BAXTER & WOODMAN
Consulting Engineers
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June 28, 2021

Mr. Kenneth Dado
Utilities Operations Manager
Village of Orland Park
15655 S Ravinia Avenue
Orland Park, Illinois 60462

Subject: Stormwater Master Plan Phase 1 - Proposal for Engineering Services

Dear Mr. Dado:

Baxter & Woodman, Inc. is pleased to submit this Proposal to provide Engineering Services for the Stormwater Master Plan Phase 1 Project. All terms and conditions of the Master Agreement dated October 1, 2020, with the Village of Orland Park shall apply.

The Village of Orland Park (Village) has an extensive and comprehensive stormwater management system that encompasses more than 22 square miles within seven different watersheds. The stormwater system includes storm sewers, swales and ditches, detention basins (wet and dry), wetlands, and local creeks, among other infrastructure. The Village intends to produce a comprehensive Stormwater Master Plan as a proactive approach to planning the impending maintenance needs of the stormwater management system. The Village intends to issue the Stormwater Master Plan in several phases over several years; the first phase will include the evaluation of all Village-owned stormwater detention basins.

Baxter & Woodman understands that the Village is seeking a consultant to perform an evaluation of 88 dry bottom basins and 90 wet bottom basins, as presented in the Request For Proposals, and that this investigation will not include natural wetlands or riparian areas. We are pleased to provide this Proposal to evaluate the existing basins. A detailed summary of our proposed scope of services and engineering fee is provided below.

Scope of Services

1. PROJECT MANAGEMENT
   - 1.1. Plan, schedule, and control activities to complete the Project. These activities include but are not limited to budget, schedule, and scope.
   - 1.2. Submit a monthly status report via email describing tasks completed the previous month and outlining goals for the subsequent month.

2. PROJECT MEETINGS
   2.1. Conduct a Project kick-off meeting with OWNER's staff and the Project team to establish clear lines of communication, introduce OWNER staff to the team members, and establish the OWNER's detailed needs, objectives, and goals for the Project.
   2.2. The meeting will also be used to obtain information, drawings, plans, atlases, and other data to be supplied by the OWNER, and set schedules and guidelines for future design meetings.
   2.3. Present the Study, including results and recommendations, to the OWNER's staff.

3. COLLECT EXISTING DATA
   3.1. Obtain, review, and evaluate the following information provided by the OWNER for use in design:
   3.2. Existing drawings, plans, atlases, plats, and reports.
   3.3. Previously completed studies and models.
   3.4. Relevant OWNER planning documents.
   3.5. Available GIS data and aerial photography.
   3.6. Create lists of missing or conflicting data.

4. EXISTING CONDITIONS ASSESSMENT
   4.1. Identify and document condition of existing infrastructure that is part of and/or related to the system to be assessed.
   4.2. Village's Evaluation Scope Items (**with assumptions**)
      1) Inlets pipes – Inspect and identify any issues or concerns related to settling, joint connections, erosion, grates, etc.
      2) Outlet pipes - Inspect and identify any issues or concerns related to settling, joint connections, erosion, grates, etc.
      3) Overland flow inlets - Identify any issues related to the swales, ditches, etc. that convey stormwater into the detention basin including settling, erosion, etc.
      4) Overland flow outlet – Identify any issues related to the swales, ditches, etc. that convey stormwater out of the detention basin including settling, erosion, etc.
      5) Outlet control structure – Identify any concerns related to the restrictor plate, pipe, weir or other appurtenance associated with the basin **(confined space entry is not included)**.
      6) Emergency weir – Identify any issues related to the overflow weir. Specifically note the type of weir (turf, riprap, concrete, other).
      7) Other Village utilities – Any other Village utilities located on the parcel **and visible from a standard surface inspection** should be inspected including water, sanitary, irrigation, aeration, etc. **(JULIE locates are not included)**
      8) Shoreline or other erosion – Identify any issues related to the loss or movement of soil due to erosion along the shoreline or any other area in the basin and associated property.
      9) Energy dissipation (specifically at inlets) – Identify any issues related to the slowing or mitigating of flow velocities.

10) Settling – Identify any issues related to settlement in the basin, slopes, inlet/outlet pipes or other areas.
11) Water Quality – Identify concerns related to the quality of the water in the basin **by visual inspection**. **(Sampling and testing are not included)**
12) Sedimentation/Siltation – Identify issues related to excess sediment in the basin. **One core sample up to 24 inches deep will be taken per basin.**
13) Volume/Capacity – Confirm the detention capacity of the basin relative to the permitted volume and/or identify concerns if issues are observed. **Research permits, survey of NWL versus HWL limits to develop in situ volume measurements in CAD, compare permitted capacity versus current capacity.**
14) Encroachment – Identify any issues in the basin or property related to encroachment by neighboring residents or others. Examples include gardens, playsets, etc., among others.
15) Vegetation assessment – Provide a detailed evaluation of the vegetation on the site including the basin slopes, trees, and all other vegetation. **A formal tree survey and wetland determination/delineation is not included.**
16) Wildlife management (geese, muskrats, beavers, etc.) – Identify any issues related to wildlife impacts to the basin or related property.
17) Design – **Visually** identify the safety shelf or lack thereof of features that may be a concern for the Village. **(Bathymetric survey is not included)**
18) Adjacent land use – Identify any issues related to adjacent land uses and their impact on Village-owned property.
19) **All items listed as not included may be included for an additional fee, and can be performed by in-house staff.**

5. ALTERNATIVES ANALYSIS
   5.1. Develop design criteria to clearly identify the goal(s) of the proposed improvements.
   5.2. Develop recommendations to resolve deficiencies – Erosion alternatives shall be soft scape and natural in nature unless absolutely necessary and based on input from the Village.
   5.3. Prepare preliminary cost estimates of the various alternatives.

6. SUMMARY REPORT
   6.1. Prepare a brief summary report describing the existing system, analyses performed, alternatives considered, conclusions, and recommendations. Prepare associated exhibits.

Engineering Fee

Our engineering fee for the above stated scope of services will be based on our hourly billing rates for actual work time performed plus reimbursement of out-of-pocket expenses including travel, which in total will not exceed **$78,258.**

We appreciate the opportunity to work with the Village of Orland Park on this important Project and we are available to begin work immediately upon your notice to proceed. If you find this proposal acceptable, please sign one copy and return for our files.

We appreciate the opportunity to work with you. If you have any questions or need additional information, please do not hesitate to call Matt Moffitt at (815) 444-4470.

Sincerely,

BAXTER & WOODMAN, INC.
CONSULTING ENGINEERS

Matthew J. Moffitt, P.E., CFM, CPESC
Associate Vice President

Dennis S. Dabros, PE
Vice President

Attachment

VILLAGE OF ORLAND PARK, ILLINOIS

ACCEPTED BY: _____

TITLE: _____

DATE: _____

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