



February 22, 2012

Ms. Dottie Franey, Director of Public Service
City Of Gahanna
200 South Hamilton Road
Gahanna, OH 43230

RE: Proposal for Professional Services: Stream Restoration Project along Sycamore Run; City of Gahanna, Ohio.

Dear Dottie,

In accordance with our recent discussions, EMH&T is pleased to provide this scope of work and fee proposal for engineering services related to the referenced stream restoration project. The engineering services include stream assessment and engineering plans related to the restoration of a portion of Sycamore Run within the City. This proposal does not include the necessary permitting services: obtaining the appropriate Section 404 Nationwide Permit from the U.S. Army Corp of Engineers (USACE), as well as a floodplain use permit from the City, which are required prior to the start of any construction activities within the channel. However, we will perform the flood hazard impact analysis as part of the design process and will use that analysis to eventually support the floodplain use permit application.

It is understood the City may not bid this project within the foreseeable future. As such, any bidding services, including preparation of a formal bid document, are also not included in this scope of services.

PROJECT DESCRIPTION

The project includes the restoration of approximately 970 linear feet of Sycamore Run downstream of N. Hamilton Road. The project area is located on land owned by the City of Gahanna (along State Route 62; E. Johnstown Road) and land owned by the Sycamore Woods Condominium Association (SWCA). The goal of the stream restoration project is to address existing impairments related to active bank erosion and encroachment of adjacent development, in a way that will restore both physical stability and aquatic habitat potential within the stream, while also considering capacity for flood conveyance. The stream restoration activities will also include the establishment of approximately 0.4 acres of floodplain wetlands within portions of the active stream channel that will be abandoned as part of the restoration process. These restoration activities are documented in a 319(h) grant application previously submitted to the Ohio EPA.

The stream restoration design will focus on establishing a properly sized bankfull channel with connectivity to the adjacent floodplain, and providing a stable sinuous channel pattern with a riffle/run/pool/glide sequence. The design will also account for channel bank stability to prevent future impairments and provide a planting plan for enhancement of the riparian corridor and wetlands.

A legacy of experience. A reputation for excellence.

5500 New Albany Road, Columbus, OH 43054 • Phone 614.775.4500 • Fax 614.775.4800

Columbus • Charlotte • Cincinnati • Indianapolis
emht.com

EXHIBIT A

SCOPE OF SERVICES

Task 1: Field Surveying and Reconnaissance

The tasks listed below will be performed to support the preliminary and final engineering aspects of the project.

- Perform a field survey of the project corridor to establish both topography and boundary information for the project corridor, as well as to identify the location of key features such as utilities and other infrastructure adjacent to the stream channel. This information will be used to establish the basemap used throughout the design process.
- Perform field reconnaissance to identify and measure geomorphic properties of the existing channel through or near the project reach, to establish stable natural channel design parameters for the project. This data will be supplemented by calculations using the USGS-published regression equations for bankfull conditions associated with streams in Ohio (Scientific Investigations Report 2005-5153). This field reconnaissance will also establish the biological baseline of the stream through the project reach that will also be a consideration during the design process.

Task 2: Preliminary Engineering

The tasks listed below will be performed to develop a detailed conceptual plan for the various stream and wetland restoration improvements.

- Perform a quantitative assessment of the existing stream channel geomorphology and determine the restoration activities that will restore form and function to the stream and/or stabilize the stream banks where necessary.
- Prepare a floodplain study, using the HEC-RAS hydraulic backwater computer program, to verify that the restoration activity will not adversely impact the flood carrying capacity of the unnamed tributary stream. The hydrologic calculations required for the floodplain study will be performed using the USGS-published regression equations for ungaged small urban streams in Ohio (Open File Report 93-135). The results of the floodplain study would be provided to the City in a brief summary memorandum, along with the modeling performed as part of the study. The flood hazard impact study will also support the floodplain permitting task associated with this project.
- Provide a conceptual engineering plan representing the various stream restoration improvements associated with the project.
- Provide a separate conceptual plan depicting potential interim stream bank stabilization improvements. For the purpose of this proposal, it is assumed these improvements will be isolated to those necessary to protect existing private and public infrastructure within the limits of the stream restoration project.
- For both the stream restoration and bank stabilization improvements, estimate potential construction costs and participate in a meeting with the City and SWCA to review the plan and seek input.

Task 3: Final Engineering

The tasks listed below will be performed to develop draft and final engineering plans and a bid document for the project.

- Prepare draft (50%) engineering plans representing the various stream restoration activities, including the floodplain wetlands. The engineering plans will include plan and profile views of the restoration activities, as well as details and specifications representing those activities. The plans will also include details and specifications regarding planting of the riparian corridor and wetland areas. We will submit these plans and a preliminary engineer's estimate of probable construction costs to the City for review and, at the request of the City, participate in a meeting to review the plans.
- Prepare draft final (90%) engineering plans for the project. These plans will address comments provided by the City and include erosion and sediment control notes and details. These plans will also include construction staking information for the various improvements. We will submit the draft final plans and a revised estimate of probable construction costs to the City for review and, at the request of the City, participate in a meeting to review the plans.
- Prepare final engineering plans reflecting the City's comments from the previous submittal. The final engineering plans, once signed by the City, will be provided in electronic format for purposes of reproduction during a future bidding process.

Note: Any necessary bidding services, including preparation of a formal bid document and pre-bid coordination with the City and potential contractors, is not included within this scope of services but will be provided under a separate agreement at a later date.

Task 4: Permit Applications

The descriptions provided below are simply to make the City aware of future permitting obligations associated with the construction of the project. At the request of the City, the services necessary to obtain these permits are not included within this scope of services but will be provided under a separate agreement at a later date.

The permitting activities described below are required prior to the start of the construction of the project.

A. Section 404 Nationwide Permit (NWP): NWP #27 (Aquatic Habitat Restoration, Establishment, and Enhancement Activities), associated with Section 404 of the Clean Water Act, will be required for the implementation of the project. EMH&T will prepare a notification to the USACE, Huntington District, premised on the application of natural channel design to stabilize and improve the habitat potential of the Sycamore Run stream corridor. The NWP will be obtained by our environmental staff that has an established reputation working with the USACE and in providing the additional coordination described below.

1. Compile all necessary information for and prepare a permit application in compliance with the requirements for a NWP #27.
2. Conduct a records search of the Ohio Natural Heritage Database to determine whether unique habitats or records of endangered species exist within the project area. For the purpose of this proposal, we are assuming this research will not reveal any significant findings and a more detailed endangered species surveys will not be required.

3. Conduct a records search through the Ohio Historic Preservation Office and provide other basic literature research regarding potential cultural resources within the project area, which is required as part of a NWP application. For the purpose of this proposal, we are assuming this research will not reveal any significant findings and no further investigation (Phase I CRM investigation) will be required.
4. Coordinate with the U.S. Fish and Wildlife Service regarding endangered species, including a site visit with a designated representative, if needed.
5. Coordinate with the Ohio Department of Natural Resources, which includes requesting and answering comments regarding the conceptual stream enhancement design.
6. Represent the Client to the regulatory agencies during the permit review process.

The completed permit will be presented to the City for consideration prior to submission to the USACE.

B. Floodplain Permitting: We will prepare a Special Flood Hazard Area Development (SFHAD) permit application for submittal to the City. The flood hazard impact analysis described under Task 2 will be used to support the permitting process. For the purpose of this proposal, it is assumed that the results of this analysis will show a no-rise in 100-year flood elevations attributed to the stream restoration project. With that in mind, the SFHAD permit can be obtained from the City without first obtaining a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA).

C. Notice of Intent (NOI): We will prepare a NOI application for submittal to the City, and we will submit the application to the Ohio EPA once it has been reviewed and signed by the City. As part of this effort, we will prepare a Stormwater Pollution Prevention Plan (SWPPP) document.

Task 5: Conservation Easements

The description provided below is only to make the City aware of the requirements for an easement to protect the property if the project is constructed under 319(h) grant funding. There may be other circumstances under which the City would require an easement over the project area. At the request of the City, the services necessary to support the easement process are not included within this scope of services but will be provided under a separate agreement at a later date.

A permanent conservation easement will be required for the stream restoration corridor as documented in the 319(h) grant application. Separate easements will be required for the City-owned and SWCA properties. In support of this effort, we will provide legal descriptions and exhibit for these easements. We will also provide recommendations regarding the appropriate conveyance document to record the easements (e.g., Deed of Easement); however, we recommend the City and the SWCA collaborate in the finalization of that document, as well as the recordation of the easements.

FEE PROPOSAL

We propose to provide the services described above for the not to exceed fees presented on the following page. Actual fees will be billed based on the number of hours worked by the various employees associated with the project. These fees include reimbursable expenses, but do not include any permitting or review fees.

City of Gahanna
Proposal for Professional Services - Stream Restoration Project along Sycamore Run

February 22, 2012

<u>Task</u>	<u>Fee</u>
1 - Field Survey and Reconnaissance	\$5,500
2 - Preliminary Engineering	\$19,000
3 - Final Engineering	<u>\$20,000 (w/o bid document)</u>
Total Fees:	\$44,500

ADDITIONAL SERVICES

Any services that are not included under this scope of services may be provided on an hourly basis in accordance with our standard rate schedule or under a separate fee proposal.

EXCLUSIONS

The services listed below are not included under this proposal but can be provided under a separate proposal at the request of the village.

- Utility improvements or line relocations except those explicitly identified in the scope of services.
- Off-site improvements.
- Subsurface (geotechnical) investigations.
- Construction administration and staking.
- Permitting activities.
- Bidding activities.

We appreciate the opportunity to submit our proposal to you and we are prepared to proceed upon receipt of your authorization. You may contact me directly with questions at (614) 775-4205 or at mhebert@emht.com.

Respectfully submitted,

EVANS, MECHWART, HAMBLETON & TILTON, INC.



Miles F. Hebert

Miles F. Hebert, PE, CFM
Director, Water Resources Engineering

Acceptance and Authorization to Proceed

Authorized Signature

Print Name and Date