CHAPTER 3

Civil and Electrical Design

Overview

This chapter provides standardized guidelines to Engineering Services Division staff on the procedures to be followed during the design phase of Capital Improvement Projects. The guidelines outlined define the roles and responsibilities of various staff involved in preparing plans and contract documents, as well as obtaining right-of-way, permits, environmental clearances, and required approvals. The following topics are covered:

- Project Management Standards
- Quality Control
- Topographic Surveys
- Base Maps
- Design Standards
- Plans, Specifications and Estimate (PS&E)
- Right of Way Acquisition
- Permitting
- Utility Coordination
- Environmental Documentation

It is the Division's intent to ensure that all projects are of high quality, and delivered within the approved budget and schedule.

SECTION 3-1

Project Management Standards

PURPOSE

This section establishes project management standards and the Project Manager's role in managing and controlling the project scope, schedule, and budget in accordance with the approved the Project Report.

DEFINITIONS / ABBREVIATIONS

CPS .....Critical Path Schedule

FRI .....Fund Request Information

PR .....Project Report

PAAF .....Project Approval and Authorization Form

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

AUTHORITY

The PM has the authority to control all aspects of the design and construction of his/her assigned CIP projects in accordance with accepted engineering standards, the scope of the project as defined in the approved Project Report, and the limits of the financial authority delegated to the City Manager by the City Council.

POLICY

All projects are to be managed in accordance with the standards set forth in this section. All necessary actions to keep the project within the approved budget, scope, and schedule, or any necessary amendments are to be considered in advance, and are to be executed in a timely manner.

RESPONSIBILITIES

Project Manager

The PM is responsible for delivering his/her assigned project within the original scope, budget, and schedule established in the Project Report prepared by the Funding and Project Development work group and approved by the Section Managers and the Engineering Services Manager.

The PM is also responsible for preparing and gaining Division approval for an amended Project Report in the event the project scope, budget, or schedule needs to be revised for reasons outside of the PM's control.

Senior Engineer / Special Projects Engineer

The Senior Engineer / Special Projects Engineer is responsible for reviewing and approving the work performed by subordinate PMs including the budget analysis form, CPS, design plans, and contract documents.

Supervising Engineer

The SE is responsible for reviewing and approving all requests for amendments to the PAAF, Budget Analysis Form, and FRI's.

INTERNAL AND EXTERNAL CUSTOMERS

Projects may be established at the request of interdepartmental customers such as SHRA, Economic Development, and CADA, Mayor and Council, and community groups. These

customers typically provide funding to initiate the project and play a significant role in establishing the scope, budget, and schedule.

When customers initiate or participate in a project, the PM is to coordinate with the appropriate representative(s) to ensure the success of the project. Customers should be informed of all progress on a regular basis and of any approved changes to the scope, budget, or schedule during the design and construction phases of the project. The information is to be timely and communicated in writing.

PROJECT HAND-OFF MEETING

Once a Project Report has been approved, the PM in F&PD is to schedule a meeting with the Design PM, Senior Engineer, and Supervising Engineer within the Civil and Electrical Design work group to hand off the Project Report. At the meeting, the F&PD PM is to discuss the scope, budget, and schedule in detail, as well as stakeholder involvement and key issues that have been decided or remain to be decided during the design phase.

The Civil and Electrical Design PM is to have a thorough understanding of the project and the key issues at the end of the hand-off meeting.

CRITICAL PATH SCHEDULE

At the outset of design of the project, the PM is to establish a CPS that is consistent with the Project Report. The CPS must be in Microsoft Project, identify critical path tasks, and indicate the expected beginning and end dates for each task and phase of the project.

Project phases and tasks that must be analyzed in detail and factored into the CPS are: the type of environmental document and analysis required, public outreach and input at key milestones, right of way, State and Federal Authorizations and Certifications, regulatory agency permits, construction permits, surveying, contracts with consultants for design, consultant and agency agreements, construction working days, and construction management.

Should the schedule reveal any inconsistencies with the Project Report, the PM is to identify possible alternatives, and if necessary, meet with F&PD to discuss the need to amend the Project Report.

The PM is to update the schedule at the 30, 60, 90 percent design stages, at contract award, and whenever critical path tasks potentially affect the completion date.

If a particular task or phase is delayed beyond the approved PAAF schedule, the PM may consider making up the lost time through streamlining other tasks, running multiple tasks in parallel, or accelerating execution of tasks where possible.

Schedule amendments will only be considered for approval if the PM's Section Manager concurs and if the schedule changes were outside the PM's control.

PROJECT SCOPE

The project is to be designed in accordance with the scope identified in the Project Report. Should customers or stakeholders request substantial changes to the scope, the PM is to obtain approval to amend the PAAF prior to incorporating those changes in the design. Substantial changes are those that would result in the need for additional funds, additional time, or involve additional work outside of the originally defined and intended scope.

At the 60 percent design stage, the PM is to schedule a meeting and present the project scope, design alternatives, budget, and schedule to the Senior Advisory Design Review Committee for review and comments. (See Section 3-2, Quality Control).

The presentation is to provide a detailed overview to the committee as a means to review and resolve critical issues.

PROJECT BUDGET

The PM is to prepare a Budget Analysis Form (Attachment 1) at the following project stages:

- 60%, 90%, and 100% Design.
- At time of bid opening and prior to award.
- Prior to approval of consultant agreements, cooperative agreements, and amendments.
- Prior to approval of construction change orders.

The Budget Analysis Form is to be completed using a recent CityInfo Report and available financial information including anticipated encumbrances and funding not loaded in the City's financial system. The Budget Analysis Form is to be reviewed, approved, and signed by the Senior Engineer and Supervising Engineer.

If the budget analysis shows that the project cost will exceed the approved PAAF budget, the PM is to develop an analysis of options, including reducing the project scope, looking for construction method savings, or requesting additional funds. The issues and options are to be disclosed and discussed with the Design Section Manager in a timely manner. Any recommended changes to the project budget are to be approved through the preparation of a PAAF amendment prior to proceeding. Any request for additional funding is to be submitted through the preparation of an FRI.

Managing Design Costs

To ensure that the proper costs are included in the Project Report, the Design Section Manager is to determine whether design is to be undertaken by in-house resources or through consultants, and is to inform the F&PD PM so that the appropriate design budget is included in the Project Report.

Once the Design Section has reviewed the design costs budgeted in the PAAF during the Project Report sign-off, the Design PM is responsible for monitoring costs to ensure that the project is kept within budget.

The PM is to track all staff labor and consultant expenditures on a monthly basis through the review of financial reports from the City's financial system. The PM is also responsible for verifying that the consultant's progress is consistent with the proportion of costs incurred on the contract and to cause the consultant to take corrective measures to avoid cost overruns.

If for any reason the consultant is requested to perform work outside the scope of the original agreement, the PM must process a supplemental agreement to provide for the additional work as soon as possible. In no case is the consultant to perform work beyond the contract amount (including supplemental agreements).

Managing Construction Costs

During construction, the PM is to monitor all expenditures, both labor and construction, to ensure that the project remains within the original budget and estimated contingencies. Construction management and inspection costs are to be discussed and negotiated with consultants and inspection staff to ensure that the planned hours are not exceeded.

All planned, executed, and proposed change orders are to be tracked by the PM to ensure that there is adequate budget to cover all expenses.

Any required budget adjustments are to be processed in a timely manner through the submission of an amended PAAF and an FRI.

Project Close Out

After a notice of completion is issued, the PM is to prepare a schedule for project close out for review and approval by the Design Section Manager. The schedule is to account for resolving any outstanding contractual issues, completing record drawings, finalizing all right of way acquisition paper work, and

completing and processing any Federal or State documentation.

No amendments to the approved schedule will be considered and the PM is to work diligently to complete close out per the approved schedule.

ATTACHMENT

Attachment 1: Budget Analysis Form

ATTACHMENT 1

Budget Analysis Form

C.I.P. PROJECT BUDGET ANALYSIS FORM

PROJECT INFORMATION

Project Name

JN or PN No.: ####

Date: Date

Project Manager: P.M.

CONTRACT AMOUNT

Engineer's Estimate: ____ **OR** **Low Bid:** ____

CONSTRUCTION CONTRACT:	
Approved Change Orders	
Proposed Change Orders	
TOTAL CONSTRUCTION CONTRACT	

EXPENDITURES (Design, Enviro., R/W, Const. Inspection. Remaining construction costs, Etc.)

*	Contingencies (10% +/-)		10%	$0.00	
*	Materials Test (2% +/-)		2%	$0.00	
*	Staking and Inspection (10% +/-)		10%	$0.00	
		SUBTOTAL:		**$0.00**	
**	Current Direct Expenditures (LABOR)			$0.00	(4880)
**	Current Direct Expenditures (BENEFITS)	Check: (~30% of Labor)		$0.00	(4881)
**	Current Indirect and Overhead Costs	Check: (~150% of Labor)		$0.00	(4831)
**	Consultant (Encumbrances & Expended)			$0.00	(4802)
**	Other Expenditures (from City info)			$0.00	(4213)
**	City furnished Materials			$0.00	(____)
***	Remaining unencumbered non-construction costs and Project Closeout costs			$0.00	Other
		SUBTOTAL:		**$0.00**	

TOTAL ESTIMATED PROJECT COST: **$0.00**

Comments:

PROJECT BUDGET

**	**BUDGETED FUNDS**	Fund #1:	$0.00
		Fund #2:	
		Fund #3:	
		Fund #4:	

TOTAL BUDGETED FUNDS: **$0.00**

Additional Funds Required:

Remaining Funds (if any): **$0.00**

**** **Proposed fund source for additional funds**

Fund #1: N/A
Fund #2: N/A

Comments:

APPROVALS

Reviewed by: _____ **Senior Engineer**

Approved by: _____ **Supervising Engineer**

Comments:

* Percentages based on contract price.
** Figures furnished by Public Works Project Accounting Section.
*** Figures furnished by Project Manager and Right-of-Way Section.
**** To be furnished by Supervising Engineer

Attachments:
City Info.
Council Letter
Other:

SECTION 3-2

Quality Control

PURPOSE

This section describes the quality control process to be followed in the design phase of projects.

DEFINITIONS / ABBREVIATIONS

PS&E .....Plans, Specifications and Estimate

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

AUTHORITY

The PM has the authority to oversee the design and construction of assigned projects in accordance with accepted local, State, and Federal design policies and engineering standards.

POLICY

All projects are to be designed in accordance with the quality control provisions contained in this section.

The delivery of all projects is to be in compliance with the items listed in Attachment 1 – Civil and Electrical Design Quality Control Checklist. The checklist is to be completed and signed by the PM, reviewed and approved by his/or her immediate supervisor, and accepted by the Design Section Manager.

RESPONSIBILITIES

Project Manager

- Completes and submits for review and acceptance the quality control checklist at the 30%, 60%, 90% and 100% design stages.
- Presents the 60% project design to the Senior Advisory Review Committee in accordance with Attachment 2.
- Signs off on all checklist items having been completed at the 100% design stage.

PM's Immediate Supervisor

- Reviews the checklist and supporting documentation submitted by the PM for completeness and accuracy and requires corrections, if necessary, before signing off.

Supervising Engineer

- Ensures that the quality control checklist is maintained and updated.
- Reviews the checklist for completeness and accuracy and accepts the checklist.

Senior Advisory Committee

- Upon presentation of the scope, budget, and project schedule by the PM, provides comprehensive comments on design policy, scope conformance, budget issues, regulatory, and technical review to the PM and Design Section Manager.

QUALITY CONTROL CHECKLIST

The Quality Control Checklist is a standardized tool to ensure that critical aspects of the delivery of a CIP have been addressed during the design and specification phase. While

comprehensive in nature, the checklist is not all encompassing in that each project may have unique issues that need to be considered. The PM is responsible for considering other quality control and process factors that may affect the delivery of the CIP.

The PM is to update the Quality Control Checklist after each task has been completed and review it on a regular basis throughout the course of design. The checklist is to be submitted for review and acceptance at the 30%, 60%, 90%, and 100% design stages.

If the PM is unsure whether an item on the checklist has been completed or satisfied, the PM is to consult with his/her supervisor for clarification.

SITE REVIEW AND PRELIMINARY DESIGN

After the base maps have been prepared, the PM is to walk the site with the engineering technician who prepared the base maps. The PM is to thoroughly review the base maps and the site conditions to identify design constraints such as buildings, driveways, drainage patterns, existing fences, signs, gates, poles, trees, underground storm, sewer, and water facilities, public utilities, etc.

The environmental documentation process is to be, at minimum, under way, and scheduled to be completed at the 30% design stage. Since the environmental process may affect the design requirements, the PM is not to proceed with design past the 30% design stage without prior approval from the Design Section Manager.

30% DESIGN STAGE

At the end of the 30% design stage, the PM is to have the striping plans completed for review by the Traffic Engineering Section. Following acceptance of the striping plans, the PM is to proceed with determining the right of way clearances needed and begin the right of way acquisition process.

The PM is to identify all interdepartmental, agency and external customers who have a significant stake or interest in the project and develop an outreach plan to inform and consult with stakeholders during critical milestones in the design phase. If the project is controversial or will significantly benefit from formal stakeholder and community input, the PM is to schedule the appropriate outreach meetings with DOT's Public Information Officer. (See Chapter 11 – Public Outreach).

60% DESIGN REVIEW COMMITTEE MEETING

At the completion of the 60% design, the PM is to conduct an internal design review meeting with the Senior Advisory Committee. The meeting is held to present the 60% design to Engineering management and to receive comments on the overall design, scope, budget, and schedule, and to make critical decisions affecting the outcome of the project.

The PM is responsible for addressing all of the design and policy issues raised by the committee, and preparing an email to the Senior Advisory Committee and project file which responds to the issues raised and stating the rational for any decisions reached.

90% DESIGN STAGE

At the 90% design stage, the PM is to have all of the items on the Quality Control Checklist substantially complete. If not completed, a timeline indicating the scheduled date for completion is to be noted on the checklist and identified in the project schedule.

In addition to updating the Quality Control Checklist, the PM is to update the Project Schedule, send out Utility Letter B, and request the RCI assigned to the project to review the plans and specifications for constructability. The RCI is to perform a site visit and review the plans for conflicts, breakdown of quantities and bid items, omitted bid items, contract working days, and conflicts with the construction of private development projects.

For projects with Federal funds, the PM is to have right of way certification completed or

scheduled to be completed prior to obtaining Federal authorization to advertise for bids.

100% DESIGN STAGE

At the 100% design stage, the PM is to submit the completed PS&E and Quality Control Checklist to his/her supervisor for final review and acceptance. If the PM is a registered engineer, the PM is to stamp and sign the improvement plan mylars. If the PM is not registered, the mylars are to be stamped and signed by his/her supervisor.

All items required to be addressed during construction, including construction traffic control considerations, construction staging, utility relocation scheduling, notices and coordination with property owners, environmental mitigation measures, and regulatory requirements are to be fully addressed in the contract Special Provisions.

ATTACHMENTS

Attachment 1: Civil and Electrical Design Quality Control Checklist

Attachment 2: 60% Senior Advisory Review Committee Process

ATTACHMENT 1

Civil and Electrical Design Quality Control Checklist

Prepared By _____ Date _____
Project Manager

Reviewed By _____ Date _____
Senior Engineer

Accepted By _____ Date _____
Supervising Engineer

_____% Submittal

Project Scoping	**YES**	**NO**	**N/A**
1. Kick-off meeting has been held with F&PD and key stakeholders to review project report, scope, schedule and budget.	☐	☐	☐
2. For Fed/State funded projects a field review has been completed with Caltrans and Real Estate Staff.	☐	☐	☐
3. Microsoft project schedule with all critical tasks has been prepared and approved by supervisor. Schedule to be created based on work days and bidding project at optimal time.	☐	☐	☐
4. Estimated labor, consultant and construction budgets have been prepared and approved by supervisor and loaded into City Info.	☐	☐	☐
5. Source of funding ☐ City ☐ State ☐ Federal ☐ CDBG ☐ Other			
6. Is design consistent with existing Landscape and Streetscape Master Plans?	☐	☐	☐

Surveying	**YES**	**NO**	**N/A**
1. Survey request has been submitted to surveying supervisor.	☐	☐	☐
2. Field meeting with survey crew has been held to explain the project scope and limit of required survey.	☐	☐	☐
3. Survey has submitted scope of work, fee and schedule for approval.	☐	☐	☐

Base Sheets	YES	NO	N/A
1. Field verification of survey with technician and supervisor has been completed.	☐	☐	☐
2. Plans are scaled (1" = 40' or 1" = 20') or scaleable.	☐	☐	☐
3. All utilities are plotted (i.e., City water, sewer drainage, PG&E, cable, ATT, Fiber, etc.).	☐	☐	☐
4. As built plans collected.	☐	☐	☐
5. All existing signs and striping plotted.	☐	☐	☐
6. Field verification of utilities has been completed. Are there any horizontal or vertical obstructions that constrain design?	☐	☐	☐
7. Utility Letter A has been sent. Date _____	☐	☐	☐
8. Right-of-way lines and utility easements are plotted.	☐	☐	☐
9. Base sheets have been reviewed and approved by supervisor.	☐	☐	☐

Striping Plans (30% Design)	YES	NO	N/A
1. Typical section(s) created and approved by Supervisor and Traffic Engineering.	☐	☐	☐
2. Striping plans created on base sheets at 1"=40'. Annotation shall be as required by Traffic Engineering. Striping plans shall show proposed lane lines and widths, crosswalks, ditch/curb FL and R/W lines. Dimensions from construction control line to EP, FL, BOW and R/W shall be shown.	☐	☐	☐
3. Striping plans have been reviewed and approved by supervisor.	☐	☐	☐
4. Striping plans reviewed and approved by Traffic Engineering.	☐	☐	☐
5. Field meeting tree services to discuss tree conflicts/removal.	☐	☐	☐
6. Community stakeholder meeting held.	☐	☐	☐
7. Turning template for design vehicle has been applied to corner radius U-turns. U-turns require 44' of width measured from the lane line to the edge of pavement.	☐	☐	☐

60% Design	YES	NO	N/A
1. Plans include:	☐	☐	☐
- Cover sheet	☐	☐	☐
- Survey control diagram sheet(s)	☐	☐	☐
- Typical sections sheet(s)	☐	☐	☐
- Plan/profile sheet(s)	☐	☐	☐
- Striping plan sheet(s)	☐	☐	☐

Plan View	YES	NO	N/A
1. Center point of curb return and radius shown at all corners.	☐	☐	☐
2. Driveways and sidewalk conforms are shown.	☐	☐	☐
3. Dimensions to saw cut lines, EP, BOC, BOW, and R/W and fence lines are shown.	☐	☐	☐
4. Sta. at center of curb ramps, driveways and walkways are shown.	☐	☐	☐
5. Sta/offset to curb and gutter, and EP sidewalk transition points are shown.	☐	☐	☐
6. Arrows used to designate direction of flow around curb returns.	☐	☐	☐
7. ADA ramps clearly laid out to scale. Maintain 4' minimum flat area between ramps. X-slope of street, 2' from lip for full width of curb ramp not to exceed 5%.	☐	☐	☐
8. Street x-slopes checked: (2% minimum, 5% maximum). Exceptions granted in Downtown area.	☐	☐	☐
9. Cross slope from cut line to EP shall be at existing x-slope but not greater than 5%.	☐	☐	☐
10. Minimum FL profile grade for existing streets is 0.25% for No. 4 C&G and 0.35% for No. 13 C&G. New street minimum FL profile grade is 0.50%. For new high-speed arterial streets minimum FL profile grade shall be 0.35%.	☐	☐	☐
11. Vertical curves have been provided on profile where algebraic difference at grade breaks is 2% or greater.	☐	☐	☐
12. Drop inlets are spaced so flows do not exceed a run of 400' before reaching an inlet and the total length of run tributary to an inlet from each direction should not exceed 600'.	☐	☐	☐

Plan View	YES	NO	N/A
13. Maintenance holes are spaced no more than 400' apart.	☐	☐	☐
14. Eccentric Maintenance Holes are used if greater than 8' in depth.	☐	☐	☐
15. BOW grades do not block drainage or offsite drainage is provided.	☐	☐	☐
16. Driveways do not exceed 10% grade and conforms are shown.	☐	☐	☐
17. Sidewalks and walkways do not exceed 5% grade.	☐	☐	☐
18. Minimum slope of D.I lead is 0.50%.	☐	☐	☐

Profile View	YES	NO	N/A
1. Existing CL and FL grades plotted.	☐	☐	☐
2. Existing and proposed utilities plotted in profile.	☐	☐	☐
3. Survey has submitted scope of work, fee and schedule for approval.	☐	☐	☐

Key PM Responsibilities during 60% Design:	YES	NO	N/A
1. Potholed for existing utilities and identified conflicts.	☐	☐	☐
2. Meeting held with Utility companies to discuss conflicts.	☐	☐	☐
3. Obtain TI and R-Valve unless otherwise approved by Supervisor.	☐	☐	☐
4. Conduct geotechnical analysis for pavement design and dynaflect testing for overlay design.	☐	☐	☐
5. Identified required permits and agreements and began processing. List permits and agreements below.	☐	☐	☐
6. Submitted environmental review request form.	☐	☐	☐

Key PM Responsibilities during 60% Design:	YES	NO	N/A
7. Identified R/W needs and requested R/W engineering and Real Estate services.	☐	☐	☐
8. Identified electrical needs and requested electrical services.	☐	☐	☐
9. Conducted field review with design plans prior to circulating for review.	☐	☐	☐
10. Prepare quantity take off sheets.	☐	☐	☐
11. Plans reviewed by, Supervisors, Utilities Department, Street Maintenance and traffic.	☐	☐	☐
12. Environmental document approved by Council. Notice of Exemption or Decision Filed with County Clerk.	☐	☐	☐

60% Submittal Requirements:	YES	NO	N/A
1. 60% plans	☐	☐	☐
2. List of Bid Items	☐	☐	☐
3. Preliminary Cost Estimate (25% contingency)	☐	☐	☐
4. Civil and Electrical Design Quality Control Checklist	☐	☐	☐

90% and 100% PS&E	YES	NO	N/A
1. Plans include:	☐	☐	☐
- Cover sheet	☐	☐	☐
- Survey control diagram sheet(s)	☐	☐	☐
- Typical sections sheet(s)	☐	☐	☐
- Construction detail sheet(s)	☐	☐	☐
- Plan/profile sheet(s)	☐	☐	☐
- Striping plan sheet(s)	☐	☐	☐
- Landscaping sheet(s)	☐	☐	☐
- Water sheet(s)	☐	☐	☐
- Electrical sheet(s)	☐	☐	☐

Plan View	YES	NO	N/A
1. Center point of curb return and radius shown at all corners.	☐	☐	☐
2. Driveways and sidewalk conforms are shown.	☐	☐	☐
3. Dimensions to saw cut lines, EP, BOC, BOW, and R/W and fence lines are shown.	☐	☐	☐
4. Sta. at CL of driveways and walkways are shown.	☐	☐	☐
5. Sta/offset to curb and gutter, and EP sidewalk transition points are shown.	☐	☐	☐
6. Arrows used to designate direction of flow around curb returns.	☐	☐	☐
7. ADA ramps clearly laid out to scale. Maintain 4' minimum flat area between ramps.	☐	☐	☐
8. Street x-slopes checked: (2% minimum, 5% maximum). Exceptions granted in Downtown area.	☐	☐	☐
9. Cross slope from cut line to EP shall be at existing x-slope but not greater than 5%.	☐	☐	☐
10. Minimum FL profile grade for existing streets is 0.25% for No. 4 C&G and 0.35% for No. 13 C&G. New street minimum FL grade is 0.50%. For new high-speed arterial streets minimum FL profile grade shall be 0.35%.	☐	☐	☐
11. Vertical curves have been provided where algebraic difference at grade breaks is 2% or greater	☐	☐	☐
12. Drop inlets are spaced so flows do not exceed a run of 400' before reaching an inlet and the total length of run tributary to an inlet from each direction should not exceed 600'.	☐	☐	☐
13. Maintenance holes are spaced no more than 400' apart.	☐	☐	☐
14. Eccentric Maintenance Holes are used if greater than 8' in depth.	☐	☐	☐
15. BOW grades do not block drainage or offsite drainage is provided.	☐	☐	☐
16. Driveways do not exceed 10% grade and conforms are shown.	☐	☐	☐
17. Sidewalks and walkways do not exceed 5% grade.	☐	☐	☐
18. Minimum slope of D.I lead is 0.50%	☐	☐	☐

Profile View	YES	NO	N/A
1. Existing CL and FL grades plotted.	☐	☐	☐
2. Existing and proposed utilities plotted in profile.	☐	☐	☐
3. Proposed CL and FL grades plotted.	☐	☐	☐

Key PM Responsibilities during 90% and 100% Design	YES	NO	N/A
1. Obtained approved environment document	☐	☐	☐
2. Completed additional potholing to address conflicts of proposed D.I.'s/Leads with existing underground facilities.	☐	☐	☐
3. Coordinated and scheduled utility relocation with utility companies.	☐	☐	☐
4. Utility Letters 'B' and 'C' sent. "B" Plans (90% PS&E) Date _____ "C" Plans (Final PS&E) Date _____	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐
5. Obtained all permits and agreements. List permits and agreements and status on lines below. _____ _____	☐	☐	☐
6. Incorporated environmental mitigation required in approved environmental document in design plans and specifications.	☐	☐	☐
7. Secured right-of-way including permanent and temporary easements and permission to enter and construct.	☐	☐	☐
8. Checked with encroachment permit engineer for any new utility company or private development projects that may impact project.	☐	☐	☐
9. Checked for minimum vertical clearances between proposed street lights and traffic signals to overhead power lines and trees	☐	☐	☐
10. Checked stopping sight distance clearances at all driveways and intersections – i.e. No trees planted near median nose	☐	☐	☐
11. Checked plans to ensure civil, street lighting, landscaping, and traffic signal improvements do not conflict with each other. (i.e., is a proposed tree located where a street light is proposed ? Or does a proposed tree block visibility of a traffic signal head? Or does a D.I. or lead conflict with an existing or proposed underground facility?)	☐	☐	☐

Key PM Responsibilities during 90% and 100% Design	YES	NO	N/A
12. Conducted field review with design plans prior to circulating for review.	☐	☐	☐
13. Check project budget and submit FRI if required.	☐	☐	☐

90% and 100% PS&E Submittal Requirements	YES	NO	N/A
1. Century Graphics Distribution Letter	☐	☐	☐
2. Construction Contract Front End Worksheet.	☐	☐	☐
3. Subcontractor Cost Worksheet	☐	☐	☐
4. Copy of CityInfo Expenditure Report	☐	☐	☐
5. Plans	☐	☐	☐
6. Master Specifications in edit mode.	☐	☐	☐
7. Bid Proposal / Schedule of Values	☐	☐	☐
8. Construction Cost Estimate (10% contingency)	☐	☐	☐
9. Quantity take-off sheets	☐	☐	☐
10. Budget Analysis Form	☐	☐	☐
11. FRI, if necessary	☐	☐	☐
12. Civil and Electrical Design Quality Control Checklist	☐	☐	☐
13. Reviewers comments and responses.	☐	☐	☐

ATTACHMENT 2

60% Senior Advisory Review Committee Process

Updated July 27, 2006

1. 60% plans are to include the final alignment showing all proposed improvements, final proposed signing and striping, all underground facilities, showing SMUD, PG&E, Comcast, etc., facilities, proposed and existing FL, CL, spot elevations, Existing R/W, Proposed R/W and BOC, BOW.

2. The Senior and Supervising Engineer will review the 60% plans, specifications and cost estimate prior to the 60% Senior Advisory Review.

3. The PM will schedule and plan a one (1) hour, 60% Senior Advisory Committee meeting with senior management staff from each section of the Division and the design consultant.

4. The PM's presentation should include aerials, striping plans, typical sections, existing photos and cover the following items:

    a. The original budget, schedule and proposed improvements identified in the approved Project Report
    b. Budget Analysis based on 60% design
    c. Design expenditures to date vs. design budget in Project Report.
    d. All changes to the budget, schedule and scope from the approved Project Report
    e. Environmental Documentation
    f. Environmental Mitigation Measures and Costs
    g. Alignment/Geometrics
    h. New issues/items not covered in the Project Report
    i. Status of the Public Outreach
    j. Define all required Permits (i.e., Caltrans, UP, etc.)
    k. Define the required R/W and related issues
    l. Proposed landscaping (if any)

5. Question and Answer (30 minutes)

6. Email to all committee members with decisions reached on the project issues raised by the committee along with the rational for the decisions.

SECTION 3-3

Topographic Surveys

PURPOSE

This section defines the process for requesting, scheduling and budgeting topographic surveys.

DEFINITIONS / ABBREVIATIONS

SRF.....Survey Request Form

TS .....Topographic Survey

PM……Project Manager

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

POLICY

All projects are to have a topographic survey completed with the exception of the types of projects listed in Section 3-4, Base Maps. Requests for topographic surveys are to be made in a timely manner.

AUTHORITY

The PM has the authority to determine the accuracy and level of information required in the topographic survey.

RESPONSIBILITIES

Project Manager

- Determines the accuracy and level of the topographic survey.
- Determines the survey limits.
- Establishes schedule and budget in consultation with the consultant or Supervising Surveyor.
- Prepares the SRF.

Supervising Surveyor

- Reviews the SRF.
- Assigns a survey crew.
- Confirms scope, schedule, and cost of survey with the PM.
- Resolves any budget, scope, and schedule issues with the PM.

Survey Crew

- Performs the TS and prepares the agreed upon deliverables.

ASSIGNING A SURVEY CREW

A survey crew is to be assigned by the Supervising Surveyor according to the current workload and availability of the crew. Assignments are to be managed so that the agreed upon schedule is met. If in-house crews cannot deliver the survey on schedule because of unforeseen circumstances or prior commitments, the Supervising Surveyor is to contract with a consultant to perform the work.

PROCESS FOR REQUESTING AND PERFORMING A TOPOGRAPHIC SURVEY

The TS process begins with the PM filling out the SRF. After a survey crew is assigned to the project, the assigned Survey Party Chief will schedule a meeting in the field with the PM to go over the survey request and any details in the field that need to be considered.

ATTACHMENT

Attachment 1: Survey Request Form

ATTACHMENT 1

Survey Request Form

SURVEY REQUEST FORM

JOB TITLE: **PN:**

FROM: **PHONE:** **DATE:**

RECEIVED: **EXPECTED COMPLETION DATE:** CRITICAL?: ◯ yes **BUDGET AMT:**

ASSIGNED TO: **ACTUAL COMPLETION DATE :** **FINAL COST:**

BUDGET AMOUNT AND EXPECTED COMPLETION DATE APPROVED BY: **PM:** ☐ **PARTY CHIEF:** ☐

☐ **STORM DRAIN FEATURES TO BE LOCATED**
- ◯ CLEAN-OUTS
- ◯ DI'S / GUTTER DRAINS
- ◯ MH
- ◯ DIP MH

☐ **SEWER FEATURES TO BE LOCATED**
- ◯ CLEAN-OUTS
- ◯ MH
- ◯ DIP MH

☐ **WATER FEATURES TO BE LOCATED**
- ◯ WATER VALVES
- ◯ SERVICES - METERS
- ◯ FIRE HYDRANTS
- ◯ SPRINKLERS
- ◯ NUTS

☐ **ELECTRICAL FEATURES TO BE LOCATED**
- ◯ POLES & GUYS
- ◯ ALL STREET LIGHTING
- ◯ TRAFFIC CONTROL
- ◯ STRIPING

☐ **PROPERTY SURVEY**
- ◯ ATTACHED MAPS & INSTRUCTIONS
- ◯ LOCATE CORNERS

☐ **ATTACHED PROJECT LOCATION MAP**

☐ **SPOT ELEVATIONS AT _____ INTERVALS OR AS REQUIRED**

☐ **STREET FEATURES**
- ◯ COMPLETE CROSS SECTIONS - INCLUDES BOW, BOC, FLOWLINE, LIP, & CENTERLINE
- ◯ PARTIAL CROSS SECTIONS - INCLUDES CENTERLINE, LIP AND/OR FLOWLINE
- ◯ JUST CENTERLINE
- ◯ JUST FLOWLINE
- ◯ OTHER

☐ **TOPOGRAPHY FEATURES**
- ◯ BUILDINGS
- ◯ FENCES
- ◯ SHRUBS
- ◯ ALL TREES OVE INCHES - EXCEPTIONS
- ◯ TREES AND DRIP LINES
- ◯ OTHER

☐ **OTHER** *Please have party chief call me prior to beginning job.*

RETURNED DATA FORMAT

☐ **SITE DRAWING ONLY**
☐ **POINTS ON DISK ONLY (ASC. STD. W/O QUOTES)**
☐ **SITE DRAWING WITH DISK (ASC. STD W/O QUOTES & DWG.)**
☐ **OTHER** *Points can be sent via E-mail. FAX/Inter-office MH data.*

ANY QUESTIONS OR INQUIRY, PLEASE CALL 808-6362, FAX REQUEST TO 808-7903 OR GROUPWISE REQUEST TO ROY HEAVENSTON.

SECTION 3-4

Base Maps

PURPOSE

This section describes the policy and procedures for creating a base map, which establishes the existing conditions and starting point for design of projects.

DEFINITIONS / ABBREVIATIONS

Base Map.....A map based on a collection of survey points downloaded into an electronic drawing, showing existing topographic and infrastructure information.

Benchmark.....Vertical control point established by surveyors at various locations throughout the City.

Construction Center Line ....The line shown on plans which forms the basis of control for laying out design information.

Plan View.....Horizontal view as seen from above.

Plat Map.....Legal document filed with the County Recorder showing the boundaries of a parcel of land.

Profile View....Section view as seen from the side.

Property Lines .....The lines showing the boundary of a parcel.

Right of Way ..Land dedicated for public use.

Topographic Survey .....A collection of three dimensional points translated into symbols and lines depicting existing land features.

Scale.....A proportional reduction of actual measurements reduced to size to fit on a plan. Typical engineering scale is either 1" = 20' or 1"=40' scale. (See Attachment 1)

Spot Elevation.....The elevation taken at a specific point and shown on the base map.

Survey Party Chief.....Lead person responsible for performing the topographic survey.

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

POLICY

All design drawings will be developed using a base map generated through a topographic survey unless otherwise provided. When a topographic survey is required, the PM is to complete the Base Map Checklist (Attachment 2) and Survey Request Form (Attachment 1, Section 3-3).

AUTHORITY

A base map is created at the request of the Project Manager.

RESPONSIBILITIES

Project Manager

The PM is responsible for defining the limits and specific items for the topographic survey. This includes the potholing needed to identify the alignment and depth of underground utilities. After preparing a Survey Request Form, the PM is to coordinate a field meeting between the PM and the Survey Party Chief to review the scope of the survey.

Survey Party Chief

The Survey Party Chief is responsible for reviewing the Survey Request Form, verifying the scope of work, establishing an itemized budget and schedule for the PM to review and approve, performing the topographic field survey and forwarding the topographic survey in electronic format to the Engineering Technician. The Survey Party Chief may also be requested to prepare plat maps and legal descriptions for right of way information.

Engineering Technician

The Engineering Technician is responsible for creating the base map. The process includes gathering all subdivision maps, assessor parcel maps and plat maps to lay out property lines, right of way lines, easements and property owner information on the base map. The PM and the Engineering Technician are required to visit the site to verify that all elements have been mapped. Upon receipt of the topographic survey points, the Engineering Technician consults with the PM on the horizontal and vertical scale of the plan, profile, striping and grading plan sheets.

DETERMINING THE NEED FOR A SURVEYED BASE MAP

Typically, projects begin with a topographic survey of existing field conditions, and the preparation of a base map. A base map includes spot elevations of existing topographic features and plan and profile views of above and below ground infrastructure. Gathering as-built drawings from City sources and utility companies to show all existing known information is fundamental to creating an accurate base map prior to starting design.

While most projects require a surveyed topographic base map, there are a few exceptions. The Senior Engineer has the authority to exempt certain types of projects from the requirement of a surveyed base map. Typical projects that may not require a surveyed map are those where the elevation of improvements will not change. These include:

- Landscaping of existing medians and planters;
- Traffic signal and street light projects;
- Overlay/slurry seals.

The above projects may use a base map developed through aerial photography or digitized as built drawings.

ELEMENTS OF A BASE MAP

Base maps are to include the following features:

Construction centerline, property lines, fences, street lights, power poles, signs, striping, traffic signals, buildings, walkways, shrubs, trees, public and private easements, assessor parcel numbers and property owner contact information, water, sewer, drainage and private utility information (PG&E, SMUD, AT&T, etc.).

All other existing features and horizontal/vertical obstructions which may constrain design will also be surveyed and mapped on the base map.

RESOLVING DISCREPANCIES IN RIGHT OF WAY AND PROPERTY LINE INFORMATION

If the Engineering Technician identifies a discrepancy in right of way and property line information based on assessor's parcel maps, subdivision maps, plat maps and/or other maps, the Engineering Technician is to consult with the PM. The PM will review the information and

if necessary consult with the Supervising Land Surveyor to resolve the discrepancies.

ATTACHMENTS

Attachment 1: Base Map Scales

Attachment 2: Base Map Checklist

ATTACHMENT 1

Base Map Scales

Typical scales used for different types of projects and plan sheets are as follows:

Type of Project	Plan and Profile Sheet Scale - Horizontal/Vertical	Grading Plan Sheet Scale	Signing and Striping Sheet Scale
Road Reconstruction	1”=20’ / 1”=2’	1”=10’	1”=40’
Street Widening	1”=40’ / 1”=4’ or 1”=20’ or 1”=2’ Use larger scale if significant conforms, details and callouts are required.	1”=10’	1”=40’
Traffic Signal	Plan only - 1”=20’ and 1”=40’	N/A	1”=40’
Street Lighting	Plan only – 1”=40’	N/A	N/A
Landscaping	Plan only 1”=40’	1”=10’	1”=40’, if needed

ATTACHMENT 2

Base Map Checklist

		YES	INITIAL
1.	The PM has prepared a Survey Request Form and met with survey team in the field to describe the project, limits and survey needs.	☐	_____
2.	The PM and the Engineering Technician have performed a field verification of the Base Map and have taken photos for project records.	☐	_____
3.	Obtain and plot City utilities (water, sewer and drainage maps).	☐	_____
4.	Obtain City fiber map and plot existing infrastructure.	☐	_____
5.	All above and below ground utilities are plotted on the plan.	☐	_____
6.	Utility Letter A has been sent.	☐	_____
7.	Utilities in potential conflict are potholed and shown in plan and profile.	☐	_____

SECTION 3-5

Design Standards

PURPOSE

This section identifies the design standards and design practices that are to be used for street improvement projects.

DEFINITIONS / ABBREVIATIONS

AASHTO .....American Association of State Highway Transportation Officials

DPM.....Design and Procedures Manual

HDM.....Caltrans Highway Design Manual

MUTCD.....Manual of Uniform Traffic Control Devices

UBC .....Uniform Building Code

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

AUTHORITY

Standards for the design of transportation projects in the City of Sacramento are governed by the City's Design and Procedures Manual. The manual may be modified by approval of the Engineering Services Manager through the Design Policy Review Committee.

POLICY

All projects are to be designed in accordance with the DPM. Streets are to be designed in accordance with Section 15 "Street Standards" of the DPM and traffic signals and street lighting are to be designed in accordance with Section 14 "Traffic Signals and Street Lighting Standards" of the DPM. In cases where the DPM does not provide a design standard, other design standards may be used including accepted engineering design practices discussed in this section, and design standards (latest edition) in the AASHTO, MUTCD, HDM, Caltrans Traffic Manual, Caltrans Standard Plans, and UBC.

RESPONSIBILITIES

Project Manager

The PM has the overall responsibility for applying the appropriate design standards to projects (see Attachment 1).

Senior Engineer / Special Projects Engineer

The SE/SPE has the responsibility for reviewing and approving the design standards applied during the course of design.

DESIGN STANDARDS

The DPM is to be used for all City projects. The DPM provides design standards for streets including widths, street radii, profile grades, cross slope grades, pavement, storm drainage, water, sewer, traffic signal and street lighting. The DPM covers most situations encountered in the design of street improvements. The DPM is not a textbook or a substitute for sound engineering knowledge, experience, or judgment.

Americans with Disabilities Act (ADA) design standards are covered in Chapter 10 of the PDM.

STANDARDS FOR PROJECTS WITHIN MULTIPLE JURISDICTIONS

Projects within multiple jurisdictions are to be designed to each jurisdiction's standards unless otherwise agreed to by the agencies.

STANDARDS FOR PROJECTS ON THE STATE HIGHWAY SYSTEM

Project on the State highway system are to be designed in accordance with the HDM, Caltrans Standard Plans and Caltrans Bridge Design Manuals.

STANDARDS FOR BRIDGE PROJECTS

All bridge projects are to be designed in accordance with the Caltrans Bridge Design Manuals and Caltrans Standard Plans.

STANDARDS FOR PROJECTS ON LEVEES

Projects undertaken on levees are to be designed in accordance with the local flood control district standards (i.e., SAFCA, Reclamation District 900 and 1000, American River Flood Control District, etc.) and State Reclamation Board standards.

ATTACHMENT

Attachment 1: Design Standards

ATTACHMENT 1

Design Standards

Design Speed: The design speed for a street is to be five (5) miles per hour higher than the posted speed.

Horizontal Curve Radius: The minimum horizontal curve radius for the design speed shall be obtained from Section 15 of the DPM or AASHTO. For a design speed, reversing horizontal curves must have an intervening tangent at the length recommended in AASHTO or HDM.

Street Width: The width of a street is dependent on the projected traffic volumes and on whether on-street bike lanes are required. The width shall comply with the one of the typical sections in Section 15 of the DPM.

Bike Lanes: Class II, on-street striped lanes, are to be 6' measured from the face of curb. When a street is on the City's Bikeway Master Plan and is designated for a Class II bikeway, an additional 4' of pavement is to be added to both sides. For Class I, Class II and Class III bikeway design standards, refer to Chapter 1000 of the HDM.

Planter Strip: This width is defined in the typical street sections in Section 15 of the DPM. This strip is to be designed with landscaping if a maintenance district or adjacent property owner agrees to maintain. If no agreement on maintenance is achieved, only trees will be planted. Trees shall be watered for two years, or until establishment, by an irrigation system or by a contract watering truck.

Curb and Gutter: The curb and gutter is to be vertical wherever possible. The minimum profile grade is to be 0.25% in accordance with Section 15 of the DPM. For self-cleaning purposes, the minimum profile grade within curb returns is to be a minimum of 0.50%. Aggregate base, 12" deep, shall be placed under the curb and gutter when the R-value is less than 15 or the soil expansion index is greater than 75%. Aggregate base of 6" is to be placed when the R-value is greater than or equal to 15 and the soil expansion index is less than or equal to 75%.

Vertical Curves: The minimum vertical curve length at the intersection of two grades is 50 feet. Vertical curves on residential and collector streets are required if the algebraic difference between grades is greater than 2%. Vertical curves on all other streets are required if the algebraic difference between grades is greater than 1.5%.

Sidewalks: The width of sidewalks shall conform to Chapter 15 of the DPM. Under no conditions is a new sidewalk to be less than 4' wide measured from the back of curb and have more than a 2% cross slope. Aggregate base, 12" deep, shall be placed under the curb and gutter when the R-value is less than 15 or the soil expansion index is greater than 75%. Aggregate base of 6" is to be placed when the R-value is greater than or equal to 15 or the soil expansion index is less than or equal to 75%.

Sidewalk profile grades are not to exceed 5%. However, higher profile grades are accepted for grade separation structures (undercrossing and overcrossing). Refer to AASHTO or HDM for maximum grade separation profile design standards.

Pavement: New pavement design is to be based on the 20-year Traffic Index and soil R-Value and be designed in accordance with the Flexible Pavement Design Method in the HDM.

Pavement Cross Slopes: New streets shall have a 2% cross-slope. The cross-slope on street widening shall be 1.5% minimum to 3% maximum. Where Class II, on-street bike lanes are proposed, the 4' of pavement next to the curb and gutter is not to exceed 3%.

Pavement Overlay: All streets to be overlaid must be deflection tested with a DYNAFLECT testing device and the overlay design is to be based on the 10-year Traffic Index.

Curb Ramps: Curb ramps shall be in accordance with the City's Curb Ramp Policy and Design Standards. At locations where a standard curb ramp detail cannot be applied, a site specific curb ramp design shall be completed in compliance with the City's Curb Ramp Policy and Design Standards. The maximum profile grade shall be 5% measured 4' from the face of curb out to the pavement for the full width of the curb ramp. For additional ADA standards, refer to Chapter 10 in the PDM.

Retaining Walls: Retaining walls shall be formed concrete or concrete masonry block and conform with the Caltrans Standard Plans (Latest Edition) or UBC.

Sound Walls: Sound walls are to be concrete masonry block and shall be designed to the height(s) required in the Mitigation and Monitoring Plan of the Environmental Document and be in accordance with the Caltrans Standard Plans(Latest Edition) or UBC. Sound walls identify property line locations and can be built entirely in the public right of way or on private property. In most situations, sound walls are built on private property.

Street Lighting: Street lighting design shall be in accordance with Section 14 of the DPM. The City maintains three (3) types of street light standards: Ornamental, Post Top and Mast Arm.

Traffic Signals: Traffic signals are to be designed in accordance with Section 14 of the DPM.

Landscaping: Landscape designs for street medians and planter strips shall be in accordance with adopted Streetscape Master Plan Guidelines and the City's Urban Landscape Design Guidelines.

Drainage: Drainage design shall be in accordance with Section 15 of the DPM.

Water Mains: Water main design shall be in accordance with DOU's standards.

Sewer Main: Sewer main design shall be in accordance with DOU's standards.

SECTION 3-6

Plans, Specifications and Estimate (PS&E)

PURPOSE

This section conveys a process and procedure for preparing Plans, Contract Specifications and Estimate (PS&E) for transportation improvement projects.

DEFINITIONS / ABBREVIATIONS

Plans..... Project plans, standard details, and supplemental drawings showing the location, limits, character, dimensions and details of the work to be performed by the Contractor.

Standard Specifications.... City of Sacramento Standard Specifications for Public Works Construction.

Caltrans Standard Specifications.... State of California Department of Transportation Standard Specifications.

Standard Plans..... Standard Plans of the State of California, Department of Transportation.

Special Provisions ..... Written instructions setting forth conditions or general requirements particular to the work.

Contract Specifications.... Special Provisions, Construction bid item technical specifications, bid proposal, and Contract Agreement.

Estimate..... Construction cost estimate for the work to be performed.

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

POLICY

Projects are to be designed and completed in accordance with the scope of work, schedule, and budget in the approved Project Report.

AUTHORITY

The Project Manager is given the authority to prepare the PS&E in accordance with the scope of work, budget, and schedule in the Project Report. The authority to change the scope of work, budget and schedule lies with the Engineering Services Manager.

RESPONSIBILITIES

Project Manager

The PM is responsible for the overall preparation of the PS&E, ensuring milestone tasks are completed on schedule, and monitoring the overall project budget and schedule. The PM is responsible for advising the Senior Engineer or Special Projects Engineer if the project scope of work, budget or schedule needs revision. A Project Approval and Authorization Form (PAAF) is to be prepared and submitted to the Supervising Engineer for approval if any of these areas need revision.

Senior Engineer and Special Projects Engineer

The Senior Engineer and Special Projects Engineer are responsible for providing quality

control reviews of the PS&E and ensuring the project schedules and budget are being met.

Supervising Engineer and City Traffic Engineer

The Supervising Engineer and City Traffic Engineer are responsible for approving the project Plans by signing the plan cover sheet.

Engineering Technician

The Engineering Technician is responsible for the preparation of the plans under the direction of the PM.

INTENT OF PS&E

The Plans and Contract Specifications are documents that bind the Contractor to performing the planned work for a specified dollar amount without undue risk to the contractor. The Plans and Contract Specifications must be prepared at a level of clarity and detail which is sufficient to define all elements of the work and assign responsibility for the execution of the work without ambiguities.

The Engineer's Estimate provides the quantities and estimated unit costs to construct the project and is used for budgeting purposes as well as to inform prospective bidders of the relative magnitude of the work.

PS&E DELIVERY PROCESS AND MILESTONE TASKS

The preparation of Plans begins after the PM reviews the Project Report prepared by F&PD. After obtaining a clear understanding of the scope of work, the PM prepares a Survey Request Form to obtain topographic survey information for the purpose of preparing base sheets for the design and preparation of the Plans.

Upon receipt of the topographic survey, the Engineering Technician prepares base sheets in accordance with the drafting requirements and standards set forth in the Design and Procedures Manual.

Following is a summary of key milestone tasks to be completed during the preparation of the PS&E for a project.

- Review Project Report prepared by F&PD.
- Prepare Survey Request Form.
- Prepare base map.
- Send base sheets to utility companies with Utility Letter 'A'.
- Prepare 30% preliminary design, striping plans for review and approval by the City Traffic Engineer. All mitigation measures identified in the environmental documents should be scoped for implementation at this stage.
- Prepare 60% PS&E and submit for review. The 60% PS&E is to include civil, electrical, signing and striping, landscaping, drainage, water and sewer plans. All utility information should be plotted and factored into the design at this stage.
- PM conducts 60% Senior Advisory Review Committee meeting. The scope of work, schedule, and budget is reviewed by the committee for consistency with the Project Report.
- Prepare 90% PS&E and submit for review. The 90% PS&E is to include construction staging, traffic control, and environmental mitigation measures.
- Send 90% design plans and Utility Letter 'B' to utility companies with known or potential conflicts.
- Prepare 100% PS&E and submit for review and approval.
- Prepare Final PS&E for approval by Supervising Engineer and City Traffic Engineer.
- Advertise project for bids.
- Send Final PS&E and Utility Letter 'C' to utility companies with known or potential conflicts.

If the scope, budget, and schedule at any milestone are inconsistent with that in the PAAF, the PM is to determine whether budget savings can be accomplished or whether the schedule can be accelerated. If not, an amended PAAF is to be filed immediately. No changes to the approved scope will be considered without an amended PAAF.

If an amended PAAF is approved with an increase to budget, an FRI is to be prepared immediately.

PLANS

Plans include a cover sheet, survey control diagram sheet(s), typical sections sheet(s), construction detail sheet(s), plan and profile sheet(s), signing and striping plan sheet(s), landscaping plan sheet(s), electrical plan sheet(s), water plan sheet(s), construction staging plan sheet(s), and traffic detour plan(s).

Plans are to be prepared in accordance with the Drafting Standards contained in the latest edition of the City's Design and Procedures Manual.

CONTRACT SPECIFICATIONS

Contract Specifications are to include the Contract Agreement, Bid Proposal, Special Provisions, Electrical Specifications (as needed), Items of the Proposal, Schedule of Values, and the Appendix, including the Mitigation Monitoring Program.

For projects which are funded with Federal funds, all Local Assistance Procedures Manual provisions are to be followed. The PM is to familiarize himself/herself with all requirements in advance and schedule all work tasks in the project work plan. Prior to advertising for bids, the PM is to submit a PS&E Certification Package for approval by the Caltrans District Local Assistance Engineer and obtain an Authorization to Proceed with Construction (FM76).

For projects on a State route or on the Federal highway system, the PM is to obtain all necessary encroachment permits from Caltrans and factor all work tasks into the project work plan in advance.

ESTIMATE

An Estimate is to be completed and submitted at the 60%, 90%, and Final PS&E submittal stages. The Estimate is to be used to complete a budget analysis of all project costs. Typical contingencies to be used are 20% for the 60% level, and 10% for the 90% and Final.

Cost estimates are to be developed using recently bid unit prices for comparable bid items. Comparable bid items are to be adjusted for trench depth, relative quantities, and other factors affecting cost. All cost estimates are to be escalated to the year of project construction using ENR indices as a guide.

Final cost estimates are to within +/- 5% of low bid.

SECTION 3-7

Right of Way Acquisition

PURPOSE

This section identifies the types of real property interests that should be acquired for public improvement projects, the clearances and approvals required, and the policies and procedures for obtaining real property interests for locally funded and federally funded projects.

DEFINITION / ABBREVIATIONS

CA.....City Attorney or his/her designee

Caltrans .....State of California Department of Transportation

CEQA.....California Environmental Quality Act

DOT .....Department of Transportation

ET .....Engineering Technician

FHWA .....Federal Highway Administration

LAPM .....Local Assistance Procedures Manual

LS .....Land Surveyor

NEPA .....National Environmental Policy Act

PM .....Project Manager

RFA.....Request for Authorization

RPA .....Real Property Agent

SE .....Supervising Engineer

SRPA ……..Supervising Real Property Agent

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

POLICY

Acquisition of right of way for all projects is to follow the Uniform Act. Acquisition of right of way for federally funded projects is to follow Chapter 13 “Right-of-Way” of the LAPM. Acquisition of right of way on the State Highway System is to follow the Caltrans Right of Way Manual and Cooperative Agreement Manual.

All construction easements, permissions to enter and construct, and permanent real property rights and easements are to be in the City’s possession prior to bid advertising.

No offers are to be made to property owners, verbally or in writing, without an approved CEQA clearance for the project improvements for which the property rights are required. For federally funded projects, a NEPA document must be approved, and an Authorization to Proceed with Right of Way obtained in writing from FHWA.

AUTHORITY

The SRPA RPA has the authority to prepare purchase agreements and deeds and make offers to property owners after an appraisal is completed. The Director of the General Services Department has the authority to establish just compensation.

For any purchase agreement that is $100,000 or greater, the agreement must be approved by the City Council.

Agreements under $100,000 must be approved by the Director of Transportation.

The City Council has the authority to condemn for real property interests by adopting a Resolution of Necessity after the environmental

document for the project has been approved and other actions have been taken in accordance with statute.

RESPONSIBILITIES

Project Manager

- Identifies temporary and permanent real property interest needs in coordination with the LS and ET.
- Produces a critical path schedule for obtaining real property interests in consultation with the LS and RPA.
- Conducts meetings as necessary with the RPA to ensure right of way is in the City's possession prior to bid advertising.
- Ensures that the plats and legal descriptions are accurate and will be accepted by the title company for recording through obtaining an independent check.
- Ensures that the property boundaries and easements are consistent with all adjacent property surveys as shown on record maps plats and legal descriptions.
- Works with the CA and RPA to prepare the Council Report and Resolution of Necessity for condemnation of real property interests.
- Approves all offers for relocation of tenants and offers to property owners to relocate or reconstruct facilities as part of the acquisition offer.
- For condemnation cases, works with the City Attorney, RPA, and appraiser on all legal, project, and financial issues.
- For federally funded projects, prepares and submits to Caltrans a Request for Authorization to proceed with Right of Way prior to making offers.
- For Caltrans Right of Way certification, works with Caltrans Right of Way to determine the appropriate certification level, and schedule for obtaining certification approval from Caltrans.
- For Caltrans Right of Way certification, prepares and submits review draft, and final signed Right of Way Certification to Caltrans and obtains clearance to advertise for bids.
- Ensures that all Certification statements are true and correct prior to requesting signature from the Division Manager.

Engineering Technician

- In coordination with the LS, plots right of way, property lines and existing easements on base maps.
- Checks property lines and easements for consistency with plotted topographic features and informs PM of any conflicts.

Land Surveyor

- Performs title search and obtains vesting deeds to identify existing right of way, property lines, and easements.
- Prepares Appraisal Map showing all properties, Assessor Parcel Numbers and real property interests and acreage required.
- Prepares plats and legal descriptions for real property interests.

Real Property Agent

- Performs or orders appraisals for real property interests.
- Obtains from the Director of General Services establishment of just compensation for real property interests.
- Prepares purchase agreements and deeds and makes offers of just compensation to property owner.
- Serves as City contact and negotiator for right of way acquisition.

- Obtains City Council approval for any agreement $100,000 or greater.
- If negotiations with property owner reach impasse, works with the PM and CA to prepare the Council Report and Resolution of Necessity for condemnation.

City Attorney

- Upon Council approval of the Resolution of Necessity, files pleadings with Superior Court of California for Orders of Possession of real property interests necessary for the project.
- Coordinates closed sessions with the PM for obtaining Council approval, as required, for settlement offers.

Caltrans

- For federally funded projects, issues to the City an Authorization to Proceed with Right of Way Acquisition.
- For federally funded projects, approves Right of Way Certifications.

TYPES OF REAL PROPERTY INTERESTS NEEDED

Permission to Enter and Construct (See Attachment 2)

Obtained from property owners to construct conforms or minor work on private property. No compensation is provided to the property owner. If property owner does not grant permission, a Temporary Construction Easement may be prepared for condemnation.

Temporary Construction Easement

Obtained from property owners for a fixed period of time. Easement is used for storage of materials and equipment, construction equipment operations, or to construct conforms. A monthly rental rate based on an appraisal is paid to the property owner.

Public Roadway Easement

Obtained from property owners to construct, maintain, and operate roadway and other public improvements.

Recreation Easement

Obtained from property owners to construct, maintain, and operate off-street bike and recreation trails.

Public Utility Easement

Obtained from property owners to construct maintain, and operate utility infrastructure.

Fee Title

Acquisition of all real property interests in the land as opposed to an easement for specific uses. With fee title, unused portions of land acquired can be sold off or put to other uses.

RIGHT OF WAY ACQUISITION PROCESS

The PM coordinates with the LS and ET to identify the right of way required. The LS prepares plats and legal descriptions for the real property interests to be acquired which may include, but not be limited to, Fee Title, Temporary Construction Easements, Public Roadway Easements, and Public Utility Easements.

The PM is to provide the plats and legal descriptions to the RPA to perform appraisals. Without the plats and legals, an appraiser may be unwilling to accept the assignment as the real property rights being appraised are not clearly defined. The CEQA document is to be approved prior to completion of the appraisal. If the project is federally funded, that the Authorization to Proceed with Right of Way has been received by the City prior to making offers to property owners.

The RPA is to negotiate with the property owner to reach agreement on the value of the real property interest(s) being acquired. The length of negotiations is limited as specified in (Attachment 1). If negotiations reach an

impasse, the RPA is to prepare and request from the property owner a Right of Entry(see Attachment 3) or Agreement for Possession and Use (see Attachment 4) which allows bid advertising and construction to proceed.

If the value of the real property interest cannot be agreed to between the RPA and property owner, the RPA is to meet with the PM and CA to prepare a Resolution of Necessity for Council adoption to begin eminent domain proceedings.

After approval of the Resolution of Necessity, the CA is to file a pleading in Superior Court to obtain Orders of Possession for the real property interest(s) needed.

ATTACHMENTS

Attachment 1:	Tasks and Duration for Right of Way Acquisition
Attachment 2:	Sample Permission to Enter and Construct
Attachment 3:	Sample Right of Entry
Attachment 4:	Agreement for Possession and Use

ATTACHMENT 1

Tasks and Duration for Right of Way Acquisition

Steps in the Public Acquisition & Eminent Domain Process	Time Estimates in Days Minimum	Outside range**
Obtain legal description and plat maps of property to be acquired	x	x
Obtain bids and hire appraiser	15	20
Appraisal performed, reviewed and establish just compensation amount	60	90 (variable)
CEQA Compliance before making offers, Prepare Agreements/Deeds and make offers	15	30
Negotiate with Property Owners	30	45
Prepare Condemnation file(s) for City Attorney	X REQUIRED before RON	x
Obtaining a Resolution is a Necessity from City Council (Owner must have at least 15 days notice prior to hearing) Add 60 days if Owner required to be served by publication	20	25 +60
SUBTOTAL	155 (5 months)	255 (7 ½ months)
City Attorney's Office Estimates		
Prepare and file pleadings Deposit Just Compensation amount	21	28
Receive Order of Possession from court	14	21
Serve Property Owner with Complaint and Order of Possession	7	60
Obtain possession of property***	3	100
TOTAL	200 (6 ½ months)	434 (14 ½ months)

* This outline provides general guidelines only. Each project is different and may deviate from these guidelines and the time allocations should be modified depending on the nature of the project, availability of the Owners and legal challenges.

** The minimum and outside range are estimates only and vary within projects. The minimum should not be relied on as those estimates assume everything flows seamlessly, notice and service can be accomplished without delay, and factors outside of the City's control are all accomplished timely.

*** Statue provide that service of an order of possession must be 90 days for residential property or being occupied by farming or business operation and 30 days for other property. In rare circumstances on a showing of an urgent need for possession the court may issue an order of possession in 3 days.

FOOTNOTE: TIME ESTIMATED IN DAYS ARE CALENDAR DAYS NOT WORKING DAYS
Note: These timelines were established by a collaborative effort of the City Attorneys' Office, Transportation Project Delivery and Real Estate Services.

ATTACHMENT 2

Sample Permission to Enter and Construct

DEPARTMENT OF
TRANSPORTATION

ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

915 I STREET
ROOM 2000
SACRAMENTO, CA
95814-2604

PH. (916) 808-8300
FAX (916) 264-8281

June 15, 2006

Name

RE: Yale Street Reconstruction Project **(PN:TV26)**

This letter is to inform you of a City of Sacramento construction project, which is scheduled to take place in the vicinity of your property at ----------. The proposed project will construct full street improvements including curb, gutter, drainage facilities, sidewalk, and water service improvements within the existing public right-of-way. This work will require the grading or reconstruction of the area immediately behind the sidewalk as necessary. The City's contractor will perform this work at no cost to you.

This project is scheduled for construction in July 2006. The start date is dependent, in part, on obtaining signed *Permission To Enter And Construct* documents from all the property owners along the line of work by June 15, 2006. Your authorization will permit the City's contractor to enter upon the portion of your property, which is within ten feet of the public right-of-way for the purpose of constructing new street improvements.

Three (3) copies of *the Permission to Enter and Construct* form and a self-addressed envelope are enclosed. Please sign, date, and return two (2) copies. The other copy is for your records.

If you have any questions please call me at (916) 808-8364. Thank you for your time and attention to this matter.

Sincerely,

Project Manager

Enclosures

PERMISSION TO ENTER AND CONSTRUCT

PROJECT NO./NAME: TV26; Yale Street Reconstruction
ASSESSOR PARCEL: _____
PROPERTY ADDRESS: _____
TIME PERIOD: 7/1/06 through 11/1/06
DATE: June 15, 2006

CITY OF SACRAMENTO
Engineering Design Section
915 I Street, Room 2000
Sacramento, CA 95814

Attn: PM Phone: (916) 808-8364

City of Sacramento:

Permission is hereby granted to the City or its authorized agent, to enter upon the property specified herein for the time period shown above. This permission is being granted for the following purpose(s) and all necessary activities incidental thereto:

1. Grade between the proposed sidewalk and my property.
2. Remove portion of my driveway and construct a new driveway with the same materials.

The specific area to be used on the specified property is described as follows:

10 feet north of the right-of-way line adjacent to Yale Street

If existing improvements will be disturbed within the area used, the City will do the following:

Replace with same as existing.

The undersigned represent(s) and warrant(s) that they are (he/she is) the owner(s) of the said property and that they have (he/she has) the exclusive right to give this permission.

Sincerely,

_____
OWNER'S SIGNATURE

_____
OWNER'S PRINTED NAME

RECOMMENDED FOR APPROVAL:

BY_____
REAL PROPERTY SUPERVISOR

ACCEPTED:
City of Sacramento
Department of Transportation

BY_____
DIRECTOR,
DEPARTMENT OF TRANSPORTATION

ATTACHMENT 3

Right of Entry

RIGHT OF ENTRY

Project Name: _____
Project No.: _____
Assessor Parcel No: _____
Property Address: _____
RES File No.: _____
Date: _____
Term: _____

City of Sacramento
Department of General Services
Real Estate Services
5730 24th Street, Building 4
Sacramento, CA 95822

Attention: Supervising Real Property Agent

City of Sacramento:

Permission is hereby granted to the City of Sacramento, its officers, employees and contractors to enter upon the landowner's property, commonly known as **APN:** _____ and shown on the attached diagram, incorporated herein by this reference, to construct _____, including all activities incidental thereto. It is understood and agreed that this permission is not a waiver in any way of the right of compensation for the City's use of said property or the necessary rights therein or of any remedy authorized by law to secure payment therefore; however, the landowner understands and agrees that the above-referenced project is a public project required by the public interest and necessity and the project has been located in the manner that is most compatible with the greatest public good and the least private injury, and that said property is necessary for the above-referenced project. This Right of Entry is granted with the agreement that the City of Sacramento will hereafter, without unnecessary delay, negotiate in good faith with the landowner for the acquisition of a permanent right to use said property. If agreement cannot be reached, the City of Sacramento will promptly commence eminent domain proceedings, including a deposit of funds to support an Order for Possession, to have such compensation determined.

Section 1245.235 of the Code of Civil Procedure requires the City of Sacramento to give each person whose property is to be acquired by eminent domain notice and a reasonable opportunity to appear before the Sacramento City Council and be heard on the matters referred to in Section 1240.030 of the Code of Civil Procedure, which provides:

The power of eminent domain may be exercised to acquire property for a proposed public project only if all of the following are established:

(1) The public interest and necessity require the project.

(2) The project is planned and located in the manner that will be most compatible with the greatest public good and the least private injury.

(3) The property sought to be acquired is necessary for the project.

The landowner agrees that the issues that will be determined in any subsequent eminent domain proceeding will be limited to those of just compensation as they relate to the property covered by this agreement.

The City of Sacramento will pay interest from the date the City of Sacramento receives this Right of Entry duly executed by all persons required to do so on the compensation ultimately paid by the City of Sacramento for its use of the Property. The rate of interest will be the rate of earnings of the Surplus Money Investment Fund and computation will be in accordance with Section 1268.350 of the Code of Civil Procedure. Interest will be computed to and including the date that the City of Sacramento receives a permanent right to use the property duly executed by all persons required to do so, or the date of deposit of compensation in an eminent domain action, whichever is sooner.

This Right of Entry shall remain in effect during the Term of this Agreement, which shall be from _____, 20 , until and including _____, unless an extension is approved by the landowner. The City of Sacramento shall indemnify, hold harmless and defend the landowner from and against any injury, damage, claim, cost or other liability arising or resulting from the activities of the City, its officers, employees and contractors under this Right of Entry.

(REST OF PAGE INTENTIONALLY LEFT BLANK)

The landowner represent and warrants that it is the owner of the property described herein and that it has the exclusive right to give this Right of Entry.

NAME OF AGENCY or PARTY

By: _____
Print Name: _____
Title: _____
Dated: _____

By: _____
Print Name: _____
Title: _____
Dated: _____

RECOMMENDED FOR APPROVAL:

By: _____
Supervising Real Property Agent

By: _____
Real Property Agent

ACCEPTED:

CITY OF SACRAMENTO,
a Municipal Corporation

By: _____
Print Name: _____
Title: _____
For Ray Kerridge, City Manager

Dated: _____

APPROVED AS TO FORM:

By: _____
Deputy City Attorney

ATTEST:

By: _____
City Clerk

S:\Facilities\Real Estate\Tools\Master Docs\RIGHT OF ENTRY - Non.City Owned Property.Revised 2.11.03.doc

ATTACHMENT 4

Agreement for Possession and Use

File No.: ACQ- _____
Project :_____(___)
Parcel No.: _____
Escrow #: _____
Title Company: _____

Date of Preliminary Title Report: _____

Grantor: _____

Grantee: CITY OF SACRAMENTO, a Municipal Corporation

AGREEMENT FOR POSSESSION AND USE

This Agreement is made this _____ day of _____, 20 ___, by and between the City of Sacramento, a municipal corporation, hereinafter referred to as "City", and _____ _____, hereinafter referred to as “Owner”.

It is hereby agreed by and between the parties that the City requires immediate possession of the Owner’s real property to construct a _____ (the “Project”). The Owner’s property is located in the County of Sacramento, State of California, and is legally described in attached Exhibit “A”, Easement deed and has been designated as Assessor’s Parcel Number _____, hereinafter referred to as “Parcel.” An easement across the Parcel is required for the purpose of constructing a portion of the Project. The purpose of this Agreement is to allow the City to proceed with the construction of the Project without delay.

It is agreed by the parties that any delay in the start of construction of the Project is contrary to the public interest. It is the intent of this agreement to offer fair-market compensation to the Owner for permission to enter the Parcel and construct the project, and for acquisition by the City of an easement across the Parcel. The City has made a firm written offer to pay the total sum of $_____ to the Owner and any other persons having an interest in the Parcel.

In consideration of the sum to be paid to the owner and any other consideration hereinafter set forth, the City and Owner agree as follows:

1. Owner hereby irrevocably grants to City, its contractors, agents, and all others deemed necessary by City, the irrevocable right to possession and use of the Parcel including the right to remove and dispose of improvements within the proposed right of way. In consideration for this irrevocable grant of possession and use, City will tender into escrow the sum of $_____. City shall have the right to take possession of the Parcel on the date this sum is paid into escrow. Owner acknowledges that this sum represents the full amount of the City-approved appraisal of what is believed by the City to be just compensation owed for the acquisition of an easement across the Parcel. Owner waives any right to challenge City’s right to possess and use the Parcel in any subsequent eminent domain proceeding filed by the City.

    a. This transaction will be handled through an escrow with _____ _____ their Escrow No. _____. City shall pay all escrow and recording fees incurred in this transaction.

This escrow shall remain open until either a settlement with respect to the City's acquisition of an easement across the Parcel is reached and Owner executes the City's Agreement for Acquisition of Easement in the form as attached hereto as Exhibit "___;" this agreement is terminated; or a final order of condemnation under Section 1268.030 of the California Code of Civil Procedure is entered by the court. Any sum disbursed to Owner from this escrow shall be deducted from the ultimate amount received by Owner as a result of any settlement, award or verdict of just compensation for the Parcel.

2. On and after the date of execution of this agreement, Owner shall not voluntarily assign, sell, encumber or otherwise transfer all or any portion of its interest in the Parcel, or the larger parcel of which the Parcel is a part, if any, without first obtaining the written consent of City.

3. This agreement is made with the understanding that City will continue to negotiate in good faith with Owner to acquire an easement in the Parcel by direct purchase. It is further understood that in the event a settlement is not reached within _____ days of the execution of this agreement, such failure will be an acknowledgment that the negotiations to acquire the Parcel have proved futile. On this date, City shall begin timely preparations for the filing of a complaint in eminent domain to acquire title to the Parcel. If City begins proceedings in eminent domain, it is understood and agreed that this agreement shall continue in effect until either a settlement is reached or a final order of condemnation under Section 1268.030 of the California Code of Civil Procedure is entered by the court.

4. By granting this irrevocable right to possession and use of the Parcel to City, Owner hereby expressly waives its right to appear and be heard before the Sacramento City Council. Owner agrees that City can establish the truth of the matters listed below:

   a. The public interest and necessity require the Project.

   b. The Project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury.

   c. The property sought to be acquired is necessary for the Project.

   d. An offer based upon the full amount of City's approved appraisal has been made to the Owner.

Owner waives its right to contest the adoption of a resolution of necessity by the City.

Owner agrees that in the event the ultimate amount of any settlement, award, or verdict is less than the total of the sums paid to and withdrawn by Owner, the Owner shall refund the difference, including interest to the City.

Owner expressly waives all claims and defenses in its favor in any subsequent eminent domain proceeding, except a claim for greater compensation.

In the event proceedings in eminent domain are begun, the date of valuation for determining the amount of just compensation for the Parcel shall be the date on which the City files the complaint in said proceeding.

Compensation awarded in an eminent domain proceeding shall draw interest as prescribed at the apportionment rate calculated by the State of California Controller as the rate of earnings by the Surplus Money Investment Fund for each six-month period. Owner shall be entitled to receive interest on any sum received as compensation for its interest in the Parcel, whether pursuant to this agreement,

a subsequent settlement or court judgment, beginning on the date City is authorized to take possession of the Parcel pursuant to this agreement and ending on the earliest of the following dates:

a. the date the amount placed into escrow by the City is paid to the Owner;

b. the date the amount is paid directly to the Owner, or;

c. the date the amount is deposited with the court as the award in a judgment in condemnation.

At any time after the commencement of the proceeding in eminent domain, City reserves the right to abandon the proceeding in whole or in part.

If any hazardous materials are present on the Parcel on the date City takes possession of the Parcel, Owner shall be responsible for and bear the entire cost of all removal, disposal, clean-up and decontamination which may be required due to the presence, release, handling or disposal of such hazardous materials. Owner shall further hold City, its officers and employees harmless from all responsibility, liability and claims for damages to persons or property resulting from the existence or use of hazardous materials which are present on the Parcel on the date City takes possession under this agreement.

This agreement shall also extend to and bind the heirs, devisees, executors, administrators, legal representatives, successors and assigns of the parties.

City shall record a memorandum of this agreement.

[signatures on following page]

IN WITNESS WHEREOF, the parties have executed this agreement the day and year first above written.

Grantor(s):

CITY OF SACRAMENTO,
a Municipal Corporation

By: _____

Print Name: _____

Title: _____

Dated: _____

By:

Print Name: _____

Title: _____

Dated: _____

By: _____
City Attorney

ATTEST:

By: _____
City Clerk

Grantee(s):

By: _____

Print Name: _____

Title: _____
For Ray Kerridge, City Manager

RECOMMENDED FOR APPROVAL:

By: _____
Supervising Real Property Agent

By: _____
Real Property Agent

APPROVED AS TO FORM:

***Note:** If the Owner is a corporation, the following two signatures are required: (1) the first signature by either the Chairman of the Board, the President or any Vice President of the corporation; and (2) the second signature by either the Secretary, any Assistant Secretary, the Chief Financial Officer or any Assistant Treasurer of the corporation.

Attach Notary Certification(s).

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SECTION 3-8

Permitting

PURPOSE

This section delineates the necessary steps for identifying, processing and obtaining permits for a project.

DEFINITIONS / ABBREVIATIONS

CEQA.....California Environmental Quality Act

EPA.....Environmental Protection Agency

NEPA .....National Environmental Policy Act

NMFS.....National Marines Fisheries Service

NOI .....Notice of Intent

NPDES .....National Pollutant Discharge Elimination System

PUC .....California Public Utilities Commission

RT .....Regional Transit

RWQCB .....Regional Water Quality Control Board

UPR .....Union Pacific Railroad Company

USACE .....United States Army Corps of Engineers

USFWS.....United States Fish and Wildlife Service

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

POLICY

All required permits will be identified, processed and obtained as early as possible in the design process so that the project will not be delayed. All required permits are typically listed in the environmental document for the project. The permit schedule is to be clearly factored into the critical path schedule for the project.

While the terms of the permit may be negotiated with regulatory agencies to some degree, the decision of those agencies is to be final and all applicable permit requirements are to be incorporated into the contract and implemented.

AUTHORITY

Authority to apply for and execute permits required for the project rests with the PM. Negotiation of permit requirements will be coordinated with the Section Manager. It is the PM's responsibility to ensure that acceptance of permit requirements does not exceed the City Manager's financial authority prior to obligating the City to the permit requirements. In the event that the cost of the permit requirements exceed the City Manager's authority, the necessary agreements must be taken to the City Council for approval prior to any financial obligation.

RESPONSIBILITIES

Environmental Staff

It is the responsibility of the Environmental Services Staff to provide an analysis of all project impacts to natural resources and identify the responsible agencies issuing project permits.

Project Manager

The PM is responsible for calculating and assessing the physical impacts of the project on natural resources, and identifying and processing applications for all necessary permits. The PM is also responsible for completing the Permitting Checklist and for incorporating all permit conditions into the design of the project, including provisions for implementation of the monitoring plan (see Attachment 1).

The PM is responsible for obtaining the necessary CEQA/NEPA environmental clearance prior to submitting an application. If the permitting Agency's required mitigation is above and beyond what is approved in the mitigation monitoring and reporting plan the PM is to consult with the supervisor.

Resident Engineer/ Resident Construction Inspector

The RE/RCI is responsible for informing the permit agency of the commencement and completion of work and ensuring that permit conditions are met.

PERMITTING AGENCIES

County of Sacramento

A permit is required for work occurring within the County's jurisdiction. Issues regarding funding participation and maintenance responsibilities are to be covered in a Cooperative Agreement. The County of Sacramento approval may be issued by way of a written permit or by signing the cover sheet of the improvement plans.

Union Pacific Railroad Company

10031 Foothills Boulevard
Roseville, CA 95747

This permit is needed when the proposed work is within the railroad right of way. The permit is in the form of a Construction and Maintenance Agreement between UPR and the City.

Sacramento Regional Transit

2811 O Street
Sacramento, CA 95816

A project will require a Regional Transit Utility Permit from RT when the proposed work affects or is in close proximity to the Light Rail tracks. In most cases, an RT Metro Track Warrant will also be needed along with the permit.

Metro Center
2700 Academy Way
Sacramento, CA 95815

A Light Rail Track Warrant is required and submitted to RT at least 12 hours before commencing construction near a track.

STATE

California Public Utilities Commission

Docket Office
505 Van Ness Avenue
San Francisco, CA 94102

This permit is required when there is a proposed physical change to an existing railroad crossing and for a proposed new crossing. Refer to PUC Code 1201-1205 and the following General Orders:

- GO 26-D: Clearances on railroads and street railroads
- GO 72-B: Construction & Maintenance
- GO 75-C: Signs, Warning Devices & Crossing Numbering
- GO 88-B: Alterations of railroad crossings
- GO 118: Construction, reconstruction and maintenance of walkways
- GO 135: Blocking of Crossings
- GO 143-B: Design, construction and operation of light rail transit systems
- GO 145: Railroad crossings to be classified exempt
- GO 164-C: Regulations governing state safety oversight

Obtaining a permit from the PUC usually takes 6 months to 1 year, although in some cases it is considerably longer.

State Lands Commission

www.slc.ca.gov

The State Lands Commission has exclusive jurisdiction over all ungranted tidelands and submerged lands owned by the State and the beds of navigable tidelands and submerged lands owned by the State and the beds of navigable rivers, sloughs, and lakes (Public Resources Code Section 6301). The State's ownership of these lands includes lands lying below the ordinary high-water mark of tidal waterways and below the low-water mark of non-tidal waterways (Civil Code Section 830). The area between the ordinary high and low water on non-tidal waterways is subject to a "public trust easement."

State Reclamation Board

www.recbd.ca.gov

The Reclamation Board maintains jurisdiction over all Federal Flood Control Project or Project levees. Generally, jurisdiction extends from a point ten (10) feet landward of the levee across to a point ten (10) feet landward on the other side. This area includes all portions of the levee and riverbed. The Board also controls "designated floodways" which includes all bypasses and weirs within the Delta.

Department of Fish and Game

www.dfg.ca.gov

The Department of Fish and Game is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. The Department must be notified before beginning an activity that will modify a river, stream, or lake. If the Department determines that the activity could adversely affect an existing fish and wildlife resource, a Lake or Streambed Alteration Agreement is required.

State Water Resources Control Board

www.swrcb.ca.gov

The State Water Resources Control Board and the California Regional Water Quality Control Board (RWQCB) for the Central Valley Region review activities that affect water quality in portions of the Sacramento – San Joaquin Delta area. The RWQCB is the enforcement arm of the State Water Resources Control Board. Water quality standards for individual projects are established by the RWQCB as part of the National Pollutant Discharge Elimination System (NPDES) permit procedure.

NPDES Permit: Any facility or activity that will discharge sediments or wastes into any surface waters of the State must obtain waste discharge requirements from the RWQCB.

Projects that disturb one (1) or more acres of soil or projects that disturb less than one (1) acre but are part of a larger common plan of development that in total disturbs one (1) or more acres, are required to obtain a permit and coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ).

California Department of Transportation

California Department of Transportation

(CALTRANS)
District 3
703 B Street
P.O. Box 911
Marysville, CA 959001-0911
Phone: (530) 741-4403
Fax: (530) 741-4236

www.dot.ca.gov

The Caltrans Encroachment Permit is needed when the project encroaches onto State right of way.

FEDERAL

United States Army Corps of Engineers

www.usace.army.mil

The USACE maintains jurisdiction over all "navigable waterways" and requires a permit for work within these waterways. This may include wetlands, vernal pools, drainage ditches, and canals.

The construction of any structure in or over any navigable water, excavation or deposit of material in such waters, and various types of work performed in such water, including full stream channelization, are examples of activities requiring a USACE permit.

There are several types of USACE permits. Some of these, such as the Section 404 permit, will require a consultation with other Federal agencies, such as USFWS, NMFS, the United States Coast Guard, and the EPA.

ATTACHMENT

Attachment 1: Permitting Checklist

ATTACHMENT 1

Permitting Checklist

	YES	INITIAL
1. Has the PM **identified** all the permits for the project?	☐	_____
2. Has the PM filled out all the necessary applications?	☐	_____
3. Have the checks been ordered if any fee applies?	☐	_____
4. Have the applications been mailed out and copies kept?	☐	_____
5. Does the PM know when to expect a response?	☐	_____
6. Has the PM followed up with phone calls or emails regarding the application status?	☐	_____
7. When permits are received, has the PM read and understood all the requirements?	☐	_____
8. Has PM consulted with supervisor if mitigation exceeds Mitigation and Reporting Plan?	☐	_____
9. Have those requirements been incorporated into the plans or contract?	☐	_____
10. Does the RE/RCI have a clear understanding of all the requirements and time lines?	☐	_____
11. Has the RE made sure all permit requirements and timelines have been accounted for or met during the course of construction?	☐	_____
12. Has the RE or PM notified the permitting agency of the completion of the project by submitting the proper documentation?	☐	_____

SECTION 3-9

Utility Coordination

PURPOSE

This section establishes policies and procedures for coordinating the identification and relocation of any utility facilities or structures which are in conflict with the construction of a proposed project.

DEFINITIONS / ABBREVIATIONS

Potholing.....An excavation to determine horizontal and vertical position of existing utilities

PUE .....Public Utility Easement

PM .....Project Manager

DOT .....Department of Transportation

DOU.....Department of Utilities

APWA .....American Public Works Association

Senior Rights.....The entity which has the senior real property rights

RFA.....Request for Authorization

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

POLICY

The process for the identification and relocation of utilities is to conform to the Cities and Counties Utility Coordination Procedures dated December 1992. Cost sharing for the relocation or construction of water, sewer, and storm drain facilities is to be in accordance with the DOT/DOU Cost Sharing Agreement.

Any conflicts with respect to the timing or cost resulting from the need to relocate a particular utility are to be resolved per the terms of the applicable Franchise Agreement, Streets or Highway Code, or PUC Code with respect to the rights and responsibilities of the City and the responsible utility.

AUTHORITY

The PM is authorized to facilitate and direct all efforts to relocate facilities in conflict with the City's project.

Where the City has a responsibility to bear the cost for a relocation, a Utility Relocation Agreement is to be prepared and executed prior to any work performed on the City's behalf. Any agreement less than $100,000 can be approved by the City Manager. Agreements of $100,000 or more are to be approved by the City Council.

RESPONSIBILITIES

Project Manager

- Ensures field verification of existing utilities through potholing and review of record drawings.
- Verifies that all existing above and below ground utility facilities are shown correctly on the base sheets.
- Identifies utility conflicts early in design and resolves conflicts by coordinating and meeting with affected utility companies.

- Sends Utility Letter A, B and C to utility companies. (See Attachment 1)
- Facilitates the relocation of any utilities in conflict and prepares the necessary agreements for the relocation.
- Coordinates and ensures that all scheduled relocations are completed prior to the start of construction.
- Ensures that all necessary coordination and scheduling of relocations between the contractor and the utility company is fully disclosed and addressed in the contract plans and specifications.

Engineering Technician

- Prepares base sheets showing all existing City and private utility infrastructure and facilities.

GENERAL

Utility relocation is a critical path item on most improvement projects. Accurately locating the utilities is essential in identifying and resolving conflicts early in the design process and avoiding expensive project delays.

Utility companies and agencies that own and maintain facilities in the City right of way include, but are not limited to: Electric Lightwave, ERM West, SMUD, Sutter Health Telecommunications, Union Pacific Railroad, PG&E, MCI Worldcom, Sure West, Comcast, Quest Communications, Wiltel (Williams Communications), AT&T (formerly SBC / Pacific Bell), U.S. Sprint, Los Rios CC, Kinder Morgan, Citizen's, Regional Transit, ICG, Caltrans District 3, UCD Medical Center, and State General Services.

In addition, the City owns and maintains the following types of utilities within the public right of way: water, sewer and drainage facilities, street lighting conduit, traffic signal conduit, fiber optic conduit, and interconnect conduit. Utility letters are not sent to Departments operating and maintaining City utilities.

COST OF RELOCATION

Utility companies with facilities within the City right of way and in conflict with a City construction project are required to relocate at the utility company's cost unless the utility company can provide documentation to the City that it has senior rights. If a utility company has senior rights, the City must enter into a Utility Relocation Agreement with the utility company unless an existing Master Agreement covers such work and cost reimbursement. In cases where a utility company has senior rights and the utility is to be relocated outside of the City's right of way, the City is responsible for obtaining the necessary easements or PUE for use by the utility company.

Projects with Federal funds that require utility relocation at the City's expense are to have an Authorization to Proceed from Caltrans for Utility Relocation before the City enters into an Agreement with the utility company to perform relocation. Proceeding without an Authorization to Proceed will jeopardize the Federal participation on the project.

ATTACHMENT

Attachment 1: Sample Utility Letter A, B and C

ATTACHMENT 1

Sample Utility Letter A, B and C

DEPARTMENT OF TRANSPORTATION

ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

915 I STREET, ROOM 2000
SACRAMENTO, CA
95814-2604

PH. (916) 808-8300
FAX (916) 264-8281

(Date)

«NAME»
«COMPANY»
«STREET»
«CITY»

Utility Letter "A"

Dear «TO»:

For your information, enclosed are two sets of preliminary prints showing the improvements to be constructed as part of the (…) project.

On one of the copies of the enclosed plans, please verify the location, size and depth, if underground, of any of your Company's existing facilities that may be affected by the proposed work. Please indicate any pending new facilities that are expected to be installed within the next year. Also, please advise if you maintain an easement for your facilities and provide documentation to that effect.

Within 15 days of receiving this letter, please return the marked up copy to this office.

Thank you for your prompt assistance in this matter. If you desire further information concerning the proposed work, please call me at 808-(…).

Sincerely,

(……..…)

Project Manager

Enclosure

DEPARTMENT OF TRANSPORTATION

ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

915 I STREET, ROOM 2000
SACRAMENTO, CA
95814-2604

PH. (916) 808-8300
FAX (916) 264-8281

March 2, 2005

«NAME»
«COMPANY»
«STREET»
«CITY»

Utility Letter “B”

Dear «TO»:

Preliminary prints showing the public improvements to be made in the (…..) project are enclosed for your information. The anticipated advertising date for the subject project (…..), with construction expected to begin (…..). At a minimum, these plans include the necessary information required to initiate potential utility relocation design.

Please respond in writing within 30 calendar days using the enclosed Utility Information Form. Unless otherwise indicated or agreed to, we assume that within 60 days of receipt of these plans, all planning and engineering of relocations will be accomplished.

If you desire further information concerning the proposed work, please call me at 808-------.).

Sincerely,

Project Manager

Enclosure

DEPARTMENT OF TRANSPORTATION

ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

915 I STREET, ROOM 2000
SACRAMENTO, CA
95814-2604

PH. (916) 808-8300
FAX (916) 264-8281

MEMORANDUM

(Date)
«NAME»
«COMPANY»
«STREET»
«CITY»

Utility Letter "C"

Dear «TO»:

Enclosed for your use are the final approved plans for the (…) Project. The following significant revisions to the project schedule or plans have been accomplished since delivery of the "B" plans:

(significant revisions)

Unless otherwise discussed or agreed, we are allowing a minimum of 60 calendar days from the date of this letter for your utility to schedule and construct relocations. Please respond in writing within 10 calendar days to confirm this schedule.

If you desire further information concerning the proposed work, please call me at 808-(…).

Sincerely,

Project Manager

Enclosure

c: David Cullivan, Right of Way Manager, Street Maintenance
Jon Blank, Supervising Engineer

SECTION 3-10

Environmental Documentation

PURPOSE

This section identifies the different types of CEQA and NEPA environmental clearance documents used for projects, the clearance process, and the interdepartmental responsibilities of various City and agency staffs.

DEFINITIONS / ABBREVIATIONS

CEQA.....California Environmental Quality Act

NEPA.....National Environmental Policy Act

ERR .....Environmental Review Request

PES.....Preliminary Environmental Studies Form

PEAR .....Preliminary Environmental Assessment Report

ED .....Environmental Document

EPA.....Federal Environmental Protection Agency

EPS.....Environmental Planning Services

The following apply to CEQA:

CE.....Categorical Exemption

IS .....Initial Study

EIR.....Environmental Impact Report

NOD.....Notice of Determination

ND .....Negative Declaration

MND .....Mitigated Negative Declaration

NOE.....Notice of Exemption

NOP.....Notice of Preparation

NOC.....Notice of Completion

The following apply to NEPA:

CE.....Categorical Exclusion

EA.....Environmental Assessment

EIS.....Environmental Impact Statement

FONSI.....Finding of No Significant Impact

For definition of terms see Attachment 6.

A comparison of CEQA and NEPA Acts and documents are included as Attachment 2

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

POLICY

Prior to beginning final design (typically beyond the 30% design stage), all projects will have an approved environmental clearance document in place, issued by the lead agency for the project.

All projects which require extensive environmental analysis or documentation, or the selection of a preferred alternative are to be environmentally cleared by the Funding and Project Development Section as part of the project scoping phase.

All mitigation measures, and mitigation monitoring plans developed for projects are to be reviewed for feasibility by the Section Managers of F&PD and the Civil and Electrical Design Section prior to, or at the time of the issuance of the Administrative Draft Environmental Document.

All mitigation measures and monitoring plans identified for the project are to be implemented prior to, during, and after construction as required by the project mitigation monitoring plan.

AUTHORITY

The City is the local Lead Agency and has approval authority for all CEQA documents prepared for City projects and City permitted activities.

For projects funded with federal funds, or which are on the federal highway system, or which require a federal permit, the lead agency for the NEPA document is the Federal Highway Administration or the federal agency issuing the federal permit.

RESPONSIBILITIES

Project Manager

- Coordinates and develops the environmental schedule consistent with Chapter 6 of the Local Assistance Procedures Manual for State administered projects and Attachment 3 for City Lead Agency projects.
- Coordinates the resolution of project issues with all regulatory agencies and project stakeholders.
- Coordinates the development and description of project alternatives for the preparation of the ERR.
- Prepares a community involvement plan and coordinates and leads public meetings.
- Prepares a City Council staff report approving the environmental document and other discretionary approval actions and coordinates the presentation to the City Council.
- Reviews all development phases of the environmental document for consistency with the project purpose and need and for feasibility.
- Consults with Environmental Planning Services to ensure the environmental mitigation included in the ED is appropriate, as required by the permitting/regulatory agencies.
- Ensures that all mitigation and monitoring measures identified for the project are implemented prior to, during, and after construction as required by the project mitigation monitoring plan.
- Ensures that the cost of all mitigation and monitoring measures are accounted for in the project budget.

Environmental Planning Services

- Conducts preliminary research, environmental documentation, and coordination with resource agencies and provides documentation of the results.
- Prepares notices, hosts public meetings, and prepares responses to public comments.
- Prepares mitigation reporting plan and assists the PM with preparation of the City Council staff report.
- Assists in fulfilling mitigation commitments.

Local Agency

- Ensures compliance with CEQA and local ordinances and NEPA, if applicable.

Caltrans

- The District Local Assistance Engineer (DLAE) or District Engineer reviews and indicates concurrence with the determination of the local agency.

- Caltrans Environmental Planning checks to make sure the project's ED covers all state and federal environmental laws, regulations, and executive orders, as applicable.

FHWA

- Approves the NEPA document for compliance with NEPA.

ENVIRONMENTAL REVIEW REQUEST

To initiate the environmental review process the PM is to complete an ERR form (Attachment 4) and submit it to the Environmental Planning Services Division (EPS) along with the Environmental Review Request checklist (see Attachment 5).

ENVIRONMENTAL PLANNING SERVICES (EPS) COORDINATION

If an environmental consultant is to be used for the environmental analysis and documentation (whether as a subconsultant to the civil firm or not), the RFP solicitation should be coordinated with and be reviewed by EPS prior to issuance. As the lead for all environmental documents EPS will review the draft RFP and provide comments relating to the environmental scope of services. EPS should also be included in the consultant proposal review and selection process.

In preparation for council approval of the project, the PM and EPS staff are to work together to prepare the "Environmental Consideration" portion of the Council staff report. EPS is to also provide Council report language for the resolution adopting the environmental document, the mitigation monitoring program, and the finding of facts.

ENVIRONMENTAL PROCESS

In most cases where the environmental clearance requires compliance with both CEQA and NEPA, a combined CEQA/NEPA environmental document is prepared. The City's responsibility and process is the same regardless of whether the documents are combined.

CEQA Environmental Scoping

Environmental scoping is required for all projects. The scoping process is to be coordinated closely with EPS to ensure that the project objectives and alternatives are clearly defined and that the scope of the environmental analysis is sufficient and not beyond the intended scope. The scoping process is critical in determining the type environmental document that is required, i.e. CE, ND, MND, Focused EIR, or EIR.

If an EIR is being prepared, submittal of a Notice of Preparation with the State Clearing House is required.

Document Preparation and Review

The environmental document and technical studies may be prepared by a consultant or City staff. These studies may require six months to over two years for preparation, review, and approval.

The technical studies supporting the environmental analysis and findings may include, but are not limited to:

- Biological Resources
- Noise Studies
- Phase I Site Assessments
- Cultural Resources
- Traffic Analysis
- Archaeological Resources
- Air Quality
- Water Quality
- Visual Impacts
- Socio-Economics

Technical studies may support a ND, MND, or EIR.

All environmental documents must be circulated for public review and comment through the State Clearinghouse. A ND or MND requires 30 days for circulation. EIRs require a 45-day public review period of the Draft EIR prior to preparation of a Final EIR. A public meeting is

recommended for a Negative Declaration. A public hearing, which includes a court reporter to transcribe comments, is required for an EIR. The EIR must be in circulation for at least 15 days prior to the hearing. A Notice of Completion, Notice of Availability, and Notice of Opportunity are filed with the State Clearing House for both an ND and EIR. Circulation and notification for a CE under CEQA is not required.

If comments are received by the public or reviewing agencies, written responses to the comments must be prepared. If significant changes to the project result from the comments, the document may require an additional circulation period.

Document Approval

A Notice of Exemption for a CE can be filed with the County Clerk's office upon approval of the Engineering Services Division Project Report.

A final environmental document (ND, MND, EIR) is approved by City Council at a council meeting and supported by the Council Staff Report. Upon approval of an ND, MND or EIR, a Notice of Determination which limits the number of days within which an environmental document may be legally challenged must be filed with the County Clerk's office and State Clearing House, after payment of filing fees, within 5 working days.

If a Notice of Exemption for a CE is filed with the County Recorder, the legal challenge period on the City's action is 31 days. If a Notice of Determination for a MND, ND or EIR is filed with the County Recorder, the challenge period is 30 days. The challenge period is 180 days if an Notice of Exemption or Notice of Determination is not filed.

NEPA Environmental Scoping

Scoping is the formal early coordination process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. The following scoping objectives may include, but are not limited to:

- To identify the affected public and agency concerns;
- To facilitate an efficient EIS preparation process, through assembling the cooperating agencies, assigning EIS writing tasks, ascertaining all the related permits and reviews that must be scheduled concurrently, and setting time or page limits;
- To define the issues and alternatives that will be examined in detail in the EIS while simultaneously devoting less attention and time to less important issues; and
- To save time in the overall process by helping to ensure that draft statements adequately address relevant issues, reducing the possibilities that new comments will cause a statement to be rewritten or supplemented.

Ideally, the scoping process should begin after publication of a Notice of Intent in the Federal Register. The lead agency should mail scoping documents to all potentially concerned government and public entities. These initial documents should include a description of the proposal, significant impacts, alternatives, and a map. The lead agency should enlist public input by publishing a public notice of intent which should include a description of the proposal and how the public can participate in the decision making process.

Document Preparation and Review

The NEPA process consists of an evaluation of the environmental effects of a federal undertaking including its alternatives. There are three levels of analysis depending on whether or not an undertaking could significantly affect the environment. These three levels include:

Categorical Exclusion Determination

- Preparation of an Environmental Assessment/Finding of No Significant Impact (EA/FONSI).
- Preparation of an Environmental Impact Statement (EIS).

Categorical Exclusion

At the first level, an undertaking may be categorically excluded from a detailed environmental analysis if it meets certain criteria which a federal agency has previously determined as having no significant environmental impact. A number of agencies have developed lists of actions which are normally categorically excluded from environmental evaluation under their NEPA regulations.

Environmental Assessment

At the second level of analysis, a federal agency prepares a written Environmental Assessment (EA) to determine whether or not a federal undertaking would significantly affect the environment. If the answer is no, the agency issues a finding of no significant impact (FONSI). The FONSI may address measures which an agency will take to reduce (mitigate) potentially significant impacts. A FONSI requires a public review period of 30 days. If the EA determines that the environmental consequences of a proposed federal undertaking may be significant, an EIS is prepared.

Environmental Impact Statement

An Environmental Impact Statement (EIS) is a more detailed evaluation of the proposed action and alternatives. The public, other federal agencies and outside parties may provide input into the preparation of an EIS and then comment on the draft EIS when it is completed. Draft EISs, draft supplements, and revised draft EISs require a 45 day review period while final EISs and final supplements require a 30 day review period.

If a federal agency anticipates that an undertaking may significantly impact the environment, or if a project is environmentally controversial, a federal agency may choose to prepare an EIS without having to first prepare an EA.

After a final EIS is prepared and at the time of its decision, a federal agency will prepare a public record of its decision addressing how the findings of the EIS, including consideration of alternatives, were incorporated into the agency's decision-making process.

Technical studies supporting the environmental analysis and findings may include, but are not limited to:

- Biological Resources
- Noise Studies
- Phase I Site Assessments
- Cultural Resources
- Traffic Analysis
- Archaeological Resources
- Air Quality,
- Water Quality
- Visual Impacts
- Socio-Economics

All environmental documents must be circulated for public review and comment through the State Clearinghouse and the Federal Register. If an EIS is prepared, a public hearing, which includes a court reporter to transcribe comments, is required. The draft EIS must be made available to the public prior to the hearing and the hearing must be announced at least 15 days prior to the hearing date. Comments received from the public or reviewing agencies would be responded to. EPA reviews EIS's prepared by other federal agencies and makes those reviews public by publishing summaries of those comments in the Federal Register. EPA has also developed a set of criteria for rating draft EIS's. The rating system provides a basis upon which EPA makes recommendations to the lead agency for improving the draft.

Document Approval

If an EA has been prepared: after preparation and approval of the final EA (FONSI), a FONSI is signed and published in the Federal Register.

If an EIS has been prepared: after preparation and approval of a final EIS, a Record of Decision (ROD) is signed and published in the Federal Register.

ATTACHMENTS

Attachment 1: Environmental Document Checklist

Attachment 2: Comparison of CEQA and NEPA Acts and Documents

Attachment 3: CEQA Document Decision Flow Chart

Attachment 4: NEPA Document Decision Flow Chart

Attachment 5: Environmental Review Request Checklist

Attachment 6: Definition of Terms

ATTACHMENT 1

Environmental Document Checklist

	YES	Initial
Submit Environmental Review Request Form with the following information provided:	☐	_____
Anticipated bid advertising date	☐	_____
Requested Environmental Completion date	☐	_____
Council Approval date (estimate)	☐	_____
Type of funding (City, State, Federal)	☐	_____
City/State funding will require CEQA	☐	_____
Federal funding will require NEPA & CEQA	☐	_____
Federal permit will require NEPA & CEQA	☐	_____
Anticipated Environmental Document	☐	_____
Project description	☐	_____
Preliminary plans/cross sections/SF of required excavation	☐	_____
Issues of concern (tree removal), a field visit with tree service representative is recommended	☐	_____
The Environmental Planning Services will assign one of their staff for the project. An immediate meeting with this person is highly recommended.	☐	_____
Working with assigned person, identify the agencies that will require a permit.	☐	_____
The Environmental Planning Services will prepare the studies needed to define and complete the required environmental documents (studies can be prepared in house or through consultants).	☐	_____
Prepare a project schedule to include the time required and timing to complete the required document. (Share this schedule with the assigned person ad use it as a guideline to help you keep track of the time and next step.)	☐	_____
All CEQA documents must be approved and a Notice of Exemption or Notice of Determination filed with the County Recorder prior to bid advertising. This action will reduce the legal challenge period from 180 days to 31 days.	☐	_____
Upon completing the required document and prior to City's action/approval, obtain a check in the amount of $21.00 from Funding and Project Development Section, payable to the Sacramento County Clerk. Remember City's checks are only valid for 90 days.	☐	_____
Call Environmental Staff to file Notice of Exemption or Notice of Determination. It must be filed (after City's action/approval) within 5 working days of the project approval date.	☐	_____

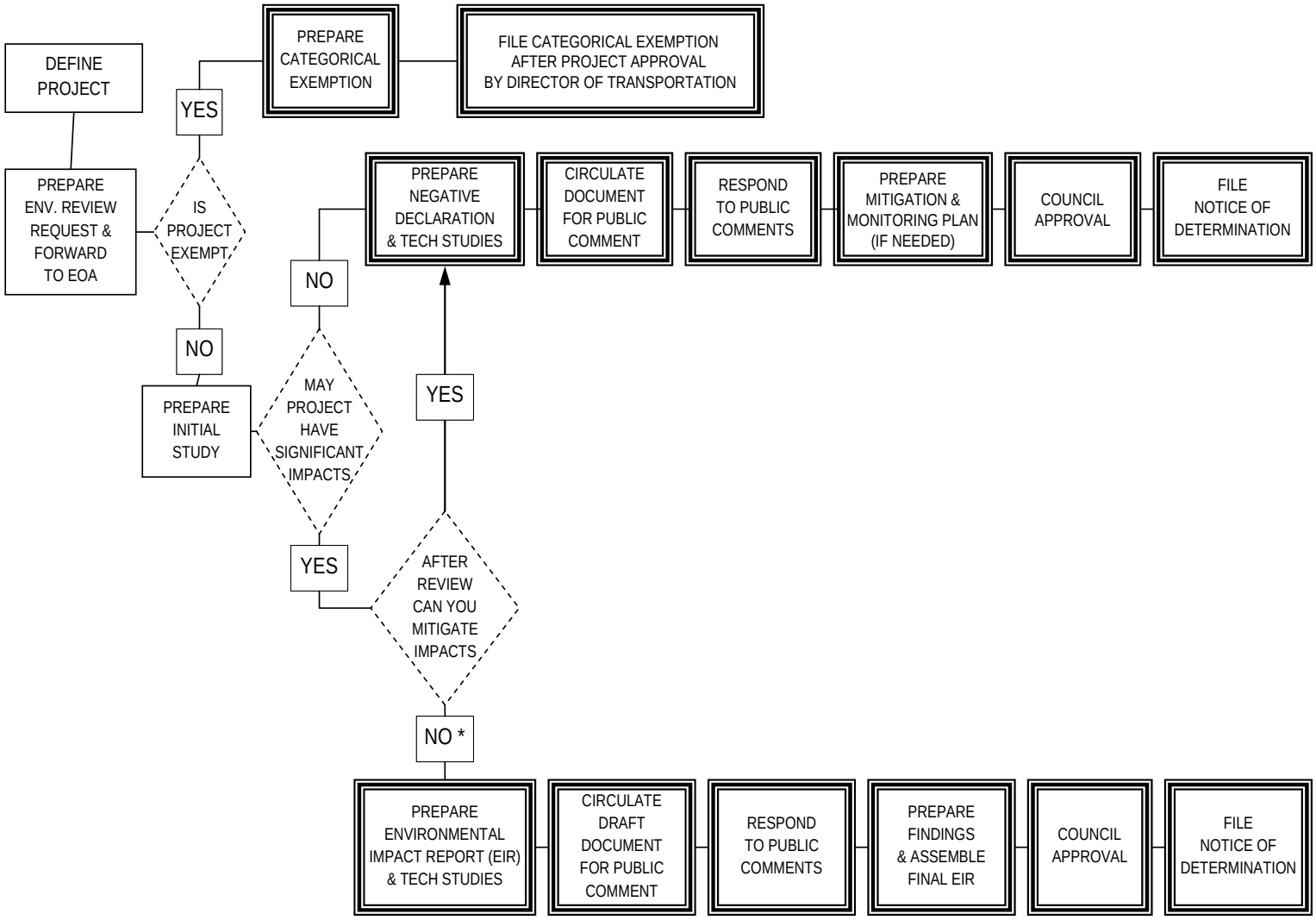
ATTACHMENT 2

Comparison of CEQA and NEPA Acts and Documents

CALIFORNIA ENVIRONMENTAL QUALITY ACT	NATIONAL ENVIRONMENTAL POLICY ACT
Legislation to ensure environmental consideration on activities by state agencies and on the regulated activities of corporations and private individuals which are approved by state agencies. The State requirements of CEQA apply to discretionary projects whether or not federal funding is used.	The Federal requirements of NEPA apply **only** if the project is being carried out, financed, or approved in whole or in part by federal agencies (i.e. projects receiving funding through any federal mechanism, projects requiring a federal permit) (California Code of Regulations '15220)
Categorical Exemption:	**Categorical Exclusion:**
An exemption from CEQA for a class of projects based upon a finding by the Secretary for Resources that the class of projects does not have a significant effect on the environment (typically exempt projects include: street restriping, installing pipelines, repair and maintenance of existing structures with no expansion of capacity)	A category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have to have no such effect in procedures adopted by a Federal agency in implementation of these regulations and for which, therefore, neither an environmental assessment nor an environmental impact statement are required.
Negative Declaration/Mitigated Negative Declaration (ND & MND):	**Finding of No Significant Impact (FONSI)**
A written statement by the Lead Agency briefly describing the reasons that a proposed project, not exempt from CEQA, will not have a significant effect on the environment and therefore does not require the preparation of an EIR. A mitigated negative declaration is prepared for a project when the initial study identifies potentially significant effects on the environment and revisions which would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would result are included in the project (revisions are agreed upon by the applicant before the negative declaration is released for public review).	A document by a Federal agency briefly presenting the reasons why an action, not otherwise excluded, will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared. It shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it. If the assessment is included, the finding need not repeat any of the discussions in the assessment but may incorporate it by reference.
Environmental Impact Report (EIR)	**Environmental Impact Statement (EIS)**
A detailed statement prepared under CEQA describing and analyzing the significant environmental effects of a project and discussing ways to mitigate or avoid the effects. The term "EIR" may mean either a draft or a final EIR depending on the context.	An action-forcing device to ensure that the policies and goals defined in NEPA are infused into the on-going programs and actions of the Federal Government. It is a document which provides full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment. An EIS is concise, clear, and to the point and supported by evidence that the agency has made the necessary environmental analysis.

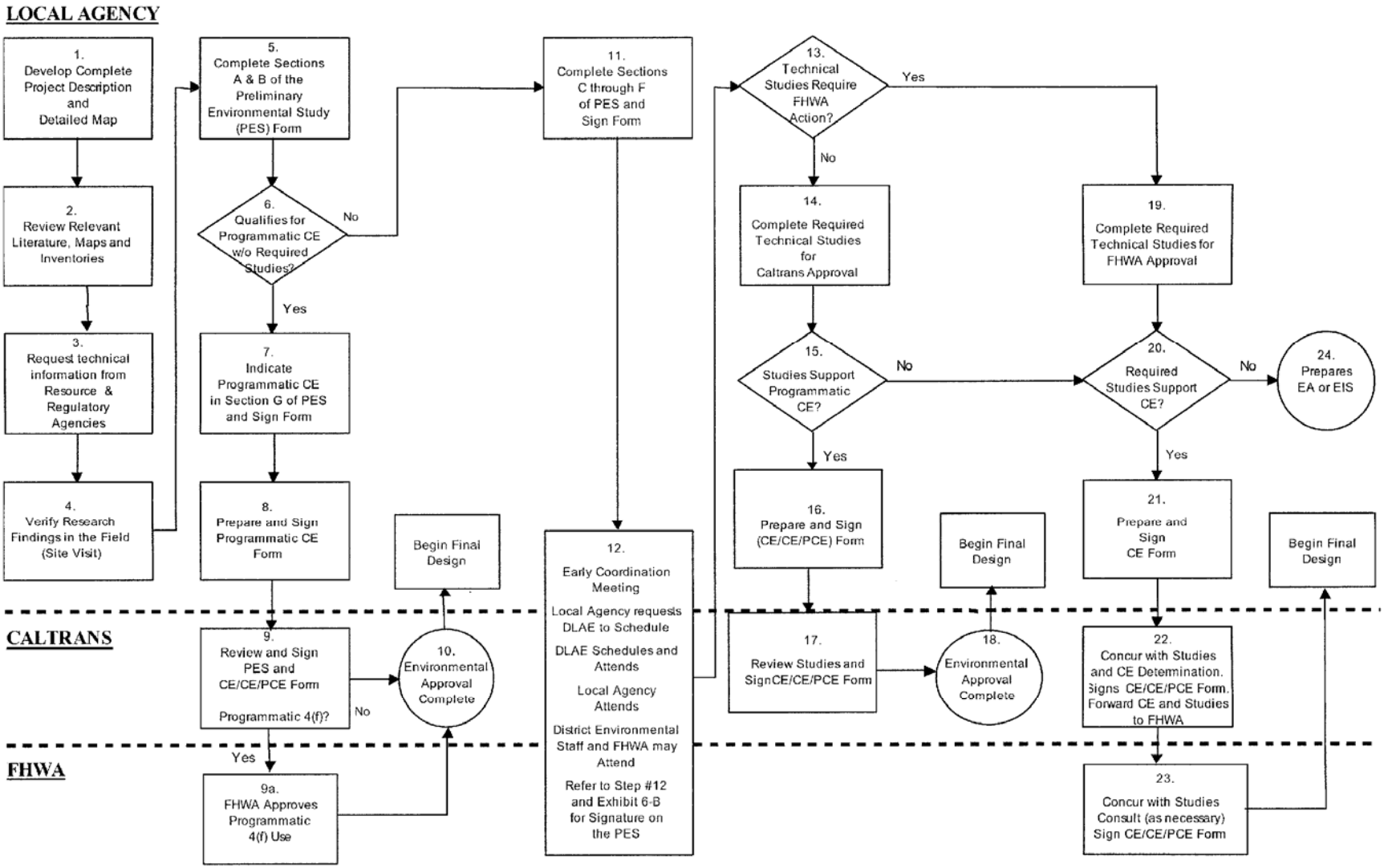
ATTACHMENT 3

CEQA Document Decision Flow Chart



ATTACHMENT 4

NEPA Document Decision Flow Chart



ATTACHMENT 5

Environmental Review Request Checklist

Environmental Review Request includes the following:	YES	Initial
• Project Title and Project Number/Job Number	☐	_____
• Anticipated advertising date	☐	_____
• Requested Environmental Completion date	☐	_____
• Council Approval date (estimate)	☐	_____
• Type of funding (City, State, Federal)	☐	_____
• City/State Funding will require CEQA process	☐	_____
• Federal Funding will require NEPA & CEQA process	☐	_____
• Anticipated Environmental Document	☐	_____
• Project description (who, what, when, where, why)	☐	_____
• Preliminary plans/cross section/SF of required excavation	☐	_____
• Issues of concern (i.e. tree removal); a field visit with Urban Forest Service representative is recommended	☐	_____

ATTACHMENT 6

Definition of Terms

CEQA - California Environmental Quality Act ..... Legislation to ensure environmental consideration on activities by state agencies and on the regulated activities of corporations and private individuals which are approved by state agencies. The State requirements of CEQA apply to discretionary projects whether or not federal funding is used. See Attachment 2 for CEQA documentation flowchart and Attachment 3 for comparison of CEQA and NEPA documents.

NEPA - National Environmental Policy Act ..... Legislation requiring all federal agencies to consider environmental impacts prior to commitment to a federal action. The Federal requirements of NEPA apply only if the project is being carried out, financed, permitted, or approved in whole or in part by federal agencies (i.e. projects receiving funding through any federal mechanism, projects requiring a federal permit) (CEQ Regulations 40 CFR 1500-1508).

Environmental Document ..... (ED) General term referring to various levels of documentation pursuant to CEQA (including CE, IS, ND, MND, EIR) or NEPA (including CE, EA, FONSI, EIS).

Environmental Review Request..... (ERR) City of Sacramento internal form to begin the environmental process.

PES – Preliminary Environmental Studies Form ..... Used for Caltrans Local Assistance projects off the state highway system. A brief form of checkboxes and short answers which is used as a scoping tool to determine the potential presence of sensitive environmental resources within the project area. The form is included in the Caltrans Local Assistance Procedures Manual.

PEAR - Preliminary Environmental Assessment Report... Similar to a PES, but used for a project on State Highway System

Environment..... Under CEQA and NEPA, this is the physical conditions that exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical/cultural or aesthetic significance. The area involved shall be the area in which significant effects would occur, either directly or indirectly, as a result of the project. The environment includes both natural and man-made conditions. In addition to these conditions, NEPA also considers socio-economic impacts to the human environment in its definition of environment.

EPA..... Federal Environmental Protection Agency

Discretionary Project..... A project which requires the exercise of judgment or deliberation and ultimately approval power of additional agencies besides the Lead Agency over a particular activity.

Environmental Planning Services..... (EPS) A division of the City of Sacramento's Department of Development Services whose roles include: 1) prepare/ oversee environmental analysis for public planning, Capital Improvement Projects, and private development, 2) provide technical assistance to City departments and private sector; 3) oversee toxics program; and 4) coordinate environmental policies.

The following apply to CEQA:

Categorical Exemption..... (CE) An exemption from CEQA for a class of projects based upon a finding by the Secretary for Resources that the class of projects does not have a significant effect on the environment but that require minimal documentation and notification.

Initial Study ..... (IS) A preliminary analysis under CEQA prepared by the Lead Agency to determine whether an EIR or a Negative Declaration or Mitigated Negative Declaration must be prepared or to identify the significant environmental effects to be analyzed in the EIR.

Environmental Impact Report ..... (EIR) A detailed statement prepared under CEQA describing and analyzing the significant environmental effects of a project and listing ways to mitigate, minimize, or avoid the effect. The EIR also proposes alternatives to the proposed project.

Notice of Determination ..... (NOD) A brief notice to be filed by a public agency at the County Recorder after it approves or determines to carry out a project, which is subject to the requirements of CEQA.

Negative Declaration..... (ND) A CEQA decision-making document supported by an Initial Study that concludes that no environmental impacts will result from a state or state regulated action.

Mitigated Negative Declaration..... (MND) A CEQA decision-making document supported by an Initial Study that concludes that no environmental impacts will result from a state or state regulated action because mitigation reduced the level of impact below significant.

Statement of Overriding Consideration..... A CEQA decision-making document supported by an Environmental Impact Report prepared when unavoidable significant environmental impacts result from a project and the project benefits outweigh the effects.

Lead Agency..... The public agency, pursuant to CEQA, which has the principal responsibility for carrying out or approving a project and will usually be the first body to discretionarily approve the project. The Lead Agency will decide whether and EIR or Negative Declaration will be required for the project.

Responsible Agency..... A public agency, which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term "Responsible Agency" includes all public agencies other than the Lead Agency, which have discretionary approval power over the project.

State Clearing House..... One of four branches within the Office of Planning and Research which has three primary functions: 1) to coordinate the state level review of environmental documents pursuant to the CEQA; 2) to provide technical assistance on land use planning and CEQA matters; and 3) to coordinate state review of certain federal grants programs. Also maintains a database of all CEQA notices and environmental documents filed.

Notice of Exemption..... (NOE) A public notice pursuant to CEQA is filed by a public agency after it has decided to carry out or approve a project and has determined that the project is exempt from CEQA as being ministerial, categorically exempt, an emergency, or subject to another exemption from CEQA. Filing the Notice of Exemption at the County Recorder within 5 days of a discretionary approval shortens the appeal period (statute of limitations) from 180 days to 31 days.

Notice of Preparation ..... (NOP) A notice pursuant to CEQA sent by a lead agency to notify the responsible agencies, trustee agencies, and involved federal agencies that the lead agency plans to prepare an EIR for the project. The purpose of this notice is to solicit guidance from those agencies as to the scope and content of the environmental information to be included in the EIR. Public agencies are free to develop their own formats for this notice.

Notice of Completion..... (NOC) A brief notice filed with the Office of Planning and Research (OPR)/State Clearinghouse by a Lead Agency as soon as it has completed a draft EIR or Negative Declaration prior to public circulation.

The following apply to NEPA:

Categorical Exclusion ..... (CE) A category of actions which do not individually or cumulatively have a significant effect on the environment.

Environmental Assessment ..... (EA) A concise public document under NEPA, for which a Federal agency is responsible, that provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a Finding of No Significant Impact (FONSI); to aid in agency's compliance with NEPA when no environmental impact statement is necessary; and to facilitate preparation of a FONSI when one is necessary.

Environmental Impact Statement ..... (EIS) Defined in the Code of Federal Regulations as an action-forcing device to insure that the policies and goals defined in NEPA are infused into the ongoing programs and actions of the Federal Government. It is a document, which provides full and fair discussion of significant environmental impacts and informs decision-makers and the public of reasonable alternatives, which would avoid or minimize adverse impacts or enhance the quality of the human environment. An EIS is concise, clear, and to the point and supported by evidence that the agency has made the necessary environmental analyses.

Finding of No Significant Impact ..... (FONSI) A NEPA decision-making document supported by an Environmental Assessment when environmental impacts are below a level of significant.

Federal Lead Agency ..... The federal agency that has the principal responsibility for compliance with NEPA and approval of the federal document.