

February 12, 2015

To: Consultant

RE: Request for Proposals (RFP 2015-01) for Preparation of Plans, Specifications and Estimate (PS&E) for the I-80 Express Lanes Project- West and East Segments in Solano County

Dear Consultant:

The Solano Transportation Authority (STA) invites your firm to submit a proposal to provide professional services for the preparation of the PS&E for this project.

To obtain a copy of the full RFP, please download it as a PDF file from the STA website: <http://tiny.cc/jobsrfps> or call the STA at (707) 424-6075. The RFP describes the project, presents the requirements of the work and outlines the criteria that will be used to evaluate the consultant.

Qualified organizations are invited to submit six (6) hard copies and one (1) digital copy (CD or flash drive) of your proposal to the STA office no later than **3:00 PM, on Friday, March 13, 2015** addressed to:

Janet Adams
STA Deputy Executive Director/Director of Projects
Solano Transportation Authority
One Harbor Center, Suite 130
Suisun City, CA 94585-2473

Note that this deadline is firm and late submittals will not be accepted. Proposals will be reviewed and the firms/teams whose proposal most closely meets the STA's needs, will be selected. The STA may two or more consultant teams, should it be determined necessary. If needed, interviews are expected to be held the week of March 30th.

The STA has adopted a Local Preference Policy which encourages the hiring of local firms. The participation goal for local firms for this Project has been established at 2 percent (%). Additional points will be provided through the evaluation process for those firms who meet or exceed this goal. The STA has prepared a database of contact information for local firms for convenience purposes only and without guarantees as to the ability of such firms to provide the services. This database and the Local Preference Policy can be viewed at <http://tiny.cc/jobsrfps>.

If you have questions regarding this project, please contact Janet Adams, Director of Projects at (707) 424-6010. Thank you for your interest.

Sincerely,



Daryl K. Halls
Executive Director



REQUEST FOR PROPOSALS
(RFP No. 2015-01)

For
Preparation of Plans, Specifications and Estimate (PS&E)
I-80 Express Lanes Project- West and East Segments

In
Solano County

Release Date: February 13, 2015

RESPONSES DUE:

3:00 PM, Friday, March 13, 2015

Six (6) complete hard copies and one digital copy (CD or flash drive) of each response must be received before 3:00 p.m. PST on March 13, 2015

Solano Transportation Authority
One Harbor Center, Suite 130
Suisun City, CA 94585-2473

DISCLOSURE: The master copy of each response to this RFP shall be retained for official files and will become a public record after the award of a contract unless the qualifications or specific parts of the qualifications can be shown to be exempt by law (Government Code section 6250 et seq.). Each Responding Firm may clearly label part of a submittal as "CONFIDENTIAL" if the Responding Firm agrees to indemnify and defend the STA for honoring such a designation. The failure to so label any information that is released by the STA shall constitute a complete waiver of all claims for damages caused by any release of the information. If a public records request for labeled information is received by the STA, the STA will notify the Responding Firm of the request and delay access to the material until seven working days after notification to the Responding Firm. Within that time delay, it will be the duty of the Responding Firm to act in protection of its labeled information. Failure to so act shall constitute a complete waiver.

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INTRODUCTION

The Solano Transportation Authority (STA) is a Joint Powers Authority comprised of members including the cities of Benicia, Dixon, Fairfield, Rio Vista, Suisun City, Vacaville, and Vallejo, and the County of Solano. The STA serves as the Congestion Management Agency for Solano County and is responsible for countywide transportation planning and programming of State and Federal funding for transportation projects within the county. Over the past few years, STA has taken on significant additional responsibilities in the delivery of priority projects on the State Highway System.

STA will be taking the lead on the preparation of the **Project Specifications and Estimate (PS&E)** for the **I-80 Express Lanes Project – West and East Segments**, with Caltrans providing oversight. The I-80 Express Lanes Project consists of two segments. The West Segment (Red Top Road to Airbase Parkway) is a conversion of existing High Occupancy Vehicle (HOV) lanes to Express Lanes and the East Segment (Airbase Parkway to I-505) consists of constructing new Express Lanes.

BACKGROUND

An Express Lane is a toll enacted on single-occupant vehicles who wish to use lanes or entire roads that are designated for the use of High-Occupancy Vehicles (HOV). Tolls are collected either by manned toll booths, automatic number plate recognition, or electronic toll collection systems.

Express Lanes require single-occupant vehicles to pay a toll that varies based on demand, called congestion pricing. The tolls change throughout the day according to real-time traffic conditions to manage the number of cars in the lanes and keep them free of congestion, even during rush hour.

The concept is an expansion of the HOV Lane System and an effort to maximize their efficiency in moving vehicles. HOV Lanes are designed to promote vehicle sharing and use of public transport by creating areas of lower road use as an incentive, but they have been criticized because some are underused. The Express Lanes provide a mobility option for single occupant vehicles to provide reliable travel at a variable price.

Express Lanes are often constructed within the existing road space and provide an option for commuters and non-routine drivers. The Express Lanes benefit drivers by providing the ability to pay to get through traffic quickly. Funds raised from Express Lane tolls would be used to pay for the maintenance and operations of the lane(s), payment of debt for the initial construction of the lane(s) and to build out the Express Lanes network in the Bay Area. By policy, additional funds can also be used for supporting transit service in the corridors.

Drivers who do not utilize the lane can also benefit from having it fully utilized, thus taking more traffic out of the mixed flow lanes, in contrast to the sometimes underutilized HOV Lanes. By linking together disconnected HOV networks, Express Lanes can allow public transportation vehicles (such as buses) and carpools more reliability to get to destinations on time. MTC has proposed the Regional Express Lanes Network concept which involves converting existing HOV lanes to Express Lanes and using the revenue generated to finance completion of the Express system as well as other improvements within the Express corridors.

The Bay Area Express Lanes Network, which includes Express Lanes on I-80 in Solano, has been included in the latest Regional Transportation Plan (Transportation 2035). Now that the environmental document is in the final stages, the next significant step in the implementation for the I-80 Express Lanes Project (Red Top Road to I-505) will be preparation of the PS&E, including R/W engineering. As mentioned above, at this point, PS&E for the I-80 Express Lanes would be completed with two separate packages, since funding is currently available for the West Segment (Red Top Road to Airbase Parkway) and funding for PS&E for the East Segment (Airbase Parkway to I-505) has not yet been allocated.

SERVICES TO BE PROVIDED

The STA intends to retain a qualified and committed professional engineering firm/team to provide services required for the preparation of **Project Specifications and Estimate (PS&E)** for the **I-80 Express Lanes Project – West and East Segments**, consistent with Caltrans and Metropolitan Transportation Commission (MTC) standards. STA or MTC will be advertising, awarding and administering the construction contract. The selected consultant will work closely with STA, MTC and Caltrans.

The consultant will provide professional and technical engineering services to prepare final design documents and related activities. The required engineering design services will include, but not be limited to, the following:

Infrastructure for the Toll Collection System and Backhaul System (concrete pads, empty conduit, pull boxes, poles, electrical and communications service to cabinets or meters, empty cabinets for Backhaul System), roadway, structure widening, structure retaining walls, sound walls, drainage, foundation investigations, lighting, pavement features, traffic studies, signals, signing, striping, stage construction, landscaping, surveys, right-of-way engineering, preparation of permit applications, obtaining permits, and such other incidental features required to complete the PS&E and final bid documents.

The selected consultant will also need to provide design support services during construction. The environmental clearance for the I-80 Express Lanes Project – West and East Segments is currently underway and expected to be completed in the August/September 2015 time frame. However, should the final design differ from the project cleared under the environmental document, the consultant will be required to complete all tasks necessary to re-validate the environmental document.

MTC will be responsible for the Toll Collection System and the Backhaul System. The selected consultant will need to coordinate closely with MTC staff and consultants to incorporate into the roadway design elements of the Toll Collection and Backhaul Systems. In addition, MTC has prepared MTC Express Lanes Program – Project Management Plans, including the following: 1) Program Controls Plan; 2) Document Control Plan; 3) Change Management Plan; and 4) Quality Assurance Plan, which have been included as Attachment A. The selected consultant shall follow and comply with these management plans and processes throughout the design and construction of this facility. This will include regular coordination with MTC staff and consultants related to the Program Management of the Bay Area Express Lanes.

FUNDING

STA and MTC have funding commitments for the I-80 Express Lanes Project – West Segment, including funding for the design (PS&E), R/W and construction phases. However, at this point, with respect to the East Segment, STA has requested funding from MTC for the design (PS&E) and R/W phases for the I-80 Express Lanes Project – East Segment and it is under consideration by MTC. As such, initially STA will enter into a contract with the selected firm to move forward with PS&E, including R/W engineering, for the West Segment and will amend the contract if and when MTC approves funding for PS&E, including R/W engineering for the East Segment.

As such, the consultant shall include in the Cost Proposal a separate proposal for the West and East Segment.

LOCAL PREFERENCE POLICY

The STA has adopted a Local Preference Policy which encourages the hiring of local firms. The participation goal for local firms for this Project has been established at **two percent (2 %)**. Additional points will be provided through the evaluation process for those firms who meet or exceed this goal. The STA has prepared a database of contact information for local firms for convenience purposes only and without guarantees as to the ability of such firms to provide the services. The Local Preference Policy and the Local Firms database can be obtained by contacting STA at (707) 424-6075, or can be found at <http://tiny.cc/jobsrfps>.

Preliminary Project Schedule

STA is committed to delivering this project expeditiously. Presented in the tables below are preliminary schedules for the I-80 Express Lanes project – East and West Segments. Construction may be phased or both segments may be constructed together, depending on available funding. Again, design of the East Segment will be contingent on securing a funding allocation from MTC.

Preliminary Project Schedule I-80 Express Lanes Project – West Segment	
Tasks	Completion Date
Select Consultant	March 2015
35% PS&E Submittal	July 2015
65% PS&E Submittal	November 2015
95% PS&E Submittal	March 2016
100% PS&E Submittal	July 2016
Final PS&E	August 2016
Right-of-Way Activities /Acquisition (R/W) – Assumes condemnation	Dec 2015 – Nov 2016
Advertise Project for Construction	December 2016
Award Construction Contract	February 2017

Preliminary Project Schedule	
I-80 Express Lanes Project – East Segments	
(East Segment contingent on securing funding allocation from MTC, Assume Funding in June 2015)	
Tasks	Completion Date
Select Consultant	March 2015
35% PS&E Submittal	November 2015
65% PS&E Submittal	April 2016
95% PS&E Submittal	November 2016
100% PS&E Submittal	April 2017
Final PS&E	June 2017
Right-of-Way Activities /Acquisition (R/W) – Assumes condemnation	July 2016 – June 2017
Advertise Project for Construction	July 2017
Award Construction Contract	September 2017

NOTE: The Admin Draft Project Report (DPR) for the I-80 Express Lanes Project – West and East Segments is available for review by request from Janet Adams at jadams@sta-snci.com.

RFP SUBMITTAL REQUIREMENTS

Please prepare your proposal in accordance with the following requirements.

1. *Proposal:* The proposals (excluding resumes and the transmittal letter) shall not exceed a total of 35 single-sided, 8.5" x 11" pages. Include sample projects or similar examples of past projects. Resumes shall be included in an appendix.
2. *Transmittal Letter:* The proposal shall be transmitted with a cover letter describing the firm's/team's interest and commitment to the proposed project. The letter shall state that the proposal shall be valid for a 90-day period and should include the name, title, address and telephone number of the individual to whom correspondence and other contacts should be directed during the consultant selection process. The person authorized by the firm/team to negotiate a contract with STA shall sign the cover letter.

Address the cover letter as follows:

Janet Adams, Deputy Executive Director/Director of Projects
 Solano Transportation Authority
 One Harbor Center, Suite 130
 Suisun City, California 94585

3. *Project Understanding:* This section shall clearly convey the consultant's understanding of the nature of the work, including coordination with and approvals from STA, MTC, Caltrans, and FHWA.
4. *Approach and Management Plan:* This section shall provide the firm's/team's proposed approach and management plan for providing the services. Include an organization chart showing the proposed relationships among consultant staff, Caltrans, FHWA, MTC, STA and any other parties that may have a significant role in the delivery of this project.
5. *Qualifications and Experience:* The proposal shall provide the qualifications and experience of the consultant team that will be available for the I-80 Express Lanes Project – West and East Segments. Please emphasize the specific qualifications and experience from projects similar to these projects for the Key Team Members. Key Team Members are expected to be committed for the duration of the project. Replacement of Key Team Members will not be permitted without prior consultation with and approval of the STA.
6. *Staffing Plan:* The proposal shall provide a staffing plan (detailed by quarter and major task) and an estimate of the total hours (detailed by position) required for the preparation of the Project Specifications and Estimate (PS&E) for the I-80 Express Lanes Project – West and East Segments. Discuss the workload, both current and anticipated, for all Key Team Members, and their capacity to perform the requested services for the I-80 Express Lanes Project – West and East Segments according to your proposed schedule. Discuss the firm/team's approach for completing the services for this project within budget.
7. *Work Plan and Schedule:* The Work Plan should be structured to include the following major tasks for the I-80 Express Lanes Project – West and East Segments. The consultant should develop a milestone schedule and incorporate the activities in an overall milestone schedule for both the west and east segments. The Work Plan should be structured to include the following major tasks for each Construction Package:
 - 35% PS&E Submittal
 - 65% PS&E Submittal
 - 95% PS&E Submittal
 - 100% PS&E Submittal
 - Final Design
 - Right-of-way Engineering
 - Permit Applications and Obtaining Permits
 - Design Support Services During Construction

This section shall include a description of how each major task and subtask of the project will be conducted, identification of deliverables for each major task and subtask, and a schedule. The Work Plan should be in sufficient detail to demonstrate a clear understanding of the project. The schedule should show the expected sequence of tasks and subtasks and include durations for the performance of each task, subtask, milestones, submittal dates and review periods for each submittal. Discuss the firm/team's approach for completing the requested services for this project on schedule.

8. *Cost Control:* A cost proposal should be submitted in a separate sealed envelope titled “I-80 Express Lanes Project – West and East Segments - Consultant Cost Proposal.” The cost submittal should indicate the number of anticipated hours by the Project Manager and Key Team Members. The estimated level of hours for other staff can be summarized in general categories.

Include information regarding your Federal Acquisition Regulations (FAR) multiplier and the FAR of any subconsultants. The STA will pay costs based on the FAR plus a negotiated fee, however the overall multiplier will not exceed 3.0. Also, please include a list of personnel positions proposed for performance of the services and the hourly salary range of each classification (including subconsultants).

9. *Quality Control/Quality Assurance Plan:* The consultant shall include in the proposal their Quality Control/Quality Assurance Plan that will be implemented on this project. The Plan shall be specific to the key personnel and included in the schedule for the project.
10. *References:* For each Key Team Member, provide at least three references (names and current phone numbers) from recent work (previous three years). Include a brief description of each project associated with the reference, and the role of the respective team member.
11. *Submittal of Proposals:* Six (6) hard copies and one digital copy (CD or flash drive) of your proposal are due at the STA office no later than 3:00 p.m., March 13, 2015.

SELECTION OF CONSULTANT & CRITERIA

The overall process will be to evaluate the technical components of all the proposals completely and independently from the cost component. The proposals will be evaluated and scored on a 100 point total basis using the following criteria:

1. Qualifications and specific experience of Key Team Members.
2. Project understanding and approach, including an understanding of STA, MTC and Caltrans review, approval and coordination processes.
3. Experience with similar types of projects.
4. Satisfaction of previous clients.
5. Schedule and capacity to provide qualified personnel.
6. Local Preference Goal

Two or more of the firms/teams will be invited to an interview during the week of March 30, 2015. The Project Manager and Key Team Members should attend the interview. The evaluation / interview panel may include representatives from STA and other agencies, but the specific composition of the panel will not be revealed prior to the interviews. Costs for travel expenses and proposal preparation shall be borne by the consultants.

Once the top firm/team has been determined, STA staff will start contract negotiations with the firm/team. If contract negotiations are not successful, the second ranked firm/team may be asked to negotiate a contract with STA, etc. Provided the negotiations are proceeding well, the STA may elect to initiate a portion of the work scope with a Notice to Proceed (NTP), prior to execution of the contract.

SELECTION SCHEDULE

February 13, 2015	RFP released
February 25, 2015	Questions emailed to Janet Adams (jadams@STA-SNCI.com)
March 4, 2015	Answers to questions posted on STA website
March 13, 2015	Proposals are due no later than 3:00 PM. <i>Late submittals will not be accepted.</i>
March 30, 2015	Week of March 30 th , exact date TBD. Tentative panel interview date.
April 2015	Consultant Selection

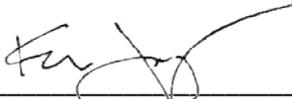
If you have any questions regarding this RFP, please contact:

Janet Adams
Deputy Executive Director/Director of Projects
Solano Transportation Authority
One Harbor Center, Suite 130
Suisun City CA 94585
Phone (707) 424-6075
Fax (707) 424-6074
jadams@sta-snci.com

MTC Express Lanes Program

Program Controls Plan

Released by:



Ken Jong, PMT Manager

Date: 07 Sep 14

Revision History

Revision	Date	Description	Prepared by	Checked by
0	07 Sep 14	Initial Release	T. Stoops	K. Jong

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Attachment A – Cost Control Procedure

Attachment B – Cost Estimating Review Procedure - TBD

Attachment C – Schedule Control Procedure

1.0 Purpose

The purpose of this plan is to identify a program control strategy that meets MTC Express Lanes Program goals and objectives, through implementation and maintenance of proven Program Controls approaches and methodologies. This plan focuses on the schedule and cost control elements of the overall program management approach, including:

- Define scope, set baseline, review progress and confirm delivery.
- Schedule workshop meetings to set baseline schedule and cost, and arrange regularly scheduled meetings to streamline the delivery process and to maintain and monitor program schedule
- Review cost estimates (capital outlay) for the elements of capital programs and projects, including cost contingencies, risks, and escalation elements and schedule float.
- Evaluate and reconcile variances from the estimates and baseline schedules prior to committing funds to ensure budgets are met
- Track and analyze trends, look for new funding opportunities by separating “Capital Outlay Support” and “Capital Outlay” construction costs to allow for their delineation for the purpose of enhancing the documentation for better and more accountable follow-through

Other major elements of the program management strategy to be submitted as separate and related plans, including:

- Develop multi-level risk management program structure to enable the Program to more effectively manage risks and ensure that risks are directed to the most capable team to assess and mitigate the risk
- Implement QA/QC procedures to avoid unnecessary claims, changes, and to reduce project claims
- Maintain document control system to ensure that project documents are archived in a manner that they can be easily retrieved and that the retrieved documents are current and appropriate for use as reference documents in supporting follow on work efforts
- Monitor scope, schedule, and cost into a “Strategic Plan” as a key tool in the successful implementation of projects
- Utilize a change control board to formalize any changes to the approved baselines that may be required

2.0 Roles and Responsibilities

Roles	Responsibilities
PMT Manager	<ul style="list-style-type: none"> • Reports to MTC Program Manager • Ensures that Program Controls functions are carried out according to the established plans and procedures
PMT Program Controls Manager	<ul style="list-style-type: none"> • Reports to PMT Manager • Assist in refinement of project control systems, cash flow analysis, cost control reports, time-phased budgets, integrated project cost and schedules, project performance indicators, work breakdown structures, project baseline budgets and schedules, project resource management, project trends, forecasts, earned value performance, project schedule recovery plans, and cost monitoring of phased costs
PMT Cost Control Lead	<ul style="list-style-type: none"> • Reports to PMT Program Controls Manager • Maintains and monitors program-level CO and COS budgets, supports change control, develops forecasts based on actual costs • Develops, maintains and analyses cost control reports, time-phased budgets, integrated project cost and schedules, project performance indicators, and cash flow analysis and reporting
PMT Cost Estimator	<ul style="list-style-type: none"> • Review cost estimates (design packages only) and report recommendation to Project Managers. Recommends if an Independent Cost Estimate is required. Review change order estimates as requested
Project Managers ¹	<ul style="list-style-type: none"> • Maintain and provide to the PMT Program Controls Manager the base contracts and amendments, project budgets and schedules, approved changes, and forecasted costs.
E-Builder	<ul style="list-style-type: none"> • Cost data source for Project/Contract actual costs on a monthly basis for use by PMT Program Controls Manager. Actual costs to be at the task level, as available.

¹Project Managers include those shown in black boxes on the org chart, including Corridor Project Managers, Infrastructure Manager, Toll Systems Manager, Communications Manager and Operations Center Manager.

3.0 Approach

3.1 Cost Control:

- Cost data coding structure will support cost reporting at contract, corridor, and program phase levels for Capital Outlay (CO) and Capital Outlay Support (COS) cost, and include tracking of contingency at Project/Contract and Program level.

- A cost tracking system (to be confirmed - E-builder or ICTS) will be used to track program and project baseline budget, approved budget, amendments, forecasted and actual costs at the task level, as available.
- Cost Control workshops will be held to jumpstart the program and project control effort. The PMT Program Controls Manager and Cost Control Lead will meet with each Project Manager and their respective teams to review the cost control reporting requirements. The following will be discussed:
 - Project cost control interface and reporting requirements
 - Consultant's contract status interface and reporting requirements to be included in each invoice (earned value, etc.)
 - Consultant/ Project Manager/ PMT communication protocols
- PMT Cost Control Lead will be provided with the following on a monthly basis:
 - Contract, amendments, task order, actual cost value update
 - Project budget update by fund source
 - Contract percent complete built up from the task level
- PMT Cost Control Lead will provide Project Managers and PMT Program Controls Manager program-level cost report for inclusion in the monthly progress report
- PMT Cost Estimator will review and analyze cost estimates and provide recommendations in line with established procedures

3.2 Schedule Control:

- Oracle Primavera P6, latest version will be used to maintain program-level schedule
- Schedule workshops will be held to jumpstart the project control and scheduling effort. The PMT Program Controls Manager and Cost Control Lead will meet with each Project Manager and their respective teams to review the schedule control and reporting requirements. The following will be discussed:
 - Schedule interface and reporting requirements
 - Consultant's scheduling status and reporting requirements to be included in each invoice
 - Consultant/ Project Manager/ PMT communication protocols
- Project Managers/Project Controls Support staff will receive updates from their teams on a monthly basis, and/or occurrence of major changes. After reviewing the schedules, the Project Managers will provide updates to the PMT Program Controls Manager
- PMT Program Controls Manager will generate summary schedules using P6 software and provide Project Managers and consultants with an updated program-level schedule report for their use as a working tool.
- PMT Program Controls Manager will analyze and make recommendations on program schedule issues for inclusion in the monthly status report
- PMT Program Controls Manager will meet and discuss with Project Managers potential issues identified from review and analysis of schedules and recommend recovery plans
- Schedules included in the Quarterly Status Reports are considered to be the approved schedules. All other schedules are considered to be working drafts..

4.0 Deliverables or outputs

4.1 Cost Control:

- Program Cost Control Procedures
- Program Cost Estimating Review Procedures
- Monthly progress reporting and input for the Quarterly Delivery Status Report
- Cost Estimate Review and Recommendations Memo, as required

4.2 Schedule Control:

- Schedule Control Procedures
- Monthly progress reports and input for the Quarterly Delivery Status Report

5.0 Schedule

Deliverable	Deliver By
Program Controls Plan Draft	07 Jul 14
Workshop sessions	Jul/Aug 14
Program Controls Plan Initial Release	08 Aug 14
Program Controls Plan Final	08 Sep 14
Progress Reporting	Monthly
Delivery Status Report	Quarterly

6.0 Procedures

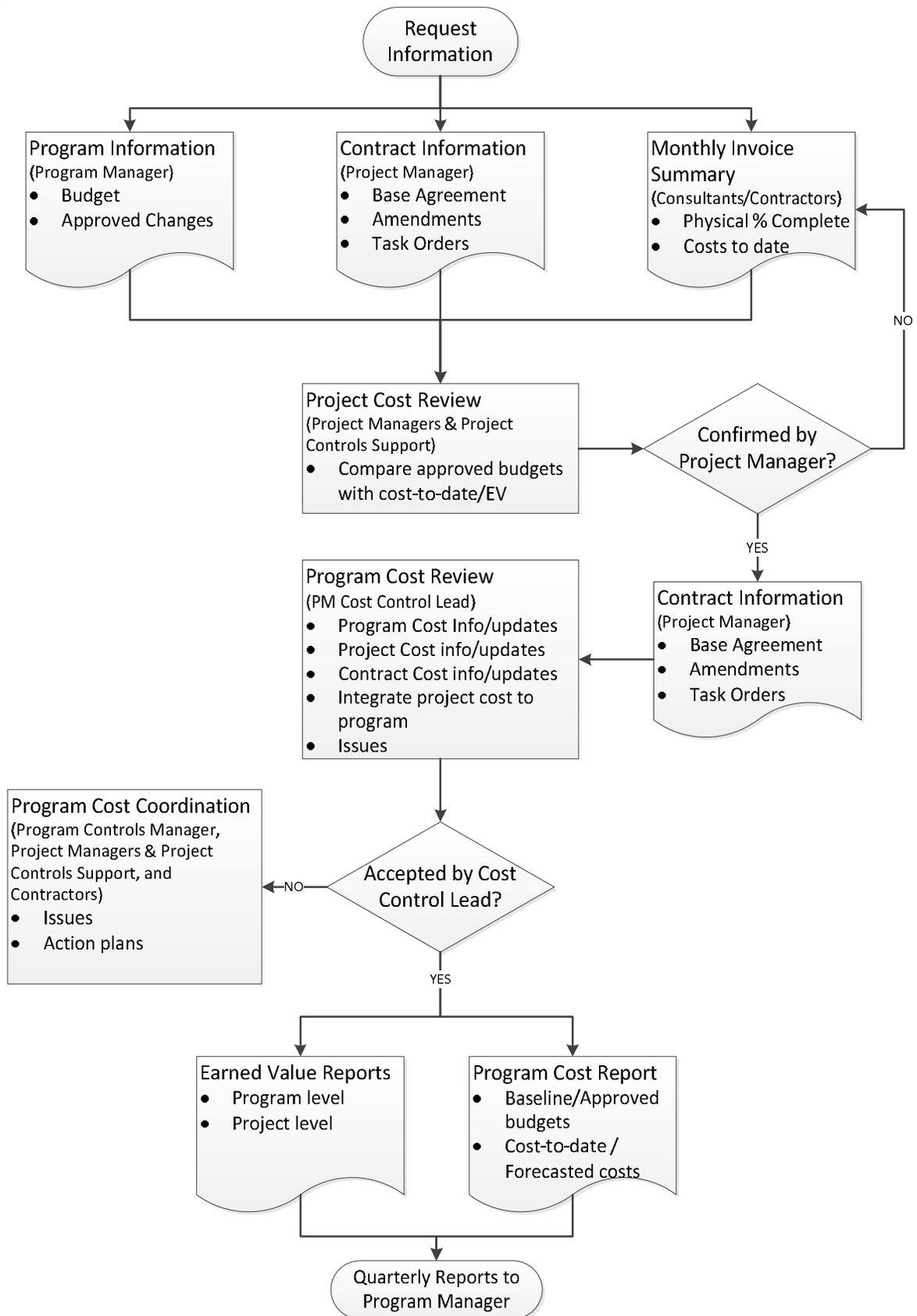
The following procedure documents included as attachments are intended to support the implementation of this plan.

Procedure Number	Title and Description	Procedure Owner
PC.01	Cost Control Procedure	PMT Cost Control Lead
PC.02	Cost Estimating Review Procedure	PMT Cost Control Lead
PC.03	Schedule Control Procedure	PMT Program Controls Manager

7.0 References

None

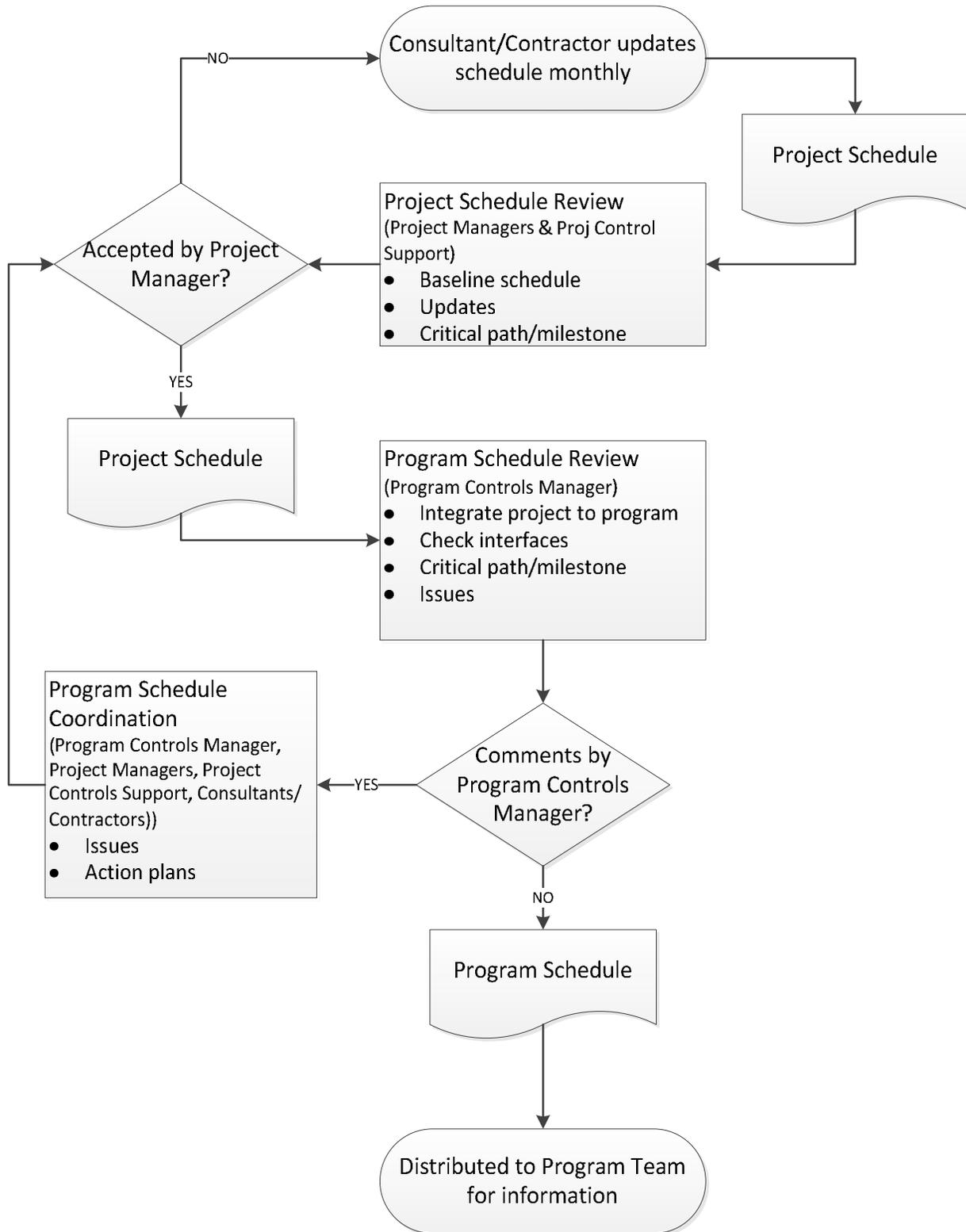
Cost Control Procedure



Cost Estimating Review Procedure

To be developed

Schedule Control Procedure



MTC Express Lanes Program

Change Management Plan

Released by:


Ken Jong, PMT Manager

Date: 07 Sep 14

Revision History

Revision	Date	Description	Prepared by	Checked by
0	07 Sep 14	Initial Release	S. Banda	L. Justison

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Attachment A – Change Notification Form Template

Attachment B – Change Request Form Template

Attachment C – Change Management Procedure Flowchart

1.0 Purpose

The purpose of the Change Management Plan document is to define the approach to implement and maintain change management (CM) processes for the MTC Express Lane (EL) Program. This document will define the plan to be implemented for effective CM, establish the roles and responsibilities of the stakeholders, describe the steps of the CM process, and specify how they are to be accomplished. Implementation of the change management process described in this document provides a structured method to submit and approve changes to the approved Program baselines.

2.0 Roles and Responsibilities

Although a change can be identified by anybody on the Program Team, the following roles and responsibilities are established to control and streamline the change management process.

Roles	Responsibilities
Change Sponsor (limited to: Program Director and Project Managers ¹)	<ul style="list-style-type: none"> • Evaluates the validity and impact of an identified change. • Provides Change Notification Form or Change Request Form to the Change Manager for validation and distribution.
Change Manager (PMT)	<ul style="list-style-type: none"> • Receives Change Notification Forms and Change Request Forms from the Change Sponsor and checks for completeness. • Maintains Change Management Log • Coordinates with Change Sponsor, the PMT and/or the Change Owner(s) to evaluate the impact of the change. • Monitors the progress of the change request and notifies the affected parties, including the Change Owners, upon approval or rejection of the Change Request.
Change Owner(s)	<ul style="list-style-type: none"> • Include staff responsible for managing the established baselines. • Evaluates the impact of changes along with the Change Sponsor to quantify the impact of the change, with input from program team members, if required. • Implements the approved changes.
Project Managers¹	<ul style="list-style-type: none"> • Assists to evaluate and quantify the impact of a change on scope, schedule and cost as needed.
PMT Manager	<ul style="list-style-type: none"> • Review and approve Change Management Plan • Provide direction to the Change Management process
MTC Program Manager	<ul style="list-style-type: none"> • Review and approve Change Management Plan • Receive and review the change log. • Review and approve changes within designated limits.

Roles	Responsibilities
Change Control Committee (CCC)	<ul style="list-style-type: none"> Review and approve changes above the limits designated to the Program Manager.

¹Project Managers include those shown in black boxes on the org chart, including Corridor Project Managers, Infrastructure Manager, Toll Systems Manager, Communications Manager and Operations Center Manager.

3.0 Approach

The Change Management Plan is developed to assist MTC in the delivery of the EL Program and to make the change management process an integral part of the planning, design and delivery processes. The Change Notification and Request templates, provided in Attachments A and B, are designed to be flexible to meet the needs of the program irrespective of the phase. The overall change control strategy accounts for various types of changes that can be categorized into the following three major category types:

- 1) Program Changes: Changes that have a major impact on the EL program (system wide) and require cross-functional coordination and integration to implement the change throughout the EL Program.
- 2) Corridor or Project Changes: The impact of project changes is confined to a specific project without affecting the entire program and may require cross-functional coordination and/or integration across two or more contracts.
- 3) Contract Changes: The impact of contract changes is confined to a individual contract without affecting a corridor or the entire program.

3.1 Establishing a Baseline

In order to effectively implement the change management process, baselines for scope, schedule and cost need to be developed, approved and distributed to the required stakeholders. Changes in scope, schedule and cost, as described below, should be measured against the approved baselines

- Scope Changes –Changes to elements of the project definition that interface across multiple disciplines and impact system performance. Scope changes require identification of those that would be affected by the change and coordination to ensure that the change is reflected throughout the Program as appropriate.
- Schedule Changes – Changes that cause the delivery of work products to deviate from the baseline schedule (i.e opening dates). Schedule changes for a specific work element need to be evaluated at the program level to assess potential impacts to other work elements.
- Cost Changes – Changes to the Capital Outlay and Capital Outlay Support budget for the EL Program that cannot otherwise be mitigated within the Program budgets.

3.1.1 Example Baseline Documents

Example documents that could serve as baselines for the Program include the following:

- Scope:

- Approved Environmental Documents
- Concept of Operations
- Schedule:
 - Open to traffic dates
- Cost:
 - Approved Program budget

3.2 Generating Change Notifications and Change Requests

Changes may be identified by anybody working on the Program, but the change must be brought to the attention of the Change Manager by a Change Sponsor. The Change Sponsor is responsible for letting the Change Manager know of any changes, initially through a Change Notification Form or, as required a Change Request Form as described below.

3.2.1 Change Notification Form (see Attachment A)

If the Change Sponsor does not believe that a change will have an impact on any of the established baselines, or if the Change Sponsor is unsure of the impact, then a Change Notification can be submitted to the Change Sponsor so that the change can be included in the Change Management Log. Changes that are submitted via a Change Notification will be evaluated by the PMT to see if they warrant an official Change Request as described below.

3.2.2 Change Request Form (see Attachment B)

If the Change Sponsor has determined that an identified change will have an impact on any of the established baselines, then a Change Request Form can be submitted to the Change Manager. A Change Request Form may also be required if a change that is submitted for inclusion in the Change Management Log is determined to have an impact on the established baselines.

The Change Sponsor, with input from the Change Owner(s) and others as appropriate, is responsible for providing all of the required information to evaluate the impact of a change submitted via a Change Request Form.

3.3 Logging Changes

The Change Manager logs all changes received via a Change Notification Form or Change Request Form into the Change Management Log. The log will be hosted on the MTC Express Lanes ProjectSolve site and will include the following fields:

- Description of change
- Date of submittal
- Change Sponsor
- Affected parties
- Whether the change requires Change Request, and if so:
 - Quantified impacts to baselines
 - Status of approval

3.4 Evaluating the Impact of Change Request

As required, the Change Sponsor, with input from the Change Owner(s) and others as appropriate, evaluates and documents the impact(s) of the changes in the Change Request Form.

3.5 Authorizing Change Requests

Changes that have impacts below threshold values (to be determined) can be authorized by the Program Manager. Other changes will go to the Change Control Committee (CCC). The composition of the CCC, the frequency of review and approval meetings, and the thresholds for changes requiring approval of the CCC are to be determined.

3.6 Implementing the approved change and updating the baseline

The Change Owner(s) are those designated as responsible for maintaining the established scope, schedule and budget baselines and are responsible for implementing any changes approved through the CM process.

4.0 Deliverables

The deliverables under this plan include a periodically updated Change Management Log, a Change Notification Form and a Change Request Form to support the Change Management process and communicate changes to the affected team members.

5.0 Schedule

Deliverable	Deliver By
Change Management Plan Draft	07 Jul 14
Change Management Plan Initial Release	08 Aug 14
Change Management Plan Final	08 Sep 14
Change Notification Form	08 Sep 14
Change Request Form	08 Sep 14
Change Management Log Updates	Monthly

6.0 Procedures

The following procedure documents included as attachments are intended to support the implementation of this plan to ensure a systematic and uniform review of all changes to the approved baselines, to ensure that the impact of changes on scope, cost and schedule are identified and thoroughly evaluated before a decision to incorporate them is taken.

Procedure Number	Title and Description	Procedure Owner
CC.01	Change Notification Form (see Attachment A)	Change Control Manager
CC.02	Change Request Form (see	Change Control

	Attachment B)	Manager
CC.03	Change Control Flowchart (see Attachment C)	Change Control Manager

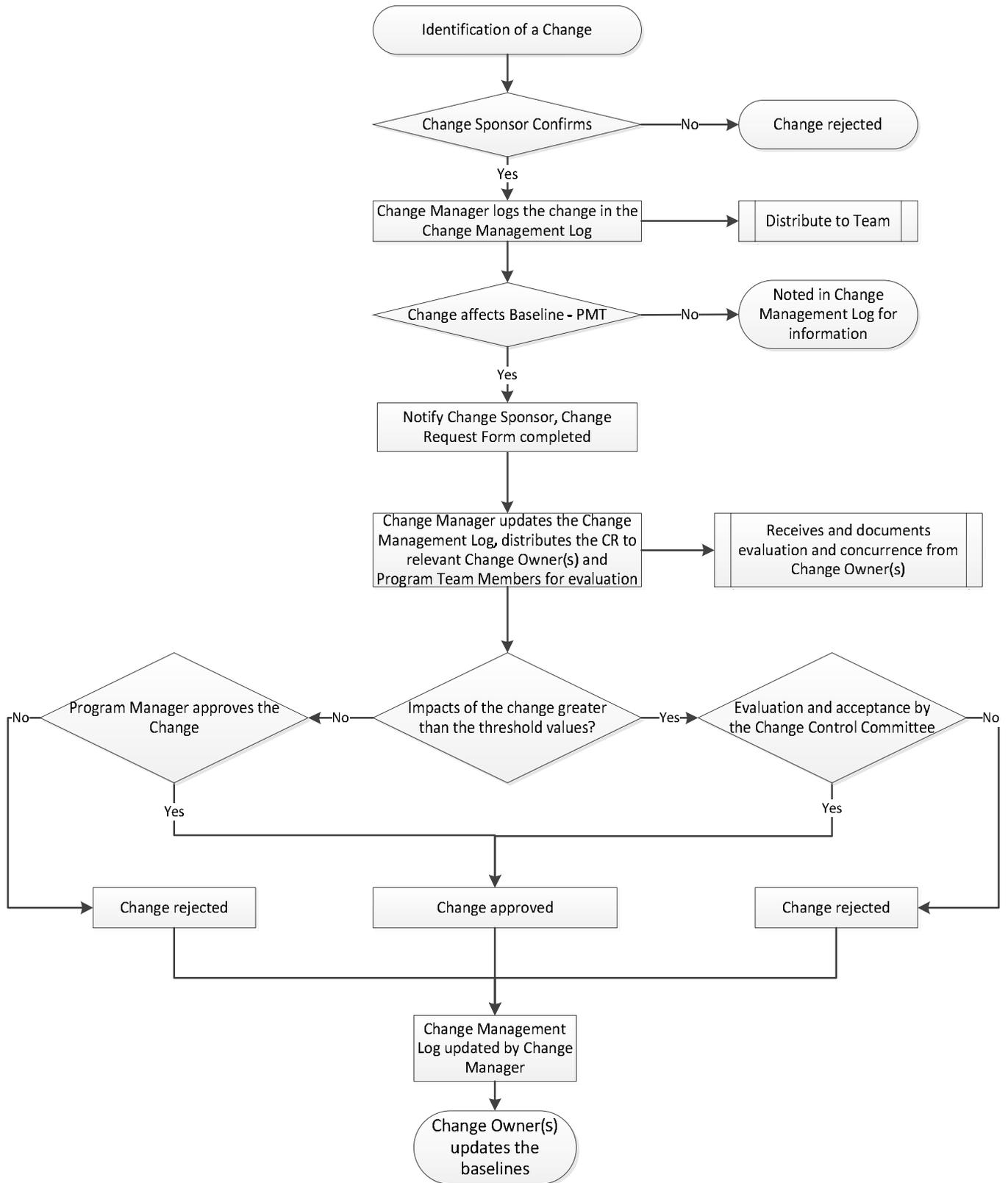
7.0 References

None

Attachment A – Change Notification Form Template

Attachment B – Change Request Form Template

Change Management Procedure Flowchart



MTC Express Lanes Program

Quality Assurance Plan

Released by:



Ken Jong, PMF Manager

Date: 07 Sep 14

Revision History

Revision	Date	Description	Prepared by	Checked by
0	07 Sep 14	Initial Release	S. VanderSluis	L. Justison

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Attachment A - Program Activity QA Procedures Flowchart

Attachment B – QA Review of Consultants Procedures Flowchart

1.0 Purpose

The purpose of this plan is to identify how quality assurance will be implemented on the MTC Express Lanes Program. Quality Assurance (QA) is a discipline to ensure that project management standards, processes, and procedures are appropriate and correctly implemented to increase the probability of a project's success. Project activities will be evaluated in the context of documented "best practices" within the Express Lane Program Management Team and tempered with knowledge of MTC's culture and working environment.

2.0 Roles and Responsibilities

Groups within the MTC Express Lanes (EL) Program subject to QA generally include those teams responsible for developing and/or implementing procedures. These may include:

Roles	Responsibilities
Quality Assurance Lead	<ul style="list-style-type: none"> • Reports to MTC Program Manager • Develops and implements QA Plan • Systematically monitor, evaluate, and provide assessment on the project's quality control (QC) activities
MTC Program Manager	<ul style="list-style-type: none"> • Review and approve QA Plan • Address and respond to QA findings
PMT Manager	<ul style="list-style-type: none"> • Review and approve QA Plan • Address Program level findings and observations
Project Managers ¹	<ul style="list-style-type: none"> • Confirm that Consultants have approved QA/QC plans that conform to MTC, Caltrans and other applicable requirements and that they are active
Consultants	<ul style="list-style-type: none"> • Prepare and implement project level QA/QC plans • Support Program level QA audits as required • Address Project level findings and observations

¹Project Managers include those shown in black boxes on the org chart, including Corridor Project Managers, Infrastructure Manager, Toll Systems Manager, Communications Manager and Operations Center Manager.

3.0 Approach

3.1 Develop and maintain this Quality Assurance Plan (QAP)

Following approval of the initial release, the QAP will be reviewed annually with the PMT Manager and revised to ensure continued relevance and usefulness toward the goal of ensuring project success. It is expected that the approaches and methods of this QAP will need to be adjusted as the project progresses to adapt to changing or unforeseen project conditions and needs.

3.2 QA Lead Responsibilities and Areas of Review

3.2.1 Quality Assurance of Program Activities

The QA Lead will be invited to the monthly Program Team Meetings and will attend a sampling of these meetings to get an idea of current program processes and activities. There will be a standing item on the Program Team Meeting agenda to discuss quality assurance as necessary. The QA Lead will also conduct audits of program activities to check whether processes are being carried out according to the agreed upon plans (e.g., document control, change control, risk management).

3.2.2 Quality Assurance Review of Consultants

The QA Lead will request consultants to submit their QA/QC Plans and review the status of the QA/QC implementation through random audits of the consultant deliverables and documentation of QC processes being carried out. The QA/QC Plans will also be checked to make sure they conform to MTC and Caltrans requirements as appropriate. The QA Lead will work directly with the consultants and Project Managers to gather information and provide recommendations for improvement. The Program Manager may request that audits be performed of low performing work or consultant teams. All findings and recommendations will be noted in the quarterly Quality Assurance Report described in Section 3.3.

3.3 Development of Quality Assurance Reports

The QA Lead will note findings in a quarterly QA Report to the MTC Program Manager. In general, the content of the report will be:

- (a) A cover letter signed by the QA Lead responsible for the content that attests to the independent preparation of the report.
- (b) An executive summary that describes:
 - i. The QA Lead's brief assessment of the reviewed team;
 - ii. A summary of any findings, recommendations, and significant risks contained in the detailed portion of the QA report;
 - iii. The response to any findings, recommendations, and significant risks; and
 - iv. A listing of any findings the audited team has not addressed or has not resolved by the due date.
- (c) A table that summarizes all findings, including a detailed description of the finding, the QA Lead's recommendation for corrective action, a response from MTC and the status of the finding. Each finding will be ranked with a significance of low, medium or high.

The QA Lead and MTC Program Manager will meet quarterly to discuss the findings and the QA Lead's recommendations with the intent to: a) ensure mutual understanding of the findings noted in the report, and b) confirm that the QA Lead's recommendation is appropriate. If necessary, corrections will be made to the description of the findings and recommendations, and a revised report will be issued.

Findings with a ranking of medium or high risk will require a response. During the quarterly meeting, the QA Lead and MTC Program Manager will also discuss who is to be responsible for providing a response to each of the findings. Responses will be provided to the QA Lead to be incorporated into the next quarterly QA Report. The responses will indicate actions to be taken regarding each finding, or if MTC elects to take no action, MTC will state so in the response. Responses will be reviewed by the QA Lead and the MTC Program Manager to make sure they are adequate and that actions have been taken consistent with the response. Findings with a low ranking are all automatically a no action finding.

Findings which are resolved or otherwise closed will be dropped from the quarterly reports and kept in an archive for future reference. As the purpose of the quarterly report is to provide the MTC Program Manager with useful information to ensure the success of the project, the format, focus, and content of the monthly report can be defined and adjusted as necessary throughout the project lifecycle. Limitations

The QA Lead must remain independent and therefore will not be responsible for implementing recommendations during the quality assurance process, will not participate in testing or validating test results achieved, and will focus on assuring that QC plans are executed as appropriate.

The QA Lead will provide input into the risk management plan and process and add suggest risks to be added when identified.

4.0 Deliverables

The deliverables under this plan include the following:

- Draft Quality Assurance Plan
- Final Quality Assurance Plan (Initial Release)
- Quarterly QA Reports

5.0 Schedule

Deliverable	Deliver By
Quality Assurance Plan Draft	07 Jul 14
Quality Assurance Plan Initial Release	08 Aug 14
Quality Assurance Plan Final	08 Sep 14
QAP Updates	Quarterly, if needed
QA Reports	Quarterly

6.0 Procedures

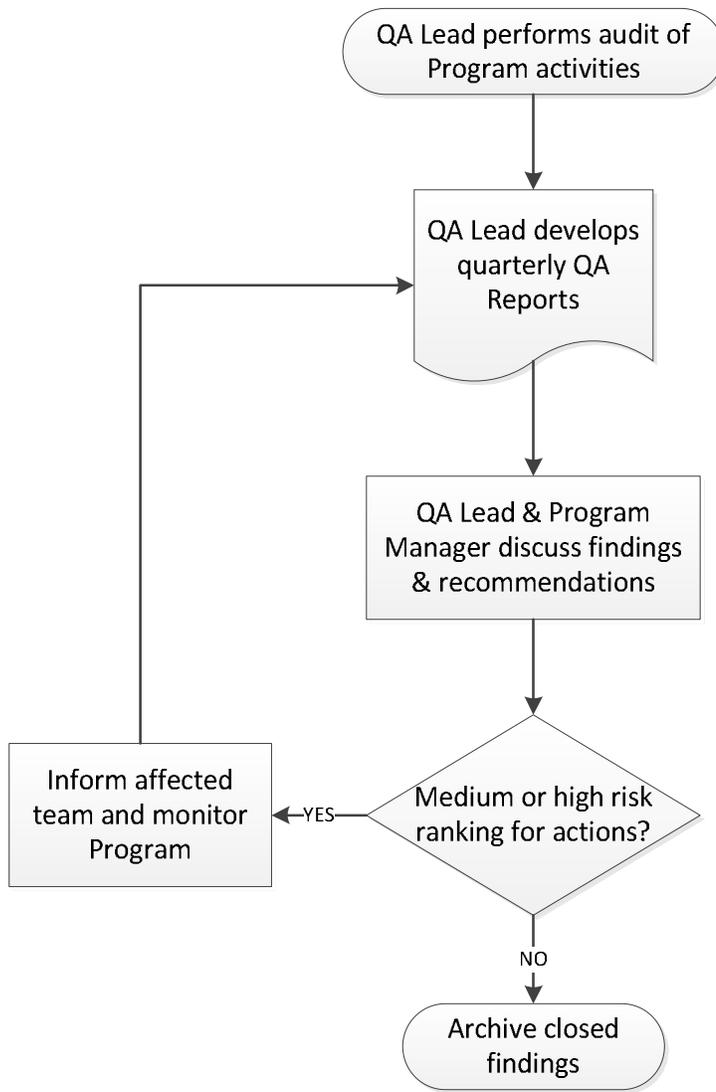
The following procedure documents included as attachments are intended to support the implementation of this plan.

Procedure Number	Title and Description	Procedure Owner
QA.01	MTC Express Lane Program Activity QA Procedure Flowchart (see attached)	QA Lead
QA.02	MTC Express Lane QA Review of Consultants Procedure Flowchart (see attached)	QA Lead

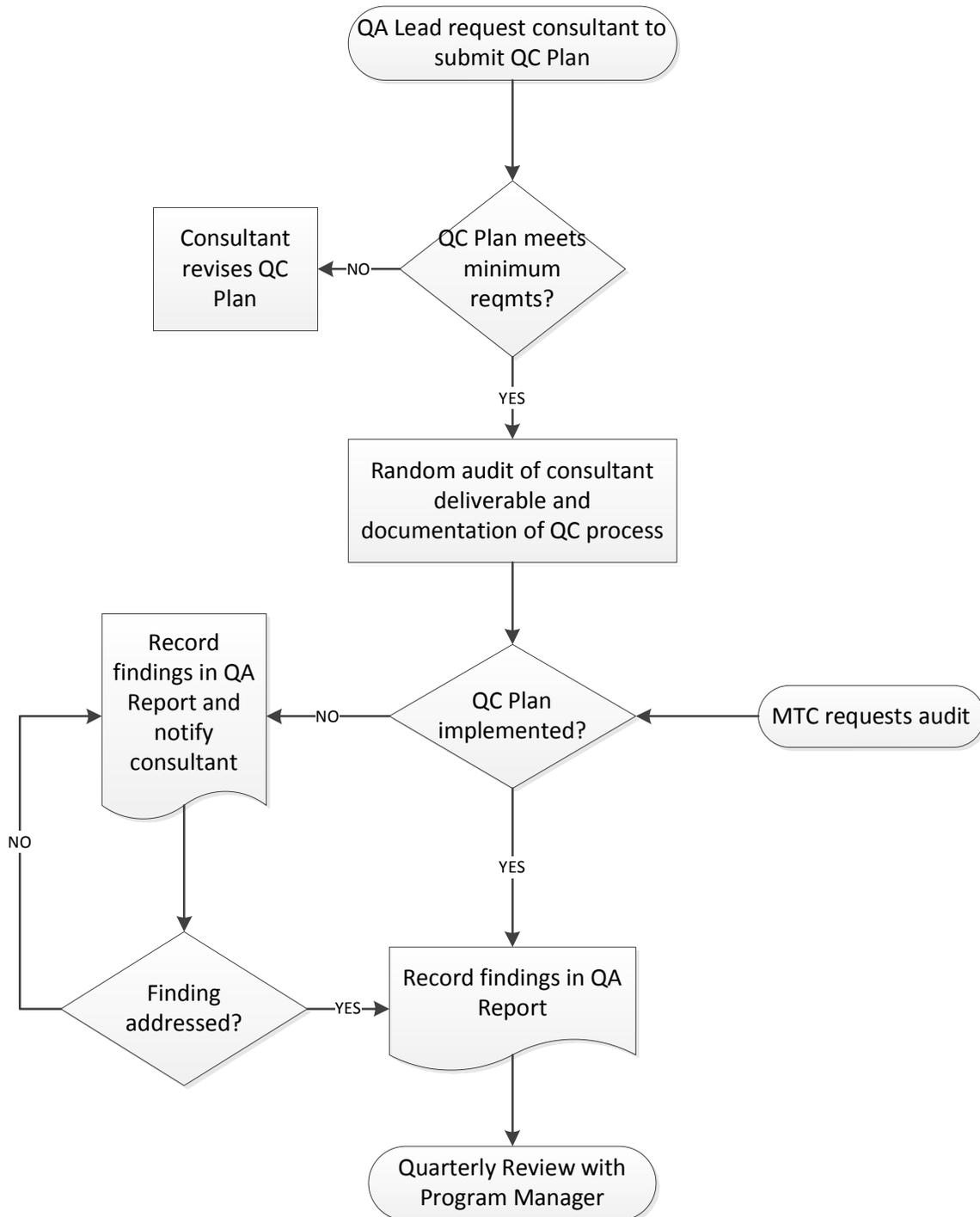
7.0 References

None

MTC Express Lane Program Activity QA Procedure Flowchart



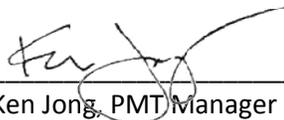
MTC Express Lane QA Review of Consultants Procedure Flowchart



MTC Express Lanes Program

Document Control Plan

Released by:


Ken Jong, PMT Manager

Date: 07 Sep 14

Revision History

Revision	Date	Description	Prepared by	Checked by
0	07 Sep 14	Initial Release	K. Jong	L. Justison

Contents

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1.0 Purpose

The purpose of this plan is to identify how document control will be implemented and what documents are to be included in the Document Control System (DCS).

The objective of the DCS is to provide a single repository for key program documents that is accessible to the Program Team and can be searched and retrieved, as needed. Documents in the DCS will become part of the official Program file.

2.0 Roles and Responsibilities

It is incumbent upon the Program Team to ensure that the DCS is successfully implemented and provides value. Specific roles and responsibilities include those listed below.

Roles	Responsibilities
Document Control Coordinator (DCC)	<ul style="list-style-type: none"> Develop the DCS in ProjectSolve Receive documents to be included in the DCS Manage the DCS
MTC Program Manager	<ul style="list-style-type: none"> Review and approve the Document Control Plan
PMT Manager	<ul style="list-style-type: none"> Review and approve the Document Control Plan Ensure that DCS is implemented effectively
Project Managers ¹	<ul style="list-style-type: none"> Ensure that key documents are provided to the DCM for inclusion in the DCS
Program Team	<ul style="list-style-type: none"> Provide key documents to Project Managers to submit for inclusion in the DCS

¹*Project Managers include those shown in black boxes on the org chart, including Corridor Project Managers, Infrastructure Manager, Toll Systems Manager, Communications Manager and Operations Center Manager.*

3.0 Approach

3.1 Description of the DCS

The DCS will be a database within ProjectSolve for the posting of key documents to be placed under control. Files added to the DCS will become part of the official Program record. Access to the DCS will be granted to all members of the Program Team; however, editing rights for the database will be restricted to the DCM and other select individuals as appropriate.

Documents in the DCS will be searchable by the following attributes:

- To – document addressee including name and agency/firm
- From – document sender including name and agency/firm
- Document title or description

- Document date or date when sent/received
- Related Project/Corridor or Element (TSI, Backhaul, O&M, Program Management, civil)
- Document type – Deliverable, Letter, Memo, Email, Record of Meeting, Other
- Work Breakdown Structure (WBS)

3.2 Types of Documents to be Included in the DCS

The purpose of the DCS is to have an easily searchable repository for key documents that contain information or records of decisions that are to be widely referenced by the Program Team. Examples of documents to be included in the DCS include the following:

- Deliverables as required by MTC EL contract documents
- Project related correspondence including formal letters, memoranda and emails that include formal direction or document decisions
- Record of meetings, including meeting attendees and minutes

3.3 Management and Implementation of the DCS

The DCM will be responsible for implementation, management and assistance with the DCS. All documents to be entered into the DCS must pass through the DCC. There are two methods by which the DCM can be notified of a document for inclusion in the DCS as described below:

1. Files are emailed to MTCEXpressLanesDocControl@projectsolveemail.com. Email must include all fields to be entered into the DCS.
2. Files are uploaded to the dropbox folder on ProjectSolve. Upon adding a file to the dropbox folder, the user will be asked to fill in the required fields to be entered into the DCS.

Upon receiving an email or being alerted that a file has been added to the ProjectSolve dropbox, the DCM will add the file and populate all required fields in the DCS. Once added to the DCS, the file will be accessible to all users.

4.0 Deliverables

The deliverable under this plan is a web-based and searchable database to store and retrieve Program-related documents to be placed under document control.

Upon approval of this plan, the DCC will prepare a one-page document for distribution to the Program Team describing how files are to be emailed or uploaded to the ProjectSolve dropbox to accompany the procedures described in Section 6.0.

5.0 Schedule

Deliverable	Deliver By
Document Control Plan Draft	07 Jul 14
Document Control Plan Initial Release	08 Aug 14
Document Control Plan Final	08 Sep 14
Web-based DCS database on ProjectSolve	08 Aug 14

6.0 Procedures

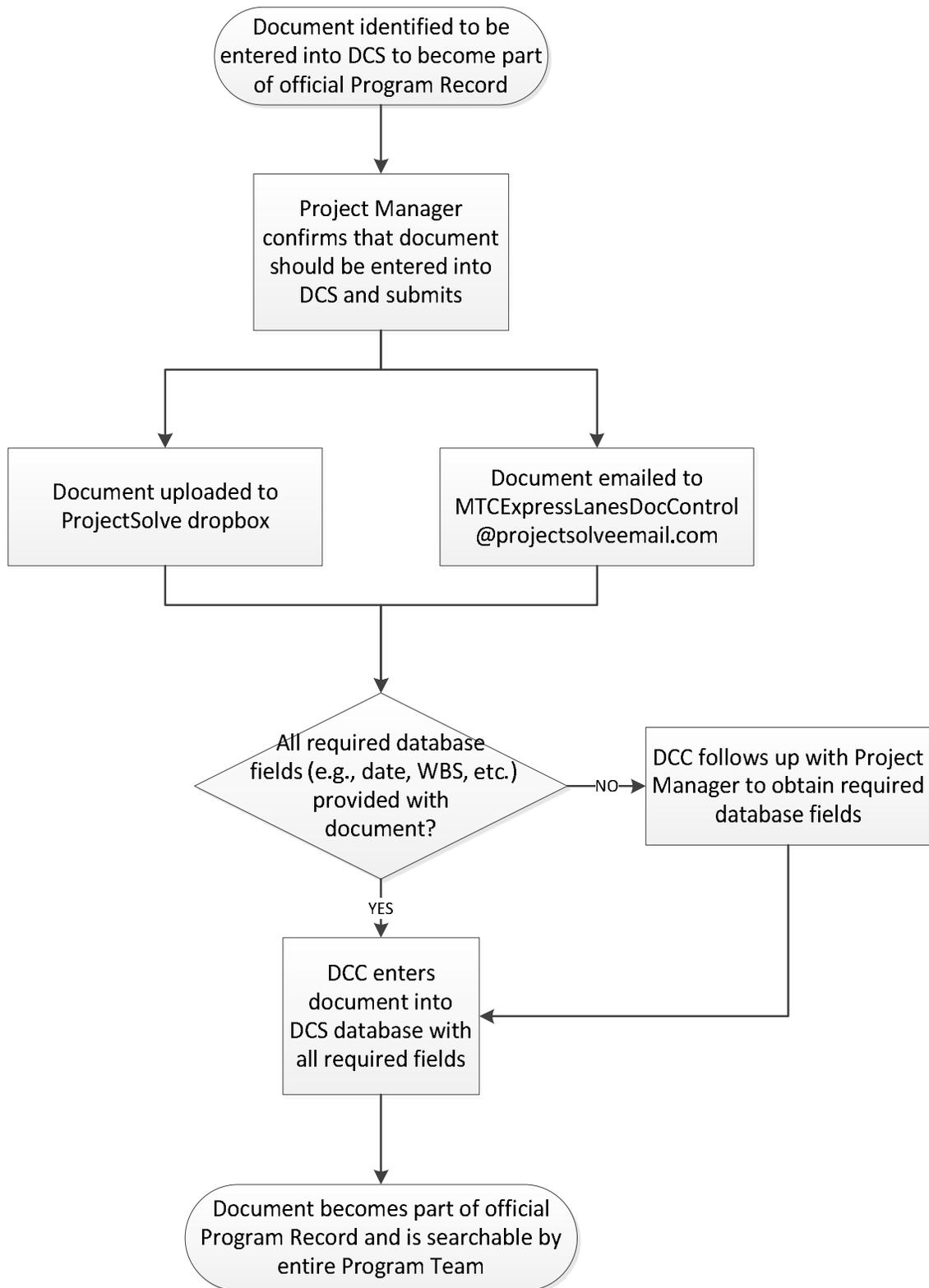
The following procedure documents included as attachments are intended to support the implementation of this plan.

Procedure Number	Title and Description	Procedure Owner
DC.01	Document Control Procedure Flowchart (see attached)	Document Control Coordinator

7.0 References

None

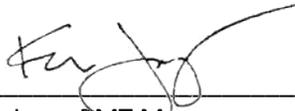
Document Control Procedure Flowchart



MTC Express Lanes Program

Risk Management Plan

Released by:



Ken Jong, PMT Manager

Date: 12 Nov 14

Revision History

Revision	Date	Description	Prepared by	Checked by
0	12 Nov 14	Initial Release	R. Gundimeda	L. Justison

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Attachment A – Risk Management Assurance Procedure Flowchart

Attachment B – Risk Management Procedure Flowchart

Attachment C – Example Caltrans Risk Register

1.0 Purpose

The purpose of this plan is to identify how risk management will be implemented on the MTC Express Lanes Program. Risk Management (RM) is an iterative, systematic process employed to identify and assess program risks and uncertainties related to cost, funding, schedule, coordination, technical objectives and institutional considerations through the program stages. Risks, both threats and opportunities, and uncertainties associated with planning, design, construction and operation, will be identified, analyzed and their probability of occurrence, and potential impact will be assessed. Possible mitigations will be identified and implemented as necessary to maintain program risk at an acceptable level.

2.0 Roles and Responsibilities

Roles	Responsibilities
MTC Program Manager	<ul style="list-style-type: none"> Review and approve RM plan
PMT Manager	<ul style="list-style-type: none"> Review and approve RM plan Address Program-level findings and observations
Program Risk Manager	<ul style="list-style-type: none"> Reports to MTC Program Manager Ensures Contract-level risk registers are maintained by consultants and Project-level risk registers are maintained by Project Managers Maintains a Program level risk register for risks that are not able to be managed by consultants or Project Managers. Facilitates transfer of risks among Contract-level, Project level and Program level risk registers Prepares quarterly Risk Management Reports Systematically monitors, evaluates, and provides assessment on the Program's RM activities
Project Managers ¹	<ul style="list-style-type: none"> Works with Risk Manager to confirm that consultants have adopted RM plans and processes as described in this document and that risk registers are current and mitigations are actively pursued Maintains a Project risk register, as applicable, for risks that are not able to be managed by consultants
Consultants	<ul style="list-style-type: none"> Maintain Contract risk registers for activities within their scope of work Notify Project Managers of any risks that are not able to be mitigated Support Program-level RM audits as required

¹Project Managers include those shown in black boxes on the org chart, including Corridor Project Managers, Infrastructure Manager, Toll Systems Manager, Communications Manager and Operations Center Manager.

3.0 Approach

3.1 Develop and maintain this Risk Management Plan (RMP)

Following approval of the initial release, the RMP will be reviewed annually with the PMT Manager and MTC Program Manager and revised as necessary to ensure continued relevance and usefulness toward the goal of ensuring program success. It is expected that the approaches and methods of this RMP will need to be adjusted as the program progresses to adapt to changing or unforeseen conditions.

3.2 Risk Management Audit

The Program Risk Manager will request consultants and Project Managers to submit their risk registers at quarterly intervals to review overall RM implementation and execution as well as the status of RM activities directed at the mitigation of particularly significant risks. The Program Risk Manager will work directly with the consultants and Project Managers and individual risk owners to gather information and provide recommendations and advice for improvement. If needed, the Program Risk Manager will convene a workshop to discuss the status of the risk registers and the overall risk management process.

At a minimum, risk registers should include the following:

- Description of identified risk
- Risk assessment, including probability of occurrence, cost impact and time impact
- Risk owner
- Mitigation strategy

3.3 Facilitate Management of Risks by Consultants and Project Managers

Risks will be managed at three levels as shown below and assigned to the team that is best suited to manage the identified risk. The role of the Program Risk Manager is to facilitate the transfer of risks between the three levels and to manage risks at the program level.

1. Contract level - Consultants will track and manage risks related to the scope of work within their contracts. Identified risks that are not able to be managed at the contract level are to be elevated to the project level.
2. Project level - Project Managers will track and manage risks that have corridor-wide effects and are not able to be managed by consultants. Project risk registers will follow the Caltrans Level 3 Risk Register format (see Attachment C, or use: http://www.dot.ca.gov/hg/projmgmt/documents/prmhb/Risk_Register_AllLevels.xlsx)
3. Program level - The Program Risk Manager will track and manage risks that have program-wide effects and are not able to be managed by Project Managers. The program risk register will also follow the Caltrans Level 3 Risk Register format. The risk management process at the program level is summarized in the following section.

3.4 Program Risk Management

3.4.1 Risk Identification Process

The risk management process is a 'living', iterative process that provides a structured, systematic procedure for managing risks. A complete risk management program comprises the following stages:

1. Define the scope and objectives of the program risk management process and ensure that the risk process is fully integrated into wider program management.
2. Identify as many knowable risks as practicable. The objectives of this stage are to establish a comprehensive and non-overlapping list of possible risks to the program and ensure that all program components are evaluated for threats and opportunities.
3. Evaluate the cost and schedule impact and probability of occurrence of individual risks, enabling them to be prioritized for further action.
4. Analyze the cumulative effect of risks on the overall program outcome and rank based on their impact on program cost and schedule outcomes.
5. Determine appropriate owners and response strategies for each risk. Risks are assigned to owners at the level they can be best handled.
6. Ensure that the risks are uniquely assigned to a particular register and do not show up in multiple registers.

3.4.2 Risk Register

The Program risk register provides a description of the events that are determined to result in a risk to the Program's cost, schedule, quality or other desired objective, a description of the outcome if that risk event were to occur together with a qualitative assessment of the risk. In accordance with general risk management principles, overall management responsibility for the individual risk – risk ownership – will be assigned to the group or individual in the organization in the best position to manage the risk. Within the assigned group a particular, named individual will assume responsibility for carrying out, or directing others to carry out, designated response actions (mitigations).

The risk register is a living management tool which is regularly updated through the risk review process, with risks being added and removed from the risk register, re-rated and adjusted as appropriate through the regular reviews and as a result of the individual risk mitigation plan implementation.

The information collected for each risk in the program risk register will include the following:

- Identification – Description of the risk as well as the general risk category (e.g., Environmental or Engineering/Design).
- Assessment – The potential cost and schedule impacts to the Program and the probability of occurrence. A risk's impact will be quantified as the product of the impact and probability.
- Ownership – Program personnel with overall responsibility for managing and reporting on current status of the risk.
- Management – Specific response actions developed to counter/eliminate the threat or capture the opportunity.

3.4.3 Management of Risks

Once identified and logged in the program risk register, risks will need to be managed and reported on by the risk owners. Management involves a determination of appropriate response strategies and actions for each individual risk to reduce the risk impact to the program. The primary aim is typically to identify specific actions that can be taken to limit or entirely avoid threats (mitigations), exploit opportunities or reduce uncertainty around a particular cost or schedule element. The Program Risk Manager will coordinate with risk owners to establish appropriate mitigations and to obtain regular reporting

3.5 Quarterly Risk Management Reports

The Program Risk Manager will facilitate quarterly reviews of risk management activities to include reviews of risk registers maintained by consultants and Project Managers. If necessary, these will be followed by a program-wide risk workshop to discuss significant project and program level risks and determine the best course of action for mitigation efforts. The findings from the project level reviews together with the outcomes of the program-level risk workshop (if conducted) will be presented in quarterly reports to the MTC Program Manager. In general, the content of the report will be:

- (a) A cover letter signed by the Program Risk Manager responsible for the content that attests to the independent preparation of the report.
- (b) An executive summary that describes:
 - i. The Program Risk Manager's assessment of the contract, project and program-level risk management efforts;
 - ii. A summary of any significant risks, including schedule and cost impacts;
 - iii. The response to any significant risks;
 - iv. A listing of any significant risks at the contract, project or program-level for which mitigations have not been identified or are not being carried out.
 - v. Brief discussion of implications for individual project's and/or program's ability to meet budget and schedule objectives.
- (c) A table summarizing program-level risks including a description of the risk and potential impact, mitigation actions and risk owner.

The Program Risk Manager and MTC Program Manager and/or PMT Manager will meet, as necessary, to discuss the findings in the quarterly risk management reports. Risks deemed 'significant', based on either a qualitative assessment or quantitative assessment that exceeds a given threshold predetermined by the MTC Program Manager, will be individually identified and described in the body of the report and the status of any identified mitigations will be reported on. In cases where no mitigations have been identified, no identified mitigations are practicable (e.g. when the cost of mitigation will approach or exceed the possible cost of the risk should occur) or no person within the program team can or will take responsibility for their timely performance, these risks will be specifically called-out in the report and referred to MTC for action. Where mitigation actions for significant risks are past due, the Program Risk Manager will seek a response or explanation from the individual responsible for carrying out mitigating action(s) and will provide this response as part of the report.

Risks that have been ‘closed-out’ during the interim between reports will be noted as such in the next report, after which they will be archived and no longer reported on in the quarterly report. Where these risks are significant, an explanation justifying their removal from the risk register and their exclusion from any quantitative analysis will be provided by the risk owner and included in the report. The Program Risk Manager may choose to reject the recommendation that a particular risk is no longer active or applicable and continue to carry it in the register, in particular if the Program Risk Manager believes the risk represents a significant continuing threat to the project or Program. As the purpose of the report is to provide the MTC Program Manager with useful information to ensure the success of the project, the format, focus, and content of the monthly report can be defined and adjusted as necessary throughout the project lifecycle.

3.6 Limitations

The Program Risk Manager, while necessarily part of Program team for purposes of collecting information, facilitating the identification and assessment of risks and monitoring the implementation and execution of the RMP, must nonetheless remain independent to provide objective reports to the MTC Program Director. The Program Risk Manager will not be responsible for implementing mitigations to specific risks nor, in general, for identifying specific risks to the project or program or developing cost estimates, schedules or other necessary inputs to the quantitative risk analysis portion of the process. The Program Risk Manager will be responsible for performing all necessary cost and schedule quantitative analysis, overseeing and reporting on the status of risks, and monitoring the implementation of the Risk Management Program as described in this document.

4.0 Deliverables

The deliverables under this plan include the following:

- Final Risk Management Plan
- Quarterly reports including Program Risk Register

5.0 Schedule

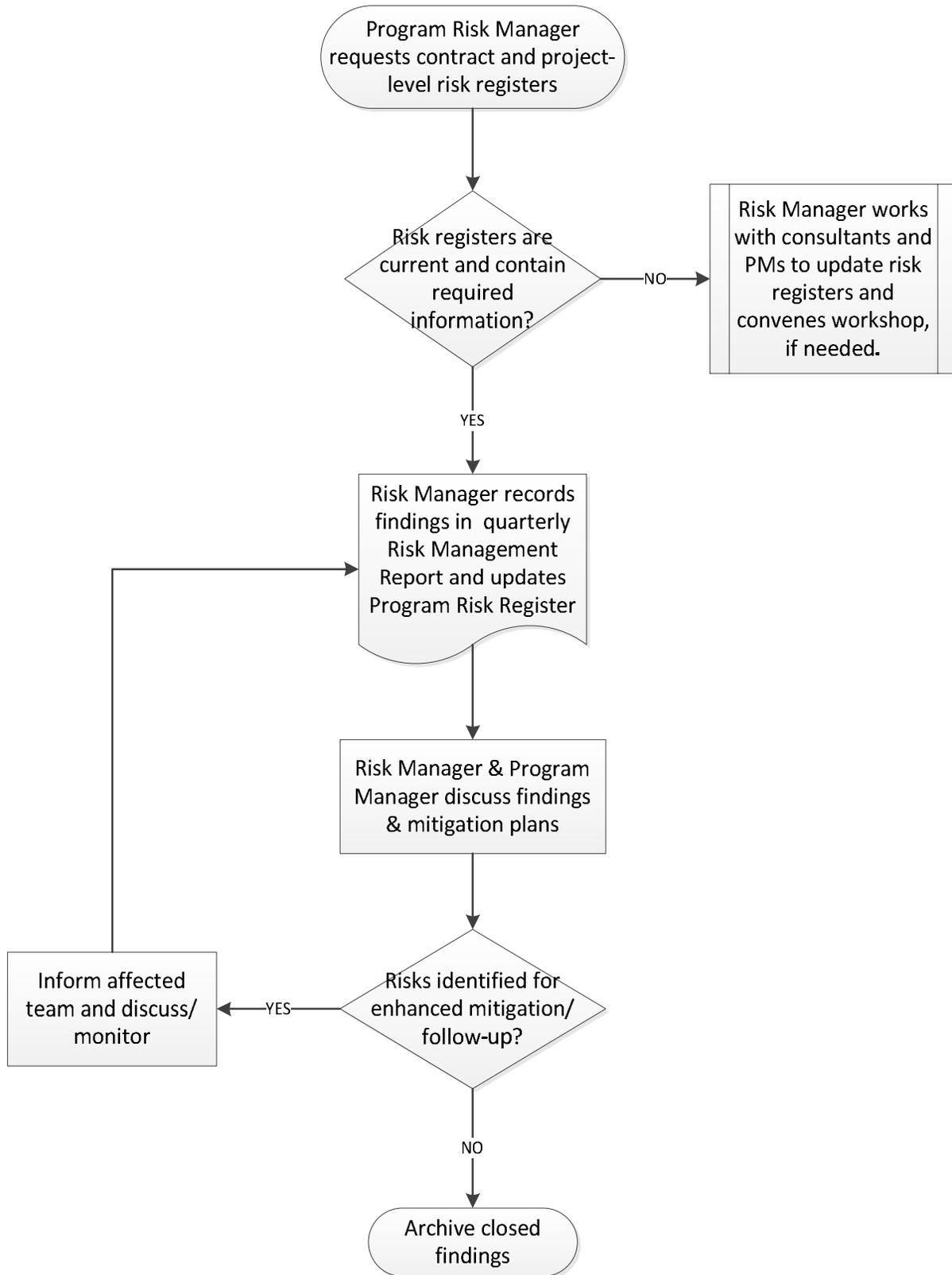
Deliverable	Deliver By
Program Risk Register updates	Quarterly
Risk Management Reports	Quarterly

6.0 Procedures

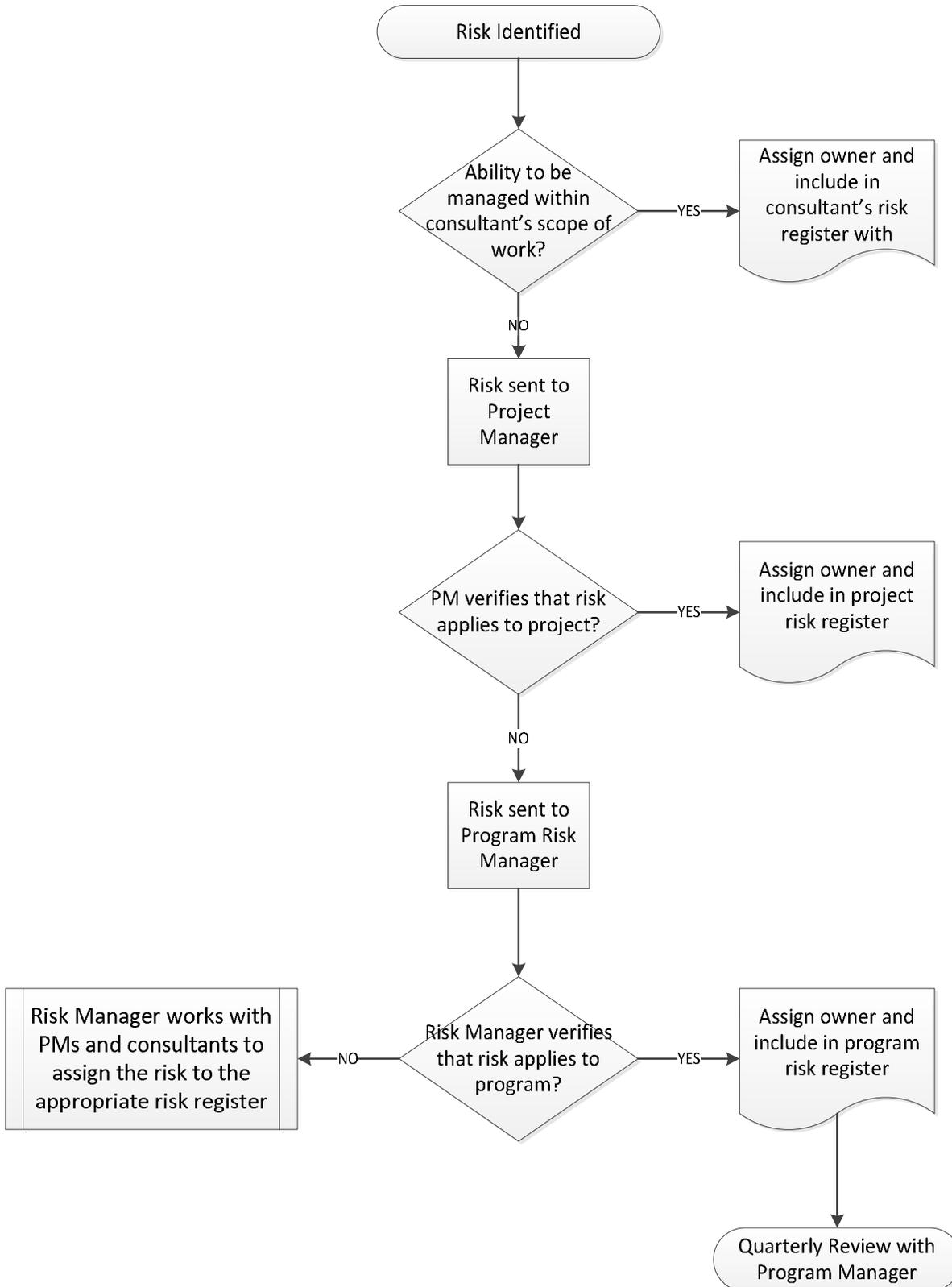
The following procedure documents included as attachments are intended to support the implementation of this plan.

Procedure Number	Title and Description	Procedure Owner
RM.01	Risk Management Assurance Procedure Flowchart (see attached)	Risk Manager
RM.02	Risk Management Procedure Flowchart (see attached)	Risk Manager

MTC Express Lane Program Risk Management Assurance Procedure Flowchart



MTC Express Lane Program Risk Management Procedure Flowchart



MTC Express Lane Program Example Caltrans Level 3 Risk Register

LEVEL 3 - RISK REGISTER			Project Name:	Example Project		DIST- EA	08-1234	Project Manager	PM Person											
Risk Identification						Probability		Cost Impact (\$)				Time Impact (days)				Rationale	Risk Response			
Status	ID #	Category	Title	Risk Statement	Current status/assumptions	Low	High	Low	Most likely	High	Probable	Low	Most likely	High	Probable		Strategy	Response Actions	Risk Owner	Updated
Active	160	Design	Survey File	Inaccuracies or incomplete information in the survey file could lead to rework of the design.		40	60	\$ 100,000		\$ 300,000	\$ 100,000					Mitigate	Verify that the survey file is accurate and complete	Sam Owner	10/12/2012	
Active	161	Environmental	Challenge to EIR	Potential lawsuits may challenge the environmental report, delaying the start of construction or threatening loss of funding.		0	10	\$ 500,000	\$ 800,000	\$ 1,200,000	\$ 42,000	60		150	5	Mitigate	Address concerns of stakeholders and public during environmental process	EIR Person	11/23/2012	
Active	162	R/W	Delay of R/W Acquisition	Due to the large number of parcels and businesses, may have to use the condemnation process to acquire R/W, which could delay start of construction by up to one year, increasing construction costs and extend the time for COS.		40	60	\$ 500,000	\$ 750,000	\$ 2,000,000	\$ 542,000	180		365	136	Accept		R/W Person	11/23/2012	
Active	163	Construction	Buried Objects	Unanticipated buried man-made objects uncovered during construction require removal and disposal resulting in additional costs.		20	40	\$ 200,000		\$ 400,000	\$ 90,000					Accept	Include a Supplemental Work item to cover this risk.	PM	11/24/2012	
Active	164	Design	Supplemental EIR	A design change that is outside of the parameters contemplated in the Environmental Document triggers a supplemental EIR which causes a delay due to the public comment period.		10	30	\$ 100,000	\$ 200,000	\$ 400,000	\$ 47,000	0		60	6	Avoid	Monitor design changes against ED to avoid reassessment of ED unless the opportunity outweighs the threat	Design Manager	11/24/2012	
Active	165	Environmental	Nesting birds	Nesting birds, protected from harassment under the Migratory Bird Treaty Act, may delay construction during the nesting season.		0	20	\$ 150,000		\$ 300,000	\$ 23,000	0		30	2	Mitigate	Schedule contract work to avoid the nesting season or remove nesting habitat before starting work.	PM/RE	11/24/2012	
Active	166	R/W	Additional R/W	Due to the complex nature of the staging, additional right of way or construction easements may be required to complete the work as contemplated, resulting in additional cost to		40	60	\$ 500,000	\$ 750,000	\$ 1,000,000	\$ 375,000					Mitigate	Re-sequence the work to enable R/W Certification	R/W Person	11/24/2012	
Active	167	Construction	Hazardous Materials	Hazardous materials encountered during construction will require an on-site storage area and potential additional costs to dispose		20	40	\$ 100,000		\$ 300,000	\$ 60,000					Accept	Ensure storage space will be available	PM	11/24/2012	

Risks shown above are examples only