

**LOS ANGELES TO PASADENA  
METRO BLUE LINE  
CONSTRUCTION AUTHORITY**

**METRO BLUE LINE  
LIGHT RAIL PROJECT**

**PROJECT MANAGEMENT PLAN**

**MARCH 1999**

**TABLE OF CONTENTS**

	<u>Page</u>
<b>1.0 INTRODUCTION</b>	<b>1</b>
1.1 General	1
1.2 Purpose of the Plan	1
1.3 Staged Completion of the Plan	2
1.4 Conflict with Authority Policies	2
<b>2.0 PROJECT DESCRIPTION</b>	<b>3</b>
2.1 General Description of the Project	3
2.2 Project Stations and Alignment	3
2.3 Project History	6
2.4 Capital Cost Summary	7
2.5 Preliminary Project Schedule	9
<b>3.0 ORGANIZATION AND STAFFING</b>	<b>11</b>
3.1 Organizational Philosophy	11
3.2 Project Staffing Requirements	11
3.3 Key Personnel/Organization	17
<b>4.0 PROJECT MANAGEMENT CONTROL SYSTEMS</b>	<b>19</b>
4.1 Schedule Management (D/B Phase)	19
4.2 Project Schedule Development and Maintenance	19
4.3 Delays	19
4.4 Change Orders	20
4.5 Work Breakdown Structure (WBS)	20
4.6 Cost Control Systems and Force Account	20
4.7 Design and Build Contracts	22
4.8 Cost Control - Management	22
4.9 Cost Control - D/B Phase	23
4.10 Invoice Control Procedures	25
4.11 Contract Modification Control	27

	<u>Page</u>
<b>5.0 HUMAN RESOURCES MANAGEMENT</b>	<b>31</b>
5.1 Statutory and Regulatory Requirements	31
5.2 Staffing	31
5.3 Staffing Training	32
5.4 Equal Employment Opportunities (EEO)	32
5.5 Disadvantageous Business Enterprises (DBE)	33
5.6 Authority Force Account	33
5.7 Utility Force Account	33
<b>6.0 RISK MANAGEMENT</b>	<b>35</b>
6.1 Risk Identification	35
6.2 Risk Evaluation	35
6.3 Risk Assessment and Analysis	36
6.4 Loss Prevention	36
6.5 Project Insurance	36
6.6 The Authority Controlled Insurance Program	37
6.7 Project Financial Assurance	37
<b>7.0 SAFETY PROGRAM</b>	<b>38</b>
7.1 Legal Requirements	38
7.2 Safety in Design	38
7.3 Construction Phase Safety Plan	38
7.4 Contractor's Safety Program	39
7.5 Maintenance of Railroad Traffic	39
7.6 Maintenance of Street and Highway Traffic	40
<b>8.0 RESOLUTION OF DISPUTES</b>	<b>41</b>
8.1 Dispute Resolution	41
8.2 Participating Agency Disputes	41
8.3 Consultant Disputes	41
8.4 D/B Contractor Disputes	42

	<u>Page</u>
<b>9.0 ENVIRONMENTAL PROGRAM</b>	<b>43</b>
9.1 Metro Blue Line Environmental Compliance	43
9.2 Environmental Compliance History	43
9.3 Proposed Mitigation Measures	44
9.4 Future Environmental Compliance	47
<b>10.0 DESIGN PROGRAM</b>	<b>50</b>
10.1 Design Management	50
10.2 Design Control and Presentation	50
10.3 Design Review Management	51
10.4 Submittal Routing Procedure	51
10.5 D/B Contractor Prepared Document	52
10.6 Design Criteria	52
10.7 Deliverables	52
<b>11.0 REAL ESTATE ACQUISITION PROGRAM</b>	<b>53</b>
11.1 General Requirements	53
11.2 Property Acquisition	53
11.3 Relocation Plan	54
11.4 Construction Staging Area	54
11.5 Construction Easements	54
11.6 Utility Easements	55
<b>12.0 PROCUREMENT PROGRAM</b>	<b>56</b>
12.1 Purpose and Scope	56
12.2 Procurement Policy Statement	56
12.3 Procurement Standards	56
12.4 General Procurement Policy	57
12.5 Sealed Bids – Generally	61
12.6 Design and Build Contracts	62
12.7 Competitively Negotiated Contracts	63
12.8 Small Purchase Procedures	65
12.9 Non-Competitive and Emergency Procurements	65

	<u>Page</u>
<b>13.0 CONSTRUCTION PROGRAM</b>	<b>68</b>
13.1 Construction Management	68
13.2 Construction Control	68
13.3 Document Control	68
13.4 Construction Review Management	68
13.5 Submittal Routing Procedure	68
<b>14.0 PUBLIC PARTICIPATION AND PUBLIC RELATIONS</b>	<b>70</b>
14.1 Public Participation	70
14.2 Publications and Releases	70
<b>15.0 LEGAL AUTHORITY AND CONSTRAINTS</b>	<b>71</b>
<b>16.0 QUALITY ASSURANCE/QUALITY CONTROL</b>	<b>74</b>
16.1 QA/QC Policy	74
16.2 Other Applicable QA/QC Documents	74
16.3 Standards and Compliance	74
16.4 Quality System Requirements	75
16.5 QA/QC Management Responsibility/Implementation	76
16.6 QA/QC Plan Submittal Schedule	76
16.7 QA/QC Document Control	76
16.8 QA/QC Update Process	77
16.8 Force Account QA/QC	77
<b>17.0 PROJECT FUNDING</b>	<b>78</b>
<b>18.0 MAINTENANCE OF THE PLAN</b>	<b>79</b>

**LIST OF FIGURES**

	<u>Page</u>
1. FIGURE 2-1	8
2. FIGURE 2-2	9
3. FIGURE 3-1	10
4. FIGURE 3-2	12
5. FIGURE 3-3	13
6. FIGURE 3-4	14
7. FIGURE 3-5	15

## **PROJECT MANAGEMENT PLAN**

### **EXECUTIVE SUMMARY**

On January 1, 1999, the Los Angeles to Pasadena Metro Blue Line Construction Authority (Authority) was established by the Passage of SB-1847 that was signed by the Governor on September 30, 1998. The Authority was created for the sole purpose of taking over responsibility for the design and construction of the Pasadena Blue Line, a 13.7 mile light rail project that had been suspended and then demobilized by the Los Angeles County Metropolitan Transportation Authority (MTA) as of June 30, 1998. The Authority also was charged with planning, designing, and building any extension of the line further to the east to the City of Claremont, a distance of approximately 21 miles.

The Project Management Plan (PMP) for the Los Angeles to Pasadena Metro Blue describes the management approach and administrative tools that will be used by the Authority. This document is intended to serve as a guide to the managers and contractors and should be revised from time to time as the project is progressing to completion.

The PMP reflects the Board's established policy on procurement and provides an outline of the project controls and accounting practices that will be employed. This documentation is necessary as the basis for the SB-580 evaluation that will be performed by CALTRANS. This 580 process is intended to review the capability and capacity of the Authority to carry out the program as described in the Implementation Plan.

As a reference document the PMP describes the procedures that the Authority will use in the acquisition of real estate, monitoring construction quality and resolving disputes. It is a handbook for managers on the Project. It is not a static document. If experience shows that particular procedures are unwieldy the PMP can be amended. A thorough review, on an annual basis, is proposed.

# 1.0 INTRODUCTION

## 1.1 GENERAL

The Los Angeles to Pasadena Metro Blue Line is a project to design and build a 13.7 mile light rail transit (LRT) system which extends from Union Station in Los Angeles to Sierra Madre Villa Station located in eastern area of Pasadena. There are 13 stations planned throughout the alignment. The line will travel through the City of Los Angeles, the community of Highland Park and the Cities of South Pasadena and Pasadena. It will operate primarily on right-of-way acquired from the Atchison Topeka & Santa Fe Railroad. The planned technology is very similar to the existing Metro Blue Line Long Beach alignment. The alignment will serve residential, light industrial, and retail communities. Public and private support for this system has come from virtually all elected officials and many residents of the alignment.

In 1998 the State Legislature passed and the Governor signed SB-1847, a piece of legislation that created the Los Angeles to Pasadena Metro Blue Line Construction Authority (Authority). The Authority was established on January 1, 1999 in accordance with the provisions of SB-1847. The sole purpose of the Authority is to complete the design and construction of Los Angeles to Pasadena Metro Blue Line Project, and to plan, design, and construct any extensions to that Project extending to the City of Claremont, a distance of approximately 20-21 miles east of the current terminus of the Project.

The objectives of the Authority in designing and constructing the LA to Pasadena Blue Line Project are to:

- Improve transit mobility from established residential neighborhoods and outlying areas of the City of Los Angeles to the commercial center.
- Provide direct access from Pasadena and South Pasadena to Los Angeles and vice-versa at the existing intermodal Metro Red Line and MetroLink station at Union Station.
- Promote investment in the potential joint development sites by connecting the area's transit systems and making these sites more accessible.
- Construct the line rapidly and in a way that it can be operated efficiently by the Los Angeles County Metropolitan Transportation Authority (MTA) as part of their regional responsibility to operate all urban rail transit lines in Los Angeles County.

This Project Management Plan (PMP) defines the methodologies to be utilized by the Authority to manage budgets, schedules, funding, procurement, staffing, interdepartmental and external agency coordination, design consultants, project management assistant consultant, contractors, and the dissemination of project-related information. As will be discussed in the PMP, funding for the Metro Blue Line Construction Authority shall be secured from the California Transportation Commission (CTC) and the MTA.

## 1.2 PURPOSE OF THE PLAN

The purposes of the PMP are to:

- Communicate project objectives to all participants along with methods and identified resources required meeting them.



- Create a team approach
- Develop the framework for monitoring the project
- Develop the framework for establishing policies, procedures and standards.
- Develop the framework for updating the PMP.
- Establish policies requiring dissemination of information to all project participants.
- Identify responsibilities and relationships within the organization.
- Identify milestones for subsequent phases.
- Promote consistency
- Promote schedule awareness
- Provide instructions for the coordination of schedule interfaces
- Provide a project overview

Organizational charts provided herein shall clearly indicate the Project's levels of project management, the responsibilities and decision making authorities of the individuals specifically identified, and the respective lines of communication. It is the intent of the PMP to provide all participants with a clear understanding of how the Authority's Project is to be effectuated.

### **1.3 STAGED COMPLETION OF THE PLAN**

The Program Management Plan is a dynamic document, which will be periodically updated and supplemented as the definition of the Project continues to be developed and refined.

### **1.4 CONFLICT WITH AUTHORITY POLICIES**

If any inconsistencies or conflicts arise, between this PMP and other currently established or future policies and procedures, the Authority's policies and procedures take precedent. Wherever any inconsistencies or conflicts arise between any current or future Authority contractual agreement with a contractor or a consultant, the contract or agreement shall govern.

## **2.0 PROJECT DESCRIPTION**

### **2.1 GENERAL DESCRIPTION OF THE PROJECT**

The Los Angeles - Pasadena Metro Blue Line Light Rail Project is a 13.7-mile conventional light rail project extending from Union Station to the eastern area of Pasadena. Figure 2-1 shows conceptually the alignment and station locations. A total of 13 stations are planned throughout the alignment. The line will travel through the city of Los Angeles, the community of Highland Park, and the cities of South Pasadena and Pasadena. It will operate primarily on right of way (ROW) recently acquired from the Atchison Topeka & Santa Fe Railroad. The intent of the Project is to incorporate technology similar to the existing Metro Blue Line, implementing lessons learned as appropriate. The objective of the Authority in this Project is to complete the final engineering and design for the line segments, stations and maintenance facilities, construct the facilities, testing and accepting of the vehicles and prepare the line for revenue operation.

### **2.2 PROJECT STATIONS AND ALIGNMENT**

#### **2.2.1 Union Station**

The alignment begins at Platform 1 of Union Station, located adjacent to the Metrolink platforms. The first station, Union Station, will serve as the southerly terminus of the line. Passenger connections with the Metro Red Line at Union Station are planned via a direct link to the existing passenger tunnel as well as surface access to Metrolink. The station will consist of a 30' wide by 270'-long platform to accommodate a three-car train and expected patronage.

#### **2.2.2 Chinatown Aerial**

The alignment travels northward and transitions to an aerial structure at Macy Street. The guideway, a cast-in-place box girder structure, is 2,760' long and proceeds toward the Chinatown area to an aerial station located at College Street

#### **2.2.3 Chinatown Station/Line Segment**

The second station, Chinatown Station, will consist of a center platform with elevator, stairway and/or escalator access to and from Alameda Street/North Spring Street. Parking is not planned for the station due to right of way limitations. Pedestrian, kiss-and-ride and bus movements will accommodate modal access to the station.

The guideway descends to grade along the western side of the Southern Pacific Transportation Company freight yard known as the Cornfield and crosses under the North Broadway Bridge. It then elevates into a bridge structure to clear the Metrolink tracks and cross over the Los Angeles River.

#### **2.2.3 Midway Yard and Shops Site**

The Midway Yard and Shops site is located on the southwest bank of the Los Angeles River just north of the Broadway Street Bridge.

#### **2.2.5 Los Angeles River Bridge**

The single-track steel truss bridge has been demolished and replaced with a new dual-track cast-in-place concrete segmental aerial structure constructed approximately 15' to 20' higher than the present grade to provide minimum vertical clearance for the Metrolink and freight trains below. The guideway enters the former Atchison, Topeka & Santa Fe Railroad right-of-way which continues northeasterly over the Golden State (5) Freeway and Avenue 26.

#### **2.2.6 Avenue 26 Station**

The third station is located at Avenue 26 and is planned as an at-grade station with two side platforms, each 12' wide by 270' long. Parking for 105 vehicles and bus drop-off had been planned for the station; however, the property is prohibitively contaminated and the provision of a park and ride lot will be abandoned if an agreement to remediate cannot be negotiated with the prior the Authority.

#### **2.2.7 French Avenue Station**

The fourth station, at French Avenue, is planned as an at-grade station with two side platforms, each 12' wide by 270' long. It is located just south of French Avenue, between Marmion Way and Pasadena Avenue. Parking for 164 vehicles and a bus drop-off area are planned for the station. The alignment continues northeasterly, under Marmion Way and Figueroa Street. This below-grade section is anticipated to be a cut-and-cover box structure initiating just south of Avenue 37 and daylighting 394' northward. A retaining wall and excavation support will be utilized for an additional 1165' until the track again reaches grade level.

#### **2.2.8 Southwest Museum Station**

The fifth station, located just south of Museum Drive along Marmion Way, is planned at-grade with a 16'-wide by 270'-long center platform. Pedestrian at-grade crossing will be constructed to provide access to the station.

#### **2.2.9 Highland Park Line Segment and Stations**

Continuing northeasterly, between Avenues 50 and 60 on Marmion Way in Highland Park, the alignment will be at-grade in a semi-exclusive right of way. This 4200' segment of the line will include parallel, 13' one-way couplets as frontage roads.

The sixth station, at Avenue 57, is planned as an at-grade station with a center platform, 16' wide by 270' long, located on the north side of Avenue 57. The location of this station necessitates the closure of the existing grade crossing at Avenue 58.

#### **2.2.10 Arroyo Seco Bridge**

Continuing easterly, the alignment crosses over the Pasadena Freeway via the recently retrofitted historic Arroyo Seco Bridge. The prior Arroyo Seco Bridge was a single-track, 11 -span, 71'-long, plate girder bridge with a timber-ballasted deck. The bridge was originally built in 1894, with modifications made in 1917 and 1923, and has been designated as a cultural heritage monument by the Los Angeles Cultural Heritage Board. The new bridge was strengthened by replacement of the deck and girders as well as modifications to towers and bents to accommodate a second light rail transit (LRT) track, while maintaining the profile of the existing structure where feasible. The guideway proceeds at-grade into South Pasadena.

#### **2.2.11 Mission Street Station**

The seventh station, on the south side of Mission Street, in South Pasadena is planned as an at grade station with two split platforms, each 12' wide by 270' long. The location of the station requires some modifications to both Meridian Avenue and El Centro Street. Parking is not planned for the station due to right of way limitations. Pedestrian, kiss-and-ride and bus movements will accommodate modal access to the station.

**2.2.12 Fillmore Street Station**

The eighth station, located on the north side of Fillmore Street, is planned as an at-grade station with a center platform, 16' Wide by 270' long. The location of this station necessitates the closure of the existing grade crossing at Fillmore Street. Parking is planned with provision for 150 spaces in a park-and-ride lot south of Fillmore Street.

**2.2.13 Del Mar Boulevard Station**

The ninth station, at Del Mar Boulevard, is planned as an at-grade station with two side platforms, each 12' wide by 270' long. The station is located north of Del Mar Boulevard at the site of the existing Amtrak depot. Parking facilities for 600 cars is planned in conjunction with the City of Pasadena. Joint development potential at the Del Mar site is being evaluated with the City of Pasadena. A below-grade line segment approximately 2400' long, beginning south of Green Street and continuing to north of Holly Street, is planned.

**2.2.14 Memorial Park Station**

The tenth station, at Memorial Park, is planned as an at-grade station with side platforms 14' wide (northbound) and 12'2" wide (southbound) by 270' long. The location of this station necessitates the closure of an existing grade crossing at Holly Street. The unique feature of the Memorial Park Station is a residential housing development constructed by the City of Pasadena and the Janis Corporation. The development was built over this section of the Metro Pasadena line and, with the exception of the Memorial Park side, fully encloses the station.

**2.2.15 Memorial Park to Sierra Madre Villa Line Segment**

An at-grade alignment in an exclusive right of way is planned within the median of the Foothill (210) Freeway. The major feature of this line segment will be the construction of double LRT trackage on right of way, which currently accommodates a single railroad track, and parallel service road. Double tracking the right of way necessitated structural modifications to 10 railroad and freeway bridge crossings of which 9 have been completed.

**2.2.16 Lake Avenue Station**

The eleventh station, at Lake Avenue, is planned as an at-grade station with elevator, escalator and stairway access from both sides of Lake Avenue down to the platform. The platform is located below Lake Avenue and within the median of the freeway. Parking is not planned for the station due to the very restrictive right of way limitations. A center platform, 16' wide by 270' long, will be located just east of the Lake Avenue overcrossing. Bridge widening modifications along both sides of the Lake Avenue overcrossing have been completed to provide separate bus turnout and drop-off lanes.

**2.2.17 Allen Avenue Station**

The twelfth station, at Allen Avenue, is planned as an at-grade station with access by elevator and stairways from the west side of Allen Avenue below, to the platform located above and within

the existing at-grade right of way in the median of the 210 Freeway. Parking is not planned for the station due to the very restrictive right of way limitations. A center platform, 16' wide by 270' long, will be located just west of the Allen Avenue undercrossing. Bus turnouts and drop-off lanes will be provided on Allen Avenue within the existing street width. A significant feature of the station will be the provision of a large opening through the existing bridge abutment for pedestrian access to the station platform above.

#### **2.2.18 Sierra Madre Villa Station**

The thirteenth station, at Sierra Madre Villa Avenue, is planned as an at-grade station with elevator, escalator and stairway access under the 210 Freeway to the platform above, located within the railroad right of way and the freeway median. Parking is planned for the station with provision for 1000 spaces. A center platform, 18' wide by 270' long, will be located just east of the Sierra Madre Villa Avenue undercrossing. A new frontage road is planned adjacent to the existing westbound on-ramp to the 210 Freeway to accommodate bus and vehicular access to the station as well as provision for bus layover.

### **2.3 PROJECT HISTORY**

In April 1988, the Los Angeles County Transportation Commission (LACTC) authorized the preparation of Environmental Impact Report (EIR) for the Metro Pasadena Project, clearing the way for conceptual engineering and preparing the project for implementation as part of the Metro Rail Transit System. In December 1988, a draft EIR was completed and issued. A revised draft EIR was issued in November 1989. Pursuant to the California Environmental Quality Act (CEQA), the LACTC prepared a final EIR for the project in February 1990. On February 28, 1990, the LACTC certified that the project's final EIR had been prepared in compliance with CEQA, and that it identified the probable impacts associated with construction and operation of the project.

On March 28, 1990, the LACTC approved the project by adopting the Findings, Statement of Overriding Considerations, and Mitigation Monitoring Program, and authorized the filing of a Notice of Determination. These actions were separate from any funding or scheduling decisions. The adopted project corridor, termed the "Highland Park alignment," was defined as a 13.7-mile line from Union Station to eastern Pasadena.

In April 1991, the LACTC amended the approved project to include an aerial alignment and station in the Chinatown area of Los Angeles. In October 1991, the LACTC approved staff recommendation for the Rail Construction Corporation (RCC) to perform Preliminary Engineering (PE) for the project. In conjunction with the project's approval, a budget of \$15 million was established for conducting PE.

Approving the PE budget initiated stage one of a unique "two-stage" adoption process. Stage two, completion of PE, resulted in defining an accurate and achievable budget and schedule for construction of the project.

Because of requests for additional analyses and potential project modifications from the Cities of Pasadena and Los Angeles, the LACTC approved the preparation of a Supplemental EIR (SEIR) in March 1992 to evaluate potential significant impacts associated with the requested modifications.

In September 1992, the SEIR was released. It analyzed potential impacts from construction of the alternatives to the Project EIR approved in February 1990. The alternatives included three potential sites for the maintenance yard, three new station locations, and two grade separations.

The Planning and Mobility Improvement Committee (PMIC) of the LACTC was asked on January 13, 1993, to adopt the Findings, Statement of Overriding Considerations, and Mitigation Monitoring Program, as well as approve the alternatives which would be included as part of the adopted project.

The alternatives included: (1) elimination of the maintenance facilities at Taylor Yard and retention of Midway Yard for maintenance activities; (2) revision to station locations in the City of Pasadena; (3) conditional approval of the Southwest Museum station, Marmion/Figueroa grade separation, Colorado Boulevard grade separation, and a park-and-ride lot, if the Marmion/Figueroa station were shifted southward. The PMIC was also asked to adopt the project budget of \$735 million and a sequential opening, with a Revenue Operations Date (ROD) of December 1996 for the Union Station to Del Mar segment and November 1997 for the Del Mar to Sierra Madre Villa segment.

The PMIC revised staff recommendations to: (1) add the Southwest Museum station and the below-grade separations at both Marmion Way/Figueroa Street and Colorado Boulevard from Green Street through Colorado Boulevard and Union Street; and (2) shift the Marmion Way/Figueroa Street station south of the below-grade segment, adding a park-and-ride lot. The recommended project budget was increased to \$941 million and a November 1997 ROD for the entire line was established.

During its January 27, 1993, meeting, the LACTC approved the PMIC recommendation. The LACTC also agreed to a motion made to hold community meetings with Midway yard area residents to address community concerns including bikeways, greenways, and pedestrian access. Lastly, the LACTC agreed to an amendment to include 600 parking spaces at Del Mar which would be paid for by a \$6.6 million state Transit Capital Improvement (TCI) grant, whose application and administration would be the responsibility of the City of Pasadena. The \$6.6 million was not included in the \$941 million budget.

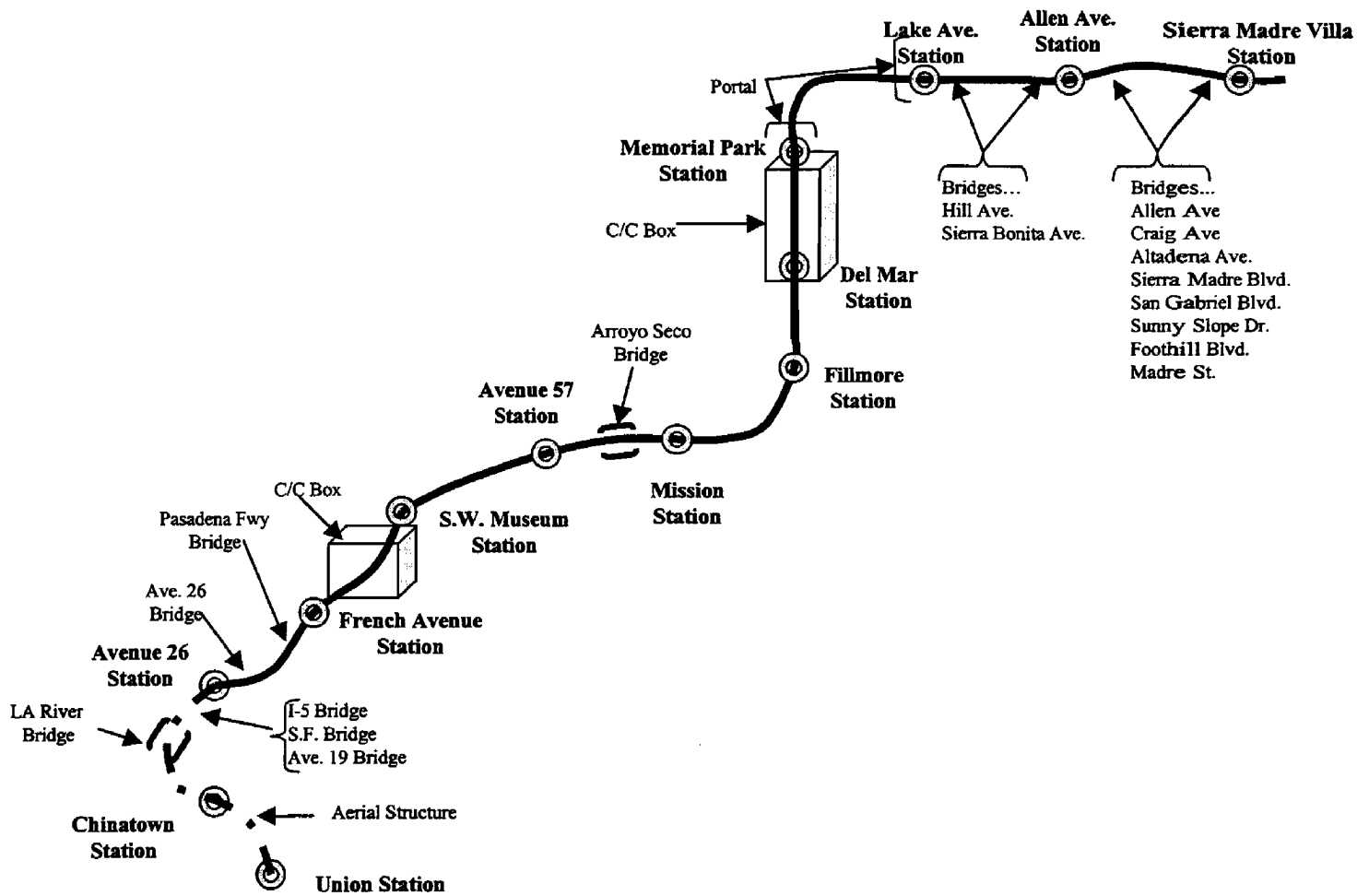
In June 1996 the MTA Board formally approved a series of recommendations by staff reducing the cost of the Project to \$803.7 million and extending the ROD date to June 30, 2002. On January 27, 1998, the MTA Board formally approved the Chief Executive Officer's recommendation to suspend, indefinitely, the partially completed Pasadena Blue Line project. The suspension of the Project was essentially completed as of June 30, 1998 when the consultants and contractors were demobilized except for a minimum amount of construction that was completed by before the end of 1998.

On September 30, 1998, Governor Pete Wilson signed State of California Senate Bill 1847, introduced by Senator Adam Schiff. SB-1847 established the Pasadena Metro Blue Line Construction Authority for the purpose of awarding and overseeing all design and construction contracts for completion of the Pasadena-Los Angeles Metro Blue Line light rail project from Union Station in the City of Los Angeles to Sierra Madre Villa Boulevard in the City of Pasadena, and any mass transit guideway that may be planned east of Sierra Madre Villa Boulevard along the rail right-of-way extending to the City of Claremont.

## **2.4 CAPITAL COST SUMMARY**

The capital costs, in escalated dollars for the Project are summarized in Figure 2-2 below.

**Figure 2.1  
Route Map of the LA to Pasadena Blue Line**



**2.5 PRELIMINARY PROJECT SCHEDULE**

Figure 2-3 is the preliminary bar chart milestone schedule which covers the 13.7 mile LA to Pasadena Metro Blue Line Project. No schedules or project development activities have been initiated for any extension of the Project to the east to the City of Claremont, a distance of some 20-21 miles.

**FIGURE 2.2**

**REVISED PROJECT BUDGET AND COST TO COMPLETE  
ESTIMATES LA TO PASADENA BLUE LINE PROJECT**

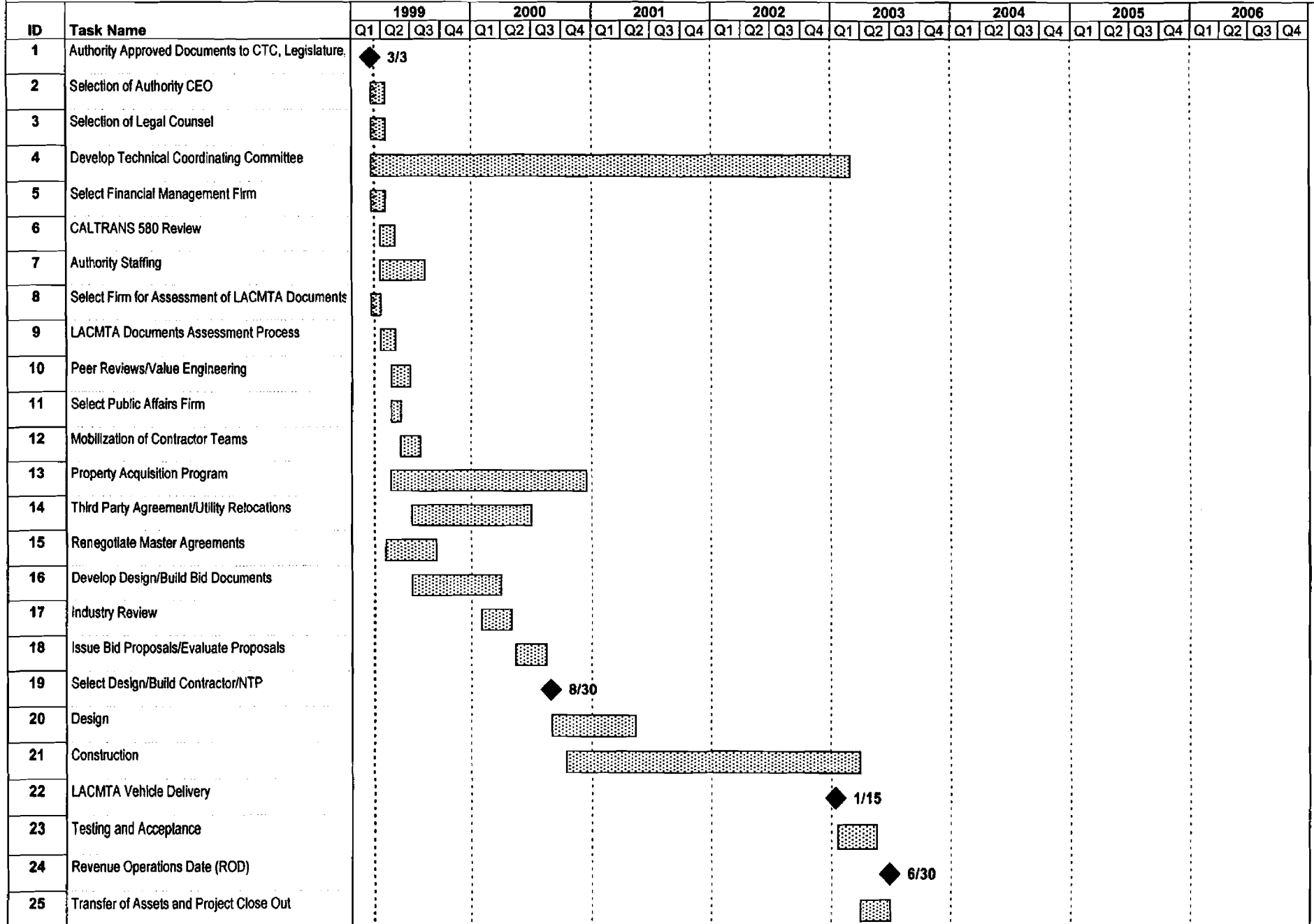
(000)

<b>ELEMENT/ DESCRIPTION</b>	<b>MTA CURRENT BUDGET (SEPT. 97)</b>	<b>GANNETT FLEMING COST TO COMPLETE 3/31/98</b>	<b>REVISED AUTHORITY BUDGET 3/12/99</b>	<b>GANNETT FLEMING COST TO COMPLETE 3/12/99</b>
CONSTRUCTION	\$ 431,365	\$ 330,913	\$ 355,922	@ \$ 306,614
PROFESSIONAL SERVICES	258,887	57,837	214,166	46,506
REAL ESTATE	55,500	18,694	47,395	17,059
UTILITY/ FORCE ACCOUNTS	12,400	9,400	15,400	8,372
SPECIAL PROGRAMS	2,201	5,636	2,201	1,806
PROJECT CONTINGENCY	43,554	48,457	48,853	31,560
PROJECT REVENUE	-39	-1,297	-198	-198
<b>TOTAL PROJECT</b>	<b>\$ 803,868</b>	<b>\$ 469,640</b>	<b>\$ 683,739</b>	<b>\$ 411,723</b>

@ The estimated construction cost of \$ 295,247 has been escalated at a rate of 3.85 percent to account for the estimated 12 month change in the ROD from July 1, 2002 to June 30, 2003



**Los Angeles to Pasadena Metro Blue Line Implementation Schedule**



## **3.0 – ORGANIZATION AND STAFFING**

### **3.1 ORGANIZATIONAL PHILOSOPHY**

The CEO of the Metro Blue Line Construction Authority is responsible for the implementation of the Los Angeles to Pasadena Light Rail Project. A hierarchical management approach is being applied to the project management organization. Direct project management responsibilities shall be under the authority of the Board of Directors of the Authority. The CEO, with the aid of staff and several consultant team firms and/or teams to be selected make up the management organization of the project. All internal and external agency correspondence, inquiries, comments, recommendations, approvals, information requests, and all other action as needed or required relating to the Project, shall be addressed to the attention of the CEO of the Authority.

Under the Project Management Plan, resolution of all contractual issues, revisions and disputes shall be the responsibility of the MBL Transit Senior Director of Procurement who serves as the Contracting Officer. Dispute resolution shall be resolved by both the Director of Construction and Professional Services Procurement with assistance provided by the Authority's CEO.

### **3.2 PROJECT STAFFING REQUIREMENTS**

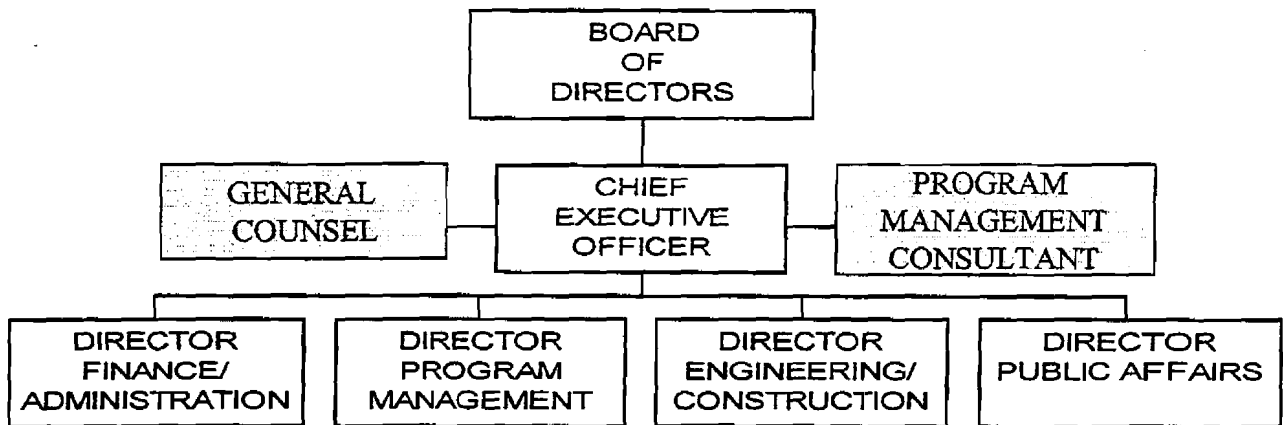
The staffing for the Authority includes approximately 24 positions as shown in Figures 3-1 through 3-5 below. Consultant firms and/or teams will provide supplemental support staff. The supplemental support is to be provided for the following Project functions:

- Conceptual design development
- Preliminary engineering
- Assistance in development of the invitation for bid package
- Assistance during bidding
- Project management controls
- Financial assistance
- Quality assurance assistance during final design and construction phases
- Contract administration

Over the next three-four months the Authority anticipates entering into agreements with firms and/or teams to provide the services listed below:

- General Counsel
- Financial management assistance
- Design management assistance
- Program management assistance
- Environmental/EIR assistance
- Hazardous materials remediation assistance
- Construction management assistance
- Value engineering and claims assistance

FIGURE 3-1  
ORGANIZATION CHART



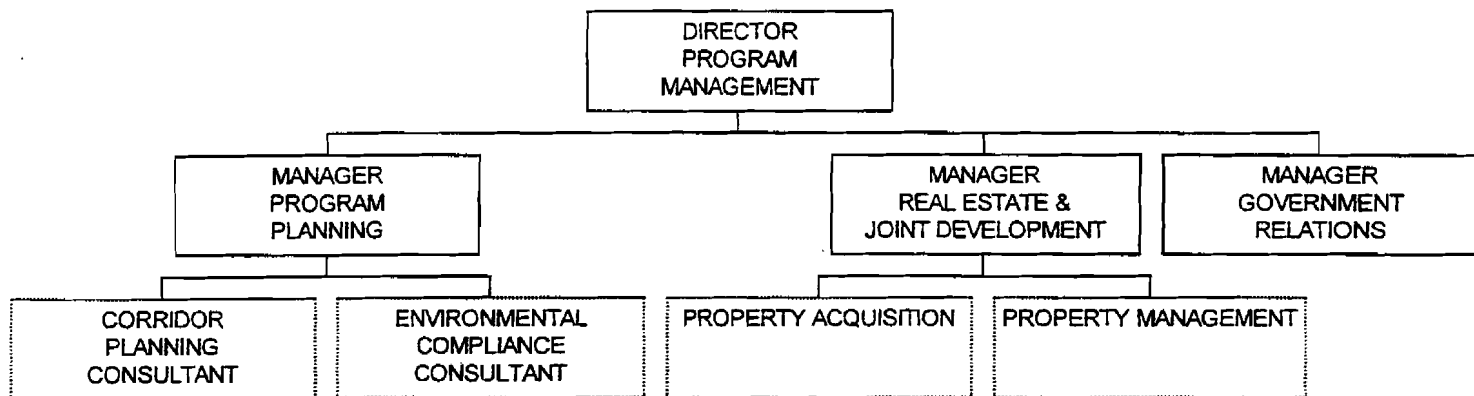
- Financial Administration
- Records Management
- Project Accounting
- Information Systems
- Human Resources
- Contracts

- Real Estate
- Corridor Planning
- Property Management
- Government Affairs
- Environmental Compliance

- Design/Construction Management
- Value Engineering
- Project Controls
- Construction Safety
- Quality Assurance

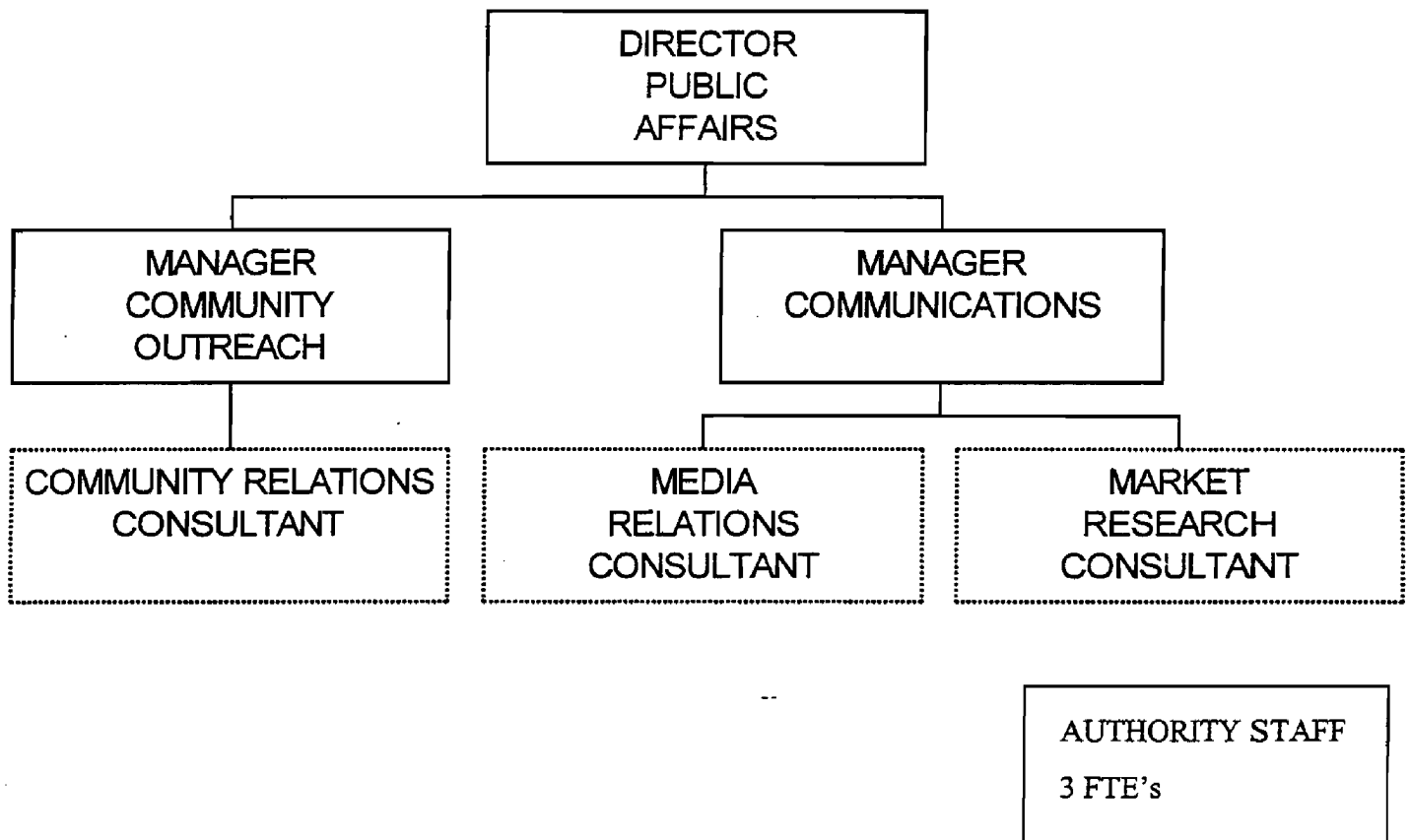
- Neighborhood Outreach
- Market Research
- Media Relations
- Legislative Relations

FIGURE 3-2  
ORGANIZATION CHART  
PROGRAM MANAGEMENT DIVISION



AUTHORITY  
STAFF  
5 FTE's

**FIGURE 3-3  
ORGANIZATION CHART  
PUBLIC AFFAIRS DIVISION**



**FIGURE 3-4  
ORGANIZATION CHART  
ENGINEERING & CONSTRUCTION DIVISION**

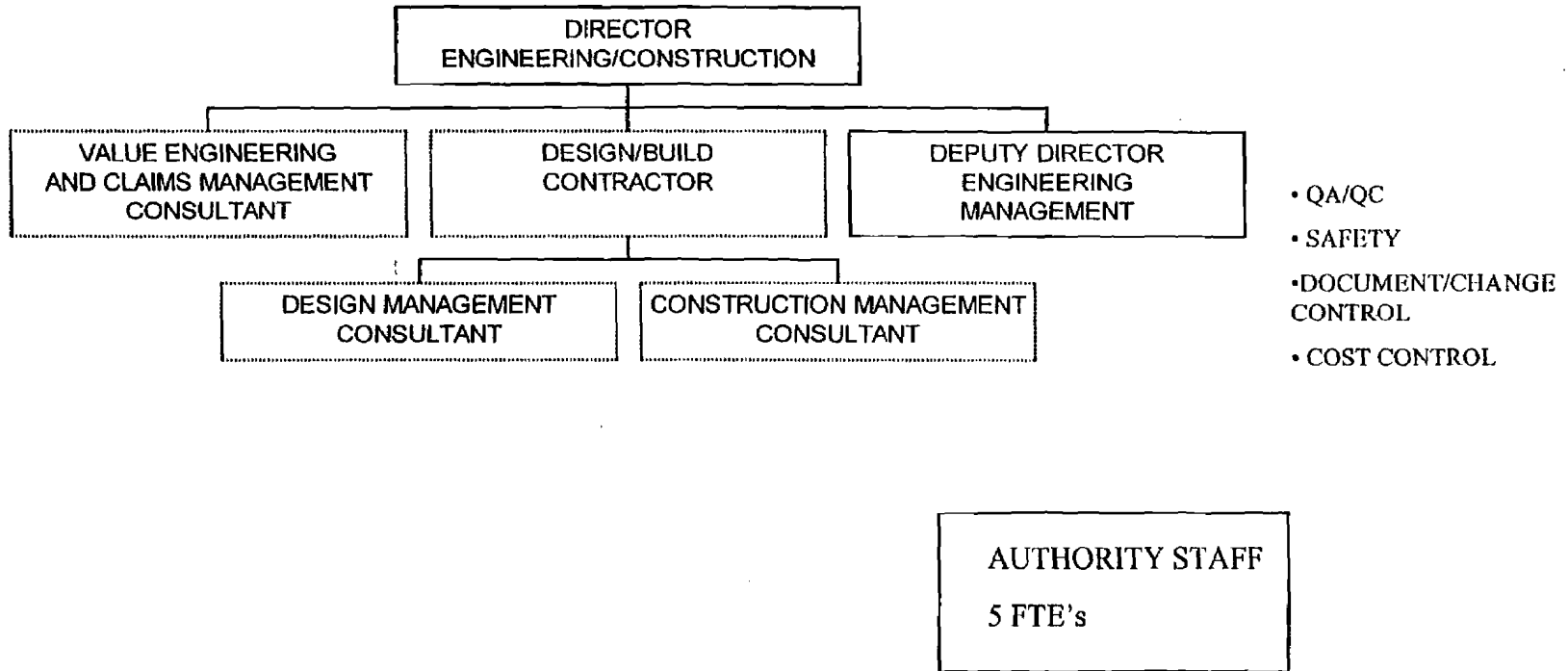
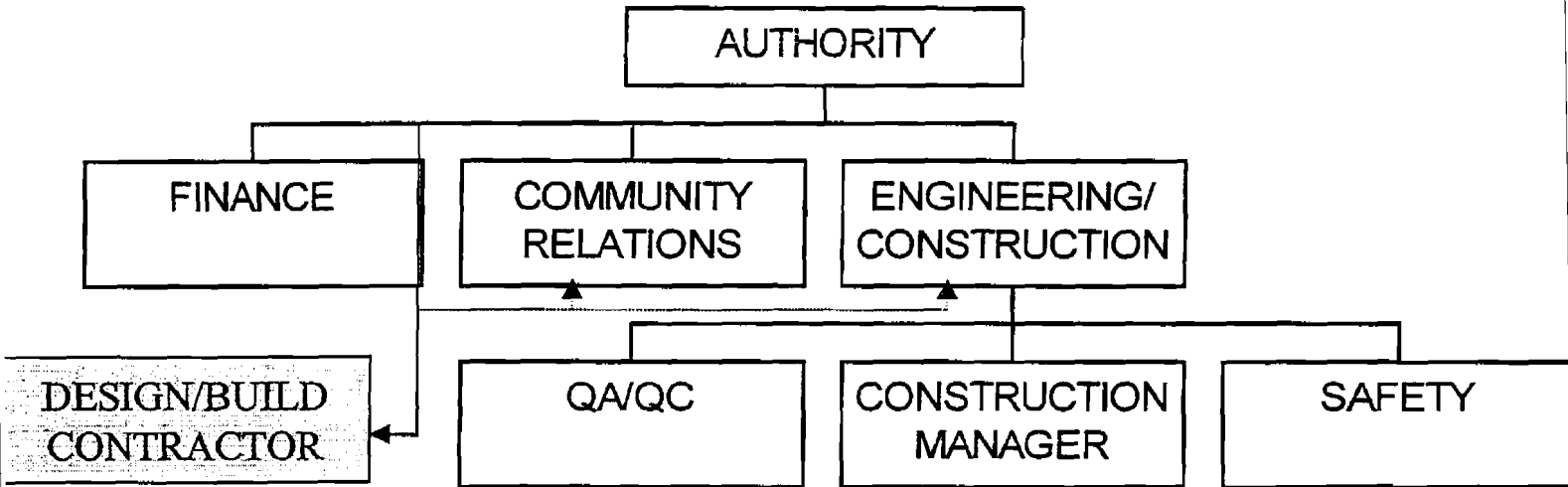


FIGURE 3-5  
ORGANIZATIONAL ARRANGEMENTS  
DURING CONSTRUCTION



### **3.3 KEY PERSONNEL**

The CEO will have overall management responsibility for staffing of the Authority. The Authority will employ dedicated project staff, either full-time or on an as-needed basis, to perform functions throughout the course of the Project. They include:

- Director Finance and Administration
- Director Program Management
- Director Engineering and Construction
- Director Public Affairs
- Manager Finance
- Manager Administration
- Manager Program Planning
- Manager Real Estate and Joint Development
- Manager Government Relations
- Manager Community Outreach
- Manager Communications

Direct interface among members of the above project staff and consultants is critical to the successful completion of the Project. In this regard, the CEO shall be the direct point of contact for these interfaces and shall establish effective lines of communication with all involved departments and all consultants, including the cities, the SGVCOG, and the MTA.

#### **3.3.1 The Authority Real Estate**

Assisting the Project CEO in all aspects of real estate is the Manager of Real Estate and Joint Development. The scope of the MBL real estate program is outlined in Section 11.0 – “Real Estate Acquisition Program.” Under the direction of the CEO, Real Estate and Joint Development, the Corridor Property Coordinator and Right of Way Negotiators shall be responsible for:

- Securing properties for construction staging and storage
- Constructions and aerial easements
- Leases, purchases, and relocation plans

#### **The Authority Risk Management**

The Risk Management Department shall be responsible for implementation of the Authority Controlled Insurance Programs (see Section 6.6). The Authority shall manage the insurance program by the Senior Director Risk Management and Claims through his designee, the Special Project Administrator.

#### **The Authority Records Management**

The Authority Records Management Unit shall be responsible for ensuring a retention schedule approved for the documents of the Project. They will coordinate the storage of records through 2007, the storage of documents on microfilm, as necessary, and retrieval of stored documents.



**3.3.2 Project Management Assistance Consultant**

The Authority will enter into a professional services agreement which provides for the delivery of project management services for the Project. The consultant will assist in the development of several documents included in the Invitation for Bid package including System Performance Specifications, Project Prospective, Business Documentation, Design/Build Requirements as well as the DB Contract and Instructions to Proposers.

Throughout the bid period, the Consultant will support the Authority in defining the proposal evaluation criteria, responding to proposers' inquiries, assisting in the evaluation of proposals and overall support in developing its project management structure and systems.

The PMA Consultant will also assist the Authority, as needed, in development and refinement of the system integration process and the Quality Assurance plans and mechanisms including operation and maintenance of the Project.

**3.3.3 Environmental Impact Analysis**

To assist the Authority in completing any environmental impact analysis, a professional service agreement will be executed with a team of consultants. The consultant's Project Manager will coordinate the efforts of the team and coordinate with the Authority.

**3.3.4 Hazardous Material Remediation Consultant**

To assist the Authority in developing hazardous material remediation designs for acceptance by the Project, and to aid in monitoring the remediations during construction. The consultant's Project Manager will coordinate the efforts of the remediation design team and coordinate with the other agencies.

**3.3.5 Design/Build Contractor**

For the final design and construction phases, the Authority will enter into an agreement with a Design/Build (D/B) Contractor. The Contractor is responsible for delivering the final design and construction of the Project. The contractor is responsible for the direct supervision of its own forces, and the direct day-to-day supervision/coordination of its subcontractors.

## **4.0 – PROJECT MANAGEMENT CONTROL SYSTEMS**

### **4.1 SCHEDULE MANAGEMENT (DESIGN/BUILD PHASE)**

The ability to rapidly move the Project forward greatly depends on the level of effort expended on planning and prioritizing work. The scheduling approach to be implemented by the Authority is a team approach whereby the Project Schedule is reviewed and updated jointly by the DB Contractor and Authority staff. This approach encourages schedule awareness among all participants and provides a forum for introduction of new schedule issues.

### **4.2 PROJECT SCHEDULE DEVELOPMENT AND MAINTENANCE**

#### **4.2.1 Baseline Schedule**

The D/B Contractor should be responsible for developing the baseline Project Schedule. The baseline Project Schedule will be a critical path method (CPM) network schedule demonstrating all design/build Work consuming the period of performance between issuance of the Notice to Proceed through the Guaranteed Completion Date. The network will include database entries for all resources required to complete each activity including labor hours, material quantities and equipment. The Project Schedule will include final engineering, submittal development and review, long-lead equipment fabrication, factory acceptance testing and delivery activities as well as activities describing field-testing, vehicle testing and full system commissioning. The Authority CEO and staff will review and comment on the proposed baseline Project Schedule. Upon the Authority's acceptance of the Project Schedule, it will be memorialized by formal transmission to all of the Project's participants.

#### **4.2.2 Schedule Updates**

The Project Schedule will be updated monthly in the presence of the Authority staff or its representative at a meeting specifically designated for updating the Project Schedule. Following the meeting, the Contractor will process and transmit the updated Project Schedule to the Authority along with a report narrative. The Authority will review the updated Project Schedule and report narrative and formally respond to the Contractor in regard to the status of critical work as well as any change in the projected Guaranteed Completion Date or interim milestones.

### **4.3 DELAYS**

The successful on-time completion of the Project depends on the ability of the Project participants to address critical issues timely. By highlighting work sequences that experience an increasing depletion of positive float, potential delay-causing issues can be managed aggressively. The Authority's participation in the Project Schedule update meeting will encourage open discussion regarding problem areas on the Project as demonstrated by the Project Schedule.

#### **4.3.1 Critical Delays**

Should an update of the Project Schedule report negative float, immediate action will be taken to recover the lost float and bring the projected Guaranteed Completion Date back on schedule. The Authority will meet with the Contractor to develop work resequencing or priority alternatives. Analysis of resource and productivity data collected from previous schedule updates will be used to review projected durations of similar activities.

#### **4.3.2 Non-Critical Delay**

Non-critical delays will be encountered throughout the design/build phase of the Project. Mostly they are the result of typical project dynamics. Consumption of positive float will be monitored with each month's schedule update. Excessive float consumption will be reported to highlight potentially delaying issues or underestimated durations.

#### **4.4 CHANGE ORDERS**

Change Orders, Authority or Contractor initiated, that result in additional scope or deletion of scope, will be represented in the Project Schedule. The Contractor in the presence of the Authority staff during the schedule update meeting will do incorporation of new activities and work sequences for additional scope. The Contractor is obligated to immediately inform the Authority of any adverse effect on the Project Schedule's critical path, or new creation thereof.

#### **4.5 WORK BREAKDOWN STRUCTURE (WBS)**

The D/B Contractor will be required to develop a written WBS for the organization of the design/build Work. Authority will review the WBS and, upon concurrence, it will be incorporated into the Project Schedule for summarizing reports on cost and schedule information.

#### **4.6 COST CONTROL SYSTEMS**

##### **4.6.1 Capital Project Accounting System (CPAS)**

Upon receipt of executed agreements from the CTC and the MTA, the Manager of Finance will input the MAC Code budgets into the CPAS as cost objectives. Other funding sources would also be input into cost objectives. Once the cost objectives are input, the Manager of Finance will advise the CEO of the availability of funding by forwarding a copy of the cost objective output report. The CEO will then have the Director of Engineering/Construction create within each cost objective code task codes with budgets structured in such a way to manage the Project.

##### **4.6.2 Modification to CPAS**

In order to transfer funds between cost objectives, the Director of Engineering and Construction must request the necessary changes be completed by the Manager of Finance. Prior to making the changes in the computer system, the Manager of Finance, with the aid of the Director of Engineering and Construction will process and require technical amendments or other funding source actions.

Once the cost objective budgets are revised, the Director of Engineering and Construction can create or revise tasks within each cost objective. The CPAS system will not allow budget to be transferred away from obligated amounts (purchase order, etc.) at either the cost objective or task level.

##### **4.6.3 Professional Services Agreements**

Formal initiation and re-mobilization of the Project by Authority's Board of Directors empowers the CEO to begin the process of entering into professional service agreements. To initiate this process, the following financial control steps must be taken:

- (1) The directors of the various departments prepare a purchase requisition and an estimated cost for the goods or services required and forward the same to the Director of Finance and Administration. The purchase requisition identifies all necessary Project account code data.
- (2) Upon approval by this department, the Contracting Officer shall create a purchase order in Authority's purchasing/accounts payable/materials management system (PAPMM). The purchase order establishes interface with the Authority's general ledger systems.

Execution of the purchase order signals the start of work and creates the compensation mechanism for the same. Collection of all reimbursable funds is the responsibility of the Accounting Section. Once invoices are posted on the general ledger system, Accounting prepares an application for reimbursement, forwarding the same to the funding agency. Project Accounting is the responsibility of the Authority's Director of Finance and Administration. Accounts payable is the general accounting division as are properly documented authorizations for contract payments. All professional services for the Project will be provided under cost-plus-fixed-fee or cost-plus-incentive-fee type of contracts.

**4.6.4 Force Account Agreements**

All force account agreements for the Project are being provided under actual cost contracts, described as follows:

**Metrolink:**

Agreement #: \_\_\_\_\_  
Purchase order #: \_\_\_\_\_

**Caltrans**

Agreement #: \_\_\_\_\_  
Purchase order #: \_\_\_\_\_

**City of Los Angeles**

Agreement #: \_\_\_\_\_  
Purchase order #: \_\_\_\_\_

**City of South Pasadena**

Agreement #: \_\_\_\_\_  
Purchase order #: \_\_\_\_\_

**City of Pasadena**

Agreement #: \_\_\_\_\_  
Purchase order #: \_\_\_\_\_

**LA DWP Authority**

Agreement #: \_\_\_\_\_  
Purchase order #: \_\_\_\_\_

**Public Service Electric & Gas**

Agreement #: \_\_\_\_\_  
Purchase order #: \_\_\_\_\_

**PAC Bell**

Agreement #: \_\_\_\_\_  
Purchase order #: \_\_\_\_\_

#### **4.7 DESIGN/BUILD CONTRACTS**

Final approval of the Design/Build (D/B) Contract by the Authority's Board of Directors empowers the CEO to begin the process of entering into the Contract. To initiate the process, the following financial control steps must be taken:

- 1) The Director of Engineering and Construction prepares an initial Purchase Requisition for the value of quarterly payments bid for which there is funding available.
- 2) Upon approval by the Contracts Office, the Contracting Officer shall create a purchase order in the Authority's Purchasing/Accounts Payable/Materials Management system (PAPMM). The purchase order establishes interfaces with the Authority's General Ledger systems.
- 3) As additional funds become available, the Director of Engineering and Construction will prepare subsequent purchase order requests for the additional value of quarterly payments bid that can be funded within the cumulative funding.
- 4) Upon approval by the Contracts Office, a purchase order requisition shall be created in the Authority's PAPMM.

The design/build portion of the Project is planned to be implemented as a lump sum contract with a bid quarterly payment schedule in accordance with the contract that will be developed by the staff with consultant assistance. Based on bids/proposals received the CEO will recommend to the Board for approval a single prime contractor which will have a number of subcontractors.

#### **4.8 COST CONTROL – MANAGEMENT, CONSULTANTS AND FORCE ACCOUNTS**

All management, consultant and force account funding allocated to the Project from the various funding sources shall be disbursed among the following entities. Similar measures will be used, during the D/B Contract execution phase, to implement cost control procedures for monitoring the expenditure of such funds. The following entities are subject to these procedures:

- The Authority
- The MTA
- Caltrans
- The City of Los Angeles
- The City of Pasadena
- The City of South Pasadena
- The San Gabriel Valley Council of Governments
- All consultants under contract
- All Utilities operating under Master Cooperative Agreements

##### **4.8.1 Cost Control of Consultants**

During the Project's remobilization phase and the D/B phase, cost control measures of consultants shall be effectuated by periodically analyzing budgeted versus actual expenditures in regard to hours for labor, materials and equipment. The information shall be catalogued and maintained by the consultants. Expenditures shall be monitored for:

- Each consultant's tasks
- Each consultant providing service to the Project

All relevant information shall be recorded in a 4-week project status report. Significant deviations shall be discussed and analyzed to determine the cause for such deviations, with corrective actions instituted, if warranted.

#### **4.8.2 Cost Control – The Authority**

Cost control mechanisms employed by the Authority to monitor internal expenditures during both phases of the Project is provided through the preparation of the Project Cost Report (PCR). This report is to be produced monthly through the offices of the Finance and Administration Department and contains detailed financial information in regard to every line item of the CPAS in regard to:

- Actual expenditures
- Year-to-date expenditures
- Project start-to-date expenditures
- Balances remaining in each budget line item

The information provided by these reports is made immediately available upon request by the CEO.

#### **4.8.3 Cost Control – Utilities**

Under existing agreements between the Authority and the utilities – water, gas, electricity, and others—each maintain limited access to the right-of-way where the Authority will construct the Project. Initiation of assistance of the utilities is provided by existing Master Agreements for the Authority upon completion of a contract work order requisition package including the following:

- Purchase Requisition Form
- Appropriate signatures of the CEO and/or his/her designee and the Director of Engineering and Construction
- Detailed scope-of-work package as well as the estimated budget required to perform such services

This package, prepared by the Director of Engineering and Construction, establishes the types of management, design, engineering support and construction expected of a utility during the design and construction phases. The package is forwarded to the procurement department. A purchase order is issued to the appropriate utility for billing purposes. The Authority will compensate the utility for all force account costs, such as providing emergency services, protection of facilities and relocation of utility facilities.

### **4.9 COST CONTROL – D/B PHASE**

Aside from the Authority Board's activities, the funds allocated to the Project from the various funding sources, shall be spent on and staff and consultant costs and design and construction activities of the D/B Contractor.

Cost control for the D/B Contractor will be effected through the use of a schedule of values, which shall be part of the D/B contract. The entities subject to the procedures to be outlined below are:

- Utility force account
- Metrolink/MTA force account

#### **4.9.1 Construction Cost Control – Metrolink**

Metrolink/MTA maintain the right to perform any work within their right-of-way where there are operating rail systems and/or railroads. Securing a their construction assistance, or their approval to permit Authority to enter into agreements with Contractors, requires the following:

- (1) The Director of Engineering and Construction shall prepare a force account work package, including an estimated cost of the services and scope of work required, forwarding same to the rail system and/or railroad's chief engineer.
- (2) The Director of Engineering and Construction shall establish the force account budget upon the conclusion of negotiations. If required, the Project's CPAS shall be updated to reflect any necessary budget revisions.

Cost control procedures monitoring funding expenditure includes the preparation of a weekly project status report containing information on the positions performing work by title, locations, hours worked by each, and equipment and materials used, if any.

Cost control measures in the field shall be instituted by the daily submission of a form signed by the field managers to record manpower, equipment and expenditure information on all force account.

#### **4.9.2 D/B Construction Cost Control**

The D/B Contractor will report dollars expended to date on a quarterly basis. Payment will be rendered based on the expended to date not to exceed the cumulative quarterly payment provided in the bid documents.

#### **4.9.3 Construction Cost Control Utilities**

In addition to urban rail/railroads and the D/B Contractor, various utilities will be providing work under the Project. Responsibility for implementing the cost control procedures monitoring utility expenditure of construction funding rests with the Director of Engineering and Construction. Procedures controlling the flow of these funds to the utilities are similar to the procedures stated above.

The engineering and/or field representatives of each utility shall be notified by the Director of Engineering and Construction of the intent of the Authority and the need for their services. To secure construction and/or relocation assistance of the utilities, the following actions shall be undertaken:

- 1) The Director of Engineering and Construction shall prepare a scope-of-work package defining the depth of the services required of the utility.
- 2) The work package shall be forward to the representative of the utility for its review and concurrence with scope, method of construction, schedule, etc.
- 3) Cost of the work will be established upon the conclusion of negotiations between the utility and the Director of Engineering and Construction.

The project's CPAS shall be updated as necessary to reflect any budget revisions. The Director of Engineering and Construction shall prepare purchase requisition forms. Upon approval by the Finance and Administration Department, the Contracting Officer shall initiate a purchase order to acquire the services needed. Methods used to monitor utility expenditures will be similar to those used to track the urban rail/railroad force accounts and shall be documented in the Project's monthly progress report. The information will include an analysis of estimated versus actual costs to complete the work package. Cost control procedures shall also be facilitated by the daily construction field reports prepared by the Director of Engineering and Construction's representative, who shall monitor the work by noting and recording the following:

- The number of workers per utility
- Types of equipment used to perform the work
- Quantities of materials used
- Productivity rates

#### **4.10 INVOICE CONTROL PROCEDURES**

To initiate invoice payment procedures a purchase order must be prepared and entered into the Authority's accounts payable system. Invoices received will be reviewed and recommended for payment to the Director of Engineering and Construction and approved by the Director of Finance and Administration. Upon the approval of an invoice by the Director of Finance and Administration, a receipting form, indicating the amount being approved and status of the work shall be completed and forwarded to the Accounts Payable office. All invoices in excess of \$50,000 must be hand signed by the Director of Engineering and Construction before payment takes place by Accounts Payable Office.

Invoices shall be received from four entities performing services to Authority. With the exception of the D/B Contractor, each will primarily be submitted in 30-day or 4-week intervals, the pay period may change depending upon the procedures of the party providing the services. Invoice control regulations are provided below for:

- Consultants
- Urban Rail/Railroads
- D/B
- Utilities and other third-parties

Upon receipt of the Invoice and Receipting Form, payment shall be issued by the Accounts Payable Office upon taking the following actions:

- Checking the invoice against the previously created purchase order
- Paying the invoice and reducing purchase order balance by the check amount
- Posting the transaction to Authority's general ledger system
- Preparing and forwarding the application for reimbursement form to CTC/Caltrans for the STIP dollars

##### **4.10.1 Consultant Invoices**

The procedures for approval of invoices submitted by the consultants shall be as follows:



- The consultants shall forward 4-week invoices providing summaries of labor and direct expenses to the Director of Engineering and Construction.
- The invoices shall be accompanied by a Progress Report addressing:
  - Total expenditures
  - Status and accomplishments of the work to date
  - A discussion of outstanding issues
  - Schedule highlighting significant milestones
  - An analysis of actual expenditures versus the actual physical completion of work
- Forward the receiving form previously noted and the approved invoice to the respective Accounts Payable Office representative.

All invoices and other payment requests shall be submitted within 15 working days of the end of any 4-week period. The Director of Engineering and Construction shall review, modify, revise and subsequently approve such invoices and forward the same under the following routing procedure for formal signoff:

- Contracting Officer
- Director of Finance and Administration
- Accounts Payable Representative

All invoice modifications, if any, shall be forwarded back to the consultant to facilitate its cost control functions.

#### **4.10.2 Force Account Invoices (Urban Rail/Railroads, Utilities and Other Third-Parties)**

Force Account invoices shall be handled in the following manner:

- The invoice shall initially be submitted to Authority's Director of Engineering and Construction
- On behalf of the Authority, the Manager of Administration and the Supervising Engineer shall review the invoice for accuracy and reconcile any differences with the organization's force account manager.
- Upon completion of approval, the Director of Engineering and Construction shall prepare the receiving form previously noted. The form shall then be forwarded, as an attachment to the invoice, to the Authority's Accounts Payable Office for payment.

Documentation submitted in support of the invoice shall include the labor usage for the period covered by the invoice.

#### **4.10.3 D/B Invoices**

The D/B Contractor shall generate periodically separate invoices for the D/B Work. The invoices shall be first submitted as draft invoices generated from the Project Milestone Schedule Report to be specified in the D/B. The draft invoice shall be reviewed at a meeting between the Contractor and the Authority Director of Engineering and Construction within 10 days of its delivery. The invoice will be reviewed in conjunction with the milestone schedule as demonstrated by the Project Schedule.

Both parties shall sign all of the Authority's Director of Engineering and Construction comments shall be addressed and the draft invoice. Within seven days after the meeting, the Contractor shall submit five copies of the final invoice that are consistent with the marked-up draft invoice.

Within 30 days after receipt by the Authority of each final invoice, the Authority shall pay the D/B Contractor in the amount of the approved invoice subject to the limitations on payment set forth in the Contract to be executed.

#### **4.11 CONTRACT MODIFICATION CONTROL**

Changes in D/B costs can occur from a number of causes. All revisions to the Contractor's scope of work shall be recorded and monitored to immediately predict cost implications to the Project's budget. Monitoring of such changes shall be effectuated with the aforementioned reports.

All such revisions shall be subdivided into three separate categories for monitoring and tracking purposes:

- Approved Change Orders: Contract changes, which have been approved by the CEO and executed by the Contracting Officer.
- Pending Change Orders: Contract changes, which have been approved by the CEO but not yet executed by the Contracting Officer.
- Potential Change Orders: Possible changes to the contract, which have been brought to the attention of the CEO and the Contracting Officer.

Whether initiated by the Authority, the Contractor, the consultants or those providing force account services, the CEO or his/her designee shall analyze each change order request and Contracting Officer to confirm that the work required represents a change to the existing contract. Upon conclusion of the review, the CEO or his/her designee shall forward recommendations to the Contracting Office to approve or deny the proposed change.

##### **4.11.1 Consultant Change Orders**

The professional consulting services for the Project will be procured, in most instances, under cost-plus-fixed fee contracts. Under this type of contractual arrangement, the consultants shall be paid all allowable costs plus a fixed fee. Changes to these contracts are generated primarily from two sources:

- Changes or revisions in the contract scope
- Underestimating or overestimating the effort required for the original scope

When either of these events occur, the following actions shall be taken:

- The consultant shall forward to the Contracting Officer documentation justifying the need for the change order.
- The change order request must identify labor hours by classification, task, wage rates, overhead rate, direct expenses and fees.

- Upon notification by the consultant, the Authority's representative shall simultaneously prepare documentation in support of an approval, revision or a denial of the change order request.

The Contracting Officer and the CEO or his/her designee shall jointly analyze the change order request comparing the proposed scope to the requirements of the original contract. Upon conclusion of the analysis, a memorandum shall be prepared by Authority's CEO and forwarded to the Contracting Officer citing the finding of the technical analysis.

This technical analysis will form the basis of negotiations with the consultant, if required. Change orders shall not be executed until the Contracting Officer is satisfied that additional or changed work is required to complete the task. In selected cases, the Contracting Officer may issue a letter of intent to the consultants to avoid costly project delays, or otherwise avoid unnecessary cost increases.

#### **4.10.2 D/B Change Orders**

The necessity for a change order during the construction phase may be initiated for several reasons, but the source is usually limited to one of four entities:

- The Authority
- D/B Contractor and its subcontractors and vendors
- Force accounts (rail and utility)
- Consultants

Once the validity, scope and cost of a change order has been agreed upon, it shall be executed upon approval of the Director of Engineering and Construction and the Contracting Officer. Once the change order has been signed, the change order work can proceed.

#### **4.10.3 Cost Impacts**

Change orders increasing the cost of the contract will not necessarily cause a revision in the budget. The CEO shall be responsible for the following:

- Determining the extent and impact of the change order to the respective budget items.
- If revisions are required, follow the CPAS modification procedures as outlined above.

If a change order has been determined to be valid, but the price cannot be agreed upon, the CEO may recommend that the Contractor proceed on a time and materials basis. Should the Contracting Officer determine that this direction is necessary, the CEO shall require the submittal of daily time, material and equipment cost sheets, as may be required under the contract, until the work is completed.

#### **4.10.4 Schedule Impacts**

Change order requests submitted by a consultant or the D/B Contractor must be accompanied by the estimated time needed to accomplish the work, if any additional time is required. Change orders causing an increase in the duration of an "element" of a contract may not necessarily

affect the duration of the "overall" contract. In change orders involving possible contract extensions, the following actions shall be undertaken:

- The CEO and Contracting Officer shall jointly review the change order request to validate the need for a revision in the contract.
- Extensions of time to complete the particular contract element will be granted if warranted by the CEO and Contracting Officer.
- If the work being revised does not affect duration on the contract's critical path, no extension of time will be granted to complete the overall contract.

#### **4.10.5 Change Order Notification by D/B Contractor**

If the D/B Contractor identifies a condition, which the D/B Contractor believes is an addition, deduction or change to the work, the following actions shall be taken:

- The Contractor shall in writing request a change order and offer solutions for resolving the condition by furnishing back-up information to the Director of Engineering and Construction.
- A review of the data shall be made by the Director of Engineering and Construction and may involve the assistance of the Design Management and/or Project Management Assistance consultant. If found valid, the Director of Engineering and Construction shall request the D/B Contractor to submit a cost proposal to correct the cited condition.
- The Director of Engineering and Construction shall prepare his/her own cost estimate of the additional work claimed by the Contractor.
- If the intended change is covered by unit prices, quantities shall be determined and reference made to the appropriate contract bid items.
- If the intended change is not covered by unit prices, the Director of Engineering and Construction shall prepare a detailed labor and materials estimate for comparison to the cost as estimated by the Contractor.

The Contracting Officer, assisted by the Director of Engineering and Construction shall negotiate a final change order cost with the D/B Contractor. A simultaneous review of any schedule change shall be conducted, if required. A similar procedure will occur if the Authority is initiating the change.

#### **4.10.6 Change Order Notification by Force Account Organization**

In accordance with funding monitoring procedures, the urban rail/railroads, utilities or other force accounts shall submit to the Authority's Director of Engineering and Construction a notification that the expenditures under the purchase requisition have exceeded a predetermined percentage of the established budget.

Upon receipt of notification, the Director will:

- Analyze work completed against the work still to be completed to justify the need for a change order.

- Prepare a cost estimate to determine if the amount of the budget needs to be increased prior to full exhaustion of funds.

Upon completion of the review, the Director of Engineering and Construction shall forward recommendations supporting or denying the need for a change to the Contracting Officer. A review of any schedule change shall be conducted. Once the validity, scope and cost of the change has been agreed upon, it shall be executed.

If budget revisions are required, the Director of Engineering and Construction shall follow the CPAS procedures to accomplish the necessary budget changes. The Director shall also be responsible for increasing the limit of the purchase requisition, if required.

#### **4.10.7 Change Order Notification by Consultants**

Problems identified by the consultants shall be addressed in the following manner:

- The CEO shall investigate the problem.
- If the problem is minor and is verified, a solution to the problem shall be determined in the field.
- If the problem is major or if the solution requires any alteration to the original design, the general design consultant shall be involved to provide its input to the solution. The Contracting Officer shall also be notified.
- After justifying the need for the change, an outline of the solution, supported by detailed plans, sketches and specifications, shall be prepared to define the solution precisely.
- Such information shall be forwarded to the D/B Contractor with a request for a cost proposal. Concurrently, the consultants shall prepare a cost estimate.

Confirmation as to the validity of the need for the change shall be prepared in formal correspondence from the Director of Engineering and Construction to the Contracting Officer with the estimated costs. After review and approval by the same, the final price shall be negotiated with the D/B Contractor, and the effect on the Project Schedule addressed, if any.

The change order documentation shall include a record of negotiations, a detailed estimate, the consultant's original and final negotiated proposal, an analysis of the costs and a statement from the Director of Engineering and Construction that the price is fair and reasonable.

The Director of Engineering and Construction shall be responsible for taking all steps as may be required to revise budgets, the CPAS, purchase requisition and/or Project Schedule, in accordance with the procedures outlined herein.

## **5.0 – HUMAN RESOURCES AND LABOR RELATIONS**

### **5.1 STATUTORY AND REGULATORY REQUIREMENTS**

In implementing the Project, the Authority shall follow all applicable State regulations and internal procedures relating to human resources and labor relations. All such procedures are detailed in the Authority's Corporate-Wide Policies and Procedures Manual. The areas covered in the policy manual directly related to the Project and as discussed in this section, are

- Staffing
- Staff Training
- EEO Compliance (The Authority)
- EEO Compliance (Contractor)
- DBE Programs
- State Compliance
- Labor Relations
- Prevailing Wage Requirements
- Force Account (The Authority)
- Force Account (Utilities)
- Force Account (Cities)
- Force Account (MTA)

Upon completion, the manual is hereby incorporated by reference into this Project Management Plan. A copy of the manual shall maintained on file within the offices of the Authority's CEO and key staff.

### **5.2 STAFFING**

#### **5.2.1 Internal Staffing**

The Authority will undertake responsibility for direct management of the Project. Should the need arise, additional staff can be hired on an as-needed basis to support project management, subject to budget department review, approval, and compliance with internal hiring practices. If additional staff needs are identified, the vacancies will be filled using the normal Authority process. The recruitment of qualified candidates outside of the Authority is expected unless there is a probability that a qualified in-house candidate will be found.

#### **5.2.2 External Staffing**

Technical and/or management assistance shall be augmented through the use of consultants retained by the Authority to provide such assistance on an as-needed basis. Consulting teams providing services to the Authority will do so under well-defined contractual agreements. However, through their respective contracts, each consultant could be called upon to provide additional assistance if requested by the CEO and/or the Contracting Officer.

### **5.3 STAFF TRAINING**

The Authority staff will be principally involved in managing the Project. The staff will need wide-ranging educational backgrounds with significant work experience related to the needs of the

Project. In continuance of maintaining and enhancing the background of its staff, Authority will consider providing training programs in the following areas:

- **Project Management – Technical.** The Authority will take advantage of numerous courses offered by various companies and agencies. Staff is encouraged to attend these courses covering such topics as project management, computer scheduling, data base management, environmental law, quality assurance auditing, and other specialized courses or seminars relating to their project responsibilities.
- **General Skills.** The Authority will offer or contract for numerous in-house courses in general areas such as effective writing, word processing skills, and time management.
- **Safety Training.** All management staff must attend safety seminars provided by the Authority. Prior to work commencing in the field, the same staff shall be required to attend the safety program to be prepared by the CEO or his/her designee. Prior to work commencing in the field, project management staff shall be required to attend an approved site safety training seminar/course, which will provide certification acknowledging that the staff has attended such a course/seminar. These courses are required to familiarize the staff on general industry and construction industry safety standards as required by CAL OSHA, as well as safety regulations working in active railroad property.

#### **5.4 EQUAL EMPLOYMENT OPPORTUNITIES (EEO)**

The Authority shall fully commit to an affirmative action plan for the Project. All employment practices shall be in accordance with California equal opportunity laws and regulations. The Authority's Human Resources Manager shall participate in all internal hiring activities and monitor enforcement of these regulations.

Every effort shall be made to recruit applicants from underutilized groups to fill any position. However, there is no quota system and a needed position will not be held vacant if a reasonable recruiting effort fails to identify a fully qualified candidate from such groups.

##### **5.4.1. D/B Contractor**

The D/B contract to be awarded under the Project shall conform to all applicable State and Federal EEO regulations. The Authority recognizes that its contractors have an obligation to employee workers in accordance with all EEO regulations. As an aid in meeting the commitment of its Disadvantaged Enterprise program, the Authority is establishing a best efforts program of awarding a percentage of the gross sum bid to disadvantaged (DBE) firms. The best effort will be based on the following percentages:

- A) Design Build:
  - 1) Professional Services
    - a) Architectural and Engineering 20%
    - b) Other Professional Services 20%
  - 2) Construction

a) Facilities Construction	30%
b) Heavy Construction	15%

The Authority shall monitor compliance with the provisions of these guidelines by:

- At the time of start of construction, and for the duration of construction on a monthly basis, the D/B contractor shall forward its "Project Manning Report" to the Authority. The Authority shall review the trades to be utilized as reported on the manning report, and shall review established hiring practices based on information as compiled by the California Department of Labor.

The State's Affirmative Action Office may conduct periodic compliance investigations pursuant to its legislative authority. In the event of a finding of noncompliance with the rules, regulations or orders, the following actions shall apply:

- (1) The contract may be subject to immediate cancellation, termination or suspension, in whole or in part.
- (2) The Authority may invoke penalties as provided in the contract to be executed.

The DB contractor's staff shall also include an EEO/DBE officer. This position shall assist the Authority, as required, in monitoring compliance with EEO regulations during the final design and construction phases.

### **5.5 DISADVANTAGED BUSINESS ENTERPRISES (DBE)**

To the extent permitted by State law the Authority is firmly committed to encouraging participation of disadvantaged business enterprises on all outside professional service procurements. The best efforts provisions of State law for DBE participation shall be detailed and monitored by Authority. The design and construction activities to be undertaken require prior experience and a technically qualified staff to fully support any consulting or contracting role. If the type of work is such that no DBE participation is possible, the best efforts provisions will be waived for that specialty only.

### **5.6 AUTHORITY FORCE ACCOUNT**

The Authority force account work is defined as work other than project administration, which is performed by its own forces. Work in this category will consist of design reviews, field monitoring of D/B construction and related activities.

### **5.7 UTILITY FORCE ACCOUNT**

Force account work also pertains to work performed by public and private utility companies, particularly water, electric, communications, gas, or other similar utilities. To facilitate Authority Project design and construction requirements, utility force account agreements will be entered into with the firms, including the following:

- Los Angeles Department of Water and Power
- Los Angeles Department of Transportation
- Los Angeles County
- City of Pasadena
- MCA – South Pasadena



- City of South Pasadena
- Santa Fe Pipeline
- MCI
- Crown Cable
- Caltrans
- Southern California Edison
- Metropolitan Water District
- Pacific Bell
- AT&T
- ATS, Inc. (Western Union)
- Mobile Oil
- Pacific Pipeline
- Southern California Gas Company
- U.S. Sprint

As a general practice, such firms will not permit any forces other than their own or their prequalified contractor(s) to install or relocate their respective utility lines.

Relocation of these utilities may be subject to further negotiations between the Authority's Director of Engineering and Construction and representatives of the respective utilities. The discussions shall be conducted in regard to costs, schedule, and methods of construction and/or relocation. Once agreement has been reached, the master cooperative agreements will be incorporated by reference into this Project Management Plan.

## **6.0 – RISK MANAGEMENT**

### **6.1 RISK IDENTIFICATION**

Successful implementation of the Project will require that appropriate systems and procedures be established to identify and address the multitude of risks that are associated with such a project. The basic components of a successful risk management program shall include the following elements:

- Risk evaluation
- Risk assessment
- Risk analysis
- Loss prevention

Each of these areas shall be evaluated in light of the proposed activities which will be undertaken in implementing the project to identify not only the possible risk, but also its potential magnitude, related consequences, and mitigating actions which can be taken to minimize potential losses.

The Authority shall, as part of the overall project management activities, establish a risk management subcommittee consisting of at least the representatives of the following divisions:

- Finance and Administration
- Engineering and Construction
- Program Management
- Public Affairs

This subcommittee shall be held by the CEO's designee and shall meet on a regular basis, usually at the commencement and conclusion of a particular phase of the project:

- Review the work, which is to be undertaken and assess the potential risks, events and outcomes, which may occur.
- Determine if adequate provisions exist (through insurance, emergency provisions, Q/C procedures, etc.) to ensure an acceptable level of protection to safeguard the Authority against risk.
- Conduct "after action" evaluations of each completed component to identify any modifications needed to the risk control process based upon the outcome of the previous phases.

### **6.2 RISK EVALUATION**

The risk management program shall, on an ongoing basis, identify the potential risks, which may exist with a particular phase of the Project. These shall be identified and included in the risk control register. They shall be reviewed by the Risk Management subcommittee and assigned to one of the following major categories:

- Financing
- Approvals
- Design activities

- Construction activities
- Contract administration

This register shall serve as the management tool to identify, assess and prepare for the possible impacts if these risks were to occur.

### **6.3 RISK ASSESSMENT AND ANALYSIS**

Following identification and classification, the risk management subcommittee shall review, as part of its regular process, the risk control register for any new risks that have been identified. The committee shall determine:

- The potential impact of the risk
- Value (cost, time, public perception)
- Mitigation of the risk
- If the risk can be avoided

The analyses of each risk shall be assigned to the appropriate member of the risk management subcommittee, who shall identify and, as appropriate, establish that the necessary mitigation action is known. The action will then be reviewed by the committee to determine its appropriateness and effectiveness.

### **6.4 LOSS PREVENTION**

Once the appropriate mitigation strategies are identified, the responsible party shall be named for implementation of the necessary actions. These are noted under the "status" heading of the risk control register as a means of monitoring the responsible party as the necessary mitigation actions are completed.

### **6.5 PROJECT INSURANCE**

With respect to the Work for the Project and during the D/B Term, the Authority through its The Authority Controlled Insurance Program (OCIP), will provide at its expense certain insurance coverage for the Contractor and Subcontractors. Upon advance written request from Contractor, using forms provided by the Authority, Contractor and Subcontractors, as appropriate, will be included as named insured to the OCIP. Contractor shall be responsible for the deductibles. The insurance provided under the OCIP shall be available for Contractor's benefit with respect to covered claims. The Contractor is responsible for the deductible amounts in excess of the coverage provided.

With respect to the D/B Work, the coverage provided through the OCIP may include builders' risk property insurance, general liability insurance (excluding automobile liability), professional liability insurance, statutory workers' compensation insurance and employer's liability insurance, environmental liability insurance and railroad protective insurance. The insurance coverage provided by the Authority will apply to the operations of each insured at the Site and shall also apply to certain property stored off-Site (Excluding LRT Cars) and certain off-Site activities. The coverage provided by The Authority will be subject to terms, conditions and other provisions, including exclusions and limitations, contained in the policies issued to The Authority.

## **6.6 THE AUTHORITY CONTROLLED INSURANCE PROGRAM POLICIES**

On or about the date of the Notice to Proceed, The Authority will provide Contractor with certificates of insurance with respect to the OCIP, bearing a notation evidencing payment of the premium therefore, or accompanied by other proof of payment satisfactory to Contractor. Upon request of Contractor, The Authority will deliver copies of each original policy to Contractor promptly upon The Authority's receipt thereof.

Concurrently with Contractor's execution of the contract, Contractor will deliver to The Authority a certificate of insurance with respect to each policy required to be provided. Certificates of insurance with respect to policies required shall be delivered to the Authority promptly upon the obtaining of the respective coverage commencement date specified in each such section.

Contractor shall cooperate fully with and provide any information or record requested by the Authority or its insurance representative regarding all aspects of the OCIP, including claims, audit, payroll records and safety procedures, and as required by The Authority's project insurance manual. If Contractor fails or delays in any material respect in reporting such required information to The Authority or its insurance representative, The Authority may defer any payments of the D/B Price then due to Contractor until seven days after such information has been provided.

## **6.7 PROJECT FINANCIAL ASSURANCES**

The Proposer selected for award of the D/B Contractor must provide the following financial assurances upon execution of the Contract: A System Payment/Performance Guarantee that must be in the amount of 50% of the lump sum price for the design and construction of the Project.

## **7.0 – SAFETY PROGRAM**

### **7.1 LEGAL REQUIREMENTS**

All construction activities shall be conducted in accordance with the Construction Safety Code as promulgated by the California Department of Labor and Industry under the authority of the Construction Safety Act, MBLSA 34:5-166 to 34:5-181. All Safety activities shall be conducted in accordance with DB Contractor's approved Safety plan.

Where the Construction Safety Code refers to the designation of a general contractor for enforcing compliance with the Code, such designation shall be intended to refer to all agencies and firms performing work under the Program, including:

- D/B contractor
- Subcontractors
- Utility force accounts

Safety shall be a direct responsibility of all participants during the design and construction phases. Each participant is solely responsible for staying abreast of the requirements of all laws pertaining to design and construction safety, including:

- Knowledge of all applicable State, state and local laws, ordinances, codes, and regulations which in any manner affect the Project.
- Knowledge of all orders decrees, judgments, etc., issued by governmental bodies exercising jurisdiction over the same.

The General and Special Provisions of the Contract Specifications detail the rules governing the performance of work in railroad territory. The contractor shall request of, and obtain from the railroads, all other information regarding the conduct of the contractor during construction.

The General and Special Provision sections of the contract specification detail the rules governing the performance of work within public streets and highways. The contractor shall obtain from California DOT and from county and local municipalities having jurisdiction, the requirements for maintenance and protection of motor vehicle, bicycle and pedestrian traffic.

### **7.2 SAFETY IN DESIGN**

The general design consultant shall review its designs for conformance to the applicable safety codes and regulations.

### **7.3 CONSTRUCTION PHASE SAFETY PLAN**

The D/B contractor shall be responsible for preparing a safety plan specifically geared to the Project. The plan shall include a comprehensive listing of safety standards, and roles and responsibilities of all project participants, etc. The means to monitor and enforce safety shall be addressed as well as the procedures for evaluation and mitigation of hazardous conditions. At a minimum, the plan shall consist of the following elements:

1. **Constructibility Reviews.** The review of design elements and construction schedules for safety consideration to reduce the hazards of concurrent operations
2. **Contractor Evaluation.** Contractor safety performance factors shall be examined to ascertain the level of the firm's commitment to safety, prior to selection for bidding.
3. **Preconstruction Review.** Review of each subcontractor's safety plan to confirm understanding and compliance with the project requirements along with the specific procedures to be utilized to enforce compliance with the same.
4. **Safety Training.** All employees will receive detailed training and orientation sessions on safety requirements, problems, issues, etc.
5. **Safety Inspection.** Ongoing safety inspections shall be performed daily by the safety officer and PM staff, in addition to safety audits performed on a monthly basis.
6. **Safety Records.** A system shall be established to investigate and report accidents and illnesses, including details of the cause and plans to avoid recurrences.

The D/B contractor shall ensure that all work is being performed pursuant the Authority's Safety Plan with standard industry practices and state and State laws regulating job site safety. Responsibility for implementing the safety plan rests with the following individuals:

- **Safety Officer:** Serves as the D/B contractor's liaison with the railroad's respective Risk Management Department directors, with municipal safety/police/traffic personnel, and with the insurance carrier. The safety officer ha authority to:
  - Eject all personnel from the project site who will not comply with regulations
  - Immediately stop all construction work where significant hazards are identified
- **Safety Director:** Provides for oversight on the development of the safety plan and coordination with the Contractor's safety department as well as municipal/local traffic/police/safety personnel to ensure that all policies are implemented in the safety plan.

#### **7.4 CONTRACTOR'S SAFETY PROGRAM**

Prior to commencement of work, each sub-contractor shall submit to the D/B contractor, for review and approval, the safety plan it intends to use to guide the performance of work in a safe manner. The plan shall include procedures for communicating safety requirements to all employees.

The D/B contractor and sub-contractors shall perform their work in full compliance with guidelines as required by the State Fire Marshall, National Fire Protection Association, the National Board of Fire Underwriters and local departments having jurisdiction.

#### **7.5 MAINTENANCE OF RAILROAD TRAFFIC**

The general directions provided below paraphrase the particulars of the maintenance of railroad traffic provisions of the contract specifications:

1. The term "railroad" shall be taken to mean all work performed on the property of the Construction Authority, Los Angeles County, and any local municipalities having jurisdiction over affected areas.

2. If during the execution of work railroad facilities are endangered, the contractor shall immediately take all actions as directed by the railroads and/or construction manager to restore safe operating conditions.

The contractor shall be informed of the limited ability of The Authority to control the action in regards to its respective line. No additional compensation will be allowed for any delays, inconvenience or damages sustained by the contractor due to the actions, operations, inaction's, or interference of the railroads.

## **7.6 MAINTENANCE OF STREET AND HIGHWAY TRAFFIC**

The general directions provided below paraphrase the particulars of the maintenance of street and highway traffic provisions of the contract specifications:

1. The term "highway authority" shall be taken to mean CALTRANS and Los Angeles county and any local municipalities having jurisdiction over affected streets and highways.
2. The contractor shall implement maintenance-of-traffic plans in conformance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) published by the U.S. Department of Transportation and any other applicable regulations.
3. The contractor shall be responsible for obtaining all permits required by highway authorities for temporary street and lane closures and detours.
4. The contractor shall be responsible for providing temporary control devices, as necessary, to conduct vehicle and pedestrian traffic safely through and/or around construction areas.
5. No additional compensation will be allowed for costs incurred in implementing the maintenance-of-the-traffic plan.

## **8.0 – RESOLUTION OF DISPUTES**

### **8.1 DISPUTE RESOLUTION**

Completion of the Project is reliant upon the contracts and agreements consummated at the conclusion of the competitive bidding process. The language of each contract agreement legally establishes the principal objectives and responsibilities of both parties:

- The Authority desires to complete the Project within the pre-established schedule and budget parameters, whereas
- The Consultants and D/B Contractor desire to be compensated for the services rendered

As the Project progresses, design and construction disputes will occur and will take on many forms. Such disputes will occur internally at the Authority and externally with other Agencies, Consultants, and Contractors. If disputes cannot be settled informally, they will be mediated and the resolutions shall be documented.

### **8.2 PARTICIPATING AGENCY DISPUTES**

All contract documents must be compatible with the goals and objectives of the Project's participating cities. To mitigate disputes, it shall be the primary responsibility of the Authority to ensure that the D/B Consultant integrates compulsory standards mandated by the participating agencies, into the mandatory documents to produce an end product meeting these standards, while at the same time achieving the desired operational objectives.

Under the guidance of the Authority's CEO, the resolution of disputes and opposing views on a variety of transportation, operations, and engineering issues shall be coordinated through the project manager's of the respective agencies.

Agreements reached with the participating agencies are documented in writing between the Authority and the affected agency. In lieu of formal correspondence pertaining to disputes small in Magnitude, such agencies shall indicate their acceptance of the resolution through the approval of the plans, specifications, and other contract documents.

### **8.3 CONSULTANT DISPUTES**

It is anticipated that from time to time disputes may arise between the contracting parties. Both parties assume responsibilities to minimize the occurrence of disputes as follows:

- The Authority's CEO shall endeavor to define work scopes in plain and precise language that avoids the use of vague, inexact, unintelligible, or ambiguous wordings.
- The consultant shall provide its services in conformance with the scope set forth in the contract.

Disputes arising in the interpretation and intent of the work required, or in the performance of the same, shall be mediated jointly between the Authority's CEO and the D/B Consultant's Project Manager. All parties shall make every reasonable effort to resolve any disagreement as expeditiously as possible so as not to significantly infringing upon progress of the work.



#### **8.4 D/B CONTRACTOR DISPUTES**

Disputes arising in the performance of the Design/Build Contract, the authorized representative of the CEO shall decide which are not resolved informally, in writing. This decision shall be final and conclusive unless within ten calendar days from the date of receipt of a copy of the decision, the Contractor delivers a written appeal to the CEO. The CEO may appoint a representative to hear the appeal, who shall not be the same individual who made the original decision. In connection with any such appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. There shall be no cessation of work during the period in which the dispute is being addressed, unless so directed by the CEO.

## **9.0 – ENVIRONMENTAL ASSESSMENT PROGRAM**

### **9.1 METRO BLUE LINE ENVIRONMENTAL COMPLIANCE**

The Metro Blue Line (PBL) Light Rail Line project is required to comply with the laws and regulations set forth in the California Environmental Quality Act (Public Resources Code §§ 21000-21178.1) (CEQA), as amended. This section addresses the environmental compliance completed to date for the MBL, the measures recommended to mitigate significant impacts, and the processes necessary to bring the environmental compliance of the project up to date.

### **9.2 ENVIRONMENTAL COMPLIANCE HISTORY**

Numerous environmental documents have been prepared for the MBL project. All previous environmental documents were prepared according to CEQA and the State CEQA Guidelines.

These documents include:

- **Revised Draft Environmental Impact Report-Pasadena-Los Angeles Light Rail Transit Project (State Clearinghouse Number SCH# 88642713) and Final Environmental Impact Report-Pasadena-Los Angeles Light Rail Transit Project (SCH# 89082327) (Los Angeles County Transportation Commission, 1989, 1990).**

The Revised Draft Environmental Impact Report (EIR) for the entire Pasadena Blue Line was prepared and circulated in 1989 after public review of a Draft EIR in 1988 resulted in the expansion of the scope of the project. The Revised Draft EIR evaluated the environmental impacts associated with construction and operation of two alternatives (Highland Park and North Main Street Alignments, various segment options, alternative rail yards, and other facilities. The Final EIR was certified in 1990 and the Highland Park, Union Station "No Subway" was selected as the preferred alternative. Implementation of mitigation measures (see detail below) would reduce any potentially significant impacts of the proposed PBL to a less than significant level.

- **Chinatown Mitigated Negative Declaration (SCH# 91071040) (Los Angeles County Transportation Commission, 1991).** An Initial Study was prepared in 1991 to analyze the redesign and relocation of the Chinatown Station as an aerial station located across the intersection of College and Alameda Streets in the City of Los Angeles. A Mitigated Negative Declaration was certified for this change in 1992. Preparation of the MND indicated that no significant impacts would result from construction and operation of the proposed Chinatown Station.
- **Supplemental EIR for the Pasadena-Los Angeles Light Rail Transit Project (Supplement EIR #1) (SCH# 92071005) (Los Angeles County Transportation Commission, 1992, 1993).**

Supplemental EIR #1 was prepared in 1992 to analyze several proposed design changes, including: three alternative locations for maintenance facilities (Taylor Yard, Cornfield, West Bank Option); three new station locations (Allen Street-replacing Hill Street and Altadena Avenue stations, Fillmore Street replacing Glenarm and California Streets stations, and Southwest Museum station; Fair Oaks and Los Robles Avenues stations were dropped from consideration); and two grade separations (Colorado Boulevard in Pasadena, and Figueroa

Street and Marmion Way in Los Angeles). None of the maintenance facility sites were chosen to replace the Midway Yard, which was selected in the original EIR. The station and grade separation changes were approved. The Supplemental EIR #1 was certified in 1993. Implementation of the recommended mitigation measures would reduce the potential environmental impacts to a less than significant level.

- **Supplemental EIR for the Pasadena-Los Angeles Light Rail Transit Project (Supplemental EIR #2) (SCH# 9321099) (Los Angeles County Metropolitan Transportation Authority, 1994a, 1994b).**

Supplemental EIR #2 was initiated in 1993 to analyze the effects of eight planning and design modifications to the PBL. These proposed modifications included a change from street-running to semi-exclusive train operation along Marmion Way in Mount Washington and Highland Park; five additional street closures in Highland Park; additional property acquisition to provide adequate emergency vehicle access to streets along Marmion Way between Avenues 51 and 59; additional property acquisition in Elysian Park for construction of an access road to the Midway Yard; sound barrier wall modifications along Marmion Way in Mount Washington and Highland Park, and in South Pasadena; a below-grade separation option in the vicinity of Marmion Way and Figueroa Street in Mount Washington; and a change in alternative locations for a park-and-ride facility located at Madre Street/Sierra Madre Villa and the Foothill (210) Freeway in Pasadena.

The Supplemental EIR #2 was certified in 1994. Implementation of mitigation measures reduced all but the vibration impacts to a less than significant level. A Statement of Overriding Considerations was adopted by the MTA for vibration impacts associated with the proposed action for this EIR.

- **Addendum #1 to the Final EIR and two Supplemental EIRs (No SCH#) (Los Angeles County Metropolitan Transportation Authority, 1995).**

This Addendum was prepared in 1994 to analyze the environmental effects of the acquisition of 17 additional parcels for the PBL alignment, facilities, station clearances, emergency access, and easements. Addendum #1 was certified in 1995. No significant environmental impacts were found and no new mitigation measures were required. Previously identified mitigation for new locations of noise impacts were included.

- **Addendum #2 to the Final EIR and two Supplemental EIRs (No SCH#) (Los Angeles County Metropolitan Transportation Authority, 1996a).**

This Addendum was prepared to analyze the environmental effects associated with changes proposed for the Del Mar Transportation Center (which includes the PBL Del Mar Station). Proposed changes included the redesign of the 600-space at-grade parking facility to a four-level subterranean parking structure to be located on MTA property and on a portion of the Public Storage Facility and the MTA property entitlement to the City of Pasadena to construct the subterranean parking structure. Addendum #2 was certified in 1996. No significant environmental impacts were found.

### **9.3 PROPOSED MITIGATION MEASURES**

A report entitled, *Mitigation Measure Consolidation for the Pasadena Blue Line*, was prepared (June 1998) to consolidate the mitigation measures proposed in the eight environmental

documents prepared to date for the proposed project. The report documents both the measures that are still applicable and those that are no longer applicable (i.e., some new measures may have been proposed in subsequent environmental documents that superseded a previous measure or a new design element may have eliminated the need for a previously recommended mitigation measure).

The report groups the measures by impact category and identifies in which CEQA document the measure was proposed. A generalized listing of the applicable measures, as identified in the Mitigation Measure Consolidation report, appears in Figure 9.2 below. A detailed list of mitigation measures can be found in the Mitigation Measure Consolidation report.

<b>Figure 9.2 Summary of PBL Project Mitigation Measures</b>	
<b>Impact Category</b>	<b>Generalized Mitigation Measures</b>
Land Use	Compensate property owners and tenants for property acquired. Implement parking permit programs around stations, if warranted by parking analysis findings. Work cooperatively with Cities and Agencies in all areas of impact.
Traffic and Circulation	Implement roadway improvements (widening, restriping, reconfiguration of turn lanes, signing, signal timing, on-street parking restrictions), ramp metering, detour and other construction plans, roadway closures, maintenance of street capacities.
Geology	Stabilize subsurface materials for below-grade construction. Design all facilities and structures to conform with City of LA Seismic Safety Plan and emergency evacuation plans, Uniform Bldg. Code and seismic design parameters of Structural Engineers Association of California. Prepare emergency preparedness and evacuation plans. Conduct on-site, specific engineering studies to identify increased potential for seismic risk. Conduct frequent in-grading inspections during construction.
Air Quality	Maintain all construction equipment to reduce emissions from heavy equipment. Halt all grading operations during first- and second-stage smog alerts. Implement other measures (twice daily watering, suppression of activities during high winds, wheelwashing, revegetation of graded areas) to reduce short-term construction emissions. Demonstrate compliance with SCAQMD regulations, including Regulation XIII, New Source Review, and Rule 403, fugitive dust emissions. Evaluate options to reduce amount of energy required for PBL operation. Perform asbestos inspection prior to building demolition.
Biology	Request permit for removal of oak trees and replace oaks removed. Develop and implement new landscaping plan to conform to surrounding environment.
Noise and Vibration	Construct sound wall barriers adjacent to sensitive land uses. Minimize construction noise in sensitive areas and comply with local ordinances (limit construction hours, use portable sound barriers, use properly muffled equipment and trucks). Place rail subgrade structure so as not to be in direct contact with

<b>Figure 9.2 Summary of PBL Project Mitigation Measures</b>	
<b>Impact Category</b>	<b>Generalized Mitigation Measures</b>
	building structure or foundation.
	Use continuous welded rail, soft direct fixation fasteners, wheel truing, and rail grinding as standard maintenance.
Light and Glare	Incorporate directional shielding of lighting fixtures, as well as safety lighting and construction equipment, and shield traction power from adjacent sensitive uses.
Risk of Upset	Conduct detailed geotechnical and hazardous materials investigations and comply with regulations from OSHA, SCAQMD, LAFD, and other agencies for handling encounter of these materials.
	Design all underground structures to include adequate ventilation to reduce potential for methane gas accumulation, and use relief wells, where necessary, to remove gas.
Population and Housing	Compensate tenants and owners fairly and adequately for relocation.
Public Services: Police	Incorporate security of LRT into design to enhance perceived and actual security of system. Should include: two-way communication, CCTV, alarm system, elimination of dark or obscured areas, protection of right-of-way, access for emergency vehicles, maximization of visibility at parking lots, installation of silent alarm.
	Incorporate "vandal-resistant" interior finishes in vehicles.
	Limit access to power substation to authorized personnel only.
Fire	Design all facilities in accordance with applicable fire codes.
	Implement fire safety measures: sufficient emergency access, smoke detectors as required by law, use of fire retardant materials, availability of fire extinguishers.
	Provide on-board communication devices to report emergencies.
Schools	Implement safety measures to ensure safety during construction and operation in vicinity of schools: separation of rail line and pedestrian rights-of-way, secure overhead power sources and power stations from unauthorized access, install "No Trespassing" signs on overhead bridges and grade separations, secure construction sites, post warning signs, phase construction to minimize conflicts with school activities, provide education program.
	Examine special requirements around Marmion/Figueroa grade separation to determine if additional lighting and/or CCTV is appropriate for security.
Electrical Consumption	Reduce consumption as part of final design with features such as: chopper rail vehicle motor speed controls, regenerative braking, coordination of traffic and rail signal systems, separate electrical meters at major facilities, integration of stations with adjacent land uses, use of solar power where practical, consolidation of yard vehicle movements.
Utilities	Coordinate relocation and in-place support of utilities.
	Prevent loss of service by notifying potentially affected consumers of construction activities.
	Obtain necessary relocation approvals.
Aesthetics	Design stations to be attractive and nonintrusive on surrounding areas. Use station design and building materials to emphasize low maintenance and graffiti resistance.
	Perform workshops to provide input to community.
	Commit 0.5 percent of construction budget toward arts program.
	Provide special landscaping treatments, sidewalk and street improvements, pedestrian plazas, and building materials to be

**Figure 9.2  
Summary of PBL Project Mitigation Measures**

<b>Impact Category</b>	<b>Generalized Mitigation Measures</b>
	consistent with Chinatown community.
Recreation	None required.
Cultural Resources: Archaeological	Follow CEQA law and guidelines if sites and/or artifacts are discovered during excavation to insure proper protection of resources. Cease earthmoving and/or grading activities if resources are unearthed.
	Use portion of granite pavers as onsite historic element as gateway to Chinatown community, donate remaining to Heritage Square Project (recommended).
	Consult with Cultural Heritage Commission to ensure consistency of design of Southwest Museum Station with existing structures.
	Conduct engineering studies to determine if structures in Old Pasadena National Register Historic District can withstand vibration from construction and operation of rail system.
	Consult with SHPO to determine data needs for undertaking of NRHP review.
	Consult with Native American Groups and other interested parties.
	Have archaeological personnel present where appropriate to monitor construction activities and all excavation associated with below-grade separation, Midway Yard access road, and Arroyo Seco Bridge support foundation excavation.
Historical	Prepare mitigation plan prior to any demolition at Johnson and Johnson/Merck site.
	Monitor excavation greater than 3 feet in depth at Capitol Milling Company to assure no potential resources are damaged.
	Review with and obtain approval from City of Pasadena Design and Historic Preservation Department prior to demolition or reconstruction in Old Pasadena Historic District and in Memorial Park.

#### **9.4 FUTURE ENVIRONMENTAL COMPLIANCE**

The need for any additional future environmental compliance is determined by CEQA regulations. If there is a change in the conditions analyzed in the EIR, after the EIR has been certified but before all discretionary actions have been taken, then a subsequent EIR, a supplemental EIR or an addenda are required. The differences in the documentation are as follows:

- A subsequent EIR is prepared if the previous EIR requires *major* revisions resulting in significant impacts;
- A supplemental EIR is prepared if the previous EIR requires *minor* changes resulting in significant impacts; and
- An addenda should be prepared for minor technical changes with no significant impacts.

Both the subsequent and supplemental EIRs must be recirculated for public review, following the requirements of the original EIR. Addendum need not be circulated for public review.

The triggers for a subsequent or supplemental EIR are more specifically defined as the following, as identified in CEQA Guidelines Sec. 15162(a)(1)-(3):

- Substantial changes are proposed in the project that will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance which was not know and could not have been know with the exercise of reasonable diligence at the time the previous EIR was certified as complete shows any of the following:
  - The project will have one or more significant effects not discussed in the previous EIR;
  - Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative.

Since the alignment and criteria have been “frozen” and significant changes to the project are not contemplated by the Authority, the need for supplemental EIR analysis is not foreseen. However, the outstanding matter of noise and vibration testing must be brought to closure.

The impact of noise and vibration has been identified as a potentially significant outstanding effect. Specifically at issue is the process by which noise and vibration were tested and whether the testing conducted represents a realistic operating scenario.

Noise and vibration were first evaluated in the environmental documentation for the proposed Pasadena Blue Line (Revised Draft EIR-Pasadena-Los Angeles Light Rail Transit Project (State Clearinghouse Number [SCH#] 88642713) and Final EIR-Pasadena-Los Angeles Light Rail Transit Project (SCH# 89082327) (LACTC, 1989, 1990). Implementation of mitigation measures (sound walls at noise sensitive areas and compliance of construction contractors with local noise ordinances) would reduce noise impacts to less than significant levels.

Noise and vibration were again identified as potential issues with preparation of the Supplemental EIR for the Pasadena-Los Angeles Light Rail Transit Project (Supplemental EIR #1) (SCH# 92071005) (LACTC, 1992, 1993). This SEIR was prepared to address several project modifications including: maintenance yards, grade separations, and station locations. None of the maintenance yards were selected to replace the Midway Yard, while the grade separations and new station locations were approved. Incorporation of mitigation measures (limitation of heavy construction activity hours, muffling construction equipment and tracks, use of portable sound barriers during construction, and the installation of an element between the rail subgrade structure and the adjacent buildings) resulted in the finding of no significant noise and vibration impacts.

The issue of noise and vibration was again identified as a potential impact when additional project modifications were evaluated in the Supplemental EIR for the Pasadena-Los Angeles Light Rail Transit Project (Supplemental EIR #2) (SCH# 9321099) (LACTC, 1994a, 1994b).

The proposed modifications included: modification of train operating conditions from street-running to semi-exclusive along Marmion Way, street closures, property acquisition, modification of previously adopted noise mitigation measures (sound barrier walls), below-grade separation at Marmion Way and Figueroa Street, and alternative locations for the project's Sierra Madre Villa park-and-ride lot.

It was determined that significant noise impacts on all affected residences and school buildings would be mitigated to less than significant with implementation of measures (sound barriers and soundproof windows/doors on impacted structures). Vibration impacts, however, despite incorporation of design criteria (continuous welded rail, soft direct fixation fasteners, wheel truing, and rail grinding), would not be reduced to less than significant. The Findings and Statement of Overriding Consideration for the Pasadena-Los Angeles Light Rail Transit Project (SCH# 93121099) (LACTC, 1994) determined that the project objectives overrode the identified unavoidable significant adverse vibration impacts.

Subsequent to the preparation of the above documents, an Administrative Draft Addendum to the project's EIR and SEIRs were initiated but not completed. To be completed for this Addendum was the noise and vibration section, to be based on the Noise and Vibration Technical Report.

The technical report was to update impacts and mitigation measures for the entire project, based on actual field measurements of the Long Beach Blue Line. Previous analyses had used the Portland Light Rail vehicle in the modeling of noise and vibration. The initial studies conducted on the Long Beach Blue Line produced higher vibration levels than anticipated and above those used from the Portland Light Rail data.

As a result of the preliminary findings, it was determined that additional sound walls, floating slab, and other track isolation would be required to mitigate these impacts. These additional measures were not included in the current Camera Ready design packages. Incorporating these measures into the project design would cost an estimated \$8 to \$12 million dollars. These funds have been incorporated in to the Project Contingency.

The previous field testing of the Long Beach Blue Line may not represent an accurate and realistic train operating scenario by which to measure the potential for noise and vibration impacts. The portion of the line used in the testing is one of the oldest segments in the system and is a non-revenue line. The equipment used in the testing was not representative of the vehicles that would operate on the Pasadena Blue Line (i.e., refurbished P865's). The combination of these two factors greatly contributed to the finding of an unavoidable significant adverse vibration impact. The use of more refined noise and vibration criteria and the application of the criteria to more realistic scenarios would potentially reduce the significance of the noise and vibration impacts.

Noise and vibration criteria were not used in early documents (Revised DEIR, FEIR) but were developed for the SEIR #2 (1994). Applying the revised criteria to new and more representative testing of noise and vibration (i.e., using equipment that is more representative of what would operate on the Pasadena Blue Line and testing along a revenue segment of the Long Beach Blue Line corridor) should result in fewer significant impacts. Fewer significant impacts would thereby reduce the need for and the cost of mitigation measures. If the re-evaluation of the noise and vibration concludes that there are still unavoidable significant adverse impacts, contingency funds will allow for the incorporation of measures to mitigate the effect. The revised testing for noise and vibration, and the development of project standards will be a priority item in the restart of the project.



## **10.0 – DESIGN PROGRAM**

### **10.1 DESIGN MANAGEMENT**

The final design and engineering activities will be provided by the Design/Build Contractor. The primary responsibilities of the design consultants are as follows:

- Development of an organizational structure to successfully complete the Project, within schedule and budget, while producing a quality product.
- Effective management of the activities of the multidisciplinary design team to provide a coordinated, well-planned Project.
- The appointment of a Project Manager, subject to the approval of the Authority, to lead each of the design teams, who shall be a Professional Engineer licensed to practice engineering in the State of California.

Subconsultants providing design services under the Project shall each be represented by a Project Manager and governed by the following:

- All written communications from these subconsultants shall be through the appropriate D/B Project Manager.
- Pursuant to state regulations, all individuals with responsible charge of each engineering discipline shall be a Professional Engineer licensed to practice in the state of California.

### **10.1 DESIGN CONTROL AND PRESENTATION**

The Contractor shall complete the Design and Construction Documents in accordance with the criteria contained in the Mandatory Documents. All materials and workmanship, except as may otherwise be provided in the Mandatory Documents, shall be in accordance with the current version of the following:

State of California Uniform Construction Code:

- BOCA Basic Building Code
- BOCA Basic National Mechanical Code
- National Standard Plumbing Code
- American with Disability Act (ADA)
- American Railway Engineering Associations (AREA) Standards
- The Authority Design Standards
- OSHA Standards
- National Electric Safety Code
- CALTRANS Standards

### **10.2 DOCUMENT CONTROL**

The consultants and D/B Contractor shall develop and maintain the Authority approved document control system. All project information, data, etc. shall be assigned a file code number,

correspondence identification number (CIN), and made available pursuant to Authority's policies for retainage of Project files. All documents shall be routed or submitted in accordance with the Contract Mandatory Documents.

### **10.3 DESIGN REVIEW MANAGEMENT**

Design and engineering review management is the process of exercising control over the progressing design. The total scope of services required to consummate the planning, design and construction of the Project includes many complex and interrelated tasks to provide practical and functional transit facilities and systems.

The objectives of the design management program are as follows:

- Ensure that the design effort is properly staffed by qualified professionals.
- Provide for consistency and accuracy in criteria, drawings, specifications, and other planning and design goals established by the Authority.
- Provide for conceptual and preliminary design, leading to detailed design, and contract documents to be developed, reviewed, monitor, and finalized in a timely and cost-effective manner.
- Promote technical refinement of the design process and achievement of design uniformity.
- Ensure that schedule reviews of planning, design tasks and documents are conducted in a timely manner.
- Ensure that specific reviews, like value engineering and peer review of technical documents, are conducted in a timely and cost-effective manner.
- Ensure that systems components are compatible throughout design of all extensions.

### **10.4 SUBMITTAL ROUTING PROCEDURE**

To ensure that the design phase progresses in a timely manner, the following steps shall be implemented:

1. All documents requiring review and approval by The Authority personnel shall be forwarded by the consultant to the CEO for internal distribution at The Authority.
2. All comments shall be forwarded back to the CEO within the schedule as noted in the consultant's scope of work.
3. Each submittal shall consist of approximately five copies.
4. A maximum of 10 working days will be allotted to complete reviews. The Authority CEO shall be the repository for all comments made and shall forward the same to the appropriate consultant.
5. All responses to the comments shall be addressed in writing by the consultant and incorporated into the documents, if required.
6. Responsibility for resolving conflicting comments rests with the Authority CEO assisted by the consultant.

Prior to the conclusion of each design phase, the consultant shall compile all comments and, together with the responses made relative to each, submit a final report as to the dispensation of each. All 100% design packages shall be forwarded to the CEO for review and Preparation for advertisement.

### **10.5 D/B Contractor Prepared Documents**

Final documents prepared by the DB Contractor, requiring review by the Authority, shall be forwarded by the Contractor to the CEO for internal distribution at the Authority.

1. Each submittal shall consist of approximately five copies.
2. A maximum of 10 working days will be allotted to complete reviews. The Authority's CEO shall be the repository for all comments made and shall forward the same to the Contractor.
3. Responsibility for resolving conflicting comments rests with the Authority's CEO.

### **10.6 DESIGN CRITERIA**

The D/B Contractor will prepare the Authority design criteria and standard/directive drawings as required for the design of facilities and systems for the Project. The D/B Contractor will identify special requirements in each discipline area and in systems for inclusion. Over the life of the Project, the D/B Contractor will maintain standard/directive drawings, incorporating changes that are necessary.

### **10.7 DELIVERABLES**

The D/B Contractor will maintain a listing of deliverables, which will be maintained current and included in the 4-week progress report.

## **11.0 – REAL ESTATE ACQUISITION PROGRAM**

### **11.1 GENERAL REQUIREMENTS**

All the land and property rights needed to support the project have not yet been defined. To enable construction, operation, and maintenance, it will be necessary to secure privately and publicly owned property. The types of acquisitions anticipated are as follows:

- Fee
- Easements (trackway)
- Permanent easements (other than trackway)
- Construction easements (temporary)
- Construction staging areas

The ownership of all parcels has not been identified. Engineering, surveying, and other related activities are being performed by the general D/B consultant to complete the identification of all properties required. Costs related to these real estate functions shall be funded throughout the project's budget.

Known property owners are:

- AT&SF
- Metrolink
- Caltrans
- City of Los Angeles
- City of Pasadena
- City of South Pasadena

Additional properties required are located along the project. Identification of the properties, the required interests, and the Authority's thereof will occur as design and engineering progress.

### **11.2 PROPERTY ACQUISITION**

The need to acquire a property and the interest(s) to be acquired will be determined by the D/B consultant with the Authority's concurrence. Such transactions shall either be uncontested or contested acquisitions.

#### **11.2.1 Property Acquisition Process**

Once a property is identified as needed for the project, the following actions will be taken:

- The property the Authority is formally notified by the CEO that the Authority and its consultants will enter its property, under provisions of California Statutes, to survey the property and to conduct geotechnical, hazardous materials and other analyses.
- A parcel map will be prepared by the D/B Consultant for the property and an additional deed research.
- The Authority obtains a title report from private title guarantee companies.

- The Authority's hazardous material remediation design consultant performs the necessary borings. Testing and analysis to provide plans and cost estimates for any in-site hazardous materials remediation.
- The property owner is formally advised of The Authority's intent to conduct appraisals.
- Results of the hazardous materials work are reviewed by a The Authority committee for consistency with other remediation estimates for the project.
- The hazardous material remediation cost estimates are provided to the appraiser.
- The CEO then has the appraisal reviewed by a review appraiser,
- Once the appraisal has been reviewed a right-of-way negotiator will make the first offer consisting of the appraisal amount.

#### **11.2.2 Land Acquisition by Agreement**

Upon successful completion of negotiations, the acquisition will be finalized based upon approval by the Authority Board of Directors.

#### **11.2.3 Contested Land Acquisition**

If it is determined by the CEO, with the advice of real estate and legal personnel, that the property the Authority will not sell the property, or requires a price too high compared to the appraised value, the CEO will initiate the acquisition process utilizing rights provided by the SB-1847.

Once it has been determined that bonafide negotiations will not result in an agreement with a property the Authority, the condemnation process will be initiated. The CEO will advise the property the Authority in writing that bonafide negotiations are at an end and it is intended to commence condemnation within 14 days.

### **11.3 RELOCATION PLAN**

Relocations shall be accomplished in accordance with applicable requirements.

### **11.4 CONSTRUCTION STAGING AREAS**

Available properties of the sizes required to house major contractor-staging operations will be identified. Negotiations with the property the Authority to conditionally lease, or have the right to enter upon, their respective properties will be initiated by The Authority. If negotiations are unsuccessful The Authority can proceed with condemnation.

### **11.5 CONSTRUCTION EASEMENTS**

Properties of the sizes required to enable the contractor to construct the project, but not needed for operations and maintenance, will be identified. Negotiations with the property the Authority's to conditionally lease, or have the right to enter upon, their respective properties will be initiated by The Authority. If negotiations are unsuccessful, The Authority can proceed with condemnation.

## **11.6 UTILITY EASEMENTS**

The Authority, its consultants, and the Contractor will identify properties required to relocate or rearrange utility facilities in coordination with the affected owning utility company. Negotiations with the property the Authority to obtain the necessary property rights will be initiated by the Authority. If negotiations are unsuccessful, The Authority can proceed with condemnation. Upon completion of the relocation and/or rearrangement, and in conjunction with the master agreement with the owning utility company, the property interest obtained by or for The Authority for the relocated and/or rearranged utility will be transferred to the owning utility company.

## **12.0 – PROCUREMENT PROGRAM**

### **12.1 PURPOSE AND SCOPE**

This Chapter sets forth a general procurement policy and set of standards that will govern the conduct of Authority procurement activities and of personnel engaged in these activities. This Chapter establishes the framework for the Procurement Policies and Procedures set forth in the Procurement Manual described in Section 4 of Chapter 2 of this Title.

### **12.2 PROCUREMENT POLICY STATEMENT**

The underlying premise of Authority procurement policy is to foster free and open competition among vendors and to provide specified material and services on a timely basis and in a cost-effective manner. The Authority should follow sound business and public policy principles in the procurement and distribution of goods and services so that these actions are performed efficiently and in a manner that serves the best interest of the Authority and the public.

### **12.3 PROCUREMENT STANDARDS**

The Procurement standards of the Authority are designed to ensure that materials and services are obtained in a timely, efficient and economical fashion, adhering to principles of good administrative practices and sound business judgment.

The following standards apply to the awarding and administering of all contracts by the Authority:

1. The Authority will maintain a contract administration system that ensures that contractors perform in accordance with the terms, conditions, and specifications of their contracts.
2. Members of the Authority Board and Authority employees will adhere to the standards of conduct in Title II.
3. Contractors and consultants will adhere to the applicable provisions of the Procurement Manual, as well as to the Code of Conduct in Title II.
4. Authority procedures will provide for a review of proposed procurements to avoid purchase of unnecessary or duplicative items. Where appropriate, an analysis will be made of lease versus purchase alternatives and any other appropriate analysis to determine the most economical approach.
5. The Authority will encourage the use of value engineering by using applicable clauses in contracts for appropriate equipment purchases and construction projects.
6. The Authority will make awards only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed contract. Consideration will be given to such matters as contractor integrity, compliance with public policy as implemented by applicable laws and regulations, record of past performance, and financial and technical resources.
7. Records sufficient to document the history of a procurement will be maintained and retained in accordance with policies and procedures approved by the Chief Executive Officer.
8. Time and material type contracts will be used only after a determination that no other type contract is suitable.

9. The Authority will have written selection procedures for procurement transactions that ensures fair, unbiased evaluation of competing proposals.
10. The Authority shall not make advance payments on any contract, except for contracts for the payment of rents, insurance premiums, subscriptions to publications and extension or connection of public utilities for Authority property, or any other contract where, based on extraordinary circumstances, the Board determines that advance payments are warranted.

## **12.4 GENERAL PROCUREMENT POLICY**

### **12.4.1 Implementation By Chief Executive Officer; Board Controls And Limitations**

- A. Final authority for purchasing actions and decisions rests with the Board, except as delegated to the Chief Executive Officer.
- B. The policies set forth herein shall be implemented by the Chief Executive Officer. The Chief Executive Officer has primary responsibility for ensuring that the Authority's procurement process is in accordance with Applicable Law and this Code, as interpreted by the General Counsel, and Authority policy.
- C. The Chief Executive Officer is authorized to approve and enter into contracts and contract modifications (including but not limited to change orders, amendments, and all other contract modifications) on behalf of the Authority, as follows: (i) contracts with a contract price that does not exceed \$250,000; (ii) modifications to contracts approved by the Chief Executive Officer that, cumulatively with the initial contract price and prior contract modifications, do not result in a total contract price in excess of \$250,000; and (iii) modifications to Board approved contracts that, cumulatively, do not increase the Board approved contract price by more than ten percent (10%), or such lesser amount as the Board may establish. The Chief Executive Officer shall not delegate this authority without express Board authorization. The powers of the Chief Executive Officer pursuant to this Paragraph are subject to: (i) the existence and provisions of a Board approved Authority Budget; (ii) the provisions of this Title; and (iii) the Applicable Laws.
- D. The Chief Executive Officer shall report to the Board at its next regularly scheduled meeting each new contract awarded on an emergency basis, and shall report monthly to the Board all other new contracts and contract modifications entered into by the Chief Executive Officer without express Board approval.

### **12.4.2 Procurement Officer - Designation And Delegation**

The Chief Executive Officer is hereby designated as the "Procurement Officer" for the Authority. The Chief Executive Officer may delegate all or part of the Procurement Officer authority delegated to him or her by the Board, under guidelines approved by the Board.

### **12.4.3 Procurement Officer - Duties**

- A. The Procurement Officer shall oversee all procurement activities of the Authority, and implement the policies and standards set forth in this Title, subject to the limitations of the authority that has been delegated to the Procurement Officer by the Board or the Chief Executive Officer.



- B. The Procurement Officer shall issue instructions for the implementation of Authority procurement policies.
- C. The Procurement Officer shall execute contracts, purchase orders, modifications, and supplemental agreements in accordance with established thresholds and delegated authority.
- D. The Procurement Officer shall ensure that a complete record of each procurement is maintained.
- E. The Procurement Officer shall issue instructions concerning the storage, distribution, and disposal of supplies and materials.

**12.4.4 Procurement Policies And Procedures Manual**

- A. The Chief Executive Officer shall develop and maintain a Procurement Policies and Procedures Manual (the "Procurement Manual"), which shall include procurement and materials management procedures and guidelines needed to implement and supplement the policies and standards set forth in this Code.
- B. The procedures set forth in the Procurement Manual shall provide for timely review and processing of all procurement actions. The procedures shall ensure that materials, services and construction are obtained timely, efficiently and economically, while adhering to principles of good public policy and practices and sound business judgment.
- C. The Procurement Manual shall include:
  - 1. Detailed definitions of terms;
  - 2. The standards for all procurement activity;
  - 3. General procurement policies and procedures which shall govern the initiation, solicitation, award and administration of all (except employment contracts where there is an employer-employee relationship) Authority contracts and purchases for supplies, services, equipment and construction;
  - 4. Methods designed to assure that procurement solicitations are published in a manner reasonably likely to attract prospective bidders or proposers;
  - 5. Methods designed to assure that minority business enterprises and women business enterprises are used;
  - 6. Standards for determining the type of contract to be used (Fixed-Price, Cost Reimbursement, Incentives, Fixed-Price Incentive, Cost-Plus-Fixed Fee, etc.);
  - 7. Standards and procedures for bonds, other forms of security, and insurance;
  - 8. Procedures for contract management and administration, including procedures for contract payments and funding;
  - 9. Procedures for receiving and processing contractor protests;
  - 10. Standards for contractor responsibility;

11. Procedures for processing claims and resolving disputes;
12. An inventory control and materials management system, including but not limited to procedures for the storage, transportation, use, and disposal of hazardous materials, and compliance with all applicable reporting requirements;
13. Procedures for quality assurance and warranties;
14. Procedures for protecting patents, copyrights, and proprietary information; and
15. Any other standards and procedures necessary to implement the provisions of this Title.

**12.4.5 Authorized Methods Of Procurement; Selection**

- A. Selection. As part of the procurement initiation process, the Procurement Officer shall determine which method of procurement is appropriate.
- B. Authorized Methods. The following methods of procurement may be used, as appropriate, in accordance with the policies and procedures included in the Procurement Manual:
  1. Sealed Bid, pursuant to Chapter 3 of this Title;
  2. Design and Build, a form of sealed bid procurement, pursuant to the procedures set forth in Chapter 4 of this Title;
  3. Competitive Negotiated Procurement, pursuant to Chapter 5 of this Title;
  4. Small Purchase Procedures, pursuant to Chapter 6 of this Title; and
  5. Non-Competitive or Emergency Procurement, pursuant to Chapter 7 of this Title.

**12.4.6 Contracting With Women Business Enterprises And Minority Business Enterprises**

- A. The Authority will take reasonable and appropriate steps to assure that minority business enterprises ("MBEs") and women business enterprises ("WBEs," collectively with MBEs, "DBEs") are used when possible. To the extent permitted by law, it is the intent of the Board to establish guidelines regarding the inclusion of DBEs in Authority procurements.
- B. For purposes of this Section 6, the terms "minority business enterprises" and "women business enterprises" shall have the meanings set forth in Section 2051 of the Public Contract Code.
- C. The Authority shall comply with the provisions of Chapter 2.5 of Part 1 of Division 2 of the Public Contract Code, commencing with Section 2050, concerning certification of DBEs.

**12.4.7 Non-Discrimination In Procurement**

All contracts entered into by the Authority shall contain appropriate clauses prohibiting discrimination by the contractor against any person or group of persons on account of race, color, religion, creed, national origin, ancestry, physical handicap, medical condition, age, marital status, sex or sexual orientation in the performance of the contract.

**12.4.8 Duties Of Authority Staff Regarding Procurement**

Procuring goods and services for the Authority must be a cooperative effort, and it shall be the responsibility of all Authority staff involved in procurement to employ sound judgment and appropriate standards of ethics and fairness to procure in a manner most advantageous to the Authority. All employees and departments are instructed to follow the policies and standards set forth in this Title, and the procedures set forth in the Procurement Manual, as well as any instructions issued by the Procurement Officer, regarding procurement of goods and services and the storage, distribution, and issuance of material.

**12.4.9 Applicable Laws**

The Authority shall comply with all Applicable Laws in its procurement activities, including but not limited to the provisions of Part 1 of Division 2, commencing with Section 1100, and Articles 1, 1.5, 1.7, and 1.8 of Chapter 1 of Part 3 of Division 2, commencing with Section 20102, of the Public Contract Code.

**12.4.10 Protest Procedures**

- A. A party that has timely submitted a bid or proposal in response to any procurement of the Authority may file a Protest objecting to the award of a contract.
- B. In order for a protest to be considered properly and timely filed, the protest must:
  - 1. Be filed in writing with the Chief Executive Officer of the Authority, within five (5) calendar days after publication of the written recommendation for award.
  - 2. Be filed by an actual bidder or proposer responding to the procurement. No other party has standing to protest.
  - 3. Identify the specific procurement number involved.
  - 4. Identify the specific recommended action or decision being protested.
  - 5. Specify in detail the grounds of the protest, the facts supporting the protest and the status of the protester.
  - 6. Include all relevant supporting documentation with the protest at the time of submittal.

If a protest does not comply with each and all of the above six requirements, the protest will not be considered and will be returned to the protester.
- C. The Chief Executive Officer of the Authority will attempt to resolve a properly filed protest or perform additional fact-finding. If the Chief Executive Officer is able to resolve the protest at this stage, a letter confirming resolution shall be sent to the protester. If the

Chief Executive Officer is unable to resolve the protest within five (5) calendar days from receipt, he/she may establish an independent team to evaluate the merits of the protest. The Chief Executive Officer will review the recommendation of the evaluation team and notify the protester in writing of the decision on whether or not to deny the protest.

- D. If the Chief Executive Officer's decision is to deny the protest, the contract shall be recommended to the Board for award, or executed, if previously awarded by the Authority Board subject to resolution of protest. If the Chief Executive Officer's decision is to uphold the protest, a recommendation will be made to the Authority Board to reject all proposals or bids, cancel the Request for Proposals or Invitation for Bids and solicit new proposals or bids, or award the contract to another proposer. If the recommendation for award is overturned by the Authority Board, the previously recommended proposer may itself file a protest with the Chief Executive Officer within five (5) calendar days of the Authority Board's decision.

## **12.5 SEALED BIDS - GENERALLY**

The primary method of procurement for public projects of the Authority is a sealed bid competitive solicitation which results in a fixed price contract awarded to the lowest responsive and responsible bidder. Advertisement and public opening of bids is required. Except as set forth in Chapters 5 and 7 of this Title, sealed bids shall be used for all procurements that require an expenditure of twenty-five Thousand Dollars (\$25,000) or more.

### **12.5.1 Use Of Procedures Set Forth In Public Contract Code**

- A. Although not otherwise applicable to the Authority, the Authority hereby adopts the procedures set forth in Article 4 of Chapter 1 of Part 3 of Division 2 of the Public Contract Code ("PCC"), commencing with Section 20161 ("Article 4"), except as set forth herein, for use when sealed bids are called for by this Code.
- B. For purposes of this Section (12.5):
1. All references in the Public Contract Code provisions set forth in Paragraph "A" to "city" or "state agency" or "public agency" shall mean the Authority, and all references to "legislative body" shall mean the Board;
  2. Notwithstanding PCC Section 20162, the threshold expenditure for a "public project" that triggers the requirement for sealed bidding is twenty-five Thousand Dollars (\$25,000); and
  3. PCC Section 20169 shall be of no force or effect.

### **12.5.2 Notice And Advertisement**

Notwithstanding PCC Section 20164, the notice inviting bids shall be posted at the offices of the Authority, or other place(s) designated by resolution of the Board, and advertised in a newspaper designated by resolution of the Board.

## **12.6 DESIGN AND BUILD CONTRACTS**

### **12.6.1 Purpose**

- A. As set forth in Public Utilities Code Section 132405 and Section 3 of Chapter 1 of Title I of this Code, the purpose of the Authority is to award and oversee all design and construction contracts for completion of the Project. In some cases, it may be efficient to have one contract for both the design and construction of a component of the Project. Such a contract shall be known as a "Design and Build" contract.
- B. For the purposes of this Chapter, "design and build" means a method of procuring design and construction from a single source. The selection of the single source occurs before the development of complete plans and specifications.

### **12.6.2 Procedures For Design And Build Contracts**

- A. Use of the design and build procedures set forth in this Chapter requires authorization by an affirmative vote of three (3) members of the Board. If the Board has authorized the solicitation of a design and build contract for a particular procurement, the Procurement Officer shall follow the procedures set forth in this Chapter 4. The Procurement Officer shall also follow the procedures set forth in Chapter 3 (Sealed Bids) of this Title, to the extent they do not conflict with the procedures set forth in this Chapter 4.
- B. The Procurement Officer shall cause to be prepared estimates, and prepare documents, for the solicitation of bids on a design and build basis.
- C. The invitation for bids shall include all of the following:
  - 1. A clear and precise description of the services to be provided and work to be performed;
  - 2. A description of the format that bids must follow and the elements they must contain, including the qualifications and relevant experience of the design professional and the contractor, and the criteria that shall be used in evaluating the submittal, including the bid price;
  - 3. The date on which the bids are due, and the timetable that will be used in reviewing and evaluating the bids.
- D. In addition to the information required in subparagraph 2 of Paragraph "C", bidders shall submit their proposals with the construction bid price and all cost information in a separate sealed envelope.
- E. The contract shall be awarded to the lowest responsible bidder whose bid is responsive to the criteria set forth in the invitation for bids.

## **12.7 COMPETITIVELY NEGOTIATED CONTRACTS**

### **12.7.1 Use Of Competitively Negotiated Procurement Procedures**

This Section outlines the Authority's procedures for competitively negotiated procurements, also known as a competitive Request for Proposals ("RFP") process. The procedures used in this Chapter may be used in the following circumstances:

- (a) Contracts for personnel services, or for other services which the Board has determined are to be competitively negotiated;
- (b) Purchases to be made from or the contract is to be made with the Federal or any State government or any agency or political subdivision thereof or pursuant to any open end bulk purchase contract of any of them;
- (c) Purchases of specialized rail equipment, computers, telecommunications equipment, fare collection equipment, microwave equipment and other related electronic equipment and apparatus, if the Board has approved, by a two-thirds vote, the use of the procedures set forth in this Chapter 5 for a particular procurement; or
- (d) A "Design and Build" contract pursuant to the procedures set forth in Chapter 4 of this Title.

### **12.7.2 Solicitation Of Proposals - General**

- A. An RFP shall be the solicitation used to communicate the Authority's requirements to prospective contractors when the negotiated method seeking competitive proposals is used. The Procurement Officer shall furnish identical information concerning a proposed procurement to all prospective contractors receiving the RFP.
- B. In determining sources to solicit, the Procurement Officer shall use all means available to ensure that an adequate number of potential qualified proposers receive the solicitation in order to obtain maximum open and competitive competition. Pre-solicitation announcement notices shall be published in a manner reasonably likely to attract prospective bidders or proposers.

### **12.7.3 Proposal Evaluation**

- A. The evaluation factors that will be considered in evaluating proposals shall be tailored to each procurement and shall include only those factors that will have an impact on the source selection decision. The evaluation factors that apply to an acquisition and the relative importance of those factors are within the broad discretion of the Procurement Officer, the Chief Executive Officer, and the Board.
- B. The Procurement Officer shall evaluate each proposal in accordance with the evaluation criteria in the solicitation. The Procurement Officer shall evaluate the cost estimate or price, not only to determine whether it is reasonable, but also to determine the offeror's understanding of the work and ability to perform the contract.
- C. Where appropriate, the Chief Executive Officer shall establish a formal evaluation board to evaluate proposals and select the source for contract award. If the procurement is for A-E Services [see Section 6], a formal evaluation board, including at least one independent architect or engineer, shall always be appointed.

- D. Unless the Chief Executive Officer designates another Authority official, or establishes a formal evaluation board, the Procurement Officer is responsible for selecting the source for contract award. However, the Procurement Officer's selection decision is subject to the approval of the Authority Board.

**12.7.4 Rejection Of Proposals**

- A. The Procurement Officer may reject all proposals received that are determined not be in the competitive range, including those proposals made by offerors who refuse to execute any required representations and certifications.
- B. The Board, based upon the recommendation of the Chief Executive Officer, may reject any or all proposals received. The Chief Executive Officer may recommend rejection by the Board because:
1. All otherwise acceptable proposals received are at unreasonable prices;
  2. The proposals were not independently arrived at in open competition, were collusive or were submitted in bad faith; or
  3. For other reasons, cancellation is clearly in the Authority's best interest.

**12.7.5 Negotiation; Selection**

- A. The Procurement Officer shall determine which proposals are in the competitive range for the purpose of conducting written or oral negotiations.
- B. Upon completion of negotiations, the Procurement Officer shall ask all offerors within the competitive range to submit their best and final offer.
- C. After evaluation of the best and final offers, the Procurement Officer (or other official designated by the Chief Executive Officer) shall recommend to the Board selection of that responsible offeror whose best and final offer is most advantageous to the Authority, considering price related factors and the other factors included in the solicitation.

**12.7.6 Special Provisions Applicable To Architect – Engineer And Related Services**

- A. This Section prescribes guidelines and requirements for the procurement of Architect-Engineer ("A-E") and related services ("A-E Services"). A-E Services are defined as professional services of an architectural or engineering nature that are required by law to be performed by a California registered or licensed architect or engineer. For the procurement of A-E Services, the Procurement Officer shall follow the procedures set forth in this Section 6, in addition to the procedures set forth elsewhere in this Chapter 5.
- B. If the procurement is for A-E Services, the selection shall be based on the demonstrated competence and qualifications of prospective contractors, and shall follow the procedures set forth in Government Code 4525, et seq. In addition to the provisions of Section 2 of this Chapter, the Authority shall provide timely notice statewide to publications of architectural and engineering societies.

## **12.8 SMALL PURCHASE PROCEDURES**

### **12.8.1 Use Of Small Purchase Procedures**

- A. This Chapter sets forth the procedures for small purchases and other simplified purchase procedures. These purchases shall be made competitively except where it is clearly in the best interests of the Authority to accomplish such purchases non-competitively.
- B. The Small Purchase Procedures set forth in this Chapter may only be used when the total amount of the procurement does not exceed twenty-five thousand dollars (\$25,000).
- C. The Procurement Officer shall use the Small Purchase Procedures that are most suitable, efficient, and economical based on the circumstances of each procurement.

### **12.8.2 Prohibited Use Of Small Purchase Procedures**

- A. The Procurement Officer shall not split a procurement totaling more than the Authority's small purchase limitation into several purchases that are less than the limit in order to use the Small Purchase Procedures.
- B. A procurement requirement shall not be parceled, split, divided, or purchased over a period of time in order to avoid the dollar limitations for use of Small Purchase Procedures.

### **12.8.3 Types Of And Requirements For Small Purchases**

- A. Small purchases for less than five thousand dollars (\$5,000) may be accomplished by securing one proposal if the Procurement Officer considers the price to be fair and reasonable.
- B. For purchases that have a total value exceeding five thousand dollars (\$5,000) but not more than twenty-five thousand dollars (\$25,000), a minimum of three (3) written quotations are to be requested. Efforts shall be made to include at least one DBE vendor.

### **12.8.4 Determination Of Reasonableness Of Price And Award**

The Procurement Officer shall determine, in writing, that the price to be paid to the successful offeror is fair and reasonable. When only one (1) response is received to a request for quotations, or the price variance between multiple responses reflects a lack of adequate competition, the Procurement Officer shall include a statement in the contract file giving the basis for the determination that the price is fair and reasonable.

## **12.9 NON-COMPETITIVE AND EMERGENCY PROCUREMENTS**

### **12.9.1 Use Of Non-Competitive And Emergency Procedures**

- A. Procurement of supplies and services without competition is authorized under limited conditions and subject to written justification documenting the conditions, which preclude competition. The need for non-competitive procurements is recognized when the Authority's interests are best served.



- B. Procurement by noncompetitive negotiation may be used pursuant to the procedures set forth in this Chapter 7 only when the award of a contract is infeasible under Small Purchase Procedures, sealed bids, or competitive negotiation; a statement of determinations and Findings ("D&F") is approved by the Chief Executive Officer; and at least one of the following circumstances applies:
1. An emergency situation, as defined in Section 2 of this Chapter;
  2. The Board may direct the purchase of any supplies, equipment or material without observance of competitive bidding requirements, upon a finding by four-fifths of the Members present that:
    - (a) there is only a single source of supply available; or
    - (b) the contractor is uniquely qualified to provide the service or product;
  3. The equipment to be purchased is of a technical nature and the procurement thereof without advertising is necessary in order to assure standardization of equipment and interchangeability of parts in the public interest;
  4. The goods are for testing or experimental purposes; or
  5. The contract is with a contractor who has entered into a contract (the "MTA Contract") with the LACMTA for the Project, if (a) the proposed Authority contract is for the same scope of work as the MTA Contract; (b) the proposed Authority Contract contains substantially the same terms as the MTA Contract; and (c) the MTA Contract was entered into pursuant to procedures substantially the same as those set forth in this Title.

#### **12.9.2 Emergency Procurements**

- A. The Authority may conduct a procurement on an emergency basis if the procurement is essential to an Authority requirement to deal with an existing emergency condition, as defined in Paragraph "B". The emergency procurement of supplies or services shall be limited to quantities and time periods sufficient to meet the immediate threat and shall not be used to meet long-term requirements.
- B. For purposes of an emergency procurement under this Chapter, an "emergency condition" is a situation (such as a flood, epidemic, riot, equipment failure, or any other reason declared by the Chief Executive Officer) which creates an immediate threat to the public health, welfare, or safety. The existence of an emergency condition creates an immediate need for supplies, services, or construction which cannot be met through normal procurement methods, and the lack of which would seriously threaten one (1) or more of the following:
1. The health or safety of any person;
  2. The preservation or protection of property; or
  3. The continuation of necessary Authority functions.
- C. The Board hereby authorizes the Chief Executive Officer to expend funds, in an amount not to exceed Five Hundred Thousand Dollars (\$500,000), for purposes of this Section 2, without prior Board action. Any funds in excess of that amount shall require Board

approval. The Chief Executive Officer shall, after such expenditure, submit to the Board a full report explaining the necessity for the expenditure.

**12.9.3 Procedures For Emergency And Other Non-Competitive Procurements**

- A. For non-competitive procurements, the Procurement Officer must use the negotiated method of procurement. In each instance where the non-competitive procurement procedures set forth in this Chapter are used, the Procurement Officer shall do the following:
1. Prepare a written statement of determinations and findings (D&F) recording all the facts that provide justification to negotiate the non-competitive or emergency procurement. The Chief Executive Officer must approve the D&F before the procurement can proceed; and
  2. Ensure that all of the steps required under this Chapter for the justification, documentation, and approval of the procurement are completed before the contract is awarded.
- B. The Chief Executive Officer shall establish other procedures and standards to be used in implementing this Chapter 7.

## **13.0 – CONSTRUCTION PROGRAM**

### **13.1 CONSTRUCTION MANAGEMENT**

Almost all the construction activities will be undertaken by the Design/Build (DB) Contractor. During the Build phase of the project the DB Contractor will construct the project's facilities and systems. The DB Contractor may also perform storm system, sewer system and water mains for the local agencies. Also, the DB Contractor may coordinate the balance of the utility relocations of gas, electric power, telephone, cable television and fiber optics.

### **13.2 CONSTRUCTION CONTROL**

The DB Contractor shall complete the construction and fabrication of the facilities, and systems in accordance with the design and construction documents produced by it in accordance with the Mandatory Documents and applicable laws, regulations and codes and such implementation will be consistent with the DB Contractor's quality assurance and control plan, safety plan and other documents approved by the Authority.

### **13.3 DOCUMENT CONTROL**

The consultants and DB Contractor shall continue to maintain the document control system developed by the Authority.

### **13.4 CONSTRUCTION REVIEW MANAGEMENT**

Construction review management is the process of exercising control over the progressing construction and fabrication. The primary responsibility for construction review will be with the DB Contractor through its construction management element, performing activities in accordance with the design documents and the approved DB Quality Assurance and Control Plan. The Authority's overview of construction, and fabrication will consist of document review for conformance to the Mandatory Documents, and design documents prepared in accordance with them, and performance of quality assurance audits of the DB Contractor's construction and review processes, procedures and activities.

### **13.5 SUBMITTAL ROUTING PROCEDURE**

Contractor shall review submittals, stamp and sign each submitted item as reviewed and approved, before submission to the Authority CEO. The CEO will review all submittals for general conformance with the Mandatory Requirements. Satisfactory submittals will be forwarded directly to the respective consultant or agency for review. After review, submittals will be returned to the CEO marked with the appropriate action stamp. If required, comments will be resolved in a joint meeting between Contractor and The Authority.

Documents prepared by the DB Contractor, its subcontractors or suppliers (shop drawings, technical data sheets, etc.), requiring review by The Authority, shall be forwarded by the DB Contractor to the CEO for internal distribution at The Authority and/or distribution to the GDC, HMRDC or PMAC. The following procedure shall be followed:

- Each submittal shall consist of approximately five copies.
- A maximum of 90 working days will be allotted to complete reviews. The Authority CEO shall be the repository for all comments made and shall forward the same to the Contractor.
- Responsibility for resolving conflicting comments rests with the Authority CEO.

## **14.0 – PUBLIC PARTICIPATION/PUBLIC RELATIONS**

### **14.1 PUBLIC PARTICIPATION**

Public participation during the project's design phases is mandated by the State of California under the California Environmental Quality Act of 1968 (CEQA). CEQA requires public review of construction projects which are partially or completely state funded. The Project, as a level-two submittal, required an EIR. The California Clearing House has acquired as meeting requirements the documentation prepared to meet the guidelines as mandated under CEQA.

Upon completion of the reviews by the regulatory agencies, the FEIR report was made available to the public for review and comment. A notice of availability was published in local newspapers inviting public comment on the findings of the FEIR. Following a mandated period, public hearings were conducted to supplement the public review process.

The environmental consultant was responsible for addressing comments made to the FEIR and for incorporating all revisions as may be required. Upon satisfactorily revising the document and responding the comments, the regulatory agencies issued their final determination as to the acceptability of the EIR documents and approval of permit(s).

The Authority has established an ongoing public participation process for the Project. This process comprises legally required activities (e.g., notice in the local news paper, a public hearing at the conclusion of the environmental phase of the project, and ongoing public information meetings).

### **14.2 PUBLICATIONS AND RELEASES**

All requests for information, news releases and publications concerning the project shall be submitted to the Authority for approval to release.

## **15.0 – LEGAL AUTHORITY AND CONSTRAINTS**

### **15.1 Legal Authority and Organization**

#### **A. Los Angeles County Metropolitan Transportation Authority (LACMTA)**

1. Assembly Bill 1784 required the Los Angeles County Transportation Commission (LACTC) and the Southern California Rapid Transit District (SCR TD) to submit a plan to the legislature by January 1992 which reorganizes the agencies to provide "a unified comprehensive institutional structure which requires maximum accountability to the people."
2. Assembly Bill 152, signed by Governor Pete Wilson on May 19, 1992, merged the LACTC and SCR TD into the LACMTA, effective February 1, 1993.
3. Public Utilities Code 130050.2 officially created the LACMTA, which is the single successor agency to the LACTC and SCR TD. Sections 130051 et seq. were added to the Public Utilities Code outlining the legal authority of the LACMTA.
5. The board members of the LACMTA were appointed February 1, 1993. The LACMTA had no powers, duties or responsibilities until February 1, 1993. From February 1, 1993, until April 1, 1993, the LACMTA, exclusively, exercised any of the powers of the board of directors of the SCR TD and the governing body of the LACTC, except those powers that the LACMTA had expressly delegated to the SCR TD or to the LACTC.

On April 1, 1993, the terms of office of members of the board of directors of the SCR TD and of the governing body of the LACTC were terminated. The board of directors and governing body were succeeded by the governing body of the LACMTA which may act on behalf of the SCR TD and the LACTC. However, the obligations, liabilities, and indebtedness, bonded and otherwise, of the SCR TD and the LACTC remained with the respective agency until May 1, 1993, when the agency was abolished and succeeded by the LACMTA.

5. On March 28, 1990 the LACTC formally adopted the Pasadena Blue Line Project and on January 27, 1998 the LACMTA Board formally approved the Executive Office recommendation to suspend, indefinitely, the partially completed Pasadena Blue Line Project.

#### **B. Pasadena Metro Blue Line Construction Authority (PMBLCA)**

1. State of California Senate Bill 1847, introduced by Senator Adam Schiff and signed by Governor Pete Wilson on September 30, 1998, established the Pasadena Metro Blue Line Construction Authority, effective January 1, 1999. The PMBLCA has been established for the purpose of awarding and overseeing all design and construction contracts for completion of the Los Angeles - Pasadena Metro Blue Line light rail project from Union Station in the City of Los Angeles to Sierra Madre Villa Boulevard in the City of Pasadena and any mass transit guideway that may be planned east of Sierra Madre Villa Boulevard along the rail right-of-way extending to the City of Claremont.
2. Public Utilities Code Division 12.7, Chapter 6 officially created the PMBLCA. Section 132400 et seq. were added to the Public Utilities Code outlining the legal authority of the PMBLCA and duties of the LACMTA.

The PMBLCA shall be governed by a Board consisting of five (5) voting members and one nonvoting member who shall be appointed as follows:

- Three members shall be appointed by the City Councils of the Cities of Los Angeles, Pasadena, and South Pasadena.
- One member shall be appointed by the President of the Governing Board of the San Gabriel Valley Council of Governments
- One member shall be appointed by the LACMTA.
- The nonvoting member shall be appointed by the Governor.

The PMBLCA has all the powers necessary for planning, acquiring, leasing, developing, jointly developing, owning, controlling, using, jointly using, disposing of, designing, procuring, and building the Project, including, but not limited to all of the following:

- Acceptance of grants, fees, and allocation from state, local agencies, and private entities.
- Acquiring, through purchase or through eminent domain proceedings, any property necessary for, incidental to, or convenient for the exercise of the powers of the authority.
- Incurring indebtedness, secured by pledges of revenue available for project completion.
- Contracting with public and private entities for the planning, design, and construction of the project.
- Entering into cooperative or joint development agreements with local governments or private entities.
- Relocation of utilities, as necessary for completion of the project.

The PMBLCA Board may appoint an executive director to serve at the pleasure of the Authority. The executive director may appoint staff or retain consultants as necessary to carry out the duties of the Authority.

The LACMTA shall identify and expeditiously enter into an agreement with the Authority to hold in trust with the Authority all real and personal property, and any other assets accumulated in the planning, design, and construction of the project, including, but not limited to, rights-of-way, documents, third-party agreements, contracts, and design documents, as necessary for the completion of the project.

The LACMTA shall transfer the unencumbered balance of all local funds programmed for completion of the project and that have been identified in the Restructuring Plan adopted by the LACMTA Board of Directors on May 13, 1998, to the Authority for completion of the project.

The Authority shall enter into a memorandum of understanding with the LACMTA that shall specifically address the ability of the LACMTA to review any significant changes in the scope of the design or construction, or both design and construction, of the project,

The Authority shall not encumber any future farebox revenue anticipated from the operation of the project.

The Authority shall not encumber the project with any obligation that is transferable to the LACMTA upon completion of the design and construction of the project. The design and

construction to be administered by the Authority does not include rolling stock, which is a component of the operation of the project and shall be administered by the LACMTA.

The Authority shall be dissolved upon completion of construction of the light rail project. The LACMTA shall assume responsibility for operating the project upon dissolution of the Authority.



## **16.0 – QUALITY ASSURANCE/QUALITY CONTROL**

### **16.1 QA/QC POLICY**

The Authority's Quality Assurance program provides for administrative control and implementation of quality assurance measures during all phases of procurements including: design, purchasing, manufacture, assembly, inspection, operations, maintenance, and warranty. The program is designed to ensure and document procurements, which provide for the safe, reliable, comfortable and on-time service to the ridership and constituents of the Authority.

The standards of quality for the Authority procurements are established and monitored to encompass considerations of safety, reliability, maintainability, and human concerns. Compliance with these standards will be verified through effective procurement procedures, comprehensive contractual requirements, proper contractor/consultant selection and effective oversight of Planning, Real Estate, Design, Construction, Operations, and Maintenance activities.

The material outlined in this Chapter will complement the Authority's more detailed Quality Assurance Program Plan (QAPP). The Project's QAPP further outlines the Authority policy on QA/QC and provides detailed work procedures and instructions on the implementation of the Project's Quality Assurance Program.

### **16.2 OTHER APPLICABLE QA/QC DOCUMENTS**

#### **16.2.1 The Authority's Quality Assurance Program Plan (QAPP)**

The Authority will developed a detailed Quality Assurance Program Plan (QAPP) specifically for the MBLCA project. The Plan, which is being revised to be consistent with ISO 9000 standards, will include all the Quality System elements. Furthermore, the Authority's QAPP is identified as a Mandatory Document in the Project procurement package .

The QAPP documents the Authority's quality policy, procedures, and the detailed day-to-day work instructions for carrying out their Quality Assurance Program on the Project. The Plan additionally provides for carrying out their Quality Assurance Program on the MBLCA project. The Plan additionally provides for comprehensive audits and oversight of the DB Contractor's Quality Assurance and Control Plan and ensures that the DB Contractor's documented QA/QC procedures are being implemented appropriately. Detailed review and oversight of the DB Contractor's work, beyond the audit stage, will be guided by the principles of a DB procurement.

#### **16.2.2 QA/QC Contract Requirements/DB Contractor's QA/QC Plan**

The Project's Procurement Contract will include requirements for the development, by the DB Contractor, of a mandatory QA/QC Plan. This Contractor QA/QC Plan, which must have reviewed and approved by The Authority, will be the master guiding document for the DB Contractor's QA/QC actions. As such, the DB Contractor's QA/QC Plan shall be filed in accordance with the Authority's Document Control System and will act a critical reference document in the QA/QC Program

### **16.3 STANDARDS AND COMPLIANCE**

The QA/QC Plan shall comply with all applicable laws and regulations of all State, state, regional and regulatory agencies exercising jurisdiction over the project including, but not limited to:

**FEDERAL REGULATORY AGENCIES:**

- Federal Highway Administration
- Federal Railroad Administration
- U.S. Environmental Protection Agency

**STATE AND REGIONAL REGULATORY AGENCIES:**

- California State Clearing House

In addition to compliance with the regulations of the above regulatory agencies, QA/QC design and construction activities shall be performed in accordance with the State, state, and regional building codes listed below:

- Americans with Disabilities Act (ADA)
- American Railway Engineering Association (AREA)
- American Society of Testing and Materials (ASTM)
- California Uniform Construction Code (UCC)

**16.4 QUALITY SYSTEM REQUIREMENTS**

“Quality system” is defined as “the organizational structure, responsibilities, procedures, processes and resources for implementing quality management”. The quality system requirements for both the Authority and the DB Contractor will, in accordance with ISO 9001, include the following features:

- Management responsibility
- Quality System
- Design control
- Contract Review
- Document and Data Control
- Purchasing
- Control of Customer – Supplied Product
- Product Identification and Traceability
- Process Control
- Inspection and Test Status
- Control of nonconforming Product
- Corrective and Preventative Action
- Handling, Storage, Packaging, Preservation, and Delivery
- Control of Inspection, Measuring and Test Equipment
- Inspection and Test Status
- Control of Quality Records
- Internal Quality Audits
- Training/Serviceing
- Statistical Techniques

In addition, a quality system focused on the service and service delivery or operational aspects of the Project will be developed in accordance with IS 9004-2, which will complement the above functions and include:

- Management Responsibility
- Personnel and Material Resources
- Quality System Structure
- Interface with Customers

## **16.5 QA/QC MANAGEMENT RESPONSIBILITY AND IMPLEMENTATION**

Each of the following agencies or firms is responsible for providing a detailed QA/QC Program Plan to The Authority and ensuring that the plan is carried out. Each plan shall be located appropriately in the Project Files and is considered to be an extension of the material in this Chapter. Implementation and verification of each agencies or firms QA/QC program shall be the responsibility of the following individuals:

### **The Authority's QA/QC PROGRAM:**

CEO [TBD]  
QA Administrator [TBD]

### **DB CONTRACTOR:**

QA/QC Manager [TBD]

The detailed responsibilities of these individuals shall be included in their representative QA/QC Programs Plans.

## **16.5 QA/QC PLAN SUBMITTAL SCHEDULE**

**DB Contractor:** The Contractor shall follow the Quality Assurance and Control Plan submittal requirements as detailed in Book III, Volume 2, Section 4.1.1.1 "Quality Assurance and Control Plan Submittal Requirements".

## **16.6 QA/QC DOCUMENT CONTROL**

All incoming QA/QC documents to The Authority will be filed in accordance with the Authority's QAPP Document Control System. Furthermore, in order to prevent confusion and promote consistency, all documents or items pertaining to any QA/QC Plan or QA/QC issue shall be submitted to the Authority CEO and copied to the Authority QA Administrator and other appropriate Authority staff. The CEO will further distribute copies of the material to The Authority staff as he sees it.

A transmittal letter must be included as the cover to all submittals to The Authority and shall include the following items:

- The Project logo or similar identifying notation
- An identifying logo or notation which identifies the sender
- Date of transmission
- Notation of the type of item being submitted
- Recap of the reason for the submittal
- Remarks on any potential impacts of the submittal
- Notation of who has received copies
- Notation of whether or not any action on the Authority's part is required, and if so, what action

### **16.8 QA/QC UPDATE PROCESS**

It is anticipated that any or all of the QA/QC Plans noted above in Section 17 will need to be update, revised or supplemented during the life of the MBLCA or during the applicable time frame for each consultant. The QA/QC manager for each QA/QC program shall follow the process noted here when updates to their program plan are necessary:

1. The agency's or firm's QA/QC Manager shall present a revised copy of his Plan, with transmittal letter, to the Authority CEO and provide a copy to the Authority QA Administrator.
2. The Authority CEO shall distribute the submittal to appropriate staff for review and comment.
3. The Authority CEO will assimilate staff comments, provide final review, and either approve, comment on, or disapprove any such recommended QA/QC plan revisions within 30 days of receipt (for the DB Contractor this is noted in Section 4.1.1.1 of the Contract), and provide written notice of these decisions back to the submitter.

### **16.9 FORCE ACCOUNT QA/QC**

The respective force account managers and/or engineers shall be directly responsible for ensuing quality assurance and control of force account work and activities. All non-conforming work elements shall immediately be brought to the attention of the CEO for further resolution.

## **17.0 – PROJECT FUNDING**

The Capital Funding Plan for the Project is detailed in the Project Financial Plan as attached in the Board report.

## **18.0 – Maintenance of the Plan**

Maintenance of the PMP shall be accomplished by approved Project procedures including design review, controlled copy sets, etc.

Preparation of the Project Management Plan is a prerequisite to obtaining State capital assistance for the Project. The PMP will be submitted in next 30 days for Board approval and subsequently for CTC review and approval.

The PMP is a dynamic document, which will be periodically updated and supplemented as the Project definition continues to be developed.