DRAFT

Illinois Department of Transportation

Local Public Agency Engineering Services Agreement

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	21-00073-10-RS	

Project Number	Contact Name	Phone Number	Email
	Benjamin Russo, PE	(847) 377-7508	BRusso@lakecountyil.gov

SECTION PROVISIONS

Local Street/Road Name	Key Route	Length	Structure Number
Gilmer Road (CH 26)	FAU 3602	6.72	

Location Termini: IL Route 120 to IL Route 176

Add Location / Remove Location

SECTION PROVISIONS

Local Street/Road Name	Key Route	Length	Structure Number
Gilmer Road Connector	MUN 19	0.11	

Location Termini: Gilmer Road (CH 26) to Fairfield Road (CH49)

Add Location / Remove Location

Project Description:

This project will include the development of plans, specifications and estimates for the resurfacing of Gilmer Road between IL Route 120 and IL Route 176. Engineer's Project No. 212459.40

Engineering Funding: ☒ MFT/TBP ☐ State ☐ Other

Anticipated Construction Funding: ☐ Federal ☒ MFT/TBP ☐ State ☐ Other

AGREEMENT FOR

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

CONSULTANT

Consultant (Firm) Name	Contact Name	Phone Number	Email
Baxter & Woodman, Inc.	Adam Woods, PE	(815) 444-3303	awoods@baxterwoodman.com

Address	City	State	Zip Code
8430 W. Bryn Mawr Ave.	Chicago	IL	60631

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	A full time LPA employee authorized to administer inherently governmental PROJECT activities
Contractor	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)

☒ Exhibit F: Manhour Summary

☒ Exhibit G: Sub Proposals: Interra

☐ _____

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 original 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
Baxter & Woodman, Inc.	36-2845242	$332,210.00

Subconsultants	TIN/FEIN/SS Number	Agreement Amount
- Interra, Inc.	36-4045796	$18,481.00
	Subconsultant Total	$18,481.00
	Prime Consultant Total	$332,210.00
	Total for all work	$350,691.00

Add Subconsultant

AGREEMENT SIGNATURES

Executed by the LPA:

Attest: The Local Public Agency Type: County of Name of Local Public Agency: Lake

By (Signature & Date)

By (Signature & Date)

Name of Local Public Agency: Lake

Local Public Agency Type: County

Clerk

Title

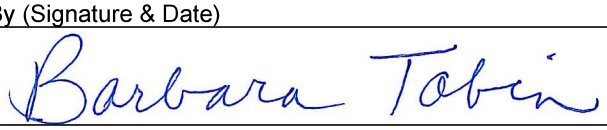
(SEAL)

Executed by the ENGINEER:

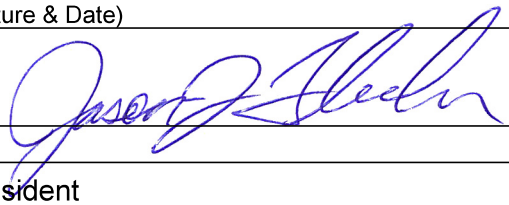
Attest:

Consultant (Firm) Name: Baxter & Woodman, Inc.

By (Signature & Date)



By (Signature & Date)



Title: Deputy Secretary

Title: Vice President

APPROVED:

Regional Engineer, Department of Transportation (Signature & Date)

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00073-10-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

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00073-10-RS

EXHIBIT B
PROJECT SCHEDULE

March 2022:	Phase II Notice to Proceed
January 2023:	Prefinal PS&E
March 2023:	Final PS&E
March 2023:	Bid Advertisement
April 2023:	Bid Opening
June: 2023:	Start Construction

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00073-10-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
☐	Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual cost (Up to state rate maximum)			
☐	Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			
☐	Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			
☒	Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	1008	$0.58	$589.68
☒	Vehicle Owned or Leased	$32.50/half day (4 hours or less) or $65/full day	8	$65.00	$520.00
☐	Vehicle Rental	Actual cost (Up to $55/day)			
☐	Tolls	Actual cost			
☐	Parking	Actual cost			
☐	Overtime	Premium portion (Submit supporting documentation)			
☐	Shift Differential	Actual cost (Based on firm's policy)			
☐	Overnight Delivery/Postage/Courier Service	Actual cost (Submit supporting documentation)			
☐	Copies of Deliverables/Mylars (In-house)	Actual cost (Submit supporting documentation)			
☐	Copies of Deliverables/Mylars (Outside)	Actual cost (Submit supporting documentation)			
☐	Project Specific Insurance	Actual Cost			
☐	Monuments (Permanent)	Actual Cost			
☐	Photo Processing	Actual Cost			
☐	2-Way Radio (Survey or Phase III Only)	Actual Cost			
☐	Telephone Usage (Traffic System Monitoring Only)	Actual Cost			
☐	CADD	Actual cost (Max $15/hour)			
☐	Web Site	Actual cost (Submit supporting documentation)			
☐	Advertisements	Actual cost (Submit supporting documentation)			
☐	Public Meeting Facility Rental	Actual cost (Submit supporting documentation)			
☐	Public Meeting Exhibits/Renderings & Equipment	Actual cost (Submit supporting documentation)			
☐	Recording Fees	Actual Cost			
☐	Transcriptions (specific to project)	Actual Cost			
☐	Courthouse Fees	Actual Cost			
☐	Storm Sewer Cleaning and Televising	Actual cost (Requires 2-3 quotes with IDOT approval)			
☐	Traffic Control and Protection	Actual cost (Requires 2-3 quotes with IDOT approval)			
☐	Aerial Photography and Mapping	Actual cost (Requires 2-3 quotes with IDOT approval)			
☐	Utility Exploratory Trenching	Actual cost (Requires 2-3 quotes with IDOT approval)			
☒	Testing of Soil Samples	Actual Cost	1	$8,250.00	$8,250.00
☐	Lab Services	Actual Cost (Provide breakdown of each cost)			
☐	Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			
☒	CCDD Review Fees	Actual Cost	1	$750.00	$750.00
☐					
☐					
☐					
☐					
				Total Direct Costs	$10,109.68

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00073-10-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?	☐	☐
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?	☐	☐
3	Was the scope of services for this project clearly defined?	☐	☐
4	Was public notice given for this project?	☐	☐
5	Do the written QBS policies and procedures cover conflicts of interest?	☐	☐
6	Do the written QBS policies and procedures use covered methods of verification for suspension and debarment?	☐	☐
7	Do the written QBS policies and procedures discuss the methods of evaluation?	☐	☐

	Project Criteria	Weighting
-		

Add

8	Do the written QBS policies and procedures discuss the method of selection?	☐	☐

Selection committee (titles) for this project

	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?	☐	☐
10	Were negotiations for this project performed in accordance with federal requirements.	☐	☐
11	Were acceptable costs for this project verified?	☐	☐
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?	☐	☐
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)?	☐	☐
14	QBS according to State requirements used?	☐	☐
15	Existing relationship used in lieu of QBS process?	☐	☐
16	LPA is a home rule community (Exempt from QBS).	☐	☐

GILMER ROAD RESURFACING
DESIGN ENGINEERING SERVICES
LAKE COUNTY DIVISION OF TRANSPORTATION
SECTION 21-00073-10-RS

EXHIBIT A
SCOPE OF SERVICES

LOCATION:

The project is located on Gilmer Road (County Highway 26) within the Village of Lakemoor, Volo, Wauconda, and Unincorporated Lake County. The improvement area includes the following:

Roadway	Limits	Length
Gilmer Road (Resurfacing)	IL 120 to IL 176	35,500 FT
Gilmer Road (Widening)	300 FT South of 1300 S. Gilmer Road Intersection to 750 FT South of Callahan Road	2,900 FT
Gilmer Road and Fairfield Road Connector	Gilmer Road to Fairfield Road	550 FT
Project Omissions	Bridge over Fairfield Road Portion of Gilmer Road and Fremont Center Road intersection previously resurfaced	

PROJECT UNDERSTANDING:

This project involves Design Engineering for resurfacing improvements along Gilmer Road from IL Route 120 to IL Route 176. Gilmer Road is primarily a two/three-lane roadway comprised of two 12-foot wide through lanes and a 12-foot wide center-turn lane north of Fish Lake Road and at some side streets. Gilmer Road is under the jurisdiction of the Lake County Division of Transportation (LCDOT). Singing Hills Forest Preserve, Ray Lake Forest Preserve, and Lakewood Forest Preserve are located along Gilmer Road. The remaining project area land use is predominantly agricultural and residential, single-family homes.

In addition to the proposed resurfacing along Gilmer Road, the following additional items are proposed:

- A portion of the existing aggregate shoulder will be converted to HMA bike friendly shoulder in areas where the cross section is rural. The intention is to maintain the shoulder break to the front slope at the existing location. This may require a variable width aggregate shoulder or eliminating aggregate shoulder at some locations.

- The bridge over Fairfield Road will be omitted.

- From approximately 300 feet south of the 1300 S. Gilmer Road intersection to 750 feet south of Callahan Road, Gilmer Road will be symmetrically widened to a three-lane section to

accommodate left turn lanes and eliminate the existing bypass lanes. A capacity analysis will be performed to determine appropriate storage lengths. LCDOT will provide traffic counts for use in the capacity analysis.

- Non-compliant sidewalk ramps will be improved or removed. Curb and gutter and sidewalk will be repaired as needed.

- The existing sidewalk along Gilmer Road will not be improved as part of this project.

- Three existing culverts are proposed to be replaced and four existing culverts are proposed to be repaired along Gilmer Road. LCDOT will televise existing storm sewer and provide a list of pipes to be replaced.

- Improvements to an identified drainage problem located in front of the driveways for 31150/31290 Gilmer Road due to snow melt draining to the road.

Improvement Limits

Gilmer Road Resurfacing

N

IL Route 120

Gilmer Road

ADA Improvements

ADA Improvements

Widen to 3 lanes through
Callahan Road intersection

ADA Improvements

Fairfield Road

Fairfield Road
Connector

Guardrail Improvements
at Fairfield Rd Bridge

IL Route 176

ADA Improvements

Mill 2.25", Replace with 0.75" polymerized leveling binder and 1.5" HMA N70 Surface Course

Mill 1.5", Replace with 1.5" HMA N70 Surface Course

Mill 2.5", Replace with 0.75" polymerized leveling binder, 2.25" HMA N70 Binder Course, and 1.5" HMA N70 Surface Course

This project will follow DEPARTMENT and LA development procedures to ensure eligibility for motor fuel tax funding. The project will be coordinated with IDOT's Bureau of Local Roads and Streets and the LA for reviews and approval.

SCOPE OF SERVICES:

1. EARLY COORDINATION AND DATA COLLECTION

- *Data Collection:* Obtain, review, and evaluate the following information provided by the LA for use in design:
    - Record Roadway and Drainage Plans including CADD files, if available
    - Utility Atlases
    - Existing Roadway and Structure Plans with Inspection Reports
    - GIS Shape files surrounding the project limits
    - Aerial Photography
    - Environmental Studies
    - Maintenance and flooding records
    - Drainage Studies
    - Available traffic data
    - Hydraulic and Hydrologic information and calculations
    - Geotechnical Data
    - Right-of-Way, GIS, and property data

- *Field evaluation:* Perform a field evaluation of the condition of existing pavements, drainage structures, culverts, sidewalk ramps, curb and gutter, and guardrail. Collect and record all necessary field data for structural, roadway, drainage, utility, and pavement analysis. Observe and photograph the project area and immediate surroundings. LCDOT will televise existing storm sewer and provide a list of pipes to be replaced.

- *Utility Locates & Coordination*: Contact JULIE to identify utilities that have facilities along the project limits. Request utility atlas maps and plot locations and sizes of existing utilities in electronic drawings. Submit preliminary and final plans to utility companies so conflicts and relocation efforts can be identified. Provide ongoing reviews of permitting and utility relocation efforts as requested by the LA. Prepare “Status of Utilities to be Adjusted” special provision in accordance with IDOT District 1 requirements, which provides the contractor with the duration of utility relocation work, status of utilities to be watched and protected within the project limits, and pertinent information for the contractor to develop a work schedule to meet the requirements for the project.

2. TOPOGRAPHIC SURVEY

- *Topographic Survey*: Perform topographic survey within the project limits and at 50-foot intervals including driveways and cross streets. Cross section width shall be taken 25 feet outside the estimated proposed right-of-way and utility corridor. All topography will be in compliance with the LCDOT’s Design Survey Procedures (Revised 02/22/2021). State plane coordinates and NAVD 88 will be used for horizontal and vertical controls. The limits of the survey will be:
    - Along Gilmer Road from the intersection of Gilmer Road and 1300 S. Gilmer Road (the Wauconda Fire District Station #3) to 1,000 feet south of the intersection of Gilmer Road and

Callahan Road.
- Along Gilmer Road from 500 feet north of the Fairfield Road Bridge to the Fairfield Road Bridge.
- Along Gilmer Road from the Fairfield Road Bridge to 500 feet south of the Fairfield Road Bridge.
- Along the south side of Gilmer Road at the entrances to 31150/31290 Gilmer Road.
- Survey all ADA ramp areas at intersections described under PLAN PREPARATION - Detailed Drawings below.

i. Photos: Collect photographs along the project route to assist with design drawings and exhibits.
ii. Structures: Collect drainage structure condition, inverts, size, and flow direction.
iii. Terrain Model: Download and develop digital terrain model for use in design and plan preparation.
iv. Right of Way: Field-locate existing property corners and utilize available tax parcel information to establish an approximate right-of-way OR Conduct research at the County Recorder to obtain recorded documents for determining the limits of existing right-of-way and easements. No right-of-way or easement acquisition is anticipated. Work to complete Plat of Easement or Plat of Dedication is not included

- *Terrain Model:* Download and develop digital terrain model for use in design and plan preparation.

3. GEOTECHNICAL INVESTIGATION

- *Pavement Cores and Soil Borings:* Utilize Interra to take pavement cores of the surface and base material for determining the composition of the existing pavement material within the Gilmer Road widening limits. Collect 7.5-foot pavement borings at 300-foot spacing on alternating sides of the pavement centerline and obtain topsoil thicknesses at select locations. Provide analysis and recommendations, including subgrade, in a soils report in accordance with IDOT guidelines. Baxter & Woodman will provide a boring and core location map prior to this work. (4 cores and 10 borings estimated).

- *Clean Construction or Demolition Debris (CCDD):*
  - Within the resurfacing limits where soil disposal is not anticipated facilitate completion of IEPA Form 662 to assist with estimating disposal costs, if needed.
  - Within the project limits where soil disposal is anticipated facilitate completion of IEPA Form 663 to assist with estimating disposal costs, if needed. Locations where soil disposal is anticipated include, but are not limited to, the Gilmer Road symmetrical widening limits, ADA improvements, culvert replacements, and guardrail improvements at the Fairfield Road Bridge.

4. TRAFFIC ANALYSIS

- *Capacity Analysis: Complete an intersection capacity analysis (AM & PM) using LCDOT supplied traffic data and Highway Capacity Software (HCS) or Sidra for the following alternatives:*
  - *2022 Proposed Widening Configurations (Gilmer Road and Fish Lake Road)*

5. ENVIRONMENTAL COORDINATION AND PERMITTING

- *Environmental Survey*: Prepare the Environmental Survey Request Form and related exhibits. Submit to IDOT to determine potential environmental impacts. Biological, Archeological, and Historical surveys will be performed by the State. Wetland delineation and special waste assessment will be performed by Baxter & Woodman as described below.

- *Special Waste Screening*: Conduct Special Waste Screening as outlined in Section 20-12.03(b) of the IDOT Bureau of Local Roads and Streets Manual. Screening will include Environmental Regulatory Records Review and a site visit. Based on Environmental Screening results and site visit determine if further action is required and prepare a summary of the findings.

- *Permit Agency Coordination:* Initiate coordination with the following regulatory agencies to obtain design comments:
  - Lake County Stormwater Management Commission (LCSMC)
  - United States Army Corp of Engineers – Chicago District (USACE)

- *Clean Water Act Permit:* Prepare a Joint Application to the USACE for work within Waters of the United States. Processing is anticipated under the jurisdiction of the USACE Regional Permit No. 9 for Maintenance.

- *Wetland Delineation*: Perform wetland delineation in the project corridor during the growing season including documentation of baseline vegetation, hydrology, and soils information. Wetland delineation will be performed at culvert improvement locations, storm sewer improvement locations, and along pavement widening. Wetland delineation will not be necessary where the existing shoulder breakpoint is being maintained. Prepare a Wetland Delineation Report and Exhibits that summarize the methodology used, site description, and results of survey.

- *Wetland Impact Evaluation*: Prepare a wetland report detailing the work within a regulatory wetland, including a description of the wetlands being impacted, avoidance, minimization, and mitigation efforts. Submit to IDOT for review and approval.

6. Preliminary Environmental Site Assessment (PESA)

- *Historical Records Review*: Review and document historical data sources for the project area, including aerial photographs, topographic maps, fire insurance maps, County resources, and other readily available development data.

- *Environmental Regulatory Records Review*: Perform a computer search of Federal, State, Tribal, and local government agency records to determine if the Site or adjacent properties are included within the selected regulatory databases. Based on the results of this query, the Site and its surrounding properties will be evaluated for recognized environmental concerns (REC). Queries will be performed, but not be limited to, the following regulatory databases:
  - National Priority List (NPL) of Hazardous Waste Sites;
  - Hazardous Waste Treatment, Storage, Disposal Facilities (TSDF);
  - Underground Storage Tank or Leaking Underground Storage Tank Locations (UST/LUST);
  - Sanitary Landfill and Solid Waste Sites (SL/SWS);
  - State Hazardous Waste Sites (SHWS);

- CERCLIS sites
- Small and Large Quantity Hazardous Waste Generators (RCRIS-SQG/LGG)
- RCRA

- *Report Preparation*: Based on Environmental Screening results and site visit, prepare a PESA using the processes described in *A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Infrastructure Projects*, Second edition, January 2012. Prepare a letter report summarizing the activities and results of the assessment. The report will include pertinent documentation to support the screening results of the assessment. It will also provide a summary of conclusions from the limited information collected.

7. Preliminary Site Investigation (PSI) – Perform a PSI where soil disposal is anticipated. 28 sampling locations have been included.

- *Sample Collection:* Collect up to four samples of subsurface soil from site, preserve samples, and transport to environmental laboratory for analytical testing. Laboratory analyses will include BTEX, PNAs, RCRA Metals, TCCL Metals, SPLP Metals, Soils, and pH.

- *PSI Report:* Prepare a letter report summarizing the activities and results of the investigation. The report will include pertinent laboratory testing results. It will also provide a summary of conclusions from the information collected and identify which IDOT pay items should be included in the construction documents for disposing of Regulated Substances.

- *Soil Disposal:* Identify any areas from which excavated material may be classified as Clean Construction or Demolition Debris (CCDD) and if applicable prepare an IEPA LPC-663 form. If regulated soils are encountered which require management as special waste additional characterization of soils for disposal as non-special waste at a licensed disposal facility will be necessary. A special provision will be prepared to including the names of at least 3 facilities where the soils have been pre-screened for possible disposal (Thelen Materials shall be 1 of 3).

8. PLAN PREPARATION (IN ACCORDANCE WITH LCDOT PLAN PREPARATION GUIDELINES)

- *Estimate of Cost and Time*: Prepare summary of quantities, estimate of time, schedules of materials and an engineer's estimate of cost.

- *Specifications*: Prepare special provisions in accordance with LPA guidelines to specify items not covered by the Standard Specifications for Road and Bridge Construction.

- *Roadway Design:* Within the resurfacing limits prepare double plan sheets (1" = 20') for the roadway design including improvement limits; shoulder, multi-use path, and sidewalk improvements; driveway repairs; utility structure adjustments; and pavement markings. Curb and patching improvements will not be shown on the plan sheets but rather will be included in the schedule of quantities. Plan sheets will consist of schematic drawings based on aerial images with the exception of the areas where topographic survey is collected.

    - Extend improvements along Gilmer Road to include the Gilmer Road/Fairfield Road Connector.

- The Gilmer Road improvements will gap the Fairfield Road Bridge. The right turn lane on the west leg of the Gilmer Road and Ellis Drive intersection will also be excluded from resurfacing.
- Show detector loop removal and replacement as required at the intersection of Gilmer Road with IL Route 120 and IL Route 176.

- *Guardrail Design:* Make design modifications to the guardrail on Gilmer Road approaching the bridge over Fairfield Road. Perform length of need calculations as required.

- Plan and Profile: Within the Gilmer Road symmetrical widening limits prepare plan and profile sheets for the roadway design including improvement limits, stations and offset callouts, label construction limit locations and right of way breaks, rehabilitation strategy, curb and gutter and sidewalk improvements, driveway repairs, utility structure adjustments, pavement marking, and note special instructions to the Contractor. The sheets will also include ditch, inlet, culvert and storm sewer design for the proposed improvements and existing utilities. If space allows, drainage schedules will be included on the individual plan and profile sheets. Separate removal sheets will be prepared within the Gilmer Road symmetrical widening limits with two windows at 1:50 scale.

- *Drainage and Utilities Design:* Prepare the inlet, storm sewer, culvert, and ditch design for the proposed improvements. It is assumed that the project outfalls will be maintained and not modified as part of this project. Drainage improvements will be included on the roadway plan and plan and profile sheets and consist of the following items:
  - LCDOT will provide a list of driveway entrances and driveway culverts to be removed.
  - Repair culvert 333, 336, 341, and 343. Replace culvert 332 and 335.
  - Evaluate/resolve drainage issues at 31150/31290 Gilmer Road entrances.
  - LCDOT will provide a list of storm sewer pipes to be replaced.
  - Provide ditch, inlet, culvert and storm sewer design within the Gilmer Road symmetrical widening limits.

- *Maintenance of Traffic and Construction Staging:* (Traffic is anticipated to be maintained along the route at all times.) Develop a preferred maintenance of traffic and staging plan and submit to the LPA for comment and approval. Identify the preferred strategy for maintaining traffic and driveway access. Complete a design of the preferred staging plan. Prepare construction staging notes, typical sections, and layout to maintain local traffic flow through the construction zone. Confer with LPA staff, emergency services, and public transportation agencies to consider local impacts and concerns.

- *Erosion Control Plans:* Prepare a soil erosion and sediment control plans per stage for the Gilmer Road widening limits and culvert repair and replacement locations with two window views per sheet at 1:100 scale. Prepare a Storm Water Pollution Prevention Plan.

- *Cross Section Design*: Design roadway cross sections at 50-foot intervals and all cross streets, driveways, and cross-road culverts at the following locations. Compute earthwork calculations.
  - Along Gilmer Road from the intersection of Gilmer Road and 1300 S. Gilmer Road (the Wauconda Fire District Station #3) to 1,000 feet south of the intersection of Gilmer Road and Callahan Road.
  - Along Gilmer Road from 500 feet north of the Fairfield Road Bridge to the Fairfield Road Bridge.

- Along Gilmer Road from the Fairfield Road Bridge to 500 feet south of the Fairfield Road Bridge.

- *Traffic Signal Plans:* Install new UPS systems at the Gilmer Road and Ellis Drive intersection. Additionally, coordinate detector loop replacement with IDOT AND LA at IL Route 120 and IL Route 176.

- *Detailed Drawings:* Complete the following sheets:
  - Cover, General Notes, Summary of Quantities, and Schedule of Quantities
  - Typical Sections:
    i. The proposed pavement design on Gilmer Road from IL Route 120 to the Fairfield Road Bridge will include milling 2.25 inches and resurfacing with 0.75-inch HMA leveling binder and 1.50 inches HMA surface course. Within the Gilmer Road widening limits, the roadway will be widened to a three-lane section to accommodate left turn lanes and eliminate the existing bypass lanes.
    ii. The proposed pavement design on Gilmer Road from the Fairfield Road Bridge to IL Route 176 will include milling 1.50 inches and resurfacing with 1.5 inches HMA surface course.
    iii. The proposed pavement design on the Gilmer Road/Fairfield Road Connector will include milling 2.50 inches and resurfacing with 0.75-inch HMA leveling binder, 2.25 inches HMA binder course, and 1.5 inches HMA surface course.
    iv. Existing 2-foot wide paved shoulders will be removed and widened to 4 feet in the sections without curb. Where edge rumble strips are installed the paved shoulder will be widened to 5 feet. The improvements will match into the outside edge of the existing aggregate shoulder and no ditch front slope improvements are anticipated.
    v. Centerline rumble strips will be installed in all two-lane sections. Edge rumble strip locations will be coordinated with LCDOT and installed.
  - Alignment and Tie, Removals, Intersection Details
  - Design ADA ramp details at the intersection of Gilmer Road with:
    i. Ellis Drive – 4 (SW, SE, NE, and NW quadrants)
    ii. Entrance 700’ South of Ellis Drive – 2 (4 ramps on west side)
    iii. Harmony Road – 4 (SW, SE, NE, and NW quadrants)
    iv. Melody Road – 2 (SW, NE quadrants)
    v. Fish Lake Road – 2 (SE, NE quadrants)
    vi. Liberty Lakes Boulevard – 4 (SW, SE, NE, and NW quadrants)
    vii. Fremont Center Road – 3 (SW, NE, and NW quadrants)

9. MEETINGS

- *Meetings:* The following meetings are anticipated for this project:
  - LCDOT (3 total) (Kickoff, Review, and Pre-final)
  - Regulatory Agencies (2 total): LCSMC (1) and USACE (1)

- *Project Website:* The design, maintenance and hosting of project website is not included in scope. Will provide project Data to LA upon request.

- *Social Media*: No social media participation is anticipated.

10. QA/QC - Perform in-house peer and milestone reviews by senior staff during pre-final and final submittals. Provide ongoing reviews of permitting and utility coordination efforts. Conduct milestone reviews of subconsultants and provide feedback throughout the progress of work.

11. MANAGE PROJECT - Plan, schedule, and control the activities that must be performed to complete the project including budget, schedule, and scope. Coordinate with LA and project team to ensure the goals of the project are achieved. Prepare and submit monthly invoices, coordinate invoices from sub-consultants, and provide regular updates to the LA.

12. PHASE III COORDINATION – Attend Pre-Construction meeting. Provide design assistance and support to the LCDOT throughout construction. 30 hours have been allocated for this task.

NOTE:

- The following plan sheets are anticipated for this project (number of sheets):
  - Title Sheet (1)
  - General Notes/Standards/Index of Sheets (3)
  - Summary of Quantities (2)
  - Schedule of Quantities (8)
  - Typical Sections (6)
  - Alignment, Ties, Benchmarks (5)
  - Removal Plans (3)
  - Maintenance of Traffic Plan (19)
  - Erosion Control Plans (7)
  - Roadway Plan (double plan view) (28)
  - Roadway Plan (plan & profile) (6)
  - Traffic Signal (5)
  - Intersection Plan Details (2)
  - Sidewalk Ramp Details (11)
  - Cross Sections (22)
  - Lake County / IDOT Construction Details (50)
- All submittals are anticipated to be electronic.

Illinois Department of Transportation

EXHIBIT E

COST ESTIMATE OF CONSULTANT SERVICES WORKSHEET

FIXED RAISE

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00073-10-RS

Consultant (Firm) Name	Prepared By	Date
Baxter & Woodman, Inc.	Adam Woods	1/17/2022

PAYROLL ESCALATION TABLE

CONTRACT TERM	**14**	**MONTHS**	**OVERHEAD RATE**	**142.57%**
START DATE	**3/1/2022**		**COMPLEXITY FACTOR**	**0**
RAISE DATE	**1/1/2023**		**% OF RAISE**	**2.00%**
END DATE	4/30/2023			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	3/1/2022	1/1/2023	10	71.43%
1	1/2/2023	5/1/2023	4	29.14%

The total escalation = 0.57%

BLR 05514 (Rev. 04/30/21)
Payroll Escalation

Local Public Agency	County	Section Number
Lake County Division of Transp	Lake	21-00073-10-RS

MAXIMUM PAYROLL RATE	**78.00**
ESCALATION FACTOR	**0.57%**

PAYROLL RATES

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Executive Vice President	$85.60	$78.00
Vice President	$73.36	$73.78
Engineer VII	$65.71	$66.09
Engineer VI	$66.42	$66.80
Engineer V	$60.73	$61.08
Engineer IV	$50.10	$50.39
Engineer III	$41.02	$41.25
Engineer II	$36.38	$36.59
Engineer I	$31.93	$32.11
Environ. Scientist V	$56.63	$56.95
Natural Resources Mngr.	$48.50	$48.78
Engineer Tech V	$51.72	$52.02
Engineer Tech IV	$45.28	$45.54
Engineer Tech III	$36.95	$37.16
Engineer Tech II	$29.13	$29.30
Engineer Tech I	$24.67	$24.81
Spatial Tech. Manager	$58.25	$58.58
Spatial Tech. Prof. III	$42.00	$42.24
Spatial Tech. Prof. II	$32.58	$32.77
Survey Manager	$44.00	$44.25
Project Surveyor	$37.00	$37.21
Survey Tech.	$22.50	$22.63
CADD Technician III	$43.88	$44.13
Marketing Prof. IV	$43.00	$43.25
Marketing Prof. III	$33.35	$33.54
Admin. Support IV	$40.00	$40.23
Admin. Support III	$29.75	$29.92

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00073-10-RS

SUBCONSULTANTS

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

NAME	Direct Labor Total	Contribution to Prime Consultant
Interra, Inc.	3,264.00	326.40

Total **3,264.00** **326.40**

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00073-10-RS

COST ESTIMATE WORKSHEET

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

OVERHEAD RATE 142.57%

COMPLEXITY FACTOR 0

TASK	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	DIRECT COSTS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
Early Coordination and Data Collection	102	4,156	5,926	168	1,372		11,622	3.31%
Topographic Survey	178	7,567	10,788	390	2,497		21,242	6.06%
Geotechnical Investigation	8	334	476		110	18,481	19,401	5.53%
Traffic Analysis	8	320	457		106		883	0.25%
Environmental Coordination and Permitting	188	8,151	11,621	130	2,690		22,592	6.44%
Preliminary Environmental Site Assessment (PESA)	80	2,987	4,259	792	986		9,024	2.57%
Preliminary Site Investigation (PSI)	66	2,514	3,584	8,418	830		15,346	4.38%
Plan Preparation	1906	80,949	115,409		26,713		223,071	63.61%
Meetings	50	2,546	3,631	211	840		7,228	2.06%
QA/QC	40	2,874	4,098		948		7,920	2.26%
Manage Project	56	2,947	4,202		973		8,122	2.32%
Phase III Coordination	30	1,420	2,025		469		3,914	1.12%
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Subconsultant DL					326		326	0.09%
TOTALS	2712	116,765	166,476	10,109	38,860	18,481	350,691	100.00%

283,241

BLR 05514 (Rev. 04/30/21)
Cost Estimate Worksheet

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00073-10-RS

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultants Services Worksheet Fixed Raise

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Early Coordination and Data Collection			Topographic Survey			Geotechnical Investigation			Traffic Analysis			Environmental Coordination and Permitting		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Executive Vice President	78.00	0.0																	
Vice President	73.78	30.0	1.11%	0.82															
Engineer VII	66.09	18.0	0.66%	0.44															
Engineer VI	66.80	38.0	1.40%	0.94													4	2.13%	1.42
Engineer V	61.08	48.0	1.77%	1.08															
Engineer IV	50.39	366.0	13.50%	6.80	10	9.80%	4.94	8	4.49%	2.26	3	37.50%	18.89	2	25.00%	12.60	60	31.91%	16.08
Engineer III	41.25	759.0	27.99%	11.55															
Engineer II	36.59	553.0	20.39%	7.46	60	58.82%	21.52				5	62.50%	22.87	6	75.00%	27.44	82	43.62%	15.96
Engineer I	32.11	88.0	3.24%	1.04															
Environ. Scientist V	56.95	18.0	0.66%	0.38															
Natural Resources Mngr.	48.78	8.0	0.29%	0.14													8	4.26%	2.08
Engineer Tech V	52.02	0.0																	
Engineer Tech IV	45.54	61.0	2.25%	1.02	32	31.37%	14.29										29	15.43%	7.02
Engineer Tech III	37.16	100.0	3.69%	1.37															
Engineer Tech II	29.30	0.0																	
Engineer Tech I	24.81	0.0																	
Spatial Tech. Manager	58.58	0.0																	
Spatial Tech. Prof. III	42.24	0.0																	
Spatial Tech. Prof. II	32.77	0.0																	
Survey Manager	44.25	60.0	2.21%	0.98				60	33.71%	14.92									
Project Surveyor	37.21	50.0	1.84%	0.69				50	28.09%	10.45									
Survey Tech.	22.63	0.0																	
CADD Technician III	44.13	510.0	18.81%	8.30				60	33.71%	14.88									
Marketing Prof. IV	43.25	0.0																	
Marketing Prof. III	33.54	0.0																	
Admin. Support IV	40.23	0.0																	
Admin. Support III	29.92	5.0	0.18%	0.06													5	2.66%	0.80
TOTALS		2712.0	100%	$43.06	102.0	100.00%	$40.75	178.0	100%	$42.51	8.0	100%	$41.76	8.0	100%	$40.04	188.0	100%	$43.36

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00073-10-RS

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Preliminary Environmental Site Assessment (PESA)			Preliminary Site Investigation (PSI)			Plan Preparation			Meetings			QA/QC			Manage Project		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Executive Vice President	78.00																		
Vice President	73.78													30	75.00%	55.33			
Engineer VII	66.09													10	25.00%	16.52	8	14.29%	9.44
Engineer VI	66.80							24	1.26%	0.84	10	20.00%	13.36						
Engineer V	61.08							48	2.52%	1.54									
Engineer IV	50.39							190	9.97%	5.02	25	50.00%	25.19				48	85.71%	43.19
Engineer III	41.25	24	30.00%	12.38	16	24.24%	10.00	694	36.41%	15.02	15	30.00%	12.38						
Engineer II	36.59							400	20.99%	7.68									
Engineer I	32.11	48	60.00%	19.27	40	60.61%	19.46												
Environ. Scientist V	56.95	8	10.00%	5.70	10	15.15%	8.63												
Natural Resources Mngr.	48.78																		
Engineer Tech V	52.02																		
Engineer Tech IV	45.54																		
Engineer Tech III	37.16							100	5.25%	1.95									
Engineer Tech II	29.30																		
Engineer Tech I	24.81																		
Spatial Tech. Manager	58.58																		
Spatial Tech. Prof. III	42.24																		
Spatial Tech. Prof. II	32.77																		
Survey Manager	44.25																		
Project Surveyor	37.21																		
Survey Tech.	22.63																		
CADD Technician III	44.13							450	23.61%	10.42									
Marketing Prof. IV	43.25																		
Marketing Prof. III	33.54																		
Admin. Support IV	40.23																		
Admin. Support III	29.92																		
TOTALS		80.0	100%	$37.34	66.0	100%	$38.09	1906.0	100%	$42.47	50.0	100%	$50.93	40.0	100%	$71.86	56.0	100%	$52.63

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	21-00073-10-RS

AVERAGE HOURLY PROJECT RATES

Exhibit E Cost Estimate of Consultant Services Worksheet Fixed Raise

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Phase III Coordination																	
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Executive Vice President	78.00																		
Vice President	73.78																		
Engineer VII	66.09																		
Engineer VI	66.80																		
Engineer V	61.08																		
Engineer IV	50.39	20	66.67%	33.59															
Engineer III	41.25	10	33.33%	13.75															
Engineer II	36.59																		
Engineer I	32.11																		
Environ. Scientist V	56.95																		
Natural Resources Mngr.	48.78																		
Engineer Tech V	52.02																		
Engineer Tech IV	45.54																		
Engineer Tech III	37.16																		
Engineer Tech II	29.30																		
Engineer Tech I	24.81																		
Spatial Tech. Manager	58.58																		
Spatial Tech. Prof. III	42.24																		
Spatial Tech. Prof. II	32.77																		
Survey Manager	44.25																		
Project Surveyor	37.21																		
Survey Tech.	22.63																		
CADD Technician III	44.13																		
Marketing Prof. IV	43.25																		
Marketing Prof. III	33.54																		
Admin. Support IV	40.23																		
Admin. Support III	29.92																		
TOTALS		30.0	100%	$47.34	0.0	0%	$0.00	0.0	0%	$0.00	0.0	0%	$0.00	0.0	0%	$0.00	0.0	0%	$0.00

EXHIBIT F

GILMER ROAD RESURFACING
LAKE COUNTY DIVISION OF TRANSPORTATION
ENGINEERING SERVICES - MANHOUR SUMMARY

	Task Manhours	Total Manhours
1- EARLY COORDINATION AND DATA COLLECTION		
Data Collection:	40	
Field Evaluation		
Pavement Evaluation	32	
Drainage and Guardrail Review	10	
Utility Coordination	20	
Total task manhours		**102**
2- TOPOGRAPHIC SURVEY		
Topographic Survey		
Field Work (1 day 1 person control, 5 days 2 person)	110	
Right-of-Way Determination	8	
CADD Processing & Management (SS4 model)	60	
Total task manhours		**178**
3- GEOTECHNICAL INVESTIGATION		
Coordination	8	
Total task manhours		**8**
4- TRAFFIC ANALYSIS		
Capacity Analysis at Gilmer Road and Fish Lake Road Intersection	8	
Total task manhours		**8**
5- ENVIRONMENTAL COORDINATION AND PERMITTING		
Environmental Survey Request (3 sheets @ 8 hrs/sheet)	24	
Special Waste Screening	4	
Wetland Impact Evaluation (8 sheets @ 4 hrs/sheet)	32	
USACE Regional Permit		
Joint Application	4	
Narrative	20	
Exhibits	20	
USFWS Consultation/Memorandum	4	
Report Assembly	4	
Wetland Delineation and Report	40	
LCSMC Permit	24	
Watershed Development Permit Application	12	
Total task manhours		**188**
6- PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT (PESA)		
Preliminary Environmental Site Assessment (PESA)		
Historical Records Review	32	
Environmental Regulary Records Review	32	
Report preparation	16	
Total task manhours		**80**
7- PRELIMINARY SITE INVESTIGATION (PSI)		
Preliminary Site Investigation (PSI)		
Sample Collection (28 samples)	40	
PSI Report	20	
Soil Disposal	6	
Total task manhours		**66**

EXHIBIT F

GILMER ROAD RESURFACING
LAKE COUNTY DIVISION OF TRANSPORTATION
ENGINEERING SERVICES - MANHOUR SUMMARY

	Task Manhours	Total Manhours
8- PLAN PREPARATION		
Double Panel Removal Plans (3 sheets - 1"=20' at 12 hours/sheet)	36	
Roadway Design		
Double Plan View on aerial (28 sheets - 1"=20' @ 18 hrs/sheet)	504	
Guardrail Design	16	
Plan & Profile (6 sheets - 1"=20' @ 32 hours/sheet)	192	
Drainage and Utilities Design	100	
Maintenance of Traffic Resurfacing Section		
Single Panel Plan sheets (10 sheets - 1"=100' at 5 hours/sheet)	50	
Maintenance of Traffic Widening Section (Pre-stage, stage 1, stage 2)		
Stage Notes (1 sheet)	8	
Typical Sections (2 sheets at 8 hours/sheet)	16	
Double Panel Plan sheets (6 sheets - 1"=50' at 20 hours/sheet)	120	
Erosion Control Plans (Pre-stage, stage 1 and stage 2)		
Erosion Control Plan Notes	8	
Double Panel Plan sheets (6 Sheets -1"=100' at 12 hours/sheet)	72	
Cross Section Design		
Gilmer Road Widening (68 cross sections @ 3 hrs/section)	204	
Fairfield Road Bridge Guardrail (20 cross sections @ 3 hrs/section)	60	
Traffic Signal Plans		
Detector Loop Replacement IL Route 120	12	
Detector Loop Replacement IL Route 176	12	
Ellis Drive UPS System	24	
Detailed Drawings		
Cover Sheet	4	
General Notes	6	
Summary of Quantities (2 sheets @ 12 hrs/sheet	24	
Schedule of Quantities (8 sheets at 12 hours/sheet)	96	
Typical Sections (12 typical sections @ 4 hrs/section)	48	
Alignment and Ties (5 sheets at 12 hours/sheet)	60	
Intersection Plan Detail Sheets (2 sheets at 24 hours/sheet)	48	
ADA Ramp Details (21 @ 6 hrs/detail)	126	
Estimate of Cost and Time	20	
Specifications	40	
Total task manhours		**1906**
9- MEETINGS		
Meetings (2 staff members @ 5 hrs/meeting)		
LCDOT (3) (Kickoff, Review, and Pre-final)	30	
Regulatory Agencies (2) (LCSMC and USACE)	20	
Total task manhours		**50**
10- QA/QC		
Review of milestone Submittals	40	
Total task manhours		**40**
11- MANAGE PROJECT		
Administration - 4 hrs/month at 14 months	56	
Total task manhours		**56**
12- PHASE III COORDINATION		
Pre-construction Meeting	6	
RFI Responses	24	
Total task manhours		**30**
TOTALS	**2712**	**2712**

EXHIBIT G

INTERRA
Engineering • Inspection • Testing

600 Territorial Drive, Suite G
Bolingbrook, IL 60440

p: 630-754-8700
f: 630-754-8705

12/27/2021

Mr. Adam Woods, PE
Baxter & Woodman Consulting Engineers
8678 Ridgefield Rd.
Crystal Lake, IL 60012

Cost Estimate
Geotechnical Investigation
Roadway Widening and Resurfacing
Gilmer Road at Callahan Road
Lake County Division of Transportation
Wauconda, Illinois

Dear Mr. Woods:

Interra, Inc. (INTERRA) is pleased to submit this cost estimate to perform geotechnical subsurface soil exploration for the above referenced project in Wauconda, Illinois. We understand that the proposed improvements would consist of roadway widening and resurfacing.

Proposed Scope of Work

Our scope of work includes drilling ten (10) soil borings and obtaining 4 full-depth pavement cores along Gilmer Road at Callahan Road. The approximate area of improvements is presented in the attached drawing. Soil borings will be drilled to a depth of 7.5 feet each from the existing ground/pavement surface in the general area of the proposed additional lanes.

The borings will be located by our crew. The location of the borings will be adjusted based on field conditions, accessibility and utility conflicts. Traffic control signage and/or flaggers will be utilized during pavement coring and borings, as needed to ensure safety of the crew and traffic.

The borings will be drilled with a truck-mounted drill rig. Soil sampling will be performed per

INTERRA
Engineering • Inspection • Testing

600 Territorial Drive, Suite G
Bolingbrook, IL 60440

p: 630-754-8700
f: 630-754-8705

AASHTO T-206, "Penetration Test and Split Barrel Sampling of Soils". Observation for groundwater will be made during and immediately after the completion of the drilling. After the completion of the drilling, the boreholes will be backfilled with the soil auger cuttings from the same borehole. Where required, the surface will be patched with asphalt or cement grout to match surrounding elevations.

Field testing involves performing unconfined compressive strength tests using a RIMAC tester/pocket penetrometer on cohesive soil samples. Laboratory testing includes moisture content tests on all recovered soil samples. Atterberg Limits, Grain Size Analysis and Organic Content tests will be performed on selected soil samples.

Pavement core thickness measurements and photo logs will be done in the laboratory.

Draft and Final Geotechnical Reports will be provided in general accordance with LCDOT guidelines.

Cost Estimate

The cost to provide the above mentioned services is provided in the attached CECS and Direct Costs estimate. If the scope of work is increased or decreased, the final invoice amount will be calculated according to the unit rates in the attached CECS and Direct Costs estimate. The cost estimate is valid until 12/31/2022.

Schedule

The fieldwork could be started within two weeks of receiving authorization to proceed. We anticipate the fieldwork to be completed in one (1) day. Pre-drilling and post-drilling meetings or conference calls will be conducted. The draft geotechnical report will be issued within two weeks of completion of field work. Final geotechnical report will be issued within one week after receiving review comments.

INTERRA
Engineering • Inspection • Testing

600 Territorial Drive, Suite G
Bolingbrook, IL 60440

p: 630-754-8700
f: 630-754-8705

INTERRA very much appreciates the opportunity to submit this proposal. Should you at any time require any additional information or clarifications, please do not hesitate to call us.

Very truly yours,

Interra, Inc.

Ashok Guntaka, EI
Project Engineer

Sanjeev Bandi, Ph.D., P.E.
Project Manager


Widen to a three-lane section through Callahan Road to accommodate left turn lanes and eliminate the existing bypass lanes
Gilmer Rd
S Fish Lake Rd
N Callahan Rd
W Old Gilmer Rd
Purcell Rd
Baroque Ave
Minuet Cir
Viola Ln
Adagio Dr
26

PAYROLL ESCALATION TABLE
FIXED RAISES

FIRM NAME	**INTERRA, Inc.**	**DATE**	**12/27/21**
PRIME/SUPPLEMENT	**PRIME**	**PTB-ITEM#**	**001-Gilmer Rd**
Prepared By	**Ashok Guntaka**		

CONTRACT TERM	**8**	**MONTHS**	**OVERHEAD RATE**	**144.85%**
START DATE	**5/1/2022**		**COMPLEXITY FACTOR**	**0**
RAISE DATE	**1/1/2023**		**% OF RAISE**	**3%**
END DATE	12/31/2022			

ESCALATION PER YEAR

year	First date	Last date	Months	% of Contract
0	5/1/2022	12/31/2022	8	100.00%

The total escalation = 0.00%

PAYROLL RATES

FIRM NAME	**INTERRA, Inc.**	**DATE**	**12/27/21**
PRIME/SUPPLEMENT	**PRIME**		
PTB-ITEM #	**001-Gilmer Rd**		

ESCALATION FACTOR **0.00%**

Note: Rates should be capped on the AVG 1 tab as necessary

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Staff Engineer	$33.63	$33.63
Inspector	$44.40	$44.40
Project Engineer	$47.00	$47.00
Project Manager	$66.42	$66.42
Principal Engineer	$75.00	$75.00

Subconsultants

FIRM NAME INTERRA, Inc. **DATE** 12/27/21
PRIME/SUPPLEMENT PRIME
PTB-ITEM # 001-Gilmer Rd

NAME	Direct Labor Total	Contribution to Prime Consultant
Total	**0.00**	**0.00**

COST PLUS FIXED FEE
COST ESTIMATE OF CONSULTANT SERVICES

Bureau of Design and Environment
Prepared By: Consultant

FIRM INTERRA, Inc.
DATE 12/27/21
PTB-ITEM # 001-Gilmer Rd
OVERHEAD RATE 144.85%
PRIME/SUPPLEMENT PRIME
COMPLEXITY FACTOR 0

DBE DROP BOX	ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	DIRECT COSTS (D)	FIXED FEE (E)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
DBE	Geotechnical Investigation	68	3,264	4,727	9,282	1,208		18,481	18,481	100.00%
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			-	-		-		-	-	
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	Subconsultant DL					0			-	
	TOTALS	68	3,264	4,727	9,282	1,208	-	18,481	18,481	100.00%
			7,991							

DBE 100.00%

Bureau of Design and Environment
Prepared By: Consultant

AVERAGE HOURLY PROJECT RATES

FIRM INTERRA, Inc.
PTB-ITEM# 001-Gilmer Rd
PRIME/SUPPLEMENT PRIME

DATE 12/27/21

SHEET 1 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Geotechnical Investigatio														
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Staff Engineer	33.63	24.0	35.29%	11.87	24	35.29%	11.87												
Inspector	44.40	18.0	26.47%	11.75	18	26.47%	11.75												
Project Engineer	47.00	8.0	11.76%	5.53	8	11.76%	5.53												
Project Manager	66.42	8.0	11.76%	7.81	8	11.76%	7.81												
Principal Engineer	75.00	10.0	14.71%	11.03	10	14.71%	11.03												
		0.0																	
		0.0																	
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TOTALS		68.0	100%	$48.00	68.0	100.00%	$48.00	0.0	0%	$0.00	0.0	0%	$0.00	0.0	0%	$0.00	0.0	0%	$0.00

Illinois Department of Transportation

Direct Costs Check Sheet

COMPANY NAME: **INTERRA, Inc.**

PTB NUMBER: **001-Gilmer Rd**

TODAY'S DATE: **12/27/2021**

ITEM	ALLOWABLE	UTILIZE W.O. ONLY	QUANTITY J.S. ONLY	CONTRACT RATE	TOTAL
Drilling, Pavement Coring & Traffic Control	Actual Cost		1.00	$6,747.00	$6,747.00
Overtime Premium	Actual Cost		4	$22.20	$88.80
Vehicle Owned or Leased	$32.50/half day (4 hours or less) or $65/full day		3	$65.00	$195.00
Lab - Moisture Content	Actual Cost		34	$20.50	$697.00
Lab - Attgerberg Limits	Actual Cost		3	$130.000	$390.00
Lab - Grainsize Analysis	Actual Cost		3	$238.00	$714.00
Lab - Organic Content	Actual Cost		3	$150.00	$450.00
				$0.00	$0.00
				$0.00	$0.00
				$0.00	$0.00
				$0.00	$0.00
				$0.00	$0.00
				$0.00	$0.00
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				$0.00	$0.00
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				$0.00	$0.00
				$0.00	$0.00
				$0.00	$0.00
				$0.00	$0.00
				$0.00	$0.00
TOTAL DIRECT COST					**$9,281.80**

**If other allowable costs are needed and not listed, please add in the above spaces provided.*

LEGEND

W.O. = Work Order

J.S. = Job Specific