

**PMOC COMPREHENSIVE MONTHLY REPORT**

**Honolulu High-Capacity Transit Corridor Project**  
City and County of Honolulu  
Honolulu, HI

March 2010 (FINAL)

PMOC Contract Number: DTFT60-09-D-00012  
Task Order No. 2: Honolulu High-Capacity Corridor Project  
Project No: DC-27-5140  
Work Order No. 1  
OPs Referenced: OP 1 and 25

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Length of Time Assigned: Five Years (November 18, 2009 through November 17, 2014)

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## 1.0 EXECUTIVE SUMMARY

### 1.1 Project Description

- **General Description:** The Project is a 20-mile elevated fixed guideway rail system along Oahu's south shore between East Kapolei and Ala Moana Center. This Project is based on the Airport Alignment, which includes 21 stations. The alignment is elevated, except for a 0.5-mile at-grade portion at the Leeward Community College station. The Project is planned to be delivered in four guideway segments.
- **Length:** 20 miles
- **No. of Stations:** 21
- **Additional Facilities:** Maintenance and Storage Facility (MSF) and parking facilities
- **Vehicles:** 76 vehicles
- **Ridership Forecast:** 97,500 weekday boardings in 2019; 116,300 weekday boardings in 2030

### 1.2 Project Status

- Project was approved to enter Preliminary Engineering (PE) on October 16, 2009.
- Publication of Final Environmental Impact Statement (FEIS) is pending resolution of the several key issues including:
  - Section 106 Programmatic Agreement (PA) has not yet been signed.
  - Section 4(f) parkland land issues and potential clearance problem with the project's alignment at and near the Lagoon Drive Station and bridge spanning Lagoon Drive.
  - Impacts at the Honolulu International Airport Runway Protection Zone (RPZ) avoidance and selection of airport alignment alternatives.

*(Note: Full details on the status of all contracts discussed below are provided in Appendix B.)*

- General Engineering Consultant (GEC) II contract is on hold until after the Record of Decision (ROD) is issued. Amendment #4 of the GEC I contract was issued on February 28, 2010 that extended the period of performance 120 days (until June 2010) and authorized an increase in budget of \$12 million. The City intends to complete procurement of the GEC II contract after receipt of a ROD.
- A Design-Build (DB) Contract for the West Oahu/Farrington Highway (WOFH) Guideway was awarded to Kiewit Constructors on November 18, 2009. The City issued Notice to Proceed (NTP) #1 on December 1, 2009. The City intends to issue NTP #1A to Kiewit to authorize initial design activities. However, the activities being considered under NTP #1A are still under review by the FTA.
- Request for Proposal (RFP) Part 1 for the Kamehameha Highway Guideway DB Contract was issued on November 18, 2009, with responses received on January 5,

2010. RFP Part 2 will be issued on March 19, 2010. The proposals are due July 2010. The price proposals are valid for 180-days from receipt. The City has indicated that they will not award this contract until after receipt of a ROD.

- RFP Part 1 for the MSF was issued on May 28, 2009. RFP Part 2 was issued on July 24, 2009 and proposals were received on February 17, 2010. The City expects to make a selection in March 2010, but they have indicated that an award will not be made until after receipt of a ROD. The price proposals are valid for 180-days from receipt.
- RFP Part 1 for the Vehicles/Core Systems Design-Build-Operate-Maintain Contract was issued on April 8, 2009. RFP Part 2 was issued on August 17, 2009, with responses due on April 20, 2010. The City will consider requesting a Best and Final Offer, which would likely be submitted in May 2010. The City then expects to make a selection in June 2010 and award the contract in September 2010. However, the City has indicated that they will not award this contract until after receipt of a ROD. The price proposals are valid for 180-days from receipt.

### 1.3 Technical Capacity Review

The table in Section 2.3 presents the status of key required management deliverables.

### 1.4 Schedule

- **Preliminary Engineering (PE):** FTA Approval to Enter PE on October 16, 2009
- **Record of Decision:** Publication of the FEIS, which must precede the ROD, is pending
- **Revenue Operations Date (ROD):** Grantee target is June 2019

### 1.5 Cost Data

The Project Budget submitted with the City’s request to enter PE is as follows:

Base Cost Estimate	\$3.838 billion
Total Contingency	\$1.219 billion (31.8% of Base Cost Estimate)
Finance Charges	\$0.290 billion
<b>Total Project Cost</b>	<b>\$5.348 billion</b>

Additional project costs include the following:

Pre-PE Expenditures	\$0.082 billion
Financing Charges	\$0.103 billion (post-revenue operations)
<b>Grand Total Project Cost</b>	<b>\$5.532 billion</b>

With the following potential changes, the City feels the Total Project Cost could be reduced from \$5.532 billion to \$5.391 billion:

- Advancing the Kamehameha Highway Guideway & Utilities Contract through the use of DB procurement
- Incorporating costs from the accepted WOFH DB Contract price proposal

The City is preparing a bottoms-up cost estimate for the Project. It is anticipated that this estimate will be available for review by the PMOC in April 2010.

## 1.6 Issues or Concerns

The following key issues or concerns have been identified:

- Regarding DB procurement prior to completion of NEPA process, Federal Register, Volume 72, No. 12 dated January 19, 2007, states on Page 2590:

“The project sponsor must receive prior FTA concurrence (A) Before issuing the RFP and (B) awarding a design-build contract. Should the project sponsor proceed with any of the activities specified in this section before the completion of the NEPA process, FTA’s concurrence merely constitutes FTA’s acquiescence that any such activities complies with Federal requirements and does not constitute project authorization or obligate Federal funds, unless otherwise provided by FTA.”

The City did not seek FTA concurrence prior to issuing RFP Part II for the WOFH DB Contract. In addition, the City has begun procurement for three additional DB contracts (Kamehameha Highway, MSF and Vehicle/Core Systems) prior to completion of the NEPA process. All DB price proposals are valid for 180-days from receipt. The City has indicated that they will not award any additional DB contracts prior to issuance of the ROD. However, if the City elects to award any of the contracts and issue an initial NTP prior to completion of the NEPA process, they must ensure that it complies with the requirements identified in Federal Register, Volume 72, No. 12 dated January 19, 2007 for DB procurement. In addition, the City should share future NTPs with the FTA and PMOC for review in advance of their issuance. The purpose of this review is to ensure that the City remains within the constraints of the New Starts requirements.

- The City must remain cognizant of the limits of the pre-award authority granted with the receipt of ROD. The City intends to issue multiple NTPs for its DB contracts. However, as noted in a December 1, 2009 letter to the City, the FTA will consider LONPs for activities not covered by automatic pre-award authority on a case-by-case basis following completion of the NEPA process.
- The FTA and the PMOC have not been afforded an opportunity to review RFP Part II documents in advance of their issuance due to the City’s confidentiality requirements for DB procurement.
- The City received two “Written Notice of Project Change” on March 1, 2010 from Kiewit, the WOFH DB Contractor. The first notice involves cost for insurance coverage. The City intended to implement an Owner Controlled Insurance Program (OCIP) for the

project, as stipulated in Special Provisions 3.1 of the contract. However, procurement of an Insurance Consultant to help manage the OCIP has been delayed due to protests. Therefore, the City has not been able to initiate their OCIP, nor do they know when this issue will be resolved. The second notice is a result of time delays experienced with the issuance of Notice to Proceeds (NTP) as stipulated in the contractual documents. Each of these notices is discussed in detail in Appendix B.

- The executed agreement for the WOFH DB Contract calls for issuance of all four NTPs within 120 calendar days of the December 1, 2009 NTP #1 date. If that does not occur, the City will review Kiewit's schedule of milestones and the baseline schedule to determine whether there has been a schedule or a cost impact. The 120 calendar day schedule for issuance of all NTPs was not met.
- The City must develop a realistic Master Project Schedule (MPS) that includes key milestones identified in the FTA Roadmap for Final Design. The schedule should reflect realistic completion dates for all critical activities including the NEPA process. The current MPS (data date of February 15, 2010) indicates issuance of a ROD on May 21, 2010 and approval to enter Final Design occurring in December 2010. The PMOC believes that both of these target dates are unlikely based on the current status of the project. At this time, a date for the resolution of the key NEPA-related issues (Programmatic Agreement, Section 4(f), and Runway Protection Zone at the Honolulu International Airport) cannot be determined, which drive the ROD. However, the City should include most likely dates including contingency in their schedule for these milestones. The City must also accurately portray any impacts to the DB contract that has been awarded or the three DB contracts that are under procurement.
- The City is including two separate MSF sites, which are identified in the NEPA document as a 44-acre vacant site near Leeward Community College (former Navy Drum Site) and a 41-acre agricultural site in Hoopili. The Navy Drum Site is the City's preferred location for the MSF and the current RFP documents reflect the Navy Drum site. The Phase I environmental assessment acknowledges that there was a former hazardous material release and releases from the former Underground Storage Tanks on an adjacent property that have impacted the environmental integrity of the site. The report also concluded that both incidents have been addressed and cleaned up in accordance with Federal and State requirements, and the State of Hawaii Department of Health issued No Further Action letters for both incidents. However, there may still be the potential for encountering contaminated materials on this site may given the amount of earthwork anticipated. The PMOC completed a site visit of the former Navy Drum Site in March 2010. The purpose of the site visit was to aid in the PMOC's understanding of proposed layout of the MSF and scope of the contract. However, the PMOC has not been provided access to the RFP Part 2 documents to review preliminary grading plans or contract language related to the potential for encountering contaminated materials. This information is necessary to assess any potential impacts to cost or schedule as a result of encountering contamination. The PMOC will review the contract documents when they are made available.

- The City must sign a license agreement with the Department of Hawaiian Homelands (DHHL) to construct the MSF on the Navy Drum Site. To do so, it must first execute a Memorandum of Agreement (MOOA). The License Agreement would be executed following ROD. The MOA has been approved by the City Council, and DHHL has begun its approval process. It is anticipated that the MOA could be executed in April 2010, but no specific time-frame has been given. The City has stated that it is not aware of any issues from the DHHL, that the Navy has cleaned the site, and that there are no limitations on the proposed use of the site. If any hazardous materials are found during construction, the DHHL is required to clean the site per the agreements. The City provided the PMOC with a copy of the MOA subsequent to the March 2010 Progress Meeting. The PMOC has recommended that the License Agreement be provided to the FTA and PMOC for review prior to execution.
- Publication of FEIS is pending resolution of the Airport Runway Protection Zone (RPZ) issue and 4(f) issue associated with Ke'Ehi Lagoon Park. The City has prepared a study that identifies three options to the current base alignment along Aolele Street to assure that the Project is not in conflict with safety clearance zones required for operations on Runway 22L/4R.
  - (1) Aolele Street – This is the Locally Preferred Alternative (LPA) as defined in the Draft Environmental Impact Statement. To provide clearance to RPZ, the City included \$20M in airport modifications, specifically, to move both ends of Runway 22L/4R 462 feet in the makai (towards the sea) direction. These costs may increase pending review of the proposed runway modifications by FAA and Hawaiian Department of Transportation.
  - (2) Ualena Street – This alternative moves the Project alignment one block in the mauka direction, where it would be situated in the center of this crowded business-oriented street. To enter the street from the west ('Ewa), the alignment would cross several privately-owned surface parking lots; where returning to the LPA on the east (Koko Head) end, the alternative would require acquisition and demolition of a number of business buildings on Waiwai Loop, Koko Head of Lagoon Drive.
  - (3) Koapaka Street – This alternative would relocate the alignment two blocks in the mauka direction, like the Ualena Street alignment, into a crowded business-oriented street. To make the transition from the LPA to this street on the 'Ewa end, the alignment would traverse parts of several parking lots, thread between an at-grade and an elevated highway and cause impact to several commercial buildings. On the Koko Head end, it limits its direct impact to one commercial building on the Waiwai Loop.
  - (4) Nimitz Freeway – This alternative would construct the alignment above the makai side surface roadway parallel to the Interstate H1 elevated highway. Transitions to the LPA would require a number of property acquisitions and building demolitions on the 'Ewa end but would use mostly publicly-owned right-of-way along the freeway on the Koko Head end. A unique feature of this alternative is the need for a double-deck station at Lagoon Drive, brought about by the narrowness of the roadway right-of-way at that station location.

The FTA has requested a copy of the backup information to support the City's assertion of cost impacts if the alignment is modified. This information was provided in January 2010 and is under review by the FTA, FAA, and PMOC.

## **2.0 BODY OF REPORT**

### **2.1 Grantee's Capabilities and Approach**

#### **2.1.1 Technical Capacity and Capability**

The PMOC has identified “capacity” issues as several key City and PMSC management positions remain vacant or vacated due to retention challenges stemming from the project’s geographic location and other related issues. Several of the City positions are currently filled by “Acting” or “Interim” staff members from the PMSC team. While these temporary solutions may fill immediate voids, the PMOC believes that the resource demands associated with the PE and Final Design phases of an approximate \$5 billion project require full time and concentrated attention and continuity within the Grantee’s organization for smooth transition into future phases.

The City’s long term strategy is to hire locally and have the Project Management Support Consultant (PMSC) train new City staff using the consultant’s expertise in an effort to ensure that the new hires are capable of managing the City’s consultants effectively. Although there is no set timetable for replacing the PMSC with City staff, the City has begun to advertise city positions currently filled by the PMSC. The need for PMSC staff will diminish as the City fills key management positions. Until such time, the City continues to supplement its staff with PMSC staff.

The City has recently added the following staff:

- QA Manager – PMSC position
- Facilities Engineer Manager – PMSC position
- Rail Systems Operational Analyst – PMSC position
- Rail System Engineer – PMSC position
- Procurement and Specification Specialists (3) – Department of Fiscal Services
- Information Technology Specialist (1) – City position (not funded by the project)

The City intends to add the following staff within the next 30 days:

- Structural Engineer – City position
- Assistant Project Officer for DB Contracts – City position
- Lead Civil Engineer – City position
- Civil Engineer for MSF – City position
- Secretary “Project Controls & Administration” – City position
- Secretary “Public Involvement” – City position
- Administrative Specialist – City position

The City and PMSC have added 41 staff members to the Project since 2009. A total of 79 positions are authorized by the City this year, and the City anticipates adding 31 more positions next year (pending approval by the City Council) for a total of 110 positions.

It is the PMOC’s professional opinion that the Project organization, staffing, and management approach provides the technical capability to support the City’s initial implementation of the

project during PE. However, significant technical capacity issues remain as several key City management positions remain vacant or filled by interim City or PMSC employees sharing multiple duties. The PMOC recommends the City attempt to fill key management positions no later than issuance of the Record of Decision (ROD).

## **2.1.2 Project Controls for Scope, Quality, Schedule, Cost, Risk and Safety**

### System Safety and Security

- The City indicated that Revision 2 of the Safety and Security Management Plan (SSMP) will likely be submitted for review in March 2010.
- The PMOC intends to hold a safety and security workshop that could include representatives from FTA Region IX as well as FTA Headquarters. However, it is likely that this workshop will be deferred until after the Governor formally establishes a State Safety Oversight Agency (SSOA). It should be noted that a letter was sent by the FTA Administrator to the Governor on February 26, 2010 regarding the need to establish the SSOA for the Project as soon as possible. The letter states “It is absolutely imperative that Hawaii establish an SSOA to monitor the planning and design of an undertaking as large and complex as the [Project].”

## **2.1.3 Compliance with Applicable Statutes, Regulations, Guidance and FTA Agreements**

### National Environmental Policy Act (NEPA)

- Section 106 Programmatic Agreement (PA) was submitted to the FTA and minor comments were provided in December 2009. The City will review the comments and present the PA to designated signatories.
- Airport Runway Protection Zone (RPZ) – In a December 11, 2009 letter to FTA, the FAA expressed an interest in becoming a cooperating agency in the development of the HHCTC project Environmental Impact Statement. The FTA welcomed FAA as a Federal Agency with jurisdiction by law to the HHCTC environmental process as a cooperative agency. Under the procedural provisions of NEPA and administration of the NEPA process, the FAA has special expertise regarding environmental matters at Honolulu International Airport. The FAA is aware of the sensitivity of the schedule and has committed to providing timely comments. The FAA regional office in Los Angeles received the Administrative Draft of the FEIS for review on December 13, 2009. The City is awaiting comments. The FTA has requested a copy of the backup information to support the City’s assertion of cost impacts if the alignment is modified to mitigate the RPZ issue and 4(f) issue associated with Ke’Ehi Lagoon Park. This information was provided in January 2010 and is under review by the FTA, FAA, and PMOC.
- The City included a new Chapter 5 in the Final Environmental Impact Statement (FEIS) to address Section 4(f) comments from the FTA.
- The City’s schedule for receiving a ROD by May 21, 2010 is not realistic due to the issues mentioned above.

### Letters of No Prejudice (LONP)

- The City is still developing an LONP approach for the Project and will send a letter when ready. In a December 1, 2009 letter to the City, the FTA clarified its policies and procedures related to LONPs. The letter states, “After completion of NEPA, FTA will consider LONPs for activities not covered by automatic pre-award authority on a case by case basis. Absent of pre-award authority or an LONP, no project cost can be incurred and be eligible for reimbursement or as local matching for any portion of the entire 20 mile alignment.”
- The following is a list of LONPs the City may request with anticipated dates for approval from FTA that were taken from the MPS (data date of February 15, 2010):
  - WOFH DB FD – May 28, 2010
  - WOFH DB Construction – May 28, 2010
  - Kamehameha Highway DB – May 28, 2010
  - Airport Guideway and Utility Design – May 28, 2010
  - Farrington Station Group Design – May 28, 2010
  - Farrington Station Group Construction – May 28, 2010
  - West Oahu Station Group Design – July 5, 2010
  - Pearl Highlands Station, H-2 Ramps, and Parking Garage Design – May 28, 2010
  - MSF DB FD and Construction – May 28, 2010
  - Core Systems NTP – May 28, 2010

The PMOC’s assessment of the current MPS, including the LONP dates listed above, is provided in Section 2.4 of this report.

- The most critical LONP that will be requested by the City is for the WOFH DB Project. Kiewit’s schedule currently reflects construction starting in September 2010. However, based on the LONP checklist the City will need a Risk Assessment, Contingency Management Plan, ROD, Financial Management Plan and updated cost estimate before an LONP could be considered by the FTA. It is the PMOC’s professional opinion that the City may not receive an LONP to support this target date for the start of construction. The FTA will consider LONPs for activities not covered by automatic pre-award authority on a case-by-case basis following completion of the NEPA process.

## **2.2 Project Scope**

The Project is a 20-mile fixed guideway rail system along Oahu’s south shore between East Kapolei and Ala Moana Center. This Project is based on the Airport Alignment, which currently includes 21 stations. The alignment is elevated, except for a 0.5-mile at-grade portion at the Leeward Community College Station. The Airport alignment will average a total of 97,500 weekday boardings at the Revenue Operations Date in the year 2019 and 116,300 weekday boardings in the year 2030. It will provide two significant areas with potential for Transit Oriented Development, one near the Airport and one in the surrounding industrial areas. It is anticipated that the initial fleet will include 76 “light metro” rail vehicles.

### 2.2.1 Status of Design/Construction Documents

The City has developed a Compendium of Design Criteria for all design elements along with its standard specification and standard and directive drawings. These items have now been made available to the PMOC for review. The PMOC’s initial review finds these documents to be well prepared. However, the PMOC has yet to complete a thorough review of all design and design support documents. This review is ongoing and will be completed in advance of the City’s request to enter Final Design.

The City has scheduled a Value Engineering Workshop the week of April 19-23, 2010. The focus of the workshop was originally to include the Airport Segment Guideway and Utilities, City Center Segment Guideway and Utilities, and station packages. However, the City has subsequently determined that the workshop will only focus on the station packages. Although a final decision will not be made in the near term, the City is now considering the use of DB for the remaining two line segments. If they do decide to utilize Design-Bid-Build (DBB) method, the City recognizes they will be required to be completed Value Engineering for these segments as well.

Through the DB procurement, the City allows for submittal of Alternate Technical Proposals for the contractors. The City will prepare a report that includes a summary of accepted Alternate Technical Proposals with estimated capital and implementation costs, expected cost savings and back-up documentation in accordance with FTA guidelines. This report will be submitted along with the Value Engineering Report that will be prepared following the completion of the workshop scheduled for April 2010.

The status of design for each contract package is discussed in Appendix B.

### 2.2.2 Status of Third-Party Agreements

The following table provides the status of Third Party Agreements for the project:

Agreement	Completion Date	Status
University of Hawaii Master Agreement	Pending	UH Reviewing
Leeward Community College Sub-agreement	Pending	UH Reviewing
Department of Education Master Agreement (Waipahu High School)	Pending	City reviewing DOE comments
Department of Education Consent to Construct	Pending	City reviewing DOE comments
DHHL Master Agreement (Drum Site)	Pending	Approved by City Council; in DHHL approval process
Department of Land and Natural Resources Executive Order Request for WOFH	Pending	Request sent to DLNR but agency will not review until after ROD
Department of Land and Natural Resources Consent to Construct for WOFH	Pending	Request sent to DLNR but agency will not review until after ROD
Easement Request for Navy Property	Pending	Navy is processing request
HDOT Master Agreement	Pending	HDOT reviewing

The following table provides a summary and status of the Utilities Engineering Services Agreements for the Project:

Utility	West Oahu/Farrington Highway DB Contract	Kamehameha Highway DB Contract
AT&T Corporation	Purchasing waiting for tax clearance from utility	Engineering cost requested
Chevron Products Company	Complete	Engineering cost requested
Hawaiian Telcom, Inc.	Under review by utility	Engineering cost requested
Hawaiian Electric Company, Inc	Compensation through agreement with GEC	Cost Received from utility
Oceanic Time Warner Cable	Complete	Engineering cost requested
Pacific LightNet Inc.	Purchasing waiting for tax clearance from utility	Engineering cost requested
Sandwich Isle Communications Inc.	Purchasing waiting for tax clearance from utility	Engineering cost requested
The Gas Company	Complete	Cost Received from utility
TW Telecom	Complete	Cost Received from utility
Tesoro Hawaiian Corporation	Not returned by utility	Engineering cost requested

### 2.2.3 Delivery Method

In accordance with the Contract Packaging Plan developed by the City, the project guideway is to be implemented in four segments. A summary of the Contract Packaging Plan for PE is currently included in the PMP as the project delivery approach for the Project. The four segments and method of delivery identified are:

- Segment I – East Kapolei to Pearl Highlands – DB
- Segment II – Pearl Highlands to Aloha Stadium – DB
- Segment III – Aloha Stadium to Middle Street Station – DBB
- Segment IV – Middle Street Station to Ala Moana Center – DBB

The DB approach is being planned to advance the project schedule in order to minimize escalation costs and start construction of the initial portion of the project while the remainder of the project proceeds through the DBB process. Work on these early contracts (Segments I & II, Maintenance and Storage Facility and Vehicle/Core Systems) is planned to be initiated after the ROD but ahead of the FFGA, utilizing excise tax funding. However, as noted above, any design activities beyond PE or construction activities not covered by automatic pre-award authority would require an LONP, which would be considered on a case-by-case basis. Also as noted previously, Segment III and IV are currently planned to be constructed using DBB methodology. However, the City is now considering the use of DB methodology for these segments. A final determination will not be made until later in the Project.

Appendix B provides the status of the various design and construction contracts associated with this Project. The following is a list of contracts, delivery methods and contract packages anticipated for the project (number in parentheses indicates number of anticipated contracts if more than one):

- Professional Services
  - Project Management Support Consultant
  - General Engineering Consultant
  - Legal Services
  - Leadership in Energy and Environmental Design (LEED) Commissioning
  - Insurance Consulting for Owner Controlled Insurance Program

- Drilled Shaft Load Testing
- Design and Construction Services
  - Guideway & Utilities Design (2)
  - Stations Design (8)
  - Design-bid-build (DBB) Construction Engineering Inspection (5-7)
- Construction and Procurement Contracts
  - 3 Design-Build Contracts – Guideway (2) and MSF
  - Design-Bid-Build Contracts
    - Stations (8) – 1-3 stations each contract
    - Utility Relocation (2)
    - Guideway Construction (2)
    - System-wide Landscaping
  - Vehicle/Core Systems Design-Build-Operate-Maintain (DBOM)
  - Elevator/Escalator

#### 2.2.4 Vehicle Status

Vehicle procurement is included in the Core Systems DBOM Contract. The current assumptions for the vehicles include a total active rail car fleet of 76 “light metro” railcars. The railcar being proposed is an automated light metro car, similar to railcars currently in operation in Vancouver, Copenhagen, and Oslo, but not in the United States. The railcar would have three doors per side and a length of approximately 60 feet. Vehicles could run in two-, three-, or four-railcar trains. Following is a summary of the anticipated vehicle characteristics (subject to change based on proposals that will be received from DBOM contractors):

- 76 light metro vehicles (identified as heavy rail in SCC workbook)
- Standard gauge, steel wheel on steel rail
- Fully automated, manual operation possible (hostler panel)
- Nominal vehicle dimensions:
  - Length: 60 feet
  - Width: 10 feet
  - Height: Up to 13.3 feet
  - Floor Height: 3.77 feet above top of rail (at entry)
- Nominal Passenger Capacity: 190 per vehicle (AW2 load)
- Electric traction via third rail, nominal 750V direct current supply, all axles powered
- Semi-permanently coupled, bi-directional trainsets
- Wide gangways between end and middle cars
- 2 to 3 double passenger plug doors per side (per car)
- Manual crew doors with steps
- Dynamic / regenerative braking
- Alternating current propulsion
- 30+ year design life

### 2.3 Project Management Plan and Sub-Plans

The following table presents the status of each City-provided management deliverable:

Management Deliverable	Revision No.	Latest Revision Date	Next Revision Date	Notes
Project Management Plan (PMP)	3	16-Feb-10	TBD	Under review by the PMOC; another update will be required for FD request
Quality Management Plan (QMP)	1	May-09	Apr-10	The update is to address QA/QC procedures to be implemented by the GEC II, as well as DB and DBB
Real Estate Acquisition Management Plan (RAMP)	3	15-Oct-09	TBD	Rev. 4 will be issued once more accurate target for ROD is identified
Bus Fleet Management Plan (BFMP)	0	21-Apr-08	Apr-10	Update will be needed for FD approval
Rail Fleet Management Plan (RFMP)	0	Apr-09	TBD	Update will be prepared by Core Systems Contractor
Safety and Security Management Plan (SSMP)	1	24-Aug-09	Mar-10	
Safety and Security Certification Plan (SSCP)	0	-	Feb-10	Under review by PMOC
System Safety Program Plan	-	-	TBD	Will be prepared by Core Systems Contractor
System Security & Emergency Preparedness Plan	-	-	TBD	Will be prepared by Core Systems Contractor

## 2.4 Project Schedule Status

The City developed a Master Project Schedule (MPS) and “baselined” the MPS at the request of the PMOC in the fall of 2009. The most recent MPS update was provided to the PMOC at the March 2010 Progress Meeting and had a data date of February 15, 2010. The project alignment contains four geographical segments, from west to east: West Oahu/Farrington, Kamehameha, Airport, and City Center. The City plans to open each segment in the same easterly direction as construction. The MPS “interim milestone” operational dates and the project Revenue Operation Date (ROD) are included in the table below.

Activity ID	Delivery Method	Milestone Description	Finish Date		Variance (Weeks)
			Baseline	MPS Data Date 15-Feb-10	
<b>West Oahu / Farrington Highway Segment</b>					
I997	DB	Open Waipahu to Leeward Section	14DEC12	12JUN13	26
M999	DB	Maintenance Service Facility	01OCT13	16FEB14	20
I998	DB	Open East Kapolei to Leeward CC Section	31JUL14	16MAR15	33
I999	DB	Open Leeward CC - Pearl Highlands Section	27APR15	11DEC15	33
<b>Kamehameha Segment</b>					
J999	DB	Open Kamehameha Section	14SEP16	13MAR17	26
<b>Airport Segment</b>					
Z999	DBB	Open Airport Section	31OCT17	27FEB18	17
<b>City Center Segment</b>					
9999	DBB	Open to Ala Moana Center *** (ROD) ***	03MAR19	30JUN19	17

As noted in the latest MPS update, all of the target dates have slipped from the baseline. It is the PMOC's opinion that the current MPS does not contain sufficient detail and logic to accurately portray the City's planning efforts to execute the program within the parameters set within the latest budget estimate. This is evidenced by the unrealistic dates for LONPs identified Section 2.1.3.

The PMOC understands the MPS remains in a dynamic state of development as the project refines in PE and Final Design, however, its current fundamental condition is not commensurate with control methods required to manage an awarded DB contract, or the multi-billion program as a whole.

The City needs to further refine the MPS and begin submitting monthly progress updates as part of their condition to enter the PE phase. The City has stated they could not revise the MPS due to not knowing when a ROD would be issued. During the PMOC March 2010 Progress Meeting, the PMOC re-emphasized the importance of maintaining of program schedule with up to date information. The PMOC recognizes such information may change as the Project progresses, but at a minimum, targets should be identified to track metrics for the Project. It is also recommended that the City develop a monthly reporting format outline in preparation of submitting monthly and quarterly reports to conform to FTA reporting requirements.

The following is a 90-day look ahead for important activities associated with the Project:

Period: March – June 2010		
Activity	Responsibility	Date
NTP #1A WOFH DB Contract*	City	TBD
Monthly Progress Meeting	FTA, PMOC and City	April 7, 2010
Issue RFP Part 2 for KH DB	City	March 19, 2010
Core Systems DBOM Proposals Due	City	April 30, 2010
Quarterly Progress Review Meeting	FTA, PMOC and City	May 2010 (TBD)
Publish FEIS/NOA*	FTA, City	TBD
FTA Issues ROD*	FTA	TBD
Begin ROW Purchasing*	City	TBD

\*Note: Dates are dependent on adequate resolution of all issues identified in Section 2.1.3.

## 2.5 Project Cost Status

The Project Budget submitted with the City's request to enter PE is as follows:

Base Cost Estimate	\$3.838 billion
Total Contingency	\$1.219 billion (31.8% of Base Cost Estimate)
Finance Charges	\$0.290 billion
<b>Total Project Cost</b>	<b>\$5.348 billion</b>

Additional project costs include the following:

Pre-PE Expenditures	\$0.082 billion
Financing Charges	\$0.103 billion (post-revenue operations)
<b>Grand Total Project Cost</b>	<b>\$5.532 billion</b>

With the following potential changes, the City feels the Total Project Cost could be reduced from \$5.532 billion to \$5.391 billion:

- Advancing the Kamehameha Highway Guideway & Utilities Contract through the use of DB procurement
- Incorporating costs from the accepted WOFH DB Contract price proposal

The City is preparing a bottoms-up cost estimate for the Project. It is anticipated that this estimate will be available for review by the PMOC in April 2010.

### **2.5.1 Standard Cost Category (SCC)**

The SCC Workbook, including Main and Inflation worksheets, is submitted as a separate electronic file. The City is in the process of preparing a detailed bottoms-up estimate. In addition, the PMOC recommends that the City perform quality assurance checks to verify scope inclusivity and escalation of SCC categories in accordance with the MPS. The cost estimate and Basis of Estimate should provide more justification and backup documentation supporting the quantification and assumptions for the “soft costs” and related General Conditions for the project.

### **2.5.2 Funding Sources**

The following are the project capital revenue (funding) sources provided by the City during the January 2010 Progress Meeting:

General Excise Tax (GET)	\$3.698 billion
Section 5309	\$1.550 billion
Section 5307	\$0.300 billion
ARRA (Section 5307)	\$0.004 billion
Interest	\$0.011 billion
<b>Total</b>	<b>\$5.563 billion</b>

The City is hopeful that it will be able to reduce the need for Section 5307 funds through project development (i.e. refined Base Cost Estimate and revenue estimates during PE) and an aggressive bidding environment.

The GET surcharge receipts received to date are approximately \$429 million. Additional surcharge revenues are received approximately 30 days following the end of each quarter.

## **2.6 Project Risk**

The PMOC completed a scope, schedule, and cost review in advance of completing a risk assessment of the Project as part of the evaluation of the Grantee’s request to enter PE. A FINAL Spot Report was submitted in July 2009. The Spot Report included recommendations for cost and schedule contingency and identified key risks. However, this effort did not include development of risk management tools (e.g., Primary Mitigation Deliverables, Secondary Mitigation Activities, or a Risk and Contingency Management Plan). It is anticipated that the

risk management tools will be developed in conjunction with an update of the risk assessment to support the City's request to enter Final Design.

## 2.7 Action Items

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	Schedule real estate workshop	PMOC	4-Nov-09	TBD		Open
2	Provide FTA with “making the case” approach letter for LONP	City	4-Nov-09	Apr-10		City will provide after they complete the bottoms up estimate and financial plan
3	FTA prepare memo to Corporation Council on confidentiality	FTA	16-Dec-09	Jan-10		Under review by the FTA
4	Schedule Roadmap meeting for Entry into FD	FTA/PMOC	16-Dec-09	Jan-10		Pending direction from FTA
5	Provide signed MOA with DHHL for Navy Drum Site	City	Jan-10	Feb-10		Not signed yet
6	Provide Section 106 Programmatic Agreement comments	FTA	Jan-10	Feb-10		In FTA legal review
7	Provide sample Force Account and Claims Avoidance Plans	PMOC	Jan-10	Feb-10		
8	Populate Final Design Roadmap	City	Jan-10	Feb-10		Ongoing
9	Check on status of FTA SSOA Letter	PMOC	Jan-10	Feb-10	26-Feb-10	Closed
10	Provide PMOC with PMSC Contract	City	Jan-10	Feb-10	17-Feb-10	Closed
11	Provide PMOC with copy of drawing indicating impact of guideway on parcel located at 1156-1164 Waimanu Street	City	11-Feb-10	Feb-10	2-Mar-10	Closed
12	Discuss contingency requirements for DB contracts entering FD	PMOC	Mar-10	Apr-10		
13	Check on status of Real Estate appraisals provided to FTA	PMOC	Mar-10	Apr-10		
14	Provide outline of Monthly Report	City	Mar-10	Apr-10		

### 3.0 APPENDICES

#### Appendix A: Acronym List

BFMP	▪ Bus Fleet Management Plan
DB	▪ Design-Build
DBB	▪ Design-Bid-Build
DBOM	▪ Design-Build-Operate-Maintain
DHHL	▪ Department of Hawaiian Homelands
FD	▪ Final Design
FEIS	▪ Final Environmental Impact Statement
FFGA	▪ Full Funding Grant Agreement
FONSI	▪ Finding of No Significant Impact
FTA	▪ Federal Transit Administration
FY	▪ Fiscal Year
GEC	▪ General Engineering Consultant
GET	▪ General Excise Tax
HAR	▪ Hawaii Administrative Rules on Procurement
HDOT	▪ Hawaii Department of Transportation
HHCTC	▪ Honolulu High Capacity Transit Corridor Project
LCC	▪ Leeward Community College
LEED	▪ Leadership in Energy and Environmental Design (LEED)
LONP	▪ Letter of No Prejudice
MSF	▪ Maintenance and Storage Facility
NEPA	▪ National Environmental Policy Act
NOA	▪ Notice of Availability
NTP	▪ Notice to Proceed
PA	▪ Programmatic Agreement
PE	▪ Preliminary Engineering
PMOC	▪ Project Management Oversight Contractor
PMP	▪ Project Management Plan
PMSC	▪ Project Management Support Consultant
QMP	▪ Quality Management Plan
RAMP	▪ Real Estate Acquisition and Management Plan
RFMP	▪ Rail Fleet Management Plan
RFP	▪ Request for Proposals
RFQ	▪ Request for Qualifications
ROD	▪ Record of Decision
ROD	▪ Revenue Operation Date
RPZ	▪ Runway Protection Zone
SCP	▪ Safety Certification Plan
SHPO	▪ State Historic Preservation Office
SSMP	▪ Safety and Security Management Plan
SSOA	▪ State Safety Oversight Agency
SSPP	▪ System Safety Program Plan
WOFH	▪ West Oahu/Farrington Highway
YOE	▪ Year of Expenditure

## Appendix B: Contract Status

The following sections provide the scope and status of the various contracts identified for this Project.

### Project Management Support Consultant (PMSC) Contract.

- Scope – The consultant will serve as a program manager in providing oversight of the PE, FD, and construction activities for the DB and DBB contracts.
- Status – The City awarded a contract to InfraConsult LLC in November 2009 to provide Project Management Support Services. The PMSC Agreement is for five years with a Not-to-Exceed amount of \$36.7 million.

### General Engineering Consultant (GEC) II Contract

- Scope – The consultant will provide services related to elevated guideway engineering, systems engineering, rail station design, construction management oversight, procurement, contract administration, configuration control, claims support, scheduling, project financing and environmental planning. After the qualifications are evaluated and the top qualifier is selected, the City will develop the detailed scope of the contract. The GEC II Contract will include a ten year period of performance. The City expects to hire separate Construction Engineering and Inspection firms to provide field services for the DBB contracts.
- Status – This contract is on hold until after the Record of Decision (ROD) is issued. The City has issued a contract amendment that extended the period of performance of the GEC I Contract to June 2010 and authorized an increase in budget of \$12 million.

### West Oahu/Farrington Highway (WOFH) DB Contract

- Scope – This contract includes the design and construction of a portion of the guideway alignment from the initial station at East Kapolei and continuing approximately 6.8 miles to a point just east of the planned Pearl Highlands station. The alignment runs along the east side of North South Road. This portion of the guideway is being identified as the West Oahu/Farrington Highway Design-Build Contract. The guideway is comprised mostly of a two-track aerial structure with a 0.3-mile portion of twin single-track guideways and a 0.3-mile section of guideway at grade.

As the alignment approaches Leeward Community College (LCC), the guideway alignment traverses from the median of Farrington Highway to the makai side of the highway where it transitions to an at-grade section. Once at grade, the entrance(s) to the Maintenance and Storage Facility (MSF) is (are) encountered. The Guideway crosses Ala Ike Road at two locations, with the roadway passing under the guideway alignment in box-culverts. At the LCC Station, a station plaza area is planned to allow passengers to walk under the guideway to access either platform.

- Status – Kiewit Constructors was awarded a \$482,924,000 contract on November 18, 2009. Notice to Proceed (NTP) #1 was issued on December 1, 2009 to Kiewit. The maximum reimbursable amount under NTP #1 is \$27 million. NTP #1 is for approximately 90 days and the scope of work for Kiewit is limited to the elements of PE

whose principal purpose is refinement and validation of information supporting the NEPA process. NTP #2 will be issued shortly following the issuance of the Record of Decision (ROD). Should NTP #2 not be issued within the required timeframe per the contract, the City will meet with the contractor to re-evaluate the work schedule and make adjustments as deemed necessary.

The City intends to issue NTP #1A to Kiewit to authorize initial design activities. The City believes this work is consistent with the permission the City received from FTA to enter PE. However, the activities being considered under NTP #1A are still under review by the FTA. NTP #1A would authorize \$25.8 million for PE activities to be completed. The City has indicated that NTP #1A would provide sufficient work for the contractor through approximately July 2010. NTP #3 is to be issued for Final Design work activities, as defined by the City. NTP #4 is to be issued for construction activities.

The City will need to seek Letter(s) of No Prejudice for any work beyond the scope of NTP #2. The current MPS does not contain realistic dates for LONPs as discussed in Sections 2.1.2 and 2.4 of this report.

- Schedule – The contract schedule was provided by Kiewit with its proposal. With the City’s issuance of NTP #1 on December 1, 2009, Kiewit had 45 calendar days, or until January 14, 2010, to submit a detailed baseline schedule to the City for review and approval. The City has indicated that the schedule submittal has not been approved pending a determination of issuance of the ROD, which will affect the contract schedule. The PMOC requested a copy of the schedule electronic file once approved by the City.
- Cost
  - Original Contract Value – \$482,924,000
  - Current Contract Value – \$482,924,000
  - Expended to Date – \$12,700,000
  - % Expended – 2.67%
- Issues or Concerns
  - The City received two “Written Notice of Project Change” on March 1, 2010 from Kiewit. The first notice involves cost for insurance coverage. The City intended to implement an Owner Controlled Insurance Program (OCIP) for the project, as stipulated in Special Provisions 3.1 of the contract. However, procurement of an Insurance Consultant to help manage the OCIP has been delayed due to protests. Therefore, the City has not been able to initiate their OCIP, nor do they know when this issue will be resolved. Subsequently, Kiewit notified the City that they will be seeking reimbursement for extra costs to provide insurance that would have been covered under the OCIP. The extent of these costs are not yet known because it is uncertain how long Kiewit will be required to self insure. This can not be determined until the issues with the procurement of the Insurance Consultant are resolved.

The second notice is a result of time delays experienced with the issuance of Notice to Proceeds (NTP) as stipulated in the contractual documents. NTP #1,

which was issued on December 1, 2009, stated that NTP #2 would be issued within 90 days, or by March 1, 2010, and upon issuance of the ROD. Since this has not occurred, Kiewit will be requesting additional compensation and/or time once NTP #2 is issued. The contract requires that Kiewit submit a detailed summary of costs associated with the claim within 30 days of notification. However, Kiewit has requested that the 30-day period for submission of this information start upon issuance of NTP #2.

This second Notice of Project Change is primarily based on the ongoing delay of issuing a NTP for the contract. At this time the time delay can not be quantified and therefore can not be completely realized.

- The executed agreement for the WOFH DB Contract calls for issuance of all four NTPs within 120 calendar days of the December 1, 2009 NTP #1 date. If that does not occur, the City will review Kiewit's schedule of milestones and the baseline schedule to determine whether there has been a schedule or a cost impact. The 120 calendar day schedule for issuance of all NTPs was not met.
- The City intends to issue NTP #1A, which would allow the contractor to proceed with PE activities. NTP #1A will authorize \$25.8 million in PE activities to be completed. NTP #1A would provide Kiewit enough work to last until July 2010, after which the City will seek LONPs for FD and Construction. Kiewit's contract shows construction activity in September 2010.
- The PMOC cautioned that the City should share future NTPs with the FTA and PMOC in advance of their issuance. The purpose of this review is to ensure that the City remains within the constraints of the New Starts requirements.

#### Kamehameha Highway Guideway DB Contract

- Scope – The contractor will design and construct a portion of the guideway alignment from the initial station at East Pearl Highlands to a point just east of the planned Aloha Stadium Station, a distance of approximately 3.9 miles. This portion of the guideway is being identified as the Kamehameha Highway Design-Build Contract. The guideway is comprised of a two-track aerial structure.
- Status – The Kamehameha Highway Guideway was originally to be constructed using DBB, but the City decided to utilize DB to take advantage of the perceived favorable bid climate. RFP Part 1 was issued on November 18, 2009, with responses received on January 5, 2010. RFP Part 2 will be issued on March 19, 2010. RFP Part 2 proposals are due on July 16, 2010. The City will make a selection on September 3, 2010 and issue NTP #1 on October 8, 2010. The contract is set up for multiple NTPs, if needed.
- Cost – The budget for this contract is \$323.5 million.
- Schedule – The Kamehameha Guideway DB project is approximately 48 months in duration.
- Issues or Concerns

- The PMOC is concerned that FTA and the PMOC will not be afforded an opportunity to review RFP Part II documents in advance of their issuance due to the City's confidentiality requirements for DB procurement.

#### Maintenance and Storage Facility DB Contract

- Scope – The contractor will design and construct the MSF to accommodate 80 revenue vehicles. The maximum capacity of the site is 100 revenue vehicles. The Shop Facility will include administrative and operational offices for the agency, including an Operations Control Center. The MSF will be designed and commissioned to achieve Leadership in Energy and Environmental Design (LEED) Green Building Rating System Silver Certification, and will operate in accordance with FTA Sustainable Maintenance and Operational Standards. The scope of the contract includes the procurement of all rail materials.
- Status – RFP Part 1 was issued on May 28, 2009. RFP Part 2 was issued on July 24, 2009 and proposals were received on February 17, 2010. The City expects to make a selection in March 2010. However, it does not intend to award the contract until after receipt of a ROD. The City is considering using multiple NTPs for this contract.
- Cost – The budget for this contract is \$234 million, of which approximately \$156 million is for MSF design and construction and the remainder is for track material procurement.
- Issues or Concerns
  - The City is including two separate MSF sites, which are identified in the NEPA document as a 44-acre vacant site near Leeward Community College and a 41-acre agricultural site in Hoopili. The City continues to identify two potential sites since the DEIS did so as well. The Navy Drum Site is the City's preferred location for the MSF and the current RFP documents reflect the Navy Drum site.
  - The City must sign a License Agreement with the Department of Hawaiian Homelands (DHHL) for the Navy Drum Site. To do so, they must first execute a Memorandum of Agreement (MOA). The MOA has been approved by the City Council, and DHHL has begun its approval process.
  - The PMOC is concerned that FTA and the PMOC have not been afforded an opportunity to review RFP Part II documents in advance of their issuance due to the City's confidentiality requirements for DB procurement.

#### Vehicle/Core Systems DBOM Contract

- Scope – A Design-Build-Operate-Maintain (DBOM) contract is anticipated to be awarded by the City in June 2010 and will include the following:
  - Design and manufacture of vehicles
  - Design, manufacture, and installation of systems components including train control communications, traction power, and fare vending equipment
  - Operations and Maintenance.

The Operations and Maintenance contract will extend 5 years beyond the full build revenue date (2019), with an additional 5 year option. The Operations and Maintenance

contractor will be responsible for Intermediate Operating Section Openings (6 sections including the demonstration section opening in 2012).

- Status – RFP Part 1 for the Vehicles/Core Systems Design-Build-Operate-Maintain Contract was issued on April 8, 2009. RFP Part 2 was issued on August 17, 2009, with responses due on April 20, 2010. The City will consider requesting a Best and Final Offer, which would likely be submitted in May 2010. The City then expects to make a selection in June 2010 and award the contract in September 2010. However, the City has indicated that they will not award this contract until after receipt of a ROD.
- Cost – The budget for this contract is \$650 million, including equipment and installation.
- Issues or Concerns
  - The PMOC is concerned that FTA and the PMOC have not been afforded an opportunity to review RFP Part II documents in advance of their issuance due to the City's confidentiality requirements for DB procurement.

#### Airport Guideway & Utility Relocation DBB Contract

- Scope – The project delivery method for the guideway and utility relocations will be DBB. The City anticipates awarding separate construction contracts for the utility relocation and guideway. This segment extends from Aloha Stadium Station to Lagoon Drive Station.

It should be noted that the City is now considering the use of DB methodology for these segments. A final determination will not be made until later in the Project.

- Status – This segment is in the PE phase. The PE drawings are under final review by the City, and the GEC is completing quantity take-offs. Utility relocation and guideway construction are anticipated to begin in late 2011 and early 2012, respectively.
- Cost – The estimated contract value will be available when the bottoms-up estimate is complete.
- Issues or Concerns
  - None identified at this time.

#### City Center Guideway & Utility Relocation DBB Contract

- Scope – The project delivery method for the guideway and utility relocations will be DBB. The City anticipates awarding separate construction contracts for the utility relocation and guideway. This segment extends from Lagoon Drive Station to Ala Moana Center Station.

It should be noted that the City is now considering the use of DB methodology for these segments. A final determination will not be made until later in the Project.

- Status – This segment is in the PE phase. The PE drawings are under final review by the City, and the GEC is completing quantity take-offs. Utility relocation and guideway construction are anticipated to begin in late 2011 and early 2012, respectively.
- Cost – The estimated contract value will be available when the bottoms-up estimate is complete.
- Issues or Concerns
  - None identified at this time. The City is in the process of finalizing third party agreements for utility relocations.

### Station Packages

- Scope – All stations will be implemented using DBB. The City has developed station group packages for design, and it intends to issue construction contracts based on those station packages. Following are the packages that the City is currently considering:
  - The West Oahu Station Group, consisting of three stations: East Kapolei, UH-West Oahu and Hoopili.
  - The Farrington Station Group, consisting of three stations: West Loch, Waipahu Transit Center and Leeward Community College.
  - The Pearl Highlands Station, H2 Ramps and Garage Group, consisting of one station at Pearl Highlands, new ramps from H2 to access the station and a multi-level parking structure.
  - The Kamehameha Station Group, consisting of two stations: Pearlridge and Aloha Stadium.
  - The Airport Station Group, consisting of three stations: Pearl Harbor Navy Base, Honolulu International Airport, and Lagoon Drive.
  - The Dillingham Station Group DBB contract, consisting of three stations: Middle Street Transit Center, Kalihi and Kapalama.
  - The City Center Group, consisting of three stations: Iwilei, Chinatown and Downtown.
  - The Kakaako Station Group, consisting of three stations: Civic Center, Kakaako and Ala Moana Center
- Status – Design is procured in a one-step Request for Qualifications (RFQ) process. The RFQ for Farrington Stations Design was released on October 13, 2009, with responses received in early January 2010. The RFQ for the West Oahu Station Group was released January 13, 2010, with responses received on February 17, 2010. The City has not established a firm date for selection of a consultant for either design contract.
- Cost
  - The estimated contract value for each station design package is \$2 million dollars.
- Issues or Concerns
  - None identified at this time.

### Elevators and Escalators

- Scope – The City intends to issue a DB contract to furnish, install, test, and commission all elevator and escalator equipment.
- Status – The City anticipates procuring this contract in 2011.
- Schedule – Following are the key contract dates:
  - Prepare Procurement Packages – January 2011
  - Bid-Award Elevator Packages – May 2011
  - Elevator & Escalators Construction – January 2012
- Cost – The estimated contract values will be available when the bottoms-up estimate is complete.
- Issues or Concerns
  - None identified at this time.

## Appendix C: PE Approval Letter Requirements

No.	Item	City Responsible Person	Date Due	Completion Date	Comments
<b>Project Scope, Design and Development</b>					
1	Identify any third party agreements necessary for project completion, including utility agreements with private and public owners and military	LR / HLB	Jan-10		Status Matrix being sent to the PMOC on a monthly basis
2	Resolve the specific regarding proximity of the guideway to runways 22R/4L and 22L/4R at the Honolulu International Airport with HDOT and FAA	HLB	Ongoing		
3	Fully develop vehicle basis of design and functional sizing	JS	Mar-10		PMOC will review selected proposal to determine whether it meets operational criteria
4	Determine rail fleet size requirement	JS	May-10		Delayed due to change in CORE Systems proposal due date
5	Fully develop scope for the administration building and operations control center	JS / HLB	Jul/Aug-10		
6	Determine the final location of the maintenance and storage facility	FM			Address in FEIS reconciliation table
7	Finalize a contracting packaging plan which includes a source selection plan(s) and contract specific work plans	SZ	Feb-10		DRAFT uploaded to PS site on February 16, 2010 with all contract budgets redacted
8	Develop strategies to streamline the City's process to award contracts and to enter into grant agreements, especially as applicable to FTA grants	LR	Apr-10		Resolution provided to FTA and PMOC after City Council approval in Dec-09. Will be included on ballot in Nov-10 election.
9	Develop a preliminary operation plan	JS	Mar-10	08-Feb-10	Uploaded to PS site
10	Ensure the service velocity does not erode over the next course of design changes	JS	Mar-10		On Schedule - currently being evaluated
<b>Project Schedule</b>					
11	Provide a baseline of the master Project Schedule (MPS) early in PE which will be used for monthly progress updates and tracking schedule variances	MH	Jan-10	29-Oct-09	Uploaded to PS site including horse blanket schedule.
12	Address the utilization manpower and equipment resource loading and budget and cost loading	MH	Mar-10		City acknowledged that schedule is cost loaded but they will not utilize resource loading

No.	Item	City Responsible Person	Date Due	Completion Date	Comments
13	Include critical activities in the MPS: utility activities, real estate acquisitions, system integration, starting and testing, operational commissioning and training, vehicle procurement, major construction material procurement, FTA review and comment, detail activities for early construction packages	MH	Jul-10		Delayed until after the CORE Systems proposals are submitted and contractor selected
14	Develop a right-of-way schedule	MH	Jan-10	29-Oct-09	Uploaded to PS site
15	Modify the Work Breakdown Structure to cross over with the project budget and cost breakdown structure	MH	Jan-10	21-Dec-09	
<b>Project Cost</b>					
16	Develop a detailed bottoms-up-style project cost estimate to Standard Cost Category format. The estimate should be detailed sufficiently to determine distributions of materials, labor, equipment and genial conditions elements at a minimum. The soft cost estimates should be based on staffing plans, force account plans, contracts and so forth rather than solely on percentages. The estimate should eliminate parametric-style values, cost estimating relationships, and lump sums as much as possible during PE	MH	Apr-10		On schedule
17	Escalate the cost estimate in accordance with the MPS	MH	Apr-10		Need to wait until Item No. 16 is complete
18	Provide justification and backup documents to support the quantification and assumptions for the "soft costs" and related general conditions of the project	MH	Apr-10		Need to wait until Item No. 16 is complete
<b>Technical Capacity</b>					
19	Update the Project Management Plan to bring it into full conformance with FTA requirements, and implement the configuration management and change control mechanism	SZ	Feb-10	16-Feb-10	Uploaded to PS site; under review by PMOC
20	Develop detailed staffing plans for all remaining phases of the project to ensure adequate technical capacity. The plans should include the dates by which the City will fill each key position. All key City management positions should be filled during PE.	TH/PR	Jun-10		
21	Work with the State of Hawaii to establish a State Safety Oversight Agency office to oversee the project	KA	Apr-10	26-Feb-10	FTA sent letter to governor; awaiting action by state

No.	Item	City Responsible Person	Date Due	Completion Date	Comments
22	Submit a fully developed Rail Fleet Management Plan	JS	Aug-10		On Schedule
23	Have a quantifiable metrics for measuring the real status of work, both cost and schedule of all professional service contracts, and any inter-local agreements for participatory services	MH	Mar -10		
24	Develop a Contingency Management Plan which will identify the specific risks and implement the anticipated mitigation measures	SZ			After risk assessment plan is started
25	Develop an Environmental Mitigation Plan that identifies required environmental mitigation actions and the party responsible for the mitigation and that will eventually become the basis for quarterly mitigation monitoring and quarterly mitigation reports	JA/FM	Mar-10		Being worked on; will be complete in first quarter 2010
26	Update and implement the:				
	Real Estate and Acquisition Plan	JI	May-10		Pending issuance of ROD
	Bus Fleet Management Plan	PK	Jun-10		
	Safety and Security Management Plan	KA	Mar-10		
	Quality Management Plan	SZ	Apr-10		