit A" at right top corner of exhibit map.
- Border, 3/8-inch from top, bottom, and right side of paper edge and 2 inches from the left side.
- Bar scale, use scale 1:1,000 to 1:5,000 depending on how long the freeway agreement is or how much detail needs to be shown. In urban areas use an appropriate scale to be able to show all streets.
- Print size, use 11-inch roll paper. Length will vary, typically 4-foot or less.
- Freeways should be shown as two parallel lines per direction.
- Local streets or roads should be shown as two parallel lines only, truncate at intersections. If a street ends, show either a cul-de-sac or a closed line. No open ended streets should be shown unless they continue past the border of the exhibit map. Show at least one main street along both sides of freeway.
- Geometrics of all freeway-to-freeway interchange connectors, freeway-to-expressway interchange connectors, and expressway-to-expressway interchange connectors need to be shown, even if freeway agreement is symbolic.
- Darken the freeway by using the symbol for freeways and connections within the boundary of the city or county and within the limits of agreement. Do not darken freeway outside of limits of agreement.
- At freeway-to-freeway interchanges, freeway-to-expressway interchanges, or expressway-to-expressway interchanges, the entire interchange should be shown on each route's freeway agreement exhibit map. Darken the freeway off-ramp connectors that are part of the agreement from start point at mainline to end at gore area with other route.
- Add "ROUTE #" in large-bold text along freeways in at least one location.
- Add city and county boundary limit lines using the standard line type as depicted in the *Plans Preparation Manual*. Make sure boundary lines are current, as cities may have annexed property from the county or other cities.
- Add "City Name Limit Line" on the respective side of the city limit line.
- Add names of cities or counties in large-bold text.

- Show all separation structures, including pedestrian overcrossings and railroad separations.
- Show bridge railings using thick lines at interchanges and separations:
  - If structure is an overcrossing, place bridge railings along the local street and stop the freeway darkening right before the railings.
  - If structure is an undercrossing, place the bridge railings along the freeway and continue the freeway symbol through the separation.
- Show all local street or road names. In urban areas include all main street names at minimum, especially the names of all streets crossing the freeway, streets affected by the project (closed, relocated, etcetera) or connecting to the freeway. There is no need to include the names of small streets.
- Show and add name of railroads, rivers and any major facility like an airport.
- Show road closure symbols where needed. Include any streets or isolated ramps closed due to final project design. Closure symbols are indicated at all points where existing city streets and county roads (and State highways) will be terminated. Cul-de-sacs are usually provided at these locations and should be shown on the exhibit map. The closure symbol gives authority to construct a cul-de-sac or perform such work as is necessary to properly terminate the street or alley, and is so noted on the exhibit map legend.
- If a ramp is moved (closed and relocated) within an interchange, there is no need to show the closure symbol at the interchange symbol unless access on that direction is no longer provided.
- Construction on the frontage roads and other local roads are distinguished from the freeway proper. Cross-hatch all streets or roads to be constructed or reconstructed as part of the project. Any right-of-way acquired by the State for construction of these streets or roads if adopted by the State and not part of the freeway proper will be relinquished to the local agency after construction is complete.
- Verify that the exhibit map shows the project's preferred alternative described in the project report.
- Show direct access ramps using an interchange symbol.
- Point and add a note indicating the name of the streets at direct access ramps, such as: "East Palomar Street Direct Access Ramp."
- Distinctly mark and show nonmotorized facilities, such as bike trails.
- Do not show private driveways, only public roads.
- Add county, route and post miles below border and on right side of exhibit map as reference location, even if freeway agreement is with a city.

- Delete all contour lines, minor drainage areas, overhead utilities, parcel lines, right-of-way lines, buildings, shopping centers, bridge numbers and names, road delineation, and other superfluous information.
- Add traffic direction arrows at each end of the freeway.
- old exhibit map into 8 ½ x 11-inch size, with title block showing in front.
- On freeway agreements where the local agency will pay for some of the construction or some of the right-of-way for mainline and/or interchange connection(s), if requested by the local agency, a note may be placed on the map to indicate the portion to be paid for by the local agency.

Apply Only to Symbolic Type Exhibit

- Extend all city streets through the interchange circles.
- Indicate interchanges by using interchange circle symbol and standard interchange arrow as per legend. This will indicate full connections to the freeway; do not show ramps.
- Elongated circles may be used to indicate an interchange with braided ramps or ramps that do not connect to the same grade separation street but are close enough to the separation to allow interchange of traffic between two or more roadways. See *Highway Design Manual (HDM)* Figure 502.2, interchange types L-3, L-4, L-5 or L-6.
- Always show isolated hook ramps in geometric form.
- If the city or county limit line goes through a portion of an interchange, or along the mainline with the ramps ending at a different local agency, the mainline will need to be crosshatched within the interchange symbol (circle) to acknowledge that other agency ramps may be carrying traffic over to their jurisdiction. Use a different cross-hatch symbol than the roads to be constructed, reconstructed or relocated symbol.
- Partial interchanges that provide at least one ramp on each direction should be shown as a standard full interchange. If project proposes to add a ramp to these partial interchanges, a new public road connection approval from CTC is not required.
- Partial interchanges which do not provide one ramp on each direction, it could be a single ramp or an on-ramp and an off-ramp in the same direction, should indicate with a note what ramps are provided, on-ramp or off-ramp and direction. If project proposes to add a ramp to these partial interchanges, a new public road connection approval from CTC will most likely be required. See Chapter 27 – Access Control Modification.
- Indicate separations with standard arrow. Do not add circles at separations.

ARTICLE 2 Template

This article is a template for the freeway agreement. When using the template, delete any italicized text within the body of the document. The italicized text provides instructions for template users and does not provide any value to the final document. The template includes the following sample formats:

- For “Original” freeway agreement for projects funded/sponsored by Caltrans
- For “Original” freeway agreement for projects funded or partially funded/sponsored by a local agency
- For “Superseding” freeway agreement for projects funded/sponsored by Caltrans or projects funded or partially funded/sponsored by a local agency
- For other clauses (not mandatory)

The template is available at:

Appendix CC Template

APPENDIX DD – Preparation Guidelines for Initial Site Assessment Checklist for Hazardous Waste

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APPENDIX DD – Preparation Guidelines for Initial Site Assessment Checklist for Hazardous Waste

ARTICLE 1 Guidelines

Introduction

The Initial Site Assessment (ISA) Checklist is a guide for district screening and assessment of projects for potential hazardous waste involvement. It is not intended to take a lot of time and effort to complete; however, some assessments may take longer to complete just because of the magnitude and/or location of a proposed project.

Project Information Section

Be sure that the project manager and project engineer have been identified. Do not begin the initial site assessment until the written project description and location maps have been provided (since hazardous waste could affect project development, it is important to know what type of work is proposed and where it will be located).

Location Map

It is suggested that the location map provided by design be attached to the initial site assessment checklist to provide a record of the area that has been assessed, as well as the findings. All future project limit changes should cause design to request further assessment for hazardous waste.

Project Screening Section

Items 1 and 2 are risk indicators that could be used to determine the level of effort required to complete the initial site assessment. Generally, a project that requires new right-of-way, excavation, structure modification or demolition, or utility relocation will have a greater potential for hazardous waste involvement than a project that does not include these features. An urban location would

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generally present more of a risk than a rural location; industrial land uses would generally be more risky than commercial uses; and so on.

Items 3 through 6 deal with the actual assessment:

- First, check available records to see if a known site is present. This item should not take a lot of effort, but it will require contacting the appropriate regional water quality control board, the Department of Toxic Substances Control, and the city/county agencies that deal with leaking underground tanks.
- Next, conduct a field inspection to look for indicators of potential hazardous waste or contamination. Identify businesses that store or use potentially hazardous materials (service stations, auto wrecking yards, paint companies, machine shops, metal platers, electronic manufacturers, dry cleaners, agricultural chemical suppliers, etcetera). Other things to look for include landfills and dumps, surface storage of potentially hazardous materials (sumps, pits, steel drums, etcetera), illegal dumping sites (especially on rural projects), and serpentine.
- Based on the field inspection, if there may have been a previous land use that could still present a hazardous waste or contamination risk, it may be necessary to verify the previous land use (for example, abandoned service stations can usually be identified by the type of structure and location and the underground tank may still be there).

Initial Site Assessment Determination

The ISA determination is simply “Yes” or “No.”

NO: No findings have been made that would indicate a known or potential hazardous waste problem within or near the proposed project.

YES: A known, or potential site has been identified that could affect the proposed project and will take more time and effort to define and coordinate cleanup options.

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Initial Site Assessment (ISA) Checklist

Project Information

District ____ County _____ Route _____ Post Mile _____ EA _____

Description_____

_____

_____

_____

Is the project on the HW Study Minimal-Risk Projects List? _____

Project Manager _____ phone # _____

Project Engineer _____ phone # _____

Project Screening

Attach the project location map to this checklist to show location of all know and/or potential HW sites identified.

1. Project Features: New R/W? _____ Excavation? _____ Railroad Involvement? _____

   Structure demolition/modification? _____ Subsurface utility relocation? _____

2. Project Setting _____

   Rural or Urban _____

   Current land uses _____

   Adjacent land uses _____
   (industrial, light industry, commercial, agricultural, residential, etcetera)

3. Check federal, State, and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project.

4. Conduct Field Inspection. Date _____ Use the attached map to locate potential or known HW sites.

   STORAGE STRUCTURES / PIPELINES:

   Underground tanks _____ Surface tanks _____

   Sumps _____ Ponds _____

   Drums _____ Basins _____

   Transformers _____ Landfill _____

   Other _____

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Initial Site Assessment (ISA) Checklist
(continued)

CONTAMINATION: (spills, leaks, illegal dumping, etcetera)

Surface staining _____ Oil sheen _____

Odors _____ Vegetation damage _____

Other _____

HAZARDOUS MATERIALS: (asbestos, lead, etcetera)

Buildings _____ Spray-on fireproofing _____

Pipe wrap _____ Friable tile _____

Acoustical plaster _____ Serpentine _____

Paint _____ Other _____

5. Additional record search, as necessary, of subsequent land uses that could have resulted in a hazardous waste site. Use the attached map to show the location of potential hazardous waste sites.

6. Other comments and/or observations: _____

_____

_____

_____

_____

ISA Determination

Does the project have potential hazardous waste involvement? _____ If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Investigation? _____ If "YES," explain; then give an estimate of additional time required: ____

_____

_____

_____

_____

A brief memorandum should be prepared to transmit the ISA conclusions to the Project Manager and Project Engineer.

ISA Conducted by _____ Date _____

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APPENDIX EE - Highway Planting "One Liner" and Design Intent Statement (DIS)

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Sample "One-Liner" for Item 2.5a of the CTC Book

Date: June 22, 2004

04-SM101, KP 28.5/32.3 (PM 17.8/20.2)	[Dist.-Co.-Rte., KP (PM)
04-135001	(EA)
PPNO: 1234	(Project Program Number)
20.20.201.210	(Program Code)

This project will upgrade 4 hectares (9.8 acres) of existing manual irrigation systems to automatic operation and rehabilitate planting areas.

Performance Measure: **4 HA (9.8 acres) Highway Planting Restoration**
14 Locations Freeway Maintenance Access

Sample "Supporting Fact Sheet" for Department Presentation to the CTC for Item 2.5a Projects

Date: June 22, 2004

FACT SHEET
Highway Planting Restoration

04-SM-101
KP 28.5/32.3 (PM 17.8/20.2)
04-135011
PPNO: 1234
20.20.201.210

In San Mateo County in and near Burlingame and Millbrae from 0.3 kilometers (0.2 mile) of Millbrae Avenue Overcrossing to 0.5 kilometers (0.3 mile) South of San Bruno Avenue Overcrossing.

PROPOSAL

This project will correct existing safety deficiencies by providing 4 hectares (9.8 acres) of rehabilitation of highway planting and upgrading the existing manual irrigation system to a remote irrigation control system. Other Design for Safety items will include 4 areas of concrete gore paving, the installation of 4 chain link access gates and six Maintenance Vehicle Pullouts. Permanent highway planting for erosion control with groundcover and mulch will be provided to control weeds, and reduce the use of herbicides, and provide stormwater pollution prevention.

WATER SUPPLY

This project will make use of one existing water meter located at the Millbrae Avenue Overcrossing. Reclaimed water is currently not feasible for this project.

NEED AND PURPOSE

The planting and irrigation restoration is necessary to improve maintenance safety and the safety of the motoring public. Overgrown vegetation impedes sight distance in some areas and must be removed or pruned to maintain traffic safety. Much of the original groundcover has died leaving large areas of bare soil subject to erosion and weed infestation that requires on-going maintenance. The project will also improve the visual quality at a major entry to the City of Millbrae.

COST FOR PROJECT

The estimated cost of this project is $1,225,000. The annual maintenance costs after the plants are established is approximately $7,800 hectare ($3,160 per/acre/yr). A 3-year plant establishment period is included.

SUPPORT FOR THIS PROJECT

The City of Millbrae and the City of Burlingame support this project.

CATEGORY 7, CTC Planting Policy; G-85-9

Outline Design Intent Statement (DIS) for Highway Planting

Purpose of Project

Explain the circumstances that led to the initiation of the project, typically as identified in the Project Study Report (PSR) and Project Report (PR) under project need and purpose. Identify deficiencies addressed by the project, including aesthetics, environmental resources, scenic and visual resources, community goals, and traveler and worker safety.

Landscape Concept

Planting:

Briefly discuss the proposed planting concept for achieving the purpose and goals of the project. Discuss the following topics that apply:

Functional Planting Goals (Function of tree, shrub, groundcover planting and seeding):

- Planting to satisfy environmental mitigation requirements and memorandum of understanding.
- Planting to satisfy legal mandates.
- Replacement, restoration and rehabilitation of existing vegetation.
- Wetland habitat conservation and restoration.
- Conservation of agricultural lands.
- Planting to discourage graffiti on noise barriers.
- Erosion control and storm water pollution prevention.

Other Planting Goals:

- Aesthetic integration with the surrounding environment.
- Incorporation of feedback from the local community and stakeholders.
- Compliment significant visual or scenic resources.
- Maintenance of sightline requirements through placement, pruning or removal.
- Herbicide reduction to satisfy Department goals and community values.
- Water conservation through use of drought tolerant plants.

In addition to fulfilling functional and aesthetic goals, a well-planned landscape design incorporates plant material best suited to the unique site conditions. Describe project plant selection with regard to the following topics:

- Climate – potential for freezing, drought, high winds.
- Soils – type, compaction, salinity, pH and water table elevation.
- Steep slopes, aspect, runoff patterns and areas susceptible to erosion.
- Air quality.
- Site propensity for recurrent wildfires.
- Plant tolerance to commonly used herbicides.
- Plant tolerance of local or regional pests and diseases
- Competition from invasive exotic plant material and common weeds.
- Compatibility with adjacent plant communities.
- Community desires regarding plant use.

Irrigation Systems:

Describe the irrigation system concept:

- Sprinkler type used for each functional purpose.
- Use of Remote Irrigation Control System (RICS).
- Conversion of quick-coupling valves to permanent fixed-head systems.
- Water source - potable or nonpotable.

Irrigation Management:

Sound irrigation management requires an understanding of the interaction between plant water requirements, soils and climate. Water conservation results from irrigation management techniques that put this understanding in action. Water shortages are inevitable during the lifespan of a project so priorities should be established for periods of drought. Describe the following in the discussion on the irrigation system concept: Describe irrigation system design with regard to the following topics:

- California Irrigation Management Information System (CIMIS).
- Impact of climate upon plant material water requirements.
- Use of RICS Irrigation system
- Irrigation scheduling
- Drought tolerance of project plant material.
- Infiltration rate of water into site soils
- Irrigation concept for slope planting
- Water holding capacity of soils
- Water budget
- Moisture, wind and rain sensors

- Use of check valves
- Use of mulches for water conservation
- Selection of irrigation components
- Deep watering tubes

When a nonpotable water source is proposed for irrigation, the DIS should describe the following:

- Source
- Quality
- Quantity
- Reliability
- Availability
- Health/environmental considerations
- Testing of water quality, if required
- Impact on adjacent or nearby planting projects
- Cooperation with other potential users
- Unique irrigation equipment requirements (scrubber valves, etc)
- Identifying signage and markers
- Potential storm water quality issues

When a Remote Irrigation Control System (RICS) or automated irrigation sprinkler system is proposed, discuss the recommended water management practices that will be used to operate the new system utilizing existing maintenance resources. Describe the following:

- How the proposed irrigation system will fit into the District's overall automatic irrigation management plan;
- District expertise and ability to manage and operate the new system;
- Training needs, including who will provide training.

Traveler and Worker Safety

Describe proposed traveler and worker safety techniques including, but not limited to the following:

Relocating facilities which require maintenance work such as irrigation controllers, backflow preventers, remote control valves, and similar facilities, to protected areas or adjacent to the right-of-way fence.

Vegetation management techniques which reduce or eliminate recurrent maintenance activities such as pruning, irrigation work, herbicide application and mowing. Describe how the proposed design concept will help achieve the Department's chemical reduction goal of a 80% reduction in herbicide use by 2012. Describe as well other vegetation management techniques utilized, including:

- Removal of plant material which encroaches upon sight distances;
- Removal or replacement of aged and deteriorated plants;
- Planting of vines or the use of textures on noise barriers;
- Automation of irrigation systems (RICS);
- Stabilization of eroding slopes;
- Paving beneath guardrails and signs;
- Paving of slopes beneath bridge structures;
- Paving of narrow areas and additional gore paving;
- Placing of rock or other inert mulch materials to reduce herbicide use.

Safe worker access improvements which provide maintenance workers with safe access to roadway and roadside facilities that require regular maintenance:

- Maintenance vehicle pullouts;
- Maintenance access roads;
- Walk or vehicle access gates.

Maintenance

The DIS should describe the project's long term maintenance requirements and goals. These requirements and goals should be identified following discussions with District Maintenance. The DIS should describe the quality of the landscape project expected at the completion of plant establishment and post plant establishment, in terms of a Level of Service (LOS) score agreed upon by District Maintenance. These LOS scores for the initial and long-term maintenance of the project represent Maintenance’s long-term commitment to the success of the project.

Describe the procedures maintenance should follow for the planting and irrigation systems, as well as other landscape improvements. Identify requirements in terms of maintenance activity, criteria, and frequency/schedule for plant establishment, post plant establishment to 5 years, and beyond 5 years.

Describe the following applicable maintenance requirements:

- Graffiti control and removal
- Mowing, weeding and/or burning of grasses
- Pruning for plant health and safety (techniques and timing)
- Replacement and removal of tree stakes and protective cages.
- Control of escaped exotics or "volunteer" plants
- Removal of litter and debris
- Pesticide application
- Application of fertilizer, compost and soil amendments
- Irrigation schedule, water budgeting, RICS system capabilities
- Actions to be taken in the event of drought
- Replacement and removal of dead plants
- Placement or replacement of wood chips, bark mulch or inert materials
- Miscellaneous landscape components and furnishings, if applicable
- Pruning to maintain sight distance requirements.
- Maintenance requirements for any permanent storm water pollution prevention treatment BMPs.

Signatures

PROJECT LANDSCAPE ARCHITECT (responsible for project design)	*DATE*	*PHONE #*
DISTRICT LANDSCAPE ARCHITECT (signature denotes concurrence)	*DATE*	*PHONE #*
DISTRICT LANDSCAPE SPECIALIST (signature denotes concurrence)	*DATE*	*PHONE #*

APPENDIX GG – Project Data Checklists

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APPENDIX GG – Project Data Checklists

ARTICLE 1 Resident Engineer File Checklist

Landscape Architecture
√ LIST

Date Requested _____ Date of Reply _____

Co. Rte. PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
1. Irrigation products		
2. Water company service contracts		
3. Source of special plants		
4. Quantity calculation sheet (not a summary)		
5. Utility plans and correspondence		
6. Design Intent Statement		
7. Pressure calculation data		

Environmental
√ LIST

Date Requested _____ Date of Reply _____

Co. Rte. PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
1. Environmental document (FEIS/FEIR or negative declaration/FONSI or categorical exemption/categorical exclusion)		
2. Backup reports (noise, cultural resources, etcetera)		
3. Associated permits, licenses, agreements, and certifications; including biological opinions, if applicable		
4. Environmental commitment record		
5. Pertinent correspondence		

Materials
√ LIST

Date Requested _____ Date of Reply _____

Co. Rte. PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
*1. Materials report		
2. Other pertinent reports		

* If the materials report covers more than one construction contract, copies should be forwarded to the construction unit with the contract. Construction will re-use these copies for successive jobs.

Project Development
√ LIST

(Page 1 of 3)

Date Requested _____ Date of Reply _____

Co. Rte. PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
*1. Project approval document and/or supplemental reports (if prepared by design)		
2. Preliminary plans		
3. Cross-sections (include drainage profile)		
4. PS&E submittal		
5. Modified drainage report (if not included in PS&E submittal)		
6. Detailed analysis of contract quantities		
7. Dummy correspondence and dummy review correspondence		
8. Correspondence and comments peculiar to the project (if not in PS&E submittal)		
9. EDP data: a. Grid-grade sheet b. Terrain notes c. Roadbed notes d. Earthwork quantity sheet e. Earthwork detail sheet		

* If the project report covers more than one construction contract, copies should be forwarded to the construction unit with the first contract. Construction will re-use these copies for successive jobs.

Project Development
√ LIST

(Page 2 of 3)

ITEMS REQUIRED	DATE PROVIDED	REMARKS
10. Working drawings (if available to facilitate construction not in plans) a. Drawing of complete interchange where stage construction is involved b. Contour maps c. Edge of pavement profiles d. Grids e. Superelevations f. Coordinates		
11. Approved (vellum) striping diagram (and four prints)		
12. Monumentation data (approved or agreed layout for job monuments)		
13. Cost estimate, breakdown of lump-sum items if not included in analysis of quantities (structure quantities) a. Other - (itemize) b. Summary of pending items - (itemize)		
14. Work on contract for other agency (city, county, etcetera) a. Description of work to be done for other agency b. Name and address of other agency involved c. Person to be notified when work is done		
15. Names of individuals to contact in various public agencies		
16. Presidents of interested associations, with their address and phone numbers		

Project Development
√ LIST

(Page 3 of 3)

ITEMS REQUIRED	DATE PROVIDED	REMARKS
17. Names of other interested individuals—particularly those who have followed the design and may be critical of the State's highway program		
18. Public meeting reports and/or CTC hearing reports		
19. Copy of reduced as-builts		
20. Risk register and Risk Register Certification Form		

Cooperative Agreement
√ LIST

Date Requested _____ Date of Reply _____

Co. Rte. PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
1. Cooperative agreements with other agencies		

Hydraulics
√ LIST

Date Requested _____ Date of Reply _____

Co. Rte. PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
1. Drainage report (if not included in the PS&E submittal furnished by design unit)		

Maintenance
√ LIST

Date Requested _____ Date of Reply _____

Co. Rte. PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
1. Active encroachment permits (excluding those issued in response to a utility Notice to Relocate)		

Traffic
√ LIST

Date Requested _____ Date of Reply _____

Co. Rte. PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
1. Letter—disposition of salvaged equipment		
2. Letter—acceptance of work for other agencies		
3. Other pertinent information, letters of request, or complaints from cities, counties, or the general public—Caltrans' response—the concurrence of the other entities		

Right of Way
√ LIST

Date Requested _____ Date of Reply _____

Co. Rte.PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
1. Right-of-way clearance letter a. Status of land acquisition b. Building obstructions (1) Removal dates (by right-of-way) (2) Availability dates (to highway construction) c. Certification of right-of-way (1) Advertisement of project and/or (2) Award of contract		
2. Final certification of right-of-way for award of contract (if required)		
3. Complete list of parcels for project (includes status of parcel acquisition and notation as to contractual obligations, if any)		
4. Contractual obligations (by parcel)		
5. Borrow agreements		
6. Disposal agreements		
7. Right of entry		
*8. Service contracts		
9. Other - (itemize)		

* Refers to work performed in right-of-way during construction contract period by other than highway contractor and/or when resident engineer will perform inspection for right-of-way unit.

Right of Way Engineering
√ LIST

Date Requested _____ Date of Reply _____

Co. Rte. PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
1. Key map to define the hard copy number and record map number		
2. Print of hard copy		
3. Reverse chronoflexes of either: a. Record maps, with title blocked out (if record maps are prepared from the appraisal maps), or b. Skeleton of the record maps (if record maps are prepared independently from the appraisal maps)		

Utilities
√ LIST

Date Requested _____ Date of Reply _____

Co. Rte. PM _____ EA _____

Limits _____

_____
Signature of respondent

ITEMS REQUIRED	DATE PROVIDED	REMARKS
1. Utility relocation plans a. telephone b. gas c. electrical d. water e. fire alarm f. sewers (if not by contract)		
2. Utility relocation notices a. telephone b. gas c. electrical d. water e. fire alarm f. sewers (if not by State contract)		
3. Railroads * a. construction maintenance agreement b. letter of transmittal * c. service contracts d. letter of transmittal		

* Copy of authorizing PUC order in right-of-way engineering files.

APPENDIX HH - Public Involvement

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Project Studies Community Involvement Invitations (sample letters)

SAMPLE LETTER #1

(for project categories 1 and 2A only)
(See Chapter 22, Article 5)

Date
File

To: *Boards of Supervisors, City Councils*

Arrangements have been made for a meeting to be held on ___*date*___, at ___*time*___, in ___*room*____, ____*building*____, at _____*address*_____. The purpose of this meeting is to discuss the need, nature, type, and scope of studies to be undertaken relative to freeway (controlled access highway or conventional) development of State Highway Route ____*ID*____ between _____ and _____.

This meeting is being held prior to formal initiation of studies. Legislators, supervisors, councilmen, and representatives of interested local, State and Federal agencies and civic groups are being invited to attend.

Within 30 days following the meeting, it is requested that you furnish comments or concurrence as to (1) study objectives, (2) organization, (3) the time schedule for the study, (4) the study limits, and (5) whether or not an advisory committee is to be used during the study, as well as any other comments that you may wish to make. It is also requested at this time that you furnish any information on the location of historic properties that may be in the project vicinity and potentially affected by the proposal.

We cordially invite you to attend and participate in this meeting. It is hoped that the early involvement of all interested parties will enhance the effectiveness of cooperative planning. Individuals who need auxiliary aids for communication in order to participate in the meeting are invited to make their needs and preferences known to the Project Manager for this proposed project at (phone number) or TDD phone number (TDD phone number).

Sincerely,

District Director

cc: Division Chief, DOD, Attention: Public Meeting
(*cc one typical letter and the mailing list*)

SAMPLE LETTER #2

(for ALL project development categories)
(See Chapter 22, Article 5)

Date
File

To: *Legislators; Council Members; Supervisors; Representatives of Local, Regional, State, and Federal Agencies; Civic Groups, etc.*

Arrangements have been made for a meeting to be held on ___*date*___, at ___*time*___, in ___*room*____, ____*building*____, at _____*address*_____. The purpose of this meeting is to discuss the need, type, and scope of studies to be undertaken relative to _____*description of proposal*_____ between _____ and _____.

This meeting is being held prior to formal initiation of studies. Legislators, supervisors, council members, and representatives of interested local, State, and Federal agencies and civic groups are being invited to attend.

Items to be discussed at the meeting will include the need for the projects, the appropriate time schedule for the study, the most logical limits to be studied, the desirability of appointing an advisory committee to work with Caltrans in the development of studies, and the procedures to be followed. Also, we would welcome any suggestions you may have as to alternatives to be studied and any comments or suggestions on significant social, economic or environmental factors.

It is requested at this time that you furnish any information on the locations of historic properties that may be in the project vicinity and potentially affected by the proposal. Please indicate if you wish to be notified at the completion of historic preservation studies.

We cordially invite you to attend and participate in this meeting. It is hoped that the early involvement of all interested parties will enhance the effectiveness of cooperative planning. If you need auxiliary aids for communication in order to participate in the meeting, please make your needs and preferences known to the Project Manager for this proposed project at (phone number) or TDD phone number (TDD phone number).

Sincerely,

District Director

cc: Division Chief, DOD, Attention: Public Meeting
(*cc one typical letter and the mailing list*)

SAMPLE LETTER #3

(for ALL project development categories)
(See Chapter 22, Article 10)

Date
File

To: *State Senators, Assembly Members, Scenic Highway Advisory Committee, Groups, and Individuals*

This is to advise you that studies are being formally initiated relative to __*description of proposal*__ for the portion of State Highway Route ___*ID*___ in _____ County between _____ and _____. (*Include remarks further amplifying the study proposal*.) The attached map shows the general limits of the proposed study.

(A meeting was held in _____*city*_____ on ___*date*___ to discuss factors to be considered in the commencement of studies for this segment of Route _____. The study proposal incorporates the conclusions reached as a result of the meeting.)

The appropriate local governing bodies and agencies are also being notified at this time of the initiation of studies. During the course of these studies, we plan to work closely with these agencies and their staffs to exchange ideas and to assure that all pertinent factors are being considered. We would welcome any comments or suggestions concerning alternatives or social, economic, and environmental factors. (*Also make reference to working with designated advisory committees where appropriate.*)

It is requested at this time that you furnish any information on the locations of historic properties that may be in the project vicinity and your views on the effects that this proposal (and alternatives) may have on such properties. Please indicate if you wish to be notified at the completion of historic presentation studies.

[When sufficient engineering, environmental, and socioeconomic data have been developed, a public hearing will be held (or opportunity afforded) to discuss the project studies. The public hearing will be well publicized and you will be notified well in advance of the hearing time and location.]

We will be pleased to answer any questions you may have in regard to this project.

Sincerely,

District Director

cc: Division Chief, DOD, Attention: Study Initiation
(*cc one typical letter and the mailing list*)

SAMPLE LETTER #4

(for ALL project development categories)
(See Chapter 22, Article 10)

Date
File

To: *City Councils, Boards of Supervisors and affected State, Federal, Regional and Municipal Agencies*

Caltrans is formally initiating studies for __*description of proposal*__ of the portion of State Highway Route __*ID*__ in _____ County between _____ and _____. (*Include remarks further amplifying the study proposal.*) The attached map shows the general limits of the study area.

(A meeting was held in _____*city*_____ on ___*date*___ to discuss factors to be considered in the commencement of studies on this segment of Route ___*ID*___. The study proposal incorporates the conclusions reached as a result of the meeting.)

We would appreciate being advised within 30 days if you have any facilities or plans for development which might be affected by the proposal. If any conflicts become evident, we will work closely with you during the studies in an effort to develop alternatives which might afford a mutually acceptable solution. We would also welcome any other comments or suggestions you may have concerning alternatives to be studied or on significant social, economic and environmental factors. It is requested at this time that you furnish any information on the locations of historic properties that may be in the project vicinity and your agency's views on the effects that this proposal (and alternatives) may have on such properties.

[Caltrans will be preparing an environmental document for the project. Our preliminary studies indicate you are participating, or plan to participate, in the National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA). We are prepared to furnish you preliminary plans and technical data relative to any highway encroachments on a floodplain and/or floodway. We wish to establish ongoing coordination with you on this matter to assist you in meeting your responsibilities to FEMA.]

[When sufficient engineering, environmental, and socioeconomic data have been developed, a public hearing will be held (or opportunity afforded) to discuss the project studies. The public hearing will be well publicized and you will be notified well in advance of the hearing time and location.]

We will be pleased to answer any questions you may have in regard to this project.

Sincerely,

District Director

Attachment
cc: Division Chief, DOD, Attention: Study Initiation
(*cc one typical letter and the mailing list*)
(Note: FHWA's copy of letter should be marked "For Information Only")

Public Notice

public notice

Item 1, 2, 3, 4, or 5

Item 4, 5, or 6

Item 7 MAP

WHAT'S BEING PLANNED — **Item 8**

WHY THIS AD — **Item 9, 10, or 11**

WHAT'S AVAILABLE — **Item 12, 13, or 14**

WHERE YOU COME IN — **Item 15, 16, 17, 18, 19, or 20**

WHEN AND WHERE — **Item 21**

CONTACT — **Item 22**

Following pages provide a key by type of notice and text samples for the items on this Public Notice example.

Refer to Chapter 11, Article 2, for a discussion on public notices and publicity for public hearings, and Chapter 22, Article 5, for a discussion of publicity for community involvement.

PUBLIC NOTICE
(Required Items)

SEE PUBLIC NOTICE EXAMPLE ON PREVIOUS PAGE FOR LOCATION OF THE ITEMS IN THIS TABLE.

TYPES OF NOTICES

	ND/EA	ND/EA w/Opportunity	ND/EA w/Hearing	DEIR/DEIS	DEIR w/Opportunity	DEIR/DEIS w/Hearing	FEIR/FEIS	Opportunity for Hearing	Hearing
Headline	1&6	1&4	1&5	2	2&4	2&5	3	4	5
Map	7	7	7	7	7	7	7	7	7
What's being planned?	8	8	8	8	8	8	8	8	8
Why this ad?	9	9	9&10	9	9	9&10	11	-	10
What's available?	12	12	12	13	13	13	14	12	12
Where you come in	15	15	15	16&17	16	16	18	19	20
When and Where	-	-	21	-	-	21	-	-	21
Contact	22	22	22	22	22	22	22	22	22

Following pages provide text samples and explanations for the items on the Public Notice example.

Refer to Chapters 11 and 22 for further discussion.

PUBLIC NOTICE
(Sample Text & Explanations)

SEE PUBLIC NOTICE EXAMPLE FOR LOCATION OF THE ITEMS DESCRIBED BELOW.

Note: Standard wording is typed in regular typeface. Optional wording or guidance is typed in *italics*.

1. Notice of Intent to Adopt a ("*Negative Declaration" or "Mitigated Negative Declaration"*). Study results available.

2. Draft Environmental Impact *("Report" or "Statement" or "Report/Statement")* available for Route ___*(number)*___.

3. Final Environmental Impact *("Report" or" Statement" or "Report/Statement")* approved for Route ___*(number)*___.

4. Do you want a public hearing on changes proposed for Route ___*(number)*___?

5. Announcement of Public Hearing.

6. Changes proposed for Route ___*(number)*___.

7. Map (*prepare specifically to show major design features and enough detail of surrounding area to identify project location*).

8. CALTRANS (California Department of Transportation) is proposing to (*project type*) Route (*number*) in (*city OR county*) between (*intersection OR geographical location*) and (*intersection OR geographical location*). (*Add other major features.*)

   USE THIS PARAGRAPH WHEN APPROPRIATE, BUT NOT ON FEI("R" or "S" or "R/S") NOTICES:

   > *The proposed work will encroach upon wetlands [and/or a floodplain]. The project is being evaluated to determine if there are any practical alternatives to avoid this encroachment or, if not, to ensure that all practical measures are taken to minimize harm to the wetlands (and/or floodplain).*

   USE THIS PARAGRAPH WHEN APPROPRIATE- This is for compliance to CCR 15072(f)(5), the "Cortese List":

   > *The proposed work involves a site on a list enumerated under Section 65962.5 of the Government Code pertaining to hazardous wastes.*

   USE ONE OF THE FOLLOWING THREE PARAGRAPHS AS APPROPRIATE,BUT NOT ON FEI("R" OR "S" OR "R/S") NOTICES:

   > *The proposed work may have an effect on historic properties eligible for the National Register of Historic Places. CALTRANS is evaluating alternatives to determine if the project can avoid adversely affecting the property(ies) or, if not, if adequate mitigation measures can be incorporated into the project plans.*
   >
   > *OR*
   >
   > *The proposed work will have an effect on historic properties eligible for the National Register of Historic Places. CALTRANS has evaluated whether adequate mitigation measures can be incorporated into the project plans.*

OR

One or more of the alternatives being evaluated will have an effect on historic properties eligible for the National Register of Historic Places. CALTRANS has evaluated whether adequate mitigation measures can be incorporated into the project plans.

9. CALTRANS has studied the effects this project may have on the environment. Our studies show it (*will OR will not)* significantly affect the quality of the environment. The report that explains why it is called a (*Negative Declaration/("Initial Study" or "Initial Study/Environmental Assessment")) OR Environmental Impact ("Report" or "Statement" or "Report/Statement"*). This notice is to tell you of the preparation of the *(Proposed Negative Declaration and ("Initial Study" or "Initial Study/Environmental Assessment")) OR Draft Environmental Impact ("Report" or "Statement" or "Report/Statement"*) and of its availability for you to read (*and to offer the opportunity for a public hearing*).

10. A hearing will be held to give you an opportunity to talk about certain design features of the project with CALTRANS' staff before the final design is selected. The tentative schedule for the purchase of land for right of way and construction will be discussed, and CALTRANS' staff will explain the Department's relocation assistance for residents moved by the project.

11. The Federal Highway Administration (FHWA) and CALTRANS have approved the Final Environmental Impact *("Report" or "Statement" or "Report/Statement"*) *("FEIR" or "FEIS" or FEIR/S")*.

12. Maps for (*the Proposed Negative Declaration and ("Initial Study" or "Initial Study/Environmental Assessment") OR Draft Environmental Impact ("Report" or "Statement" or "Report/Statement"*) and other project information are available for review and copying at the CALTRANS District Office (*address*) on weekdays from (*time*) to (*time*). The (*Proposed Negative Declaration and ("Initial Study" or "Initial Study/Environmental Assessment")) OR Draft Environmental Impact ("Report" or "Statement" or "Report/Statement"*) is also available at (*address of other locations*).

13. You can look at or obtain the Draft Environmental Impact *("Report" or "Statement" or "Report/Statement"*) at the CALTRANS District Office (*address*) on weekdays from (*time*) to (*time*). Maps and other information are also available. There are also copies of the statement available at (*address of other locations*).

14. The *("FEIR" or "FEIS" or "FEIR/S")* which describe the project is now available to the public. It is being distributed to those who made substantive comments on the draft version or requested a copy.

15. Do you have any comments about processing the project with a Negative Declaration and the *("Initial Study" or "Initial Study/Environmental Assessment")*? Do you disagree with the findings of our study as set forth in the Proposed Negative Declaration? Would you care to make any other comments on the project? (*Would you like a public hearing?*) Please submit your comments (*or request for public hearing*) in writing no later than (*date*) to CALTRANS (*address*). The date we will begin accepting comments is

_____. If there are no major comments (*or requests for a public hearing*), CALTRANS will *(Request approval from the Federal Highway Administration and)* proceed with the project's design.

16. Have the potential impacts been addressed? Do you have information that should be included? Your comments will be part of the public record. If you wish to make a comment on the *("report" or "statement" or "report/statement"*) (*or request a public hearing*), you may submit your written comments (*or request*) until (*date*) to CALTRANS (*address*).

17. A public hearing will be held (*approximate date*) to discuss the proposals. The time and place will be announced in local newspapers.

18. You can look at or obtain the *("report" or "statement" or "report/statement"*)at the CALTRANS District Office (*address*) on weekdays from (*time*) to (*time*). Also, you can review the statement at (*name and location of other locations*).

19. If you would like a public hearing or wish to make any comments, write CALTRANS by (*date*) at (*address*). If there are no requests, CALTRANS will *(request approval from the Federal Highway Administration and)* proceed with the project's design.

20. If you can not attend the hearing, you can send your written comments until (*date*) to CALTRANS (*address*).

21. The hearing will be (*day, date, time*) at (*address*).

    USE THIS PARAGRAPH IN THE FIRST HEARING NOTICE:

    Individuals who require special accommodation (American Sign Language interpreter, accessible seating, documentation in alternate formats, etc.) are requested to contact the District (number) Design Division (or Public Affairs Office) at (phone number) at least 21 days prior to the scheduled hearing date. TDD users may contact the California Relay Service TDD line at 1-800-735-2929 or Voice Line at 1-800-735-2922. (or Caltrans at TDD phone number (TDD phone number)).

22. For more information about this study or any transportation matter, call CALTRANS at (*phone number*).

    USE THIS SENTENCE WHEN ITEM #21 IS NOT INCLUDED IN THE NOTICE:

    Individuals who require documents in alternative formats are requested to contact the District (number) Design Division (or Public Affairs Office) at (phone number). TDD users may contact the California Relay Service TDD line at 1-800-735-2929 or Voice Line at 1-800-735-2922. (or Caltrans at TDD phone number (TDD phone number)).

Record of Public Hearing

State of California
Business, Transportation, and Housing Agency
Department of Transportation
District_____

_____ _____
R.U. E.A.

RECORD OF PUBLIC HEARING

(Route location studies, freeway development, conventional development, widening, etc.)

OF

ROUTE _____

IN _____ COUNTY

POST MILE _____ TO _____

BETWEEN

_____

AND

_____

_____ POST MILES

____(DATE)____

_____(LOCATION)_ _____

_____(PRESIDING OFFICER)_____

CONTENTS

Title Page

See the prior page for a sample of the information desired. The information may be placed directly on the cover or on the first page.

Table of Contents

Contents of the Record.

Resume of Hearing

State the time (duration) and number in attendance at the hearing. List the Hearing Officer, Caltrans staff, and local officials in attendance.

Handouts

Include a copy of each brochure or pamphlet prepared for the hearing.

Index of Speakers

The index of speakers or commenters should include their affiliation, if known, and the first page reference of each appearance in the transcript. It is not necessary to make a page reference to the Hearing Officer to members of the panel participating in the hearing.

Transcript of Hearing

Throughout the text, whenever a speaker refers to an exhibit, document, map, etc., an appropriate page reference must be placed in the margin of the transcript to indicate the location in the Record for that particular item. Otherwise, a great deal of hunting will be required to find the item; in Records of larger hearings the correct item may not be found. For added convenience, consider inserting the exhibit in the transcript text where it is mentioned. Preferably the exhibit will not have to be placed on the backside of the page, but even that is better than in the back of the volume.

Open Forum Questions and Answers

When the hearing format is an Open Forum format, staff members who answered questions from the audience should create a recap of questions asked and answers given.

Displays

Reproductions of all exhibits, maps, typical sections, sketches, models, photos, etc., displayed or presented at the hearing by Caltrans or any other party should be included in the Record. This does not include documents such as a DED, Noise and Air Study Reports, etc., which are included by reference.

Documents for the Record

Copies of statements, resolutions, petitions, letters, and exhibits received while the Record is still open must be included. Where the number of documents is particularly large, they should be subdivided into group. For example: local governing bodies, community organizations, State and federal agencies, individuals, etc.

Documents Requiring Response

Documents that required a response must include the response. This treatment will afford some measure of comparability, as far as the Record is concerned, with questions that were answered at the hearing.

Other Materials

Newspaper articles published prior to the hearing notice and after the close of the Record should be attached to the letter transmitting the hearing record. Also include other material and pertinent correspondence received after the closing of the Record. Only items specifically submitted for the Record are to be included.

Publicity

The Record should include reproductions of all newspaper articles, published press releases, paid notices, etc., for the period from first announcement of the hearing to the closing of the Record.

Invitations

Include a copy of the typical letter of invitation to the hearing, as well as a list of those receiving the invitation. An appropriate notation should be placed beside the names of those who attended the hearing.

Public Hearing, Presiding Officer Letter of Confirmation (sample)

SAMPLE LETTER

(See Chapter 11, Article 6)

Date
File

Dear_____:

Thank you for agreeing to act as presiding officer at the public hearing to receive comments on _____*(brief description of Hearing purpose)*_____.

The hearing has been set for _____ p.m. on ____*(date)*_____ in the _____, California.

Messrs. _____, _____, _____, of Caltrans and _____, _____, _____, of _____ will be sitting on the Hearing panel with you. We plan to hold a briefing session for the members of the Hearing panel on ___*(date or open)*___.
We will keep you advised on this and other details as they develop.

The following are attached for your information: schedule of key events; news release; letter of general invitation (and its mailing list); a copy of a paid advertisement, with a list of insertions; and a copy of the Draft environmental document (revise as appropriate).

If you have any questions or wish to further discuss arrangements, please call:
_____*(name)*_____ at _____*(phone)*_____.

Sincerely,

_____

APPENDIX II - Rescissions

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CTC Resolution G-15

Passed by CTC
FEB 29, 1980

RESOLUTION NO. G-15 AS AMENDED OUTLINING PROCEDURE FOR RECYCLING ADOPTED FREEWAY LOCATIONS AND POLICY FOR CONDITIONAL RETENTION OF ADOPTIONS

WHEREAS, monetary and other constraints have identified the need for a reevaluation of the implementation of the State Highway System; and

WHEREAS, a number of adopted freeway routes are not likely to be constructed as State freeways within the foreseeable future; and

WHEREAS, retention of the adoptions may not be desirable and may subject the Transportation Commission to possible continuing expense for acquisition of property on a hardship basis; and

WHEREAS, in special cases, some adoptions that would be otherwise rescinded may be retained on the condition that the local agencies involved assume responsibility for further hardship and protection acquisition; and

* NOW, THEREFORE, BE IT RESOLVED, that the procedure outlined by the diagram on attached Exhibit A be followed in recycling adopted freeway routes; and,

BE IT ALSO RESOLVED, that after the Transportation Commission has passed a resolution giving notice of its intention to consider rescinding a freeway route adoption and disposing of any acquired rights of way, the steps outlined below shall be followed:

1. The Department of Transportation, in each case, upon being authorized to do so by resolution of the Transportation Commission, shall notify the appropriate local and regional agencies of the intention to consider rescinding the freeway adoption. Such notifications shall request comments within sixty days or any additional information the Transportation Commission should have prior to its final consideration.

   Concurrently, the Department of Transportation shall also notify local and regional agencies of the intent to initiate disposal of any acquired rights of way if the adoption is rescinded, requesting comments on disposition uses.

2. At the expiration of the notification period, the Department of Transportation shall submit a report to the Transportation Commission analyzing any additional information received within the 60-day comment period together with a further recommendation on whether to proceed with the rescission action.

* (Exhibit A has been modified and moved to Figure 4, Chapter 23 of the PDPM)

3. Upon receipt of the Department's recommendation, the Transportation Commission may at its own option, because of controversy or lack of local consensus, hold a hearing at a location which is reasonably convenient to the communities affected by the proposed rescission, to the general public, and to the Commission in the discharge of its regular business.

4. If the Transportation Commission determines the freeway location should be vacated, it shall adopt an appropriate resolution rescinding the freeway adoption and authorizing disposal of any acquired rights of way.

5. Upon rescinding action by the Transportation Commission, the Department shall proceed with timely disposition of any acquired rights of way.

BE IT FURTHER RESOLVED that, in those special cases where the Transportation Commission agrees to suspend consideration of rescinding a freeway route adoption if the local agencies enter into an agreement to assume responsibility for further hardship and protection acquisition, agreements for hardship and protection acquisition shall be based on the responsibilities and provisions outlined below for either Option 1 or Option 2, depending upon the applicable conditions:

Option 1

The Department will enter into a formal agreement with the involved local agency or agencies.

Under this option, the local agencies would:

1. Pay 100 percent of the capital outlay cost of the hardship or protection acquisition, any benefits required under the California Uniform Relocation Assistance and Real Properties Act, and the cost of necessary environmental studies.

2. Accept title in the local agency's name and be responsible for maintenance and liability on any acquired parcels. The local agency will execute the necessary joint powers agreement authorizing the State to acquire property for the local agency.

3. Accept the State's established practices for determination of property owner eligibility for a hardship or protection acquisition. The State's decision on eligibility would be final. If a local agency failed to provide capital funds to acquire an eligible hardship or protection acquisition parcel, the State would be relieved of any further obligation to retain the adoption. The Transportation Commission would be immediately advised and requested to proceed with rescission if a local agency refused to proceed with a hardship or protection acquisition.

4. If at some future date the State budgets funds for normal right of way acquisition, the State would purchase any acquired parcels at the local agency's costs at time of original acquisition and title transferred to the State. This does not preclude the local agency's donating the property at this later time as a means of advancing construction. Maintenance or liability costs during the period title was vested in the local agency's name would not be reimbursable.

5. If the route adoption were subsequently rescinded, the State would be relieved of all obligations. The local agency would be free to dispose of any properties acquired in its name and would receive all proceeds from sales. The local agency would agree not to downzone properties previously acquired by the State.

Under this option the State would:

1. Assume the administrative costs and staffing for necessary engineering and acquisition activities.

2. Assume responsibility for maintenance and liability on parcels previously acquired by the State and for inverse condemnation actions (Klopping) that may arise because of retention of the adoption as a whole.

3. Notwithstanding the above, be released to reconsider rescission of the adoption, if inverse action liability suits should become excessive in the State's opinion.

Option 2

This option assumes Federal-aid Urban (FAU) or other Federal or local funds will be allocated by the local authorities for hardship and protection acquisition. It is limited to routes that provide important regional service and that have environmental clearance to purchase rights of way. Under this option, the State would provide an amount equivalent to the matching share for FAU participation current at the time (now about 14%). Routes of important regional service are defined as those serving or connecting primary transportation corridors of the region. They must be included in the Regional Transportation Plan.

The Department will enter into a formal agreement with the involved agency or agencies.

Under this option the local responsibility would be to:

1. Pledge FAU or equivalent other Federal or local funds for hardship and protection acquisition, including that necessary for support costs (i.e., the Federal ratio of all costs, including capital outlay for acquisition and RAP costs and necessary overhead for engineering, appraisal, acquisition, RAP, and environmental studies).

2. Accept the State's established practices for determination of property-owner eligibility for a hardship or protection acquisition. The State's decision on eligibility would be final. If FAU funds or equivalent local or Federal funds were not available to acquire an eligible hardship or protection acquisition parcel, the State would be relieved of any further obligation to retain the adoption. The Transportation Commission would be immediately advised and requested to proceed with rescission if a local agency refused to proceed with a hardship or protection acquisition.

3. If at some future date, the State budgets funds for construction which will utilize the acquired parcels, the local authorities will not be reimbursed for any acquisition costs incurred.

4. If the route adoption is eventually rescinded, properties are to be disposed of at fair market value with the net proceeds to be divided between the contributing parties on the same ratio as purchased, subject to meeting any applicable Federal requirements. The local authorities will not downzone properties previously acquired by the State or acquired under the provisions of Option 2 where there is participation by the State.

Under this option the State would:

1. Provide the matching share for FAU participation (or the equivalent to FAU if other funds are used) in acquisition and support costs. The State's staff would undertake the necessary work.

2. Accept title in the State's name and be responsible for maintenance and liability on any acquired parcels. The State would continue to have responsibility for inverse condemnation actions (Klopping) that may arise because of retention of the adoption as a whole.

3. Notwithstanding the above, be released to reconsider rescission of the adoption if inverse action liability suits should become excessive in the State's opinion.

Special Circumstances:

It is recognized there may be special circumstances that make a route segment not fully adaptable to the provisions of Option 1 or Option 2. In these instances, deviations from the standardized provisions are to be submitted to the Transportation Commission for review and concurrence.

BE IT FURTHER RESOLVED, that after the Transportation Commission has passed a resolution giving notice of its intention to suspend consideration of rescinding a freeway route adoption, the involved local authorities must agree within 120 days to assume responsibility for further hardship and protection acquisitions and to enter into agreements as outlined above. Hardship or protection acquisition parcels approved prior to the Transportation Commission's Notice of Intent Resolution and during the specified 120-day period will continue to be the full responsibility of the State. After 120 days, the Transportation Commission may grant an extension until the agreement is executed subject to local assumption of all financial responsibility for hardship and protection acquisitions. Failure of the local authorities to act after 120 days will relieve the State of any further obligations and the Transportation Commission will proceed with rescission consideration of the adoption and disposal of previously acquired rights of way.

BE IT FURTHER RESOLVED, that Resolution No. G-8 adopted by the Commission on May 19, 1978 is hereby rescinded.

Preparation Guidelines for Route Inventory Report

Application

The following outline for a Route Inventory Report should be used when considering rescission of adopted freeway locations, as well as for conditional retention of freeway adoptions or locations.

Procedures

Follow the procedures that are described in Chapter 23 and those described in CTC Resolution G-15 in this Appendix.

Outline For
ROUTE INVENTORY REPORT

Route Description

- Route Segment Description
  - Limits
  - Type of facility originally planned
  - Systems functional classification (F&E, Scenic Highway Master Plan, Interregional Road System, National Highway System)
  - Functional classification
  - Type of regional and State-wide service
- Route Adoption
  - Date
  - Reason for adoption
  - Controversial aspects (at time of adoption and now)
  - Dates of Freeway Agreements
- Systems Planning
  - Concept as described in the Route Concept Report
  - Describe the route's function in the regional network.
  - Describe any impacts/effects of rescission on the adjacent regional network.
  - Describe the need for, and cost of, improving adjacent facilities if the route is rescinded.
- Design
  - Number of lanes and median width of original proposal (or subsequent modifications)
  - Percent complete
  - Unusual problems
  - Engineering costs to-date

  - Status of environmental document

- Existing Highway
  - Description
  - Existing ADT
  - Accident rates (total, severity and fatality by segment as appropriate)
  - Capacity adequacy

- Forecasted Traffic
  - Forecasted traffic on existing routing, in segments as appropriate (or may be expressed as percentage increase above existing traffic)
  - Traffic split between existing facility and adopted routing, if in existence (can give numbers or percentages for traffic forecast year)
  - Traffic forecasts for the adjacent network with and without the adopted route

- Alternatives
  - Current construction and right of way cost of proposal on the adopted routing
  - Current construction and right of way cost of downscoped or stage construction possibilities on the adopted routing
  - Costs and appropriateness of improvements to the existing highway needed to accommodate forecasted traffic
  - Other possibilities

Local and Regional Plans

- Do the local general plans show the freeway?
- What does the regional transportation plan show or say regarding the route segment?
- Summarize development trends along the route corridor.
- Are there any local or regional studies under way having a bearing on the route segment?

Right of Way

- Past acquisition (parcels, acquisition cost, parcel types including number of single family residences and number of living units in multi-family parcels)
- Future anticipated acquisition for hardship and protection
- Management problems
- Impacts if disposed of or kept
- Disposal value, including consideration of contractual obligations and possible RAP payments
- Reasons why disposal value is lower or higher than acquisition cost

Local Staff Reactions

- Summarize discussions with local staffs.

Conclusions

- State the conclusions, taking into consideration the eight criteria listed in the second paragraph of Chapter 23, Article 9.

  If the proposed rescission has special circumstances that are not in conformance with the G-15 options, provide a full description and justification for recommending CTC approval of a nonconforming rescission.

- District recommendation

Maps

- Vicinity map
- Route Adoption map
- Other maps as needed

APPENDIX JJ – Preparation Guidelines for Resolution of Necessity

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APPENDIX JJ – Preparation Guidelines for Resolution of Necessity

ARTICLE 1 Resolution of Necessity Appearance Fact Sheet

The fact sheet should be kept to a single page. The design unit usually completes the project data portion while the right-of-way unit completes the parcel data portion. Standard wording is typed in regular typeface and project-specific wording and guidance is typed in italics. The following is the fact sheet template with the project identifiers placed in the header and the date added to the footer.

District - County - Route - Begin Post Mile/End Post Mile
Expenditure Authorization (EA) – Project Number

Resolution of Necessity Appearance Fact Sheet

PROJECT DATA

Location:	*What highway in what county or city*
Limits:	*Between what major streets or landmarks*
Contract Limits:	*Use if project is broken down into several contracts*
Cost:	*Capital outlay right-of-way cost estimate and capital outlay construction cost estimate*
Funding Source:	*State (includes Federal-aid), local, or other such as: State Transportation Improvement Program (STIP) or State Highway Operation and Protection Program (SHOPP)*
Number of Lanes:	*Number of lanes; designate between mixed flow and high-occupancy vehicle* Existing: Proposed:

Proposed Major Features: Interchanges: *List each street having an interchange*
Other: *Such as high-occupancy vehicle (HOV) interchanges, frontage roads, city street widening or shoulder widening that is affecting parcel*

Traffic Volumes: Existing (*year*): average daily traffic (*ADT)*
Proposed (*year*): average daily traffic (*ADT)*

PARCEL DATA

Property Owner: *Name of owner(s)*

Parcel Location: *For example: 12 First Avenue, Any Town, California; at the corner of First Avenue and Main Street, west of Route 99*

Present Use: *Residential, agricultural, industrial, business district; approximate number of tenants, General Plan zoning*

Area of Property: *Total area of larger parcel in acres or square feet*

Area Required: *List each sub-parcel number, the corresponding area of acquisition, type of acquisition (fee, easement, etcetera) in acres or square feet*

ARTICLE 2 Appearance Information Sheet

Standard wording is typed in regular typeface and project-specific wording and guidance is typed in italics. The following is the information sheet template with the project identifiers and owner's name placed in the header and the date added to the footer.

District - County - Route - Begin Post Mile/End Post Mile
Expenditure Authorization (EA) – Project Number
Property Owner's Name

Appearance Information Sheet

Under the eminent domain law, a property owner whose property is to be considered for a resolution of necessity has the right to appear before the California Transportation Commission (CTC) to question whether:

- The public interest and necessity require the proposed project.
- The proposed project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury.
- The property sought to be condemned is necessary for the proposed project.

The CTC has no jurisdiction to set compensation or deal with issues other than those specifically listed above.

The CTC should expect an appearance at its ___*(suggested CTC meeting date)*___ meeting by ___*(owner or representative)*_ __ opposing the proposed acquisition of ___*(briefly describe extent and type of acquisition)*___. *(Briefly state the project for which the acquisition is needed and the relationship of the needed property to the overall area in acres or square feet of the ownership.)* The full amount of the approved appraisal has been offered to ___*(owner)*___.

PARCEL DESCRIPTION

Describe any pertinent features of the parcel—how used, area in square feet and acres, topography, buildings, access, etcetera.

Give the status of other parcels required for the project: total parcels needed; number of parcels acquired; number of parcels under order for possession; and number of other owners expected to request appearance before the CTC.

PROPERTY OWNER'S CONCERNS

Provide a listing of the owner's primary concerns: compensation; design features; timing of the acquisition; lack of replacement housing; etcetera.

Quote or paraphrase the property owner's objections to the project.

Give a description of any design or right-of-way modifications suggested by the owner.

DISTRICT'S RESPONSE

Include the district's response to each concern or objection and the district's opinion on the feasibility of the owner's suggestions and the basis for the district opinion (why they are or are not feasible).

NEED FOR PROJECT

Give the reasons why the overall project is necessary—including, as appropriate, a description of the existing highway, current and design year traffic volumes, accident data and statewide rates, other warrants, etcetera. Discuss the project's priority in relation to other projects in the district or region.

PROJECT PLANNING AND LOCATION

Describe the proposed project. Include historical background as appropriate. Give dates of project report and environmental document approval, current construction cost, State Transportation Improvement Program (STIP) or State Highway Operation and Protection Program (SHOPP) programming, source of funding, right-of-way certification date, Ready to List (RTL) date and tentative advertising date.

Give the reasons for the specific project location and/or design requirements. Discuss alternatives that were considered and the reasons for their rejection.

Describe other alternatives to the proposed acquisition that have been considered by the district (such as: modified access control, construction obligations to offset concerns, a lesser project, etcetera).

NEED FOR SUBJECT PROPERTY

Discuss the need for acquiring the individual parcel—could it be avoided? Discuss whether or not the project's impact on the owner's property could be lessened by reducing or modifying the planned right-of-way acquisition. What would be the effects of avoiding the parcel on costs and on impacts to other properties and facilities?

Include other pertinent factors.

DISCUSSION

This section should discuss other issues raised by the property owner or contain more detailed elaboration of the issues of project need, location, and design where challenged by the property owner.

Give the district's opinion of the potential for settling the parcel prior to the CTC meeting.

Provide an assessment of the willingness/availability of the owner to meet with the district (due to business, employment, or other reasons).

DISTRICT CONTACT LIST

Identify the appropriate contact person(s) in district right-of-way and design functions who can provide additional detailed information on the project (such as: right-of-way agent, project manager, etcetera.), including mailing information and phone numbers. If the district elects to identify a project point person as a single point of contact, please include here.

DISTRICT'S REQUEST FOR CONDEMNATION PANEL REVIEW MEETING

I have personally reviewed the attached documents and have actively participated in the District Condemnation Evaluation Meeting and the development of the District's position that requires the proposed property acquisition. I agree with the project and parcel needs as described and attest to the accuracy of the information enclosed. I recommend that the District Director summon the Condemnation Panel to begin review of this project.

_____

Deputy District Director, Right-of-Way

_____

Deputy District Director, Design

I have personally reviewed the attached documents and have actively participated in the development of the District's position that requires the proposed property acquisition. I agree with the project and parcel needs as described and attest to the accuracy of the information enclosed.

By way of this Appearance Information Sheet, I summon the Condemnation Panel to begin review of this project in pursuit of a Resolution of Necessity action through the CTC.

_____

DISTRICT DIRECTOR

(District Director or a Deputy District Director from the district/region) will be the district's representative to attend the CTC meeting where the Resolution of Necessity action will be presented. It is understood that this representative will conduct the presentation before the CTC if the Assistant Chief Engineer is not available, and must be able to address project history and local issues if raised by the Commissioners or the property owner. This representative will also be an active participant during the draft presentation at the Headquarters Resolution of Necessity Dry Run.

ATTACHMENTS:

Project Map	*Furnish a clear print of the project title sheet. The location of the subject parcel is to be indicated on the print.*
Parcel Map	*Furnish a clear print showing relationship of the property needed to the total parcel and overall right-of-way requirements. Important topographic features should be shown, including planimetrics.*
Plan Sheets	*Furnish clear prints of plan sheets on 500:1 scale with geometric designs as necessary to illustrate issues.*
Chronology	*A chronology of official contacts or attempted contacts with the property owner (or representative) involving acquisition and formal offers must be included with this Appearance Information Sheet (AIS). Include also major project events accomplished and scheduled, including: public hearing date, environmental document approval date, right-of-way certification date, Ready to List date, advertising date, contract award date, and project completion date.*
Project Report	*Furnish a copy of the approved project report or appropriate scoping document along with any supplemental documents to support the current project purpose-and-need. Include all project report attachments identified in Appendix K – Preparation Guidelines for Project Report (especially the environmental document and the right-of-way data sheet).*

Displays for CTC meetings will be developed by the districts from modified or enlarged project and parcel maps obtained from computer-aided design and drafting (CADD) files, or may be special combinations thereof to best illustrate the issues involved. Contact the Headquarters Division of Design Chief, Office of Project Support or the Assistant Chief Engineer to discuss special situations.

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APPENDIX LL – Utility Policy Certification and Utility Matrix

ARTICLE 1 Overview

Utility Policy Certification

The utility policy certification is required for all projects developed for the State Highway System to confirm compliance with State law and Caltrans' policy. The project engineer must certify that both the determination and the presentation of the utilities shown on the project plans conform to the policy in Chapter 17 – Encroachments and Utilities.

For projects administered by Caltrans and others, the utility policy certification is a mandatory attachment to the plans, specifications, and estimate (PS&E) submittal and must be signed by a California registered civil engineer.

Utility Matrix

The utility matrix is used to organize utility information for individual projects. The project engineer must provide the Caltrans district utility coordinator with a utility matrix for facilities within the project limits. The utility matrix may be used as an attachment to the utility policy certification, but is not required.

If any portion of the utility matrix is not applicable to a specific project, fill in section as "Not applicable."

ARTICLE 2 Templates

This article is for the templates associated with this appendix. When using the templates, delete any italicized text within the body of the document. The italicized text provides instructions for template users and does not provide any value to the final document.

The utility policy certification template is available at:

http://www.dot.ca.gov/hq/oppd/pdpm/templates/apdx-ll-template1.docx

The utility matrix template is available at:

http://www.dot.ca.gov/hq/oppd/pdpm/templates/apdx-ll-template2.xls

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APPENDIX QQ – Preparation Guidelines for Survey Files

CHAPTER 1 Overview

This appendix contains guidance for the preparation of the survey file on all projects implemented by Caltrans. These guidelines provide information to be used with the policies and procedures described in Chapters 3 and 15 of this manual.

Survey File

The **survey file** is a component of the design package when surveying efforts are required for the construction of a project. The survey file contains all of the data necessary for the project surveyor to meet the needs of the resident engineer's staking requests in a timely and effective manner. The project engineer transmits the survey file to the survey unit by the ready to list (RTL) date. The survey file must be developed in accordance with Chapter 3.6 of the *CADD Users Manual* and Chapter 12 of the Surveys Manual. The **survey file checklis**t shown in Chapter 3 of this appendix identifies items that are typical survey file deliverables. The information, in both hardcopy and electronic format, are critical to the construction of a project.

At the beginning of the project the project engineer should verify if surveying efforts are or are not required for the construction of a project. The scope of the project should be reviewed with the project surveyor to determine the surveying needs. If a survey file is needed for the project, include the surveyor as part of the project team. For projects that do not require the delivery of a survey file, e.g. a CAPM project, the project surveyor and the project engineer shall sign the verification of survey file delivery form as "survey file not required."

Different project types may not require all of the deliverables listed in the survey file checklist. The project surveyor is responsible for determining the level of information that will be used for construction stakeout. The project engineer should solicit input from the project surveyor in a focused project team meeting to identify the required submittals on the survey file checklist as soon as the scope of the project is well defined. This meeting should occur no later than the initial constructability review phase or as soon as possible for projects that do not require a constructability review, e.g. minor projects. If the scope of the project changes additional input may be required. The survey file checklist should be used to ensure that the items required for construction are provided.

Build the survey file as you design the project. The survey file is comprised of components developed by the roadway design software and must contain data that accurately represents the contract plans. It is important to note that data contained in the

survey file may also be transferred to the contractor for use in machine guidance applications.

Provide interim survey files to the project team as a part of the constructability review. Update survey files to reflect design changes made as a result of each constructability review. This will ensure that the survey file is complete and accurate at the time of its final transmittal by RTL. Interim files should also be provided for projects that do not require a constructability review, e.g. minor projects, throughout the development of the project. The major benefit is that errors or omissions can be identified at an early stage and not under the pressure of construction or after the mistake is built. Errors discovered during construction could require costly change orders.

The final complete package should be delivered no later than RTL unless an alternate delivery schedule has been arranged. If mutually agreed upon by the project engineer and project surveyor, a submittal date after RTL but before advertisement may be identified for items not available at RTL.

The delivery of the survey file is identified as a performance indicator in the PS&E submittal memorandum found in the *Ready to List and Construction Contract Award Guide*. The final delivery date shall be documented in the memorandum and the "Verification of Survey File Delivery" form, shown in Chapter 3 of this appendix, shall be completed and submitted to the district office engineer as a deliverable required to obtain the project's RTL status.

If revisions are made to the project after delivery of the survey file, all of the affected items should be resubmitted to the project surveyor.

The survey file checklist templates, shown in Chapter 3 of this appendix, provide a listing of the survey support information that may be required for the project and are to be used as an aid in developing the survey file.

Survey File Preparation

Project Engineer Roles

As noted in Chapter 2 of this manual, the project engineer is in "responsible charge" of preparation of appropriate project development documents (PSR, project report, etc.) and the project design effort. When projects do not require an engineer, i.e. highway planting projects, the person responsible for the project will be considered the project engineer.

The project engineer is responsible for including the project surveyor in any pertinent meetings, communications, and e-mails pertaining to the constructability of the project. When the scope of the project is well defined, the project engineer should meet with the project surveyor, no later than the initial constructability review phase, to identify the required submittals and preferred electronic formats on the survey file checklist. A preliminary survey file should be prepared at the 60% constructability stage and the project engineer will meet with the project surveyor for this review. An updated survey

file should be compiled according to the survey file checklist for review at the 95% constructability stage. The project engineer should work with the project team to address constructability concerns before delivering the final survey file at RTL.

Project Surveyor Roles

The project surveyor represents the surveying function on the project team and is responsible for participating in the constructability review and the preparation of the data required for construction.

When the scope of the project is well defined, the project surveyor should meet with the project engineer, no later than the initial constructability review phase, to identify the required submittals and preferred electronic formats on the survey file checklist. Specific needs for the project should be discussed throughout the constructability review process and should be noted on the survey file checklist or the Additional Instructions form shown in Chapter 3 of this appendix. The project surveyor is responsible for reviewing the data furnished by the project engineer throughout the constructability review process for completeness and discrepancies, advising the project engineer of all discovered survey constructability issues. A review will be made of the final survey file delivered at RTL in preparation for construction.

Survey File Delivery

The project engineer and project surveyor should mutually agree upon an appropriate method for delivery of the electronic deliverables. Electronic data can be delivered by e-mail, on a CD or placed in a directory accessible by both parties. If the files are to be placed on a server, the network path should be noted on the project reference list provided in Article 3 of Chapter 3 of this appendix. The project surveyor should be notified when the files are in place.

The designated number of requested hardcopies, if any, should be sent to the project surveyor.

CHAPTER 2 Guidelines for Compiling Survey Files

ARTICLE 1 General

See Chapter 15 of this manual, Chapter 2 of the *Plans Preparation Manual,* Chapter 3 of the *CADD Users Manual*, and the Project Development Workflow Tasks (PDWT) for more information about the requested items and electronic formats.

The templates included in Chapter 3 of this appendix identify items that are typical survey file deliverables. The rows designated as "Other" on the survey file checklist and the Additional Instructions form should be used to identify items that are not listed on the forms, but are specific to the project. These items should be discussed, clarified, and documented early in the constructability review process.

Electronic Format of Project Deliverables

All deliverables shall be in electronic format unless specified otherwise as "hardcopy". The project surveyor and the project engineer should mutually agree upon formats known to be compatible with the current Caltrans design software. Chapter 3 of the *CADD Users Manual* lists the possible electronic formats for each of the project deliverables. The agreed upon format should be noted on the survey file checklist.

Alternate electronic formats are not recommended, but the project engineer may discuss the possibility with the project surveyor prior to the constructability review process. If acceptable, the alternate format should be noted on the checklist.

ARTICLE 2 Information Referenced in the Survey File Checklist

The survey file checklist template is provided in Article 1 of Chapter 3 of this appendix.

Project Information

District-County-Route-Post Mile-EA

The post mile should be given to the nearest 0.1 mile.

Project Engineer

Provide the project engineer's contact information.

Engineer Preparing Survey File

The engineer compiling the survey file should provide contact information in case the project surveyor has any questions about the deliverables.

Project Surveyor

Provide the project surveyor's contact information.

Structures Engineer

Provide the structures engineer's contact information.

Construction Area Engineer

Provide the construction area engineer's contact information.

1. **Attachments**

The contact list, datum listing, and project reference list are required components of the survey file. The "Additional Instructions" form should only be included when necessary.

Contact List

A copy of the contact list prepared for the resident engineer file is a required component of the survey file.

Datum Listing

A completed datum listing is a required component of the survey file. See Article 3 of this chapter for more information about completing the template.

Project Reference List

A completed project reference list is a required component of the survey file. See Article 4 of this chapter for more information about completing the template.

Additional Instructions

See Article 5 of this chapter for more information about completing the template.

2. **Project Deliverables**

The deliverables must accurately represent information depicted on the final contract plans to prevent delays and costly mistakes. Different project types may not require all of the deliverables listed in the survey file checklist. The project surveyor should indicate with a checkmark in "Requested by Surveys" all requested items. The project engineer should indicate with a checkmark in "Included" those items prepared and delivered. The project engineer should indicate with a checkmark in "Confirmed" when they have verified the delivery of an item.

Contract Plans

The project engineer shall provide a copy of the PS&E plans to the project surveyor at the time of submittal to the district office engineer. The final set of plans that are available at advertisement should also be transmitted to the project surveyor. To ensure the transmittal of the final plans, the project engineer should include the project surveyor in the distribution list. The project engineer should communicate with the project surveyor to verify delivery of the plans.

Note: After the project is awarded, the project engineer should provide any addendums and revisions made to the plans, as well as an updated survey file if necessary.

Chapter 2 of the *Plans Preparation Manual* contains standards and guidance for the development of the contract plans.

Project Control

The surveyor performing the preliminary survey work is responsible for establishing and documenting the control used during the collection of the topographic data and any additional control required. The control must be documented in accordance with Section 2-2.4 of the Plans Preparation Manual and Chapter 9 of the Surveys Manual. This control should subsequently be used for construction staking.

This data is typically readily available to the project surveyor. In the event of brokered or consultant work, the project surveyor may not have access to this data. If requested, the project engineer is responsible for the transmittal of the requested deliverables from the responsible surveyor or contract manager.

Topography

The surveyor performing the preliminary survey work is responsible for collecting and compiling the topographic data in accordance with Caltrans' standards.

This data is typically readily available to the project surveyor. In the event of brokered or consultant work, the project surveyor may not have access to this data. If requested, the project engineer shall be responsible for the transmittal of the requested deliverables from the responsible surveyor or contract manager.

Chapter 3 of the *CADD Users Manual* contains standards, formats, and guidance for the development of topographic data.

Base Map

Chapter 3 of the *CADD Users Manual* contains standards, formats, and guidance for developing base maps.

Alignments

Alignments are an integral part of the design and construction staking processes. All roadway alignments depicted on the contract plans should be included in the survey file.

In addition to roadways, other alignments that may be requested include:

- Flow line of curb returns and islands.
- Pullouts that are not parallel with roadway alignments.
- Ditches not depicted in cross sections or slope stake listings.
- Earthwork and limits not referenced to roadway alignments (such as clearing and grubbing or environmentally sensitive areas).
- Curves connecting two alignments which cannot be staked completely from both alignments.
- Fence lines not controlled by right of way.

Chapter 3 of the *CADD Users Manual* contains standards, formats, and guidance for the development of alignments.

Profiles

Profiles are an integral part of the design and construction staking processes. All roadway profiles depicted on the contract plans should be included in the survey file.

In addition to roadways, other profiles that may be requested include:

- Flow line of curb returns and islands.
- Pullouts that are not parallel with roadway alignments.
- Ditches not depicted in cross sections or slope stake listings.
- Bridges.
- Grade at base of concrete barriers.
- Retaining walls and sound walls.

Chapter 3 of the *CADD Users Manual* contains standards, formats, and guidance for the development of profiles.

Cross Sections

Final cross sections should be delivered to the survey unit as part of the survey file checklist, no later that RTL.

It is important that the final cross sections are developed from identical data depicted on the contract plans. Cross sections are an integral part of the design and construction staking processes. They assist the designer in developing the most efficient way to handle earthwork items and can be utilized to identify conflicts. Surveyors utilize the cross sections to construct the project as designed.

The project engineer should provide cross sections for interim construction phases when projects with stage construction require partial fills, cuts, or detour work.

Chapter 3 of the CADD Users Manual contains standards, formats, and guidance for the development of cross sections.

Slope Stake Listings

Slope stake listings are an integral part of the construction staking process. Surveyors utilize the slope stake listings to construct the area as designed. It is important that the slope stake listings are developed from the final cross sections of the area.

The project engineer should provide slope stake listings for interim construction phases when projects with stage construction require partial fills, cuts, or detour work.

Chapter 3 of the *CADD Users Manual* contains standards, formats, and guidance for the development of slope stake listings.

Right of Way

The coordinate geometry defining the R/W layout is required prior to construction to ensure that the work is contained within the appropriate areas. It will be used after construction to monument new lines of ownership in accordance with Chapter 10 of the *Surveys Manual*.

Existing monumentation that will be destroyed during construction must be properly documented and perpetuated in accordance with State law and Chapter 10 of the Surveys Manual. If the contractor is required to perpetuate the monumentation, the monuments should be included on the project control sheet in the contract plans.

This data is typically readily available to the project surveyor from right of way engineering. In the event of brokered or consultant work, the project surveyor may not have access to this data. If requested, the project engineer should gather and confirm the transmittal of the requested deliverables from the responsible surveyor or contract Manager.

Chapter 3 of the *CADD Users Manual* contains formats and guidance for the development of right of way coordinate geometry.

Structural Systems – District

Structural systems included in this category are those designed under the guidance of the project engineer. These systems are typically those identified in the Standard Plans. Examples of such systems include:

- Standard retaining walls.
- Standard sound walls.

When structural layout lines (LOL's) are not parallel with or controlled by an alignment provided with the survey file, a layout line of the structure is required.

Chapter 2 of the *Plans Preparation Manual* contains requirements and Chapter 3 of the *CADD Users Manual* contains formats and guidance for the development of structural systems deliverables that are designed by the District.

Structural Systems – Structures

Structural systems included in this category are those designed under the guidance of the structures design unit. This includes bridge facilities and structural systems that require special design due to foundation bearing capacity concerns or those that are not specified in the Standard Plans. Examples of such systems include:

- Non-standard and standard retaining walls.
- Non-standard sound walls.
- Non-standard culverts and channels.
- Bridge facilities.
- Buildings.

When structural LOL's are not parallel with or controlled by an alignment provided with the survey file, a layout line of the structure is required. Major structures of the bridge facility must be staked in accordance with Chapter 12 of the *Surveys Manual*. In situations where the system cannot be staked out by station and offset relative to an alignment provided with the survey file, the coordinate geometry defining these systems should be provided.

The project engineer should direct the project surveyor to the responsible structures engineer for coordinating the transmittal of the requested deliverables. The project engineer should communicate with the project surveyor to verify delivery of the data.

Drainage Systems

Surveyors use the coordinate geometry defining the centerline of pipes, culverts, and in-stream and channel facilities during the construction staking process. Typically this is generated from the stations, offsets, and elevations on the Drainage Plan and Profile Sheets. In situations where the system cannot be staked out by station and offset relative to an alignment provided with the survey file, an alignment of the drainage system will be requested.

Chapter 2 of the *Plans Preparation Manual* contains standards and Chapter 3 of the *CADD Users Manual* contains requirements, formats, and guidance for the development of drainage systems deliverables.

Digital Design Model

Because of new roadway design software capabilities, the project engineer should be taking a modular design approach for defining the design finish grade. The end result will be a digital terrain model of the roadway design, referred to as a digital design model (DDM), which can be used for calculations, quality control and in the construction process.

New surveying and construction technology provides a method of stakeout and inspection with the use of a digital terrain model. Construction equipment with machine guidance technology relies on the DDM to guide the operator instead of construction stakes. Requests for this deliverable will be dependant upon the contractor's capabilities. The project engineer should expect requests for DDMs to become more frequent as the technology becomes more prevalent. The DDM should be the final model of the project, generated from the final alignments, profiles, etc.

Chapter 3 of the *CADD Users Manual* contains standards, formats, and guidance for the development of DDMs.

Miscellaneous Facilities

Some planned facilities require alternate design methods to develop information needed by the surveyor for construction staking. The project engineer and project surveyor should meet and decide on the appropriate delivery format. Identify the facility in the row marked "Other" for all of the appropriate deliverables on the survey file checklist.

Examples of such facilities include:

- Bridge-fill cone areas.
- Intersections with multiple layout lines that require more detailed information than slope stake listings.
- Building pads.
- Retention ponds.
- Berms, dikes & levees.
- Stockpiles & borrow pits.
- General landscaping and contour grading.
- Parks.
- Parking lots.

Chapter 3 of the *CADD Users Manual* contains standards, formats, and guidance for the development of facilities using alternate design methods.

ARTICLE 3 Datum Listing

The Datum Listing template is provided in Article 2 of Chapter 3 of this appendix to document the datums used in the design process and the method used to generate existing alignments. See example of completed form in the Project Development Workflow Tasks (PDWT).

It is important that the project surveyor work closely with the project engineer, completing the datum listing as appropriate, early in the design process to ensure all alignments, profiles, elevations, and control are on the appropriate California coordinate system (CCS) and epoch date.

1. **Project Information**

   District-County-Route-Post Mile-EA

The post mile should be given to the nearest 0.1 mile.

2. **Horizontal Datum**

Indicate the California coordinate system used in the design of the project. For example, "coordinates, bearings and grid distances are based on CCS83 (1991.35), Zone 3"

See Chapter 3 of the *CADD Manual* and Chapter 4 of the *Surveys Manual* for more information about the California coordinate systems. Chapter 2 of the Plans Preparation Manual contains datum terminology and notation specifications for the first sheet of the layouts of the contract plans.

3. **Vertical Datum**

Indicate the vertical datum used in the design of the project. For example, "elevations are based on NAVD88"

See Chapter 4 of the *Surveys Manual* for more information about the vertical datum. Chapter 2 of the *Plans Preparation Manual* contains datum terminology and notation specifications for the first sheet of the profiles of the contract plans.

4. **Project Units**

Indicate the units used in the design of the project.

5. **Existing Alignment Information**

Indicate how the existing alignments used in the design of the project were developed.

Existing alignments used in the design process can be established in a number of ways. This information is important to the project surveyor because the method used to develop alignments determines how the alignment can be used. If the project surveyor deems it necessary, the as-built documentation may be requested as a deliverable to clarify discrepancies. Chapter 3 of the *CADD Users Manual* contains guidance for the establishment of existing alignments.

6. **Comments**

Provide additional information regarding the design of the project that may be pertinent.

ARTICLE 4 Project Reference List

The Project Reference List template is provided in Article 3 of Chapter 3 of this appendix to document and cross reference data included in the survey file. See example of completed form in the Project Development Workflow Tasks (PDWT).

1. **Project Information**

   District-County-Route-Post Mile-EA

The post mile should be given to the nearest 0.1 mile.

2. **Path to electronic deliverables**

Indicate the network path to the electronic deliverables. Confirm that the project surveyor has permission to copy all files in the referenced directory.

3. **Design Software Used**

Indicate the software used in the development of the electronic deliverables.

4. **Base Map File Name(s)**

Indicate the name(s) of the base map(s) when requested.

5. **Alignment/Layout Line and Associated Design Elements**

   Alignment/LOL - Plan Name/Description

Indicate the designation and description of the alignment or LOL as it is noted on the contract plans.

Alignment/LOL - Chain Name

Indicate the designation of the alignment or LOL as it is labeled in the electronic deliverable.

Profile(s) – Name(s)

Indicate the designation of the profile(s) associated to the alignment or LOL as it is labeled in the electronic deliverable. When possible name the profile the same as the associated alignment.

Cross Section(s) – File Name(s)

Indicate the name(s) of the cross section(s) associated to the alignment or LOL as it is labeled in the electronic deliverable.

Slope Stake Listing(s) – File Name(s)

Indicate the name(s) of the slope stake listing(s) associated to the alignment or LOL as it is labeled in the electronic deliverable.

Additional File(s)

Indicate any additional file(s) associated to the alignment or LOL as it is labeled in the electronic deliverable.

Comments

Provide additional information regarding the deliverables.

ARTICLE 5 Additional Instructions

The project engineer should get input from the project surveyor, regularly throughout the project development process, to identify any odd-stations or unique submittals on the Additional Instructions form.

The Additional Instructions form is provided in Article 4 of Chapter 3 of this appendix to identify submittals not listed in the survey file checklist.

1. **Information**

   District-County-Route-Post Mile-EA

The post mile should be given to the nearest 0.1 mile.

2. **Cross Sections and Slope Stake Listings**

Some projects may require the creation of cross sections at additional stations or may require the labeling of grade breaks that are not noted in Chapter 3 of the *CADD Users Manual*. The project surveyor should discuss these needs with the project engineer and will include any special requests on the Additional Instructions form.

3. **Other Items Requested by Surveys**

The project surveyor should discuss any unforeseen needs with the project engineer and will include any special requests on the Additional Instructions form.

4. **Comments**

Provide additional information regarding the deliverables.

ARTICLE 6 Verification of Survey File Delivery

The district office engineer will verify the delivery of the survey file to the project surveyor upon submittal of a completed Verification of Survey File Delivery form. In the

event that the survey file is not required or an alternate delivery schedule has been agreed upon, the form should be signed appropriately. See the *Ready to List and Construction Contract Award Guide* for additional information.

The form is provided in Article 5 of Chapter 3 of this appendix. See example of completed form in the Project Development Workflow Tasks (PDWT).

1. **Project Information**

District-County-Route-Post Mile-EA

The post mile should be given to the nearest 0.1 mile.

2. **Complete or partial submittal on or before RTL**

Indicate with a checkmark in "Complete or partial submittal on or before RTL" when requested items are delivered.

Project Engineer

The project engineer should sign and date upon delivery.

Project Surveyor

The project surveyor should sign and date upon receipt.

3. **Agreement for Submittal after RTL, but before advertisement**

If mutually agreed upon by the project engineer and project surveyor, a submittal date after RTL but before advertisement may be identified for items not available at RTL. Indicate with a checkmark in "Agreement for submittal after RTL, but before advertisement" when requested items are delivered.

Target Submittal Date

Identify the target date for submittal.

The following items will be delivered on the agreed upon date

Identify the items that will be delivered after RTL.

Project Engineer

The project engineer should sign and date only if a later submittal date is agreed upon.

Project Surveyor

The project surveyor should sign and date only if a later submittal date is agreed upon.

4. Survey File not required

If surveying efforts are not required for the construction of a project, indicate with a checkmark in "Survey File not required" and the project engineer and project surveyor should sign the form to verify that the project does not require the delivery of the survey file.

Project Engineer

The project engineer shall sign and date only if a survey file is not required.

Project Surveyor

The project surveyor shall sign and date only if a survey file is not required.

CHAPTER 3 Templates

ARTICLE 1 Template for the Survey File Checklist

This article is a template for the survey file checklist. Guidance for completing this template is located in Chapter 2 of this appendix.

Survey File Checklist

Project Surveyor - **Check** the appropriate "**Requested by Surveys**" box for each item required.
Project Engineer - **Check** the appropriate "**Included**" or "**Confirmed**" box when preparing the Survey File.
Submit this checklist with the Survey File.

Project Information

District: ___ **County:** _____ **Route:** _____ **PM (KP) Limits:** _____ **EA#:** _____

Project Engineer
Name: _____ **Phone #:** _____
e-mail: _____ **Phone #:** _____

Engineer Preparing Survey File
Name: _____ **Phone #:** _____
e-mail: _____ **Phone #:** _____

Project Surveyor
Name: _____ **Phone #:** _____
e-mail: _____ **Phone #:** _____

Structures Engineer
Name: _____ **Phone #:** _____
e-mail: _____ **Phone #:** _____

Construction Area Engineer
Name: _____ **Phone #:** _____
e-mail: _____ **Phone #:** _____

Attachments

☐ Included **Contact List**
☐ Included **Datum Listing**
☐ Included **Project Reference List**
☐ Included ☐N/A **Additional Instructions**

Project Deliverables

Contract Plans — **Hardcopy**
☐Requested by Surveys __ # of Copies ☐ Included **Plan set submitted at PS&E**
☐Requested by Surveys __ # of Copies ☐ Confirmed **Reduced** (11" x 17")
☐Requested by Surveys __ # of Copies ☐ Confirmed **Full size**

Project Control — **Electronic Format:** _____
☐ Requested by Surveys ☐ Included **Control used during collection of topographic data**
☐ Requested by Surveys ☐ Included **Control set for construction stakeout**
☐ Requested by Surveys ☐ Included **Other:** _____

Topography — **Electronic Format:** _____
☐ Requested by Surveys ☐ Included **Topographic data**
☐ Requested by Surveys ☐ Included **Other:** _____

Base Map — **Electronic Format:** _____
☐ Requested by Surveys ☐ Included **Alignment data, roadway & drainage features, etc.**
☐ Requested by Surveys ☐ Included **Other:** _____

Alignments **Electronic Format:** _____

- ☐ Requested by Surveys ☐ Included **Highways, ramps, & branch connections**
- ☐ Requested by Surveys ☐ Included **City, county, and frontage roads**
- ☐ Requested by Surveys ☐ Included **Detours**
- ☐ Requested by Surveys ☐ Included **Curb returns, islands, & pullouts**
- ☐ Requested by Surveys ☐ Included **Other:** _____
- ☐ Requested by Surveys ☐ Included **Printed copies of requested alignment traverses**

Profiles **Electronic Format:** _____

- ☐ Requested by Surveys ☐ Included **Highways, ramps, & branch connections**
- ☐ Requested by Surveys ☐ Included **City, county, and frontage roads**
- ☐ Requested by Surveys ☐ Included **Detours**
- ☐ Requested by Surveys ☐ Included **Curb returns, islands, & pullouts**
- ☐ Requested by Surveys ☐ Included **Other:** _____

Cross Sections **Electronic Format:** _____

- ☐ Requested by Surveys ☐ Included **All roadways**
- ☐ Requested by Surveys ☐ Included **Bridge**
- ☐ Requested by Surveys ☐ Included **Other:** _____
- ☐ Requested by Surveys ☐ Included **Printed copies of requested cross sections**

Slope Stake Listings **Electronic Format:** _____

- ☐ Requested by Surveys ☐ Included **All roadways**
- ☐ Requested by Surveys ☐ Included **Number of stations per page:** ____
- ☐ Requested by Surveys ☐ Included **Other:** _____
- ☐ Requested by Surveys ☐ Included **Printed copies of requested slope stake listings**

Right of Way **Electronic Format:** _____

- ☐ Requested by Surveys ☐ Confirmed **Hardcopy of final R/W Appraisal Map**
- ☐ Requested by Surveys ☐ Confirmed **Right of Way coordinate geometry**
- ☐ Requested by Surveys ☐ Confirmed **Monument perpetuation documentation**
- ☐ Requested by Surveys ☐ Confirmed **Other:** _____

Structural Systems - District **Electronic Format:** _____

- ☐ Requested by Surveys ☐ Included **Retaining wall and sound wall LOL's**
- ☐ Requested by Surveys ☐ Included **Other:** _____

Structural Systems - Structures **Electronic Format:** _____

- ☐ Requested by Surveys ☐ Confirmed **Retaining wall and sound wall LOL's**
- ☐ Requested by Surveys ☐ Confirmed **Bridge control monuments**
- ☐ Requested by Surveys ☐ Confirmed **Bridge abutment & wing wall LOL's**
- ☐ Requested by Surveys ☐ Confirmed **Column, bent, & pier LOL's**
- ☐ Requested by Surveys ☐ Confirmed **Edge of deck LOL's**
- ☐ Requested by Surveys ☐ Confirmed **Other:** _____

Drainage Systems **Electronic Format:** _____

- ☐ Requested by Surveys ☐ Included **C/L of pipes and culverts**
- ☐ Requested by Surveys ☐ Included **In-stream and channel facilities**
- ☐ Requested by Surveys ☐ Included **Headwall LOL's**
- ☐ Requested by Surveys ☐ Included **Flow line Profile**
- ☐ Requested by Surveys ☐ Included **Other:** _____

Digital Design Model **Electronic Format:** _____

- ☐ Requested by Surveys ☐ Included **Finished Grade**
- ☐ Requested by Surveys ☐ Included **Other:** _____

ARTICLE 2 Template for the Datum Listing

This article is a template for the datum listing. Guidance for completing this template is located in Chapter 2 of this appendix.

Datum Listing

District: ___ **County:** _____ **Route:** _____ **PM (KP) Limits:** _____ **EA#:**____

Horizontal Datum

Coordinates, bearings, and grid distances are based on:

- ☐ CCS83 (1991.35), Zone ___
- ☐ CCS83 (2007.00), Zone ___
- ☐ CCS83 (_____), Zone ___
- ☐ CCS27, Zone
- ☐ _____

Vertical Datum

Elevations are based on:

☐ NGVD29 ☐ NAVD88 ☐ _____

Project Units

Units:

☐ U.S. Survey Feet ☐ Metric

Existing Alignment Information

Existing alignment engineering is based on:

- ☐ Existing alignments from as-built contract plans
- ☐ "Best-fit" to photogrammetric topographic data
- ☐ "Best-fit" to survey topographic data
- ☐ A field survey "best-fit" retracement of the as-built contract plans generated by Surveys Office
- ☐ Other:

If U.S. Survey Feet stationing is based on metric as-built data identify a major tie point:
U.S. Survey Feet station _____ = metric station _____.

If metric stationing is based on U.S. Survey Feet as-built data identify a major tie point:
Metric station _____ = U.S. Survey Feet station _____.

Comments

ARTICLE 3 Template for the Project Reference List

This article is a template for the project reference list. Guidance for completing this template is located in Chapter 2 of this appendix.

Project Reference List

District: ___ **County:** _____ **Route:** _____ **PM (KP) Limits:** _____ **EA#:** _____

Network path to the electronic deliverables: _____

Design Software Used: _____ **Base Map File Name(s):** _____

Alignment/LOL & Associated Design Elements

Alignment/LOL		Profile(s)	Cross Section(s)	Slope Stake Listing(s)	Additional File(s)
Plan Name/Description	Chain Name	Name(s)	File Name(s)	File Name(s)	

Comments:

ARTICLE 4 Template for Additional Instructions

This article is a template for additional instructions. Guidance for completing this template is located in Chapter 2 of this appendix.

Additional Instructions

District: ___ **County:** _____ **Route:** _____ **PM (KP) Limits:** _____ **EA#:** _____

Cross Sections & Slope Stake Listings

☐ Cross sections only
☐ Slope stake listings only

☐ Requested by Surveys ☐ Included **Key Stations:** _____
☐ Requested by Surveys ☐ Included **Key Stations:** _____
☐ Requested by Surveys ☐ Included **Key Stations:** _____
☐ Requested by Surveys ☐ Included **Key Stations:** _____

☐ Requested by Surveys ☐ Included **Lane Line Grade Breaks**
☐ Requested by Surveys ☐ Included **String Line Grade Breaks**

☐ Requested by Surveys ☐ Included **Other:** _____
☐ Requested by Surveys ☐ Included **Other:** _____
☐ Requested by Surveys ☐ Included **Other:** _____
☐ Requested by Surveys ☐ Included **Other:** _____
☐ Requested by Surveys ☐ Included **Other:** _____

Other Items Requested by Surveys

☐ Included _____
☐ Included _____
☐ Included _____
☐ Included _____
☐ Included _____
☐ Included _____
☐ Included _____
☐ Included _____
☐ Included _____
☐ Included _____

Comments

ARTICLE 5 Template for Verification of Survey File Delivery

This article is a template for verification of delivery. Guidance for completing this template is located in Chapter 2 of this appendix.

Verification of Survey File Delivery

Project Information

District: ___ **County:** _____ **Route:** _____ **PM (KP) Limits:** _____ **EA#:** _____

☐ ***Complete or partial submittal on or before RTL***

Project Engineer

Name: _____ **Date:** _____

Project Surveyor

Name: _____ **Date:** _____

☐ ***Agreement for submittal after RTL, but before advertisement***

Target Submittal Date: _____

The following items will be delivered on the agreed upon date:

Project Engineer

Name: _____ **Date:** _____

Project Surveyor

Name: _____ **Date:** _____

☐ ***Survey File not required***

Project Engineer

Name: _____ **Date:** _____

Project Surveyor

Name: _____ **Date:** _____

California Department of Transportation

Project Development Procedures Manual

If you have questions regarding this manual, contact:

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF DESIGN
CHIEF, OFFICE OF STANDARDS AND PROCEDURES
1120 “N” Street
SACRAMENTO, CALIFORNIA 95814