


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 450 E. Devon Ave., Ste. 300
County Lake County – Division of Transportation		City Itasca		
Section 10-00079-16-CH		State IL		

Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds

THIS AGREEMENT is made and entered into this _____ day of Nov, 2015 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Non-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 Gilmer Road and Midlothian Intersection Improvements Phase II Engineering

Route CH V76/ Length 2.01 Mi. 10625.00 FT (Structure No. _____)

Termini Gilmer Rd from Chevy Chase Rd to CN RRD/Midlothian Road from 1,782 FT S. of Gilmer to 1,588 FT N of Gilmer

Description:
Intersection reconstruction and widening with new traffic signals, drainage pedestrian improvements and land acquisition.

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** ~~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 \$1399565.00

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's 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 triplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

ATTEST: _____ of the

 (Municipality/Township/County)
 State of Illinois, acting by and through its

 County Board
 By _____

 Lake County Clerk

 (Seal) Title Chairman of the County Board

RECOMMENDED FOR EXECUTION

 Paula J. Trigg, P.E.
 Director of Transportation/County Engineer
 Lake County

Executed by the ENGINEER:

ATTEST: _____

 Engineering Firm

 Street Address

 City, State
 By _____

 Title _____

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

Exhibit A-1

Phase II Scope of Engineering Services

Gilmer Road and Midlothian Road Intersection Improvements

DRAFT

I. PROJECT UNDERSTANDING AND APPROACH

This project includes improvements to the intersection of Gilmer Road and Midlothian Road. Local jurisdictions include unincorporated Lake County, the Village of Hawthorne Woods and Ela Township. Gilmer Road is under the jurisdiction of Lake County, and Midlothian Road is IDOT jurisdiction.

The Phase I design of the project is currently on-going. Our project understanding is based on the draft PDR and associated documents provided by the County for review. The project will utilize local funding for design and construction, and is currently anticipated to be processed and approved through IDOT as a permit project.

The proposed improvement will require the acquisition of permanent right-of-way and temporary easements. The scope of work under this Phase II engineering proposal will include the preparation of the necessary Plat of Highways, appraisals, review appraisals, and negotiations necessary to acquire the right-of-way.

A Phase II Engineering scoping meeting was held with County staff on September 14, 2015 and a copy of the minutes are attached to this proposal to further define the work under this agreement.

II. SCOPE OF SERVICES

All work will be performed in accordance with the Lake County Division of Transportation standards and guidelines and the Illinois Department of Transportation Bureau of Design and Environment (BDE) and Bureau of Local Roads and Streets (BLRS) Manuals. In addition, all permitting will follow the requirements set forth by the Lake County Stormwater Management Commission, Illinois Environmental Protection Agency, and the United States Army Corps of Engineers.

1. Data Collection and Early Coordination

- A. Initial Meeting with County** - We will hold a joint meeting with the Lake County Division of Transportation to discuss the Phase I work performed to date, project requirements, schedule, and coordination with IDOT and any other jurisdictions involved with the project.
- B. Obtain/Update and Review Record Data** - The Phase II Engineers will review the Phase I project information in detail to ensure that the design of the proposed improvements is in accordance with the report. It was noted that a number of comments made on the Phase I engineering work were proposed to be deferred to the Phase II engineering. Civiltech will track any outstanding comments that require addressing during Phase II. Furthermore, the report will be reviewed to ensure that any commitments made during the Phase I preliminary engineering stage of the project are followed through during Phase II design engineering. We will obtain and review available County data including, but not limited to, subdivision plans and plats, existing/proposed record drawings, geotechnical reports, right-of-way data, aerial photography and contour mapping, other existing plans, and utility atlases.

Gilmer Road and Midlothian Road Intersection Improvements

- C. Preliminary Utility Company Coordination** - We will send letters to the utility companies within the project limits, including the Village of Hawthorne Woods and Lake County Public Works requesting copies of their utility atlases in order to confirm or update the information obtained during Phase I. The information collected will be incorporated into the project base drawing.
- D. Supplemental Topographic Survey** – This item includes obtaining additional survey at locations where the original survey did not cover what is anticipated to be part of the Phase II engineering work. Trotter and Associates provided the original survey. They will gather this supplemental survey information as a subconsultant to Civiltech. We have included manhours to coordinate the supplemental survey with Trotter and Associates.
- E. Pavement Cores** – Six additional pavement cores are needed to supplement the geotechnical report prepared during Phase I. These cores are near the project limits to confirm that the existing pavement is suitable for widening and resurfacing. Approximate locations are Gilmer Road stations 472, 477 and 481+50, and Midlothian Road stations 600, 604 and 631. We propose to use Midland Standard Engineering & Testing, Inc. as a subconsultant to perform supplemental pavement coring for this project.
- F. Field Review of Survey** – This item includes review of the existing topographic survey and performing a “plan-in-hand” field check of the project site to verify the completeness and accuracy of the survey. We will also photo document 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. At this time we will also establish as accurately as possible, the locations of existing private utilities in the field using a combination of the atlases obtained during our Preliminary Utility Company Coordination and visual observation in the field.
- G. Lake County Stormwater Management Commission Kick-Off Meeting** – We will meet with LCSMC to discuss the project and confirm permitting requirements for the project prior to starting detailed drainage design and wetland permitting work.
- H. IDOT Project Kick-off Meeting** - Once we have had the initial meeting with the County and a project schedule has been set, we will conduct a joint meeting with the Illinois Department of Transportation to discuss the project, further define IDOT’s processing requirements, and gain everyone’s acceptance of the project schedule and commitment to timely reviews.

2. Preliminary (65%) Engineering

- A. Plan Base Sheet Preparation** - We will plot existing topographic aerial/survey information and develop plan base sheets at a scale of 1" = 20' and 1"=50' for use in the development of contract plans. Any updated existing utility information that has been obtained during the data collection phase and survey phase will also be plotted on the base sheets.
- B. Review and Confirm Project Right-of-Way Requirements** - We will review the proposed roadway alignment and horizontal and vertical geometrics with respect to the existing right-of-way. 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.

Gilmer Road and Midlothian Road Intersection Improvements

C. Pavement Design – Pavement designs were completed during the Phase I engineering, and the County has indicated concurrence with the Gilmer Road design. We will complete a pavement design for Midlothian Road to confirm what was anticipated during Phase I. This work will be in accordance with the geotechnical report and the IDOT BDE Manual. The pavement design for Midlothian Road will be completed using IDOT's standard forms and will be submitted to IDOT for approval. No pavement life cycle cost analyses are anticipated to be required.

D. Drainage Design – All drainage calculations will be completed in accordance with the Lake County Stormwater Management Commission's requirements and IDOT Drainage Manual, incorporating the recommended design included in the Location Drainage Study. Stormwater detention for the proposed improvement is proposed by expanding an existing LCDOT detention basin as well as by oversized storm sewers. There are no floodplain impacts as a result of the proposed improvement.

Once we have completed the preliminary design of the geometrics and drainage, we will conduct a pre-application meeting with Lake County Stormwater Management Commission (LCSMC) and LCDOT to discuss the project and further define the Watershed Development Ordinance permit requirements. We will confirm the Phase I drainage design, and update calculations based on actual Phase II engineering for use in permitting. It is anticipated that updated drainage calculations will be submitted to IDOT as part of the Phase II submittals as well as LCSMC for permit approval.

E. 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. Construction staging, maintenance of traffic concepts and detour routes will be agreed to prior to the pre-final plan development. Civiltech will prepare and submit a technical memorandum with preliminary plan exhibits to establish agreed to Maintenance of Traffic / Staging concepts.

F. Preliminary Plans (65%) - We will prepare preliminary plans containing the following drawings:

- Cover Sheet and Index of Sheets
- General Notes and List of State and Local Standards
- Alignment, Ties and Benchmarks 1"=100'
- Existing Typical Sections
- Proposed Typical Sections
- Roadway Plan and Profile 1"=20'
- Superelevation Details
- Multi-use Path Plan and Profile/Drainage and Utilities 1"=50'
- Drainage and Utilities 1"=50'
- Drainage Details
- Detention Basin Plan 1"=20'
- Pavement Marking Plan 1"=50'
- Signing Plan (Gilmer and Midlothian Roads) 1"=50'
- Retaining Wall Plan and Elevation 1"=20'
- Roadway Cross Sections 1"=10' H : 1"=5' V
- Multi-use Path Cross Sections 1"=10' H : 1"=5' V
- Traffic Signal Modernization Plan (Gilmer/Midlothian)
- Cable Plan, Sequences and Schedule of Quantities (Gilmer/Midlothian)

Gilmer Road and Midlothian Road Intersection Improvements

The Preliminary Plan 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 throughout the design process to resolve any current design issues. With the approval of LCDOT, we will also submit the preliminary plans to the other local jurisdictional agencies.

At the request of the County, we will review the feasibility of combining the Plan and Profile and Drainage and Utility sheets into a single set of 1"=20' scale drawings depending on the extent of drainage and utility information that needs to be included in the drawings.

Separate multi-use path Plan and Profile sheets will be developed for the path north of the roadway pavement reconstruction limit at a scale of 1"=50' versus the 1"=20' roadway Plan and Profile sheets.

It is anticipated that some smaller retaining walls may be required at various locations yet to be defined during Phase II engineering. These walls are expected to be landscape block walls with their construction being covered by a General Plan and Elevation drawing and a performance based special provision.

In an effort to alert the various utility providers 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 Lake County's Utility Coordinator for their records.

G. Preliminary Quantity Calculations and Estimate of Cost - We will perform detailed quantity calculations at the preliminary stage of the plan development. Two sets of calculations will be performed by separate engineers in order to ensure the accuracy of the calculations. A Preliminary Estimate of Cost will be prepared in order to verify LCDOT budget numbers for the project.

Quantity calculations will be broken out to meet the various funding responsibilities and sources, and provide any necessary back up for IGA's.

H. 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.

3. Right-of-Way Documents and Coordination

There are 53 anticipated parcels that right-of-way and/or easements are required from as defined during the Phase I engineering work. For purposes of this proposal, we have assumed appraisals, review appraisals, and negotiations will be required for all parcels.

A. Sub-consultant Coordination - The preparation of the Plat of Highways and Legal Descriptions will be performed by **Trotter & Associates, Inc.** in accordance with LCDOT requirements and the IDOT Plats of Highway Checklist. We will provide Trotter & Associates electronic copies of the proposed alignment and right-of-way for use in preparing the Plat of Highways and tying down the centerline alignment. Trotter & Associates will obtain the initial title commitments for the acquisition parcels.

Gilmer Road and Midlothian Road Intersection Improvements

David W. White of **Civiltech** will provide the necessary valuation and relocation services. We propose to use **T Engineering Services Ltd.** for review appraisals and to use **Santacruz Land Acquisitions** as the negotiator for the land acquisition. All such services shall be performed in accordance with the policies of the County, and where applicable, the Illinois Department of Transportation Land Acquisition Policies and Procedures Manual.

Building demolition is anticipated as part of two parcel acquisitions, and Terracon will provide pre-demolition surveys as a sub-consultant to Civiltech.

Civiltech will review the title commitments obtained as part of the Plat of Highways development for evidence of any prior rights utility easements along the roadways, with an underlying goal of confirming or denying any potential LCDOT cost liabilities associated with utility relocation work.

This item includes work involved with meetings and 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.

- B. Right-of-Way Coordination Meetings** - We will arrange and attend meetings with the County to kick off the proposed right-of-way acquisition as well as right-of-way status meetings. We also anticipate the need to meet with some property owners to support the negotiation efforts.

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

- A. Pre-Final Plans** - 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 BDE manual, 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:

- Cover Sheet and Index of Sheets
- General Notes and List of State and Local Standards
- Summary of Quantities
- Schedule of Quantities
- Alignment, Ties and Benchmarks 1"=100'
- Existing Typical Sections
- Proposed Typical Sections
- Erosion Control and Landscaping – 3 stages and pond, 1"=50'
- Erosion Control Details
- Stages of Construction – sequences and typical sections
- Stages of Construction – 3 stages, 1"=50'
- Roadway Plan and Profile 1"=20'
- Multi-use Path Plan and Profile/Drainage and Utilities 1"=50'
- Site Reconfiguration Plans 1"=20'
- Superelevation Details
- Plat of Highways
- Drainage and Utilities 1"=20'

Gilmer Road and Midlothian Road Intersection Improvements

- Drainage Details
- Detention Basin Plan 1"=20'
- Detention Basin Planting Plan 1"=20'
- Intersection Grading Plan and Details 1"=20'
- ADA/PROWAG Grading Details 1"=10'
- Pavement Marking Plan 1"=50'
- Signing Plan (Gilmer and Midlothian Roads) 1"=50'
- Retaining Wall Plan and Elevation
- Roadway Cross Sections
- Multi-use Path Cross Sections
- Traffic Signal Modification Plan (Gilmer/Schwerman)
- Cable Plan, Sequences and Schedule of Quantities (Gilmer/Schwerman)
- Temporary Signal Plan (Gilmer/Midlothian)
- Temporary Cable Plan and Sequences (Gilmer/Midlothian)
- Traffic Signal Modernization Plan (Gilmer/Midlothian)
- Cable Plan, Sequences and Schedule of Quantities (Gilmer/Midlothian)
- Temporary Interconnect Plan
- Temporary Interconnect Schematic
- Interconnect Plan
- Interconnect Schematic
- Mast Arm Mounted Street Name Sign Sheet
- IDOT and LCDOT Traffic Signal Details
- Project Specific Construction Details
- LCDOT and IDOT Standard Construction Details

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. 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. Staged cross sections will be prepared in order to accurately estimate earthwork quantities by stages of construction. The decision about whether to include all staged sections in the bidding plans will be made collectively with the County at a later time.

The pre-final contract documents will be submitted to the County and IDOT. 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's 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

Gilmer Road and Midlothian Road Intersection Improvements

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 LCDOT** - 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** - A project review meeting will be held with the County and IDOT to address design issues and plan comments generated from the pre-final contract document review.

5. 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 LCDOT 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 LCDOT with pdf's of the plans and bid documents per the LCDOT Bid Package Format Submittal guidelines, as well as the number of full and reduced size copies that they request. We will also submit the contract plans to the various utility companies and to IDOT for final permit issuance.

- B. Final Special Provisions** - All comments received pertaining to the pre-final 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.

Gilmer Road and Midlothian Road Intersection Improvements

- 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.

6. Project Administration, Coordination and Permits

- 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. **Project Website** – Civiltech will take ownership of the project website during the Phase II engineering, and keep it up to date with project status and other pertinent information leading up to construction. We will work with the County to develop ideas and strategies to make the most of the project website during the design phase.
- 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 four 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. **IDOT Permitting and Agency Coordination** – This project is anticipated to be approved as a permit project by IDOT. Civiltech will work with the Department throughout the Phase II engineering to respond to plan review comments, assist the County with any interagency coordination, and complete the necessary permit forms and documentation. We will also attend IDOT plan review meetings to discuss comments and outstanding design issues.

We will also assist the County by providing supporting calculations and costs for local agency agreements for the pedestrian facilities.
- F. **LCSMC Watershed Development Ordinance and USACOE Wetland Permitting and Documentation** - This project will require a permit submittal to Lake County Stormwater Management Commission in compliance with the Countywide Watershed Development Ordinance. A Regional Permit for Transportation Projects will also be required from the USACOE for impacts to Wetlands and Waters of the US. We will prepare and submit the permit applications along with the required calculations, exhibits, plans, and documentation. An IDNR floodway permit is not required and Lake County SMC permit fees are not included.

Gilmer Road and Midlothian Road Intersection Improvements

Work associated with the wetland field investigations, jurisdictional determinations, and preliminary endangered species assessments involved with this project have been included previously in the Phase I engineering contract. It is anticipated that wetland impacts will be unavoidable and that mitigation will be required through the purchase of wetland credits. The scope of this work does not include the funding for the actual purchase within the selected wetland bank. The wetland portion of the permitting process will be performed by **Huff and Huff** as a sub-consultant to Civiltech.

Civiltech will have Huff and Huff review isolated wetland site w9R to confirm that it meets the criteria of an isolated wetland. This wetland site was included in the PJD obtained during Phase I, however there remains question as to whether or not this site should be classified as a wetland.

Huff and Huff will also review and extend if necessary, the wetland site w8R since that parcel is now anticipated to be a full acquisition, with the pond area being expanded for additional detention volume

- G. NPDES Permitting and Documentation** - The NPDES permit, along with a Stormwater Pollution Prevention Plan, 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 Lake County requirements.
- H. Special Waste** - A Preliminary Environmental Site Assessment report was prepared as part of the Phase I engineering. It was determined that 3 REC's exist that will require further investigation as part of the Phase II work. We propose to utilize Huff & Huff to complete a Preliminary Site Investigation (PSI) and also provide Clean Construction and Demolition Debris (CCDD) certification as part of the Phase II design work.
- I. Post-Approval Alignment Staking** - Upon approval of the roadway plans and alignment, we propose to have the proposed alignment staked with PK nails or iron pipes at the 100-foot stations, station equations and alignment control points, in accordance with the Lake County Division of Transportation Surveying Procedures. This work is to be performed by Trotter and Associates, Inc. as a sub-consultant to Civiltech. The man hours included are for coordination between Civiltech and Trotter.

7. Bidding and Construction Assistance

- A. Bidding Assistance** - We will review any questions received from contractors during the bidding process and provide any necessary responses to clarify the documents.
- B. Pre-Construction Meeting Attendance** - We will attend the pre-construction meeting at LCDOT to answer any questions regarding the design and contract documents. We will also provide responses to any questions from contractors during the bidding process, if necessary.
- C. 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.
- D. Construction Phase Public Meeting Attendance** – In order to maintain positive project perception with the local stakeholders, the County will hold a Construction Phase public informational meeting. Civiltech will attend this meeting, and we will develop and produce exhibits and/or handouts for use at the meeting.

Meeting Minutes

Re: Gilmer Road and Midlothian Road
Phase II Scoping Meeting

Date: 9/14/2015

Location: LCDOT Design Conference Room

Time: 1:00 PM

Attending:

NAME / AFFILIATION	TEL	EMAIL
Emily Karry, P.E. / LCDOT	(847)377-7400	ekarry@lakecountyil.gov
Michael Zemaitis, P.E. / LCDOT	(847)377-7400	mzemaitis@lakecountyil.gov
Darryl Kuntz, P.E. / LCDOT	(847)377-7400	dkuntz@lakecountyil.gov
Richard McMorris, P.E. / LCDOT	(847)377-7400	rmcmorris@lakecountyil.gov
Jonathan Vana, P.E. / Civiltech	(630)735-3382	jvana@civiltechinc.com
David Kreeger, P.E. / Civiltech	(630)735-3375	dkreeger@civiltechinc.com

Status of Phase I:

- HDR is addressing comments on Draft PDR from IDOT and LCDOT
- A comment log was provided by HDR as part of the information provided to Civiltech by the County to prepare the Phase II scope of services and fee calculations.
- There are additional County comments that were provided by HDR, but the County did not believe they would have an impact on the Phase II scope of work or fee calculations.
- Civiltech will include manhours to review comments as part of the Early Coordination and Data Collection stage.
- Public Hearing is anticipated for 10/20/2015

Since local funding commitments are not in place for the 10 foot wide multi use path on the east side of Gilmer Road between Schwerman Road and Chevy Chase Drive, Civiltech will break out the design hours for this item of work in case it does not get designed.

LCDOT expressed concern about the anticipated multi use path detention exclusion that is currently included in the Phase I documents. This will need to be discussed with LCSMC to verify their concurrence, or they could also require that any additive impervious as a result of the path construction be included in the overall project calculations.

It is anticipated that the Phase II scope will need to include updating of the Phase I drainage calculations based on more detailed design and agency coordination.

Pulte will provide as-built pond information for use in the Phase II stormwater calculations and permitting. Civiltech will review the feasibility of eliminating the berm in between the existing and proposed LCDOT ponds on the south west side of Gilmer Road that is currently proposed in order to maximize detention volume achieved.

BMP measures will be reviewed and prioritized during the design to protect Sylvan Lake water quality. LCDOT would like to review IDOT's minimum ditch bottom width of 4' along Midlothain Road in efforts to minimize ROW needs.

Civiltech is in the process of confirming the land acquisition parcel count. Civiltech will utilize the anticipated proposed ROW needs included in the Phase I for purposes of developing the scope and fees for land acquisition services. However, the proposed ROW needs will be reviewed in detail up front in the Phase II design with the goal being to minimize needs.

There are two relocation parcels, one on Midlothian Road and one on Gilmer Road. Building demolition will not be by the property owners and may be part of the construction contract. Therefore Civiltech will include the necessary provisions in the Phase II contract to have this demolition included in the construction contract documents.

The County will be discussing the possibility of IDOT's assistance with the land acquisition including their quick take authority. Depending on IDOT's willingness to assist with the land acquisition, relocation assistance may also be provided by IDOT for the above referenced 2 parcels. Civiltech will include the relocation assistance services in our proposal, and they would be deleted if the relocation was performed by IDOT.

Considering the significant site impacts to the Gilmer Road House, Civiltech will include manhours to complete a specialty report for this parcel.

Civiltech noted that full pavement reconstruction is shown in the Phase I report through the tapers at the project limits. Traffic shifting and construction staging under this design will need to extend beyond the reconstruction limits as a result of temporary embankment widening and temporary pavement construction. In order to not impact the rail crossing on Gilmer Road and the existing culvert under Midlothain Road at the southwest project limit, Civiltech proposed that the tapers be revised to widening and resurfacing. This approach was used successfully as part of the County's Fairfield Road and IL Route 176 intersection project, and will allow the staging and traffic shifting to be designed to stop before these features that should be avoided.

The County is satisfied with the pavement designs shown on the Phase I typical sections. Civiltech will provide any needed supplemental core locations to the County which will be obtained as part of another contract.

Wetland flags have been surveyed, LCDOT will confirm that the boundary verification will be completed by HDR. Phase II contract should include time to re-flag in case it becomes necessary.

No additional detailed tree survey will be required. Tree survey information will be limited to topographic location and size as part of the supplemental survey work within newly surveyed areas.

Page 11 or 25 of the draft PDR indicates that a landscaping plan will be developed with the Village of Hawthorne Woods during Phase II. The County confirmed that any ROW plantings will be limited to trees, and the landscaping plans will not require a landscape architect.

Civiltech will review the Phase I profiles and intersection grading to see if the current design can be improved with respect to the Cherry Hill driveway and drainage.

A project website was developed to aid in the Phase I engineering public involvement activities. Civiltech will carry the website forward during Phase II.

No need to include sewer televising in the Phase II contract. If needed televising will be done by locals or Lake County Public Works.

Hours should be included for Phase 3 coordination, preparation of Phase 3 public meeting exhibits and attendance at the Phase 3 public meeting.

Various other items to be addressed during Phase II engineering:

- Mailbox turnouts
- Access to detention pond
- Train queue detection
- Re-visit isolated wetland site on Midlothian Road
- Small retaining walls may be required at some locations

By: Jon Vana

Date: 9/21/2015

Exhibit A-2 Cost Estimate of Consultant Services

	Personnel & Hours							Total Hours	% of Hours	Labor Cost	
	Director of Design Services	Project Manager	Project Engineer	Design Engineer	Traffic Signal Engineer	Senior Design Technician	QA/QC Engineer				
1 Data Collection and Early Coordination	\$70.00	\$52.00	\$41.00	\$29.50	\$42.00	\$33.00	\$70.00				
	11	35	38	16	12	0	0	112	1.5%	\$5,124.00	
2 Preliminary (65%) Engineering											
	70	305	907	1031	32	452	0	2797	38.3%	\$104,621.50	
3 Right-of-Way Documents and Coordination											
	16	56	36	24	0	16	0	148	2.0%	\$6,744.00	
4 Pre-Final (90%) Plans, Special Provisions and Estimates											
	78	281	802	875	184	339	40	2599	35.6%	\$100,481.50	
5 Final (100%) Plans, Special Provisions and Estimates											
	27	114	248	200	71	40	16	716	9.8%	\$29,308.00	
6 Project Administration, Coordination and Permits											
	52	192	242	186	28	120	0	820	11.2%	\$34,169.00	
7 Construction Assistance											
	7	31	40	0	8	16	0	102	1.4%	\$4,606.00	
Total Cost										\$285,054	
Multiplier*	2.67										\$761,094
Direct Costs and Sub Consultant Expense (See attached calculation)											\$638,471
							Total Engineering Cost:	7294	100.0%	\$1,399,565	

*Multiplier
 1(Direct Labor)+OH + 0.145*(1+OH)
 IDOT Approved OH Rate = 133.51%

Exhibit A-3 Manhours (page 1 of 3)

Task No.	Task	Personnel & Hours							Total Hours	% of Hours																																																																																																																																																																																																																																																																																																																																																																																						
		Director of Design Services	Project Manager	Project Engineer	Design Engineer	Traffic Signal Engineer	Senior Design Technician	QA/QC Engineer																																																																																																																																																																																																																																																																																																																																																																																								
1	Data Collection and Early Coordination																																																																																																																																																																																																																																																																																																																																																																																															
A.	Initial Meeting with County	3	3	4					10	8.9%																																																																																																																																																																																																																																																																																																																																																																																						
B.	Obtain/Update and Review Record Data	2	4	4	4	4			18	16.1%																																																																																																																																																																																																																																																																																																																																																																																						
C.	Preliminary Utility Company Coordination		1	4	4	4			13	11.6%																																																																																																																																																																																																																																																																																																																																																																																						
D.	Supplemental Topographic Survey (by Trotter) coordination only		12	8					20	17.9%																																																																																																																																																																																																																																																																																																																																																																																						
E.	Pavement Cores (by MSET) coordination only		1	2					3	2.7%																																																																																																																																																																																																																																																																																																																																																																																						
F.	Field Review of Survey		8	8	8	4			28	25.0%																																																																																																																																																																																																																																																																																																																																																																																						
G.	LCSMC PreApplication Meeting	3	3	4					10	8.9%																																																																																																																																																																																																																																																																																																																																																																																						
H.	IDOT Project Kick-Off Meeting	3	3	4					10	8.9%		Sub-total Item 1	11	35	38	16	12	0	0	112	100.0%	2	Preliminary (65%) Engineering												Sheet Count									A.	Plan Base Sheet Preparation		2	8	24		40		74	2.6%	B.	Review and Confirm Project Right-of-Way Requirements		4	24	40				108	3.9%	C.	Pavement Design			4	4				9	0.3%	D.	Drainage Design		20	60	180		40		480	17.2%	E.	Maintenance of Traffic Concept		2	8	24		16		74	2.6%	F.	Preliminary Plans								0	0.0%		Cover Sheet and Index of Sheets	1		1	1				2	0.1%		General Notes and List of State and Local Standards	3		1	2				5	0.2%		Alignment, Ties and Benchmarks 1"=100'	2	1	2	4	4	2		13	0.5%		Existing Typical Sections	3		2	4	8	8		22	0.8%		Proposed Typical Sections	5		4	12	16	12		44	1.6%		Roadway Plan and Profile 1"=20'	15	8	40	120	160	60		388	13.9%		Superelevation Details	1	1	2	12	8	2		25	0.9%		Multi-use Path Plan and Profile/Drainage and Utilities 1"=50'	3	4	24	60	80	40		208	7.4%		Drainage and Utilities 1"=50'	15	8	40	160	180	80		468	16.7%		Drainage Details	3		4	20	20	8		52	1.9%		Detention Basin Plan 1"=20'	2	1	4	32	32	16		85	3.0%		Pavement Marking Plan 1"=50'	4	1	2	8	16	16		43	1.5%		Signing Plan 1"=50'	4	1	2	8	24	16		51	1.8%		Retaining Wall Plan and Elevation 1"=20'	2	2	8	12	16	12		50	1.8%		Roadway Cross Sections 1"=10' H : 1"=5' V	42	8	40	96	96	60		300	10.7%		Multi-use Path Cross Sections 1"=10' H : 1"=5' V	20	4	24	56	56	24		164	5.9%		Traffic Signal Modernization Plan (Gilmer/Midlothian)	1					24		24	0.9%		Cable Plan, Sequences and Schedule of Quantities (Gilmer/Midlothian)	1					8		8	0.3%	G.	Preliminary Quantity Calculations and Estimate of Cost		2	8	40	40			90	3.2%	H.	Preliminary Design Review Meeting (Includes Geotechnical Discussion)		3	3	4				10	0.4%		Sub-total Item 2	70	305	907	1031	32	452	0	2797	100.0%	3	Right-of-Way Documents and Coordination										A.	Sub-consultant Coordination		8	40	24	24	16		112	75.7%	B.	Right-of-Way Coordination Meetings		8	16	12				36	24.3%		Sub-total Item 3		16	56	36	24	0	16	148	100.0%
	Sub-total Item 1	11	35	38	16	12	0	0	112	100.0%																																																																																																																																																																																																																																																																																																																																																																																						
2	Preliminary (65%) Engineering																																																																																																																																																																																																																																																																																																																																																																																															
		Sheet Count																																																																																																																																																																																																																																																																																																																																																																																														
A.	Plan Base Sheet Preparation		2	8	24		40		74	2.6%																																																																																																																																																																																																																																																																																																																																																																																						
B.	Review and Confirm Project Right-of-Way Requirements		4	24	40				108	3.9%																																																																																																																																																																																																																																																																																																																																																																																						
C.	Pavement Design			4	4				9	0.3%																																																																																																																																																																																																																																																																																																																																																																																						
D.	Drainage Design		20	60	180		40		480	17.2%																																																																																																																																																																																																																																																																																																																																																																																						
E.	Maintenance of Traffic Concept		2	8	24		16		74	2.6%																																																																																																																																																																																																																																																																																																																																																																																						
F.	Preliminary Plans								0	0.0%																																																																																																																																																																																																																																																																																																																																																																																						
	Cover Sheet and Index of Sheets	1		1	1				2	0.1%																																																																																																																																																																																																																																																																																																																																																																																						
	General Notes and List of State and Local Standards	3		1	2				5	0.2%																																																																																																																																																																																																																																																																																																																																																																																						
	Alignment, Ties and Benchmarks 1"=100'	2	1	2	4	4	2		13	0.5%																																																																																																																																																																																																																																																																																																																																																																																						
	Existing Typical Sections	3		2	4	8	8		22	0.8%																																																																																																																																																																																																																																																																																																																																																																																						
	Proposed Typical Sections	5		4	12	16	12		44	1.6%																																																																																																																																																																																																																																																																																																																																																																																						
	Roadway Plan and Profile 1"=20'	15	8	40	120	160	60		388	13.9%																																																																																																																																																																																																																																																																																																																																																																																						
	Superelevation Details	1	1	2	12	8	2		25	0.9%																																																																																																																																																																																																																																																																																																																																																																																						
	Multi-use Path Plan and Profile/Drainage and Utilities 1"=50'	3	4	24	60	80	40		208	7.4%																																																																																																																																																																																																																																																																																																																																																																																						
	Drainage and Utilities 1"=50'	15	8	40	160	180	80		468	16.7%																																																																																																																																																																																																																																																																																																																																																																																						
	Drainage Details	3		4	20	20	8		52	1.9%																																																																																																																																																																																																																																																																																																																																																																																						
	Detention Basin Plan 1"=20'	2	1	4	32	32	16		85	3.0%																																																																																																																																																																																																																																																																																																																																																																																						
	Pavement Marking Plan 1"=50'	4	1	2	8	16	16		43	1.5%																																																																																																																																																																																																																																																																																																																																																																																						
	Signing Plan 1"=50'	4	1	2	8	24	16		51	1.8%																																																																																																																																																																																																																																																																																																																																																																																						
	Retaining Wall Plan and Elevation 1"=20'	2	2	8	12	16	12		50	1.8%																																																																																																																																																																																																																																																																																																																																																																																						
	Roadway Cross Sections 1"=10' H : 1"=5' V	42	8	40	96	96	60		300	10.7%																																																																																																																																																																																																																																																																																																																																																																																						
	Multi-use Path Cross Sections 1"=10' H : 1"=5' V	20	4	24	56	56	24		164	5.9%																																																																																																																																																																																																																																																																																																																																																																																						
	Traffic Signal Modernization Plan (Gilmer/Midlothian)	1					24		24	0.9%																																																																																																																																																																																																																																																																																																																																																																																						
	Cable Plan, Sequences and Schedule of Quantities (Gilmer/Midlothian)	1					8		8	0.3%																																																																																																																																																																																																																																																																																																																																																																																						
G.	Preliminary Quantity Calculations and Estimate of Cost		2	8	40	40			90	3.2%																																																																																																																																																																																																																																																																																																																																																																																						
H.	Preliminary Design Review Meeting (Includes Geotechnical Discussion)		3	3	4				10	0.4%																																																																																																																																																																																																																																																																																																																																																																																						
	Sub-total Item 2	70	305	907	1031	32	452	0	2797	100.0%																																																																																																																																																																																																																																																																																																																																																																																						
3	Right-of-Way Documents and Coordination																																																																																																																																																																																																																																																																																																																																																																																															
A.	Sub-consultant Coordination		8	40	24	24	16		112	75.7%																																																																																																																																																																																																																																																																																																																																																																																						
B.	Right-of-Way Coordination Meetings		8	16	12				36	24.3%																																																																																																																																																																																																																																																																																																																																																																																						
	Sub-total Item 3		16	56	36	24	0	16	148	100.0%																																																																																																																																																																																																																																																																																																																																																																																						

Exhibit A-3 Manhours (page 2 of 3)

Task No.	Task	Sheet Count	Personnel & Hours						Total Hours	% of Hours	
			Director of Design Services	Project Manager	Project Engineer	Design Engineer	Traffic Signal Engineer	Senior Design Technician			QA/QC Engineer
4	Pre-Final (90%) Plans, Special Provisions and Estimates										
A.	Pre-Final Plans										
	Cover Sheet and Index of Sheets	1		1	1				2	0.1%	
	General Notes and List of State and Local Standards	3		1	1	1			3	0.1%	
	Summary of Quantities	5		2	4	4			10	0.4%	
	Schedule of Quantities	30		4	32	40		40	116	4.5%	
	Alignment, Ties and Benchmarks 1"=100'	2		2	8	4		4	18	0.7%	
	Existing Typical Sections	3		2	4	4		2	12	0.5%	
	Proposed Typical Sections	5	1	2	8	8		8	27	1.0%	
	Erosion Control and Landscaping – 3 stages and pond, 1"=50'	15	2	8	24	40		16	90	3.5%	
	Erosion Control Details	8		1	2	3		3	9	0.3%	
	Stages of Construction – sequences and typical sections	4	2	4	16	16		12	50	1.9%	
	Stages of Construction – 3 stages, 1"=50'	15	2	16	60	96		32	206	7.9%	
	Roadway Plan and Profile 1"=20'	15	8	40	80	80		24	232	8.9%	
	Multi-use Path Plan and Profile/Drainage and Utilities 1"=50'	3	4	16	40	60		16	136	5.2%	
	Site Reconfiguration Plans 1"=20'	1	2	8	16	24		12	62	2.4%	
	Superelevation Details	1		1	4	4		2	11	0.4%	
	Plat of Highways	30						4	4	0.2%	
	Drainage and Utilities 1"=20'	15	8	40	100	120		40	308	11.9%	
	Drainage Details	3	1	4	16	16		4	41	1.6%	
	Detention Basin Plan 1"=20'	2	1	4	20	20		4	49	1.9%	
	Detention Basin Planting Plan 1"=20'	2		4	16	16		4	40	1.5%	
	Intersection Grading Plan and Details 1"=20'	2	1	3	12	16		8	40	1.5%	
	ADA/PROWAG Grading Details 1"=10'	8	2	12	60	60		8	142	5.5%	
	Pavement Marking Plan 1"=50'	4	1	2	8	8		8	27	1.0%	
	Signing Plan 1"=50'	4	1	2	8	8		8	27	1.0%	
	Retaining Wall Plan and Elevation	2	2	4	8	12		12	38	1.5%	
	Roadway Cross Sections	42	4	32	80	80		32	228	8.8%	
	Multi-use Path Cross Sections	20	2	16	48	48		16	130	5.0%	
	Traffic Signal Modification Plan (Gilmer/Schwerman)	1					24		24	0.9%	
	Cable Plan, Sequences and Schedule of Quantities (Gilmer/Schwerman)	1					8		8	0.3%	
	Temporary Signal Plan (Gilmer/Midlothian)	1					24		24	0.9%	
	Temporary Cable Plan and Sequences (Gilmer/Midlothian)	1					8		8	0.3%	
	Traffic Signal Modernization Plan (Gilmer/Midlothian)	1					24		24	0.9%	
	Cable Plan, Sequences and Schedule of Quantities (Gilmer/Midlothian)	1					8		8	0.3%	
	Temporary Interconnect Plan	2					16		16	0.6%	
	Temporary Interconnect Schematic	1					4		4	0.2%	
	Interconnect Plan	2					32		32	1.2%	
	Interconnect Schematic	1					8		8	0.3%	
	Mast Arm Mounted Street Name Sign Sheet	1					4		4	0.2%	
	IDOT and LCDOT Traffic Signal Details	12					2		2	0.1%	
	Project Specific Construction Details	4		4	16	24		16	60	2.3%	
	LCDOT and IDOT Standard Construction Details	20		1	2	2		4	9	0.3%	
B.	Pre-Final Special Provisions		2	24	40		4		70	2.7%	
C.	Pre-Final Quantity Calculations			8	60	60	16		144	5.5%	
D.	Pre-Final Estimate of Cost and Construction Time		2	8			2		12	0.5%	
E.	Pre-Final QA/QC Review		24					40	64	2.5%	
F.	Pre-Final Project Review Meeting with LCDOT		3	3	4				10	0.4%	
G.	Pre-Final Project Review Meeting with IDOT		3	3	4				10	0.4%	
	Subtotal Item 4		78	281	802	875	184	339	40	2599	100.0%

Exhibit A-3 Manhours (page 3 of 3)

Task No.	Task	Personnel & Hours							Total Hours	% of Hours
		Director of Design Services	Project Manager	Project Engineer	Design Engineer	Traffic Signal Engineer	Senior Design Technician	QA/QC Engineer		
5	Final (100%) Plans, Special Provisions and Estimates									
A.	Final Plans	16	100	180	160	60	40		556	77.7%
B.	Final Special Provisions	2	8	24		2			36	5.0%
C.	Final Quantity Calculations		4	40	40	8			92	12.8%
D.	Final Estimate of Cost and Construction Time	1	2	4		1			8	1.1%
E.	Final QA/QC Review							16	24	3.4%
	Sub-total Item 5	27	114	248	200	71	40	16	716	100.0%
6	Project Administration, Coordination and Permits									
A.	Project Administration	24	48			8			80	9.8%
B.	Project Submittals		4	24	24	8	8		68	8.3%
C.	Project Website	4	8	8			60		80	9.8%
D.	Utility Company Coordination	16	48	72	24				160	19.5%
E.	IDOT Permitting and Agency Coordination	8	32	16	16	12	8		92	11.2%
F.	LCSMC Permitting and Documentation		32	60	80		24		196	23.9%
F.	USACOE Permitting and Documentation		8	32	32		16		88	10.7%
G.	NPDES Permitting and Documentation		2	10	10		4		26	3.2%
H.	Special Waste (by Huff & Huff) coordination only		8	16					24	2.9%
I.	Post Approval Alignment Staking (by Trotter) coordination only		2	4					6	0.7%
	Sub-total Item 6	52	192	242	186	28	120	0	820	100.0%
7	Construction Assistance									
A.	Bidding Assistance		8	16					24	23.5%
B.	Pre-Construction Meeting Attendance	3	3						6	5.9%
C.	Construction Review and Meeting Attendance		16	16					32	31.4%
D.	Construction Phase Public Meeting Attendance	4	4	8		8	16		40	39.2%
	Sub-total Item 7	7	31	40	0	8	16	0	102	100.0%
	Total Hours:	261	1014	2313	2332	335	983	56	7294	
	% of Hours:	3.6%	13.9%	31.7%	32.0%	4.6%	13.5%	0.8%	100.0%	

Exhibit A-4 Direct Costs (page 1 of 2)

ITEM 1 - Printing	
Preliminary Plans	
LCDOT 4 sets X 127 sheets/set X \$0.15/sheet (Reduced size)	\$76.20
IDOT 2 sets X 127 sheets/set X \$0.60/sheet (Full size)	\$152.40
IDOT 6 sets X 127 sheets/set X \$0.15/sheet (Reduced size)	\$114.30
Local Agencies 4 sets X 127 sheets/set X \$0.15 (Reduced size)	\$76.20
Utility Co's 4 sets X 127 sheets/set X \$0.60/sheet (Full size)	\$304.80
Utility Co's 8 sets X 127 sheets/set X \$0.15/sheet (Reduced size)	\$152.40
Pre-Final Plans	
LCDOT 4 sets X 294 sheets/set X \$0.15/sheet (Reduced size)	\$176.40
IDOT 2 sets X 294 sheets/set X \$0.60/sheet (Full size)	\$352.80
IDOT 6 sets X 294 sheets/set X \$0.15/sheet (Reduced size)	\$264.60
Local Agencies 4 sets X 294 sheets/set X \$0.15 (Reduced size)	\$176.40
Utility Co's 10 sets X 294 sheets/set X \$0.15/sheet (Reduced size)	\$441.00
Pre-Final Specification Books	
LCDOT 4 books X \$25/book	\$100.00
IDOT 8 books X \$25/book	\$200.00
Final Plans	
LCDOT 4 sets X 294 sheets/set X \$0.15/sheet (Reduced size)	\$176.40
IDOT 8 sets X 294 sheets/set X \$0.15/sheet (Reduced size)	\$352.80
Local Agencies 4 sets X 294 sheets/set X \$0.15 (Reduced size)	\$176.40
Utility Co's 10 sets X 294 sheets/set X \$0.15/sheet (Reduced size)	\$441.00
Final Specification Books	
IDOT 8 books X \$25/book	\$375.00
Total Item 1	\$4,109.10
ITEM 2 - Shipping	
50 overnight shipping items X \$25/each	
Total Item 2	\$1,250.00
ITEM 3 - Vehicle Expense	
Mileage	
Total Item 3	\$750.00
ITEM 4 - Project Website Hosting	
Domain Registration	
Total Item 4	\$500.00
ITEM 5 - Supplemental Survey and ROW Documents	
Trotter and Associates	
Total Item 5	\$254,240.94
ITEM 6 - Geotechnical Investigation	
Midland Standard Testing & Engineering	
Total Item 6	\$3,800.00

Exhibit A-4 Direct Costs (page 2 of 2)

ITEM 7 - Wetland Permitting, PSI and CCDD		
Huff & Huff		
Total Item 7		\$36,621.25
ITEM 8 - Pre-Demolition Building Surveys		
Terracon		
Total Item 8		\$4,700.00
ITEM 9 - Land Acquisition Services		
Appraisals (Civiltech)		
11 parcels @ \$1,800	\$	19,800.00
34 parcels @ \$2,200	\$	74,800.00
3 parcels @ \$2,500	\$	7,500.00
2 parcels @ \$3,200	\$	6,400.00
Review Appraisals (T Engineering LTD)		
11 parcels @ \$800	\$	8,800.00
3 parcels @ \$1,000	\$	3,000.00
2 parcels @ \$1,300	\$	2,600.00
Relocation Services (Civiltech)		
Project Relocation Plan	\$	3,000.00
2 Property Relocations @ \$8,500 each	\$	17,000.00
Negotiations (Santacruz Land Acquisitions)		
	\$	159,000.00
Total Item 9		\$301,900.00
TOTAL DIRECT COSTS:		\$607,871.29



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

July 27, 2015

Subject: PRELIMINARY ENGINEERING
Consultant Unit
Prequalification File

John Breitsameter
CIVILTECH ENGINEERING, INC.
450 E Devon Ave.
Suite 300
Itasca, IL 60143

Dear John Breitsameter,

We have completed our review of your "Statement of Experience and Financial Condition" (SEFC) which you submitted for the fiscal year ending Dec 31, 2014. Your firm's total annual transportation fee capacity will be \$33,600,000.

Your firm's payroll burden and fringe expense rate and general and administrative expense rate totaling 133.51% are approved on a provisional basis. The actual rate used in agreement negotiations may be determined by our Office of Quality Compliance and Review in a pre-award audit.

Your firm is required to submit an amended SEFC through the Engineering Prequalification & Agreement System (EPAS) to this office to show any additions or deletions of your licensed professional staff or any other key personnel that would affect your firm's prequalification in a particular category. Changes must be submitted within 15 calendar days of the change and be submitted through the Engineering Prequalification and Agreement System (EPAS).

Your firm is prequalified until December 31, 2015. You will be given an additional six months from this date to submit the applicable portions of the "Statement of Experience and Financial Condition" (SEFC) to remain prequalified.

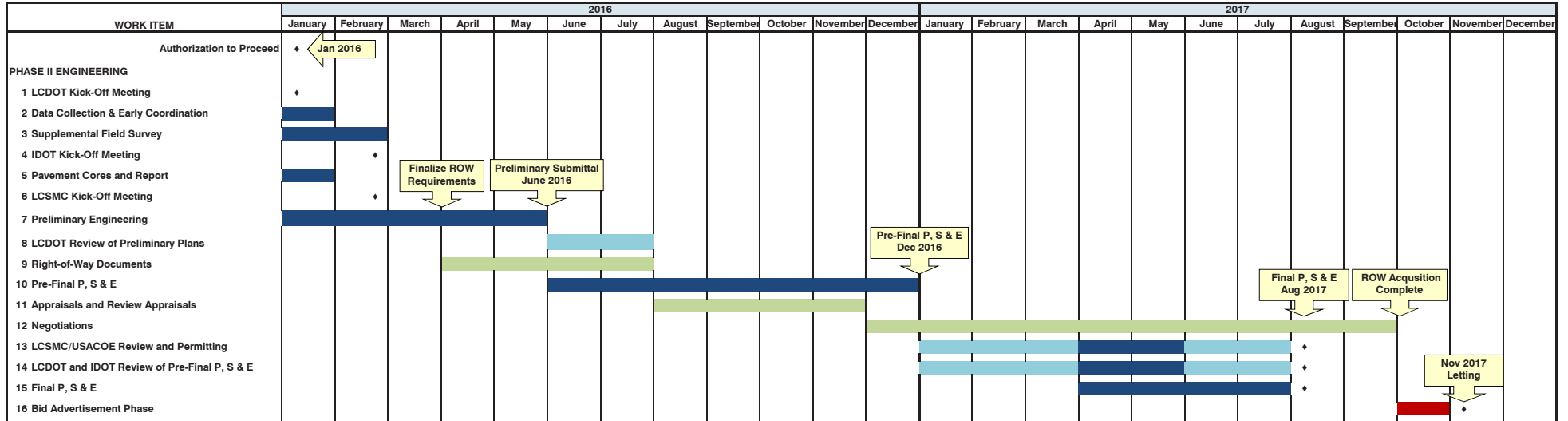
Sincerely,
John Baranzelli
Acting Bureau Chief
Bureau of Design & Environment

SEFC PREQUALIFICATIONS FOR CIVILTECH ENGINEERING, INC.

CATEGORY	STATUS
Special Services - Construction Inspection	X
Special Studies - Traffic Signals	X
Structures - Railroad	X
Special Studies - Location Drainage	X
Environmental Reports - Environmental Assessment	X
Special Studies - Safety	X
Location Design Studies - New Construction/Major Reconstruction	X
Highways - Freeways	X
Location Design Studies - Rehabilitation	X
Location Design Studies - Reconstruction/Major Rehabilitation	X
Hydraulic Reports - Pump Stations	X
Hydraulic Reports - Waterways: Complex	X
Environmental Reports - Environmental Impact Statement	X
Special Studies - Traffic Studies	X
Special Studies - Lighting: Typical	X
Hydraulic Reports - Waterways: Typical	X
Structures - Highway: Simple	X
Special Studies - Feasibility	X
Structures - Highway: Advanced Typical	X
Highways - Roads and Streets	X
Structures - Highway: Typical	X

X	PREQUALIFIED
A	NOT PREQUALIFIED, REVIEW THE COMMENTS UNDER CATEGORY VIEW FOR DETAILS IN EPAS.
S	PREQUALIFIED, BUT WILL NOT ACCEPT STATEMENTS OF INTEREST

Exhibit A-5 Schedule



- ♦ Indicates Project Milestone
- Indicates Consultant Work Time
- Indicates Agency Review Time
- Land Acquisition Phase (18 months total*) +/- 50 parcels
- Advertisement and Bidding Phase

***Notes:**

Land Acquisition Phase is the controlling element of the project schedule, and has been shown as 18 months involving approximately 50 parcels. This is an aggressive schedule considering the number of parcels, and property owner negotiations will need to go well to achieve this target letting. Civiltech will review strategies with the County at the KO meeting to facilitate property acquisitions.

Subconsultant Qualifications

Trotter and Associates, Inc.



October 22, 2015
~~October 8, 2015~~
~~October 1, 2015~~

Jonathan R. Vana, P.E.
Civiltech Engineering, Inc.
450 E. Devon Avenue, Suite 300
Itasca, Illinois 60143

Re: Gilmer Road and Midlothian Road Phase II
Professional Services Agreement

Dear Mr. Vana:

We sincerely appreciate this opportunity to offer our services. Enclosed for your review is the professional services agreement for the referenced project. Please contact us if there are any questions or changes to the listed scope of services. If you would like to proceed with the contract, please sign and return one copy of the agreement.

Sincerely,

TROTTER & ASSOCIATES, INC.

James M. McKenzie, PLS
Vice President – Support Services Group Leader

TROTTER & ASSOCIATES, INC.

Civiltech Engineering, Inc.
Gilmer Rod and Midlothian Road Phase II
October 22, 2015
~~October 8, 2015~~
~~October 1, 2015~~
Page 2

This Page is intentionally left blank

October 22, 2015
~~October 8, 2015~~
~~October 1, 2015~~

Jonathan R. Vana, P.E.
Civiltech Engineering, Inc.
450 E. Devon Avenue, Suite 300
Itasca, Illinois 60143

Re: Gilmer Road and Midlothian Road Phase II
Professional Services Letter Agreement and Exhibits

Dear Mr. Vana,

Trotter and Associates, Inc. (ENGINEER) is pleased to provide professional services to Civiltech Engineering, Inc. (CLIENT) for the Gilmer Road and Midlothian Road Phase II (hereinafter referred to as the "PROJECT").

Lake County has asked Civiltech Engineering, Inc. to prepare and submit a proposal for Phase II engineering for the Gilmer and Midlothian Road intersection project. Part of the Phase II project requires the preparation of right-of-way documents for the acquisition of fee simple parcel takes, permanent easements or temporary construction easements. Supplemental topographic survey is required as well to update the current survey CAD files for the project.

Project Background

Lake County Division of Transportation has completed the Phase I portion of the project and is moving forward with Phase II engineering. The Lake County DOT is looking to improve the intersection to provide enhanced intersection capacity with the addition of storage and through lanes. The project also includes a multi-use trail and a multi-use path along segments of the project. The original contract scope included plats and legal descriptions for up to twenty (20) parcels for proposed right-of-way and/or easements. The addition of proposed multi-purpose pedestrian/bicycle path, sidewalks, and the extension of the Gilmer Road limits to the CN Railroad crossing has affected the number of proposed ROW parcels. It is now estimated that there will be up to fifty three (53) parcels for proposed right-of-way and/or easements for the project overall. Trotter and Associates, Inc. has completed topographic survey and the existing parcel base map for the original 20 parcels that were included in the Phase I portion of this project.

Project Understanding and Scope of Services

Supplemental Topographic Survey – Provide additional supplemental topographic survey in accordance with the topographic survey provided during the previous Phase of the project. The supplemental survey will be limited to areas that have recently had improvements made in and or adjacent to the Gilmer Road and Midlothian Road right-of-ways within the project limits or certain areas that need additional detailed survey data. Additional topographic survey data is also required for the parcel (PIN: 14-03-200-024) locally known as the "flag house". This parcel contains a home with typical appurtenances, numerous trees and wetlands surrounding a pond. TAI will survey the wetland stakes placed by others on this parcel at the time the topographic survey is performed. If the wetland delineation is finished after the topographic field survey has been completed, TAI will locate the wetlands at the time the other defined wetlands are staked in the task outlined below.

The original contract survey limits included only the Gilmer Road/Midlothian Road intersection and approximately 1,100 feet on all four approaches. In addition to the study of the intersection, the original project scope included the study of a proposed multi-purpose pedestrian/bicycle path from Midlothian Road to Chevy Chase Road on the north side of Gilmer Road only. After the project was underway, the Village of Hawthorn Woods expressed a desire to include additional non-motorized accommodations along both sides of Gilmer Road and Midlothian Road. The proposed pedestrian accommodations within the expanded limits are to be a combination of multi-use trails and sidewalks. In addition, the roadway improvements along Gilmer and Midlothian Roads are longer than the original survey coverage. The survey was accomplished such that cross sections could be cut at 50 foot intervals along the roadways and at all private driveways and commercial entrances. The original surveyed limits along the west leg of

the intersection extend approximately 1,100 feet along Gilmer Road, while the limits of the proposed multi-use path to Chevy Chase Road extend approximately 4,600 additional feet to the west. In order to establish accurate proposed right-of-way limits and associated impacts for the proposed multi-use path, additional topographic survey was acquired on both sides of Gilmer Road. The additional survey limits extended 100 feet on each side of the Gilmer Road centerline, from the point where the currently surveyed limits left off to Chevy Chase Road.

The surveyed limits along the east leg of the intersection extend approximately 1,100 feet along Gilmer Road, while the limits of the proposed roadway and non-motorized improvements have been expanded to the CN Railroad crossing which is approximately 1,800 feet to the east. In order to establish accurate proposed right-of-way limits and associated impacts, additional topographic survey was acquired on along Gilmer Road. The additional survey limits extended 100 feet on each side of the Gilmer Road centerline, from the point where the currently surveyed limits left off to the CN Railroad crossing. The surveyed limits along the south leg of the intersection extended approximately 1,100 feet along Midlothian Road. The proposed roadway limits extend 200 feet beyond the original survey limits and field survey was acquired on both sides of Midlothian Road in this area. The additional survey limits extended 100 feet from the existing centerline on both sides of Midlothian. The surveyed limits along the north leg of the intersection extended approximately 1,100 feet along Midlothian Road. The proposed roadway limits extend 200 feet beyond the original survey limits and field survey was acquired on both sides of Midlothian Road in this area. The limits of the proposed multi-use path to Highland Drive extend approximately 1,100 additional feet to the north to Highland Drive. In order to establish accurate proposed right-of-way limits and associated impacts for the proposed multi-use path, additional topographic survey was acquired on the west side of Midlothian Road in this area. The additional survey limits extended 100 feet from the existing centerline on either one or both sides of Midlothian Road as noted above. The topographic survey included natural and manmade features for the development of base sheets for existing and proposed project plan and profile drawings. Trotter and Associates, Inc. has completed all of the topographic surveying that was included in the Phase I portion of this project.

Title Work Coordination– Trotter and Associates, Inc. will coordinate the procurement of the Title Commitments, Later Date Title Commitments, Later Date Title Commitments including examination of judicial proceedings from Wheatland Title for the approximately fifty three (53) parcels that will have some form of property acquisition from them.

Title Commitments– Trotter and Associates, Inc. will procure the Title Commitments, Later Date Title Commitments, Later Date Title Commitments including examination of judicial proceedings from Wheatland Title for the approximately fifty three (53) parcels that will have some form of property acquisition from them. This work does not include any parcels that are found to be currently or previously owned by a railroad. Document copies are not included in the cost and will be invoiced at the time they are requested. TAI has included the quote from Wheatland Title in our proposed fee in the “Services by Others” field of the CECS form and have attached their proposal for your records

Title Work – Trotter and Associates, Inc. will review (QA/QC) of the title commitment and associated documents to ensure that the necessary information will be represented on the parcels and shown on the Plat of Highways or Parcel Plats and catalog the information into the appropriate parcel file folder.

Plat of Highways or Parcel Plats – Prepare a Plat of Highways or individual Parcel Plats in accordance with the Lake County Division of Transportation and the Illinois Department of Transportation Plat of Highways & Legal Description checklists. The original contract scope included plats and legal description for up to twenty (20) parcels for proposed right-of-way and/or easements. The addition of proposed multi-purpose pedestrian/bicycle path, sidewalks, and the extension of the Gilmer Road limits to the CN Railroad crossing affected the number of proposed ROW parcels. It is now estimated that there will approximately fifty three (53) parcels for proposed right-of-way and/or permanent or temporary easements for the project overall. Trotter and Associates, Inc. has included revisions for up to 5 parcel in our scope of services and associated fees.

The original project scope included plats and legal descriptions for up to twenty (20) parcels for proposed right-of-way and/or easements. The addition of proposed multi-purpose pedestrian/bicycle path, sidewalks, and the extension of the Gilmer Road limits to the CN Railroad crossing affected the number of proposed ROW parcels. The addition caused an increase in the parcel count by 40 parcels bringing the total to approximately 60 parcels. However, the scope of services for this addition was modified to only determine the existing right-of-way line for the additional parcels under this revised supplemental scope of services. TAI was not engaged by its former client to produce any documents associated with this task during the Phase I portion of this project. However, TAI has completed the base parcel map for the twenty (20) parcels that were originally identified in the initial project scope as they existed at that time. Some of those parcels may have had changes in their legal descriptions or have been subdivided and will need to be revised accordingly. No further billing for this work will occur under the Phase I contract. As part of the addendum to the scope in Phase I, the existing parcel base map was removed from our scope of services and TAI was only contracted to produce the existing right of way line. No further parcel work was completed during Phase I.

Post-Approval Alignment Staking – Upon approval of the roadway plans and alignment, we will stake the approved alignment with PK nails and/or iron pipes or rods at the 100-foot stations, station equations and alignment control points in accordance with the Lake County Division of Transportation Surveying procedures.

Wetland Staking – Provide one set of stakes for the wetland areas that were previously delineated by others in Phase I. Wetland data to be provided to Trotter and Associates, Inc. in an acceptable format to accomplish this task.

Changes to the scope of services outlined in this agreement shall be authorized through execution of an Exhibit D - Contract Addendum.

Compensation

See Attached Fixed Cost Plus Spreadsheet

Contents of Agreement

This Letter Agreement and the Exhibits attached hereto and incorporated herein, represent the entire understanding with respect to the Project and may only be modified in writing signed by both parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement.

CLIENT:

Trotter and Associates, Inc.:

By: _____

By: James M. McKenzie, PLS

Title: _____

Title: Vice President – Support Services Group Leader

Effective Date: _____

Date Signed: October 8, 2015

Address for giving notices:

Address for giving notices:
40W201 Wasco Road, Suite D
St. Charles, Illinois 60175

Designated Representative

Designated Representative
James M. McKenzie, PLS

Title:

Title: Vice President – Support Services Group Leader

Phone Number:

Phone Number: 630.587.0470

Facsimile Number:

Facsimile Number: 630.587.0475

E-Mail Address:

E-Mail Address: j.mckenzie@trotter-inc.com



Wheatland

Title Guaranty

105 West Veterans Parkway, Yorkville, IL 60560
Phone: 630-892-2323
Fax: 630-892-2390

09/25/2015

James McKenzie
Trotter and Associates, Inc.
40W201 Wasco Road, Suite D
St. Charles, IL 60175

Re: LC DOT Gilmer Road and Midlothian
Quote for Title Insurance Proposal #15-150

Dear Mr. McKenzie:

Thank you for the opportunity to review your request for Title work on the above referenced project. Listed below are our proposed costs for this project:

Title Commitment (per tax parcel number).....	\$425.00
Later Date	\$60.00
Later Date including examination of judicial proceedings	\$75.00

The cost per title commitment as stated above, does not include any parcels that are found to be currently or previously owned by a railroad.

Document copies are \$1.00 per page and will be invoiced at the time they are requested.

Please do not hesitate to contact me if you should have any questions or need any additional information.

Thank you,

John D. Ammons

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PSB NO.

Trotter and Associates, DATE

10/22/15

ESCALATION FACTOR 0.00%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Principal	\$70.00	\$70.00
Senior Project Manager	\$70.00	\$70.00
Project Manager	\$62.00	\$62.00
Professional Land Surveyor	\$62.00	\$62.00
Project Coordinator	\$70.00	\$70.00
Senior Project Engineer	\$62.00	\$62.00
Engineer Level IV	\$44.00	\$44.00
Engineer Level III	\$40.00	\$40.00
Engineer Level II	\$37.00	\$37.00
Engineer Level I	\$32.50	\$32.50
Senior Technician	\$43.50	\$43.50
Technician Level IV	\$41.50	\$41.50
Technician Level III	\$38.75	\$38.75
Technician Level II	\$34.50	\$34.50
Technician Level I	\$25.00	\$25.00
Clerical II	\$30.00	\$30.00
Clerical I	\$24.00	\$24.00
Survey Crew	\$36.00	\$36.00
Survey Technician Level II	\$36.00	\$36.00
Survey Technician Level II	\$35.75	\$35.75
		\$0.00
		\$0.00
		\$0.00
		\$0.00

Midland Standard Engineering & Testing, Inc.

SCOPE OF WORK PROPOSAL

9/29/15

To: Mr. Jonathan R. Vana, P.E.
Civiltech Engineering, inc.
 450 E. Devon Avenue Suite 300
 Itasca, Illinois 60143
 (630)773-3900
jvana@civiltechinc.com

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

Gilmer Road and Midlothian Road
 Lake County, Illinois

Propose to make a total of six (6) pavement cores at locations along Gilmer and Midlothian. Pavement cores will be made with 4" core barrel to obtain intact pavement section. Granular Base will be sampled with hand auger and subgrade strength tested with static or dynamic cone penetrometer. Patch core locations with non shrink grout. Summary report will include core locations, core images and pavement section measurement logs.

FIELD SERVICES	UNIT PRICE	EST QTY	BUDGET EXTENSION
Mob, Core Rig & Crew, Field Eng, lump sum	\$400.00	1	\$400.00
Pavement Core, each	\$250.00	6	\$1,500.00
Traffic Control, per day	\$1,200.00	1	\$1,200.00
Patch sample location, each	\$25.00	6	\$150.00
FIELD SERVICES SUBTOTAL			\$3,250.00
ENGINEERING SERVICES			
Summary Report, lump sum	\$550.00	1	\$550.00
ENGINEERING SERVICES SUBTOTAL			\$550.00

PROJECT TOTAL
\$3,800.00

Accepted: _____ Date: _____

Huff and Huff, Inc.

October 21, 2015

Mr. Jonathan R. Vana, P.E.
Director of Design Services
Civiltech Engineering, Inc.
450 E. Devon Ave, Suite 300
Itasca, Illinois 60143

**Re: Phase II Environmental Services – Wetland Permitting, Preliminary Environmental Site Assessment (PSI), and CCDD Assessment
Gilmer Road and Midlothian Road Intersection Improvements
Mundelein, Lake County, Illinois
Proposal No.: 81.PT00102.16 REVISED**

Dear Mr. Vana:

Huff & Huff, Inc. (H&H), a subsidiary of GZA GeoEnvironmental, Inc. (Consultant) is pleased to submit this revised proposal to Civiltech Engineering, Inc. (Client) to provide various Phase II environmental services related to the Gilmer Road / Midlothian Road improvement project in Mundelein, Lake County, Illinois.

This proposal presents our project understanding, the scope of services, and cost for completing the project.

1. PROJECT UNDERSTANDING

Consultant understands the Phase I engineering was completed by HDR on behalf of Lake County Division of transportation (LCDOT) and Consultant has been provided a copy of the Draft Project Development Report (PDR) to develop the enclosed scope of services.

In addition, Consultant understands that funding will be sourced from local sales tax (not federal funds) and IDOT has jurisdiction of Midlothian Road with this proceeding as a permit project though IDOT.

2. SCOPE OF SERVICES

The information within the PDR from the Phase I portion of the project will be relied upon to proceed with the Phase II environmental tasks identified below. The environmental tasks proposed include: permitting, agency coordination, Lake County wetland permitting; special waste services including a PSI based on the previously completed Phase I Environmental Site Assessment (Phase I ESA); and assessment of project spoils for suitability for final disposition at a Clean Construction

and Demolition Debris (CCDD) facility. Consultant performs PSIs for local roads. IDOT completes PESAs for state right of way portions of the project. However, Consultant will complete the PESA for the local roads portions.

In addition, revisions to this proposal include tasks necessary to address Lake County requests including:

- Wetland boundary verifications under assumption that reflagging of the wetland boundaries, if necessary, will be conducted by the surveying subcontractor to Client;
- Confirm status of originally identified wetland site w9R since this identification is currently in question; and
- Review delineation and potentially expand prior delineation of wetland site w8R since parcel is now anticipated for full take to gain additional detention storage.

These revised tasks are included in the scope presented below.

Task 1 – Permitting

Permits for impacts to jurisdictional wetland are issued through the Chicago District, COE in Lake County.

CONSULTANT will complete and submit the Joint Application form and other necessary information to obtain a permit from the COE for impacts to “Waters of the U.S.” (WOUS) and/or wetlands. The COE will coordinate with the following agencies during the review of the Joint Application as required:

- U.S. Army Corps of Engineers (COE)
- U.S. Fish & Wildlife Service (FWS)
- Illinois Department of Natural Resources (IDNR)
- Illinois Department of Natural Resources/Office of Water Resources (IDNR/OWR)
- Illinois Environmental Protection Agency (IEPA)
- Illinois Historic Preservation Agency (IHPA)

The Chicago District of the COE has a regional permit program meant to simplify and expedite specific types of projects. Most regional permits have automatically authorized Section 401 Water Quality Certification (WQC) from the IEPA. It is anticipated that this project will qualify for a regional permit. If the project does not qualify for a regional permit, an individual permit will be required. Individual permits require a public notice period as well as separate WQC from the IEPA. The individual permit process can take significantly more time than the regional permit process. This scope of work assumes the project will qualify under the Regional Permit program. This scope does not include permitting under the Individual Permit.

Within the regional permit program, permits are classified as either Category I or Category II. Category I includes activities with minimal impacts requiring review by the COE. Category II includes activities with minimal impacts requiring more rigorous review by the COE and coordination with the resource agencies.

Regional Permit 3 (RP3) authorizes the construction or replacement of public transportation projects, including roads, bridges, runways and taxiways, and railroads. Impacts to WOUS permitted under an RP3 shall not exceed 0.25 acre for any single crossing. For projects that involve multiple crossings of WOUS, the cumulative impact cannot exceed 1.0 acre.

Limited wetland and wetland impact information is present in the DRAFT Phase I PDR. It is assumed the project will meet the requirements of RP3. If the requirements of RP3 cannot be met then a separate scope will be development to obtain an Individual Permit (IP).

Mitigation

There are currently two options by which mitigation criteria can be met: 1) the use of a wetland bank, or 2) new wetland construction. In most cases, the COE prefers the use of wetland banks over new wetland construction.

Wetland banking is typically the best way to provide mitigation for wetland impacts. The creation of small isolated mitigated wetlands does not replace the functions of wetlands as well as a large scale wetland bank. In many cases, the regulatory community prefers the use of wetland banks to mitigate impacts. Banking is a viable mitigation option for this project.

Because the COE generally prefers the use of mitigation banks and the level of mitigation required, if any, is currently unknown, wetland mitigation design is not included in this proposal. Wetland mitigation design is not included in this scope of work.

At this time, no on-site mitigation design is included in the scope of services. This scope assumes wetland banking for impacts as stated in the DRAFT Phase I PDR. If not, a separate proposal will be prepared for wetland mitigation design.

Other permits

Costs for the following permits are not included in this proposal. If these permits become necessary, a separate proposal can be submitted.

- Section 401 of the Clean Water Act is automatically granted under most Regional Permits from the COE. If the project does not meet the guidelines of the Regional Permit Program, separate Section 401 WQC will be required. This proposal assumes the project will qualify for a regional permit.
- National Pollutant Discharge Elimination System (NPDES) Permitting - Client will be responsible for preparation of the NPDES permitting, plan preparation, and associated coordination. CONSULTANT will not complete this item; however, as stated above, CONSULTANT will complete the coordination with the IDNR and IHPA (associated with a Section 404 permit), which will need to be submitted by Client during the NPDES permitting process, prior to receiving an NPDES permit.

Task 2 – Agency Coordination

Endangered species review is also required through the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Federal Endangered Species Act if a federal action is undertaken (the COE issuing a permit).

The USFWS no longer conducts project-by-project review upon request; rather, the applicant is required to conduct an assessment and determine if impacts to federally listed species will occur as a result of the proposed project. To conduct this review, applicants are required to conduct the USFWS Section 7 Consultation and document their findings. CONSULTANT will prepare the Section 7 Consultation letter. Threatened or endangered species surveys are not included in this scope.

On April 2, 2015 the FWS issued the Endangered and Threatened Wildlife and Plants; Threatened Species Status for the Northern Long-Eared Bat With 4(d) Rule; Final Rule and Interim Rule (50 CFR Part 17). The rule went into effect on May 4, 2015. The final rule designates the northern long-eared bat (NLEB) as federally threatened and the species-specific interim 4(d) rule exempts certain activities from the Endangered Species Act (ESA) prohibitions. As the proposed project uses local funds it is anticipated the project may not need to comply with the tree removal restriction dates as outlined in the Federal Highway Administration (FHWA) and Federal Railroad Administration (FRA) Range-wide Biological Assessment (BA) for Transportation Projects for the Indiana bat and the northern long-eared bat (NLEB); however, as a portion of the project is under the jurisdiction of IDOT, these restrictions may apply. This will have to be determined through coordination with the agencies. In addition, as a federal permit is potentially required (Section 404), coordination with the USFWS on tree clearing dates and habitat impacts will most likely be required.

An NLEB habitat assessment was not completed as part of the Phase I tree survey for the proposed project. This scope does not include time to conduct a Phase I Summer Habitat Assessment. If the proposed project cannot meet the 4(d) restrictions a Phase I Summer Habitat Assessment and/or additional studies may be required.

Endangered species review through the IDNR is initiated through the Ecological Compliance Assessment Tool (EcoCAT) found on the IDNR website. An EcoCAT was submitted as part of Phase I and the Illinois Natural Heritage Database showed the black crowned night heron (*Nycticorax nycticorax*) potentially in the vicinity of the project limits. Since the EcoCAT was submitted indicating the project is local funded, IDNR terminated coordination. Therefore, an EcoCAT will be submitted for formal consultation as required by the COE.

Coordination with the Illinois Historic Preservation Agency (IHPA) is required to determine the presence/absence and potential impacts of the project to cultural or archeological resources. Coordination with the IHPA during Phase I determined the proposed project does not impact cultural or archeological resources. The IHPA review is valid through July 29, 2016. If required, CONSULTANT will obtain an extension of the IHPA clearance. If cultural or archeological resources are identified within the proposed project a Phase I archeological survey could be

required by IHPA. CONSULTANT will coordinate with CLIENT to find a qualified firm if a certified Phase I archeologist is required for the project. A cost for such a study is not included in this proposal as the need is undetermined until IHPA responds.

Task 3 – Lake County Wetland Permitting

Lake County regulates all wetlands including isolated waters of Lake County and buffers to these wetlands. Lake County defines four levels of wetland impacts:

- Category I includes wetland impacts with a cumulative impact area of 0.25 acre or less, without impacts to High Quality Aquatic Resources (HQAR), High Functional Value Wetland (HFVW), or High Quality Habitat Sites (HQHS).
- Category II includes projects that have between 0.25 and 2 acres of wetland impact and do not impact HQAR, HFVW, and/or HQHS.
- Category III includes wetland impacts with a cumulative impact area of 2 acres or greater in size, or that impact HQAR, HQHS, and/or HFVW.
- Category IV includes wetland impacts for the restoration, creation, and enhancement of wetlands provided that there are net gains in aquatic resource function.

Isolated Waters of Lake County (IWLC) are present within the project limits as determined by the September 10, 2015 Preliminary Jurisdictional Determination conducted by the Lake County Stormwater Management Commission (SMC) and the COE. Limited wetland and wetland impact information is present in the DRAFT Phase I PDR. Therefore, it is unclear the Category of wetland impacts associated with the proposed project. Category III permit applications must include documentation of avoidance and minimization on the site. In addition, any permit application that includes an impact to a HQAR, HQHS, or HFVW ADID wetlands must include an alternative analysis for wetland avoidance.

The CONSULTANT will work with the LCDOT to obtain permits as required under the Lake County Watershed Development Ordinance. The Lake County Ordinance requires permits for impacts related to stormwater and wetlands. CONSULTANT will work with CLIENT to obtain the wetland authorizations through the County. Client will obtain the necessary stormwater permits. This scope includes a pre-application meeting with Lake County. This scope assumes the Preliminary Jurisdictional Determination and Boundary Verification will be valid at the time of permit submittal. The wetland permits will require submittal of the wetland delineation reports that were completed in Phase 1. Therefore, the Client will provide the wetland delineation reports to the consultant for submittal with the permit packages.

Task 4 – Preliminary Site Investigation (PSI)

Based on the findings of the Phase I Environmental Site Assessment (Phase I ESA) completed by HDR (June 24, 2015) a PSI is necessary to further investigate the sites identified as Recognized Environmental Conditions (RECs) relative to the Project Corridor. Three sites were identified that contain RECs in Table 1 of the Phase I ESA:

Table 1. Summary of Sites Determined to Contain RECs

Property Name	Address	Listings	Location
Cherry Hill Cleaners and Tailors	107 West Gilmer Road, Hawthorn Woods, IL 60047	AST, presence of chemicals, activities at this facility, proximity to the proposed construction limits	Northeast of the intersection within the Cherry Hill Plaza strip mall (outside proposed construction limits)
Shell Service Station	25809 N Midlothian Road Mundelein, IL 60060	On-site contamination, proximity to proposed construction limits	Southeast of the intersection (outside proposed construction limits)
Landscaping Company	25744 N Gilmer Road Mundelein, 60060	ASTs fueling station, higher elevation, proximity to proposed construction limits	Southwest of the intersection (outside proposed construction limits)

The Phase I ESA was relied upon as the basis to determine the number / location of borings and to identify the contaminants of concern associated with the RECs. A total of two (2) days of field effort is estimated with up to eight (8) borings will be advanced and soil samples collected for laboratory analysis to address the RECs / Potentially Impacted Properties (PIPs). In addition, due to the large area of the Project Corridor without RECs/PIPs, up to an additional eight (8) borings will be advanced to address CCDD considerations.

The depths of the soil borings will be dependent upon design details to account for depths of proposed disturbance, currently estimated to be at depths ranging from eight (8) to twelve (12) feet below ground surface. Consultant will determine depths of specific borings prior to mobilization consistent with project plans as provided by Client, in conjunction with Phase I ESA findings.

A. Analytical

Laboratory analysis of soil samples is proposed to be consistent with constituents of concern (COCs) as determined from the Phase I ESA. Boring locations where petroleum products or other volatile organic compounds represent the primary concern, samples will be field screened with a photoionization detector (PID). The sample with the highest PID reading in each boring will be analyzed for:

- **Volatile Organic Compounds** (up to 4 samples) – VOCs are volatile compounds found in gasoline and related to various solvents;
- **Benzene, toluene, ethylbenzene, and total xylenes (BTEX) as well as methyl-tert-butyl-ether (MTBE)** (up to 8 samples) – BTEX / MTBE are volatile compounds found in gasoline;

- **Polynuclear Aromatic Compounds (PNAs)** (up to 8 samples) – PNAs are semi-volatile compounds commonly formed during incomplete combustion of organic compounds. PNAs can be formed by the combustion of wood, coal, and petroleum products. They are also found in less refined, nonvolatile petroleum products and can be used to identify potential for diesel or fuel oil contamination in soil.

Other field screening factors such as visual, or proximity to potential sources of known contamination to determine which samples will be analyzed to identify the presence of:

- **Total and SPLP/TCLP RCRA Heavy Metals** (up to 4 samples total and 2 SPLP/TCLP) – Federal environmental regulations identify eight (8) heavy metals as hazardous if present in a *solid waste* at concentrations above varying threshold concentrations. Samples will be analyzed for select RCRA Metals, some of which may require further SPLP for consideration as CCDD.

In addition to comply with CCDD regulations up to 24 soil samples are included for pH analysis.

B. PSI Report Preparation

A report summarizing the results of the soil sample collection activities and analytical results will be prepared. This document will present information pertinent for the bidding documents regarding conditions of soils tested, handling and final disposition considerations.

Task 5 – CCDD Assessment and Documentation

This task includes time for assessment of analytical results with respect to final disposition at a CCDD or soil-only facility and for preparing the PE certification needed for CCDD under the new IEPA regulations. This task, will include completion of the appropriate LPC-Form documentation using the results of the soil sampling indicated in the PSI task.

It should be noted that, when appropriate, the LPC-662 Form shall be utilized for roadway segments where there are no RECs or PIPs and therefore appropriate for an Owner signed form (Lake County DOT) with only pH soil sampling necessary; or the LPC-663 Form will be utilized with Consultant signing and stamping the form (cases with RECs/PIPs identified and laboratory analytical completed to document soil conditions relative to REC/PIP).

Task 6 - QA/QC

Time will be allotted to conduct QA/QC reviews of the various documents, forms, field sheets, and other deliverables related Task 1 to Task 6.

Task 7 – Project Management

This task covers items necessary to manage the project, scheduling, and coordination with the prime consultant and subconsultants, as necessary to complete the various tasks. In addition, this task includes time for coordination related to the existing Highway Authority Agreement (HAA).

Task 8 – Wetland Boundary Verifications

Wetland boundaries will be verified under assumption that reflagging of the wetland boundaries, if necessary, will be conducted by the surveying subcontractor to Client. CONSULTANT staff will be present when the boundaries of the wetlands are verified with the Lake County SMC staff.

Task 9 – Specific Wetland Confirmations

To address Lake County comments, the following wetlands will be further investigated:

- Wetland site w9R since the status of this wetland is currently in question; and
- Wetland site w8R since parcel is now anticipated for full take to gain additional detention storage.

This will require supplemental delineation work to prepare the information requested. This will need to be conducted during the growing season, which is Lake County is from April 5 to October 1.

3. PROJECT COST

The project cost is provided in the CECS Form attached to this proposal. Costs will be invoiced as a cost plus fixed fee

4. SCHEDULE

The Consultant will initiate the agency coordination and permitting process upon Notice to Proceed. COE and Lake County permits will be submitted within four weeks of receiving all required information from the Client. The PSI and CCDD tasks will be initiated within two weeks of notice to proceed with completion of the report within twelve (12) weeks of initiation.

5. TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

© 2008 by GZA GeoEnvironmental, Inc.

Client: Civiltech Engineering, Inc.

Proposal No: 81.PT00102.16:

Site: Gilmer Road and Midlothian Road Improvements – Mundelein, Lake County, IL

These Terms and Conditions, together with Consultant's Proposal, make up the Agreement between with Consultant, Civiltech Engineering, Inc, named above.

1. Services. H&H will perform the services set forth in its Proposal and any amendments or change orders authorized by you. Any request or direction from you that would require extra work or additional time for performance or would result in an increase in H&H's costs will be the subject of a negotiated amendment or change order.

2. Standard of Care. H&H will perform the services with the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time under similar conditions in

the same or similar locality. **NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MARKETABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS MADE OR INTENDED BY H&H'S PROPOSAL OR BY ANY OF H&H'S ORAL OR WRITTEN REPORTS.**

3. Payment.

- a. Except as otherwise stated in the Proposal, you will compensate H&H for the services at the rates set forth in the applicable Proposal, amendment or change order; reimburse its expenses, which will include a communication fee calculated as a percentage of labor invoiced; and pay any sales or similar taxes thereon.
- b. Any retainer specified in H&H's Proposal shall be due prior to the start of services and will be applied to the final invoice for services.
- c. H&H will submit invoices periodically, and payment will be due within 20 days from invoice date. Overdue payments will bear interest at 1½ percent per month or, if lower, the maximum lawful rate. H&H may terminate its services upon 10 days' written notice anytime your payment is overdue on this or any other project and you will pay for all services through termination, plus termination costs. You will reimburse H&H's costs of collecting overdue invoices, including reasonable attorneys' fees.

4. Your Responsibilities.

- a. Except as otherwise agreed, you will secure the approvals, permits, licenses and consents necessary for performance of the services. If you are the owner or operator of the Site, you will provide H&H with all documents, plans, information concerning underground structures (including but not limited to utilities, conduits, pipes, and tanks), information related to hazardous materials or other environmental or geotechnical conditions at the site and other information that may be pertinent to the services or, if you are not the owner or operator of the Site, you agree to make reasonable efforts to obtain these same documents and provide them to H&H. Unless otherwise indicated in writing, H&H will be entitled to rely on documents and information you provide.
- b. If you use the services of a construction contractor at the Site, you agree to use best and reasonable efforts to include in your agreement(s) with the construction contractor provisions obligating the latter:
 - (i) to indemnify, defend and hold harmless, to the fullest extent permitted by law, you and H&H, its officers, employees and principals, for or on account of any claims, liabilities, costs and expenses, including attorneys' fees, arising out of or relating to the design or implementation of construction means, methods, procedures, techniques, and sequences of construction, including safety precautions or programs, of the contractor, or any of its subcontractors or any engineer engaged by it;
 - (ii) to name you and H&H as additional insureds under general liability and builder's risk insurance coverages maintained by the contractor, or any of its subcontractors; and
 - (iii) to require that all of its subcontractors agree and be bound to the obligations set forth in (i) and (ii) above.
- c. In the event that you are unable to secure such provisions in the agreement(s) with the construction contractor, you shall promptly notify H&H and H&H shall have the opportunity to negotiate with you reasonable substitute risk allocation and insurance indemnities and protections.

5. Right of Entry. You grant H&H and its subcontractor(s) permission to enter the site to perform the services. If you do not own the site, you represent and warrant that the owner has granted permission for H&H to enter the site and perform the services; you will provide reasonable verification on request; and you will indemnify H&H for any claims by the site owner related to alleged trespass by H&H or its subcontractors.

6. Reliance. The services, information, and other data furnished by you shall be at your expense, and H&H may rely upon all information and data that you furnish, including the accuracy and completeness thereof. You acknowledge that the quality of the services provided by H&H is directly related to the accuracy and completeness of the information and data that you furnish to H&H. **H&H's REPORTS ARE PREPARED FOR AND MADE AVAILABLE FOR YOUR SOLE USE. YOU ACKNOWLEDGE AND AGREE THAT USE OF OR RELIANCE UPON THE REPORT OR THE FINDINGS IN THE REPORT BY ANY OTHER PARTY, OR FOR ANY OTHER PROJECT OR PURPOSE, SHALL BE AT YOUR OR SUCH OTHER PARTY'S SOLE RISK AND WITHOUT ANY LIABILITY TO H&H.**

7. H&H Professionals. H&H employees or consultants may act as licensed, certified or registered professionals (including but not limited to Professional Engineers, Licensed Site or Environmental Professionals, or Certified Industrial Hygienists, collectively referred to in this section as "H&H Professionals") whose duties may include the rendering of independent professional opinions. You acknowledge that a federal, state or local agency or other third party may audit the services of H&H or other contractor/consultant(s), which audit may require additional services, even though H&H and such H&H Professionals have each performed such services in accordance with the standard of care set forth herein. You agree to compensate H&H for all services performed in response to such an audit, or to meet additional requirements resulting from such an audit, at the rates set forth in the applicable Proposal, amendment or change order.

8. Hazardous Materials; H&H "Not a Generator". Before any hazardous or contaminated materials are removed from the site, you will sign manifests naming you as the generator of the waste (or, if you are not the generator, you will arrange for the generator to sign). You will select the treatment or disposal facility to which any waste is taken. H&H will not be the generator or owner of, nor will it possess, take title to, or assume legal liability for any hazardous or contaminated materials at or removed from the site. H&H will not have responsibility for or control of the site or of operations or activities at the site other than its own. H&H will not undertake, arrange for or control the handling, treatment, storage, removal, shipment, transportation or disposal of any hazardous or contaminated materials at or removed from the site, other than any laboratory samples it collects or tests. You agree to defend, indemnify and hold H&H harmless for any costs or liability incurred by H&H in defense of or in payment for any legal actions in which it is alleged that H&H is the owner, generator, treater, storer or disposer of hazardous waste.

9. Limits on H&H's Responsibility. H&H will not be responsible for the acts or omissions of contractors or others at the site, except for its own subcontractors and employees. H&H will not supervise, direct or assume control over or the authority to stop any contractor's work, nor shall H&H's professional activities or the presence of H&H or its employees and subcontractors be construed to imply that H&H has authority over or responsibility for the means, methods, techniques, sequences or procedures of construction, for work site health or safety precautions or programs, or for any failure of contractors to comply with contracts, plans, specifications or laws. Any opinions by H&H of probable costs of labor, materials, equipment or services to be furnished by others are strictly estimates and are not a guarantee that actual costs will be consistent with the estimates.

10. Changed Conditions.

- a. You recognize the uncertainties relating to the furnishing of professional services, which often require a phased or exploratory approach, with the need for additional services becoming apparent during the initial services. You also recognize that actual conditions encountered may vary significantly from those anticipated, that laws and regulations are subject to change, and that the requirements of regulatory authorities are often unpredictable.
- b. If changed or unanticipated conditions or delays make additional services necessary or result in additional costs or time for performance, H&H will notify you and the parties will negotiate appropriate changes to the scope of services, compensation and schedule.

- c. If no agreement can be reached, H&H will be entitled to terminate its services and to be equitably compensated for the services already performed. H&H will not be responsible for delays or failures to perform due to weather, labor disputes, intervention by or inability to get approvals from public authorities, acts or omissions on your part or any other causes beyond H&H's reasonable control, and you will compensate H&H for any resulting increase in its costs.

11. Documents and Information. All documents, data, calculations and work papers prepared or furnished by H&H are instruments of service and will remain H&H's property. Designs, reports, data and other work product delivered to you are for your use only, for the limited purposes disclosed to H&H. Any delayed use, use at another site, use on another project, or use by a third party will be at the user's sole risk, and without any liability to H&H. Any technology, methodology or technical information learned or developed by H&H will remain its property. Provided H&H is not in default under this Agreement, H&H's designs will not be used to complete this project by others, except by written agreement relating to use, liability and compensation.

12. Electronic Media. In accepting and utilizing any drawings, reports and data on any form of electronic media generated by H&H, you covenant and agree that all such electronic files are instruments of service of H&H, who shall be deemed the author, and shall retain all common law, statutory law and other rights, including copyrights. In the event of a conflict between the signed documents prepared by H&H and electronic files, the signed documents shall govern. You agree not to reuse these electronic files, in whole or in part, for any purpose or project other than the project that is the subject of this Agreement. Any transfer of these electronic files to others or reuse or modifications to such files by you without the prior written consent of H&H will be at the user's sole risk and without any liability to H&H.

13. Confidentiality; Subpoenas. Information about this Agreement and H&H's services and information you provide to H&H regarding your business and the site, other than information available to the public and information acquired from third parties, will be maintained in confidence and will not be disclosed to others without your consent, except as H&H reasonably believes is necessary: (a) to perform its services; (b) to comply with professional standards to protect public health, safety and the environment; and (c) to comply with laws and court orders. H&H will make reasonable efforts to give you prior notice of any disclosure under (b) or (c) above. You will reimburse H&H for responding to any subpoena or governmental inquiry or audit related to the services, at the rates set forth in the applicable Proposal, amendment or change order.

14. Insurance. During performance of the services, H&H will maintain workers compensation, commercial general liability, automobile liability, and professional liability insurance. H&H will furnish you certificates of such insurance on request.

15. Indemnification. You agree to hold harmless, indemnify, and defend H&H and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "H&H") against all claims, suits, fines and penalties, including mandated cleanup costs and attorneys' fees and other costs of settlement and defense, which claims, suits, fines, penalties or costs arise out of or are related to this Agreement or the services, except to the extent they are caused by H&H's negligence or willful misconduct.

16. Limitation of Remedies.

- a. To the fullest extent permitted by law and notwithstanding anything else in this Agreement to the contrary, the aggregate liability of H&H and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "H&H") for all claims arising out of this

Agreement or the services is limited to \$50,000 or, if greater, 10% of the compensation received by H&H under this Agreement.

- b. You may elect to increase the limit of liability by paying an additional fee, such fee to be negotiated prior to the execution of this Agreement.
- c. Any claim will be deemed waived unless received by H&H within one year of substantial completion of the services.
- d. H&H will not be liable for lost profits, loss of use of property, delays, or other special, indirect, incidental, consequential, punitive, exemplary or multiple damages.
- e. H&H will not be liable to you or the site owner for injuries or deaths suffered by H&H's or its subcontractors' employees.
- f. You will look solely to H&H for your remedy for any claim arising out of or relating to this Agreement, including any claim arising out of or relating to alleged negligence or errors or omissions of any H&H principal, officer, employee or agent.

17. Disputes.

- a. All disputes between you and H&H shall be subject to non-binding mediation.
- b. Either party may demand mediation by serving a written notice stating the essential nature of the dispute, the amount of time or money claimed, and requiring that the matter be mediated within forty-five (45) days of service of notice.
- c. The mediation shall be administered by the American Arbitration Association in accordance with its most recent Construction Mediation Rules, or by such other person or organization as the parties may agree upon.
- d. No action or suit may be commenced unless mediation has occurred but did not resolve the dispute, or unless a statute of limitation period would expire if suit were not filed prior to such forty-five (45) days after service of notice.

18. Miscellaneous.


- a. Massachusetts law shall govern this Agreement.
- b. The above terms and conditions regarding Limitation of Remedies and Indemnification shall survive the completion of the services under this Agreement and the termination of the contract for any cause.
- c. Any amendment to these Terms and Conditions must be in writing and signed by both parties.
- d. Having received these Terms and Conditions, your oral authorization to commence services, your actions, or your use of the Report or Work Product constitutes your acceptance of them.
- e. This Agreement supersedes any contract terms, purchase orders or other documents issued by you.
- f. Neither party may assign or transfer this Agreement or any rights or duties hereunder without the written consent of the other party.
- g. Your failure or the failure of your successors or assigns to receive payment or reimbursement from any other party for any reason whatsoever shall not absolve you, your successors or assigns of any obligation to pay any sum to H&H under this agreement.
- h. These Terms and Conditions shall govern over any inconsistent terms in H&H's Proposal.
- i. The provisions of this Agreement are severable; if any provision is unenforceable it shall be appropriately limited and given effect to the extent it is enforceable.
- j. The covenants and agreements contained in this Agreement shall apply to, inure to the benefit of and be binding upon the parties hereto and upon their respective successors and assigns.

BOTH PARTIES HERETO WARRANT AND REPRESENT that they have full right, power, and authority to execute this Contract.

IN WITNESS THEREOF, the parties hereto have executed this Agreement as of the day and year first specified above.

CONSULTANT
HUFF & HUFF, INC.

CLIENT
CIVILTECH ENGINEERING, INC.



Signature

Signature

By Linda L. Huff, P.E.

Typed Name

Typed Name

Principal

Officer's Title

Officer's Title

October 21, 2015

Date

Date



**Payroll Escalation Table
Fixed Raises**

FIRM NAME Huff & Huff, Inc.
PRIME/SUPPLEMENT Civiltech Engineering, Inc.

DATE 10/22/2015
PTB NO. _____

CONTRACT TERM 18 MONTHS
START DATE 11/1/2015
RAISE DATE 3/1/2016

OVERHEAD RATE 148.09%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

11/1/2015 - 3/1/2016

3/2/2016 - 3/1/2017

3/2/2017 - 5/1/2017

4
18

12
18

2
18

= 22.22%
= 1.0268

68.67%

11.79%

The total escalation for this project would be:

2.68%

Average Hourly Project Rates

Route Gilmer at Midlothian
Section 10-00079-16-CH
County Lake
Job No.
PTB/Item

Consultant Huff & Huff, Inc.

Date 10/22/2015

Sheet 2 **OF** 2

Payroll Classification	Avg Hourly Rates	QA/QC			Project Management			Wetland Boundary Verifications			Specific Wetland Confirmation/								
		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	2	25.00%	17.50															
Senior Geotechnical Cons.	58.48																		
Senior Consultant	54.31	4	50.00%	27.15				1	6.67%	3.62	1	5.88%	3.19						
Senior Geologist PM	54.69																		
Senior Engineering PM	39.51																		
Senior Scientist PM	42.21	2	25.00%	10.55	6	100.00%	42.21												
Senior Planning PM	44.67																		
Engineering PM	38.01																		
Geologist PM	39.50																		
Scientist PM II	33.82																		
Scientist PM I	40.73							14	93.33%	38.02	16	94.12%	38.34						
Asst. PM Engineer II	37.52																		
Asst. PM Engineer I	29.62																		
Asst. PM Planning	31.59																		
Sr. Technical Specialist	42.95																		
Sr. CADD Specialist	31.10																		
Environmental Engineer	32.59																		
Environmental Scientist E1	24.68																		
Environmental Scientist E2	22.71																		
Administrative Managers	38.26																		
Sr. Administrative Asst.	26.70																		
Administrative Assistant	21.73																		
Senior PM II	59.23																		
Senior PM I	39.74																		
TOTALS		8	100%	\$55.21	6	100%	\$42.21	15	100%	\$41.64	17	100%	\$41.53	0	0%	\$0.00	0	0%	\$0.00

HUFF & HUFF, INC.
SUMMARY OF INHOUSE DIRECT COSTS
 Project: Civiltech Gilmer and Midlothian Ph II

						<u>DIRECT</u>
Task 1 - Permitting						
Parking			1 x	\$ 35.00	= \$	35.00
Reproduction	6 sets	x	100 x	\$ 0.03	= \$	18.00
Color copies	6 sets	x	12 x	\$ 0.11	= \$	7.92
Photo sheets	6 sets	x	8 x	\$ 0.11	= \$	5.28
Task Total						\$ 66.20
Task 2 - Agency Coordination						
Reproduction	3 sets	x	10 x	\$ 0.03	= \$	0.90
Color copies	3 sets	x	10 x	\$ 0.11	= \$	3.30
Photo sheets	3 sets	x	10 x	\$ 0.11	= \$	3.30
Task Total						\$ 7.50
Task 3 - Lake County Wetland Permitting						
Trips - Company	90 miles	x	1 x	\$ 0.575	= \$	51.75
Reproduction	3 sets	x	100 x	\$ 0.03	= \$	9.00
Color copies	3 sets	x	10 x	\$ 0.11	= \$	3.30
Photo sheets	3 sets	x	10 x	\$ 0.11	= \$	3.30
Task Total						\$ 67.35
Task 4 - Preliminary Site Assessment						
Trips - Company	80 miles	x	2 x	\$ 0.575	= \$	92.00
Tolls			12 x	\$ 1.00	= \$	12.00
Reproduction	3 sets	x	150 x	\$ 0.03	= \$	13.50
Color copies	3 sets	x	15 x	\$ 0.11	= \$	4.95
Photo sheets	3 sets	x	10 x	\$ 0.11	= \$	3.30
Field Kit (day)			1 x	\$ 30.00	= \$	30.00
PID (day)			1 x	\$ 100.00	= \$	100.00
Task Total						\$ 255.75
Task 5 - CCDD Assessment						
Reproduction	3 sets	x	75 x	\$ 0.03	= \$	6.75
Color copies	3 sets	x	10 x	\$ 0.11	= \$	3.30
Photo sheets	3 sets	x	5 x	\$ 0.11	= \$	1.65
Task Total						\$ 11.70
Task 6 - QA/QC						
Task Total						\$ -
Task 07 - Project Management						
Task Total						\$ -
Task 09 - Wetland Boundary Verifications						
Trips - Company	90 miles	x	1 x	\$ 0.575	= \$	51.75
Tolls			8 x	\$ 1.00	= \$	8.00
			0 x	\$ -	= \$	-
Task Total						\$ 59.75
Task 10 - Specific Wetland Confirmations/Delineations						
Trips - Company	90 miles	x	1 x	\$ 0.575	= \$	51.75
Tolls			8 x	\$ 1.00	= \$	8.00
			0 x	\$ -	= \$	-
Task Total						\$ 59.75
GRAND TOTAL						\$ 528.00

HUFF & HUFF, INC.
SUMMARY OF OUTSIDE DIRECT COSTS
Project: Civiltech Gilmer and Midlothian Ph II

OUTSIDE

Task 1 - Permitting				
Federal Express	2 x	\$ 20.00	= \$	40.00
		Task Total	\$	40.00
Task 2 - Agency Coordination				
Federal Express	1 x	\$ 20.00	= \$	20.00
		Task Total	\$	20.00
Task 3 - Lake County Wetland Permitting				
Federal Express	2 x	\$ 20.00	= \$	40.00
		Task Total	\$	40.00
Task 4 - Preliminary Site Assessment				
VOCs	4 x	\$ 125.00	= \$	500.00
BTEX+MTBE	8 x	\$ 65.00	= \$	520.00
Federal Express	1 x	\$ 20.00	= \$	20.00
5035 kits (voc/btex)	12 x	\$ 12.00	= \$	144.00
PNAs	8 x	\$ 105.00	= \$	840.00
RCR metals (total)	4 x	\$ 85.00	= \$	340.00
RCRA metals (SPLP)	2 x	\$ 165.00	= \$	330.00
pH	24 x	\$ 20.00	= \$	480.00
		Task Total	\$	3,174.00
Task 5 - CCDD Assessment				
_____	0 x	\$ -	= \$	-
		Task Total	\$	-
Task 6 - QA/QC				
_____	0 x	\$ -	= \$	-
		Task Total	\$	-
Task 07 - Project Management				
_____	0 x	\$ -	= \$	-
		Task Total	\$	-
Task 08 - Project Management				
_____	0 x	\$ -	= \$	-
		Task Total	\$	-
Task 09 - Wetland Boundary Verifications				
Federal Express	1 x	\$ 20.00	= \$	20.00
Records Search	0 x	\$ 250.00	= \$	-
_____	0 x	\$ -	= \$	-
		Task Total	\$	20.00
Task 10 - Specific Wetland Confirmations/Delineations				
Federal Express	1 x	\$ 20.00	= \$	20.00
Records Search	0 x	\$ 250.00	= \$	-
_____	0 x	\$ -	= \$	-
		Task Total	\$	20.00

GRAND TOTAL \$ 3,314.00

HUFF & HUFF, INC.
SUMMARY OF SERVICES BY OTHERS
Project: Civiltech Gilmer and Midlothian Ph II

OUTSIDE

Task 1 - Permitting _____	0 x	\$ -	=	\$ -	
		<u>Task Total</u>		<u>\$ -</u>	
Task 2 - Agency Coordination _____	0 x	\$ -	=	\$ -	
		<u>Task Total</u>		<u>\$ -</u>	
Task 3 - Lake County Wetland Permitting _____	0 x	\$ -	=	\$ -	
		<u>Task Total</u>		<u>\$ -</u>	
Task 4 - Preliminary Site Assessment					
Driller (day)	2 x	\$ 2,000.00	=	\$ 4,000.00	
Traffic Control (day)	2 x	\$ 2,000.00	=	\$ 4,000.00	
		<u>Task Total</u>		<u>\$ 8,000.00</u>	
Task 5 - CCDD Assessment					
		<u>Task Total</u>		<u>\$ -</u>	
Task 6 - QA/QC _____	0 x	\$ -	=	\$ -	
		<u>Task Total</u>		<u>\$ -</u>	
Task 07 - Project Management _____	0 x	\$ -	=	\$ -	
		<u>Task Total</u>		<u>\$ -</u>	
Task 09 - Wetland Boundary Verifications _____	0 x	\$ -	=	\$ -	
		<u>Task Total</u>		<u>\$ -</u>	
Task 10 - Specific Wetland Confirmations/Delineations _____	0 x	\$ -	=	\$ -	
		<u>Task Total</u>		<u>\$ -</u>	

GRAND TOTAL \$ 8,000.00

Terracon

October 7, 2015

Mr. Jonathan R. Vana, P.E.
Civiltech Engineering, Inc.
450 E. Devon Ave, Suite 300
Itasca, IL 60143

Phone: 630.735.3382

Email: JVana@civiltechinc.com

**RE: Proposal for Pre-Demolition Asbestos Services
Gilmer Road and Midlothian Road LCDOT Project
Mundelein, Lake County, IL
Terracon Proposal No: P11150248**

Dear Mr. Vana:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to Civiltech Engineering, Inc. (Client) to conduct pre-demolition asbestos-containing material (ACM) surveys and prepare the appropriate State of Illinois Department of Transportation (IDOT) Bureau of Design & Environment (BDE) Special Provision forms for the two properties to be demolished for the above-referenced project in accordance with your request.

A. PROJECT INFORMATION

Terracon understands the following properties are to be acquired for demolition¹:

Property Identification # (PIN)	Address	Type	Approximate Size/Stories	Year Constructed
14-03-200-024	25706 N. Gilmer Road, Mundelein, IL	SFR ²	1,524 square feet (SF)/one-story (924 SF) with partial basement (600 SF)	1928
14-03-200-005	25892 N Midlothian, Mundelein, IL	SFR w/attached garage and detached garage	2,548 square feet (SF)/one-story (1,274 SF) with full basement (1,274 SF); attached garage (396 SF); detached garage (768 SF)	1953

The services will be performed after property acquisition anticipated for late 2016. If this information is not accurate, please inform us immediately.

¹ Note: Descriptions, approximate size and other property information were estimated from available data.

² SFR = single family residential



B. SCOPE OF SERVICES

For each property, Terracon will perform the following:

Pre-Demolition Asbestos Survey

Terracon will mobilize a State of Illinois Department of Public Health (IDPH) licensed asbestos building inspector to conduct an asbestos survey of the buildings as required by United States Environmental Protection Agency (USEPA) regulation 40 Code of Federal Regulations (CFR) 61, National Emissions Standards for Hazardous Air Pollutants (NESHAP).

Terracon will conduct a visual assessment of the buildings to identify materials suspected of containing asbestos (suspect ACM). Suspect materials will be physically assessed for friability and evidence of damage.

Based upon the findings of the visual assessment, samples of suspect ACM will be collected for laboratory analysis in general accordance with the sampling protocols outlined in USEPA 40 CFR 763.86. At a minimum, three samples of each homogeneous suspect material will be collected. Sample collection will result in some isolated damage to materials; however, attempts will be made to limit such damage to the extent necessary for sample collection. Terracon may conduct sampling which requires selective demolition or destructive activities such as knocking holes in walls, dismantling of equipment or removal of protective coverings, if necessary. Terracon will not be responsible for repair or touch-up of sample locations. Reasonable efforts to access suspect materials within known areas of restricted access will be made provided these areas are not determined to be permit-required confined spaces, or to pose a health or safety risk to Terracon personnel. Sampling will not include suspect materials that are not made available for inspection, and will not be conducted if the materials are inaccessible due to physical barriers, confined spaces or cannot be safely reached with available ladders/man lifts.

Terracon will sample the roofing only if reasonable access can be obtained. By authorizing this proposal, the Client agrees to defend and hold Terracon harmless from subsequent liability and damages that may result from roof sampling activities. Terracon will apply temporary patching to roof sample locations, but it is recommended that a roofing contractor should be hired to repair areas damaged by roof sampling.

A laboratory accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), will analyze bulk material samples by visual estimation using polarized light microscopy/dispersion staining (PLM/DS) techniques in accordance with methodology approved by the USEPA, Method for the Determination of Asbestos in Bulk Building Materials number 600/R-93/116, on a turn-around time (TAT) of five business days.

Proposal for Pre-Demolition Asbestos Services

Gilmer Road and Midlothian Road LCDOT Project ■ Mundelein, Lake Co., IL

Proposal No: P11150248 ■ October 7, 2015



When analysis of friable bulk samples by PLM reveals greater than zero, but less than 10% asbestos, USEPA regulation 40 CFR Part 61 (NESHAP) states the analysis should be verified with the more quantitative point counting technique. If point counting is not performed these friable material samples must be considered ACM, including those reported with asbestos content of greater than 0%, but less than or equal to 1%. If PLM analysis reveals the presence of asbestos in the range described above, Terracon will contact the client to discuss the merits of point count analysis. Client approval of additional costs will be obtained before authorizing re-analysis.

When samples for nonfriable materials such as vinyl/asphaltic products (floor tiles/floor sheeting, mastics, shingles etc.), where small, thin asbestos fibers may have been potentially milled into the non-organic binder matrix, identify the amount of asbestos as non-detected by PLM analysis, USEPA recommends these materials be further analyzed using transmission electron microscopy (TEM) due to the difficulty in analyzing such small, thin asbestos fibers in resin-bound materials by PLM analysis. If this scenario presents itself, Terracon will contact the client to discuss the merits of TEM analysis. Client approval of additional costs will be obtained before authorizing reanalysis.

Terracon will prepare schematic floor plans indicating the approximate location of collected samples and any identified ACM for inclusion in the report.

Report

Terracon will prepare a separate technical report describing the sample methodology and the results for each property. The reports will include the number, type and location of material samples collected, the analytical results, the estimated quantities and the condition of the materials identified as ACM, as well as recommendations as to any additional sampling or remediation procedures that may be deemed necessary, based on regulatory requirements, guidelines and industry standards. One full electronic version (PDF®) of the report will be submitted.

Special Provision Preparation

Upon completion of all asbestos surveys, Terracon will prepare a Special Provision form for each identified condition from the options described below:

- Building Removal – Case I (Non-Friable and Friable Asbestos)
- Building Removal – Case II (Non-Friable Asbestos)
- Building Removal – Case III (Friable Asbestos)
- Building Removal – Case IV (No Asbestos)

One full electronic version (PDF®) of each required Special Provision form will be submitted.

Schedule

Services will begin following receipt of the authorization to proceed and access to the properties and the final report for a given site will be submitted within fifteen business days after Terracon has been

Proposal for Pre-Demolition Asbestos Services

Gilmer Road and Midlothian Road LCDOT Project ■ Mundelein, Lake Co., IL

Proposal No: P11150248 ■ October 7, 2015



granted access. Special provision forms will be submitted within ten business days after all site asbestos surveys have been completed. In order to comply with the proposed schedule, the following items are required to be provided by the Client at the time of notification to proceed:

- A signed notice to proceed evidencing acceptance of this scope of services;
- Right of entry to conduct the assessment, including unrestricted access; and
- Notification of any restrictions or special requirements (such as confidentiality) regarding accessing the site.

Scope and Report Limitations

The findings and conclusions presented in the final reports will be based on each site’s current utilization and the information collected as discussed in this proposal. If requested by the Client, Terracon may provide a verbal report prior to completion of a final written report. The content of the final written report takes precedence over any verbal reports, which may be provided. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the reports. As indicated herein, the surveys will be limited to readily and safely accessible areas of the subject properties. Terracon cannot guarantee a building or building components to be asbestos-free as the possibility exists that suspect ACM may be hidden from sight or in inaccessible locations, or the homogeneous construction areas identified may not be truly homogeneous. The limitations herein must be considered when the user of this report formulates opinions as to risks associated with the site. No warranties, express or implied, are intended or made.

C. COMPENSATION

The services proposed herein will be conducted for the following fees:

Description	Unit Cost	Extended Cost
Asbestos Surveys/Reports (2) – Fee per site includes survey, report preparation and laboratory analysis of up to 50 PLM asbestos bulk samples on a five-day TAT. If additional samples are necessary, the samples will be invoiced at \$10.00 per PLM sample upon client approval.	\$2,050.00	\$4,100.00
Special Provisions Preparation (2) - Fee assumes the preparation of up to two forms.	\$300.00	\$600.00
TOTAL FEE		\$4,700.00

Terracon will proceed with these services in accordance with written authorization. If activities outlined herein do not reflect your intended objectives, a modification of the proposed scope can be prepared. If conditions are encountered at the sites, which require significant changes in the scope of services which will increase the cost of the services, you will be contacted for discussion and approval of such changes before we proceed.

Proposal for Pre-Demolition Asbestos Services

Gilmer Road and Midlothian Road LCDOT Project ■ Mundelein, Lake Co., IL

Proposal No: P11150248 ■ October 7, 2015



The compensation assumes a single mobilization per property.

Terracon's invoices will be submitted to the address appearing above at regular intervals throughout the course of the project.

D. AUTHORIZATION

This proposal may be accepted by executing the attached Agreement for Services and returning one copy along with this proposal to Terracon. This proposal is valid only if authorized within 60 days from the listed proposal date. Project initiation may be expedited by sending a copy of the authorization to proceed via e-mail to brendan.quealy@terracon.com or by facsimile to 630-357-9489.

We appreciate the opportunity to provide this proposal and look forward to working with you on this project. If you have any questions or comments regarding this proposal or require additional services, please give us a call.

Sincerely,

Terracon Consultants, Inc.

A handwritten signature in blue ink, reading "Heather E. Eckard".

Heather E. Eckard

Project Industrial Hygienist I

A handwritten signature in blue ink, reading "Brendan J. Quealy".

Brendan J. Quealy

Senior Associate

Department Manager-IH/Asbestos Services

Attachment: Agreement for Services

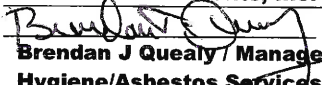
AGREEMENT FOR SERVICES

This **AGREEMENT** is between Civiltech Engineering Inc ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the Pre-Demo Asbestos Services - Gilmer Road and Midlothian Road for LCDOT Phase II Engineering Contract project ("Project"), as described in the Project Information section of Consultant's Proposal dated 10/07/2015 ("Proposal") unless the Project is otherwise described in Exhibit A to this Agreement (which section or Exhibit is incorporated into this Agreement).

- 1. Scope of Services.** The scope of Consultant's services is described in the Scope of Services section of the Proposal ("Services"), unless Services are otherwise described in Exhibit B to this Agreement (which section or exhibit is incorporated into this Agreement). Portions of the Services may be subcontracted. Consultant's Services do not include the investigation or detection of, nor do recommendations in Consultant's reports address the presence or prevention of biological pollutants (e.g., mold, fungi, bacteria, viruses, or their byproducts) or occupant safety issues, such as vulnerability to natural disasters, terrorism, or violence. If Services include purchase of software, Client will execute a separate software license agreement. Consultant's findings, opinions, and recommendations are based solely upon data and information obtained by and furnished to Consultant at the time of the Services.
- 2. Acceptance/ Termination.** Client agrees that execution of this Agreement is a material element of the consideration Consultant requires to execute the Services, and if Services are initiated by Consultant prior to execution of this Agreement as an accommodation for Client at Client's request, both parties shall consider that commencement of Services constitutes formal acceptance of all terms and conditions of this Agreement. Additional terms and conditions may be added or changed only by written amendment to this Agreement signed by both parties. In the event Client uses a purchase order or other form to administer this Agreement, the use of such form shall be for convenience purposes only and any additional or conflicting terms it contains are stricken. This Agreement shall not be assigned by either party without prior written consent of the other party. Either party may terminate this Agreement or the Services upon written notice to the other. In such case, Consultant shall be paid costs incurred and fees earned to the date of termination plus reasonable costs of closing the project.
- 3. Change Orders.** Client may request changes to the scope of Services by altering or adding to the Services to be performed. If Client so requests, Consultant will return to Client a statement (or supplemental proposal) of the change setting forth an adjustment to the Services and fees for the requested changes. Following Client's review, Client shall provide written acceptance. If Client does not follow these procedures, but instead directs, authorizes, or permits Consultant to perform changed or additional work, the Services are changed accordingly and Consultant will be paid for this work according to the fees stated or its current fee schedule. If project conditions change materially from those observed at the site or described to Consultant at the time of proposal, Consultant is entitled to a change order equitably adjusting its Services and fee.
- 4. Compensation and Terms of Payment.** Client shall pay compensation for the Services performed at the fees stated in the Compensation section of the Proposal unless fees are otherwise stated in Exhibit C to this Agreement (which section or Exhibit is incorporated into this Agreement). If not stated in either, fees will be according to Consultant's current fee schedule. Fee schedules are valid for the calendar year in which they are issued. Fees do not include sales tax. Client will pay applicable sales tax as required by law. Consultant may invoice Client at least monthly and payment is due upon receipt of invoice. Client shall notify Consultant in writing, at the address below, within 15 days of the date of the invoice if Client objects to any portion of the charges on the invoice, and shall promptly pay the undisputed portion. Client shall pay a finance fee of 1.5% per month, but not exceeding the maximum rate allowed by law, for all unpaid amounts 30 days or older. Client agrees to pay all collection-related costs that Consultant incurs, including attorney fees. Consultant may suspend Services for lack of timely payment. It is the responsibility of Client to determine whether federal, state, or local prevailing wage requirements apply and to notify Consultant if prevailing wages apply. If it is later determined that prevailing wages apply, and Consultant was not previously notified by Client, Client agrees to pay the prevailing wage from that point forward, as well as a retroactive payment adjustment to bring previously paid amounts in line with prevailing wages. Client also agrees to defend, indemnify, and hold harmless Consultant from any alleged violations made by any governmental agency regulating prevailing wage activity for failing to pay prevailing wages, including the payment of any fines or penalties.
- 5. Third Party Reliance.** This Agreement and the Services provided are for Consultant and Client's sole benefit and exclusive use with no third party beneficiaries intended. Reliance upon the Services and any work product is limited to Client, and is not intended for third parties. For a limited time period not to exceed three months from the date of the report, Consultant will issue additional reports to others agreed upon with Client, however Client understands that such reliance will not be granted until those parties sign and return Consultant's reliance agreement and Consultant receives the agreed-upon reliance fee.
- 6. LIMITATION OF LIABILITY.** CLIENT AND CONSULTANT HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSULTANT'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE ASSOCIATED RISKS. TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF CONSULTANT (AND ITS RELATED CORPORATIONS AND EMPLOYEES) TO CLIENT AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE GREATER OF \$50,000 OR CONSULTANT'S FEE, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF CONSULTANT'S SERVICES OR THIS AGREEMENT. PRIOR TO ACCEPTANCE OF THIS AGREEMENT AND UPON WRITTEN REQUEST FROM CLIENT, CONSULTANT MAY NEGOTIATE A HIGHER LIMITATION FOR ADDITIONAL CONSIDERATION. THIS LIMITATION SHALL APPLY REGARDLESS OF AVAILABLE PROFESSIONAL LIABILITY INSURANCE COVERAGE, CAUSE(S) OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. THIS LIMITATION SHALL NOT APPLY TO THE EXTENT THE DAMAGE IS PAID UNDER CONSULTANT'S COMMERCIAL GENERAL LIABILITY POLICY.
- 7. Indemnity/Statute of Limitations.** Consultant and Client shall indemnify and hold harmless the other and their respective employees from and against legal liability for claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are legally determined to be caused by their negligent acts, errors, or omissions. In the event such claims, losses, damages, or expenses are legally determined to be caused by the joint or concurrent negligence of Consultant and Client, they shall be borne by each party in proportion to its own negligence under comparative fault principles. Neither party shall have a duty to defend the other party, and no duty to defend is hereby created by this indemnity provision and such duty is explicitly waived under this Agreement. Causes of action arising out of Consultant's services or this Agreement regardless of cause(s) or the theory of liability, including negligence, indemnity or other recovery shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of Consultant's substantial completion of services on the project.
- 8. Warranty.** Consultant will perform the Services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. **EXCEPT FOR THE STANDARD OF CARE PREVIOUSLY STATED, CONSULTANT MAKES NO WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, RELATING TO CONSULTANT'S SERVICES AND CONSULTANT DISCLAIMS ANY IMPLIED WARRANTIES OR WARRANTIES IMPOSED BY LAW, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**
- 9. Insurance.** Consultant represents that it now carries, and will continue to carry: (i) workers' compensation insurance in accordance with the laws of the states having jurisdiction over Consultant's employees who are engaged in the Services, and employer's liability insurance (\$1,000,000); (ii) commercial general liability insurance (\$1,000,000 occ / \$2,000,000 agg); (iii) automobile liability insurance (\$1,000,000 B.I. and P.D. combined single

limit); and (iv) professional liability insurance (\$1,000,000 claim / agg). Certificates of insurance will be provided upon request. Client and Consultant shall waive subrogation against the other party on all general liability and property coverage.

- 10. CONSEQUENTIAL DAMAGES.** NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR LOSS OF PROFITS OR REVENUE; LOSS OF USE OR OPPORTUNITY; LOSS OF GOOD WILL; COST OF SUBSTITUTE FACILITIES, GOODS, OR SERVICES; COST OF CAPITAL; OR FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES.
- 11. Dispute Resolution.** Client shall not be entitled to assert a Claim against Consultant based on any theory of professional negligence unless and until Client has obtained the written opinion from a registered, independent, and reputable engineer, architect, or geologist that Consultant has violated the standard of care applicable to Consultant's performance of the Services. Client shall provide this opinion to Consultant and the parties shall endeavor to resolve the dispute within 30 days, after which Client may pursue its remedies at law. This Agreement shall be governed by and construed according to Kansas law.
- 12. Subsurface Explorations.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. Client understands Consultant's layout of boring and test locations is approximate and that Consultant may deviate a reasonable distance from those locations. Consultant will take reasonable precautions to reduce damage to the site when performing Services; however, Client accepts that invasive services such as drilling or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the Services.
- 13. Testing and Observations.** Client understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Consultant will provide test results and opinions based on tests and field observations only for the work tested. Client understands that testing and observation are not continuous or exhaustive, and are conducted to reduce - not eliminate - project risk. Client agrees to the level or amount of testing performed and the associated risk. Client is responsible (even if delegated to contractor) for requesting services, and notifying and scheduling Consultant so Consultant can perform these Services. Consultant is not responsible for damages caused by services not performed due to a failure to request or schedule Consultant's services. Consultant shall not be responsible for the quality and completeness of Client's contractor's work or their adherence to the project documents, and Consultant's performance of testing and observation services shall not relieve Client's contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. Consultant will not supervise or direct the work performed by Client's contractor or its subcontractors and is not responsible for their means and methods.
- 14. Sample Disposition, Affected Materials, and Indemnity.** Samples are consumed in testing or disposed of upon completion of tests (unless stated otherwise in the Services). Client shall furnish or cause to be furnished to Consultant all documents and information known or available to Client that relate to the identity, location, quantity, nature, or characteristic of any hazardous waste, toxic, radioactive, or contaminated materials ("Affected Materials") at or near the site, and shall immediately transmit new, updated, or revised information as it becomes available. Client agrees that Consultant is not responsible for the disposition of Affected Material unless specifically provided in the Services, and that Client is responsible for directing such disposition. In the event that test samples obtained during the performance of Services (i) contain substances hazardous to health, safety, or the environment, or (ii) equipment used during the Services cannot reasonably be decontaminated, Client shall sign documentation (if necessary) required to ensure the equipment and/or samples are transported and disposed of properly, and agrees to pay Consultant the fair market value of this equipment and reasonable disposal costs. In no event shall Consultant be required to sign a hazardous waste manifest or take title to any Affected Materials. Client shall have the obligation to make all spill or release notifications to appropriate governmental agencies. The Client agrees that Consultant neither created nor contributed to the creation or existence of any Affected Materials conditions at the site. Accordingly, Client waives any claim against Consultant and agrees to indemnify and save Consultant, its agents, employees, and related companies harmless from any claim, liability or defense cost, including attorney and expert fees, for injury or loss sustained by any party from such exposures allegedly arising out of Consultant's non-negligent performance of services hereunder, or for any claims against Consultant as a generator, disposer, or arranger of Affected Materials under federal, state, or local law or ordinance.
- 15. Ownership of Documents.** Work product, such as reports, logs, data, notes, or calculations, prepared by Consultant shall remain Consultant's property. Proprietary concepts, systems, and ideas developed during performance of the Services shall remain the sole property of Consultant. Files shall be maintained in general accordance with Consultant's document retention policies and practices.
- 16. Utilities.** Client shall provide the location and/or arrange for the marking of private utilities and subterranean structures. Consultant shall take reasonable precautions to avoid damage or injury to subterranean structures or utilities. Consultant shall not be responsible for damage to subterranean structures or utilities that are not called to Consultant's attention, are not correctly marked, including by a utility locate service, or are incorrectly shown on the plans furnished to Consultant.
- 17. Site Access and Safety.** Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the Services and will execute any necessary site access agreement. Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any other parties, including Client. Client's contractors, subcontractors, or other parties present at the site.

Consultant: **Terracon Consultants, Inc.**
 By:  Date: **10/7/2015**
 Name/Title: **Brendan J Quealy / Manager Industrial Hygiene/Asbestos Services**
 Address: **135 Ambassador Dr. Naperville, IL 60540**
 Phone: **(630) 717-4263** Fax: **(630) 357-9489**
 Email: **Brendan.Quealy@terracon.com**

Client: **Civiltech Engineering Inc**
 By: _____ Date: _____
 Name/Title: **Jonathan Vana / Director of Design Services**
 Address: **450 E. Devon Ave Suite 300 Itasca, IL 60143**
 Phone: **(630) 735-3382** Fax: **(630) 773-3975**
 Email: **JVana@civiltechinc.com**

Reference Number: P11150248

Santacruz Land Acquisitions

PROPOSAL FOR LAND ACQUISITION SERVICES

Lake County Division of Transportation

Civiltech Engineering, Inc.



Intersection of Gilmer and Midlothian Roads

**Santacruz Land
Acquisitions**

2650 Valor Drive · Glenview, IL 60026
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 FWHA 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 reconstruction of the intersection of Gilmer Road and Midlothian Road (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	\$2,500.00
---	------------

Consultation & Witness Services

Rate for each ½ day in pretrial conference or in court for Negotiator	\$1,000.00
---	------------

Hourly rate for consultation not otherwise specifically provided for herein	\$250.00
---	----------

Title Services (if applicable)

Later date commitment – In addition to actual recording costs + Administrative fee	\$25.00
---	---------

Title insurance policies – In addition to actual recording costs + Administrative fee	\$25.00
--	---------

Recording of Documents – In addition to actual recording costs + Administrative fee	\$25.00
--	---------

Copies of recorded documents – In addition to actual copying costs & research fees + Administrative fee	\$25.00
--	---------

DESIGN SURVEY PROCEDURES (Revised 12/4/14)

HORIZONTAL ALIGNMENT

Unless otherwise specified in the services contract, the CONSULTANT is to provide the horizontal alignment. The CONSULTANT will conduct all surveying, stationing, and preparation of required plans using English units of measure and the U.S. Survey Foot. The CONSULTANT'S SURVEYOR will try to re-establish the original horizontal alignment as shown on the recorded R.O.W. plats. The CONSULTANT shall contact LCDOT's Land Surveyor to obtain R.O.W. plats and field notes before establishing the horizontal alignment and stationing. The CONSULTANT shall notify LCDOT's Surveyor immediately if the alignment cannot be reproduced or if in the CONSULTANT'S opinion the existing alignment information is in error.

The CONSULTANT'S SURVEYOR, prior to construction, shall stake the PCs, PIs, PTs, and POTs so that the alignment location can be verified before construction staking is initiated. The CONSULTANT'S SURVEYOR will provide four reference ties to all U.S. Public Land Survey Monuments that are located within the construction limits. The reference points should be located outside of the anticipated construction limits if practical, so that they can be used after construction to replace the monuments. The CONSULTANT shall record Monument Records for all Section and Quarter Section corners set or found within the construction limits.

The CONSULTANT will mark all 100-foot interval station locations on the survey base line for construction when on paved surfaces with a P.K. or Mag nail and spray paint. The baseline for relocated alignments when off pavement will be marked at the PCs, PTs, and POTs with iron rods. The rods shall be set one foot below the surface in farmed land. The CONSULTANT will advise the County of any pavement alignment variations. In cases where the proposed centerline of construction or survey baseline is different from the existing centerline of R.O.W., both shall be shown and the relationship between them shall be indicated on an Alignment & Tie sheet.

ALIGNMENT & TIE SHEET

An Alignment & Tie Sheet shall be provided as part of the final plans. The plans are to be prepared using English units of measure and the U.S. Survey Foot. The station, offset, and coordinates of the alignment points (PCs, PTs, PIs, and POTs) and survey control (traverse) points shall be shown. Coordinates for all projects shall be on the Illinois State Plane Coordinate System, - East zone, NAD83 (Adjustment). The grid (combination) factor for the project shall be shown. A list of traverse points with station, offset, and coordinates shall be provided.

VERTICAL ALIGNMENT

The North American Vertical Datum of 1988 (NAVD 88) shall be used for vertical control. Lake County Mapping Benchmarks are available on-line (<http://gis.lakeco.org/maps/>). NAVD88 benchmarks are available on-line from the National Geodetic Survey. LCDOT's Land Surveyor may also be contacted for benchmarks that may be in the area. The primary benchmarks and site benchmarks shall be listed and described on the Alignment & Tie Sheet. The location of the site

benchmarks shall also be shown on the plan sheets with a symbol. Site benchmarks are to be located at less than 1000-foot intervals with a minimum of two (2) on each project.

All benchmarks shall be located on stable objects. LCDOT prefers these objects to be outside the construction limits. Some acceptable benchmark examples are, spikes in poles, bolts on fire hydrant rings, and concrete foundations.

TOPOGRAPHY

The CONSULTANT shall cut cross-sections at 50-foot intervals and at all points needing clarification. For areas of superelevation or requiring greater detail, cross-sections shall be cut at 25-foot intervals. The cross section interval should be defined in the engineering services contract.

Full cross-section profiles will be taken at all cross streets, alleys, cross road culverts, and entrances (commercial, private, and field). Half cross-sections will not be accepted because they skew the computer terrain model.

The CONSULTANT will locate and identify all trees (6 inches in diameter or greater) within the area either side of the centerline, defined by the proposed ROW or construction limits (whichever is greater) plus an additional 10 feet. The trees shall be identified by species and size. The trees shall be located by station/offset and have a ground elevation.

Streams, tributaries, or major drainage ditches located within a lateral distance of 250 feet from centerline (upstream and downstream) shall be surveyed. Alignment, profiles, and cross-sections shall be taken. The stream width shall be shown as the distance measured between the tops of the stream banks. Profile elevations along the bottom of the watercourse shall be taken at a minimum of 50-foot intervals.

The survey shall extend a minimum of 200 feet beyond the roadway construction limits. Cross-sections shall be taken a minimum of 10 feet beyond the proposed R.O.W. or construction limits (whichever is greater). Cross-sections will extend 30 feet beyond the proposed R.O.W. at entrances and 150 feet at minor side roads.

All survey data shall be collected in Illinois State Plane Coordinates – East Zone. The collected survey data for the existing topography shall have a minimum of 3rd Order Accuracy horizontally with readings to the nearest 0.1 feet for vertical on gravel or ground and readings to the nearest 0.01 feet for vertical on all other surfaces.

RAILROAD INSURANCE

The CONSULTANT will comply with the railroad's requirements when conducting a survey on the railroad's R.O.W. Usually, this includes obtaining a permit, paying a fee, obtaining Railroad Protective Liability Insurance, notification of a flagman to be present near the rails during the

survey operations, and any other requirements of the railroad. The CONSULTANT is responsible for all of the foregoing requirements.

DELIVERABLES

- I. Copies from the CONSULTANT'S field books, showing benchmarks, level circuits, & structure details, such as size and inverts etc.

- II. Base Drawing at 1:1. All the topographic information shall be plotted electronically. The data shall be **in Illinois State Plane Coordinates – East Zone and be** recorded in a MICROSTATION .DGN format. All CAD work shall be according to LCDOT CAD Standards. ASCII files, gpk files, and/or InRoads files containing all point information as described below shall be included. A filename “ID” acronym explanation sheet shall be provided. Backup CDs shall be provided.

- III. Point Information:
 - (1) Point number
 - (2) Northing and Easting coordinate values
 - (3) "Z" elevations
 - (4) Point identification by code
 - (5) Notes



PLAT OF HIGHWAYS & LEGAL DESCRIPTION CHECKLIST

REVISED 5/29/2015

A copy of this initialed and dated checklist shall be submitted to Lake County Division of Transportation along with the Plats of Highway and Legal Descriptions.

	<u>Initials or N/A</u>	<u>Date</u>
1. Plat of Highways sheet size is 22" x 34".	_____	_____
2. A project cover sheet is required.	_____	_____
3. All lettering should be 1/10 th inch or greater.	_____	_____
4. Complete the project box in the lower right-hand corner.	_____	_____
5. Show survey company name, address and/or logo (if applicable) above the title box.	_____	_____
6. Show North Arrow, up or to the right and appropriate scale bar on each page.	_____	_____
7. Coordinates for all projects should be based on Illinois State Plane Coordinate System, East zone, NAD83 (Adjustment). The referenced NGS monumentation should be noted on the plat.	_____	_____
8. Plat will include the following notes:	_____	_____
• Bearings and distances shown hereon reference the Illinois State Plane Coordinate System, East Zone, North American Datum of 1983 (adjustment year) "grid". NOTE: added "grid" for those who look at the plats, such as appraisers, and are not aware that state plane and grid are synonymous and it ties into the next statement.		
• All measured and calculated distances are "grid" not "ground". To obtain ground distances, divide grid distances shown by the combination factor of 0.xxxxxxx.		
• Areas shown on this plat are "ground".		
9. Label the Section, Township, Range, Principal meridian and County at the top of each applicable sheet.	_____	_____
10. Label all subdivisions, (incl. recording date and document number), blocks, and lots on the plat of highways.	_____	_____
11. All known recording dates and document numbers (subdivision, right-of-way, deed, etc.) will be included in the legal descriptions.	_____	_____
12. Show all section/quarter section corners and ties on the Plat of Highway. These should relate to the ties on the corresponding monument records. Label the monument recording date and document number.	_____	_____
13. Show necessary land lines with proper line types (section lines, lot lines, property lines, etc.)	_____	_____
14. Indicate and label the following lines (use the proper line types):	_____	_____
• Existing and proposed right-of-way lines (use the proper line types)		
• Existing and proposed access control lines		
• Existing roadway easements lines and proposed IDPT easement lines		
15. Show width of existing right-of way at least once per sheet.	_____	_____

16. Reference the documents which established the existing right-of-way or "As monumented and occupied" on the plat of highway. _____
17. Show all distances and bearings as used in the legal descriptions. _____
18. Show the radius (R), length (L), chord length (CH) and chord bearing (CB) for all curves as used in the legal descriptions (Use curve tables as applicable). _____
19. Label the Point of Commencing (P.O.C.) and Point of Beginning (P.O.B.) for every parcel when applicable. _____
20. Total holding property (including contiguous property) should be shown and labels (bearings, distances, angles, etc.) will be identical to the title report legal description. _____
21. Use land hooks to show common lines of ownership for contiguous property. _____
22. The property line symbol should be shown on all sides of the total holding parcel. _____
23. Indicate any land locked remainders. _____
24. Parcel numbers are to be shown as four (4) digits and boxed in a rectangle. Use the suffix "PE" for Permanent easement "TE" for temporary easement and "AC" for access control. No suffix is needed for a parcel being conveyed. _____
25. Areas shall be shown to the nearest 0.001 Acre. All parcels 0.010 of an acre or less should also be shown to the nearest square foot. _____
26. Complete the Parcel Table:
 - Parcel Number
 - Total Holdings Acres
 - Part Taken Acres (Include Square Feet when 0.010 of an acre or less)
 - Areas in existing R.O.W. Acres (prescription, monumented, occupied or common law)
 - Remainder Area Acres
 - Easement Area Acres (Include Square Feet when 0.010 of an acre or less)
 - Parcel Index Number (List all P.I.N.'s for the total holdings)
27. Complete the Index Table on cover or as 2nd sheet if too many parcels for cover:
 - Parcel Number
 - Owners' Name (as listed in the title commitment)
 - Sheet Number
 - Property Acquired By
28. Legal Description Heading to be on right side & on each sheet:
 - Route
 - Section
 - County
 - Parcel Number
 - Beginning to ending station (Both stations should be from same center line)
 - Parcel Index Number (List only P.I.N.'s for the affected parcel)
29. Legal Descriptions will include the following:
 - CAPTION FORMAT: "... In (Name) County, Illinois, bearings and distances Based on the Illinois State Plane Coordinate System, East Zone, NAD83 (Adjustment year), with a combined factor of _____", described as follows..."
 - ...BODY OF LEGAL...
 - END WITH AREA STATEMENT: Said parcel Containing X.XXX acres, more or less, of which X.XXX acres, more or less, was previously dedicated or used for highway purposes.
30. The type and use of all buildings on the total holding should be indicated.
 - All buildings within 100 feet of the proposed right-of-way or easement should be dimensioned and tied perpendicular to the proposed right-of-way. _____
 - All buildings beyond 100 feet from the proposed right-of-way or easement should just be outlined on the plat. _____

31. Show and label all private improvements in the proposed/existing Right-of-Way and proposed easement lines in the parcel. This includes fences, signs, light standards, private utilities, canopies, driveways, parking lots, etc. _____
32. Show all fuel pump islands with perpendicular ties to the proposed right-of-way or proposed easements. _____
33. Show all encroachments within the existing right of way. (This would include parking areas) _____
34. Label the route and street name designation once per sheet. _____
35. Label the project's beginning and ending stations _____
36. Show the proposed centerline and label with IDOT stationing for State highways and LCDOT stationing for County highways, including all station equations. _____
37. Label the station and offset at the following points: _____
 - All proposed take and easement corners. _____
 - Intersection of all property lines with the proposed right-of-way lines and easement lines. _____
38. The station of the intersection of the proposed centerline with all Section and Quarter Section lines should be shown. _____
39. The bearing and distance of all section and quarter section lines measured for the project shall be shown. _____
40. Show all found monumentation with reference to true corner location. (Note: Following the completion of construction, all property corner monumentation found where new R.O.W. was not acquired shall be verified to still be in place. Any property corner monumentation destroyed during construction is to be replaced in the previously located positions. This will be coordinated with the Resident Engineer). _____
41. Show all set monumentation. (Note: Monumentation for proposed R.O.W. is to be placed after completion of construction in areas that may be disturbed during construction, e.g., temporary construction easements. The consultant will be notified by the Resident Engineer). _____
42. List in tabular form the state plane coordinates for: _____
 - All centerline control points
 - P.C., P.I., P.T.
 - Station equations
 - Project begin and project end points
 - Proposed right of way monuments
 - All found monumentation
 - All section/quarter section corners utilized.
 - Header for coordinate table text box.

PROJECT COORDINATES
 Illinois State Plane, East Zone, NAD 83 (Adjustment Year)

Items 43 and 44 shall be completed after initial approval.

43. Monument Record Documents should be prepared and recorded for Section/Quarter Section corners utilized for which no Monument Record exists. New Monument Records should be prepared and recorded for those documents which show ties within the proposed right-of-way. _____
44. Submit one complete set of signed and sealed mylars, a MicroStation file (.dgn), a .pdf file of the signed Plat of Highways, and the legal descriptions in Microsoft Word format and in a .pdf file. _____