Tinley Creek Streambank Stabilization # 21-015
Scope of Services and Hourly Breakdown
Living Waters Consultants, Inc.
4/12/2021

Scope Task	Type	Rate	Hours	Extended Cost
1. Provide overall project management and coordination services. This include review ongoing activities, monitor schedule and budget, and communicate with the Village and where needed, with MWRDGC.	Stream Engineer (Project Manager)	$154	28	$4,312
2. Lead and manage project kick off and coordination meetings. This include conducting monthly to bi-monthly meetings throughout the design to update on progress and to bring issues to the Village's attention for timely action.	Stream Engineer (Project Manager)	$154	36	$5,544
3. Review previously completed design documents prepared by Michael Baker Jr., Inc., of Chicago, Illinois. These design documents were 98% complete. These include but not limited to design plans, environmental, and geotechnical data. SEE ITEMS NOT INCLUDED BELOW.	Stream Engineer (Project Manager)	$154	24	$3,696
	Hydraulic Engineer	$125	18	$2,250
	Structural Engineer	$175	4	$700
4. Meet with MWRDGC to understand and collect streambank stabilization design requirements and criteria. All designs and improvements (update/revise or new) must meet MWRDGC requirements or guidelines and streambank stabilization best practices. We assume that there are no additional MWRD permit requirements other than what has already been provided on the existing engineering plans.	Stream Engineer (Project Manager)	$154	12	$1,848
	Hydraulic Engineer	$125	4	$500
	Structural Engineer	$175	4	$700
5. Perform visits to each impacted site where improvements were proposed in Baker's Plan. The intent of these visits is to review site features for consistency with the Baker's Plan. SEE ITEMS NOT INCLUDED BELOW.	Stream Engineer (Project Manager)	$154	24	$3,696
	Hydraulic Engineer	$125	12	$1,500
	Structural Engineer	$175	4	$700
6. Update and/or replace existing topographic surveys up to a Maximum 15% of the previously surveyed project area. We propose to conduct all survey in the dormant season (the absence of leaf cover). The survey purpose would be to confirm the Baker site conditions. SEE ITEMS NOT INCLUDED BELOW.	Stream Engineer (Project Manager)	$154	6	$924
	Land Surveyor	$165	50	$8,250
7. Develop a photographic record of the existing conditions of streambanks (both sides). We propose to conduct the photo record during the dormant season (absence of leaf cover). This record will be used as a baseline and will be compared with any future, unauthorized changes to the banks by the residents, Homeowners' Associations, or other entities. We propose to collect this information using GPS based camera, GoPro video, and/or Drone during the dormant season. All of the properties (with addresses) along the creek and photographs shall correlate to each other.	Stream Engineer (Project Manager)	$154	36	$5,544

8. Update/revise streambank stabilization design included in Baker's Plan. SEE ITEMS NOT INCLUDED BELOW. We assume that Structural Engineer designed elements would only be required, for example, for the modification for the volume of backfill required. For the remaining design elements not under the auspices of the Structural Engineer, such as biotechnical design elements, they will be reviewed and modified as appropriate for extension of streambank, additional streambank treatment, and reduction or elimination of in-stream practices not focused on addressing or minimizing erosion.	Stream Engineer (Project Manager)	$154	54	$8,316
	Hydraulic Engineer	$125	25	$3,125
	Structural Engineer	$175	10	$1,750
9. Add missing creek section (identified in blue in Figure 1) and complete design of streambank stabilization. Assumes survey and site visits occur during dormant season (no leaf cover).	Stream Engineer (Project Manager)	$154	150	$23,100
	Hydraulic Engineer	$125	60	$7,500
	Structural Engineer	$175	28	$4,900
	Transportation Engineer	$154	60	$9,240
	Land Surveyor	$165	60	$9,900
10. Update/revise and/or develop new specifications including general notes and other related information. The specifications must meet MWRDGC requirements and design guidelines.	Stream Engineer (Project Manager)	$154	80	$12,320
	Hydraulic Engineer	$125	40	$5,000
	Structural Engineer	$175	20	$3,500
11. Submit design documents to the Village and MWRDGC at 30%, 60%, and 90% design stages for reviews. Incorporate comments as appropriate. The 60% and 90% documents should also include estimated construction costs. The cost estimates shall include separate bid items for project elements within MWRDGC scope (identified in red in Figure 1) and those that are entirely Village's responsibility (identified in blue in Figure 1).	Stream Engineer (Project Manager)	$154	20	$3,080
	Hydraulic Engineer	$125	10	$1,250
	Structural Engineer	$175	10	$1,750
12. Prepare separate exhibits for impacted property owners. The exhibits must show details of improvements including permanent and temporary easement limits. These exhibits will be shared with the property owners, comments will be collected, and designs will be adjusted if needed and approved by the Village and MWRDGC. We assume for multi-family buildings that one easement document would be prepared per each entire multi-family building. That is, individual easement documents would not be prepared for each condo or townhome owner.	Stream Engineer (Project Manager)	$154	10	$1,540
	Land Surveyor	$165	150	$24,750
13. Prepare permanent and temporary easement documents that can be used to execute easement agreements with individual property owners and Homeowners' Associations. The easement agreements will be prepared and executed by the Village. It is Village's opinion that a property acquisition consultant will not be needed for the project. We assume for multi-family buildings that one easement document would be prepared per each entire multi-family building. That is, individual easement documents would not be prepared for each condo or townhome owner.	Stream Engineer (Project Manager)	$154	10	$1,540
	Land Surveyor	$165	100	$16,500
14. Identify properties that are not critical for the successful stabilization of streambanks. We asume this includes a simple depiction on the Plans, and that no additional survey or Professional Surveyor based exhibits are required.	Stream Engineer (Project Manager)	$154	18	$2,772

15. Prepare and attend one public meeting to share and discuss streambank stabilization improvements.	Stream Engineer (Project Manager)	$154	10	$1,540
	Hydraulic Engineer	$125	3	$375
16. Prepare and attend meetings with individual property owners and Homeowners' Associations to discuss and share improvements and impacts to their properties. We would propose here to participate in 3 rounds of public meetings where the individual residents are divided into 3 groups. And proposed stabilization within each group is reviewed in detail in a 1 hour meeting. Q & A to follow each meeting. Then as needed, individual meetings would occur up to a time and materials time limit of $5,000.	Stream Engineer (Project Manager)	$154	33	$5,082
17. Prepare estimated construction costs for improvements. The overall construction budget of this project is approximately $6 million. If the cost estimate exceeds project budget, work with the Village and MWRDGC to implement Value Engineering (VE) elements to bring the costs within the available budget.	Stream Engineer (Project Manager)	$154	24	$3,696
	Hydraulic Engineer	$125	10	$1,250
	Structural Engineer	$175	10	$1,750
18. Prepare annual Operation and Maintenance (O&M) costs of the streambank improvements over a 20-year period.	Stream Engineer (Project Manager)	$154	12	$1,848
	Hydraulic Engineer	$125	6	$750
	Structural Engineer	$175	6	$1,050
19. Prepare and present the project to the Village Board of Trustees, if requested by the Village.	Stream Engineer (Project Manager)	$154	8	$1,232
20. Update or submit new permit applications, and acquire all applicable permits from various government agencies including MWRDGC and Army Corps of Engineers.	Stream Engineer (Project Manager)	$154	155	$23,870
	Hydraulic Engineer	$125	85	$10,625
	Structural Engineer	$175	50	$8,750
21. Prepare a complete PS&E document that will be used by the Village to solicit bids from qualified contractors.	Stream Engineer (Project Manager)	$154	80	$12,320
	Hydraulic Engineer	$125	10	$1,250
22. Assist the Village staff in developing the Invitation for Bids including developing criteria for contractors' qualifications and selection. We assume that the LWC involvement will be limited to the development of criteria for qualifications and selection. And that the Village will complete the remaining tasks.	Stream Engineer (Project Manager)	$154	15	$2,310
	Hydraulic Engineer	$125	4	$500
	Structural Engineer	$175	4	$700
23. Prepare an estimated construction schedule for improvements. Include Gantt charts for graphical presentation.	Stream Engineer (Project Manager)	$154	10	$1,540

	Hydraulic Engineer	$125	0	$0
	Structural Engineer	$175	0	$0
24. Include other scope of services needed to complete the project and deliver all of the required deliverables. SEE ITEMS NOT INCLUDED BELOW.	Stream Engineer (Project Manager)	$154	10	$1,540
	Hydraulic Engineer	$125	10	$1,250
25. Develop a proposed scope of services (without professional fees) for construction engineering or construction observation services to implement the improvements. The Village may use this scope of services to solicit proposals from qualified consultants for construction engineering or construction observation services. The selected consultant for design services will be allowed to propose on the construction engineering/observation services.	Stream Engineer (Project Manager)	$154	20	$3,080
	Hydraulic Engineer	$125	10	$1,250
	Structural Engineer	$175	10	$1,750
26. Assist the Village in reviewing bids collected by the Village for the construction of the project. The bidding process will be led and managed by the Village staff.	Stream Engineer (Project Manager)	$154	24	$3,696
	Hydraulic Engineer	$125	6	$750
	Structural Engineer	$175	4	$700
			Total	**$276,451**

See Items Not Included and/or Clarifications Below.

Items Not Included and/or Clarifications:

Living Waters Consultants, Inc. (LWC) clarification of contract scope, exclusions and limitations based on LWC's understanding of the Project and LWC's response to RFP. The following Items Not Included and/or Clarifications supersede any other language in the RFP and/or submitted by LWC previously in response to the RFP for the Tinley Creek Stabilization Project.

a. Neither Living Waters Consultants, Inc. (LWC) nor its agents shall have any responsibility for the discovery, presence, handling, permitting, removal or disposal of, or exposure of persons to, hazardous materials or toxic substances in any form at the Project site.
b. Wildlife or fish surveys pertaining to threatened or endangered species, if needed for permit approval, are not expected to be likely and are not included.
c. Additional soil borings, if required for design or by permitting agencies, are not included and if needed would be provided under separate contract.
d. We reserve the right to negotiate the proposed Indemnification provisions, and to have the language vetted by our insurance carrier, and subject to review and revision according to the standard provisions of our professional liability coverage.
e. Permit agency review fees are not included.
f. Construction Observation is not included.
g. We assume that all completed engineering plans are available in digital CAD compatible format. We assume that Specifications are available in digital MS Word document format.

LWC reviewed the plans and bid documents with the understanding that the Village desired to use as much of the Baker plans as practicable for this Project. Therefore, LWC prepared a scope of activities and corresponding budget for services which included a 15 percent survey re-do as a check against the survey prepared under the original Baker plans and in response to the CBBEL recommendations for scope revision of items in the Baker plans. LWC expects to prepare a set of construction plans and assist in obtaining permits for the full length of stream stabilization. It is LWC's understanding that for this Project considerable effort was expended in development/plan preparation/bid specifications/bid documents for the Project and in permit agency co-ordination to arrive at 98 percent completion (basically, final engineering). The scope of services LWC envisioned is as follows:

(1) 15-percent survey of Baker Plan topography for potential revision of plan item dimension revision of largely non-structural items (based on the CBBEL plan review),
(2) Review of the Baker Plans in light of the additional 15-percent survey and annotation of the Baker plans for the Baker plan project area for the largely non-structural items which may require a quantity or dimensional change (based on the CBBEL plan review),
(3) Within the Baker plan project area, no changes to the Baker alignment, which appears to control the locations, dimensions and geometric relationships for items on the Baker plans (based on the Village expressed desire to limit design cost),
(4) Within the Baker plan section, no changes to the Baker traffic control plan, which appears to control the anticipated movements of construction traffic within the Baker plan section (based on the Village expressed desire to limit design cost),
(5) Within the Baker plan section, no changes to the significant structural elements, such as sheet pile and hard structural retaining wall sections within the Baker plan section (based on the Village expressed desire to limit design cost),
(6) LWC's site visits during the RFP process and subsequent to submittal appear to indicate that the Baker plan should address the areas of erosion and significant bank deficiencies with modification to some of non-structural stabilization elements,
(7) LWC's site visits during the RFP process and subsequent to submittal appear to indicate that the Baker plan should address the areas of erosion and significant bank deficiencies with only quantity adjustment to items ancillary to the hard structural sheet pile and retaining structures; ancillary items such as backfill or pavement restoration, etc. (the hard structural design parameters of backfill height and setting are anticipated to match the original Baker plan design intent as expressed on the Baker plans).
(8) Within the Remaining intervening project area section, survey of the stream stabilization corridor within the remaining limits of construction.
(9) Within the Remaining intervening project area section, depictions of stream stabilization location and, dimensions for the LWC plan section,
(10) Within the Remaining intervening project area section, plan design development of a traffic control plan which would control the anticipated movements of construction traffic within the LWC plan section,
(11) Within the Remaining intervening project area section, plan design development of largely non-structural stream stabilization measures, which are anticipate to be all that is necessary for the LWC plan section,
(12) Preparation of temporary and permanent easement documents for execution by the Village and Residents.
(13) Preparation of final bid documents and specifications incorporating Baker specifications for Baker plan items and LWC specifications for LWC items,
(14) Assistance with the bidding process and creation of bid tabulations for qualified bidders,
(15) Assistance with permit document preparation and obtaining permits for the construction of the Project.
(16) The Village of Orland Park in the RFP has requested that we utilze the existing 98% complete Baker Engineering design engineering plans and specifications to the maximum extent practicable. Therefore, LWC understands that since the Village has compensated Baker Engineering for the 98% complete engineering plans and related permit approvals, that the Baker Engineering plans and specifications shall be utilized for the proposed project construction. Furthermore, LWC assumes that Baker Engineering, the Village of Orland Park, and/or others accept full responsibility and liability for the 98% complete engineering plans prepared by Baker. We assume that the completed 98% Baker structural engineering plans and practices (including but not limited to proposed structural walls) were approved by and were satisfactory to the permit agencies and to the Village of Orland Park.
(17) LWC shall not accept liability for the 98% complete Baker engineering plans that LWC expects to be used by the Village of Orland Park for construction. Other than minor annotations that LWC expects to provide for non-structural elements of the Baker plans.
(18) LWC proposes to incorporate CBBEL comments to the extent practicable and to modify where appropriate non-structural, biotechnical elements (rock toe dimensions, re-grading dimensions, rock vane locations, dimensions of non-structural stabilization techniques) based on current site conditions, site visits, and/or as a result of a re-survey of a maximum 15% of the Baker site.
(19) LWC may also make minor modifications to certain Details or Specifications on the Baker plans but only as applicable to biotechnicall design elements (i.e., not pertaining to proposed walls or other design elements that have already been prepared and approved by the Baker Structural Engineer(s)).