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Transportation

Civil

Construction

Environmental

Water Resources

Structural

Appraisal

October 19, 2017

Mr. Darrell Kuntz, P.E.
Project Manager
Lake County Division of Transportation
600 W Winchester Road
Libertyville, Illinois 60048

Re: Fremont Center Road and IL Route 60 Intersection Improvements

Dear Mr. Kuntz:

We are pleased to submit for your consideration our professional design engineering services agreement for the County's Fremont Center Road improvements. Civiltech has what we believe to be a unique breadth of expertise and staff capability that we can use to serve the County in an exceptional manner. Civiltech is entering its twenty-ninth year serving the Chicagoland area in transportation and infrastructure improvements.

Though company credentials are significant, the most important ingredient to the success of any project assignment will be the education, training and capability of the staff that is assigned to it. Our proposed project team is the same group that has successfully completed past projects for the County with a diverse specialized expertise needed to successfully execute this project.


Civiltech takes pride in all our projects whether it's planning, design, or construction. We thank you for the opportunity to submit our proposal, and we look forward to working with the County again in making this project a tremendous success.

Very truly yours,

A handwritten signature in black ink, appearing to read "Jonathan R. Vana".

Jonathan R. Vana, P.E.
President

CIVILTECH ENGINEERING, INC.

Municipality	L O C A L A G E N C Y	 Illinois Department of Transportation	C O N S U L T A N T	Name Civiltech Engineering, Inc.
Township				Address Two Pierce Place, Suite 1400
County Lake County – Division of Transportation		City Itasca		
Section 12-00138-02-CH		Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds		State IL

THIS AGREEMENT is made and entered into this _____ day of _____, 2017 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 Fremont Center Road (FAU 3711) and IL Route 60 (FAP535) Intersection Improvements

Route CH V65 Length 0.52 Mi. 2,748 FT (Structure No. n/a)

Termini at the IL 60/Fremont Center Road intersection

Description:

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	(see note)
Under \$50,000	_____	%
	_____	%
	_____	%

~~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 \$300,767.67.

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 167 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 167 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.

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:

County of Lake of the
(Municipality/Township/County)
ATTEST: State of Illinois, acting by and through its
County Board

By _____ Clerk
Lake County
(Seal)

By _____
Title Chairman of the County Board

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

Executed by the ENGINEER:

ATTEST:

By Mary D Young
Title Vice President

Civiltech Engineering, Inc.
Engineering Firm
Two Pierce Place, Suite 1400
Street Address
Itasca, IL 60143
City, State
By J.R.V.
Title President

Note: Three (3) Original Executed Contracts – (2) LCDOT; (1) Consultant



Proposal to Furnish Phase II Engineering Services

Lake County Division of Transportation, Unincorporated Lake County, Illinois

September 9, 2017

I. Project Understanding

The intersection of IL Route 60 and Fremont Center Road is a skewed intersection located at a curve on IL Route 60. Because of the existing geometrics, there has been a history of crashes at this intersection, including injury crashes.

The proposed improvement will consist of realigning Fremont Center Road at IL Route 60 to provide an intersection angle of 75°, and will consist of widening IL Route 60 and Fremont Center Road to improve the safety of the intersection by providing turn lanes and installing a traffic signal at the intersection which has been warranted for this intersection and has been approved by IDOT-Traffic. The widening of IL Route 60 is to provide an eastbound right turn lane and a westbound left turn lane, and Fremont Center Road is to be widened to provide a northbound right turn lane and a northbound left turn lane. The improvement will also include a turn lane for the Fremont Township facility should it be required. A 10-foot shared-use path is proposed along the west side of Fremont Center Road and is to be constructed only along Fremont Center Road and will match into the future connection to Behm Homestead Park.

The proposed safety improvement will be designed to accommodate 2018 design year traffic. The design is based off criteria outlined in BDE Chapter 49: 3R Guidelines for Rural and Urban Highways (Non-Freeways) and BLRS Chapter 33: Geometric Design of Existing Highways.

This project will be funded by Lake County and administered thru the Lake County Division Transportation for its design, bidding/letting, and construction stages. The Phase II design will adhere to the current LCDOT plan preparation guidelines and will be subject to an IDOT Highway Permitting process, but will not be processed through the IDOT-BLRS in accordance with their District 1 BLRS Phase 2 Plans and Specifications Guidelines. Since there are no federal dollars in the Phase I and Phase II Engineering portions of this project, the schedule of these two phases can overlap, i.e., Phase II can commence prior to receiving Phase I Design Approval and can result in a significant reduction in the overall project schedule duration. The project is currently programmed and targeted for construction in 2019.

A proposed intersection concept plan is shown on **Attachment D**.

II. Anticipated Scope of Services

Following is our proposed scope of services for Phase II (Design) Engineering.



A. Phase II Engineering

1. Project Kick-Off Meeting

We will meet with the Lake County Division of Transportation to further discuss the Phase I work performed to date, project requirements, schedule, and coordination with IDOT and any others involved with the project. Since the project will use local funds, coordination with IDOT's Permit Section will be required. An initial kick-off meeting can be scheduled with IDOT prior to starting Phase II Design Engineering. This meeting will ensure that IDOT concurs with the scope of the improvements and the proposed schedule.

2. Coordination with Phase I Project Development Report

The Project Manager and Design Engineers will review the approved Phase I project report in detail to ensure that the design of the proposed improvements is in accordance with the report. Furthermore, the report will be reviewed to ensure that any commitments made during the Phase I stage of the project are followed through during Phase II Engineering.

3. Data Collection and Review

This work item will include obtaining and reviewing record information such as existing geotechnical reports, aerial photography, contour mapping, and other available data such as existing plans and utility atlases. This item will also include collecting non-municipal utility atlases and right-of-way data. Much of this information was obtained during the Phase I stages of the project, however it will need to be verified and/or updated during Phase II.

4. Field Survey and Base Sheet Development

In order to develop accurate and complete construction documents supplemental design topographic survey will be conducted to cover areas outside the original limits obtained during the Phase I portion of this project.

We propose to use Jorgensen & Associates, Inc. (Jorgensen) as a subconsultant to perform the follow-up topographic survey services. This item includes time for Civiltech coordination with the sub-consultant. The scope of these services and fee estimate for the supplemental topography work will be completed within the original fee of the Phase I contract. A copy of Jorgensen's scope of services and fee estimate is included in the Phase I contract.

Once Phase II begins, we will perform a "plan-in-hand" field check of the project site to verify the completeness and accuracy of the survey. We will also complete a more detailed photo-documentation of the site and prepare a detailed inventory of existing signage and any other topographic features which may impact or be impacted by the proposed design.

5. Geometric Studies

Concurrently and in coordination with the Phase I Engineering Study, we will provide a preliminary investigation of the proposed intersection improvements and the associated roadway improvements. Based upon the preliminary geometrics, horizontal and vertical geometrics will be completed for the proposed alignment of the roadways and shared-use bike path. Geometrics will need to satisfy the American Association of State Highway Transportation Officials (AASHTO) and the related bicycle guidelines, and IDOT design criteria or, where not feasible, justifications for design deviations will be developed.



6. Subsurface Soils and Pavement Investigation

Concurrently and in coordination with the Phase I Engineering Study, pavement cores and soil borings for the project have been obtained to aid in the development of the appropriate pavement design for both IL Route 60 and Fremont Center Road. The results of the geotechnical studies will be incorporated into the construction documents. A copy of Midland Standard Engineering & Testing's (MSET) scope of services and fee estimate is included in the Phase I contract. This item includes time for Civiltech coordination with MSET as a subconsultant.

7. Special Waste and CCDD Testing

Civiltech will coordinate and provide the required Clean Construction and Demolition Debris (CCDD) evaluation and certification for any uncontaminated construction material that will need to be disposed of off-site. MSET, in accordance with current IEPA CCDD regulations, will prepare a materials disposal plan, identify pre-approved CCDD facilities, and complete the appropriate pre-construction permit application forms for material disposal.

We don't foresee the need to complete a Preliminary Site Investigation (PSI) based upon the Phase I PESA. However, we anticipate the Fremont Center and IL Route 60 intersection project to only generate Clean Construction or Demolition Debris (CCDD) materials. Therefore, to comply with Illinois Environmental Protection Agency (IEPA) regulations for CCDD disposal, we will complete the LPC662/663 certification for inclusion in the bidding documents.

This item includes time for Civiltech coordination with MSET as a subconsultant to perform the complete the environmental services for this project. A copy of their scope of services and fee estimate are included in **Attachment A**.

8. Wetland Permitting and Coordination

Wetland delineations have been performed within the project limits as part of the Phase I study by our subconsultant, Stuedemann Environmental Consulting, Inc. A copy of SEC's proposal is included in the Phase I contract.

The wetland delineation report will be prepared for concurrence and jurisdictional determination of any Waters of the U.S., including wetlands. Coordination will occur with U.S. Army Corps of Engineers (USACE) and Lake County Stormwater Management Commission (LCSMC) for review of the wetland delineation report and the submittal of the Wetland Impact Evaluation forms through the Phase I Engineering Study. Through the Phase II Design Engineering and in accordance with requirements associated with LCSMC and USACE, SEC will prepare and submit wetland related documents to the USACE and LCSMC for permitting to construct the Fremont Center Road project. This item includes time for Civiltech coordination with SEC as a subconsultant to perform the complete wetland services for this project. A copy of their Phase II scope of services and fee estimate are included in **Attachment A**.

9. Drainage Design, Storm Water Permitting, and Supporting Documentation

A Drainage Study is anticipated as a part of this project through the Phase I Engineering Study with an analysis of the existing drainage patterns and proposed improvements. Specifically, we will investigate carrying a curb and gutter section thru the southeast corner of the intersection to accommodate a back-slope within IDOT's right of way with the use of a mountable M-4.12 to alleviate



and address particular property owner concerns. In other instances, we will evaluate the potential opportunities to introduce stormwater quality treatments through shallow graded basins within the available right of way due to relocated Fremont Center Road (Specifically in the southwest quadrant of the intersection of IL Route 60 and Fremont Center Road).

The Drainage Study will be used as the starting point for the completion of the detailed drainage design. We will submit for storm water permitting to the LCSMC to ensure the proposed drainage plan meets local storm water requirements for storm water detention and best management practices as set forth by the Lake County Watershed Development Ordinance (WDO).

We anticipate the County to require a full permit submittal in accordance with the WDO. Our plan is to develop preliminary engineering plans for a pre-application meeting with the LCSMC to get their guidance on any known drainage complaints, special management areas, erosion control, wetland impacts, storm water management, and drainage design elements. We'll need to meet with the LCSMC and USACE representatives on-site to review the wetland delineation and get concurrence with the limits of any wetlands, that the wetland is a regulatory wetlands, and that there are no other critical wetlands along the corridor. Subsequently, the USACE will issue a Jurisdictional Determination confirming any wetland sites as jurisdictional "waters of the United States".

10. NPDES Permitting and Documentation

The NPDES permit, along with a Storm Water Pollution Prevention Plan (SWPPP), will also be prepared for inclusion in the contract documents for final execution by the successful bidder. All erosion control design will be in accordance with the latest IEPA, IDOT, and County requirements.

11. Review and Confirm Project Right-of-Way Requirements

We will review the proposed roadway and bike path alignment and horizontal and vertical geometrics with respect to the existing right-of-way and construction grading limits. Additionally, the preliminary cross sections will be analyzed in detail by the Phase II design team in order to confirm the proposed right-of-way required. This work will be performed early in the design phase so that the right-of-way acquisition process can begin as soon as possible to ensure that the project remains on schedule.

There are potentially eight (8) parcels with potential right-of-way impacts, permanent easement, and/or a temporary easements within the project limits and we have included as a contingency one (1) parcel to accommodate any revisions or changes that may result through the preparation, appraisal, review, and land acquisition process. We anticipate plats, appraisals, and negotiations to be necessary through the valuation and land acquisition process with all such services to be performed in accordance with the policies of the County, and where applicable, the Illinois Department of Transportation Land Acquisition Policies and Procedures Manual and the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act.

The preparation of the Plat of Highways and Legal Descriptions will be performed by Jorgensen & Associates, Inc. in accordance with the IDOT Plats of Highway Checklist (the scope of these services and fee estimate for the POH work will be completed within the original fee of the Phase I contract. A copy of Jorgensen's scope of services and fee estimate is included in the Phase I contract.). We will provide Jorgensen electronic copies of the proposed alignment and right-of-way for use in preparing the Plat of Highways and roadway baseline / centerline alignments.



Civiltech will provide the necessary valuation services. The fees included in the Direct Costs reflect that there will be parcels with differing levels of work required. We propose to use T Engineering Services Ltd. for our review appraisals, and to use Santacruz Associates Ltd. as the negotiator for the land acquisitions. This item also includes work involved with coordination between the Phase II design team and the appraisers and negotiators. This work typically includes providing the appraisers and negotiators with exhibits for use during meetings with the property owner, and providing information regarding the design and potential modifications to the same. For the Township parcel acquisitions, we anticipate providing exhibits, coordination, and assistance to the County and Township through their development of an Inter-Governmental Agreement and referendum to the election ballot to be approved through voting. However, the design for the relocation of any private property items is NOT included within the scope of this agreement. We will work with the appraisers and negotiators to ensure that all items within the takes or easements that need to be relocated by the property owner are accounted for in the compensation offered to them.

12. Maintenance of Traffic Concept

We envision the construction staging and maintenance of traffic as a critical component to be addressed and resolved as part of the preliminary engineering. We will prepare a staging and maintenance of traffic concept memorandum for review and approval by the County. Construction staging, maintenance of traffic concepts will be agreed to prior to the pre-final plan development which will include work associated with maintaining access through the corridor. If required due to scheduling or changes to the anticipated letting dates, and staging of work over the winter may also be required, and maintenance of the roadways during this period will be coordinated with the County and IDOT.

13. Traffic Signal Installation Plan

The proposed signal will be designed in accordance with LCDOT signal design standards including video detection cameras, a remote-controlled video system and LED internally illuminated street name signs. We will attempt to place the traffic signal poles so as not to interfere with the future shared-use path that may cross the west leg of the intersection. Since there is currently no existing traffic signal at the intersection, a temporary traffic signal will not be needed. Because the proposed signal will only be about 0.30 miles from the existing signal at IL Route 60/Peterson Road, IDOT will require traffic signal interconnect to be installed along IL Route 60 between the two intersections. Finally, the proposed signal will be incorporated into the Lake County PASSAGE network. We assume plan sheets as follows:

- Traffic Signal Installation Plan (1 sheet)
- Cable Plan and Sequences (1 sheet)
- Schedule of Quantities and Mast Arm Mounted Street Name Signs (1 sheet)
- Interconnect Plan – Fremont Center Road to Peterson Road (1 sheet)
- Interconnect Schematic – IL Route 60 (1 sheet)
- PASSAGE Details (2 sheets)
- IDOT Details (8 sheets)
- LCDOT Details (3 sheets)

14. Preliminary Plans (65%)

- a. Preliminary Plans will be prepared containing the following drawings:
 - Cover Sheet and Index of Sheets (1 sheet)
 - General Notes and List of State and Local Standards (2 sheets)



- Existing Typical Sections (1 sheet)
- Proposed Typical Sections (1 sheet)
- Erosion Control and Landscaping – 2 stages 1"=50' (4 sheets)
- Stormwater Quality Basin Grading Plan, Planting, and Details 1"=10' (2 sheets)
- Roadway Plan and Profile 1"=20' (6 sheets)
- Bike Path Plan and Profile 1"=20' (2 sheet)
- Drainage and Utilities 1"=20' (6 sheets)
- Traffic Signal Installation Plan (1 sheet)
- Traffic Signal Cable Plan and Sequences (1 sheet)
- Interconnect Schematic (1 sheet)
- Pavement Marking Plan 1"=50' (2 sheets)
- Signing Plan 1"=50' (2 sheets)
- IL Route 60 and Fremont Center Intersection Grading Plan 1"=10' (1 sheet)
- Erhart Road and Fremont Center Intersection Grading Plan 1"=10' (1 sheet)
- Overall Project Grading Plan with Contours 1"=50' (2 sheets)
- Roadway Cross Sections (22 sheets)

The Preliminary Plan preparation and submittal will serve as a progress submittal for review by the County staff, in an effort to identify and address any significant design issues prior to completing pre-final plans. We will communicate with the County and IDOT throughout the design process to resolve any current design issues.

In an effort to alert the various utility companies of possible conflicts and to advise them of the overall project schedule, we will submit a utility plan set for their review. It is our intention that this submittal will allow the utility companies to review the plans to determine where additional information is needed concerning the location of their facilities. Utility plan submittals will be coordinated with County's Utility Coordinator for their records.

- b. Preliminary Design Review Meeting - We will coordinate a meeting in order to discuss the status of the project with the County. The meeting will be scheduled such that all parties will have had an opportunity to review the preliminary plans and provide comments.
- c. Preliminary Quantity Calculations and Estimate of Cost - We will perform detailed quantity calculations at the preliminary stage of the plan development. We will use the quantities of work in order to calculate an Engineer's Estimate of Cost based on recent bid tab information for projects of similar scope and magnitude.

15. Pre-Final (90%) Plans, Special Provisions and Estimates

The development of Pre-Final Contract Plans and documents will proceed throughout the County's review of the Preliminary Plan Submittal. We will prepare pre-final contract plans based on comments received on the preliminary plans and in accordance with the approved Phase I Report, the applicable sections of the BLRS manual, applicable IDOT Standards and in accordance with current County standards and practices. We anticipate that the contract plans will contain the following drawings:

- a. Pre-final Plans



- Cover Sheet and Index of Sheets (1 sheet)
- General Notes and List of State, County, and Local Standards (2 sheets)
- Summary of Quantities (1 sheet)
- Schedules of Quantities (6 sheets)
- Alignment, and Ties (1 sheet)
- Existing Typical Sections (1 sheet)
- Proposed Typical Sections (1 sheet)
- Erosion Control and Landscaping – 2 stages 1"=50' (4 sheets)
- Stormwater Quality Basin Grading Plan, Planting, and Details 1"=10' (2 sheets)
- Roadway Plan and Profile 1"=20' (6 sheets)
- Bike Path Plan and Profile 1"=20' (2 sheets)
- Drainage and Utilities 1"=20' (6 sheets)
- Traffic Signal Installation Plan (1 sheet)
- Traffic Signal Cable Plan and Sequences (1 sheet)
- Traffic Signal Schedule of Quantities and MA Mounted Street Name Signs (1 sheet)
- Traffic Signal Interconnect Plan – IL Route 60 from Fremont to Peterson Road (1 sheet)
- Traffic Signal Interconnect Schematic – IL Route 60 (1 sheet)
- PASSAGE Details (2 sheets – to be provided by LCDOT following the pre-final submittal)
- Traffic Signal IDOT Standard Details (8 sheets)
- LCDOT Traffic Signal Details (3 sheets)
- Pavement Marking Plan 1"=50' (2 sheets)
- Signing Plan 1"=50' (2 sheets)
- IL Route 60 and Fremont Center Intersection Grading Plan 1"=10' (1 sheet)
- Erhart Road and Fremont Center Intersection Grading Plan 1"=10' (1 sheet)
- Overall Project Grading Plan with Contours 1"=50' (2 sheets)
- Roadway Cross Sections (22 sheets)
- Project Specific Construction Details (4 sheets)
- ADA Ramp and Construction Details per PROWAG Guidelines (2 sheets)
- Driveway Construction Layout Plan 1"=5' (7 sheets)
- IDOT and County Standard Construction Details (30 sheets)

We estimate that the contract plans will contain a total of 122 sheets.

The cross sections will be prepared at 50-foot intervals and will include full sections at intersections of streets, high and low points along the roadway profile, beginning of project, and end of project limits. Construction details with half width cross sections will be prepared at driveways and access points. This work will be in accordance with Lake County Division of Transportation Plan Preparation Guidelines.

The goal with the design of the proposed water quality basin will be to meet the needs of the roadway improvement, conform to the requirements of the Lake County Watershed Development Ordinance and be, at a minimum, aesthetically neutral. We propose to utilize planting schemes similar to what we've done for similar facilities to develop a planting scheme which is low maintenance and native in character. Inclusion of appropriate hydrophytic vegetation in the plan will aid in addressing water quality issues.

The County or Township have not expressed their intent to plant trees along the Fremont Center Road intersection as part of a plan to reforest this area. However, should it be desired the County or Township can provide marked-up plans showing the location, size, and species of trees to be planted. Civiltech will draft the mark-ups for inclusion in the contract documents. Civiltech will work with



the County or Township in regard to any specific special provisions for the trees covering supplying, planting and maintenance requirements.

The pre-final contract documents will be submitted to the County and IDOT for review and permitting. We will also submit the contract plans to the various utility companies. This submittal will sufficiently define the conflicts so that the utility companies can, at a minimum, perform the necessary engineering for any required utility relocations. This allows relocations to be performed in advance of the actual construction. Civiltech will perform the necessary coordination with the utility companies and follow up as needed on each of our submittals. This will attempt to ensure that no utility company is ignoring the project. Depending on the complexity of the utility involvement it may be necessary to conduct periodic coordination meetings. Utility plan submittals will be coordinated with Lake County Utility Coordinator.

- b. Pre-Final Special Provisions - We will prepare special provisions that supplement or amend the special provisions contained in the latest edition of the Standard Specifications for Road and Bridge Construction adopted by the Illinois Department of Transportation and the latest edition of the Standard Specifications for Sewer and Watermain Construction in Illinois. Applicable County special provisions will be utilized to supplement the Standard Specifications. In addition, we will include the latest IDOT Recurring Special Provisions Check Sheet. The most recent set of IDOT's Bureau of Design and Environment Special Provisions and District 1 Special Provisions will be reviewed and included in the special provisions where applicable.
- c. Pre-Final Quantity Calculations - We will perform detailed quantity calculations at the pre-final stage of the plan development. Two sets of calculations will be performed by separate engineers in order to ensure the accuracy of the calculations.
- d. Pre-Final Estimate of Cost and Construction Time - We will use the quantities of work in order to calculate an Engineer's Estimate of Cost and Time. Estimates will be based on recent bid tab information for projects of similar scope and magnitude.
- e. Pre-Final QA/QC Review - Prior to submission of the pre-final plans for review, we will perform an internal Quality Assurance / Quality Control review of the work completed. The review will be performed by a professional engineer independent of the design team. The review will consider constructability issues as well as identification of missing pay items, quantities of work, and special provisions required. The design team will also perform a "plan-in-hand" field check to confirm the existing conditions and design.
- f. Pre-Final Project Review Meeting with County - A project review meeting will be held with the County to address design issues and plan comments generated from the pre-final contract document review.
- g. Pre-Final Project Review Meeting with IDOT – If necessary, a project review meeting will be held with the Township and IDOT to address design issues and plan comments generated from the pre-final contract document review.



16. Final (100%) Plans, Special Provisions and Estimates

- a. Final Plans - After completion of all agency reviews and resolution of any other agency or utility company concerns, the contract plans will be finalized. In order to assist the Resident Engineer (RE) we will furnish the County, as part of our deliverables, detailed information including all design, quantity calculations, and microstation files in their format. We will also prepare a technical memorandum to the RE highlighting any key issues, commitments, or special concerns that arose during the design stage of the project. LCDOT will be responsible for letting the project. Therefore, we will provide the County with pdf's of the plans and bid documents as assembled by LCDOT for the bidding. We will also submit the contract plans to the various utility companies for their permitting of any necessary relocations.
- b. Final Special Provisions - All comments received pertaining to the prefinal special provisions and bid documents will be addressed and a disposition will be included in the final bid documents. The status and schedule of all utility relocations, as of the date of the final plans, will be included in the bid documents.
- c. Final Quantity Calculations - The quantities will be updated based on changes made to the plans after the pre-final stage.
- d. Final Estimate of Cost and Construction Time - The estimates will be updated based on the revised quantities. Cost breakdowns for different funding sources will be provided to the County to assist in the completion of any joint agreements for construction.
- e. Final QA/QC Review - Prior to the final submittal, a second QA/QC review of the plans and special provisions will be performed.

17. Project Administration and Coordination

- a. Project Administration - This item includes project setup, monthly invoicing, preparation of status reports, and internal project team coordination meetings.
- b. Project Submittals - As noted above, we will make the necessary document submittals, and follow through with each agency in regards to their review comments or arrange a review meeting to discuss plan changes necessary to resolve conflicts if possible.
- c. Status Meetings –If necessary, we will attend meetings with the County to discuss the status of the project. Based on the enclosed design schedule, we have assumed 4 meetings will be required.
- d. Utility Company Coordination - As noted above, we will analyze the project for potential impacts to existing utilities. We will provide the utility companies with a list of areas of potential conflict so that additional information, such as horizontal locates or depth borings can be obtained where necessary to further define the extent of conflicts. We will first attempt to address utility conflicts through design modifications while considering the impact those changes will have on the overall improvement. It is anticipated that utility relocation work will be necessary to construct the proposed roadway improvements. Based on the amount and complexity of the required utility relocation, it may be necessary to have periodic coordination meetings with the utility companies. We have included hours to meet two times with the utility companies. In addition, we will review the permit submittals from



- the utility companies to ensure that all of the conflicts have been resolved and that the plans are compatible with the proposed construction.
- e. Bidding Assistance - We will review any questions received from contractors during the bidding process and provide any necessary responses to clarify the documents.
 - f. Pre-Construction Meeting Attendance - We will attend the pre-construction meeting at LCDOT to answer any questions regarding the design and contract documents.

18. Construction Assistance

- a. Construction Shop Drawing Reviews - We will make the necessary construction shop drawing reviews for the signals, and follow through with the Resident Engineer and Contractor in regard to review comments to ensure compliance with the contract documents and the design engineer's intent.
- b. Construction Review and Meeting Attendance - When a problem occurs it is the construction engineer who will utilize their critical thinking, listening, learning, problem solving, monitoring and decision making skills to create and enact a solution. Civiltech will be a resource to the construction engineer for them to seek further clarification to confirm the interpretation of a detail, specification or note on the construction drawings or to secure a documented directive or clarification that is needed to continue work.

III. Anticipated Project Schedule

We have prepared the project schedule included in Attachment B. The schedule is based on the intersection improvement concept plan. We have assumed that this engineering proposal will be able to start at the beginning of December 2017. Because of the necessary permitting approvals (IDOT), our goal is to aggressively proceed with the design and permitting of the project, and to acquire right of way with the goal of constructing the intersection improvements in 2019. However, the current schedule reflects only a 6-month window for negotiations and it is possible that right of way acquisitions could extend through mid-Spring of 2019 because of troublesome acquisitions or condemnations should they arise. Because this is locally let thru the LCDOT, the Division's flexibility to adapt to right of way challenges and if necessary to target a late spring / early summer letting for the project, we believe the roadway construction could still be completed by the end of 2019.

IV. Cost Estimate of Consultant Services

In order to calculate our "not-to-exceed" fee, we estimated workhours to complete the individual tasks outlined in the Phase I and Phase II Scope of Services sections of this proposal.

Compensation for our work will be based upon actual labor dollars expended times a factor of **2.67** to cover actual payroll, overhead and indirect costs, payroll burden and fringe benefit costs and profit. Direct costs such as printing, vehicle expenses, and sub-consultant expenses will be billed at their actual cost. Please reference the Cost Estimate of Consultant Services and workhour/direct expense calculations in **Attachment C**.

Our proposed maximum "not-to exceed" fee for Phase II (Design) Engineering is **\$300,767.67**.



Attachment A

Subconsultant Proposals and Qualifications

Anticipated Project Schedule

Cost Estimate of Consultant Services

Proposed Intersection Concept Plan



**Fremont Center Road and IL Route 60 Intersection Improvements
Proposal to Furnish Phase II Engineering Services
Lake County Division of Transportation, Unincorporated Lake County, Illinois**

Lake County Division of Transportation | October 19, 2017

Midland Standard Engineering & Testing, Inc.

Mr. Reid T. Magner, PE
Civiltech Engineering, Inc.
 Two Pierce Place, Suite
 1400
 Itasca, IL 60143
 (630) 773-3900

From: **Midland Standard
 Engineering & Testing, Inc.**
 558 Plate Drive Unit 6
 East Dundee, Illinois 60118
 (847) 844-1895 f (847) 844-3875

CLASSIFICATION of UNCONTAMINATED SOIL				
<i>Intersection Improvements - IL Route 60 & Fremont Center Road</i>				
Scope of work includes scanning samples from probe and roadway borings with a Photo Ionization Detector (PID), selecting and submitting one (1) sample to an analytical laboratory for testing of parameters listed below, and preparation of IEPA LPC-663 Certification Report. It is assumed that this work will be done at the same time as the roadway borings.				
	Unit	Unit Rate	Estimated Units	Extension
Field Sampling/Equipment				
Layout & Clear with JUI	per hour	\$ 95.00	3	\$ 285.00
Soil Probe Boring 5', ea	each	\$ 100.00	3	\$ 300.00
PID	per day	\$ 75.00	1	\$ 75.00
Sample Kit	each	\$ 18.00	1	\$ 18.00
SRP Part 740 Regulations Target Compound List (Partial)*				
VOC	each	\$ 180.00	1	\$ 180.00
SVOC	each	\$ 300.00	1	\$ 300.00
Pesticides/PCBs	each	\$ 180.00	1	\$ 180.00
PNA's	each	\$ 200.00	1	\$ 200.00
RCRA Metals	each	\$ 150.00	1	\$ 150.00
SPLP Lead	each	\$ 150.00	1	\$ 150.00
pH	each	\$ 18.00	1	\$ 18.00
Sample Delivery	each	\$ 75.00	1	\$ 75.00
* Standard Turn around time quoted. Add 50% for 3 day TAT; \$100% for 1-2 day TAT				
Expedited Lab Testing - 3 da	lump sum	\$ 589.00	0	\$ -
Expedited Lab Testing - 1-2 c	lump sum	\$ 1,178.00	0	\$ -
Certification				
Form LPC-662	each	\$ 125.00	0	\$ -
Form LPC-663 w/PE Se	each	\$ 750.00	1	\$ 750.00
Total Cost Estimate:				\$ 2,681.00
NOTES TO PROJECT SCOPE:				
Upon review of the site and available information, additional test parameters may be required for certification. Additional soil samples may also be required if the material sources vary, to obtain a representative sample of the UNCONTAMINATED SOIL.				
LIMIT OF WARRANTY:				
The scope of work does not warrantee all soil for the project. If non-representative soil is rejected at the dump site, additional testing will be required to characterize the material for landfill disposal. Rejected material should not be mixed with the remaining materials.				



**Fremont Center Road and IL Route 60 Intersection Improvements
Proposal to Furnish Phase II Engineering Services
Lake County Division of Transportation, Unincorporated Lake County, Illinois**

Lake County Division of Transportation | October 19, 2017

Stuedemann Environmental Consulting, LLC



October 18, 2017

Mr. Reid T. Magner, P.E.
Project Manager
Civiltech Engineering, Inc.
Two Pierce Place, Suite 1400
Itasca, IL 60143

**SUBJECT: Proposal to Provide Wetland Science Services
Fremont Center Road Improvements Phase II Project
Unincorporated Lake County, Illinois**

Dear Mr. Magner:

Stuedemann Environmental Consulting, LLC (SEC) is pleased to present Civiltech Engineering, Inc. (Civiltech) with this proposal to provide wetland science services for Phase II of the Lake County Division of Transportation (LCDOT) Fremont Center Road Improvements Phase II Project (Fremont Center Road Phase II Project), located in Unincorporated Lake County, Illinois. Services presented herein coincide with the Fremont Center Road Phase II Project transportation engineering related services provided by Civiltech to LCDOT, and include wetland science related U.S. Army Corps of Engineers (USACE) and Lake County Stormwater Management Commission (LCSMC) permitting services. SEC presents this proposal in the following sections: project understanding, scope of work, project team, project schedule, project costs, and proposal acceptance.

PROJECT UNDERSTANDING

SEC understands that Civiltech has been retained by LCDOT to perform Phase II engineering design services for improvements to Fremont Center Road near IL Route 60 and Peterson Road. Civiltech has solicited SEC to prepare and submit wetland related documents to the USACE and LCSMC for permitting to construct the Fremont Center Road Phase II Project. On April 24, 2017, SEC completed the Fremont Center Road Phase I Study Wetland Delineation Report for Civiltech and LCDOT. SEC understands that the Project Corridor presented in that report has not changed, and that it is the same for the Fremont Center Road Phase II Project.

SEC proposes to prepare and submit required wetland related permit documentation to the USACE and LCSMC per: the June 11, 2013, Lake County Watershed Development Ordinance (LCWDO); and the April 1, 2017, U.S. Army Corps of Engineers (USACE) Chicago District Regional Permit Program (RPP).

In preparing this proposal, SEC has made the following assumptions:

1. The Fremont Center Road Phase II Project is not an Illinois Department of Transportation (IDOT) federally funded pass-through project; therefore, neither IDOT related coordination has been completed nor is it part of this scope of work;

2. All pertinent coordination, documentation, and correspondence from the Fremont Center Road Phase I Study will be available for use by SEC in the Fremont Center Road Phase II Project submittals;
3. The April 24, 2017, Wetland Delineation Report prepared by SEC for the Fremont Center Road Phase I Study will not expire prior to permitting for the Fremont Center Road Phase II Project;
4. There are no Lake County Advanced Identification (ADID) wetlands or high-quality aquatic resources (HQAR) within, adjoining, or adjacent to the Project Corridor;
5. There is no wetland mitigation coordination included in this scope of work;
6. An EcoCAT was submitted as part of the Fremont Center Road Phase II Project and SEC assumes consultation termination documentation will be available at the time of permitting; and
7. There are no other environmental concerns within the Project Corridor that have not been referenced in this proposal that would impede the USACE and LCSMC coordination and permitting process, such as the presence of state and federal endangered and threatened species, and protected historical and cultural sites.

SCOPE OF WORK

SEC proposes to complete the requested services in one task as follows:

Task 1: USACE and LCSMC Permit Coordination

SEC proposes to prepare and submit all applicable wetland related permit materials for the Fremont Center Road Phase II Project to the USACE and LCSMC. Wetland related permitting materials include: a wetland buffer memorandum; a preliminary Section 7 consultation memorandum; and wetland narratives. Preparation of these materials may also require on-site investigations as well as on-site meetings with the USACE and LCSMC. SEC understands the required permits to include the Joint Application submittal to USACE and the LCWDO Watershed Development Permit (WDP) submittal to LCSMC. SEC will prepare the Joint Application permit application and will request information and signatures from Civiltech for a complete initial submittal. SEC will provide wetland related documentation and assistance to Civiltech in preparing the WDP submittal to LCSMC.

All wetland related permit submittals will be prepared and submitted by SEC's Lake County Certified Wetland Specialist (CWS). Permitting fees have not been included in this proposal and are the responsibility of Civiltech and LCDOT. SEC will communicate with the USACE and LCSMC after the initial permit submittals until USACE and LCSMC comments and approvals are received.

PROJECT TEAM

SEC proposes to manage this project out of our Geneva, Illinois office with a support network of scientists who have experience in conducting wetland science services in Lake County. Mr. Barry Stuedemann, P.E., P.W.S. will serve as the Lake County CWS.

PROJECT SCHEDULE

SEC will proceed with the scope of work presented in this proposal immediately upon authorization from Civiltech. Specific schedules for each task are unknown at this time and will be coordinated with Civiltech throughout the duration of the Fremont Center Road Phase II Project. Wetland and buffer field

investigations are best completed during the Lake County growing season, from May 7th to October 10th. Floristic Quality Assessments can be conducted outside this growing season at the discretion of the CWS. The schedule to complete each task is influenced by the responses, concerns, and requests of Civiltech and the pertaining agencies.

PROJECT COSTS

SEC estimates the cost to complete the task outlined in this proposal to be a maximum “not-to-exceed” fee of \$6,543. An itemization of these costs is presented in Table 1, Cost Estimate for Consulting Services. The following is a summary of these costs:

SCOPE OF WORK		COSTS
Task 1:	USACE and LCSMC Permit Coordination	\$6,543
Total:		\$6,543

PROPOSAL ACCEPTANCE

To indicate your acceptance of this proposal, please notify me by mail or e-mail. SEC will assume the mail or e-mail correspondence as your signature and date for our authorization to proceed with the task presented in this proposal.

SEC appreciates this opportunity to provide wetland science services to Civiltech. If you have any questions, please do not hesitate to contact me at your convenience.

Sincerely,



Baron H. Stuedemann, P.E., P.W.S.
Technical Director | Managing Member
Stuedemann Environmental Consulting, LLC
Mobile: 630-664-4550
E-Mail: bstuedemann@stuedenv.com

TABLE 1
Cost Estimate for Consulting Services

WETLAND SCIENCE SERVICES
FREMONT CENTER ROAD IMPROVEMENTS PHASE II PROJECT
UNINCORPORATED LAKE COUNTY, ILLINOIS

Prepared for Civiltech Engineering, Inc.
Prepared by Stuedemann Environmental Consulting, LLC

October 18, 2017

FREMONT CENTER ROAD PHASE II PROJECT WETLAND SCIENCE SERVICES TASK DESCRIPTION	Project Manager	Project Coordinator	Total Hours	Direct Labor	Overhead of 150%	In-House Direct Costs	Fixed Fee	Other Direct Costs	Not-to-Exceed Costs
	\$64.00	\$24.00		(DL)	OH(DL)	(IHDC)	(FF)		
Task 1: USACE and LCSMC Permit Coordination	33	1	34	\$2,136	\$3,204	\$374	\$829	\$0	\$6,543
TOTAL:	33	1	34	\$2,136	\$3,204	\$374	\$829	\$0	\$6,543

DL (Direct Labor) = Hours x Hourly Rate
R (Complexity Factor) = 0
OH (Overhead Rate) = 150%
IHDC (In-House Direct Costs) = See Table Below for Itemization
FF (Fixed Fee) = 14.5% [DL + R(DL) + OH(DL) + IHDC]
Other Direct Costs = Testing, Drilling, and Hauling are not included in these costs.

FREMONT CENTER ROAD PHASE II PROJECT WETLAND SCIENCE SERVICES IN-HOUSE DIRECT COSTS BY TASK	Mileage (\$0.535/mile)		Delivery (\$25/package)		Copies (\$0.60/page)		In-House Direct Costs (IHDC)
	Miles	\$	Packages	\$	Pages	\$	
Task 1: USACE and LCSMC Permit Coordination	270	\$144	2	\$50	300	\$180	\$374
TOTAL:	270	\$144	2	\$50	300	\$180	\$374

Mileage (miles) = 90 miles Round Trip to/from Site
Delivery (packages) = UPS, FedEx, or USPS
Copies (pages) = Average Cost for Black and White, Color, 8" x 11.5", and 11" x 17"



**Fremont Center Road and IL Route 60 Intersection Improvements
Proposal to Furnish Phase II Engineering Services
Lake County Division of Transportation, Unincorporated Lake County, Illinois**

Lake County Division of Transportation | October 19, 2017

Santacruz Land Acquisitions

PROPOSAL FOR LAND ACQUISITION SERVICES

Lake County Division of Transportation

Civiltech Engineering, Inc.



Fremont Center Road

@ IL 60

**Santacruz Land
Acquisitions** 

310 Happ Road · Suite 206
Northfield, IL 60093
www.santacruz-associates.com

Contact:
J. Steve Santacruz
847-868-9620
jsteve@santacruz-associates.com



EXECUTIVE SUMMARY

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

- Deliver the right of way on-time to meet the letting
- Manage the acquisition risks, including the cost of condemnation litigation
- Compliance with the Uniform Relocation Assistance and Real Property Act of 1970, as amended (Uniform Act), IDOT land acquisition policies and procedures and FWA policies.

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

Delivery of right of way on-time keeps the project on its letting schedule. We understand that nothing is more important to LPA. We also know that keeping the land acquisition on-time and within budget is a measurement of success for LPA. When a project does not meet its letting schedule, we know it can impact the budget for LPA, causing scheduling conflicts with potential contractors and also affect other economic factors which govern the delivery of the overall roadway improvement program for LPA.

Santacruz Land Acquisitions is an industry leading right of way professional organization with years of experience working on land acquisition projects with the understanding of what needs to be done to complete an acquisition on time.

Santacruz Land Acquisitions will work with the staff for LPA and Civiltech Engineering, Inc., Engineer for LPA, (“Consultant”) to develop a land acquisition plan for the construction of Fremont Center Road at IL 60 (the “Project”) to assure that the goals are met. With years of right of way acquisition work, we have a large database of real estate representatives for corporate acquisitions to cut down the time spent in the initial steps of locating the real estate representative for each property.

These efficiencies minimize our time with an acquisition and translate to your project staying on schedule.

CRITICAL ISSUE 2: MANAGE THE ACQUISITION RISKS

Equally important as the scheduled letting is the acquisition budget for the Project. Cost overruns can jeopardize a project from moving forward. Because real estate costs can represent a significant portion of the budget for a transportation project, we will suggest ways to minimize impacts and reduce costs in challenging acquisitions. We will also work with LPA to minimize the condemnation referrals that impact the budget for this Project. By the same token, we will quickly identify parcels in the very beginning of the process that have title issues that can only be resolved through condemnation.

Through experience, we know that a portion of the parcels will need to be acquired through condemnation. As such, your land acquisition consultant needs to have knowledge of the legal requirements necessary to position an agency for condemnation. We possess that knowledge and have experience providing “expert witness” testimony in these matters.

Santacruz Land Acquisitions is made up skilled right of way professionals with a vast background in real estate and civil engineering with respect to transportation projects which gives us the ability to recognize issues and resolve them before they create delays.

CRITICAL ISSUE 3: COMPLIANCE WITH GOVERNMENT REGULATIONS

All land acquisition services must be performed in accordance with the Uniform Relocation Assistance and Real Property Act of 1970, as amended (Uniform Act). Santacruz Land Acquisitions is familiar with IDOT’s land acquisition guidelines, policies and procedures.

WHY SANTACRUZ LAND ACQUISITIONS?

As you review our proposal, you will see that Santacruz Land Acquisitions has the versatility, experience and qualifications to deliver the land acquisition needs for your project. What sets us apart is:

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

We provide extensive experience complying with federal and state laws and maximizing the team’s knowledge of the land acquisition policies of IDOT.

ADDITIONAL COMPONENT OF OUR PROPOSAL: BEP UTILIZATION

Santacruz Land Acquisitions is a DBE with IDOT and an MBE with Cook County and the City of Chicago. Santacruz Land Acquisitions is also certified in the Business Enterprise Program with the State of Illinois Central Management Services.



TECHNICAL APPROACH

Santacruz Land Acquisitions shall perform all necessary services in the negotiation of the acquisition of necessary properties required for the completion of the Project. All services shall be performed at the direction of LPA and Consultant in accordance with the policies and procedures of IDOT, as applicable, the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (“Uniform Act”), as amended (49 CFR Part 24), the Illinois Eminent Domain Act (735 ILCS 30) (“Eminent Domain Act”) and the Illinois Code of Civil Procedure (“Code of Civil Procedure”).

Santacruz Land Acquisitions will review the highway construction plans with LPA and/or the Consultant to understand the nature and purpose of the project.

Santacruz Land Acquisitions agrees to perform the services as set forth herein as well as furnish and deliver to LPA the final reports accompanied by all necessary documents needed for recordation and/or necessary for eminent domain proceedings. **The process described in this section has been the roadmap to many successful right of way projects for Santacruz Land Acquisitions helping us help you keep your projects on-time and within budget.**

LAND ACQUISITION CRITICAL PATH STEPS – “OUR ROAD MAP”

Task 1: Notice to Proceed

Our services start within one week (or sooner, if requested) of an authorization to proceed from LPA.

Task 2: Kick-off Meeting

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

Task 3: Delivery and Review of Project Information

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

Task 4: Negotiation and Acquisition

All negotiations and acquisition services shall be provided by Santacruz Land Acquisitions after approval by LPA of the amount of just compensation to be offered to the property owner.

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

Prior to the start of negotiations, the Negotiator will review the plats of highway and appraisals for each parcel before the start of negotiations with a property owner to understand the valuation and impact to the property. Santacruz Land Acquisitions will also inspect the title commitment provided for each parcel to determine the liens and encumbrances that will need to be addressed in order to complete the acquisition process for LPA. Santacruz Land Acquisitions will direct any questions to LPA or Consultant resulting from its review of the plans, plats, appraisals and title commitments so that Santacruz Land Acquisitions is prepared for any issues raised by the property owner during negotiations.

Before contacting the owner of a parcel, Santacruz Land Acquisitions will prepare and send the introductory letter to the property owner on LPA's

letterhead. This letter will provide a general statement of the Project, identify the property and the legal property owner, and briefly state the right of requirements necessary from the parcel. This letter shall also contain contact information for Santacruz Land Acquisitions and a representative of LPA.

Santacruz Land Acquisitions will prepare an offer package for presentation to the owner at the first meeting. The offer package shall contain the Basis for Computing Total Approved Compensation and Offer to Purchase (in the format approved by IDOT), a copy of the plat of highway with the acquisition areas highlighted and a copy of the legal descriptions of the parcels to be acquired. If, after repeated efforts to contact the property owner to schedule a meeting to present the offer, Santacruz Land Acquisitions is unable to make contact with the property owner, or if the property owner is located out of town, or at the request of the property owner to have the offer package mailed, Santacruz Land Acquisitions will send the offer package by certified mail so that a receipt of delivery can be established.

Santacruz Land Acquisitions will personally contact the property owner a minimum of three times before making a determination that the acquisition of the parcel cannot be successfully negotiated. In most cases, Santacruz Land Acquisitions will exceed the minimum number of contacts in an attempt to make all reasonable efforts to reach a settlement before recommending that LPA commence condemnation proceedings. All contacts and efforts to make contact with the property owner shall be documented in the negotiator's report maintained by Santacruz Land Acquisitions for each parcel.

If, during its discussions with the property owner, errors in the plans are discovered or the property owner requests design changes, Santacruz Land Acquisitions will immediately notify LPA or Consultant with this information. At any time during negotiations for situations involving design changes, errors in plans or for any other reason, if requested by LPA or Consultant, Santacruz Land Acquisitions will cease negotiations on certain

parcels until corrected information or further instruction is provided to Santacruz Land Acquisitions.

Upon successful negotiations with the property owner, Santacruz Land Acquisitions will prepare all necessary conveyance documents in the forms provided by and approved by IDOT in order to complete the acquisition and obtain title approval for the property. Santacruz Land Acquisitions will submit the completed parcel file with original conveyance documents, any documents necessary for title clearance, the Negotiator's Log documenting all negotiation activities, copies of all correspondence with the property owner, title commitments, plats, and all other documentation as required by LPA.

In the event that Santacruz Land Acquisitions, after having made every reasonable effort to contact and negotiate with the owner of a parcel, is unable to obtain a settlement on the approved appraisal amount, Santacruz Land Acquisitions shall prepare and submit to LPA a completed parcel file with its recommendation to acquire the parcel by means of condemnation. In addition, the file will include the Negotiator's Log, copies of all correspondence with the property owner, title commitments, plats, and all other documentation as required by LPA.

We understand that appearances in court and/or pretrial conferences, which may include depositions, and preparation for litigation or pre-trial conferences may be required by LPA so that it may complete the acquisition of the property through condemnation. In such case, at the request of LPA or its trial counsel, we shall make any such appearances or complete such preparation work in order to assist with this process. Such requests will be pursuant to a separate work order.

PERSONNEL

The experience and talent of the right of way professionals that make up the team for Santacruz Land Acquisitions will, to a large extent, be the basis for the success of keeping this Project on-time and within budget. J. Steve Santacruz brings over twenty years of right of way acquisition experience to lead this team as its project manager. He has worked on thousands of acquisition parcels for ISTHA, IDOT, Cook, Kane, Lake, and Will Counties. Steve has a reputation in the right of community of being able to handle the most complex of land acquisition transactions.

The internal support team members for Santacruz Land Acquisitions include Robin Weber, a real estate paralegal with over twenty years of experience in closing residential and commercial real estate transactions, and Jonathan Abplanalp, a District 1 fee negotiator.

PRIOR EXPERIENCE

Santacruz Land Acquisitions was founded in 1992 as Santacruz Associates Ltd. and has grown to be one of the most dependable right of way negotiation firms in IDOT's District 1. Since it opened, Santacruz Land Acquisitions has been providing comprehensive right of way solutions, including negotiation activities and the coordination of the valuations of parcels for various public agencies.

We bring an array of services and broad disciplines in real estate which give us a distinct advantage in handling even the most complex of your land acquisition projects.

Santacruz Land Acquisitions has delivered real estate solutions for its public agencies balancing risk management and letting dates on some of the largest and most intricate projects in the State.



EXHIBITS

a. Pricing Schedule

Compensation for Services

Negotiation Services

Negotiation and acquisition services for Right of Way including, without limitation, documentation of conveyance of property interest	\$2,700.00
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Consultation & Witness Services

Rate for each ½ day in pretrial conference or in court for Negotiator	\$1,000.00
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Hourly rate for consultation not otherwise specifically provided for herein	\$250.00
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Title Services (if applicable)

Later date commitment – In addition to actual recording costs + Administrative fee	\$25.00
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Title insurance policies – In addition to actual recording costs + Administrative fee	\$25.00
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Recording of Documents – In addition to actual recording costs + Administrative fee	\$25.00
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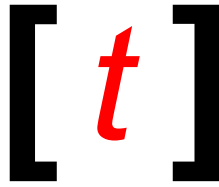
Copies of recorded documents – In addition to actual copying costs & research fees + Administrative fee	\$25.00
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**Fremont Center Road and IL Route 60 Intersection Improvements
Proposal to Furnish Phase II Engineering Services
Lake County Division of Transportation, Unincorporated Lake County, Illinois**

Lake County Division of Transportation | October 19, 2017

“T” Engineering Services, Ltd.



"T" Engineering Services, Ltd.

real estate appraisers

October 19, 2017

Mr. Reid T. Magner, P.E.
Civiltech Engineering, Inc.
Two Pierce Place, Suite 1400
Itasca, Illinois 60143

*Subject: Proposal for Review Appraisal Services
Fremont Center Road*

Dear Mr. Magner:

We have experience in working for governmental agencies and participation in eminent domain proceedings: appraisal reviews, depositions, court testimony etc.; and have the ability to work closely with attorneys. We have familiarity with the Weiland Road area, development patterns, and trends. Also we have the ability to work concurrently on numerous projects.

We propose to review appraisal reports on the subject project at \$1,000 per parcel with the client being Civiltech Engineering, Inc. The appraisal reviews will be completed within two weeks after receiving the subject appraisal reports.

Respectfully submitted,

Keith T. Tadrowski
President



Attachment B

Subconsultant Proposals and Qualifications

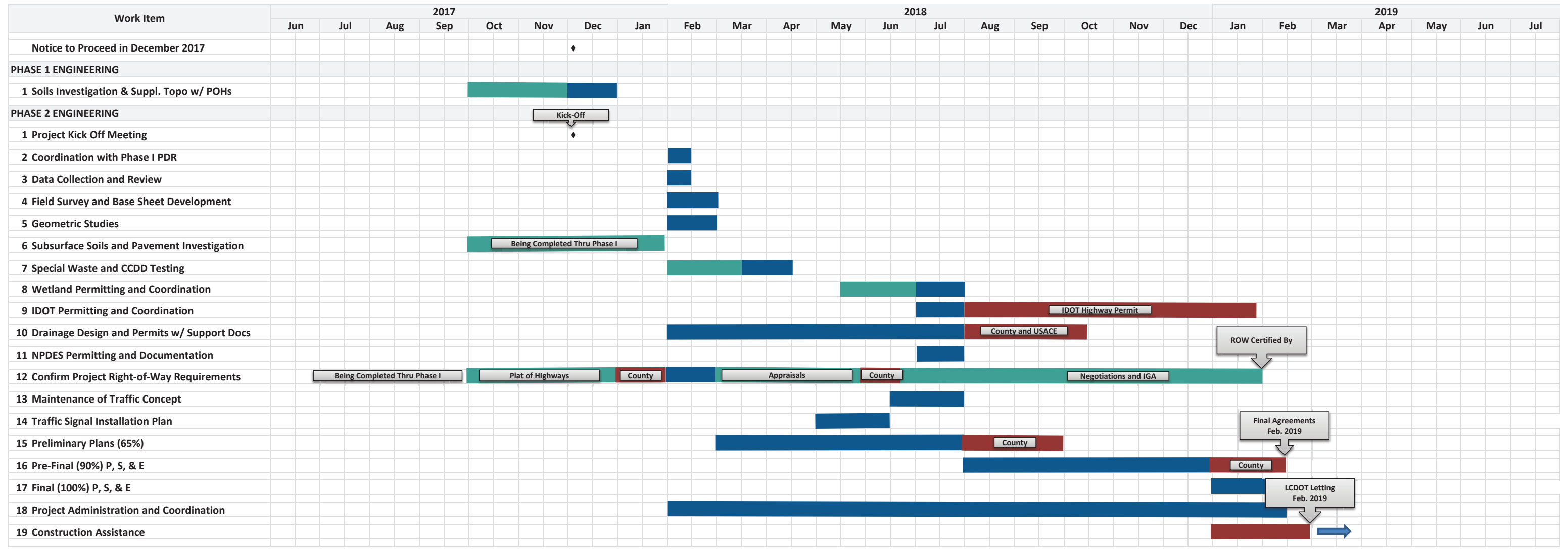
Anticipated Project Schedule

Cost Estimate of Consultant Services

Proposed Intersection Concept Plan



Anticipated Project Schedule



- Consultant Work Time
- Sub Consultant Work Time
- Agency Review Time
- ➔ Award and Contract Processing



Attachment C

Subconsultant Proposals and Qualifications

Anticipated Project Schedule

Cost Estimate of Consultant Services

Proposed Intersection Concept Plan



Cost Estimate of Consultant Services (Page 1 of 2)

Item No.	Task	Staff Classifications, Direct Labor Rate and Workhours								Total Workhours	% of Workhours	Direct Labor Cost
		Senior Project Manager	Project Manager	Engineer IV	Engineer I	Design Technician	Water Resources Manager	Water Resources Engineer II	Traffic Signals Engineer V			
		\$70.00	\$54.00	\$36.00	\$29.00	\$31.00	\$70.00	\$29.00	\$43.00			
1	Project Kick Off Meeting	4	4	4	0	0	0	0	0	12	1%	\$640.00
2	Coordination with Phase I Project Development Report	4	4	2	2	2	4	2	2	22	1%	\$1,112.00
3	Data Collection and Review	2	6	4	8	2	4	2	4	32	1%	\$1,412.00
4	Field Survey and Base Sheet Development	0	2	12	10	4	2	2	4	36	2%	\$1,324.00
5	Geometric Studies	7	7	36	58	46	2	0	2	158	7%	\$5,498.00
6	Subsurface Soils and Pavement Investigation	0	1	1	4	0	0	0	0	6	0%	\$206.00
7	Special Waste and CCDD Testing	1	2	4	1	0	0	0	0	8	0%	\$351.00
8	Wetland Permitting and Coordination	1	3	3	3	2	0	0	0	12	1%	\$489.00
9	Drainage Design, Storm Water Permitting, and Supporting Docs	6	14	40	44	4	20	88	0	216	10%	\$7,968.00
10	NPDES Permitting and Documentation	2	4	6	6	0	2	4	0	24	1%	\$1,002.00
11	Review and Confirm Project Right-of-Way Requirements	4	12	10	4	10	4	0	4	48	2%	\$2,166.00
12	Maintenance of Traffic Concept	2	4	8	12	4	4	2	0	36	2%	\$1,454.00
13	Traffic Signal Installation Plan	0	0	0	0	0	0	0	0	0	0%	\$0.00



Cost Estimate of Consultant Services (Page 2 of 2)

Item No.	Task	Staff Classifications, Direct Labor Rate and Workhours								Total Workhours	% of Workhours	Direct Labor Cost
		Senior Project Manager	Project Manager	Engineer IV	Engineer I	Design Technician	Water Resources Manager	Water Resources Engineer II	Traffic Signals Engineer V			
		\$70.00	\$54.00	\$36.00	\$29.00	\$31.00	\$70.00	\$29.00	\$43.00			
14	Preliminary Plans (65%)	16	42	118	200	60	20	34	56	546	25%	\$20,090.00
15	Pre-Final (90%) Plans, Special Provisions and Estimates	26	52	138	184	79	23	55	105	662	30%	\$25,101.00
16	Final (100%) Plans, Special Provisions and Estimates	14	21	39	48	22	8	12	26	190	9%	\$7,618.00
17	Project Administration and Coordination	11	52	37	34	4	6	4	12	160	7%	\$7,072.00
18	Construction Assistance	2	8	8	0	0	0	0	6	24	1%	\$1,118.00
Total Workhours by Staff Classification:		102	238	470	618	239	99	205	221	2,192		
Percentage of Total Workhours:		5%	11%	21%	28%	11%	5%	9%	10%	100%		
Direct Labor Cost by Staff Classification:		\$7,140.00	\$12,852.00	\$16,920.00	\$17,922.00	\$7,409.00	\$6,930.00	\$5,945.00	\$9,503.00			
Total Direct Labor Cost:											\$84,621.00	
Times 2.67 Direct Labor Multiplier:											\$225,938.07	
Total In-House Direct & Subconsultant Costs (see separate calculation):											\$74,829.60	
2,192											100%	\$300,767.67



**Fremont Center Road and IL Route 60 Intersection Improvements
 Proposal to Furnish Phase II Engineering Services
 Lake County Division of Transportation, Unincorporated Lake County, Illinois**

Lake County Division of Transportation | October 19, 2017

Workhours (Page 1 of 3)

Item No.	Task	Staff Classifications & Workhours								Total Workhours	% of Workhours
		Senior Project Manager	Project Manager	Engineer IV	Engineer I	Design Technician	Water Resources Manager	Water Resources Engineer II	Traffic Signals Engineer V		
1	Project Kick Off Meeting										
	a. Initial Meeting with County	2	2	2						6	50.0%
	b. IDOT Project Kick-Off Meeting	2	2	2						6	50.0%
	Item 1 Subtotal	4	4	4	0	0	0	0	0	12	100.0%
2	Coordination with Phase I Project Development Report										
	a. Design Criteria & Preliminary Design Studies	4	4	2	2	2	4	2	2	22	100.0%
	Item 2 Subtotal	4	4	2	2	2	4	2	2	22	100.0%
3	Data Collection and Review										
	a. Obtain/Update and Review Record Data	2	4	2	2	2	4	2	4	22	68.8%
	b. Preliminary Utility Company Coordination		2	2	6					10	31.3%
	Item 3 Subtotal	2	6	4	8	2	4	2	4	32	100.0%
4	Field Survey and Base Sheet Development										
	a. Supplemental Topographic Survey		2	6	4	4	2		2	20	55.6%
	b. Field Review of Survey			6	6			2	2	16	44.4%
	Item 4 Subtotal	0	2	12	10	4	2	2	4	36	100.0%
5	Geometric Studies										
	a. Coordination with Phase I Scope of Work	1	1	6	2	2	2		2	16	10.1%
	b. Detailed Horizontal Geometrics	2	2	12	24	12				52	32.9%
	c. Detailed Vertical Profiles	2	2	6	16	8				34	21.5%
	d. Proposed Cross-Sections	2	2	12	16	24				56	35.4%
	Item 5 Subtotal	7	7	36	58	46	2	0	2	158	100.0%
6	Subsurface Soils and Pavement Investigation										
	a. By Sub-Consultant: Midland Standard Engineering & Testing, Inc.									0	
	b. Pavement Design		1	1	4					6	100.0%
	Item 6 Subtotal	0	1	1	4	0	0	0	0	6	100.0%
7	Special Waste and CCDD Testing										
	a. By Sub-Consultant: Stuedemann Environmental Consulting									0	
	b. Coordination to comply (IEPA) regulations for CCDD	1	2	4	1					8	100.0%
	Item 7 Subtotal	1	2	4	1	0	0	0	0	8	100.0%
8	Wetland Permitting and Coordination										
	a. By Sub-Consultant: Stuedemann Environmental Consulting									0	
	b. Coordination to comply USACE regulations for Permitting	1	3	3	3	2				12	100.0%
	Item 8 Subtotal	1	3	3	3	2	0	0	0	12	100.0%



Fremont Center Road and IL Route 60 Intersection Improvements
Proposal to Furnish Phase II Engineering Services
Lake County Division of Transportation, Unincorporated Lake County, Illinois

Lake County Division of Transportation | October 19, 2017

Workhours (Page 2 of 3)

Item No.	Task	Staff Classifications & Workhours								Total Workhours	% of Workhours
		Senior Project Manager	Project Manager	Engineer IV	Engineer I	Design Technician	Water Resources Manager	Water Resources Engineer II	Traffic Signals Engineer V		
9	Drainage Design, Storm Water Permitting, and Supporting Docs										
a.	Drainage Design and Coordination with Phase I Drainage Study	2	6	16	12	4	12	48		100	46.3%
b.	Storm Water Permitting through LCSMC and USACE Joint Application	4	8	24	32		8	40		116	53.7%
	Item 9 Subtotal	6	14	40	44	4	20	88	0	216	100.0%
10	NPDES Permitting and Documentation										
a.	Storm Water Pollution Prevention Plan (SWPPP) and Permitting	2	4	6	6		2	4		24	100.0%
	Item 10 Subtotal	2	4	6	6	0	2	4	0	24	100.0%
11	Review and Confirm Project Right-of-Way Requirements										
a.	By Sub-Consultant: Jorgensen Plat of Highways									0	
b.	By In-House CEI Consultant: David White Appraisal									0	
c.	By Sub-Consultant: Santacruz Associates Negotiations										
d.	Determination of Construction Limits and Boundaries w/ Exhibits	2	4	8	4	10	4		4	36	75.0%
e.	Coordination of Plat of Highways, Appraisals, and Negotiation/IGA	2	8	2						12	25.0%
	Item 11 Subtotal	4	12	10	4	10	4	0	4	48	100.0%
12	Maintenance of Traffic Concept										
a.	Maintenance of Traffic Concept w/ Exhibits	2	4	8	12	4	4	2		36	100.0%
	Item 12 Subtotal	2	4	8	12	4	4	2	0	36	100.0%
13	Traffic Signal Installation Plan										
a.	Reference the Preliminary, Pre-Final and Final Plan Development									0	
	Item 13 Subtotal	0	0	0	0	0	0	0	0	0	0.0%
14	Preliminary Plans (65%)										
a.	Preliminary Plans										
	Cover Sheet and Index of Sheets (1 sheet)			2	4	2				8	1.5%
	General Notes and List of State and Local Standards (2 sheets)			2	2					4	0.7%
	Existing Typical Sections (1 sheet)		2	4	6	4				16	2.9%
	Proposed Typical Sections (1 sheet)		2	4	8	4				18	3.3%
	Erosion Control and Landscaping – 2 stages 1"=50' (4 sheets)		2	4	24	4	2	4		40	7.3%
	Stormwater Quality Basin Grading Plan, Planting, and Details 1"=10' (2 sheets)	2	2	6	16	4	2	4		36	6.6%
	Roadway Plan and Profile 1"=20' (6 sheets)	2	4	20	36	10	4	6		82	15.0%
	Bike Path Plan and Profile 1"=20' (2 sheets)	2	2	6	12	2				24	4.4%
	Drainage and Utilities 1"=20' (6 sheets)		2	4	4		6	8		24	4.4%
	Traffic Signal Installation Plan (1 sheet)		2	4					20	26	4.8%
	Traffic Signal Cable Plan and Sequences (1 sheet)		2	4					16	22	4.0%
	Interconnect Schematic (1 sheet)								8	8	1.5%
	Pavement Marking Plan 1"=50' (2 sheets)		2	2	4	2				10	1.8%
	Signing Plan 1"=50' (2 sheets)		2	2	4	2				10	1.8%
	IL Route 60 and Fremont Center Intersection Grading Plan 1"=10' (1 sheet)	2	2	4	8	2				18	3.3%
	Erhart Road and Fremont Center Intersection Grading Plan 1"=10' (1 sheet)	2	2	2	8	2				16	2.9%
	Overall Project Grading Plan with Contours 1"=50' (2 sheets)	2	2	8	16	4				32	5.9%
	Roadway Cross Sections (22 sheets)	2	6	20	32	8	4	8		80	14.7%
b.	Preliminary Design Review Meeting	2	2	4					12	8	1.5%
c.	Preliminary Quantity Calculations and Estimate of Cost		4	16	16	10	2	4		64	11.7%
	Item 14 Subtotal	16	42	118	200	60	20	34	56	546	100.0%



**Fremont Center Road and IL Route 60 Intersection Improvements
Proposal to Furnish Phase II Engineering Services
Lake County Division of Transportation, Unincorporated Lake County, Illinois**

Lake County Division of Transportation | October 19, 2017

Workhours (Page 3 of 3)

Item No.	Task	Staff Classifications & Workhours								Total Workhours	% of Workhours
		Senior Project Manager	Project Manager	Engineer IV	Engineer I	Design Technician	Water Resources Manager	Water Resources Engineer II	Traffic Signals Engineer V		
15	Pre-Final (90%) Plans, Special Provisions and Estimates										
a.	Pre-Final Plans										
	Cover Sheet and Index of Sheets (1 sheet)			1	2	1				4	0.6%
	General Notes and List of State, County, and Local Standards (2 sheets)			1	1					2	0.3%
	Summary of Quantities (1 sheet)		1	2	2	4				9	1.4%
	Schedule of Quantities (6 sheets)		1	4	8	6	1	2	1	23	3.5%
	Alignment and Ties (1 sheet)		1	2	4	1				8	1.2%
	Existing Typical Sections (1 sheet)		1	2	4	2				9	1.4%
	Proposed Typical Sections (1 sheet)		1	2	6	2				11	1.7%
	Erosion Control and Landscaping – 2 stages 1"=50' (4 sheets)	1	1	3	6	2	3	6		22	3.3%
	Stormwater Quality Basin Grading Plan, Planting, and Details 1"=10' (2 sheets)	1	1	3	12	3	1	3		24	3.6%
	Roadway Plan and Profile 1"=20' (6 sheets)	1	4	12	24	6	3	6		56	8.5%
	Bike Path Plan and Profile 1"=20' (2 sheets)	1	1	4	8	2				16	2.4%
	Drainage and Utilities 1"=20' (6 sheets)	2	4	8	2		8	24		48	7.3%
	Traffic Signal Installation Plan (1 sheet)		1	6	4				32	43	6.5%
	Traffic Signal Cable Plan and Sequences (1 sheet)			1					6	7	1.1%
	Traffic Signal Schedule of Quantities and MA Mounted Street Name Signs (1 sheet)			1					6	7	1.1%
	Traffic Signal Interconnect Plan – IL Route 60 from Fremont to Peterson Road (1 sheet)			1					20	21	3.2%
	Traffic Signal Interconnect Schematic – IL Route 60 (1 sheet)			1					8	9	1.4%
	Traffic Signal IDOT Standard Details (8 sheets)			1					4	5	0.8%
	Traffic Signal LCDOT Standard Details (3 sheets)			1					2	3	0.5%
	Pavement Marking Plan 1"=50' (2 sheets)		1	2	4	1				8	1.2%
	Signing Plan 1"=50' (2 sheets)		1	2	4	1				8	1.2%
	IL Route 60 and Fremont Center Intersection Grading Plan 1"=10' (1 sheet)	1	2	2	4	1				10	1.5%
	Erhart Road and Fremont Center Intersection Grading Plan 1"=10' (1 sheet)	1	1	2	3	1				8	1.2%
	Overall Project Grading Plan with Contours 1"=50' (2 sheets)	1	1	6	14	2				24	3.6%
	Roadway Cross Sections (22 sheets)	1	2	16	20	8	1	4		52	7.9%
	Project Specific Construction Details (4 sheets)		2	4	2	4				12	1.8%
	ADA Ramp and Construction Details per PROWAG Guidelines (2 sheets)		2	4	8	4				18	2.7%
	Driveway Construction Layout Plan 1"=5' (7 sheets)		2	2	8	4				16	2.4%
	IDOT and County Standard Construction Details (30 sheets)	1	1	2	4	8				16	2.4%
b.	Pre-Final Special Provisions	2	4	12	8		2	4	4	36	5.4%
c.	Pre-Final Quantity Calculations		4	12	12	10	2	4	12	56	8.5%
d.	Pre-Final Estimate of Cost and Construction Time	1	2	4					2	9	1.4%
e.	Pre-Final QA/QC Review	10	6	6	6	6	2	2	8	46	6.9%
f.	Pre-Final Project Review Meeting with County	1	2	3	2					8	1.2%
g.	Pre-Final Project Review Meeting with IDOT	1	2	3	2					8	1.2%
	Item 15 Subtotal	26	52	138	184	79	23	55	105	662	100.0%
16	Final (100%) Plans, Special Provisions and Estimates										
a.	Final Plans										
	Final Plans	4	12	24	36	16	4	8	16	120	63.2%
b.	Final Special Provisions	2	4	6	4				2	18	9.5%
c.	Final Quantity Calculations		2	4	4	4	2	4	4	24	12.6%
d.	Final Estimate of Cost and Construction Time		1	1						2	1.1%
e.	Final QA/QC Review	8	2	4	4	2	2		4	26	13.7%
	Item 16 Subtotal	14	21	39	48	22	8	12	26	190	100.0%
17	Project Administration and Coordination										
a.	Project Administration	4	24	4	4		4		4	44	23.2%
b.	Project Submittals		12	12	12	4	2	4	4	50	31.3%
c.	Status Meetings	4	8	8						20	12.5%
d.	Utility Company Coordination		4	8	16				4	32	20.0%
e.	Bidding Assistance	2	2	2						6	3.8%
f.	Pre-Construction Meeting Attendance	1	2	3	2					8	5.0%
	Item 17 Subtotal	11	52	37	34	4	6	4	12	160	95.7%
18	Construction Assistance										
a.	Construction Shop Drawing Reviews		2	2					4	8	33.3%
b.	Construction Review and Meeting Attendance	2	6	6					2	16	66.7%
	Item 18 Subtotal	2	8	8	0	0	0	0	6	24	100.0%
	Total Workhours:	102	238	470	618	239	99	205	221	2,192	
	% of Workhours:	4.7%	10.9%	21.4%	28.2%	10.9%	4.5%	9.4%	10.1%	100.0%	



Direct Costs (Page 1 of 3)

Item No.	Task	In-House Direct Cost	Sub-Consultant Cost
1	Project Kick Off Meeting		
	Mileage: 2 trips @ 60 mi./round trip @ \$0.54/mi.	\$64.80	
	Item 1 Subtotal	\$64.80	
4	Field Survey and Base Sheet Development		
	Sub-Consultant: Jorgensen & Associates, Inc.		
	Mileage: 2 trips @ 60 mi./round trip @ \$0.54/mi.	\$64.80	
	Item 4 Subtotal	\$64.80	
7	Special Waste and CCDD Testing		
	Sub-Consultant: Midland Standard Engineering & Testing, Inc.		\$2,681.00
	Item 7 Subtotal		\$2,681.00
8	Wetland Permitting and Coordination		
	Sub-Consultant: Stuedemann Environmental Consulting, LLC		\$6,543.00
	Item 8 Subtotal		\$6,543.00
9	Drainage Design, Storm Water Permitting, and Supporting Docs		
	Mileage: 2 trips @ 60 mi./round trip @ \$0.54/mi.	\$64.80	
	Item 9 Subtotal	\$64.80	



Direct Costs (Page 2 of 3)

Item No.	Task	In-House Direct Cost	Sub-Consultant Cost
11	Review and Confirm Project Right-of-Way Requirements		

Sub-Consultant: Jorgensen & Associates, Inc. (within PHI fee for POHS and ROW)

In-House Civiltech Consultant: David White (Appraisals) \$24,300.00

Sub-Consultant: T-Engineering (Review Appraisals) \$9,000.00

Sub-Consultant: Santacruz Associates (Negotiations and ROW Certification) \$29,800.00

Item 11 Subtotal \$24,300.00 \$38,800.00

14 Preliminary Plans (65%)

Printing: County 3 Sets of 58 Sheets 11"x17" pages @ \$0.15/ea. \$26.10

Printing: Utilities 10 Sets of 58 11"x17" sheets @ \$0.15/ea. \$87.00

Deliveries: County 1 @ \$50/ea. \$50.00

Shipping: Utilities 10 @ \$25/ea. \$250.00

Item 14 Subtotal \$413.10

15 Pre-Final (90%) Plans, Special Provisions and Estimates

Printing: County 3 Sets of 122 Sheets 11"x17" pages @ \$0.15/ea. \$54.90

Printing: IDOT 6 Sets of 122 Sheets 11"x17" pages @ \$0.15/ea. \$109.80

Printing: Utilities 10 Sets of 122 11"x17" sheets @ \$0.15/ea. \$183.00

Printing: Specification Books 10 Sets @ \$25.00/ea. \$250.00

Deliveries: County 1 @ \$50/ea. \$50.00

Deliveries: IDOT 1 @ \$50/ea. \$50.00

Shipping: Utilities 10 @ \$25/ea. \$250.00

Item 15 Subtotal \$947.70



Direct Costs (Page 3 of 3)

Item No.	Task	In-House Direct Cost	Sub-Consultant Cost
16	Final (100%) Plans, Special Provisions and Estimates		
	Printing: County 2 Sets of 122 Sheets 11"x17" pages @ \$0.15/ea.	\$36.60	
	Printing: IDOT 6 Sets of 122 Sheets 11"x17" pages @ \$0.15/ea.	\$130.80	
	Printing: Utilities 10 Sets of 122 11"x17" sheets @ \$0.15/ea.	\$183.00	
	Printing: Specification Books 10 Sets @ \$25.00/ea.	\$250.00	
	Deliveries: County 1 @ \$50/ea.	\$50.00	
	Deliveries: IDOT 1 @ \$50/ea.	\$50.00	
	Shipping: Utilities 10 @ \$25/ea.	\$250.00	
	Item 16 Subtotal	\$950.40	

Total In-House Direct Costs:	\$26,805.60	-
Total Subconsultant Costs:	-	\$48,024.00
TOTAL IN-HOUSE DIRECT & SUBCONSULTANT COSTS:	\$74,829.60	



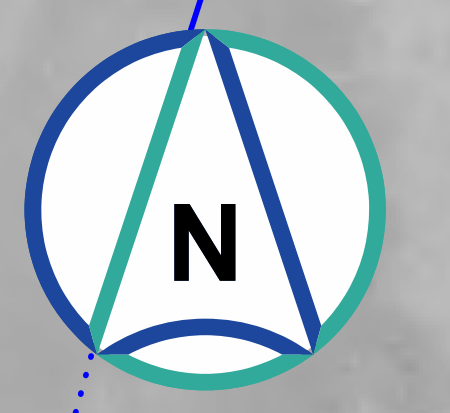
Attachment D

Subconsultant Proposals and Qualifications

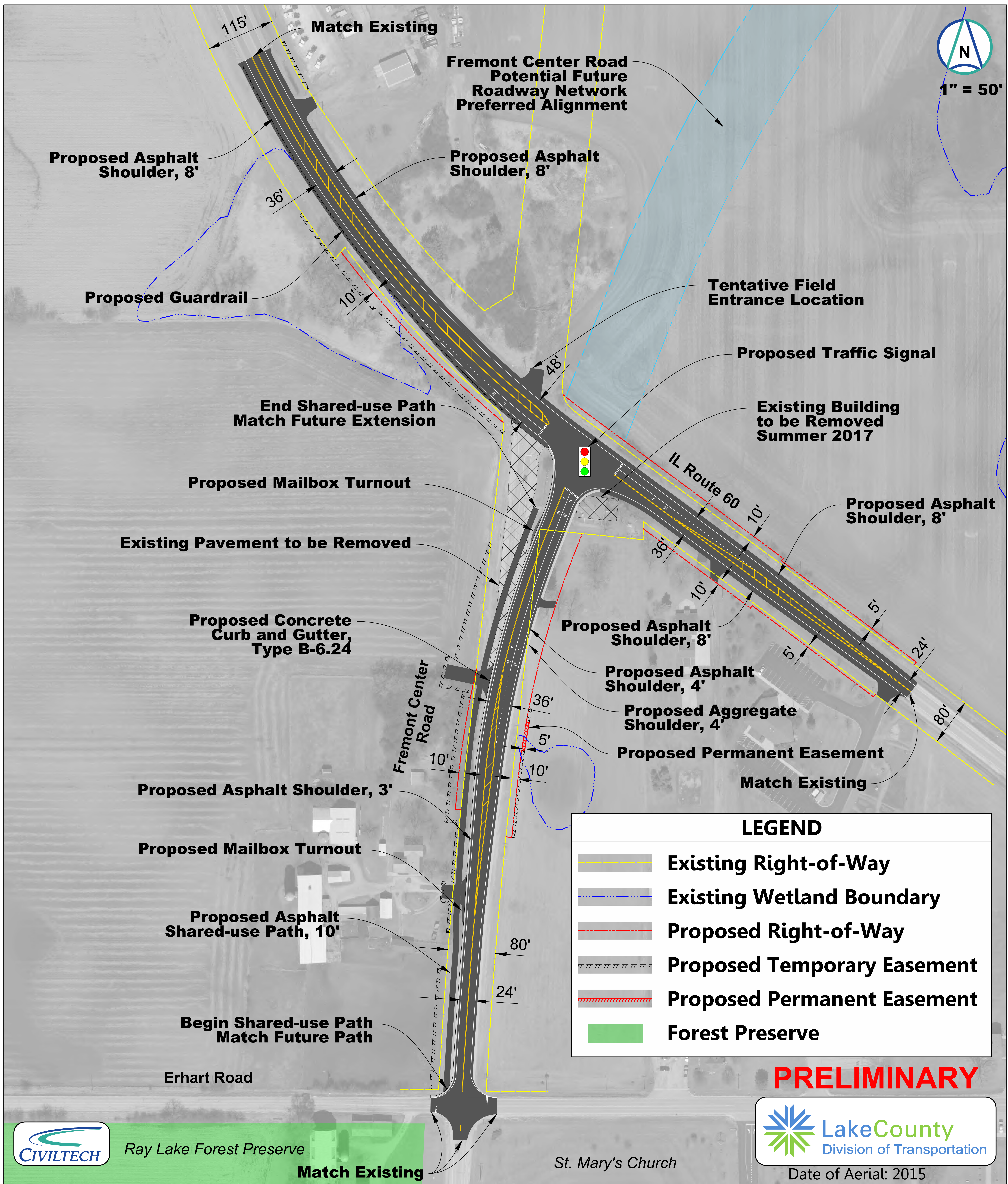
Anticipated Project Schedule

Cost Estimate of Consultant Services

Proposed Intersection Concept Plan



1" = 50'



Fremont Center Road
Potential Future
Roadway Network
Preferred Alignment

Proposed Asphalt
Shoulder, 8'

Proposed Asphalt
Shoulder, 8'

Proposed Guardrail

Tentative Field
Entrance Location

Proposed Traffic Signal

End Shared-use Path
Match Future Extension

Existing Building
to be Removed
Summer 2017

Proposed Mailbox Turnout

IL Route 60

Proposed Asphalt
Shoulder, 8'

Existing Pavement to be Removed

Proposed Concrete
Curb and Gutter,
Type B-6.24

Proposed Asphalt
Shoulder, 8'

Proposed Asphalt
Shoulder, 4'

Proposed Aggregate
Shoulder, 4'

Proposed Permanent Easement

Match Existing

Proposed Asphalt Shoulder, 3'

Proposed Mailbox Turnout

Proposed Asphalt
Shared-use Path, 10'

Begin Shared-use Path
Match Future Path

Erhart Road

Fremont Center
Road

LEGEND

	Existing Right-of-Way
	Existing Wetland Boundary
	Proposed Right-of-Way
	Proposed Temporary Easement
	Proposed Permanent Easement
	Forest Preserve

PRELIMINARY



Ray Lake Forest Preserve

Match Existing

St. Mary's Church



Date of Aerial: 2015