**MASSACHUSETTS BAY TRANSPORTATION AUTHORITY**

**SOUTH STATION HSIPR EXPANSION**

# PROJECT MANAGEMENT PLAN

**PROJECT SHORT TITLE:** SOUTH STATION EXPANSION

**HSIPR GRANT NO.:**

# MASSACHUSETTS BAY TRANSPORTATON AUTHORITY

# PROJECT MANAGEMENT PLAN

## 1. GENERAL INFORMATION

### 1.1 PROJECT DESCRIPTION

| | |
|---|---|
| MBTA PROJECT NO.: | |
| HSIPR GRANT NO.: | |
| PROJECT NAME: | **The Boston South Station HSIPR Expansion Project** |

BRIEF DESCRIPTION OF PROJECT SCOPE:

The Boston South Station High Speed Intercity Passenger Rail (HSIPR) Expansion Project (the "Project") consists of improvements to South Station needed to accommodate increased Northeast Corridor HSIPR and other passenger rail services between Washington, DC and Boston.
This scope of proposed work includes project management, public participation, data collection, preliminary engineering, preliminary capital and operating cost estimates, alternatives analysis, and preparing an Environmental Notification Form (ENF) and a Draft Environmental Assessment/Environmental Impact Report (Draft EA/EIR) for the Boston South Station HSIPR Expansion Project. Project elements include:

- Relocating the USPS facility to South Boston;
- Demolishing the existing USPS South Annex;
- Adding seven (7) tracks and four (4) canopied platforms at the terminal, while lengthening several of the existing platforms;
- Expanding the passenger terminal, including a secondary head house for the new tracks and two new concourses;
- Reconfiguring track interlockings and improving signals, traction power, and other systems;
- Finalizing and implementing a layover yard solution for both Amtrak's overnight and MBTA's layover needs;
- Restoring Dorchester Avenue, a historic South Boston connection along the Station's harbor edge, for public use; and
- Preparing available Station parcels and air rights for potential private real estate development.

### 1.2 LEGAL AUTHORITY AND REQUIREMENTS

The Massachusetts Department of Transportation (MassDOT) has broad powers and responsibilities for transportation in the Commonwealth of Massachusetts and under Massachusetts General Laws Chapter 161 c, it is directed to improve the rail system in the state. MassDOT owns and oversees active railroad corridors and is the umbrella organization for transportation agencies with significant experience in designing and building

rail projects and in administering ARRA funds. The agency's rail office has overseen repair and rehabilitation projects of its stations and on its rail lines for the past 20 years, with the support of consultants and experienced staff at agencies within the transportation secretariat.

As one of five MassDOT operating Divisions, the Rail & Transit Division is responsible for all transit, freight and intercity rail initiatives and oversees the MBTA and all Regional Transit Authorities of the Commonwealth. The MBTA Board of Directors serves as the governing body of the MBTA, which itself remains a separate authority within MassDOT. However, the five members of the MassDOT Board of Directors also serve as the MBTA Board of Directors. MassDOT's Rail & Transit Administrator also serves as the General Manager of the MBTA.

The Massachusetts Bay Transportation Authority (MBTA) is a body politic and corporate, and a political subdivision of the Commonwealth of Massachusetts. The MBTA is duly organized and existing pursuant to Chapter 161A of the Massachusetts General Laws (as amended) and has a usual place of business at 10 Park Plaza, Boston, Massachusetts. Its primary purpose is to hold, operate and manage the mass transportation facilities and equipment acquired by the Authority.

The South Station Project Management Team will oversee the Preliminary Engineering and National Environmental Policy Act Compliance (PE/NEPA) for the Boston South Station HSIPR Expansion Project in accordance with all applicable federal and state laws and regulations, codes and guidelines, including the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), as well as the Cooperative Agreement executed by and between the Federal Railroad Administration (FRA) and MassDOT.

## 1.3 HSIPR PROJECT SELECTION PROCESS

All proposed HSIPR projects have been subject to an extensive screening and approval process, to ensure that those included in an executed FRA grant are consistent with federal, state and regional expectations and requirements for the HSIPR program.

### 1.3.1 FEDERAL HSIPR PURPOSE

On April 16, 2009 a new vision for developing high-speed passenger rail in America was announced for a collaborative effort among the Federal Government, States, railroads, and other key stakeholders to help transform America's transportation system through the creation of a national network of high-speed rail corridors. To achieve this vision, the Federal Railroad Administration (FRA) launched the High-Speed Intercity Passenger Rail (HSIPR) Program in June 2009.

In the long-term, the HSIPR Program aims to build an efficient, high-speed passenger rail network connecting major population centers 100 to 600 miles apart. In the near-term, the program will aid in economic recovery efforts and lay the foundation for this high-speed passenger rail network through targeted investments in existing intercity passenger rail infrastructure, equipment and intermodal connections. On January 28, 2010, President Obama announced the first recipients selected to receive grant funding under the HSIPR Program (press release). These initial strategic investments are focused on three key areas that will deliver transportation, economic recovery and other public benefits:

1. Building new high-speed rail corridors that will fundamentally expand and improve passenger transportation in the geographic regions they serve

2. Upgrading existing intercity passenger rail services

3. Laying the groundwork for future high-speed passenger rail services through smaller projects and planning efforts

### 1.3.2 HSIPR PROJECT APPROVALS

This South Station Expansion project proceeded through the approval process outlined in Section 3.2 "HSIPR Project Selection Process" of the South Station Expansion Oversight Plan.

- MassDOT Approval
- Boston MPO Approval (TIP Amendment)
- MBTA Board Approval (CIP Amendment)
- Department of Labor Review
- FRA Approval (Grant Executed)

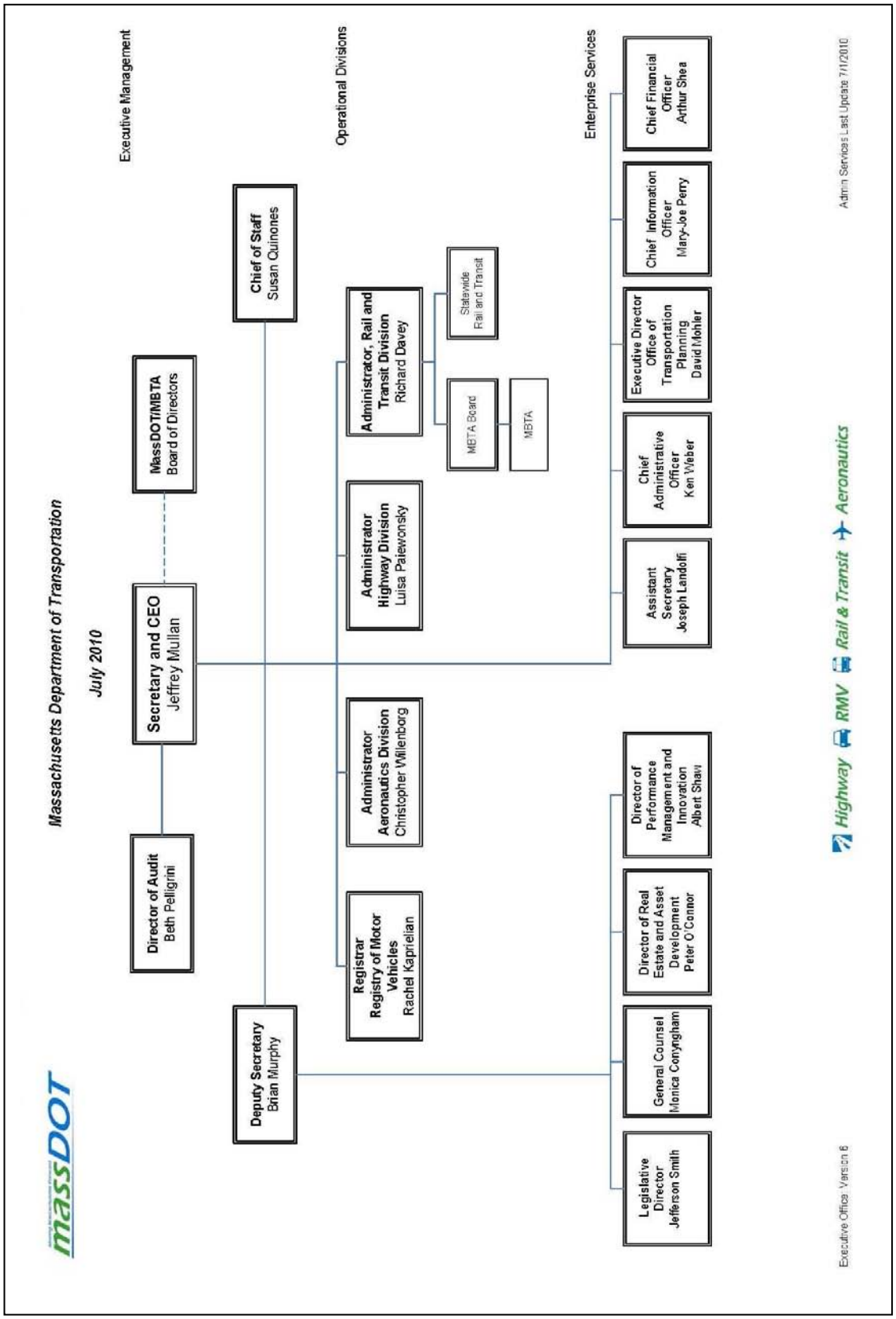
## 2. ORGANIZATION AND STAFFING

The Project will be accomplished by the concerted efforts of various organizations and responsible parties, who will work together as an integrated team providing multiple levels of oversight to ensure a successful outcome. The "Project Team" will be comprised of the combined staff of MBTA and the PE/NEPA Consultant, together with MassDOT staff. The Project Team will also include members of, or be responsible for regular consultation with, other key support and stakeholders such as MassPort, USPS, Amtrak, and the City of Boston as well as support staff from MassDOT Planning and other state agencies involved in programming federal funds and providing requisite reports to state and federal oversight personnel.

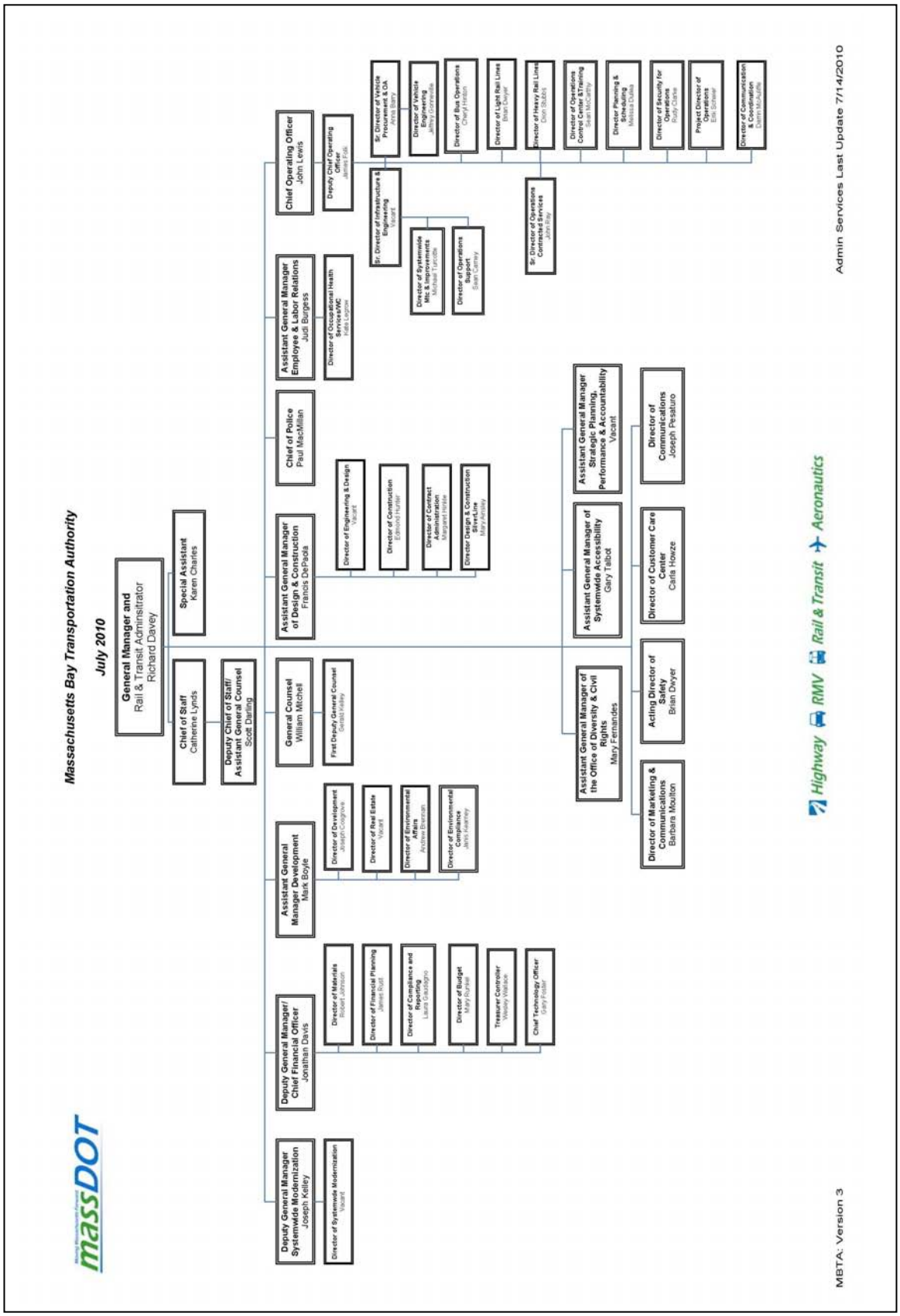
The Project Team will work towards the common goal of successfully completing the Project, and complying with the FRA Cooperative Agreement and applicable terms of Stakeholder Agreements. The PE/PEPA Consultant will be responsible for moving the design from the conceptual Engineering accomplished to date through completion of the PE/NEPA documents required for final design and construction, completion of any environmental documents, as well as all documents and submittals required as part of the FRA's grant program. The approach for Final Design and Construction will be developed during the PE/NEPA Process.

The following sections describe the structure, integration, and interfaces of the Project organization. Organization charts for both the MassDOT and the MBTA are provided in Figures 1 and 2, respectively.

**Figure 1 MassDOT Organization (as of July 2010)**



## Figure 2 MBTA Organization (as of July 2010)



## 2.1 MassDOT / MBTA Organization

### 2.11 MassDOT / MBTA Project Management Team

The Project Management Team (PMT) is an integrated staff of managers and personnel from MassDOT and the MBTA. The PMT reduces overlaps in duties and functions and provides the flexibility to accomplish Project objectives effectively and efficiently. This basic structure will be maintained throughout the Project's life in order to provide continuity between phases and maintain effective Project communications.

The Project Management Team is comprised of:

For MassDOT:
- Secretary and Chief Executive Officer
- Rail & Transit Administrator (also General Manager of MBTA)
- Executive Director, Office of Transportation Planning
- MassDOT Project Manager

For MBTA:
- General Manager (also Rail & Transit Administrator of MassDOT)
- Assistant General Manager for Design & Construction
- Director of Environmental Affairs
- Director of Construction
- MBTA Project Manager
- Federal Programming and Grant Management Manger
- Director of Rail Operations

In addition, various MassDOT and MBTA departments will support the Project Management Team.

During the design period, the MassDOT Project Manager and MBTA Project Manager will be closely involved in all stages of the Project so as to ensure consistency and smooth transition through the design and construction period.

**KEY PROJECT PERSONNEL**

The following Key Personnel have been assigned to oversee and report on this South Station Expansion project.

| | |
|---|---|
| MBTA Director/Deputy Director: | |
| MBTA Project Manager: | |
| MBTA Resident Engineer: | |
| South Station Expansion Reporting Liaison: | |
| MBTA Budget Analyst: | |

PE/NEPA Contractor:

# 3. MANAGEMENT CONTROL

Responsibility for management of the capital program, and as such the South Station Expansion Project, is dispersed throughout the Authority. The Design and Construction Directorate oversees the construction of stations, tracks, signals, communications, bridges, tunnels and other infrastructure projects. The Environmental Department ensures conformity with environmental and land use regulations, while the Planning & Environmental Directorate is responsible for studying capital infrastructure needs to maintain the existing system over the long-term and enhancement concepts. The Operations Directorate has primary responsibility for maintaining safety, vehicle purchases, track, signals, and the MBTA's electric power generation, transmission and distribution system. The Financial Directorate manages cash flows, grant applications, and debt issuance and expenditure tracking. Various administrative departments share responsibility for the balance of the capital program.

## 3.1 DESIGN

Design will be performed for HSIPR project in accordance with MBTA Design Management and Procedures Manual.

### 3.1.1 PROJECT DESIGN SCOPE

The following table summarizes the scope of services to be performed in the PE/NEPA project phase

| PE Phase Services | Project Element | | | | | |
|---|---|---|---|---|---|---|
| | New USPO Building | USPO Demolition | South Station Expansion | Layover Facility | Dorchester Street | Transit Oriented Development |
| Project Management | Yes | Yes | Yes | Yes | Yes | Yes |
| Public Coordination | Information | NA | Information/ Outreach | Information/ Outreach | Information/ Outreach | Information |
| Track and Systems | NA | NA | Preliminary Design | Preliminary Design | NA | Coordinate |
| Operations Analysis/ Simulation | NA | NA | Analysis | Analysis | NA | NA |
| Architecture and Planning | Preliminary Design | NA | Preliminary Design/ Design Competition / Master Plan Development | NA | Preliminary Design | Conceptual Design / Master Plan Development |
| Site Civil/Structural | Preliminary Design | Preliminary Design | Preliminary Design | Preliminary Design | Preliminary Design | Conceptual Design |
| MEP | Preliminary Design | NA | Preliminary Design | Preliminary Design | Preliminary Design/ Streetscaping | Conceptual Design |
| Environmental | EA/EIR | EA/EIR | EA/EIR | Site Evaluation/ EA/EIR | Clearances | Identify Constraints |
| Traffic Engineering | Site Access Planning and Parking Needs | Debris haul routing | Site Access Planning | Site Access Planning | Preliminary Design | Identify Constraints and Parking |
| Construction Management | Constructability, Staging, Outline Rqmts. | Constructability, Staging, Outline Rqmts. | Constructability, Staging, Outline Rqmts. | Constructability, Staging, Outline Rqmts. | Constructability, Staging, Outline Rqmts. | Outline Requirements |
| LEED | Outline Requirements | NA | Outline Requirements | NA | NA | Outline Requirements |
| Cost Estimating | Preliminary Estimate | Preliminary Estimate | Preliminary Estimate | Preliminary Estimate | Preliminary Estimate | Order of Magnitude Estimate |
| Specifications | Outline Specifications | Outline Specifications | Outline Specifications | Outline Specifications | Outline Specifications | Outline Specifications |
| Preparations for Next Phase | FD Scope and RFP | FD Scope and RFP | FD Scope and RFP | FD Scope and RFP | FD Scope and RFP | Develop Solicitation |

Reference detailed Project Scope attached hereto as **Attachment A** (Preliminary Engineering/NEPA/MEPA Work Program).

### 3.1.2 DESIGN DOCUMENTATION

Design documentation will be prepared and archived in accordance with MBTA Design Management and Procedures Manual.

## 3.2 QUALITY ASSURANCE / QUALITY CONTROL

The Massachusetts Bay Transportation Authority (MBTA) has implemented a Quality Assurance Plan (QAP) meeting the requirements of the U.S. Department of Transportation Quality Assurance/Quality Control Guidelines, FTA-MA-IT-90- 001-02.1.

The MBTA's Quality Assurance Plan is integral to management's commitment to improve efficiency, quality, and service and management system wide. The plan is critical to supporting the development of a management environment that produces excellence and accountability. Use and implementation of the Quality Assurance Plan will enable the MBTA to meet the present and future transportation needs of the Commonwealth.

The plan is applied to each and every transit system project and covers all capital contract work from development of specifications through project completion. The plan ensures compliance with all requisite contract documents, codes and standards during the design, installation and test phases of the project. It ensures that completion of the consultant's and contractor's work are verified and documented in accordance with the Project Quality Assurance Plan and that the contracts lead to safe, on-time and cost effective transit service.

The plan ensures that designs are in accordance with engineering requirements. Close adherence to the plan allows for early detection and correction of potential problems, minimizes costs and prevent delays. The plan also sets standards for testing equipment during development, manufacturing and installation. The plan includes a uniform system of documentation that allows easy access for audit and evaluation of adherence to the plan for specific project(s).

## 3.3 COST CONTROL

The Project Team will establish and maintain a cost control system and provide information to the HSIPR reporting system. Through this system, the Project Team will provide the MBTA with required summary-level cost information derived from approved budgets, current estimates, progress payments and other actual costs.

The Project Team will prepare project financial analyses, budgets, forecasts, cost estimates, project breakdown schedules, cost reduction evaluations, and financial data to meet the project's specific needs. Additional tasks include development of procedures to track and evaluate cost trends and variances in the costs associated with design, construction, administration, utility, real estate, and other items. In addition, the Project Team will recommend adjustments when adverse trends occur.

### 3.3.1 BASELINE PROJECT COST

| Item | Cost |
|---|---|
| Materials Procurement: | |
| Professional Services: | |
| Construction: | |
| PI Agreement: | |

| | |
|---|---|
| MBTA Force Account/TSP: | |
| Project Administration: | |
| Field Inspection: | |
| Other: | |
| **Total Baseline Project Cost:** | |

### 3.3.2 CHANGE ORDER CONTROL

Change orders and appropriate documentation shall be in accordance with MBTA Construction Contract Change Orders Guidelines, Revision 3, dated March 2008.

### 3.3.3 FORCE ACCOUNT PLAN

Work on any specific HSIPR project may require work to be performed with MBTA work forces. Force account plans, including scope of the work to be performed, must be prepared where the value of the work to be done under force account will exceed $100,000. Force account estimates will be prepared, documented and set up for separate monitoring under the cost control system. Estimates will be prepared in accordance with established man-hour rates (including all required taxes, insurances and fringe benefits) and equipment costs.

Force account budgets will be monitored and actual work performed and expenditures will be reported on a monthly basis as a part of the overall project cost report.

Force Account Plan Required for HSIPR Project: Yes ☐ No ☒

(If yes, FAP is included as **Attachment B**.)

## 3.4 SCHEDULE CONTROL

Through the use of several levels of schedules, strict schedule management and control is the responsibility of the MBTA Project Manager, with input from all participants on the HSIPR project. This is accomplished through a stringent change control process, and a comprehensive monitoring and reporting system.

Procedures have been established to provide sound, efficient, timely, and accurate methods of schedule control, monitoring, and reporting. Scheduling provides a planning framework not only for MBTA staff, but also for Federal and State HSIPR reporting and local agencies, as well as public and private utility companies that may have project involvement, consultant, suppliers and contractors.

This HSIPR project will be required to develop a Critical Path Method (CPM) schedule for all particular work elements to be performed. The schedule will identify the critical path and conform to the specific scheduling requirements of the particular contract.

Schedule monitoring of field construction activities will provide a clear indication of and confirmation that adequate work force, materials, tools, and equipment are available for the

timely performance of the work. Activities falling outside the expected performance time will be examined in detail, and reasons for delay will be identified.

Project status, schedule conflicts and changes will be reported on in a Monthly Progress Report prepared by the MBTA Project Manager. Additionally, the MBTA Project Manager will assist in preparing the Quarterly Milestone Progress Report for the Federal Transit Administration.

### 3.4.1 PE AND PROJECT SCHEDULES

The PE Schedule is attached hereto as Attachment C and the project schedule is attached hereto as **Attachment D**.

## 3.5 DOCUMENT CONTROL

All records associated with HSIPR projects are stored in the departments responsible for each element of the management of the project.

HSIPR records are segregated either physically or electronically from other project records, and the MBTA has identified a primary person and a back-up person for each record type in each of the offices or departments listed below.

- Board Approvals – Chief Financial Officer
- TIP Approvals – Planning Department
- Environmental Approvals - Environmental Management Department
- FRA Grants - Budget Office
- CMS/Work Order Approvals - Budget Office
- Material Bids and Procurements - Materials
- Consultant/Construction Bid Process and Contracts - Contracts Administration
- HSIPR Invoice Payments - Accounting
- Federal Funding Drawdowns - Treasurer-Controller's Office
- MBCR PI Agreements - Commuter Rail
- DBE – Office of Diversity and Civil Rights (ODCR)
- Federal Reporting - Finance
- Labor/Manhour Reporting – Project Office/ODCR

## 3.6 HSIPR REPORTING REQUIREMENTS

Refer to HSIPR Oversight Plan, Section 3.6 “HSIPR Reporting Requirements”. The South Station Expansion Project Office will be responsible for all required federal reporting.

# 4. PROCEDURE OF MATERIALS AND EQUIPMENT

## 4.1 ☐ PROCEDURE FOR MBTA PROCUREMENT OF MATERIALS AND EQUIPMENT

(Check box if materials are to be procured by MBTA Materials Department))

The Materials Management Department is under the Deputy General Manager/Chief Financial Officer's group and is responsible for the procurement, storage, and distribution of materials, supplies, equipment and services essential in maintaining operations of the transit system and its support facilities. Materials Procurement is organized around three functions: purchasing; vehicle and system procurement; and stores and inventory control. Materials procurement is governed by the MBTA Materials Policies and Procedures Manual and includes:

- Materials Department Policies
- User Department Regulations
- Non-Inventory Materials and Services Requisitions
- Inventory Material Requisition Forms
- Invitation for Bids
- Proposal Review and Contract Award
- Contract / Purchase Order Management and Administration
- Appeals and Protest Procedure
- Purchasing Authorization Levels
- Two-Phase Procurement Process
- Guidelines for Competitive Negotiation
- Federally Funded Procurement
- Staff Summaries
- Disposal of Scrap and Obsolete / Surplus Material

### 4.1.1 PERMANENT MATERIALS:

(Provide list of materials to be procured by MBTA Materials department)

To be developed during PE/NEPA phase.

### 4.1.2 EQUIPMENT

(Provide list of equipment/vehicles to be procured by MBTA Materials department)

To be developed during PE/NEPA phase.

### 4.1.3 SYSTEM COMPONENTS

(Provide list of systems/components to be procured by MBTA Materials department) (

| |
|---|
| To be developed during PE/NEPA phase. |

### 4.1.4 SYSTEM AND EQUIPMENT TEST AND EVALUATION PLAN

If required, system and equipment test and evaluation plan is attached hereto as **Attachment E**.

## 4.2 ☐ PROCEDURE FOR PROCUREMENT OF MATERIALS AND/OR SERVICES BY MBCR

(Check box if materials or services are to be purchased directly by MBCR)

Under the terms of the MBTA-MBCR Project Initiation agreement for HSIPR work, MBCR will be responsible for ensuring that all federal procurement requirements and guidelines are strictly adhered to, including those included in FTA Circular 4220.1F ("Third Party Contracting Guidance"), the FTA "Best Practices Procurement Manual" and the HSIPR legislation.

# 5. ☐ PROCEDURE FOR PROCUREMENT OF PROFESSIONAL SERVICES AND/OR CONSTRUCTION CONTRACT BY MBTA DESIGN & CONSTRUCTION

*(Check box if design services or construction contract to be procured by MBTA)*

## 5.1 OVERVIEW

All HSIPR projects to be administered by the MBTA Design & Construction Directorate will be managed, designed, procured and managed during construction in accordance with Project Management and Procedures Manual 2003.

## 5.2 GENERAL PROCEDURES:

The South Station HSIPR Expansion project will obtain Environmental Approval and will be included within the Commonwealth of Massachusetts Transportation Improvement Plan.

Design documentation will be completed in accordance with Design Management and Procedures Manual dated 2003 and in accordance with Section 5 herein.

Upon approval of the Assistant General Manager, Design and Construction Directorate, the bid documents and advertisement for bid will be provided to MBTA Contract Administration. Contract Administration will follow all standard MBTA procurement requirements related to obtaining competitive bids for each project.

Upon receipt of the contractor bids, Contract Administration will confirm reasonableness and responsiveness of the apparent low bidder and make a recommendation of award to the Assistant General Manager, Design and Construction Directorate.

MBTA will provide Notice of Award to the low bidder with a request for the submission of all pre-construction documentation in accordance with the requirements of the bid solicitation.

Once approved, MBTA will provide a Notice to Proceed to the Contractor thus starting the project and construction time will be as specified in the final executed construction agreement between the MBTA and Contractor.

The above General Procedures are meant to provide a summary overview of the management and procurement of this HSIPR project. Please see the MBTA Contract Administrative Procedures attached in Appendix B “MBTA Policies and Procedures” for specific requirements.

## 5.3 DESIGN PROGRAM

### 5.3.1 REQUIREMENTS AND STANDARDS

As required, the MBTA will have design and specification requirements for this project, which will include:

- Project Objectives
- Operational and Functional Requirements
- Operational and Maintenance Preferences
- Existing Design Standards and Guidelines

- Special Provisions

The Design Consultant will review all relevant MBTA, municipal, state, and federal codes and standards and select the most appropriate design criteria for the project. The Design Consultant will consolidate the criteria for the project in the Project Design Criteria memorandum, which will then be used to complete the design. Design inputs may include:

- Functional and Performance Requirements
- Regulatory Requirements, including the Americans with Disabilities Act (ADA) Compliance
- Codes and Standards
- MBTA Requirements or Preferences
- Previous Experience
- Proven Methods or Processes
- Engineering Judgment
- Investigation Data
- Existing or Previous Design Data

Design inputs shall be controlled to ensure that the history of design is maintained and that proper changes are made when they occur. Control is maintained through the process of identification, maintenance, and update of criteria. Identification occurs in design criteria documents, calculations, and design reports. The input documents are maintained through the document control process.

## 5.4 DESIGN COORDINATION

The MBTA Project Manager is responsible for the day-to-day activities of the project and regular interface with the Design Team. Senior representatives of Design, Operations and Maintenance will provide guidance to the MBTA Program Manager on technical and operational issues and have a forum for discussion and input with various points of view.

## 5.5 DESIGN REVIEW PROCESS

Design reviews, as described in the MBTA's design review procedure (as contained in the MBTA's Project Management and Procedures Manual) are an integral part of the design process and necessary to ensure that both the right problem is solved and that it is solved correctly. The quality assurance process for reviews will be organized as required by the specifics of the project. It is both a pro-active and a reactive process; it is pro-active in the systems that are set up and the steps that are required, and it is reactive in the review of data and drawings after their creation by senior staff.

## 5.6 OPERATIONS AND MAINTENANCE CONSIDERATIONS AND REVIEWS

During the course of design, all specific elements are reviewed for conformance to the applicable MBTA Manual of Design Criteria. Additionally, special meeting and/or reviews are held with the appropriate MBTA Operations or Maintenance Department to review the design and incorporate any comments pertaining to operations management or maintenance.

# 6. CONSTRUCTION PROGRAM PROCUREMENT

## 6.1 CONSTRUCTION METHOD:

*Check one or more boxes, as it applies to project:*

☐ **Construction Contract** (fill in section 6.2)

☐ **MBCR Project Initiation (PI) Agreement** (fill in section 6.3)

☐ **MBTA Temporary Service Project (TSP) Staff** (fill in section 6.4)

☐ **Vehicle Procurement** (section 4 – this section not applicable)

☐ **Other – specify:**

## 6.2 CONSTRUCTION CONTRACT:

Construction contract procurement is governed by the MBTA Construction Procurement Manual. The manual describes the overall responsibilities of the Construction Contract Procurement group and describes policies and procedures regarding:

- Contract Specification Review and Contract Advertisement
- Prequalification Procedures for Construction contractors
- Issuance of Contract bidding documents
- Bid Openings
- Preparation of Bid Packages
- Protest Procedures
- Bid Rejection Procedures
- Review and Preparation of Award / Execution of Contract Documents
- Maintenance of Contract Procurement Records

MBTA Construction Procurement Manual is incorporated by reference.

**6.2.1 CONTRACTOR NAME:**

**6.2.2 MBTA CONTRACT NAME:**

**6.2.3 PROJECTED/ACTUAL MILESTONE DATES:**

**Date of Bid Advertisement**

**Date of Contract Award**

**Date of Notice to Proceed**

**Date of Project Completion**

## 6.3 MBCR PROJECT INITIATION (PI) AGREEMENT

A significant portion of the HSIPR Commuter Rail Improvement Program will be constructed by the Massachusetts Bay Commuter Railroad Company (MBCR), in accordance with the terms of its existing Agreement with the MBTA.

This Agreement, which was competitively procured in conformance with all Federal requirements, contains force account provisions for work to be performed by MBCR outside of their daily operations and maintenance responsibilities. All federal procurement guidelines and requirements will apply to MBCR for this HSIPR work. They will also be subject to various "HSIPR Special Provisions."

If applicable, the PI for this project is attached hereto as **Attachment F.**

### 6.3.1 PI NUMBER:

| |
|---|
| |

### 6.3.2 PROJECTED/ACTUAL MILESTONE DATES:

| | Provide Date (xx/xx/xxxx) | Projected or Actual |
|---|---|---|
| **Date of P.I. Approval** | | |
| **Date of MBCR Project Start** | | |
| **Date of MBCR Project Completion** | | |

## 6.4 MBTA TEMPORARY SERVICE PROJECT (TSP) STAFF

TSP employees are union laborers with skills appropriate to the tasks required for the projects they work on (Carpenters, Electricians, General Laborer, etc.). The MBTA will hire laborers for a temporary term (generally no more than two years) to carry out a variety of HSIPR construction tasks. The MBTA enters into separate agreements with each of the affected unions.

See section 3.3.3 of this document for Force Account Plan provisions.

### 6.4.1 PROJECTED/ACTUAL MILESTONES DATES:

| | Provide Date (xx/xx/xxxx) | Projected or Actual |
|---|---|---|
| **Date of TSP Project Start** | | |
| **Date of TSP Project Completion** | | |

# 7. CONSTRUCTION PROGRAM MANAGEMENT

## 7.1 CONSTRUCTION CONTRACT ADMINISTRATION

Reference is made to the MBTA's Project Management Manual, Section 4.0; Subsection entitled "Use of Construction Managers".

The MBTA will retain the services of a consultant Construction Manager (CM) to assist in administering certain projects within the South Station Expansion Project. See HSIPR Oversight Plan, Section 3.4.7 "Use of CM/PM Firms to Supplement MBTA Oversight".

## 7.2 OVERVIEW

The most important goal of the MBTA's HSIPR Project Managers (PM) is to deliver the HSIPR projects on time and on budget, while ensuring that accountability and reporting requirements have been met.

For some HSIPR projects, the MBTA chose to retain a Construction Management (CM) contractor based upon the need to supplement the MBTA's departmental management and inspection forces and the multiple and varied nature of all of the projects making up the MBTA's South Station Expansion Project.

## 7.3 ALLOCATION OF RESPONSIBILTY BETWEEN THE MBTA AND PROFESSIONAL SERVICES CONTRACTORS

For each specific project, the PM will develop a Task Order that will specifically outline the scope of services, budget and schedule for the CM or other professional services contractors. The Task Order is attached hereto as **Attachment G**. For this HSIPR Project, the general division of responsibilities between the PM and CM (or other professional services contractors) is shown in the table below.

| TASK RESPONSIBILITY | MBTA | PE OR OTHER PROF SVCS CONTRACTORS |
|---|---|---|
| Convene and chair regular meetings with all project participants to review project status and outstanding issues. | ☒ | ☐ |
| Manage all internal coordination, ensuring any necessary participation by individual operating departments. | ☒ | ☐ |
| Manage all community outreach activities. | ☒ | ☐ |
| Chair all of the design submission meetings and clearly articulate the Authority's position if there is a disagreement. | ☒ | ☐ |
| Carefully review all major submissions, including design submissions, weekly and monthly schedule and budget updates. | ☐ | ☒ |
| Periodically review the project's file system to ensure that daily journals are written and that records of events are maintained. | ☐ | ☒ |

| TASK RESPONSIBILITY | MBTA | PE OR OTHER PROF SVCS CONTRACTORS |
|---|---|---|
| Review, and when authority exists, either approve or deny recommendations for change orders, scope change, design modifications, etc. | ☒ | ☐ |
| Review and approve this Project Management Plan. | ☒ | ☐ |
| Weekly site inspections during the construction phase paying careful attention to safety issues, the integrity of the construction and conformance with the design specifications. | ☐ | ☒ |
| Review and approve all invoices for payment. | ☒ | ☐ |
| Review all requests and recommendations for scope changes. | ☒ | ☐ |
| Assist the MBTA with the bidding process and/or cost negotiations and all related procurement issues. | ☐ | ☒ |
| Organize and run a pre-construction “kick-off” meeting. | ☐ | ☒ |
| Organize and run regular meetings with the Consultants and Contractors to provide construction updates, discuss problems and generally coordinate the construction process. | ☐ | ☒ |
| Implement and maintain a tracking system to provide timely and accurate schedules and progress and cost updates to the MBTA and for reporting to HSIPR. | ☐ | ☒ |
| Monitor all construction related activities. | ☐ | ☒ |
| Develop and update a record keeping system of all construction activities. | ☐ | ☒ |
| Ensure all records include any special information and/or documentation required under HSIPR. | ☐ | ☒ |
| Prepare independent cost estimate of proposed changes and a complete explanation and justification of the need for the change. All paperwork in conformance with MBTA Change Order Procedures. | ☐ | ☒ |
| Ensure strict adherence to MBTA Quality Assurance / Quality Control Plan. | ☐ | ☒ |
| Prepare the Punch List(s) that documents all items of work that are incomplete or that need correction. | ☐ | ☒ |
| Maintain a claim register indicating the current status of each claim, its ultimate resolution and its impact on the Project budget and schedule. | ☐ | ☒ |
| Coordinate the initial start-up of all Project equipment, utilities and operations systems after installation is complete. | ☐ | ☒ |
| Provide construction inspection to ensure that the construction work performed conforms to the plans and specifications governing the work. | ☐ | ☒ |
| Collection of Certified Payrolls, Work Hours and Payroll Report | ☐ | ☒ |

# 8. DBE GOALS AND UTILIZATION

## 8.1 DISADVANTAGE BUSINESS ENTERPRISE PROGRAM

All FRA grantees who receive planning, capital and/or operating assistance and who anticipate that they will award prime contracts cumulatively exceeding $2  0,000 during a Federal fiscal year are required to have in place a Disadvantaged Business Enterprise (DBE) Program (49 CFR Part 26).  Contracts to purchase transit vehicles do not count toward the $2  0,000 prime contract amount.

The Office of Diversity and Civil Rights (ODCR) is the major component in the MBTA's effort to provide an inclusive work environment that fosters an atmosphere of dignity and mutual respect. The role of this department is to develop system-wide policies and procedures that promote inclusion and equity among all employees. ODCR monitors and initiates equal opportunity in employment and civil rights compliance through its three program functions: Government Compliance, Equal Employment Opportunity/Affirmative Action, Civil Rights Complaint Investigation & Resolution.

The MBTA Equal Employment Opportunity (EEO) Office establishes the affirmative action and disadvantaged business enterprise goals for both consultant and construction contracts, within the parameters of State and Federal guidelines that require that construction by third parties be procured by free, open and unrestricted competition.

See HSIPR Oversight Plan, Section 2.13 "Federal DBE Requirements".

## 8.2 DBE PARTICIPATION ESTABLISHED DESIGN GOAL:

## 8.3 DBE PARTICIPATION ESTABISHED CONSTRUCTION GOAL:

# 9. REPORTING REQUIREMENTS AND GRANT CLOSEOUT

## 9.1 SPECIFIC REPORTING REQUIREMENTS

The Project Manager is responsible for providing a Monthly HSIPR Project Status Report as well as budget and schedule data for the FTA Quarterly Financial Status Report (FSR) and Milestone/Progress Report (MPR). These reports are submitted to the MBTA South Station Expansion Project Office.

In addition, the MBTA South Station Expansion Project Office will prepare and submit other required HSIPR reports, including the Section 1 12 report and the Section 1201(c) report. The PM will provide project information as required for these reports. All HSIPR reporting requirements are outlined in Section 3.6 “HSIPR Reporting Requirements” of the HSIPR Oversight Plan.

## 9.2 GRANT AT CLOSEOUT

The MBTA must initiate a close-out of a grant when all approved activities are completed and/or applicable Federal funds expended. All close-out documentation must be submitted within 90 days of the completion of all activities in the grant. Close-out documentation is outlined in Chapter III, Section of FTA Circular 010.1D. Following is the completion date and final cost of this HSIPR project.

**9.2.1 TOTAL COST AT COMPLETION:**

**9.2.2 COMPLETION DATE:**

As this document is expected to be part of a Request For Qualifications, MassDOT requests that FRA keep this document confidential (to the extent possible) until the end of October, 2010.

It is being provided for the FRA's exclusive use for this application.

# Attachment A – Preliminary Engineering/ NEPA/ MEPA Work Program

**SCOPE OF SERVICES**

**TASK 1: PROJECT MANAGEMENT AND ADMINISTRATION**

*Objectives:*

- Monitor, organize, and control manpower assignments, work effort, submission of deliverables, schedules, and costs associated with the team's effort.
- Maintain continual control of the progress of work as part of this agreement and to ensure that all elements are being coordinated among all interested parties in accordance with direction from the Massachusetts Department of Transportation, Office of Transportation Planning (MassDOT Planning).
- To ensure that the project is developed in a manner that is consistent with MassDOT Planning and the consultant's quality standards.

*Work Elements:*

**1.1 Project Procedure Manual**

Prepare a project procedures manual that defines project goals, assigns project responsibilities, provides project contacts, details the scope of services, defines the project schedule, and incorporates an overall Project Management Plan.

**1.2 Kick-off Meeting**

Prepare for and conduct a project kickoff meeting between the consultant, MassDOT and the MBTA, prepare conference notes and follow up with detailed minutes.

**1.3 Project Management and Coordination Meetings**

- Prepare for and conduct weekly project management and administrative coordination meetings with consultants, sub-consultants and other involved parties.
- Stakeholders may include (but may not be limited to): FRA, FTA, USPS, Amtrak, Department of Defense, MassDOT, MBTA/MBCR, MEPA/NEPA, Massport, CTPS, and The City of Boston.
- Prepare for and conduct weekly project coordination meetings with MassDOT Planning and other agencies. Develop agenda and detailed minutes for each meeting.

**1.4 Issues/Action Logs**

Develop and maintain an issues/action item list for tracking actions,

information transfers, issue resolution, and decisions required for the execution of the project schedule. Present the Issues/Action Log weekly at each Project Management and Internal Coordination Meeting and monthly in the Progress Report.

**1.5 Scope Management**

Develop and maintain a scope change management system to track changes in scope and associated project schedule and budget implications. Present the scope management list weekly at each Project Management Meeting and Monthly in the Progress Report.

**1.6 Project Scheduling**

Develop and maintain a Preliminary Engineering Phase project schedule that identifies milestones for task deliverables. The schedule will include all design, permitting and procurement activities and milestones for work completed in this Agreement during the Preliminary Engineering phase. Track project progress against the schedule, update schedule and submit to MassDOT monthly as part of the Progress Report.

**1.7 Cost Monitoring and Reporting**

Develop a detailed professional services budget for tracking professional services costs against the established budget of this Agreement. Budgets will be tracked against project progress using earned value assessments of activity progress based on actual costs, estimates to complete activities and schedule progress. Any necessary changes in scope or anticipated underruns and overruns will be identified early to manage the overall Agreement budget and identify any potential change requests. Present cost monitoring results monthly as part of the Progress Report.

**1.8 Progress Reports and Invoices**

Develop a monthly invoice and progress report to MassDOT Planning. Progress report will include monthly updates of Sub-Tasks.

**1.9 QA/QC**

Develop a QA/QC Manual for submission to MassDOT for approval. All deliverables and materials submitted to any consultant and/or sub-consultant will adhere to the consultant's approved QA/QC Manual.

***Task Deliverables:***

- Project Procedures Manual (with Project Management Plan)
- Project Schedule
- Meeting Notices, Agenda, Materials and Conference Notes

- Issues/Action Item List with monthly updates
- Monthly progress reports
- Weekly Scope Management list
- Project invoices
- QA/QC Manual

**TASK 2: DOCUMENT MANAGEMENT**

*Objectives:*

- Monitor, organize, and control documents

*Work Elements:*

**2.1 Document Management**

Manage, track and archive all documents generated within a project. Managed documents include schedules, diagrams, drawings, plans, specifications, training material, annuals, requests for information, change requests, and all written daily project correspondence.

*Task Deliverables:*

- None

**TASK 3: CIVIC ENGAGEMENT**

*Objectives:*

- Provide an interactive, collaborative and credible public process.
- Solicit input from local citizens, local and regional government agencies and interest groups.
- Provide the design team with public ideas and recommendations that can inform the development of PE.

*Work Elements:*

**3.1 Community Outreach Program**

Prepare a program to efficiently share information between the design team and the public forum.

**3.2 Public Information Meetings**

Assist MassDOT Planning in holding 56 general public information meetings during the PE phase. The consultant shall consider, at a minimum, the following meetings:

- Public Information Meetings (8 meetings)
- Informal neighborhood meetings (8 meetings)
- Special briefings with local officials (8 meetings)

- Draft EA/EIR meetings (4 meetings)
- Pre-meeting coordination and strategy planning sessions with MassDOT (28 meetings)

**3.3 Project Coordination/Interagency Meetings**

Meet with stakeholders identified in 1.3 above, and other state and local public agencies such as MassDOT Highway, Department of Conservation and Recreation and local community organizations as required.

**3.4 Project Website**

Support MassDOT Planning by providing web content that supports the goal of maintaining a useful and up-to-date site. Monitor the website closely and use it as a tool for managing the public outreach process. Ensure that materials prepared for and posted to the website are developed in accordance with Section 508 of the Rehabilitation Act, which requires that electronic information be made accessible to people with disabilities. All Word files shall fully comply, and the team shall work with MassDOT to develop a protocol for materials such as presentations and maps.

**3.5 Project Newsletter**

Design and produce up to 10 newsletters during the Preliminary Engineering Phase. The newsletters shall update communities of interest on the project's status. Included will be a project description, key contacts, a schedule and milestones, meeting announcements, project updates and interviews with stakeholders and MassDOT staff. Ensure that the newsletter is available in printed and PDF format for easy distribution. The newsletter shall be distributed to the project database, community centers, neighborhood groups and elected officials. The newsletter shall also be translated into Spanish.

***Task Deliverables:***

- Meeting handouts & graphics
- Meeting notes
- Up-to-date Project Website
- Up-to-date Project Newsletter

## TASK 4: FEDERAL FUNDING MANAGEMENT

*Objectives:*

- Prepare submittals and documentation to assist MassDOT with Federal Funding process

*Work Elements:*

**4.1 Federal Funding Management**

Prepare necessary submittal materials for the Federal Transit Administration New Starts program or the Federal Railroad Administration process, and/or prepare submittal materials for federal funding programs not yet identified.

*Task Deliverables:*

- Federal Funding submittal materials

## TASK 5: DATA COLLECTION - EXISTING CONDITIONS - SOUTH STATION/EXISTING USPS PROPERTY

*Objectives:*

- Gather information on existing conditions of South Station and the existing USPS property.
- Conduct field surveys to gather information not already compiled or no longer up-to-date, including traffic counts.

*Work Elements:*

**5.1 Control Surveys**

Prepare and include base control surveys by utilizing the following:

- New survey within the limits of work
- Most recent existing Hines overbuild survey compilation
- New/compiled survey of property lines and ownership.

Note: Project locus for all of Task 5 includes:

- Site features within 75′ around the existing USPS GMF
- Roadway survey 50′ outside the edge of pavement limits of Dorchester Avenue from the Summer Street intersection to Foundry Street
- Track limits from 100′ west of Shawmut Avenue Bridge and the southern end of the Fort Point Channel Bridge to the terminal building at South Station.

**5.2 Major Utility Surveys**

Prepare base utility surveys for the entire existing project locus.

### 5.3 Subsurface Geologic/Seismic Exploration

Prepare geologic/seismic exploration surveys for the entire existing project locus.

### 5.4 Soils

Prepare soil surveys for the entire existing project locus.

### 5.5 Site/Field Reviews for Existing Inventory

Prepare a site/field review of the existing inventory including systems, mechanical, electrical, plumbing, safety and security within existing South Station and the USPS GMF.

### 5.6 Existing Traffic Counts

Prepare a vehicular traffic count for the existing area roads of Atlantic Ave and Summer Street and adjacent to the project locus.

### 5.7 Existing Structural Analysis/Visual Inspection

Prepare and conduct a structural analysis and visual analysis of:

- The sea wall along Dorchester Avenue
- South Station structure
- Between grade turnouts
- Existing track infrastructure
- South Station bus station.
-

### 5.8 Assist CTPS with Ridership Forecast

Aide in CTPS' preparation of the ridership forecast for increased demand post-construction and through an alternative analysis.

*Task Deliverables:*

- Documented survey plans and reports (as applicable) for the site including surveys of soils, geological/seismic, major utilities, base, limit of work, and property lines and ownership
- Traffic counts for the area roads adjacent to the project locus
- Collaborative ridership forecast with CTPS
- Memorandum detailing structural integrity of structures identified

## TASK 6: DATA COLLECTION - EXISTING CONDITIONS – PROPOSED LAYOVER FACILITY

*Objectives:*

- Gather information on existing conditions layover facility.
- Conduct field surveys to gather information not already compiled or no longer up-to-date, including traffic counts.

*Work Elements:*

**6.1 Control Surveys**

Prepare and include base control surveys by utilizing the following:

- New survey within the limits of work
- New/compiled survey of property lines and ownership.

Note: Project locus for all of Task 5 includes:

- Site features within 75′ of the limits of work around the layover facility

**6.2 Major Utility Surveys**

Prepare base utility surveys for the entire existing project locus.

**6.3 Subsurface Geologic/Seismic Exploration**

Prepare geologic/seismic exploration surveys for the entire existing project locus.

**6.4 Soils**

Prepare soil surveys for the entire existing project locus.

**6.5 Site/Field Reviews for Existing Inventory**

Prepare a site/field review of the existing inventory including track infrastructure, signal/communication equipment, and existing buildings.

**6.6 Existing Traffic Counts**

Prepare a vehicular traffic count for the existing area roads affected adjacent to the project locus.

**6.7 Existing Structural Analysis/Visual Inspection**

Prepare and conduct a structural analysis and visual analysis of:

- Existing track infrastructure
- Existing buildings to remain.

*Task Deliverables:*

- Documented survey plans and reports (as applicable) for the site including surveys of soils, geological/seismic, major utilities, base, limit of work, and property lines and ownership
- Traffic counts for the area roads adjacent to the project loci
- Memorandum detailing structural integrity of structures identified

## TASK 7: DATA COLLECTION - EXISTING CONDITIONS - PROPOSED USPS LOCATION

*Objectives:*

- Gather information on existing conditions of proposed USPS property.
- Conduct field surveys to gather information not already compiled or no longer up-to-date, including traffic counts.

*Work Elements:*

**7.1 Control Surveys**

Prepare base control surveys that include a new survey of the surface of the proposed USPS site and a survey of the proposed USPS site of property lines and ownership.

Note: Project locus for all of Task 7 includes an approximate 10-acre site to be determined by MassDOT.

**7.2 Major Utility Surveys**

Prepare base utility surveys for the entire proposed USPS location.

**7.3 Subsurface Geologic/Seismic Exploration**

Prepare geologic/seismic exploration surveys for the proposed USPS location.

**7.4 Soils**

Prepare soil surveys for the entire proposed USPS location.

**7.5 Existing Traffic Counts**

Prepare a vehicular traffic count for the existing area roads adjacent to the proposed USPS location.

*Task Deliverables:*

- Documented survey numbers for the site including surveys of soils, geological/seismic, major utilities, base, limit of work, and property lines and ownership
- Traffic counts for the area roads adjacent to the project locus

## TASK 8: OPERATIONS ANALYSIS AND SIMULATION

*Objectives:*

- Operations analysis on proposed expansion.
- Operations analysis on layover facility movements.
- Simulate the expanded South Station operations.

*Work Elements:*

**8.1 Railroad Operations**

Conduct an operational analysis and simulation based on existing operational and ridership data available from the MBTA's 2030 Master Plan, Amtrak's 2030 Northeast Regional and Acela Express NEC and In-land routing, and the Central Transportation Planning Staff (CTPS). For each alternative, develop and analyze a single operational concept. Reassess the operational concepts in concert with ridership projections to optimize service reliability and ridership potential. Based on the analysis, develop a refined operational concept for each alternative. The analysis will identify the following attributes:

- Vehicle running times
- Service frequencies
- Daily and annual vehicle hours of service
- Vehicle maintenance window requirements
- Operational capacity requirements
- Infrastructure needs to support the operating plan (including signal, communications, and power systems)
- Potential vehicle/service conflict points
- Operational feasibility at terminal and layover facility
- Operational impacts on the future transportation system

**8.2 Bus Operations**

Prepare a South Station Bus Operations analysis. Document the existing bus network in the corridor including MBTA and any privately operated services. Changes should be designed to maximize transit ridership while maintaining the quality of bus service for local trips within the area.

**8.3 Pedestrian Circulation and Existing Analysis**

Prepare analysis of pedestrian movements and traffic flow in and around South Station. Document pedestrian flow and identify locations for improvement.

*Task Deliverables:*

- Railroad and Bus Operations Reports

- Pedestrian and Traffic Flow Report

## TASK 9: PRELIMINARY ENGINEERING - SOUTH STATION TRACKWORK

*Objectives:*

- Rework the existing South Station tracks to meet the needs of the proposed expanded South Station to include additional platforms and tracks.
- Prepare preliminary engineering plans detailing proposed improvements.

*Work Elements:*

**9.1 Track Layout/Engineering**

Prepare track stick diagrams and preliminary engineering drawings for 4 (four) proposed South Station track layouts. Investigate improvements to Tower I, Cove, and Broadway Interlockings as applicable. Rework existing cross-overs and universals from the Ft. Point Channel Bridge and from Shawmut Avenue to South Station.

**9.2 Architectural**

Prepare preliminary architectural plans for the South Station catenary and signage.

**9.3 Track and Station Structures**

Prepare preliminary plans for South Station platforms, catenary structures over tracks and other structures over or around the proposed tracks.

**9.4 Track Systems**

Prepare train control/signaling systems including:

- Wayside signal
- Cab signaling systems
- CTEC central controls for Amtrak
- OCC central control monitors for MBTA and train supervision controls.

Prepare communication systems including:

- Fiber optics
- Telephone service
- SCADA - data transmission
- Passenger information systems/public address systems
- Security/cameras
- Fire detection alarms
- Cable systems
- Security/intrusion detection alarms.

Prepare traction power and distribution systems including:

- Existing power study
- Proposed design for substations
- Tie breaker equipment
- Power distribution.

Prepare electrical systems including:

- Existing electrical study and proposed design for lighting
- Alternative emergency power supply requirements
- Hotel power
- Other equipment
- Existing emergency generators in South Station
- Switch heaters.

**9.5 Safety and Security**

Propose a safety and security certification program. Prepare a preliminary hazard analysis. Prepare a threat and vulnerability analysis. Prepare a preliminary safety and security design criteria manual. Create a list of preliminary safety and security performance requirements. Get safety and security design reviews and approvals.

**9.6 Mechanical and Electrical Plans**

Prepare preliminary plans for station ventilation, communication signage, and elevators/escalators.

**9.7 Site/Civil Plans**

Prepare site/civil plans for the following aspects:

- USPS GMF Demolition plans
- Track Demolition
- Drainage/utility
- Grading
- Details
- Landscape
- Erosion & sedimentation control.

**9.8 Pedestrian Circulation/Emergency Egress Evaluation**

Prepare a pedestrian egress evaluation for during construction and post-construction.

**9.9 Vehicular Access**

Prepare a vehicular access plan for South Station.

*Task Deliverables:*

- South Station track diagrams
- South Station track structure plans
- South Station track system plans
- South Station safety and security plans
- South Station mechanical plans
- South Station site/civil plans
- South Station egress evaluation report
- South Station vehicular access plan

## TASK 10: PRELIMINARY ENGINEERING – LAYOVER FACILITY TRACKWORK

*Objectives:*

- Prepare preliminary engineering plans detailing proposed improvements.

*Work Elements:*

**10.1 Track Layout/Engineering**

Prepare track stick diagrams and preliminary engineering drawings for 2 (two) proposed layover track layouts. Investigate improvements to adjacent Interlockings as applicable. Rework existing cross-overs and universals to enable access into the layover facility

**10.2 Architectural**

Prepare preliminary architectural plans for the on-site support structures, catenary and signage, as applicable.

**10.3 Track Structures**

Prepare preliminary plans for catenary structures over tracks and other structures over or around the proposed tracks.

**10.4 Track Systems**

Prepare train control/signaling systems including:

- Wayside signals
- Cab signaling systems
- CTEC central controls for Amtrak
- OCC central control monitors for MBTA and train supervision controls.

Prepare communication systems including:

- Fiber optics
- Telephone service
- SCADA - data transmission
- Passenger information systems/public address systems

- Security/cameras
- Fire detection alarms
- Cable systems
- Security/intrusion detection alarms.

Prepare traction power and distribution systems including:

- Existing power study in conjunction with South Station study
- Proposed design for substations
- Tie breaker equipment
- Power distribution.

Prepare electrical systems including:

- Existing electrical study and proposed design for lighting
- Alternative emergency power supply requirements
- Hotel power
- Other equipment
- Existing emergency generators in South Station
- Switch heaters.

**10.5 Mechanical and Electrical Plans**

Prepare preliminary plans for on-site support structure ventilation, communication signage, and elevators/escalators.

**10.6 Site/Civil Plans**

Prepare site/civil plans for the following aspects:

- Demolition plans of existing structures
- Track demolition
- Drainage/utility
- Grading
- Details
- Landscape
- Erosion & sedimentation control.

***Task Deliverables:***

- Layover Facility track diagrams
- Layover Facility track structure plans
- Layover Facility track system plans
- Layover Facility mechanical plans
- Layover Facility site/civil plans

## TASK 11: PRELIMINARY ENGINEERING – HEADHOUSE, PLATFORMS AND CONCOURSES

*Objectives:*

- Create and prepare preliminary engineering plans and reports necessary for the proposed Future Build, Headhouse and Concourses

*Work Elements:*

**11.1 Site/Civil Plans**

Prepare preliminary plans for:

- Demolition
- Layout
- Drainage/utility
- Grading
- Details
- Landscape
- Erosion & sedimentation control.

**11.2 Design Competition**

Provide packaging for solicitation for proposals of South Station and T.O.D. design competition including:

- Prepare a solicitation package
  Provide technical assistance for design teams and selections panel.
- Coordination with Boston Redevelopment Authority to create Masterplan of the Station site.

**11.3 Architectural Plans – Future Build**

Prepare preliminary architectural plans that include:

- Program development
- Conceptual elevations
- Conceptual renderings pertinent to the Future Build.

**11.4 Architectural Plans – Headhouse Concourses**

Prepare preliminary architectural plans relative to the proposed Headhouse and Concourses that include:

- Program development
- Elevations
- Floor plans
- Roof plans
- Reflective ceiling plans
- Vertical access plans
- Building sections

- Typical wall sections
- Details
- Renderings.
- Extend the existing South Station pedestrian concourse to the new track expansion Headhouse and Dorchester Avenue
- Include an elevated pedestrian concourse, perpendicular to tracks, connecting the existing MBTA bus facility to Dorchester Avenue

**11.5 Mechanical/Electrical/Plumbing (M/E/P)**

Prepare a set of preliminary mechanical, electrical and plumbing plans for the new headhouse facilities that includes:

- Elevator/stair/escalator sizing
- M/E/P equipment
- Layout
- Details

**11.6 Building Structural**

Prepare preliminary structural plans with:

- Foundations
- Pedestrian concourse
- Service road extension from bus off-ramp
- Conceptual column schedules for the over-build location and preliminary Column schedules for the headhouse
- Braced frame elevations
- Wall sections
- Elevator/escalator/stair/ramp systems
- Details.

**11.7 Leadership in Energy & Environmental Design (LEED)**

Prepare a report on the LEED certifications and criteria to be met by the Future build and Headhouse. Prepare planning and engineering documents in a fashion that will allow for the designs to meet LEED Plus criteria, as determined by the State of Massachusetts.

**11.8 Vehicular/Pedestrian Access Plans**

Prepare preliminary engineering plans for the following:

- Dorchester Avenue. It is the intent that Dorchester Avenue will be reconstructed to allow for public access between South Boston and Summer Street.
- Include an extension of the Boston Harbor Walk along Dorchester Avenue
- Drop-off/Pick-up area for new headhouse building

- Evaluation of bus rerouting to serve Dorchester Avenue and bus stop locations and facilities along Dorchester Avenue
- Extend elevated existing bus off-ramp from current location above existing tracks to service area in existing triangle to provide service to South Station
- Summer Street and Atlantic Ave signal retiming.

*Task Deliverables:*

- Preliminary site/civil plans for the Headhouse, Dorchester Avenue, Pedestrian Concourse, and Service Road Extension
- Design competition solicitation package
- Conceptual Architectural plans for future over-build
- Preliminary Architectural plans for Headhouse and appurtenances
- Preliminary M/E/P plans for Headhouse and appurtenances
- Preliminary Structural plans for Headhouse, Pedestrian Concourse, Service Road Extension
- Preliminary report outlining steps taken to obtain LEED certification

**TASK 12: PRELIMINARY ENGINEERING - PROPOSED USPS GMF**

*Objectives:*

- Prepare preliminary architectural and engineering plans for proposed USPS GMF relocation area.

*Work Elements:*

**12.1 Site/Civil Plans**

Prepare preliminary engineering plans for:

- Demolition
- Layout
- Parking garage
- Drainage/utility
- Grading
- Details
- Landscape
- Erosion & sedimentation control.

**12.2 Architectural Plans**

Prepare preliminary architectural plans relative to the proposed Headhouse that include:

- Program development
- Elevations
- Floor plans

- Roof plans
- Reflective ceiling plans
- Vertical access plans
- Building sections
- Typical wall sections
- Details
- Renderings.

**12.3 Mechanical/Electrical/Plumbing (M/E/P)**

Prepare a set of mechanical, electrical, and plumbing preliminary engineering plans for the proposed USPS location that includes:

- Elevator/stair/escalator sizing
- M/E/P equipment
- Layout
- Details

**12.4 Building Structural**

Prepare preliminary engineering structural plans with:

- Foundations
- Column schedules
- Braced frame elevations
- Wall sections
- Elevator/escalator/stair/ramp systems
- Details.

**12.5 Leadership in Energy & Environmental Design LEED**

Prepare planning and engineering documents in a fashion that will allow for the designs to meet LEED Plus criteria, as determined by the USPS.

**12.6 Roadway Plans**

Prepare plans required to obtain and receive MassDOT Highway Access permit.

**12.7 Land Acquisition Plans**

Prepare land acquisition plans to show for all land to be acquired by the State.

***Task Deliverables:***

- Preliminary site/civil plans
- Preliminary Architectural
- Preliminary M/E/P plans
- Preliminary Structural plans

- Preliminary report outlining steps taken to obtain LEED certification
- Roadway plans for MassDOT Highway Access Permit
- Land Acquisition Plans

## TASK 13: STAGING AND PHASING PLANS

*Objectives:*

- Prepare phasing plans to mitigate construction impacts. It is the intent to stage the phasing of the construction in order to limit the impact on the pedestrians, traffic, and Amtrak/MBTA passengers.

*Work Elements:*

**13.1 Railroad Infrastructure Construction Phasing**

Prepare a set of construction phasing plans for the railroad infrastructure. Phase track construction in order to minimize delays to MBTA and Amtrak trains.

**13.2 Operating Phasing**

Provide operating analysis and simulations for railroad infrastructure phasing plans in order to assess construction impacts.

**13.3 Building Construction Phasing**

Prepare a construction phasing plan for the demolition of the current USPS building and construction and extension of the South Station headhouse.

**13.4 Pedestrian/Vehicular Access Phasing**

Prepare a set of phasing plans to reroute pedestrian and vehicular access to South Station during construction times.

*Task Deliverables:*

- Construction phasing plans

## TASK 14: ENVIRONMENTAL CLEARANCES

*Objectives:*

- Prepare, review, and analyze environmental data from existing and proposed conditions
- File plans and documentation to MEPA/NEPA for a Draft EA/EIR

*Work Elements:*

**14.1 Environmental Analysis**

The South Station Expansion environmental analyses will study a range of resources for the MEPA/NEPA review. The studies will include analysis of the proposed project's construction and operation impacts to environmental resources as follows:

- **Wetlands**
  - **Existing Conditions**
    Identify limits of wetland resources associated with the Fort Point Channel through field survey and existing mapping. Wetland resources will be characterized by type, as identified by both state and federal regulations. Plans showing the surveyed limit of wetland resource areas will be prepared.

  - **Environmental Consequences**
    Identify potential impacts to wetland resources from the proposed project.
  - **Mitigation**
    Describe proposed actions to mitigate impacts to wetland resources, if required.

  - **Regulatory Requirements**
    Discuss how the proposed project would comply with the U.S. Clean Water Act and the Massachusetts Wetlands Protection Act and other identified regulatory programs, as applicable.
- **Waterways**
  - **Existing Conditions**
    Identify the limits of areas at each site within Chapter 91 jurisdiction using aerial photography and existing mapping (MassGIS and DEP's presumed jurisdictional maps for the City of Boston). Water-related interests of the public, as outlined in the Waterways Regulations at 310 CMR 9.55, will be identified.

  - **Environmental Consequences**
    Identify potential work within tidelands subject to Chapter 91 from the proposed project.

  - **Mitigation**
    Describe proposed actions to mitigate impacts to public water-related interests, if required.

  - **Regulatory Requirements**

Discuss how the proposed project would comply with Chapter 91, in particular, standards for nonwater-dependent infrastructure facilities.

- **Water Quality**
  - **Existing Conditions**
    Determine the existing surface water classification of the Fort Point Channel near the South Station Expansion site based on the Massachusetts Surface Water Quality Standards (310 CMR 4.00). Existing on-site storm water infrastructure and connections to the City of Boston and Massachusetts Water Resource Authority's infrastructure will be described.

  - **Environmental Consequences**
    Evaluate potential impacts of surface water discharge (quality and quantity) from the proposed project to surface and groundwater resources. Changes in impervious surface, sources of pollutants, and runoff rates will be calculated. This task assumes that all stormwater management facilities would be constructed in accordance with the Massachusetts Stormwater Policy Standards. Temporary (construction-period) impacts to water quality from expansion alternatives will be evaluated. Proposed pollution prevention measures, and sedimentation and erosion controls during construction will be described.

  - **Mitigation**
    Identify measures to mitigate potential short-term (construction period) and long-term impacts to surface or groundwater quality (potential dewatering during construction) from the proposed project, in accordance with the Massachusetts Stormwater Policy Standards. Proposed actions to mitigate impacts (additional storm water flows and potential alterations) to City of Boston and Massachusetts Water Resource Authority's infrastructure will be described, if required. Additional storm water management measures proposed to improve existing conditions will be included, as required by Stormwater Management Standard 7 for redevelopment projects.

  - **Regulatory Requirements**

Discuss how the proposed project would comply with the National Pollutant Discharge Elimination System permit for the City of Boston, Massachusetts Surface Water Quality Standards, Massachusetts Stormwater Management Standards, and the City of Boston Sewer Regulations and other associated permits and requirements. Compliance with the NPDES Construction General Permit will be discussed. Proposed storm water management measures to meet water quality standards will be included.

- **Contaminated Soils or Groundwater**
  - **Existing Conditions**
    Conduct Phase I Environmental Site Assessments to assess the potential for oil and hazardous materials (OHM) to be present from historical or current activities at the South Station Expansion site. Recognized Environmental Conditions (RECs) that could present an environmental liability will be identified. Optionally, a hazardous materials survey of the existing USPS facility may be conducted. Further evaluation of subsurface contamination may be conducted, based on the findings of the Phase I Environmental Site Assessments, as Phase II Subsurface Investigations.

  - **Environmental Consequences**
    Confirm the presence of OHM, if present, which could impact construction and/or operation. Also, identify potential effects of construction on existing areas of environmental contamination. Conditions that may pose a Significant Risk to human health, safety, public welfare or the environment will be identified.

  - **Mitigation**
    Identify specific response actions that are required to be in compliance with the Massachusetts Contingency Plan (MCP) within areas of identified soil or groundwater contamination.

  - **Regulatory Requirements**
    Discuss compliance with the MCP with regard to the identification and evaluation of contaminated soils and groundwater discovered at the site. Compliance with the Massachusetts Hazardous Waste Regulations will also be included regarding the storage, collection, transport,

treatment, disposal, use, reuse, and recycling of hazardous waste found on the property and during construction.

- **Historic and Archaeological Resources**
  - **Existing Conditions**
    Review and obtain existing cultural resource information including Massachusetts Historical Commission (MHC) Inventory of Historic and Archaeological Assets of the Commonwealth forms, State Register of Historic Places, National Register of Historic Places, and MHC archeological files to identify known or potential archaeological resources within the South Station Expansion site. Previously designated and inventoried cultural resources will be identified and mapped. An evaluation of resources not previously identified will also be included. Fieldwork for archeological resources would involve limited testing to determine the presence of archeological resources. Prior to this fieldwork, a State Archeologist permit will need to be obtained from MHC. Any resources documented during fieldwork will be mapped using GIS.

  - **Environmental Consequences**
    Determine the nature and extent of potential impacts within areas that have a moderate to high likelihood of containing archaeological resources. Impacts to cultural resources will be evaluated taking into consideration direct construction impacts, vibration impacts, and changes in setting that adversely affect resources.

  - **Mitigation**
    Describe proposed mitigation measures for impacts to archeological resources.

  - **Regulatory Requirements**
    Discuss compliance with Section 106 of the Historic Preservation Act (36 CMR 800) and MGL Chapter 254 (950 CMR 71) with the MHC. Consultation with MHC would also occur regarding the preparation of a permit application.

- **Traffic**
  - **Existing Conditions**

Summarize existing traffic conditions within the South Station project area.

- **Environmental Consequences**
  Summarize the positive and negative traffic impacts of the proposed project. The analyses will include traffic volume impacts, level-of-service analysis, and traffic circulation around the proposed South Station Expansion.

- **Mitigation**
  Describe proposed mitigation measures for impacts to traffic and parking.

- **Regulatory Requirements**
  Discuss compliance with MassDOT Highway and City of Boston traffic and parking ordinances.

❖ **Noise**

- **Existing Conditions**
  Determine noise sensitive receptor locations at and near the South Station Expansion site based on plans, USGS maps, aerial photographs, site visits, and following the procedures contained in the FTA guidance manual "Transit Noise and Vibration Impact Assessment." Noise projections (background, transit and construction) and impact assessment details will be explained.

- **Environmental Consequences**
  Identify locations that would be adversely affected by noise during construction and post-construction (operations) of the proposed project, following FTA guidance and procedures.

- **Mitigation**
  Describe mitigation measures for noise impacts from transit operations and the construction-period (short-term). Recommendations for any proposed restrictions on construction or operations will be included.

- **Regulatory Requirements**
  Explain how the proposed project would comply with the City of Boston Noise Ordinance standards for construction and post-construction conditions.

- **Vibration**
  - **Existing Conditions**
    Identify vibration sensitive receptor locations at and near the South Station Expansion site based on USGS maps, aerial photographs, site visit and following the procedures contained in the FTA guidance manual. Details regarding vibration impact criteria and existing vibration conditions will be provided.

  - **Environmental Consequences**
    Identify locations that would be adversely affected by vibration during construction and post-construction (operations) of the proposed project, following FTA guidance and procedures.

  - **Mitigation**
    Describe mitigation measures for vibration impacts from transit operations and the construction-period (short-term). Recommendations for any proposed restrictions on construction or operations will be included.

- **Air Quality**
  - **Existing Conditions**
    Obtain DEP's air quality monitoring data to determine the study area's attainment status for the transportation-related pollutants. A hotspot analysis will be conducted to calculate existing carbon monoxide (CO) and particulate matter (PM) concentrations. Existing Air Toxic and Greenhouse Gas emissions will be presented and evaluated, based upon FTA's, EPA's and DEP's guidance manuals.

  - **Environmental Consequences**
    Obtain the latest mobile source emission factors, and SIP activity related to the study area, and evaluate the proposed project's impact on local and regional emissions. Changes in traffic and rail emissions will be incorporated into the regional emissions. A local hotspot analysis will be conducted to evaluate CO and PM concentrations for each alternative. Future Air Toxic and Greenhouse Gas emissions from the proposed project will be evaluated, based upon FTA's, EPA's and DEP's guidance manuals.

- **Mitigation**
  Describe mitigation measures for short-term (construction-period) impacts from construction equipment, and for any long-term effects of the proposed project.

- **Regulatory Requirements**
  The consultant will describe how the proposed project conforms to the State Implementation Plan (SIP) and the 1990 Clean Air Act Amendments (CAAA).

❖ **Economic**

- **Existing Conditions**
  Characterize the general social and economic conditions within the South Station Expansion area and the adjacent neighborhoods (Fort Point, Leather District) using information provided by the U.S. Census, Metropolitan Area Planning Council, and other sources (aerial photography, municipal mapping). Summaries of important socioeconomic data such as population statistics, housing income and trends, employment statistics, and property tax rates may be included.

- **Environmental Consequences**
  Potential beneficial or detrimental socioeconomic impacts from the proposed project would be analyzed including property tax revenue loss, business displacement, and job loss/gain.

❖ **Environmental Justice**

- **Existing Conditions**
  Obtain state environmental justice census data (census block and block-group) to determine locations of minority, low-income and Hispanic populations near the South Station Expansion site. Maps showing locations of environmental justice populations within ½ mile of the sites will be included. Potential impacts to these communities will be identified based on changes in noise, traffic, air quality, or other resources.

- **Environmental Consequences**
  Describe any potential impacts from the proposed project that would disproportionately affect environmental justice populations.

- **Regulatory Requirements**
  Describe compliance with the Massachusetts Executive Office of Energy and Environmental Affairs Environmental Justice Policy, Executive Order 12898, and US Department of Transportation (DOT) Order 5610.2.

- **Cumulative Impacts**
  - **Impacts of South Station Expansion**

  Assess cumulative impacts of the proposed project in combination with reasonably foreseeable future projects on the neighborhoods surrounding the site (Fort Point Channel, Leather District, and South Boston). The purpose of the analysis is to ensure that federal decisions consider the full range of consequences of actions. Narrow the focus of the analysis to important issues of local and regional significance. The timeframe for the cumulative impacts analysis will include two components: the time period covering past, known effects and a period covering future, predictable effects. Information on land uses and future development in these neighborhoods will be solicited from the Boston Redevelopment Authority and the Metropolitan Area Planning Council. Relocation of the USPS Facility, as part of the proposed project, will be considered in the cumulative effects analysis of future actions. CEQ's *Considering Cumulative Effects under the National Environmental Policy Act* (CEQ 1997) will be used to guide the cumulative impacts analysis.

  - **Impacts of New Layover Facility**

  Assess cumulative impacts of the proposed project in combination with reasonably foreseeable future projects on the neighborhoods surrounding the site. The purpose of the analysis is to ensure that federal decisions consider the full range of consequences of actions. Narrow the focus of the analysis to important issues of local and regional significance. The timeframe for the cumulative impacts analysis will include two components: the time period covering past, known effects and a period covering future, predictable effects. Information on

land uses and future development in adjacent neighborhoods will be solicited from the Boston Redevelopment Authority and the Metropolitan Area Planning Council. CEQ's *Considering Cumulative Effects under the National Environmental Policy Act* (CEQ 1997) will be used to guide the cumulative impacts analysis.

- **Impacts of Overbuild**

The consultant will specifically assess cumulative impacts of the potential overbuild development that could be constructed above the proposed platform tracks, as a reasonably foreseeable future project, on the neighborhoods surrounding the proposed project area. Assessment of the cumulative impacts of the air rights development would be made on a conceptual basis, given that a proposal for such development does not exist at this time.

❖ **Summary**

Summarize cumulative impacts of the proposed project and potential overbuild in combination with reasonably foreseeable future projects on the neighborhoods surrounding the proposed project.

## 14.2 Environmental Documentation

### 14.2.1 Prepare and File ENF

Prepare a full ENF for internal review and page-through.

- Prepare a full ENF for client submittal and review.
- Incorporate client comments on the ENF and prepare a final draft for distribution.
- Print and distribute an ENF as required by MEPA regulations via hard copy and on MassDOT's website. Distribution of the hard copy version of the document and/or CD will be achieved using the USPS regular first class mail service

### 14.2.2 Prepare and File Draft EA/EIR

Develop an outline for the Draft EA/EIR based on the Executive Office of Energy and Environmental Affairs (EEA) Secretary's Certificate on the ENF and requirements of FRA's NEPA regulations.

- **Internal Draft**
  Prepare a full EA/EIR for internal review and page-through, in accordance with the EEA Secretary's Certificate on the ENF. The Draft EA/EIR will address all points in the DEIR Scope contained in the Certificate. Draft copies of the Draft EA/EIR will be submitted to MassDOT and the MBTA for review and approval prior to completing the Final EA/EIR.
  The Draft EA/EIR may contain the following elements:
  - Table of Contents
  - Executive Summary
  - Project History
  - Description of the alternatives considered for the South Station Expansion.
  - Description of the proposed project and rationale.
  - Description of construction methods and staging for the proposed project.
  - Project cost and funding.
  - Project phasing and schedule.
  - Description of the existing environment for each affected resource.
  - Description of proposed project impacts to each environmental resource.
  - Consistency with regulatory standards regarding affected environmental resources.
  - Description of all proposed mitigation measures.
  - Proposed Section 61 Findings.
  - Comment letters on the ENF, the ENF Certificate, and responses to comments
  - Supporting graphics.
  - Technical Appendices, as necessary.
  - Appendix of Responses to Comments on the ENF. The consultant will prepare a catalog and index of substantive comments on the ENF and will mark comment letters with sequential numbers for each letter and comment. The consultant will also develop responses to the comments.
- **Client Review Draft**
  Prepare a full EA/EIR for client submittal and review.

- **Publication Version**
  Incorporate client comments on the Draft EA/EIR and prepare final draft for distribution.

  **Distribution:** Print and distribute the Draft EA/EIR document, CD, and Executive Summary in compliance with Section 508 and the MEPA regulations via hard copy and on MassDOT's website. Distribution of the hard copy version of the document and/or CD will be achieved using the USPS regular first class mail service.

### 14.2.3 Prepare and File Final EA/EIR

Develop an outline for the Final EA/EIR based on the Certificate on the Draft EIR. Conduct additional technical studies specified in the Certificate.

- **Internal Draft**
  Address the Certificate elements regarding the Draft EA/EIR and agency feedback. The consultant will also prepare a catalog and index of substantive comments on the Draft EA/EIR. Comment letters will be marked with sequential numbers for each letter and comment. The consultant will develop responses to the comments. The consultant will prepare a Final EA/EIR for internal review and page-through.

- **Client Review Draft**
  Prepare a Final EA/EIR for client submittal and review.

- **Publication Version**
  Incorporate client comments on the Draft EA/EIR and prepare the final draft for distribution.
  **Distribution:** Print and distribute the Final EA/EIR document, CD, and Executive Summary to be compliant with Section 508 and MEPA regulations via hard copy and on MassDOT's website. Distribution of the hard copy version of the document and/or CD will be achieved using the USPS regular first class mail service.

### 14.3 Meetings and Agency Coordination

- Coordinate with MassDOT and other agencies (such as the MEPA office, MassDEP Waterways, MassDEP Air Quality, City of Boston Environment Department, and EPA)_ regarding NEPA/MEPA compliance. The consultant will assume at least four environmental agency meetings will occur during preparation of the Draft EA/EIR, and twenty meetings with MassDOT staff. Meeting agendas, meeting minutes, and graphics will be prepared for each of the meetings.
- Assist MassDOT with the coordination of public hearings on the ENF and Draft and Final EA/EIR and attend meetings with the appropriate presentation materials.
- Prepare for and conduct coordination meetings with interested and affected parties to inform the public, solicit input and feedback, and coordinate among agencies, including stakeholders identified in 1.3 above.
- Meet with City of Boston and DEP representatives to discuss compliance with Waterways Regulations and the City of Boston Municipal Harbor Plan. The consultant will assume at least four consultation meetings will occur.
- Attend City of Boston meetings regarding the City of Boston Municipal Harbor Plan renewal or amendment process for the Fort Point Channel and participate in the process, if possible. The consultant will assume attendance at approximately six planning meetings.

***Task Deliverables:***

- Provide Technical reports for each of the environmental topics studied
- Draft EA/EIR
- Final EA/EIR

## TASK 15: PRELIMINARY COST ESTIMATING

*Objectives:*

- Prepare necessary cost estimate documents.

*Work Elements:*

**15.1 Baseline Cost Estimate**

Prepare a baseline cost estimate for the proposed redesigns of South Station and the USPS proposed relocation.

**15.2 Claims Avoidance Reviews**

Prepare a review of the claims avoidance for the proposed redesigns of South Station and the USPS proposed relocation.

**15.3 Intermediate, Pre-Final and Final Cost Estimates**

Prepare intermediate, pre-final and final cost estimates for the proposed redesigns of South Station and the USPS proposed relocation.

*Task Deliverables:*

- Baseline cost estimate
- Claims avoidance review
- Intermediate, pre-final, and final cost estimates

## TASK 16: FLAGGING AND RAILROAD PROTECTIVE INSURANCE

*Objectives:*

- Prepare agreements for complying with liability and insurance requirements
- Prepare a schedule of flagging services

*Work Elements:*

**16.1 Right of Entry Agreement**

Prepare a set of Right of Entry agreements that comply with the MassDOT, MBCR, and other involved agencies standards.

**16.2 Scheduling of Flagging Services**

Prepare a schedule of necessary flagging services agreed on by the contractor and MassDOT, MBCR, and other involved agencies standards

*Task Deliverables:*

- A Right of Entry Agreement
- A schedule of Flagging Services

## TASK 17: ON-CALL SUPPORT SERVICES

*Objectives:*

- Compile and prepare an estimate of the amount to be allotted to On Call Support Services

*Work Elements:*

**17.1 On-Call Estimate**

Prepare an estimate for the amount to be allotted to On-Call Support Services

*Task Deliverables:*

- An estimate for the amount to be allotted to On-Call Support Services

## TASK 18: PREPARATION/PACKAGING OF SOLICITATION/RFP

*Objectives:*

- Preparation of a solicitation/RFR for final engineering of the Project

*Work Elements:*

**18.1 Prepare a RFR**

- Prepare documentation/memorandum outlining next steps to the project
- Develop a solicitation/RFR for Final Engineering portion of Project
- Provide all deliverables electronically to MassDOT and attach to the solicitation.

*Task Deliverables:*

- Request for Responses

## TASK 19: SPECIFICATIONS

*Objectives:*

- Collaborate and create a set of specifications and agreements for the project areas

*Work Elements:*

**19.1 Project Specifications and Requirements**

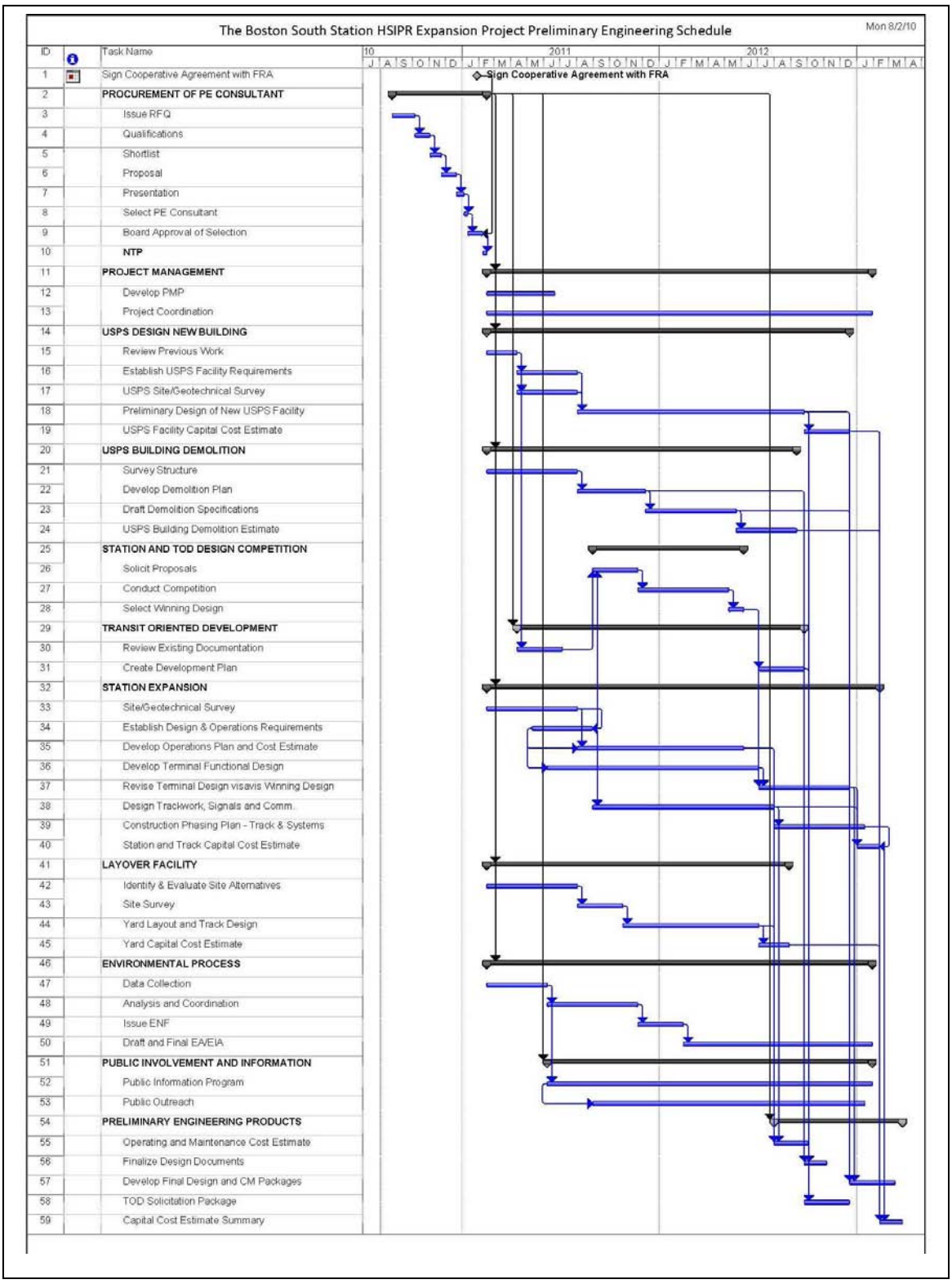
Prepare a complete set of outline specifications, for MassDOT review for the Project. Outline specifications shall include all Divisions, including Division 1 specifications, as provided by the State.

*Task Deliverables:*

- A set of contract specifications between the contract and the state and federal agencies, as well as any other participants

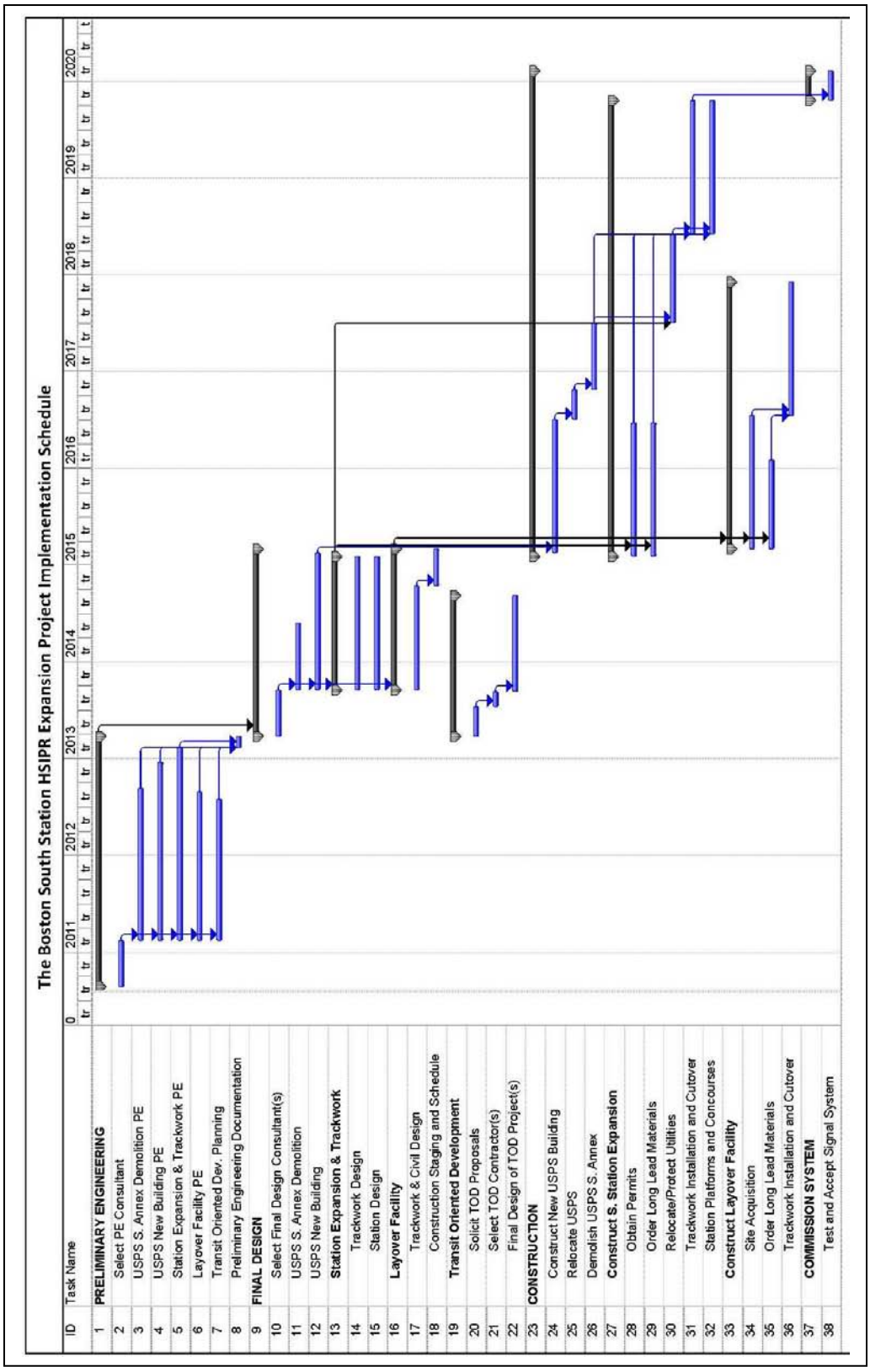
# Attachment B – Force Account Plan (if applicable)
# NA

# Attachment C – PE Schedule




| ID | Task Name |
|---|---|
| 1 | Sign Cooperative Agreement with FRA |
| 2 | **PROCUREMENT OF PE CONSULTANT** |
| 3 | Issue RFQ |
| 4 | Qualifications |
| 5 | Shortlist |
| 6 | Proposal |
| 7 | Presentation |
| 8 | Select PE Consultant |
| 9 | Board Approval of Selection |
| 10 | **NTP** |
| 11 | **PROJECT MANAGEMENT** |
| 12 | Develop PMP |
| 13 | Project Coordination |
| 14 | **USPS DESIGN NEW BUILDING** |
| 15 | Review Previous Work |
| 16 | Establish USPS Facility Requirements |
| 17 | USPS Site/Geotechnical Survey |
| 18 | Preliminary Design of New USPS Facility |
| 19 | USPS Facility Capital Cost Estimate |
| 20 | **USPS BUILDING DEMOLITION** |
| 21 | Survey Structure |
| 22 | Develop Demolition Plan |
| 23 | Draft Demolition Specifications |
| 24 | USPS Building Demolition Estimate |
| 25 | **STATION AND TOD DESIGN COMPETITION** |
| 26 | Solicit Proposals |
| 27 | Conduct Competition |
| 28 | Select Winning Design |
| 29 | **TRANSIT ORIENTED DEVELOPMENT** |
| 30 | Review Existing Documentation |
| 31 | Create Development Plan |
| 32 | **STATION EXPANSION** |
| 33 | Site/Geotechnical Survey |
| 34 | Establish Design & Operations Requirements |
| 35 | Develop Operations Plan and Cost Estimate |
| 36 | Develop Terminal Functional Design |
| 37 | Revise Terminal Design visavis Winning Design |
| 38 | Design Trackwork, Signals and Comm. |
| 39 | Construction Phasing Plan - Track & Systems |
| 40 | Station and Track Capital Cost Estimate |
| 41 | **LAYOVER FACILITY** |
| 42 | Identify & Evaluate Site Alternatives |
| 43 | Site Survey |
| 44 | Yard Layout and Track Design |
| 45 | Yard Capital Cost Estimate |
| 46 | **ENVIRONMENTAL PROCESS** |
| 47 | Data Collection |
| 48 | Analysis and Coordination |
| 49 | Issue ENF |
| 50 | Draft and Final EA/EIA |
| 51 | **PUBLIC INVOLVEMENT AND INFORMATION** |
| 52 | Public Information Program |
| 53 | Public Outreach |
| 54 | **PRELIMINARY ENGINEERING PRODUCTS** |
| 55 | Operating and Maintenance Cost Estimate |
| 56 | Finalize Design Documents |
| 57 | Develop Final Design and CM Packages |
| 58 | TOD Solicitation Package |
| 59 | Capital Cost Estimate Summary |

# Attachment D – Project Schedule



# Attachment E – System and Equipment Test and Evaluation Plan (if applicable)
# NA

# Attachment F – MBCR Project Initiation (PI) Agreement (if applicable)
# TBD

# Attachment G – CM/PM Task Order (if applicable)
# NA