


Municipality	LOCAL AGENCY	 Illinois Department of Transportation	CONSULTANT	Name Baxter & Woodman, Inc
Township				Address 8678 Ridgefield Road
County Lake County – Division of Transportation		Preliminary Engineering Services Agreement For Motor Fuel Tax Funds		City Crystal Lake
Section 16-00222-02-CH				State Illinois

THIS AGREEMENT is made and entered into this 14th day of July, 2020 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Motor Fuel Tax Funds, allotted to the LA 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.

Section Description

Name Stearns School Road (CH 74) at US Highway 41 Intersection Improvements

Route CH 74 Length 0.54 Mi. 2862.00 FT (Structure No. N/A)

Termini CH 74: 1471 ft west of US Hwy 41 to US Hwy 41; US Hwy 41: 858 ft SE to 533 ft NW of Stearns School Rd

Description:

This project will include channelization improvements at CH 74/ US Hwy 41 and CH 74/Fuller Rd, widening of CH 74, sidewalk replacement, and traffic signal modernization at CH 74/US Hwy 41.

Agreement Provisions

The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below:
 - a. ☒ Make such detailed surveys as are necessary for the preparation of detailed roadway plans
 - b. ☐ Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
 - c. ☒ Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
 - d. ☐ Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
 - e. ☒ Prepare Army Corps of Engineers Permit, **Lake County Stormwater Management Commission Permit**, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
 - f. ☐ Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
 - g. ☒ Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with **one (1) copy of each document in both hardcopy and electronic format**. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at the ENGINEER's actual cost for reproduction.
 - h. ☒ Furnish the LA with survey and drafts in **duplicate** of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.
 - i. ☐ Assist the LA in the tabulation and interpretation of the contractors' proposals.

- j. ☐ Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
 - k. ☐ Prepare the Project Development Report when required by the DEPARTMENT.
 - l. ☒ **Services as included and/or defined in the attached Scope of Services.**
2. That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies **of the LA and** of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA and the DEPARTMENT.
 3. To attend conferences at any reasonable time when requested to do so by representatives of the LA or the Department.
 4. In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that the ENGINEER will perform such work without expense to the LA, even though final payment has been received by the ENGINEER. The ENGINEER shall give immediate attention to these changes so there will be a minimum delay to the CONTRACTOR.
 5. That basic survey notes and sketches, charts, computations and other data prepared or obtained by the ENGINEER pursuant to this AGREEMENT will be made available, upon request, to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.
 6. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by the ENGINEER and will show the ENGINEER's professional seal where such is required by law.

The LA Agrees,

1. ~~To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT according to the following method indicated by a check mark:~~
 - a. ☐ A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
 - b. ☐ A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

~~Schedule for Percentages Based on Awarded Contract Cost~~

Awarded Cost		Percentage Fees	
Under	\$50,000	_____	(see note)
		_____	%
		_____	%
		_____	%

~~Note: Not necessarily a percentage. Could use per diem, cost-plus or lump sum.~~

2. To pay for all services rendered in accordance with this AGREEMENT at the actual cost of performing such work plus ****** percent to cover profit, overhead and readiness to serve - "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at the ENGINEER's actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided in section 1 of the ENGINEER AGREES. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus an additional service charge of up to five (5) percent.

"Cost to Engineer" to be verified by furnishing the LA and the DEPARTMENT copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed. ****See the CECs**

The Total Not-to-Exceed Contract Amount shall be \$407,084.27

3. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after the services have been performed. ~~in accordance with the following schedule:~~
- ~~a. Upon completion of detailed plans, special provisions, proposals and estimate of cost - being the work required by section 1 of the ENGINEER AGREES - to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.~~
 - ~~b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.~~

By Mutual agreement, partial payments, ~~not to exceed 90 percent of the amount earned~~, may be made from time to time as the work progresses.

4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in sections 1 and 3 of the ENGINEER AGREES and prior to the completion of such services, the LA shall reimburse the ENGINEER for the ENGINEER's actual costs plus ** percent incurred up to the time the ENGINEER is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of the LA AGREES.
5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of the ENGINEER AGREES, after they have been approved by the DEPARTMENT, the LA will pay the ENGINEER for such changes on the basis of actual cost plus ** percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of the LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of the ENGINEER's responsibility to prepare a complete and adequate set of plans and specifications.

****See the CECS**

It is Mutually Agreed,

1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
2. This AGREEMENT may be terminated by the LA 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 LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with section 4 of the LA AGREES.
3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA and their approval by the DEPARTMENT, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA and the DEPARTMENT.
4. That the ENGINEER warrants that the ENGINEER has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that the ENGINEER has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in quintuplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

ATTEST:

By

Lake County

Clerk

(Seal)

County of Lake

(Municipality/Township/County)

of the

State of Illinois, acting by and through its

County Board

By

Title

Chair, Lake County Board

RECOMMENDED FOR EXECUTION

Shane E. Schneider, P.E.
Director of Transportation/County Engineer
Lake County

Executed by the ENGINEER:

ATTEST:

By

Title

Engineering Firm

Street Address

City, State

By

Title

Approved

Date

Department of Transportation

Regional Engineer

County Engineer

On behalf of IDOT pursuant to Agreement
of Understanding dated May 3, 2018

Note: Five (5) Original Executed Contracts – (2) LCDOT; (2) IDOT District 1, Local Roads; (1) Consultant

**STEARNS SCHOOL ROAD (CH 74) AT U.S. HIGHWAY 41
INTERSECTION IMPROVEMENTS
PHASE II ENGINEERING SERVICES
LAKE COUNTY DIVISION OF TRANSPORTATION
SECTION 16-00222-02-CH**

SCOPE OF SERVICES

LOCATION:

The project is located on Stearns School Road and U.S. Highway 41 within unincorporated Lake County near the Village of Gurnee. The area for improvements includes the following:

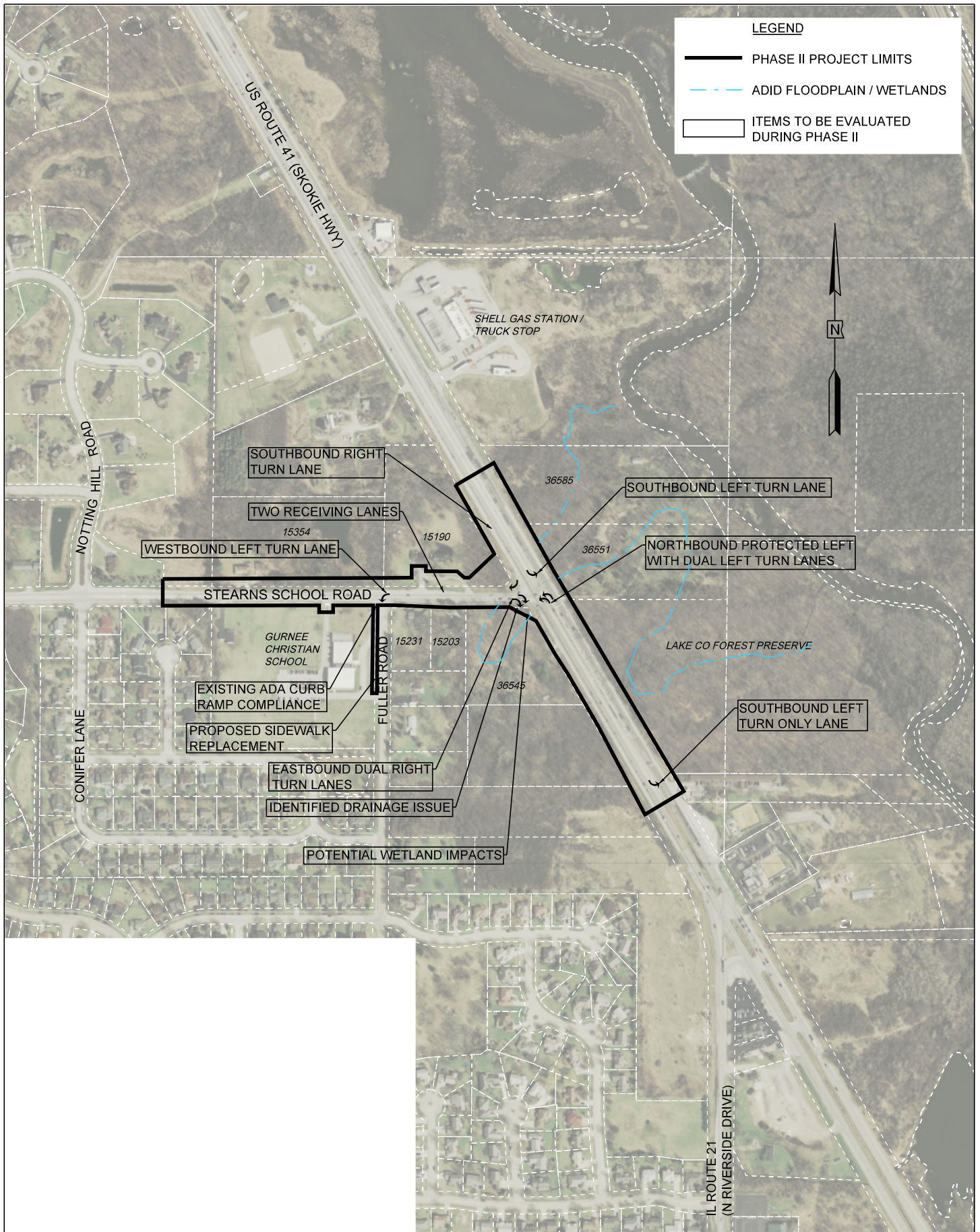
<u>Roadway</u>	<u>Limits</u>	<u>Length</u>
Stearns School Road	1,471 feet west of the centerline of U.S. Hwy 41 to U.S. Hwy 41	1,471 FT
U.S. Hwy 41	858 feet southeast of the centerline of Stearns School Road to 533 feet northwest of the centerline of Stearns School Road	1,391 FT

PROJECT UNDERSTANDING:

This project involves Phase II Engineering for the intersection improvements at Stearns School Road and U.S. Hwy 41. U.S. Hwy 41 is a divided four lane road with two 12 ft lanes in each direction and 10 ft wide paved shoulders on both sides under the jurisdiction of the Illinois Department of Transportation (IDOT). There is a barrier wall in the median to the north and a left turn lane with mountable median on the south leg. There are traffic signals at the intersection of U.S. Hwy 41 and Stearns School Road and at the intersection of U.S. Hwy 41 and IL Route 21. The intersections are approximately 1,400 ft apart.

Stearns School Road is primarily a two lane road with 12 ft wide lanes under the jurisdiction of the Lake County Division of Transportation (LCDOT). The east end of Stearns School Road forms a T-intersection with U.S. Hwy 41. The eastbound direction on Stearns School Road has a shared left turn/through lane and a right turn only lane. There is a driveway to a single family home on the east side of U.S. Hwy 41, opposite of Stearns School Road. Westbound Stearns School Road has a single through lane and a bypass lane at Fuller Road. Stearns School Road has B-6.24 curb and gutter on both sides of the roadway and on the returns at the U.S. Hwy 41 intersection. Stearns School Road has a sidewalk on the south side, west of Fuller Road. There are no crosswalks on either U.S. Hwy 41 or Stearns School Road. The existing sidewalk along the south side of Stearns School Road and the west side of Fuller Road is owned and maintained by the Village of Gurnee and appears to have sections that are non-ADA compliant due to cross slope and running slope.

Gurnee Christian School is located in the southwest quadrant of the intersection of Stearns School Road and Fuller Road. The remaining project area land use is predominantly residential, single family homes. North and south of the project limits there are several businesses along U.S. Hwy 41.



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This project will follow federal project development procedures to ensure eligibility for federal funding. The project will be coordinated with the Illinois Department of Transportation's Bureau of Local Roads and Streets and the Federal Highway Administration for reviews.

SCOPE OF SERVICES:

1. EARLY COORDINATION AND DATA COLLECTION

- *Utility Coordination:* HBK Engineering will provide utility coordination services include Level B-D locates. Level A locates are not included at this time. Refer to HBK proposal for further detail.

2. SUPPLEMENTAL TOPOGRAPHIC SURVEY

- *Supplemental Topographic Survey:* As approved by LCDOT, provide additional topographic survey for areas identified for future development. State plane coordinates and NAVD 88 will be used for horizontal and vertical controls.

3. ENVIRONMENTAL COORDINATION AND PERMITTING

- *USACE Regional Permit:*
 - Joint Application
 - USFWS Consultation Memorandum
 - Illinois Historic Preservation Agency Coordination
- Coordination with Lake County SMC – No permit required. Coordination and consideration of comments will be included.
- *PESA Response Form:* Prepare a PESA Response Form for U.S. Hwy 41 and submit to IDOT for review and approval.
- *Clean Construction or Demolition Debris (CCDD):*
 - Based on the findings of the Environmental Screening and PESA for Stearns School Road, utilize soil borings and hand augers for testing the potential classification of CCDD. One soil sample will be collected at each soil boring and submitted to a laboratory for analysis for BTEX, PNA, RCRA Metals, SPLP Metals analysis and pH. A field geologist/engineer will field screen soils with a photoionization detector and prepare a field log of the soils encountered and observed during drilling of each soil boring. Additionally, we will check with one local CCDD facility regarding the potential for additional testing requirements.
 - Prepare IEPA LPC-663 soil certification forms for disposal of Stearns School Road excavated soils at a CCDD facility as appropriate. If regulated soils are encountered which require management as special waste additional characterization of soils for disposal as non-special waste at a licensed disposal facility will be necessary. A special provision will be prepared to including the names of facilities where the soils have been pre-screened for possible disposal (Min. of 2 facilities; 3 desired).

- *Wetlands:*
 - *Update the Wetland Delineation Report and Exhibits that summarize the methodology used, site description, and results of survey.*

4. PLAN PREPARATION (IN ACCORDANCE WITH LCDOT AND IDOT PLAN PREPARATION GUIDELINES)

- *Title Sheet:* The Title Sheet will be the LCDOT Standard signed and sealed by the CONSULTANT(S).
- *Alignment and Ties:* The alignment and ties sheet will be provided showing all horizontal curve data for the proposed alignments and descriptions of survey benchmarks and control points.
- *General Notes/Index of Sheets/Approved Required Notes/List of State Standards/Commitments:* The General Notes will include LCDOT Standard Notes. The sheet index and list of applicable highway standards and District Details will be included on the General Notes sheet.
- *Summary of Quantities, Schedule of Quantities and Quantity Calculations:* The Summary of Quantities shall include the Pay Item Number, the IDOT Code Number, Quantity, Unit and Item name as it appears on the IDOT Coded Pay Item List. Specialty Items will be noted. Sheets will be limited to fifteen (15) pay items per sheet, single panel, double spaced per latest IDOT/District 1 format with fund breakdown. Lump sum item breakdowns will be provided in excel and pdf format.

Schedules shall be provided for all pay items except contingency and lump sum pay items.

- *Typical Sections:* Prepare typical sections for the existing and proposed improvements (separate typical sections for existing vs. proposed), showing dimensions for roadway surfaces, bases, subbases, subgrade treatments, gutters, curb and gutters, medians, sidewalks, bike paths, ditches, backslopes, and right of way. Prepare a pavement design form based on the Phase I Roadway Geotechnical Report and submit to IDOT for approval.
- *Maintenance of Traffic and Construction Staging:* Develop a Transportation Management Plan (TMP) and staging plan to be submitted to IDOT and LCDOT for approval. Identify the preferred strategy for maintaining traffic and driveway access. Complete a design of the preferred staging plan which may include a detour or staged construction. Prepare construction staging notes, typical sections, and layout to maintain local traffic flow through the construction zone. Layout sheets will be provided with two window views per sheet at 1:50 scale. Confer with LCDOT staff, emergency services, and public transportation agencies to consider local impacts and concerns.
- *Plan and Profile:* Identify design constraints including clear zone, safety protection requirements, obstructions, drainage limitations, and potential design exceptions. Plan and profile sheets will include improvement limits, stations and offset callouts, define paving limits, label construction limit locations and right of way breaks, utility adjustments, guardrail locations, and wetland locations and impacts. Separate removal sheets will be prepared for this project with two windows at 1:20 scale. All sheets will be per chapter 63 of the BDE Manual.

- The plan sheets will also include vertical and horizontal curve data. Provide existing/proposed plan and existing/proposed profile at 1:20 horizontal and 1:5 vertical scale.
- *Drainage and Utility:* Prepare the ditch, inlet, culvert, and storm sewer design for the proposed improvements. Provide drainage structure information, show utilities and provide ditch profiles, as necessary with existing/proposed plan and profile at 1:20 horizontal and 1:5 vertical scales. Perform inlet spacing and storm sewer calculations. Existing Utilities will be shown on separate sheets. Utility research, coordination and exploration will be performed by HBK – See HBK scope.
- *Watermain and Sanitary Sewer Adjustments* – Prepare plan sheets showing location of necessary adjustments for watermain and sanitary sewer. This does not include a redesign or relocation of these utilities.
- *Erosion Control Plans:* Prepare a soil erosion and sediment control plans per stage for the improvements with two window views per sheet at 1:50 scale. Prepare a Storm Water Pollution Prevention Plan.
- *Pavement Marking and Signage Plans:* Prepare pavement marking plans with two window views per sheet at 1:50 scale. Include legends and callouts for the type pavement marking, the limits of the pavement marking and taper rates. Incorporate signage plans on the U.S. Hwy 41 pavement marking sheets. Identify the type, size, and location of each sign. Signage plans will not be provided for Stearns School Road.
- *Landscaping Plans:* Design landscape trees and plantings for proposed planting areas and replacement of parkway trees removed during construction. Layout sheets will be provided with two window views per sheet at 1:50 scale.
- *Structural Plans (Junction Chamber):*
 - Prepare detailed structural calculations and structural plans for a junction chamber to be located on the south side of Stearns School Road approximately 350 feet west of Fuller Road. Includes reinforcement schedules, material specifications, and general notes.
- *Traffic Signal and Interconnect Plans:* Design temporary and permanent traffic signal plans at 1:20 scale, cable plans, and mast arm mounted street name signs. Prepare temporary and permanent traffic signal interconnect plans with two window views per sheet at 1:50 scale and interconnect schematics. Detector loops will be utilized on U.S. Hwy 41 and radar detection will be installed for Stearns School Road. The PTZ camera in the SE quadrant will be removed and replaced on a combination mast arm post.

PTZ camera detail sheets will be provided by LCDOT upon request. Plan sheets will then be inserted into the plan set.

- *Street Lighting Plans:* None anticipated (temporary or permanent).
- *Plat of Highway* – Insert approved Plat of Highway into plan set.

- *Cross Section Design:* Design roadway cross sections at 50-foot intervals and all cross streets, driveways and cross-road culverts utilizing Bentley's MicroStation Select series 4 Corridor Design Program in order to provide sufficient detail to determine ROW, including varying slopes to limit ROW impacts.
 - 1:5V, 1:10H scale
 - Half section on centerline of all driveways,
 - Existing and proposed ROW to be shown
 - Provide centerline, edge of pavement and ditch elevations.
 - Provide cut and fill quantities.
 - Indicate location of unsuitable removal.
 - Show proposed drainage.
 - Any existing/proposed utilities
- ADA Curb Ramp Details at 1:5 scale to be provided at the following locations listed below where either new ramps will be constructed, existing ramps will be impacted or where existing locations are not current standard. Locations that do not warrant a detectable warning are not considered ADA curb ramps. Details will not be provided for those locations. Maximum Extent Practicable (MEP) forms will be prepared as required. Fuller Rd/Stearns School Rd detail included in Phase I.

MAIN ROUTE	CROSSROAD	QUADRANT	CONTROL TYPE	DETECTABLE WARNING REQ.
Stearns School	Fuller Rd	SW	STOP SIGN	YES
Stearns School	Gurnee Christian School	SE, SW	NONE	NO
Stearns School	Private Ent.	SE, SW	NONE	NO
Fuller Rd	Gurnee Christian School (North Drive)	NW, SW	NONE	NO
Fuller Rd	Gurnee Christian School (South Drive)	NW, SW	NONE	NO

- *Driveway Details:* Driveway details will be provided for northwest corner property.
- *Intersection Details:* The intersection of U.S. Hwy 41 and Stearns School Road will have an intersection detail provided at 1:20 scale. The intersection of Stearns School Road and Fuller Road will not have an intersection detail provided.
- *Culvert Grading Detail:* Detail prepared in Phase I
- *Miscellaneous D1 and LCDOT Details* – Sheetting of relevant IDOT D1 and LCDOT Details.
- *Special Provisions:* Prepare special provisions to specify items not covered by the Standard Specifications for Road and Bridge Construction. Utilize District One Recurring Special Provisions, Bureau of Design and Environment (BDE) Special Provisions and LCDOT special provisions. Prepare additional project specific Special Provisions as necessary.

- *Estimate of Cost:* Prepare independent estimate of cost utilizing BDE 213 form for preliminary, pre-final and final plan submittal. Estimates will also be included for the Inter-Governmental Agreement with the Village of Gurnee at the same time as the preliminary, pre final and final submittal. An Exhibit will be prepared showing the Village the cost sharing improvements.
- *Estimate of Time:* Complete BDE 220A form and prepare bar chart. BDE 220A form to be provided at Final Submittal only.

5. MEETINGS

- *Meetings:* The following meetings (6) are anticipated for this project:
 - LCDOT (2) (Kickoff, Review)
 - IDOT (2) (Kickoff and Review)
 - Utility Coordination Meetings (2)
 - LCDOT/Geotechnical Meetings (2 – pre bore & post bore)
 - ROW Kick-off meeting (1)
 - Village meetings (2)
 - LCDOT Additional Meetings (2)
- *Project Website:* The design, maintenance and hosting of project website is not included in scope. The ENGINEER will provide project data to the LCDOT upon request.
- *Social Media:* No social media participation is anticipated.

6. GEOTECHNICAL REPORT

- *Pavement Cores and Soil Borings:* Utilize Interra, Inc. to take one 30' structural boring at the location of the proposed junction chamber on the south side of Stearns School Road approximately 350-feet west of Fuller Road. Provide analysis and recommendations in a soils report in accordance with LCDOT and IDOT guidelines.
- *Work to be performed by Interra, Inc.*

7. RIGHT OF WAY AND BOUNDARY

- *Appraisals:* Employ a real-estate appraiser certified by IDOT to prepare a comparable land sales analysis and appraisals for parcels of land to be acquired for right-of-way, permanent easements, or temporary construction easements.
- *See scope prepared by HDR.*
- *Negotiations:* Employ a negotiator certified by IDOT to negotiate the sale of parcels of land to be acquired for right-of-way, permanent easements, or temporary construction easements. Provide support to the LCDOT during the ROW acquisition process.
- *See scope prepared by HDR.*

8. QA/QC

- Perform in-house peer and milestone reviews by senior staff during project initiation, conceptual review, preliminary, pre final, and final submittals. Conduct milestone reviews of sub-consultants and provide feedback throughout the progress of work.

9. MANAGE PROJECT

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

10. PHASE III COORDINATION

- Attend Pre-Construction meeting. Provide design assistance and support to the LCDOT and IDOT throughout construction. 40 hours have been allocated for this task.

STEARNS SCHOOL ROAD (CH 74) AT U.S. HIGHWAY 41
 LAKE COUNTY DIVISION OF TRANSPORTATION
 PH II ENGINEERING SERVICES - MANHOUR SUMMARY

	Task Manhours	Total Manhours
1- EARLY COORDINATION AND DATA COLLECTION		
Utility Coordination with HBK	12	
Total task manhours		12
2- SUPPLEMENTAL TOPOGRAPHIC SURVEY		
Supplemental Survey		
Field Work	32	
CADD Processing & Management (SS4 model)	24	
Total task manhours		56
3- ENVIRONMENTAL COORDINATION AND PERMITTING		
USACE Regional Permit		
Joint Application	4	
Narrative	40	
Exhibits	64	
USFWS Consultation/Memorandum	16	
Illinois Historic Preservation Agency Coordination	2	
Report Assembly	4	
SMC Coordination	8	
PESA Response Form (To IDOT)	20	
CCDD Investigation	44	
CCDD Forms	3	
Update Wetland Delineation	10	
Total task manhours		215
4- PLAN PREPARATION		
Title Sheet	8	
Alignment and Ties (4 sheets at 12 hours/sheet)	48	
Notes/Index/Standards (1 sheet)	12	
Summary of Quantities (4 sheets at 15 hours/sheet)	60	
Lump Sum Item Breakdown Forms	10	
Schedule of Quantities (8 sheets at 12 hours/sheet)	96	
Typical Sections (6 sheets at 10 hours/sheet)	60	
Pavement Design Form (To IDOT)	10	
Double Panel Removal Plans (4 sheets - 1"=20' at 18 hours/sheet)	72	
Maintenance of Traffic (Pre-stage, Stage 1, Stage 2)		

STEARNS SCHOOL ROAD (CH 74) AT U.S. HIGHWAY 41
 LAKE COUNTY DIVISION OF TRANSPORTATION
 PH II ENGINEERING SERVICES - MANHOUR SUMMARY

	Task Manhours	Total Manhours
Transportation Management Plan (TMP) submittal (TO IDOT)	60	
TMP Sheets	32	
Stage Notes (1 sheet)	8	
Typical Sections (6 sheets at 8 hours/sheet)	48	
Double Panel Plan sheets (5 sheets - 1"=50' at 20 hours/sheet)	100	
Plan & Profile (6 sheets - 1"=20' @ 32 hours/sheet)	192	
Drainage & Utilities Plans		
Plan & Profiles (6 sheets - 1"=20' at 24 hours/sheet inc. StormCAD)	144	
Existing utility plan sheets (double panel - 1"=20' at 12 hours/sheet)	36	
Watermain (and structures) adjustment sheet - 1 sheet	16	
Sanitary Sewer (and structures) adjustment sheet - 1 sheet	16	
Erosion Control Plans (Pre-stage, Stage 1, Stage 2)		
Double Panel Plans (5 sheets - 1"=50' at 16 hours/sheet)	80	
Pavement Marking and Signage Plans		
Double Panel Plans (5 sheets - 1"=50' at 16 hours/sheet)	80	
Landscaping Plans		
Double Panel Plans (5 sheets - 1"=50' at 16 hours/sheet)	80	
Structural Plans		
Elevation and Detail sheets (Junction Chamber)	44	
Fuller Road West Sidewalk Sheets		
Plan (1 sheet - 1"=20' at 16 hrs/sheet)	16	
Erosion Control Plan (1 sheet 1"=50' at 8 hrs/sheet))	8	
Cross Sections (1 sheet - 10 sections, 1 hr/section)	10	
Traffic Signal Plans (Permanent)		
Traffic Signal General Notes	4	
Traffic Signal Details	8	
Traffic Signal Plan (2 sheets at 16 hours/sheet)	32	
Cable Diagram Plan (1 sheet at 16 hours/sheet)	16	
Mast Arm Mounted Signs and Schedule of Quantities	16	
Insertion of LCDOT Details (PZT Camera)	4	
Traffic Signal Plans (Temporary)		
Analysis of staging and permanent signal locations	4	
Temporary Traffic Signal General Notes	2	
Removal and Temporary Installation Plans - Pre Stage	24	
2 sheets at 12 hours/sheet		
Temporary Installation Plans - Stages 1 and 2	56	
4 sheets at 14 hours/sheet		
Cable Diagram Plan (Pre-Stage, Stages 1 and 2)	28	
2 sheets at 14 hours/sheet		
Interconnect		
Temporary Interconnect Dbl Plan (1 sheet - 1"=50' at 12 hours/sheet)	12	
Temporary Interconnect Schematic (1 sheet at 12 hours/sheet)	12	
Permanent Interconnect Dbl Plan (1 sheet - 1"=50' at 12 hours/sheet)	12	
Permanent Interconnect Schematic (1 sheet at 12 hours/sheet)	12	
Plat of Highway sheet insertion	2	
Cross Sections		
Revise 3D Model per stage	72	
Roadway - 72 Sections at 0.5 hrs/section	36	
Phase II Labeling & Earthwork by Stage	40	
Driveway Detail Sheet for Northwest corner property	16	
ADA Summary Form	4	
Intersection Plan Detail Sheet (U.S. Hwy 41 and Stearns School Road)	24	
Miscellaneous D1 and LCDOT details	6	
Special Provisions	40	
Estimate of Cost	16	
Estimate of Time	8	
		1852

STEARNS SCHOOL ROAD (CH 74) AT U.S. HIGHWAY 41
LAKE COUNTY DIVISION OF TRANSPORTATION
PH II ENGINEERING SERVICES - MANHOUR SUMMARY

	Task Manhours	Total Manhours
5- MEETINGS		
LCDOT (kickoff, review, 2 people)	24	
IDOT (kickoff, review, 2 people)	24	
Utility Coordination (2 mtgs, 2 people)	24	
LCDOT (2 geotechnical, 1 person)	12	
ROW Kick-off Meeting (2 people)	12	
Village of Gurnee Meeting (2 people, 2 meetings)	24	
LCDOT Meetings (2 people, 2 meetings)	24	
Total task manhours		144
6- GEOTECHNICAL REPORT		
Coordination	8	
Total task manhours		8
7- RIGHT OF WAY AND BOUNDARY		
Coordination	8	
POH Update	24	
Total task manhours		32
8- QAQC		
Review of Milestone Submittals	100	
Total task manhours		100
9- MANAGE PROJECT		
Administration - 4 hrs/month at 24 months	96	
Coordination with IDOT	80	
Total task manhours		176
10- PHASE III COORDINATION		
Pre-construction Meeting (1 person)	6	
RFI Responses	40	
Total task manhours		46
TOTALS	2641	2641

STEARNS SCHOOL ROAD (CH 74) AT U.S. HIGHWAY 41
 LAKE COUNTY DIVISION OF TRANSPORTATION
 ENGINEERING SERVICES - EXPENSE SUMMARY

	Travel			Postage	Copies (Outside)	Additional Expense
	Miles @\$0.580	Days @\$65	Mileage Cost			
1- EARLY COORDINATION AND DATA COLLECTION						
2- SUPPLEMENTAL TOPOGRAPHIC SURVEY Vehicle Expense (Supplemental Topographic) Vehicle Expense (Update Wetland Delineation) 1-53 miles @0.580/mi	53	2	\$130.00 \$30.74			
3- ENVIRONMENTAL COORDINATION AND PERMITTING Vehicle Expense (2-53 miles @ \$0.580/mi) Equipment Rental First Environmental Laboratory Permit Submittals	106		\$61.48	\$100.00		\$500.00 \$5,000.00
4- PLAN PREPARATION Plan Submittals				\$200.00	\$2,500.00	
5- MEETINGS Vehicle Expense (13-53 miles @ \$0.580/mi)	689		\$399.62			
6- GEOTECHNICAL REPORT						
7- RIGHT OF WAY AND BOUNDARY						
8- QAQC						
9- MANAGE PROJECT						
10- PHASE III COORDINATION Vehicle Expense (Pre-construction Meeting) 1 - 50 miles \$0.580/mi	50		\$29.00			
Subtotals	898	miles	\$650.84	\$300.00	\$2,500.00	\$5,500.00

Total Expenses \$8,950.84

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME Baxter & Woodman, Inc.
PRIME/SUPPLEMENT PRIME

DATE 06/24/20
PTB NO. N/A

CONTRACT TERM 34 MONTHS
START DATE 7/15/2020
RAISE DATE 1/1/2021

OVERHEAD RATE 146.37%
COMPLEXITY FACTOR
% OF RAISE 3.00%

ESCALATION PER YEAR

7/15/2020 - 1/1/2021

6
34

= 17.65%
= 1.0430

1/2/2021 - 1/1/2022

12
34

36.35%

1/2/2022 - 1/1/2023

12
34

37.44%

1/2/2023 - 5/1/2023

4
34

12.86%

The total escalation for this project would be:

4.30%

Subconsultants

FIRM NAME Baxter & Woodman, Inc.
 PRIME/SUPPLEMENT PRIME
 PSB NO. N/A

DATE 06/24/20

NAME	Direct Labor Total	Contribution to Prime Consultant
Interra, Inc	1,200.00	144.00
HDR, Inc.	4,406.00	528.72
HBK Engineering	11,233.80	1,348.06
		0.00
		0.00
		0.00
		0.00
		0.00
Total	16,839.80	2,020.78

Project Name
Exhibit A

Route: **Stearns School Road (CH 74) at US Highway 41**
Local Agency: **Lake County, IL**
(Municipality)

Section:
Project:
Job No.:

*Firm's approved rates on file with
Bureau of Accounting and Auditing:

Overhead Rate	144.71%
Complexity Factor	0.00
Calendar	

Method of Compensation:

- Cost Plus Fixed Fee 1 ☒ 14.5%[DL + R(DL) + OH(DL) + IHDC]
Cost Plus Fixed Fee 2 ☐ 14.5%[DL + R(DL) + 1.4(DL) + IHDC]
Cost Plus Fixed Fee 3 ☐ 14.5%[(2.3 + R)DL + IHDC]
Specific Rate ☐
Lump Sum ☐

Cost Estimate of Consultant's Services in Dollars

ELEMENT OF WORK	EMPLOYEE CLASS.	MANHOURS	PAYROLL RATE	PAYROLL COSTS (DL)	OVERHEAD	SERVICES BY OTHERS	IN-HOUSE DIRECT COSTS	PROFIT	TOTAL
Early Coordination and Data Collection		12		665.72	963.36	30,133.73		236.22	31,999.03
Supplemental Topographic Survey		56		2,163.58	3,130.92		160.74	791.01	6,246.25
Environmental Coordination/Permitting		215		8,935.69	12,930.84		5,661.48	3,991.56	31,519.58
Plan Preparation		1852		75,696.54	109,540.46		2,700.00	27,250.87	215,187.88
Meetings		144		8,396.58	12,150.69		399.62	3,037.30	23,984.19
Geotechnical Report	See	8	See	537.10	777.24	8,035.00		190.58	9,539.91
Right-of-Way and Boundary	Payroll	32	Payroll	1,685.47	2,439.05	30,343.00		598.06	35,065.58
QA/QC	Rates	100	Rates	6,713.74	9,715.45			2,382.23	18,811.41
Manage Project		176		10,082.72	14,590.71			3,577.65	28,251.08
Phase III Coordination		46		2,300.61	3,329.21		29.00	820.53	6,479.35
TOTALS		2,641		117,177.76	169,567.94	68,511.73	8,950.84	42,876.01	407,084.27

AVERAGE HOURLY PROJECT RATES

FIRM Baxter & Woodman, Inc.
 PSB N/A
 PRIME/SUPPLEMENT PRIME

DATE 06/24/20SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Early Coordination and Data Collection			Supplemental Topographic Survey			Environmental Coordination/Permitting			Plan Preparation			Meetings		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Executive Vice President	70.00	0																	
Vice President	70.00	0																	
Engineer V	67.14	480	18.17%	12.20							24	11.16%	7.49	120	6.48%	4.35	100	69.44%	46.62
Engineer IV	55.48	162	6.13%	3.40	12	100.00%	55.48							120	6.48%	3.59			
Engineer III	46.87	114	4.32%	2.02										102	5.51%	2.58			
Engineer II	38.25	832	31.50%	12.05							108	50.23%	19.21	600	32.40%	12.39	44	30.56%	11.69
Engineer I	31.24	470	17.80%	5.56										470	25.38%	7.93			
Environmental Scientist	56.86	4	0.15%	0.09							4	1.86%	1.06						
Environmental Scientist	43.81	30	1.14%	0.50							30	13.95%	6.11						
Engineer Tech V	53.15	0																	
Engineer Tech IV	47.18	248	9.39%	4.43				24	42.86%	20.22				220	11.88%	5.61			
Engineer Tech III	37.23	266	10.07%	3.75				16	28.57%	10.64	30	13.95%	5.20	220	11.88%	4.42			
Engineer Tech II	27.21	32	1.21%	0.33				16	28.57%	7.77	16	7.44%	2.03						
GIS Manager	57.49	0																	
GIS Coordinator	44.93	0																	
GIS Specialist	35.84	0																	
GIS Tech	33.24	3	0.11%	0.04							3	1.40%	0.46						
Survey Manager	37.51	0																	
Project Surveyor	35.63	0																	
CADD Technician III	48.38	0																	
CADD Technician II	41.92	0																	
Administrative Support	29.04	0																	
Administrative Support	20.11	0																	
		0																	
		0																	
		0																	
		0																	
TOTALS		2641	100%	\$44.37	12	100.00%	\$55.48	56	100%	\$38.64	215	100%	\$41.56	1852	100%	\$40.87	144	100%	\$58.31

AVERAGE HOURLY PROJECT RATES

FIRM Baxter & Woodman, Inc.
PSB N/A
PRIME/SUPPLEMENT PRIME

DATE 06/24/20

SHEET 2 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Geotechnical Report			Right-of-Way and Boundary			QA/QC			Manage Project			Phase III Coordination					
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Executive Vice President	70.00																		
Vice President	70.00																		
Engineer V	67.14	8	100.00%	67.14	4	12.50%	8.39	100	100.00%	67.14	116	65.91%	44.25	8	17.39%	11.68			
Engineer IV	55.48				12	37.50%	20.80							18	39.13%	21.71			
Engineer III	46.87				12	37.50%	17.58												
Engineer II	38.25										60	34.09%	13.04	20	43.48%	16.63			
Engineer I	31.24																		
Environmental Scientist	56.86																		
Environmental Scientist	43.81																		
Engineer Tech V	53.15																		
Engineer Tech IV	47.18				4	12.50%	5.90												
Engineer Tech III	37.23																		
Engineer Tech II	27.21																		
GIS Manager	57.49																		
GIS Coordinator	44.93																		
GIS Specialist	35.84																		
GIS Tech	33.24																		
Survey Manager	37.51																		
Project Surveyor	35.63																		
CADD Technician III	48.38																		
CADD Technician II	41.92																		
Administrative Support	29.04																		
Administrative Support	20.11																		
TOTALS		8	100%	\$67.14	32	100%	\$52.67	100	100%	\$67.14	176	100%	\$57.29	46	100%	\$50.01	0	0%	\$0.00

PAYROLL RATES

FIRM NAME	Baxter & Woodman, Inc.	DATE	06/24/20
PRIME/SUPPLEMENT	PRIME		
PSB NO.	N/A		

ESCALATION FACTOR	4.30%
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CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Executive Vice President	\$70.00	\$70.00
Vice President	\$68.50	\$70.00
Engineer V	\$64.37	\$67.14
Engineer IV	\$53.19	\$55.48
Engineer III	\$44.94	\$46.87
Engineer II	\$36.67	\$38.25
Engineer I	\$29.95	\$31.24
Environmental Scientist V	\$54.52	\$56.86
Environmental Scientist IV	\$42.00	\$43.81
Engineer Tech V	\$50.96	\$53.15
Engineer Tech IV	\$45.24	\$47.18
Engineer Tech III	\$35.70	\$37.23
Engineer Tech II	\$26.09	\$27.21
GIS Manager	\$55.12	\$57.49
GIS Coordinator	\$43.08	\$44.93
GIS Specialist	\$34.36	\$35.84
GIS Tech	\$31.87	\$33.24
Survey Manager	\$35.96	\$37.51
Project Surveyor	\$34.16	\$35.63
CADD Technician III	\$46.39	\$48.38
CADD Technician II	\$40.19	\$41.92
Administrative Support III	\$31.64	\$33.00
Administrative Support II	\$27.84	\$29.04
Administrative Support I	\$19.28	\$20.11
		\$0.00

June 24, 2020

Mr. Jim McNally, PE
Transportation Department Manager
Baxter & Woodman
8678 Ridgefield Road
Crystal Lake, IL 60012

RE: Stearns School Road at Rt. 41 (SSUS41)
HDR Real Estate Services

Dear Mr. McNally:

HDR Engineering, Inc. (HDR) is pleased for the opportunity to provide Real Estate Services to Baxter & Woodman for the Stearns School Road at Rt. 41 (SSUS41) Improvement Project. These services shall be performed in accordance with the Uniform Relocation and Real Properties Acquisition Policy Act of 1970, as amended (including MAP-21) and State and local laws and regulations. At your request, we have prepared and attached a Scope of Services.

HDR understands that it will contract directly with the Subconsultants for preliminary services (i.e., appraisals, appraisal reviews and title work). Additionally, HDR will provide a Right-of-Way team to manage the subconsultants, which includes ordering their services and performing quality reviews of deliverables. HDR will also perform land acquisition services. Our agents have the experience to ensure the Scope of Services attached is completed in a professional and timely manner.

We look forward to working with you to successfully complete the SSUS41 Improvement Project. If modifications to the Scope of Services are required or you have any questions, please contact Adam Handy at 773.867.7261 or adam.handy@hdrinc.com.

Sincerely,

HDR Engineering, Inc.



Thomas M. Hein, PE
Vice President



Adam Handy
Project Manager

hdrinc.com

9450 W. Bryn Mawr Ave., Suite 400, Rosemont, IL 60018
773-380-7900

SCOPE OF SERVICES

PART 1.0 LAND ACQUISITION SERVICES

HDR's land acquisition services, responsibilities, and deliverables will consist of the following:

- Manage contracted Subconsultants, including:
 - ordering and monitoring delivery of appraisal reports
 - ordering and monitoring delivery of appraisal reviews
 - ordering and monitoring delivery of title work
- Perform quality reviews of all Subconsultant deliverables.
- Attend up to or participate in four hours of meetings and conference calls to discuss project related items.
- Perform and maintain project reporting. Reports will be provided on a weekly basis or upon request from Baxter & Woodman.
- Prepare and send introductory letter to land owner with general statement of the project and briefly describe the necessary requirements.
- Review plat of highway and title documents for each parcel prior to negotiation activities.
- Prepare offer packages for 4 residential parcels consisting of (2) fee takes and (9) temporary easements.¹
- Conduct negotiations with land owners to reach a settlement. HDR will send the offer package via certified mail to the property owner. Once the offer has been sent, HDR will follow up with land owners to schedule a virtual or in-person meeting to discuss the offer and impacts to the property. HDR will continue to follow up with land owners until a settlement is reached.
- Upon successful negotiations, HDR will submit to Baxter & Woodman the completed parcel file with original signed conveyance documents, the Negotiator's report documenting all negotiation activities, and all other documentation as required.
- Prepare necessary documentation for administrative settlements.
- If negotiations are not successful, HDR will submit the parcel file along with all necessary documentation to Baxter & Woodman with a recommendation to acquire the parcel through condemnation.

PART 2.0 ADDITIONAL SERVICES

Additional and necessary land acquisition services not listed above can be performed upon request. Such services may include the following:

- Additional negotiation efforts due to project changes or if the project extends beyond the current schedule.
- Lender's fees related to processing partial release of mortgage for a parcel being acquired in fee.²
- Recording fees.³
- Litigation Services.⁴

¹ Per information provided by Baxter & Woodman on 6/15/2020, there could be an additional residential parcel added. A contingency for man hours and direct costs has been added to the cost estimate.

² Many lenders require a processing fee to process partial releases for parcels being acquired in fee. Costs can range from \$50.00 to \$500.00. A contingency for man hours and direct costs has been added to the estimate.

³ If HDR is tasked with recording easement agreements, a contingency for man hours and direct costs has been added to the estimate.

⁴ Rate for each ½ day for pretrial meeting or court appearance for negotiator is \$1,000.00. Rate for each ½ day for appraiser is \$1,000.00.

PART 3.0 SUBCONSULTANTS

The proposed Subconsultants have provided fees associated with their respective service. HDR understands that it will contract directly with the Subconsultants for appraisals, appraisal reviews and title. HDR will manage the subconsultants and perform quality reviews of their deliverables.

PART 4.0 PERIOD OF SERVICE

Date of Notice to Proceed through December 31, 2022.

PART 5.0 OTHER

HDR shall invoice on a monthly basis. All invoices shall include costs associated with each task performed. HDR will submit a Progress Report on a monthly basis with invoicing. The Progress Report will include a description of work accomplished that period as well as work anticipated for the next period for each parcel.

PART 6.0 COMPENSATION

- Appraisal Reports will be provided by Triple D Valuation Services, Inc.
 - \$2,000.00 for residential parcels (Non-complex)⁵
- Appraisal Reviews will be provided by Woodland Valuation Services, LLC.
 - \$600.00 per appraisal review
- Title Services will be provided by Wheatland Title Guaranty Company.⁶
 - \$525.00 for original title commitment, including a copy of the last deed, or other document showing current title owner
 - \$65.00 for date-down title commitment
- Negotiation Services will be provided by HDR, Inc.
 - \$3,600.00 (Labor & Directs) per parcel for land acquisition services

⁵ If a residential complex appraisal is needed, fee can be up to \$3,500.00. This may require an additional work order.

⁶ Title services do not include closings, which can be up to \$750.00 per closing. This may require an additional work order.

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME HDR Engineering, Inc.
PRIME/SUPPLEMENT Prime
Prepared By Aniko Shuey

DATE 06/24/20
PTB-ITEM#

CONTRACT TERM 27 MONTHS
START DATE 9/15/2020
RAISE DATE 12/27/2020
END DATE 12/14/2022

OVERHEAD RATE 155.99%
COMPLEXITY FACTOR 0
% OF RAISE 3%

ESCALATION PER YEAR

year	First date	Last date	Months	% of Contract
0	9/15/2020	12/27/2020	3	11.11%
1	12/28/2020	12/27/2021	12	45.78%
2	12/28/2021	12/27/2022	12	47.15%

The total escalation = 4.04%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PTB-ITEM #

HDR Engineering, Inc. DATE
Prime
0

06/24/20

ESCALATION FACTOR 4.04%

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

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Principal	\$70.00	\$70.00
Project Manager I	\$52.83	\$54.96
Realty Specialist IV	\$60.90	\$63.36
Realty Specialist II	\$45.63	\$47.47
Realty Technician I	\$27.00	\$28.09
Clerical V	\$53.58	\$55.74

**COST PLUS FIXED FEE
COST ESTIMATE OF CONSULTANT SERVICES**

FIRM
PTB-ITEM #
PRIME/SUPPLEMENT

HDR Engineering, Inc.
0
Prime

OVERHEAD RATE	155.99%
COMPLEXITY FACTOR	0

DATE 06/24/20

[illegible]

DBE 32.96%

AVERAGE HOURLY PROJECT RATES

FIRM
PTB-ITEM#
PRIME/SUPPLEMENT

HDR Engineering, Inc.
0
Prime

DATE 06/24/20

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Preliminary Work			Land Acquisition			Quality Control			Project Management			Partial Release		
		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	70.00	2.0	2.15%	1.51	0			0			0			2	16.67%	11.67	0		
Project Manager I	54.96	14.0	15.05%	8.27	6	100.00%	54.96	0			4	50.00%	27.48	4	33.33%	18.32	0		
Realty Specialist IV	63.36	4.0	4.30%	2.73	0			0			4	50.00%	31.68	0			0		
Realty Specialist II	47.47	53.0	56.99%	27.05	0			40	90.91%	43.16	0			0			0		
Realty Technician I	28.09	14.0	15.05%	4.23	0			4	9.09%	2.55	0			0			4	100.00%	28.09
Clerical V	55.74	6.0	6.45%	3.60	0			0			0			6	50.00%	27.87	0		
		0.0																	
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TOTALS		93.0	100%	\$47.38	6.0	100.00%	\$54.96	44.0	100%	\$45.71	8.0	100%	\$59.16	12.0	100%	\$57.86	4.0	100%	\$28.09

AVERAGE HOURLY PROJECT RATES

FIRM

HDR Engineering, Inc.

PTB-ITEM#

0

PRIME/SUPPLEMENT

Prime

DATE

06/24/20

SHEET

2

OF

2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Recording Fees			One Additional Parcel														
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Principal	70.00	0			0														
Project Manager I	54.96	0			0														
Realty Specialist IV	63.36	0			0														
Realty Specialist II	47.47	0			13	76.47%	36.30												
Realty Technician I	28.09	2	100.00%	28.09	4	23.53%	6.61												
Clerical V	55.74	0			0														
TOTALS		2.0	100%	\$28.09	17.0	100%	\$42.91	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00

COMPANY NAME: HDR Engineering, Inc.
PTB NUMBER: SSUS41 LCDOT
TODAY'S DATE: 6/24/2020

ITEM	ALLOWABLE	UTILIZE W.O. ONLY	QUANTITY J.S. ONLY	CONTRACT RATE	TOTAL
Per Diem (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum			\$0.00	\$0.00
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual cost (Up to state rate maximum)			\$0.00	\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual cost			\$0.00	\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00	\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum		250	\$0.580	\$145.00
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day			\$65.00	\$0.00
Vehicle Rental	Actual cost (Up to \$55/day)			\$0.00	\$0.00
Tolls	Actual cost		14	\$5.00	\$70.00
Parking	Actual cost			\$0.00	\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00	\$0.00
Shift Differential	Actual cost (Based on firm's policy)			\$0.00	\$0.00
Overnight Delivery/Postage/Courier Service	Actual cost (Submit supporting documentation)		9	\$7.00	\$63.00
Copies of Deliverables/Mylars (In-house)	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Copies of Deliverables/Mylars (Outside)	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Project Specific Insurance	Actual cost			\$0.00	\$0.00
Lender fee to obtain partial release	Actual cost		2	\$500.00	\$1,000.00
Photo Processing	Actual cost			\$0.00	\$0.00
2-Way Radio (Survey or Phase III Only)	Actual cost			\$0.00	\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual cost			\$0.00	\$0.00
CADD	Actual cost (Max \$15/hour)			\$14.00	\$0.00
Web Site	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Advertisements	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Public Meeting Facility Rental	Actual cost (Submit supporting documentation)			\$0.00	\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual cost (Submit supporting documentation)			\$500.00	\$0.00
Recording Fees	Actual cost		2	\$72.00	\$144.00
Transcriptions (specific to project)	Actual cost			\$0.00	\$0.00
Courthouse Fees	Actual cost			\$500.00	\$0.00
Storm Sewer Cleaning and Televising	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Traffic Control and Protection	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Aerial Photography and Mapping	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Utility Exploratory Trenching	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
Testing of Soil Samples*	Actual cost			\$0.00	\$0.00
Lab Services*	Actual cost (Provide breakdown of each cost)			\$0.00	\$0.00
Equipment and/or Specialized Equipment Rental*	Actual cost (Requires 2-3 quotes with IDOT approval)			\$0.00	\$0.00
B/W Prints 8.5x11	Actual cost (each)		150	\$0.05	\$6.75
B/W Prints 11x17	Actual cost (each)		25	\$0.09	\$2.25
Color Prints 8.5x11	Actual cost (each)		50	\$0.45	\$22.50
Color Prints 11x17	Actual cost (each)		25	\$0.90	\$22.50
Plotting of Base Sheets at 24 x 36 B/W	Actual cost (each)			\$0.81	\$0.00
Plotting of Base Sheets at 24 x 36 Color	Actual cost (each)			\$5.40	\$0.00
Laminated Foam Board Exhibit	Actual cost (each)			\$9.00	\$0.00
				\$0.00	\$0.00
				\$0.00	\$0.00
TOTAL DIRECT COST					\$1,476.00

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

W.O. = Work Order

J.S. = Job Specific

June 19, 2020

James McNally, PE, LEED AP, CPESC
Transportation Department Manager
Baxter & Woodman Consulting Engineers
8676 Ridgefield Road
Crystal Lake, IL 60012

Re: Scope and Fee for LCDOT Intersection and Roadway Improvements
Stearns School Road and US41, Warren Township
Sect. 16-00222-02-CH

Dear Jim,

HBK Engineering, LLC, (HBK) is pleased to present this revised proposal to Baxter & Woodman (B&W). The Stearns School Road and US41/Skokie Highway Intersection Project consists of an additional single right and dual right turn lane improvements. This project will require utility coordination and Sub-surface Utility Engineering (SUE)/locating, which HBK will provide.

HBK's work scope and fees are attached. Fees are provided for SUE Utility Coordination, Locating and associated Surveying at the intersection of Stearns School Road and US 41 with a base scope fee of \$30,133.73.

It is hoped that through sound utility coordination and adequate SUE Quality Level B utility locating/surveying techniques that SUE Quality Level A locating/potholes can be avoided.

HBK appreciates the opportunity to assist B&W on this project. Please contact me if there are questions and/or a need for additional information. Upon acceptance of this proposal, HBK will require execution of a new task authorization with B&W, based on the existing MSA, for this work.

Sincerely,



Robert Kolar
Senior Project Manager

Attachments:

- B&W_LCDOT_StearnsSchool&US41_HBK_205153_Work Scope_06192020 R1 (PDF)
- B&W_LCDOT_SUE&UtilityCoord_ExhibitA_HBK_RJK_06192020 R1 (PDF)
- B&W_LCDOT_SUE&UtilityCoord_SOW_HBK_RJK_06162020 R1 (PDF)
- B&W_LCDOT_ManhourFeeEst_UtilCoordSUE_RJK_06192020 R1.xls (Excel)
- HBK BDE-LCDOT_StearnsUS41_04152020 (PDF)

cc: Bethany Turk, P.E., and Project File

(B&W_LCDOT_StearnsSchool&US41_HBK_205153_CoverLtr_06192020 R1.DOC)

Lake County DOT – Stearns School Road and US41/Skokie Highway Section 16-00222-02-CH

At the request of Baxter & Woodman Engineering (B&W), HBK Engineering, LLC (HBK) has prepared a scope of services for Utility Coordination, Subsurface Utility Engineering (SUE) and Surveying for the Stearns School Road and US41/Skokie Highway, Warren Township, Lake County, IL intersection improvements within the project limits per Exhibit A. A manhour and fee estimate for this improvement project is also attached.

The following information represents HBK's scope of work for services noted previously for this roadway and path/walk improvements project.

UTILITY COORDINATION PHASES I & II

Utility coordination and Subsurface Utility Engineering (SUE)/utility locating for this project will be completed by **HBK Engineering, Inc. (HBK)**, as a subconsultant to Baxter & Woodman (B&W).

Initial Coordination/Data Collection:

The proposed improvements will require coordination with public and private utilities that have facilities within the project corridor. HBK will coordinate with any utility companies/agencies found to have facilities located within the vicinity of the project limits through a JULIE Design Stage/Planning Information Request. A request will be made for these utilities to provide any available maps of existing facilities that the Client has not already requested/obtained. It has been estimated that there will be approx. 5 public and private utilities to coordinate with for this project.

Utility Locating

Descriptions of Subsurface Utility Engineering (SUE) quality levels are derived from the FHWA website on subsurface utility engineering. The website describes American Society of Civil Engineers (ASCE) Standard C-I 38-02, *Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data*. There are four recognized quality levels of underground utility information ranging from Quality Level QL-D (the lowest level) to Quality Level QL-A (the highest level).

HBK will perform SUE Level D, C and B locating of any utility facilities located within the project limits. Level D information will be obtained from utility atlases, JULIE requests, and other reliable sources. Qualified HBK staff will perform Level B locates of underground utilities within the project limits and mark them with appropriately colored paint and/or flags. HBK staff will coordinate with the designer's survey crew so that utility markings surveyed by HBK staff can be incorporated into their work in a timely manner.

SUE Level D and B locating shall include underground traffic control facilities at signalized intersections to the extent allowed by MOT limitations, worker safety, and the ability of the facilities to transmit a locating tone.

Level A locating (potholing or otherwise exposing buried utilities) is **not included** in this scope of work. If needed, Level A locating can be added to the scope at a later date.

Utility Data Base Mapping

HBK will coordinate with the roadway designer so that utilities can be depicted accurately in the survey data and utility base maps that HBK will create. This shall include time allotted for utility base map QA/QC.

Preliminary Design Coordination Meetings

HBK will send preliminary plans to utility companies to verify the locations of their facilities and review preliminary design to determine if there are any significant conflicts that need to be reviewed. HBK will also coordinate with the roadway design team to develop understanding the presence of utilities, their type, and possible issues with protecting and/or relocating those utilities.

FIELD SURVEY WORK PHASE I

HBK will perform the field survey work as a subconsultant to B&W. B&W will coordinate with LCDOT to prepare a survey right-of-entry letter for survey work on private property. HBK will contact property owners, to the extent possible, in advance of surveying on private property.

On this basis, HBK will perform the following survey tasks in accordance with applicable Lake County Survey Procedures:

Horizontal Control: Utilizing state plane coordinates, HBK will set recoverable primary control utilizing GPS and robotic total station equipment. It is assumed that the control for the one-foot contour Lake County LiDAR mapping is Illinois State Plane East, NAD83 (2011).

Vertical Control: It is assumed that either LCDOT has benchmarks available in the vicinity of the project or that HBK will be allowed to establish vertical control (NAVD88) utilizing GPS and the nearest NGS vertical monuments. A level circuit within the above identified survey limits will be run to establish benchmarks (minimum of 2 site benchmarks will be set per the LCDOT Vertical Alignment requirements) and assign elevations to the horizontal control points.

Planimetric Survey: Planimetric Survey will include the limits as outlined in the attached exhibits in Exhibit A within the limits of the SUE Levels B & C as requested by B&W. In general, these limits shall be surveyed, as follows:

- Approximately 600 feet along Stearns School Road west of the US41/Skokie Highway intersection.
- Approximately 600 feet north and approximately 875 feet south of the Stearns School Road intersection along US41/Skokie Highway.
- Approximately 375 feet along west side of Fuller Road, south of Stearns School Road.

Survey will include existing visible features and improvements. The telecommunication, gas, electric, watermain, traffic signal control devices and other utility structures will be surveyed, including manhole rim elevations, pedestals, and utility poles. HBK will survey all utility locate marks provided by public utilities and/or HBK locating staff (as indicated in previous 'Utility Coordination' work scope).

Base Mapping: HBK will compile all of the above located utility information into one base map MicroStation drawing suitable for plotting at 1"=20' scale that is representative of existing conditions for use in all Phase I and Phase II engineering work in developing the detailed plan, profile and cross sections for the preferred alternative. Survey base map drawing will be generated in MicroStation V8i SS4.

Specific work items under this task will include:

- Completion of utility survey.
- Coordination with LCDOT Utilities Coordinator.
- Obtaining existing utility information from utility agencies and incorporation of data obtained into the planimetric utilities survey base map.

Scope Omissions:

- Coordination with LCDOT for survey right-of-entry letter will be handled by B&W.
- SUE Quality Level A locates/potholes

End of Document

Lake County DOT - Stearns Rd/US41 Sec. 16-00222-02-CH

Baxter & Woodman/HBK 20-5153 - SUE Locating/Surveying/Utility Coordination Services

EXHIBIT A

Legend



Project Limits (rev.)

Skokie Hwy

Fuller Rd

Spruce Pointe Dr

Conifer Ln

Spruce Pointe Ct

Stearns School Rd

Subsurface Utility Engineering (SUE) and Utility Coordination

The following information is derived from the FHWA website on subsurface utility engineering. It describes American Society of Civil Engineers (ASCE) Standard C-I 38-02, *Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data*.

There are four recognized quality levels of underground utility information ranging from Quality Level QL-D (the lowest level) to Quality Level QL-A (the highest level).

The highest level of accuracy and comprehensiveness is generally not needed at every point along a utility's path, only where conflicts with highway design features are most likely to occur. Hence, lesser levels of information may be appropriate at points where fewer or no conflicts are expected.

Each of the four Quality Levels is described as follows:

- **Quality Level D.** QL-D is the most basic level of information for utility locations. It comes solely from existing utility records or verbal recollections, both typically unreliable sources. It may provide an overall "feel" for the congestion of utilities but is often highly limited in terms of comprehensiveness and accuracy. QL-D is useful primarily for project planning and route selection activities.
- **Quality Level C.** QL-C is probably the most commonly used level of information. It involves surveying visible utility facilities (e.g., manholes, valve boxes, etc.) and correlating this information with existing utility records (QL-D information). When using this information, it is not unusual to find that many underground utilities have been either omitted or erroneously plotted. Its usefulness, therefore, is primarily on rural projects where utilities are not prevalent or are not too expensive to repair or relocate.
- **Quality Level B.** QL-B involves the application of appropriate surface geophysical methods to determine the existence and horizontal position of virtually all utilities within the project limits. This activity is called "designating". The information obtained in this manner is surveyed to project control. It addresses problems caused by inaccurate utility records, abandoned or unrecorded facilities, and lost references. The proper selection and application of surface geophysical techniques for achieving QL-B data is critical. Information provided by QL-B can enable the accomplishment of preliminary engineering goals. Decisions regarding location of storm drainage systems, footers, foundations and other design features can be made to successfully avoid conflicts with existing utilities. Slight adjustments in design can produce substantial cost savings by eliminating utility relocations.
- **Quality Level A.** QL-A, also known as "locating", is the highest level of accuracy presently available and involves the full use of the subsurface utility engineering services. It provides information for the precise plan and profile mapping of underground utilities through the nondestructive exposure of underground utilities, and it also provides the type, size, condition, material and other characteristics of underground features.

The following information represents HBK's typical scope of work for utility coordination and SUE for a surface roadway project.

Phase 1 Design: Utility Coordination

Utility coordination and utility locating (Subsurface Utility Engineering, or SUE) for this project will be completed by **HBK Engineering, Inc. (HBK)**, as a subconsultant.

Initial Coordination/Data Collection:

The proposed improvements will require coordination with public and private utilities that have facilities within the project corridor. HBK will coordinate with any utility companies/agencies found to have facilities located within the vicinity of the project limits through a JULIE Design Stage/Planning Information Request. A request will be made for these utilities to provide any available maps of existing facilities. It has been estimated that there will be up to ten public and private utilities to coordinate with for this project.

Utility Locating

HBK will perform SUE Level D, C and B locating of any utility facilities located within the project limits. Level D information will be obtained from utility atlases, JULIE requests, and other reliable sources. Qualified HBK staff will perform Level B locates of underground utilities within the project limits and mark them with appropriately colored paint and/or flags. HBK staff will coordinate with the designer's survey crew so that utility markings surveyed by HBK staff can be incorporated into their work in a timely manner.

SUE Level D and B locating shall include underground traffic control facilities at signalized intersections to the extent allowed by MOT limitations, worker safety, and the ability of the facilities to transmit a locating tone.

Level A locating (potholing or otherwise exposing buried utilities) is **not included** in this scope of work. If needed, Level A locating can be added to the scope at a later date.

Utility Data Base Mapping

HBK will coordinate with Baxter & Woodman so that utilities can be depicted accurately in the survey data and utility base maps. This shall include time allotted for utility base map QA/QC.

Preliminary Design Coordination Meetings

HBK will send preliminary plans to utility companies to verify the locations of their facilities and review preliminary design to determine if there are any significant conflicts that need to be reviewed. HBK will also coordinate with the roadway design team to develop understanding the presence of utilities, their type, and possible issues with protecting and/or relocating those utilities.

Phase 2 Design: Utility Coordination

The utility coordination will be completed by **HBK Engineering, Inc. (HBK)**, as a subconsultant.

Coordination

HBK will continue to coordinate with utility companies during the Phase II Engineering phase. HBK will draft and send Notices of Interference and/or other required correspondence in accordance with local, state and federal guidelines, as appropriate, to notify utilities of the project and to begin their protection and relocation processes. Preliminary (60%) plans and electronic files will be sent to utility companies to review the proposed improvements and identify impacts/conflicts to their facilities. Pre-final plans will be sent to utility companies for their use in preparing any relocation plans.

HBK will continue to coordinate with utility companies throughout Phase II until utility protection or relocation plans are submitted by the utility companies or until verification of clearance is confirmed. Additionally, HBK will review utility relocation plans and permit submittals.

HBK will also coordinate with the roadway design team to integrate utility protection and relocation plans and timelines into the contract documents.

Utility Coordination Meetings

HBK will plan, attend, and lead up to two (2) joint utility coordination meetings, and all impacted utilities will be invited so that their relocations, if any, can be mutually coordinated.

(B&W_LCDOT_SUE&UtilityCoord_SOW_HBK_RJK_06162020 R1.doc)

HBK ENGINEERING, LLC - LCDOT SECTION 16-00222-02-CH UTILITY COORDINATION SUE - HOURS/FEES SCHEDULE

Route: Stearns School Road & US41
 Local: LAKE COUNTY DOT
 (Municipality/Township/County)
 Section: 16-00222-02-CH
 Project: UTILITY COORDINATION & SUE
 Job No: (HBK 20-5153)

*Firm's **approved rates** on file with
 Bureau of Accounting and Auditing:

Overhead Rate (OH)	126.42%
Complexity Factor (R)	0.00
Calendar Days	

Cost Plus Fixed Fee Methods of Compensation:

Fixed Fee 1 ☒ 14.5%[DL + R(DL) + OH(DL) + IHDC]
 Fixed Fee 2 ☐ 14.5%[DL + R(DL) + 1.4(DL) + IHDC]
 Fixed Fee 3 ☐ 14.5%[(2.3 + R)DL + IHDC]
 Specific Rate ☐ 10%[DL + (OH*DL)]
 Lump Sum ☐

Cost Estimate of Consultant's Services in Dollars

Element of Work	Employee Classification	Man-Hours	Payroll Rate	Payroll Costs (DL)	Overhead (OH*DL)	Services by Others (SBO)	Outside Direct Cost	In-House Direct Costs (IHDC)	Fixed Fee (FF)	Total	Section Sub-totals
UTILITY COORDINATION - PHASE I	PRINCIPAL	2	\$ 70.00	\$ 140.00	\$ 176.99				\$ 45.96	\$ 362.95	
	SENIOR PROJECT MANAGER	16	\$ 63.30	\$ 1,012.80	\$ 1,280.38				\$ 332.51	\$ 2,625.69	
	PROJECT MANAGER	12	\$ 58.00	\$ 696.00	\$ 879.88				\$ 228.50	\$ 1,804.39	
	PROJECT ENGINEER	12	\$ 45.00	\$ 540.00	\$ 682.67				\$ 177.29	\$ 1,399.95	
	LOCATOR 3	35	\$ 37.00	\$ 1,295.00	\$ 1,637.14		\$ 252.50		\$ 425.16	\$ 3,609.80	
	LOCATOR 2	35	\$ 33.00	\$ 1,155.00	\$ 1,460.15		\$ 252.50		\$ 379.20	\$ 3,246.85	
	PERMIT COORDINATOR	8	\$ 33.00	\$ 264.00	\$ 333.75				\$ 86.67	\$ 684.42	
	ANALYST	8	\$ 29.00	\$ 232.00	\$ 293.29				\$ 76.17	\$ 601.46	
	DESIGNER	9	\$ 43.00	\$ 387.00	\$ 489.25				\$ 127.06	\$ 1,003.30	\$ 15,338.82
FIELD SURVEY WORK - PHASE I	PROFESSIONAL LAND SURVEYOR	8	\$ 56.00	\$ 448.00	\$ 566.36				\$ 147.08	\$ 1,161.44	
	PROJECT MANAGER	10	\$ 58.00	\$ 580.00	\$ 733.24				\$ 190.42	\$ 1,503.66	
	FIELD LEAD	35	\$ 33.00	\$ 1,155.00	\$ 1,460.15		\$ 252.50		\$ 379.20	\$ 3,246.85	
	FIELD TECHNICIAN	35	\$ 25.00	\$ 875.00	\$ 1,106.18		\$ 252.50		\$ 287.27	\$ 2,520.95	
	DESIGNER	9	\$ 43.00	\$ 387.00	\$ 489.25				\$ 127.06	\$ 1,003.30	\$ 9,436.19
UTILITY COORDINATION - PHASE II	PRINCIPAL	2	\$ 70.00	\$ 140.00	\$ 176.99				\$ 45.96	\$ 362.95	
	SENIOR PROJECT MANAGER	10	\$ 63.30	\$ 633.00	\$ 800.24				\$ 207.82	\$ 1,641.06	
	PROJECT MANAGER	8	\$ 58.00	\$ 464.00	\$ 586.59				\$ 152.34	\$ 1,202.92	
	PROJECT ENGINEER	8	\$ 45.00	\$ 360.00	\$ 455.11				\$ 118.19	\$ 933.30	
	LOCATOR 3	8	\$ 37.00	\$ 296.00	\$ 374.20				\$ 97.18	\$ 767.38	
	ANALYST	6	\$ 29.00	\$ 174.00	\$ 219.97				\$ 57.13	\$ 451.10	\$ 5,358.72
Totals		276.00		\$ 11,233.80	\$ 14,201.77	\$ -	\$ 1,010.00	\$ -	\$ 3,688.16	\$ 30,133.73	

NOTES:

1. 'Outside Direct Cost' is per the IDOT BDE spreadsheet, including Mileage, Tolls and Locating Equipment (Marking Paint/Flags)
2. This estimate does not include any SUE Quality Level A locates/potholes.

BLR 05611 (Rev. 11/09/17)
 Printed on 01/09/2020



PTB NUMBER: **Stearns School Rd/US41 Intersect Imps. - Lake County DOT**
TODAY'S DATE: **4/15/2020**

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

W.O. = Work Order
J.S. = Job Specific

6/18/2020

Mr. James McNally
Baxter & Woodman
8678 Ridgely Road
Crystal Lake, IL 60012

PROPOSAL

**Geotechnical Investigation
Proposed Drainage Junction Box
Stearns School Road at US 41
Gurnee, Lake County, Illinois**

Dear Mr. McNally:

Interra, Inc. (INTERRA) is pleased to submit this proposal to perform Geotechnical subsurface soil exploration, related laboratory testing and prepare geotechnical report for the above referenced project in Wheaton, Illinois. We understand that the purpose of the investigation is to aid in the design of the Drainage Junction Box.

Proposed Scope of Work

Our scope of work includes locating and drilling one (1) soil boring to a depth of 30 feet. The location of the boring is to be determined. Soil sampling in the borings will be performed in general accordance with American Society for Testing and Materials (ASTM) standards, D 1586 "Penetration Test and Split Barrel Sampling of Soils" and in general accordance with IDOT Geotechnical manual guidelines. Observation for groundwater will be made during and immediately after the completion of the drilling. Collection of Twenty-four hour water levels is beyond the scope of this investigation. After the completion of the drilling, the boreholes will be backfilled with soil auger cuttings.

All clayey soil samples recovered during drilling will be tested in our laboratory for natural moisture content and unconfined compressive strength using a RIMAC tester/pocket penetrometer.

A qualified Geologist/Geotechnical Engineer will visually classify all the soil samples and prepare the borehole logs. After the completion of the field and laboratory work an addendum Geotechnical report will be issued. This report will describe the existing soil conditions, physical properties and strength parameters.

Cost Estimate

The cost to provide the above-mentioned services is attached. We do not anticipate the need for traffic control. If traffic control becomes necessary, a separate change request will be submitted.

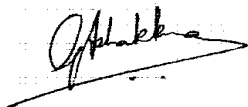
Schedule

We understand that the drilling will be performed in 2021. The Geotechnical work could be started within 2 weeks of receiving authorization to proceed. We anticipate the fieldwork to be completed in one day. Prior to performing the soil borings, INTERRA's drilling contractor will call the Illinois One-Call underground utility locating service to locate all underground utility lines within the subject property. Any other utilities that are not members of the one-call system should be identified and marked by the client. A detailed report on our findings will be submitted to you within three weeks of completion of the fieldwork.

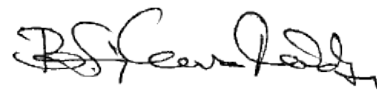
INTERRA very much appreciates the opportunity to submit this proposal. Should you require any additional information or clarifications, please do not hesitate to call us.

Very truly yours,

Interra, Inc.



Ashok Guntaka, EI
Project Manager



Sanjeev Bandi, Ph.D., PE
Principal Engineer

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME
PRIME/SUPPLEMENT
Prepared By

INTERRA, Inc.
PRIME
Ashok Guntaka

DATE 06/19/20
PTB-ITEM# 001-Stearns School Rd.

CONTRACT TERM 6 MONTHS
START DATE 1/1/2021
RAISE DATE 1/1/2022

END DATE 6/30/2021

OVERHEAD RATE 146.28%
COMPLEXITY FACTOR 0
% OF RAISE 3%

ESCALATION PER YEAR

year	First date	Last date	Months	% of Contract
0	1/1/2021	6/30/2021	6	100.00%

The total escalation = 0.00%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PTB-ITEM #

INTERRA, Inc. **DATE**
PRIME
001-Stearns School Rd.

06/19/20

ESCALATION FACTOR

0.00%

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

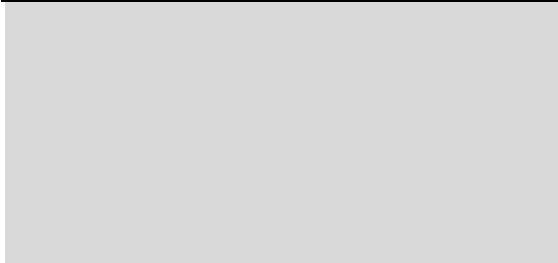
CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Project Manager	\$64.69	\$64.69
Project Engineer	\$41.50	\$41.50
Staff Engineer	\$31.50	\$31.50
Principal Engineer	\$70.00	\$70.00

Subconsultants

FIRM NAME INTERRA, Inc.
PRIME/SUPPLEMENT PRIME
PTB-ITEM # 001-Stearns School Rd.

DATE 06/19/20

NAME	Direct Labor Total	Contribution to Prime Consultant
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Total

0.00

0.00

Bureau of Design and Environment
Prepared By: Consultant

06/19/20

COMPLEXITY FACTOR	0
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DBE 100.00%

AVERAGE HOURLY PROJECT RATES

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

DATE 06/19/20

SHEET 1 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Field Engineering			Report											
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Project Manager	64.69	3.0	10.00%	6.47	3	20.00%	12.94	0											
Project Engineer	41.50	4.0	13.33%	5.53	0			4	26.67%	11.07									
Staff Engineer	31.50	20.0	66.67%	21.00	12	80.00%	25.20	8	53.33%	16.80									
Principal Engineer	70.00	3.0	10.00%	7.00	0			3	20.00%	14.00									
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TOTALS		30.0	100%	\$40.00	15.0	100.00%	\$38.14	15.0	100%	\$41.87	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00



TODAY'S DATE: 6/19/2020

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

W.O. = Work Order
J.S. = Job Specific