

DRAFT

HAINESVILLE ROAD IMPROVEMENTS
WASHINGTON STREET TO ROLLINS ROAD
SECTION 19-00072-14-WR

PHASE II ENGINEERING SERVICES
for
LAKE COUNTY DIVISION OF TRANSPORTATION

APRIL 19, 2022

PREPARED BY

V3 Companies
7325 Janes Ave.
Woodridge, Il. 60517



Using Federal Funds? ☐ Yes ☒ No	Agreement For PH II Eng	Agreement Type Original
--	----------------------------	----------------------------

LOCAL PUBLIC AGENCY

Local Public Agency Lake County Division of Transportation	County Lake	Section Number 19-00072-14-WR	Job Number
Project Number	Contact Name Michael Lukich, PE	Phone Number (847) 377-7474	Email mlukich@lakecountyil.gov

SECTION PROVISIONS

Local Street/Road Name V66 (Hainesville Road)	Key Route 4-0193	Length 8,200	Structure Number
Location Termini Washington Street to Rollins Road			Add Location Remove Location

Project Description

The proposed improvements involve roadway widening and the addition of a bike path and sidewalk. This project will include some Phase I elements (ie: geometric studies/public involvement) and Phase II documents.

Engineering Funding	☐ MFT/TBP ☐ State ☒ Other	Sales Tax
Anticipated Construction Funding	☐ Federal ☐ MFT/TBP ☐ State ☒ Other	Sales Tax

AGREEMENT FOR

☐ Phase I - Preliminary Engineering ☒ Phase II - Design Engineering

CONSULTANT

Consultant (Firm) Name V3 Companies, Ltd.	Contact Name Kurt Corrigan	Phone Number (630) 729-6226	Email kcorrigan@v3co.com
Address 7325 Janes Ave	City Woodridge	State IL	Zip Code 60517

THIS AGREEMENT IS MADE between the above Local Public Agency (LPA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Project funding allotted to the LPA by the State of Illinois under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT," will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

Since the services contemplated under the AGREEMENT are professional in nature, it is understood that the ENGINEER, acting as an individual, partnership, firm or legal entity, qualifies for professional status and will be governed by professional ethics in its relationship to the LPA and the DEPARTMENT. The LPA acknowledges the professional and ethical status of the ENGINEER by entering into an AGREEMENT on the basis of its qualifications and experience and determining its compensation by mutually satisfactory negotiations.

WHEREVER IN THIS AGREEMENT or attached exhibits the following terms are used, they shall be interpreted to mean:

Regional Engineer	Deputy Director, Office of Highways Project Implementation, Regional Engineer, Department of Transportation
Resident Construction Supervisor	Authorized representative of the LPA in immediate charge of the engineering details of the construction PROJECT
In Responsible Charge Contractor	A full time LPA employee authorized to administer inherently governmental PROJECT activities Company or Companies to which the construction contract was awarded

AGREEMENT EXHIBITS

The following EXHIBITS are attached hereto and made a part of hereof this AGREEMENT:

- ☒ EXHIBIT A: Scope of Services
- ☒ EXHIBIT B: Project Schedule
- ☒ EXHIBIT C: Cost Estimate of Consultant Services Worksheet (BLR 05513 or BLR 05514)

☐ _____

☐ _____

☐ _____

I. THE ENGINEER AGREES,

1. To perform or be responsible for the performance of the Scope of Services presented in EXHIBIT A for the LPA in connection with the proposed improvements herein before described.
2. The Classifications of the employees used in the work shall be consistent with the employee classifications and estimated staff hours. If higher-salaried personnel of the firm, including the Principal Engineer, perform services that are to be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the payroll rate for the work performed.
3. That the ENGINEER shall be responsible for the accuracy of the work and shall promptly make necessary revisions or corrections required as a result of the ENGINEER'S error, omissions or negligent acts without additional compensation. Acceptance of work by the LPA or DEPARTMENT will not relieve the ENGINEER of the responsibility to make subsequent correction of any such errors or omissions or the responsibility for clarifying ambiguities.
4. That the ENGINEER will comply with applicable Federal laws and regulations, State of Illinois Statutes, and the local laws or ordinances of the LPA.
5. To pay its subconsultants for satisfactory performance no later than 30 days from receipt of each payment from the LPA.
6. To invoice the LPA, The ENGINEER shall submit all invoices to the LPA within three months of the completion of the work called for in the AGREEMENT or any subsequent Amendment or Supplement.
7. The ENGINEER or subconsultant shall not discriminate on the basis of race, color, national origin or sex in the performance of this AGREEMENT. The ENGINEER shall carry out applicable requirements of 49 CFR part 26 in the administration of US Department of Transportation (US DOT) assisted contract. Failure by the Engineer to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy as the LPA deems appropriate.
8. That none of the services to be furnished by the ENGINEER shall be sublet, assigned or transferred to any other party or parties without written consent of the LPA. The consent to sublet, assign or otherwise transfer any portion of the services to be furnished by the ENGINEER shall be construed to relieve the ENGINEER of any responsibility for the fulfillment of this AGREEMENT.
9. For Preliminary Engineering Contracts:
 - (a) To attend meetings and visit the site of the proposed improvement when requested to do so by representatives of the LPA or the DEPARTMENT, as defined in Exhibit A (Scope of Services).
 - (b) That all plans and other documents furnished by the ENGINEER pursuant to the AGREEMENT will be endorsed by the ENGINEER and affixed the ENGINEER's professional seal when such seal is required by law. Such endorsements must be made by a person, duly licensed or registered in the appropriate category by the Department of Professional Regulation of the State of Illinois. It will be the ENGINEER's responsibility to affix the proper seal as required by the Bureau of Local Roads and Streets manual published by the DEPARTMENT.
 - (c) That the ENGINEER is qualified technically and is thoroughly conversant with the design standards and policies applicable for the PROJECT; and that the ENGINEER has sufficient properly trained, organized and experienced personnel to perform the services enumerated in Exhibit A (Scope of Services).
10. That the engineering services shall include all equipment, instruments, supplies, transportation and personnel required to perform the duties of the ENGINEER in connection with this AGREEMENT (See Exhibit C).

II. THE LPA AGREES,

1. To certify by execution of this AGREEMENT that the selection of the ENGINEER was performed in accordance with the Professional Services Selection Act (50 ILCS 510) (Exhibit D).
2. To furnish the ENGINEER all presently available survey data, plans, specifications, and project information.
3. To pay the ENGINEER:
 - (a) For progressive payments - Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LPA, monthly payments for the work performed shall be due and payable to the ENGINEER, such payments to be equal to the value of the partially completed work minus all previous partial payments made to the ENGINEER.
 - (b) Final payment - Upon approval of the work by the LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA and DEPARTMENT a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amount of partial payments previously paid to the ENGINEER

shall be due and payable to the ENGINEER.

(c) For Non-Federal County Projects - (605 ILCS 5/5-409)

- (1) For progressive payments - Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LPA, monthly payments for the work performed shall be due and payable to the ENGINEER. Such payments to be equal to the value of the partially completed work in all previous partial payments made to the ENGINEER.
- (2) Final payment - Upon approval of the work by the LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA ~~and STATE~~, a sum of money equal to the basic fee as determined in the AGREEMENT less the total of the amount of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

4. To pay the ENGINEER as compensation for all services rendered in accordance with the AGREEMENT on the basis of the following compensation method as discussed in 5-5.10 of the BLR Manual.

Method of Compensation:

- ☐ Percent
- ☐ Lump Sum
- ☐ Specific Rate

☒ Cost plus Fixed Fee:

Total Compensation = DL + DC + OH + FF

Where:

DL is the total Direct Labor,

DC is the total Direct Cost,

OH is the firm's overhead rate applied to their DL and

FF is the Fixed Fee.

Where $FF = (0.33 + R) DL + \%SubDL$, where R is the advertised Complexity Factor and %SubDL is 10% profit allowed on the direct labor of the subconsultants.

The Fixed Fee cannot exceed 15% of the DL + OH.

5. The recipient shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any US DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of US DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by US DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as violation of this AGREEMENT. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C 3801 et seq.).

III. IT IS MUTUALLY AGREED,

1. To maintain, for a minimum of 3 years after the completion of the contract, adequate books, records and supporting documents to verify the amount, recipients and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the contract shall be available for review and audit by the Auditor General, and the DEPARTMENT; the Federal Highways Administration (FHWA) or any authorized representative of the federal government, and to provide full access to all relevant materials. Failure to maintain the books, records and supporting documents required by this section shall establish a presumption in favor of the DEPARTMENT for the recovery of any funds paid by the DEPARTMENT under the contract for which adequate books, records and supporting documentation are not available to support their purported disbursement.
2. That the ENGINEER shall be responsible for any all damages to property or persons out of an error, omission and/or negligent act in the prosecution of the ENGINEER's work and shall indemnify and save harmless the LPA, the DEPARTMENT, and their officers, agents and employees from all suits, claims, actions or damages liabilities, costs or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.

The LPA will notify the ENGINEER of any error or omission believed by the LPA to be caused by the negligence of the ENGINEER as soon as practicable after the discovery. The LPA reserves the right to take immediate action to remedy any error or omission if notification is not successful; if the ENGINEER fails to reply to a notification; or if the conditions created by the error or omission are in need of urgent correction to avoid accumulation of additional construction costs or damages to property and reasonable notice is not practicable.
3. This AGREEMENT may be terminated by the LPA upon giving notice in writing to the ENGINEER at the ENGINEER's last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LPA all drawings, plats, surveys, reports, permits, agreements, soils and foundation analysis, provisions, specifications, partial and completed estimates and data, if any from soil survey and subsurface investigation with the understanding that all such materials becomes the property of the LPA. The LPA will be responsible for reimbursement of all eligible expenses incurred under the terms of this AGREEMENT up to the date of the written notice of termination.

4. ~~In the event that the DEPARTMENT stops payment to the LPA, the LPA may suspend work on the project. If this agreement is suspended by the LPA for more than thirty (30) calendar days, consecutive or in aggregate, over the term of this AGREEMENT, the ENGINEER shall be compensated for all services performed and reimbursable expenses incurred prior to receipt of notice of suspension. In addition, upon the resumption of services the LPA shall compensate the ENGINEER, for expenses incurred as a result of the suspension and resumption of its services, and the ENGINEER's schedule and fees for the remainder of the project shall be equitably adjusted.~~
5. This AGREEMENT shall continue as an open contract and the obligations created herein shall remain in full force and effect until the completion of construction of any phase of professional services performed by others based upon the service provided herein. All obligations of the ENGINEER accepted under this AGREEMENT shall cease if construction or subsequent professional services are not commenced within 5 years after final payment by the LPA.
6. That the ENGINEER shall be responsible for any and all damages to property or persons arising out of an error, omission and/or negligent act in the prosecution of the ENGINEER's work and shall indemnify and have harmless the LPA, the DEPARTMENT, and their officers, employees from all suits, claims, actions or damages liabilities, costs or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.
7. The ENGINEER and LPA certify that their respective firm or agency:
 - (a) has not employed or retained for commission, percentage, brokerage, contingent fee or other considerations, any firm or person (other than a bona fide employee working solely for the LPA or the ENGINEER) to solicit or secure this AGREEMENT,
 - (b) has not agreed, as an express or implied condition for obtaining this AGREEMENT, to employ or retain the services of any firm or person in connection with carrying out the AGREEMENT or
 - (c) has not paid, or agreed to pay any firm, organization or person (other than a bona fide employee working solely for the LPA or the ENGINEER) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out the AGREEMENT.
 - (d) that neither the ENGINEER nor the LPA is/are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency,
 - (e) has not within a three-year period preceding the AGREEMENT been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.
 - (f) are not presently indicated for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph and
 - (g) has not within a three-year period preceding this AGREEMENT had one or more public transaction (Federal, State, local) terminated for cause or default.

Where the ENGINEER or LPA is unable to certify to any of the above statements in this clarification, an explanation shall be attached to this AGREEMENT.

8. In the event of delays due to unforeseeable causes beyond the control of and without fault or negligence of the ENGINEER no claim for damages shall be made by either party. Termination of the AGREEMENT or adjustment of the fee for the remaining services may be requested by either party if the overall delay from the unforeseen causes prevents completion of the work within six months after the specified completion date. Examples of unforeseen causes included but are not limited to: acts of God or a public enemy; acts of the LPA, DEPARTMENT, or other approving party not resulting from the ENGINEER's unacceptable services; fire; strikes; and floods.

If delays occur due to any cause preventing compliance with the PROJECT SCHEDULE, the ENGINEER shall apply in writing to the LPA for an extension of time. If approved, the PROJECT SCHEDULE shall be revised accordingly.

9. This certification is required by the Drug Free Workplace Act (30 ILCS 580). The Drug Free Workplace Act requires that no grantee or contractor shall receive a grant or be considered for the purpose of being awarded a contract for the procurement of any property or service from the DEPARTMENT unless that grantee or contractor will provide a drug free workplace. False certification or violation of the certification may result in sanctions including, but not limited to suspension of contract on grant payments, termination of a contract or grant and debarment of the contracting or grant opportunities with the DEPARTMENT for at least one (1) year but not more than (5) years.

For the purpose of this certification, "grantee" or "Contractor" means a corporation, partnership or an entity with twenty-five (25) or more employees at the time of issuing the grant or a department, division or other unit thereof, directly responsible for the specific performance under contract or grant of \$5,000 or more from the DEPARTMENT, as defined the Act.

The contractor/grantee certifies and agrees that it will provide a drug free workplace by:

- (a) Publishing a statement:
 - (1) Notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance, including cannabis, is prohibited in the grantee's or contractor's workplace.
 - (2) Specifying actions that will be taken against employees for violations of such prohibition.
 - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
 - (a) abide by the terms of the statement; and
 - (b) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;

- (2) The grantee's or contractor's policy to maintain a drug free workplace;
 - (3) Any available drug counseling, rehabilitation and employee assistance program; and
 - (4) The penalties that may be imposed upon an employee for drug violations.
- (c) Providing a copy of the statement required by subparagraph (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- (d) Notifying the contracting, or granting agency within ten (10) days after receiving notice under part (b) of paragraph (3) of subsection (a) above from an employee or otherwise, receiving actual notice of such conviction.
- (e) Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program.
- (f) Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.

Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act, the ENGINEER, LPA and the Department agree to meet the PROJECT SCHEDULE outlined in EXHIBIT B. Time is of the essence on this project and the ENGINEER's ability to meet the PROJECT SCHEDULE will be a factor in the LPA selecting the ENGINEER for future projects. The ENGINEER will submit progress reports with each invoice showing work that was completed during the last reporting period and work they expect to accomplish during the following period.

10. Due to the physical location of the project, certain work classifications may be subject to the Prevailing Wage Act (820 ILCS 130/0.01 et seq.).
11. For Preliminary Engineering Contracts:
- (a) That tracing, plans, specifications, estimates, maps and other documents prepared by the ENGINEER in accordance with this AGREEMENT shall be delivered to and become the property of the LPA and that basic survey notes, sketches, charts, CADD files, related electronic files, and other data prepared or obtained in accordance with this AGREEMENT shall be made available, upon request to the LPA or to the DEPARTMENT, without restriction or limitation as to their use. Any re-use of these documents without the ENGINEER involvement shall be at the LPA's sole risk and will not impose liability upon the ENGINEER.
 - (b) That all reports, plans, estimates and special provisions furnished by the ENGINEER shall conform to the current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Manual or any other applicable requirements of the DEPARTMENT, it being understood that all such furnished documents shall be approved by the LPA and the DEPARTMENT before final acceptance. During the performance of the engineering services herein provided for, the ENGINEER shall be responsible for any loss or damage to the documents herein enumerated while they are in the ENGINEER's possession and any such loss or damage shall be restored at the ENGINEER's expense.

AGREEMENT SUMMARY

Prime Consultant	TIN/FEIN/SS Number	Agreement Amount
V3 Companies, Ltd.	36-3252440	\$1,666,158.00

Subconsultants	TIN/FEIN/SS Number	Agreement Amount
- CBBEL		\$70,150.00
- SantaCruz		\$715,500.00
- SAM		\$63,750.00
- TSC		\$36,950.00
Subconsultant Total		\$886,350.00
Prime Consultant Total		\$1,666,158.00
Total for all work		\$2,552,508.00
Add Subconsultant		

AGREEMENT SIGNATURES

Executed by the LPA:

		Local Public Agency Type	Name of Local Public Agency
Attest:	The County	of	Lake
By (Signature & Date)		By (Signature & Date)	
Name of Local Public Agency	Local Public Agency Type	Title	
Lake	County	Chair, Lake County Board	
		Clerk	

(SEAL)

Executed by the ENGINEER:

Consultant (Firm) Name

Attest:

V3 Companies, Ltd.

By (Signature & Date)

	04/19/2022
---	------------

Title

Sr. Project Manager

By (Signature & Date)

	04/19/2022
--	------------

Title

Vice President

Note: 3 Original Contracts (2 LCDOT and 1 Consultant)

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	19-00072-14-WR

EXHIBIT A
SCOPE OF SERVICES

To perform or be responsible for the performance of the engineering services for the LPA, in connection with the PROJECT herein before described and enumerated below

Attached

Local Public Agency

County

Section Number

Lake County Division of Transportation

Lake

19-00072-14-WR

**EXHIBIT B
PROJECT SCHEDULE**

Attached

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	19-00072-14-WR

EXHIBIT C
Cost Estimate of Consultant Services Worksheet (BLR 05514)

Attached

Exhibit A-1

V3 Phase II Scope

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

Contents

1.1. TOPOGRAPHIC SURVEY 4

1.2. PRELIMINARY ENGINEERING REPORT APPROVAL 6

1.3. GEOMETRIC UPDATES FOR PHASE II 6

1.4. WETLAND DELINEATION, PERMITTING, & MITIGATION 7

 Field Work..... 7

 Wetland Assessment..... 7

 Wetland Delineation Technical Report, Threatened & Endangered Species Consultation & USACE/Lake County SMC Preliminary Jurisdictional Determination Submittal 7

 USACE Nationwide Permit 14 Submittal 8

 Lake County SMC Isolated Wetland Permit Submittal 8

 Response to Agency Wetland/Waters Permit Review Comments 9

 Buffer and BMP Native Planting Plan Design..... 9

 Native Planting 3-Year Monitoring and Management Plan (MMP)..... 9

 Wetland Project Meetings/Coordination 9

1.5. SPECIAL WASTE ASSESSMENTS 9

 Preliminary Site Investigation (PSI)..... 9

 Clean Construction or Demolition Debris (CCDD) Pre-package Coordination..... 11

1.6. UTILITY & SUBSURFACE UTILITY ENGINEERING (SUE) LEVEL A/B COORDINATION 12

 Utility Coordination..... 12

 Subconsultant for Subsurface Utility Engineering (SUE) Level A/B 12

1.7. LAND ACQUISITION SERVICES 13

 Land Acquisition Evaluation..... 13

 Plat of Highways..... 13

 Subconsultant for Land Appraisals/Negotiations Services 13

1.8. GEOTECHNICAL ENGINEERING SERVICES..... 14

 Subconsultant for Geotechnical Services..... 14

1.9. HYDRAULIC MODELING AND PERMITTING 14

 Illinois Department of Natural Resources (IDNR) Permitting 14

 Lake County Watershed Development Permit Submittal Package..... 15

 NPDES Permit..... 16

1.10. CORRIDOR LANDSCAPE CONCEPTUAL DESIGN 16

 Conceptual Layout 16

 Preliminary Layout 16

1.11. ROUND LAKE BEACH WATERMAIN AND SANITARY SEWER IMPROVEMENTS..... 17

 Existing Facility Research 17

 Watermain Permitting 17

 Plans, Specifications, & Estimates..... 18

1.12. STRUCTURAL DESIGN AND CALCULATIONS 19

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

Retaining Wall Design 19

Headwall Design..... 19

1.13. PLANS, SPECIFICATIONS, & ESTIMATES 19

Plans 20

Construction Specifications 22

Construction Cost Estimate and Quantities..... 22

Estimate of Time 22

1.14. PUBLIC OUTREACH..... 22

1.15. AGENCY / COORDINATION MEETINGS..... 23

1.16. QUALITY ASSURANCE/QUALITY CONTROL..... 23

1.17. ADMINISTRATION AND MANAGEMENT 23

1.18. BID SUPPORT & COORDINATION 24

1.19. PHASE III SUPPORT / COORDINATION 24

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

Exhibit A-1

Scope of Work

**Hainesville Road - Washington Street to Rollins Road
Phase II Engineering Services**

**Lake County Division of Transportation
Section No. 19-00072-14-WR**

PROJECT DESCRIPTION

Phase II elements include preparation of plans, specifications, and engineer estimate of probable construction cost (EOPCC); drainage analysis and design; retaining wall and structural engineering design; traffic signal design; landscape design; preliminary site investigation (PSI); wetland delineation and investigation; topographic field survey; utility and subsurface utility engineering coordination; geotechnical services; plats/legal descriptions; and negotiations for any land acquisitions for roadway improvements on Hainesville Road between Washington Street and Rollins Road in various communities and unincorporated Lake County, IL. Coordination with utility companies, permitting agencies (including the Lake County Stormwater Management Commission (SMC)), and local communities will be part of the work. Phase II will be locally funded and processed through the Lake County Department of Transportation (LCDOT).

Improvements to be designed within the project include roadway reconstruction with three-lane section (11-ft lanes), a 4-ft paved shoulder on both sides (with exception to the Park District property), B-6.24 curb and gutter, a 5-ft sidewalk on the west side, and an 8-ft multi-use path on the east side of the road for the entire length of the project, a closed drainage system, offsite stormwater detention and water quality improvements and all associated roadway appurtenances to construction the proposed improvements. As part of the project improvements, the side streets will be widened at the intersection with Hainesville Road.

Plans will be prepared using MicroStation V8i (SS10) utilizing a workspace from the Illinois Department of Transportation (IDOT). The plans will be prepared in accordance with LCDOT Plan Preparation Guidelines, other LCDOT Consultant Resources and other local permitting agency guidelines.

The following documents or information is anticipated to be received from LCDOT for reference in Phase II Engineering:

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

- Proposed and as-built plans and stormwater report of the Rollins Road Improvements, specifically the area south of Rollins from the RR tracks (underpass) to the stormwater facility west of Hainesville Road.
- Sample of a recent Plat of Highways specifically for a LCDOT project.
- All necessary details and direction for the connection to the existing fiber optic system. As part of the project improvements, LCDOT will consider installing new fiber along Hainesville Road, from Shorewood Road south to Washington Street. V3 will coordinate with LCDOT to determine the requirements for new fiber optic cable. LCDOT to provide all necessary details.

1.1. TOPOGRAPHIC SURVEY

See Exhibit A-2 for a depiction of the additional survey limits and needs.

The supplemental topographic survey will build upon the previously completed survey as part of the Phase I plan development. The survey work will capture the areas necessary to complete the Phase II design requirements for the selected preferred alternate improvements. Below is reference to areas shown in Exhibit A-2 and a brief description. The areas of supplemental topographic survey will encompass:

- Area 1 and 2: Various additional drainage investigation and data collection.
- Area 3: East side of Hainesville Road, from E. Lake Avenue to 600' south of E. Shorewood Drive, extending to approximately 250' east beyond the existing R.O.W. Required for the north pond expansions on the Renwood Golf course, including plotting the wetland delineation for these areas.
- Area 4: East side of Hainesville Road, from E. Maple Avenue to E. Lake Avenue, extending to approximately 100' east beyond the existing R.O.W. Required for the north pond expansions on the Renwood Golf course, including plotting the wetland delineation for these areas.
- Area 5: East side of Hainesville Road, from E. Shorewood Drive to Heather Terrace, extending to approximately 350' east beyond the existing R.O.W. Required for the north pond expansions on the Renwood Golf course, including plotting the wetland delineation for these areas.
- Area 6: East side of Hainesville Road, from north of Clarendon Road to Rollins Road, extending the old Hainesville Road alignment. Required to investigate the alignment of the non-motorized vehicle path, including verification of the critical hydraulic elevations from the recently built storm water facilities as part of the Rollins Road improvements such as the pond high water level, overflow elevation and inverts of outlet structure(s).

The Topographic Survey services will include the following as outlined in the Lake County Division of Transportation Design Survey Procedures, as applicable for the supplemental survey areas:

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

- a. Utilize previous recorded benchmarks for the site.
- b. A contour survey with 1'-0" contour intervals shall be prepared from field spot elevations. Spot elevations obtained in the field shall be of sufficient quantity to generate a contour survey which properly represents the ground surface. Additional elevations shall be indicated on the survey as required to establish accurate profiles (including all changes or breaks in grade) and cross-sections of walks, curbs, gutter, pavement edges, and centerlines.
- c. Spot elevations shall be shown to the nearest 0.01 foot on all "hard surfaces" and utility structures. Spot elevations in unpaved areas such as grass and dirt shall be accurate to the nearest 0.1 foot.
- d. Grid intervals/profiles of 50 feet shall be taken in all fields for offsite hydraulic work (drainage ditches, streams, etc.). Additional shots shall be taken at all sudden grade break lines and driveway and property entrances.
- e. Pavement types such as concrete, asphaltic concrete, gravel, etc. shall be indicated.
- f. Existing improvements, buildings, and surface features shall be located.
- g. All trees (6 inches in diameter and greater) within the Survey Area shall be located. The trees shall be identified by species and size.
- h. General outlines of landscaping shrubs and bushes shall be shown.
- i. Mean elevations of water in retention ponds, lakes, or streams will be shown as depicted at the time the survey field work was conducted.
- j. A bathymetric (bottom-of-pond survey) for the pond on Renwood Golf course, just north of E. Lake Avenue. A bathymetric (bottom-of-pond survey) for all other ponds within the supplemental survey areas are not included in this scope of services.
- k. V3 will verify drainage areas and existing storm sewer facilities brought to the team's attention by the Highland Lake Association. Generally, the area consists of Lake Avenue as well as areas south of Lake Avenue.
- l. Right-of-way and property lines shall be calculated from existing monumentation in coordination with record maps, plats and deeds.
- m. The topographic survey shall incorporate information on existing utility systems adjoining or contained within the survey area which are obtained from city departments or utility companies responding to written or verbal requests for utility records through the Joint Utility Locating Information for Excavators (J.U.L.I.E.) Design Stage/Planning Information process and available for the surveyors use at the time of the survey. Records or Atlas information that is provided to V3 after completion of the survey can be provided to the CLIENT or engineer.
- n. Establish all rim and invert elevations, utility size and types, depth subterranean structures, etc. at all points of access to below grade utilities.
- o. Utilities and improvements shall be shown based on visible field verified structures, in coordination with atlas information provided by utility companies through J.U.L.I.E.'s design stage process, if available.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

- p. V3's subconsultant, SAM, will provide subsurface utility engineering as identified in their scope and referenced under the section UTILITY & SUBSURFACE UTILITY ENGINEERING (SUE) LEVEL A/B COORDINATION .
- q. All survey data shall be collected in Illinois State Plane Coordinates – East Zone.

1.2. PRELIMINARY ENGINEERING REPORT APPROVAL

We anticipate finalizing the Preliminary Engineering Report in conjunction with the start of Phase II engineering.

- a. Updates shall incorporate feedback received from LCDOT and coordination with residents. Any outstanding comments will be added to the report in an appendix.
- b. Any design modifications resulting from the public involvement process will be documented in the report.

1.3. GEOMETRIC UPDATES FOR PHASE II

Finalize any adjustments to the roadway geometry received from the LCDOT review of the PER and the Preferred Alternative Public meeting. These modifications will be documented and finalized in the final PER.

Additional geometric design studies will be completed for evaluation of the sub alternatives and commitments presented in the PER for the following items:

- a. Investigation of the alternate routing for the multi-use path along the old alignment of Hainesville Road, east of the detention pond for the Rollins Road underpass.
- b. Evaluation of the private driveway modified length relative to requirements of the roadway section.
- c. Determination of horizontal and vertical site distance at each proposed driveway for all residential and commercial driveways within the project limits.
- d. Determination of horizontal and vertical site distance at each approach for intersecting roadways.
- e. Evaluate viability of mid-block crossings with LCDOT staff.

Through the public coordination process multiple suggestions were received to investigate a connection to the existing multi-use path on the south side of Shorewood Drive currently terminating at Churchill Lane, approximately 1400' east of Hainesville Road. Additional investigation and development of a connection to this path is not included in this contract and would be done under a separate contract at the discretion of the municipality and/or park district.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

1.4. WETLAND DELINEATION, PERMITTING, & MITIGATION

Field Work

V3's Lake County Certified Wetland Specialists will conduct an additional field investigation during the 2022 Lake County growing season (May 15-October 1) to locate and delineate wetlands in the areas of the proposed pond expansion within the Renwood Golf Course and the area north of Clarendon Road to Rollins Road along the east side of Hainesville Road and the existing stormwater ponds in accordance with the Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region. The limits of any delineated wetlands/Waters of the U.S. will be staked in the field, and approximate boundaries will be mapped on a recent large-scale aerial photograph, based on our field assessment of the vegetation, soils and hydrology at the site. The limits of any on-site wetland/Waters of the U.S. will be located using a handheld GPS unit during the field investigation portion of the wetland delineation. Professional survey of any wetland/Waters of the US flags will be provided as part of the Supplemental Topography scope of services.

Wetland Assessment

Since wetlands/Waters of the U.S. are present within the project corridor, wetland assessment is required by the U.S. Army Corps of Engineers, Chicago District (USACE) and Lake County SMC. Wetland assessment involves an evaluation of wetland characteristics, including wildlife habitat quality, water quality functions, and plant community quality. Wetland Assessment also includes a preliminary jurisdictional determination for isolated or adjacent wetland. Delineated wetlands will be rated as High-Quality Aquatic Resources (HQAR's) in accordance with the USACE and Lake County SMC, if applicable.

Wetland Delineation Technical Report, Threatened & Endangered Species Consultation & USACE/Lake County SMC Preliminary Jurisdictional Determination Submittal

Our current wetland report will be updated as necessary based on the results of the additional field investigation, including the location and approximate size of wetlands/Waters of the U.S. present, a wetland quality evaluation, a Floristic Quality Assessment (FQA), and the wetland assessment.

The USACE Chicago District and Lake County Watershed Development Ordinance (WDO) require threatened & endangered species consultation with the Illinois Department of Natural Resources (IDNR) and the U.S. Fish & Wildlife Service. V3 will update the following tasks as part of this phase:

- a. V3 will update and submit the required IDNR EcoCat consultation for State threatened & endangered species for the proposed new project areas. This consultation will be included in the USACE permit submittal.
- b. V3 will update and submit the required U.S. Fish & Wildlife Services (USFWS) Section 7 consultation for Federal threatened & endangered species. This consultation will be included in the USACE permit submittal.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

Upon completion of the wetland delineation field work and update to the draft technical report, V3 will prepare and submit all of the required documents to Lake County SMC to facilitate the preliminary jurisdictional determination process for any wetlands/Waters identified within the project corridor (or within 100 feet of the project corridor). This process includes V3 meeting the USACE and Lake County SMC wetland specialists at the site, reviewing the data collected from V3's Lake County Certified wetland specialists, and reviewing and gaining approval of the wetland flags placed on the site for the new areas previously discussed. Any fee's applicable or required by Lake County SMC for the PJD and wetland boundary verification will be the responsibility of the Applicant.

USACE Nationwide Permit 14 Submittal

V3 is of the opinion that the project will require a USACE Nationwide Permit 14 (Linear Transportation Projects). V3 will prepare and submit the required Nationwide Permit to the USACE Chicago District for their review and approval. The application submittal will include the following:

- a. Cover letter
- b. Joint Application Form
- c. Wetland Delineation and Assessment Report
- d. Project Engineering Plans
- e. A project description
- f. Information on compliance with Federal and State Endangered Species
- g. Discussion of Best Management Practices (BMPs)
- h. Soil Erosion and Sediment Control Plans
- i. Native Landscape Plan drawings, restoration details
- j. Native plant lists
- k. 3 Year Monitoring & Management Plan document (MMP)

The USACE Chicago District, at their discretion, may require a Phase I Archaeological investigation as part of the Regional Permitting Process. This request is determined on a project-by-project basis. Should the USACE require a Phase I Archaeological investigation as part of their permit review, a separate scope and fee will need to be provided to the Client.

Lake County SMC Isolated Wetland Permit Submittal

V3 will prepare and submit the Category I wetland and wetland buffer portions of the Lake County WDO to be incorporated into the overall stormwater permit submittal. V3 will address all of the wetland and buffer items identified in the Category I wetland submittal requirements of the Ordinance. Included with the wetland/buffer submittal will be the wetland delineation report, the Lake County SMC/USACE Pre-JD determination letter, a description of the proposed project, the associated buffers for identified wetlands/Waters within the project corridor, and

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

proposed impacts to existing wetlands/Waters will be documented. BMPs and mitigation will also be addressed.

Response to Agency Wetland/Waters Permit Review Comments

Additional coordination will be required following the initial wetland submittal to the USACE and Lake County SMC. This coordination will primarily consist of responding to agency comments and resubmittals to the USACE and Lake County SMC as it relates to wetlands, Waters of the U.S., buffers, and the proposed native BMP and buffer design.

Buffer and BMP Native Planting Plan Design

If required, V3 will design and submit the native planting design for the proposed corridor. This design will include proposed native plantings, native seed mixes, and planting specifications. This task will be required if there are any impacts to existing wetland/Waters buffers that will require buffer mitigation. If impacts to wetlands/Waters exceed the 0.10-acre threshold for mitigation, V3 will coordinate the purchase of wetland mitigation banking credits from a USACE approved wetland mitigation bank facility within Lake County.

Native Planting 3-Year Monitoring and Management Plan (MMP)

If required, V3 will prepare and submit the proposed 3-year native monitoring and management plan to Lake County SMC and the USACE for their review and concurrence. This proposed monitoring and management plan will include seed and plant lists, recommended specifications, and management activities to be performed over a 3-year period so that the native plantings and seed that are installed will thrive and become established.

Wetland Project Meetings/Coordination

V3's wetland specialists are available for meetings with the CLIENT, USACE, Lake County SMC, Village of Round Lake Park, project contractors, and/or other agency personnel, as required. This task includes one pre-application meeting with the USACE and one pre-application meeting with Lake County SMC. This task also includes minimal project coordination not requiring a separate agreement.

1.5. SPECIAL WASTE ASSESSMENTS

V3 will conduct a special waste screening in accordance with the typical IDOT Bureau of Local Roads & Streets Policies & Procedures. Based on the current understanding of the proposed project, the special waste screening will include the following.

Preliminary Site Investigation (PSI)

The Preliminary Environmental Site Assessment (PESA) conducted in September of 2020, identified 7 sites with Recognized Environmental Conditions (RECs).

- Meijer Gasoline Filling Station, 752 E. Rollins Road, Round Lake Beach, IL

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

- Phillips 66 Gasoline Filling Station, 1306 Hainesville Road, Round Lake Beach, IL
- Sereno's Insulation & Supply Company, 766 Hainesville Road, Round Lake Beach, IL
- Vacant Lot, 760 Hainesville Road, Round Lake Beach, IL
- Strictly Stone, Inc., 624 Hainesville Road Round Lake Beach, IL
- Thornton's Gasoline Filling Station, 598 E. Washington Street, Round Lake Beach, IL
- Renwood Golf Course, 1413 Hainesville Road and 701 E. Shorewood Drive Round Lake Beach, IL

Based on the findings of the PESA, a Preliminary Site Investigation (PSI) should be conducted to evaluate project soils with regard to reuse, off-site disposal, and construction worker safety. The PSI will be conducted in accordance with Section 20-12.05 of the IDOT Bureau of Local Roads & Streets Manual, Section 27-3.05 of the IDOT Bureau of Design and Environment Manual. The PSI will include the following:

- a. A soil sampling plan will be developed based on the estimated excavation depths of proposed construction activities and the historic use of properties adjacent to project ROW. It is anticipated that the soil sampling plan will include sampling spaced along the roadways in the project limits and will include additional sampling at the RECs identified in the PESA.
- b. Environmental drilling services will be provided by Earth Solutions, Inc.
- c. Soil sampling will be conducted by a V3 geologist or environmental engineer.
- d. Sample analysis will be performed by STAT Analysis, an Illinois NELAP accredited laboratory.
- e. Soil samples will be collected into laboratory-provided containers, packaged in the field, and stored on ice until delivery to STAT under proper chain-of-custody.
- f. The field sampling activities and the lab analytical result will be detailed in the PSI report. The PSI report will include:
 - i. Brief project summary and propose excavation and/or ROW acquisition associated with the Project.
 - ii. The proposed sampling plan and the justification for sampling and propose analysis.
 - iii. Summary of field activities and observations.
 - iv. Detected concentrations of contaminants of concern based on laboratory analysis.
 - v. Comparison of detected concentrations of contaminants to Maximum Allowable Concentrations (MACs) specified in 35 IAC Part 1100, Subpart F. to evaluate excavated soils for CCDD acceptance, and comparison to Tier 1 soil remediation objectives (ROs) specified in 35 Illinois Administrative Code (IAC), Part 742 Tiered Approach to Corrective Action Objectives (TACO) for industrial/commercial and, residential land use, and Construction Worker exposure routes to evaluate the ability of the soil to be reused as fill, or the need for construction worker notification.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

- vi. Delineation of soil management areas based on the soil classifications detailed in Article 669.05 Regulated Substances Management and Disposal of the IDOT Standard Specifications of Road and Bridge Construction Adopted January 1, 2022.
 - vii. Figures depicting the limits of the soil management areas. (Note: estimated volumes of waste soils requiring disposal will only be included in the PSI if volumes are provided by design engineer).
 - viii. LPC 662 and 663 forms to certify soils qualifying for CCDD disposal will be included in the appendix of the PSI.
- g. Considering the proposed design has not been finalized and the PSI soil sampling is dependent on the proposed excavation, the costs associated with the PSI and soil sampling were based on the following assumptions and could be subject to change depending on the project design and the RECs identified. Proposed costs are based on the following assumptions:
- i. Project limits do not extend beyond Hainesville Rd from E Rollins Rd to Washington St.
 - ii. One initial field visit to locate proposed boring locations prior to utility locate.
 - iii. Standard 48-hours for the JULIE utility locate.
 - iv. A maximum of 3 days of drilling.
 - v. Up to 35 boring locations with up to 2 soil samples per boring.
 - vi. Assumes standard 5 to 7-day turn-around time for lab sample results (expedited turnaround time is available for an added surcharge).

Clean Construction or Demolition Debris (CCDD) Pre-package Coordination

A local CCDD facility will be contacted to determine specific sampling requirements and procure a “pre-certification” packet for preapproval of the site materials for admittance into the facility prior to the letting. The pre-certification packet will be included in the bid documents.

Based on proximity, it is assumed that Thelen Sand & Gravel, Inc. is one potential CCDD disposal site for potentially excavated soils. In addition to Thelen Sand & Gravel, (1) additional facility will be contact for preapproval coordination.

It is understood that Thelen Sand & Gravel has fairly specific sampling requirements for soil acceptance. Prior to sampling the project geologist will coordinate with Thelen during the sample plan development. Based on Thelen’s soil testing policy, the assumed sample analysis for project samples includes one or more of the following:

- a. VOCs
- b. SVOCs
- c. Pesticides/Herbicides
- d. RCRA 8 Metals (Total and/or TCLP/SPLP)

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

- e. Iron (Total and/or TCLP/SPLP)
- f. pH

A sampling approach consistent with Thelen Sand & Gravel's policy will likely be acceptable to other CCDD facilities in the area.

1.6. UTILITY & SUBSURFACE UTILITY ENGINEERING (SUE) LEVEL A/B COORDINATION

Utility Coordination

The following is included under this task:

- a. Prepare letters and exhibits as needed to initiate coordination with utility companies within the project corridor.
- b. Submit plans to the private utility companies at the preliminary level of completion in order to coordinate any required utility adjustments/relocations. Additional plan submittals at pre-final and final levels of completion will be made as needed for additional coordination of adjustments/relocations.
- c. Review and identify potential utility conflicts according to the preferred alternative
- d. Attend utility coordination field verification meetings – up to two (2) field meetings with one V3 project team member present.
- e. Facilitate monthly coordination meetings as needed, starting after the submittal of preliminary plans to help ensure utility conflicts are addressed and the relocation of utilities is scheduled to be complete prior to the project begins.

Existing street lights are mounted on utility poles at various minor intersections throughout the project limits. It is anticipated that those lights would be relocated or replaced by the utility as part of the required utility relocation.

Subconsultant for Subsurface Utility Engineering (SUE) Level A/B

Survey and Mapping, LLC (SAM) will complete additional survey, utility potholing and review to identify critical vertical and horizontal clearances for the new areas of the project (as described in the section TOPOGRAPHIC SURVEY). The potholing will be SUE Level A/B for up to 15 locations, if necessary, with fees applied per pothole performed.

Additional utility coordination that may be necessary once the locations of utilities have been further determined. V3 will coordinate with SAM on the locations for further investigation and review the data received.

A detailed scope provided by SAM can be found under Exhibit A-4.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

1.7. LAND ACQUISITION SERVICES

With the nature of the roadway widening and potential drainage impacts, it is anticipated that all properties adjacent to the Hainesville Road corridor will have some level of land acquisition; whether it is temporary and/or permanent easement or proposed ROW. The PER has identified a potential of 106 parcels that may require land acquisition services.

See Exhibit A-2 for a listing of the anticipated parcels that may require land acquisition services.

Land Acquisition Evaluation

The potential easement and ROW needs will be evaluated and reduced to the extent possible through final design of the roadway and drainage system. It is anticipated that there will be development of potential alternatives and/or additional property modifications in support of the R.O.W. negotiation process and address concerns expressed at the public meeting. Exhibits documenting alternatives and/or additional property modifications will be provided for up to 106 properties during the design development process, if necessary, with up to 2 alternatives for each property. It is understood that LCDOT staff will lead communication of the proposed improvements and meet on-site to discuss the proposed improvements with local business and residents and provide updates and direction to V3 throughout the process.

Plat of Highways

A Plat of Highway along with legal descriptions shall be prepared conforming to the LCDOT's Plat Guidelines.

The Plat shall also conform to those requirements necessary for recording in Lake County, Illinois and to Section 765 IL CS 205/9 of the Illinois Compiled Statutes. Iron rods (5/8" in diameter) shall be set at new Right-of-way corners and at the intersection of any property lines and new right-of-way lines. Title commitments will be reviewed and processed through CAD for development of the Plat of Highways.

Title commitments required for Phase II and received during Phase I will be updated at an estimated cost of \$75 each. It is anticipated 106 parcels will require updated titles. Title commitments required for Phase II and not previously received will be requested. It is assumed that up to 5 parcels additionally may require title commitments at an estimated cost of \$550 each. Please note that on recent projects title information has been taking 6-9 months. In the event that negotiations require updated title documentation above and beyond the estimated amount included in the costs, the County will be responsible to reimburse these direct costs.

Subconsultant for Land Appraisals/Negotiations Services

Santacruz Land Acquisitions (Santacruz) will perform the land appraisals and negotiations for the project. V3 will coordinate with Santacruz and review and assist with the tracking of acquisition status.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

A detailed scope provided by Santacruz can be found under Exhibit A-4.

1.8. GEOTECHNICAL ENGINEERING SERVICES

Soil borings and reports will be completed for the retaining wall and new detention pond locations.

Subconsultant for Geotechnical Services

Testing Service Corporation (TSC), will perform up to 34 soil borings for the anticipated retaining walls and 4 borings for the proposed detention pond locations. Anticipated retaining wall locations are detail in the section STRUCTURAL DESIGN AND CALCULATIONS and proposed detention pond locations are detailed in the section TOPOGRAPHIC SURVEY.

Geotechnical reports will be provided for the proposed retaining wall locations detailing the geotechnical conditions and recommendations for foundation types and groundwater management. A geotechnical study will be conducted for the soils at the locations of the detention ponds to determine the suitability of the existing soils and if additional accommodations will be necessary.

V3 will coordinate with TSC on the locations of borings and review the information provided.

A detailed scope provided by TSC can be found under Exhibit A-4.

1.9. HYDRAULIC MODELING AND PERMITTING

V3's drainage engineer will assist CBBEL in tasks associated with their hydraulic model and/or permitting. All fees related to permitting are not included under the direct costs as part of this contract and would be paid for separately by the Lake County Division of Transportation.

Illinois Department of Natural Resources (IDNR) Permitting

CBBEL will prepare a report package containing hydrologic and hydraulic floodplain modeling which will be submitted to IDNR for review. IDNR will review this submittal and determine if permit review authority will be delegated to Lake County Stormwater Management Commission (SMC) or if IDNR will review and issue the required floodway construction permit. This is primarily a CBBEL task however V3 will provide the floodplain cut/fill calculations and exhibits as well as any other additional exhibits that may be needed.

If IDNR delegates review authority to Lake County SMC, the floodway construction calculations and exhibits will be included in the Lake County Watershed Development Permit (WDP) Application Report package and Lake County SMC will issue the required floodway construction permit as part of the Lake County WDP permit process. However, if IDNR keeps review

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

authority, a separate floodway construction permit report package will be prepared and submitted to IDNR.

In the event that IDNR does not delegate floodway permitting authority to Lake County SMC a floodway construction permit report package will be prepared and submitted to IDNR. This report will be prepared by CBBEL with support from V3 as needed, specifically related to floodplain cut/fill calculations and exhibits.

Lake County Watershed Development Permit Submittal Package

V3 will prepare a Lake County WDP report package with assistance from CBBEL. The report will include storm sewer calculations, existing and proposed drainage exhibits, drainage outlet evaluations, floodplain cut/fill calculations, wetland calculations, stormwater detention calculations, water quality calculations, regional drainage exhibits, release rate calculations, and a narrative describing the stormwater management plan. This report might also contain floodplain hydrologic and hydraulic modeling if IDNR delegates review authority to Lake County SMC. The following are a few of the WDP tasks explained in detail:

- a. There are three Lake County isolated wetlands that will be impacted by the proposed improvements. An 80%-150% hydrologic analysis will be required for each impacted wetland. This involves delineating a tributary area, developing a CN, and a time of concentration for both the existing and proposed conditions. These factors are then used to calculate existing and proposed runoff volumes. The Watershed Development Ordinance (WDO) requires the total runoff volume to a wetland after development to be within 80% and 150% of the runoff prior to development for the 2-year, 24-hour storm event. Exhibits and calculations will be provided for each impacted wetland and included in the WDP submittal. CBBEL will perform the required calculations for two of these wetlands and V3 will perform the calculations for the third wetland.
- b. Preliminary floodplain fill and compensatory storage calculations have been performed in Phase 1. When the detention basin grading and roadway cross-sections are finalized, these cut/fill calculations will also be recalculated. There are several exhibits associated with this task and these exhibits / cross-sections will likely be revised 2 to 3 times during the design process due to review comments and design changes.
- c. Agency coordination and meetings associated with this task will be required along with public hearings and presentations.
- d. During a Phase 1 preliminary stormwater review Lake County SMC raised concerns related to existing downstream and upstream flooding issues and has asked the design team to investigate solutions to alleviate this flooding such as additional detention volume. Calculations, report narrative discussion, and team meetings may be required to complete this task.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

NPDES Permit

V3 will develop a Stormwater Pollution Prevention Plan (SWPPP) for the proposed improvements along with soil erosion and sediment control plans that meet the requirements defined in Article 6 of the WDO. V3 will complete the appropriate portions of the Notice of Intent (NOI) permit application along with the SWPPP and erosion control plans in order to obtain the required NPDES permit issued by the Illinois EPA.

A detailed scope provided by CBBEL can be found under Exhibit A-4.

1.10. CORRIDOR LANDSCAPE CONCEPTUAL DESIGN

Conceptual Layout

During the Phase I design and coordination both the Park District and Renwood Golf Course expressed concerns about the proposed plantings along the east side of Hainesville Road due to the loss of plant materials and trees. In addition, the proposed expansion of the two ponds within the Renwood Golf Course will require landscape plans to restore and enhance the areas.

V3's landscape architects will prepare concepts for the landscaping plans for the corridor to address the concerns and requirements of the project. The replacement of the existing trees to be removed the naturalized areas along the roadway will be investigated and designed as necessary. The following task are anticipated:

- Perform due diligence review to align with Lake County DOT standards for replacement of trees and the character of the existing landscaping on the corridor and the golf course.
- Coordinate with LCDOT and Park District and local municipalities, as needed, to establish landscape expectations and project goals.
- Sketch concept generation to illustrate design intent; review with LCDOT and Park District.

Preliminary Layout

After review and general consensus of the concept, V3 will Incorporate LCDOT and Park District feedback into an updated concept, create rendered plan and cross-section graphics for use on the project website and develop cost estimate based on refined concept. Present updated concept to LCDOT and Park District and establish general concurrence and direction for construction documents.

Construction documents will be prepared under the PLANS, SPECIFICATIONS, & ESTIMATES section for landscaping that incorporate the concept developed by V3's landscape architects.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

1.11. ROUND LAKE BEACH WATERMAIN AND SANITARY SEWER IMPROVEMENTS

The Village of Round Lake Beach expressed interest in installing new watermain along the west side of Hainesville Road, from E. Lake Avenue to Clarendon Drive as part of the Hainesville Road improvements. The installation of new watermain will be complicated by the various underground utilities and utility poles with overhead lines that are present. Currently, there is no watermain located from E. Lake Avenue to Shorewood Road. From Shorewood Road to Clarendon Drive, the existing watermain is old and undersized and located in the backyard of several homes. The watermain plans will be incorporated with the Hainesville Road improvements plans.

As documented in the Phase I coordination, there are no plans for installation or replacement of other agencies' facilities (i.e., Village of Round Lake Park, Avon Township, LCPW, etc.).

Existing Facility Research

Prior to the design of the proposed watermain, V3 will perform a detailed review of the existing sanitary sewer adjacent to the routing of the proposed watermain. In particular, V3 will research the sanitary service connections to determine potential conflicts and the routing of the proposed watermain. A review of the televising video during Phase I engineering showed inconsistencies with the number of sanitary service connections and number of properties, so additional review is required.

- a. V3 will contract additional televising of the sanitary sewer for an estimated distance of 2,000 feet to determine the exact location of each sanitary service with potential to conflict the proposed watermain.
- b. V3 will perform additional potholing for each sanitary service. There is estimated to be 32 sanitary connections with potential conflict with the proposed watermain.
- c. V3 will coordinate with the Village of Round Lake Beach for comments and concurrence. All required coordination with the Village during the design phase will be led by V3.
- d. V3 will review the information gathered to determine the preliminary profile of the existing watermain and any sanitary sewer impacts.
- e. V3 will provide designs for any sanitary impacts from the proposed watermain.
- f. V3 will provide cost estimates to the Village of Round Lake Beach for these improvements. It is understood that the Village will reimburse LCDOT for all design fees and construction costs of these improvements.
- g. LCDOT shall coordinate the execution of the Intergovernmental Agreement (IGA) for this scope of work and payment required with the Village of Round Lake Beach.

Watermain Permitting

V3 will complete the IEPA and LCDOT permitting required for the proposed watermain improvements.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

Plans, Specifications, & Estimates

Construction documents will be prepared based on the research of the existing facilities and profile evaluation. The design shall be incorporated and bid with the roadway improvement plans.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

1.12. STRUCTURAL DESIGN AND CALCULATIONS

V3's structural engineers will perform detailed structural design for retaining walls and culvert modifications.

Retaining Wall Design

To further minimize impacts to existing ROW or other features along the corridor, the PER identified 4 locations of potential retaining walls, totaling approximately 2,050'. All walls are anticipated to be an average of 6' tall. The anticipated retaining wall locations are as follows:

- Wall 1: Station 148+00 (LT) to Station 152+50 (LT) – approximately 450-ft
- Wall 2: Station 131+50 (RT) to Station 141+00 (RT) – approximately 950-ft
- Wall 3: Station 173+00 (RT) to Station 176+50 (RT) – approximately 350-ft
- Wall 4: Station 182+00 (RT) to Station 185+00 (RT) – approximately 300-ft

These locations will be further evaluated in the roadway design with respect to ROW, slight changes to path layout and property impacts to verify the need for the walls. In particular, Wall 4 would likely be eliminated with acceptance of the alternate routing for the multi-use path along the old alignment of Hainesville Road, east of the detention pond for the Rollins Road underpass.

V3 will complete detailed structural design for the retaining walls determined to be necessary. Due to the height of the walls, a TS&L submittal is not anticipated. The ROW constraints and the geotechnical conditions will be reviewed and a wall type will be selected. Detailed structural design and calculations will be prepared for the proposed retaining walls. Retaining wall plans will be provided in the plan production phase.

Headwall Design

Along the south side of Shorewood Road (approximately Station 611+00) a 30" RCP pipe is being replaced with a 42" pipe which will require a new headwall. Based on information available, the existing roadway culvert from the Highland Lake Drain is a 30" diameter reinforced concrete pipe. Due to the roadway widening (and dependent on the hydraulic model), it is anticipated that a full replacement and/or upsizing of the culvert. The design will include the necessary headwalls and wingwalls/retaining walls and any fence or railing needed for fall protection, if necessary, based on the final design. Structural details will be provided in the plan production phase.

1.13. PLANS, SPECIFICATIONS, & ESTIMATES

Construction plans, a construction specification document and a construction cost estimate will be prepared for one construction package in accordance with all applicable IDOT and LCDOT standards and guidelines. Submittals to the LCDOT are anticipated at the preliminary (60%),

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

pre-final (95%) and final (100%) stages. V3 shall include a separate disposition of comments with each submittal to address the comments of each reviewing agency.

Plans

The following is a summary of the plan sheets anticipated at final stage:

<u>Description</u>	<u>Quantity</u>
Cover Sheet - NTS	1 sheet
Index of Sheets, Highway Stds, Commitments - NTS	1 sheet
General Notes - NTS	2 sheets
Summary of Quantities - NTS - 350 pay items	7 sheets
Schedule of Quantities - NTS	20 sheets
Earthwork Schedule - NTS	4 sheets
Existing & Proposed Typical Sections - NTS	9 sheets
Alignment, Ties, and Benchmarks - 50-scale single	11 sheets
Removal Plans - 20-scale single	24 sheets
Roadway Plan and Profile - 20-scale	
R P&P - Hainesville Road	15 sheets
R P&P - Heather Terrace (T-int)	1 sheet
R P&P - Shorewood Drive	2 sheets
R P&P - E. Lake Ave (T-int)	1 sheet
R P&P - E Maple Ave / Lake Ave (300' west +800' east)	2 sheets
R P&P - E Indian Trail (300' west +200' east)	1 sheet
R P&P - N Circle Dr (T-int)	1 sheet
R P&P - N Oak Ave (T-int)	1 sheet
Construction Details	5 sheets
Intersection Grading - 1 sheet per intersection	
IG - Clarendon Drive (T-int)	1 sheet
IG - Heather Terrace (T-int)	1 sheet
IG - Shorewood Drive	1 sheet
IG - E. Lake Ave (T-int)	1 sheet
IG - E Cardinal Ln (T-int)	1 sheet
IG - E Cedar Dr (T-int)	1 sheet
IG - E Maple Ave / Lake Ave (300' west +800' east)	1 sheet
IG - E Indian Trail (300' west +200' east)	1 sheet
IG - N Circle Dr (T-int)	1 sheet
IG - N Oak Ave (T-int)	1 sheet
Driveway and ADA Ramp Details - 4 corners	
ADA - Clarendon Drive (T-int / cul-de-sac)	1 sheet
ADA - Heather Terrace (T-int)	1 sheet

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

ADA - Shorewood Drive	1 sheet
ADA - E. Lake Ave (T-int)	1 sheet
ADA - E Cardinal Ln (T-int)	1 sheet
ADA - E Cedar Dr (T-int)	1 sheet
ADA - E Maple Ave / Lake Ave (300' west +800' east)	1 sheet
ADA - E Indian Trail (300' west +200' east)	1 sheet
ADA - N Circle Dr (T-int)	1 sheet
ADA - N Oak Ave (T-int)	1 sheet
ADA - Washington St	1 sheet
ADA - Rollins Rd	1 sheet
ADA - # of residential & comm. driveways (approx. 70)	35 sheets
Maintenance of Traffic Plan - 50-scale double plan	
MOT GN	2 sheets
MOT Typs	4 sheets
MOT Plans - Pre-Stage & 3 Stages (Hainesville + Shorewood)	24 sheets
Soil Erosion and Sediment Control Plan - 50-scale double plan	
EC Plans - Ex. Cond & 3 Stages (Hainesville + Shorewood)	24 sheets
EC Notes	1 sheet
EC Details	4 sheets
Drainage Plan and Profile - 20-scale	
Proposed Drainage Plan & Profiles	24 sheets
Drainage Schedules	2 sheets
Drainage Details	1 sheet
Round Lake Beach Utility Plan and Profile - 20-scale	
See Section 1.11	
Site Grading Plans (Detention Basins) – 40-scale	4 sheets
Signing and PM Plan - 20-scale double	
Sign Schedule	1 sheet
Proposed Signing & Pavement Marking Plan	12 sheets
Landscape Plans - 20-scale double	
Proposed Landscape Plan	13 sheets
Proposed Planting Schedule	1 sheet
Landscape Legend & Details	1 sheet
Traffic Signal Plans	
Traffic Signal Plan - Shorewood/Hainesville	4 sheets
Temporary Traffic Signal Plan - Shorewood/Hainesville	3 sheets
Interconnect Schematic	1 sheet
Traffic Signal Details	10 sheets
Fiber Optic Plans	
Fiber Optic Plan	5 sheets
Fiber / Splicing Details	2 sheets

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

Roadway Lighting Plans - 20-scale double plan	
Proposed Roadway Lighting Plan	1 sheet
Roadway Lighting Details	2 sheets
Retaining Wall Plans	24 sheets
Structural Headwall Details	2 sheets
Soil Borings (35 borings; 3 per sheet)	12 sheets
IDOT Standard Details (1 per sheet)	55 sheets
LCDOT Standard Details (1 per sheet)	20 sheets
Cross Sections - 5 scale; 3 per sheet	
Hainesville cross sections 8200'@50'+driveways	78 sheets
All Side Road and Detention Basin cross sections 7000'@50'+driveways	47 sheets

Total estimated number of sheets = 549 sheets

Construction Specifications

A construction specification document will be prepared for the project to provide standard requirements and work requirements for pay items used on the project. The document will include standard LCDOT front end documents and specifications (to be provided by LCDOT), applicable IDOT supplemental, recurring, BDE, BLR and District One special provisions and project specific special provisions. Project specific special provisions will be prepared as needed for items not covered by IDOT standard specifications, LCDOT standard specifications or IDOT special provisions. The SWPPP and NOI will be included within the special provisions

Construction Cost Estimate and Quantities

A list of standard pay items needed for the project will be compiled for a unit price bid. Quantities for each item will be calculated based on the project design. The list of pay items and quantities will be the basis for the Summary of Quantities in the plans and the Construction Cost Estimate. The cost estimate will consist of unit prices based on research of archived bid tabs. The cost estimates shall include breakout costs for local participation. The construction cost estimate will be submitted at the preliminary (60%), pre-final (95%) and final (100%) stages.

Estimate of Time

An estimate of time will be developed based upon pay items and quantities to determine an estimate of reasonable completions dates for the project. The estimate of time will be submitted at the pre-final (95%) and final (100%) plan stages.

1.14. PUBLIC OUTREACH

V3 will continue public outreach as an extension of the coordination effort from Phase I. It is anticipated that these efforts will include:

- a. Maintenance of the property owner mailing list

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

- b. Semiannual project updates for distribution by the municipalities and/or LCDOT. This is anticipated to consist of design status updated for a web page.

1.15. AGENCY / COORDINATION MEETINGS

V3 anticipates attending the following meetings throughout the Phase II design process. These meetings are in addition to other meetings discussed separately within this scope.

- a. Up to six (7) LCDOT meetings (with 2 - V3 Project Team members present):
 - One (1) project kick-off meeting
 - One (1) LCSMC drainage coordination meeting
 - Three (3) plan review meetings
 - Two (2) joint utility coordination meetings
- b. Up to twelve (12) meetings with local agencies to discuss design issues, project status, schedule, or meet with other review agencies (up to 2 - V3 Project Team members present).

Hours for meetings will also include preparation time prior to meetings and subsequent preparation of meeting minutes.

1.16. QUALITY ASSURANCE/QUALITY CONTROL

Throughout the duration of the project, V3 will perform in-house quality control reviews to ensure that the plans, special provisions, EOPCC, and other computations or assumptions, are accurate and meet the standards and guidelines for the element or system. These quality control reviews will occur prior to submittal of any deliverable to the LCDOT or other review agency. Prior to the pre-final (95%) and final (100%) plan submittals, the V3 Construction Engineering Division will perform a constructability review. V3 will keep record of the quality control reviews as documentation of the process.

1.17. ADMINISTRATION AND MANAGEMENT

Throughout the duration of the project (Phase II), the following administrative and management tasks will be performed:

- a. Preparation of a project work plan which addresses schedule, deliverables, staffing, communication procedures and invoicing/progress reporting procedures.
- b. Updates to the project design schedule. A project design schedule included as part of the contract proposal. The project design schedule will be reviewed with LCDOT project manager and revised as required on a quarterly basis.
- c. Internal project team meetings/coordination.
- d. Contract administration and budget control.
- e. Invoice and billing reviews. Invoices shall be submitted on a monthly basis.

Exhibit A-1: Phase II Engineering Scope of Work
Hainesville Road – Washington Street to Rollins Road

- f. Sub-consultant coordination.

1.18. BID SUPPORT & COORDINATION

During the bidding phase, V3 will:

- a. Attend Pre-Bid Meeting (up to two V3 representatives)
- b. Provide responses to bidder questions and answer RFI's that arise during the bidding phase.
- c. Issue any addendums to perspective bidders as required to interpret or clarify the Bid Documents.
- d. If requested, assist the LCDOT in reviewing the bid proposals and prepare a recommendation of award of contract letter.

1.19. PHASE III SUPPORT / COORDINATION

Under this task, V3 will:

- a. Review shop drawings
- b. Attend any necessary field meetings
- c. RFI Response Assistance
- d. Assist the LCDOT with special waste/CCDD issues that may arise during construction.

Exhibit A-2

Survey & Land Acquisition Exhibits

PHASE I STUDY: HAINESVILLE ROAD IMPROVEMENTS

LAND ACQUISITION SUMMARY

#	Tax Payer Name	Parcel Address	Parcel City	State	Parcel Zip	PIN	PR RIGHT-OF-WAY		PR PERMANENT EASEMENT		PR TEMPORARY EASEMENT	
							ROW SF	ROW AC	PERM EASE SF	PERM EASE AC	TEMP EASE SF	TEMP EASE AC
1	SUBURBAN CORNERS LLC	0 HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621415037		0.00		0.00		0.00
2	SUBURBAN CORNERS LLC	598 E WASHINGTON ST	ROUND LAKE PARK	IL	60073	621415036		0.00		0.00		0.00
3	SUBURBAN CORNERS LLC	0 HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621415035		0.00		0.00		0.00
4	SUBURBAN CORNERS LLC	516 HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621400031		0.00		0.00		0.00
4	SUBURBAN CORNERS LLC	538 E WASHINGTON ST	ROUND LAKE PARK	IL	60073	621415034		0.00		0.00		0.00
5	THE RETREAT AT ROUND LAKE PARK	544 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073-3100	621400030	453.0	0.01		0.00		0.00
6	HARRY DEMOS	HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621400029		0.00		0.00		0.00
7	GARY WREN	34079 N HAINESVILLE RD	ROUND LAKE	IL	60073	621417001	376.0	0.01		0.00		0.00
8	THOMAS E & JESSICA P EDWARDS	34069 N HAINESVILLE RD	ROUND LAKE	IL	60073	621417016	600.0	0.01		0.00		0.00
9	JACK A BUTTACAVOLI	34039 N HAINESVILLE RD	ROUND LAKE	IL	60073	621400041		0.00		0.00		0.00
10	JACK A BUTTACAVOLI	507 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621417021	351.0	0.01		0.00		0.00
11	DONALD L TAYLOR	22230 W WASHINGTON ST	GRAYSLAKE	IL	60030	621417017		0.00		0.00		0.00
12	JOHN R CMIEL	34020 N HICKORY AVE	GRAYSLAKE	IL	60030	621417019		0.00		0.00		0.00
13	JUDITH A ROBBERT	616 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073-3179	621400027	1,030.0	0.02		0.00		0.00
14	REFUGIO A DOMINGUEZ	624 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073-3179	621400026	1,000.0	0.02		0.00		0.00
15	BENA ATL PROPERTIES INC	650 HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621400019	3,300.0	0.08		0.00		0.00
16	LILIANA TRIPA	34179 N HAINESVILLE RD	ROUND LAKE	IL	60073	621400022	660.1	0.02		0.00		0.00
17	EIKU LLC THE RETREAT AT HIGHLAND LAKE	34175 N HAINESVILLE RD	ROUND LAKE	IL	60073	621400023	160.0	0.00		0.00		0.00
18	EIKU LLC THE RETREAT AT HIGHLAND LAKE 2	34169 N HAINESVILLE RD	ROUND LAKE	IL	60073	621400024	500.0	0.01		0.00		0.00
19	DENISE R EAVES	34159 N HAINESVILLE RD	ROUND LAKE	IL	60073	621416036	1,097.7	0.03		0.00		0.00
20	MARILYN PRAHL	34139 N HAINESVILLE RD	ROUND LAKE	IL	60073	621416003	600.0	0.01		0.00		0.00
21	KATHERINE H MOORE	34129 N HAINESVILLE RD	ROUND LAKE	IL	60073	621416004	600.0	0.01		0.00		0.00
22	ROBERT A & ERICA L JUENGER	34119 N HAINESVILLE RD	ROUND LAKE	IL	60073	621416005	600.0	0.01		0.00		0.00
23	DEANNA BONGIOVANNI	22230 W OAK AVE	GRAYSLAKE	IL	60030	621416006	650.0	0.01		0.00		0.00
24	RYSZARD K PINSCHER & NICOLE SZEWCZAK	744 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073-3180	621400017	1,500.0	0.03		0.00		0.00
25	AVON TOWNSHIP ROAD DISTRICT	0 HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621400015	493.6	0.01		0.00		0.00
26	AVON TOWNSHIP ROAD DISTRICT	HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621400011	2,705.9	0.06		0.00		0.00
27	ROBERT G & MYRTLE R ROSEMEYER, TRUSTEES	34269 N HAINESVILLE RD	ROUND LAKE	IL	60073	621400013	800.0	0.02		0.00		0.00
28	ANGELO CALIENDO	34259 N HAINESVILLE RD	ROUND LAKE	IL	60073	621400014	495.0	0.01		0.00		0.00
29	TANNER D & ASHLEY D TONJES	34235 N HAINESVILLE RD	ROUND LAKE	IL	60073	621400016	500.0	0.01		0.00		0.00
30	OSWALD, DAVID	34219 N HAINESVILLE RD	ROUND LAKE	IL	60073	621400018	1,499.9	0.03		0.00		0.00
31A	SUZANNE M ANDERSON	34199 N HAINESVILLE RD	ROUND LAKE	IL	60073	621400020	1,789.1	0.04		0.00		0.00
31B	RAYMUNDO SERENO & HORACIO SERENO	766 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621400043		0.00		0.00		0.00
32	OSCAR GOMEZ	774 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073-3180	621408010	539.0	0.01		0.00		0.00
33	JEFFREY T UDISCHAS	782 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073-3180	621408009	539.0	0.01		0.00		0.00
34	CRAIG P PETERSEN	788 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073-3193	621408008	539.0	0.01		0.00		0.00
35	MANUEL & MARIA LARA	802 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073-3136	621408007	539.0	0.01		0.00		0.00
36	MANUEL & MARIA LARA	549 INDIAN TRL	ROUND LAKE PARK	IL	60073	621408006	613.0	0.01		0.00		0.00
37	RONALD C & JEANETTE N BARTOLI	34366 N CIRCLE DR	ROUND LAKE	IL	60073	621409009	1,273.1	0.03		0.00		0.00
38	JOSE E JUAREZ & JOSE JUAREZ	34340 N CIRCLE DR	ROUND LAKE	IL	60073	621409005	600.1	0.01		0.00		0.00
39	JAY MOORE	34330 N CIRCLE DR	ROUND LAKE	IL	60073	621409006	600.5	0.01		0.00		0.00
40	JESS LEIDICH	34310 N CIRCLE DR	ROUND LAKE	IL	60073	621400033	1,928.1	0.04		0.00		0.00
41	DONALD C & ELIZABETH N SVEC	34285 N HAINESVILLE RD	ROUND LAKE	IL	60073	621400012	2,271.2	0.05		0.00		0.00
42	JENNIFER GAWINSKI	598 INDIAN TRL	ROUND LAKE PARK	IL	60073	621407008	675.0	0.02		0.00		0.00
43	MARIA V BECERRA	822 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621407007	600.0	0.01		0.00		0.00
44	MORENO CHAVEZ SR, JUAN RAMON	830 N HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621407012	600.0	0.01		0.00		0.00

PHASE I STUDY: HAINESVILLE ROAD IMPROVEMENTS

LAND ACQUISITION SUMMARY

#	Tax Payer Name	Parcel Address	Parcel City	State	Parcel Zip	PIN	PR RIGHT-OF-WAY		PR PERMANENT EASEMENT		PR TEMPORARY EASEMENT	
							ROW SF	ROW AC	PERM EASE SF	PERM EASE AC	TEMP EASE SF	TEMP EASE AC
45	HITESH MEHTA	832 HAINESVILLE RD	ROUND LAKE PARK	IL	60073	621407011	611.7	0.01		0.00		0.00
46	UKRAINIAN YOUTH CAMPING ORGANIZATION	MAPLE AVE	ROUND LAKE PARK	IL	60073	621400004	3,600.1	0.08		0.00		0.00
47	SCOTT M JONES	22229 W LAKE AVE	ROUND LAKE	IL	60073	621403001	2,362.1	0.05		0.00		0.00
48	THOMAS R & JUDITH A BENTON	34475 N HAINESVILLE RD	ROUND LAKE	IL	60073	621403002	589.6	0.01		0.00		0.00
49	RECYCLED PROPERTIES LLC	34465 N HAINESVILLE RD	ROUND LAKE	IL	60073	621403003	599.6	0.01		0.00		0.00
50	ERNEST & HAZEL BALL	34455 N HAINESVILLE RD	ROUND LAKE	IL	60073	621403004	599.6	0.01		0.00		0.00
51	ERNEST & HAZEL BALL	34443 N HAINESVILLE RD	ROUND LAKE	IL	60073	621403005	599.6	0.01		0.00		0.00
52	THOMAS ALVA	34429 N HAINESVILLE RD	ROUND LAKE	IL	60073	621403006	599.6	0.01		0.00		0.00
53	MICHAEL J FRALEY	34419 N HAINESVILLE RD	ROUND LAKE	IL	60073	621403007	1,199.2	0.03		0.00		0.00
54	GREGORY & LISA BOIDY	34400 N CIRCLE DR	ROUND LAKE	IL	60073	621403008	1,274.2	0.03		0.00		0.00
55	ROBERT H & ROXANNE L SEMINARY	598 MAPLE AVE	ROUND LAKE PARK	IL	60073	621205010	799.7	0.02		0.00		0.00
56	PATRICK T & KATHLEEN B PENDER	588 E CEDAR DR	ROUND LAKE PARK	IL	60073-2776	621205009	699.2	0.02		0.00		0.00
57	ROBERT K & SANDRA J SIEGER	521 E CEDAR DR	ROUND LAKE BEACH	IL	60073	621204059	249.5	0.01		0.00		0.00
58	ARDELLE MAMPE	934 N HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	621204057	1,497.2	0.03		0.00		0.00
59	CARLOS NICOLI	952 N HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	621204056	996.1	0.02		0.00		0.00
60	ERLINDA HERNANDEZ	575 E CARDINAL LN	ROUND LAKE BEACH	IL	60073	621204055	1,044.7	0.02		0.00		0.00
61	LESINSKI, NEIL D & SARA L	436 E CARDINAL LN	ROUND LAKE BEACH	IL	60073	621204035	79.6	0.00		0.00		0.00
62	TITUS T SIMONS III	572 E CARDINAL LN	ROUND LAKE BEACH	IL	60073	621204063	904.3	0.02		0.00		0.00
63	EDWARD GUEROUT	0 MERRIWOOD LN	ROUND LAKE BEACH	IL	60073	621204034	618.1	0.01		0.00		0.00
64	JAMES R & JOY R BROCKS	568 E MERRIWOOD LN	ROUND LAKE BEACH	IL	60073	621204033	1,980.0	0.05		0.00		0.00
65	MICHAEL & ANN DOUMA	1030 N HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	621204029	2,640.1	0.06		0.00		0.00
66	LEVI & NATALYA DINKLA	1046 N HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	621204028	2,640.1	0.06		0.00		0.00
67	WATERS, EARLEEN C	1068 N HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	621204027	2,320.5	0.05		0.00		0.00
68	ROUND LAKE AREA PARK DISTRICT	701 E SHOREWOOD RD	ROUND LAKE BEACH	IL	60073-9704	621200002	16,011.6	0.37	30,350.2	0.70	10,230.9	0.23
69	ROUND LAKE AREA PARK DISTRICT	701 E SHOREWOOD RD	ROUND LAKE BEACH	IL	60073-9704	621200004	2,586.2	0.06		0.00		0.00
70	ROUND LAKE AREA PARK DISTRICT	701 E SHOREWOOD RD	ROUND LAKE BEACH	IL	60073-9704	621200005	10,126.4	0.23		0.00		0.00
71	HECTOR A CERVANTES	525 E LAKE AVE	ROUND LAKE BEACH	IL	60073-2707	621203038	1,276.3	0.03		0.00		0.00
72	REYES & ANA V RODRIGUEZ	1108 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	621203025	3,334.3	0.08		0.00		0.00
73	CHURCH OF CHRIST	1132 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	621203024	2,757.7	0.06		0.00		0.00
74	SERENO, HORACIO	1198 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	621203023	92.3	0.00		0.00		0.00
75	BULMARO & MARIA JUAREZ	1220 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	621203040	7,568.4	0.17		0.00		0.00
76	JUNE YOUNG KIM	1298 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	621203053	0.0	0.00		0.00		0.00
77	LGP REALTY HOLDINGS LP	1306 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423034	711.0	0.02		0.00		0.00
78	LGP REALTY HOLDINGS LP	1310 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423030	242.2	0.01		0.00		0.00
79	ROBERT & ANITA BENAVIDES	1312 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423029	212.0	0.00		0.00		0.00
80	ROBERT & ANITA BENAVIDES	1314 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423028	210.0	0.00		0.00		0.00
81	COUNTY OF LAKE TTEE	1316 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423027	210.0	0.00		0.00		0.00
82	JUVENAL & ROSALBA CORDOVA	1318 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423041		0.00		0.00		0.00
83	RAFAEL JUAREZ & OMAR JUAREZ	1322 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423040		0.00		0.00		0.00
84	MAXIMILIANO & ISABEL LLAMAS	1324 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423023	210.0	0.00		0.00		0.00
85	RAFAEL ROMANI	1326 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423022	210.0	0.00		0.00		0.00
86	RAFAEL ROMANI	1328 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423021	210.0	0.00		0.00		0.00
87	RAFAEL ROMANI	1328 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423020	210.0	0.00		0.00		0.00
88	RAFAEL ROMANI	1332 W HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423019	210.0	0.00		0.00		0.00
89	LAKE COUNTY HOUSING AUTHORITY	1338 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616423018	340.0	0.01		0.00		0.00
90	MR & MRS JUAN ANTONIO ALVAREZ	627 HEATHER TER	ROUND LAKE BEACH	IL	60073	616423017	310.0	0.01		0.00		0.00
91	IIRMA & RUBEN HERNANDEZ	621 HEATHER TER	ROUND LAKE BEACH	IL	60073	616423001		0.00		0.00		0.00
92	ROUND LAKE AREA PARK DISTRICT	701 E SHOREWOOD RD	ROUND LAKE BEACH	IL	60073-9704	616400005	29,131.1	0.67	42,999.2	0.99	66,053.2	1.52

PHASE I STUDY: HAINESVILLE ROAD IMPROVEMENTS

LAND ACQUISITION SUMMARY

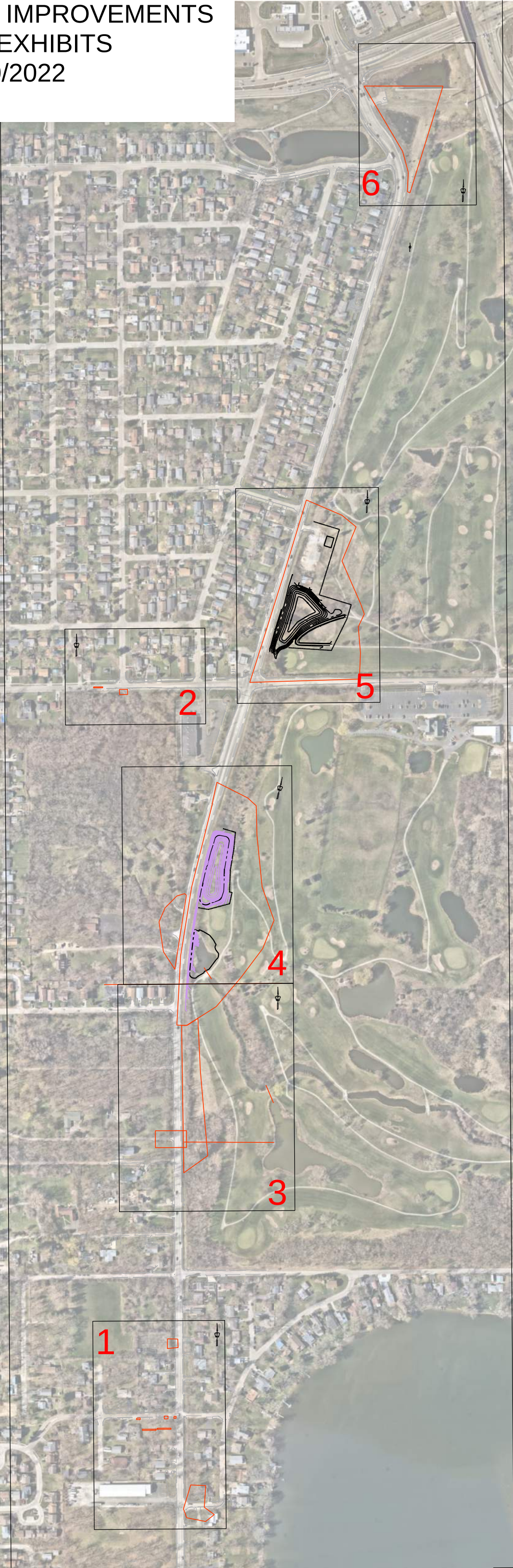
#	Tax Payer Name	Parcel Address	Parcel City	State	Parcel Zip	PIN	PR RIGHT-OF-WAY		PR PERMANENT EASEMENT		PR TEMPORARY EASEMENT	
							ROW SF	ROW AC	PERM EASE SF	PERM EASE AC	TEMP EASE SF	TEMP EASE AC
93	CRUZ C MEJIA	622 HEATHER TER	ROUND LAKE BEACH	IL	60073	616409033		0.00		0.00		0.00
94	THOMAS D & ROSEANN S GRIMES	628 HEATHER TER	ROUND LAKE BEACH	IL	60073	616409064	244.9	0.01		0.00		0.00
95	DWITIS, AMANDA K	1410 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409063		0.00		0.00		0.00
96	DWITIS, AMANDA K	1412 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409060	318.6	0.01		0.00		0.00
97	CHRISTOPHER M VARELA & ADRIANA RAMON	1416 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409059	318.6	0.01		0.00		0.00
98	JUDITH A RITTER	1418 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409058	212.4	0.00		0.00		0.00
99	JUDITH A RITTER	1420 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409057	212.4	0.00		0.00		0.00
100	ROBERT S MC DOWELL, JR	1422 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409056	212.4	0.00		0.00		0.00
101	SHM PROPERTIES LLC	1424 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409055	212.4	0.00		0.00		0.00
102	TAREQ LEFDAMI & ALONDA F TORRES	1426 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409054	212.4	0.00		0.00		0.00
103	VONTAIN D MERCIER	1428 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409053	283.6	0.01		0.00		0.00
104	BAHENA, JAIME	1502 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409052	282.3	0.01		0.00		0.00
105	AARON PEREZ	1504 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409070	564.7	0.01		0.00		0.00
106	OCTAVIO BORRACHANDO	1506 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409049	424.7	0.01		0.00		0.00
108	DANIEL & TIFFANIE POLLINA	1508 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409048	419.8	0.01		0.00		0.00
109	INVITATION HOMES	1510 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409047	419.8	0.01		0.00		0.00
110	WILLIAM J MOORE	1512 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409046	419.8	0.01		0.00		0.00
111	WILLIAM J & VICKY J MOORE	1514 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409067	105.0	0.00		0.00		0.00
112	DAVID MOUNCE	1518 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409073	314.8	0.01		0.00		0.00
113	ORA R OLDENBURG	1524 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409040		0.00		0.00		0.00
114	DOMINGO T GARCIA	1526 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616400011		0.00		0.00		0.00
115	PAUL C TOBIN III	1528 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616400010		0.00		0.00		0.00
116	JOHNNY RODRIGUEZ	1604 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409039		0.00		0.00		0.00
117	JOSE S CORTES & MARIA E SORIANO	1606 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409038		0.00		0.00		0.00
118	NOREAN A HILL TRUSTEE	1608 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409037		0.00		0.00		0.00
119	RHONDA MALIC	1610 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409036		0.00		0.00		0.00
120	RHONDA MALIC	1612 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616409035		0.00		0.00		0.00
121	ANTONIO & FRANCESCA BONILLA	717 E CLARENDON DR	ROUND LAKE BEACH	IL	60073	616409071		0.00		0.00		0.00
122	TRINIDAD & ALICIA TELLEZ	711 E CLARENDON DR	ROUND LAKE BEACH	IL	60073	616409001		0.00		0.00		0.00
123	GERALD J & DOREEN L SAAM	1612 WILLIAM AVE	ROUND LAKE BEACH	IL	60073	616408005		0.00		0.00		0.00
124	DONALD MASTRO	701 E CLARENDON DR	ROUND LAKE BEACH	IL	60073-2213	616408004		0.00		0.00		0.00
125	ANTONIO ZAMORA & MIKAYLA CALANCA	629 E CLARENDON DR	ROUND LAKE BEACH	IL	60073-2213	616408003		0.00		0.00		0.00
126	ROUND LAKE AREA PARK DISTRICT	704 CLARENON DR	ROUND LAKE BEACH	IL	60073-2215	616402017		0.00		0.00		0.00
127	ROUND LAKE AREA PARK DISTRICT	704 CLARENON DR	ROUND LAKE BEACH	IL	60073-2215	616402018		0.00		0.00		0.00
128	COMED	0 HAINESVILLE RD	ROUND LAKE BEACH	IL	60073	616400002	1832.5	0.04		0.00		0.00
130	CATHOLIC BISHOP OF CHICAGO	0 SHOREWOOD RD	ROUND LAKE BEACH	IL	60073	621203022	165.4	0.00		0.00		0.00
131	GIEZI & MICHELLE CEPEDA ORTIZ	34019 N HICKORY AVE	GRAYSLAKE	IL	60030	621418018		0.00		0.00		0.00
132	RONALD D & DANETTE E RUSSELL	1304 WILLIAMS AVE	ROUND LAKE BEACH	IL	60073	616427014		0.00		0.00		0.00
133	RONALD D & DANETTE E RUSSELL	604 E SHOREWOOD RD	ROUND LAKE BEACH	IL	60073	616427013		0.00		0.00		0.00
134	RONALD D & DANETTE E RUSSELL	602 E SHOREWOOD RD	ROUND LAKE BEACH	IL	60073	616427012		0.00		0.00		0.00
135	FOSTER, ROBERT & LEOLA	532 E SHOREWOOD RD	ROUND LAKE BEACH	IL	60073	616427011		0.00		0.00		0.00
136	FOSTER, ROBERT & LEOLA	530 E SHOREWOOD RD	ROUND LAKE BEACH	IL	60073	616427010		0.00		0.00		0.00
137	FOSTER, ROBERT & LEOLA	526 E SHOREWOOD RD	ROUND LAKE BEACH	IL	60073	616427009		0.00		0.00		0.00
138	CAMPOS, BERNARD & ISABEL	1303 LESLIE AVE	ROUND LAKE BEACH	IL	60073	616427008		0.00		0.00		0.00
139	CAMPOS, BERNARD & ISABEL	1303 LESLIE AVE	ROUND LAKE BEACH	IL	60073	616427007		0.00		0.00		0.00
140	VILLAGE OF ROUND LAKE BEACH	0 SHOREWOOD RD	ROUND LAKE BEACH	IL	60073	616426008		0.00		0.00		0.00
141	LGP REALTY HOLDINGS LP	0 SHOREWOOD RD	ROUND LAKE BEACH	IL	60073	616423033		0.00		0.00		0.00
142	LGP REALTY HOLDINGS LP	0 SHOREWOOD RD	ROUND LAKE BEACH	IL	60073	616423032		0.00		0.00		0.00

PHASE I STUDY: HAINESVILLE ROAD IMPROVEMENTS

LAND ACQUISITION SUMMARY

#	Tax Payer Name	Parcel Address	Parcel City	State	Parcel Zip	PIN	PR RIGHT-OF-WAY		PR PERMANENT EASEMENT		PR TEMPORARY EASEMENT	
							ROW SF	ROW AC	PERM EASE SF	PERM EASE AC	TEMP EASE SF	TEMP EASE AC
143	CLYDE R & SANDRA BARKLEY	612 E SHOREWOOD RD	ROUND LAKE BEACH	IL	60073	616423031		0.00		0.00		0.00
144	WATERS, EARLEEN C	0 LAKE AVE	ROUND LAKE BEACH	IL	60073	621204026	250.0	0.01		0.00		0.00
145	WATERS, EARLEEN C	0 LAKE AVE	ROUND LAKE BEACH	IL	60073	621204025	99.1	0.00		0.00		0.00
146	JOSE L & MARIA C GONZALEZ	523 E LAKE AVE	ROUND LAKE BEACH	IL	60073	621203037	250.0	0.01		0.00		0.00
147	GUILBERTO BUSTILLOS, JR	521 E LAKE AVE	ROUND LAKE BEACH	IL	60073	621203036	99.1	0.00		0.00		0.00
148	PATRICK J & DAWN J SMART	34486 N LAKE SHORE DR	ROUND LAKE	IL	60073	621403017	385.9	0.01		0.00		0.00
						TOTAL AREA	146,224.7	3.36	73,349.3	1.68	76,284.1	1.75
						# OF PINS	106		2		2	

HAINESVILLE RD IMPROVEMENTS
SURVEY EXHIBITS
01/20/2022





MISSING SANITARY MANHOLE?

IS THERE A STORM STR HERE?
FIND DOWNSTREAM PIPE OUTLET
OR STRUCTURE

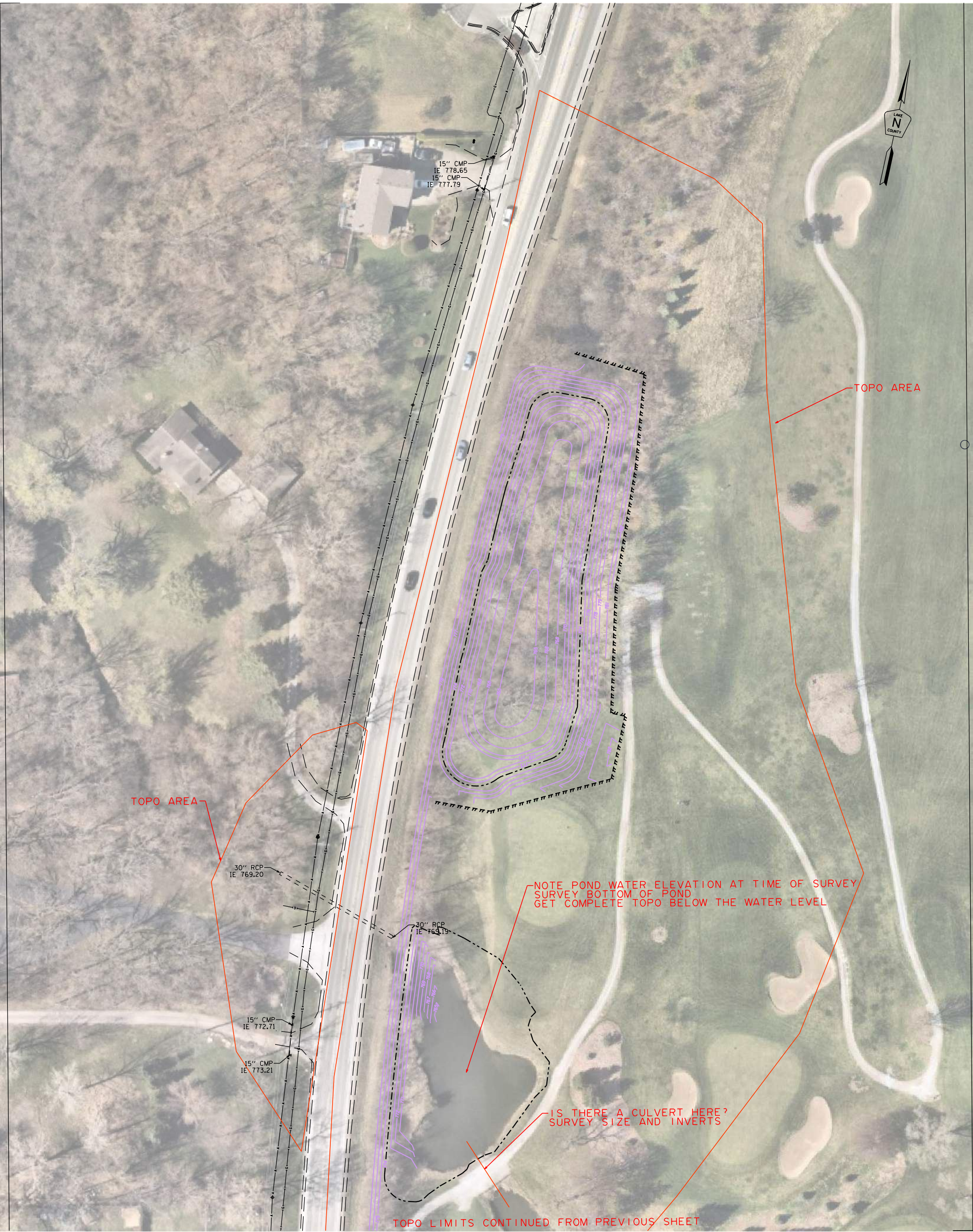
WHERE DOES THIS 15\"/>

WHERE DOES THIS 24\"/>

IS THERE A 12\"/>









HEATHER TERRACE

TOPO AREA

NOTE POND WATER ELEVATION
AT TIME OF SURVEY
SURVEY BOTTOM OF POND
GET COMPLETE TOPO BELOW
THE WATER LEVEL



Exhibit A-3

V3 Hours & Direct Expense Breakdown

EXHIBIT A-3
V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

1.1	<u>ITEM</u>		<u>QTY</u>	<u>HOURS PER QTY PER PHASE</u>			<u>SUBTOTAL</u>	<u>MANHOUR BREAKDOWN</u>								
				<u>PRELIM</u>	<u>PRE-FINAL</u>	<u>FINAL</u>	<u>HOURS/TASK</u>	<u>Proj</u>	<u>Project</u>	<u>Project</u>	<u>Design</u>	<u>CAD</u>	<u>Survey</u>	<u>Survey</u>	<u>Admin</u>	<u>TOTAL</u>
	TOPOGRAPHIC SURVEY							Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
	Supplemental Topographic Survey															
	Field Data Collection (PBP; 2-man crew)		1	100			100		4				96			100
	Tree tags & locates		1	32			32						32			32
	Data Importing, Processing and Drafting		1	60			60							60		60
	PLS QC Topo		1	4			4		4							4
TOTAL TOPOGRAPHIC SURVEY				196	0	0	196	0	8	0	0	0	128	60	0	196
1.2			<u>QTY</u>	<u>HOURS PER QTY PER PHASE</u>			<u>SUBTOTAL</u>	<u>MANHOUR BREAKDOWN</u>								
				<u>PRELIM</u>	<u>PRE-FINAL</u>	<u>FINAL</u>	<u>HOURS/TASK</u>	<u>Proj</u>	<u>Project</u>	<u>Project</u>	<u>Design</u>	<u>CAD</u>	<u>Survey</u>	<u>Survey</u>	<u>Admin</u>	<u>TOTAL</u>
	PRELIMINARY ENGINEERING REPORT APPROVAL							Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
	Preliminary Engineering Report Sign-off															
	Finalize PER Documents for Design Development		1	80			80	4	4	40	28				4	80
	Revisions to PER Documents for Additional Comments		1	60			60	4	4	32	16				4	60
TOTAL PRELIMINARY ENGINEERING REPORT APPROVAL				140	0	0	140	8	8	72	44	0	0	0	8	140
1.3			<u>QTY</u>	<u>HOURS PER QTY PER PHASE</u>			<u>SUBTOTAL</u>	<u>MANHOUR BREAKDOWN</u>								
				<u>PRELIM</u>	<u>PRE-FINAL</u>	<u>FINAL</u>	<u>HOURS/TASK</u>	<u>Proj</u>	<u>Project</u>	<u>Project</u>	<u>Design</u>	<u>CAD</u>	<u>Survey</u>	<u>Survey</u>	<u>Admin</u>	<u>TOTAL</u>
	GEOMETRIC UPDATES FOR PHASE II							Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
	Geometric Updates for Phase II															
	Alternate Path Routing, Claredon Dr to Rollins Rd		1	32			32	2	5	8	14	3				32
	Evaluate length of residential driveways		1	36			36	2	5	9	16	4				36
	Evaluate site distance of residential driveways		70	140			140	7	21	35	63	14				140
	Evaluate site distance of commercial driveways		13	39			39	2	6	10	18	3				39
TOTAL GEOMETRIC UPDATES FOR PHASE II				247	0	0	247	13	37	62	111	24	0	0	0	247

EXHIBIT A-3
V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

1.4	WETLAND PERMITTING, & MITIGATION	QTY	HOURS PER QTY PER PHASE			SUBTOTAL HOURS/TASK	MANHOUR BREAKDOWN								TOTAL V3 Hours
			PRELIM	PRE-FINAL	FINAL		Proj Director	Project Manager	Project Scientist	Design Engineer	CAD Tech	Scientist	Survey Tech	Admin	
	<u>Wetland Permitting & Mitigation</u>														
	<i>Field Work and Assesment</i>	1	28			28	2	2	24						28
	<i>T&E, USACE/LCSMC Submittal</i>	1	11			11	1	2	8						11
	<i>USACE Regional Permit 3 Submittal</i>	1	50			50	6	24	20						50
	<i>Lake County SMC Isolated Wetland Permit Submittal</i>	1	38			38	4	18	16						38
	<i>Response to Agency Wetland/Waters Permit Review Com.</i>	1	22			22		12	10						22
	<i>Buffer and BMP Native Planting Plan Design</i>	1	34			34	4	6	24						34
	<i>Native Planting 3-Year Monitoring and Management Plan</i>	1	26			26	2	4	20						26
	<i>Wetland Project Meetings/Coordination</i>	1	24			24	6	10	8						24
	TOTAL WETLAND PERMITTING, & MITIGATION		233	0	0	233	25	78	130	0	0	0	0	0	233

1.5	SPECIAL WASTE ASSESSMENTS	QTY	HOURS PER QTY PER PHASE			SUBTOTAL HOURS/TASK	MANHOUR BREAKDOWN								TOTAL V3 Hours
			PRELIM	PRE-FINAL	FINAL		Proj Director	Project Manager	Project Scientist	Design Engineer	CAD Tech	Scientist	Survey Tech	Admin	
	<u>SPECIAL WASTE ASSESSMENTS</u>														
	<i>Preliminary Site Investigations (PSI)</i>	1		186		186		40	20	53		65		8	186
	<i>CCDD Pre-package Coordination</i>	1		12		12		6	4					2	12
	TOTAL SPECIAL WASTE ASSESSMENTS		0	198	0	198	0	46	24	53	0	65	0	10	198

1.6	UTILITY COORDINATION & SUE LEVEL A/B	QTY	HOURS PER QTY PER PHASE			SUBTOTAL HOURS/TASK	MANHOUR BREAKDOWN								TOTAL V3 Hours
			PRELIM	PRE-FINAL	FINAL		Proj Director	Project Manager	Project Engineer	Design Engineer	CAD Tech	Survey Field	Survey Tech	Admin	
	<u>Utility Coordination</u>														
	<i>Prepare Letters and Submit Plans</i>	1	20	6	6	32		2	8	16				6	32
	<i>Review Utility Conflicts</i>	1		60	20	80		8	8	64					80
	<i>Field Meetings (2) - 1 V3 team member</i>	1		16		16		8	8						16
	<i>Monthly Coordination Meetings (Virtual)</i>	1		12	12	24		12	12						24
	<u>Subconsultant for Subsurface Utility Engineering (SUE) Level A/B</u>														
	<i>Review of Data from SAM</i>	1	16			16		4	4	8					16
	<i>Coordination</i>	1	8	8	8	24		8	8	8					24
	TOTAL UTILITY COORDINATION & SUE LEVEL A/B		44	102	46	192	0	42	48	96	0	0	0	6	192

EXHIBIT A-3
V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

						MANHOUR BREAKDOWN									
1.7		QTY	HOURS PER QTY PER PHASE			SUBTOTAL	Proj	Project	Project	Design	CAD	Survey	Survey	Admin	TOTAL
	LAND ACQUISITION & PLAT OF HIGHWAYS		PRELIM	PRE-FINAL	FINAL	HOURS/TASK	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
	Land Acquisition Evaluation														
	Design Change Coordination with LCDOT	1	60	40	16	116	16	40	60						116
	Alternative Analysis and Exhibits - 106 parcels - 2 exhibits each	1	100	60	52	212				159	53				212
	Plat of Highways and Legal Descriptions														
	Prepare Plate of Highways (POH)	1	100			100							100		100
	Review & CAD calc of approximately 106 title commitments	1	120			120							120		120
	Set all Proposed ROW taking corners (PBP; 2-man crew)	1	68			68						60	8		68
	Write legal description & PLS QC	1	354			354		100					254		354
	PLS QC POH	1	120			120		120							120
	Subconsultant for Land Appraisals/Negotiations Services														
	Review of Tracking of Acquisition Status and Risks	1	16	16	16	48	4	22	22						48
	Coordination	1	20	20	20	60	12	24	24						60
	TOTAL LAND ACQUISITION & PLAT OF HIGHWAYS		958	136	104	1,198	32	306	106	159	53	60	482	0	1,198

						MANHOUR BREAKDOWN									
1.8		QTY	HOURS PER QTY PER PHASE			SUBTOTAL	Proj	Project	Project	Design	CAD	Survey	Survey	Admin	TOTAL
	GEOTECHNICAL ENGINEERING SERVICES		PRELIM	PRE-FINAL	FINAL	HOURS/TASK	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
	Subconsultant for Geotechnical Services														
	Review of Data from TSC	1	16			16		4	4	8					16
	Coordination	1	8	8	8	24		8	8	8					24
	TOTAL GEOTECHNICAL ENGINEERING SERVICES		24	8	8	40	0	12	12	16	0	0	0	0	40

EXHIBIT A-3
V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

1.9	HYDRAULIC MODELING AND PERMITTING	QTY	HOURS PER QTY PER PHASE			SUBTOTAL HOURS/TASK	MANHOUR BREAKDOWN								TOTAL V3 Hours
			PRELIM	PRE-FINAL	FINAL		Proj Director	Project Manager	Project Engineer	Design Engineer	CAD Tech	Survey Field	Survey Tech	Admin	
	<u>Illinois Department of Natural Resources Permitting</u>														
	<i>IDNR-OWR Delegation Submittal</i>	1	36	12	12	60		4	32	24					60
	<i>IDNR-OWR Floodway Construction Permit Submittal</i>	1	24	8	8	40		4	24	12					40
	<u>Lake County Storm Water Commission Permitting</u>														
	<i>Lake County Watershed Development Permit Submittal</i>	1	184	40	40	264		24	120	120					264
	<u>NPDES Permit</u>														
	<i>NOI Permit Application & SWPPP</i>	1			24	24		2	18	4					24
	TOTAL HYDRAULIC MODELING AND PERMITTING		244	60	84	388	0	34	194	160	0	0	0	0	388

1.10	CORRIDOR LANDSCAPE CONCEPTUAL DESIGN	QTY	HOURS PER QTY PER PHASE			SUBTOTAL HOURS/TASK	MANHOUR BREAKDOWN								TOTAL V3 Hours
			PRELIM	PRE-FINAL	FINAL		Proj Director	Project Manager	Project Engineer	Design Engineer	CAD Tech	Survey Field	Survey Tech	Admin	
	<u>Conceptual Layout</u>														
	<i>Existing Conditions Review</i>	1	26			26		14	12						26
	<i>LCDOT & Park District Coordination</i>	1	40			40	4	20	16						40
	<i>Conceptual Design and Review</i>	1	54			54	2	12	40						54
	<u>Preliminary Layout</u>														
	<i>Revisions to Concept for Approval</i>	1	84			84	4	20	60						84
	TOTAL CORRIDOR LANDSCAPE CONCEPTUAL DESIGN		204	0	0	204	10	66	128	0	0	0	0	0	204

EXHIBIT A-3
V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

1.11	ROUND LAKE BEACH WATER AND SANITARY IMPROVEMENTS	QTY	HOURS PER QTY PER PHASE			SUBTOTAL HOURS/TASK	MANHOUR BREAKDOWN								TOTAL V3 Hours
			PRELIM	PRE-FINAL	FINAL		Proj Director	Project Manager	Project Engineer	Design Engineer	CAD Tech	Survey Field	Survey Tech	Admin	
	Existing Facility Research														
	Sanitary Sewer Televising Contracting and Review	1	8			8				8					8
	Sanitary Service Potholing Field Observation	1	172			172			12	60		100			172
	Village of Round Lake Beach Coordination	1	8			8		4	4						8
	Watermain Profile Evaluation	1	40			40		4	16	20					40
	Watermain Permitting														
	IEPA & LCDOT Permit	1		12	8	20		10	10						20
	Plans, Specifications and Estimates - 20 Scale														
	Proposed Utility Plan & Profiles	13	94	125	93	312	13	52	91	130	26				312
	Utility Details	1	5	6	5	16	1	2	5	6	2				16
	Specifications/Cost Estimate QA/QC	1	5	6	5	16	2	6	4	4					16
	TOTAL ROUND LAKE BEACH WATER AND SANITARY IMPROVEMENTS		332	149	111	592	16	78	142	228	28	100	0	0	592

1.12	STRUCTURAL DESIGN AND CALCULATIONS	QTY	HOURS PER QTY PER PHASE			SUBTOTAL HOURS/TASK	MANHOUR BREAKDOWN								TOTAL V3 Hours
			PRELIM	PRE-FINAL	FINAL		Proj Director	Project Manager	Project Engineer	Design Engineer	CAD Tech	Survey Field	Survey Tech	Admin	
	Retaining Wall Design														
	Review and Coordination with Geotechnical Engineer	1	10			10	2	4	4						10
	Wall 1,2&3 (Phase I Sidewalk/Path Routing)	1		172		172	6	38	80	48					172
	Wall 4 ('Alt Path Routing, Claredon Dr to Rollins Rd)	1		40		40	2	10	16	12					40
	Headwall Design														
	Headwall Structure Calculations	1		50		50	2	8	16	24					50
	TOTAL STRUCTURAL DESIGN AND CALCULATIONS		10	262	0	272	12	60	116	84	0	0	0	0	272

EXHIBIT A-3

V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services

04/19/2022

							MANHOUR BREAKDOWN									
1.13	PLANS, SPECIFICATIONS, AND ESTIMATES	# OF		HOURS PER PHASE			SUBTOTAL HOURS/TASK	Proj	Project	Project	Design	CAD	Survey	Survey	Admin	TOTAL
		Sht	Hrs	PRELIM	PRE-FINAL	FINAL		Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
	Cover Sheet - NTS	1	4	1	2	1	4	0	1	1	2	0				4
	Index of Sheets, Highway Stds, Commitments - NTS	1	10	3	4	3	10	0	2	3	4	1				10
	General Notes - NTS	2	8	5	6	5	16	0	2	4	8	2				16
	Summary of Quantities - NTS - 350 pay items	7	12	25	34	25	84	7	14	28	28	7				84
	Schedule of Quantities - NTS	20	12	37	120	83	240	20	40	80	80	20				240
	Earthwork Schedule - NTS	4	12	14	19	15	48	4	8	16	16	4				48
	Existing & Proposed Typical Sections - NTS															
	Typicals - Hainesville Road	3.0	10	9	12	9	30	0	6	9	12	3				30
	Typicals - Heather Terrace (T-int)	0.5	10	2	2	1	5	0	1	2	2	1				5
	Typicals - Shorewood Drive	2.0	10	6	8	6	20	0	4	6	8	2				20
	Typicals - E. Lake Ave (T-int)	0.5	10	2	2	1	5	0	1	2	2	1				5
	Typicals - E Maple Ave / Lake Ave (300' west +800' east)	1.0	10	3	4	3	10	0	2	3	4	1				10
	Typicals - E Indian Trail (300' west +200' east)	0.5	10	2	2	1	5	0	1	2	2	1				5
	Typicals - N Circle Dr (T-int)	0.5	10	2	2	1	5	0	1	2	2	1				5
	Typicals - N Oak Ave (T-int)	0.5	10	2	2	1	5	0	1	2	2	1				5
	Alignment, Ties, and Benchmarks - 50-scale single	11	12	40	53	39	132	11	22	44	44	11				132
	Removal Plans - 20-scale single	24	12	86	115	87	288	24	48	96	96	24				288
	Roadway Plan and Profile - 20-scale															
	R P&P - Hainesville Road	15	20	90	120	90	300	15	45	90	120	30				300
	R P&P - Heather Terrace (T-int)	1	20	6	8	6	20	1	3	6	8	2				20
	R P&P - Shorewood Drive	2	20	12	16	12	40	2	6	12	16	4				40
	R P&P - E. Lake Ave (T-int)	1	20	6	8	6	20	1	3	6	8	2				20
	R P&P - E Maple Ave / Lake Ave (300' west +800' east)	2	20	12	16	12	40	2	6	12	16	4				40
	R P&P - E Indian Trail (300' west +200' east)	1	20	6	8	6	20	1	3	6	8	2				20
	R P&P - N Circle Dr (T-int)	1	20	6	8	6	20	1	3	6	8	2				20
	R P&P - N Oak Ave (T-int)	1	20	6	8	6	20	1	3	6	8	2				20
	Construction Details - NTS	5	12	18	24	18	60	5	10	20	20	5				60

EXHIBIT A-3
V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

TASK (continued)	# OF		HOURS PER PHASE			SUBTOTAL	MANHOUR BREAKDOWN								TOTAL
							Proj	Project	Project	Design	CAD	Survey	Survey	Admin	
	Sht	Hrs	PRELIM	PRE-FINAL	FINAL		Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
PLANS, SPECIFICATIONS, AND ESTIMATES															
Intersection Grading - 1 sheet per intersection															
IG - Clarendon Drive (T-int--potential cul-de-sac improvements)	1	16	5	6	5	16	1	2	5	6	2				16
IG - Heather Terrace (T-int)	1	16	5	6	5	16	1	2	5	6	2				16
IG - Shorewood Drive	1	16	5	6	5	16	1	2	5	6	2				16
IG - E. Lake Ave (T-int)	1	16	5	6	5	16	1	2	5	6	2				16
IG - E Cardinal Ln (T-int)	1	16	5	6	5	16	1	2	5	6	2				16
IG - E Cedar Dr (T-int)	1	16	5	6	5	16	1	2	5	6	2				16
IG - E Maple Ave / Lake Ave (300' west +800' east)	1	16	5	6	5	16	1	2	5	6	2				16
IG - E Indian Trail (300' west +200' east)	1	16	5	6	5	16	1	2	5	6	2				16
IG - N Circle Dr (T-int)	1	16	5	6	5	16	1	2	5	6	2				16
IG - N Oak Ave (T-int)	1	16	5	6	5	16	1	2	5	6	2				16
Driveway and ADA Ramp Details - 4 corners															
ADA - Clarendon Drive (T-int / cul-de-sac)	1	12	4	5	3	12	1	2	4	4	1				12
ADA - Heather Terrace (T-int)	1	12	4	5	3	12	1	2	4	4	1				12
ADA - Shorewood Drive	1	12	4	5	3	12	1	2	4	4	1				12
ADA - E. Lake Ave (T-int)	1	12	4	5	3	12	1	2	4	4	1				12
ADA - E Cardinal Ln (T-int)	1	12	4	5	3	12	1	2	4	4	1				12
ADA - E Cedar Dr (T-int)	1	12	4	5	3	12	1	2	4	4	1				12
ADA - E Maple Ave / Lake Ave (300' west +800' east)	1	12	4	5	3	12	1	2	4	4	1				12
ADA - E Indian Trail (300' west +200' east)	1	12	4	5	3	12	1	2	4	4	1				12
ADA - N Circle Dr (T-int)	1	12	4	5	3	12	1	2	4	4	1				12
ADA - N Oak Ave (T-int)	1	12	4	5	3	12	1	2	4	4	1				12
ADA - Washington St	1	12	4	5	3	12	1	2	4	4	1				12
ADA - Rollins Rd	1	12	4	5	3	12	1	2	4	4	1				12
ADA - # of residential & comm. driveways (approx. 70)	35	12	126	168	126	420	35	70	140	140	35				420

EXHIBIT A-3
V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

TASK (continued)	# OF		HOURS PER PHASE			SUBTOTAL	MANHOUR BREAKDOWN								TOTAL
							Proj	Project	Project	Design	CAD	Survey	Survey	Admin	
PLANS, SPECIFICATIONS, AND ESTIMATES	Sht	Hrs	PRELIM	PRE-FINAL	FINAL	HOURS/TASK	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
<u>Maintenance of Traffic Plan - 50-scale double plan</u>															
MOT GN	2	8	5	6	5	16	0	2	4	8	2				16
MOT Typs	4	12	14	19	15	48	4	8	16	16	4				48
MOT Plans - Pre-Stage & 3 Stages (Hainesville + Shorewood)	24	20	144	192	144	480	24	72	144	192	48				480
<u>Soil Erosion and Sediment Control Plan - 50-scale double plan; staged</u>															
EC Plans - Ex. Cond & 3 Stages (Hainesville + Shorewood)	24	12	86	115	87	288	24	48	96	96	24				288
EC Notes	1	8	2	3	3	8	0	1	2	4	1				8
EC Details	4	10	12	16	12	40	0	8	12	16	4				40
<u>Drainage Plan and Profile - 20-scale</u>															
Proposed Drainage Plan & Profiles	24	20	144	192	144	480	24	72	144	192	48				480
Drainage Schedules	2	12	7	10	7	24	2	4	8	8	2				24
Drainage Details	1	12	4	5	3	12	1	2	4	4	1				12
<u>Round Lake Beach Utility Plan and Profile - 20-scale</u>															
See Section 1.11															
Site Grading Plans - 20-scale	4	16	19	26	20	64	4	8	20	24	8				64
<u>Signing and PM Plan - 20-scale double</u>															
Sign Schedule	1	16	5	6	5	16	1	2	5	6	2				16
Proposed Signing & Pavement Marking Plan	12	20	72	96	72	240	12	36	72	96	24				240
<u>Landscape Plans - 20-scale double</u>															
Proposed Landscape Plan	13	20	78	104	78	260	13	39	78	104	26				260
Proposed Planting Schedule	1	16	5	6	5	16	1	2	5	6	2				16
Landscape Legend & Details	1	8	2	3	3	8	0	1	2	4	1				8
<u>Traffic Signal Plans</u>															
Traffic Signal Plan - Shorewood/Hainesville	4	24	29	38	29	96	4	16	28	40	8				96
Temporary Traffic Signal Plan - Shorewood/Hainesville	3	24	22	29	21	72	3	12	21	30	6				72
Interconnect Schematic	1	10	3	4	3	10	0	2	3	4	1				10
Traffic Signal Details	10	4	12	16	12	40	0	10	10	20	0				40
<u>Fiber Optic Plans</u>															
Fiber Optic Plan	5	16	24	32	24	80	5	10	25	30	10				80
Fiber / Splicing Details	2	10	6	8	6	20	0	4	6	8	2				20

EXHIBIT A-3
V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

TASK (continued)	# OF		HOURS PER PHASE			SUBTOTAL	MANHOUR BREAKDOWN								TOTAL
							Proj	Project	Project	Design	CAD	Survey	Survey	Admin	
	Sht	Hrs	PRELIM	PRE-FINAL	FINAL	HOURS/TASK	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
PLANS, SPECIFICATIONS, AND ESTIMATES															
Roadway Lighting Plans - 20-scale double plan															
Proposed Roadway Lighting Plan	1	20	6	8	6	20	1	3	6	8	2				20
Roadway Lighting Details	2	12	7	10	7	24	2	4	8	8	2				24
Retaining Wall Plans															
Wall 1,2&3 (Phase I Sidewalk/Path Routing)	19	20	114	152	114	380	19	57	114	152	38				380
Wall 4 ('Alt Path Routing, Claredon Dr to Rollins Rd)	5	20	30	40	30	100	5	15	30	40	10				100
Structural Headwall Details	2	12	7	10	7	24	2	4	8	8	2				24
Soil Borings (35 borings; 3 per sheet)	12	1	4	5	3	12	0	0	6	6	0				12
IDOT Standard Details (1 per sheet)	55	1	8	11	9	28	0	0	0	14	14				28
LCDOT Standard Details (1 per sheet)	20	1	3	4	3	10	0	0	0	5	5				10
Cross Sections - 5 scale; 3 per sheet															
Hainesville cross sections 8200' @ 50' + driveways	78	9	211	281	210	702	0	78	234	312	78				702
All Side Road cross sections 7000' @ 50'+ driveways	47	9	127	169	127	423	0	47	141	188	47				423
Special Provisions	1	220	66	88	66	220	40	140	40	0	0				220
Estimate of Cost	1	28	8	11	9	28	4	8	8	8	0				28
Estimate of Time	1	28	8	11	9	28	4	8	8	8	0				28
TOTAL PLANS, SPECIFICATIONS, AND ESTIMATES	549		1,919	2,617	1,953	6,488	351	1,073	2,008	2,437	620	0	0	0	6,488

of Est. Sheets Only

EXHIBIT A-3
V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

						MANHOUR BREAKDOWN											
1.14			# OF		HOURS PER PHASE			TOTAL	Project	Project	Project	Design	CAD	Survey	Survey	Admin	TOTAL
			Tsk	Hrs	PRELIM	PRE-FINAL	FINAL	HOURS	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
	Project Updates (2 times per year)		4	8	8	12	12	32		16	16						32
	TOTAL PUBLIC OUTREACH					8	12	12	32	0	16	16	0	0	0	0	0

						MANHOUR BREAKDOWN											
1.15			# OF		HOURS PER PHASE			TOTAL	Project	Project	Project	Design	CAD	Survey	Survey	Admin	TOTAL
			Tsk	Hrs	PRELIM	PRE-FINAL	FINAL	HOURS	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
	AGENCY / COORDINATION MEETINGS																
	LCDOT		7		18	24		42	21		21						42
	Local Agencies		12		24	48		72	36		36						72
TOTAL AGENCY / COORDINATION MEETINGS					42	72	0	114	57	0	57	0	0	0	0	0	114

							MANHOUR BREAKDOWN									
		# OF		HOURS PER PHASE			TOTAL	Project	Project	Project	Design	CAD	Survey	Survey	Admin	TOTAL
1.16	QA/QC	Tsk	Hrs	PRELIM	PRE-FINAL	FINAL	HOURS	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
	Plan/Design documents QA/QC	1		20	16	8	44	22	11	11						44
	Specifications/Cost Estimate QA/QC	1		20	16	8	44	22	11	11						44
	Constructability Review QA/QC	1		20	20	20	60	60								60
	TOTAL QA/QC			60	52	36	148	104	22	22	0	0	0	0	0	148

							MANHOUR BREAKDOWN										
1.17			# OF		HOURS PER PHASE			TOTAL	Project	Project	Project	Design	CAD	Survey	Survey	Admin	TOTAL
			Tsk	Hrs	PRELIM	PRE-FINAL	FINAL	HOURS	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
	Project Work Plan & Design Schedule		1		36			36	18	18							36
	Internal Team Project Meetings		24	1	40	40	40	120	24	24	24	48					120
	Contract Administration		24	1	8	8	8	24		24							24
	Invoicing and Billing Reviews		24	1	8	8	8	24	24								24
	TOTAL ADMINISTRATION / MANAGEMENT				92	56	56	204	66	66	24	48	0	0	0	0	204

EXHIBIT A-3
V3 MANHOUR SUMMARY FORM

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

							MANHOUR BREAKDOWN								
							Project	Project	Project	Design	CAD	Survey	Survey	Admin	TOTAL
1.18	BID SUPPORT	<u># OF</u>	<u>HOURS PER PHASE</u>			<u>TOTAL</u>	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
		<i>Tsk</i>	<i>Hrs</i>	PRELIM	PRE-FINAL	FINAL	HOURS								
	Attend Pre-Bid Meeting	1				4	4	2	2						4
	Respond to RFI's / Addendums	1				32	32	2	8	16	6				32
	Bid Tabulation / Award Letter/Recommendation	1				8	8	4	4						8
TOTAL BID SUPPORT				0	0	44	44	8	14	16	6	0	0	0	44

							MANHOUR BREAKDOWN								
							Project	Project	Project	Design	CAD	Survey	Survey	Admin	TOTAL
1.19	PHASE III SUPPORT/COORDINATION	<u># OF</u>	<u>HOURS PER PHASE</u>			<u>TOTAL</u>	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
		<i>Tsk</i>	<i>Hrs</i>	PRELIM	PRE-FINAL	FINAL	HOURS								
	Review Shop Drawings	1				52	52		24	28					52
	RFI Response Assistance	1				104	104	24	40	20	20				104
	Any necessary field meetings	1				12	12		12						12
	Supplemental CCDD/Special Waste Consultation	1				32	32	4	4	24					32
TOTAL PHASE III SUPPORT/COORDINATION				0	0	200	200	28	80	72	20	0	0	0	200

				<u>HOURS PER PHASE</u>			<u>TOTAL</u>	Project	Project	Project	Design	CAD	Survey	Survey	Admin	TOTAL
				PRELIM	PRE-FINAL	FINAL	HOURS	Director	Manager	Engineer	Engineer	Tech	Field	Tech		V3 Hours
TOTAL HOURS				4,753	3,724	2,654	11,130	730	2,046	3,249	3,462	725	353	542	24	11,130

ATTACHMENT A-3
V3 DIRECT COSTS SUMMARY

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

			Travel		Mailers, Exhibits, Copies					Other Expenses	TOTAL DIRECT COST	SERVICES BY OTHERS	TOTAL DIRECT EXPENSES		
			Miles	Mileage Cost	Postage	Pages (Sheets) per submittal	8.5" X 11" (Black & White)	8.5" X 11" (Color)	11" X 17" (Black & White)					11" X 17" (Color)	22" X 34" (Color Boards)
				\$ 0.58	\$ 0.50		\$ 0.06	\$ 0.60	\$ 0.20					\$ 1.00	\$ 70.00
				Per Mile			Each	Each	Each					Each	6 S.F.
1.1	TASK			UNIT COST											
		QTY		UNIT											
	TOPOGRAPHIC SURVEY														
	Survey Crew - days at 104 miles		10	VISIT(S)	104	\$ 598.00							\$ 598.00	\$ -	\$ 598.00
	Arborist - days at 104 miles		5	VISIT(S)	104	\$ 299.00						\$ 299.00		\$ 299.00	
1.2	PRELIMINARY ENGINEERING REPORT APPROVAL												\$ -	\$ -	\$ -
													\$ -		\$ -
1.3	GEOMETRIC UPDATES FOR PHASE II												\$ -	\$ -	\$ -
													\$ -		\$ -
1.4	WETLAND PERMITTING, & MITIGATION												\$ 239.20	\$ -	\$ 239.20
	Wetland Delineation Field Work (initial & update		2	VISIT(S)	104	\$ 119.60							\$ 119.60		\$ 119.60
	USACE Pre-JD Field Meeting		1	VISIT(S)	104	\$ 59.80							\$ 59.80		\$ 59.80
	Lake County SMC Pre-JD Field Meeting		1	VISIT(S)	104	\$ 59.80							\$ 59.80		\$ 59.80
1.5	SPECIAL WASTE ASSESSMENTS												\$ 34,299.00	\$ -	\$ 34,299.00
	Drilling Vendor		1	NOT TO EXCEED								\$ 11,000.00	\$ 11,000.00		\$ 11,000.00
	Lab Analysis		1	NOT TO EXCEED								\$ 22,500.00	\$ 22,500.00		\$ 22,500.00
	Field Sampling Supplies		1	NOT TO EXCEED								\$ 500.00	\$ 500.00		\$ 500.00
	Sampling - days at 104 miles		5	VISIT(S)	104	\$ 299.00							\$ 299.00		\$ 299.00
1.6	UTILITY COORDINATION & SUE LEVEL A/B												\$ 63,776.00	\$ -	\$ 63,776.00
	Letters & Plans to Utility Companies		10	MAILERS			3	\$ 6.00		\$ 20.00			\$ 26.00		\$ 26.00
	Subsurface Utility Engineering Vendor		1	NOT TO EXCEED									\$ 63,750.00		\$ 63,750.00
1.7	LAND ACQUISITION & PLAT OF HIGHWAYS												\$ 725,950.00	\$ -	\$ 725,950.00
	Title Commitments (\$500 per PIN)		5	PARCELS								\$ 2,500.00	\$ 2,500.00		\$ 2,500.00
	Title Commitments Updates (\$75 per PIN)		106	PARCELS								\$ 7,950.00	\$ 7,950.00		\$ 7,950.00
	Land Appraisals/Negotiations Services Vendor		1	NOT TO EXCEED									\$ 715,500.00		\$ 715,500.00
1.8	GEOTECHNICAL ENGINEERING SERVICES												\$ 36,950.00	\$ -	\$ 36,950.00
	Geotechnical Engineering Services Vendor		1	NOT TO EXCEED									\$ 36,950.00		\$ 36,950.00

ATTACHMENT A-3
V3 DIRECT COSTS SUMMARY

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

			Travel		Mailers, Exhibits, Copies						Other Expenses	TOTAL DIRECT COST	SERVICES BY OTHERS	TOTAL DIRECT EXPENSES	
			Miles	Mileage Cost	Postage	Pages (Sheets) per submittal	8.5" X 11" (Black & White)	8.5" X 11" (Color)	11" X 17" (Black & White)	11" X 17" (Color)					22" X 34" (Color Boards)
							\$ 0.06	\$ 0.60	\$ 0.20	\$ 1.00					\$ 70.00
							Each	Each	Each	Each					6 S.F.
TASK	QTY	UNIT COST UNIT		\$ 0.58 Per Mile	\$ 0.50										
1.9	HYDRAULIC MODELING AND PERMITTING											\$ 1,168.00	\$ 70,150.00	\$ 71,318.00	
	Report & Exhibits (2 Submittals)	8	HARD COPIES			300	\$ 48.00	\$ 720.00		\$ 400.00		\$ 1,168.00		\$ 1,168.00	
	Subconsultant for Hydraulic Services	8	HARD COPIES										\$ 70,150.00	\$ 70,150.00	
1.10	CORRIDOR LANDSCAPE CONCEPTUAL DESIGN											\$ 119.60	\$ -	\$ 119.60	
	Field Meetings (2)	2	VISIT(S)	104	\$ 119.60							\$ 119.60		\$ 119.60	
1.11	ROUND LAKE BEACH WATER AND SANITARY IMPROVEMENTS											\$ 58,299.00	\$ -	\$ 58,299.00	
	Sanitary Televising Vendor (\$2000 ft @ \$5/ft)	1	NOT TO EXCEED								\$ 10,000.00	\$ 10,000.00		\$ 10,000.00	
	Sanitary Potholing Vendor (32 homes at \$1500)	1	NOT TO EXCEED								\$ 48,000.00	\$ 48,000.00		\$ 48,000.00	
	Sanitary Potholing Observation - 5 days	5	VISIT(S)	104	\$ 299.00							\$ 299.00		\$ 299.00	
1.12	STRUCTURAL DESIGN AND CALCULATIONS											\$ -	\$ -	\$ -	
												\$ -		\$ -	
1.13	PLANS, SPECIFICATIONS, AND ESTIMATES											\$ 3,960.00	\$ -	\$ 3,960.00	
	Preliminary Submittal	3	HARD COPIES			550			\$ 990.00			\$ 990.00		\$ 990.00	
	Pre-Final Submittal	3	HARD COPIES			550			\$ 990.00			\$ 990.00		\$ 990.00	
	Final Submittal	3	HARD COPIES			550			\$ 990.00			\$ 990.00		\$ 990.00	
	Bid Set Submittal	3	HARD COPIES			550			\$ 990.00			\$ 990.00		\$ 990.00	
1.14	PUBLIC OUTREACH											\$ 1,980.00	\$ -	\$ 1,980.00	
	Letters & Exhibits to Stakeholders	900	MAILERS			4		\$ 1,080.00		\$ 900.00		\$ 1,980.00		\$ 1,980.00	
1.15	AGENCY / COORDINATION MEETINGS											\$ 717.60	\$ -	\$ 717.60	
	Attendance at Meetings	12	VISIT(S)	104	\$ 717.60							\$ 717.60		\$ 717.60	
1.16	QA/QC											\$ 2,970.00	\$ -	\$ 2,970.00	
	Preliminary Submittal	3	HARD COPIES			550			\$ 990.00			\$ 990.00		\$ 990.00	
	Pre-Final Submittal	3	HARD COPIES			550			\$ 990.00			\$ 990.00		\$ 990.00	
	Final Submittal	3	HARD COPIES			550			\$ 990.00			\$ 990.00		\$ 990.00	

ATTACHMENT A-3
V3 DIRECT COSTS SUMMARY

PROJECT: Hainesville Road: Washington Street to Rollins Road, Phase II Engineering Services
04/19/2022

			Travel		Mailers, Exhibits, Copies						Other Expenses	TOTAL DIRECT COST	SERVICES BY OTHERS	TOTAL DIRECT EXPENSES
			Miles	Mileage Cost	Postage	Pages (Sheets) per submittal	8.5" X 11" (Black & White)	8.5" X 11" (Color)	11" X 17" (Black & White)	11" X 17" (Color)	22" X 34" (Color Boards)			
TASK		UNIT COST		\$ 0.58	\$ 0.50		\$ 0.06	\$ 0.60	\$ 0.20	\$ 1.00	\$ 70.00			
	QTY	UNIT		Per Mile			Each	Each	Each	Each	6 S.F.			
1.17	ADMINISTRATION / MANAGEMENT											\$ -	\$ -	\$ -
														\$ -
	Design Change Coordination with LCDOT													
1.18	BID SUPPORT											\$ 59.80	\$ -	\$ 59.80
	Attend Pre-Bid Meeting	1	VISIT(S)	104	\$ 59.80							\$ 59.80		\$ 59.80
1.19	PHASE III SUPPORT/COORDINATION											\$ 59.80	\$ -	\$ 59.80
	Any necessary field meetings	1	VISIT(S)	104	\$ 59.80							\$ 59.80		\$ 59.80

	TRAVEL COSTS	MAILERS, EXHIBITS, AND COPIES COST	OTHER EXPENSES	TOTAL DIRECT COST	SERVICES BY OTHERS	TOTAL DIRECT EXPENSES
TOTAL	\$ 2,691.00	\$ 10,104.00	\$ 102,450.00	\$ 931,445.00	\$ 70,150.00	\$ 1,001,595.00

*All fees related to permitting are not included under Direct Costs. The fees shall be paid for by the Lake County Division of Transportation

Exhibit A-4

Subconsultant Phase II Scope & Fee Breakdown

**SCOPE OF SERVICES
PHASE II – DESIGN ENGINEERING SERVICES**

**Hainesville Road Reconstruction from Washington Street to Rollins Road
Section No. 19-00072-14-WR**

As a sub-consultant to V3, CBBEL will aid with the completion of Phase II services for the study of the Hainesville Road Reconstruction between Washington Street and Rollins Road. CBBEL will be involved with the Stormwater Permitting, Agency Meetings and Coordination, and Quality Assurance/Quality Control.

TASK 1.10 Stormwater Modeling and Permitting

Task 1.10.4 Floodplain Fill/Compensatory Storage: The existing conditions flood profiles will be provided to V3 for input into the project cross-sections to determine the proposed floodplain fill quantities. In accordance with the WDO, the required amount of compensatory storage will be determined above and below the 10-year flood elevation. We will work with V3 to determine the appropriate location for the compensatory storage. This will be an iterative process and we have provided for two iterations. Additional iterations will be billed on a Time and Material basis.

Task 1.10.5 Proposed Conditions Hydraulic Model: The proposed roadway culvert will be input into the existing conditions unsteady HEC-RAS hydraulic model previously developed. The results will be required to verify that IDNR-OWR, LCDOT and WDO are being complied with, including freeboard and upstream/downstream flood profile impacts. We have budgeted for three iterations given the sensitive nature of the upstream golf course and downstream residential properties. Additional iterations will be billed on a Time and Material basis.

Task 1.10.6 IDNR-OWR Floodway Construction Permit (if necessary): The project contains Zone A regulatory floodplain with greater than 1 square mile of tributary area. To qualify for Statewide Permit #12, the roadway profile must not be raised above the existing elevation and written documentation must be provided indicating that the structure is not a source of flood damage. It is anticipated that it may not be possible to meet these requirements, so an individual Part 3700 floodway construction permit from IDNR-OWR would be required. CBBEL will prepare the technical support package for permit application to IDNR-OWR for the culvert replacement project.

Task 1.10.7 Stormwater Management Permit Submittal: Based on the information developed during this analysis, CBBEL will assist V3 with preparation of a Watershed Development Permit (WDP) submittal to Lake County SMC. The permit application will include storm sewer calculations, floodplain fill calculations, wetland reports, and roadway plans prepared by V3. CBBEL will prepare or review the necessary stormwater detention calculations, compensatory storage calculations, regional drainage exhibits, hydraulic modeling, release rate calculations, and a narrative describing the stormwater management plan.

Task 1.10.8 Agency Coordination: During the permit review process, follow-up meetings with the regulatory agencies, roadway engineer, and client can be anticipated to finalize required information, submittals and documentation. Because this task is difficult to quantify, it is estimated that 3 meetings will be required and additional meetings will be billed on a Time and Materials basis.

Task 1.10.X Isolated Waters of Lake County Hydrologic Analysis: As part of the Lake County Watershed Development Permit, CBBEL will perform an 80%-150% hydrologic analysis for two of the three Isolated Waters of Lake County (IWLC). This analysis will be used to verify that the hydrology to the wetland will be maintained from existing to proposed conditions.

Task 1.10.XX Known Problem Area Alternative Evaluation: CBBEL will work with V3 and the Lake County SMC to evaluate alternatives to improve the level of protection of the known problem area immediately downstream of the Hainesville Road culvert. As part of this evaluation we anticipate meeting with SMC to discuss potential modifications to the plan and analyzing up to two alternatives.

TASK 1.15 Agency Meeting/Coordination:

CBBEL will aid with agency coordination and meetings as required. CBBEL will aid in providing exhibits for agency and public meetings, as requested. CBBEL will attend up to 4 agency meetings throughout Phase II Engineering.

TASK 1.16 Quality Assurance/Quality Control:

CBBEL will aid with QA/QC as needed. Specific items CBBEL will coordinate within the QA/QC process will be an overall geometric design and plan preparation format to ensure the plans meet LCDOT design requirements and guidelines. QA/QC reviews will be completed for the Preliminary Plans, Pre-Final Plans, and Final Plans.

TASK 1.17 Administration and Management:

CBBEL will manage our staff and provide project administration throughout this project. Daily assignments will be managed and coordinated with V3 as needed to provide efficient completion of our assignment. Monthly billing and will be completed and submitted to V3 in a timely manner for inclusion on their invoices to LCDOT. The invoicing will include appropriate documentation as required by LCDOT.



COST ESTIMATE OF CONSULTANT SERVICES WORKSHEET

FIXED RAISE

Local Public Agency

Lake County

County

Lake

Section Number

19-00072-14-WR

Consultant (Firm) Name

CBBEL

Prepared By

Martin Worman

Date

1/26/2022

PAYROLL ESCALATION TABLE

CONTRACT TERM	18
START DATE	6/1/2022
RAISE DATE	1/1/2023

MONTHS

OVERHEAD RATE	132.36%
COMPLEXITY FACTOR	0
% OF RAISE	2.00%

END DATE 11/30/2023

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	6/1/2022	1/1/2023	7	38.89%
1	1/2/2023	12/1/2023	11	62.33%

The total escalation = 1.22%

Local Public Agency	County	Section Number
Lake County	Lake	19-00072-14-WR

MAXIMUM PAYROLL RATE	78.00
ESCALATION FACTOR	1.22%

PAYROLL RATES

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Principal	\$78.00	\$78.00
Engineer VI	\$77.90	\$78.00
Engineer V	\$69.77	\$70.62
Engineer IV	\$58.58	\$59.30
Engineer III	\$47.01	\$47.58
Engineer I/II	\$33.72	\$34.13
Survey V	\$78.00	\$78.00
Survey IV	\$72.00	\$72.88
Survey III	\$63.00	\$63.77
Survey II	\$51.50	\$52.13
Survey I	\$38.50	\$38.97
Engineering Technician V	\$67.75	\$68.58
Engineering Technician IV	\$56.63	\$57.32
Engineering Technician III	\$32.88	\$33.28
CAD Manager	\$67.17	\$67.99
CAD Technician II	\$48.75	\$49.35
GIS Specialist III	\$54.00	\$54.66
Landscape Architect	\$61.00	\$61.75
Landscape Designer I/II	\$34.75	\$35.17
Environmental Resource Specialist V	\$75.06	\$75.98
Environmental Resource Specialist IV	\$58.00	\$58.71
Environmental Resource Specialist II	\$49.75	\$50.36
Environmental Resource Specialist I/II	\$30.50	\$30.87
Environmental Resource Technician	\$42.75	\$43.27
Engineering Intern	\$19.00	\$19.23

Local Public Agency

Lake County

County

Lake

Section Number

19-00072-14-WR

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultants Services Worksheet Fixed Raise

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Task 1.10.4 Floodplain Fill/Compensatory Storage			Task 1.10.5 Proposed Conditions Hydraulic Model			Task 1.10.6 IDNR-OWR Floodway Construction Permit (if necessary)			Task 1.10.7 Stormwater Management Permit Submittal			Task 1.10.8 Agency Coordination		
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Principal	78.00	0.0																	
Engineer VI	78.00	58.0	12.24%	9.54	6	13.04%	10.17	6	7.50%	5.85	6	8.11%	6.32	10	17.24%	13.45	10	23.81%	18.57
Engineer V	70.62	50.0	10.55%	7.45															
Engineer IV	59.30	234.0	49.37%	29.27	20	43.48%	25.78	54	67.50%	40.02	32	43.24%	25.64	32	55.17%	32.72	32	76.19%	45.18
Engineer III	47.58	0.0																	
Engineer I/II	34.13	132.0	27.85%	9.51	20	43.48%	14.84	20	25.00%	8.53	36	48.65%	16.60	16	27.59%	9.42			
Survey V	78.00	0.0																	
Survey IV	72.88	0.0																	
Survey III	63.77	0.0																	
Survey II	52.13	0.0																	
Survey I	38.97	0.0																	
Engineering Technician V	68.58	0.0																	
Engineering Technician IV	57.32	0.0																	
Engineering Technician III	33.28	0.0																	
CAD Manager	67.99	0.0																	
CAD Technician II	49.35	0.0																	
GIS Specialist III	54.66	0.0																	
Landscape Architect	61.75	0.0																	
Landscape Designer I/II	35.17	0.0																	
Environmental Resource S	75.98	0.0																	
Environmental Resource S	58.71	0.0																	
Environmental Resource S	50.36	0.0																	
Environmental Resource S	30.87	0.0																	
Environmental Resource T	43.27	0.0																	
Engineering Intern	19.23	0.0																	
		0.0																	
		0.0																	
TOTALS		474.0	100%	\$55.77	46.0	100.00%	\$50.79	80.0	100%	\$54.41	74.0	100%	\$48.57	58.0	100%	\$55.58	42.0	100%	\$63.75

Local Public Agency

County

Section Number

Lake County

Lake

19-00072-14-WR

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

SHEET 2 **OF** 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Task 1.10.X Isolated Waters of Lake County Hydrologic Analysis			Task 1.10.XX Known Problem Area			Task 1.15 Agency Meeting/Coordination			Task 1.16 Quality Assurance/Quality Control			Task 1.17 Administration and Management					
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	78.00																		
Engineer VI	78.00	6	12.00%	9.36	6	10.34%	8.07							8	44.44%	34.67			
Engineer V	70.62							24	100.00%	70.62	24	100.00%	70.62	2	11.11%	7.85			
Engineer IV	59.30	24	48.00%	28.46	32	55.17%	32.72							8	44.44%	26.35			
Engineer III	47.58																		
Engineer I/II	34.13	20	40.00%	13.65	20	34.48%	11.77												
Survey V	78.00																		
Survey IV	72.88																		
Survey III	63.77																		
Survey II	52.13																		
Survey I	38.97																		
Engineering Technician V	68.58																		
Engineering Technician IV	57.32																		
Engineering Technician III	33.28																		
CAD Manager	67.99																		
CAD Technician II	49.35																		
GIS Specialist III	54.66																		
Landscape Architect	61.75																		
Landscape Designer I/II	35.17																		
Environmental Resource Spe	75.98																		
Environmental Resource Spe	58.71																		
Environmental Resource Spe	50.36																		
Environmental Resource Spe	30.87																		
Environmental Resource Tec	43.27																		
Engineering Item	19.23																		
TOTALS		50.0	100%	\$51.47	58.0	100%	\$52.55	24.0	100%	\$70.62	24.0	100%	\$70.62	18.0	100%	\$68.87	0.0	0%	\$0.00



SAM, LLC

1224 Fern Ridge Parkway, Suite 110, St. Louis, MO 63141

Ofc 314.576.9878 Fax 314.576.9922

info@sam.biz www.sam.biz

DRAFT

Delivery Method: Via Email: kcorrigan@v3co.com

4/19/2022

Kurt Corrigan, P.E.

Senior Project Manager

V3 Companies

7325 Janes Ave

Woodridge, Illinois 60517

RE: **Subsurface Utility Engineering Services**

Hainesville LCDOT Phase II

Project Number: 1022068049

Dear Mr. Corrigan,

Surveying And Mapping, LLC (SAM) is pleased to provide this proposal for professional Subsurface Utility Engineering (SUE) Quality Level A, B and Survey services to V3 Companies for the Hainesville LCDOT Phase II project in Round Lake, IL. This proposal has been prepared based on an email received 4/18/22.

After you have reviewed the attached proposed Scope of Services and associated fees, please do not hesitate to call if you have any questions or comments. Again, thank you for the opportunity to be of service. We are looking forward to working with you on this important project.

Sincerely,

Survey & Mapping, LLC.

Israel Perez

Project Manager

(p) 224-404-1300

(c) 224-279-9133

Cc : Brandon Espinosa, PLS

Andy Wesley, PLS

Attachments:

Proposal

A-C Site Map

D Standard Terms and Conditions



1.0 Project Description

- SAM proposes to provide subsurface utility engineering (SUE) services in an attempt to identify approximately 2,400' of private utilities, to include electric, in an area approximately 800' by 200' as shown on **Attachment A**, further identified as starting from the centerline of E Lake Ave heading North for 800' within the private property along the East side of Hainesville Rd and heading East from property line for 200' at the furthest point, approximately 3,000' of private utilities in an area as shown on **Attachment B**, further described as within the private property along the East side of Hainesville Rd from Shorewood Rd at a point approximately 75' North of property line heading North approximately 750', extending 300' East at its furthest point, approximately 2,500' of public utilities as shown on **Attachment C**, further described as within the Southern end of Millennium Trail South of Rollins Rd heading South along the East side of Hainesville Rd for 500' extending 500' East of Hainesville Rd's ROW at its furthest point, to include the excavating of fifteen 15 test holes on various utilities throughout the span of Hainesville Rd between E Rollins Rd and E Washington St. This investigation is to aid the reconstruction of Hainesville Rd, in the City of Round Lake, IL.

The work will be conducted in accordance with the Construction Institute (CI)/American Society of Civil Engineers (ASCE) Standard 38-02, *Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data*. This document is the standard upon which SUE is conducted, defining the service as:

A branch of engineering practice that involves managing certain risks associated with: utility mapping at appropriate quality levels, utility coordination, utility relocation design and coordination, utility condition assessment, communication of utility data to certain parties, utility relocation cost estimates, implementation of utility accommodation policies, and utility design.

2.0 Scope of Services

The proposed scope of services includes:

2.1 Designating and Marking - Quality Level B

SAM staff will utilize the suite of geophysical equipment in each vehicle to attempt to designate the utilities identified in the Project Description within the area(s) of interest. Quality Level B services for this project include:

- Utilizing normal traffic control, including standard placement of traffic cones, freestanding warning signage and vehicle-mounted traffic directional sign.
- Designating and marking underground utilities within the project limits using an appropriate suite of surface geophysical methods. Typical equipment utilized includes:
 - Radiodetection - RD8100 and Metrotech Vivax VM 810 & vLocML Cable and Pipe Locator
 - Acoustic - ULTRA-TRAC® Acoustic Pipe Locator
 - GPR - Single and/or Dual Frequency
 - Magnetic locators
 - Rodders, Sondes (transmitters) and Receivers for non-conductive utility detection



- Marking the utilities at maximum 50-foot intervals and at changes in direction.
- Attempting to locate water lines, force mains, and other non-tonable utilities using ground-penetrating radar. If successful, these utilities will be marked as Quality Level D. If appropriate, Test Holes may be recommended to establish the precise location for design.
- Marking each utility run with the appropriate surveying code and number for each mark. This will be noted on the field sketch for use by the surveyor and our quality control staff.
- Surveying markings that indicate the presence of a utility. Horizontal data will be held to the accuracies and precision dictated by the project's survey control.
- Plotting survey data on base plans provided by client using either AutoCAD or MicroStation platforms.
- Providing a deliverable including engineering drawing(s) shown in plan view using the approved color codes for found utilities in accordance with CI/ASCE Standard 38-02 complete with engineering seal and signature.

2.2 Locating - Quality Level A

Quality Level A services will include performing an upper limit of fifteen (15) test holes to establish the exact location and elevation of critical utilities that may conflict with future construction. SAM will use minimally intrusive excavation techniques that protect the integrity of the utilities in question, and that of other lines that may be encountered. The test hole will be excavated using air and/or water assisted vacuum excavation equipment intended for this purpose.

The excavation procedure will include:

- Clearing the Test Hole area of surface debris.
- In paved areas, neatly cutting and removing existing pavement. Cut shall not exceed 225 square inches unless otherwise approved.
- Excavating the Test Hole utilizing the above-described equipment. The nominal diameter will not exceed 15 inches unless otherwise approved. Care will be taken to avoid damaging lines, wrappings, coatings, cathodic protection or other protective coverings and features. Hand digging will be conducted to the extent necessary to supplement the vacuum excavation process.
- Exposing the utility only to the extent required for identification and data collection purposes.
- Storing excavated material for re-use or disposal at an approved location near the project, as appropriate.

Data collected from the Test Hole will be recorded on a standard SAM, LLC *Test Hole Data Sheet* that will be subsequently sealed and dated. The location will be shown on the drawing. Data will include:

- Utility owner (if known)
- Top and/or bottom elevation of the utility relative to an above ground mark to a vertical accuracy of +/- 0.05 feet.
- Field sketch showing horizontal location referenced to a minimum of two physical structures existing in the field.
- Approximate centerline bearing of utility.
- Outside diameter of pipe, width of duct bank, and configuration of multi-conduit systems.
- Utility structure material composition, when reasonably ascertainable.



- Other pertinent information.

Site restoration will include:

- Replacing bedding material around exposed utility lines.
- Backfilling and compacting the excavation using a steel tamper bar in one-foot lifts.
- As applicable, providing permanent pavement restoration within the limits of the original cut using materials, compaction, and pavement thickness similar or equal to that found.
- For excavations in unpaved areas, restoring disturbed area, to the extent practical, to reflect pre-existing conditions.
- Furnishing and installing permanent surface marker (e.g., P.K. nail, peg, steel pin, or hub) directly above the centreline of the utility.
- Surveying the test hole marker.

The deliverable will include Test Hole Data Forms depicting found utility information in accordance with CI/ASCE Standard 38-02 complete with professional seal and signature. SAM will also update the existing CAD file with the test hole location(s).

3.0 Cost Proposal

SAM, LLC proposes to complete the above-described scope of services in accordance with the Standard Terms and Conditions included as **Attachment B** for the time and materials not to exceed cost of \$63,750. The cost breakdown is provided in **Table 1** below. If additional services are provided, the work will be billed in accordance with our standard rates.

Table 1
Cost Breakdown

Task	Cost
SUE QLA 15 test hole locations + Survey	\$49,750
SUE QLB + Survey of Attachments A, B & C	\$14,000
Total:	\$63,750

This cost estimate is based on our current understanding described in the project description, the scope of services, and the assumptions listed below. In the event these items change in the course of this project, the SAM project manager will be in touch concerning changes to the project cost and schedule.

4.0 Assumptions

Proposal

- This proposal is valid for a period of 90 days.

Required by Client

- Access



- Client will provide complete access to the project site between the hours of 7:00 a.m. and 5:30 p.m. This is inclusive of sidewalks in front of businesses and private residences and curbside parking on either side of the road.
- Notification and Coordination
 - Client will notify local property and or business owners of the work activities and schedule.
 - Client will facilitate coordination with the site owners to the extent required.
 - Client will secure permits from LCDOT, should any excavation require it.
 - Any permit fees for excavating within LCDOT jurisdiction, or any other entity, are not part of this scope
 - Specialized MOT for 5 days has been included in the fee, if required, additional cost beyond will be incurred by client.
- Records
 - To the extent available, client will provide copies of available records for existing facilities and improvements prior to commencement of work.
 - To the extent available, client will provide CAD file of all survey information including previously found utilities, topographic features and survey control prior to the commencement of work.
- Work Permits, Entry, and Training
 - Client will facilitate work, excavation permits and entry forms to the extent required by the project.
 - SAM does not anticipate working within railroad properties.
 - Project specific training will not be required.
 - Confined space entry is not required.
- Safety
 - Client will facilitate safe access for vehicles, equipment, and personnel.
- Surveyor
 - SAM, LLC personnel will survey our subsurface utility engineering markings. We cannot assume responsibility for errors or omissions should SAM not perform the survey of our marks if a third party surveyor is required by client. Exclusion from surveying and timely QC review from a third party surveyor may result less than desirable results.

Traffic Control

- Traffic control requiring lane closures, traffic detouring, flag persons, police, etc., is considered special traffic control and is not included in this scope of services. If special traffic control is required, SAM, LLC can provide this service utilizing a specialty subcontractor.



Weather:

- SAM will notify the client of snow cover or other issues that may impede or delay the investigation.

Quality Level B Services

- General Scope of Work:
 - Unless requested, utilities designated will not include: a) non-accessible empty conduits or empty utilities, b) vault or manhole limits/ dimensions, c) irrigation, fountain or sprinkler systems, d) underground storage tanks and associated piping/ wiring., e) traffic loop detectors, f) utility tunnels, g), railroad signalization, h) grounding grids, i) grease traps and associated piping, j) septic tanks and distribution boxes and k) drain fields or abandoned wells.
 - Utility depths are not obtained as part of Quality Level B reporting unless requested.
- Limits of Technology:
 - The scope of services is limited to the extent of the technology utilized. Non-metallic piping, inactive electric and/or communication lines may or may not be found. SAM will not be responsible for omission of utility information that is not obtainable via electromagnetic, sonic, or acoustical designating services.
 - The accuracy of subsurface data can be influenced by factors beyond our control such as conductivity of materials and their surroundings, soil moisture content, proximity of other underground utilities or structures, depth of utility, etc. Therefore, physical verification (through vacuum excavation or otherwise) is the only subsurface utility data that is collected to applicable engineering and/or surveying standards.
 - Other surface geophysical methods, such as terrain conductivity and point to source transmitters can be used, as appropriate. These techniques, although typically involving extra expense, can further refine the utility model. Generally, these extra refinements are not cost effective, and SAM, LLC will not apply these techniques without authorization of the client. However, SAM, LLC can recommend appropriate techniques on a case-by-case basis.
- Work Product/ Deliverables:
 - Record information utilized to create digital line work is placed in accordance with professional judgement as a best-fit alignment. In doing this, the owner should be aware of the inaccuracies that may accompany these decisions.
 - Paint markings placed on the ground by SAM are to be used for design purposes only and not for construction. The use of this information does not relieve any contractor or the Client from the duty to comply with applicable utility damage prevention laws and regulations, including, but not limited to, providing notification to utility owners or One-Call centers before excavation.



Quality Level A Services

- If the utilities are over 10 feet deep or a significant large gravel or caliche is encountered, non-destructive vacuum excavation techniques may be unsuccessful uncovering the utility. In such a case, the Test Hole results will be inconclusive.
- Every effort will be made to excavate the Test Hole over the utility. However, if multiple holes are required to identify its location, additional charges will be incurred.
- Client will coordinate access with property owners so that we may traverse across their land to reach test hole locations with our vac truck.
- SAM will utilize methods to minimally affect lawn while traversing across private property. Costs of materials and associated fees are not included in proposal total.
- Responsible measures will be employed to access test hole locations, however SAM will not be held liable for damages caused to property while performing QLA operations, outside of gross negligence.
- Multiple attempts to expose nontoneable utilities will incur additional charges should such attempts exceed the upper limit of fifteen (15) test holes.

5.0 Schedule of Services

Based on a written agreement and notice to proceed, we will mobilize within 15 business days working 7:00 a.m. to 5:30 p.m. Monday - Friday pending no weather delays or conditions beyond our control. SAM, LLC will submit the deliverable drawings and CAD file within fifteen (15) business days upon the final collection of field data. Weather will be paramount to the success of a geophysical investigation and changing weather conditions may elongate the schedule of services. The project manager for SAM will keep the client apprised of the progress and any delays that occur.



ATTACHMENT B

SITE MAP





ATTACHMENT C SITE MAP





ATTACHMENT D STANDARD TERMS AND CONDITION

STANDARD TERMS AND CONDITIONS

1. Access To Site - Unless otherwise stated, SAM, LLC will have access to the site for activities necessary for the performance of the services. SAM, LLC will take precautions to minimize damage due to these activities, but has not included in the fee the cost of restoration of any resulting damage.
2. Ownership Of Documents - Client acknowledges that all original papers, documents, maps, surveys, digital data and other work product and copies thereof, produced by SAM, LLC pursuant to this Agreement shall remain the property of SAM, LLC, except documents which are to be filed with public agencies. Client further acknowledges that Client's right to utilize the services and work product performed pursuant to this agreement will continue only so long as Client is not in default pursuant to the terms and conditions of this Agreement and Client has performed all obligations under this Agreement.
3. Copyright - The parties agree that all protections of the United States and Texas copyright laws shall be applicable to the work product to the benefit of SAM, LLC, including common law and statutory law, whether or not any copyright for such work product actually is registered, and without regard to whether or not such copyright actually applies to such work product.
4. Invoices - Invoices for fees and all other charges will be submitted monthly for all services rendered as the work progresses, and the net amount shall be due and payable as of the date of the invoice at SAM, LLC's office in Austin, Travis County, Texas.
5. Client's obligation to pay - Client's obligation to pay is solely that of Client, and the acts or omissions of any third party shall not affect that obligation. All sums due and not received shall be construed as past due. To cover the costs of collection, all past-due amounts will incur a late charge of one and one-half percent (1 ½ %) per month until paid. The Client shall pay any attorney's fees or court costs incurred in collecting any past-due amount. In the event that Client fails to pay SAM, LLC within thirty (30) days after invoices are rendered, then Client agrees that SAM, LLC shall have the right to stop or suspend work and consider the non-payment as grounds for a total breach of this Agreement.
6. Termination Of Services - This Agreement may be terminated by either party upon five (5) days' written notice, by mutual consent or in the event of persistent failures of performance of material terms and conditions of this Agreement by the other party through no fault of the terminating party. SAM, LLC shall then be paid for the services completed up to the time of the termination date based upon the attached Rate Schedule.
7. Dispute Resolution - Claims or disputes in connection with the services provided under this agreement between Client and SAM, LLC shall be submitted to non-binding mediation. Client and SAM, LLC agree to include a similar mediation agreement with all contractors, subcontractors, subconsultants, suppliers and fabricators, thereby providing for mediation as the primary method for dispute resolution between all parties.
8. Governing Law - This Agreement shall be construed and enforced in accordance with the laws of Texas.
9. Indemnification - The Client shall, to the fullest extent permitted by law, indemnify and hold harmless SAM, LLC, its officers, directors, employees, agents and subconsultants from and against all damage,

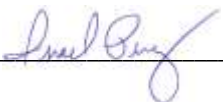


liability and cost, including reasonable attorney's fees and defense costs, arising out of or in any way connected with the performance by any of the parties above named of the services under this agreement, excepting only those damages, liabilities or costs attributable to the sole negligence or willful misconduct of SAM, LLC

10. Limitation Of Liability - In recognition of the relative risks, rewards and benefits of the project to both the Client and SAM, LLC, the risks have been allocated such that the Client agrees that, to the fullest extent permitted by law, total liability to the Client for any and all injuries, claims, losses, expenses, damages or claim expenses arising out of this agreement from any cause or causes shall not exceed the total fee paid by the Client to SAM, LLC, excluding any sales tax, for the services rendered. Such causes include, but are not limited to, SAM, LLC's negligence, errors, omissions, strict liability, breach of contract or breach of warranty.
11. Authority - Client affirmatively represents and states that he/she is authorized to enter into this Agreement, either as the owner or an officer of V3 Companies as Company's duly authorized agent, trustee or receiver for the purpose of entering into this Agreement.
12. Professional Services - All surveying services are regulated under the Illinois Department of Financial and Professional Regulation.
13. Use of Work Product - SAM, LLC acknowledges that client is requesting services to be performed under the applicable work order(s) for the purpose of providing such information to other parties including, but not limited to, clients, customers, governmental entities and other interested parties. Client agrees that the work product prepared by SAM, LLC may not be altered in any way except for the addition of page numbers or exhibit captions necessary to incorporate that work product into other documents. SAM, LLC agrees to provide copies of the work product mutually agreed upon by both parties described in the work orders hereof.

Surveying & Mapping, LLC

V3 Companies

Signature: 

Signature: _____

Printed Name: Israel Perez

Printed Name: Kurt Corrigan _____

Date: 4/19/22

Date: _____

Title: Project Manager

Title: _____

PROPOSAL FOR LAND ACQUISITION SERVICES

**Lake County Division of
Transportation**

V3 Companies



**Hainesville Road
from Washington Street
to Rollins Road**

**Santacruz Land
Acquisitions** 

222 Northfield Road · Suite 201
Northfield, IL 60093
www.santacruz-associates.com

Contact:
Javier Steve Santacruz
847-868-9620
javier@santacruz-associates.com

1

EXECUTIVE SUMMARY

Having extensive experience with right of way projects, we understand the importance of keeping on schedule. On-time lettings gives the Lake County Division of Transportation, the Local Public Agency (“LPA”) the best use of its resources and strengthens the efficiencies in the implementation of its roadway improvement program. To achieve your goals, it is critical that your land acquisition consultant understands the importance and addresses three critical issues in your acquisition of right of way:

- Deliver the right of way on-time to meet the letting
- Manage the acquisition risks, including the cost of condemnation litigation
- Compliance with land acquisition policies and procedures and FWHA policies that effect the certification and funding of your project.

CRITICAL ISSUE 1: DELIVER THE RIGHT-OF-WAY ON-TIME TO MEET LETTING

Delivery of right of way on-time keeps the project on its letting schedule. We understand that nothing is more important to the LPA. Santacruz Land Acquisitions knows delays can impact the project budget, cause scheduling conflicts with potential contractors and affect other economic factors which govern the delivery of the overall infrastructure improvement program for the LPA.

Santacruz Land Acquisitions (“**Santacruz**”) will work with the staff for the LPA and/or, V3 Companies, Engineer for the LPA, (“Consultant”) to develop a land acquisition plan for the reconstruction of Hainesville Road from Washington Street to Rollins Road (the “Project”) to assure that the goals are met.

Our solution is to assemble a team of industry leading right-of-way professionals that have years of experience working on land acquisition projects with the understanding of what needs to be done to complete an acquisition on time.

CRITICAL ISSUE 2: MANAGE THE RIGHT-OF-WAY PROCESS & RISKS

With over twenty-five years working on land acquisition projects, Santacruz Land Acquisitions understands the workload associated with this project and the level of performance the LPA is seeking with this engagement. As such, we have assembled a team of professionals with vast experience in delivering right-of-way services for IDOT, the Tollway and other such agencies on various infrastructure projects.

Equally important as the scheduled letting is the acquisition budget for the Project. Our team will suggest ways to minimize impacts and reduce costs in challenging acquisitions. We will also work with the LPA to minimize the condemnation referrals that impact the budget for this Project. At the same, our team will quickly identify parcels in the very beginning of the process that have title issues that can only be resolved through condemnation so that the team can develop strategies on moving the land acquisition process forward.

Your land acquisition consultant needs to have knowledge of the legal requirements necessary to position an agency for a successful acquisition of the right-of-way.

Our solution is to compile extensive experience in law, real estate and civil engineering which gives us the ability to recognize issues and resolve them before they create bigger problems. Santacruz has over 25 years of providing right-of-way services including managing land acquisition projects of various sizes.

CRITICAL ISSUE 3: COMPLIANCE WITH GOVERNMENT REGULATIONS

All land acquisition services must be performed in accordance with the Uniform Relocation Assistance and Real Property Act. In addition, we are familiar with IDOT's land acquisition guidelines, policies and procedures.

Our solution is to apply our team's extensive collective decades of experience complying with federal and state laws and maximizing the team's knowledge of the land acquisition policies of IDOT.

ADDITIONAL COMPONENT OF OUR PROPOSAL: BEP UTILIZATION

Santacruz is a BEP with Central Management Services, a DBE with IDOT and an MBE with Cook County and the City of Chicago.

WHY SANTACRUZ LAND ACQUISITIONS?

As you review our proposal, you will see that the team that Santacruz Land Acquisitions has assembled is versatile, experienced and qualified to deliver the full scope of the land acquisition needs for the LPA. What sets apart our team is:

- Years of successful on-time delivery of right of way land acquisition services to various other agencies
- Diverse set of real estate acquisition disciplines including backgrounds in law and civil engineering
- Extensive experience with complex valuations and acquisitions
- Title review experience, including familiarity with all types of recorded documents affecting real estate and knowledge on how to the clear title
- Experience in reviewing plats and legal descriptions, as well as an ability to review and understand roadway construction plans
- Expertise with the Uniform Relocation Assistance and Real Property Act of 1970, as amended (Uniform Act), Illinois Eminent Domain Act (735 ILCS 30), IDOT Land Acquisition Guidelines.
- Familiarity with IDOT policies and procedures related to land acquisition and appraisals.

SUMMARY

With a long history of successful delivery of a variety of right of way projects on-time, within budget and to our client's satisfaction, we look forward to the opportunity to assist the LPA with its land acquisition needs.

COMPENSATION

Santacruz shall be entitled to the compensation as shown on the attached schedule. Our cost proposal, based on **one hundred six (106)** projected parcels of right-of-way, is as follows:

<u>APPRAISALS:</u>	\$318,000.00.
<u>NEGOTIATIONS:</u>	\$318,000.00.

As directed, **Santacruz** shall invoice the LPA or Consultant for any fees and charges related to the acquisitions including, without limitation, (i) the cost of the later date title commitments, (ii) the cost of title insurance policies obtained on the parcels to be acquired, (iii) the cost of recording any necessary documents to complete the conveyance and obtain clear title, (iv) lender's fees related to the processing of any partial releases needed to provide clear title, and (v) land trustee processing fees. **Santacruz** shall include **\$750.00** per parcel for these charges. **Santacruz** shall pay any such fees and charges in excess of the **\$750.00** per parcel allowance for which Santacruz Land Acquisitions shall be entitled to additional compensation in the amount of any such payments pursuant to a separate work order issued.

Based on the projected total number of parcels of right-of-way to be acquired for the Project, the land acquisition negotiation services provided herein are offered at a cost not to exceed **\$715,500.00** as follows (per the pricing schedule in Exhibit 3.a.):

Land Acquisition Services	\$636,000.00
Estimated Direct Billable Expenses	\$79,500.00

2

TECHNICAL APPROACH

Santacruz shall provide Right-of-Way Acquisition Services including, but not limited to:

- Project Management
- Appraisals
- Acquisition negotiations and settlements

In addition, as may be required in order to complete the processing of any parcel and subject to the approval in advance by the LPA, **Santacruz** can also provide specialty engineering reports and relocation assistance of displaced property owners. All services shall be performed at the direction of the LPA and in accordance with the policies and procedures of IDOT, as applicable, the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (“Uniform Act”), as amended (49 CFR Part 24), the Illinois Eminent Domain Act (735 ILCS 30) (“Eminent Domain Act”), and the Illinois Code of Civil Procedure (“Code of Civil Procedure”).

Santacruz Land Acquisitions agrees to perform the services as set forth herein. **This process has been the roadmap to many successful right-of-way projects. This Road Map will help us help you keep your project on schedule.**

LAND ACQUISITION CRITICAL PATH STEPS – “OUR ROAD MAP”

Task 1: Notice to Proceed

Our services start after authorization to proceed from the LPA and IDOT (as may be necessary).

Task 2: Kick-off Meeting

Santacruz will meet with the LPA and/or Consultant to discuss the Project, identify issues and develop any necessary strategies to assure the timely completion of the Project.

Task 3: Delivery and Review of Project Information

The LPA or Consultant will provide **Santacruz** with plats of highway, legal descriptions, the most recent title commitments and any other pertinent information regarding the property owner for each parcel assigned for acquisition. In addition, the LPA or Consultant will also provide **Santacruz** with a set of project plans, including, (i) plan and profile, (ii) drainage and utilities, (iii) pavement markings and (iv) cross sections.

Task 4: Introductory Notice to Owners

The appraiser will notify the property owner of the proposed taking and will invite the property owner to be present during the inspection by the appraiser.

Task 5: Appraisal

The appraiser shall make a detailed inspection of the properties and make such investigations and studies as are consistent with industry standard and necessary to derive sound conclusions for the preparation of appraisal reports. All appraisal work shall be completed within eight to ten weeks after commencement.

The Appraiser shall assist in analyzing and responding to valuation information provided by a property owner in support of a counter-offer.

As necessitated by a change of ownership, a revision to the right of way or for condemnation purposes, **Santacruz** will furnish and deliver updated or revised appraisals. Such requests may be pursuant to a separate work order.

Task 6: Review Appraisal

All appraisals will be reviewed by the review appraiser assuring that all items affecting the value of the property have been considered in the appraisal.

As necessitated by a change of ownership, a revision to the right of way or for condemnation purposes, **Santacruz** will furnish and deliver updated or revised reviews. Such requests may be pursuant to a separate work order.

Task 7: Negotiation and Acquisition

Santacruz shall commence negotiations after approval by the LPA of the appraisals and the amount of just compensation to be offered to the property owner.

Before contacting the property owner, **Santacruz** will prepare and send the introductory letter to the property owner on the LPA's letterhead.

Santacruz will present the property owner with an offer package, which shall contain the Offer to Purchase and other documents to assist the property owner with reviewing the right-of-way request.

Santacruz will make all reasonable efforts to complete the acquisition of the right-of-way from the property owner.

Santacruz will not have any authority to determine administrative settlements. **Santacruz** will consult with the LPA for approval of any counter offers and upon acceptance by the LPA of any such counter-offer, **Santacruz** will prepare the necessary documentation for administrative settlement.

Santacruz will review the title commitment provided for each parcel to determine the liens and encumbrances that will need to be addressed in order to complete the acquisition process for the LPA.

If, during its discussions with the property owner, errors in the plans are discovered or the property owner requests design changes, **Santacruz** will immediately notify LPA or Consultant with this information. At any time during negotiations for situations involving design changes, errors in plans or for any other reason, if requested by LPA or Consultant, **Santacruz** will cease negotiations on certain parcels until corrected information or further instruction is provided to **Santacruz**.

Upon successful negotiations with the property owner, **Santacruz** will prepare all necessary conveyance documents in order to complete the acquisition and obtain title approval for the property. **Santacruz** will submit the completed parcel file with original conveyance documents, any documents necessary for title clearance, the Negotiator's Log documenting all negotiation activities, copies of all correspondence with the property owner, title commitments, plats, and all

Per Phone call 4/18/2022 with J.Santacruz this contract does not include review appraisals.

other documentation as required by the LPA and IDOT (as necessary).

Task 7: Project Management

Santacruz Land Acquisitions shall appoint a Project Manager for this project. The Project Manager will provide proposed project time-line with milestones on delivery. The Project Manager will coordinate all deliverables, keep project on schedule and maintain the channels of communication with the LPA.

The Project Manager will attend project kick-off meetings and project status meetings. In addition, when needed, the Project Manager will review construction plans and provide comments.

The Project Manager shall provide QA/QC oversight for this contract. Santacruz Land Acquisitions has a very strong commitment to QA/QC for all its projects. In addition to monthly status reports prepared for our clients in which we review the progress of each parcel, Santacruz Land Acquisitions meets on a bi-weekly basis with its production team to assure that projects are on schedule and proceeding to letting.

The paralegal team at Santacruz Land Acquisitions reviews every title commitment to alert the negotiator of title concerns and to prepare for title clearance. Also, all conveyance documents prepared by the paralegals are reviewed by the head paralegal and/or the negotiator. Finally, all final packages of settled or condemned parcels are compiled using QA/QC checklist and reviewed by the Project Manager to assure proper completion.

Condemnation Support

Santacruz understands that appearances in court and/or pretrial conferences, which may include depositions, and preparation for litigation or pre-trial conferences may be required by the LPA so that it may complete the acquisition of the property through condemnation.

In the event, after making every reasonable effort to contact and negotiate with a property owner,

Santacruz is unable to obtain a settlement for the acquisition of the right-of-way, **Santacruz** shall refer the parcel to the LPA for acquisition by condemnation.

In such case, at the request of the LPA or its trial counsel, the Appraiser assigned to appraise the parcel shall make any such appearances or complete such preparation work in order to assist with this process. In addition, at the request of the LPA or its trial counsel, the Negotiator assigned to negotiate the parcel shall make any such appearances or complete such preparation work in order to assist with this process. Such requests for trial appearances or condemnation support will be pursuant to a separate work order.

PERSONNEL

The experience and talent of the right of way professionals that make up the team for **Santacruz** will, to a large extent, be the basis for the success of keeping this Project on-time and within budget. **Santacruz** brings over twenty-five years of right of way acquisition experience. Santacruz has worked on thousands of acquisition parcels for ISTHA, IDOT, Cook, Kane, Lake, and Will Counties. We have also worked for numerous township and municipalities. **Santacruz** has years of experience handling some of the most complex land acquisition transactions.

The **Santacruz** staff includes two negotiators and two paralegals with years of experience in acquiring a variety of right-of-way parcels.

PRIOR EXPERIENCE

Santacruz Land Acquisitions was founded in 1992 and has grown to be one of the most dependable right-of-way negotiation firms in Illinois. **Santacruz** has been providing comprehensive right-of-way solutions, including negotiation activities and the coordination of the valuations of parcels for various public agencies.

3

EXHIBITS

- a. Pricing Schedule

Compensation for Services

Appraisal Services (per parcel)

Appraisals	\$3,000.00
Revision to appraisal due to change in ROW or plans ¹	\$1,500.00 - \$3,000.00

Negotiation Services (per parcel)

Negotiation and acquisition services for Right of Way including, without limitation, documentation of conveyance of property interest	\$3,000.00
Additional negotiations due to change in ownership or plans ¹	\$1,900.00 - \$3,000.00

Witness Services (if applicable)

Rate for each ½ day in pretrial conference or in court for Negotiator ¹	\$1,000.00
Rate for each ½ day in pretrial conference or in court for Appraiser ¹	\$1,000.00
Hourly rate for consultation not otherwise specifically provided for herein	\$250.00

Title Services (if applicable)

Later date commitment – In addition to actual recording costs + Administrative fee	\$25.00
Title insurance policies – In addition to actual recording costs + Administrative fee	\$25.00
Recording of Documents – In addition to actual recording costs + Administrative fee	\$25.00
Copies of recorded documents – In addition to actual copying costs & research fees + Administrative fee	\$25.00

¹ May requires supplemental work order.

**TESTING SERVICE CORPORATION**

Corporate Office

360 South Main Place, Carol Stream, IL 60188-2404
Phone 630.462.2600

January 28, 2022

Mr. Jacob Bauer, P.E.
V3 Companies, Ltd.
7325 Janes Avenue
Woodridge, IL 60517RE: P.N. 68,363
Geotechnical Exploration
Retaining Walls and Basins
Hainesville Road
Lake County, IL

Dear Mr. Bauer, P.E.:

Testing Service Corporation (TSC) is pleased to submit this proposal to provide Geotechnical Engineering Services for the above captioned project. It is in response to your email dated January 26, 2022. The objectives of the Geotechnical Study are to explore soil and groundwater conditions and provide recommendations for foundation design in connection with the four (4) proposed retaining walls and two (2) detention basins planned along Hainesville Road.

Boring Program:

As requested, thirty-four (34) soil borings are to be drilled as part of our Geotechnical Exploration. The retaining wall borings are to typically be extended 12½ to 15 feet below existing grade, with the borings on the north end to be extended 15 to 25 feet deep due to relatively soft and/or organic clay soils found as part of a previous investigation. The detention basin borings are to be extended 15 feet below existing grade. Total drilling footage on this basis is estimated to be about 550 lineal feet.

For the purposes of this proposal we have assumed that the boring locations will be accessible to a conventional truck or ATV mounted drill. In this regard, they should not be located in standing water, within wooded areas or on steeply sloping ground. No provisions have been made for tree/brush clearing or other obstruction removal should borehole access be impeded. Landscape restoration (if required) is also not included in the project budget.

Based on Google Earth some of the borings for the retaining walls may be located in wooded areas. The retaining wall borings will be adjusted in the field for drill rig access. In regard to the borings for the detention basins, a TSC representative will meet with the Client, Park District and/or golf course to determine where best to drill these borings. Tree/brush clearing may be performed by the Park District based on the site visit.

TSC will utilize personnel who are trained in layout procedures to stake the borings in the field. Ground surface elevations for each borehole will be determined by GPS using a Trimble R8s GNSS receiver. Utility clearance for the borings will be obtained by contacting JULIE (Joint Utility Locating Information for Excavators). Private underground utility lines will have to be marked by the property owner or their agents; a private locator can be hired for an added cost if necessary.

Soil samples will primarily be obtained by split-spoon methods, with thin-walled tubes also taken if conditions dictate. Sampling will be performed at 2½-foot intervals for at least the first 15 feet (and greater if fill or unsuitable soil types extend below that depth as well as in cut or detention areas), to otherwise not exceed 5-foot intervals. A representative portion of the split-spoon samples will be placed in a glass jar with screw-type lid for transportation to our laboratory. Groundwater observations will also be made during and following completion of drilling operations, with the boreholes to be backfilled immediately and any in pavement areas also patched at the surface.

TSC will attempt to minimize damage or ground disturbance (rutting, etc.) with the drill rig. However, ground disturbance is inevitable and should be expected if work is performed while the ground is soft.

Assumptions for Permits:

Hainesville Road is under the Lake County jurisdiction and will not require a permit. However, a preconstruction meeting will likely be required before the soil borings are staked and drilled.

Traffic Control:

Some of the soil borings for the retaining walls located along Hainesville Road may require lane closures. This proposal includes a provision for lane closures by a professional traffic control firm. If it is determined that traffic control is not needed you will not be charged for this service.

Please note that our cost estimate for this project is based on the assumption that TSC will be able to perform all borings and cores during weekdays (Monday through Friday) beginning no later than 9:00 AM and ending no sooner than 3:00 PM. A cost supplement to this proposal may be required if the LCDOT or IDOT imposes restricted hours (nights or weekends) to complete any of this work.

No traffic control is anticipated due to the borings being located in grass areas off the existing roadways. However, cones and signs may still be required.

Laboratory Testing:

Samples obtained from the borings will be examined by experienced laboratory personnel in order to verify field descriptions as well as to visually classify in accordance with the Unified Soil Classification System. Laboratory testing will include moisture content and dry unit weight determinations as well as measurements of unconfined compressive strength by direct or indirect methods, as appropriate. Other tests deemed to be necessary by TSC's Project Engineer may also be recommended for your approval.

Engineering Report:

A geotechnical engineering report will be prepared upon completion of field and laboratory testing, to include typed boring logs and a location plan. The report will provide a summary of soil and groundwater conditions as well as address their impact on the proposed site development. It will also provide recommendations to guide design and specification preparation pertaining to geotechnical issues relevant to the structure or purpose described in this proposal. These may include the following as applicable:

- General earthwork and construction considerations.
- Remedial work and/or treatment of unstable or unsuitable soil types.
- Fill placement and compaction requirements.

- Foundation type, capacity and depth/elevation.
- Anticipation and management of groundwater.

Fees and Scope:

In accordance with the Cost Estimate attached, TSC is proposing a not-to-exceed budget amount of **Thirty-Six Thousand Nine Hundred and Fifty Dollars (\$ 36,950.00)** to provide the Geotechnical Exploration outlined above. Our proposal is based on the understanding that the boring locations are accessible to conventional drilling equipment and the work can be performed during standard business hours. Our fee is further subject to this proposal being accepted by you on or before June 30, 2022.

Should the study reveal unexpected subsurface conditions requiring a change in the scope of work, you will be contacted before we proceed with any additional work. Our invoice would then be based on our standard unit rates given in the attached Cost Estimate or as otherwise agreed upon. While our quoted fee does not include earthwork, excavation, and/or footing observations during the construction phase, the project budget should include a provision for these services. Plan review, preconstruction meetings and/or other consulting and professional services that are provided subsequent to the delivery of TSC's report would be covered by separate invoice.

TSC's geotechnical investigation does not include services required to evaluate the likelihood of the site being contaminated by hazardous materials or other pollutants. Analytical testing which would be required in connection with IEPA Form LPC-663, Uncontaminated Soil Certification is also not included. Should environmental and/or analytical testing be desired, please contact the undersigned for additional details and/or associated costs.

Closure:

The geotechnical engineering services being performed are subject to TSC's attached General Conditions. TSC charges include all state and federal taxes that may be required. However, unless stated otherwise they do not include license, permit or bond fees that local governments may impose, if any to potentially be added to our invoice. The invoice will be sent to the following unless written instructions to the contrary are received:

Mr. Jacob Bauer, P.E.
V3 Companies, Ltd.
7325 Janes Avenue
Woodridge, IL 60517
Tel: (630) 724-9200
Email: jbauer@v3co.com

If this proposal meets with your approval, please indicate your acceptance by signing one copy and returning it to our Carol Stream, Illinois office. It would be helpful if you could also complete the attached Project Data form indicating who is to receive copies of TSC's report and other related information.

Your consideration of our proposal is appreciated. We look forward to being of service to you on this project.

Respectfully submitted,

TESTING SERVICE CORPORATION



Timothy R. Peceniak, P.E.
Geotechnical Engineer

Enc: Cost Estimate
General Conditions
Project Data Sheet

Approved and accepted for _____ by:

(NAME)

(TITLE)

(DATE)

COST ESTIMATE
Retaining Walls and Basins
Hainesville Road
Lake County, IL

ITEM		UNIT	QTY	RATE	COST
STAKING AND UTILITY CLEARANCE					
1.1	Layout Person to Mark Boring Locations, Obtain Surface Elevations and Arrange for Clearance of Underground Utilities	Hour	12.0	110.00	\$ 1,320.00
1.2	Utility Locator to Mark Private Underground Lines incl. Inside Existing Buildings	Cost + 10%	0	Est. 750.00	\$ 0.00
1.3	Couty Permit, Bond and Other Direct Charges	Estimated Cost	0	1,000.00	\$ 0.00
1.4	Engineer to Prepare and Submit Permit	Lump Sum	0	450.00	\$ 0.00
DRILLING AND SAMPLING					
2.1	Drill Mounted on Truck or ATV with Two-Person Crew (Portal-to-Portal)	Day	5	3,600.00	\$ 18,000.00
TRAFFIC CONTROL (for Soil Borings and Pavement Cores)					
3.1	2-Man Flagging Crew, Regular Time (Portal to Portal)	Hour	24	300.00	\$ 7,200.00
3.2	2-Man Flagging Crew, Overtime	Hour	3	370.00	\$ 1,110.00
3.3	TSC Pickup, Arrowboard and/or cones	Day	0	125.00	\$ 0.00
LABORATORY TESTING					
3.1	Examine Samples to Describe by Textural System and Classify Using the Unified Soil Classification System	Each	220	4.00	\$ 880.00
3.2	Water Content Determination (Includes Pocket Penetrometer Reading on Cohesive Samples)	Each	210	8.00	\$ 1,680.00
3.3	Unconfined Compressive Strength of Cohesive Soils or Torvane Shear Strength Measurement	Each	40	16.00	\$ 640.00
3.4	Dry Unit Weight Determination	Each	15	8.00	\$ 120.00
ENGINEERING SERVICES					
5.1	Prepare Geotechnical Report with Typed Boring Logs and Location Plan	Lump Sum	1	6,000.00	\$ 6,000.00
5.2	Senior Geotechnical Engineer to Consult or Attend Project Meetings	Hour	0.0	200.00	\$ 0.00
ESTIMATED TOTAL					\$ 36,950.00
RECOMMENDED BUDGET					\$ 36,950.00



TESTING SERVICE CORPORATION

GENERAL CONDITIONS

Geotechnical and Construction Services

1. PARTIES AND SCOPE OF WORK: If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Unless otherwise expressly assumed in writing, TSC's services are provided exclusively for client. TSC shall have no duty or obligation other than those duties and obligations expressly set forth in this Agreement. TSC shall have no duty to any third party. Client shall communicate these General Conditions to each and every party to whom the Client transmits any report prepared by TSC. Ordering services from TSC shall constitute acceptance of TSC's proposal and these General Conditions.

2. SCHEDULING OF SERVICES: The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.

3. ACCESS TO SITE: TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.

4. CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this Agreement. Unless otherwise agreed in writing, TSC's responsibility with respect to underground utility locations is to contact the Illinois Joint Utility Locating Information for Excavators for the location of public, but not private, utilities.

5. DISCOVERY OF POLLUTANTS: TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C. § 6901, et, seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.

6. MONITORING: If this Agreement includes testing construction materials or observing any aspect of construction of improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to

perform same shall not in any way operate or excuse any contractor from the performance of its work in accordance with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

7. DOCUMENTS AND SAMPLES: Client is granted an exclusive license to use findings and reports prepared and issued by TSC and any sub-consultants pursuant to this Agreement for the purpose set forth in TSC's proposal provided that TSC has received payment in full for its services. TSC and, if applicable, its sub-consultant, retain all copyright and ownership interests in the reports, boring logs, maps, field data, field notes, laboratory test data and similar documents, and the ownership and freedom to use all data generated by it for any purpose. Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.

8. TERMINATION: TSC's obligation to provide services may be terminated by either party upon (7) seven days prior written notice. In the event of termination of TSC's services, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses. The terms and conditions of these General Conditions shall survive the termination of TSC's obligation to provide services.

9. PAYMENT: Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.

10. WARRANTY: TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.

11. INDEMNITY: Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.

12. SUBPOENAS: TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.

13. OTHER AGREEMENTS: TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence. These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.



TESTING SERVICE CORPORATION

General Information: _____

Project Name: _____

Project Address: _____

City/State/Zip: _____

County: _____

Project Manager: _____

Email: _____

Telephone: _____

Site Contact: _____

Email: _____

Telephone: _____

Send Invoice to: _____

Purchase Order Number: _____

Attention: _____

Company: _____

Address: _____

City/State/Zip: _____

Email: _____

Telephone: _____

Cell Phone: _____

IMPORTANT NOTES: _____

Completed by: _____

Signature: _____

Name: _____

Date: _____

Distribute Reports as Follows:

Name: _____

Company: _____

Address: _____

City/State/Zip: _____

Email: _____

Telephone: _____

Cell Phone: _____

Name: _____

Company: _____

Address: _____

City/State/Zip: _____

Email: _____

Telephone: _____

Name: _____

Company: _____

Address: _____

City/State/Zip: _____

Email: _____

Telephone: _____

Name: _____

Company: _____

Address: _____

City/State/Zip: _____

Email: _____

Telephone: _____

Exhibit B

Project Schedule

Lake County - Division of Transportation

Exhibit B

Section No. 19-00072-14-WR - Hainesville Road - Washington Street to Rollins Road

Project Schedule - Phase II Engineering

[illegible]

Exhibit C

Cost Estimate of Consultant Services Worksheet



EXHIBIT C
COST ESTIMATE OF CONSULTANT SERVICES WORKSHEET
FIXED RAISE

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

19-00072-14-WR

Consultant (Firm) Name

V3 Companies, Ltd.

Prepared By

KRC

Date

4/15/2022

PAYROLL ESCALATION TABLE

CONTRACT TERM	18
START DATE	6/1/2022
RAISE DATE	1/1/2023

MONTHS

OVERHEAD RATE	159.00%
COMPLEXITY FACTOR	0
% OF RAISE	2.00%

END DATE 11/30/2023

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	6/1/2022	1/1/2023	7	38.89%
1	1/2/2023	12/1/2023	11	62.33%

The total escalation = 1.22%

BLR 05514 (Rev. 04/30/21)
Subconsultants

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	19-00072-14-WR

MAXIMUM PAYROLL RATE

ESCALATION FACTOR

PAYROLL RATES

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Director	\$75.00	\$75.92
Principal	\$75.00	\$75.92
Senior Project Manager - Trans & Mun	\$75.00	\$75.92
Senior Project Manager - Constr Eng	\$71.55	\$72.42
Senior Project Manager - Wetland	\$66.26	\$67.07
Senior Project Manager - Survey	\$62.11	\$62.87
Senior Project Manager - Environmental	\$75.00	\$75.92
Project Manager - Environmental	\$47.84	\$48.42
Project Manager - Survey	\$43.58	\$44.11
Project Manager - Trans & Mun	\$63.74	\$64.52
Senior Project Engineer	\$54.45	\$55.12
Project Engineer II	\$49.17	\$49.77
Project Engineer I	\$44.88	\$45.43
Engineer III	\$38.43	\$38.90
Engineer II	\$37.37	\$37.83
Engineer I	\$34.23	\$34.65
Design Technician III	\$40.76	\$41.26
Project Scientist II	\$44.51	\$45.05
Project Scientist I	\$35.95	\$36.39
Scientist I	\$26.29	\$26.61
Survey Crew	\$31.23	\$31.62
Project Surveyor II	\$36.53	\$36.97
Project Surveyor I	\$26.08	\$26.40
Project Coordinator	\$22.61	\$22.89

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

[illegible]

0.00 BLR 05514 (Rev. 04/30/21)
Subconsultants

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

19-00072-14-WR

COST ESTIMATE WORKSHEET

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

OVERHEAD RATE 159.00%

COMPLEXITY FACTOR 0

TASK	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	DIRECT COSTS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
TOPOGRAPHIC SURVEY	196	6,100	9,700	897	2,013	0	18,710	0.73%
PRELIMINARY ENGINEERING REPORT APPROVAL	140	6,940	11,034	0	2,290	0	20,264	0.79%
GEOMETRIC UPDATES FOR PHASE II	247	12,100	19,239	0	3,993	0	35,332	1.38%
WETLAND PERMITTING, & MITIGATION	233	12,332	19,608	239	4,070	0	36,249	1.42%
SPECIAL WASTE ASSESSMENTS	198	7,182	11,419	34,299	2,370	0	55,270	2.17%
UTILITY COORDINATION & SUE LEVEL A/B	192	9,124	14,508	63,776	3,011	0	90,419	3.54%
LAND ACQUISITION SERVICES	1198	55,792	88,709	725,950	18,411	0	888,862	34.82%
GEOTECHNICAL ENGINEERING SERVICES	40	2,041	3,245	36,950	673	0	42,909	1.68%
HYDRAULIC MODELING AND IDNR & LCSMC PERMITTING	388	18,939	30,113	1,168	6,250	70,150	126,620	4.96%
CORRIDOR LANDSCAPE DESIGN PRELIMINARY DESIGN	204	9,770	15,534	120	3,224	0	28,648	1.12%
ROUND LAKE BEACH WATER AND SANITARY IMPROVEMENTS	592	26,739	42,514	58,299	8,824	0	136,376	5.34%
STRUCTURAL DESIGN AND CALCULATIONS	272	14,353	22,822	0	4,737	0	41,912	1.64%
PLANS, SPECIFICATIONS, AND ESTIMATES	6488	303,062	481,869	3,960	100,010	0	888,901	34.82%
PUBLIC OUTREACH	32	1,738	2,764	1,980	574	0	7,056	0.28%
AGENCY / COORDINATION MEETINGS	114	7,469	11,876	718	2,465	0	22,528	0.88%
QA/QC	148	10,527	16,738	2,970	3,474	0	33,709	1.32%
ADMINISTRATION / MANAGEMENT	204	12,407	19,728	0	4,094	0	36,229	1.42%
BID SUPPORT	44	2,619	4,165	60	864	0	7,708	0.30%
PHASE III SUPPORT/COORDINATION	200	11,899	18,920	60	3,927	0	34,806	1.36%
		-	-		-		-	
		-	-		-		-	
		-	-		-		-	
		-	-		-		-	
		-	-		-		-	
		-	-		-		-	
		-	-		-		-	
		-	-		-		-	
		-	-		-		-	
		-	-		-		-	
Subconsultant DL					0		-	
TOTALS	11130	531,133	844,505	931,446	175,274	70,150	2,552,508	100.00%

Local Public Agency

County

Section Number

Lake County Division of Transportation

Lake

19-00072-14-WR

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultants Services Worksheet Fixed Raise

SHEET 1 OF 4

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			TOPOGRAPHIC SURVEY			PRELIMINARY ENGINEERING REPORT APPROVAL			GEOMETRIC UPDATES FOR PHASE II			WETLAND PERMITTING, & MITIGATION			SPECIAL WASTE ASSESSMENTS		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Director	75.92	0.0																	
Principal	75.92	0.0																	
Senior Project Manager - Trans & Mun	75.92	705.0	6.33%	4.81				8	5.71%	4.34	13	5.26%	4.00						
Senior Project Manager - Constr Eng	72.42	0.0																	
Senior Project Manager - Wetland	67.07	78.0	0.70%	0.47										78	33.48%	22.45			
Senior Project Manager - Survey	62.87	8.0	0.07%	0.05	8	4.08%	2.57												
Senior Project Manager - Environmental	75.92	0.0																	
Project Manager - Environmental	48.42	112.0	1.01%	0.49													46	23.23%	11.25
Project Manager - Survey	44.11	16.0	0.14%	0.06															
Project Manager - Trans & Mun	64.52	1,836.0	16.50%	10.64				8	5.71%	3.69	37	14.98%	9.66						
Senior Project Engineer	55.12	1,624.0	14.59%	8.04				72	51.43%	28.35	62	25.10%	13.84						
Project Engineer II	49.77	25.0	0.22%	0.11										25	10.73%	5.34			
Project Engineer I	45.43	797.0	7.16%	3.25															
Engineer III	38.90	1,167.0	10.49%	4.08							111	44.94%	17.48						
Engineer II	37.83	1,692.0	15.20%	5.75				44	31.43%	11.89									
Engineer I	34.65	1,219.0	10.95%	3.80															
Design Technician III	41.26	725.0	6.51%	2.69							24	9.72%	4.01						
Project Scientist II	45.05	154.0	1.38%	0.62										130	55.79%	25.13	24	12.12%	5.46
Project Scientist I	36.39	53.0	0.48%	0.17													53	26.77%	9.74
Scientist I	26.61	0.0																	
Survey Crew	31.62	0.0																	
Project Surveyor II	36.97	542.0	4.87%	1.80	60	30.61%	11.32												
Project Surveyor I	26.40	353.0	3.17%	0.84	128	65.31%	17.24										65	32.83%	8.67
Project Coordinator	22.89	24.0	0.22%	0.05				8	5.71%	1.31							10	5.05%	1.16
		0.0																	
		0.0																	
		0.0																	
TOTALS		11130.0	100%	\$47.72	196.0	100.00%	\$31.12	140.0	100%	\$49.57	247.0	100%	\$48.99	233.0	100%	\$52.93	198.0	100%	\$36.27

Local Public Agency

County

Section Number

Lake County Division of Transportation

Lake

19-00072-14-WR

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

SHEET 2 OF 4

PAYROLL CLASSIFICATION	AVG HOURLY RATES	UTILITY COORDINATION & SUE LEVEL A/B			LAND ACQUISITION SERVICES			GEOTECHNICAL ENGINEERING SERVICES			HYDRAULIC MODELING AND IDNR & LCSMC PERMITTING			CORRIDOR LANDSCAPE DESIGN PRELIMINARY DESIGN			ROUND LAKE BEACH WATER AND SANITARY IMPROVEMENTS		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Director	75.92																		
Principal	75.92																		
Senior Project Manager - Trans & Mun	75.92	0			32	2.67%	2.03							10	4.90%	3.72	16	2.70%	2.05
Senior Project Manager - Constr Eng	72.42																		
Senior Project Manager - Wetland	67.07																		
Senior Project Manager - Survey	62.87																		
Senior Project Manager - Environmental	75.92																		
Project Manager - Environmental	48.42													66	32.35%	15.67			
Project Manager - Survey	44.11																		
Project Manager - Trans & Mun	64.52	42	21.88%	14.11	306	25.54%	16.48	12	30.00%	19.36	34	8.76%	5.65				78	13.18%	8.50
Senior Project Engineer	55.12	48	25.00%	13.78	106	8.85%	4.88	12	30.00%	16.54	194	50.00%	27.56				142	23.99%	13.22
Project Engineer II	49.77																		
Project Engineer I	45.43													128	62.75%	28.50			
Engineer III	38.90				159	13.27%	5.16										228	38.51%	14.98
Engineer II	37.83	96	50.00%	18.91				16	40.00%	15.13	160	41.24%	15.60						
Engineer I	34.65																		
Design Technician III	41.26				53	4.42%	1.83										28	4.73%	1.95
Project Scientist II	45.05																		
Project Scientist I	36.39																		
Scientist I	26.61																		
Survey Crew	31.62																		
Project Surveyor II	36.97				482	40.23%	14.88												
Project Surveyor I	26.40				60	5.01%	1.32										100	16.89%	4.46
Project Coordinator	22.89	6	3.13%	0.72															
TOTALS		192.0	100%	\$47.52	1198.0	100%	\$46.57	40.0	100%	\$51.02	388.0	100%	\$48.81	204.0	100%	\$47.89	592.0	100%	\$45.17

Local Public Agency

County

Section Number

Lake County Division of Transportation

Lake

19-00072-14-WR

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

SHEET 3 OF 4

PAYROLL CLASSIFICATION	AVG HOURLY RATES	STRUCTURAL DESIGN AND CALCULATIONS			PLANS, SPECIFICATIONS, AND ESTIMATES			PUBLIC OUTREACH			AGENCY / COORDINATION MEETINGS			QA/QC			ADMINISTRATION / MANAGEMENT		
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Director	75.92																		
Principal	75.92																		
Senior Project Manager - Trans & Mun	75.92	12	4.41%	3.35	351	5.41%	4.11				57	50.00%	37.96	104	70.27%	53.35	66	32.35%	24.56
Senior Project Manager - Constr Eng	72.42																		
Senior Project Manager - Wetland	67.07																		
Senior Project Manager - Survey	62.87																		
Senior Project Manager - Environmental	75.92																		
Project Manager - Environmental	48.42																		
Project Manager - Survey	44.11							16	50.00%	22.06									
Project Manager - Trans & Mun	64.52	60	22.06%	14.23	1073	16.54%	10.67	16	50.00%	32.26				22	14.86%	9.59	66	32.35%	20.87
Senior Project Engineer	55.12	116	42.65%	23.51	669	10.31%	5.68				57	50.00%	27.56	22	14.86%	8.19	24	11.76%	6.48
Project Engineer II	49.77																		
Project Engineer I	45.43				669	10.31%	4.68												
Engineer III	38.90				669	10.31%	4.01												
Engineer II	37.83	84	30.88%	11.68	1218	18.77%	7.10										48	23.53%	8.90
Engineer I	34.65				1219	18.79%	6.51												
Design Technician III	41.26				620	9.56%	3.94												
Project Scientist II	45.05																		
Project Scientist I	36.39																		
Scientist I	26.61																		
Survey Crew	31.62																		
Project Surveyor II	36.97																		
Project Surveyor I	26.40																		
Project Coordinator	22.89																		
TOTALS		272.0	100%	\$52.77	6488.0	100%	\$46.71	32.0	100%	\$54.32	114.0	100%	\$65.52	148.0	100%	\$71.13	204.0	100%	\$60.82

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

19-00072-14-WR

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

SHEET 4 OF 4

PAYROLL CLASSIFICATION	AVG HOURLY RATES	BID SUPPORT			PHASE III SUPPORT/COORDINATION														
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Director	75.92																		
Principal	75.92																		
Senior Project Manager - Trans & Mun	75.92	8	18.18%	13.80	28	14.00%	10.63												
Senior Project Manager - Constr Eng	72.42																		
Senior Project Manager - Wetland	67.07																		
Senior Project Manager - Survey	62.87																		
Senior Project Manager - Environmental	75.92																		
Project Manager - Environmental	48.42																		
Project Manager - Survey	44.11																		
Project Manager - Trans & Mun	64.52	14	31.82%	20.53	68	34.00%	21.94												
Senior Project Engineer	55.12	16	36.36%	20.04	84	42.00%	23.15												
Project Engineer II	49.77																		
Project Engineer I	45.43																		
Engineer III	38.90																		
Engineer II	37.83	6	13.64%	5.16	20	10.00%	3.78												
Engineer I	34.65																		
Design Technician III	41.26																		
Project Scientist II	45.05																		
Project Scientist I	36.39																		
Scientist I	26.61																		
Survey Crew	31.62																		
Project Surveyor II	36.97																		
Project Surveyor I	26.40																		
Project Coordinator	22.89																		
TOTALS		44.0	100%	\$59.53	200.0	100%	\$59.50	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00