



January 11, 2022

Khurshid Hoda, CPP
Director, Engineering Programs and Services
Village of Orland Park
14700 Ravinia Avenue
Orland Park, Illinois 60462

RE: **Amendment No. 1 – Phase I Design Engineering Services
153rd Street & Ravinia Avenue Intersection Improvements
Village of Orland Park | Cook County**

Dear Mr. Hoda:

This letter is sent to request authorization to establish Additional Services for the above-referenced project. The services listed herein will be provided under the terms and conditions of our original Agreement for Services signed and dated June 29, 2021. The work will be billed hourly based on the billing rates in our original Agreement for Services on a not-to-exceed basis.

Project Understanding

The additional services will include Phase I design engineering services for a new roundabout at the intersection of 153rd Street and Ravinia Avenue. It is our understanding that at the January 4, 2022 Village Committee of the Whole meeting, the Committee directed staff to proceed with a roundabout as the preferred alternative. The original Agreement for Services included a new traffic signal at the intersection as the preferred alternative. Please note that the work performed by V3 to date will be utilized for the roundabout alternative. Also, work not performed by V3 to date but part of the original Agreement for Services will be completed as part of the roundabout alternative. Attached as Exhibit 1 is the additional scope of work needed to complete the Phase I design engineering services and receive Phase 1 approval by IDOT under the roundabout alternative.

Compensation

For the Scope of Services provided herein, V3 shall be paid on an hour basis with an **additional not-to-exceed fee of \$109,876.17** for a project total not-to-exceed \$179,726.17. This fee includes work by sub-consultants and reimbursable costs such as printing, postage, messenger service, travel, mileage, and tolls to/from meetings and other similar project-related items.

Miscellaneous Contractual Items

If this request is found to be satisfactory, please sign in the space provided and return one signed copy to our office. Receipt of the signed authorization will serve as our Notice to Proceed for this work. Please feel free to contact us should you have any questions or comments regarding this request.

Sincerely,
V3 Companies, Ltd.



Michael J. Rechterik, P.E., PTOE
Senior Project Manager



Kurt Corrigan, P.E.
Municipal Lead – Senior Project Manager

Accepted for:
VILLAGE OF ORLAND PARK

BY: _____
Authorized Signature

TITLE: _____

DATE: _____

Attachments:

- Exhibit 1 – Scope of Services
- Exhibit 2 – Fee Estimate
- Exhibit 3 – Strand Scope and Fee



EXHIBIT 1 - SCOPE OF SERVICES

The following is the additional scope of work necessary to complete and receive IDOT Design Approval – Group II CE - BLR Form 22210, for a proposed roundabout at the intersection of 153rd Street and Ravinia Avenue.

UTILITY COORDINATION

V3 will prepare letters and exhibits to initiate coordination with additional utility companies within the project limits.

TREE IDENTIFICATION & ASSESSMENT

V3's International Society of Arboriculture (ISA) certified arborist will identify and assess all trees 3" DBH and greater within the project area. The trees will be tagged as part of V3's topographic survey scope of services. The tag number, diameter, and tree species will be recorded for each tree identified. A rating will be assigned to each tree which will consider the size, species, condition, location, and aesthetics of each. A summary table will be prepared listing the scientific name, common name, DBH, and rating of each tree identified.

The information provided by V3 regarding tree quality is based on an interpretation of observed tree growth habit and health at the time of the field investigation. V3 provides the best information available at the time of the field investigation, but outside factors may affect tree characteristics with time, including weather, vegetation maintenance, altered drainage, disease, or other events.

LOCATION DRAINAGE STUDY

A Location Drainage Study (LDS) will be prepared in accordance with IDOT's Drainage Manual. The study will include a description of the existing and proposed drainage systems and identification of outfall locations and their adequacy based on IDOT criteria. The study will include required mapping and exhibits, design of the drainage system, a discussion of Best Management Practices (BMPs) (if applicable), and identification of permitting requirements. Although the existing and proposed drainage exhibits typically only include the proposed limits of the project, it may be necessary to study areas outside the project limits.

GEOTECHNICAL INVESTIGATION

V3 will hire a geotechnical subconsultant to perform 2 soil borings with pavement cores and prepare a geotechnical report to determine the general suitability of the soils for the construction of the roundabout and multi-use path. Additional borings and cores will be necessary during Phase II engineering to finalize the pavement structure and aggregate sub-grade depth. If the Village desires, we can coordinate this work with the Village's Geotech consultant for the Village's Road program.

GEOMETRIC STUDIES/INTERSECTION DESIGN STUDY

The geometric studies will be evaluated to minimize impacts to right-of-way, utilities, environmentally sensitive areas, and structures. V3 will prepare exhibits, meet with the Village, and determine final layout of the roundabout alternative.

Based on the roundabout alternative, an intersection design study (IDS) will be prepared at the intersection of 153rd



EXHIBIT 1 - SCOPE OF SERVICES

Street and Ravinia Avenue in accordance to IDOT District One guidelines.

- Utilize the existing traffic counts, capacity analyses, and the warrant analyses previously performed at the intersection.
- Perform future capacity analyses.
- The IDS sheets will consist of plan & profile, capacity analysis results, and turning templates for the design vehicle.

The IDS will be submitted to the Village and IDOT for review. Strand Associates will be utilized for this work. Their scope and fee are attached as Exhibit 3.

ENGINEERS' OPINION OF PROBABLE CONSTRUCTION COST

The preliminary engineer's opinion of probable construction costs (EOPCC) will be updated to include the roundabout alternative.

PUBLIC INVOLVEMENT

During the development of the PDR, a public meeting or open house will be held. We will confirm with IDOT the public involvement plan which may include letters to the residents, video presentation, website information and surveys, individual meetings and follow up responses to comments. We anticipate one formal public open house to be held.

PROJECT DEVELOPMENT REPORT

The original scope included preparation of a Project Development Report (PDR) for a State Approved Categorical Exclusion using BLR Form 19100. It is anticipated that the roundabout alternative will require preparation of a Group II Categorical Exclusion using BLR Form 22210. The report will include a description of existing conditions, proposed improvements, traffic and capacity analysis, right-of-way/easement required, identified environmental concerns and impacts, maintenance of traffic during construction and agency coordination/public involvement activities. Exhibits that will be prepared and incorporated into the project report will include:

- Location Map
- Existing and Proposed Typical Sections
- Intersection Design Study
- Proposed Plan and Profile sheets
- ADA Details at the Intersection
- Intersection Capacity Analysis
- Traffic Management Plan
- Right-of-way and Easement Mapping
- Estimate of Probable Construction Cost

Two submittals of the PDR will be made to the Village and IDOT (preliminary and final). A disposition of comments will be included with each submittal. Final deliverable will be an IDOT approved PDR.



EXHIBIT 1 - SCOPE OF SERVICES

During Phase I V3 will submit for funding through the Southwest Conference of Mayors, specifically, STP- Local. We understand that other funding opportunities may arise and we will apply as needed for up to three additional applications over the next two years.

MEETINGS AND PROJECT COORDINATION

Due to the additional project scope, it's anticipated that additional meetings and project coordination will be required. It is anticipated that the following additional meetings will be needed that were not necessary with the original scope.

- IDOT/FHWA Coordination Meeting (1 meeting)
- Staff Meetings (2 meetings)
- Public Information Meeting – (1 meeting)

ADMINISTRATION AND MANAGEMENT

Due to the additional project scope, it's anticipated that the project schedule will extend beyond the original scope. Therefore, additional project administration and management will be required. Included in this additional scope is the preparation of a subconsultant agreement for geotechnical services and managing performance of their work efforts.

QUALITY ASSURANCE/QUALITY CONTROL

Due to the additional project scope and deliverables, it's anticipated that additional QA/QC will be required. V3 will perform in-house QA/QC reviews prior to submittal of any deliverable to the Village and IDOT.

REIMBURSABLE EXPENSES

In addition to the professional services fees set forth above, V3 shall be compensated for all reimbursable expenses such as printing, postage, messenger service, travel, mileage and tolls to/from meeting and other similar project-related items.

Exhibit 2 - Fee Estimate
 Village of Orland Park
 153rd Street & Ravinia Avenue
 Phase I Design Engineering Services
 Alternative 3 - Roundabout



Task	Director	Senior Project Manager	Project Manager	Senior Ecologist	Project Engineer	Project Scientist	Landscape Architect	Project Surveyor	Design Technician	Engineer I/II	Survey Crew	Admin	Total Hours	Task Cost	Services by Others	Direct Costs	Total Task Cost
Data Collection													0	\$ -		\$ -	\$ -
Topographic Survey													0	\$ -		\$ -	\$ -
ROW Research & Title Searches													0	\$ -		\$ -	\$ -
Utility Coordination					4					4			8	\$ 960.00		\$ -	\$ 960.00
Special Waste Studies (PESA)													0	\$ -		\$ -	\$ -
Tree Identification & Assessment		2		8									10	\$ 1,770.00		\$ -	\$ 1,770.00
Environmental Survey Request (ESR)													0	\$ -		\$ -	\$ -
Location Drainage Study		8	8		24					32		4	76	\$ 9,800.00		\$ -	\$ 9,800.00
Geotechnical Investigations					4								4	\$ 560.00	\$ -	\$ 2,000.00	\$ 2,560.00
Traffic/Crash Analysis													0	\$ -	\$ 1,941.77	\$ -	\$ 1,941.77
Geometric Studies / Intersection Design Study		2			4				8	8			22	\$ 2,690.00	\$ 32,171.75	\$ -	\$ 34,861.75
Engineers Opinion of Probable Construction Cost					4					4			8	\$ 960.00		\$ -	\$ 960.00
Public Involvement	2	4			12					20		8	46	\$ 5,400.00	\$ 8,416.53	\$ -	\$ 13,816.53
Project Development Report	2	16			60				32	70			180	\$ 22,780.00		\$ 1,000.00	\$ 23,780.00
Meetings and Project Coordination	2	16			40					8			66	\$ 10,100.00	\$ -	\$ -	\$ 10,100.00
Administration and Management	2	8			16								26	\$ 4,300.00		\$ -	\$ 4,300.00
Quality Assurance/Quality Control	2	4			8								14	\$ 2,360.00	\$ 2,666.12	\$ -	\$ 5,026.12
													0	\$ -		\$ -	\$ -
													0	\$ -		\$ -	\$ -
													0	\$ -		\$ -	\$ -
													0	\$ -		\$ -	\$ -
Hourly Rate (\$/hr)	\$ 210.00	\$ 205.00	\$ 170.00	\$ 170.00	\$ 140.00	\$ 130.00	\$ 125.00	\$ 115.00	\$ 115.00	\$ 100.00	\$ 195.00	\$ 60.00					
Total Level of Effort (HOURS)	10	60	8	8	176	0	0	0	40	146	0	12	460				
Labor Costs	\$ 2,100.00	\$ 12,300.00	\$ 1,360.00	\$ 1,360.00	\$ 24,640.00	\$ -	\$ -	\$ -	\$ 4,600.00	\$ 14,600.00	\$ -	\$ 720.00		\$ 61,680.00			
Direct Costs															\$ 45,196.17	\$ 3,000.00	

Amendment 1 Total \$ 109,876.17

Current Phase I Services Fee \$ 69,850.00

New Contract Total \$ 179,726.17

SCOPE OF SERVICES–PRELIMINARY ENGINEERING SERVICES

Engineer: Strand Associates, Inc.®
Route: Ravinia Avenue at 153rd Street
Local Agency: Village of Orland Park, IL
V3 Contact: Kurt Corrigan
Date: January 11, 2022

ENGINEER will provide the following services for V3:

Traffic Analysis & Preliminary Design

1. Prepare a capacity analysis utilizing SIDRA software for existing, no-build, and build conditions utilizing existing traffic counts by Others and 2050 projected traffic volumes from the Chicago Metropolitan Agency for Planning (CMAP).
2. Perform CADD design in Microstation Select Series 4.
3. Prepare the Intersection Design Study (IDS) for a single lane roundabout. IDS will include STATE's IDS base sheet modified for a roundabout and the following exhibits:
 - Capacity Analysis and Plan View
 - One horizontal alignment for Ravinia Avenue and 153rd Street.
 - Horizontal alignments along the edge of pavement of the curb and gutter at the roundabout and splitter islands.
 - One vertical profile for Ravinia Avenue and 153rd Street
 - Design vehicle turning movements
 - Fast Paths
 - Sight Distance
 - Phi and Vision Angles
 - Proposed Signing
4. Prepare up to four design exceptions for the roundabout design on forms provided by the STATE.
5. Develop visualization model utilizing VISSIM software for use at public meeting.
6. Design roundabout pavement elevations of inscribed circle to establish land acquisition needs. Sidewalk and multi-use path grades will not be provided.
7. Develop up to twenty-five cross sections for design purposes to establish land acquisition at 50-foot intervals and at entrances. Cross sections will show existing and proposed surface geometry but will not be included in the project development report.

Quality Control

1. Perform quality control on traffic modeling and IDS.

Meetings

Attending the following meetings with two ENGINEER representatives. Agendas and meeting minutes will be prepared by Others.

1. One meeting with STATE and LA for IDS review.
2. One LA review meeting.
3. Up to two progress meetings with LA.
4. Up to two public meetings (one ENGINEER representative). ENGINEER will prepare up to two exhibits for each public meeting.

