

The City of Saco  
and the  
Eastern Trail Management District (ETMD)

Request for Proposal (RFP) for  
Final Design Engineering Services leading to  
Contract Documents  
for the  
**EASTERN TRAIL OLD ORCHARD TO SACO PROJECT**  
(PIN 13340.00)

The Eastern Trail (ET) is part of the East Coast Greenway trail system. When completed, the ET will run from South Portland to Kittery. Most of the "off-road" portion of the ET is proposed to be, or presently is, located within the long-abandoned "Eastern Railroad" corridor that formerly ran from Portland to Boston. This corridor was acquired by a natural gas transmission company in the 1960s, which installed a high pressure gas pipeline. Most of the corridor is currently owned by Unitil Corp. There has been an ongoing working relationship between Unitil and the Eastern Trail Management District to allow for the co-location of ETMD's trail system within the pipeline corridor.

**Project Scope:** The scope of this RFP is to invite qualified engineering consulting firms to submit a formal proposal to produce a Final Design for a new Bicycle and Pedestrian Facility from Milliken Mills Road in Old Orchard Beach to the Thornton Academy campus in Saco (Clark Street ), an approximate distance of 4.37 miles. This will include design for crossing over Mill Brook as well as a pedestrian-bicycle bridge over Route 1, and a fairly complex crossing of on- and off-ramps at the I-195/U.S. Route One intersection. The design shall follow the route specified in the attached map (Exhibit A).

The Final Design shall identify concepts that best meet the design criteria set forth in this document, and shall include estimated project costs including but not limited to construction, right-of-way acquisition, and environmental permitting that will be used to seek construction bids.

A pre-proposal meeting will be held at **9:00 am on January 15, 2010 in the Conference Room of Saco City Hall, 300 Main Street.** Interested consultants should attend this informational meeting.

Five (5) copies of the proposal must be clearly marked: ***"Eastern Trail Old Orchard Beach to Saco Final Design Project, PIN #13340.00." Completed proposals must be delivered by 2:00 p.m. on January 29, 2010 to:***

**Bob Hamblen, President, ETMD**  
Saco City Hall  
300 Main Street

Submittals delivered after the deadline will not be considered. All questions shall be e-mailed to ETMD Executive Director Carole Brush, at [eta@eastertrail.org](mailto:eta@eastertrail.org), and must be received by 4:00 p.m. local time on January 21, 2010 in order to assure that any responses or changes can be properly disseminated to all interested parties by 4:00 p.m. on January 25, 2010.

## **APPROVAL**

The City of Saco will administer the project locally in accordance with the MaineDOT's Local Project Administration (LAP) requirements. Project work may begin as soon as an Agreement between the City of Saco and selected engineer is approved by the State, and a notice to proceed is given.

Additional information that the successful bidder should be aware of:

- “The Eastern Trail – A Multi-Use Trail Construction Project Preliminary Design Report, Segments in the Town of Old Orchard Beach and the City of Saco, November, 2009,” can be viewed at [www.eastertrail.org](http://www.eastertrail.org).
- The Eastern Trail Engineering Feasibility Study, April 2001 done by Wilbur Smith & Associates, can be viewed at [www.eastertrail.org/documents/engstudy.htm](http://www.eastertrail.org/documents/engstudy.htm)

## **SCOPE OF SERVICES**

The Engineer shall provide final design and engineering for this project. Engineer services shall be based on the Preliminary Design Report referenced above, and shall be in accordance with the MaineDOT project development process, and will include but not be limited to the following:

### **1. Project Administration and Meetings**

- a. Project Management – contract development, team oversight, schedule preparation and maintenance, and monthly project management related to final design.
- b. Project Coordination – coordinate project development between City of Saco, ETMD and MaineDOT.
- c. Meetings and field walks – the following meetings and field walks are required, including preparation and attendance at:
  - Two team meetings
  - One field walk with abutting property owners at Rte. One crossing
  - One utility meeting with Unutil at their Hampton, NH office
  - One field walk with Unutil, as requested
  - One combined visit with Maine DEP and U.S. Army Corps of Engineers
  - One pre-application meeting with Maine DEP
  - One presentation to the OOB planning board
  - One presentation to the Saco planning board

## **2. Survey**

Survey was requested during preliminary design and was submitted by Dow and Coulombe, Inc. Additional survey as may be required.

## **3. Geotechnical Investigation**

R.W. Gillespie and Associates, Inc., provided geotechnical services as part of the Preliminary Design Report. Additional services for the final design phase may include:

- General review of final design plans and specifications to verify geotechnical recommendations specifically with respect to the U.S. Route One pedestrian bridge crossing
- Assist in addressing geotechnical concerns raised by Unitil during final design

## **4. Final Trail Design**

Shall include but is not limited to:

- a. Finalize the draft horizontal and vertical alignment and provide a baseline that is tied to the former rail corridor right of way and/or to the I-195 right of way.
- b. Finalize typical sections.
- c. Review the preliminary trail alignment in areas of existing box culvert crossings to determine if the proposed trail footprint will fit within the length of the box culvert.
- d. At approaches to Rte. One bridge, cross sections shall be developed at 50 foot intervals and 100 foot intervals elsewhere, and will be included in the contract plans.
- e. In areas of proposed grade changes of more than two feet and in areas of proposed ditches, elevation tables shall be developed and included on the contract plans.
- f. Incorporate erosion and sedimentation control devices on the plans.
- g. Develop screening/buffering recommendations and details as needed.
- h. Determine final locations and details of safety rail or fence at road and culvert crossing where proposed side slopes are steeper than 3:1. Contract plans shall instruct the contractor to install safety rail in other locations where warranted. An estimated quantity of safety rail shall be included in the engineer's estimate.
- i. Identify locations and develop specifications for blocking unauthorized trails that intersect the trail, assuming this will be accomplished by placing large boulders in the intersecting path to prevent access.
- j. Retaining wall design along and within the I-195 corridor, a significant issue identified by the PDR.
- k. I-195 ramp crossings, including crosswalks, signage, and potential pedestrian/traffic signalization.

## **5. Roadway Crossings**

The design and layout of paved aprons, bollards, signs, crosswalks, detectable warning strips, guardrail, and up to two trail kiosks where applicable, at at-grade roadway crossings. In addition, the following work will be completed:

- i. Evaluate the need for selective clearing and limbing within the trail corridor to improve sight distance. Develop plans and specifications accordingly.
- ii. Prepare trail plan, profile and cross sections to road approach. Constraints may include existing utilities, right of way, drainage structures and accessibility requirements. Retaining walls and a reduced trail width shall be considered to reduce the proposed trail grade and impacts.
- iii. Develop trail signage package to notify trail users of trail grades and curves approaching the Rte. One bridge or other sections of the Trail where design speeds may be at their minimum.

## **6. Trailhead Parking Locations**

Identify up to three trailhead parking locations as directed by the City of Saco or ETMD and include on contract plans.

## **7. Environmental Permitting**

Prepare applications for permits, authorizations, and approvals from federal, state and local authorities for the construction of the trail section between OOB and Saco. The project is subject to permitting by the US Army Corps of Engineers (ACOE), Maine Department of Environmental Protection (Maine DEP), and each municipality. The scope of work for performing the federal, state and local permitting tasks during the final design phase is described below.

### **a. General Coordination**

This task is for environmental coordination between the review agencies, City of Saco, ETMD, and Maine DOT relative to permitting, compliance, and environmental documentation. Effort would entail coordination of the findings from the historic review, hazardous material assessment, NEPA documentation, wetland permits, stormwater management permit and local reviews. MaineDOT will provide findings relative to cultural resources, hazardous materials screening and assist with processing the Categorical Exclusion through the Federal Highway Administration.

Deliverables: None. Correspondence, telephone memoranda, etc. shall be maintained in the project file.

### **b. Design Review/ Recommendations (avoidance, minimization, best practices for meeting environmental permitting requirements)** This task entails environmental review and guidance during final design to be consistent with federal, state and local regulations, prior to completing construction documents and permit applications.

### **c. Determine regulatory and jurisdictional requirements**

Delineations were performed as part of the PDR for potential wetland impact sites along the corridor. This task entails compiling findings from the Preliminary Design Report, including wetland field study data, submitting documentation to the agencies and determining the final jurisdictional status to establish which permits are required.

#### **i. Prepare and submit project information to agencies**

Wetland delineation plans and supporting documentation, photographs, text from the preliminary design report, and project plans shall be provided to the permitting agencies

to assist in determining jurisdiction of wetland areas occupying the former rail grade or other trail corridor sections.

ii. Discuss project and findings with ACOE and Maine DEP

Discuss the agency interpretations about the jurisdiction of wetland areas, and based upon the determination of jurisdiction, will assess the permit thresholds and type of permits needed.

Deliverables: Memorandum of conversations.

iii. Conduct one project site visit with state and federal agencies

Attend a site visit with the ACOE and Maine DEP to view and discuss the areas of potential regulatory jurisdiction.

Deliverables: Meeting notes.

iv. Attend one pre-application meeting with Maine DEP

Prepare for and attend one pre-application meeting at Maine DEP in Portland to formally discuss the project, permitting requirements and permitting schedule. This meeting will satisfy the meeting requirements for NRPA filings.

Deliverables: Meeting minutes.

d. Prepare Categorical Exclusion Checklist (Maine DOT/FHWA)

Based upon the nature of the project and anticipated impacts, this project likely qualifies for Categorical Exclusion under the National Environmental Policy Act (NEPA). Since federal funding is proposed, review under NEPA is required. Prepare the Categorical Exclusion Checklist for the project using information obtained during the preliminary design and supplemented with findings conducted during the final design phase. The CE Checklist will be provided to the Maine Department of Transportation for review and submission to the Federal Highway Administration.

Deliverables: CE Checklist with attachments.

e. Prepare US ACOE Section 404 PGP application (Assumes PGP Category 2)

Based upon the preliminary design findings, it is anticipated that the project will require a permit from the ACOE for work in wetlands and waters of the U.S. Preliminary impacts indicate that a Category 2 General Permit will be required. Prepare the Corps Permit application with supporting plans, wetland findings, and proposed compensation methods for unavoidable wetland impacts. It is anticipated that any wetland compensation required for the project will be made through purchase of credits through the Maine In-lieu fee program, or through the City of Saco or ETMD arranging for the conservation of wetlands to offset the project impact. If the City of Saco or ETMD elect to use wetland conservation to offset project impacts, the City of Saco or ETMD shall be responsible for identifying and acquiring acceptable property, and for placing this property in a conservation easement acceptable to ACOE and MaineDEP.

Deliverables: 404 permit application, supporting plans, wetland data, abutters list.

f. Prepare Coordination Letters for the Maine Tribes

Send letters describing the project to each of the recognized Maine Native American tribes, seeking their review for any cultural resources or potential archaeological concerns. This coordination is required for the federal wetland permitting.

Deliverables: Coordination letters to each of the four tribes.

g. Prepare Maine DEP NRPA application and Water Quality Certification (assumes NRPA Tier 2)

Prepare the Maine Natural Resources Protection Act and Water Quality Certification application for wetland impacts. Based upon the preliminary findings, it is anticipated that a Tier 2 permit will be required. The application will include all attachments and the visual evaluation field survey checklist. A public notice of intent to file shall be prepared for the newspapers, abutters and municipal offices.

Deliverables: Permit application forms, attachments, public notice, abutter notifications, filing fee.

h. Prepare Maine Stormwater Management Act Permit By Rule Application

Prepare the Stormwater Permit by Rule Notification and supporting attachments, as needed.

Deliverables: Stormwater Notice of Intent, supporting documents, Erosion & Sediment Control Plan, filing fee.

i. Determine Wetland Mitigation requirements & establish compensation plan

The project will result in impacts to wetland resources; therefore compensation for unavoidable impacts is anticipated. Based upon the linear nature of the project and limited right-of-way, the implementation schedule, and the effort to identify compensation sites and evaluate feasibility and prepare design plans, the compensation may be made using the State of Maine In-lieu fee (ILF) program. If necessary, the ILF shall satisfy both the state and federal wetland permitting agencies. This task involves coordinating with the ACOE and Maine DEP to establish the appropriate ILF compensation for the project.

Deliverables: Memorandum of findings

j. Prepare NRPA Permit by Rule application for Mill Brook stream crossing

Prepare and submit the PBR application to the MeDEP with supporting attachments, as needed.

Deliverables: PBR for stream crossing

k. Prepare Site Location of Development Project Amendment application for that portion of the Trail that will be located within property of Thornton Academy.

## **9. Utility Coordination**

Utility coordination and certification will follow MaineDOT's coordination process and will be completed as follows:

### **a. Coordination with Unitil**

The following coordination process shall occur with Unitil:

- i. Send 98% plans to Unitil for review (2 week review period assumed).
- ii. Complete field walk of corridor with Unitil to identify trail locations requiring special consideration.
- iii. Conduct a coordination meeting with Unitil to identify outstanding concerns and to develop practical solutions.
- iv. Revise plans and specification based on sit down meeting. Submit to Unitil for review and comment (2 week review period assumed).
- vi. Revise final plans and specifications based on review comments from Unitil.
- vii. Submit 100% PS&E documents to Unitil for review and approval for advertising (2 week review period assumed).

### **b. Coordination with all other utility companies**

The following coordination process shall occur for all other utility companies. Final utility coordination and certification will include the following:

- i. Gather and review "Survey Plan Questionnaire". Determine if any utilities are not located accurately on survey plans and modify as necessary based on information provided by the utility companies.
- ii. Send out PDR plans and request conflict identification from utility companies with utilities located within the project limits at locations other than roadway crossings.
- iii. Send out preliminary roadway crossing plans, including profiles and cross sections where applicable, and request conflict identification from companies with utilities located at roadway crossings.
- iv. Incorporate modifications into the contract plans, develop required utility special provisions and distribute to utility companies for review
- v. Attend one (1) pre-coordination meeting
- vi. Develop final utility certification.

## **10. Right-of-Way and/or Easement Acquisition**

The Engineer shall assist the City of Saco and ETMD in acquiring either a fee interest in private property, or easements, for use at the Rte. One crossing and the Thornton Academy property as follows:

Right of way mapping - Gather property ownership data and develop preliminary and final right-of-way plans. This work will use the title investigation work from the previous task and build upon it.

### **11. Rte One Bridge Design**

Final design of the U.S. Route One bridge shall be completed based on the recommendations made in the PDR. The design will be completed in accordance with the Maine Department of Transportation “Bridge Design Guide” (BDG), August 2003, AASHTO “LRFD Bridge Design Specifications”, 4<sup>th</sup> Edition, AASHTO Standard Specifications, 17<sup>th</sup> Edition, and the AASHTO Guide Specification for the design of Pedestrian bridges. Following is an outline of each scope item:

a. Approach trail design

Develop the trail layout, profile and cross sections for the approaches to the Rte. One Bridge. A 5% maximum profile grade shall be maintained. Cross sections shall be taken every 50’ and used to develop earthwork quantities.

b. Superstructure Design

Develop general plan, elevation, typical section for a prefabricated steel bridge. Superstructure reactions shall be calculated for substructure design. Final design and detailing of the prefabricated bridge and bridge bearings shall be the bridge fabricator’s responsibility.

c. Substructure Analysis and Design

i. Complete analysis and design for a reinforced concrete stub abutment. Develop foundation plan, elevation and details. Design of the foundation shall be coordinated with the geotechnical recommendations made by in the PDR.

ii. Geometry - Perform bridge geometric calculations and layout including framing, deck elevation, critical clearances, seat elevations, and abutment locations.

### **12. Mill Brook Crossing**

Design a bridge or culvert installation suitable to cross an eroded streambed and to meet the 100-year storm event flow rate. Consult with Unutil to ensure that existing natural gas line is accurately located, and design of structure and fill materials will be placed so as to avoid impacts on the pipeline. If a culvert is the preferred installation, prepare all culvert design to meet the latest Maine DEP Chapter 305 standards.

### **13. Deliverables**

A single set of contract documents detailing the work to be completed for the trail and Rte. One crossing will be compiled and submitted by the Engineer. The contract documents shall include:

a. Contract Drawings - The final construction plans shall be developed in accordance with the Department’s Bridge & Highway Design Guides as applicable. Five copies of the final drawings will be provided to the City of Saco. The following plans are assumed:

General Plans

- Title Sheet with project locus
- General notes sheet with legend



#### Trail Plans

- Typical Sections for trail
- Trail plans, including horizontal alignment and baseline control
- Trail plans, including required erosion and sedimentation control
- Road Crossing and approach Plan/Profile/Cross Sections/Details
- Rte. One Crossing Plan, including but not limited to structural bridge and foundation plans
- Mill Brook Crossing Plan and Profile
- Abutment details
- Miscellaneous details (1)

#### Miscellaneous Plans

- Detail Sheets - Including details for proposed erosion and sedimentation control, safety rail, guardrail, drainage structures, retaining walls, intersection treatments (bollards, signage, crosswalks, warning strips, etc.), and trail kiosks.
  - b. Specifications and bid documents – the Engineer shall prepare and compile Bridge & Trail Special Provisions and/or Supplemental Specifications as necessary to supplement the Department's Specifications and Supplemental Specifications. In addition, the Engineer shall assemble bid documents for advertisement. Bid documents will include legal and procedural documents, general and special provisions as well as plan sheets necessary to describe the work to be performed. Five copies of the final project specifications and bid documents will be provided to the City of Saco.
  - c. Construction Estimate – the Engineer shall prepare the construction quantity estimate in accordance with the Bridge & Highway Design Guides.
  - d. The following Plan, Specification and Estimate (PS&E) submissions will be made:
    - 98% Plans
    - 100% Final Plans, Specifications and Engineer's Estimate
  - e. Provide monthly progress reports to ETMD Executive Director Carole Brush; P. O. Box 250, Saco, ME 04072; [eta@eastertrail.org](mailto:eta@eastertrail.org); 207-284-9260.

#### **OTHER CONSIDERATIONS**

- The selected engineer will work under the general direction of the City of Saco, contact person Bob Hamblen, City Planner and ETMD President, (207)282-3487, Fax (207)282-8202 ; [bhamblen@sacomaine.org](mailto:bhamblen@sacomaine.org).
- Design shall be consistent with MDOT construction requirements and specifications.
- The City and ETMD reserve the right to use the successful bidder to perform CE services.

## **PROPOSAL SUBMISSION REQUIREMENTS**

The proposals shall include as a minimum, the following information:

- **Transmittal Letter:** A brief letter summarizing project team's qualifications, project understanding and project approach.
- **Company profile:** Firm size, qualifications and services.
- **Project Team:** Names of project manager and relevant team members that will be assigned to this project with their capabilities and experience with similar projects.
- **Project Approach:** Outline of scope of work and approach with estimated timeline. The consultant should provide a schedule of deliverables including milestones for submittal for review and approval. Also proposed dates for project coordination meetings.
- **Project Administration:** Any experience with MDOT Local Project Administration (LPA), Federal, State, and Local requirements and your approach to meeting those requirements.
- **Workload Capacity:** Firm's workload and capacity to perform the work on a reasonable schedule. ETMD desires that the Consultant have sufficient resources to get this project responsibly completed as soon as possible so that construction bids can be sought in Spring, 2010.
- **References:** Names, addresses (including e-mail), and telephone numbers of representatives of current or recent clients familiar with the work your firm and project team (three suggested).

**Sealed Proposals:** Provide a sealed proposal in a separate envelope. Include as a minimum: (1.) Cost Plus Fixed Fee broken down per discipline/person as follows: Direct Labor Costs, Overhead Costs, Profit, and Direct Expenses.

**Person Hour Assignments:** Total work hours that project manager and relevant team members will spend on the project, preferably in tabular form.

All costs shall be in accordance with the Maine Department of Transportation Policy on reimbursement of consultant salary and overhead caps. This policy applies to all direct and indirect costs. For details, see [www/maine.gov/mdot/contractor-consultant-informatino/contractor-cons.php](http://www/maine.gov/mdot/contractor-consultant-informatino/contractor-cons.php).

**Additional Data:** Provide any additional data you consider essential to the submittal.

**SELECTION PROCESS AND CRITERIA**

The proposal review team will include but not be limited to City of Saco staff, ETMD President, ETMD Vice President, ETMD Executive Director, ETA President, and a MaineDOT representative. The following guidelines will be used when reviewing and ranking the Engineer submittals:

- 1. Project team qualifications and relevant experience with similar projects and LAP's 15 Pts
  - 2. Company experience with similar projects 20Pts
  - 3. Approach to Project Scope 25 Pts
  - 4. Reference's satisfaction with quality, timeliness and budget management 20 Pts
  - 5. Availability and ability to meet schedule 20 Pts
- Total Possible Points 100 Pts

Engineers with top ranking proposals may be selected for an interview. The proposal from the selected consultant will be subject to contract negotiation for the services if the Selection Committee finds everything satisfactory and within budget funding. If an acceptable contract cannot be negotiated with the finalist, the second ranking consultant will be contacted and the same process applied.

**A final selection is expected to be made no later than February 5, 2010.**

Following final selection, the parties shall execute a contract based on this RFP, the MDOT/ City of Saco Project Agreement, and any applicable requirements of ETMD. Project work under this proposal may not begin until the City of Saco/MDOT and the successful Consultant execute a Contract and the City of Saco receives notice from MDOT that the federal and state funds have been appropriated and are available.

**GENERAL CONDITIONS AND REQUIREMENTS**

**MDOT General Contract Provisions:** The Engineer shall ensure Engineer and Contractor compliance with the required contract provisions for federally-funded contracts contained in the current revision of State of Maine Department of Transportation's Consultant General Conditions and related Supplement to these Consultant General Conditions. The Consultant General Conditions may be found at <http://www.state.me.us/mdot/contractor-consultant-information/contractorcons.php>.

**Certified DBE (Disadvantaged Business Enterprise)**

Certified DBE's are encouraged to apply as the prime or subcontracting Engineer for this work. Non-DBE Consultants shall ensure that DBE's, have the maximum opportunity to participate in the performance of the Contract. The Department has established a current annual aspiration effort for DBE utilization of 4.5%. Firms certified by another state's transportation agency must

be certified by Maine DOT. More information may be found about Maine DOT's "Certified Disadvantaged and Women Business Enterprise" directory at:  
<http://www.state.me.us/mdot/disadvantaged-business-enterprises/dbe-home.php> The completed form must be submitted with the proposal.

**Indemnification and Insurance:**

The selected engineer shall agree to indemnify and hold the City of Saco and the ETMD harmless from claims, demands, suits, causes of action and judgments arising from the Engineer's performance, including claims of professional malpractice or negligence.

The City of Saco and the ETMD reserve the right to reject any or all proposals.