Illinois Department of Transportation

DRAFT

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	22-00999-86-ES	

Project Number	Contact Name	Phone Number	Email
	Thomas Somodji	(847) 377-7485	tsomodji@lakecountyil.gov

SECTION PROVISIONS

Local Street/Road Name	Key Route	Length	Structure Number
Peterson Road and Monaville Road			n/a

Location Termini: at the Canadian National Railroad (CN) at-grade crossing

Add Location | Remove Location

Project Description: Feasibility Study to evaluate alternatives for grade separating Peterson Road and Monaville Road at the CN crossing.

Engineering Funding: ☐ MFT/TBP ☐ State ☒ Other — County Option MFT

Anticipated Construction Funding: ☐ Federal ☐ MFT/TBP ☐ State ☒ Other — To be determined at a future date.

AGREEMENT FOR

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

CONSULTANT

Prime Consultant (Firm) Name	Contact Name	Phone Number	Email
Christopher B. Burke Engineering	Matt Huffman	(847) 823-0500	mhuffman@cbbel.com

Address	City	State	Zip Code
9575 West Higgins Road, Suite 600	Rosemont	IL	60018

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: Qualification Based Selection (QBS) Checklist

☒ EXHIBIT D: Cost Estimate of Consultant Services (BLR 05514. See Attached Cost Estimates)

☒ EXHIBIT E: Direct Costs Check Sheet (attach BDE 436 when using Lump Sum on Specific Rate Compensation)

☐ _____

☐ _____

☐ _____

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 DIRECT COST tab in BLR 05513 or BLR 05514).

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 C).
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 (Firm) Name	TIN/FEIN/SS Number	Agreement Amount
Christopher B. Burke Engineering	36-3468939	$601,619.00

Subconsultants	TIN/FEIN/SS Number	Agreement Amount
TranSystems	43-0839725	$483,946.00
Quality Counts	74-3073687	$37,650.00
	Subconsultant Total	$521,596.00
	Prime Consultant Total	$601,619.00
	Total for all work	$1,123,215.00

AGREEMENT SIGNATURES

Executed by the LPA:

Attest: The [Local Public Agency Type] of Lake County Division of Transportation [Local Public Agency]

By (Signature & Date)

By (Signature & Date)

Local Public Agency: Lake County Division of Tra

Local Public Agency Type:

Clerk

Title

(SEAL)

Executed by the ENGINEER:

Attest:

Consultant (Firm) Name: Christopher B. Burke Engineering

By

Date: 2/3/2023

Title: President

By

Date: 2/3/2023

Title: Vice President

APPROVED:

Regional Engineer, Department of Transportation (Signature & Date)

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake County Division of Transport	Christopher B. Burke Engineering	Lake	22-00999-86-ES

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 separate Exhibit A - Scope of Services documents for Peterson Road and Monaville Road.

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake County Division of Transport	Christopher B. Burke Engineering	Lake	22-00999-86-ES

EXHIBIT B
PROJECT SCHEDULE

The Feasibility Study is anticipated to be completed within 18 months after authorization to proceed, which is anticipated as 4/01/2023. The project schedule will be finalized after authorization to proceed is received and the kickoff meeting with LCDOT is held.

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake County Division of Transport	Christopher B. Burke Engineering	Lake	22-00999-86-ES

Exhibit C
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?	☐	☒

If yes Due date of submittal 02/11/22

Method(s) used for advertisement and dates of advertisement

NewSun - published 1/28/2022 and 2/4/2022
Email blast to LCDOT Consultant List

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
Technical Approach	25%
Firm Experience	15%
Specialized Expertise	10%
Staff Capabilities (prime/sub)	15%
Workload Capacity	15%
Past Performance	10%
Public Outreach	10%

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

Selection committee (titles) for this project

County Engineer, Asst. County Eng., Engineer of Traffic, Director of Planning, Project Manager, Engineer of Design

Top three consultants ranked for this project in order	
1	Christopher B. Burke Engineering, Ltd. (CBBEL)
2	Bowman Consulting Group
3	Patrick Engineering

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?	☐	☒

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake County Division of Transport	Christopher B. Burke Engineering	Lake	22-00999-86-ES

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).	☒	☐

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	22-00999-86-ES

Exhibit E
Direct Costs Check Sheet (IDOT BDE 436)

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	1400	$0.63	$875.00
☒	Vehicle Owned or Leased	$32.50/half day (4 hours or less) or $65/full day	12	$65.00	$780.00
☐	Vehicle Rental	Actual cost (Up to $55/day)			
☒	Tolls	Actual cost	80	$0.40	$32.00
☐	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)	20	$15.00	$300.00
☐	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			
☐	Lab Services	Actual Cost (Provide breakdown of each cost)			
☐	Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			
☒	CN Right-of-Entry Permit, Flaggers, Training	Actual Cost (Lump Sum)	2	$7,500.00	$15,000.00
☒	CN Insurance	Actual Cost (Lump Sum)	2	$5,000.00	$10,000.00
☒	Misc Printing/Reproduction, Exhibits, and Reports	Actual Cost (Lump Sum)	1	$3,400.00	$3,400.00
☐					
☐					
				Total Direct Costs	$30,387.00

Scope of Services and Cost Proposal For:

Monaville Road (County Hwy 55) at Canadian National Railway

Grade Separation Feasibility Study

SN 22-00999-86-ES

CN Grade Separation Feasibility Study at Monaville Road (County Hwy 55) SN 22-00999-86-ES Scope of Services

The Lake County Division of Transportation (County) desires to complete a Feasibility Study for a potential grade separation of the Canadian National Railroad (CN) at Monaville Road within the Village of Lake Villa and Round Lake Beach. The purpose of the Feasibility Study is to determine if a grade separation is possible at this location by analyzing potential impacts to surrounding property and environmental resources, needed improvements to adjacent intersections and roadways based on future traffic volumes, potential drainage and utility conflicts and resolutions, the need for non-motorized travel accommodations, overall constructability, and estimated future construction costs. Consideration of projected future CN track usage within the study area will also be a key component of this evaluation. The Feasibility Study is anticipated to be completed within 18 months after authorization to proceed.

Monaville Road is functionally classified as a Minor Arterial roadway that is County jurisdiction (CH 55). The feasibility analysis will incorporate year 2050 traffic projections from CMAP to ensure the appropriate cross section is considered as part of the grade separation feasibility analysis. On this basis, the overall limits of the Monaville Road Feasibility Study are anticipated to be from approximately Orchard/Farmhill Lane to west of IL Route 83, a distance of approximately 0.5 miles.

The Feasibility Study will include coordination with the County and the CN to assist with identifying key issues/concerns to be considered as part of the feasibility analysis. A Feasibility Report will be prepared that documents the results of the analysis and coordination completed and serves as a project scoping report for future project development.

Based on this overall project understanding, and preliminary scoping discussions with the County, the CBBEL-TranSystems team will complete the following scope of services as part of the CN at Monaville Road Grade Separation Feasibility Study.

Task 1 – Data Collection and Review: Background data required to complete the Feasibility Study will be obtained and reviewed, which is anticipated to include the following information:

- Traffic Counts. Six (6) locations of full classification (including ped/bike) traffic counts will be collected along Monaville Road with two sets of mid-week (T, W, TH) counts collected at each location on a non-holiday, during two separate weeks, and one set of Saturday counts to ensure count consistency.
- 6-hour counts (6-9 a.m., 3-6 p.m.) will be collected for the intersections of Monaville Road at Orchard/Farmhill, Silver Oaks Drive, the western Walmart entrance, and IL 83.
- For purposes of warrant analysis, 24-hour counts will be collected for the intersections at the eastern Walmart Entrance and Lancaster Lane.
- IDOT is nearing completion of a Phase I Engineering study for IL Route 83, which is already a multi-lane roadway at Monaville Road. It is assumed that any additional improvements at this intersection would be minor, however, outreach to IDOT will occur for information on the proposed improvements at this intersection and associated traffic volumes for comparison to the traffic counts collected.

- Crash Analysis. The latest 5-years of crash data will be retrieved from the County and/or IDOT for Monaville Road within the noted project limits.
- Utility atlases. Available utility data will be collected from the County and record plans. Additional utility coordination will occur as part of Task 6.
- Current ICC and USDOT/FRA Railroad Crossing Inventory Data.
- Record roadway plans. Record roadway plans for Monaville Road will be retrieved from the County, as available.
- LiDAR data. Available County LiDAR contour mapping and control data will be retrieved from the County.
- Records of any (if any) roadway flooding or drainage concerns.
- Existing Right-of-Way information and Property Owner data.
- Available socio-economic and environmental data will be assembled as part of Task 5.
- County video recording of the CN crossing to determine the average gate-down time and number of trains per day. It is assumed the County will collect video data using Miovision cameras from two 24-hour periods including one weekday and one weekend.

Task 2 – Survey: A full topographic survey for the Monaville Road corridor will not be completed. However, some spot topographic survey will be completed near the CN crossing to better correlate the existing CN top-of-rail and nearby roadway elevation differences, to tie into the County LiDAR data that will be used for alternatives analysis for the remainder of the corridor, and to ensure accurate above ground utility information near the existing crossing. It is anticipated that approximately 500 feet of topographic survey along the CN tracks north and south of the roadway, and approximately 500 feet east and west of the tracks along Monaville Road will be completed. Cost of RR flaggers and permits (if required) will be included in the survey work cost, for survey inside the CN right-of-way.

A base CAD file including the completed topographic survey and County LiDAR data will be compiled in MicroStation V8i SS10 at 1”=50’ scale, for developing concept plans, profiles and cross sections (as applicable). Existing property lines will be included in the base CAD file based on available information from the County and other readily available sources. For purposes of this Feasibility Study, horizontal alignments will be set utilizing record roadway and/or right-of-way plans, available County mapping data and project aerials as applicable. County stationing to be used per County Design Survey Procedures.

Existing right-of-way information, including Plat of Highways, will be retrieved from the County. Additional right-of-way data, including adjacent property owners and parcel data, will be retrieved from the Lake County Recorder’s office, and up to three (3) title reports will be ordered and reviewed (as/if necessary) to identify superior easements within, crossing, and/or adjacent to Peterson Road that supersede the Peterson Road right-of-way. Of particular interest are the two railroad crossings, IL Route 137, and major utilities.

This task also includes planning level JULIE coordination with utilities to retrieve atlas information as supplemental to information retrieved from the County (i.e., equivalent to SUE

Level D). A separate SUE Level C or B review will not be completed. Additional ongoing coordination with adjacent major utilities such as ComEd will occur as part of Task 7, as required.

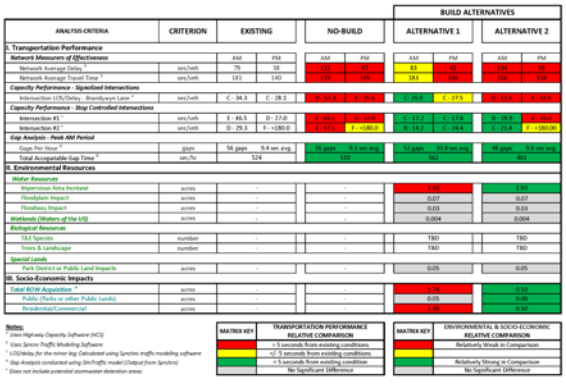
Task 3 – Alternatives Analysis: For purposes of the Feasibility Study, the alternatives analysis will include concept level plan and profile development of grade separation alternatives at the Monaville Road crossing of the CN for comparative analysis and evaluation. Based on the presence of existing sidewalk at the crossing and the adjacent non-motorized trip generators (residential and commercial development), sidewalks and/or a bike path will be considered as part of the grade separation alternatives analysis. Applicable County and IDOT BLRS Manual design criteria will be used for concept design development based on the roadway functional classification. Applicable CN design criteria will be used for concept design development related to track elevation changes considered.

An initial Level One analysis will be completed to identify areas of "fatal" constraints that would limit or preclude development of a potential grade separation alternative and/or construction thereof. The Level One analysis will be based on a desk top review of the compiled GIS database of collected socio-economic and environmental data, collected right-of-way information including superior easements, and a field review. The objective of the Level One analysis is to refine the viable areas for potential alternatives development and evaluation as part of the Level Two analysis.

For the Level Two analysis, each concept grade separation alternative will be developed in plan-view with concept level profiles and critical cross sections to determine probable right-of-way needs for comparative evaluation. The CBBEL-TranSystems team will prepare the concept proposed improvement plans at a scale of 1"=50'.

It is assumed that six (6) separate grade separation alternatives will be developed for relative comparison (i.e., two each for overpass, underpass, and CN track adjustment), based on symmetrical vs asymmetrical profile designs as a best fit investigation. In addition, alternatives for realignment of local access points (i.e., Silver Oaks Drive, Walmart entrances, Lancaster Lane, as/if required), as well as the resulting redistribution of traffic and intersection sight distance effects will be evaluated for each Monaville Road over or under alternative considered. The effect (if any) of the IDOT proposed improvements at the IL Route 83 intersection will be considered as part of the alternatives evaluation. For each alternative considered, construction staging will be evaluated and conceptually drafted for incorporation into the alternatives evaluation process related to impacts and costs. A key consideration will be whether Monaville Road can be maintained during construction, and the associated right-of-way and cost requirements for temporary pavement and a

EXAMPLE ALTERNATIVES EVALUATION MATRIX



temporary CN crossing.

The Level Two alternatives evaluation process will include a comparative analysis with respect to operational and safety benefits, required access modifications, probable right-of-way needs/impacts, utility impacts, environmental impacts, drainage considerations, constructability and stage construction methodology, and program level engineering and construction cost estimates. The associated traffic, environmental, and drainage analysis components of the overall alternatives analysis will be completed as part of Tasks 4, 5, and 6 respectively.

The Level Two alternatives evaluation process is anticipated to be somewhat iterative, with draft alternatives provided to the County and the CN for review, with subsequent refinement of alternatives to address review comments received. The alternatives evaluation results will be presented in a comparative evaluation matrix format for review (similar to example below) and summarized in a separate standalone alternatives evaluation technical memorandum (AETM) that will also be incorporated into the Feasibility Report (Task 8).

The objective of the alternatives evaluation process is to determine if a CN grade separation is feasible and practical, and to identify viable alternatives for further consideration as part of future project development beyond the Feasibility Study. This recommendation will be summarized in the Feasibility Report.

Task 4 – Traffic and Crash Analysis: Traffic capacity and operations will be analyzed for weekday AM and PM peaks and weekend peak. The CBBEL-TranSystems team will coordinate with CMAP for development of 2050 traffic projections for the Monaville Road corridor, and coordinate with the CN for 20-year (+) future projections on the number and length of trains at the Monaville Road crossing. Capacity analysis will be completed using Synchro/SimTraffic for existing, 2050 No-Build, and 2050 Build conditions (as applicable) for all counted intersections, including the effect of any rerouted traffic due to the proposed grade separation alternatives such as with the Walmart entrances.

Although the CMAP model does not technically include network impedance for existing at-grade railroad crossings, the issue of assessing potential latent demand via a select-link analysis, based on a proposed new CN grade separation alternative, and the one-mile distance north and south to the next available crossings will be discussed with CMAP and factored into the 2050 Build projections as/if applicable.

The completed capacity analysis will determine if capacity improvements along Monaville Road should be factored into the feasibility analysis based on the 2050 traffic projections. A traffic signal warrant review for possible realignment of the Walmart entrance to Lancaster Lane based on existing and 2050 traffic will be completed. Other elements of this task include:

- Prepare exhibits with balanced traffic volumes for existing, 2050 No-Build and 2050 Build conditions.

- Establish Synchro/SimTraffic network and complete peak am and pm traffic analysis for existing, 2050 No-Build, and 2050 Build conditions, and summarize in a spreadsheet.
- Incorporate the railroad gate-down time from the video analysis into the SimTraffic network to evaluate the associated delay.
- Calculate the daily and annual "gates down" user delay and cost for existing conditions, and the accrued "gates down" user delay and cost over time to the year 2050, based on existing and year 2050 roadway and rail traffic volumes. The cost analysis will be completed based on value of time data recommended as part of the US DOT Discretionary Grant Application procedures for potential future use with grant applications.
- Establish a preliminary project Purpose & Need statement for future project development.

Under the safety review, most recent 5-year crash data available to the team will be tabulated, reviewed and summarized with respect to notable trends and crash patterns. This crash data review will be used to identify areas requiring a safety focus and to recommend safety countermeasures within the study area. A field review of current safety deficiencies under a Road Safety Audit (RSA) or development of predictive crash rates for future conditions is not anticipated under the feasibility study.

Results of the traffic and safety analysis will be included within the Feasibility study. Separate documentation of the traffic or safety study in form of a memo or report is not anticipated.

Task 5 – Environmental Evaluation: A socio-economic and environmental resources project database will be compiled for evaluation of potential environmental impacts associated with alternatives considered. Environmental field surveys will not be completed for the project.

Environmental information retrieved from available databases will include the following:

- Lake County GIS: Lake County wetland inventory and ADID wetlands, Floodway/Floodplain, public land and features, etc.
- Zoning maps, bike/ped facilities and plans, soils data, school/transit/mail/emergency service routes, etc.
- IDNR: EcoCAT (biological resources); HARGIS (cultural resources); Special Lands (Parks, Open Space, LAWCON, OSLAD funding)
- IEPA: 303d list (water quality)
- Special Waste Screening: NETR Online, State Fire Marshall, etc.

Silver Oaks Park and Sutton on the Lakes Park within the Village of Round Lake Beach are just south of Monaville Road and adjacent to both sides of the CN corridor. If park boundary and funding source information (LAWCON, OSLAD) is not available from IDNR, the project team will reach out to the Round Lake Area Park District for this information for use as part of the Level One constraints analysis. In addition to potential right-of-way impacts at the parks, tree impacts

in these areas related to the alternatives considered and construction staging, could be a concern. Although a detailed tree survey will not be completed as part of the Feasibility Study, tree sample plots will be established in wooded areas adjacent to the corridor to gather tree data and estimate the number and quality of trees that would be impacted for each alternative considered.

This information will be compiled into an environmental resources GIS database for evaluation of alternatives along the Monaville Road corridor. This compiled environmental database also establishes the baseline environmental footprint for future project development. Although a detailed tree survey will not be completed as part of the Feasibility Study, the alternatives evaluation will include an assessment of acres of tree impacts and density based on desktop review of recent aerial photography. The number and quality of trees that would be impacted for each alternative considered will not be evaluated.

Based on this information, the CBBEL-TranSystems team will evaluate the potential impacts to the above environmental elements associated with each alternative considered as part of the feasibility analysis. Potential impacts to identified wetlands and other environmental elements will be evaluated for each alternative, along with the associated mitigation requirements and the most suitable mitigation locations (and any associated right-of-way requirements) will be identified for each alternative considered.

Task 6 – Drainage Evaluation: The CBBEL-TranSystems team will identify existing drainage patterns, including existing drainage outfalls along the Monaville Road corridor, to the extent possible based on the limited field survey data and review of record plans. A Concept Level Existing Drainage Plan (CLEDP) will be prepared for the Monaville Road corridor.

The suitability of the existing drainage outfall(s) will be evaluated, and any existing drainage problem areas identified as part of project data collection and coordination will be documented for consideration as part of the alternatives analysis. Detailed investigation of needed corrective drainage improvements to address identified existing drainage problem areas will not be completed as part of the Feasibility Study.

Drainage concepts will be investigated for each grade separation alternative considered to identify likely drainage outfall locations, to determine if a drainage pump station is likely to be required for the underpass alternatives, and to identify the most suitable location if a pump station is likely required. For the underpass alternatives, concept drainage profiles will be prepared for purposes of evaluating if a pump station will be required.

The need for stormwater detention will be estimated for each alternative considered, based on the projected future roadway cross section and in consideration of 2050 traffic projections. Any right-of-way acquisition that is likely to be needed for stormwater detention will be identified and shown on the alternative plan/profile exhibits.

Detailed drainage calculations for pipe sizing as part of the alternatives considered and/or hydraulic reports (existing culverts or pump station) will not be completed as part of the Feasibility Study. The results of the concept drainage analysis will be included in the applicable sections of the Feasibility Report. A separate drainage technical memorandum will not be prepared.

Task 7 – Project Coordination: A formal public involvement process, including public information meetings, will not be implemented as part of the Monaville Road Feasibility Study. The CBBEL-TranSystems team will complete project coordination with the County and the CN to obtain important input related to the consideration of a grade separation. This coordination is anticipated to include a combination of phone conversations, email exchange, virtual meetings, and in-person meetings as required. Coordination with additional future project stakeholders (i.e., Metra, ICC, Com Ed, Villages, IDOT, etc.) will not be completed as part of Feasibility Study.

To facilitate each project coordination meeting, the CBBEL-TranSystems team will develop supporting exhibits and handout materials. Meeting summaries will be prepared for all meetings for the project record and inclusion in the Feasibility Study Report. Coordination with IDOT-BLRS related to potential future Phase I Engineering will not be pursued as part of the Feasibility Study.

Task 8 – Feasibility Report: A Feasibility Report will be prepared that documents all analysis and coordination completed, the recommended alternative, and the estimated project implementation costs. The information included in the Feasibility Report will form the basis for a project scoping report for consideration as part of future project development.

The format of each Feasibility Report is anticipated as follows, with potential modifications as/if required or desired by the County:

- Introduction
- Existing Conditions (*Traffic, Safety, Environmental*)
- Purpose/Objective of Potential Grade Separation (*Preliminary Purpose & Need*)
- Description of Alternatives Considered
- Comparative Evaluation of Alternatives (including program level cost estimates)
- Summary of Project Coordination
- Summary of Results and Recommended Action
- Next Steps
- Appendices (as applicable)

It is anticipated that a draft Feasibility Report will be submitted for review and a final Feasibility Report will be prepared that addresses any review comments received.

Task 9 – Project Administration: This task includes overall project administration and quality assurance. Project administration includes managing the day-to-day work effort on the project

including work force allocations, budget oversight, invoicing, and monthly progress reviews to ensure project milestones are being met, and periodic progress coordination meetings as required. A Feasibility Study project schedule will be developed as part of this task that identifies key project milestones and deliverables.

Task 10 – QA/QC

This task includes establishment and adherence to an approved Quality Management Plan (QMP). QA/QC reviews will be performed in accordance with the QMP prior to all major deliverables.

CNRR Grade Separation Feasibility Study
at Monaville Road (County Route A18)
Project Location

CN RAILWAY GRADE SEPARATION FEASIBILITY STUDY
AT MONAVILLE ROAD (COUNTY HWY 55)
SN 22-00999-86-ES
Work Hour Estimate

	Task	Units	Work Hours	
			CBBEL	TSC
1.	**Data Collection and Review**			
a	Compile and catalog project data: Retrieve recent project aerials via NearMap or other source for the full study area. Retrieve available traffic and crash data (latest 5-years plus Safety Tier), IDOT and USDOT/FRA railroad crossing inventory data, record roadway and drainage plans, records of any roadway drainage concerns, plat of highways and property owner information, public lands ownership and use, current FEMA maps and models as applicable, zoning maps, bike/ped facilities and plans, soils data, school/transit/mail/emergency service routes, etc.	L. Sum	24	16
b	Compile project GIS database and update as required.	L. Sum	28	
c	Coordination with IDOT about ongoing IL Route 83 project. As part of initial coordination with IDOT, information will be retrieved on the proposed improvements at this intersection and associated traffic volumes.	L. Sum		16
d	Coordination with traffic count subconsultant for completion of Traffic Counts per scope of services.	L. Sum	4	
e	Field reconnaisance (project photo log, resolve questions from data collection and review).	2 trips x 2 ppl x 4 hrs		16
f	Evaluate video data provided by County for average gate-down time and number of trains per day.	L. Sum		8
		SUBTOTAL:	56	56
2.	**Survey**			
a	Coordination with the County for survey right-of-entry letter and survey control data.	L. Sum	4	
b	Coordination with the County for available LiDAR (1' contour) mapping and control data, and available utility information for the study area	L. Sum	10	
c	Topographic survey: County LiDAR control recovery and establishment. Spot roadway and CNRR survey as described in the scope of services.	L. Sum	160	
d	JULIE Coordination	L. Sum	24	
e	Research for right-of-way information including coordination with the County for Plat of Highways, Lake County Recorders office for parcel ownership, and order/review up to three (3) title reports.	L. Sum	48	
f	Compile survey and prepare base mapping in Microstation V8i/SS10 at 1' = 50' scale, and incorporating Lake County LiDAR mapping. Includes establishing horizontal alignment thru the study area by record roadway and right-of-way plans, mapping data, and aerials.	L. Sum	92	
		SUBTOTAL:	338	0
3.	**Alternatives Analysis**			
a	Prepare design criteria table for development of roadway and railroad alternatives.	L. Sum		4

CN RAILWAY GRADE SEPARATION FEASIBILITY STUDY
AT MONAVILLE ROAD (COUNTY HWY 55)
SN 22-00999-86-ES
Work Hour Estimate

	Task	Units	Work Hours	
			CBBEL	TSC
b	Level One analysis to identify areas of "fatal" constraints that would limit or preclude development of a potential grade separation alternative and/or construction thereof. The Level One analysis will be based on a desk top review of the compiled GIS database of collected socio-economic, land use, and environmental data, collected right-of-way information including superior easements, and a field review.	60 hrs Avg x 6 alts	60	
c	Prepare Level Two concept CNRR grade separation alternatives per scope of services (plan, profile, typical cross sections).	60 hrs Avg x 6 alts		360
d	Evaluate each combined Level Two alternative with respect to potential environmental, drainage, right-of-way, and utility impacts.	16 hrs Avg x 6 combined alts		96
e	Evaluate each combined Level Two alternative for constructability and develop construction staging concepts.	16 hrs Avg x 6 combined alts		96
f	Prepare a program level cost estimate for each combined alternative considered, for relative comparison.	8 hrs Avg x 6 combined alts		48
g	Prepare concept alternatives comparative evaluation summary table (performance, safety, impacts, right-of-way, program level cost) for County and Agency coordination as applicable.	L. Sum		40
h	Identify viable alternatives for further consideration as part of future project development beyond the feasibility study, and refine the alternative concept, construction staging, associated right-of-way and other impacts, and the program level cost estimate based on County and Agency review comments.	L. Sum		48
i	Prepare Alternatives Evaluation Technical Memorandum (AETM) summarizing the results of the alternatives evaluation.	L. Sum		40
		SUBTOTAL:	60	732
4.	**Traffic and Crash Analysis**			
a	Crash Analysis: Review and summarize crash data in tabular format by year, conditions, and severity. Evaluate Safety Tier data as applicable, including retrieve and review police reports for K and/or A injury crashes.	L. Sum		32
b	Collate existing traffic counts, identify and balance study area peaks. Coordinate with CMAP for 2050 traffic projections (No-Build and Build as applicable) for the project area, and coordinate with CNRR for 20-year (+) projections on number of tracks, and number and length of trains at the CNRR crossing. Includes coordination with CMAP for potential analysis of latent demand via select link analysis at the CNRR crossing.	L. Sum		28
c	Prepare a base/balanced study area traffic diagram for existing and 2050 (No-Build/Build as applicable) traffic data, including intersection turning movements and level of service (added after analysis). Prepare a balanced traffic 2050 (No-Build/Build as applicable) diagram for each alternative considered, including possible realignment of the Walmart entrance to Lancaster Lane as applicable. Assume up to 3 distinct combinations based on potential side street/entrance reconfiguration concepts.	12 hours; 4 hrs Avg x 3 alts		24
d	Signal Warrant Analysis for possible realignment of the Walmart entrance to Lancaster Lane, based on existing and 2050 traffic.	L. Sum		16

CN RAILWAY GRADE SEPARATION FEASIBILITY STUDY
AT MONAVILLE ROAD (COUNTY HWY 55)
SN 22-00999-86-ES
Work Hour Estimate

	Task	Units	Work Hours	
			CBBEL	TSC
e	Initial Synchro/SimTraffic and HCS Model setup and analysis for existing and 2050 (No-Build/Build as applicable), for all counted intersections and for each intersection variation considered based on possible realignment of the Walmart entrance to Lancaster Lane in addition to Monaville at IL Route 83. Assume up to 7 build alternatives in addition to existing and 2050 no-build scenario. Incorporate the railroad gate-down time from the video analysis into the SimTraffic network to evaluate the associated delay. Includes model setup. Includes model setup.	32 hrs for existing condition and calibration. 24 hrs for modeling RR x-ing. 16 hrs Avg x 8 alts		184
f	Calculate the daily and annual "gates down" user delay and cost for existing conditions, and the accrued "gates down" user delay and cost over time to the year 2050, based on existing and year 2050 roadway and rail traffic volumes.	L. Sum	40	
g	Prepare a preliminary Purpose and Need statement for future project development	L. Sum		40
		SUBTOTAL:	40	324
5.	**Environmental Evaluation**			
a	Assemble project socio-economic and environmental data from available databases including Lake County GIS (LCWI/ADID wetlands, floodway/floodplain boundaries, public lands, etc.), IDNR (biological and cultural resources, and special lands (Parks, LAWCON, OSLAD), IEPA (water quality), and Special Waste sources (State Fire Marshall) and include in project GIS database for use with the evaluation of concept alternatives.	L. Sum	32	
b	Assessment of acres of tree impacts and density based on desktop review of recent aerial photography. The number and quality of trees that would be impacted for each alternative considered will not be evaluated.	L. Sum	28	
		SUBTOTAL:	60	0
6.	**Drainage Evaluation**			
a	Collect data to help understand how the existing drainage network functions. Using best available topography determine the major areas tributary to the project site. Determine the outfalls from the project site and determine if they are suited for continued use. Prepare the Concept Level Existing Drainage Plan (CLEDP).	L. Sum	40	24
b	Evaluate drainage concepts for each Level Two grade separation alternative considered~~, including~~ in order to determine pump station needs, as well as compensatory storage and stormwater detention requirements.	48 hrs Avg x 6 alts	60	228
		SUBTOTAL:	100	252
7.	**Project Coordination**			
a	Coordination with CN. Includes phone conversations, email exchange, virtual meetings and/or in-persons as required of desired. Assume 4 coordination events with 3 CBBEL/TSC staff at 3 hours each (includes travel (as applicable), meeting preparation (5 hours each), and preparing meeting summaries (2 hours each).	4 mtgs x 16 hrs	32	32
b	CBBEL-TSC Team bi-weekly progress coordination meetings. 4 people (avg) per meeting at 1 hour each. Assumed all virtual meetings.	39 mtgs x 4 hrs	78	78
c	County Project Coordination/Status Meetings. Assume 6 meetings (includes 4 ppl at 3 hours each (including travel as applicable), meeting preparation (8 hours each), and preparing meeting summaries (2 hours each).	6 mtgs x 22 hrs	66	66
		SUBTOTAL:	176	176
8.	**Feasibility Report**			

CN RAILWAY GRADE SEPARATION FEASIBILITY STUDY
AT MONAVILLE ROAD (COUNTY HWY 55)
SN 22-00999-86-ES
Work Hour Estimate

	Task	Units	Work Hours	
			CBBEL	TSC
a	Compile Exhibits, Documents, and Materials for inclusion in the Feasibility Report.	L. Sum		24
b	Prepare Preliminary Feasibility Report and submit for County and CNRR~~, and IDOT for~~ review as applicable.	L. Sum		120
c	Prepare Final Feasibility Report based on LCDOT and CNRR~~, and IDOT~~ review comments.	L. Sum		32
		SUBTOTAL:	0	176
9.	**Project Management and Adminstration**			
a	Project Management and Administration	4 hours x 18 months	72	72
b	Monthly Progress Reports	2 hours x 18 months	36	36
		SUBTOTAL:	108	108
10.	**QA/QC**			
a	Quality Management plan (QMP)	L Sum	2	6
b	QA/QC reviews in accordance with quality process and QMP. The following deliverables/tasks are included: Survey, Wetland Technical Report, EDP/PDP, Feasibility Report, AETM and traffic models)	8 hours x 6 deliverables	16	32
		SUBTOTAL:	18	38
		Consultant Totals:	**956**	**1,862**
			Project Total:	**2,818**

Illinois Department of Transportation

EXHIBIT D

COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

FIXED RAISE

Local Public Agency	County	Section Number
LCDOT	Lake	22-00999-86-ES

Prime Consultant (Firm) Name	Prepared By	Date
Christopher B. Burke Engineering, Ltd.	CBBEL	6/3/2022

Consultant / Subconsultant Name	Job Number
Christopher B. Burke Engineering, Ltd.	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

Canadian National Railway (CN) Feasibility Study at Monaville Road.

PAYROLL ESCALATION TABLE

CONTRACT TERM	**18**	**MONTHS**	**OVERHEAD RATE**	**126.53%**
START DATE	**4/1/2023**		**COMPLEXITY FACTOR**	**0**
RAISE DATE	**1/1/2024**		**% OF RAISE**	**2.00%**
END DATE	9/30/2024			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	4/1/2023	1/1/2024	9	50.00%
1	1/2/2024	10/1/2024	9	51.00%

The total escalation = 1.00%

Local Public Agency	County	Section Number
LCDOT	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
Christopher B. Burke Engineering, Ltd.	

PAYROLL RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

MAXIMUM PAYROLL RATE	**78.00**
ESCALATION FACTOR	**1.00%**

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Principal	$78.00	$78.00
Engineer VI	$78.00	$78.00
Engineer V	$70.82	$71.53
Engineer IV	$58.50	$59.09
Engineer III	$46.57	$47.04
Engineer I/II	$33.88	$34.22
Survey V	$78.00	$78.00
Survey IV	$74.00	$74.74
Survey III	$64.75	$65.40
Survey II	$53.00	$53.53
Survey I	$37.56	$37.94
Engineering Technician V	$70.17	$70.87
Engineering Technician IV	$59.13	$59.72
Engineering Technician III	$38.25	$38.63
CAD Manager	$68.83	$69.52
CAD Technician II	$51.81	$52.33
GIS Speciailist III	$56.00	$56.56
Landscape Architect	$63.00	$63.63
Landscape Designer I/II	$36.50	$36.87
Environmental Resource Specialist V	$73.20	$73.93
Environmental Resource Specialist IV	$60.58	$61.19
Environmental Resource Specialist III	$51.25	$51.76
Environmental Resource Specialist I/II	$29.13	$29.42
Environmental Resource Technician	$44.00	$44.44
Engineering Itern	$17.50	$17.68

Local Public Agency	County	Section Number
LCDOT	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
Christopher B. Burke Engineering, Ltd.	

SUBCONSULTANTS

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

NAME	Direct Labor Total	Contribution to Prime Consultant
TranSystems	105,557.00	10,555.70

Total	105,557.00	10,555.70

NOTE: Only subconsultants who fill out a cost estimate that splits out direct labor may be listed on this sheet.

Local Public Agency	County	Section Number
LCDOT	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
Christopher B. Burke Engineering, Ltd.	

DIRECT COSTS WORKSHEET

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.

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	700	$0.63	$437.50
Vehicle Owned or Leased	$32.50/half day (4 hours or less) or $65/full day	6	$65.00	$390.00
Vehicle Rental	Actual Cost (Up to $55/day)			$0.00
Tolls	Actual Cost	40	$0.40	$16.00
Parking	Actual Cost			$0.00
Overtime	Premium portion (Submit supporting documentation)			$0.00
Shift Differential	Actual Cost (Based on firm's policy)			$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)	10	$15.00	$150.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			$0.00
Project Specific Insurance	Actual Cost			$0.00
Monuments (Permanent)	Actual Cost			$0.00
Photo Processing	Actual Cost			$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			$0.00
CADD	Actual Cost (Max $15/hour)			$0.00
Web Site	Actual Cost (Submit supporting documentation)			$0.00
Advertisements	Actual Cost (Submit supporting documentation)			$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			$0.00
Recording Fees	Actual Cost			$0.00
Transcriptions (specific to project)	Actual Cost			$0.00
Courthouse Fees	Actual Cost			$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Utliity Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Testing of Soil Samples	Actual Cost			$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
CN Right-of-Entry Permit, Flaggers, Training	Actual Cost	1	$7,500.00	$7,500.00
CN Insurance	Actual Cost	1	$5,000.00	$5,000.00
Miscellaneous Printing and Material Production	Actual Cost (Lump Sum)	1	$1,400.00	$1,400.00
				$0.00
			TOTAL DIRECT COSTS:	**$14,893.50**

Local Public Agency	County	Section Number
LCDOT	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
Christopher B. Burke Engineering, Ltd.	

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE 126.53% **COMPLEXITY FACTOR** 0

Exhibit E: Feasibility Study - Monaville Road at CN/Metra Railroad Crossing

TASK	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	DIRECT COSTS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
1. Data Collection and Review	56	2,955	3,739	$14,893.50	975	17,106	39,669	8.94%
2. Survey	338	17,551	22,207		5,792		45,550	10.27%
3. Alternatives Analysis	60	3,435	4,346		1,133	107,161	116,075	26.16%
4. Traffic and Crash Analysis	40	2,201	2,785		726	47,060	52,772	11.89%
5. Environmental Evaluation	60	3,216	4,069		1,061		8,346	1.88%
6. Drainage Evaluation	100	5,369	6,793		1,772	34,140	48,074	10.84%
7. Project Coordination	176	10,680	13,513		3,524	30,286	58,003	13.07%
8. Feasibility Report		-	-		-	27,312	27,312	6.16%
9. Project Management & Administration	108	6,838	8,652		2,256	19,909	37,655	8.49%
10. QA/QC	18	1,028	1,301		339	7,005	9,673	2.18%
		-	-		-		-	
		-	-		-		-	
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		-	-		-		-	
Subconsultant DL					522		522	0.12%
TOTALS	956	53,273	67,405	14,894	18,100	289,979	443,651	100.00%

120,678

BLR 05514 (Rev. 05/27/22)

The subconsultant fee has been adjusted due to 15% fixed

COST EST

Local Public Agency: LCDOT

County: Lake

Section Number: 22-00999-86-ES

Consultant / Subconsultant Name: Christopher B. Burke Engineering, Ltd.

Job Number:

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			1. Data Collection and Review			2. Survey			3. Alternatives Analysis			4. Traffic and Crash Analysis			5. Environmental Evaluation		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	78.00	0.0																	
Engineer VI	78.00	78.0	8.16%	6.36							12	20.00%	15.60	4	10.00%	7.80			
Engineer V	71.53	122.0	12.76%	9.13	10	17.86%	12.77	4	1.18%	0.85				8	20.00%	14.31			
Engineer IV	59.09	126.0	13.18%	7.79	16	28.57%	16.88	24	7.10%	4.20	20	33.33%	19.70				18	30.00%	17.73
Engineer III	47.04	124.0	12.97%	6.10							28	46.67%	21.95	28	70.00%	32.92			
Engineer I/II	34.22	120.0	12.55%	4.30	18	32.14%	11.00	10	2.96%	1.01							24	40.00%	13.69
Survey V	78.00	12.0	1.26%	0.98				12	3.55%	2.77									
Survey IV	74.74	12.0	1.26%	0.94				12	3.55%	2.65									
Survey III	65.40	0.0																	
Survey II	53.53	104.0	10.88%	5.82				104	30.77%	16.47									
Survey I	37.94	104.0	10.88%	4.13				104	30.77%	11.67									
Engineering Technician V	70.87	0.0																	
Engineering Technician IV	59.72	0.0																	
Engineering Technician III	38.63	0.0																	
CAD Manager	69.52	32.0	3.35%	2.33				32	9.47%	6.58									
CAD Technician II	52.33	24.0	2.51%	1.31				24	7.10%	3.72									
GIS Speciailist III	56.56	44.0	4.60%	2.60	12	21.43%	12.12	12	3.55%	2.01									
Landscape Architect	63.63	0.0																	
Landscape Designer I/II	36.87	0.0																	
Environmental Resource Specialist V	73.93	36.0	3.77%	2.78													18	30.00%	22.18
Environmental Resource Specialist IV	61.19	18.0	1.88%	1.15															
Environmental Resource Specialist III	51.76	0.0																	
Environmental Resource Specialist I/II	29.42	0.0																	
Environmental Resource Technician	44.44	0.0																	
Engineering Itern	17.68	0.0																	
		0.0																	
		0.0																	
TOTALS		956.0	100%	$55.72	56.0	100.00%	$52.77	338.0	100%	$51.93	60.0	100%	$57.24	40.0	100%	$55.03	60.0	100%	$53.59

Local Public Agency: LCDOT

County: Lake

Section Number: 22-00999-86-ES

Consultant / Subconsultant Name: Christopher B. Burke Engineering, Ltd.

Job Number:

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	6. Drainage Evaluation			7. Project Coordination			8. Feasibility Report			9. Project Management & Administration			10. QA/QC					
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	78.00																		
Engineer VI	78.00				24	13.64%	10.64				32	29.63%	23.11	6	33.33%	26.00			
Engineer V	71.53	20	20.00%	14.31	48	27.27%	19.51				32	29.63%	21.19						
Engineer IV	59.09	20	20.00%	11.82							22	20.37%	12.04	6	33.33%	19.70			
Engineer III	47.04	20	20.00%	9.41	48	27.27%	12.83												
Engineer I/II	34.22	20	20.00%	6.84	20	11.36%	3.89				22	20.37%	6.97	6	33.33%	11.41			
Survey V	78.00																		
Survey IV	74.74																		
Survey III	65.40																		
Survey II	53.53																		
Survey I	37.94																		
Engineering Technician V	70.87																		
Engineering Technician IV	59.72																		
Engineering Technician III	38.63																		
CAD Manager	69.52																		
CAD Technician II	52.33																		
GIS Speciailist III	56.56	20	20.00%	11.31															
Landscape Architect	63.63																		
Landscape Designer I/II	36.87																		
Environmental Resource Specialist V	73.93				18	10.23%	7.56												
Environmental Resource Specialist IV	61.19				18	10.23%	6.26												
Environmental Resource Specialist III	51.76																		
Environmental Resource Specialist I/II	29.42																		
Environmental Resource Technician	44.44																		
Engineering Itern	17.68																		
TOTALS		100.0	100%	$53.69	176.0	100%	$60.68	0.0	0%	$0.00	108.0	100%	$63.31	18.0	100%	$57.10	0.0	0%	$0.00

TRANSYSTEMS PROPOSAL

Monaville Road

TRANSYSTEMS

Illinois Department of Transportation

EXHIBIT D

COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

FIXED RAISE

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	22-00999-86-ES

Prime Consultant (Firm) Name	Prepared By	Date
Christopher B. Burke Engineering, Ltd.	BVW (TranSystems)	1/31/2023

Consultant / Subconsultant Name	Job Number
TranSystems	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

Grade Separation Feasibility Study at Monaville Road

PAYROLL ESCALATION TABLE

CONTRACT TERM	**18**	**MONTHS**	**OVERHEAD RATE**	**143.97%**
START DATE	**4/1/2023**		**COMPLEXITY FACTOR**	**0**
RAISE DATE	**4/1/2023**		**% OF RAISE**	**2.00%**
END DATE	9/30/2024			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	4/1/2023	4/1/2023	0	0.00%
1	4/2/2023	4/1/2024	12	68.00%
2	4/2/2024	10/1/2024	6	34.68%

The total escalation = 2.68%

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
TranSystems	

PAYROLL RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

MAXIMUM PAYROLL RATE	**78.00**
ESCALATION FACTOR	**2.68%**

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Engineer 5 (E5)	$78.00	$78.00
Engineer 4 (E4)	$78.00	$78.00
Engineer 3 (E3)	$68.93	$70.78
Engineer 2 (E2)	$48.86	$50.17
Engineer 1 (E1)	$36.58	$37.56
Technician 3 (T3)	$41.14	$42.24
Technician 1 (T1)	$20.29	$20.83
Administrative 3 (A3)	$57.58	$59.12
Administrative 2 (A2)	$31.77	$32.62
Administrative 1 (A1)	$27.48	$28.22

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
TranSystems	

DIRECT COSTS WORKSHEET

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.

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	400	$0.63	$250.00
Vehicle Owned or Leased	$32.50/half day (4 hours or less) or $65/full day			$0.00
Vehicle Rental	Actual Cost (Up to $55/day)			$0.00
Tolls	Actual Cost			$0.00
Parking	Actual Cost			$0.00
Overtime	Premium portion (Submit supporting documentation)			$0.00
Shift Differential	Actual Cost (Based on firm's policy)			$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)	10	$60.00	$600.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			$0.00
Project Specific Insurance	Actual Cost			$0.00
Monuments (Permanent)	Actual Cost			$0.00
Photo Processing	Actual Cost			$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			$0.00
CADD	Actual Cost (Max $15/hour)			$0.00
Web Site	Actual Cost (Submit supporting documentation)			$0.00
Advertisements	Actual Cost (Submit supporting documentation)			$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			$0.00
Recording Fees	Actual Cost			$0.00
Transcriptions (specific to project)	Actual Cost			$0.00
Courthouse Fees	Actual Cost			$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Utliity Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Testing of Soil Samples	Actual Cost			$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Printing - B/W		250	$0.15	$37.50
Printing - Color		250	$1.50	$375.00
				$0.00
				$0.00
			TOTAL DIRECT COSTS:	**$1,262.50**

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

22-00999-86-ES

Consultant / Subconsultant Name

TranSystems

Job Number

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE **143.97%** **COMPLEXITY FACTOR** **0**

TASK	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	DIRECT COSTS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
Data Collection & Review	56	2,319	3,339	$1,262.50	765		7,686	2.74%
Alternative Analysis	732	38,690	55,703		12,768		107,161	38.20%
Traffic & Crash Analysis	324	16,991	24,462		5,607		47,060	16.77%
Drainage Evaluation	252	12,326	17,746		4,068		34,140	12.17%
Project Coordination	176	10,935	15,743		3,608		30,286	10.79%
Feasibility Report	176	9,861	14,197		3,254		27,312	9.73%
Project Management & Administration	108	7,188	10,349		2,372		19,909	7.10%
QA/QC	38	2,529	3,641		835		7,005	2.50%
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		-	-		-		-	
Subconsultant DL					0		-	
TOTALS	1862	100,839	145,180	1,263	33,277	-	280,559	100.00%
		246,019						

BLR 05514 (Rev. 05/27/22)
COST EST

Printed 2/2/2023 6:33 PM

Local Public Agency
Lake County Division of Transportation

County
Lake

Section Number
22-00999-86-ES

Consultant / Subconsultant Name
TranSystems

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Data Collection & Review			Alternative Analysis			Traffic & Crash Analysis			Drainage Evaluation			Project 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
Engineer 5 (E5)	78.00	160.0	8.59%	6.70	4	7.14%	5.57	56	7.65%	5.97	16	4.94%	3.85	8	3.17%	2.48	16	9.09%	7.09
Engineer 4 (E4)	78.00	140.0	7.52%	5.86				72	9.84%	7.67	20	6.17%	4.81	16	6.35%	4.95	32	18.18%	14.18
Engineer 3 (E3)	70.78	456.0	24.49%	17.33	4	7.14%	5.06	152	20.77%	14.70	80	24.69%	17.48	48	19.05%	13.48	52	29.55%	20.91
Engineer 2 (E2)	50.17	464.0	24.92%	12.50	12	21.43%	10.75	160	21.86%	10.97	88	27.16%	13.63	60	23.81%	11.95	52	29.55%	14.82
Engineer 1 (E1)	37.56	404.0	21.70%	8.15	12	21.43%	8.05	168	22.95%	8.62	96	29.63%	11.13	72	28.57%	10.73	24	13.64%	5.12
Technician 3 (T3)	42.24	72.0	3.87%	1.63	8	14.29%	6.03	48	6.56%	2.77				16	6.35%	2.68			
Technician 1 (T1)	20.83	148.0	7.95%	1.66	16	28.57%	5.95	76	10.38%	2.16	24	7.41%	1.54	32	12.70%	2.65			
Administrative 3 (A3)	59.12	0.0																	
Administrative 2 (A2)	32.62	18.0	0.97%	0.32															
Administrative 1 (A1)	28.22	0.0																	
		0.0																	
		0.0																	
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TOTALS		1862.0	100%	$54.16	56.0	100.00%	$41.41	732.0	100%	$52.86	324.0	100%	$52.44	252.0	100%	$48.91	176.0	100%	$62.13

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

22-00999-86-ES

Consultant / Subconsultant Name

TranSystems

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Feasibility Report			Project Management & Administration			QA/QC												
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer 5 (E5)	78.00	16	9.09%	7.09	32	29.63%	23.11	12	31.58%	24.63									
Engineer 4 (E4)	78.00																		
Engineer 3 (E3)	70.78	48	27.27%	19.30	58	53.70%	38.01	14	36.84%	26.08									
Engineer 2 (E2)	50.17	80	45.45%	22.80				12	31.58%	15.84									
Engineer 1 (E1)	37.56	32	18.18%	6.83															
Technician 3 (T3)	42.24																		
Technician 1 (T1)	20.83																		
Administrative 3 (A3)	59.12																		
Administrative 2 (A2)	32.62				18	16.67%	5.44												
Administrative 1 (A1)	28.22																		
TOTALS		176.0	100%	$56.03	108.0	100%	$66.56	38.0	100%	$66.55	0.0	0%	$0.00	0.0	0%	$0.00	0.0	0%	$0.00

QUALITY COUNTS PROPOSAL

Monaville Road

Quality Counts

DATA THAT DRIVES COMMUNITIES

ESTIMATE

Quality Counts
DATA THAT DRIVES COMMUNITIES

CHI:IL

BILL TO : Christopher B. Burke Engineering, Ltd
9575 W. Higgins Road , Suite 600
Rosemont,IL 60018
(847) 823-0500

CLIENT PROJECT # :22-00999-86-ES ESTIMATE DATE : 7/26/2022 ORDER DATE : 5/18/2022

ORDER No	PROJECT NAME	PAYMENT TERMS	ORDER BY
158381	CNRR at Monaville Road	PWP	Michael Matkovic

QTY	DESCRIPTION	RATE	TOTAL
30	**Standard-Turn Count**	$215.00	$6,450.00
	5 Location(s) for time period(s): 6:00 AM -- 9:00 AM-(Tuesday) - 3 Hrs.		
	-Orchard/Farmhill Lane -- Monaville Road, Round Lake Beach, IL		
	-IL 83--Monaville Road, Round Lake Beach, IL		
	-Walmart Entrance (east) -- Monaville Road , Round Lake Beach, IL		
	-Walmart Entrance (west) -- Monaville Road , Round Lake Beach, IL		
	-Lancaster Lane -- Monaville Road , Round Lake Beach, IL		
	5 Location(s) for time period(s): 6:00 AM -- 9:00 AM-(Thursday) - 3 Hrs.		
	-Orchard/Farmhill Lane -- Monaville Road, Round Lake Beach, IL		
	-IL 83--Monaville Road, Round Lake Beach, IL		
	-Walmart Entrance (east) -- Monaville Road , Round Lake Beach, IL		
	-Walmart Entrance (west) -- Monaville Road , Round Lake Beach, IL		
	-Lancaster Lane -- Monaville Road , Round Lake Beach, IL		
	5 Location(s) for time period(s): 6:00 AM -- 9:00 AM-(Saturday) - 3 Hrs.		
	-Orchard/Farmhill Lane -- Monaville Road, Round Lake Beach, IL		
	-IL 83--Monaville Road, Round Lake Beach, IL		
	-Walmart Entrance (east) -- Monaville Road , Round Lake Beach, IL		
	-Walmart Entrance (west) -- Monaville Road , Round Lake Beach, IL		
	-Lancaster Lane -- Monaville Road , Round Lake Beach, IL		
	5 Location(s) for time period(s): 3:00 PM -- 6:00 PM-(Tuesday) - 3 Hrs.		
	-Orchard/Farmhill Lane -- Monaville Road, Round Lake Beach, IL		
	-IL 83--Monaville Road, Round Lake Beach, IL		
	-Walmart Entrance (east) -- Monaville Road , Round Lake Beach, IL		
	-Walmart Entrance (west) -- Monaville Road , Round Lake Beach, IL		
	-Lancaster Lane -- Monaville Road , Round Lake Beach, IL		
	5 Location(s) for time period(s): 3:00 PM -- 6:00 PM-(Thursday) - 3 Hrs.		
	-Orchard/Farmhill Lane -- Monaville Road, Round Lake Beach, IL		
	-IL 83--Monaville Road, Round Lake Beach, IL		
	-Walmart Entrance (east) -- Monaville Road , Round Lake Beach, IL		

QTY	DESCRIPTION	RATE	TOTAL
	-Walmart Entrance (west) -- Monaville Road , Round Lake Beach, IL		
	-Lancaster Lane -- Monaville Road , Round Lake Beach, IL		
	5 Location(s) for time period(s): 3:00 PM -- 6:00 PM-(Saturday) - 3 Hrs.		
	-Orchard/Farmhill Lane -- Monaville Road, Round Lake Beach, IL		
	-IL 83--Monaville Road, Round Lake Beach, IL		
	-Walmart Entrance (east) -- Monaville Road , Round Lake Beach, IL		
	-Walmart Entrance (west) -- Monaville Road , Round Lake Beach, IL		
	-Lancaster Lane -- Monaville Road , Round Lake Beach, IL		
3	**Standard-Turn Count**	$990.00	$2,970.00
	1 Location(s) for time period(s): 12:00 AM -- 12:00 AM-(Tuesday) - 24 Hrs.		
	-N Silver Oaks Drive -- Monaville Road, Round Lake Beach, IL		
	1 Location(s) for time period(s): 12:00 AM -- 12:00 AM-(Thursday) - 24 Hrs.		
	-N Silver Oaks Drive -- Monaville Road, Round Lake Beach, IL		
	1 Location(s) for time period(s): 12:00 AM -- 12:00 AM-(Saturday) - 24 Hrs.		
	-N Silver Oaks Drive -- Monaville Road, Round Lake Beach, IL		
		TOTAL	$9,420.00

Balances unpaid by end of Payment term (listed above) will be charged 1.5% interest per month

Quality Counts, LLC
15615 SW 74th Ave #100
Tigard, OR 97224
(877) 580-2212
qualitycounts.net

Scope of Services and Cost Proposal For:

Peterson Road (County Hwy 20) at Canadian National Railway

Grade Separation Feasibility Study

SN 22-00999-86-ES

CN GRADE SEPARATION FEASIBILITY STUDY
AT PETERSON ROAD (COUNTY Hwy 20)
SN 22-00999-86-ES
SCOPE OF SERVICES

The Lake County Division of Transportation (County) desires to complete a Feasibility Study for a potential grade separation of the Canadian National Railroad (CN) at Peterson Road within the Village of Libertyville. The purpose of the Feasibility Study is to determine if a grade separation (Peterson Road over or under the CN) is possible at this location by analyzing potential impacts to surrounding property and environmental resources, needed improvements to adjacent intersections and roadways based on future traffic volumes, potential drainage and utility conflicts and resolutions, the need for non-motorized travel accommodations, overall constructability, and estimated future construction costs. Consideration of projected future CN track usage within the study area will also be a key component of this evaluation. The Feasibility Study is anticipated to be completed within 18 months after authorization to proceed.

Peterson Road is functionally classified as an Other Principal Arterial roadway that is County jurisdiction (Hwy 20; designated a freeway) west of US Route 45 and is under IDOT jurisdiction east of US Route 45. The feasibility analysis will incorporate year 2050 traffic projections from CMAP to ensure the appropriate cross section is considered as part of the grade separation feasibility analysis, but also to evaluate potential future capacity needs east of US Route 45, through the IL Route 137 interchange. On this basis, the overall limits of the Peterson Road Feasibility Study are anticipated to be from approximately Harris Road on the west to Butterfield Road on the east, a distance of approximately 1.6 miles.

The Feasibility Study will include coordination with adjacent property owners, other identified project stakeholders and applicable jurisdictional agencies including IDOT to assist with identification of key issues/concerns to be considered as part of the feasibility analysis. A Feasibility Report will be prepared that documents the results of the analysis and coordination completed and serves as a project scoping report for future project development.

Based on this overall project understanding, and the preliminary scoping discussion with the County on March 29th, the CBBEL-TranSystems team will complete the following scope of services as part of the CN at Peterson Road Grade Separation Feasibility Study.

Task 1 – Data Collection and Review: Background data required to complete the Feasibility Study will be obtained and reviewed, which is anticipated to include the following information:

- Given the relative complexity of potential alternatives to be considered along the Peterson Road corridor, which could include rerouting of movements, and to have a better understanding of the current and future 2050 daily travel demand within the study limits, some 24-hour count data is proposed. The following traffic counts will be collected:
- Eleven (11) locations of full classification (including ped/bike) traffic counts will be collected as two sets of mid-week counts (T, W, TH) at each location on a non-holiday, during two separate weeks, and one set of Saturday counts, as follows:
  - 24-hour TMC Counts for Peterson Road at Harris Road, US Route 45, Butterfield Road (3 Locations)

  - 6-hour TMC Counts (6-9 a.m., 3-6 p.m.) for Peterson Road at Franklin Blvd, Industrial Drive, Northwind Blvd, Butterfield Square East Access, and Elderberry Drive (unsignalized), and Butterfield Road at Old Barn Circle (6 Locations).
  - 24-hour ATR Counts for EB Peterson Road connector to IL 137 and WB IL 137 connector to Peterson Road (2 Locations)
- Existing timing for signalized intersections will be obtained from the County and IDOT to model and calibrate existing traffic operations.
- The latest 5-years of crash data will be retrieved from the County TDMS Portal and/or IDOT for Peterson Road within the noted project limits.
- Utility atlases. Available utility data will be collected from the County and record plans. Additional utility coordination will occur as part of Task 7.
- IDOT and USDOT/FRA Railroad Crossing Inventory Data.
- Record roadway plans. Record roadway plans for Peterson Road will be retrieved from the County and IDOT, as available. CBBEL has record plans for west of Franklin.
- LiDAR data. Available County LiDAR contour mapping and control data will be retrieved from the County.
- Records of any (if any) roadway flooding or drainage concerns.
- Retrieve recent project aerials via NearMap or other source for the full study area.
- Existing Right-of-Way information and Property Owner data will be assembled as part of Task 2.
- Available socio-economic and environmental data will be assembled as part of Task 5.
- County video recording of the CN crossing to determine the average gate-down time and number of trains per day. It is assumed the County will collect video data using Miovision cameras from two 24-hour periods including one weekday and one weekend.

Task 2 – Survey: A full topographic survey for the Peterson Road corridor will not be completed. However, some spot topographic survey will be completed near the CN crossing to better correlate the existing CN top-of-track and nearby roadway elevation differences near the existing crossing, to tie into the County LiDAR data that will be used for alternatives analysis for the remainder of the corridor, and to ensure accurate above ground utility information near the existing crossing. It is anticipated that approximately 500 feet of topographic survey along the CN tracks north and south of the roadway, and approximately 500 feet east and west of the tracks along the roadway will be completed. Additional survey will be completed to document the existing horizontal and vertical clearances at the existing connector roadway structures along Peterson Road east of US 45 at the Metra RR (SN 049-0127) and at IL Route 137 (SN 049-0096), for purposes of the alternatives analysis in Task 3. The cost of RR flaggers and permits (if required) will be included for survey within the CN right-of-way.

A base CAD file including the completed topographic survey and County LiDAR data will be compiled in MicroStation V8i SS10 at 1”=50’ scale, for developing concept plans, profiles and cross sections (as applicable). Existing property lines will be included in the base CAD file based on available information from the County and other readily available sources. For purposes of

this Feasibility Study, horizontal alignments will be set utilizing record roadway and/or right-of-way plans, available County mapping data and project aerials as applicable. Available plans include the County Peterson Road project (07-00098-17-WR) from Franklin to the west, and 1999 IDOT plans for the Peterson Road/US 45 intersection.

Existing right-of-way information, including Plat of Highways, will be retrieved from the Lake County DOT. Additional right-of-way data, including adjacent property owners and parcel data, will be retrieved from the Lake County Recorder's office, and up to five (5) title reports will be ordered and reviewed (as/if necessary) to identify superior easements within, crossing, and/or adjacent to Peterson Road that supersede the Peterson Road right-of-way. Of particular interest are the two railroad crossings, IL Route 137, and major utilities.

This task also includes planning level JULIE coordination with utilities to retrieve atlas information as supplemental to information retrieved from the County (i.e., equivalent to SUE Level D). A separate SUE Level C or B review will not be completed. Additional ongoing coordination with adjacent major utilities such as Kinder Morgan, Hawkeye, North Shore Gas, ComEd, etc., will occur as part of Task 7, as required.

Task 3 – Alternatives Analysis: For purposes of the Feasibility Study, the alternatives analysis will include concept level plan and profile development of grade separation alternatives at the Peterson Road crossing of the CN for comparative analysis and evaluation. Applicable Lake County and IDOT design criteria will be used for concept design development based on the roadway functional classification. Applicable CN design criteria will be used for concept design development related to track elevation changes considered.

An initial Level One analysis will be completed to identify areas of "fatal" constraints that would limit or preclude development of a potential grade separation alternative and/or construction thereof. The Level One analysis will be based on a desk top review of the compiled GIS database of collected socio-economic and environmental data, collected right-of-way information including superior easements, and a field review. The objective of the Level One analysis is to refine the viable areas for potential alternatives development and evaluation as part of the Level Two analysis.

For the Level Two analysis, each concept grade separation alternative will be developed in plan-view with concept level profiles and critical cross sections to determine probable right-of-way needs for comparative evaluation. The CBBEL-TranSystems team will prepare the concept proposed improvement plans at a scale of 1"=50'.

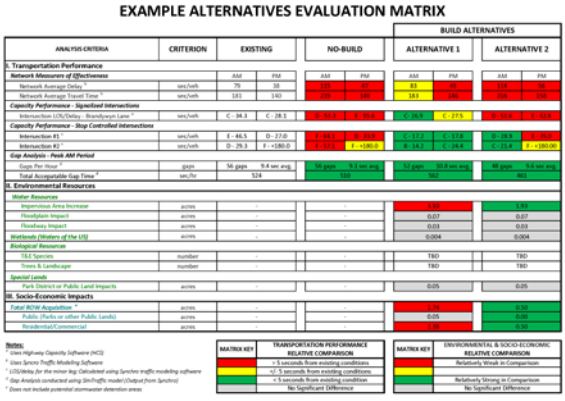
It is assumed that up to six (6) separate grade separation alternatives will be developed for relative comparison (i.e., two each for overpass, underpass, and CN track adjustment), based on symmetrical vs asymmetrical profile designs as a best fit investigation. In addition, alternatives for realignment of local access points (i.e., Franklin Blvd, Industrial Drive, commercial access points, etc.) and redistribution of traffic resulting from the proposed Peterson Road over or

under alternatives will be evaluated. For each alternative considered, construction staging will be evaluated and conceptually drafted for incorporation into the alternatives evaluation process related to impacts and program level cost estimates. For construction staging, it is assumed that a shoo-fly will be required for underpass construction in order to maintain CN traffic. In addition, a key consideration will be whether Peterson Road traffic can be maintained during construction, and the associated right-of-way and cost requirements for temporary pavement and a temporary CN crossing.

The CBBEL-TranSystems team will also develop and evaluate potential capacity improvement alternatives along Peterson Road at the US Route 45 intersection and eastward between US Route 45 and Butterfield Road based on the year 2050 traffic projections. If capacity improvement needs are identified at the US Route 45 intersection, providing those improvements at-grade or via grade separation will be evaluated in the context of each of the CN grade separation alternatives considered. In addition, potential reconfiguration of the existing Peterson Road at IL Route 137 partial interchange will be evaluated to determine if safety and/or operational improvements can be provided within the existing interchange footprint, with or without modifications to the existing structure openings (SN 049-0127 and SN 049-0096).

The Level Two alternatives evaluation process will include a comparative analysis with respect to operational and safety benefits, required access modifications, probable right-of-way needs/impacts, utility impacts, environmental impacts, drainage considerations, constructability and stage construction methodology, and program level engineering and construction cost estimates. The associated traffic, environmental, and drainage analysis components of the overall alternatives analysis will be completed as part of Tasks 4, 5, and 6 respectively.

The Level Two alternatives evaluation process is anticipated to be somewhat iterative, with draft alternatives provided to the County and others (CN, IDOT, Libertyville, Major Utilities, etc.) for review, with subsequent refinement of alternatives to address review comments received. The alternatives evaluation results will be presented in a comparative evaluation matrix format for review (similar to example shown here) and summarized in a separate standalone alternatives evaluation technical memorandum (AETM) that will also be incorporated into the Feasibility Report (Task 8).


EXAMPLE ALTERNATIVES EVALUATION MATRIX

ANALYSIS CRITERIA	CRITERION	EXISTING		NO-BUILD		BUILD ALTERNATIVES			
						ALTERNATIVE 1		ALTERNATIVE 2	
I. Transportation Performance									
Network Measures of Effectiveness		AM	PM	AM	PM	AM	PM	AM	PM
Network Average Delay [1]	sec/veh	70	58						
Network Average Travel Time [1]	sec/veh	181	140						
Capacity Performance - Signalized Intersections									
Intersection LOS/Delay - Brandywyn Lane*	sec/veh	C - 34.3	C - 28.1						
Capacity Performance - Stop Controlled Intersections									
Intersection #1 *	sec/veh	E - 46.5	D - 27.0						
Intersection #2 *	sec/veh	D - 29.3	F - >180.0						
Gap Analysis - Peak AM Period									
Gaps Per Hour [2]	gaps	56 gaps	9.4 sec avg.						
Total Acceptable Gap Time [2]	sec/hr	524							
II. Environmental Resources									
Water Resources									
Impervious Area Increase	acres	-		-					
Floodplain Impact	acres	-		-					
Floodway Impact	acres	-		-					
Wetlands (Waters of the US)	acres	-		-					
Biological Resources									
T&E Species	number	-		-					
Trees & Landscape	number	-		-					
Special Lands									
Park District or Public Land Impacts	acres	-		-					
III. Socio-Economic Impacts									
Total ROW Acquisition [3]	acres	-		-					
Public (Parks or other Public Lands)	acres	-		-					
Residential/Commercial	acres	-		-					

Notes:
[1] Uses Highway Capacity Software (HCS)
[2] Uses Synchro Traffic Modelling Software
[3] LOS/delay for the minor leg. Calculated using Synchro traffic modelling software
* Gap Analysis conducted using SimTraffic model (Output from Synchro)
* Does not include potential stormwater detention areas

MATRIX KEY	TRANSPORTATION PERFORMANCE RELATIVE COMPARISON
	> 5 seconds from existing conditions
	+/- 5 seconds from existing conditions
	< 5 seconds from existing condition
	No Significant Difference

MATRIX KEY	ENVIRONMENTAL & SOCIO-ECONOMIC RELATIVE COMPARISON
	Relatively Weak in Comparison
	Relatively Strong in Comparison
	No Significant Difference

The objective of the alternatives evaluation process is to determine if a CN grade separation is feasible and practical, and to identify viable alternatives for further consideration as part of future project development beyond the Feasibility Study. This recommendation will be summarized in the Feasibility Report.

Task 4 – Traffic and Safety Analysis: Traffic capacity and operations will be analyzed for weekday AM and PM peaks. The CBBEL-TranSystems team will coordinate with CMAP for development of 2050 average daily traffic (ADT) projections for the Peterson Road corridor and other major routes within the study area. Balanced design hourly volumes for 2050 will be developed based on the ADT projections provided by CMAP and existing travel patterns. Traffic count data will be considered to represent the average existing conditions and review or calibration to pre-covid conditions is not anticipated. The CBBEL-TranSystems team will also coordinate with the CN for 20-year (+) future projections on the number of tracks, and the number and length of trains at the Peterson Road crossing.

Capacity analysis will be completed for existing, 2050 No-Build, and 2050 Build conditions (as applicable) for all counted intersections and the ramps to/from IL-137 for each alternative considered including the effect of rerouted traffic due to any proposed side street realignments associated with the grade separation concepts. Intersection operations (signalized and unsignalized) will be evaluated using Synchro/SimTraffic. Merge and diverge operations at IL-137/Peterson interchange ramps will be evaluated using Highway Capacity Software (HCS). Microsimulation analysis with Vissim is not anticipated under the feasibility study but may be performed for selected alternatives under the Phase 1 analysis. Travel time and speed metrics from Streetlight and queue and delay metrics from the County ATSPM data will be used to calibrate the Synchro/SimTrafic models. Incorporate the railroad gate-down time from the video analysis into the SimTraffic network to evaluate the associated delay. In addition, analysis of the alternatives considered for the Peterson Road/IL Route 137 interchange will be completed with measures of effectiveness (MOEs) anticipated to include merge and diverge level of service, travel time, sight distance, and safety considerations.

Although the CMAP model does not technically include network impedance for existing at-grade railroad crossings, the issue of assessing potential latent demand via a select-link analysis, based on a proposed new CN grade separation alternative, will be discussed with CMAP and factored into the 2050 Build projections as/if applicable. In addition, Streetlight traffic data will be retrieved to assist with travel demand and origin-destination (O-D) travel pattern review. Streetlight is a proprietary data collection resource that allows users to place gates/zones within the study corridor to track several different metrics including AADT, origin-destination, traveler attributes (demographics, trip purpose), trip attributes (speed, duration, length, and circuity), commercial vehicles, and bicycles and pedestrians. It is anticipated that up to 10 gates/zones will be placed at the major corridors entering/exiting the study area to collect the referenced data, utilizing the Advanced Analytics package for Streetlight.

The completed capacity analysis will determine if capacity improvements would be required along Peterson Road within the project limits at the existing signalized intersections (US Route 45, Butterfield Road) or any unsignalized intersections due to rerouting of traffic. However, no additional traffic signal warrant reviews are anticipated to be completed. Other elements of this task include:

- Prepare exhibits with balanced traffic volumes for existing, 2050 No-Build and 2050 Build conditions.
- Establish Synchro/SimTraffic network and complete peak am and pm traffic analysis for existing, 2050 No-Build, and 2050 Build conditions, and summarize in a spreadsheet.
- Incorporate the railroad gate-down time from the video analysis into the SimTraffic network to evaluate the associated delay.
- Calculate the daily and annual "gates down" user delay and cost for existing conditions, and the accrued "gates down" user delay and cost over time to the year 2050, based on existing and year 2050 roadway and rail traffic volumes. The cost analysis will be completed based on value of time data recommended as part of the US DOT Discretionary Grant Application procedures for potential future use with grant applications.
- Establish a preliminary project Purpose & Need statement for future project development.

Under the safety review, most recent 5-year crash data available to the team will be tabulated, reviewed and summarized with respect to notable trends and crash patterns. This crash data review will be used to identify areas requiring a safety focus and to recommend safety countermeasures within the study area. A field review of current safety deficiencies under a Road Safety Review/Audit (RSR/A) or development of predictive crash rates for future conditions is not anticipated under the feasibility study.

Results of the traffic and safety analysis will be included within the Feasibility study. Separate documentation of the traffic or safety study in form of a memo or report is not anticipated

Task 5 – Environmental Evaluation: A socio-economic and environmental resources project database will be compiled based on retrieval of relevant data from available online sources for evaluation of potential environmental impacts associated with alternatives considered. Environmental field surveys will not be completed for the project.

Environmental information retrieved from available databases will include the following:

- Lake County GIS: Lake County wetland inventory and ADID wetlands, Floodway/Floodplain, public lands and features, etc.
- Zoning maps, bike/ped facilities and plans, soils data, school/transit/mail/emergency service routes, etc.
- IDNR: EcoCAT (biological resources); HARGIS (cultural resources); Special Lands (Parks, Open Space, LAWCON, OSLAD funding)
- IEPA: 303d list (water quality)
- Special Waste Screening: NETR Online, State Fire Marshall, etc.

This information will be compiled into an environmental resources GIS database for a desktop evaluation of alternatives along the Peterson Road corridor. This compiled environmental

database also establishes the baseline environmental footprint for future project development. Although a detailed tree survey will not be completed as part of the Feasibility Study, the alternatives evaluation will include an assessment of acres of tree impacts and density based on desktop review of recent aerial photography. The number and quality of trees that would be impacted for each alternative considered will not be evaluated.

Based on this information, the CBBEL-TranSystems team will evaluate the potential impacts to the above environmental elements associated with each alternative considered as part of the feasibility analysis. Potential impacts to identified wetlands and floodways/floodplains (i.e., Bull Creek Tributary, east of US Route 45) will be evaluated for each alternative, along with the associated mitigation requirements and the most suitable mitigation locations (and any associated right-of-way requirements) will be identified for each alternative considered.

Task 6 – Drainage Evaluation: The CBBEL-TranSystems team will identify existing drainage patterns, including existing drainage outfalls along the Peterson Road corridor, to the extent possible based on the limited field survey data and review of record plans. A Concept Level Existing Drainage Plan (CLEDP) will be prepared for the Peterson Road corridor.

The suitability of the existing drainage outfalls will be evaluated, and any existing drainage problem areas identified as part of project data collection and coordination will be documented for consideration as part of the alternatives analysis. Detailed investigation of needed corrective drainage improvements to address identified existing drainage problem areas will not be completed as part of the Feasibility Study.

A Concept Level Proposed Drainage Plan (CLPDP) will be prepared for each grade separation alternative considered. East of US Route 45, contingent upon whether capacity improvements are required based on 2050 traffic projections, a concept level CLPDP will be prepared that will identify drainage subareas and outfalls along the corridor. For the grade separation alternatives considered, the CLPDP development will be focused on determining whether or not a pump station will be required for underpass drainage at the CN crossing, and the most suitable pump station location if required. In addition, the potential need for pump stations will be evaluated for grade separation alternatives considered at the US 45 intersection and potential reconfiguration of the IL Route 137 interchange. Concept drainage profiles will be prepared for the underpass alternatives to determine if a pump station will be required..

Stormwater detention if required due to added impervious area and/or compensatory storage required due to floodway/floodplain fill, based on a proposed wider cross section with the grade separation and/or east of US Route 45 (as/if applicable), will be estimated for each alternative considered. Any right-of-way acquisition that is likely to be needed for stormwater detention and/or compensatory storage will be estimated and shown on the CLPDP.

Detailed drainage calculations for pipe sizing as part of the alternatives considered and/or hydraulic reports (existing culverts or pump station) will not be completed as part of the

Feasibility Study. The results of the drainage analysis, including charts, tables, CLEDP and CLPDP exhibits, etc., will be included in the applicable sections of the Feasibility Report and a separate drainage technical memorandum will not be prepared.

Task 7 – Project Coordination: A formal public involvement process, including public information meetings, will not be implemented as part of the Peterson Road Feasibility Study. The CBBEL-TranSystems team will perform all required coordination with the County, IDOT, and project stakeholders as required to obtain important input related to the consideration of a CN grade separation and potential capacity improvements east of US Route 45. This coordination is anticipated to include a combination of phone conversations, email exchange, virtual meetings, and in-person meetings as required. The list of project stakeholders to be coordinated with as part of the Feasibility Study includes, but is not necessarily limited to, the following entities/organizations, in no particular order:

- Canadian National Railroad (CN)
- Metra
- Illinois Commerce Commission (ICC)
- Kinder Morgan, Inc.
- North Shore Gas
- ComEd
- Village of Libertyville
- Townships (Freemont, Libertyville)
- Libertyville Fire Department
- Grayslake Fire Protection District
- Lake County SMC
- IDOT (US 45 Intersection, IL 83/137 project)
- CMAP

To facilitate each project coordination meeting, the CBBEL-TranSystems team will develop supporting exhibits and handout materials. Meeting summaries will be prepared for all meetings for the project record and inclusion in the Feasibility Study Report. Although coordination will occur with IDOT related to the adjacent IL 83 project, coordination with IDOT-BLRS related to potential future Phase I Engineering will not be pursued as part of the Feasibility Study

Task 8 – Feasibility Report: A Feasibility Report will be prepared that documents all analysis and coordination completed, the recommended alternative, and the estimated project implementation costs. The information included in the Feasibility Report will form the basis for a project scoping report for consideration as part of future project development.

The format of each Feasibility Report is anticipated as follows, with potential modifications as/if required or desired by the County:

- Introduction
- Existing Conditions (*Traffic, Safety, Environmental*)

- Purpose/Objective of Potential Grade Separation (*Preliminary Purpose & Need*)
- Description of Alternatives Considered (including program level cost estimates)
- Comparative Evaluation of Alternatives
- Summary of Results and Recommended Action
- Next Steps
- Appendices (as applicable)

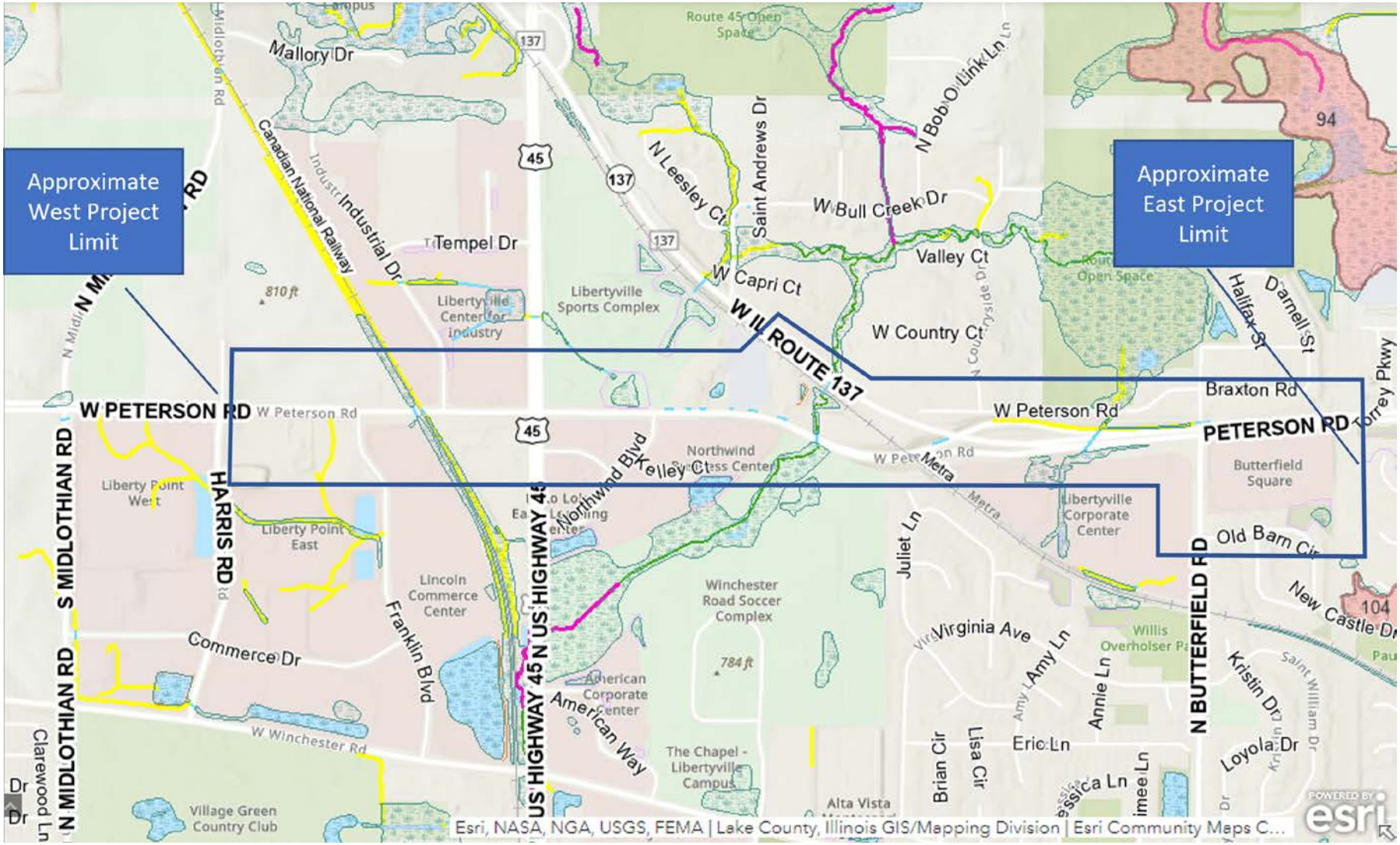
It is anticipated that a draft Feasibility Report will be submitted for review and a final Feasibility Report will be prepared that addresses any review comments received.

Task 9 – Project Administration: This task includes overall project administration and quality assurance. Project administration includes managing the day-to-day work effort on the project including work force allocations, budget oversight, invoicing, and monthly progress reviews to ensure project milestones are being met, and periodic progress coordination meetings as required. A Feasibility Study project schedule will be developed as part of this task that identifies key project milestones and deliverables.

Task 10 – QA/QC

This task includes establishment and adherence to an approved Quality Management Plan (QMP). QA/QC reviews will be performed in accordance with the QMP prior to all major deliverables.

CN GRADE SEPARATION FEASIBILITY STUDY
AT PETERSON ROAD (COUNTY HWY 20)
Project Location Map



CN RAILWAY GRADE SEPARATION FEASIBILITY STUDY
AT PETERSON ROAD (COUNTY HWY 20)
SN 22-00999-86-ES
Work Hour Estimate

	Task	Units	Work Hours	
			CBBEL	TranSystems
1.	**Data Collection and Review**			
a	Compile and catalog project data: Retrieve recent project aerials via NearMap or other source for the full study area. Retrieve available traffic and crash data (latest 5-years plus Safety Tier), IDOT and USDOT/FRA railroad crossing inventory data, record roadway and drainage plans, records of any roadway drainage concerns, plat of highways and property owner information, public lands ownership and use, current FEMA maps and models as applicable, zoning maps, bike/ped facilities and plans, soils data, school/transit/mail/emergency service routes, etc.	L. Sum	30	32
b	Compile project GIS database and update as required.	L. Sum	28	10
c	Retrieve and review Structure Master Reports from IDOT for Metra over Peterson Road (049-0127) and IL 137 over IL 137 WB Ramp (049-0096).	L. Sum		12
d	Coordination with traffic count subconsultant for completion of traffic counts per scope of services.	L. Sum	4	
e	Field reconnaisance (project photo log, resolve questions from data collection and review).	2 trips x 2 ppl x 4 hrs	8	8
f	Evaluate video data provided by County for average gate-down time and number of trains per day.	L. Sum		8
		SUBTOTAL:	70	70
2.	**Survey**			
a	Coordination with the County for survey right-of-entry letter and survey control data.	L. Sum	6	
b	Coordination with the County for available LiDAR (1' contour) mapping and control data.	L. Sum	6	
c	Coordination with the County for known major utility information.	L. Sum	12	
d	Topographic survey: County LiDAR control recovery and establishment. Spot roadway and CNRR survey, and at the Peterson Road/Metra and Peterson Rd/IL 137 structures survey as described in the scope of services).	L. Sum	265	
e	JULIE Coordination.	L. Sum	40	
f	Research for right-of-way information including coordination with the Lake County DOT for Plat of Highways, Lake County Recorder's office for parcel ownership, and order/review up to five (5) title reports.	L. Sum	72	
g	Compile survey and prepare base mapping in Microstation V8i/SS10 at 1' = 50' scale. Includes establishing horizontal alignment thru the study area by record roadway and right-of-way plans, mapping data, and aerials.	L. Sum	148	
		SUBTOTAL:	549	0
3.	**Alternatives Analysis**			

CN RAILWAY GRADE SEPARATION FEASIBILITY STUDY
AT PETERSON ROAD (COUNTY HWY 20)
SN 22-00999-86-ES
Work Hour Estimate

	Task	Units	Work Hours	
			CBBEL	TranSystems
a	Prepare design criteria table for development of roadway and railroad alternatives.	L. Sum	4	
b	Level One analysis to identify areas of "fatal" constraints that would limit or preclude development of a potential grade separation alternative and/or construction thereof. The Level One analysis will be based on a desk top review of the compiled GIS database of collected socio-economic, land use, and environmental data, collected right-of-way information including superior easements, and a field review.	60 hrs Avg x 6 alts	60	
c	Prepare Level Two concept CNRR grade separation alternatives per scope of services (plan, profile, typical cross sections).	60 hrs Avg x 6 alts	360	
d	Prepare Level Two concept US 45 grade separation and Peterson Road/IL 137 interchange alternatives in conjunction with each CNRR grade separation alternative considered, per scope of services.	32 hrs Avg x 6 alts	192	
e	Evaluate each combined Level Two alternative with respect to potential environmental, drainage, right-of-way, and utility Impacts.	32 hrs Avg x 6 combined alts	192	
f	Evaluate each combined alternative for constructability and develop construction staging concepts.	16 Avg hrs x 6 combined alts	96	
g	Prepare a program level cost estimate for each combined alternative considered, for relative comparison.	8 hrs Avg x 6 combined alts	48	
h	Prepare concept alternatives comparative evaluation summary table (performance, safety, impacts, right-of-way, program level cost) for County and Agency coordination as applicable.	L. Sum	48	
i	Identify viable alternatives for further consideration as part of future project development beyond the Feasibility Study, and refine the viable alternative concepts, construction staging, associated right-of-way and other impacts, and the program level cost estimate based on County and Agency review comments.	L. Sum	60	
j	Prepare Alternatives Evaluation Technical Memorandum (AETM) summarizing the results of the alternatives evaluation.	L. Sum	48	
		SUBTOTAL:	1,108	0
4.	**Traffic and Crash Analysis**			
a	Crash Analysis: Review and summarize crash data in tabular format by year, conditions, and severity. Evaluate Safety Tier data as applicable, including retrieve and review police reports for K and/or A injury crashes.	L. Sum		68

CN RAILWAY GRADE SEPARATION FEASIBILITY STUDY
AT PETERSON ROAD (COUNTY HWY 20)
SN 22-00999-86-ES
Work Hour Estimate

	Task	Units	Work Hours	
			CBBEL	TranSystems
b	Collate existing traffic counts, identify and balance study area peaks. Coordinate with CMAP for 2050 traffic projections (No-Build and Build as applicable) for the project area, and coordinate with CNRR for 20-year (+) projections on number of tracks, and number and length of trains at the CNRR crossing. Includes coordination with CMAP for potential analysis of latent demand at the CNRR crossing.	L. Sum		60
c	Retrieve and process Streetlight Traffic Data	L. Sum		40
d	Prepare a base/balanced study area traffic diagram for existing and 2050 (No-Build/Build as applicable) traffic data, including intersection turning movements and level of service (added after analysis). Prepare a balanced traffic 2050 (No-Build/Build as applicable) diagram for each alternative considered, including rerouting of side traffic as applicable, US 45 grade separation traffic distribution, and Peterson Road/IL 137 interchange traffic distribution. Assume up to 12 distinct combinations based on potential side street reconfiguration concepts, US 45 grade separation concepts, and potential Peterson/IL 137 interchange reconfiguration concepts.	12 hours; 4 hrs Avg x 12 alts		60
e	Initial Synchro/SimTraffic and HCS Model setup and analysis for existing and 2050 (No-Build/Build as applicable), for all counted intersections and ramps, for each intersection variation considered based on side street reconfiguration and alternatives considered at US45 and IL137. Assume up to 12 build alternatives in addition to existing and no-build scenario. Incorporate the railroad gate-down time from the video analysis into the SimTraffic network to evaluate the associated delay. Includes model setup.	60 hrs for existing condition and calibration. 24 hrs for modeling RR x-ing. 30 hrs avg x 13 alts.		474
f	Calculate the daily and annual "gates down" user delay and cost for existing conditions, and the accrued "gates down" user delay and cost over time to the year 2050, based on existing and year 2050 roadway and rail traffic volumes.	L. Sum	40	
g	Prepare a preliminary Purpose and Need statement for future project development.	L. Sum		60
		SUBTOTAL:	40	762
5.	**Environmental Evaluation**			
a	Assemble project socio-economic and environmental data from available databases including Lake County GIS (LC/ADID wetlands, floodway/floodplain boundaries, public lands, etc.), IDNR (biological and cultural resources, and special lands (Parks, LAWCON, OSLAD), IEPA (water quality), and Special Waste sources (State Fire Marshall) and include in project GIS database for use with the evaluation of concept alternatives.	L. Sum	72	
b	Desktop assessment of likely tree impacts for the Level Two alternatives based on acres of tree impacts by density (L, M , H). The number, species, and quality of trees that would be impacted for each Level Two alternative will not be evaluated.	L. Sum	48	
		SUBTOTAL:	120	0
6.	**Drainage Evaluation**			

CN RAILWAY GRADE SEPARATION FEASIBILITY STUDY
AT PETERSON ROAD (COUNTY HWY 20)
SN 22-00999-86-ES
Work Hour Estimate

	Task	Units	Work Hours	
			CBBEL	TranSystems
a	Prepare Concept Level Existing Drainage Plan (CLEDP) for the full study area per the scope of services.	L. Sum	140	
b	Prepare a Concept Level Proposed Drainag Plan (CLPDP) for the full study area for each Level Two grade separation alternative considered, including evaluation of compensatory storage and stormwater detention requirements, and evaluation of pump station requirements, per the scope of services.	60 hrs Avg x 6 alts	360	
		SUBTOTAL:	500	0
7.	**Project Coordination**			
a	Stakeholder Coordination. Approximately 13 identified key stakeholders per scope of services. Includes phone conversations, email exchange, virtual meetings and/or in-persons as required of desired. On average, assume 1 or 2 coordination events per stakeholder (say 20 total) with 2 CBBEL/TSC staff at 3 hours each (includes travel (as applicable), meeting preparation (4 hours each), and preparing meeting summaries (2 hours each).	20 mtgs x 12 hrs	120	120
b	CBBEL-TSC Team bi-weekly progress coordination meetings. 5 people (avg) per meeting at 1 hour each. Assumed all virtual meetings.	48 mtgs x 5 hrs	120	120
c	LCDOT Project Coordination/Status Meetings. Assume 6 meetings (includes 4 ppl (avg) at 3 hours each (including travel as applicable), meeting preparation (8 hours each), and preparing meeting summaries (2 hours each).	6 mtgs x 22 hrs	66	66
		SUBTOTAL:	306	306
8.	**Feasibility Report**			
a	Compile Exhibits, Documents, and Materials for inclusion in the Feasibility Report.	L. Sum	32	
b	Prepare Preliminary Feasibility Report and submit for LCDOT, CNRR, and IDOT for review as applicable.	L. Sum	168	
c	Prepare Final Feasibility Report based on LCDOT, CNRR, and IDOT review comments.	L. Sum	48	
		SUBTOTAL:	248	0
9.	**Project Management & Adminstration**			
a	Project Management and Administration	6 hours x 18 months	108	108
b	Monthly Progress Reports	2 hours x 18 months	36	36
		SUBTOTAL:	144	144
10.	**QA/QC**			
a	Quality Management plan (QMP).	L Sum	6	2
b	QA/QC reviews in accordance with quality process and QMP. The following deliverables/tasks are included: Survey, Wetland Technical Report, EDP/PDP, Feasibility Report, AETM and traffic models).	8 hours x 6 deliverables	40	8

CN RAILWAY GRADE SEPARATION FEASIBILITY STUDY
AT PETERSON ROAD (COUNTY HWY 20)
SN 22-00999-86-ES
Work Hour Estimate

Task		Units	Work Hours	
			CBBEL	TranSystems
		SUBTOTAL:	46	10
		Consultant Totals:	**3,131**	**1,292**
			Project Total:	4,423

Illinois Department of Transportation

EXHIBIT D

COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

FIXED RAISE

Local Public Agency	County	Section Number
LCDOT	Lake	22-00999-86-ES

Prime Consultant (Firm) Name	Prepared By	Date
Christopher B. Burke Engineering, Ltd.	CBBEL	6/3/2022

Consultant / Subconsultant Name	Job Number
Christopher B. Burke Engineering, Ltd.	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

Canadian National Railway (CN) Feasibility Study at Peterson Road.

PAYROLL ESCALATION TABLE

CONTRACT TERM	**18**	**MONTHS**	**OVERHEAD RATE**	**126.53%**
START DATE	**4/1/2023**		**COMPLEXITY FACTOR**	**0**
RAISE DATE	**1/1/2024**		**% OF RAISE**	**2.00%**
END DATE	9/30/2024			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	4/1/2023	1/1/2024	9	50.00%
1	1/2/2024	10/1/2024	9	51.00%

The total escalation = 1.00%

Local Public Agency	County	Section Number
LCDOT	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
Christopher B. Burke Engineering, Ltd.	

PAYROLL RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

MAXIMUM PAYROLL RATE	**78.00**
ESCALATION FACTOR	**1.00%**

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Principal	$78.00	$78.00
Engineer VI	$78.00	$78.00
Engineer V	$70.82	$71.53
Engineer IV	$58.50	$59.09
Engineer III	$46.57	$47.04
Engineer I/II	$33.88	$34.22
Survey V	$78.00	$78.00
Survey IV	$74.00	$74.74
Survey III	$64.75	$65.40
Survey II	$53.00	$53.53
Survey I	$37.56	$37.94
Engineering Technician V	$70.17	$70.87
Engineering Technician IV	$59.13	$59.72
Engineering Technician III	$38.25	$38.63
CAD Manager	$68.83	$69.52
CAD Technician II	$51.81	$52.33
GIS Speciailist III	$56.00	$56.56
Landscape Architect	$63.00	$63.63
Landscape Designer I/II	$36.50	$36.87
Environmental Resource Specialist V	$73.20	$73.93
Environmental Resource Specialist IV	$60.58	$61.19
Environmental Resource Specialist III	$51.25	$51.76
Environmental Resource Specialist I/II	$29.13	$29.42
Environmental Resource Technician	$44.00	$44.44
Engineering Itern	$17.50	$17.68

Local Public Agency	County	Section Number
LCDOT	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
Christopher B. Burke Engineering, Ltd.	

SUBCONSULTANTS

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

NAME	Direct Labor Total	Contribution to Prime Consultant
TranSystems	69,863.00	6,986.30

Total	69,863.00	6,986.30

NOTE: Only subconsultants who fill out a cost estimate that splits out direct labor may be listed on this sheet.

Local Public Agency	County	Section Number
LCDOT	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
Christopher B. Burke Engineering, Ltd.	

DIRECT COSTS WORKSHEET

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.

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	700	$0.63	$437.50
Vehicle Owned or Leased	$32.50/half day (4 hours or less) or $65/full day	6	$65.00	$390.00
Vehicle Rental	Actual Cost (Up to $55/day)			$0.00
Tolls	Actual Cost	40	$0.40	$16.00
Parking	Actual Cost			$0.00
Overtime	Premium portion (Submit supporting documentation)			$0.00
Shift Differential	Actual Cost (Based on firm's policy)			$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)	10	$15.00	$150.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			$0.00
Project Specific Insurance	Actual Cost			$0.00
Monuments (Permanent)	Actual Cost			$0.00
Photo Processing	Actual Cost			$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			$0.00
CADD	Actual Cost (Max $15/hour)			$0.00
Web Site	Actual Cost (Submit supporting documentation)			$0.00
Advertisements	Actual Cost (Submit supporting documentation)			$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			$0.00
Recording Fees	Actual Cost			$0.00
Transcriptions (specific to project)	Actual Cost			$0.00
Courthouse Fees	Actual Cost			$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Utliity Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Testing of Soil Samples	Actual Cost			$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
CN Right-of-Entry Permit, Flaggers, Training	Actual Cost	1	$7,500.00	$7,500.00
CN Insurance	Actual Cost	1	$5,000.00	$5,000.00
Miscellaneous Printing and Material Production	Actual Cost (Lump Sum)	1	$2,000.00	$2,000.00
				$0.00
			TOTAL DIRECT COSTS:	**$15,493.50**

Local Public Agency	County	Section Number
LCDOT	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
Christopher B. Burke Engineering, Ltd.	

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE 126.53% **COMPLEXITY FACTOR** 0

Exhibit E: Feasibility Study - Peterson Road at CN/Metra Railroad Crossing

TASK	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	DIRECT COSTS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
1. Data Collection and Review	70	3,618	4,578	$15,493.50	1,194	44,098	68,982	10.15%
2. Survey	549	28,900	36,567		9,537		75,004	11.04%
3. Alternatives Analysis	1108	57,787	73,118		19,070		149,975	22.07%
4. Traffic and Crash Analysis	40	2,319	2,934		765	108,952	114,970	16.92%
5. Environmental Evaluation	120	6,493	8,216		2,143		16,852	2.48%
6. Drainage Evaluation	500	25,317	32,034		8,355		65,706	9.67%
7. Project Coordination	306	16,905	21,389		5,579	51,137	95,010	13.98%
8. Feasibility Report	248	12,945	16,380		4,272		33,597	4.94%
9. Project Management & Administration	144	9,046	11,446		2,985	25,389	48,866	7.19%
10. QA/QC	46	2,672	3,381		882	2,041	8,976	1.32%
		-	-		-		-	
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		-	-		-		-	
Subconsultant DL					1,626		1,626	0.24%
TOTALS	3131	166,002	210,043	15,494	56,408	231,617	679,564	100.00%

376,045

BLR 05514 (Rev. 05/27/22)

The subconsultant fee has been adjusted due to 15% fixed

Local Public Agency
LCDOT

County
Lake

Section Number
22-00999-86-ES

Consultant / Subconsultant Name
Christopher B. Burke Engineering, Ltd.

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			1. Data Collection and Review			2. Survey			3. Alternatives Analysis			4. Traffic and Crash Analysis			5. Environmental Evaluation		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	78.00	0.0																	
Engineer VI	78.00	218.0	6.96%	5.43							80	7.22%	5.63	4	10.00%	7.80	8	6.67%	5.20
Engineer V	71.53	114.0	3.64%	2.60	10	14.29%	10.22	8	1.46%	1.04	24	2.17%	1.55						
Engineer IV	59.09	718.0	22.93%	13.55	18	25.71%	15.19	8	1.46%	0.86	290	26.17%	15.46	26	65.00%	38.41	34	28.33%	16.74
Engineer III	47.04	446.0	14.24%	6.70							214	19.31%	9.08	10	25.00%	11.76			
Engineer I/II	34.22	664.0	21.21%	7.26	24	34.29%	11.73	8	1.46%	0.50	280	25.27%	8.65				48	40.00%	13.69
Survey V	78.00	26.0	0.83%	0.65				26	4.74%	3.69									
Survey IV	74.74	12.0	0.38%	0.29				12	2.19%	1.63									
Survey III	65.40	0.0																	
Survey II	53.53	175.0	5.59%	2.99				175	31.88%	17.06									
Survey I	37.94	175.0	5.59%	2.12				175	31.88%	12.09									
Engineering Technician V	70.87	0.0																	
Engineering Technician IV	59.72	0.0																	
Engineering Technician III	38.63	0.0																	
CAD Manager	69.52	80.0	2.56%	1.78				80	14.57%	10.13									
CAD Technician II	52.33	116.0	3.70%	1.94				32	5.83%	3.05	52	4.69%	2.46						
GIS Speciailist III	56.56	129.0	4.12%	2.33	18	25.71%	14.54	25	4.55%	2.58	24	2.17%	1.23						
Landscape Architect	63.63	0.0																	
Landscape Designer I/II	36.87	0.0																	
Environmental Resource Specialist V	73.93	120.0	3.83%	2.83							48	4.33%	3.20				30	25.00%	18.48
Environmental Resource Specialist IV	61.19	90.0	2.87%	1.76							48	4.33%	2.65						
Environmental Resource Specialist III	51.76	48.0	1.53%	0.79							48	4.33%	2.24						
Environmental Resource Specialist I/II	29.42	0.0																	
Environmental Resource Technician	44.44	0.0																	
Engineering Itern	17.68	0.0																	
		0.0																	
		0.0																	
TOTALS		3131.0	100%	$53.02	70.0	100.00%	$51.69	549.0	100%	$52.64	1108.0	100%	$52.15	40.0	100%	$57.96	120.0	100%	$54.11

Local Public Agency: LCDOT

County: Lake

Section Number: 22-00999-86-ES

Consultant / Subconsultant Name: Christopher B. Burke Engineering, Ltd.

Job Number:

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	6. Drainage Evaluation			7. Project Coordination			8. Feasibility Report			9. Project Management & Administration			10. QA/QC					
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	78.00																		
Engineer VI	78.00	8	1.60%	1.25	24	7.84%	6.12	18	7.26%	5.66	60	41.67%	32.50	16	34.78%	27.13			
Engineer V	71.53	48	9.60%	6.87	24	7.84%	5.61												
Engineer IV	59.09	128	25.60%	15.13	66	21.57%	12.74	72	29.03%	17.15	60	41.67%	24.62	16	34.78%	20.55			
Engineer III	47.04	124	24.80%	11.66	66	21.57%	10.14	32	12.90%	6.07									
Engineer I/II	34.22	128	25.60%	8.76	66	21.57%	7.38	72	29.03%	9.93	24	16.67%	5.70	14	30.43%	10.41			
Survey V	78.00																		
Survey IV	74.74																		
Survey III	65.40																		
Survey II	53.53																		
Survey I	37.94																		
Engineering Technician V	70.87																		
Engineering Technician IV	59.72																		
Engineering Technician III	38.63																		
CAD Manager	69.52																		
CAD Technician II	52.33	32	6.40%	3.35															
GIS Speciailist III	56.56	32	6.40%	3.62				30	12.10%	6.84									
Landscape Architect	63.63																		
Landscape Designer I/II	36.87																		
Environmental Resource Specialist V	73.93				30	9.80%	7.25	12	4.84%	3.58									
Environmental Resource Specialist IV	61.19				30	9.80%	6.00	12	4.84%	2.96									
Environmental Resource Specialist III	51.76																		
Environmental Resource Specialist I/II	29.42																		
Environmental Resource Technician	44.44																		
Engineering Itern	17.68																		
TOTALS		500.0	100%	$50.63	306.0	100%	$55.24	248.0	100%	$52.20	144.0	100%	$62.82	46.0	100%	$58.10	0.0	0%	$0.00

TRANSYSTEMS PROPOSAL

Peterson Road

TRANSYSTEMS

Illinois Department of Transportation

EXHIBIT D

COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

FIXED RAISE

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	22-00999-86-ES

Prime Consultant (Firm) Name	Prepared By	Date
Christopher B. Burke Engineering, Ltd.	BVW (TranSystems)	1/31/2023

Consultant / Subconsultant Name	Job Number
TranSystems	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

Grade Separation Feasibility Study at Peterson Road

PAYROLL ESCALATION TABLE

CONTRACT TERM	**18**	**MONTHS**	**OVERHEAD RATE**	**143.97%**
START DATE	**4/1/2023**		**COMPLEXITY FACTOR**	**0**
RAISE DATE	**4/1/2023**		**% OF RAISE**	**2.00%**
END DATE	9/30/2024			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	4/1/2023	4/1/2023	0	0.00%
1	4/2/2023	4/1/2024	12	68.00%
2	4/2/2024	10/1/2024	6	34.68%

The total escalation = 2.68%

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
TranSystems	

PAYROLL RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

MAXIMUM PAYROLL RATE	**78.00**
ESCALATION FACTOR	**2.68%**

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Engineer 5 (E5)	$78.00	$78.00
Engineer 4 (E4)	$78.00	$78.00
Engineer 3 (E3)	$68.93	$70.78
Engineer 2 (E2)	$48.86	$50.17
Engineer 1 (E1)	$36.58	$37.56
Technician 3 (T3)	$41.14	$42.24
Technician 1 (T1)	$20.29	$20.83
Administrative 3 (A3)	$57.58	$59.12
Administrative 2 (A2)	$31.77	$32.62
Administrative 1 (A1)	$27.48	$28.22

Local Public Agency	County	Section Number
Lake County Division of Transportation	Lake	22-00999-86-ES

Consultant / Subconsultant Name	Job Number
TranSystems	

DIRECT COSTS WORKSHEET

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.

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	400	$0.63	$250.00
Vehicle Owned or Leased	$32.50/half day (4 hours or less) or $65/full day			$0.00
Vehicle Rental	Actual Cost (Up to $55/day)			$0.00
Tolls	Actual Cost			$0.00
Parking	Actual Cost			$0.00
Overtime	Premium portion (Submit supporting documentation)			$0.00
Shift Differential	Actual Cost (Based on firm's policy)			$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)	10	$60.00	$600.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			$0.00
Project Specific Insurance	Actual Cost			$0.00
Monuments (Permanent)	Actual Cost			$0.00
Photo Processing	Actual Cost			$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			$0.00
CADD	Actual Cost (Max $15/hour)			$0.00
Web Site	Actual Cost (Submit supporting documentation)			$0.00
Advertisements	Actual Cost (Submit supporting documentation)			$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			$0.00
Recording Fees	Actual Cost			$0.00
Transcriptions (specific to project)	Actual Cost			$0.00
Courthouse Fees	Actual Cost			$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Utliity Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Testing of Soil Samples	Actual Cost			$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			$0.00
Streetlight Traffic Information		1	$7,000.00	$7,000.00
Printing - B/W		0	$0.15	$0.00
Printing - Color		0	$1.50	$0.00
				$0.00
			TOTAL DIRECT COSTS:	**$7,850.00**

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

22-00999-86-ES

Consultant / Subconsultant Name

TranSystems

Job Number

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE 143.97%

COMPLEXITY FACTOR 0

TASK	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	DIRECT COSTS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
Data Collection & Review	70	2,895	4,168	$7,850.00	955		15,868	7.80%
Traffic & Crash Analysis	762	39,337	56,634		12,981		108,952	53.57%
Project Coordination	306	18,463	26,581		6,093		51,137	25.14%
Project Management & Administration	144	9,167	13,197		3,025		25,389	12.48%
QA/QC	10	737	1,061		243		2,041	1.00%
		-	-		-		-	
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		-	-		-		-	
Subconsultant DL					0		-	
TOTALS	1292	70,599	101,641	7,850	23,297	-	203,387	100.00%
		172,240						

Local Public Agency

Lake County Division of Transportation

County

Lake

Section Number

22-00999-86-ES

Consultant / Subconsultant Name

TranSystems

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Data Collection & Review			Traffic & Crash Analysis			Project Coordination			Project Management & Administration			QA/QC		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer 5 (E5)	78.00	96.0	7.43%	5.80	4	5.71%	4.46	40	5.25%	4.09	24	7.84%	6.12	24	16.67%	13.00	4	40.00%	31.20
Engineer 4 (E4)	78.00	90.0	6.97%	5.43				42	5.51%	4.30	48	15.69%	12.24						
Engineer 3 (E3)	70.78	372.0	28.79%	20.38	6	8.57%	6.07	176	23.10%	16.35	88	28.76%	20.35	96	66.67%	47.18	6	60.00%	42.47
Engineer 2 (E2)	50.17	294.0	22.76%	11.42	16	22.86%	11.47	188	24.67%	12.38	90	29.41%	14.76						
Engineer 1 (E1)	37.56	288.0	22.29%	8.37	16	22.86%	8.59	216	28.35%	10.65	56	18.30%	6.87						
Technician 3 (T3)	42.24	48.0	3.72%	1.57	8	11.43%	4.83	40	5.25%	2.22									
Technician 1 (T1)	20.83	104.0	8.05%	1.68	20	28.57%	5.95	60	7.87%	1.64				24	16.67%	3.47			
Administrative 3 (A3)	59.12	0.0																	
Administrative 2 (A2)	32.62	0.0																	
Administrative 1 (A1)	28.22	0.0																	
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TOTALS		1292.0	100%	$54.64	70.0	100.00%	$41.36	762.0	100%	$51.62	306.0	100%	$60.34	144.0	100%	$63.66	10.0	100%	$73.67

QUALITY COUNTS PROPOSAL

Peterson Road

Quality Counts

DATA THAT DRIVES COMMUNITIES

ESTIMATE

Quality Counts
DATA THAT DRIVES COMMUNITIES

CHI:IL

BILL TO : Christopher B. Burke Engineering, Ltd
9575 W. Higgins Road , Suite 600
Rosemont,IL 60018
(847) 823-0500

CLIENT PROJECT # : 22-00999-86-ES ESTIMATE DATE : 7/26/2022 ORDER DATE : 5/18/2022

ORDER No	PROJECT NAME	PAYMENT TERMS	ORDER BY
158383	CNRR at Peterson Road	PWP	Michael Matkovic

QTY	DESCRIPTION	RATE	TOTAL
30	**Standard-Turn Count**	$215.00	$6,450.00
	5 Location(s) for time period(s): 6:00 AM -- 9:00 AM-(Tuesday) - 3 Hrs.		
	-Franklin Blvd -- Peterson Road, Libertyville, IL		
	-Industrial Drive -- Peterson Road, Libertyville, IL		
	-Northwind Blvd -- Peterson Road, Libertyville, IL		
	-Butterfield Square Commercial Entrance -- Peterson Road, Libertyville, IL		
	-Butterfield Road -- Old Barn Circle, Libertyville, IL		
	5 Location(s) for time period(s): 6:00 AM -- 9:00 AM-(Thursday) - 3 Hrs.		
	-Franklin Blvd -- Peterson Road, Libertyville, IL		
	-Industrial Drive -- Peterson Road, Libertyville, IL		
	-Northwind Blvd -- Peterson Road, Libertyville, IL		
	-Butterfield Square Commercial Entrance -- Peterson Road, Libertyville, IL		
	-Butterfield Road -- Old Barn Circle, Libertyville, IL		
	5 Location(s) for time period(s): 6:00 AM -- 9:00 AM-(Saturday) - 3 Hrs.		
	-Franklin Blvd -- Peterson Road, Libertyville, IL		
	-Industrial Drive -- Peterson Road, Libertyville, IL		
	-Northwind Blvd -- Peterson Road, Libertyville, IL		
	-Butterfield Square Commercial Entrance -- Peterson Road, Libertyville, IL		
	-Butterfield Road -- Old Barn Circle, Libertyville, IL		
	5 Location(s) for time period(s): 3:00 PM -- 6:00 PM-(Tuesday) - 3 Hrs.		
	-Franklin Blvd -- Peterson Road, Libertyville, IL		
	-Industrial Drive -- Peterson Road, Libertyville, IL		
	-Northwind Blvd -- Peterson Road, Libertyville, IL		
	-Butterfield Square Commercial Entrance -- Peterson Road, Libertyville, IL		
	-Butterfield Road -- Old Barn Circle, Libertyville, IL		
	5 Location(s) for time period(s): 3:00 PM -- 6:00 PM-(Thursday) - 3 Hrs.		
	-Franklin Blvd -- Peterson Road, Libertyville, IL		
	-Industrial Drive -- Peterson Road, Libertyville, IL		
	-Northwind Blvd -- Peterson Road, Libertyville, IL		

QTY	DESCRIPTION	RATE	TOTAL
	-Butterfield Square Commercial Entrance -- Peterson Road, Libertyville, IL		
	-Butterfield Road -- Old Barn Circle, Libertyville, IL		
	5 Location(s) for time period(s): 3:00 PM -- 6:00 PM-(Saturday) - 3 Hrs.		
	-Franklin Blvd -- Peterson Road, Libertyville, IL		
	-Industrial Drive -- Peterson Road, Libertyville, IL		
	-Northwind Blvd -- Peterson Road, Libertyville, IL		
	-Butterfield Square Commercial Entrance -- Peterson Road, Libertyville, IL		
	-Butterfield Road -- Old Barn Circle, Libertyville, IL		
6	**High Volume-Turn Count**	$330.00	$1,980.00
	1 Location(s) for time period(s): 6:00 AM -- 9:00 AM-(Tuesday) - 3 Hrs.		
	-Elderberry Drive -- Peterson Road, Libertyville, IL		
	1 Location(s) for time period(s): 6:00 AM -- 9:00 AM-(Thursday) - 3 Hrs.		
	-Elderberry Drive -- Peterson Road, Libertyville, IL		
	1 Location(s) for time period(s): 6:00 AM -- 9:00 AM-(Saturday) - 3 Hrs.		
	-Elderberry Drive -- Peterson Road, Libertyville, IL		
	1 Location(s) for time period(s): 3:00 PM -- 6:00 PM-(Tuesday) - 3 Hrs.		
	-Elderberry Drive -- Peterson Road, Libertyville, IL		
	1 Location(s) for time period(s): 3:00 PM -- 6:00 PM-(Thursday) - 3 Hrs.		
	-Elderberry Drive -- Peterson Road, Libertyville, IL		
	1 Location(s) for time period(s): 3:00 PM -- 6:00 PM-(Saturday) - 3 Hrs.		
	-Elderberry Drive -- Peterson Road, Libertyville, IL		
		TOTAL	$8,430.00

Balances unpaid by end of Payment term (listed above) will be charged 1.5% interest per month

Quality Counts, LLC
15615 SW 74th Ave #100
Tigard, OR 97224
(877) 580-2212
qualitycounts.net

ESTIMATE

Quality Counts
DATA THAT DRIVES COMMUNITIES

CHI:IL

BILL TO : Christopher B. Burke Engineering, Ltd
9575 W. Higgins Road , Suite 600
Rosemont,IL 60018
(847) 823-0500

CLIENT PROJECT # : ESTIMATE DATE : 7/26/2022 ORDER DATE : 5/24/2022

ORDER No	PROJECT NAME	PAYMENT TERMS	ORDER BY
158450	CNRR at Peterson Road (Option B)	PWP	Michael Matkovic

QTY	DESCRIPTION	RATE	TOTAL
9	**High Volume-Turn Count**	$1,540.00	$13,860.00
	6 Location(s) for time period(s): 12:00 AM -- 12:00 AM-(Midweek) - 24 Hrs.		
	-(Day 1) Harris Road -- Peterson Road, Libertyville, IL		
	-(Day 1) US Route 45 -- Peterson Road, Libertyville, IL		
	-(Day 1) Butterfield Road -- Peterson Road, Libertyville, IL		
	-(Day 2) Harris Road -- Peterson Road, Libertyville, IL		
	-(Day 2) US Route 45 -- Peterson Road, Libertyville, IL		
	-(Day 2) Butterfield Road -- Peterson Road, Libertyville, IL		
	3 Location(s) for time period(s): 12:00 AM -- 12:00 AM-(Saturday) - 24 Hrs.		
	-Harris Road -- Peterson Road, Libertyville, IL		
	-US Route 45 -- Peterson Road, Libertyville, IL		
	-Butterfield Road -- Peterson Road, Libertyville, IL		
6	**Standard-Turn Count**	$990.00	$5,940.00
	4 Location(s) for time period(s): 12:00 AM -- 12:00 AM-(Midweek) - 24 Hrs.		
	-(Day 1) EB Peterson Road connector -- IL 137, Libertyville, IL		
	-(Day 1) WB IL 137 connector to Peterson Road --WB IL 137 connector to Peterson Road , Libertyville, IL		
	-(Day 2) EB Peterson Road connector -- IL 137, Libertyville, IL		
	-(Day 2) WB IL 137 connector to Peterson Road --WB IL 137 connector to Peterson Road , Libertyville, IL		
	2 Location(s) for time period(s): 12:00 AM -- 12:00 AM-(Saturday) - 24 Hrs.		
	-EB Peterson Road connector -- IL 137, Libertyville, IL		
	-WB IL 137 connector to Peterson Road --WB IL 137 connector to Peterson Road , Libertyville, IL		
		TOTAL	$19,800.00

Balances unpaid by end of Payment term (listed above) will be charged 1.5% interest per month

Quality Counts, LLC
15615 SW 74th Ave #100
Tigard, OR 97224
(877) 580-2212
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