



FEE PROPOSAL FOR

Tinley Creek Streambank Stabilization

REQUEST FOR PROPOSALS #21-015

Village of Orland Park, Illinois

March 29, 2021, 11:00 a.m.

PROPOSAL SUMMARY SHEET
RFP 21-015
Tinley Creek Streambank Stabilization

Business Name: Farnsworth Group, Inc.

Street Address: 18311 North Creek Drive Suite F

City, State, Zip: Tinley Park, IL 60477

Contact Name: David Pellizzari, SE, PE

Title: Senior Engineering Manager

Phone: 708.310.9178 Fax: 309.663.1571

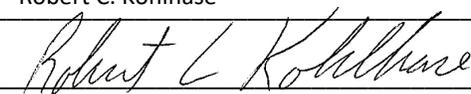
E-Mail address: dpellizzari@f-w.com

Price Proposal

PROPOSAL TOTAL \$ 464,100
(On an hourly, not to exceed fee basis)

AUTHORIZATION & SIGNATURE

Name of Authorized Signee: Robert C. Kohlhase

Signature of Authorized Signee: 

Title: Principal and Secretary Date: 3/25/2021

FEE BREAKDOWN

| Firm | Total Fee |
|------------------------------|-----------|
| Farnsworth Group, Inc. (FGI) | \$324,870 |
| Aqua Vitae (AV) | \$139,230 |

Aqua Vitae is a Veteran Owned Business and will be completing approximately 30% of the project.

SCOPE OF WORK

(For detail regarding the hours and dollars, please see the Hourly Breakdown spreadsheet.)

1. PROJECT MANAGEMENT AND ADMINISTRATION (REACHES 1-4)

- a. Lead and manage project kick off meeting. The Consultant will hold the project kick-off meeting, led by the project manager, and attended by the Consultant's team, the Village Staff, and MWRDGC staff. Discussions will include the project background, the project scope, proposed schedule, and budget.
- b. Lead and manage monthly coordination meetings. The Consultant will hold coordination meetings, led by the Project Manager and attended by the team, as applicable. Discussions will include progress by task, critical issues, coordination between team members, potential barriers to quality/budget adherence, and conformance to schedule and upcoming milestones.
- c. Progress Reports/Invoicing. The Consultant will prepare progress reports describing activities during the preceding invoicing period, plans for the next period, problems encountered, actions required of the Village, and overall status of the project. Periodically, invoices for services rendered during the preceding work period will be prepared by the Consultant and submitted to the Village.
- d. Provide overall project management and coordination services. Project management services include reviewing ongoing activities of team members and subconsultant, monitor schedule, monitor the budget, and communicate with the Village and MWRDGC on a regular basis.

Total Fee for Scope Item 1: \$35,625 / 120 FGI hours, 84 AV hours

2. DATA COLLECTION AND REVIEW (REACHES 1 & 3)

- a. Gather, review, and file available Michael Baker 2014 plans, documents, specifications.
- b. Review all governing requirements and regulations (Orland Park, IDNR, ACOE permit requirements).
- c. Verify Baker Design Plans:
 - i. Verify stream alignment.
 - ii. Verify structure placement.
 - iii. Review details for bank stabilization.
- d. Review environmental data.
- e. Review geotechnical report and develop design criteria.
- f. Review and verify specifications.

Total Fee for Scope Item 2: \$5,752 / 34 FGI hours, 0 AV hours

3. PERFORM INITIAL SITE VISIT (REACHES 1-4)

- a. Walk the entire limits of project.
- b. Note areas of particular scour and erosion.
 - i. Note areas of particular constraint with existing infrastructure.
 - ii. Visual comparison of current conditions with previous surveyed data.
 - iii. Review notable site features and compare to Baker's 2014 Plan.
 - iv. Take photographic documentation to be used in exhibits for individual homeowners and HOA.
- c. Waters of the U.S. survey site visit in accordance with the US Army Corps of Engineers 1987 Wetland Delineation Manual. During this visit, the ordinary high-water mark of Tinley Creek for each bank will be mapped and

centerline of the channel will be mapped. Any adjacent wetlands that may be impacted by the project will be mapped. Features identified as potentially jurisdictional will be flagged and the boundaries will be digitally mapped using a GPS with submeter accuracy.

- d. Conduct tree survey.
- e. Conduct Soil and Geotechnical survey (Reaches 2 & 4). Soils will be tested to determine if any contaminants are present. Geotechnical borings will be taken for the structural engineers on our team to design retaining walls along the new reaches. Locations of both soil samples and geotechnical borings will be field determined. Extent of services not possible to be determined until a field visit is performed. Work will be subcontracted to SEECO Consultants, Inc.

Total Fee for Scope Item 3: \$13,532 / 74 FGI hours, 18 AV hours

4. FIELD TOPOGRAPHY SURVEY (REACHES 1-4)

- a. Establish survey control.
- b. Conduct full topographic survey of the stream corridor.
- c. Measure six (6) bridge openings.
- d. Process survey data.
- e. QA/QC topographic survey.

Total Fee for Scope Item 4: \$79,000 / 554 FGI hours, 0 AV hours

5. DEVELOP A PHOTOGRAPHIC RECORD OF THE EXISTING CONDITIONS OF STREAMBANKS (BOTH SIDES, REACHES 1-4)

- a. All properties with addresses along the creek and photographs must correlate to each other.
- b. Create hard copy for report and GIS map.

Total Fee for Scope Item 5: \$3,920 / 0 FGI hours, 24.5 AV hours

6. UTILITIES

- a. Determine utility companies with facilities in the project area.
- b. Coordinate with impacted utility companies.
- c. Negotiate utility conflict resolutions.
- d. Review utility relocation plans for conflicts with the proposed streambank stabilization.

Total Fee for Scope Item 6: \$22,720 / 155 FGI hours, 0 AV hours

7. STREAM STABILIZATION DESIGN

- a. Reaches 1 & 3
 - i. Compare current survey of streambank to previously surveyed streambank to determine rate of erosion.
 - ii. Review and modify Baker's 2014 stream details, including but not limited to: Rock Toe Flanking detail, Rock Toe Detail, Soil Lift, J-hook, Rock Vane, Rock Cross Vane, and Augment Rock Toe.
 - iii. Verify eight (8) existing wall designs and modify existing drawings to bring them to 100%.
 - iv. Revisit, verify, and adjust structure placements.
- b. Reaches 2 & 4
 - i. Review FEMA FIS, drainage areas, profiles, and discharges.
 - ii. Calculate streamflow for bankfull, 2-year, 5-year, 10-year, 25-year, 50-year, and 100-year event using Bulletin 75 rainfall.
 - iii. Design a stable riffle and pool cross section.
 - iv. Complete eight (8) new wall designs and detail drawings.
 - v. Identify areas to dissipate energy throughout the creek.
 - vi. Identify critical infrastructure to protect and critical banks to repair.
 - vii. Determine bank protection and bank restoration technique for eroded bank areas, utilizing Baker's 2014 details when possible.

- c. Landscaping Design (Reaches 1-4)
 - i. Code required planting plan construction documents. Farnsworth Group will prepare one (1) planting plan for review and approval by the Village. Work includes:
 1. Planting plan as required by Orland Park.
 2. Specify lawn areas and seed or sod mix.
 3. Coordinate all planting layout with site and utility design.
 4. Provide written specifications for soil preparation, lawn, and plant material.
 5. Provide all necessary planting details.
 6. Provide revised drawings based on one (1) review by the owner.

Total Fee for Scope Item 7: \$55,652 / 297 FGI hours, 46 AV hours

8. CONSTRUCTABILITY AND EROSION CONTROL PLANS

- a. Reaches 1 & 3
 - i. Adjust construction access, staging, and Maintenance of Traffic during construction, as necessary.
 - ii. Update SWPPP and erosion control plan sheets.
- b. Reaches 2 & 4
 - i. Design construction access and staging.
 - ii. Design Maintenance of Traffic during construction.
 - iii. Construction sequence: Perform site analysis to identify staging sequence, disturbance areas and schedule, temporary and permanent conditions, slopes, drainage patterns, and maintenance.
 - iv. Prepare SWPPP.
 - v. Select the type of temporary and permanent erosion control measures.
 - vi. Prepare plan sheets outlining areas of temporary and permanent erosion control measures.

Total Fee for Scope Item 8: \$31,424 / 134 FGI hours, 54 AV hours

9. EASEMENT EXHIBITS

- a. Reaches 1& 3
 - i. Update permanent and temporary easement exhibits that the Village can use to execute easement agreements with individual property owners and Homeowner's Associations. Exhibits will include language describing the survey extents of the easement and an accompanying figure.
- b. Reaches 2 & 4
 - i. Prepare permanent and temporary easement exhibits that the Village can use to execute easement agreements with individual property owners and Homeowner's Associations. Exhibits will include language describing the survey extents of the easement and an accompanying figure.

Total Fee for Scope Item 9: \$58,000 / 0 FGI hours, 370 AV hours

10. MEETINGS (VILLAGE STAFF, MWRDGC, PUBLIC, INDIVIDUALS, HOAS, VILLAGE BOARD)

- a. Meet with MWRDGC to understand and collect streambank stabilization design requirements and criteria. (Reaches 1-4).
- b. Prepare 66 separate exhibits for impacted property owners, showing details of improvements, permanent easements limits, and temporary easement limits. (Reaches 1-4).
- c. Reaches 1 & 3
 - i. One public meeting to update residents on project and changes to improvements.
 - ii. Break-out meetings with individual property owners to refresh and update them on the project.
 1. Prepare for five (5) meetings with individuals after the public meeting.
- d. Reaches 2 & 4
 - i. Public meeting to share and discuss streambank stabilization improvements.
 1. Prepare and attend one (1) public meeting, including handouts, exhibits, and advertising.
 - ii. Meetings with individual property owners and HOAs to discuss and share improvements and impacts to their properties..
 1. Prepare for five (5) meetings with groups of individual property owners and HOAs.
 2. Schedule meetings with homeowners and HOAs .

3. Attend five (5) meetings.
- e. Present project to the Village Board of Trustees (Reaches 1-4).
 - i. Prepare for the Trustees presentation.
 - ii. Present to the Board of Trustees.

Total Fee for Scope Item 10: \$25,440 / 44 FGI hours, 110 AV hours

11. PLANS, SPECIFICATIONS, AND ESTIMATES

- a. Reaches 1 & 3
 - i. Submit design documents to the Village and MWRDGC.
 1. Submit 30% plans.
 2. Submit 60% design documents, including construction costs.
 3. Submit 90% design documents, including construction costs.
 - ii. Specifications - Review and revise specifications, including general notes.
 - iii. Prepare estimated construction costs for improvements.
 1. The cost estimate shall include separate bid items for project elements within MWRDGC scope and Village's responsibility.
- b. Reaches 2 & 4
 - i. Submit design documents to the Village and MWRDGC.
 1. Submit 30% plans.
 2. Submit 60% design documents, including construction costs.
 3. Submit 90% design documents, including construction costs.
 - ii. Specifications - Review and revise specifications, including general notes.
 - iii. Prepare estimated construction costs for improvements.
 1. The cost estimate shall include separate bid items for project elements within MWRDGC scope and Village's responsibility.
- c. Provide structural engineering calculations for submittal to the AHJ, signed and sealed by Illinois licensed structural engineer.
- d. Prepare annual Operation and Maintenance costs of the streambank improvement over a 20-year period (Reaches 1-4).

Total Fee for Scope Item 11: \$61,590 / 298 FGI hours, 66 AV hours

12. PERMITS: OBTAIN PERMITS FROM THE FOLLOWING AGENCIES/ENTITIES (REACHES 1-4)

- a. MWRDGC
- b. USACOE. Based on a recent visit to the project area, the stream would be classified as a perennial stream and would likely be considered as a jurisdictional water of the US. Farnsworth Group would propose to the District Engineer at USACE-Chicago District for this action to be authorized under NWP 13 via a special waiver as this action exceeds the 500 feet length threshold associated with the NWP. The special waiver will be proposed as this action would only cause temporary minimal adverse environmental effects and long-term beneficial impacts to the stream. If this action is not granted as the waiver to be authorized under NWP 13, an individual permit will be required for this action. Farnsworth Group's experience with the USACE-Chicago District will enable us to reach out directly to our points of contact to determine the likelihood of the waiver being granted, allowing us to expedite the permitting path forward. Farnsworth Group will prepare the materials needed to submit an individual permit application or a pre-construction notification to the USACE-Chicago District. We will remain in contact with the USACE Project Manager during the permitting process to ensure they have the material needed to process the permit as quickly as possible.
- c. IDNR
- d. IEPA: SWPPP
- e. Village of Orland Park

Total Fee for Scope Item 12: \$35,805 / 223 FGI hours, 36 AV hours

13. BIDDING SERVICES (REACHES 1 & 3 AND REACHES 2 & 4)

- a. Prepare a complete plans, specifications, and estimates (PS&E) document that will be used by the Village to solicit bids from qualified contractors.
- b. Assist the Village staff in developing the Invitation for Bids, including developing criteria for contractors' qualifications and selection.
- c. Prepare an estimated construction schedule for improvements. Include Gantt charts for graphical presentation.
- d. 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 consultant for construction engineering services.
- e. 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 Village staff.

Total Fee for Scope Item 13: \$27,240 / 118 FGI hours, 42 AV hours

14. QA/QC

Total Fee for Scope Item 14: \$8,400 / 20 FGI hours, 26 AV hours

TOTAL: \$464,100

ASSUMPTIONS AND CLARIFICATIONS

The following assumptions and clarifications support the fee for this proposal.

GENERAL

- The following will be provided by the Village of Orland Park to Farnsworth Group:
 - HEC-RAS files
 - 98% Opinion of Probable Costs
 - 98% Design Reports/Criteria
 - 98% CADD files
 - o Existing topo and ALTA surveys
 - o Proposed conditions
 - o Retaining walls
 - o Utility locates
 - o Existing and proposed easements
 - Previous easement exhibits with metes and bounds descriptions
 - Previous meeting agendas and minutes
 - o Public meetings
 - o IDNR
 - o USACE

MEETINGS

- The kick-off meeting will be in-person at the Village of Orland Park.
- Coordination meetings will occur monthly virtually.
- The proposal assumes public meetings can be scheduled and held in a timely manner and homeowners and Homeowners' Associations will be available to meet with our team during the timeframe noted on our schedule.
- The proposal includes the following meetings:
 - Twelve (12) total coordination virtual meetings. Two (2) Farnsworth Group team members and one (1) Aqua Vitae team member will be present at each meeting.
 - Five (5) meetings total with small groups of individual homeowners for Reaches 2 & 4.
 - Five (5) meetings total with individuals after the public meeting for Reaches 1 & 3.

- Two (2) public meeting charettes total - one (1) for Reaches 1 & 3 and one (1) for Reaches 2 & 4.
- One (1) meeting with the Village trustees.

SURVEY

- The topographic survey will include six bridge/culvert openings.
- The stream length for topographic survey will be 2.6 miles.
- Farnsworth Group will not enter into any union agreements.
- Farnsworth Group will prepare easement exhibits for 66 parcels along the creek corridor. Exhibits will include language describing the survey extents of the easement and an accompanying figure.
- The proposal does not include the following:
 - Easement Plats.
 - Surveys of first floor elevations for floodplain purposes.
 - Boundary surveys
- Farnsworth Group will only survey trees to keep, as identified by a Farnsworth Group arborist.
- The Village of Orland Park will provide a letter and notify owners of survey work. Cutting of brush (only where necessary) for shooting topo will be approved by owners and Village of Orland Park before work starts.
- The Village of Orland Park to provide subdivision plats and surveys of record, as well as any deeds required for easement exhibit preparation.
- The Village of Orland Park will prepare easement agreements and execute agreements.

UTILITY COORDINATION

- The proposal for utility coordination includes total project length of 46 weeks (May 2021 to March 2022) and five (5) utility coordination meetings.

ENVIRONMENTAL / STORMWATER / PERMITTING

- The Waters of the US survey will not include cultural resources survey or species specific threatened and endangered species surveys.
- An USACOE individual permit will be required.
- The proposal does not include the following:
 - Threatened and Endangered Species Surveys or USFWS coordination.
 - Local or Cook County Wetland Permitting.
 - Stormwater Management Plans.
 - Wetland/Stream Mitigation Design, Costs, or Monitoring.
 - Irrigation design services.
 - Changes to the FEMA maps.
- The proposal assumes that a IEPA individual 401 water quality certification will not be necessary.
- Effort and costs associated with soil sampling, borings, and testing is not included in the proposal and will be determined during initial field investigations and survey. Work will be subcontracted to SEECO Consultants, Inc.

STRUCTURAL

- The proposal for structural engineering services assumes:
 - All retaining walls will be designed with similar intent to the existing designs on the 98% plans using soldier piling and sheet piling components.
 - Soldier piling will be used at existing utility crossings and where construction vibrations are not permitted and this will be provided by the Village of Orland Park to Farnsworth Group prior to the start of design.
 - 1,100 total linear feet of new wall designs.
 - Existing wall designs provided by client on 98% drawing set are assumed to be adequate without redesign. Redesign of existing walls may require additional fee.
 - A geotechnical report with design recommendations will be provided to structural staff prior to design.
 - Bill of Materials for concrete reinforcement provided on plans will be approximate and not used for pricing. Contractors will be required to calculate quantities for bidding and the selected contractor will develop reinforcement shop drawings for review by engineer.

- Calculation Packages will include loading calculations and results obtained from commercial engineering software and proprietary programs. It is assumed that the format and contents of the calculation package will be determined by the structural engineer of record to convey the structural design. If additional requirements are imposed by the authority having jurisdiction (AHJ), those may be addressed for additional fee.

BIDDING AND CONSTRUCTION

- The Village of Orland Park will lead and manage bidding services.
- The proposal does not include construction phase services.
- The proposal does not include site visits during construction, but can be provided on a Time and Materials basis.
- Redesign for any site condition, owner, or contractor driven changes affecting the design or details, including but not limited to value engineering revisions, will be an additional service for additional fees.

