



MAINE TURNPIKE AUTHORITY

Project Development Process

A Milestone Guide for the MTA, Consultant, & Partners to Build a MTA Project

INTRODUCTION: BACKGROUND AND APPLICABILITY

The intent of this document is to provide Maine Turnpike Authority (MTA) Staff and Consultants assigned to a MTA Infrastructure Improvement or Maintenance construction Project, that will be put out to bid to Contractors, guidance on the steps necessary and the order in which they must be taken.

Most MTA Projects have a planning phase, a project development phase, and a construction phase. This document focuses on Project Development, however includes a brief overview of the Planning Process.

Typical MTA Infrastructure Improvement & Maintenance construction Projects that would be covered by the Project Development Process include:

1. Highway mainline improvements, including new alignments, capacity improvements, reconstruction and rehabilitation
2. Interchange and Interchange ramp improvements, including new alignments, capacity improvements, reconstruction and rehabilitation
3. Bridge improvements, including new construction and repairs, rehabilitation, reconstruction of existing of existing structures
4. Toll Plaza improvements, including new construction and improvements to site/civil and existing structures/facilities
5. Buildings and Facility improvements, including new construction and improvements to existing buildings or structures and their components
6. Service Plaza improvements, including new construction and improvements to existing buildings, parking lots and their components
7. Wetland Mitigation projects
8. Other ancillary highway improvements, including sign, streetlight and guardrail upgrades, clearzone improvements, slope and drainage repairs and improvements, tree planting and other vegetation control/enhancements
9. Utilities improvements, including water, sewer, electrical and communications improvements.

The Project Development process has a series of 16 events, from project kickoff to project completion that the Project Manager and the Project Team must follow to assure a quality project.

PLANNING PROCESS AND MTA POLICIES

The following section provides a brief overview of the Planning Process and applicable MTA Policies and is included in this document for background information only. The Planning Process occurs prior to Project Development commencing.

PLANNING

There are two processes by which an MTA construction project may be initiated. The first process is when an improvement need to existing infrastructure is identified during the Annual Inspection by the MTA's General Engineering Consultant (GEC).

The second process is when a need is identified either by the MTA or by an agreement with a State, Local or Partner Entity. Such capital improvement projects fulfill an identified need that provides additional capacity, new connections to other roads or new facilities. These capital improvement projects typically require substantial studying and planning.

Process 1: Annual Inspection/30-year plan

Each year, the GEC performs an annual inspection of the entire facility. After reviewing with MTA staff, the GEC updates the 30-year Reserve Maintenance (RM) and Capital Asset plan and provides the plan to the Chief Financial Officer (CFO) for inclusion in the annual 30-year financial model. The project list for the subsequent year is finalized and presented to the Board for approval each October as part of the required annual RM deposit worksheet. Once these are approved, a more specific and detailed draft 4-year planning tool known as the 4-year capital investment plan is developed, which is based on the 30-year plan, and details project time periods, scope, traffic impacts and program budget. Each spring, a draft of the proposed 4-year capital investment plan is provided to staff for comment and review, as well as to coordinate with affected Municipalities, MaineDOT and other Partner Entities. The 30-year RM and Capital Asset plan continues to undergo a series of reviews by staff, and is updated again in the Spring. Any changes to the 30-year RM and Capital Asset model are incorporated into the draft 4-year plan twice a year- Spring and Fall. The draft 4-year capital investment plan is made available on the MTA website for public comment typically in July. By the October Board meeting, the yearly project list has gone through numerous reviews and thoughtful study as part of the Annual RM deposit, 4-year and 30-year plan development processes.

Process 2: Projects derived from an agreement

The MTA may also authorize a project to be included in the 30-year plan or annual RM deposit through the following methods:

1. Legislative action
2. Negotiation with MaineDOT
3. Negotiation with another State or Local agency
4. Compliance with the MTA's Interchange Program
5. Identification in the MTA's Safety and Capacity Study
6. Any other process that identifies a need that provides additional capacity, new connections to other roads or new facilities

Once the need has been identified and an agreement has been negotiated with the participating State

or Local Agency, an additional level of planning effort may need to be undertaken before the project enters the Project Development Process. Such planning effort may include feasibility studies, location and alignment studies, environmental impact statements, tolling studies, or any other planning process.

MTA POLICIES

Public Participation

The MTA has adopted a Public Participation Policy (PPP) which is located on the MTA web site. At all phases of a project, public participation should meet or exceed the requirements described in the PPP.

Throughout the planning and permitting phases, as well as project development, public meetings or public hearings could be required to satisfy permitting agencies. Depending on the magnitude of the project other public informational meetings or public hearings could be necessary. These will be discussed later in the Project Development Process.

Coordination with Municipalities, Metropolitan Planning Organizations (MPO's) and MaineDOT

MTA staff meets regularly and shares its yearly project list with Municipalities, MPO's and MaineDOT to coordinate projects especially as they relate to traffic impacts. In addition, meetings with local officials such as the Town Manager, Public Works Director, Fire, Police, and School officials occur for projects where impacts to traffic may be caused by detours, closures, or other construction activities.

The MTA also works with Municipalities involving building projects to insure appropriate State building codes are followed and Municipality input is considered. The MTA may provide local informational submissions and presentations to local codes officers and planning boards as described in the MTA's Public Participation Policy.

Abutter Relations

The MTA's Right of Way department will make the initial contact with abutters of any project and provide them with relevant information. Updates throughout the project are also provided in accordance with the PPP by either the ROW department or the MTA's construction inspection team.

Noise Policy

The MTA has adopted a Noise Policy which is located on the MTA's website. Any project that meets the criteria as established in the Noise Policy must be reviewed in accordance with that policy in order to determine if noise abatement measures need to be considered as part of the project development.

PROJECT DEVELOPMENT PROCESS

The following section describes the process involved in the development of a project for the MTA, provides a reference for those involved in the delivery of projects, and provides for consistency for the procurement of professional services. The process is laid out in the order that a project will typically progress towards completion. It explains the activities and objectives in the order they should occur. The MTA does not use State or Federal funds for MTA projects, though a joint project may include state or federal funds and additional steps and requirements may be added in those cases. **For projects with Federal funds, MaineDOT's processes regarding Right of Way activities must be followed, in lieu of the process outlined in this document.**

PROJECT TEAM

Once a project has been identified, a MTA Project Manager (PM) is assigned by the relevant Director/Officer (Engineering, Planning or Finance). The PM is responsible for tracking a project's progress, managing the consultant contracts, coordinating team meetings and other needs of the project to ensure the project is completed within budget and on schedule.

The Project Team (Team) typically includes a Consultant. For purposes of this document, the Consultant is defined as the primary Consultant responsible for all major design activities that may include geotechnical, survey, environmental assessment (both hazardous and wetland), traffic analysis and overall project management. Actual responsibilities will be assigned in a task order.

Other MTA department liaisons are assigned to the Team by their respective Director/Officer so that every relevant Department or critical function is represented, as needed. The MTA Construction Program Manager and Resident Engineer manage the construction project after the contract is bid and will participate on the Team, as needed.

The Team may also include other Partners/Lessees, as needed.

PROJECT TEAM EXPECTATIONS

Throughout the Project Development Process there are certain responsibilities that are incumbent on each member of the Team.

1. PM is responsible for soliciting scope and fee proposal from the selected Consultant(s) and negotiating the final task/project order. PM will work with the Engineering Program Manager to fulfill this task and will seek approvals from the Chief Financial Officer (CFO) or Chief Operations Officer (COO) and the Executive Director. PM will manage and monitor the Consultant's activities throughout the project.
2. PM is responsible for monitoring the schedule and budget and keeping them up to date (though may delegate to staff or to a Consultant as required).
3. The PM must notify the Department Director & CFO/COO responsible for the project, if appropriate, about any schedule and budget changes that affect the project.
4. The Team Members will provide input to the PM and the team members will report as to their

progress and when they need assistance to continue with the project. This should be done well in advance of the point of need. The Team is responsible for managing the project within budget and finding ways to further reduce costs even below original budget.

5. Throughout the budget management process, there should be consultation with members affected by the budget line items. Communication with all team members is crucial in developing/managing realistic cost estimates.
6. The PM is responsible for scheduling regular team meetings.

Team meeting structure:

1. An agenda and backup information is provided by the Consultant before the meeting, if required by the PM.
2. All Members required for the meeting are expected to attend the Team meeting.
3. Minutes are taken and distributed, if needed.
4. Other ground rules may be utilized as agreed upon by the Team, or as imposed by the Department head, or as required by the project.

Project Development Milestones & Corresponding Events

Event 1 - Project Kickoff	P. 8
Event 2 - Initial Team Meeting	P. 9
Event 3 - Preliminary Project Scope Development	P. 9
Event 4 - 10% Design	P. 10
Event 5 - 10% Design Review	P. 10
Event 6 - Finalizing 10% Design	P. 10
Event 7 - PDR Preparation (30% Design)	P. 11
Event 8 - Finalizing PDR	P. 13
Event 9 - 60 % Design	P. 13
Event 10 - 98 % Design	P. 14
Event 11 - PS&E (Plans, Specifications and Estimate)	P. 16
Event 12 - Bid Phase	P. 17
Event 13 - Contract Award	P. 17
Event 14 - Construction	P. 18
Event 15 - Construction Complete	P. 19
Event 16 - Project Complete	P. 19

Event 1- PROJECT KICKOFF

The PM, department liaisons and Consultant meet, as necessary, to discuss their respective roles in the project and what is required as part of the initial phase. The PM and the Team Members begin collecting as much preliminary information as possible. This information is gathered in preparation for the Initial Team Meeting. **The project development process has officially been kicked-off.**

CONSULTANT TASK/PROJECT ORDER NEGOTIATIONS

The PM would solicit a scope and fee proposal from the selected Consultant to perform the design work and other related tasks. A scoping meeting may be required with the Consultant to provide direction and resolve any outstanding questions. Any relevant project information including required deliverables, CADD requirements, prior work done on the project, and this Project Development process shall be given to the Consultant. Specific attention should be made to the tasks and events that the Consultant will be responsible for under this Project Development Process. Once executed, the Consultant will officially become a team member assigned to this project.

PRELIMINARY DATA GATHERING

The Consultant collects any existing data from published records as needed. The PM initiates discussions with Maintenance and Operations, Fare Collections or other departments that may be impacted by the project so they can begin to better understand project parameters and provide input, if necessary.

EXISTING R/W OWNERSHIP

The Right of Way department will assign a project liaison or team member and will compile tax maps and assessments, property owner mailing list (including abutters) and other Right of Way information or needed valuation and zoning data from municipal and MTA existing data. If appropriate, abutter letters are sent, informing abutters of the project and providing contact information. Example: Prior to a survey crew performing work on an abutter's property a letter is typically sent to the abutter.

INITIAL UTILITY CONTACTS

The PM would ask Right of Way liaison to provide a list of utilities and other entities that may be impacted by the project. The Right of Way liaison may need to solicit known utilities in the area if no records are available or immediately found. If new utilities are found to be present at the site, but no records or agreements exist, the Right of Way liaison will need to engage that utility in a process to determine their eligibility to remain within MTA property, and if so under what terms. The PM will delegate to the Right of Way liaison to send the first letter to Utilities and Railroads informing them of the project and who the utility coordinator will be. The Consultant shall be the utility coordinator for the project unless otherwise stated by the MTA. The Consultant shall coordinate with utilities to have any utilities within the project limits marked so that the Consultant's surveyor can locate them. The Consultant should request the PM to contact the MTA's Building Maintenance Department to locate any MTA owned utilities. The MTA may use their own forces to locate their utilities or may use a contracted vendor.

If additional utilities are found and they do not have a license to be on MTA property, additional efforts by Right of Way will be required, including Board approval for a new license/easement.

If a Railroad passes through the project, a railroad agreement will be needed and the PM will coordinate with the Right of Way liaison.

PRELIMINARY SURVEY COORDINATION

The scope of the project is reviewed with the Consultant. The horizontal and vertical GPS controls are set by the Consultant or their sub-consultant. The MTA Right of Way department would gather existing Right of Way and Survey plans and provide through the PM to the Consultant. The Consultant obtains the Utility Contacts list and Property Owner Lists from the PM or from the Right of Way liaison. Once the Consultant has contacted the utilities to locate their facilities in the field, the Consultant sends their surveyor out to create an existing condition base map. Existing conditions plans and CADD files/model are then created, edited, and transmitted to the PM. A pre-survey meeting with PM, Consultant, ROW and Surveyor may occur if needed.

PRELIMINARY GEOTECHNICAL INVESTIGATION

The Consultant's geotechnical team member reviews the geology maps and requests existing utility information. The existing soil reports are reviewed for relevant information such as borings.

INITIAL TRAFFIC IMPACT DISCUSSION

The PM reviews with the Director of Engineering and the Consultant any particular needs regarding potential traffic control or other traffic impacts and assigns necessary tasks. If needed, traffic crash data is requested from MaineDOT by the Consultant or MTA staff and PM can request lane closure restriction traffic data from Engineering department.

PRELIMINARY ENVIRONMENTAL EVALUATION

The Consultant will conduct a Preliminary Wetland Delineation, Preliminary Surface Water Evaluation, Preliminary Hazardous Waste Assessment, and other Historic/Archeological/Cultural/Environmental evaluations, as necessary. Initial coordination letters are sent by the Consultant and copied to the MTA Permitting Liaison, if required. The MTA's Permitting Liaison will provide the project purpose statement, if required.

INITIAL CONTACTS TO MaineDOT, Municipalities, MPOs:

The PM delegates to the Planning Department liaison the task of contacting the Municipality and other Local and Regional Planning Organizations. In addition, if it has not been already done, the Planning Department liaison would inform the MaineDOT of the project and any potential traffic impacts as part of a joint coordination effort. In some cases, the project would have already been discussed with those entities as part of a previous planning effort, but this contact would be an informal update and a schedule may be suggested for future project related meetings.

For MTA projects involving a building or a new facility that is not connected to the road, such as an administration building, the MTA will utilize its Site Law of Development Act (SLODA) General Permit to comply with State permitting requirements. The PM delegates to Planning Department liaison the task of scheduling a preliminary meeting with the affected Municipality. Such meeting may discuss expectations regarding site plan review, building permits and other local permitting requirements. In

those cases, MTA Legal would also be contacted to review situation and determine what will be required.

PRELIMINARY BUDGET

The Team Members shall review the project budget. If the project scope does not align with the budget, a meeting with GEC, CFO or COO may be required to understand the scope associated with the project budget (from 30-year plan or RM Deposit), and the PM will coordinate. If substantial additions to the scope/budget are being considered, the COO/CFO shall notify and receive input from the GEC.

Event 2 - INITIAL TEAM MEETING

An initial team meeting may be scheduled by the PM, or requested by a team member to be scheduled by the PM, if determined beneficial. At this meeting, all information gathered by the Team is shared and discussed to help identify constraints. In addition, the project milestone dates and the project budget should be reviewed.

Event 3 - PRELIMINARY PROJECT SCOPE DEVELOPMENT

BASE R/W MAPPING

The Consultant gathers Property Owner Records, Survey, Titles and Tax Maps. Existing Property Lines and Right of Way is plotted on the Existing Condition Plan by the Consultant.

PRELIMINARY DRAINAGE DESIGN

Regional Hydrology is reviewed by the Consultant. Rough flows are calculated and initial pipe sizes and locations are determined. The Consultant may conduct a field visit to see how the existing drainage functions. Preliminary recommendations are given to the team.

PRELIMINARY UTILITY COORDINATION

A field inspection by Consultant to review existing Utilities is conducted. Comments received from the Utility companies are reviewed by PM and Consultant and it is determined if more survey is required to address utility concerns. The Consultant contacts the utility to discuss needs of the project and solicit initial feedback. The Consultant should reference the MaineDOT Utility Coordination process as a guide when coordinating with the utilities.

PRELIMINARY TRAFFIC DESIGN

The Engineering department supplies traffic design considerations to the Consultant who incorporates them into the design. An example of such considerations is a possible detour route for a bridge closure.

PRELIMINARY GEOTECH INFORMATION PHASE II

The Consultant's Geotechnical Team Member proposes any additional borings. Upon approval by the PM, the PM shall arrange for Traffic control. The boring logs are evaluated and preliminary recommendations are developed.

Event 4 10% DESIGN

PRELIMINARY ALIGNMENT DESIGN OR SCOPE DEVELOPMENT

Based on the input from the Team at Event 2 - Initial Team Meeting and the subsequent activities under Event 3, the Consultant develops the initial horizontal and vertical alignment and/or the preliminary project scope of work. This alignment and/or scope of work are shared with the Team and other Departments for comments. The PM will determine a comment period and everyone is expected to respond. By providing the alignment/scope proposal at this stage, Team members will have advanced opportunity to review the proposal and consider any potential impacts from their perspective. Adjustments are made, as warranted.

A bridge type study, if needed, may be initiated and reviewed with the MTA to later be included in the Preliminary Design Report (PDR).

ENVIRONMENTAL EVALUATION

Initial project information is delivered to the PM by the Consultant for comments. These comments are reviewed and delivered to the Team. Additional data may be identified and collected in order to determine and document preliminary permitting levels and permitting timeline, if needed. At this time, an Interagency or Pre-application Meeting may be required between the Authority, MaineDOT and other State and Federal Environmental Agencies, such as the Department of Environmental Protection, Department of Inland Fisheries and Wildlife, Department of Marine Resources, Army Corps of Engineers and Environmental Protection Agency. This meeting is coordinated by MTA's Environmental Permitting Liaison.

Event 5 -10% DESIGN REVIEW

A team meeting may be scheduled by the PM, or requested by a team member to be scheduled by the PM, if determined beneficial.

Event 6 - FINALIZING 10% DESIGN

PRELIMINARY COORDINATION WITH MUNICIPALITY AND MAINEDOT

Consultation with the Municipality officials may occur at this stage of the project to determine impacts or the requirement for a public informational meeting. At a minimum, the Town Manager, or a designee of the town government is informed of the project. If impacts such as a detour are planned, a meeting with Town officials and Team representatives should be conducted. Town officials may include, but are not limited to the Manager, Planner, Engineer, Public Works Director, the Fire/Rescue/Police officials and school bus officials, depending on the level of impact. In addition, a meeting or discussion with MaineDOT regional office may occur to discuss the project.

PUBLIC MEETING

If a public informational meeting is determined to be required, the PM schedules the meeting or tasks Planning Department liaison with scheduling the meeting. Notice of such meeting is mailed to the impacted abutter mailing list, provided by the Right of Way liaison. A notice of the meeting may also be advertised in the local newspaper. At this meeting, information gathered from the previous Events is shared and information from the Public is gathered. The PM acts as the moderator and other Team Members may attend, if appropriate.

SUMMARY OF INPUT RECEIVED

The PM communicates to the Team a summary of the input received (if any). All comments and information provided to the MTA during Event 6 is considered and all reasonable alternatives are investigated. The PM and Team members should review the input received and follow-up with the respective party, as needed. Then, the PM and Team can begin utilizing all the information obtained to continue developing the project. The amount of preliminary engineering may vary between alternatives depending on the continued viability of an alternative (if applicable). Further discussions with MaineDOT may be required, including coordination with adjacent projects.

Event 7 - PDR PREPARATION (30% DESIGN)

The PDR (Preliminary Design Report) is a document that contains general project information, a conceptual design and corresponding cost estimate, preliminary plans and other information gathered during the preliminary data gathering stage. All Team Members review and provide input into the PDR.

RIGHT OF WAY ACTIVITIES

Preliminary Design and Proposed Right of Way information are reviewed. If there are major impacts to properties, the affected Property Owners are contacted by the Right of Way liaison.

Cost data arising from proposed Right of Way is compiled, including any appraisals or valuations needed. If relocations due to the Project are required, a Preliminary Relocation Report and cost estimate are compiled. MTA Right of Way would contact the impacted Property Owners.

The Utility Coordinator schedules a meeting with the Utilities to discuss their Right of Way needs. Preliminary utility costs are developed by the Consultant in order to determine alternatives and to minimize impacts. Aerial and underground Utility conflicts with the Preliminary Design are identified. Data from the Preliminary Design and Consultant Utility Coordinator are compiled to develop the proposed Right of Way mapping. Right of Way mapping may be done by MTA Right of Way or may be tasked to the Consultant.

ENVIRONMENTAL EVALUATION

The appropriate department liaison and/or Consultant will develop the Hazardous Waste Plan, Long-term BMPs (CPEC binder), Stormwater Analysis, Landscape Plan, Wetland Mitigation Plan, Property Assessment and Work Windows, as required. A draft permit application is prepared and submitted to the PM as part

of the PDR.

MUNICIPAL & MAINE DOT COORDINATION

The Municipalities and/or MaineDOT are contacted by the Planning Department liaison and if necessary project preliminary plans are provided for review. In some cases, Municipal or MaineDOT participation might be required (i.e. sidewalks on a bridge, etc.). These costs would be determined and a written Memorandums of Understanding would be agreed upon and executed.

PRELIMINARY CONSTRUCTION ESTIMATE

The Consultant develops a cost estimate and provides it to the PM. The estimate is incorporated into the PDR. Costs for Environmental mitigation, right of way acquisition or impacts, utility coordination and traffic impacts should be included. If the project scope does not align with the budget, a meeting with GEC, CFO or COO may be required to understand the scope associated with the project budget (from 30-year plan or RM Deposit), and the PM will coordinate. If substantial additions to the scope/budget are being considered, the COO/CFO shall notify and receive input from the GEC.

DRAFT PDR DISTRIBUTION

The PDR is distributed for comments to the Project Team and other departments, as necessary, with a comment period, as determined by the PM.

The PM collects and analyzes the comments received on the PDR. If no comments or only minor comments are received, the necessary adjustments are made to the PDR. If significant comments are received, the Team will meet to review and address these comments. Final comments will be incorporated into the PDR. If the Team has determined that the comments from the PDR lead to decisions outside the Team's discretion, a Meeting with COO and/or CFO may be held.

Once the PDR is completed, it is expected that the Team has addressed all comments and concerns with regards to alignment and/or scope and made final decisions based on all the information collected to date. The alignment/scope will remain unchanged through the remainder of the project development process in order to remain on schedule and within the allotted project budget. Any change to the alignment/scope from beyond this step would essentially bring the project back to this point and put the schedule and budget in jeopardy. The Team will select the preferred alternative and a public presentation will be developed, if needed. The reasons for dismissal of other alternatives, if any, are discussed in the PDR's Summary of Engineering.

Event 8 – FINALIZING PDR

PUBLIC MEETING

If determined to be required by the Project Team, the relevant information from the PDR is presented to the public by the Project Manager and other Team Members as appropriate. This could be a letter to the municipality, a meeting with Municipal Officials, or a Public Meeting, depending on the level of impact. The Public's comments and concerns are received. The PM communicates a brief summary of the Public Meeting to the Team.

In addition, further communications with MaineDOT would occur at this time if impacts associated with traffic or adjacent projects/structures are determined.

PDR APPROVAL

The PDR is approved by the Director of Engineering & Building Maintenance and other Directors/Officers, if appropriate. PDR is distributed to Project Team.

Event 9 - 60% DESIGN

The 60% design including geometrics, details and drainage are refined (or other features depending on the project type). Special details and special provisions are written as the plans are created.

FINAL TRAFFIC DESIGN

Final recommendations for Traffic are incorporated into the plans by the Consultant.

FINAL GEOTECH DESIGN/REPORT

Recommendations on settlement, foundations and wall details are developed. (If additional borings are needed to supplement previous findings, they are requested at this stage.) The Final Soils Report is written.

ENVIRONMENTAL PERMIT SUBMITTAL

If not already completed, the Consultant shall prepare and submit the final Permit Application (Permit By Rule, ACOE Self-certification form, NRPA, etc.) to the appropriate regulatory agencies.

RIGHT OF WAY ACTIVITIES

The consultant will provide the ROW mapping to the MTA right of way liaison. The easements and rights are added to the plan. New boundaries, parcel delineation, and distances are added to the plan. The plan is reviewed for negotiation and final design changes. The final right of way plan is developed. MTA Right of Way liaison will determine if any impacts to adjacent properties and/or any acquisitions needed and will determine value. The Right of Way liaison will negotiate with the Property Owners and will purchase needed property.

The Titles are updated by the Right of Way Department, or assigned to a contracted title attorney. Final Offer Letters and Condemnation Package are sent out. If negotiations are ongoing, a work permit to

access the needed parcel may be utilized, only when absolutely necessary. Condemnation is to be used only when absolutely necessary. All Right of Way purchases shall be handled in accordance with the MTA's Right of Way acquisition policy.

A letter and plans are sent to the Utilities and any railroads if required by the Consultant with particular issues marked. The pole list and other final relocations are received from the utilities involved. A Pre-Coordination meeting may be held at this time and will be run by the Consultant.

New utility services will be established by the PM, as needed.

The Relocation Report is reviewed. It is determined if there are any Business or Residential relocations. It is also determined if there are any signs or Personal Property takes. Owners are contacted by MTA Right of Way department.

CONSTRUCTION ESTIMATE

The Consultant refines cost estimate and provides it to the PM. The estimate is incorporated into the 60% design submission package. If the project scope does not align with the budget, a meeting with GEC, CFO or COO may be required to understand the scope associated with the project budget (from 30-year plan or RM Deposit), and the PM will coordinate. If substantial additions to the scope/budget are being considered, the COO/CFO shall notify and receive input from the GEC.

60% DESIGN SUBMISSION DISTRIBUTION

The 60% design plans and draft specifications are distributed for comments to the Project Team and other departments, as necessary, with a comment period, as determined by the PM.

The PM collects and analyzes the comments received on the 60% submission. If no comments or only minor comments are received, the necessary adjustments are made to the plans and specifications. If significant comments are received, the Team will meet to review and address these comments. Final comments will be incorporated into the final design.

Event 10 - 98% DESIGN

ENVIRONMENTAL COORDINATION

The Permit is received. Approval for the Final Mitigation Plan or in lieu fee has also been received. The Consultant shall incorporate any permit conditions into the contract documents.

The BMP locations, Impacts and Mitigation Plan are finalized. Special Provisions 105, 656 and Hazardous Waste are finalized. Erosion and Sedimentation Control quantities, Hazardous Waste quantities and Landscape Items are estimated.

CPEC BINDER

The Construction Project Environmental Compliance (CPEC) Binder is a procedural document that records the project design, project construction, and post construction activities for environmental compliance. CPEC binder shall include a checklist with all the permit conditions, including the

submission of a compliance report. The Consultant shall submit the 98% CPEC binder to the PM. The PM will distribute the CPEC binder to applicable departments, for review.

CONSTRUCTION ESTIMATE

The Consultant finalizes the cost estimate and provides it to the PM. The estimate is incorporated into the 98% design submission package. The 98% project estimate is submitted to the Engineering Program manager to include in the monthly Authority Board bidding schedule update. If the project scope does not align with the budget, a meeting with GEC, CFO or COO may be required to understand the scope associated with the project budget (from 30-year plan or RM Deposit), and the PM will coordinate. If substantial additions to the scope/budget are being considered, the COO/CFO shall notify and receive input from the GEC. This cost estimate is submitted to the Engineering Program Manager to include in the MTA Board Update.

98% DESIGN SUBMISSION DISTRIBUTION

The 98% submission shall consist of all plan sheets and a complete contract specification book. The PM distributes the 98% submission for comments to the Project Team and other departments, as necessary, with a comment period, as determined by the PM.

The PM collects and analyzes the comments received on the 98% submission. If no comments or only minor comments are received, the necessary adjustments are made to the plans and specifications. If significant comments are received, the Team will meet to review and address these comments. Final comments will be incorporated into the PS&E submission.

ADMINISTRATIVE RESPONSIBILITIES

The PM will work with Construction Program Manager and Purchasing Department to establish the contract advertising and bid opening dates. Construction Manager needs to select/assign resident engineer and inspection team including material testing firms.

The Consultant must submit the required information needed for the Request for Wage Determination form to the PM who will submit to the COO. The COO will submit the Request for a Wage Determination form to the Bureau of Labor Standards for the fair minimum wage rates to be paid to the laborers and workers employed on the construction project. This information must be included in the final PS&E.

Event 11 - PS&E (PLANS, SPECIFICATIONS AND ESTIMATE)

FINALIZE PLANS AND CONTRACT DOCUMENTS

Consultant revises the plans and contract documents to reflect the comments received on the 98% submission.

FINAL ESTIMATE REVIEW

The Final Construction Estimate is developed by the Consultant and reviewed by the Team. This is incorporated into the PS&E package.

ENVIRONMENTAL APPROVALS COMPLETE

The Environmental Documentation is packaged and added to the Contract Package.

FINAL CPEC BINDER

The Consultant shall submit the CPEC binder to the PM. The PM will distribute the CPEC binder to the Construction Program Manager.

CONSTRUCTION SURVEY/INSPECTION TEAM REVIEW

Construction inspection team should be on board and the inspection team should be reviewing the plans and providing constructability review before PS&E is finalized.

R/W SECURED

All right of way needed for the project including land acquisitions, work permits, licenses or easements are finalized and executed.

UTILITY/MPO/Municipal/MaineDOT Agreements

Any Utility or other project related agreements or separate Memorandums for coordinating work have been executed and are ready to implement.

PS&E PACKAGE SUBMISSION

The Consultant submits the PS&E package, consisting of the final Plans, Specifications, and an Engineer's Estimate. The PS&E package is reviewed by the Director of Engineering & Building Maintenance and any other interested party or stakeholder.

The PM submits the PS&E package and the "Notice to Advertise" to the Purchasing Department (short form and long form).

The final original plan cover sheet is signed by the MTA COO and the appropriate Director. Professional Engineer stamp(s) for the responsible engineer(s) for each plan sheet shall be stamped on the final original plan cover sheet as per the MTA's sample CADD drawings provided to the Consultant by the PM.

Event 12 – BID PHASE

PROJECT ADVERTISEMENT

The project is advertised or solicited. Shortly thereafter, a pre-bid meeting may be held. The Consultant will typically run the pre-bid meeting. Addendums are created by the Consultant and reviewed and approved by the MTA. Addendum approvals are required by the MTA staff that signed the Title Sheet of the Plans. Addendums are sent out to the bidders by the MTA's Purchasing Department.

PUBLIC INFORMATIONAL MEETING

If determined to be required by the Project Team or by the MTA's Public Participation Process Policy, a public informational meeting is scheduled by the PM or Planning Department liaison. This meeting may occur while the project is out to bid, or after the contract has been awarded. The public informational meeting may be a stand-alone public meeting, or may be part of a Selectmen's or Council Meeting. Notice of such meeting may be communicated via a letter mailed to impacted abutters or an advertisement in the local newspaper. At the meeting, an overview of the project scope of work and anticipated schedule is presented. The PM communicates a brief summary of the Public Meeting to the Team.

AWARD RECOMMENDATION

Bids are received and reviewed by the Consultant and the Team. A recommendation regarding contract award is made to the Team by the Consultant. The Team forwards the recommendation to the COO/CFO who will make a recommendation regarding contract award to the MTA Board. The Board makes the decision to award.

Event 13 - CONTRACT AWARD

The management and oversight of the project is officially handed off from the PM to the Construction Program Manager at this point.

CONTRACT AWARD

The Award Recommendation is completed and sent to the Contractor by the Purchasing Department. The Purchasing department will review the required materials submitted by the Contractor to make sure all documents are in order including insurance certificates, bonds, and other requirements of award.

ENVIRONMENTAL COORDINATION

Consultant shall prepare and submit the Construction General Permit NOI for the MTA Environmental Coordinator's signature. MTA Planning Department liaison shall submit the ACOE NOI. The MTA Planning Department liaison should have also sent a request for check in to Finance department for any permitting or in-lieu fees, or develop a schedule for wetland monitoring, if applicable.

CONSTRUCTION ADMINISTRATION

The responsibilities of the Consultant will be defined in a construction support task/project order and

will differ from project to project. At a minimum, the Consultant will need to be available throughout the construction to answer questions and provide the construction team with advice.

PRE-CONSTRUCTION and/or PARTNERING MEETING

The Resident Engineer assigned to the project coordinates and runs the Pre-Construction meeting with the Contractor to discuss Plans, Specifications and Procedures for the Project. The Resident Engineer is responsible to the Construction Program Manager for the project from this point forward. The Resident Engineer and Construction Program Manager would determine if any other MTA or Consultant team members are required for the Pre-construction or Partnering meeting. Usually a meeting with the Utilities is held jointly with this meeting. A partnering meeting is also discussed with the Contractor and may be scheduled for several weeks following construction start.

Event 14 - CONSTRUCTION

Construction of the project takes place. Proposed changes during construction that may affect project impacts, property owner compensation, or commitments to others, should be coordinated with Team Members whose interest may be affected. Should Change Orders or Extra Work Orders be required, appropriate Team Members, including the Consultant, are consulted for input.

SUBSTANTIAL COMPLETION

At substantial completion the MTA's General Engineering Consultant needs to provide a recommendation to the MTA concerning the reduction in retainage. Once this recommendation is made, a reduction can be authorized.

FINAL TEAM MEETING/INSPECTION

When construction is complete, the Construction Program Manager and the Resident Engineer invite some Team members and the GEC to an on-site Final Inspection to review the project. In addition, a separate meeting may be scheduled for the Team members to provide feedback on how the process worked during the development of the project. At the meeting, Team Members will discuss what went right, what went wrong, and how the project development process could be improved.

Once the Team has determined that the completed project met the intent of the contract plans and specifications, the Resident Engineer shall prepare a letter to the COO/CFO stating such.

In addition, the MTA's General Engineering Consultant must provide a recommendation to close the project and release all retainage to the COO and the MTA's Board must review and approve the final payment to the Contractor.

Event 15 - CONSTRUCTION COMPLETE

FINAL CONSTRUCTION DOCUMENTATION

Resident Engineer and the Construction Program Manager and any other field Inspector files final construction documentation in a central file at the MTA (both hard copies and electronic).

UTILITY/RAILROAD/MPOs/MaineDOT AGREEMENT RESOLUTIONS

The Resident Engineer tracks all field changes and provides reports on work to the CPM. CPM coordinates with PM to ensure all agreements are fulfilled. Utilities are notified of any field changes and given progress reports on the work. Final payments are made in accordance with the agreements.

R/W DISPUTE RESOLUTION

R/W dispute resolution may be ongoing until resolved through court system or through negotiations.

CONTRACTOR AND CONSULTANT EVALUATIONS

The Construction Program Manager and MTA PM shall complete the Contractor and Consultant Evaluations, respectively and send them to MaineDOT.

ENVIRONMENTAL COMPLIANCE

The Construction Program Manager, PM and Permitting Liaison shall confirm all permit conditions have been met and submit the compliance report. A mitigation monitoring program (if required) and schedule has been established and will be implemented by the permitting liaison. The MTA Environmental Coordinator shall transfer the CPEC Binder and any responsibility for maintaining any permanent BMPs to Highway Maintenance.

Event 16 - PROJECT COMPLETE

The Project is complete when:

- 1) Construction is complete.
- 2) The team has reviewed and had a Final Team Meeting/Inspection
- 3) RE provides final closeout documentation to Construction Program Manager.
- 4) Utilities and Railroad agreements are closed out.
- 5) All project documentation is complete and submitted to the MTA central file.
- 6) Final Payment has been recommended by the MTA's General Engineering Consultant to the MTA's Chief Operations Officer.
- 7) The MTA's Board has approved the final payment be made to the Contractor.
- 8) Final Payment has been made.
- 9) Finance and Administration is closed out.
- 10) Right of Way and other disputes are settled.
- 11) Any project warranties or bonds have been satisfied.