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Date: January 10, 2022

Benjamin R. Boggs, ASLA Landscape Architect

Clotfelter-Samokar, PSC Architecture | Interiors | Landscapes | Planning 228 E. Reynolds Road, Suite One Lexington, KY 40517

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Re: Garrard County High School

Stormwater Study and Improvement Proposal for Engineering Services

Dear Mr. Boggs,

Thank you for the opportunity to submit this proposal for engineering services for stormwater study and improvement for the Garrard County High School.

Vision Engineering scopes of services is to develop detail stormwater study for the existing condition, develop and stormwater management system, and stormwater study for the proposed condition. Scope of services will also include developing a detail construction plans for the stormwater improvements that collect all runoff from roofdrains, road, and parking area, and sport facilities and route the flow to stormwater management facilities.

Scope of Work:

TASK 1: Existing Storm Sewer and stormwater Study: \$7,500.00

Vision Engineering to conduct hydrological and hydraulic study for the existing facility.

Hydrological and Hydraulic Study:

The Study will divide study area to multiples Of sub-watersheds (HEC-HMS). Hydrological study will be conducted per TR-55 / CN methodologies.

- a. Calculate the peak discharge using HEC-HMS model for the 2, 10, 25, 50 and 100 year storm events.
- b. Technical methodology will be based on the following guidelines:
 - I. TR-55/ CN methodology.
 - II. Sub-Watershed area shall not exceed 75 acres.
 - III. Routing of peak flow shall be performed based on Muskingum-Cunge or Kinematic Wave methodology.

c. Deliverable::

- I. Digital copies of all input and output of the hydrologic analysis and associated supporting documentation. This will include (watershed areas, time of concentration, equivalent CN, and routing procedures)
- II. Digital summary of the calculated peak flow for each sub-watershed for the 2, 10, 25, 50, and 100 year storm events.
- III. GIS & CAD submittal of all input and output data and associated digital data.
- IV. Summary of the calibration techniques implemented in the calculated peak flow.

Task 2: Proposed Stormwater Improvements:

\$15,000.00

Vision Engineering's scope of services include, drainage, storm sewer, and stormwater management. Vision Engineering shall provide the following:

- Detail plans and profile for storm sewer
- Strom sewer structure types and pipe material
- Detail design and specifications for the Stormwater Management BMP facilities including the principal spillway and emergency spillway.
- Detail design and specifications for the sediment forebay
- Prepare detail grading plan with earthwork calculations (cut/fill) for the stormwater Management Facilities.
- Design an access road for the maintenance of the stormwater management facility
- Provide schedule for maintenance and checklist for inspections for the stormwater management facilities.
- Provide detail planting species for the stormwater management facility
- Obtain grading permit from local authority.
- Assist contractor in applying for the NOI from KDOW
- Provides details and specifications for the proposed improvements.
- Attend progress meeting.

TASK 3: Proposed Stormwater System

\$7,500.00

Vision Engineering to conduct detail hydrological and hydraulic study and drainage report for the proposed stormwater facilities

Hydrological and Hydraulic Study:

The Study will divide study area to multiples Of sub-watersheds (HEC-HMS). Hydrological study will be conducted per TR-55 / CN methodologies.

- a. Calculate the peak discharge using HEC-HMS model for the 2, 10, 25, 50 and 100 year storm events.
- b. Technical methodology will be based on the following guidelines:
 - I. TR-55/ CN methodology.
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- III. GIS & CAD submittal of all input and output data and associated digital data.
- IV. Summary of the calibration techniques implemented in the calculated peak flow.

TASK 4: Bidding Services:

\$4,000.00

Assist the Owner in the bidding process, submit plans to Contractor, address questions, issues addendum, and assist the Owner in the selection of the lowest responsible bidder.

TASK 5 Construction Administration:

\$10,000,00

Construction Supervision this include approval of Shop drawings, attend progress meetings, and address questions.

We appreciate the opportunity to submit this proposal, upon approval and a notice to proceed; we can begin the process immediately. I will personally manage this project. Should you have any questions or need additional information, please do not hesitate to call.

Sincerely,

Jihad A Hallany

Jihad A. Hallany, P.E.