

PROFESSIONAL SERVICES REQUEST FOR PROPOSALS (RFP)

Hannacrois Creek - Debris Removal/Channel Restoration Project Town of Coeymans, Albany County, New York

INTRODUCTION

The Town of Coeymans desires to hire a professional services firm to design and permit a debris removal/channel restoration plan for an approximately 1,800 foot portion of the Hannacrois Creek located on Town property. The Town secured funding from the Federal Emergency Management Agency (FEMA) to remove accumulated gravel from a section of Hannacrois Creek. The project site is located between Sycamore Country Club Golf Course (on Tompkins Road along Route 106) and Joralemon Park (along Starr Road) in the Town of Coeymans, Albany County, New York (refer to Attachment A, Site Location Map and Attachment B, Aerial Imagery of Project Site). The Hannacrois Creek project site can be accessed from Greening Lane and Hannacreek Drive.

The identified 1,800-foot section of the Hannacrois Creek is prone to persistent sediment and gravel deposition. The deposition is largely occurring in this area due to a steeper upstream gradient conveying the sediment into the flatter, current project site area. In this stretch of the creek the stream gradient decreases rather significantly causing the velocity of the water to decrease and allowing sediments to drop out of suspension. The Town is concerned that sediment and gravel will likely continue to accumulate in this section of the Creek increases the potential of flooding nearby residential areas. In addition to the observed gravel deposition, several debris dams have formed, reducing the cross sectional flow area of the stream and contributing to flooding and gravel deposition.

This section of the Hannacrois Creek has undergone past sediment maintenance, as indicated by the numerous large stockpiles of sediment and windrows of side-cast gravel present in the floodplain. The upstream section of the Hannacrois Creek, above the Sycamore Country Club, appears to be stable with minimal sediment deposition within the channel boundary.

The fisheries biologist for NYSDEC Region 4 (Jerry Fraine) previously has been contacted by the Town and visited the site with Town officials last year. Mr. Fraine confirmed that an Article 15, Protection of Waters Permit from NYSDEC will be required prior to initiating any gravel removal within the stream corridor. In addition, a permit from the U.S. Army Corps of Engineers (Corps) will be required for work within regulated Waters of the U.S.

The Hannacrois Creek throughout the project reach is listed by NYSDEC as a Class A(T) Stream, which is a protected stream classification indicating its best usage for a source of drinking water, swimming and other recreation and fishing opportunities. The "TS" designation denotes the suitability for trout spawning, and it is typical for NYSDEC to restrict in-stream construction for trout spawning streams to a period between the middle of June and the end of September for any given year, subject to the specific conditions of a NYSDEC Protection of Waters permit.

A list of the tasks is as follows:

- TASK 1 - Wetlands Delineation
- TASK 2 - Topographic Survey
- TASK 3 - Geomorphic Assessment
- TASK 4 - Hydrology Assessment
- TASK 5 - Hydraulic Assessment - Existing Conditions
- TASK 6 - Preliminary Design
- TASK 7 - Final Design
- TASK 8 - Project Permitting & SEQRA Compliance
- TASK 9 - Construction Administration Services

WORK SCOPE

The professional services firm will be responsible for preparing suitable base mapping, and detailed engineering drawings depicting the debris removal/channel restoration project. The design of the project needs to be supported by geomorphic, hydrology, and hydraulic assessments. The professional services firm will be responsible for obtaining all required permits for the project. In addition, once a Contractor is selected to perform the work, it is anticipated that the professional services firm will provide construction observation services on behalf of the Town.

One of the primary objectives of the work is to reduce the potential for flooding in the area, including most importantly the nearby homes located on Cynthia Court, Macintosh Street, and Greening Drive.

TASK 1: WETLANDS DELINEATION

The professional services firm shall perform a wetlands delineation for the Hannacrois Creek project site that shows all regulated Waters of the U.S. within the jurisdiction of the Corps. The wetlands delineation shall be conducted in accordance with 1987 U.S. Army Corps of Engineers (Corps) Methodology and the SWANCC Rapanos and Carabell Supreme Court decisions. A wetlands delineation report and mapping shall be prepared that provides a substantive basis for addressing the project impacts. At a minimum the wetlands delineation report shall include the following:

- Review available mapping, including National Wetland Inventory (NWI) maps, New York State Freshwater Wetland maps, Soil Survey maps, aerial photography, stream classification mapping, and topographic maps for the project site.
- Prepare Corps data forms for each identified Wetland and Other Waters of the U.S., including classification as isolated or non-isolated wetlands consistent with the relevant Supreme Court decision.

Representative photographs will be taken of the project area, and pertinent observations will be recorded for special environmental characteristics that are readily evident at the time of the field work, including any existing historic structures and any potential threatened or endangered species that might be present in the area (e.g., bald eagle, bog turtle, Indiana bat, Karner blue butterfly, and the shortnose sturgeon).

TASK 2: TOPOGRAPHIC SURVEY

Conduct a topographic survey of the project site (i.e., the approximately 1,800 foot portion of Hannacrois Creek), including the entire extent of the associated published 100-year floodplain. Mapping shall be prepared with a maximum 2 foot contour interval. The survey shall be georeferenced in New York State Plane Coordinates, East Zone - NAD83. The vertical datum shall be relative to NAD 88.

The topographic survey shall include the location of all structures, homes, roadways, ditches, tributaries, mapped floodplains and shall include bathymetry within the stream channel of Hannacrois Creek. The survey shall include a detailed profile of Hannacrois Creek's thalweg, as well as a minimum of three (3) representative detailed cross sections transverse (i.e., perpendicular) to the stream channel, and extending to the boundary of the mapped floodplain.

The topographic survey shall locate boundaries of all delineated wetlands and other Waters of the U.S., including the ordinary high water mark (OHWM) of the Hannacrois Creek.

TASK 3: GEOMORPHIC ASSESSMENT

Task 3a: Project Reach Assessment

The professional services firm shall conduct a geomorphic assessment of the project reach, to include a Rosgen Level I and Level II stream classification and inventory, or equivalent, to identify the existing stream type(s) present throughout the project reach. The analysis shall include cross sections necessary to determine the bankfull channel area, width, depth and entrenchment through each stream type present. Profile data shall include existing slope of the stream channel bottom, water surface, and bankfull surface. Representative sediment analyses (i.e. grain size analysis) shall be conducted to determine both the dominant particle size of the stream sediments as well as representative sediment samples collected for sediment mobility and sediment transport analysis.

The geomorphic assessment shall include a summary of channel conditions, Bank Erodability Hazard Index assessments (BEHI), site evaluations with photographs, profile data to incorporate channel bed features, plan form dimensions, and channel particle size for incorporation into the project design. Information gathered shall be used to inventory general stream channel dimensions for comparison to reference and regional stream data for use in the project design.

Task 3b: Reference Reach Assessment

The professional services firm shall compile and/or collect local reference reach data at a stable stream reach for comparison to the existing unstable channel and for incorporation into the project design. Reference reach(s) shall be of the stream type targeted for project restoration and should include a Rosgen Level I and Level II stream classification and inventory (or equivalent) as well as include pertinent information required for project reach design and comparison.

The professional services firm shall acquire and digitally match, rotate, and scale available recent aerial photography in order to assess and document the changes in stream pattern throughout the selected reference reach(es) to confirm the reference reach stability. Completion of this task shall rely on the ability to visually interpret the stream channel location on individual aerial images.

TASK 4: HYDROLOGY ASSESSMENT

The professional services firm shall review existing regional stream flow and flood recurrence data for comparison and incorporation on the project analysis and design. The flow rate information presented in the Flood Insurance Study (FIS) prepared for the Town of Coeymans shall be used as a starting point. Other sources of information may include, but are not limited to, regional data available by NYSDEC, USGS, FEMA, and others. Design reach discharge estimates for various storm recurrence intervals (1-year,

bank-full, 2-year, 10-year, 25-year, 50-year, and 100-year) shall be generated for use in the project design.

TASK 5: HYDRAULIC ASSESSMENT - EXISTING CONDITIONS

The professional services firm shall prepare, develop, and analyze an existing conditions hydraulic model using HEC-RAS, or equivalent, to develop water surface profiles for the project reach. This requires detailed channel cross-sections developed from the topographic survey and structural inputs combined with design reach discharge estimates to determine water surface profiles through the project reach. The existing channel shall be analyzed for its ability to effectively convey various storm flows. Flood surface elevations, channel stress conditions, and structure performance shall be evaluated.

TASK 6: PRELIMINARY DESIGN

A preliminary design of the proposed stream channel shall be prepared for the project site reach for review and distribution to the Town for review and comment. The design shall include a preliminary plan view alignment, cross sections, proposed profile, preliminary structure layout, typical details, as well as estimates of earthwork volumes and a preliminary Corps permitting assessment.

The preliminary design will be based upon a proposed condition hydraulic assessment. The professional services firm shall prepare, develop, and analyze a proposed conditions hydraulic model using HEC-RAS, or equivalent, to develop water surface profiles for the project reach based on the project design. This requires detailed channel cross-sections sampled from the design and structural inputs combined with design reach discharge estimates to determine water surface profile through the project reach. The proposed channel shall be analyzed for its ability to effectively convey various storm flows. Flood surface elevations, channel and floodplain velocities, and channel stress conditions shall be evaluated.

TASK 7: FINAL DESIGN

The professional services firm shall provide final design to include project design drawings, final existing and proposed plan view alignments, detailed cross sections, proposed profile, stabilization structure layout, typical details, final estimates of rock material quantities and earthwork volumes, and survey stakeout file. The final design shall include an assessment of temporary and permanent impacts to Waters of the U.S., including wetlands. Impacts to streams will be assessed relative to the ordinary high

water mark. The need for mitigation shall be analyzed with potential options, as may be necessary.

The final design shall be of sufficient detail to obtain final permits from the Corps and NYSDEC, and such that the Town can obtain bids from Contractors to perform the work. The Final Design shall include a final design report that summarizes and presents collected data, analyses, and design methodology.

TASK 8: PROJECT PERMITTING & SEQRA COMPLIANCE

The professional services firm shall prepare and submit project permit applications and associated SEQRA compliance documents. At project initiation, the professional services firm shall arrange for and attend a one-half day site pre-application meeting with key regulatory agencies (NYSDEC and Corps) to review the project site and assess preliminary permitting requirements. The following permitting/compliance requirements at a minimum are anticipated:

- Prepare a Joint Permit Application to NYSDEC and the Corps. The JPA shall address the requirements from NYSDEC (401 Water Quality Certification and an Article 15 Protection of Waters permit) and the Corps (specify if the project is intended to be covered under a Corps Nationwide Permit(s) or an individual Section 404 Permit).
- Prepare and submit letters to the NYSDEC Division of Fish, Wildlife and Marine Resources and U.S. Fish and Wildlife Service (FWS) to obtain information on known occurrences of threatened and endangered species on the project site.
- Prepare and submit a letter to the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) to obtain information regarding historic properties on the project site that are listed or eligible for listing in the National Registry of Historic Places.
- Prepare New York State Environmental Quality Review Act (SEQRA) compliance documentation for the proposed project including and expanded Part 1 of a Full Environmental Assessment Form (EAF). The objective of the expanded EAF is to support a Negative Declaration determination of significance by NYSDEC.
- Prepare a Stormwater Pollution Plan (SWPPP) and file a Notice of Intent (NOI).

The professional services firm shall provide a list of all permits and approvals which shall be included in the proposed work scope.

TASK 9: CONSTRUCTION ADMINISTRATION SERVICES

Task 9a: Bidding.

Prepare an invitation to bid to prospective contractors. Respond to bidder questions during the bidding process. Review submitted bids and provide the Town with a recommendation based on the review of the bids.

Task 9b: Construction Observation Services

Provide on-site construction observation services. Provide estimates for weekly, 2-day, daily, and ½ day rates.

Weekly Rate

Provide full-time (8hrs/day, 5days/week) on-site construction management/observation services. Construction management and observation is proposed using one person per week and includes travel and expenses.

2-Day Rate

Provide on-site construction management/observation services. Construction management and inspection is proposed using one person for two successive days per week and includes travel and expenses.

Daily Rate

Provide on-site construction management/observation services. Construction management and inspection is proposed using one person per day and includes travel and expenses.

EXPERIENCE

The professional services firm is required to provide the following information related to its own organization and with any organization with which it has formed a strategic alliance (if any):

- Company history and organization;
- Resources and expertise available to fulfill RFP specifications; and
- Personnel assigned to the project, resumes, qualifications, licenses and professional registration.

The professional services firm, along with any sub-consultant(s), shall provide a minimum of three (3) references for similar projects within the last five (5) years, with a minimum of two (2) that are from the public sector. References shall be for recent and prior projects of a similar scope or magnitude undertaken by the professional services firm. Each reference shall include:

- Contact name and current telephone number;
- Name and size of project;
- Name of client organizations, contact name, address, telephone numbers;
- Duration of the project;
- Approximate total cost; and
- A brief description of the project including whether the project was completed within/under budget and within the time limit assigned.

Professional services firms are invited to submit material they desire in support of their proposal. The Town will evaluate proposal based on the following criteria:

- Cost and value added services;
- Demonstrated experience and expertise;
- Firm's philosophy toward strategic planning for channel restoration and the firm's approach to be used in this project;
- Firm's values and principles that guide in undertaking a project of this scope;
- Management approach to the work, including most importantly the project management experience of the Project Manager;
- Successes the firm has enjoyed in delivering projects with similar scope as outlined in this RFP;
- Schedule or timeline for project and philosophy towards strategic planning;
- Firm's understanding of the project scope and proposed scope of work; and
- Firm's current work load, and demonstrated ability to staff the project.

Any subcontractors proposed to be used in undertaking the work should be listed in the proposal. Proposals should be presented in clear, concise, 8.5" by 11" format. Proposals should not include any unnecessary promotional material.

COST

The professional services firm will provide a "not to exceed" estimate for this work, including the expected expenditures on a monthly basis to complete the work for the proposed duration of the project. A cost breakdown shall be provided by the professional services firm for the various services discussed in the work scope, including both labor and expense details. Costs for any extra work anticipated by the professional services firm for this project, not included in this RFP, should be provided in the proposal.

CLOSING

This RFP is to be treated confidentially. Neither copy nor transmission of any part of this RFP is authorized, except as may be necessary for a professional services firm to respond to this RFP. The Town of Coeymans reserves the right to accept or reject any or all proposals or parts thereof. All proposals must remain valid for a period of 90 days after the due date.

The Town of Coeymans is an equal opportunity employer. Women's and Minority Businesses are encouraged to submit proposals, and professional services firms are encouraged to include Women's and Minority Businesses on their project team.

Five (5) copies of the proposal should be submitted to:

Mr. Ronald K. Hotaling Jr., Supervisor
Town of Coeymans
Town Hall
18 Russell Avenue
Ravena, New York 12143

All questions pertaining to this RFP need to be made in writing via email to the Town of Coeymans at least five (5) working days prior to the proposal due date. The Town of Coeymans contact representative for this project is:

Ronald K. Hotaling, Jr.
Email: supervisor@coeymans.org

A MANDATORY PRE-PROPOSAL MEETING FOR THIS PROJECT IS SCHEDULED AT THE TOWN HALL ON NOVEMBER 17, 2008 AT 1:00 PM. IT IS ANTICIPATED THAT A BRIEF TOUR OF THE PROJECT SITE WILL FOLLOW AN INITIAL OVERVIEW OF THE PROJECT.

PROPOSALS MUST BE RECEIVED IN HARD COPY FORMAT ON DECEMBER 15, 2008 AT 4:00 PM AT THE TOWN HALL OF COEYMANS AT 18 RUSSELL AVENUE, RAVENA, NY 12143. AN ELECTRONIC VERSION OF THE PROPOSAL SHOULD ALSO BE TRANSMITTED TO THE TOWN'S CONTACT REPRESENTATIVE AT THE EMAIL ADDRESS ABOVE.

