



Using Federal Funds? ☐ Yes ☒ No Agreement For
MFT PE

Agreement Type
Original

LOCAL PUBLIC AGENCY

Local Public Agency	County	Section Number	Job Number
Lake County Division of Transportation	Lake	20-0099980-RS	
Project Number	Contact Name	Phone Number	Email
	Richard D. McMorris, P E.	(847) 377-7457	rmcmorris@lakecountyil.gov

SECTION PROVISIONS

Local Street/Road Name	Key Route	Length	Structure Number
Winchester Road Resurfacing		18480	
Location Termini			Add Location
IL Route 83 to IL Route 21			Remove Location

Project Description

Milling and Resurfacing of the roadway pavement.

See project scopes for additional information

Engineering Funding ☒ MFT/TBP ☐ State ☐ Other
Anticipated Construction Funding ☐ Federal ☒ MFT/TBP ☐ State ☒ Other
Resurfacing - MFT, Cty Bridge - Culvert

AGREEMENT FOR

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

CONSULTANT

Consultant (Firm) Name	Contact Name	Phone Number	Email
Bravo Company Engineering, Inc.	Joseph Kozial	(630) 702-9855	jkozial@bravocoeng.com
Address		City	State Zip Code
1111 Burlington Avenue, Suite 108G		Lisle	IL 60532

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: Direct Costs Check Sheet
- ☒ EXHIBIT D: Qualification Based Selection (QBS) Checklist
- ☐ EXHIBIT E: 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: Fixed

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

Subconsultants	TIN/FEIN/SS Number	Agreement Amount
-		
Subconsultant Total		
Prime Consultant Total		
Total for all work		

Add Subconsultant

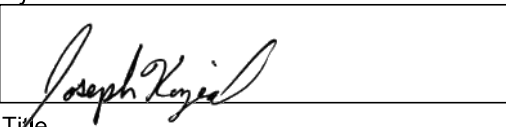
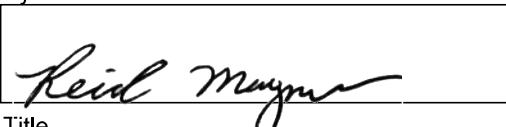
AGREEMENT SIGNATURES

Executed by the LPA:

Local Public Agency Type		Name of Local Public Agency	
Attest:	The	of	
By		Date	
Name of Local Public Agency		Local Public Agency Type	Title
		Clerk	

(SEAL)

Executed by the ENGINEER:

Consultant (Firm) Name	
Attest:	Bravo Company Engineering, Inc.
By	Date
	12/15/2021
Title	
President	
By	Date
	12/15/2021
Title	
Vice President	

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	20-00999-80-RS

**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

See Attached Scope of Services for each construction project.

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	20-00999-80-RS
EXHIBIT B PROJECT SCHEDULE		
See Attached		

Local Public Agency

County

Section Number

Lake County Division of Transportation

Lake

20-00999-80-RS

Exhibit C
Direct Costs Check Sheet

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.

Item	Allowable	Quantity	Contract Rate	Total
<input type="checkbox"/> Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual cost (Up to state rate maximum)			
<input type="checkbox"/> Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			
<input type="checkbox"/> Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			
<input checked="" type="checkbox"/> Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	7	\$45.00	\$315.00
<input type="checkbox"/> Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day			
<input type="checkbox"/> Vehicle Rental	Actual cost (Up to \$55/day)			
<input type="checkbox"/> Tolls	Actual cost			
<input type="checkbox"/> Parking	Actual cost			
<input type="checkbox"/> Overtime	Premium portion (Submit supporting documentation)			
<input type="checkbox"/> Shift Differential	Actual cost (Based on firm's policy)			
<input type="checkbox"/> Overnight Delivery/Postage/Courier Service	Actual cost (Submit supporting documentation)			
<input type="checkbox"/> Copies of Deliverables/Mylars (In-house)	Actual cost (Submit supporting documentation)			
<input type="checkbox"/> Copies of Deliverables/Mylars (Outside)	Actual cost (Submit supporting documentation)			
<input type="checkbox"/> Project Specific Insurance	Actual Cost			
<input type="checkbox"/> Monuments (Permanent)	Actual Cost			
<input type="checkbox"/> Photo Processing	Actual Cost			
<input type="checkbox"/> 2-Way Radio (Survey or Phase III Only)	Actual Cost			
<input type="checkbox"/> Telephone Usage (Traffic System Monitoring Only)	Actual Cost			
<input type="checkbox"/> CADD	Actual cost (Max \$15/hour)			
<input type="checkbox"/> Web Site	Actual cost (Submit supporting documentation)			
<input type="checkbox"/> Advertisements	Actual cost (Submit supporting documentation)			
<input type="checkbox"/> Public Meeting Facility Rental	Actual cost (Submit supporting documentation)			
<input type="checkbox"/> Public Meeting Exhibits/Renderings & Equipment	Actual cost (Submit supporting documentation)			
<input type="checkbox"/> Recording Fees	Actual Cost			
<input type="checkbox"/> Transcriptions (specific to project)	Actual Cost			
<input type="checkbox"/> Courthouse Fees	Actual Cost			
<input type="checkbox"/> Storm Sewer Cleaning and Televising	Actual cost (Requires 2-3 quotes with IDOT approval)			
<input type="checkbox"/> Traffic Control and Protection	Actual cost (Requires 2-3 quotes with IDOT approval)			
<input type="checkbox"/> Aerial Photography and Mapping	Actual cost (Requires 2-3 quotes with IDOT approval)			
<input type="checkbox"/> Utility Exploratory Trenching	Actual cost (Requires 2-3 quotes with IDOT approval)			
<input type="checkbox"/> Testing of Soil Samples	Actual Cost			
<input type="checkbox"/> Lab Services	Actual Cost (Provide breakdown of each cost)			
<input type="checkbox"/> Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
Total Direct Costs				\$315.00

Lake County Division of Transportation

Lake

20-00999-80-RS

Exhibit D
Qualification Based Selection (QBS) Checklist

The LPA must complete Exhibit D. If the value meets or will exceed the threshold in 50 ILCS 510, QBS requirements must be followed. Under the threshold, QBS requirements do not apply. The threshold is adjusted annually. If the value is under the threshold with federal funds being used, federal small purchase guidelines must be followed.

☐ Form Not Applicable (engineering services less than the threshold)

Items 1-13 are required when using federal funds and QBS process is applicable. Items 14-16 are required when using State funds and the QBS process is applicable.

		No	Yes								
1	Do the written QBS policies and procedures discuss the initial administration (procurement, management and administration) concerning engineering and design related consultant services?	<input type="checkbox"/>	<input type="checkbox"/>								
2	Do the written QBS policies and procedures follow the requirements as outlined in Section 5-5 and specifically Section 5-5.06 (e) of the BLRS Manual?	<input type="checkbox"/>	<input type="checkbox"/>								
3	Was the scope of services for this project clearly defined?	<input type="checkbox"/>	<input type="checkbox"/>								
4	Was public notice given for this project?	<input type="checkbox"/>	<input type="checkbox"/>								
5	Do the written QBS policies and procedures cover conflicts of interest?	<input type="checkbox"/>	<input type="checkbox"/>								
6	Do the written QBS policies and procedures use covered methods of verification for suspension and debarment?	<input type="checkbox"/>	<input type="checkbox"/>								
7	Do the written QBS policies and procedures discuss the methods of evaluation?	<input type="checkbox"/>	<input type="checkbox"/>								
Project Criteria		Weighting									
-											
Add											
8	Do the written QBS policies and procedures discuss the method of selection?	<input type="checkbox"/>	<input type="checkbox"/>								
Selection committee (titles) for this project											
<table border="1"> <thead> <tr> <th colspan="2">Top three consultants ranked for this project in order</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> </tr> <tr> <td>2</td> <td></td> </tr> <tr> <td>3</td> <td></td> </tr> </tbody> </table>				Top three consultants ranked for this project in order		1		2		3	
Top three consultants ranked for this project in order											
1											
2											
3											
9	Was an estimated cost of engineering for this project developed in-house prior to contract negotiation?	<input type="checkbox"/>	<input type="checkbox"/>								
10	Were negotiations for this project performed in accordance with federal requirements.	<input type="checkbox"/>	<input type="checkbox"/>								
11	Were acceptable costs for this project verified?	<input type="checkbox"/>	<input type="checkbox"/>								
12	Do the written QBS policies and procedures cover review and approving for payment, before forwarding the request for reimbursement to IDOT for further review and approval?	<input type="checkbox"/>	<input type="checkbox"/>								
13	Do the written QBS policies and procedures cover ongoing and finalizing administration of the project (monitoring, evaluation, closing-out a contract, records retention, responsibility, remedies to violations or breaches to a contract, and resolution of disputes)?	<input type="checkbox"/>	<input type="checkbox"/>								
14	QBS according to State requirements used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
15	Existing relationship used in lieu of QBS process?	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
16	LPA is a home rule community (Exempt from QBS).	<input checked="" type="checkbox"/>	<input type="checkbox"/>								

WINCHESTER ROAD RESURFACING and
CULVERT LINING PROJECTS

Summary of Engineering Costs
Bravo Company Engineering

East Section	\$299,036.07
West Section	\$129,940.00
Culvert Lining	<u>\$ 48,656.51</u>
Total Engineering	\$477,632.58

EXHIBIT A-1 SCOPE OF DESIGN ENGINEERING SERVICES

I. GENERAL INFORMATION

Bravo Company Engineering is a certified Veteran Owned Small Business (VOSB) that provides civil and transportation engineering consultant services and is prequalified to complete the required engineering tasks related to Phases I, II, and III. The company has staff with over 20 years of engineering experience in design and construction. Bravo Company has a record of project achievements, skillful guidance, and expertise; we have leadership with contagious energy. Be Know Do!

DESIGN TEAM ORGANIZATION CHART

VOSB Firm

Subconsultant Firm



II. PROJECT UNDERSTANDING AND APPROACH (WEST SECTION)

The Lake County Division of Transportation is seeking a firm that is knowledgeable and responsible for engineering services assigned to manage and prepare contract documents for the Winchester Road Resurfacing project. Bravo Company Engineering will serve as a liaison between the County, residents, and local partners to obtain the necessary approvals and permits for the resurfacing improvement plan with timely completion and commitments required to finalize the design process and bid this project in Early 2023.

Bravo Company Engineering understands that our role would include a thorough engineering evaluation of the project area, which includes approximately 18,480 feet

(3.5 mi) of roadway. The subject project area is depicted below and consists of Winchester Road from IL Route 83 to IL Route 21. Omissions from the resurfacing project limits include the US Route 45 concrete intersection, the through-lane paved limits at the Butterfield Road intersection, and the Metra railroad track section of pavement that was recently reconstructed west of the LCDOT campus.



Additionally, this project will address and include the following items of scope:

1. Traffic signal upgrades at Technology Way to replace loop detection with video detection.
2. Traffic signal UPS battery replacements at Midlothian Road, US Route 45, and Technology Way.
3. Guardrail removal and replacement to current standard (west of Midlothian Road along north side).
4. Replacement of ADA ramps to bring up to current standards of compliance.
 - i. Midlothian Road (signalized) at all four corners (7 ramps)
 - ii. Technology Way (signalized) at two corners (2 ramps)
 - iii. Winchester Court at two corners (2 ramps)
 - iv. Tiffany Lane at two corners (2 ramps)
 - v. Lucerne Lane at two corners (2 ramps)
 - vi. Loyola Drive / Windhaven Road at all four corners (6 ramps)
 - vii. Claridge Drive / Ashley Lane at all four corners (4 ramps)
 - viii. Sherborne Court at two corners (2 ramps)
 - ix. Wellington Avenue at two corners (3 ramps)
 - x. Jeremy Lane at two corners (2 ramps)



Having executed prior contracts with Lake County, Bravo Company Engineering understands that our roles would include a thorough engineering evaluation of the corridors with proximity to various neighborhoods and schools in the project area. We realize each of these locations poses its own unique design challenge, and all possible remedies will be thoroughly evaluated by Bravo Company Engineering. Generally, our technical review would entail a site inspection to document existing conditions, accessibility review, coordination with the County's various departments such as Traffic, Public Works, and PB&Z to acquire pertinent project information, and a code compliance check for both the County and external agencies items potentially affected by the proposed improvements. The most recent ADA and PROWAG Standards will be examined to provide the County with a compliant and thorough design.

Bravo Company Engineering will work closely with the Division and their staff to evaluate and gain a better understanding of the project scope and to further develop our project approach. All survey data has been completed and will be provided by the County, and the development of plans, specifications, and estimates for the advertisement,

bidding, and construction are to be completed by the Bravo design team and will be coordinated effectively with County staff to minimize revisions knowing that a change in the later stages of the project's review can delay or jeopardize a project's targeted completion date.

Equally important to the County's schedule to complete the design review is the budget. Our Project Manager routinely suggests ways to address impacts and resolve what may be challenging cost issues for local agency projects while working together with their staff. As such, our Project Manager and engineering team understand the obligations and requirements associated with an agency's desire to protect and rehabilitate infrastructure and pedestrian facilities; we possess that knowledge through extensive experience providing "real world solutions" in these matters.

III. SCOPE OF SERVICES

The Bravo Company Engineering team will prepare the contract plans and bidding documentation for the resurfacing of Winchester Road as well as coordinate to obtain the available site soils investigations with CCDD documentation (LPC-662/663 forms) and any necessary permitting that will be required by IDOT, SMC, the IEPA, and the Army Corps of Engineers. We will provide written records to document coordination efforts, always be available to interpret the plans, answer any questions throughout the design and construction phases, and assist the County with the bidding process and answering questions from Contractors. We recognize the number of schools in the project area and will be available to work with the School District and solve any issues that may arise; the School District's calendar year and schedule will be considered during construction to minimize disruption to school operations.

1. Early Coordination and Data Collection

- A. Initial Meetings with the Lake County Division of Transportation and SMC** – We will conduct initial meetings with the County staff involved with the project and SMC to discuss the project requirements, schedule, concerns, and coordination of the available data, records, and contract documents.
- B. Utility Company Coordination** – Bravo Company Engineering will submit to JULIE a Design Stage/Planning Information Request and indicate that we are in the design stage of the project. That information will be processed, and we will receive a list of affected member engineering contacts. BCE will send letters to the utility companies within the project limits requesting copies of their utility atlases, which will then be used to incorporate utility locations within our project base drawing.
- C. Clean Construction Demolition Debris (CCDD) Testing** – CCDD is uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, or reclaimed asphalt pavement generated from construction or demolition activities. This CCDD material may include small incidental quantities of soil that are commingled as part of the removal process. When uncontaminated soil is mixed with any of these materials, the uncontaminated soil is also considered CCDD. The BCE team and our environmental subconsultant Huff & Huff will complete the required documentation for off-site final disposition of spoils at a clean construction or demolition debris (CCDD) facility. This work includes providing sampling documentation to Thelen Materials to undertake their advance screening assessment procedures and secure approval and an authorization letter for disposal to be included within the project specification bid book.
- D. Ecological Compliance Assessment Tool** – Because this resurfacing project is using local funds, the biological and cultural clearances will not be obtained through IDOT. Therefore, coordination for FWS federal endangered species, the IDNR coordination through the submittal of the Ecological Compliance Assessment Tool, and the Illinois SHPO material submittals for review of the proposed project areas will be completed by the BCE team and our environmental subconsultant Huff & Huff. The Huff & Huff subconsultant proposal is included as an attachment with additional details about the scope of this effort.

2. Field Survey and Preparation of Base Drawings

Bravo Company Engineering will perform a field inspection to confirm conditions of survey completed by the County within the limits of the project, and we will make reasonable efforts to prepare construction drawings which minimize interference with existing utilities, infrastructure, and facilities in the construction area; we will depict on all appropriate documents the approximate position and type of each utility. After collecting and organizing the survey data and available imagery, Bravo Company Engineering will use the available data to develop base sheets for the design plan preparation.

3. Data Evaluation / Project Review

Bravo Company Engineering will review the field inspection and survey data, and further refine the proposed restoration scope.

4. Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost

Bravo Company Engineering will prepare and complete the contract documents in accordance with the applicable Lake County Division of Transportation policies and standards as set forth by the LCDOT Plan Preparation Guidelines (revised 3/10/17). The base sheets for use in the development of the construction documents shall be at an appropriate scale which can be printed to pdf for electronic distribution. We can provide initial submittals to the County and other invested parties to demonstrate progress and to ensure needs and desires are being addressed. Detailed quantity calculations will be developed based on the plans and the electronic base drawings to establish an engineer's estimate of cost. We can also meet periodically with the County to review design details and the project schedule and cost if desired. Our prefinal plans will address the below list of items:

A. Winchester Road Resurfacing

- i. IL Route 83 to Midlothian Road, mill 2.25" and resurface with a 0.75" poly. leveling binder and 1.5" hot-mix asphalt surface course.
 - o 900ft section from IL 83 to beginning project limits has not been surveyed and will be depicted within plan set based upon the aerial photography and previous plans.
- ii. Midlothian Road to US Route 45, mill 1.50" and resurface with a 1.5" hot-mix asphalt surface course.
 - o 1,200ft omission section at US Route 45 has not been surveyed and will be depicted within plan set based upon the aerial photography and previous plans.
- iii. US Route 45 to Metra railroad tracks, mill 2.25" and resurface with a 0.75" poly. leveling binder and 1.5" hot-mix asphalt surface course.
 - o 800ft omission section west of the Metra railroad tracks has not been surveyed and will be depicted within plan set based upon the aerial photography and previous plans.
- iv. Shoulder widening to a 4-ft paved shoulder within limits of the existing aggregate shoulder; to account for any elevation differences, up to 3" of aggregate shoulder top dressing will be provided as well as a 2-ft width of seeding (complete). In general, the shoulder widening will be restricted to rural cross section areas, no widening in existing curb and gutter sections, with the proposed paved shoulder widening to be depicted on the plan sheets. Our team will also investigate areas requiring curb and gutter removal and replacement (rehabilitation of the deteriorated sections).

B. Bull Creek Culvert Lining under Winchester Road (west of Metra railroad crossing) – This existing 107" x 171" structural plate culvert that is 76 feet in length, will be reviewed by GZA and Bravo to investigate further the culvert area and most viable rehabilitation option.

- i. Wetlands and Floodplains – A joint application to the IDNR and Army Corps of Engineers will be completed for the potential work within the floodplain and wetlands in the project area, and potential isolated wetland permitting procedures through LCSMC with Boundary Verifications and Preliminary Jurisdictional Determinations. Permitting applications, submittals, and coordination through GZA included within this scope of work.

C. ADA Pedestrian Crossing Improvements – Bravo Company Engineering will evaluate the existing ADA ramps and pedestrian crossings and redesign them to ensure ADA compliance; at a minimum, all detectable warnings will be replaced to install cast iron panels. Plan details providing proper ramp slopes and dimensions, side curbs, detectable warning panel layout/sizes/radii, and improved pedestrian push button access will be included. It is anticipated that the ten (10) fifteen (15) affected intersections will involve 32 52 ramp designs as detailed within the project understanding and approach.**5. Signalized Intersection Improvements – Bravo Company Engineering will include Standard Details and Pay Items for Traffic Signal Maintenance at the signalized intersections for traffic signal UPS battery replacements at Midlothian Road, US Route 45, and Technology Way. Upgrades at Technology Way will include replacement of loop detection with video detection.**

6. Final Plans, Special Provisions, and Engineer's Estimate of Cost

Bravo Company Engineering will submit the contract documents to the Lake County Division of Transportation for final plan review. If necessary, we will also meet with the County or any other agencies and utilities to discuss review comments or to resolve conflicts. Plans will be submitted in a printable pdf electronic format, as well as hard paper copies when requested, and the Engineer's Estimate of Cost will be submitted in Excel format (for both pre-final and final). A disposition of comments will be provided to address the LCDOT comments from the review submittal. Upon project completion, all CADD files will be provided to LCDOT.

7. Project Administration, Advertisement, Bid Coordination, Award Recommendation, Pre-Construction Assistance

After the completion of the County's final plan review, we will address comments received and bring resolution to any concerns. The bid contract plans, special provisions, and engineer's estimate of cost will be provided by Bravo Company Engineering.

8. Construction Engineering Services

Bravo Company Engineering will be available to answer any questions during construction, assist with issues such as addendums between plan posting and bid, and we will create new plan details and solutions for any unforeseen issues that may arise during construction. Our team recognizes communication is essential with residents, businesses, and schools in the area to ensure pedestrian safety and minimal impacts to the community and businesses operations.

IV. PROJECT SCHEDULE

A project schedule is a strategic and important tool for guiding a project successfully to its target letting date. Bravo Company Engineering's milestone schedule is a summary that allows the project team to review and identify all the significant and major project related milestones that are to be achieved during the project. Our milestones are significant events in the project usually marked by the completion of a major deliverable. A tentative schedule is as follows and will be adjusted based upon the County's input and permitting requirements.

- December 8, 2021 - Proposal Submittal
- December 15, 2021 - Final Proposal and Contract Submittal to LCDOT
- January 2022 - County Board Approval
- February 2022 - Notice to Proceed
- May 2022 - Final PS&E and Bid Advertisement
- June 2022 - Bid Opening
- August 2022- Start Construction

V. OTHER FACTORS

Bravo Company Engineering and our assembled team of engineers can meet this contract obligation with our current staff and have the knowledge and experience to perform the tasks assigned while also fulfilling the schedule required. Having a team with surveyors, engineers, technicians, and sub-consultants will ensure we can provide the proper staff when required. We can abide by the County's standard form agreement, and we have no conflicts of interest or other factors impacting the value and quality of our work.

Bravo Company Engineering and its team commit to making the necessary expertise and manpower available to meet the needs of this project. We are confident that our team has what it takes to produce a successful project and quality product that Elmhurst, our team, and the community can be proud of. Very fitting for this project is Bravo Company Engineering's philosophy mantra of

BE, KNOW, DO! Be the expert, Know the job, and Do the difficult!



Exhibit A-2 Preliminary Engineering

Route: Winchester Road Resurfacing Project
 Local Agency: Lake County Division of Transportation
 Section: 20-00999-80-RS
 Project: M-XXXX(XXX)
 Job No: D-XX-XX-XX

*Firm's **approved rates** on file with IDOT's
 Bureau of Accounting and Auditing:
 Overhead Rate (OH) **1.2**
 Complexity Factor (R) 0.000
 Calendar Days 360

Method of Compensation:

Cost Plus Fixed Fee 1 ☒ 14.5%[DL + R(DL) + OH(DL) + IHDC]
 Cost Plus Fixed Fee 2 ☐ 14.5%[DL + R(DL) + 1.5(DL) + IHDC]
 Cost Plus Fixed Fee 3 ☐ 14.5%[(2.3 + R)DL + IHDC]
 Specific Rate ☐
 Lump Sum ☐

See Exhibit A-1 for Scope of Services

See Exhibit A-3 for a detailed Workhour Estimate.

See Exhibit A-4 for detailed Services by Others and In-House Direct Costs.

Cost Estimate of Consultant's Services									
Element of Work	Employee Classification	Man-hours	Payroll Rate	Payroll Costs (DL)	Overhead*	In-House Direct Costs (IHDC)	Services by Others	Profit	Total
1 Early Coordination and Data Collection						\$ 65.00	\$ 56,616.00	\$ -	\$ 56,681.00
	Project Manager	8.0	\$ 60.00	\$ 480.00	\$ 576.00			\$ 153.12	\$ 1,209.12
	Engineer IV	32.0	\$ 50.00	\$ 1,600.00	\$ 1,920.00			\$ 510.40	\$ 4,030.40
\$68,258.32	Engineer III	34.0	\$ 46.00	\$ 1,564.00	\$ 1,876.80			\$ 498.92	\$ 3,939.72
	Engineer II	34.0	\$ 28.00	\$ 952.00	\$ 1,142.40			\$ 303.69	\$ 2,398.09
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
2 Field Survey and Preparation of Base Drawings						\$ -	\$ -	\$ -	\$ -
	Project Manager	2.0	\$ 60.00	\$ 120.00	\$ 144.00			\$ 38.28	\$ 302.28
	Engineer IV	48.0	\$ 50.00	\$ 2,400.00	\$ 2,880.00			\$ 765.60	\$ 6,045.60
\$22,147.05	Engineer III	112.0	\$ 46.00	\$ 5,152.00	\$ 6,182.40			\$ 1,643.49	\$ 12,977.89
	Engineer II	40.0	\$ 28.00	\$ 1,120.00	\$ 1,344.00			\$ 357.28	\$ 2,821.28
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
3 Data Evaluation / Project Review / Culvert Lining Treatment Determination						\$ 65.00	\$ -	\$ -	\$ 65.00
	Project Manager	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
	Engineer IV	12.0	\$ 50.00	\$ 600.00	\$ 720.00			\$ 191.40	\$ 1,511.40
\$4,276.77	Engineer III	16.0	\$ 46.00	\$ 736.00	\$ 883.20			\$ 234.78	\$ 1,853.98
	Engineer II	12.0	\$ 28.00	\$ 336.00	\$ 403.20			\$ 107.18	\$ 846.38
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
4 Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost						\$ 130.00	\$ 54,817.00	\$ -	\$ 54,947.00
	Project Manager	14.0	\$ 60.00	\$ 840.00	\$ 1,008.00			\$ 267.96	\$ 2,115.96
	Engineer IV	158.0	\$ 50.00	\$ 7,900.00	\$ 9,480.00			\$ 2,520.10	\$ 19,900.10
\$176,131.05	Engineer III	624.0	\$ 46.00	\$ 28,704.00	\$ 34,444.80			\$ 9,156.58	\$ 72,305.38
	Engineer II	368.0	\$ 28.00	\$ 10,304.00	\$ 12,364.80			\$ 3,286.98	\$ 25,955.78
	QA/QC Admin.	6.0	\$ 60.00	\$ 360.00	\$ 432.00			\$ 114.84	\$ 906.84
5 Final Plans, Special Provisions, and Engineer's Estimate of Cost						\$ -	\$ -	\$ -	\$ -
	Project Manager	4.0	\$ 60.00	\$ 240.00	\$ 288.00			\$ 76.56	\$ 604.56
	Engineer IV	32.0	\$ 50.00	\$ 1,600.00	\$ 1,920.00			\$ 510.40	\$ 4,030.40
\$15,234.91	Engineer III	72.0	\$ 46.00	\$ 3,312.00	\$ 3,974.40			\$ 1,056.53	\$ 8,342.93
	Engineer II	32.0	\$ 28.00	\$ 896.00	\$ 1,075.20			\$ 285.82	\$ 2,257.02
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
6 Project Admin., Advertisement, Bid Coord., Award Recommendation, Pre-Constr. Asst.				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Project Manager	12.0	\$ 60.00	\$ 720.00	\$ 864.00			\$ 229.68	\$ 1,813.68
\$9,562.12	Engineer IV	18.0	\$ 50.00	\$ 900.00	\$ 1,080.00			\$ 287.10	\$ 2,267.10
	Engineer III	40.0	\$ 46.00	\$ 1,840.00	\$ 2,208.00			\$ 586.96	\$ 4,634.96
	Engineer II	12.0	\$ 28.00	\$ 336.00	\$ 403.20			\$ 107.18	\$ 846.38
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
7 Construction Engineering Services				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Project Manager	4.0	\$ 60.00	\$ 240.00	\$ 288.00			\$ 76.56	\$ 604.56
\$3,425.84	Engineer IV	4.0	\$ 50.00	\$ 200.00	\$ 240.00			\$ 63.80	\$ 503.80
	Engineer III	20.0	\$ 46.00	\$ 920.00	\$ 1,104.00			\$ 293.48	\$ 2,317.48
	Engineer II	0.0	\$ 28.00	\$ -	\$ -			\$ -	\$ -
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
Totals		1,770.0		\$ 74,372.00	\$ 89,246.40	\$ 260.00	\$ 111,433.00	\$ 23,724.67	\$ 299,036.07



Exhibit A-3 Preliminary Engineering

Workhour Estimate								
Item No.	Task	Staff Classifications & Workhours					Total Workhours	% of Workhours
		Project Manager	Engineer IV	Engineer III	Engineer I	QA/QC Admin.		
Scope of Services								
1	Early Coordination and Data Collection							
	A. Initial Kick-Off Meeting with the LCDOT staff and SMC	2.0		2.0	4.0		8.0	7.4%
	B. Utility Coordination through JULIE and LCDOT Utilities Permit Coordinator	4.0		12.0	24.0		40.0	37.0%
	C. Evaluation of Project Wetland Report, Soil Borings, Permits, and EcoCAT	2.0	24.0	16.0	6.0		48.0	44.4%
	i. Clean Construction Demolition Debris (CCDD) Testing and Sampling		8.0	4.0			12.0	11.1%
	Item 1 Subtotal	8.0	32.0	34.0	34.0	0.0	108.0	100.0%
2	Field Survey and Preparation of Base Drawings							
	A. Field Review of Project with Photolog to Document Existing Conditions		16.0	16.0	24.0		56.0	27.7%
	B. Importing and Conversion of LCDOT Data to Develop Surface Models and Linework	2.0	8.0	40.0	16.0		66.0	32.7%
	C. Preparation of Base CADD File and Sheet Drawings with an Aerial Overlay		24.0	56.0			80.0	39.6%
	Item 2 Subtotal	2.0	48.0	112.0	40.0	0.0	202.0	100.0%
3	Data Evaluation / Project Review / Culvert Lining Treatment Determination							
	A. Review Field Inspection / Survey Data and Examine Noted-Problem-Culvert Areas		12.0	16.0	12.0		40.0	100.0%
	Item 3 Subtotal	0.0	12.0	16.0	12.0	0.0	40.0	100.0%
4	Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost							
	A. Plans							
	Title Sheet/Index of Sheets/State and LCDOT Standards (1 sheet)		2.0	4.0	6.0		12.0	1.0%
	General Notes and List of Commitments (2 sheets)		2.0	4.0	2.0		8.0	0.7%
	Summary of Quantities (2 sheets)		4.0	4.0	8.0		16.0	1.4%
	Schedule of Quantities (10 sheets)		4.0	20.0	16.0		40.0	3.4%
	Typical Roadway Sections (2 sheets)		8.0	16.0	12.0		36.0	3.1%
	Alignment, Ties, and Benchmarks (3 sheets)		2.0	24.0	32.0	2.0	60.0	5.1%
	Roadway Plan Sheets (removal/paving/stripping) - dual pane 1"=20' (33 sheets)	2.0	24.0	280.0	120.0		426.0	36.4%
	Erosion Control Plan (General notes and SMC typical notes) - 1"=20' (1 sheet)	2.0	6.0	12.0			20.0	1.7%
	Traffic Control Plan Sheets (TCP notes, no staging, typ. RWA signs) - dual pane 1"=100' (7 sheets)	2.0	6.0	40.0	24.0		72.0	6.2%
	ADA Pedestrian Crossing Improvements - 10 intersections with 32± Ramps (14 sheets)		40.0	120.0	60.0		220.0	18.8%
	Roadway Construction Details and LCDOT Std. Highway Details (22 sheets)		2.0	6.0	24.0		32.0	2.7%
	IDOT Bureau Of Design Stds. w/ BD's and TC's, and Std. Highway Details (added-to-SPs) (55 sheets)		2.0	6.0	32.0		40.0	3.4%
	B. Special Provisions	2.0	24.0	40.0			66.0	5.6%
	C. Quantity Calculations and Estimate of Cost	2.0	16.0	32.0	32.0		82.0	7.0%
	D. QA/QC Review	4.0	16.0	16.0		4.0	40.0	3.4%
	Item 4 Subtotal	14.0	158.0	624.0	368.0	6.0	1,170.0	100.0%
5	Final Plans, Special Provisions, and Engineer's Estimate of Cost							
	A. Final Contract Document Modifications (Plan, Special Provisions, Quantities)	4.0	32.0	72.0	32.0		140.0	100.0%
	→ includes a disposition of comments to address the review comments received						0.0	
	Item 5 Subtotal	4.0	32.0	72.0	32.0	0.0	140.0	100.0%
6	Project Admin., Advertisement, Bid Coord., Award Recommendation, Pre-Constr. Asst.							
	A. Project Administration (invoice preparation and job-file documentation)	8.0					8.0	9.8%
	B. McHenry-Lake County SWCD Permitting and WDP Through LCSMC with CW#1 Permit	2.0	16.0	24.0	12.0		54.0	65.9%
	C. IEPA and SWPPP Permitting and Documentation (NOI, NOT, ION, plus BDE 2343a and BC 2259)	2.0	2.0	16.0			20.0	24.4%
	D. CCDD Permitting and Documentation (coordination with Huff and Huff included with Item 1.C.i)						0.0	
	Item 6 Subtotal	12.0	18.0	40.0	12.0	0.0	82.0	100.0%
7	Construction Engineering Services							
	A. Project Administration, Pre-Construction Meeting Attendance, Project Coordination and QA/QC	4.0	4.0	20.0			28.0	100.0%
	→ includes assistance with any issues such as addendums between plan posting and bid, and we will create new plan details and solutions for any unforeseen issues that may arise during construction							
	B. Verify Construction Layout						0.0	
	C. Part-Time Construction Engineering Observation / Inspection						0.0	
	D. Traffic Control / Site Cleanliness Monitoring						0.0	
	E. Documentation						0.0	
	F. Weekly Progress Meetings, Stakeholder Coordination (with updates sent to County)						0.0	
	G. 24-hour Contact Information and Question Answering						0.0	
	H. Punchlist, Miscellaneous Items, and Final Inspection						0.0	
	I. Final Agreement to Quantities						0.0	
	J. Project Closing and Job Box Submittal						0.0	
	Item 7 Subtotal	4.0	4.0	20.0	0.0	0.0	28.0	100.0%
	Total Workhours:	44.0	304.0	918.0	498.0	6.0	1,770.0	
	% of Workhours:	2.5%	17.2%	51.9%	28.1%	0.3%	100.0%	



Exhibit A - 4 Preliminary Engineering

Services by Others and In-House Direct Costs			
Item No.	Task	In-House Direct Cost	Sub-Consultant Cost
1	Early Coordination and Data Collection		
	Vehicle: Kickoff Mtgs. - 2 trips @ vehicle 1/2 day (\$65.00 per day)	\$65.00	
	Sub-Consultant: Huff & Huff (Wetlands, Special Waste and CCDD Testing)		\$56,616.00
	Item 1 Subtotal	\$65.00	\$56,616.00
2	Field Survey and Preparation of Base Drawings		
	Item 2 Subtotal	\$0.00	\$0.00
3	Data Evaluation / Project Review / Culvert Lining Treatment Determination		
	Vehicle: Additional Mtgs. - 2 trips @ vehicle 1/2 day (\$65.00 per day)	\$65.00	
	Item 3 Subtotal	\$65.00	\$0.00
4	Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost		
	Vehicle: Truck (\$65.00 per day) Design Field Check and Submittal	\$130.00	
	Sub-Consultant: Lochner (Traffic Signal Modifications)		\$54,817.00
	Item 4 Subtotal	\$130.00	\$54,817.00
5	Final Plans, Special Provisions, and Engineer's Estimate of Cost		
	Item 5 Subtotal	\$0.00	\$0.00
	Total In-House Direct Costs:	\$260.00	-
	Total Subconsultant Costs:	-	\$111,433.00
	TOTAL IN-HOUSE DIRECT & SUBCONSULTANT COSTS:	\$111,693.00	

EXHIBIT A-1 SCOPE OF DESIGN ENGINEERING SERVICES

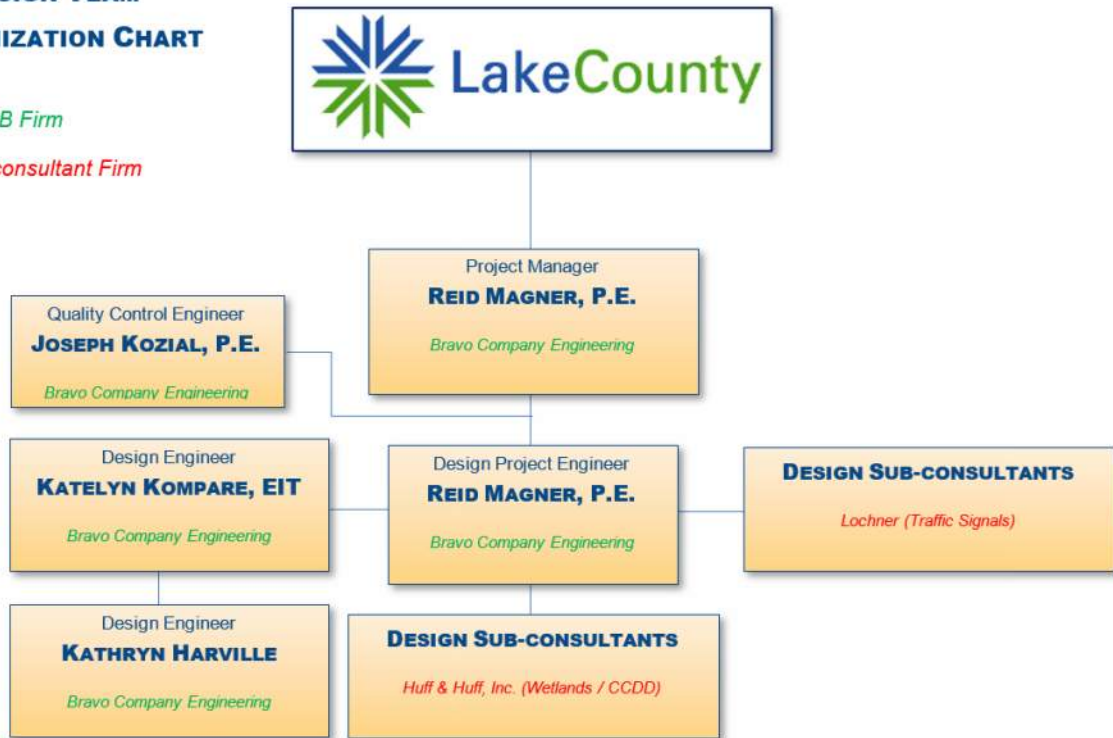
I. GENERAL INFORMATION

Bravo Company Engineering is a certified Veteran Owned Small Business (VOSB) that provides civil and transportation engineering consultant services and is prequalified to complete the required engineering tasks related to Phases I, II, and III. The company has staff with over 20 years of engineering experience in design and construction. Bravo Company has a record of project achievements, skillful guidance, and expertise; we have leadership with contagious energy. Be Know Do!

DESIGN TEAM ORGANIZATION CHART

VOSB Firm

Subconsultant Firm



II. PROJECT UNDERSTANDING AND APPROACH (EAST SECTION)

The Lake County Division of Transportation is seeking a firm that is knowledgeable and responsible for engineering services assigned to manage and prepare contract documents for the Winchester Road Resurfacing project. Bravo Company Engineering will serve as a liaison between the County, residents, and local partners to obtain the necessary approvals and permits for the resurfacing improvement plan with timely completion and commitments required to finalize the design process and bid this project in Early 2023.

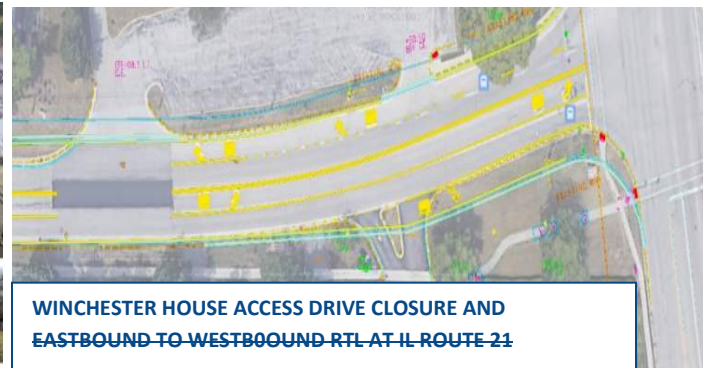
Bravo Company Engineering understands that our role would include a thorough engineering evaluation of the project area, which includes approximately 18,480 feet

(3.5 mi) of roadway. The subject project area is depicted below and consists of Winchester Road from IL Route 83 to IL Route 21. Omissions from the resurfacing project limits include the US Route 45 concrete intersection, the through-lane paved limits at the Butterfield Road intersection, and the Metra railroad track section of pavement that was recently reconstructed west of the LCDOT campus.



Additionally, this project will address and include the following items of scope:

1. A right turn lane, westbound from the former Winchester House, along the north side with removal of the two lot access drives, extending to connect with the existing right turn lane into the Division of Transportation access drive (East County Farm Road), including the sidewalk extension (PACE shelter to LCDOT visitor lot/mid-block crossing) with Level B SUE investigation of the potential duct within the graded embankment area.
2. Division of Transportation access drive (East County Farm Road) channelization and widening extending north from the Winchester Road intersection to accommodate exiting left and right turn lanes.
3. Replacement of ADA ramps to bring up to current standards of compliance.
 - i. Ellis Avenue at two corners (2 ramps)
 - ii. Division of Transportation mid-block crossing at both sides and west access drive (3 ramps)
 - iii. Division of Transportation access drive with channelization improvements extending north (6 ramps)
 - iv. Intersection of IL21, excluded because IDOT has a resurfacing project on IL21 scheduled for 2022.



Having executed prior contracts with Lake County, Bravo Company Engineering understands that our roles would include a thorough engineering evaluation of the corridors with proximity to various neighborhoods and schools in the project area. We realize each of these locations poses its own unique design challenge, and all possible remedies will be thoroughly evaluated by Bravo Company Engineering. Generally, our technical review would entail a site inspection to document existing conditions, accessibility review, coordination with the County's various departments such as Traffic, Public Works, and PB&Z to acquire pertinent project information, and a code compliance check for both the County and external agencies items potentially affected by the proposed improvements. The most recent ADA and PROWAG Standards will be examined to provide the County with a compliant and thorough design.

Bravo Company Engineering will work closely with the Division and their staff to evaluate and gain a better understanding of the project scope and to further develop our project approach. All survey data has been completed and will be provided by the County, and the development of plans, specifications, and estimates for the advertisement, bidding, and construction are to be completed by the Bravo design team and will be coordinated effectively with County staff to minimize revisions knowing that a change in the later stages of the project's review can delay or jeopardize a project's targeted completion date.

Equally important to the County's schedule to complete the design review is the budget. Our Project Manager routinely suggests ways to address impacts and resolve what may be challenging cost issues for local agency projects while working together with their staff. As such, our Project Manager and engineering team understand the obligations and requirements associated with an agency's desire to protect and rehabilitate infrastructure and pedestrian facilities; we possess that knowledge through extensive experience providing "real world solutions" in these matters.

III. SCOPE OF SERVICES

The Bravo Company Engineering team will prepare the contract plans and bidding documentation for the resurfacing of Winchester Road as well as coordinate to obtain the available site soils investigations with CCDD documentation (LPC-662/663 forms) and any necessary permitting that will be required by IDOT, SMC, the IEPA, and the Army Corps of Engineers. We will provide written records to document coordination efforts, always be available to interpret the plans, answer any questions throughout the design and construction phases, and assist the County with the bidding process and answering questions from Contractors. We recognize the number of schools in the project area and will be available to work with the School District and solve any issues that may arise; the School District's calendar year and schedule will be considered during construction to minimize disruption to school operations.

1. Early Coordination and Data Collection

- A. **Initial Meetings with the Lake County Division of Transportation and SMC** – We will conduct initial meetings with the County staff involved with the project and SMC to discuss the project requirements, schedule, concerns, and coordination of the available data, records, and contract documents.
- B. **Utility Company Coordination** – Bravo Company Engineering will submit to JULIE a Design Stage/Planning Information Request and indicate that we are in the design stage of the project. That information will be processed, and we will receive a list of affected member engineering contacts. BCE will send letters to the utility companies within the project limits requesting copies of their utility atlases, which will then be used to incorporate utility locations within our project base drawing. Includes a Level B SUE investigation.
- C. **Clean Construction Demolition Debris (CCDD) Testing** – **GZA work completed w/n west section.**
- D. **Ecological Compliance Assessment Tool** – **GZA work completed w/n west section.**

2. Field Survey and Preparation of Base Drawings

Bravo Company Engineering will perform a field inspection to confirm conditions of survey completed by the County within the limits of the project, and we will make reasonable efforts to prepare construction drawings which minimize interference with existing utilities, infrastructure, and facilities in the construction area; we will depict on all appropriate documents the approximate position and type of each utility. After collecting and organizing the survey data and available imagery, Bravo Company Engineering will use the available data to develop base sheets for the design plan preparation.

3. Data Evaluation / Project Review / ~~Culvert Lining Treatment Determination~~

Bravo Company Engineering will review the field inspection and survey data, further refine the proposed restoration scope, ~~and examine in depth the culvert problem areas noted by LCDOT. BCE will meet with the County to discuss the desired culvert improvements and determine the most suitable solutions together. Items to be discussed include, but are not limited to, an insertion liner, cured-in-place pipe (CIPP), and spray-on liner, or other alternative techniques that would not involve traffic impacts and similar detours to reconstruct the culvert (i.e., utility obstructions conflicts, drainage study, pedestrian accommodations, and analyzing shoulders to determine appropriate clear zones).~~

4. Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost

Bravo Company Engineering will prepare and complete the contract documents in accordance with the applicable Lake County Division of Transportation policies and standards as set forth by the LCDOT Plan Preparation Guidelines (revised 3/10/17). The base sheets for use in the development of the construction documents shall be at an appropriate scale which can be printed to pdf for electronic distribution. We can provide initial submittals to the County and other invested parties to demonstrate progress and to ensure needs and desires are being addressed.

Detailed quantity calculations will be developed based on the plans and the electronic base drawings to establish an engineer's estimate of cost. We can also meet periodically with the County to review design details and the project schedule and cost if desired. Our prefinal plans will address the below list of items:

A. Winchester Road Resurfacing - covered under west section scope of services

B. IL Route 21 and East County Farm Road Improvements

- i. US Route 45 to IL Route 21, mill 2.25" and resurface with a 0.75" poly. leveling binder and 1.5" hot-mix asphalt surface course.
 - o 800ft omission section at east of the Metra railroad tracks has not been surveyed and will be depicted within plan set based upon the aerial photography and previous plans.
- ii. A right turn lane, westbound from the former Winchester House, along the north side with removal of the two lot access drives, extending to connect with the existing right turn lane into the Division of Transportation access drive. Channelization and widening that extend north from the Winchester Road intersection to accommodate southbound exiting left and right turn lanes.
 - o The outside lane will initially be a through lane from IL21 morphing into a right turn lane at the County Farm entrance (similar to the south bound turn lane on St Mary's Road between IL176 and Rockland Road).
 - o Sidewalk will be extended along the back of curb from the IL21 to the midblock crossing west of County Farm. A shared use path (8ft wide) will be extended from the midblock crossing west to the associated County campus entrance and adjoining path termini. **Supplemental survey to be completed and provided by the LCDOT.**
 - o Redesigned to reflect current standards; a proposed sidewalk and shared use path at the back of curb with landscaping areas restored with 50-ft cross sections to depict areas of work, along the widening, sidewalk, and shared use path limits.

C. Bull Creek Culvert Lining under Winchester Road (west of Metra railroad crossing) – covered under the Culvert Lining scope of services

D. ADA Pedestrian Crossing Improvements – Bravo Company Engineering will evaluate the existing ADA ramps and pedestrian crossings and redesign them to ensure ADA compliance; at a minimum, all detectable warnings will be replaced to install cast iron panels. Plan details providing proper ramp slopes and dimensions, side curbs, detectable warning panel layout/sizes/radii, and improved pedestrian push button access will be included. It is anticipated that the three (3) ~~fifteen (15)~~ affected intersections will involve 11 ~~52~~ ramp designs as detailed within the project understanding and approach.

5. Final Plans, Special Provisions, and Engineer's Estimate of Cost

Bravo Company Engineering will submit the contract documents to the Lake County Division of Transportation for final plan review. If necessary, we will also meet with the County or any other agencies and utilities to discuss review comments or to resolve conflicts. Plans will be submitted in a printable pdf electronic format, as well as hard paper copies when requested, and the Engineer's Estimate of Cost will be submitted in Excel format (for both pre-final and final). A disposition of comments will be provided to address the LCDOT comments from the review submittal. Upon project completion, all CADD files will be provided to LCDOT.

6. Project Administration, Advertisement, Bid Coordination, Award Recommendation, Pre-Construction Assistance

After the completion of the County's final plan review, we will address comments received and bring resolution to any concerns. The bid contract plans, special provisions, and engineer's estimate of cost will be provided by Bravo Company Engineering.

7. Construction Engineering Services

Bravo Company Engineering will be available to answer any questions during construction, assist with issues such as addendums between plan posting and bid, and we will create new plan details and solutions for any unforeseen issues that may arise during construction. Our team recognizes communication is essential with residents, businesses, and schools in the area to ensure pedestrian safety and minimal impacts to the community and businesses operations.

IV. PROJECT SCHEDULE

A project schedule is a strategic and important tool for guiding a project successfully to its target letting date. Bravo Company Engineering's milestone schedule is a summary that allows the project team to review and identify all the significant and major project related milestones that are to be achieved during the project. Our milestones are significant events in the project usually marked by the completion of a major deliverable. A tentative schedule is as follows and will be adjusted based upon the County's input and permitting requirements.

- December 8, 2021 – Proposal Submittal
- December 15, 2021 – Final Proposal and Contract Submittal to LCDOT
- January 2022 - County Board Approval with Notice to Proceed
- February 2022 – Notice to Proceed
- December 2022 - Pre-Final PS&E Submittal for LCDOT Review and Comments
- February 2023 - Final PS&E Submittal
- February 2023 – Bid Advertisement
- February 2023 – Plans and Specifications Publication
- March 2023 – Bid Opening
- May 2023 – Begin Construction

V. OTHER FACTORS

Bravo Company Engineering and our assembled team of engineers can meet this contract obligation with our current staff and have the knowledge and experience to perform the tasks assigned while also fulfilling the schedule required. Having a team with surveyors, engineers, technicians, and sub-consultants will ensure we can provide the proper staff when required. We can abide by the County's standard form agreement, and we have no conflicts of interest or other factors impacting the value and quality of our work.

Bravo Company Engineering and its team commit to making the necessary expertise and manpower available to meet the needs of this project. We are confident that our team has what it takes to produce a successful project and quality product that Elmhurst, our team, and the community can be proud of. Very fitting for this project is Bravo Company Engineering's philosophy mantra of **BE, KNOW, DO!** Be the expert, Know the job, and Do the difficult!



Exhibit A-2 Preliminary Engineering

Route: Winchester Road Resurfacing Project
 Local Agency: Lake County Division of Transportation
 Section: 20-00999-80-RS
 Project: M-XXXX(XXX)
 Job No: D-XX-XX-XX

*Firm's **approved rates** on file with IDOT's
 Bureau of Accounting and Auditing:
 Overhead Rate (OH) **1.2**
 Complexity Factor (R) 0.000
 Calendar Days 360

Method of Compensation:

Cost Plus Fixed Fee 1 ☒ 14.5%[DL + R(DL) + OH(DL) + IHDC]
 Cost Plus Fixed Fee 2 ☐ 14.5%[DL + R(DL) + 1.5(DL) + IHDC]
 Cost Plus Fixed Fee 3 ☐ 14.5%[(2.3 + R)DL + IHDC]
 Specific Rate ☐
 Lump Sum ☐

See Exhibit A-1 for Scope of Services

See Exhibit A-3 for a detailed Workhour Estimate.

See Exhibit A-4 for detailed Services by Others and In-House Direct Costs.

Cost Estimate of Consultant's Services									
Element of Work	Employee Classification	Man-hours	Payroll Rate	Payroll Costs (DL)	Overhead*	In-House Direct Costs (IHDC)	Services by Others	Profit	Total
1 Early Coordination and Data Collection						\$ 8,565.00	\$ -	\$ -	\$ 8,565.00
	Project Manager	4.0	\$ 60.00	\$ 240.00	\$ 288.00			\$ 76.56	\$ 604.56
	Engineer IV	12.0	\$ 50.00	\$ 600.00	\$ 720.00			\$ 191.40	\$ 1,511.40
\$15,890.25	Engineer III	34.0	\$ 46.00	\$ 1,564.00	\$ 1,876.80			\$ 498.92	\$ 3,939.72
	Engineer II	18.0	\$ 28.00	\$ 504.00	\$ 604.80			\$ 160.78	\$ 1,269.58
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
2 Field Survey and Preparation of Base Drawings						\$ -	\$ -	\$ -	\$ -
	Project Manager	4.0	\$ 60.00	\$ 240.00	\$ 288.00			\$ 76.56	\$ 604.56
	Engineer IV	16.0	\$ 50.00	\$ 800.00	\$ 960.00			\$ 255.20	\$ 2,015.20
\$11,940.06	Engineer III	54.0	\$ 46.00	\$ 2,484.00	\$ 2,980.80			\$ 792.40	\$ 6,257.20
	Engineer II	22.0	\$ 28.00	\$ 616.00	\$ 739.20			\$ 196.50	\$ 1,551.70
	QA/QC Admin.	10.0	\$ 60.00	\$ 600.00	\$ 720.00			\$ 191.40	\$ 1,511.40
3 Data Evaluation / Project Review						\$ -	\$ -	\$ -	\$ -
	Project Manager	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
	Engineer IV	2.0	\$ 50.00	\$ 100.00	\$ 120.00			\$ 31.90	\$ 251.90
\$1,319.96	Engineer III	8.0	\$ 46.00	\$ 368.00	\$ 441.60			\$ 117.39	\$ 926.99
	Engineer II	2.0	\$ 28.00	\$ 56.00	\$ 67.20			\$ 17.86	\$ 141.06
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
4 Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost						\$ 65.00	\$ -	\$ -	\$ 65.00
	Project Manager	6.0	\$ 60.00	\$ 360.00	\$ 432.00			\$ 114.84	\$ 906.84
	Engineer IV	123.0	\$ 50.00	\$ 6,150.00	\$ 7,380.00			\$ 1,961.85	\$ 15,491.85
\$80,567.20	Engineer III	392.0	\$ 46.00	\$ 18,032.00	\$ 21,638.40			\$ 5,752.21	\$ 45,422.61
	Engineer II	252.0	\$ 28.00	\$ 7,056.00	\$ 8,467.20			\$ 2,250.86	\$ 17,774.06
	QA/QC Admin.	6.0	\$ 60.00	\$ 360.00	\$ 432.00			\$ 114.84	\$ 906.84
5 Final Plans, Special Provisions, and Engineer's Estimate of Cost						\$ -	\$ -	\$ -	\$ -
	Project Manager	4.0	\$ 60.00	\$ 240.00	\$ 288.00			\$ 76.56	\$ 604.56
	Engineer IV	16.0	\$ 50.00	\$ 800.00	\$ 960.00			\$ 255.20	\$ 2,015.20
\$10,801.47	Engineer III	56.0	\$ 46.00	\$ 2,576.00	\$ 3,091.20			\$ 821.74	\$ 6,488.94
	Engineer II	24.0	\$ 28.00	\$ 672.00	\$ 806.40			\$ 214.37	\$ 1,692.77
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
6 Project Admin., Advertisement, Bid Coord., Award Recommendation, Pre-Constr. Asst.				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Project Manager	12.0	\$ 60.00	\$ 720.00	\$ 864.00			\$ 229.68	\$ 1,813.68
\$6,922.21	Engineer IV	14.0	\$ 50.00	\$ 700.00	\$ 840.00			\$ 223.30	\$ 1,763.30
	Engineer III	24.0	\$ 46.00	\$ 1,104.00	\$ 1,324.80			\$ 352.18	\$ 2,780.98
	Engineer II	8.0	\$ 28.00	\$ 224.00	\$ 268.80			\$ 71.46	\$ 564.26
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
7 Construction Engineering Services				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Project Manager	4.0	\$ 60.00	\$ 240.00	\$ 288.00			\$ 76.56	\$ 604.56
\$2,498.85	Engineer IV	4.0	\$ 50.00	\$ 200.00	\$ 240.00			\$ 63.80	\$ 503.80
	Engineer III	12.0	\$ 46.00	\$ 552.00	\$ 662.40			\$ 176.09	\$ 1,390.49
	Engineer II	0.0	\$ 28.00	\$ -	\$ -			\$ -	\$ -
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
Totals		1,143.0		\$ 48,158.00	\$ 57,789.60	\$ 8,630.00	\$ -	\$ 15,362.40	\$ 129,940.00



Exhibit A-3 Preliminary Engineering

Workhour Estimate								
Item No.	Task	Staff Classifications & Workhours					Total Workhours	% of Workhours
		Project Manager	Engineer IV	Engineer III	Engineer I	QA/QC Admin.		
Scope of Services								
1	Early Coordination and Data Collection							
A.	Initial Kick-Off Meeting with the LCDOT staff and SMC						0.0	
B.	Utility Coordination through JULIE and LCDOT Utilities Permit Coordinator w/ Level B SUE	4.0	8.0	24.0	16.0		52.0	76.5%
C.	Evaluation of Project Wetland Report, Soil Borings, Permits, and EcoCAT (covered by west section)		2.0	4.0	2.0		8.0	11.8%
i.	Clean Construction Demolition Debris (CCDD) Testing and Sampling (covered by west section)		2.0	6.0			8.0	11.8%
Item 1 Subtotal		4.0	12.0	34.0	18.0	0.0	68.0	100.0%
2	Field Survey and Preparation of Base Drawings							
A.	Field Review of Project with Photolog to Document Existing Conditions		6.0	6.0	6.0		18.0	17.0%
B.	Importing and Conversion of LCDOT Data to Develop Surface Models and Linework	2.0	6.0	24.0	8.0		40.0	37.7%
C.	Preparation of Base CADD File and Sheet Drawings with an Aerial Overlay	2.0	4.0	24.0	8.0	10.0	48.0	45.3%
Item 2 Subtotal		4.0	16.0	54.0	22.0	10.0	106.0	100.0%
3	Data Evaluation / Project Review							
A.	Review Field Inspection / Survey Data and Examine Noted-Problem Culvert Areas		2.0	8.0	2.0		12.0	100.0%
Item 3 Subtotal		0.0	2.0	8.0	2.0	0.0	12.0	100.0%
4	Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost							
A.	Plans							
	Title Sheet/Index of Sheets/State and LCDOT Standards (1 sheet)		1.0	4.0	4.0		9.0	1.2%
	General Notes and List of Commitments (2 sheets)		1.0	2.0	2.0		5.0	0.6%
	Summary of Quantities (1 sheets)		2.0	6.0	4.0		12.0	1.5%
	Schedule of Quantities (6 sheets)		2.0	12.0	8.0		22.0	2.8%
	Typical Roadway Sections (2 sheets)		6.0	16.0	8.0		30.0	3.9%
	Alignment, Ties, and Benchmarks (1 sheets)		2.0	12.0	8.0	2.0	24.0	3.1%
	Roadway Plan Sheets (removal/paving/stripping) - dual pane 1"=20' (5 sheets)							
	→ Winchester Road (3 sheets)		3.0	32.0	12.0		47.0	6.0%
	→ County Farm Road (2 sheets)		2.0	24.0	12.0		38.0	4.9%
	Erosion Control Plan (General notes and SMC typical notes) - 1"=20' (1 sheet)		2.0	4.0	2.0		8.0	1.0%
	Traffic Control Plan Sheets (TCP notes, no staging, typ. RWA signs) - dual pane 1"=100' (1 sheets)		4.0	20.0	12.0		36.0	4.6%
	Cross Sections (roadway widening sections, 3/sht landscape) - 50ft and at Drwys (20 sheets)							
	→ Winchester Road (12 sheets)		12.0	80.0	48.0		140.0	18.0%
	→ County Farm Road (8 sheets)		6.0	32.0	20.0		58.0	7.4%
	ADA Pedestrian Crossing Improvements - 3 intersections with 11± Ramps (6 sheets)		24.0	56.0	32.0		112.0	14.4%
	Roadway Construction Details and LCDOT Std. Highway Details (22 sheets)		2.0	6.0	16.0		24.0	3.1%
	IDOT Bureau Of Design Stds. w/ BD's and TC's, and Std. Highway Details (added-to-SPs) (55 sheets)		2.0	6.0	24.0		32.0	4.1%
B.	Special Provisions	2.0	20.0	24.0	8.0		54.0	6.9%
C.	Quantity Calculations and Estimate of Cost	2.0	16.0	40.0	32.0	2.0	92.0	11.8%
D.	QA/QC Review	2.0	16.0	16.0		2.0	36.0	4.6%
Item 4 Subtotal		6.0	123.0	392.0	252.0	6.0	779.0	100.0%
5	Final Plans, Special Provisions, and Engineer's Estimate of Cost							
A.	Final Contract Document Modifications (Plan, Special Provisions, Quantities)	4.0	16.0	56.0	24.0		100.0	100.0%
	→ includes a disposition of comments to addresss the review comments received						0.0	
Item 5 Subtotal		4.0	16.0	56.0	24.0	0.0	100.0	100.0%
6	Project Admin., Advertisement, Bid Coord., Award Recommendation, Pre-Constr. Asst.							
A.	Project Administration (invoice preparation and job-file documentation)	8.0					8.0	13.8%
B.	McHenry-Lake County SWCD Permitting and WDP Through LCSMC with CW#1 Permit	2.0	12.0	16.0	8.0		38.0	65.5%
C.	IEPA and SWPPP Permitting and Documentation (NOI, NOT, ION, plus BDE 2343a and BC 2259)	2.0	2.0	8.0			12.0	20.7%
D.	CCDD Permitting and Documentation (coordination with Huff and Huff included with Item 1.C.i)						0.0	
Item 6 Subtotal		12.0	14.0	24.0	8.0	0.0	58.0	100.0%
7	Construction Engineering Services							
A.	Project Administration, Pre-Construction Meeting Attendance, Project Coordination and QA/QC	4.0	4.0	12.0			20.0	100.0%
	→ includes assistance with any issues such as addendums between plan posting and bid, and we will create new plan details and solutions for any unforeseen issues that may arise during construction							
B.	Verify Construction Layout						0.0	
C.	Part-Time Construction Engineering Observation / Inspection						0.0	
D.	Traffic Control / Site Cleanliness Monitoring						0.0	
E.	Documentation						0.0	
F.	Weekly Progress Meetings, Stakeholder Coordination (with updates sent to County)						0.0	
G.	24-hour Contact Information and Question Answering						0.0	
H.	Punchlist, Miscellaneous Items, and Final Inspection						0.0	
I.	Final Agreement to Quantities						0.0	
J.	Project Closing and Job Box Submittal						0.0	
Item 7 Subtotal		4.0	4.0	12.0	0.0	0.0	20.0	100.0%
Total Workhours:		34.0	187.0	580.0	326.0	16.0	1,143.0	
% of Workhours:		3.0%	16.4%	50.7%	28.5%	1.4%	100.0%	



Exhibit A - 4 Preliminary Engineering

Services by Others and In-House Direct Costs			
Item No.	Task	In-House Direct Cost	Sub-Consultant Cost
1	Early Coordination and Data Collection		
	Vehicle: Kickoff Mtgs. - 2 trips @ vehicle 1/2 day (\$65.00 per day)	\$65.00	
	SUE Level B: (direct cost based upon on-going contract work with Tollway) (does not include direct costs for potholing / non-destructive)	\$8,500.00	
	Sub-Consultant: Huff & Huff (Wetlands, Special Waste and CCDD Testing) (covered by scope within west contract)		
	Item 1 Subtotal	\$8,565.00	\$0.00
2	Field Survey and Preparation of Base Drawings		
	Item 2 Subtotal	\$0.00	\$0.00
3	Data Evaluation / Project Review		
	Item 3 Subtotal	\$0.00	\$0.00
4	Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost		
	Vehicle: Truck (\$65.00 per day) Design Field Check and Submittal	\$65.00	
	Sub-Consultant: Lochner (Traffic Signal Modifications) (covered by scope within west contract)		
	Item 4 Subtotal	\$65.00	\$0.00
5	Final Plans, Special Provisions, and Engineer's Estimate of Cost		
	Item 5 Subtotal	\$0.00	\$0.00
	Total In-House Direct Costs:	\$8,630.00	-
	Total Subconsultant Costs:	-	\$0.00
	TOTAL IN-HOUSE DIRECT & SUBCONSULTANT COSTS:	\$8,630.00	

EXHIBIT A-1 SCOPE OF DESIGN ENGINEERING SERVICES

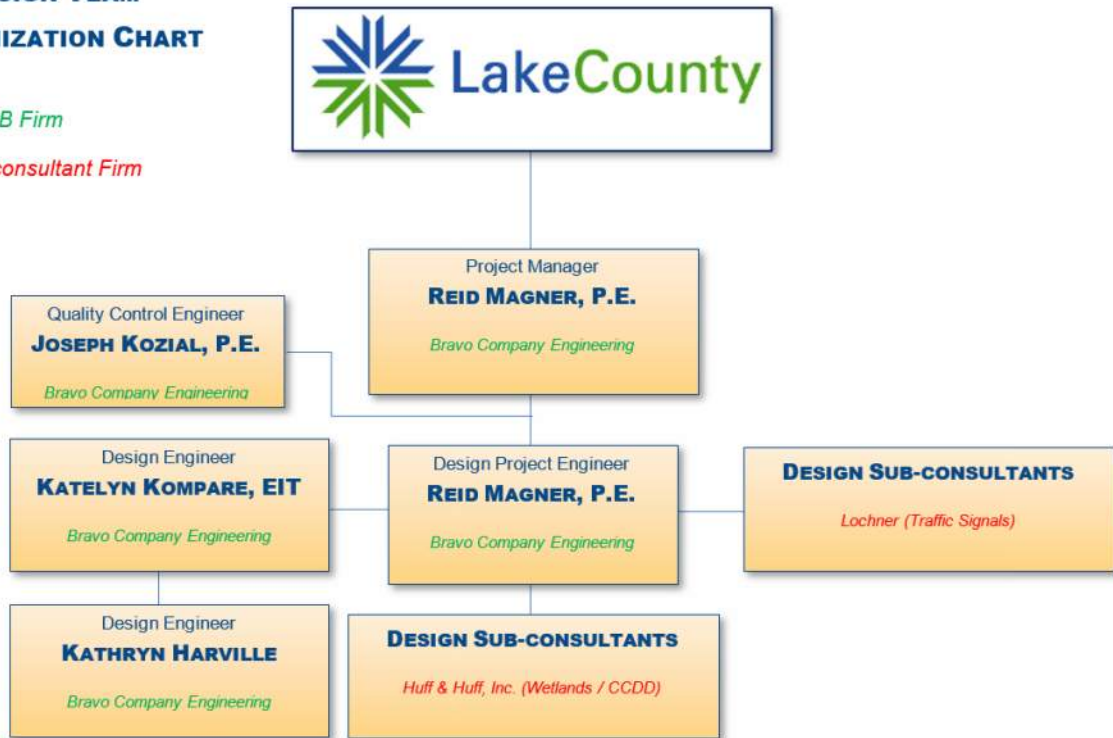
I. GENERAL INFORMATION

Bravo Company Engineering is a certified Veteran Owned Small Business (VOSB) that provides civil and transportation engineering consultant services and is prequalified to complete the required engineering tasks related to Phases I, II, and III. The company has staff with over 20 years of engineering experience in design and construction. Bravo Company has a record of project achievements, skillful guidance, and expertise; we have leadership with contagious energy. Be Know Do!

DESIGN TEAM ORGANIZATION CHART

VOSB Firm

Subconsultant Firm



II. PROJECT UNDERSTANDING AND APPROACH (CULVERT LINING)

The Lake County Division of Transportation is seeking a firm that is knowledgeable and responsible for engineering services assigned to manage and prepare contract documents for the Winchester Road Resurfacing project. Bravo Company Engineering will serve as a liaison between the County, residents, and local partners to obtain the necessary approvals and permits for the resurfacing improvement plan with timely completion and commitments required to finalize the design process and bid this project in Early 2023.

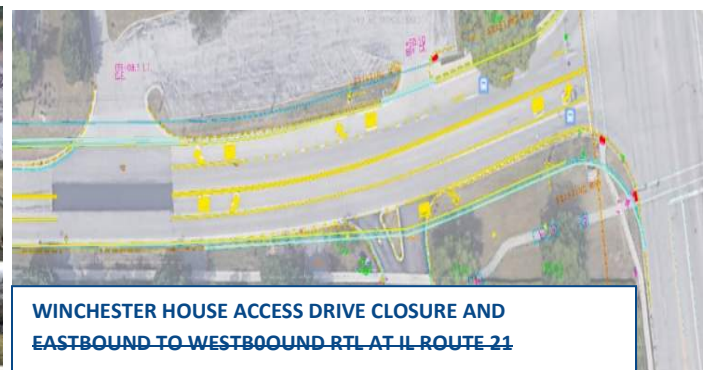
Bravo Company Engineering understands that our role would include a thorough engineering evaluation of the project area, which includes approximately 18,480 feet

(3.5 mi) of roadway. The subject project area is depicted below and consists of Winchester Road from IL Route 83 to IL Route 21. Omissions from the resurfacing project limits include the US Route 45 concrete intersection, the through-lane paved limits at the Butterfield Road intersection, and the Metra railroad track section of pavement that was recently reconstructed west of the LCDOT campus.



Additionally, this project will address and include the following items of scope:

1. A culvert lining for the Bull Creek crossing (either slip-lining or spray lining) with required permitting and coordination (IDNR, USACE, and SMC).



Having executed prior contracts with Lake County, Bravo Company Engineering understands that our roles would include a thorough engineering evaluation of the corridors with proximity to various neighborhoods and schools in the project area. We realize each of these locations poses its own unique design challenge, and all possible remedies will be thoroughly evaluated by Bravo Company Engineering. Generally, our technical review would entail a site inspection to document existing conditions, accessibility review, coordination with the County's various departments such as Traffic, Public Works, and PB&Z to acquire pertinent project information, and a code compliance check for both the County and external agencies items potentially affected by the proposed improvements. The most recent ADA and PROWAG Standards will be examined to provide the County with a compliant and thorough design.

Bravo Company Engineering will work closely with the Division and their staff to evaluate and gain a better understanding of the project scope and to further develop our project approach—We will coordinate with all necessary parties involved in the project such as the IDOT, the Army Corps of Engineers for floodplain work and potential wetland impacts, and SMC to discuss project goals and permitting for the Bull Creek culvert lining work. All survey data has been completed and will be provided by the County, and the development of plans, specifications, and estimates for the advertisement, bidding, and construction are to be completed by the Bravo design team and will be coordinated effectively with County staff to minimize revisions knowing that a change in the later stages of the project's review can delay or jeopardize a project's targeted completion date.

Equally important to the County's schedule to complete the design review is the budget. Our Project Manager routinely suggests ways to address impacts and resolve what may be challenging cost issues for local agency projects while working together with their staff. As such, our Project Manager and engineering team understand the obligations and

requirements associated with an agency's desire to protect and rehabilitate infrastructure and pedestrian facilities; we possess that knowledge through extensive experience providing "real world solutions" in these matters.

III. SCOPE OF SERVICES

The Bravo Company Engineering team will prepare the contract plans and bidding documentation for the resurfacing of Winchester Road as well as coordinate to obtain the available site soils investigations with CCDD documentation (LPC-662/663 forms) and any necessary permitting that will be required by IDOT, SMC, the IEPA, and the Army Corps of Engineers. We will provide written records to document coordination efforts, always be available to interpret the plans, answer any questions throughout the design and construction phases, and assist the County with the bidding process and answering questions from Contractors. We recognize the number of schools in the project area and will be available to work with the School District and solve any issues that may arise; the School District's calendar year and schedule will be considered during construction to minimize disruption to school operations.

1. Early Coordination and Data Collection

- A. Initial Meetings with the Lake County Division of Transportation and SMC** – We will conduct initial meetings with the County staff involved with the project and SMC to discuss the project requirements, schedule, concerns, and coordination of the available data, records, and contract documents.
- B. Utility Company Coordination** – Bravo Company Engineering will submit to JULIE a Design Stage/Planning Information Request and indicate that we are in the design stage of the project. That information will be processed, and we will receive a list of affected member engineering contacts. BCE will send letters to the utility companies within the project limits requesting copies of their utility atlases, which will then be used to incorporate utility locations within our project base drawing. Includes a Level B SUE investigation.
- C. Clean Construction Demolition Debris (CCDD) Testing** – **GZA work completed w/n west section.**
- D. Ecological Compliance Assessment Tool** – **GZA work completed w/n west section.**

2. Field Survey and Preparation of Base Drawings

Bravo Company Engineering will perform a field inspection to confirm conditions of survey completed by the County within the limits of the project, and we will make reasonable efforts to prepare construction drawings which minimize interference with existing utilities, infrastructure, and facilities in the construction area; we will depict on all appropriate documents the approximate position and type of each utility. After collecting and organizing the survey data and available imagery, Bravo Company Engineering will use the available data to develop base sheets for the design plan preparation.

3. Data Evaluation / Project Review / Culvert Lining Treatment Determination

Bravo Company Engineering will review the field inspection and survey data, further refine the proposed restoration scope, and examine in depth the culvert problem areas noted by LCDOT. BCE will meet with the County to discuss the desired culvert improvements and determine the most suitable solutions together. Items to be discussed include, but are not limited to, an insertion liner, cured-in-place-pipe (CIPP), and spray-on liner, or other alternative techniques that would not involve traffic impacts and similar detours to reconstruct the culvert (i.e., utility obstructions conflicts, drainage study, pedestrian accommodations, and analyzing shoulders to determine appropriate clear zones).

4. Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost

Bravo Company Engineering will prepare and complete the contract documents in accordance with the applicable Lake County Division of Transportation policies and standards as set forth by the LCDOT Plan Preparation Guidelines (revised 3/10/17). The base sheets for use in the development of the construction documents shall be at an appropriate scale which can be printed to pdf for electronic distribution. We can provide initial submittals to the County and other invested parties to demonstrate progress and to ensure needs and desires are being addressed. Detailed quantity calculations will be developed based on the plans and the electronic base drawings to establish an engineer's estimate of cost. We can also meet periodically with the County to review design details and the project schedule and cost if desired. Our prefinal plans will address the below list of items:

- A. Winchester Road Resurfacing (covered under west section scopes of services)**

- B. **IL Route 21 and East County Farm Road Improvements (covered under west section scopes of services)**
- C. **Bull Creek Culvert Lining under Winchester Road (west of Metra railroad crossing)** – This existing 107" x 171" structural plate culvert that is 76 feet in length, will be reviewed by Bravo Company Engineering to investigate further the culvert area and most viable rehabilitation option.
 - i. **Wetlands and Floodplains** – A joint application to the IDNR and Army Corps of Engineers will be completed for the potential work within the floodplain and wetlands in the project area, and potential isolated wetland permitting procedures through LCSMC with Boundary Verifications and Preliminary Jurisdictional Determinations.

5. Final Plans, Special Provisions, and Engineer's Estimate of Cost

Bravo Company Engineering will submit the contract documents to the Lake County Division of Transportation for final plan review. If necessary, we will also meet with the County or any other agencies and utilities to discuss review comments or to resolve conflicts. Plans will be submitted in a printable pdf electronic format, as well as hard paper copies when requested, and the Engineer's Estimate of Cost will be submitted in Excel format (for both pre-final and final). A disposition of comments will be provided to address the LCDOT comments from the review submittal. Upon project completion, all CADD files will be provided to LCDOT.

6. Project Administration, Advertisement, Bid Coordination, Award Recommendation, Pre-Construction Assistance

After the completion of the County's final plan review, we will address comments received and bring resolution to any concerns. The bid contract plans, special provisions, and engineer's estimate of cost will be provided by Bravo Company Engineering.

7. Construction Engineering Services

Bravo Company Engineering will be available to answer any questions during construction, assist with issues such as addendums between plan posting and bid, and we will create new plan details and solutions for any unforeseen issues that may arise during construction. Our team recognizes communication is essential with residents, businesses, and schools in the area to ensure pedestrian safety and minimal impacts to the community and businesses operations.

IV. PROJECT SCHEDULE

A project schedule is a strategic and important tool for guiding a project successfully to its target letting date. Bravo Company Engineering's milestone schedule is a summary that allows the project team to review and identify all the significant and major project related milestones that are to be achieved during the project. Our milestones are significant events in the project usually marked by the completion of a major deliverable. A tentative schedule is as follows and will be adjusted based upon the County's input and permitting requirements.

- December 8, 2021 – Proposal Submittal
- December 15, 2021 – Final Proposal and Contract Submittal to LCDOT
- January 2022 - County Board Approval with Notice to Proceed
- February 2022 – Notice to Proceed
- December 2022 - Pre-Final PS&E Submittal for LCDOT Review and Comments
- February 2023 - Final PS&E Submittal
- February 2023 – Bid Advertisement
- February 2023 – Plans and Specifications Publication
- March 2023 – Bid Opening
- May 2023 – Begin Construction

V. OTHER FACTORS

Bravo Company Engineering and our assembled team of engineers can meet this contract obligation with our current staff and have the knowledge and experience to perform the tasks assigned while also fulfilling the schedule required. Having a team with surveyors, engineers, technicians, and sub-consultants will ensure we can provide the proper staff when required. We can abide by the County's standard form agreement, and we have no conflicts of interest or other factors impacting the value and quality of our work.

Bravo Company Engineering and its team commit to making the necessary expertise and manpower available to meet the needs of this project. We are confident that our team has what it takes to produce a successful project and quality product that Elmhurst, our team, and the community can be proud of. Very fitting for this project is Bravo Company Engineering's philosophy mantra of **BE, KNOW, DO!** Be the expert, Know the job, and Do the difficult!



Exhibit A-2 Preliminary Engineering

Route: Winchester Road Resurfacing Project
 Local Agency: Lake County Division of Transportation
 Section: 20-00999-80-RS
 Project: M-XXXX(XXX)
 Job No: D-XX-XX-XX

*Firm's **approved rates** on file with IDOT's
 Bureau of Accounting and Auditing:
 Overhead Rate (OH) **1.2**
 Complexity Factor (R) 0.000
 Calendar Days 360

Method of Compensation:

Cost Plus Fixed Fee 1 ☒ 14.5%[DL + R(DL) + OH(DL) + IHDC]
 Cost Plus Fixed Fee 2 ☐ 14.5%[DL + R(DL) + 1.5(DL) + IHDC]
 Cost Plus Fixed Fee 3 ☐ 14.5%[(2.3 + R)DL + IHDC]
 Specific Rate ☐
 Lump Sum ☐

See Exhibit A-1 for Scope of Services

See Exhibit A-3 for a detailed Workhour Estimate.

See Exhibit A-4 for detailed Services by Others and In-House Direct Costs.

Cost Estimate of Consultant's Services									
Element of Work	Employee Classification	Man-hours	Payroll Rate	Payroll Costs (DL)	Overhead*	In-House Direct Costs (IHDC)	Services by Others	Profit	Total
1 Early Coordination and Data Collection						\$ 32.50	\$ -	\$ -	\$ 32.50
	Project Manager	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
	Engineer IV	0.0	\$ 50.00	\$ -	\$ -			\$ -	\$ -
\$32.50	Engineer III	0.0	\$ 46.00	\$ -	\$ -			\$ -	\$ -
	Engineer II	0.0	\$ 28.00	\$ -	\$ -			\$ -	\$ -
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
2 Field Survey and Preparation of Base Drawings						\$ -	\$ -	\$ -	\$ -
	Project Manager	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
	Engineer IV	6.0	\$ 50.00	\$ 300.00	\$ 360.00			\$ 95.70	\$ 755.70
\$6,267.27	Engineer III	26.0	\$ 46.00	\$ 1,196.00	\$ 1,435.20			\$ 381.52	\$ 3,012.72
	Engineer II	14.0	\$ 28.00	\$ 392.00	\$ 470.40			\$ 125.05	\$ 987.45
	QA/QC Admin.	10.0	\$ 60.00	\$ 600.00	\$ 720.00			\$ 191.40	\$ 1,511.40
3 Data Evaluation / Project Review / Culvert Lining Treatment Determination						\$ -	\$ -	\$ -	\$ -
	Project Manager	2.0	\$ 60.00	\$ 120.00	\$ 144.00			\$ 38.28	\$ 302.28
	Engineer IV	13.0	\$ 50.00	\$ 650.00	\$ 780.00			\$ 207.35	\$ 1,637.35
\$6,478.87	Engineer III	27.0	\$ 46.00	\$ 1,242.00	\$ 1,490.40			\$ 396.20	\$ 3,128.60
	Engineer II	20.0	\$ 28.00	\$ 560.00	\$ 672.00			\$ 178.64	\$ 1,410.64
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
4 Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost						\$ 32.50	\$ -	\$ -	\$ 32.50
	Project Manager	6.0	\$ 60.00	\$ 360.00	\$ 432.00			\$ 114.84	\$ 906.84
	Engineer IV	32.0	\$ 50.00	\$ 1,600.00	\$ 1,920.00			\$ 510.40	\$ 4,030.40
\$24,995.79	Engineer III	123.0	\$ 46.00	\$ 5,658.00	\$ 6,789.60			\$ 1,804.90	\$ 14,252.50
	Engineer II	69.0	\$ 28.00	\$ 1,932.00	\$ 2,318.40			\$ 616.31	\$ 4,866.71
	QA/QC Admin.	6.0	\$ 60.00	\$ 360.00	\$ 432.00			\$ 114.84	\$ 906.84
5 Final Plans, Special Provisions, and Engineer's Estimate of Cost						\$ -	\$ -	\$ -	\$ -
	Project Manager	1.0	\$ 60.00	\$ 60.00	\$ 72.00			\$ 19.14	\$ 151.14
	Engineer IV	6.0	\$ 50.00	\$ 300.00	\$ 360.00			\$ 95.70	\$ 755.70
\$3,798.65	Engineer III	20.0	\$ 46.00	\$ 920.00	\$ 1,104.00			\$ 293.48	\$ 2,317.48
	Engineer II	6.0	\$ 28.00	\$ 168.00	\$ 201.60			\$ 53.59	\$ 423.19
	QA/QC Admin.	1.0	\$ 60.00	\$ 60.00	\$ 72.00			\$ 19.14	\$ 151.14
6 Project Admin., Advertisement, Bid Coord., Award Recommendation, Pre-Constr. Asst.				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Project Manager	6.0	\$ 60.00	\$ 360.00	\$ 432.00			\$ 114.84	\$ 906.84
\$5,783.62	Engineer IV	14.0	\$ 50.00	\$ 700.00	\$ 840.00			\$ 223.30	\$ 1,763.30
	Engineer III	22.0	\$ 46.00	\$ 1,012.00	\$ 1,214.40			\$ 322.83	\$ 2,549.23
	Engineer II	8.0	\$ 28.00	\$ 224.00	\$ 268.80			\$ 71.46	\$ 564.26
	QA/QC Admin.	0.0	\$ 60.00	\$ -	\$ -			\$ -	\$ -
7 Construction Engineering Services				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Project Manager	2.0	\$ 60.00	\$ 120.00	\$ 144.00			\$ 38.28	\$ 302.28
\$1,299.80	Engineer IV	0.0	\$ 50.00	\$ -	\$ -			\$ -	\$ -
	Engineer III	6.0	\$ 46.00	\$ 276.00	\$ 331.20			\$ 88.04	\$ 695.24
	Engineer II	0.0	\$ 28.00	\$ -	\$ -			\$ -	\$ -
	QA/QC Admin.	2.0	\$ 60.00	\$ 120.00	\$ 144.00			\$ 38.28	\$ 302.28
Totals		448.0		\$ 19,290.00	\$ 23,148.00	\$ 65.00	\$ -	\$ 6,153.51	\$ 48,656.51



Exhibit A-3 Preliminary Engineering

Workhour Estimate								
Item No.	Task	Staff Classifications & Workhours					Total Workhours	% of Workhours
		Project Manager	Engineer IV	Engineer III	Engineer I	QA/QC Admin.		
Scope of Services								
1	Early Coordination and Data Collection							
	Item 1 Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
2	Field Survey and Preparation of Base Drawings							
	A. Field Review of Project with Photolog to Document Existing Conditions		2.0	2.0	4.0		8.0	14.3%
	B. Importing and Conversion of LCDOT Data to Develop Surface Models and Linework		2.0	12.0	2.0		16.0	28.6%
	C. Preparation of Base CADD File and Sheet Drawings with an Aerial Overlay		2.0	12.0	8.0	10.0	32.0	57.1%
	Item 2 Subtotal	0.0	6.0	26.0	14.0	10.0	56.0	100.0%
3	Data Evaluation / Project Review / Culvert Lining Treatment Determination							
	A. Review Field Inspection / Survey Data and Examine Noted-Problem Culvert Areas	2.0	10.0	24.0	16.0		52.0	83.9%
	B. Meeting with LCDOT and Additional Stakeholders to Discuss Problems and Potential Solutions		3.0	3.0	4.0		10.0	16.1%
	Item 3 Subtotal	2.0	13.0	27.0	20.0	0.0	62.0	100.0%
4	Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost							
	A. Plans							
	Title Sheet/Index of Sheets/State and LCDOT Standards (1 sheet)			2.0	2.0		4.0	1.7%
	General Notes and List of Commitments (1 sheets)			1.0	1.0		2.0	0.8%
	Summary of Quantities (1 sheets)			3.0	2.0		5.0	2.1%
	Schedule of Quantities (1 sheets)			3.0	2.0		5.0	2.1%
	Typical Culvert Sections (1 sheets)		2.0	16.0	6.0		24.0	10.2%
	Alignment, Ties, and Benchmarks (1 sheets)		2.0	8.0	4.0	2.0	16.0	6.8%
	Bull Creek Culvert Repair Plan Sheet (culvert lining/rehab/sesc) - dual pane 1"=20' (1 sheet)		8.0	48.0	24.0		80.0	33.9%
	Erosion Control Plan (General notes and SMC typical notes) - 1"=20' (1 sheet)		2.0	4.0	2.0		8.0	3.4%
	Roadway Construction Details and LCDOT Std. Highway Details (4 sheets)		1.0	3.0	2.0		6.0	2.5%
	IDOT Bureau Of Design Stds. w/ BD's and TC's, and Std. Highway Details (added-to-SPs) (0 sheets)		1.0	3.0	2.0		6.0	2.5%
	B. Special Provisions	2.0	8.0	16.0	6.0		32.0	13.6%
	C. Quantity Calculations and Estimate of Cost	2.0	4.0	12.0	12.0	2.0	32.0	13.6%
	D. QA/QC Review	2.0	4.0	4.0	4.0	2.0	16.0	6.8%
	Item 4 Subtotal	6.0	32.0	123.0	69.0	6.0	236.0	100.0%
5	Final Plans, Special Provisions, and Engineer's Estimate of Cost							
	A. Final Contract Document Modifications (Plan, Special Provisions, Quantities)	1.0	6.0	20.0	6.0	1.0	34.0	100.0%
	→ includes a disposition of comments to address the review comments received						0.0	
	Item 5 Subtotal	1.0	6.0	20.0	6.0	1.0	34.0	100.0%
6	Project Admin., Advertisement, Bid Coord., Award Recommendation, Pre-Constr. Asst.							
	A. Project Administration (invoice preparation and job-file documentation)	4.0					4.0	8.0%
	McHenry-Lake County SWCD Permitting and WDP Through LCSMC with CW#1 Permit and USACE (MOU with LCSMC for SE/SC and USACOE Permit Coordination)	2.0	12.0	20.0	8.0		42.0	84.0%
	C. IEPA and SWPPP Permitting and Documentation (NOI, NOT, ION, plus BDE 2343a and BC 2259)		2.0	2.0			4.0	8.0%
	D. CCDD Permitting and Documentation (coordination with Huff and Huff included with Item 1.C.i)						0.0	
	Item 6 Subtotal	6.0	14.0	22.0	8.0	0.0	50.0	100.0%
7	Construction Engineering Services							
	A. Project Administration, Pre-Construction Meeting Attendance, Project Coordination and QA/QC	2.0		6.0		2.0	10.0	100.0%
	→ includes assistance with any issues such as addendums between plan posting and bid, and we will create new plan details and solutions for any unforeseen issues that may arise during construction							
	B. Verify Construction Layout						0.0	
	C. Part-Time Construction Engineering Observation / Inspection						0.0	
	D. Traffic Control / Site Cleanliness Monitoring						0.0	
	E. Documentation						0.0	
	F. Weekly Progress Meetings, Stakeholder Coordination (with updates sent to County)						0.0	
	G. 24-hour Contact Information and Question Answering						0.0	
	H. Punchlist, Miscellaneous Items, and Final Inspection						0.0	
	I. Final Agreement to Quantities						0.0	
	J. Project Closing and Job Box Submittal						0.0	
	Item 7 Subtotal	2.0	0.0	6.0	0.0	2.0	10.0	100.0%
	Total Workhours:	17.0	71.0	224.0	117.0	19.0	448.0	
	% of Workhours:	3.8%	15.8%	50.0%	26.1%	4.2%	100.0%	



Exhibit A - 4 Preliminary Engineering

Services by Others and In-House Direct Costs			
Item No.	Task	In-House Direct Cost	Sub-Consultant Cost
1	Early Coordination and Data Collection		
	Vehicle: Kickoff Mtgs. - 2 trips @ vehicle 1/2 day (\$65.00 per day) (covered by scope within west contract)	\$32.50	
	Item 1 Subtotal	\$32.50	\$0.00
2	Field Survey and Preparation of Base Drawings		
	Item 2 Subtotal	\$0.00	\$0.00
3	Data Evaluation / Project Review / Culvert Lining Treatment Determination		
	Vehicle: Additional Mtgs. - 2 trips @ vehicle 1/2 day (\$65.00 per day)		
	Item 3 Subtotal	\$0.00	\$0.00
4	Pre-Final Plans, Special Provisions, and Engineer's Estimate of Cost		
	Vehicle: Truck (\$65.00 per day) Design Field Check and Submittal	\$32.50	
	Sub-Consultant: Lochner (Traffic Signal Modifications) (covered by scope within west contract)		
	Item 4 Subtotal	\$32.50	\$0.00
5	Final Plans, Special Provisions, and Engineer's Estimate of Cost		
	Item 5 Subtotal	\$0.00	\$0.00
	Total In-House Direct Costs:	\$65.00	-
	Total Subconsultant Costs:	-	\$0.00
	TOTAL IN-HOUSE DIRECT & SUBCONSULTANT COSTS:	\$65.00	