

December 17, 2014

625 Forest Edge Drive, Vernon Hills, IL 60061

TEL 847.478.9700 ■ FAX 847.478.9701

www.gha-engineers.com

Ms. Paula J. Trigg, P.E.
Director of Transportation / County Engineer
Lake County Division of Transportation
600 West Winchester Road
Libertyville, IL 60048

Re: Proposal for Professional Services
Phase II – Design Engineering Services
Buffalo Grove Road
IL Route 22 (Half Day Road) to Deerfield Parkway
Buffalo Grove, Illinois
Section # 11-00249-03-WR
GHA Proposal No. 2014.T118

ATTN: Mr. Matt Emde

Dear Mr. Emde:

Thank you for requesting a proposal from Gewalt Hamilton Associates, Inc. (GHA) for the Phase II - Design Engineering Services of Buffalo Grove Road, from IL Route 22 (Half Day Road) to Deerfield Parkway.

The following are attached for your review:


- BLR 05510 Preliminary Engineering Services Agreement (LCDOT format)
- Exhibit A – Scope of Services
- Exhibit B – Anticipated Plan Sheets
- Exhibit C – Estimate of Direct Costs
- Exhibit D – Man-Hour and Fee Estimate
- Exhibit E – Subconsultant Proposals (Attachments 1 - 6)
- GHA Attachment A

We appreciate the opportunity to make our services available to the Division of Transportation and look forward to continuing working with LCDOT staff on this project. If you have any questions or would like additional information, please do not hesitate to contact me at 847.478.9700.

Sincerely,
Gewalt Hamilton Associates, Inc.



Todd P. Gordon, P.E.
Associate/Senior Engineer
tgordon@gha-engineers.com

Municipality	LOCAL AGENCY	 Illinois Department of Transportation	CONSULTANT	Name Gewalt Hamilton Associates, Inc.
Township				Address 625 Forest Edge Drive
County Lake County – Division of Transportation		Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds		City Vernon Hills
Section 11-00249-03-WR				State Illinois

THIS AGREEMENT is made and entered into this _____ day of _____, _____ 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 Buffalo Grove Road Widening and Reconstruction

Route #16! Length 1.98 Mi. 10525.00 FT (Structure No. N/A)

Termini IL Route 22 (Half Day Road) to Deerfield Parkway

Description:

Description: Improvements include the widening and reconstruction of Buffalo Grove Rd from IL Rte 22 to Deerfield Parkway. Improvements will include intersection improvements at Buffalo Grove Rd and Aptakisic Rd

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

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

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

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

The Total Not-to-Exceed Contract Amount shall be \$1,197,363.11

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 179 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 179 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:

County of Lake of the
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By _____

County Board

Lake County

Clerk

(Seal)

By _____

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:

Gewalt Hamilton Associates, Inc.

Engineering Firm

625 Forest Edge Drive

Street Address

Vernon Hills, Illinois

City, State

ATTEST:

By _____

By _____

Title Secretary

Title President

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

Exhibit A

Scope of Services

EXHIBIT A – SCOPE OF SERVICES

**Phase II – Design Engineering Services
Lake County Division of Transportation
Buffalo Grove Road
IL Route 22 (Half Day Road) to Deerfield Parkway
Lake County, Illinois**

December 17, 2014

Gewalt Hamilton Associates, Inc. (GHA) will provide Phase II – Design Engineering Services to the Lake County Division of Transportation (LCDOT) for the improvements to Buffalo Grove Road, between Illinois Route 22 (Half Day Road) and Deerfield Parkway. This project includes the reconstruction of Buffalo Grove Road from approximately Sta. 56+00 to Sta. 146+50. Included are intersection improvements at Aptakisic Road and Buffalo Grove Road including the reconstruction of Aptakisic Road from approximately Sta. 60+50 to Sta. 76+00. The length of the improvement is approximately 9,050 ft (1.7 miles) along Buffalo Grove Road and approximately 1,550 ft (0.29 miles) along Aptakisic Road approximately 510 feet west of Buffalo Grove Road and approximately 1,040 feet east of Buffalo Grove Road.

The proposed reconstruction of Buffalo Grove Road will provide two 11-foot travel lanes in each direction and a center raised landscaped median with B-6.12 curb and gutter along the median and B-6.24 curb and gutter along the outside edge of pavement from Deerfield Parkway to IL Route 22. There will also be an 11-foot-wide left-turn lane at all intersecting streets as well as an 11-foot-wide southbound right-turn lane at Thompson Boulevard, an 11-foot-wide northbound and southbound right-turn lane at Aptakisic Road, a northbound right-turn lane at Brandywyn Lane, and a southbound right-turn lane at Twin Groves Middle School. A 2-foot paved shoulder adjacent to the travel lane will be provided for the entire length of the improvements. A bike path exists on the east side of Buffalo Grove Road from Deerfield Parkway to Aptakisic Road and from Brandywyn Lane to IL Route 22. The bike path will be completed between Aptakisic Road and Brandywyn Lane.

Included in the Phase II design services, GHA will design the reconstruction of the Aptakisic Road and Buffalo Grove Road intersection. GHA had completed the Intersection Design Study (IDS) for this intersection and Christopher B. Burke Engineering, Ltd. (CBBEL) completed the Phase I study for the intersection and Aptakisic Road between Sta. 76+00 to IL Route 83 which includes this segment. The intersection improvements include temporary and permanent traffic signal improvements. Aptakisic Road reconstruction improvements will extend east of Buffalo Grove Road and widen and meet the existing width of Aptakisic Road. The proposed widening will extend to the Buffalo Grove Park District driveway on the south side of Aptakisic Road at Sta. 60+50. Included on both sides of the west leg of Aptakisic Road is the replacement of the existing bike path. The reconstruction of Aptakisic Road west of Buffalo Grove Road will include the removal and replacement of an existing seventy-two inch (72") diameter culvert with a proposed 6-ft x 6-ft box culvert at approximate Sta. 63+25.

Task 1 – Early Coordination and Data Collection

- A. LCDOT Kick-Off Meeting: GHA will attend a kick-off meeting with LCDOT to discuss the Phase II design for the Buffalo Grove Road corridor and the Phase II design of the Buffalo Grove Road and Aptakisic Road intersection, including project requirements, schedule, and coordination with other agencies involved within the project limits. Upon concurrence of the schedule, we anticipate holding an additional kick-off meeting with the Village of Buffalo Grove, the Buffalo Grove Park District, ComEd, the land acquisition consultant, and other stakeholders involved with the project.
- B. Lake County Stormwater Management Commission Kick-Off Meeting: Prior to preparing the drainage report submittal, we will meet with LCSMC for a pre-application meeting to discuss the project and confirm their permitting requirements in order to secure approval and permit from the LCSMC. As this project is within Lake County it is subject to the requirements of the LCSMC Watershed Development Ordinance.
- C. Village of Buffalo Grove Kick-Off Meeting: We will meet with the Village of Buffalo Grove early in the design phase to discuss project improvements, including but not limited to drainage and detention, property acquisition, street lighting, landscape medians, Village utilities (water main and sanitary sewer), sidewalks, and paths.
- D. Buffalo Grove Park District Kick-Off Meeting: We will meet with the Park District to review proposed improvements.
- E. Coordination with CBBEL for Aptakisic Road/Buffalo Grove Road Phase I Study: We will meet with CBBEL to confirm coordination between project limits and facilitate sharing of information from Phase I studies as Phase II design progresses.
- F. Project Data Review and Update: We will review both the Buffalo Grove Road and Aptakisic Road Phase I Study reports in detail to ensure the design of the proposed improvements is in accordance with the respective reports. The reports will be reviewed to ensure that any commitments made during the Phase I preliminary engineering stage of the projects are followed through during Phase II design engineering.
- G. We will obtain and review any additional available information/data from the County, Village, and other agencies. This item also includes man-hours for coordination between the Phase I and Phase II Engineers during the preliminary stages of the project, as there will be overlap between completion of the Phase I studies and the start of Phase II.
- H. The Village of Buffalo Grove had advised the County of the Northwest Suburban ERUV which was granted permission by various agencies to erect an ERUV in Buffalo Grove. It is understood that the boundary is bounded by IL Route 22 to the north; Deerfield Parkway to the south; IL Route 83 to the west and Prairie Road/Wieland Road to the east. We will coordinate with the appropriate representative for the ERUV regarding any modifications, adjustments and maintenance of the facility that falls within the project limits.

Task 2 – Utility Coordination

- A. We will submit copies of the final Preliminary Phase I Plans to the appropriate utility companies requesting copies of utility atlases in order to confirm or update the information obtained during Phase I. The information will be incorporated and/or updated into the project base drawing.
- B. We will review utility information received with the design and identify potential conflicts so that additional information, such as horizontal locates or depth borings by the utility companies, can be

obtained as necessary to further define the extent of conflicts. We will first attempt to address utility conflicts through design modifications while reviewing what impacts those changes will have on the overall improvement.

After review, we will submit the Preliminary (65%) plans to the various utility companies for their review of possible conflicts, and to advise them of the overall project schedule. The submittal will define conflicts so that the utility companies can further determine where additional information is needed concerning the location of their facilities and they can perform the necessary engineering for any required utility relocations in advance of the actual construction. Utility plan submittals will be coordinated through the LCDOT Utility Coordinator.

We will review the respective utility companies proposed utility relocation plans and permit as submitted to LCDOT. We will provide review of the proposed relocation plans and provide comments and coordinate with the design plans and make recommendations to LCDOT Utility Coordinator. Once accepted the proposed utility relocations will be identified on the "Drainage and Utilities" plan sheets and will be identified in both the plan and profile views as well as on their respective cross-section sheets.

- C. We will submit the Pre-Final (90%) contract plans to the various utility companies. The Pre-Final plans will include proposed utility relocations as proposed by the respective utility companies. We will coordinate with the utility companies and follow up as needed.
- D. GHA will set up meetings with the respective utilities to discuss needed relocations or adjustments and schedules for these utility relocations prior to project construction. This item also includes man-hours related to attending coordination meetings with utilities and the LCDOT Utility Coordinator. We anticipate a maximum of six (6) utility coordination meetings.
- E. We will also coordinate with ComEd regarding their providing of electricity for the traffic signal and lighting systems.

Task 3 – Topographic Survey

This item includes obtaining additional survey at locations where the Phase I study survey did not cover areas anticipated to be part of the Phase II engineering work.

Supplemental survey for areas outside of the original survey limits of the Phase I study include:

- 1. Proposed detention area expansion at Village of Buffalo Grove parcels (PINs 15-28-101-081 and 15-28-101-060)
- 2. Various areas where the survey did not extend far enough beyond the existing right-of-way to encompass the proposed right-of-way or easements, including:
 - a. Walgreens Parking Lot Area
 - b. Twin Groves School Parking Lot Area
- 3. Aptakisic Road east of Buffalo Grove Road, from approximately Sta. 64+00 to Sta. 76+00, including areas extending beyond existing right-of-way and proposed right-of-way and easements. We will coordinate with CBBEL for available topography and boundary data to include in the Phase II design.
- 4. Field investigation and survey of unmapped drain tiles and storm sewer connections identified in the Phase I study survey.

We will review the existing topographic survey from the respective Phase I studies and perform a field check of the project limits to verify completeness and accuracy of the survey(s). 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 Task 2 – Utility Coordination and visual observation in the field.

We will prepare a current photo log of the project limits and an inventory of existing signage and any other topographic features which may impact or be impacted by the proposed design. This photo log will include an inventory of the existing residential fences along the Buffalo Grove Road corridor.

Task 4 – Geotechnical Studies

Geotechnical reports were prepared during the Phase I study by Testing Service Corporation (TSC) for the Buffalo Grove Road Phase I study. The report included 28 soil borings and 10 pavement cores for the roadway reconstruction. Soil borings will be obtained during the CBBEL Phase I study for the Aptakisic Road portion.

Additional borings are recommended for:

1. Proposed detention expansion area
2. Two (2) soil borings for box culvert at approximate Sta. 63+25 under Aptakisic Road west of Buffalo Grove Road.
3. The areas between due to questionable subgrade:
 - a. Sta. 130+00 to Sta. 139+00
 - b. Sta. 88+00 to Sta. 94+00

This work will be performed by TSC. We have included man-hours for coordination with TSC and to attend one (1) pre-boring meeting with the County to discuss the scope and schedule of the boring work. A copy of TSC's proposal is included in Exhibit E (Attachment 1).

Task 5 – Wetland Delineation

- A. A wetland delineation report was prepared by GHA for the Phase I study area, dated December 3, 2012. The delineation is valid for 3 years from the date of the report, per the Lake County Stormwater Management Commission (SMC) and is valid for 5 years from the date of the report, per the U.S. Army Corp of Engineers (USACE). Due to the proposed expansion of the existing detention area on the Village of Buffalo Grove parcels to accommodate detention for the Aptakisic Road improvements, the wetland delineation is required to be updated and modified. We have included man-hours to account for additional field work to perform wetland delineations.
- B. The wetland delineation report will to be updated due to the expanded project area with the inclusion of Aptakisic Road and the expanded detention area. In addition, we will utilized CBBEL wetland delineation for the proposed culvert replacement west of Aptakisic Road (approximate station 63+25). We have included man-hours to account for an updated wetland delineation report.
- C. The Illinois Department of Natural Resources (IDNR) consultation is dated August 19, 2013 and is in effect for two (2) years. The IDNR consultation will be required to be renewed during the Phase II design and likely again prior to the final letting.

- D. The Illinois Historic Preservation Agency (IHPA) has provided an updated clearance dated September 16, 2014 and is in effect for two (2) years. The IHPA clearance will be required to be renewed during the Phase II design and likely again prior to the final letting.

Task 6 – Special Waste and CCDD Testing

Preliminary Environmental Site Assessments (PESA) were performed during the Buffalo Grove Road Phase I study by Huff & Huff, Inc. (H&H), who was also a sub-consultant to CBBEL for the Aptakisic Road Phase I study.

According to the findings in the PESA, based on the data collected as of July 13, 2012 (the date of the last physical investigation of the project area), this assessment reveals evidence of potentially impacted properties (PIPs) in connection to the project area. However, based on available information, including receipt of FOIA information, none of the sites identified are in close enough proximity to proposed construction activities to warrant sampling. Therefore, based on available information, a Preliminary Site Investigation (PSI) related to the identified sites is not recommended, depending on final plans and the ability to avoid the REC/PIPs.

We propose using H&H as a sub-consultant to the Phase II design. Their tasks include the following and are outlined in their proposal in Exhibit E (Attachment 2):

1. Preliminary Environmental Site Assessment (PESA) Update
2. Site Evaluation
3. Database Search
4. Preliminary Site Investigation for CCDD
5. Analytical
6. Preliminary Site Investigation Report Preparation for CCDD
7. CCDD Determination and LPC Form/Package Completion
8. Project Management
9. QA/QC

We have included man-hours for coordination between GHA and Huff & Huff.

Task 7 – Drainage Design

The Buffalo Grove Road Phase I study included the preparation of a Location Drainage Study (LDS). The approved LDS will be used as the basis for a drainage design/report and permit applications to the Lake County Stormwater Management Commission (LCSMC) and the US Army Corps of Engineers. The storm sewer mainline layout and sizing performed during Phase I will be verified and used to prepare the detailed plans.

Included in the LDS, "Impervious and Detention Requirement Calculations" were prepared and summarized. The additional impervious areas within the improvement limits are at approximately 2.98 acres, equal to 1.70 ac-ft/mile of new impervious. This results in 1.55 ac-ft of required detention, per the Lake County Watershed Development Ordinance (WDO).

As part of the Phase I study, an evaluation was conducted to review various documents pertaining to the available detention storage within the adjacent basins along the project corridor, including design plans, drainage calculations, and as-built plans obtained from the Village of Buffalo Grove, LCDOT and LCSMC. The Village of Buffalo Grove required developers adjoining the Buffalo Grove corridor hold a certain amount of detention in their basins for the anticipated 5-lane roadway section. The Village and LCSMC previously indicated that the adjoining developments had reserved detention and water quality aspects in these respective basins, as required.

LCSMC has concurred that sufficient volumes have been provided in these existing basins for the calculated detention volume of 1.55 ac-ft for the proposed roadway improvements between IL Route 22 and Deerfield Parkway. However, a portion of the roadway runoff does not drain to the basins; instead, it discharges directly to the Aptakisic Creek via the 7-ft x11-ft culvert south of Aptakisic Road. Per concurrence with the Village and LCSMC at a September 12, 2012 meeting, additional storage will be provided for subject portion of the roadway in a Village owned basin located southeast of Aptakisic Road. This basin is proposed to be expanded to provide additional detention storage.

The planned Buffalo Grove Road roadway improvements are proposed outside the floodplain limits. In addition, no changes are proposed to the two box culverts and sidewalk on the west side of the roadway. Therefore, we anticipate only minor floodplain impacts in the event any grading transitions are required off the pavement adjoining the floodplain.

Floodway is regulated by the Illinois Department of Natural Resources Office of Water Resources (IDNR-OWR). IDNR-OWR has delegated LCSMC for improvements within the regulatory floodway. Since both the 7-ft x 11-ft and 4-ft x 8-ft box culverts will remain, and in accordance with the Phase I preliminary design the proposed grading improvements are outside of the floodway limits, and floodway permit is not required. If impacts to the floodplain and/or floodway arise during the Phase II final design of Buffalo Grove Road, we will advise LCDOT and proceed with the proper permitting.

We proposed to use CBBEL as a sub-consultant to complete the hydrologic/hydraulic analysis of the existing 72" diameter culvert under Aptakisic Road (approximate station 63+25) which as identified in the Phase I study is proposed to be improved to a 6-ft x 6-ft box culvert. CBBEL has identified compensatory storage requirements for this box culvert improvement. We will incorporate the CBBEL analysis of this culvert improvements as an appendix to the drainage report for inclusion to the Lake County watershed development permit application and the USACE permit application. CBBEL's proposal is included in Exhibit E (Attachment 3). GHA will review and determine location(s) of the required compensatory storage for the box culvert improvements.

As identified in the LDS, it is our understanding that the WDO water quality requirements will be met when discharging directly to a retention pond. For the areas that discharge directly to the creek or to a dry bottom basin, GHA will work with the Village, LCSMC, and LCDOT to identify the appropriate means of water quality treatment.

Task 8 – Structural Design

A structural analysis was performed by Wiss, Janney, Elstner Associates, Inc. (WJE) for the following box culverts in the Phase I study:

1. South Culvert: 7-ft x 11-ft Box Culvert (Sta. 83+38): This culvert carries the Aptakisic Creek at a northwest-to-southeast direction.
2. North Culvert: 4-ft x 8-ft Box Culvert (Sta. 105+50): This culvert carries the Tributary to Aptakisic Creek at a northeast-to-southwest direction.

We propose to use WJE as a sub-consultant for structural engineering design services and to perform further analysis and design of the above referenced box culverts in accordance with the recommendations included in the Phase I study of the above referenced box culverts on Buffalo Grove Road. WJE's proposal is included in Exhibit E (Attachment 4).

We propose to use CBBEL as a sub-consultant for the structural engineering design services for removal and replacement of an existing seventy-two inch (72") diameter culvert with a proposed 6-ft x6-ft box culvert at approximate Sta. 63+25 under Aptakisic Road west of Buffalo Grove Road. We will coordinate the maintenance of traffic options with the proposed staging of construction of this box culvert with CBBEL. CBBEL's proposal is included in Exhibit E (Attachment 3).

Task 9 – Municipal Utilities Analysis

It is anticipated that the proposed roadway widening may require relocation of Village water main at the following locations:

1. Along the west side of Buffalo Grove Road, from approximate Sta. 91+50 to Sta. 94+00.
2. Along the west side of Buffalo Grove Road, from approximate Sta. 138+50 to Sta. 143+00.

The existing Village water main will fall under the proposed new right-turn lanes at these locations.

The Village of Buffalo Grove televised the Village's sanitary sewer adjoining the Buffalo Grove Road corridor in the fall of 2012. The analysis did not identify a need for repairs or replacement of the sanitary sewer main. It was identified that a damaged manhole may need to be replaced as part of the roadway improvements. The manhole is located on Larraway Drive, immediately west of Buffalo Grove Road.

No other municipal utilities have been identified in the Phase I study as requiring relocation. We will coordinate further review of the Village utilities with the Village of Buffalo Grove Public Works Department to identify any adjustment and/or relocations that may be necessary during the Phase II design and determine the extent of such modifications.

The Northwest Water Commission (NWWC) has an existing transmission main crossing under Buffalo Grove Road at approximately Sta. 77+20. The NWWC is proposing improvements to the transmission main with new water main proposed along the west side of Buffalo Grove Road, between Aptakisic Road and LaSalle Lane (approx. 100-ft south of LaSalle Lane). We will further coordinate the Phase II design with the NWWC and their design consultant.

Task 10 – Lighting Coordination

The Village of Buffalo Grove owns and maintains street lighting along portions of the project limits with varying pole spacing along the corridor. The existing street lights were originally set back to accommodate future roadway widening. Options presented during Phase I coordination meetings with the Village include filling in the gaps with new lighting, or complete replacement of the current system with new street lighting throughout the project limits. These options would be at the expense of the Village, and determination was planned to be coordinated during Phase II of the project. However, it is anticipated that various street lights, foundations, and cabling along the corridor will require relocation due to the proposed road widening and grading transitions. These relocations will be reviewed in detail during the Phase II final design stage and adjusted as needed.

If the Village proposes to include a new lighting system through the project corridor, then the Village will be responsible for the lighting design. The Village will provide an approved lighting design plans and will be

incorporated to the Buffalo Grove Road engineering plans. We have include man-hours for coordinating with the Village and the incorporation of a lighting plans.

Task 11 – Traffic Signal Modernization and Interconnect Plan Design

Traffic signal and signal interconnect improvements will be part of the Phase II design. In this task we have included the man-hours for coordination with the County's Traffic Engineer. The intersections with proposed traffic signal improvements include the following:

1. Buffalo Grove Road and Thompson Boulevard
2. Buffalo Grove Road and Aptakisic Road

We have included the man-hours in Tasks 18, 19 and 21 for the preparation of the various traffic signal plans. Each intersection includes both temporary and permanent traffic signal plans in accordance with LCDOT guidelines and standards. The traffic signals will be included with emergency vehicle preemption if requested by the respective jurisdictional authorities. We will coordinate with the LCDOT consultant for the Fiber Splicing Diagrams and Cabinet Detail Plans for each intersection. The intersection plans will include a complete traffic signal modernization with pedestrian crosswalks and access routes in conformance with ADA guidelines and in compliance with LCDOT standards.

A temporary radio interconnect will be installed and operated during all roadway reconstruction activities along Buffalo Grove Road, between Aptakisic Road and Deerfield Parkway, and along Aptakisic Road, between Brandywyn Lane and Prairie Road. Any adaptive control components, including the Bluetooth detector, shall be reused in the temporary traffic signal at Buffalo Grove Road at Aptakisic Road as directed by the Lake County Division of Transportation Traffic Engineer.

The permanent interconnect plans and schematics will consist of Buffalo Grove Road between Deerfield Parkway and IL Route 22 (Half Day Road) and will re-establish the existing interconnect along Aptakisic Road, between Brandywyn Lane and Prairie Road.

Task 12 – Maintenance of Traffic Analysis

We will expand on the developed preliminary maintenance of traffic (MOT) plan as presented in the Phase I study and include the reconstruction of the Aptakisic Road and Buffalo Grove intersection. We will update and expand the staging and MOT concept plans to minimize disruption to the traveling public while maintaining a satisfactory construction work zone. The construction staging, MOT concepts, and detour routes for sidewalks and bike paths will be approved by the County prior to pre-final plan development.

Task 13 – Landscape Design

The Phase I study indicates that trees will be removed from the parkway and the existing median as needed. It is anticipated that the trees to be removed will be replaced on a 1:1 basis. Trees were surveyed as part of the topographic survey in the Phase I study for this project; only location and size was obtained. The tree species and conditions were not included and a detailed tree survey is not being proposed. The available information will be used to determine the number of trees requiring replacement.

The proposed landscape design will be performed by Hitchcock Design Group (HDG). HDG is also the Landscape Architect on the Wieland Road Phase II project. A copy of their proposal is included in Exhibit E (Attachment 5). They will assist in the development of a landscape plan including appropriate plan views,

sections, elevations, and other graphic images to illustrate the landscape improvements, including the parkway and median tree plantings and supplemental detention basin plantings. The man-hours indicated for this line item are for coordination between GHA and HDG.

Included to the manhours is one (1) meeting with the County, GHA, Village of Buffalo Grove and HDG for an aesthetics review of the project corridor.

Task 14 – Review and Confirm Project Right-of-Way Requirements

- A. We will review the proposed preliminary horizontal and vertical roadway geometrics, preliminary cross sections with respect to the existing right-of-way, and the proposed design to confirm the right-of-way required. This work will be performed early in the design phase so the right-of-way acquisition process can begin as soon as possible.
- B. This item also includes review of the preliminary plans in the field with representative of LCDOT to:
 - 1. Verify the completeness and accuracy of the preliminary design and features impacted by the proposed design;
 - 2. Review as accurately as possible the locations of existing private utilities using a combination of the atlases obtained during our Utility Company Coordination and visual observation; and
 - 3. Review the impacted areas required for additional right-of-way and/or easements.
- C. This item will also include further investigation and coordination with ComEd to address existing ComEd easements in relationship with roadway easements located along Buffalo Grove Road, Sta. 94+00 to Sta. 97+25 and along Aptakisic Road, Sta. 69+00 to Sta. Initial investigation during Phase I at the above mentioned Buffalo Grove Road location, as shown on the tax maps, identifies a total of 105 feet of ComEd easement across Buffalo Grove Road. However, further review of recorded documents demonstrates a 66-foot ComEd easement commencing from the east side of Buffalo Grove Road, with no easement for the remaining 39 feet to the west. We will coordinate with ComEd Real Estate representative regarding this discrepancy.

Task 15 – Plat of Highway, Legal Descriptions, Title Commitments

We will prepare the Plat of Highways, Legal Descriptions and obtain the title commitments of the parcels proposed for acquisition in accordance with the LCDOT Plats of Highway Checklist. There are thirty-three (33) parcels with potential right-of-way and easement acquisitions proposed within the project limits.

We will need to provide additional field surveying to identify:

- 1. All found or set monumentation;
- 2. Buildings within 100-ft of the proposed right-of-way or easement (to be tied to the proposed rights-of-way);
- 3. All private encroachments with the existing right-of-way; and
- 4. All private improvements in, and within 20-ft of, the proposed/existing right-of-ways and proposed easement lines in the parcels (i.e. fences, signs, lighting standards, private utilities, canopies, driveways, parking lots, etc.).

The above noted information is to be included on the plat of highways as identified on the LCDOT Plat of Highway Checklist.

We will coordinate and order the title commitments. We anticipate utilizing the services of Wheatland Title Company.

Task 16 – Property Acquisitions (Appraisals, Review Appraisals, Negotiations)

There are fifty-three (53) acquisition locations (or thirty-three (33) parcels) with potential acquisition of right-of-way and permanent and temporary easements within the project limits as identified in the Phase I study. We anticipate appraisals, review appraisals, and negotiations to be necessary through the valuation and land acquisition process. All such services shall be performed in accordance with the procedures and policies of the County. It is our understanding that no federal funds are to be utilized for land acquisition for this project and all funds will be local funds.

Out of the above noted parcels, the following is a general summary of the estimated acquisition locations to be acquired from the Village of Buffalo Grove, Buffalo Grove Park District, Kildeer Countryside School District 96 (Twin Groves Middle School), Commonwealth Edison, Residential (Single Family and Multi Family), Commercial and Unincorporated parcels.

<u>Agency</u>	<u>Right-of-Way</u>	<u>Permanent Easement</u>	<u>Temporary Easement</u>
Village of Buffalo Grove	2	0	10
Buffalo Grove Park District	3	3	4
Kildeer Countryside SD 96	1	0	2
ComEd	3	0	2
Residential (Single-Family)	4	0	9
Residential (Multi-Family)	0	0	3
Commercial	1	0	2
Unincorporated	<u>2</u>	<u>1</u>	<u>1</u>
Totals:	16	4	33

We propose to use the services of Santacruz Associates, Ltd. (SAL), as the negotiator for the land acquisition. SAL will also provide the appraisal and review appraisal services under their proposal. At the time of the land acquisition kick-off meeting, SAL will identify who will be assigned to the project to perform the appraisal and review appraisal functions. A copy of SAL's proposal is included in Exhibit E (Attachment 6).

GHA will coordinate with the appraisers and negotiators. It is anticipated that we will provide the appraisers and negotiators with exhibits for use during meetings with property owners, and provide information regarding the design and associated modifications. The design for relocation of any private property items resulting from negotiations is not included within the scope of this agreement.

We anticipate two (2) meetings with the County to discuss the proposed right-of-way acquisition.

Task 17 – Preliminary Engineering (65%)

Preliminary Plans will be developed using the findings and recommendations of the approved Phase I combined design report, the design criteria contained in IDOT's Bureau of Local Roads and Streets (BLRS) manual, and LCDOT standards and requirements. All drawings will be in MicroStation format following LCDOT standards.

During this stage, a representative from GHA's Construction Division and representatives from the design team will perform a field check with the preliminary plans to confirm the existing conditions and perform a general overview of the proposed preliminary design to identify any potential design issues.

The Preliminary Plan preparation and submittal will serve as a progress submittal for review by County staff, in an effort to identify and address any significant design issues prior to completing pre-final plans. We will communicate with the County and other affected agencies throughout the design process to resolve any current design issues. At this stage, we can also submit preliminary plans to the Village of Buffalo Grove or other agencies at the direction of the County.

We will coordinate Preliminary Design Review Meetings in order to discuss the status of the project and review of the preliminary plans. The meetings will be scheduled such that all parties will have had an opportunity to review the preliminary plans and provide comments. We anticipate a total of two (2) meetings; one (1) with the LCDOT and one (1) with the Village of Buffalo Grove.

Exhibit B identifies the plan sheets anticipated to be included in the Preliminary Plan (65%) submittal.

Task 18 – Pre-Final Plans, Special Provisions and Estimates (90%)

- A. Pre-Final Plans: The development of Pre-Final Contract Plans will be based on comments received on the preliminary plans and in accordance with the approved Phase I study, the applicable sections of the BLRS manual, applicable IDOT Standards, and in accordance with current County standards and practices.
- B. Pre-Final Special Provisions: We will prepare special provisions that supplement or amend the latest edition of the Standard Specifications for Road and Bridge Construction adopted by the Illinois Department of Transportation, and the latest edition of the Standard Specifications for Sewer and Watermain Construction in Illinois. Applicable County special provisions will be utilized to supplement the Standard Specifications. In addition, we will include the latest IDOT Recurring Special Provisions Check Sheet. The most recent set of IDOT's Bureau of Design and Environment Special Provisions and District 1 Special Provisions will be reviewed and included in the special provisions where applicable.
- C. Pre-Final Quantity Calculations: We will perform detailed quantity calculations at the pre-final stage of the plan development.
- 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 Estimate of Time.
- 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 completed design. The review will be performed by a professional engineer independent of the design team, as well as by a representative from GHA's Construction Division. The review will consider constructability issues as well as identification of missing pay items, quantities of work, and special provisions required. In addition, a second independent quantity calculation will be performed by a representative from GHA's Construction Division to verify the quantities as prepared by the design staff. After review of the independent quantity calculations, the Pre-Final quantities can be finalized.
- F. We will coordinate a Pre-Final Review Meeting in order to discuss the status of the projects and discuss the review of the Pre-Final plans. The meetings will be scheduled such that all parties will have had an opportunity to review the Pre-Final plans and provide comments. We anticipate a total of two (2) meetings; one (1) with the LCDOT and one (1) with the Village of Buffalo Grove.

The pre-final contract documents will be submitted to LCDOT, and to the Village of Buffalo Grove and other agencies as directed by LCDOT.

Exhibit B identifies the plan sheets anticipated to be included in the Pre-Final (90%) submittal.

Task 19 – Project Administration, Coordination and Permits

- A. Project Administration: This item includes project set-up, monthly invoicing, preparation of monthly status reports, and internal project team coordination meetings.
- B. Project Submittals: We will make the necessary document submittals, and follow up with each agency regarding their review comments, or to arrange a review meeting to discuss plan changes necessary to resolve conflicts. The final deliverable to LCDOT will include PDFs and MicroStation (*.dgn) drawings.
- C. Lake County Stormwater Management Commission Permitting: This project will require a permit submittal to LCSMC in compliance with the Lake County Watershed Development Ordinance. We will prepare and submit the permit application along with the required back-up documentation.
- D. United States Army Corps of Engineers: The required data and project information will be compiled and assembled into a permit application submittal package and submitted to the U.S. Army Corps of Engineers (USACE) for review. If minor impacts to WOUS or adjoining wetlands are unavoidable due to construction, the project will be filed under Regional Permit 3 – Transportation Project. For wetland impacts greater than 0.10 acre, wetland mitigation will be required. For impacts over 1.0 acre, an Individual Permit will be required from the USACE. Preparation of an Individual Permit Application is not included as part of this scope of work.
- E. IEPA /NPDES Permitting and Documentation: The NPDES permit, along with a Stormwater Pollution Prevention Plan (SWPPP), will also be prepared for inclusion in the contract documents. Separate permits will be required for each construction contract. All erosion control design will be in accordance with the latest IEPA and County requirements.
- F. IEPA Permitting: If it is determined through final design that the Village of Buffalo Grove water main will require relocation, then IEPA permits will be required as part of this project. The Village of Buffalo Grove will prepare the appropriate permit applications and documents and obtain the permits. We will coordinate with the Village to obtain the executed permits to include to the contract documents.
- G. Project Letting Delays/Project Restart: We will include man-hours for updating the plans, standards, special provisions, specifications, details, etc. due to possible delays in the letting schedule.

Task 20 – Final Plans, Special Provisions and Estimates (100%)

- A. Final Plans: All comments received pertaining to the pre-final plans and after completion of all agency reviews and resolution of any other agency or utility company concerns, the contract plans will be finalized. We will also submit the final plans to LCDOT and to other agencies and the utility companies as directed by LCDOT.
- B. Final Special Provisions: All comments received pertaining to the pre-final special provisions and bid documents and final plans will be addressed and a disposition of responses to comments will be provided. The status and schedule of all utility relocations, as of the date of the final plans, will be included in the bid documents.

- C. Final Quantity Calculations: The quantities will be updated based on changes made to the plans after the pre-final stage.
- D. Final Estimate of Cost and Construction Time: The estimates will be updated based on the revised quantities. Cost breakdowns for different funding sources will be provided to the County to assist in the completion of any joint agreements for construction.
- E. Final QA/QC Review: Prior to the final submittal, a second QA/QC review of the plans and special provisions will be performed.

Exhibit B identifies the plan sheets anticipated to be included in the Final (100%) submittal.

Task 21 – Phase III – Coordination

- A. Bidding Assistance: We will provide assistance to LCDOT during the bidding process. We will address questions from bidders and if necessary, will compile addendums to be issued to bidders.
- B. Pre-Construction Meeting Attendance: We will attend the pre-construction meeting at LCDOT to answer any questions regarding the design and contract documents.
- C. Shop Drawing Review: We will provide shop drawing review to LCDOT during construction.
- D. Resident Engineer Support: We will clarify design intent to the Resident Engineer if questions arise.

Fee Calculation

The attached Exhibit C includes GHA's man-hour calculations and estimated fee. Sub-consultant expenses and direct costs are invoiced at cost without markup. The following is a summary of the fee estimate:

GHA Fee Estimate Summary – Engineering Services

GHA – Phase II Design Engineering (labor)	\$304,165.27
GHA – Phase II Design Engineering (overhead)	\$498,831.04
GHA – Phase II Design Engineering (fixed fee)	\$112,541.15
GHA – Phase II Design Engineering (direct costs)	\$11,722.25
Subconsultants	\$270,103.40
Total	\$1,197,363.11

Exhibit B

Anticipated Plan Sheets

EXHIBIT B – ANTICIPATED PLAN SHEETS

Phase II - Design Engineering Services
Lake County Division of Transportation
Buffalo Grove Road
IL Route 22 (Half Day Road) to Deerfield Parkway
Lake County, Illinois

Anticipated Plan Sheets

No. of Sheets

Preliminary Engineering Plans (65%)

1. Cover Sheet	1
2. General Notes and List of State and Local Standards	3
3. Typical Section (Existing & Proposed)	8
4. Alignment, Ties and Benchmarks	10
5. Roadway Removal Plan (1"=20')	20
6. Plan and Profile (1"=20')	20
7. Maintenance of Construction (1"=50') and Typical Sections	30
8. Erosion Control Plan (1"=50') and Details	8
9. Drainage and Utilities (1"=20')	20
10. Detention Basin Plan (1"=20')	1
11. Intersection Details (1"= 20')	7
12. Water Main Relocation Plans (1"=20') and Details	4
13. Pavement Marking and Signing Plan (1"=50') and Details	8
14. Landscaping Plan (1"= 50') and Details	8
15. Detention Basin Planting Plan (1"= 20') and Details	2
16. Traffic Signal Removal Plan	2
17. Temporary Traffic Signal Plan	14
18. Temporary Interconnect Plan	2
19. Permanent Traffic Signal Plan	5
20. Interconnect Plan	2
21. Lighting Plan (1"=50') and Details	8
22. Structural Plans	6
23. Cross Sections	<u>60</u>
Total Anticipated Sheets:	249

Note:

Cross Sections: 50' interval, streets, driveways, high and low points, beginning of project, end of project, culverts and storm sewer structures. In accordance with Lake County Plan Preparation Guidelines.

EXHIBIT B – ANTICIPATED PLAN SHEETS (cont.)

<u>Anticipated Plan Sheets</u>	<u>No. of Sheets</u>
Pre-Final (90%) & Final (100%) Engineering Plans	
1. Cover Sheet	1
2. General Notes and List of State and Local Standards	3
3. Summary of Quantities	4
4. Schedule of Quantities (All Quantities Except Lump Sums)	15
5. Typical Section (Existing & Proposed)	10
6. Erosion Control Plan (1"=50') and Details	8
7. Alignment, Ties and Benchmarks	10
8. Roadway Removal Plan (1"=20')	20
9. Maintenance of Construction Plan – Stage 1 (1"=50')	8
10. Maintenance of Construction Plan – Stage 1 Typical Sections	2
11. Maintenance of Construction Plan – Stage 2 (1"=50')	8
12. Maintenance of Construction Plan – Stage 2 Typical Sections	2
13. Maintenance of Construction Plan – Stage 3 (1"=50')	8
14. Maintenance of Construction Plan – Stage 3 Typical Sections	2
15. Plan and Profile (1"=20')	20
16. Drainage and Utilities (1"=20')	20
17. Detention Basin Plan (1"=20')	1
18. Intersection Details (1"= 20')	7
19. Driveway Details (1"=10')	7
20. Sidewalk ADA Ramp Details (1"=5')	8
21. Water Main Relocation Plans (1"=20') and Details	4
22. Pavement Marking and Signing Plan (1"=50') and Details	8
23. Landscaping Plan (1"= 50') and Details	8
24. Detention Basin Planting Plan (1"= 20') and Details	2
25. Traffic Signal Removal Plan	2
26. Temporary Traffic Signal Plan – Buffalo Grove Road @ Thompson Blvd.	
a. Pre-Construction and Stage 4	1
b. Stage 1 Plan	1
c. Stage 2 Plan	1
d. Stage 3 Plan	1
27. Temporary Cable Plan – Buffalo Grove Road @ Thompson Blvd.	1
28. Traffic Signal Modernization Plan – Buffalo Grove Road @ Thompson Blvd.	1
29. Permanent Cable Plan – Buffalo Grove Road @ Thompson Blvd.	1

EXHIBIT B – ANTICIPATED PLAN SHEETS (cont.)

<u>Anticipated Plan Sheets</u>	<u>No. of Sheets</u>
Pre-Final (90%) & Final (100%) Engineering Plans (cont.)	
30. Temporary Traffic Signal Plan – Buffalo Grove Road @ Aptakisic Road	
a. Pre-Construction and Stage 4	1
b. Stage 1 Plan	2
c. Stage 2 Plan	2
d. Stage 3 Plan	3
31. Temporary Cable Plan – Buffalo Grove Road @ Aptakisic Road	1
32. Traffic Signal Modernization Plan – Buffalo Grove Road @ Aptakisic Road	2
33. Permanent Cable Plan – Buffalo Grove Road @ Aptakisic Road	1
34. Temporary Interconnect Plan	1
35. Temporary Interconnect Schematic	1
36. Interconnect Plan	5
37. Interconnect Schematic	1
38. Fiber Spicing Detail	1
39. Cabinet Detail	2
40. Mast Arm Mounted Street Name Signs	1
41. IDOT District One Standard Signal Design Details	7
42. Lighting General Notes, Legend & Schedule of Quantities	6
43. Proposed Circuit Diagrams and Lighting Controller Details	1
44. Lighting Details	2
45. Structural Plans	8
46. Cross Sections	60
47. IDOT Standards and Details	6
48. LCDOT Standards and Details	10
49. Project Specific Construction Details	<u>6</u>
Anticipated Total Sheets:	325

Note:

Cross Sections: 50' interval, streets, driveways, high and low points, beginning of project, end of project, culverts and storm sewer structures. In accordance with Lake County Plan Preparation Guidelines.

Exhibit C

Estimate of Direct Costs

EXHIBIT C – ESTIMATE OF DIRECT COSTS

Phase II - Design Engineering Services
Lake County Division of Transportation
Buffalo Grove Road
IL Route 22 (Half Day Road) to Deerfield Parkway
Lake County, Illinois

Estimated Printing Expenses

Preliminary Plans (65%)

22"x34"	249 sheets/set x 5 sets x 5.1943 sf (22"x34") x \$0.25/sf:	\$1,616.73
11"x17"	249 sheets/set x 15 sets x \$0.15/sheet:	\$560.25

Pre-Final Plans (90%)

22"x34"	369 sheets/set x 5 sets x 5.1943 sf (22"x34") x \$0.25/sf:	\$2,110.18
11"x17"	369 sheets/set x 15 sets x \$0.15/sheet:	\$731.25

Pre-Final Specifications (90%)

400 sheets/set x 15 sets x \$0.15/sheet:	\$900.00
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Final Plans

22"x34"	369 sheets/set x 5 sets x 5.1943 sf (22"x34") x \$0.25/sf:	\$2,110.18
11"x17"	369 sheets/set x 15 sets x \$0.15/sheet:	\$731.25

Plat of Highway

22"x34"	16 sheets/set x 5 sets x 5.1943 sf (22"x34") x \$0.25/sf:	\$58.44
11"x17"	16 sheets/set x 5 sets x \$0.15/sheet:	\$6.75
Mylar	16 sheets/set x 1 sets x \$7.50/sheet:	\$67.50

Final Specifications

400 sheets/set x 15 sets x \$0.15/sheet:	\$900.00
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Wetland Delineation Report

100 sheets x 6 sets x \$0.15/sheet:	\$90.00
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Drainage Report

150 sheets x 10 sets x \$0.15/sheet:	\$225.00
20 sheets/set x 10 sets x 5.1943 sf (22"x34") x \$0.25/sf:	\$259.72

Printing Expenses	\$10,367.25
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Estimated Shipping Expenses

50 submittals x \$15/each	\$750.00
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Shipping Expenses	\$750.00
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Estimated Vehicle Expenses

Project Site:	10 miles x \$0.55/mile x 30 site visits	\$165.00
Meetings:	16 miles x \$0.55/mile x 25 meetings x 2 staff	\$440.00

Vehicle Expenses	\$605.00
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Subtotal Estimated Direct Costs (Printing, Shipping, Mileage):	\$11,722.25
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EXHIBIT C – ESTIMATE OF DIRECT COSTS (cont.)

Subconsultants

Task 4 – Geotechnical Studies

Subconsultant: Testing Service Corporation (see Attachment 1 for proposal) \$14,800.00

Task 6 – Special Waste and CCDD Testing

Subconsultant: Huff & Huff (see Attachment 2 for proposal) \$15,138.69

Task 7 – Drainage Design

Subconsultant: Christopher B. Burke Engineering, Ltd. (see Attachment 3 for proposal) \$6,721.87

Task 8 – Structural Design

Subconsultant: Christopher B. Burke Engineering, Ltd. (see Attachment 3 for proposal) \$13,560.34

Subconsultant: Wiss Janney Elsner (see Attachment 4 for proposal) \$42,381.00

Task 13 – Landscape Design

Subconsultant: Hitchcock Design Group (see Attachment 5 for proposal) \$14,151.50

Task 15 – Plats of Highway, Legal Descriptions, Title Commitments

Subconsultant: Wheatland Title (estimate: \$400/parcel x 33 parcels) \$13,200.00

Task 16 – Property Acquisitions (Appraisals, Review Appraisals, Negotiations)

Subconsultant: Santacruz Associates, Ltd (see Attachment 6 for proposal) \$150,150.00

Subtotal Anticipated Direct Costs (Subconsultants): \$270,103.40

TOTAL ANTICIPATED DIRECT COSTS

Subtotal Anticipated Direct Costs (Printing, Shipping, Mileage): \$11,722.25

Subtotal Anticipated Direct Costs (Subconsultants): \$270,103.40

Total: \$281,825.65

Exhibit D

Man-Hour and Fee Estimate

Phase II Design Engineering Services
Exhibit C - Manhour Calculations of Consultant Services
Buffalo Grove Road - IL Route 22 to Deerfield Parkway
Lake County Division of Transportation (LCDOT)

Description	Princpl	Senior Eng	Sr Env Consult	Prof Eng	Prof Land Survey	Staff Eng	Env Consult	Senior Eng Tech	Eng Tech II	Eng Tech I	Clerical	Sub-Conslt	Total Effort (hrs)	
Task 1-Early Coordination and Data Collection														
A LCDOT Kick-Off Meeting		6		5	3								14	9.72%
B LCSMC Kick-Off Meeting		3	3	3		5							14	9.72%
C Village of Buffalo Grove Kick-Off Meeting		3		5									8	5.56%
D Buffalo Grove Park District Kick-Off Meeting		3		5									8	5.56%
E Coordination w/ CBBEL re: Aptakisic Ph I		8		16	8			16					48	33.33%
F Project Data Review and Update				16		16		16					48	33.33%
G Buffalo Grove ERUV Coordination				4									4	2.78%
	0	23	3	54	11	21	0	32	0	0	0		144	100.00%
Task 2-Utility Coordination														
A Initial Utility Coordination		6		24		32		8					70	27.89%
B Preliminary Plans (65%) to Utilities/Coordination		6		16		24		4					50	19.92%
C Pre-Final Plans (90%) to Utilities/Coordination		4		8		16		4					32	12.75%
D Utility Coordination Meeting (estimated: 6 meetings)		9		24		32		16	8				89	35.46%
E Coordination w/ ComEd re: electric to signals & lighting								4	6				10	3.98%
	0	25	0	72	0	104	0	36	14	0	0		251	100.00%
Task 3-Topographic Survey														
A Confirm Field Control		2			4			8	16				30	12.93%
B Survey Existing Condition Topography (Field)					8			80	16				104	44.83%
C Reduction of Field Survey (Office)					2				32				34	14.66%
D Field Investigation of Draitiles		4		8				24					36	15.52%
E Photolog Project Cooridor				2		2				24			28	12.07%
	0	6	0	10	14	2	0	112	64	24	0		232	100.00%
Task 4-Geotechnical Studies														
A Coordination w/ Geotech Consultant		2		4					8				14	77.78%
B Pre-Boring Meeting w/ LCDOT				4									4	22.22%
	0	2	0	8	0	0	0	0	8	0	0		18	100.00%
Task 5-Wetland Delineation														
A Re-Delineate Wetlands		2	8				16		12				38	41.30%
B Update Wetland Delineation Report		2	16	4			24						46	50.00%
C Update IDNR Consultation							4						4	4.35%
D Updated IHPA Clearances							4						4	4.35%
	0	4	24	4	0	0	48	0	12	0	0		92	100.00%
Task 6-Special Waste and CCDD Testing														
A Coordination w/ Special Waste Consultant		4		8					4				16	100.00%
	0	4	0	8	0	0	0	0	4	0	0		16	
Task 7-Drainage Design														
A Review BG Rd LDS and Aptakisic Phase I Drainage Analysis		16		4		16							36	5.84%
B Storm Sewer Design		40		24		80							144	23.38%
C Detention Desgin		56		12		32							100	16.23%
D Floodplain Analysis/Comp Storage Review		48		8		64							120	19.48%
E Water quality treatment review		40		4		40							84	13.64%
F Stormwater Report		44		8		80							132	21.43%
	0	244	0	60	0	312	0	0	0	0	0		616	100.00%
Task 8-Structural Design														
A Coordination w/ Structural Engineer(s)		16		24					16				56	100.00%
	0	16	0	24	0	0	0	0	16	0	0		56	100.00%
Task 9-Municipal Utilties Analysis														
A Review Watermain Relocation Options		16		24									40	100.00%
	0	16	0	24	0	0	0	0	0	0	0		40	100.00%
Task 10-Lighting Coordination														
A Review impacted light foundation/pole locations		8		24					16				48	54.55%
B Review lighting alternatives w/ Buffalo Grove		6		16									22	25.00%
C Coordinate Village Lighting Design		2		16									18	20.45%
	0	16	0	56	0	0	0	0	16	0	0		88	100.00%

Phase II Design Engineering Services
Exhibit C - Manhour Calculations of Consultant Services
Buffalo Grove Road - IL Route 22 to Deerfield Parkway
Lake County Division of Transportation (LCDOT)

Description	Princpl	Senior Eng	Sr Env Consult	Prof Eng	Prof Land Survey	Staff Eng	Env Consult	Senior Eng Tech	Eng Tech II	Eng Tech I	Clerical	Sub-Conslt	Total Effort (hrs)	
Task 11-Traffic Modernization and Interconnect Plan Design														
A Coordinate w/ LCDOT Traffic Engineer		8		8				24					40	100.00%
	0	8	0	8	0	0	0	24	0	0	0		40	100.00%
Task 12-Maintenance of Traffic Analysis														
A Review MOT alternatives		16		40				40					96	40.00%
B Prepare MOT alternatives/present to LCDOT		16		56				40	32				144	60.00%
	0	32	0	96	0	0	0	80	32	0	0		240	100.00%
Task 13-Landscape Design														
A Coordination w/ Landscape Architect		16		16					8				40	71.43%
B Aesthetics Review Meeting w/ LCDOT		4		4									8	14.29%
C Meeting w/ LCDOT & Village of Buffalo Grove		4		4									8	14.29%
	0	24	0	24	0	0	0	0	8	0	0		56	100.00%
Task 14-Review and Confirm Project Right-of-Way Requirements														
A Review ROW w/ Prelim Plan and Cross-Sections		24		24	16				8				72	31.86%
B Field Review of Proposed Acquisition Locations w/ Prelim. Design Plans		2		16					16				34	15.04%
C Coord. w/ Com Ed re: Existing Easement/ROW along Buffalo Grove Road		24		16	48				32				120	53.10%
	0	50	0	56	64	0	0	0	56	0	0		226	100.00%
Task 15-Plat of Highways, Legal Descriptions, Title Commitments														
A Field Work														
Reconnaissance					30			24					54	4.89%
Setting Control and Alignment					30			30	30				90	8.14%
Survey Boundary					30			30	60				120	10.86%
Locating Building Structures/Hardscape					15			120	30				165	14.93%
Final Staking					30			30	60				120	10.86%
B Office Work														
Pre-Survey Coordination					15								15	1.36%
Coordination Ordering of Title Commitments					8								8	0.72%
Analysis of Deeds/Titles Commitments					30			30					60	5.43%
Preparation of Plat of Highways					136			30	45				211	19.10%
Preparation of Legal Descriptions					60						30		90	8.14%
C Pre-Final Plat of Highway/Legal Description/Titles		8		16	24								48	4.34%
D QA/QC	8	24		16	48								96	8.69%
E Final Plat of Highway/Legal Description/Titles		4		8	16								28	2.53%
	8	36	0	40	472	0	0	294	225	0	30		1105	100.00%
Task 16-Property Acquisitions (Appraisals, Review Appraisals, Negotiations)														
A Coordination w/ Negotiator (Appraiser/Review Appraiser)		16		32					24				72	78.26%
B Property Acquisition meeting w/ LCDOT (2 meetings)		8		12									20	21.74%
	0	24	0	44	0	0	0	0	24	0	0		92	100.00%
Task 17-Preliminary Engineering (65%)														
A Preliminary Plans														
Cover Sheet		2		2									4	0.25%
General Notes and List of State and Local Standards		4		8									12	0.75%
Typical Section (Existing & Proposed)		4		8		4			8				24	1.50%
Alignment, Ties, Benchmarks and Highway Plats				4	24								28	1.75%
Roadway Removal Plan (1"=20')		8		80		8			16				112	7.01%
Plan and Profile (1"=20')		16		60		20		24	24				144	9.01%
Maintenance of Construction (1"=50') and Typical Sections		24		80				24	40				168	10.51%
Erosion Control Plan (1"=50') and Details		8	8	32		16		8					72	4.51%
Drainage and Utilities (1"=20')		24		64		72		64	16				240	15.02%
Detention Basin Plan (1"=20')		16	8	16		24		8					72	4.51%
Intersection Details (1"= 20')		4		40				40					84	5.26%
Water Main Relocation Plans (1"=20') and Details		4		8									12	0.75%
Pavement Marking and Signing Plan (1"=50') and Details		4		8				24	24				60	3.75%
Landscaping Plan (1"= 50') and Details				2				8					10	0.63%
Detention Basin Planting Plan (1"= 20') and Details		4	2	4									10	0.63%
Traffic Signal Removal Plan				4				16	16				36	2.25%
Temporary Traffic Signal Plan				4				16	16				36	2.25%
Temporary Interconnect Plan				4				8	16				28	1.75%
Permanent Traffic Signal Plan		4		8				40	24				76	4.76%
Interconnect Plan		2		4				16	8				30	1.88%
Lighting Plan (1"=50') and Details		8		16				8	24				56	3.50%
Structural Plans				8				4					12	0.75%
Cross Sections		16		80		40		40	24				200	12.52%
B GHA Field Review		4		16				16					36	2.25%
C Preliminary Plan Meeting w/ LCDOT		8		8				4					20	1.25%
D Preliminary Plan Meeting w/ Village of Buffalo Grove		4		8				4					16	1.00%
	0	168	18	576	24	184	0	372	256	0	0		1598	100.00%

Phase II Design Engineering Services
Exhibit C - Manhour Calculations of Consultant Services
Buffalo Grove Road - IL Route 22 to Deerfield Parkway
Lake County Division of Transportation (LCDOT)

Description	Princpl	Senior Eng	Sr Env Consult	Prof Eng	Prof Land Survey	Staff Eng	Env Consult	Senior Eng Tech	Eng Tech II	Eng Tech I	Clerical	Sub-Conslt	Total Effort (hrs)	
Task 18-Pre-Final Plans, Special Provisions and Estimates (90%)														
A Pre-Final Plans														
Cover Sheet				2									2	0.10%
General Notes and List of State and Local Standards		2		2									4	0.20%
Summary of Quantities		2		4				4					10	0.51%
Schedule of Quantities		2		8		8		24					42	2.14%
Typical Section (Existing & Proposed)		1		4				4					9	0.46%
Erosion Control Plan (1"=50') and Details		8	8	16		24		8					64	3.26%
Alignment, Ties, Benchmarks and Highway Plats		2		2	4								8	0.41%
Roadway Removal Plan (1"=20')		4		16					8				28	1.43%
Maintenance of Construction Plan – Stage 1 (1"=50')		1		8				16	8				33	1.68%
Maintenance of Construction Plan – Stage 1 Typical Sections		1		4				8	4				17	0.87%
Maintenance of Construction Plan – Stage 2 (1"=50')		1		8				16	8				33	1.68%
Maintenance of Construction Plan – Stage 2 Typical Sections		1		4				8	4				17	0.87%
Maintenance of Construction Plan – Stage 3 (1"=50')		1		8				16	8				33	1.68%
Maintenance of Construction Plan – Stage 3 Typical Sections		1		4				8	4				17	0.87%
Plan and Profile (1"=20')		16		64		16		24	40				160	8.15%
Drainage and Utilities (1"=20')		24		64		32		24	40				184	9.37%
Detention Basin Plan (1"=20')		24	8	16									48	2.45%
Intersection Details (1"= 20')		16		24				16					56	2.85%
Driveway Details (1"=10')		12		48				24					84	4.28%
Sidewalk ADA Ramp Details (1"=5')		8		48		24			24				104	5.30%
Water Main Relocation Plans (1"=20') and Details		2		4									6	0.31%
Pavement Marking and Signing Plan (1"=50') and Details								16	16				32	1.63%
Landscaping Plan (1"= 50') and Details		4		4									8	0.41%
Detention Basin Planting Plan (1"= 20') and Details		2	4	4									10	0.51%
Traffic Signal Removal Plan								2	4				6	0.31%
Temporary Traffic Signal Plan – Buffalo Grove Road @ Thompson Blvd.								8	4				12	0.61%
Pre-Construction and Stage 4								4	4				8	0.41%
Stage 1 Plan								4	4				8	0.41%
Stage 2 Plan								4	4				8	0.41%
Stage 3 Plan								4	4				8	0.41%
Temporary Cable Plan – Buffalo Grove Road @ Thompson Blvd.								4	4				8	0.41%
Traffic Signal Modernization Plan – Buffalo Grove Road @ Thompson Blvd.								8	8				16	0.82%
Permanent Cable Plan – Buffalo Grove Road @ Thompson Blvd.								8	4				12	0.61%
Temporary Traffic Signal Plan – Buffalo Grove Road @ Aptakisic Road								16	8				24	1.22%
Pre-Construction and Stage 4								4	4				8	0.41%
Stage 1 Plan								4	4				8	0.41%
Stage 2 Plan								4	4				8	0.41%
Stage 3 Plan								4	4				8	0.41%
Temporary Cable Plan – Buffalo Grove Road @ Aptakisic Road								4	4				8	0.41%
Traffic Signal Modernization Plan – Buffalo Grove Road @ Aptakisic Road								16	12				28	1.43%
Permanent Cable Plan – Buffalo Grove Road @ Aptakisic Road								8	4				12	0.61%
Temporary Interconnect Plan								12	8				20	1.02%
Temporary Interconnect Schematic								8	8				16	0.82%
Interconnect Plan								12	8				20	1.02%
Interconnect Schematic								8	8				16	0.82%
Fiber Spicing Detail								4	4				8	0.41%
Cabinet Detail								4	2				6	0.31%
Mast Arm Mounted Street Name Signs								2	2				4	0.20%
IDOT District One Standard Signal Design Details								2	2				4	0.20%
Lighting Plan and Details		16		24				4	8				52	2.65%
Structural Plans				4				4					8	0.41%
Cross Sections		24		80		16		24	24				168	8.56%
IDOT Standards and Details		4		8									12	0.61%
LCDOT Standards and Details		4		8									12	0.61%
B Pre-Final Special Provisions		32		40				24			32		128	6.52%
C Pre-Final Quantity Calculations		24		64				40					128	6.52%
D Pre-Final Estimate of Cost and Time		8		8				6					22	1.12%
E Pre-Final QA/QC Review	16	32						64					112	5.71%
F Pre-Final Meeting w/ LCDOT		8		6				4					18	0.92%
G Pre-Final Meeting w/ Village of Buffalo Grove		4		6									10	0.51%
	16	291	20	614	4	120	0	544	322	0	32		1963	100.00%
Task 19-Project Administration and Permits														
A Project Administration	8	36		36									80	17.70%
B Project Submittals		12		12									24	5.31%
C LCSMC Permitting		16		4		16							36	7.96%
D USACE Permitting		8	24	4			40						76	16.81%
E IEPA/NPDES Permitting (SWPPP)		8		4		24							36	7.96%
G Project Letting/Project Restart	8	40		80		24		32	16				200	44.25%
	16	120	24	140	0	64	40	32	16	0	0		452	100.00%

Phase II Design Engineering Services
Exhibit C - Manhour Calculations of Consultant Services
Buffalo Grove Road - IL Route 22 to Deerfield Parkway
Lake County Division of Transportation (LCDOT)

Description	Princpl	Senior Eng	Sr Env Consult	Prof Eng	Prof Land Survey	Staff Eng	Env Consult	Senior Eng Tech	Eng Tech II	Eng Tech I	Clerical	Sub-Conslt	Total Effort (hrs)	
Task 20-Final Plans, Special Provisions and Estimates (100%)														
A Final Plans														
Cover Sheet				2									2	0.18%
General Notes and List of State and Local Standards		1		2									3	0.26%
Summary of Quantities		2		4				4					10	0.88%
Schedule of Quantities		8		16		4		16					44	3.87%
Typical Section (Existing & Proposed)		1		1									2	0.18%
Erosion Control Plan (1"=50') and Details		4	4	8		8		4					28	2.46%
Alignment, Ties, Benchmarks and Highway Plats				1	2								3	0.26%
Roadway Removal Plan (1"=20')		2		8					8				18	1.58%
Maintenance of Construction Plan – Stage 1 (1"=50')				8				8	2				18	1.58%
Maintenance of Construction Plan – Stage 1 Typical Sections				2				4	1				7	0.62%
Maintenance of Construction Plan – Stage 2 (1"=50')				2				8	4				14	1.23%
Maintenance of Construction Plan – Stage 2 Typical Sections				2				4	4				10	0.88%
Maintenance of Construction Plan – Stage 3 (1"=50')				2				8	4				14	1.23%
Maintenance of Construction Plan – Stage 3 Typical Sections				2				4	4				10	0.88%
Plan and Profile (1"=20')		16		40				16	16				88	7.75%
Drainage and Utilities (1"=20')		16		40		24		8	16				104	9.15%
Detention Basin Plan (1"=20')		2	2	4									8	0.70%
Intersection Details (1"= 20')		4		8				8					20	1.76%
Driveway Details (1"=10')		4		8				4					16	1.41%
Sidewalk ADA Ramp Details (1"=5')				8					8				16	1.41%
Water Main Relocation Plans (1"=20') and Details				4		4							8	0.70%
Pavement Marking and Signing Plan (1"=50') and Details				4				4	4				12	1.06%
Landscaping Plan (1"= 50') and Details		2		4									6	0.53%
Detention Basin Planting Plan (1"= 20') and Details			2	2									4	0.35%
Traffic Signal Removal Plan								1					1	0.09%
Temporary Traffic Signal Plan – Buffalo Grove Road @ Thompson Blvd.								4	2				6	0.53%
Pre-Construction and Stage 4								1	1				2	0.18%
Stage 1 Plan								1	1				2	0.18%
Stage 2 Plan								1	1				2	0.18%
Stage 3 Plan								1	1				2	0.18%
Temporary Cable Plan – Buffalo Grove Road @ Thompson Blvd.								2	2				4	0.35%
Traffic Signal Modernization Plan – Buffalo Grove Road @ Thompson Blvd.								4	4				8	0.70%
Permanent Cable Plan – Buffalo Grove Road @ Thompson Blvd.								2	2				4	0.35%
Temporary Traffic Signal Plan – Buffalo Grove Road @ Aptakisic Road								2	2				4	0.35%
Pre-Construction and Stage 4								1	1				2	0.18%
Stage 1 Plan								1	1				2	0.18%
Stage 2 Plan								1	1				2	0.18%
Stage 3 Plan								1	1				2	0.18%
Temporary Cable Plan – Buffalo Grove Road @ Aptakisic Road								2	2				4	0.35%
Traffic Signal Modernization Plan – Buffalo Grove Road @ Aptakisic Road								8	8				16	1.41%
Permanent Cable Plan – Buffalo Grove Road @ Aptakisic Road								8	4				12	1.06%
Temporary Interconnect Plan								8	4				12	1.06%
Temporary Interconnect Schematic								4	4				8	0.70%
Interconnect Plan								8	4				12	1.06%
Interconnect Schematic								4	2				6	0.53%
Fiber Spicing Detail								1	1				2	0.18%
Cabinet Detail								1	1				2	0.18%
Mast Arm Mounted Street Name Signs								1					1	0.09%
IDOT District One Standard Signal Design Details								1					1	0.09%
Lighting Plan and Details		8		16					4				28	2.46%
Structural Plans				2				2					4	0.35%
Cross Sections		16		40		16		24	24				120	10.56%
IDOT Standards and Details		2		2									4	0.35%
LCDOT Standards and Details		2		2									4	0.35%
B Final Special Provisions		24		32				8			16		80	7.04%
C Final Quantity Calculations	8	24		64				40					136	11.97%
D Final Estimate of Cost and Time		4		4				8					16	1.41%
E Final QA/QC Review	16	32		24				64					136	11.97%
F Final Meeting w/ LCDOT		8		6									14	1.23%
G Final Meeting w/ Village of Buffalo Grove		4		6									10	0.88%
	24	186	8	380	2	56	0	315	149	0	16		1136	100.00%
Task 21-Phase III Coordination														
A Bidding Assistance		4		8		8							20	10.87%
B Pre-Construction Meeting Attendance		4		4	4								12	6.52%
C Shop Drawing Review		16		32		8							56	30.43%
D Resident Engineering Support		8		48		8		32					96	52.17%
	0	32	0	92	4	24	0	32	0	0	0		184	100.00%
Total Hours	64	1327	97	2390	595	887	88	1873	1222	24	78	8645	8645	

PAYROLL ESCALATION TABLE
FIXED RAISES

FIRM NAME	Gewalt Hamilton Associates, Inc	DATE	12/17/14
PRIME/SUPPLEMENT	Prime	PTB NO.	11-00249-03-WR
CONTRACT TERM	36 MONTHS	OVERHEAD RATE	164.00%
START DATE	1/15/2015	COMPLEXITY FACTOR	0
RAISE DATE	5/1/2015	% OF RAISE	3.00%

ESCALATION PER YEAR

1/15/2015 - 1/1/2016	1/2/2016 - 1/1/2017	1/2/2017 - 1/1/2018		
12	12	12		
36	36	36		
= 33.33%	34.33%	35.36%		
= 1.0303				
The total escalation for this project would be:		3.03%		

PAYROLL RATES

FIRM NAME Gewalt Hamilton Associ
PRIME/SUPPLEMENT Prime
PSB NO. 11-00249-03-WR

DATE 12/17/14

ESCALATION FACTOR 3.03%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Principal Engineer	\$58.94	\$60.73
Senior Engineer	\$50.45	\$51.98
Sr. Environmental Consultar	\$40.00	\$41.21
Professional Engineer	\$35.54	\$36.62
Registered Land Surveyor	\$38.25	\$39.41
Staff Engineer	\$26.67	\$27.48
Environmental Consultant	\$24.00	\$24.73
Sr. Engineering Tech	\$30.69	\$31.62
Engineering Tech II	\$22.38	\$23.06
Engineering Tech I	\$16.07	\$16.56
Engineer Tech Intern	\$13.00	\$13.39
Clerical/Administrative	\$24.83	\$25.58
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00

COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

DF-824-039
REV 12/04

FIRM
SECTION
PRIME/SUPPLEMENT

Gewalt Hamilton Associates, Inc
11-00249-03-WR
Prime

OVERHEAD RATE
COMPLEXITY FACTOR

1.64
0

DATE 12/17/14

DBE DROP BOX	ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	Outside Direct Costs (F)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-H)	% OF GRAND TOTAL
	Task 1-Early Coord. And Data Collection	144	5,318.83	8,722.88		1,967.97				16,009.68	1.34%
	Task 2-Utility Coordination	251	8,254.73	13,537.76		3,054.25				24,846.75	2.08%
	Task 3-Topographic Survey	232	6,699.24	10,986.75		2,478.72				20,164.70	1.68%
	Task 4-Geotechnical Studies	18	581.36	953.43		215.10		14,800.00		16,549.88	1.38%
	Task 5-Wetland Delineation	92	2,807.07	4,603.60		1,038.62				8,449.29	0.71%
	Task 6-Special Waste and CCDD Testing	16	593.08	972.65		219.44		15,138.69		16,923.87	1.41%
	Task 7-Drainage Design	616	23,452.97	38,462.86		8,677.60		6,721.87		77,315.30	6.46%
	Task 8-Structural Design	56	2,079.39	3,410.20		769.38		55,941.34		62,200.31	5.19%
	Task 9-Municipal Utility Analysis	40	1,710.46	2,805.16		632.87				5,148.49	0.43%
	Task 10-Lighting Coordination	88	3,251.13	5,331.86		1,202.92				9,785.91	0.82%
	Task 11-Traffic Mod. and Interconnect Plan Design	40	1,467.64	2,406.93		543.03				4,417.60	0.37%
	Task 12-Maintenance of Traffic Analysis	240	8,445.99	13,851.42		3,125.02				25,422.42	2.12%
	Task 13-Landscaping Design	56	2,310.76	3,789.64		854.98		14,151.50		21,106.88	1.76%
	Task 14-Review and Confirm Project ROW	226	8,462.90	13,879.16		3,131.27				25,473.34	2.13%
	Task 15-Plat of Hwy, Legal Descriptions, Titles	1105	37,674.55	61,786.26		13,939.58		13,200.00		126,600.39	10.57%
	Task 16-Property Acquisitions	92	3,412.02	5,595.72		1,262.45		150,150.00		160,420.19	13.40%
	Task 17-Preliminary Engineering (65%)	1598	54,232.81	88,941.80		20,066.14				163,240.75	13.63%
	Task 18-Pre-Final PS&E (90%)	1963	68,303.98	112,018.52		25,272.47				205,594.97	17.17%
	Task 19-Project Administration and Permits	452	17,452.95	28,622.84		6,457.59				52,533.39	4.39%
	Task 20-Final PS&E (100%)	1136	40,792.39	66,899.52		15,093.18				122,785.09	10.25%
	Task 21-Phase III Coordination	184	6,861.01	11,252.06		2,538.58				20,651.66	1.72%
	GHA Direct Costs				11,722.25					11,722.25	0.98%
	Subconsultant DL					0.00				0.00	0.00%
	TOTALS	8645	304,165.27	498,831.04	11,722.25	112,541.15	0.00	270,103.40	0.00	1,197,363.11	100.00%

PREPARED BY THE AGREEMENTS UNIT

Printed 12/17/2014 11:18 AM

AVERAGE HOURLY PROJECT RATES

FIRM Gewalt Hamilton Associates, Inc
SECTION 11-00249-03-WR
PRIME/SUPPLE Prime

DATE 12/17/14

SHEET 1 OF 4

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Task 1-Early Coord. And D			Task 2-Utility Coordinatio			Task 3-Topographic Surv			Task 4-Geotechnical Stud			Task 5-Wetland Delineati		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal Engineer	60.73	64	0.74%	0.45															
Senior Engineer	51.98	1327	15.35%	7.98	23	15.97%	8.30	25	9.96%	5.18	6	2.59%	1.34	2	11.11%	5.78	4	4.35%	2.26
Sr. Environmental Consultant	41.21	97	1.12%	0.46	3	2.08%	0.86										24	26.09%	10.75
Professional Engineer	36.62	2390	27.65%	10.12	54	37.50%	13.73	72	28.69%	10.50	10	4.31%	1.58	8	44.44%	16.27	4	4.35%	1.59
Registered Land Surveyor	39.41	595	6.88%	2.71	11	7.64%	3.01				14	6.03%	2.38						
Staff Engineer	27.48	887	10.26%	2.82	21	14.58%	4.01	104	41.43%	11.39	2	0.86%	0.24						
Environmental Consultant	24.73	88	1.02%	0.25													48	52.17%	12.90
Sr. Engineering Tech	31.62	1873	21.67%	6.85	32	22.22%	7.03	36	14.34%	4.54	112	48.28%	15.26						
Engineering Tech II	23.06	1222	14.14%	3.26				14	5.58%	1.29	64	27.59%	6.36	8	44.44%	10.25	12	13.04%	3.01
Engineering Tech I	16.56	24	0.28%	0.05							24	10.34%	1.71						
Engineer Tech Intern	13.39	0																	
Clerical/Administrative	25.58	78	0.90%	0.23															
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TOTALS		8645	100%	\$35.18	144	100.00%	\$36.94	251	100%	\$32.89	232	100%	\$28.88	18	100%	\$32.30	92	100%	\$30.51

AVERAGE HOURLY PROJECT RATES

FIRM Gewalt Hamilton Associates, Inc
SECTION 11-00249-03-WR
PRIME/SUPPLE Prime

DATE 12/17/14

SHEET 3 OF 4

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Task 12-Maintenance of Traffic			Task 13-Landscaping Design			Task 14-Review and Confirm			Task 15-Plat of Hwy, Legal De			Task 16-Property Acquisitions			Task 17-Preliminary Engineeri		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal Engineer	60.73										8	0.72%	0.44						
Senior Engineer	51.98	32	13.33%	6.93	24	42.86%	22.28	50	22.12%	11.50	36	3.26%	1.69	24	26.09%	13.56	168	10.51%	5.46
Sr. Environmental Consultant	41.21																18	1.13%	0.46
Professional Engineer	36.62	96	40.00%	14.65	24	42.86%	15.69	56	24.78%	9.07	40	3.62%	1.33	44	47.83%	17.51	576	36.05%	13.20
Registered Land Surveyor	39.41							64	28.32%	11.16	472	42.71%	16.83				24	1.50%	0.59
Staff Engineer	27.48																184	11.51%	3.16
Environmental Consultant	24.73																		
Sr. Engineering Tech	31.62	80	33.33%	10.54							294	26.61%	8.41				372	23.28%	7.36
Engineering Tech II	23.06	32	13.33%	3.07	8	14.29%	3.29	56	24.78%	5.71	225	20.36%	4.70	24	26.09%	6.02	256	16.02%	3.69
Engineering Tech I	16.56																		
Engineer Tech Intern	13.39																		
Clerical/Administrative	25.58										30	2.71%	0.69						
TOTALS		240	100%	\$35.19	56	100%	\$41.26	226	100%	\$37.45	1105	100%	\$34.09	92	100%	\$37.09	1598	100%	\$33.94

Exhibit E

Subconsultant Proposals

Attachment 1

Testing Service Corporation

December 17, 2014



TESTING SERVICE CORPORATION

Corporate Office

360 South Main Place, Carol Stream, IL 60188-2404
630.462.2600 • Fax 630.653.2988

Mr. Todd Gordon
Gewalt Hamilton Associates, Inc.
625 Forest Edge Drive
Vernon Hills, IL 60061

RE: P.N. 53,435 - Revised December 17, 2014
Geotechnical Exploration
Roadway Improvements, Detention Expansion & Box Culvert
Buffalo Grove Road
Buffalo Grove, IL

Dear Mr. Gordon:

Testing Service Corporation (TSC) is pleased to submit this proposal to provide Geotechnical Engineering Services for the above captioned project. The objectives of the Geotechnical Study are to explore soil conditions and provide recommendations for pavement and detention design in connection with the proposed improvements.

Project Description:

Our understanding of existing site conditions and the proposed construction are as follow:

- Detention area will be expanded at PINs 15-28-101-081 and 15-28-101-060.
- Additional borings will be performed along Buffalo Grove Road at Sta. 130+00 to 139+00 and Sta. 88+00 to Sta. 94+00.
- A 6' x 6' box culvert will be constructed at approximate Sta. 63+25 under Aptakisic Road west of Buffalo Grove Road.

If the location or type of the proposed structure(s) are changed, TSC should be promptly contacted to determine the relevance of our proposed boring program to the new project configuration.

Boring Program:

We are proposing to drill eleven (11) soil borings as part of our Geotechnical Exploration.

- Six (6) borings will be extended to a depth of 10 feet and will be located along Buffalo Grove Road.
- Three (3) borings will be extended to a depth of 20 feet and will be located at the detention area expansion.
- Two (2) borings will extended to a depth of 35 feet and will be located along Aptakisic Road at approximate Sta 63+25.

Total drilling footage on this basis is estimated to be about 190 lineal feet. Traffic control consisting of a two-person flagging crew will be utilized at the borings along Buffalo Grove Road.

For the purposes of this proposal we have assumed that the boring locations will be accessible to conventional drilling equipment. In this regard, they should not be located in standing water, within wooded or landscaped areas, or on steeply sloping ground. No provisions have been made for tree/brush clearing or other obstruction removal should borehole access be impeded. Landscape restoration or crop damage (if required) is also not included in the project budget.

TSC will utilize personnel who are trained in layout procedures to stake the borings in the field. Ground surface elevations for each borehole will be determined by level survey methods (benchmark to be provided). Utility clearance for the borings will be obtained by contacting JULIE (Joint Utility Locating Information for Excavators). Secondary and /or private underground utility lines will have to be marked by the property owner or their agents; a private locator can be hired (at an added cost) if necessary.

Roadway Borings: Soil samples will primarily be obtained by split-spoon methods, with thin-walled tube also taken if conditions dictate. Sampling will be performed continuously for the first 5 feet and 2½-foot intervals for remainder of the boring.

Detention and Structure Borings: Soil samples will primarily be obtained by split-spoon methods, with thin-walled tube also taken if conditions dictate. Sampling will be performed at 2½-foot intervals for the entire depth of the boring.

A representative portion of the split-spoon samples will be placed in a glass jar with screw-type lid for transportation to our laboratory. Groundwater observations will also be made during and following completion of drilling operations, with any boreholes in pavement areas to be backfilled immediately and patched at the surface.

Laboratory Testing:

Samples obtained from the borings will be examined by experienced laboratory personnel in order to verify field descriptions as well as to visually classify in accordance with the Unified Soil Classification System. Laboratory testing will include moisture content and dry unit weight determinations as well as measurements of unconfined compressive strength by direct or indirect methods, as appropriate. Other tests deemed to be necessary by TSC's Project Engineer may also be recommended for your approval.

Engineering Report:

Upon completion of drilling and testing, you will receive an engineering report summarizing field and laboratory test data, including a boring location plan and boring logs. The report will address anticipated soil and groundwater conditions impacting site development, based upon the information obtained from the borings. It will also provide recommendations to guide design and specification preparation pertaining to geotechnical issues relevant to the structure or purpose described in this proposal. These may include the following:

- General earthwork and construction considerations.
- Remedial work and/or treatment of unstable or unsuitable soil types.
- Fill placement and compaction requirements for pavements and detention areas.

This proposal also includes Professional Engineer to attend two meetings.

Fees and Scope:

In accordance with the Cost Estimate attached, TSC is proposing a not-to-exceed budget amount of Fourteen Thousand Eight Hundred Dollars (\$14,800.00) to provide the Geotechnical Exploration outlined above. Our proposal is based on the understanding that: the boring locations are accessible to a conventional truck or All-Terrain Vehicle (ATV) mounted drill; none of the borings will be located in standing water; in wooded or landscaped areas or on steeply slopping ground; and that the work can be performed during standard business hours. Our fee is further subject to this proposal being accepted by you on or before June 30, 2015.

Should the study reveal unexpected subsurface conditions requiring a change in the scope of work, you will be contacted before we proceed with additional work. Our invoice would then be based on the unit rates given in the attached Cost Estimate or as otherwise agreed upon. While our quoted fee does not include excavation, fill, earthwork, footing or foundation observations during construction phase, the project budget should include a provision for these services. Plan review, preconstruction meetings and/or other consulting and professional services that are provided subsequent to delivery of TSC's report would be covered by separate invoice.

TSC's geotechnical investigation does not include services required to evaluate the likelihood of the site being contaminated by hazardous materials or other pollutants. Analytical testing which would be required in connection with IEPA Form LPC-663, Uncontaminated Soil Certification is also not included. Should an environmental and/or analytical testing be desired, please contact the undersigned for additional details and/or associated cost.

Closure:

The geotechnical services being performed are subject to TSC's attached General Conditions. Unless stated otherwise, TSC fees include all state and federal taxes and permits that may be required. However, they do not include any license, permit or bond fees that local governments may impose. The local fees, if any, will be added to the invoice. Unless we receive written instructions to the contrary, invoices will be sent to:

Mr. Todd Gordon
Gewalt Hamilton Associates, Inc.
625 Forest Edge Drive
Vernon Hills, IL 60061
email: tgordon@gha-engineers.com

If this proposal meets with your approval, please indicate your acceptance by signing one copy and returning it to our Carol Stream, Illinois office. It would be helpful if you could also complete the attached Project Data form indicating who is to receive copies of TSC's report and other related information.

Your consideration of our proposal is appreciated. We look forward to being of service to you on this project.

Respectfully submitted,

TESTING SERVICE CORPORATION

Prepared by,



Michael V. Machalinski, P.E.
Vice President



Michael D. Billings
Vice President

MVM:MDB:kw

Enc: Cost Estimate
General Conditions
Project Data Sheet

Approved and accepted for _____ by:

(NAME)

(TITLE)

(DATE)

COST ESTIMATE
Roadway Improvements & Detention Expansion
Buffalo Grove Road
Buffalo Grove, IL
TSC P.N. 53,435

ITEM		UNITS	QTY	RATE	COST
STAKING AND UTILITY CLEARANCE					
1.1	Layout Person to Mark Boring Locations, Obtain Surface Elevations and/or Arrange for Clearance of Underground Utilities	Hour	7.0	110.00	\$ 770.00
1.2	Permits, Bonds and Other Direct Charges	Cost + 10%	0	0.00	\$ 0.00
DRILLING AND SAMPLING					
2.1	Drill and Two-Person Crew (Portal to Portal) - Prevailing Wage	Lump Sum	1	6,300.00	\$ 6,300.00
TRAFFIC CONTROL					
3.1	Single Flagman, Regular Time (Portal to Portal)	Hour	0.0	135.00	\$ 0.00
3.2	Single Flagman, Overtime	Hour	0.0	170.00	\$ 0.00
3.3	2-Man Flagging Crew, Regular Time (Portal to Portal)	Hour	8.0	270.00	\$ 2,160.00
3.4	2-Man Flagging Crew, Overtime	Hour	0.0	340.00	\$ 0.00
3.5	TSC Pickup and Arrowboard	Day	1	125.00	\$ 125.00
LABORATORY TESTING					
4.1	Examine Samples to Describe by Textural System and Classify Using the Unified Soil Classification System	Each	82	4.00	\$ 328.00
4.2	Water Content Determination (Includes Pocket Penetrometer Reading on Cohesive Samples)	Each	74	7.00	\$ 518.00
4.3	Unconfined Compressive Strength of Cohesive Soils (or Torvane Shear Strength Measurement)	Each	22	14.00	\$ 308.00
4.4	Dry Unit Weight Determination	Each	11	7.00	\$ 77.00
4.5	Atterberg Limit Determinations	Each	2	100.00	\$ 200.00
4.6	Sieve Analysis with #200 Wash	Each	0	90.00	\$ 0.00
4.7	Sieve Analysis with Hydrometer	Each	2	130.00	\$ 260.00
4.8	Modified Proctor Test	Each	0	190.00	\$ 0.00
4.9	Loss-On-Ignition (Organic Content)	Each	1	95.00	\$ 95.00

ITEM		UNITS	QTY	RATE	COST
ENGINEERING SERVICES					
5.1	Prepare Geotechnical Report with Boring Logs and Location Plan	Lump Sum	1	1,700.00	\$ 1,700.00
5.2	Geotechnical Engineer to Perform Special Calculations or Run Slope Stability Analyses (Two Meetings)	Hour	8.0	120.00	\$ 960.00
5.3	Project Engineer to Attend Project Meetings	Hour	8.0	120.00	\$ 960.00
ESTIMATED TOTAL:					\$ 14,761.00
RECOMMENDED BUDGET:					\$ 14,800.00



TESTING SERVICE CORPORATION

GENERAL CONDITIONS

Geotechnical and Construction Services

1. PARTIES AND SCOPE OF WORK: If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Unless otherwise expressly assumed in writing, TSC's services are provided exclusively for client. TSC shall have no duty or obligation other than those duties and obligations expressly set forth in this Agreement. TSC shall have no duty to any third party. Client shall communicate these General Conditions to each and every party to whom the Client transmits any report prepared by TSC. Ordering services from TSC shall constitute acceptance of TSC's proposal and these General Conditions.

2. SCHEDULING OF SERVICES: The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.

3. ACCESS TO SITE: TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.

4. CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this agreement.

5. DISCOVERY OF POLLUTANTS: TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C. § 6901, et. seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.

6. MONITORING: If this Agreement includes testing construction materials or observing any aspect of construction or improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to perform same shall not in any way operate or excuse any contractor from the performance of its work in accordance

with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

7. DOCUMENTS AND SAMPLES: Client is granted an exclusive license to use findings and reports prepared and issued by TSC and any sub-consultants pursuant to this Agreement for the purpose set forth in TSC's proposal provided that TSC has received payment in full for its services. TSC and, if applicable, its sub-consultant, retain all copyright and ownership interests in the reports, boring logs, maps, field data, field notes, laboratory test data and similar documents, and the ownership and freedom to use all data generated by it for any purpose. Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.

8. TERMINATION: TSC's obligation to provide services may be terminated by either party upon (7) seven days prior written notice. In the event of termination of TSC's services, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses. The terms and conditions of these General Conditions shall survive the termination of TSC's obligation to provide services.

9. PAYMENT: Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.

10. WARRANTY: TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.

11. INDEMNITY: Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.

12. SUBPOENAS: TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.

13. OTHER AGREEMENTS: TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence. These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.

Attachment 2

Huff & Huff Incorporated



915 Harger Road, Suite 330
Oak Brook, IL 60523
Phone (630) 684-9100
Fax (630) 684-9120
Website: <http://huffnhuff.com>

August 27, 2014

Mr. Daniel P Brinkman, P.E.,PTOE
Associate/Senior Transportation Engineer
Gewalt Hamilton Associates, Inc.
850 Forest Edge Drive
Vernon Hills, Illinois 60061

**Re: Phase II Environmental Services (PSI/CCDD) – Buffalo Grove Road from Half Day Road (IL-22) to Deerfield Parkway and Aptakisic Road (1000 Ft. E and 300 Ft. W of Buffalo Grove Road), Lake County, Illinois
Proposal No.: T14-125I**

Dear Mr. Brinkman:

Huff & Huff, Inc. (Consultant) is pleased to submit this proposal to Gewalt Hamilton Associates, Inc. (Client) to perform a Preliminary Site Investigation (PSI) for the referenced project, based upon the Preliminary Environmental Site Assessment (PESA) work previously completed by Consultant. The scope of services proposed by Consultant also addresses soil handling issues associated with Clean Construction and Demolition Debris (CCDD) certification, as appropriate along with the PSI in support of the reconstruction project being undertaken by Client for Lake County Division of transportation (LCDOT). Since the PESA conducted for this project corridor was submitted August 2012, Consultant has also included scope for a PESA update, to be included with the PSI documentation. This proposal presents our project approach, the scope of services, and cost.

1. PROJECT UNDERSTANDING

The preliminary project scope includes widening of Buffalo Grove Road from IL-Route 22 to Deerfield Parkway and will also likely include detention work along the corridor. In addition, this revised proposal also includes added project limits along Aptakisic Road, including approximately 1000-feet east and 300-feet west of Buffalo Grove Road. This proposal presents our project understanding, the scope of services, cost, and schedule for completing the project.

A PESA was conducted by Consultant for the project corridor as documented in their PESA Report dated August 2012. Based on the data collected and as of July 13, 2012 (the date of the last physical investigation of the project area) this assessment has revealed evidence of potentially impacted properties (PIPs) in connection to the project area.

However, based on available information, including receipt of FOIA information, none of the sites identified are in close enough proximity to proposed construction activities to warrant sampling. Therefore, a preliminary site investigation (PSI) related to identified sites is not recommended based on available information, depending on final plans and ability to avoid the RECs/PIPs. However, since it is likely that earth excavation and off-site disposal of soil spoils would be considered acceptable for clean construction and demolition debris (CCDD) or soil-only facilities. This PESA can be used in support of an owner signed LPC Form 662, in conjunction with soil pH sampling to ensure project spoils meet the range of acceptance (6.25 to 9.0). However, if the receiving facility is unwilling to accept an LPC Form 662 and requires the use of an LPC Form 663, analytical results of soil spoils would become necessary.

Two potential PIPs were identified, however based on supporting information these two sites are not considered to be PIPs in relation to the project corridor. Table 4-1 (extracted from the PESA Report and reproduced below) summarizes the potentially impacted properties (PIPs); however based upon additional information reviewed, neither of these two sites are considered to present a risk to the proposed construction activities. Specifically, the ABC Cleaners site located at 1657 North Buffalo Grove Road was identified as a dry cleaner, but is not listed on any other databases, including RCRA, which would identify the site as handling regulated chemicals like chlorinated solvents. The Rainbow Cleaners site located at 482 Half Day Road is listed in several databases, including listings as a VCP site which has undergone remedial activities. Based on the NFR documentation, the Site Remediation Boundary is located approximately 475 feet north of Half Day Road, and 200 feet east of Buffalo Grove Road. **Based on these factors, neither site is considered to be a PIP to the project corridor.**

SUMMARY OF POTENTIALLY IMPACTED PROPERTIES (PIPs)

Map ID	Site name	Address	Data Base	Status	Comment	Distance & Direction
19	ABC Cleaners	1657 N Buffalo Grove Rd	Dry Cleaners	Existing	Possible Solvent Use	Adjacent to Corridor
33, 42, 43, 46,	Rainbow Cleaners	482 Half Day Rd	Dry Cleaners, Air Permits, FINDS, RCRA, VCP	RCRA - SQG, VCP-Closed (NFR)	Remediation Boundary established in NFR documents	Remedial boundary ~ 175 ft E and 475 ft N of Buffalo grove Rd and Half Day Rd

Consultant also completed a PESA along Aptakisic Road (from IL-83 to approximately 1,000 feet east of Buffalo Grove Road, dated June 2013. Based on the data collected and as of May 22, 2013 (the date of the last physical investigation of the project area), this assessment has revealed evidence of one potentially impacted property (PIP) in connection to the project area.

The research of historical resources was used to identify sites with PIPs. Specifically, historical aerial photos and a Northern Illinois Planning Commission (NIPC) Solid Waste Inventory Map

of Lake County were reviewed. One site was determined to be a PIP in connection to the project area using these resources. The site was identified under the name Krouse at 5163 Aptakisic Road, Long Grove, IL. In addition, other sites were identified that although determined to not be PIPs, have the potential to affect spoils disposal consideration at a CCDD facility including:

**SUMMARY OF SITES IDENTIFIED IN DATABASE REVIEW OR SITE INSPECTION
WITH PIPS ON OR ADJACENT TO THE PROJECT CORRIDOR**

Site Name (Map ID from ERS)	Figure 5-1 ID #¹	Address	Database/Reason	PIP?²
Valentino Vineyard	2	5175 Aptakisic Road, Long Grove, IL	Vineyard	No
Former Rolling Hills Nursery (4)	3	650 Aptakisic Road, Buffalo Grove, IL	UST	No
ComEd Substation	4	16889 Aptakisic Road, Buffalo Grove, IL	Substation (Transformers)	No
ABC Cleaners	5	1657 Buffalo Grove Road, Buffalo Grove, IL	VOCs	No

¹Referred to as “Site Number” in Sections 5.2 through 5.3 from PESA

²Refers to PIP in connection to the project area.

Consultant utilized findings summarized in the PESA documents to locate proposed borings for completion during the PSI. Soil samples appropriate for the identified contamination risk from the areas of potential concern will be analyzed for petroleum related constituents as appropriate based on location. Analytical results will be reviewed and a report will be prepared summarizing and comparing the results to the Illinois Environmental Protection Agency’s Tiered Approach to Corrective Action (TACO) standards and assessing areas requiring special handling or disposal.

In addition, the PSI phase will include collection of soil samples for assessment of appropriate disposal practices and consideration as CCDD. Samples will either be collected related to Potentially Impacted Properties (PIPs), which are essentially the same as the RECs identified in the PESAs (for LPC-663 Form) or for pH only along project areas where PIPs/RECs were not identified (for LPC-662 Form). Collection of soil samples for landfill permitting is not included as part of this scope as analytical results for landfill permitting, if necessary are typically included as a pay item in the contractor bidding documents.

2. SCOPE OF SERVICES

Task 1 - Preliminary Environmental Site Assessment (PESA) Update

Due to the age of the original PESA, consultant will prepare a PESA Update for the Buffalo Grove Road project. The process will follow general protocols associated with Chapter 27-3 of the Illinois Department of Transportation (IDOT) Bureau of Design and Environment (BDE) Procedure Memorandum and in general accordance with the search distances defined in ASTM International (ASTM) Standard E1527-13. The specific methods used to conduct the assessment are contained in the following:

- A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Highway Projects (Erdmann et al., 2012)
- ASTM Standard E1527-13
- The IDOT BDE Manual, Chapter 27, Section 27-3, *Special Waste Procedures*.
- IDOT Bureau of Local Roads and Streets (BLRS) Manual, Chapter 20-12, Special Waste, July 2013.
- Public Act 96-1416
- Clean Construction or Demolition Debris Fill Operations (CCDD) and Uncontaminated Soil Fill Operations: Amendments to 35 Illinois Administrative Code 1100. Effective on August 27, 2012.

The previous PESAs from July 2012 and May 2013 will be used to compare to current database listings to confirm if additional RECs/PIPs are identified along the project corridor.

A. Site Evaluation

Current environmental features and conditions of sites adjacent to the ROW will be evaluated. A site walkover of potential right-of-way areas designated for excavation and/or acquisition will be conducted for first-hand evaluation of current environmental conditions within the project limits. All of the features and conditions listed above will be investigated and, as appropriate, documented in photographs. The land-use and housekeeping practices of adjacent properties also will be evaluated in accordance with ASTM protocols.

B. Database Search

A records review or database search will be conducted as part of the PESA update and will be compared to the original database information to update potential environmental concerns within the study area. It includes a search of standard state and federal environmental record databases in accordance with the specifications of ASTM standards.

Specifically, Consultant will search each database to identify any potential sources requiring further investigation. As appropriate, Freedom of Information Act (FOIA) requests will be filed with the Illinois Environmental Protection Agency (IEPA) to obtain additional data pertaining to identified sites. A local source, such as the fire department or building department, will be contacted regarding available records and area history.

The following information will be included in the PSI report:

- a) The project location and description
- b) The environmental records review compared to previous PESA.
- c) An analysis of the site inspection.
- d) A summary of the findings regarding newly identified environmental concerns.

Results of the PESA update will be incorporated into the PSI Report discussed under Task 4, and will also be used to guide the PSI portion of the project discussed under Task 2.

Task 2 Preliminary Site Investigation (PSI)

Consultant will utilize the findings of the PESA(s)/PESA Update and an assumption that the primary factor for handling earth excavation will be to consider potential acceptability for CCDD facility disposal to determine the final number of soil borings to advance for this corridor.

For bidding purposes, consultant has preliminarily located up to twelve (14) soil borings along the project corridor primarily from the standpoint of CCDD considerations (soil pH only collection), but also accounts for situations where RECs/PIPs determined in the original PESA(s) that cannot be avoided and also accounts for the potential of additional RECs/PIPs being identified in the PESA Update. Since the project length along Buffalo Grove Road is approximately 9,250 feet, and the length along Aptakisic Road is approximately 1,300 feet (total of 10,550 feet) this translates to one boring every 750 linear feet along the project corridors.

The depths of the proposed borings will be completed to depths consistent with the proposed improvements. For bidding purposes the borings are all proposed to a depth of eight (8) feet below ground surface. Consultant will revise depths of planned borings prior to mobilization consistent with project plans as provided by Client.

Consultant anticipates collection of samples along the edge of existing roadways when/if possible to avoid conducting borings thru the existing pavement and to avoid lane closures if possible. However, since it may be necessary to conduct some borings within the outside traffic lanes, Consultant has included traffic control costs in this task.

Task 3 Analytical

Since sampling for CCDD purposes is likely the primary concern on this project corridor, and not addressing RECs/PIPs, Consultant proposes limited analytical. Specifically, for areas with no RECs/PIPs identified, soil pH samples will be collected in support of an owner-signed LPC-662 form where appropriate along the project corridor.

However, the PESA Update may identify other RECs/PIPs and/or previously identified RECs/PIPs may not be able to be avoided through design considerations. Therefore, laboratory analysis is included to address those situations and/or if unexpected odors are noted when samples are 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 3 samples) – VOCs are volatile compounds found in gasoline and related to various solvents (dry cleaner facilities);
- **Benzene, Toluene, Ethyl benzene, and Xylene (BTEX)** (up to 5 samples) – BTEX are volatile compounds found in gasoline and other volatile petroleum-based products; and
- **Polynuclear Aromatic Compounds (PNAs)** (up to 4 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:

- **Select Total RCRA Metals** (up to 4 samples) – Federal environmental regulations identify eight (8) heavy metals as hazardous if present in a *solid waste* at concentrations above varying threshold concentrations. Select soil samples collected for this project will be analyzed for the presence of metals believed to be present and associated with the RECs (PIPs). Total lead is the only metal associated with LUST sites, no other metals will be analyzed for LUST sites. However, additional select metals may be warranted for CCDD considerations. These select samples will be analyzed for consideration as Clean Construction and Demolition Debris (CCDD).
- **SPLP or TCLP Metals** (up to 4 samples) – The Synthetic Precipitation Leaching Procedure (SPLP) is designed to determine the mobility of both organic and inorganic analytes present in solid wastes. This analytical method will only be used if required to determine final disposition of spoils if a sample indicates elevated levels of metals which require further analysis for disposal. The Toxicity Characteristic Leaching Procedure (TCLP) is similar to the SPLP method to determine if analytes exist at hazardous levels which may affect disposal considerations. In addition, it is a preferred method for analysis of certain analytes with respect to CCDD considerations, specifically chromium.
- **Polychlorinated Biphenyls** (up to 1 sample) - PCBs were widely used as dielectric and coolant fluids such as used in electric transformers and commonly associated with electric sub-stations.

In addition, up to 28 soil samples will be analyzed for pH to evaluate the acidic or alkaline characteristics of a liquid or solid. High concentrations of either acid or alkaline materials introduced into the environment can impair the effected environment. Soil pH is important in assessing metal concentrations relative to migration to groundwater according to TACO Tier 1 objectives and the CCDD Maximum Allowable Concentrations (MACs).

Task 4 PSI Report Preparation

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

Task 5 CCDD Determination and LPC Form/Package Completion

This task includes time for preparing the PE certification needed for CCDD under the new IEPA regulations, based upon analytical results. It should be noted that, when appropriate, the LPC-662 Form shall be utilized (cases of no RECs or PIPs and therefore appropriate for an Owner

signed form 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). Analytical results shall be utilized from up to twelve (12) soil borings, as necessary to determine suitability for earth excavation to be accepted at a CCDD facility.

Task 6 Project Management

For this task, the scope of work includes time necessary to manage the project, including scheduling and coordination with the prime consultant, drillers, traffic control, and environmental laboratories.

Task 7 QA/QC

For this task, time has been allotted for quality assurance/quality control, specifically for review of laboratory analytical information and internal document review.

3. PROJECT COSTS

The estimated man-hours and project costs are tabulated in the attached tables. Costs have been included for traffic control, should this become necessary. It is anticipated that all soil cuttings will be returned to the borings from which it originated. No disposal of waste material is anticipated from proposed soil borings.

4. SCHEDULE

We anticipate that work will begin for the PSI within 10 days of the Notice to Proceed and will be completed within 10 weeks from the start date, unless a more aggressive schedule is conveyed to Consultant by Client.

Please indicate acceptance of this agreement by returning a signed copy of this agreement or a purchase order incorporating the terms of the agreement. We appreciate the opportunity to work with you and look forward to a successful completion of the project. If you have any questions concerning our proposed scope of services or fees, please contact us.

CONTRACT TERMS

1. **CONSULTANT'S SERVICES:** The Consultant's (Huff & Huff, Inc.) services shall consist of those tasks described in Section 2.
2. **SCHEDULE:** The Consultant's work under this Agreement shall begin within ten days of receipt of written notice to proceed or a signed copy of this Agreement.
3. **COMPENSATION:** The fee basis for the scope of work, as outlined in Section 3, pertains to the specific scope work.
4. **DIRECTION:** For work performed under this Agreement, Consultant shall take direction from the CLIENT.
5. **CHANGES:** This Agreement may only be changed by written amendment which specifies the terms being revised and which has been signed by both parties hereto.
6. **PROJECT DATA:** The Consultant, in coordination with the CLIENT, shall obtain from the appropriate sources all data and information necessary for the proper and complete execution of the Consultant's services.
7. **INDEPENDENT CONSULTANT:** The Consultant shall be deemed to be an independent contractor in all its operations and activities hereunder. The employees furnished by Consultant to perform the work shall be deemed to be Consultant employees exclusively, and said employees shall be paid by Consultant for all services in this connection. The Consultant shall be responsible for all obligations and reports covering Social Security, Unemployment Insurance, Workmen's Compensation, Income Tax, and other reports and deductions required by an applicable state or Federal law.
8. **RIGHTS OF WORK PRODUCT:** CLIENT shall have unlimited rights in all drawings, designs, specifications, notes, and other work developed in the performance of this contract, including the right to use same on any other work without additional cost to the CLIENT. The Consultant shall not be liable for any use or reuse of the drawings, designs, specifications, notes and other work for use other than intended under the terms of this Agreement.
9. **INDEMNIFICATION:** The Consultant hereby agrees to indemnify and hold harmless the CLIENT and any proper owners whose property it is necessary to access in the performance of this work, against any and all liability, loss, damages, demands, or actions or causes of action, which may result from any damages or injuries sustained by a person or entity in connection with or on account of any negligent act or omission of the Consultant or its employees relating to its obligations pursuant to this Agreement.
10. **TERMINATION:** CLIENT may terminate this Agreement at any time upon ten (10) days written notice for whatsoever reason, provided CLIENT shall pay the Consultant a reasonable fee for work satisfactorily performed prior to the effective date of termination. In no case, however, shall the total amount paid to Consultant exceed the amount set out above.

11. **INSURANCE:** The Consultant shall maintain insurance as set forth in the prime contract, if attached, or as set forth below.
- a. Worker's Compensation and Employer's Liability Insurance: Worker's Compensation in compliance with applicable State and Federal laws.
 - b. Comprehensive General Liability Insurance for Bodily Injury and Property Damage to a combined single limit of \$2,000,000 per occurrence/claim or an umbrella of \$3,000,000.
 - c. Comprehensive Automobile Liability Insurance, including owned, hired, and non-owned automobiles, for Bodily Injury and Property Damage to a combined single limit of \$1,000,000 per occurrence/\$2,000,000 aggregate.
 - d. Professional liability insurance \$2,000,000 on a claims made basis.
12. **STANDARD OF CARE:** Services performed by the Consultant under this Agreement will be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.
13. **RETENTION OF RECORDS:** Consultant shall maintain complete records of all hours billed and direct costs incurred under this Agreement so as to accurately reflect the services performed and basis for compensation and reimbursement under this Agreement.
14. **LEGAL:** This Agreement shall be construed and interpreted solely in accordance with the laws of the State of Illinois.

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

CLIENT

HUFF & HUFF, INC.

GEWALT HAMILTON ASSOCIATES,
INC.


Signature

Signature

By: Linda L. Huff, P.E.

Typed Name

Typed Name

President

Officer's Title

Officer's Title

August 27, 2014

Date

Date



Payroll Escalation Table
Fixed Raises

FIRM NAME Huff & Huff, Inc.
PRIME/SUPPLEMENT Gewalt Hamilton Associates

DATE 8/28/2014
PTB NO. BG Rd

CONTRACT TERM 12 MONTHS
START DATE 9/1/2014
RAISE DATE 1/1/2015

OVERHEAD RATE 148.80%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

9/1/2014 - 1/1/2015
4
12

1/2/2015 - 9/1/2015
8
12

= 33.33%
= 1.0200

68.67%

The total escalation for this project would be:

2.00%



Payroll Rates

DATE 8/28/2014

ESCALATION FACTOR **2.00%**

[illegible]



Firm	Huff & Huff, Inc.
Route	Buffalo Grove Road
Section	Deerfield Pkwy to W. Half Day Rd
County	Lake
Job No.	
PTB & Item	BG Rd

Complexity Factor **0**

Cost Plus Fixed Fee 1	<input checked="" type="checkbox"/>	14.5%[DL + R(DL) + OH(DL) + IHDC]
Cost Plus Fixed Fee 2	<input type="checkbox"/>	14.5%[DL + R(DL) + 1.4(DL) + IHDC]
Cost Plus Fixed Fee 3	<input type="checkbox"/>	14.5%[(2.3 + R)DL + IHDC]
Specific Rate	<input type="checkbox"/>	
Lump Sum	<input type="checkbox"/>	

Average Hourly Project Rates

Route Buffalo Grove Road
Section Deerfield Pkwy to W. Half Day Rd
County Lake
Job No.
PTB/Item BG Rd

Consultant Huff & Huff, Inc.

Date 8/28/2014

Sheet 1 **OF** 1

Payroll Classification	Avg Hourly Rates	Total Project Rates			PESA Update			PSI			Analytical			Report			CCDD Document		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	69.05	2.5	3.05%	2.11										1	3.03%	2.09	0.5	5.56%	3.84
Senior Geologist I	36.15	16	19.51%	7.05	3	27.27%	9.86	2	10.00%	3.61	1	33.33%	12.05	3	9.09%	3.29	2	22.22%	8.03
Project Engineer I	28.32	53	64.63%	18.30	7	63.64%	18.02	18	90.00%	25.48	2	66.67%	18.88	22	66.67%	18.88	4	44.44%	12.58
Senior CADD I	39.37	1	1.22%	0.48										1	3.03%	1.19			
CADD II	28.80	7	8.54%	2.46										5	15.15%	4.36	2	22.22%	6.40
Admin. Manager I	34.56	0.5	0.61%	0.21	0.5	4.55%	1.57												
Administrative IV	23.66	2	2.44%	0.58	0.5	4.55%	1.08							1	3.03%	0.72	0.5	5.56%	1.31
		0																	
		0																	
		0																	
		0																	
TOTALS		82	100%	\$31.19	11	100%	\$30.52	20	100%	\$29.10	3	100%	\$30.93	33	100%	\$30.53	9	100%	\$32.17

Average Hourly Project Rates

Route Buffalo Grove Road
 Section Deerfield Pkwy to W. Half Day Rd
 County Lake
 Job No.
 PTB/Item BG Rd

Consultant Huff & Huff, Inc.

Date 8/28/2014

Sheet 2 OF 1

Payroll Classification	Avg Hourly Rates	Project Management			QA/QC														
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	69.05				1	50.00%	34.53												
Senior Geologist I	36.15	4	100.00%	36.15	1	50.00%	18.07												
Project Engineer I	28.32																		
Senior CADD I	39.37																		
CADD II	28.80																		
Admin. Manager I	34.56																		
Administrative IV	23.66																		
TOTALS		4	100%	\$36.15	2	100%	\$52.60	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

HUFF & HUFF, INC.

SUMMARY OF INHOUSE DIRECT COSTS

Project: GHA Buffalo Grove Road (Revised w/1,300' Aptakistic)

DIRECT

Task 1 - PESA Update

Trips - Company	30 miles	x	1 x	\$	0.56	=	\$	16.80
Tolls			3 x	\$	1.00	=	\$	3.00
Reproduction	1 sets	x	100 x	\$	0.03	=	\$	3.00
Color copies	1 sets	x	10 x	\$	0.11	=	\$	1.10
			0 x	\$	-	=	\$	-
Task Total								\$ 23.90

Task 2 - PSI

Trips - Company	60 miles	x	2 x	\$	0.56	=	\$	67.20
Tolls			6 x	\$	1.00	=	\$	6.00
PID	day	x	1 x	\$	75.00	=	\$	75.00
Field Kit/Supplies	day	x	1 x	\$	30.00	=	\$	30.00
			0 x	\$	-	=	\$	-
Task Total								\$ 178.20

Task 3 - Analytical

Reproduction	1 sets	x	75 x	\$	0.03	=	\$	2.25
			0 x	\$	-	=	\$	-
Task Total								\$ 2.25

Task 4 - Report

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	3 x	\$	0.11	=	\$	0.99
			0 x	\$	-	=	\$	-
Task Total								\$ 19.44

Task 5 - CCDD Document

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	3 x	\$	0.11	=	\$	0.99
			0 x	\$	-	=	\$	-
Task Total								\$ 13.29

Task 6 - Project Management

			0 x	\$	-	=	\$	-
Task Total								\$ -

Task 07 - QA/QC

			0 x	\$	-	=	\$	-
Task Total								\$ -

GRAND TOTAL \$ 237.08

HUFF & HUFF, INC.

SUMMARY OF OUTSIDE DIRECT COSTS

Project: GHA Buffalo Grove Road (Revised w/1,300' Aptakisic)

OUTSIDE

Task 1 - PESA Update

Records Search

1 x \$ 250.00 = \$ 250.00

0 x \$ - = \$ -

Task Total \$ 250.00

Task 2 - PSI

0 x \$ - = \$ -

Task Total \$ -

Task 3 - Analytical

Soil PNAs each

4 x \$ 105.00 = \$ 420.00

Soil BTEX + 5035 Kit each

5 x \$ 80.00 = \$ 400.00

Soil VOC + 5035 kit each

3 x \$ 140.00 = \$ 420.00

Soil total RCRA Metals each

4 x \$ 85.00 = \$ 340.00

Soil SPLP RCRA Metals each

4 x \$ 165.00 = \$ 660.00

Soil PCBs each

1 x \$ 180.00 = \$ 180.00

Soil pH each

28 x \$ 24.00 = \$ 672.00

0 x \$ - = \$ -

Task Total \$ 3,092.00

Task 4 - Report

Federal Express

1 x \$ 20.00 = \$ 20.00

0 x \$ - = \$ -

Task Total \$ 20.00

Task 5 - CCDD Document

Federal Express

1 x \$ 20.00 = \$ 20.00

0 x \$ - = \$ -

Task Total \$ 20.00

Task 6 - Project Management

0 x \$ - = \$ -

Task Total \$ -

Task 07 - QA/QC

0 x \$ - = \$ -

Task Total \$ -

GRAND TOTAL \$ 3,382.00

HUFF & HUFF, INC.
SUMMARY OF SERVICES BY OTHERS

Project: GHA Buffalo Grove Road (Revised w/1,300' Aptakisic)

OUTSIDE

Task 1 - PESA Update

<hr/>	0 x	\$	-	=	\$	-
			Task Total		\$	-

Task 2 - PSI

Driller	day	1 x	\$ 2,200.00	=	\$	2,200.00
Traffic Control	day	1 x	\$ 2,000.00	=	\$	2,000.00
<hr/>			Task Total		\$	4,200.00

Task 3 - Analytical

<hr/>	0 x	\$	-	=	\$	-
			Task Total		\$	-

Task 4 - Report

<hr/>	0 x	\$	-	=	\$	-
			Task Total		\$	-

Task 5 - CCDD Document

<hr/>	0 x	\$	-	=	\$	-
			Task Total		\$	-

Task 6 - Project Management

<hr/>	0 x	\$	-	=	\$	-
			Task Total		\$	-

Task 07 - QA/QC

<hr/>	0 x	\$	-	=	\$	-
			Task Total		\$	-

GRAND TOTAL	\$	4,200.00
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Attachment 3

Christopher B. Burke
Engineering, Ltd.



CHRISTOPHER B. BURKE ENGINEERING, LTD.

9575 West Higgins Road Suite 600 Rosemont, Illinois 60018 TEL (847) 823-0500 FAX (847) 823-0520

December 16, 2014

Gewalt Hamilton Associates, Inc.
625 Forest Edge Drive
Vernon Hills, IL 60061

Attention: Mr. Todd P. Gordon
Senior Engineer

Subject: **Aptakisic Road Culvert near Sta. 68+25**

Dear Mr. Gordon:

Thank you for requesting this proposal to provide engineering for the construction of the culvert near Sta. 68+25 along Aptakisic Road which will be constructed with the Lake County Division of Transportation (LCDOT) improvements to Buffalo Grove Road at Aptakisic Road. Included in this proposal is our Understanding of the Assignment, Scope of Services and Cost Estimate of Consultant Services (CECS).

UNDERSTANDING OF ASSIGNMENT

Christopher B. Burke Engineering, Ltd. (CBBEL) understands that the Gewalt Hamilton Associates, Inc. (GHA) is providing design engineering services to LCDOT for the improvements to Buffalo Grove Road which includes the intersection with Aptakisic Road. CBBEL will provide construction drawings for the culvert near Sta. 68+25 of Aptakisic Road based on the Phase I plans CBBEL is doing for LCDOT along Aptakisic Road. Additionally, CBBEL will provide GHA a report to be included in GHA's LCSMC permit application demonstrating the culvert meets all regulatory floodplain and floodway ordinance requirements.

SCOPE OF SERVICES

Task 1 LCSMC Culvert Report: CBBEL will provide GHA with a report to include in the LCSMC permit application for the permitting of the 6x6 RCBC near Sta. 68+25 to replace the existing 72" CMP culvert. The report will demonstrate that all regulatory floodplain and floodway ordinance requirements are being met for the culvert construction. This report will include all necessary tables, calculations, and modeling to satisfy LCSMC that all requirements are being met. It is noted that all compensatory storage cannot be provided at the culvert crossing. This will require coordination of providing compensatory storage within the correct elevation ranges at other locations. Compensatory storage at other locations is not included in this scope. This scope does not include any wetland permitting work.

Task 2 - Structural Drawings: CBBEL will provide structural drawings for the construction of the 6x6 RCBC near Sta. 68+25, including construction details, sheeting locations for staged construction, and cast-in-place headwalls. For the purposes of this scope, it is assumed the 6x6 RCBD will be precast with cast-in-place headwalls. Staged MOT plans will be coordinated for the culvert construction but development of detailed roadway staging plans is not included in this scope.

We will bill you according to the attached CECS and establish our contract in accordance with the attached General Terms and Conditions. These General Terms and Conditions are expressly incorporated into and are an integral part of this contract for professional services.

Please sign and return one copy of this agreement as an indication of acceptance and notice to proceed. Please feel free to contact us anytime.

Sincerely,



Christopher B. Burke, PhD, PE, D.WRE, Dist.M.ASCE
President

Encl. General Terms and Conditions

THIS PROPOSAL AND GENERAL TERMS AND CONDITIONS ACCEPTED FOR GHA, INC.

BY: _____
TITLE: _____
DATE: _____



**Payroll Escalation Table
Fixed Raises**

FIRM NAME Christopher B. Burke Engineering, Ltd.
PRIME/SUPPLEMENT _____

DATE 12/16/14
PTB NO. _____

CONTRACT TERM 12 MONTHS
START DATE 12/15/2014
RAISE DATE 1/1/2015

OVERHEAD RATE 123.72%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

12/15/2014 - 1/1/2015

1/2/2015 - 12/1/2015

1
12

11
12

= 8.33%
= 1.0275

94.42%

2.75%

The total escalation for this project would be:

Payroll Rates

FIRM NAME Christopher B. Burke Engineering, Ltd. DATE 12/16/14
PRIME/SUPPLEMENT _____
PTB NO. _____

ESCALATION FACTOR 2.75%

CLASSIFICATION	CURRENT RATE	ESCALATED RATE
Engineer V	\$59.56	\$59.86
Engineer IV	\$48.60	\$48.84
Engineer III	\$40.10	\$40.30
Engineer I/II	\$29.63	\$29.78



LakeCounty
Division of Transportation

EXHIBIT A

**Cost Estimate of
Consultant Services
(CPFF)**

Firm Christopher B. Burke Engineering, Ltd.
Route Aptakasic Rd Culvert
Section
County Lake
Job No. TBD
PTB & Item N/A

Date 12/16/14

Overhead Rate 123.72%

Complexity Factor 0

Item	Work Hours	Payroll	Overhead & Fringe Benefits	In-House Direct Costs *	Fixed Fee	Outside Direct Costs	Subs	Total (C+D+E+F+G+H)	% of Grand Total
Task 1 – SMC Report	60	2,478.48	3,066.38	100.00	877.01	200.00		6,721.87	33.14%
Task 2 – Structural Drawings	120	5,123.72	6,339.07	100.00	1,797.55	200.00		13,560.34	66.86%
TOTALS	180	7,602.20	9,405.44	200.00	2,674.57	400.00	0.00	20,282.21	100.00%

* Mileage Only. All other direct costs are "outside"

Avg Hrly: 42.23

EXHIBIT A

Average Hourly Project Rates

Route Aptakisic Rd Culvert
 Section _____
 County Lake
 Job No. TBD
 PTB/Item _____

Consultant Christopher B. Burke Engineering, Ltd.

Date 12/16/14

Sheet 1 OF 1

Payroll Classification	Avg Hourly Rates	Total Project Rates			Task 1 – SMC Report			Task 2 – Structural Drawings											
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
		0																	
Engineer V	59.86	32	17.78%	10.64	16	26.67%	15.96	16	13.33%	7.98									
Engineer IV	48.84	34	18.89%	9.23				34	28.33%	13.84									
Engineer III	40.30	60	33.33%	13.43	20	33.33%	13.43	40	33.33%	13.43									
Engineer I/II	29.78	54	30.00%	8.93	24	40.00%	11.91	30	25.00%	7.45									
		0																	
		0																	
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TOTALS		180	100%	\$42.23	60	100%	\$41.31	120	100%	\$42.70	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

CHRISTOPHER B. BURKE ENGINEERING, LTD.
GENERAL TERMS AND CONDITIONS

1. Relationship Between Engineer and Client: Christopher B. Burke Engineering, Ltd. (Engineer) shall serve as Client's professional engineer consultant in those phases of the Project to which this Agreement applies. This relationship is that of a buyer and seller of professional services and as such the Engineer is an independent contractor in the performance of this Agreement and it is understood that the parties have not entered into any joint venture or partnership with the other. The Engineer shall not be considered to be the agent of the Client. Nothing contained in this Agreement shall create a contractual relationship with a cause of action in favor of a third party against either the Client or Engineer.

Furthermore, causes of action between the parties to this Agreement pertaining to acts of failures to act shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of substantial completion.

2. Responsibility of the Engineer: Engineer will strive to perform services under this Agreement in accordance with generally accepted and currently recognized engineering practices and principles, and in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. No other representation, express or implied, and no warranty or guarantee is included or intended in this Agreement, or in any report, opinion, document, or otherwise.

Notwithstanding anything to the contrary which may be contained in this Agreement or any other material incorporated herein by reference, or in any Agreement between the Client and any other party concerning the Project, the Engineer shall not have control or be in charge of and shall not be responsible for the means, methods, techniques, sequences or procedures of construction, or the safety, safety precautions or programs of the Client, the construction contractor, other contractors or subcontractors performing any of the work or providing any of the services on the Project. Nor shall the Engineer be responsible for the acts or omissions of the Client, or for the failure of the Client, any architect, engineer, consultant, contractor or subcontractor to carry out their respective responsibilities in accordance with the Project documents, this Agreement or any other agreement concerning the Project. Any provision which purports to amend this provision shall be without effect unless it contains a reference that the content of this condition is expressly amended for the purposes described in such amendment and is signed by the Engineer.

3. Changes: Client reserves the right by written change order or amendment to make changes in requirements, amount of work, or engineering time schedule adjustments, and Engineer and Client shall negotiate appropriate adjustments acceptable to both parties to accommodate any changes, if commercially possible.
4. Suspension of Services: Client may, at any time, by written order to Engineer (Suspension of Services Order) require Engineer to stop all, or any part, of the services required by this Agreement. Upon receipt of such an order, Engineer shall immediately comply with its terms and take all reasonable steps to minimize the costs associated with the services affected by such order. Client, however, shall pay all costs incurred by the suspension, including all costs necessary to maintain continuity and for the

resumptions of the services upon expiration of the Suspension of Services Order. Engineer will not be obligated to provide the same personnel employed prior to suspension, when the services are resumed, in the event that the period of suspension is greater than thirty (30) days.

5. Termination: This Agreement may be terminated by either party upon thirty (30) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. This Agreement may be terminated by Client, under the same terms, whenever Client shall determine that termination is in its best interests. Cost of termination, including salaries, overhead and fee, incurred by Engineer either before or after the termination date shall be reimbursed by Client.
6. Documents Delivered to Client: Drawings, specifications, reports, and any other Project Documents prepared by Engineer in connection with any or all of the services furnished hereunder shall be delivered to the Client for the use of the Client. Engineer shall have the right to retain originals of all Project Documents and drawings for its files. Furthermore, it is understood and agreed that the Project Documents such as, but not limited to reports, calculations, drawings, and specifications prepared for the Project, whether in hard copy or machine readable form, are instruments of professional service intended for one-time use in the construction of this Project. These Project Documents are and shall remain the property of the Engineer. The Client may retain copies, including copies stored on magnetic tape or disk, for information and reference in connection with the occupancy and use of the Project.

When and if record drawings are to be provided by the Engineer, Client understands that information used in the preparation of record drawings is provided by others and Engineer is not responsible for accuracy, completeness, nor sufficiency of such information. Client also understands that the level of detail illustrated by record drawings will generally be the same as the level of detail illustrated by the design drawing used for project construction. If additional detail is requested by the Client to be included on the record drawings, then the Client understands and agrees that the Engineer will be due additional compensation for additional services.

It is also understood and agreed that because of the possibility that information and data delivered in machine readable form may be altered, whether inadvertently or otherwise, the Engineer reserves the right to retain the original tapes/disks and to remove from copies provided to the Client all identification reflecting the involvement of the Engineer in their preparation. The Engineer also reserves the right to retain hard copy originals of all Project Documentation delivered to the Client in machine readable form, which originals shall be referred to and shall govern in the event of any inconsistency between the two.

The Client understands that the automated conversion of information and data from the system and format used by the Engineer to an alternate system or format cannot be accomplished without the introduction of inexactitudes, anomalies, and errors. In the event Project Documentation provided to the Client in machine readable form is so converted, the Client agrees to assume all risks associated therewith and, to the fullest

extent permitted by law, to hold harmless and indemnify the Engineer from and against all claims, liabilities, losses, damages, and costs, including but not limited to attorney's fees, arising therefrom or in connection therewith.

The Client recognizes that changes or modifications to the Engineer's instruments of professional service introduced by anyone other than the Engineer may result in adverse consequences which the Engineer can neither predict nor control. Therefore, and in consideration of the Engineer's agreement to deliver its instruments of professional service in machine readable form, the Client agrees, to the fullest extent permitted by law, to hold harmless and indemnify the Engineer from and against all claims, liabilities, losses, damages, and costs, including but not limited to attorney's fees, arising out of or in any way connected with the modification, misinterpretation, misuse, or reuse by others of the machine readable information and data provided by the Engineer under this Agreement. The foregoing indemnification applies, without limitation, to any use of the Project Documentation on other projects, for additions to this Project, or for completion of this Project by others, excepting only such use as may be authorized, in writing, by the Engineer.

7. Reuse of Documents: All Project Documents including but not limited to reports, opinions of probable costs, drawings and specifications furnished by Engineer pursuant to this Agreement are intended for use on the Project only. They cannot be used by Client or others on extensions of the Project or any other project. Any reuse, without specific written verification or adaptation by Engineer, shall be at Client's sole risk, and Client shall indemnify and hold harmless Engineer from all claims, damages, losses, and expenses including attorney's fees arising out of or resulting therefrom.

The Engineer shall have the right to include representations of the design of the Project, including photographs of the exterior and interior, among the Engineer's promotional and professional materials. The Engineer's materials shall not include the Client's confidential and proprietary information if the Client has previously advised the Engineer in writing of the specific information considered by the Client to be confidential and proprietary.

8. Standard of Practice: The Engineer will strive to conduct services under this agreement in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as of the date of this Agreement.
9. Compliance With Laws: The Engineer will strive to exercise usual and customary professional care in his/her efforts to comply with those laws, codes, ordinance and regulations which are in effect as of the date of this Agreement.

With specific respect to prescribed requirements of the Americans with Disabilities Act of 1990 or certified state or local accessibility regulations (ADA), Client understands ADA is a civil rights legislation and that interpretation of ADA is a legal issue and not a design issue and, accordingly, retention of legal counsel (by Client) for purposes of interpretation is advisable. As such and with respect to ADA, Client agrees to waive any action against Engineer, and to indemnify and defend Engineer against any claim arising from Engineer's alleged failure to meet ADA requirements prescribed.

Further to the law and code compliance, the Client understands that the Engineer will strive to provide designs in accordance with the prevailing Standards of Practice as previously set forth, but that the Engineer does not warrant that any reviewing agency having jurisdiction will not for its own purposes comment, request changes and/or additions to such designs. In the event such design requests are made by a reviewing agency, but which do not exist in the form of a written regulation, ordinance or other similar document as published by the reviewing agency, then such design changes (at substantial variance from the intended design developed by the Engineer), if effected and incorporated into the project documents by the Engineer, shall be considered as Supplementary Task(s) to the Engineer's Scope of Service and compensated for accordingly.

10. Indemnification: Engineer shall indemnify and hold harmless Client up to the amount of this contract fee (for services) from loss or expense, including reasonable attorney's fees for claims for personal injury (including death) or property damage to the extent caused by the sole negligent act, error or omission of Engineer.

Client shall indemnify and hold harmless Engineer under this Agreement, from loss or expense, including reasonable attorney's fees, for claims for personal injuries (including death) or property damage arising out of the sole negligent act, error omission of Client.

In the event of joint or concurrent negligence of Engineer and Client, each shall bear that portion of the loss or expense that its share of the joint or concurrent negligence bears to the total negligence (including that of third parties), which caused the personal injury or property damage.

Engineer shall not be liable for special, incidental or consequential damages, including, but not limited to loss of profits, revenue, use of capital, claims of customers, cost of purchased or replacement power, or for any other loss of any nature, whether based on contract, tort, negligence, strict liability or otherwise, by reasons of the services rendered under this Agreement.

11. Opinions of Probable Cost: Since Engineer has no control over the cost of labor, materials or equipment, or over the Contractor(s) method of determining process, or over competitive bidding or market conditions, his/her opinions of probable Project Construction Cost provided for herein are to be made on the basis of his/her experience and qualifications and represent his/her judgement as a design professional familiar with the construction industry, but Engineer cannot and does not guarantee that proposal, bids or the Construction Cost will not vary from opinions of probable construction cost prepared by him/her. If prior to the Bidding or Negotiating Phase, Client wishes greater accuracy as to the Construction Cost, the Client shall employ an independent cost estimator Consultant for the purpose of obtaining a second construction cost opinion independent from Engineer.
12. Governing Law & Dispute Resolutions: This Agreement shall be governed by and construed in accordance with Articles previously set forth by (Item 9 of) this Agreement, together with the laws of the **State of Illinois**.

Any claim, dispute or other matter in question arising out of or related to this Agreement, which can not be mutually resolved by the parties of this Agreement, shall be subject to mediation as a condition precedent to arbitration (if arbitration is agreed upon by the parties of this Agreement) or the institution of legal or equitable proceedings by either party. If such matter relates to or is the subject of a lien arising out of the Engineer's services, the Engineer may proceed in accordance with applicable law to comply with the lien notice or filing deadlines prior to resolution of the matter by mediation or by arbitration.

The Client and Engineer shall endeavor to resolve claims, disputes and other matters in question between them by mediation which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect. Requests for mediation shall be filed in writing with the other party to this Agreement and with the American Arbitration Association. The request may be made concurrently with the filing of a demand for arbitration but, in such event, mediation shall proceed in advance of arbitration or legal or equitable proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.

The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

13. Successors and Assigns: The terms of this Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns: provided, however, that neither party shall assign this Agreement in whole or in part without the prior written approval of the other.
14. Waiver of Contract Breach: The waiver of one party of any breach of this Agreement or the failure of one party to enforce at any time, or for any period of time, any of the provisions hereof, shall be limited to the particular instance, shall not operate or be deemed to waive any future breaches of this Agreement and shall not be construed to be a waiver of any provision, except for the particular instance.
15. Entire Understanding of Agreement: This Agreement represents and incorporates the entire understanding of the parties hereto, and each party acknowledges that there are no warranties, representations, covenants or understandings of any kind, matter or description whatsoever, made by either party to the other except as expressly set forth herein. Client and the Engineer hereby agree that any purchase orders, invoices, confirmations, acknowledgments or other similar documents executed or delivered with respect to the subject matter hereof that conflict with the terms of the Agreement shall be null, void & without effect to the extent they conflict with the terms of this Agreement.
16. Amendment: This Agreement shall not be subject to amendment unless another instrument is duly executed by duly authorized representatives of each of the parties and entitled "Amendment of Agreement".

17. Severability of Invalid Provisions: If any provision of the Agreement shall be held to contravene or to be invalid under the laws of any particular state, county or jurisdiction where used, such contravention shall not invalidate the entire Agreement, but it shall be construed as if not containing the particular provisions held to be invalid in the particular state, country or jurisdiction and the rights or obligations of the parties hereto shall be construed and enforced accordingly.
18. Force Majeure: Neither Client nor Engineer shall be liable for any fault or delay caused by any contingency beyond their control including but not limited to acts of God, wars, strikes, walkouts, fires, natural calamities, or demands or requirements of governmental agencies.
19. Subcontracts: Engineer may subcontract portions of the work, but each subcontractor must be approved by Client in writing.
20. Access and Permits: Client shall arrange for Engineer to enter upon public and private property and obtain all necessary approvals and permits required from all governmental authorities having jurisdiction over the Project. Client shall pay costs (including Engineer's employee salaries, overhead and fee) incident to any effort by Engineer toward assisting Client in such access, permits or approvals, if Engineer perform such services.
21. Designation of Authorized Representative: Each party (to this Agreement) shall designate one or more persons to act with authority in its behalf in respect to appropriate aspects of the Project. The persons designated shall review and respond promptly to all communications received from the other party.
22. Notices: Any notice or designation required to be given to either party hereto shall be in writing, and unless receipt of such notice is expressly required by the terms hereof shall be deemed to be effectively served when deposited in the mail with sufficient first class postage affixed, and addressed to the party to whom such notice is directed at such party's place of business or such other address as either party shall hereafter furnish to the other party by written notice as herein provided.
23. Limit of Liability: The Client and the Engineer have discussed the risks, rewards, and benefits of the project and the Engineer's total fee for services. In recognition of the relative risks and benefits of the Project to both the Client and the Engineer, the risks have been allocated such that the Client agrees that to the fullest extent permitted by law, the Engineer's total aggregate liability to the Client for any and all injuries, claims, costs, losses, expenses, damages of any nature whatsoever or claim expenses arising out of this Agreement from any cause or causes, including attorney's fees and costs, and expert witness fees and costs, shall not exceed the total Engineer's fee for professional engineering services rendered on this project as made part of this Agreement. Such causes included but are not limited to the Engineer's negligence, errors, omissions, strict liability or breach of contract. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

24. Client's Responsibilities: The Client agrees to provide full information regarding requirements for and about the Project, including a program which shall set forth the Client's objectives, schedule, constraints, criteria, special equipment, systems and site requirements.

The Client agrees to furnish and pay for all legal, accounting and insurance counseling services as may be necessary at any time for the Project, including auditing services which the Client may require to verify the Contractor's Application for Payment or to ascertain how or for what purpose the Contractor has used the money paid by or on behalf of the Client.

The Client agrees to require the Contractor, to the fullest extent permitted by law, to indemnify, hold harmless, and defend the Engineer, its consultants, and the employees and agents of any of them from and against any and all claims, suits, demands, liabilities, losses, damages, and costs ("Losses"), including but not limited to costs of defense, arising in whole or in part out of the negligence of the Contractor, its subcontractors, the officers, employees, agents, and subcontractors of any of them, or anyone for whose acts any of them may be liable, regardless of whether or not such Losses are caused in part by a party indemnified hereunder. Specifically excluded from the foregoing are Losses arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs, or specifications, and the giving of or failure to give directions by the Engineer, its consultants, and the agents and employees of any of them, provided such giving or failure to give is the primary cause of Loss. The Client also agrees to require the Contractor to provide to the Engineer the required certificate of insurance.

The Client further agrees to require the Contractor to name the Engineer, its agents and consultants as additional insureds on the Contractor's policy or policies of comprehensive or commercial general liability insurance. Such insurance shall include products and completed operations and contractual liability coverages, shall be primary and noncontributing with any insurance maintained by the Engineer or its agents and consultants, and shall provide that the Engineer be given thirty days, unqualified written notice prior to any cancellation thereof.

In the event the foregoing requirements, or any of them, are not established by the Client and met by the Contractor, the Client agrees to indemnify and hold harmless the Engineer, its employees, agents, and consultants from and against any and all Losses which would have been indemnified and insured against by the Contractor, but were not.

When Contract Documents prepared under the Scope of Services of this contract require insurance(s) to be provided, obtained and/or otherwise maintained by the Contractor, the Client agrees to be wholly responsible for setting forth any and all such insurance requirements. Furthermore, any document provided for Client review by the Engineer under this Contract related to such insurance(s) shall be considered as sample insurance requirements and not the recommendation of the Engineer. Client agrees to have their own risk management department review any and all insurance requirements for adequacy and to determine specific types of insurance(s) required for the project. Client further agrees that decisions concerning types and amounts of insurance are

specific to the project and shall be the product of the Client. As such, any and all insurance requirements made part of Contract Documents prepared by the Engineer are not to be considered the Engineer's recommendation, and the Client shall make the final decision regarding insurance requirements.

25. Information Provided by Others: The Engineer shall indicate to the Client the information needed for rendering of the services of this Agreement. The Client shall provide to the Engineer such information as is available to the Client and the Client's consultants and contractors, and the Engineer shall be entitled to rely upon the accuracy and completeness thereof. The Client recognizes that it is impossible for the Engineer to assure the accuracy, completeness and sufficiency of such information, either because it is impossible to verify, or because of errors or omissions which may have occurred in assembling the information the Client is providing. Accordingly, the Client agrees, to the fullest extent permitted by law, to indemnify and hold the Engineer and the Engineer's subconsultants harmless from any claim, liability or cost (including reasonable attorneys' fees and cost of defense) for injury or loss arising or allegedly arising from errors, omissions or inaccuracies in documents or other information provided by the Client to the Engineer.

26. Payment: Client shall be invoiced once each month for work performed during the preceding period. Client agrees to pay each invoice within thirty (30) days of its receipt. The client further agrees to pay interest on all amounts invoiced and not paid or objected to for valid cause within said thirty (30) day period at the rate of eighteen (18) percent per annum (or the maximum interest rate permitted under applicable law, whichever is the lesser) until paid. Client further agrees to pay Engineer's cost of collection of all amounts due and unpaid after sixty (60) days, including court costs and reasonable attorney's fees, as well as costs attributed to suspension of services accordingly and as follows:

Collection Costs. In the event legal action is necessary to enforce the payment provisions of this Agreement, the Engineer shall be entitled to collect from the Client any judgement or settlement sums due, reasonable attorneys' fees, court costs and expenses incurred by the Engineer in connection therewith and, in addition, the reasonable value of the Engineer's time and expenses spent in connection with such collection action, computed at the Engineer's prevailing fee schedule and expense policies.

Suspension of Services. If the Client fails to make payments when due or otherwise is in breach of this Agreement, the Engineer may suspend performance of services upon five (5) calendar days' notice to the Client. The Engineer shall have no liability whatsoever to the Client for any costs or damages as a result of such suspension caused by any breach of this Agreement by the Client. Client will reimburse Engineer for all associated costs as previously set forth in (Item 4 of) this Agreement.

27. When construction observation tasks are part of the service to be performed by the Engineer under this Agreement, the Client will include the following clause in the construction contract documents and Client agrees not to modify or delete it:

Kotecki Waiver. Contractor (and any subcontractor into whose subcontract this clause is incorporated) agrees to assume the entire liability for all personal injury claims suffered by its own employees, including without limitation claims under the Illinois Structural Work Act, asserted by persons allegedly injured on the Project; waives any limitation of liability defense based upon the Worker's Compensation Act, court interpretations of said Act or otherwise; and to the fullest extent permitted by law, agrees to indemnify and hold harmless and defend Owner and Engineer and their agents, employees and consultants (the "Indemnitees") from and against all such loss, expense, damage or injury, including reasonable attorneys' fees, that the Indemnitees may sustain as a result of such claims, except to the extent that Illinois law prohibits indemnity for the Indemnitees' own negligence. The Owner and Engineer are designated and recognized as explicit third party beneficiaries of the Kotecki Waiver within the general contract and all subcontracts entered into in furtherance of the general contract.

28. Job Site Safety/Supervision & Construction Observation: The Engineer shall neither have control over or charge of, nor be responsible for, the construction means, methods, techniques, sequences of procedures, or for safety precautions and programs in connection with the Work since they are solely the Contractor's rights and responsibilities. The Client agrees that the Contractor shall supervise and direct the work efficiently with his/her best skill and attention; and that the Contractor shall be solely responsible for the means, methods, techniques, sequences and procedures of construction and safety at the job site. The Client agrees and warrants that this intent shall be carried out in the Client's contract with the Contractor. The Client further agrees that the Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work; and that the Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to all employees on the subject site and all other persons who may be affected thereby. The Engineer shall have no authority to stop the work of the Contractor or the work of any subcontractor on the project.

When construction observation services are included in the Scope of Services, the Engineer shall visit the site at intervals appropriate to the stage of the Contractor's operation, or as otherwise agreed to by the Client and the Engineer to: 1) become generally familiar with and to keep the Client informed about the progress and quality of the Work; 2) to strive to bring to the Client's attention defects and deficiencies in the Work and; 3) to determine in general if the Work is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Engineer shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. If the Client desires more extensive project observation, the Client shall request that such services be provided by the Engineer as Additional and Supplemental Construction Observation Services in accordance with the terms of this Agreement.

The Engineer shall not be responsible for any acts or omissions of the Contractor, subcontractor, any entity performing any portions of the Work, or any agents or employees of any of them. The Engineer does not guarantee the performance of the

Contractor and shall not be responsible for the Contractor's failure to perform its Work in accordance with the Contract Documents or any applicable laws, codes, rules or regulations.

When municipal review services are included in the Scope of Services, the Engineer (acting on behalf of the municipality), when acting in good faith in the discharge of its duties, shall not thereby render itself liable personally and is, to the maximum extent permitted by law, relieved from all liability for any damage that may accrue to persons or property by reason of any act or omission in the discharge of its duties. Any suit brought against the Engineer which involve the acts or omissions performed by it in the enforcement of any provisions of the Client's rules, regulation and/or ordinance shall be defended by the Client until final termination of the proceedings. The Engineer shall be entitled to all defenses and municipal immunities that are, or would be, available to the Client.

29. Insurance and Indemnification: The Engineer and the Client understand and agree that the Client will contractually require the Contractor to defend and indemnify the Engineer and/or any subconsultants from any claims arising from the Work. The Engineer and the Client further understand and agree that the Client will contractually require the Contractor to procure commercial general liability insurance naming the Engineer as an additional named insured with respect to the work. The Contractor shall provide to the Client certificates of insurance evidencing that the contractually required insurance coverage has been procured. However, the Contractor's failure to provide the Client with the requisite certificates of insurance shall not constitute a waiver of this provision by the Engineer.

The Client and Engineer waive all rights against each other and against the Contractor and consultants, agents and employees of each of them for damages to the extent covered by property insurance during construction. The Client and Engineer each shall require similar waivers from the Contractor, consultants, agents and persons or entities awarded separate contracts administered under the Client's own forces.

30. Hazardous Materials/Pollutants: Unless otherwise provided by this Agreement, the Engineer and Engineer's consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials/pollutants in any form at the Project site, including but not limited to mold/mildew, asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic/hazardous/pollutant type substances.

Furthermore, Client understands that the presence of mold/mildew and the like are results of prolonged or repeated exposure to moisture and the lack of corrective action. Client also understands that corrective action is a operation, maintenance and repair activity for which the Engineer is not responsible.

June 13, 2005

P:\Proposals\Terms and Conditions\GT&C 2005.061305.doc

Attachment 4

Wiss, Janney, Elstner
Associates, Inc.

Via E-mail: tgordon@gha-engineers.com

November 25, 2014

Mr. Todd Gordon, P.E.
Senior Engineer
Gewalt Hamilton Associates, Inc.
820 Lakeside Drive, Suite 5
Gurnee, Illinois 60031

Re: Proposal for 2015 Evaluation, Repair Design, and Construction Period Services
Buffalo Grove Road Culverts
WJE No. 2014.5234

Dear Mr. Gordon:

Wiss, Janney, Elstner Associates, Inc. (WJE) is pleased to provide structural engineering services to assist Gewalt Hamilton Associates, Inc. (GHA) on behalf of the Lake County Division of Transportation (LCDOT) in the evaluation of two culverts located under Buffalo Grove Road between Deerfield Parkway and Illinois Route 22 in Buffalo Grove, Illinois. The evaluation, to be performed in 2015, will primarily consist of a field condition assessment to update the findings from our 2012 evaluation of the culverts. We also propose to prepare construction documents detailing the repair of the concrete culvert, should this be requested. This letter serves as our proposal for the work.

Background

In 2012, Wiss, Janney, Elstner Associates, Inc. (WJE) had previously performed an evaluation of the two existing concrete culverts under Buffalo Grove Road between Deerfield Parkway and IL Route 22. The purpose of the evaluation was to determine if the culverts required repairs, strengthening, or replacement to carry current code-prescribed loads. Our work included documentation of the culvert dimensions and of the reinforcement at the interior slab and wall surfaces as well as a condition assessment of the culverts. We found transverse cracking with water infiltration and some amount of unsound concrete, especially in the north culvert. The findings from our evaluation were described in a letter report dated March 5, 2012. The letter also described repair recommendations including crack injection, concrete removal and replacement, and a waterproofing membrane on the culvert roof slabs.

Work Scope

Our proposed engineering tasks for this project are divided into three phases, as described below.

Phase 1: Field Condition Assessment

Our work in this phase will consist of a one-day inspection performed by two WJE engineers. This work will consist of a visual survey of the accessible concrete surfaces and documentation of observed conditions. We will also use hammer tapping to sound the concrete surface and thereby document areas of concrete delamination. We will provide a letter report describing our findings and recommendations and, based on comments and direction from GHA and LCDOT, will incorporate these recommendations in the repair documents prepared in Phase 2.

Phase 2: Construction Documents

This work will consist of the preparation of details and technical specifications for the repair of the two concrete culverts. Based on our previous observations, we anticipate that the repairs will include crack injection, concrete replacement to address spalling and delaminations, and waterproofing details on the roof slabs of the culverts. We will provide a draft copy of the documents to GHA and LCDOT and will incorporate their comments into the final documents.

Because the roof slab top surface are not currently accessible, we anticipate that some changes to the repair details and a contingency for additional repair quantities may be needed to address conditions that are revealed when the roadway and fill above the culverts are removed. We have included time for a one-day assessment at each culvert following removal of the roadway and fill in our proposed fees. We have also included engineering time and drafting time to revise details, if necessary, to address uncovered conditions. Please note that our fee estimate is based on the assumption that the conditions revealed will be typical concrete deterioration and a typical culvert slab configuration and will not require, for example, a redesign of the roof slab. If this is the case, WJE can provide a proposal for the additional work. Also, this scope of this proposal does not include engineering services related to the construction phase.

Proposed Fees

To carry out the tasks described above, we propose to perform the work on a cost-plus basis. Using the assumptions described above, we propose the following budgets to perform the work:

Phase 1	<u>\$8,240</u>
Phase 2	<u>\$34,141</u>

Refer to the attached tables for a breakdown of the budget for each phase. We will perform the proposed engineering services in accordance with our standard Terms and Conditions for Professional Services dated October 1, 2009. (A copy of this document is attached.)

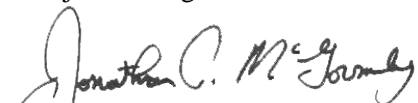
We appreciate this opportunity to work with Gewalt Hamilton and the LCDOT on this project. Please call if you have questions regarding our proposal and our understanding of the project. If this proposal is acceptable and you wish to proceed with the work, please provide written notice to proceed.

Sincerely,

WISS, JANNEY, ELSTNER ASSOCIATES, INC.



Flora A. Calabrese, P.E., S.E.
Project Manager



Jonathan C. McGormley, P.E., S.E.
Principal

Attachments

AVERAGE HOURLY PROJECT RATES

FIRM

Wiss, Janney, Elstner Associates, Inc.

DATE 11/25/14

PROJECT

Buffalo Grove Road Culverts

SHEET 1 OF 1

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Phase 1			Phase 2		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00	12	5.08%	3.56	4	10.00%	7.00	8	4.08%	2.86
Associate Principal	61.22	68	28.81%	17.64	20	50.00%	30.61	48	24.49%	14.99
Senior Associate	50.90	76	32.20%	16.39	16	40.00%	20.36	60	30.61%	15.58
Associate III	42.81	0								
Associate II	35.00	0								
Associate I	28.99	0								
Senior Specialist	38.21	80	33.90%	12.95				80	40.82%	15.60
Specialist	32.74	0								
Senior Technician	27.85	0								
Technician II	24.13	0								
Technician I	19.48	0								
TOTALS		236	100%	\$50.54	40	100.00%	\$57.97	196	100%	\$49.03

The average hourly rate for the Principal level is based on a cap of \$70.00.

COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

FIRM Wiss, Janney, Elstner Associates, Inc.

DATE 11/25/14

OVERHEAD RATE 2.1257

PROJECT Buffalo Grove Road Culverts

ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	Outside Direct Costs (F)	SERVICES BY OTHERS (G)	TOTAL (B thru G)	% OF GRAND TOTAL
Phase 1	40	2,318.76	4,929.00	50.00	942.21	0.00	0.00	8,239.97	19.44%
Phase 2	196	9,609.32	20,426.53	200.00	3,904.66	0.00	0.00	34,140.51	80.56%
TOTALS	236	11,928.08	25,355.53	250.00	4,846.87	0.00	0.00	42,380.48	100.00%

In-house direct costs for Phase 1 are estimated as follows:

Mileage: two engineers traveling a total of 30 miles each: 2*30 miles*\$0.60/mile = \$36, rounded to \$50 for incidental materials.

In-house direct costs for Phase 2 are estimated as follows:

Mileage: two round trips at 30 miles each: 2*30 miles*\$0.60/mile = \$36

Reproduction: \$50

Mailing: FedEx - \$20*5 mailings = \$100

Round Phase 2 costs to \$200.

Wiss, Janney, Elstner Associates, Inc. or WJE Engineers & Architects, P.C. (WJE) has been requested to perform certain professional and other services. The parties agree that these services shall be performed under the following Terms and Conditions, and that Client's acceptance of WJE's proposal or its direction for WJE to commence any services constitutes acceptance of these Terms.

1. Independent Contractor. WJE is an independent contractor, and all persons employed to furnish services hereunder are employees of WJE or its subcontractors/subconsultants and not of the Client. WJE and Client agree to be solely responsible for compliance with all federal, state, and local laws, rules and regulations, and ordinances that apply to their own respective employees.

2. Performance. The standard of care for all professional services performed or furnished by WJE will be the skill and care ordinarily used by members of WJE's professions performing similar services and practicing under similar circumstances at the same time and in the same locality. WJE makes no guarantees or warranties, express or implied, with regard to the performance of its services. WJE shall not have control over or be in charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures or for construction safety precautions and programs since these are the responsibilities of others. WJE agrees to perform its services in as timely a manner as is consistent with the professional standard of care and to comply with applicable laws, regulations, codes and standards that relate to WJE's services and that are in effect as of the date when the services are provided.

3. Client Duties. In order for WJE to perform the services requested, the Client shall, at no expense to WJE, (1) provide all necessary information regarding Client's requirements as necessary for the orderly progress of the work; (2) designate a person to act as Client's representative for the services who shall have the authority to transmit instructions, receive instructions and information, and interpret and define Client's policies and requests for WJE's services; and (3) provide access to and make all provisions for WJE to enter, without cost, limitation, or burden to WJE, the subject property as required to perform the work, including the use of scaffolds or similar mechanical equipment. WJE is entitled to rely upon the information and services provided by the Client.

4. Safety. Field work will be performed only under conditions deemed safe by WJE personnel. Charges may be made for safety or security measures required by hazardous job conditions that WJE may encounter. Client understands that WJE is only responsible for the safety of its own employees and that of its subconsultants and is not responsible for the safety of other persons or property.

5. Compensation and Expenses. Client agrees to pay for WJE's requested services in accordance with WJE's standard hourly rate schedule or negotiated fee. Charges generally will be billed in monthly intervals with applicable taxes included. Travel, subsistence, and out-of-pocket expenses incurred; communications; reproduction; and shipping charges will be billed at cost plus 5 percent and invoiced as an expense service fee. Use of vehicles will be billed at \$0.60 per mile. Expended materials for field and laboratory work, rental equipment, and any fees advanced on Client's behalf will be billed at cost plus 10 percent and invoiced as an expense service fee. WJE equipment used in field or laboratory work is billed at WJE's equipment usage rate

schedule in effect at the time the work is performed, subject to adjustment for minimum or extended usage. Portal-to-portal equipment usage rates are comparable to prevailing commercial rental rates (if available). Billing rates may be increased annually. Any subcontracted service will be billed at cost plus 10 percent providing the subcontract firm has in place adequate insurance coverage determined by WJE; otherwise, the cost will be marked up 20 percent and invoiced as an expense service fee. Client agrees to pay WJE's then-current time charges, attorneys' fees, and other expenses resulting from required attendance at depositions, administrative proceedings, or responding to subpoenas or court orders relating to the Project, but not for such expenses attributed to WJE's negligent performance of its services.

Payment for WJE's services is expected in full in US dollars upon receipt of the invoice. Invoices considered past due are subject to any related attorneys' fees and collection expenses. WJE reserves the right to suspend its services if the Client fails to make payment when due providing that WJE gives seven calendar days' notice to Client as practicable. In such an event, WJE shall have no liability to the Client for delay or damage caused the Client because of such suspension.

6. Termination. Both the Client and WJE have the right to terminate WJE's services for convenience upon seven calendar days' written notice to the other party. In the event the Client terminates without cause, WJE shall be entitled to compensation for its services and expenses up to the time of such notification, including fees for any transition services, and shall have no liability for delay or damage to Client because of such termination.

7. Reports, Drawings, and Work Product. WJE retains ownership of reports, drawings, specifications, test data, techniques, photographs, letters, notes, and other work product, including those in electronic form, it has created. These documents or parts thereof may not be reproduced or used by the Client for any purpose other than the purpose for which they were prepared, including, but not limited to, use on other projects or future modifications to this Project, without the prior written consent of WJE. Upon request, WJE will provide Client with a copy of documentation for information and reference purposes and bill for such reproduction in accordance with Paragraph 5 above. Any unauthorized use of WJE's work product shall be at the Client's sole risk and Client shall indemnify WJE for any liability or legal exposure to WJE. To the extent WJE terminates its services due to non-payment of fees by Client, Client shall not be entitled to use the documents described herein for any purpose whatsoever.

8. Environmental Hazards. Client acknowledges that WJE's services do not include the detection, investigation, evaluation, or abatement of environmental conditions that WJE may encounter, such as mold, lead, asbestos, PCBs, hazardous substances, or toxic materials that may be present in buildings and structures involved in this Project. The Client agrees to defend, indemnify, and hold WJE harmless from any claims relating to the actual or alleged existence or discharge of such materials through no fault

of WJE's employees. WJE reserves the right to suspend its services, without liability for consequential or any other damages, if it has reason to believe that its employees may be exposed to hazardous materials and will notify the Client in such event.

9. Dispute Resolution. Prior to the initiation of any legal proceedings, WJE and the Client agree to submit all claims, disputes, or controversies arising out of or in relation to the services provided by WJE to mediation. Such mediation shall be conducted under the auspices of the American Arbitration Association or such other mediation service or mediator upon which the parties agree.

10. Governing Law. The laws of the state where WJE performs its services shall govern.

11. Successors and Assigns. These Terms shall be binding upon Client and WJE and their respective successors, assigns and legal representatives. Neither party may assign, subcontract, or otherwise delegate its responsibilities without the prior consent of the other party, which consent shall not be unreasonably withheld.

12. Insurance. WJE maintains commercial general liability, automobile, workers' compensation, and employers' liability and professional liability coverages under policies written by national insurance carriers rated by the A.M. Best Company, evidence of which will be provided upon request. Endorsements are not allowed. No waiver of subrogation is allowed on WJE's professional liability policy. Upon written request, WJE agrees to name the Client as an additional insured to the commercial general liability and automobile coverages. Any request to add other parties as additional insureds must be made in writing and is subject to certain limitations. All policies are subject to annual renewal, and WJE will not undertake to guarantee continued coverage beyond the individual policy term. Excess coverage is available for exposures over primary policy limits except for professional liability.

13. Indemnity. To the fullest extent permitted by law, Client and WJE each agree to indemnify and hold the other harmless, and their respective agents, officers and employees, from and against liability for all direct claims, losses, damages, and expenses, including reasonable attorneys' fees, to the extent such claims, losses, damages, or expenses are for bodily injury, sickness, disease, death, or property damage and to the extent they are caused by the negligent acts, errors, or omissions of the indemnifying party, and/or the indemnifying party's agents, officers, employees, independent contractors, or subcontractors of any tier. In the event such claims, losses, damages, or expenses are caused by the joint or concurrent negligence of

Client and WJE, or their respective agents, officers, employees, independent contractors, or subcontractors of any tier, they shall be borne by each party in proportion to that negligence.

14. Agreed Remedy. To the fullest extent permitted by law, the total liability, in the aggregate, of WJE and WJE's officers, directors, employees, agents, and consultants to Client and anyone claiming by, through, or under Client, for any and all injuries, claims, losses, expenses, or damages, including, without limitation, attorneys' fees, arising out of or in any way related to WJE's services, the Project, or these Terms, from any cause or causes whatsoever, including but not limited to, negligence, strict liability, indemnity or breach of contract shall not exceed an amount equal to the proceeds obligated to be paid under WJE's applicable insurance policy for such claims. If, for any reason, the applicable insurance policy does not provide coverage for any particular claim described herein, then the liability amount shall not exceed WJE's fees for the services performed hereunder.

In no event shall WJE be liable in contract, tort, strict liability, warranty or otherwise, for any special, incidental or consequential damages, such as, but not limited to, delay, disruption, loss of product, loss of anticipated profits or revenue, loss of use of equipment or system, non-operation or increased expense of operation of other equipment or systems, cost of capital, or cost of purchase or replacement equipment systems or power.

15. Third-Party Beneficiaries. Nothing contained in these Terms shall create a contractual relationship with, or a cause of action in favor of, a third party against either the Client or WJE. WJE's services hereunder are being performed solely for the benefit of the Client, and no other entity shall have any claim against WJE because of these Terms or WJE's performance or non-performance of services hereunder.

16. Entire Agreement. These Terms together with any written proposal shall constitute the entire understanding of the parties concerning the Project and supersede all prior negotiations and written agreements between them, and any amendment or modification to either WJE's proposal or these Terms may be made only by a written instrument expressly stated to be an amendment and signed by WJE.

17. Severability. If any provisions of these Terms, or portions thereof, are determined to be unenforceable, the remainder shall not be affected thereby and each remaining provision or portion thereof shall continue to be valid and effective and shall be enforceable to the fullest extent permitted by law.

Attachment 5

Hitchcock Design Group



Scope of Services

Phase I Engineering

The goal for this part of the engagement is to review the previously prepared Phase I documents and further define the landscape items to be included in the project. We understand that trees removed as part of this project will be replaced on a 1:1 basis. A tree survey has already been conducted and will be used to determine the number of trees requiring replacement.

A. Data Collection and Coordination

Objective: Collect and review data from the previously prepared Phase I documents and coordinate with Gewalt Hamilton to determine the specific landscape improvements to advance.

Process: Hitchcock Design Group will:

1. Identify jurisdictional requirements, operational practices, development plans and construction procedures related to landscape items as regulated by the following groups:
 - a. Lake County Division of Transportation (LCDOT)
 - b. Village of Buffalo Grove
 - c. Franchise power and communication utility providers
 - d. Adjacent property owners
2. Review previously prepared existing data for the project area and the immediate surroundings related to landscape items as provided by Gewalt Hamilton including:
 - a. Aerial photography
 - b. Topographic surveys
 - c. Boundaries, property ownership and easements
 - d. Utility information
 - e. Proposed roadway improvement plans
3. Observe and photograph the project area and immediate surroundings in order to identify readily apparent physical conditions and patterns of use.
4. Using the survey information and proposed roadway improvement plans provided by Gewalt Hamilton, prepare **Base Maps** at appropriate scales for the study area suitable for preparation of the preliminary landscape design.
5. Prepare a **Landscape Program Memorandum** that summarizes the landscape requirements and consensus project program elements to advance.

Deliverables: **Base Maps; Landscape Program Memorandum**

B. Preliminary Landscape Design

Objective: Reach consensus on the type, location, organization, scale, character and potential cost of the specific landscape improvements.

Process: Following approval of the Landscape Program Memorandum, Hitchcock Design Group will:

1. Prepare a **Preliminary Landscape Plan** including appropriate plan views, sections, elevations and other graphic images to illustrate the landscape improvements including:
 - a. Parkway plantings
 - b. Median plantings
 - c. Detention basin plantings
2. Prepare **Preliminary Landscape Quantities and Costs** using standard IDOT and LCDOT pay items.



3. Provide the preliminary documents to Gewalt Hamilton to incorporate into the overall project documents and submit to LCDOT for Preliminary plan review (30%). Participate in plan-in-hand field review with the project team, LCDOT, and Village of Buffalo Grove representatives.
4. Based on input received, refine the preliminary landscape plan including updating the landscape quantities and costs.
5. Prepare a presentation quality **Color Rendering** of the landscape improvements suitable for public presentation.
6. Attend an Aesthetics Review meeting with LCDOT.
7. Finalize and submit the preliminary landscape recommendations to Gewalt Hamilton.

Deliverables: **Preliminary Landscape Plan, Preliminary Landscape Quantities and Costs, Color Rendering**

Phase II Engineering

The goal for this part of the engagement is to finalize the Plans, Specifications, and Estimates (PS&E) for the landscape improvements and submit the documents to Gewalt Hamilton for inclusion in the final documents as required by LCDOT for final approval and bid letting.

A. Pre-Final Plan Development

Objective: Advance the approved preliminary landscape design and receive project team and LCDOT approval of the landscape improvements to document for construction and bidding.

Process: Following Phase I approval, Hitchcock Design Group will:

1. Prepare **Pre-Final Landscape Plans** based on the specific site conditions including:
 - a. Parkway plantings
 - b. Median plantings
 - c. Detention basin plantings
2. Prepare a **Pre-Final Plant List, Summary of Quantities** and **Cost Estimate** for the proposed landscape items based on standard IDOT and LCDOT pay items.
3. Prepare **Pre-Final Special Provisions** for the landscape items.
4. Provide the Pre-Final Landscape Plans, Plant List, Summary of Quantities, Cost Estimate, and Outline Special Provisions to Gewalt Hamilton who will incorporate them into the overall project documents and submit to LCDOT for Pre-Final plan review (60%). Prepare a disposition of comments for the landscape items to include with the submittal.

Deliverables: **Pre-Final Landscape Plans, Plant List, Summary of Quantities, Cost Estimate, and Special Provisions**

B. Final Plan Development

Objective: Produce the plans, specifications, and estimates for LCDOT review and approval to bid and construct the landscape improvements.

Process: Following LCDOT Pre-Final plan approval, Hitchcock Design Group will:



1. Finalize the Plans, Specifications and Estimates based on LCDOT standards for the landscape items, including:
 - a. Summary of quantities
 - b. Landscape plans, material list, and details
 - c. Specifications and special provisions
 - d. Quantity estimate and construction cost estimate using IDOT and LCDOT coded pay items
2. Participate in a meeting with Gewalt Hamilton and the Village of Buffalo Grove to review the landscape recommendations.
3. Provide the Final Landscape Plans, Plant List, Summary of Quantities, Cost Estimate, and Special Provisions to Gewalt Hamilton who will incorporate them into the overall project documents and submit to LCDOT for Final plan review (90%). Prepare a disposition of comments for the landscape items to include with the submittal.
4. Finalize and submit the documents to Gewalt Hamilton for Final Plan Approval and Release (100%).

Deliverables: Final Landscape Plans, Plant List, Summary of Quantities, Cost Estimate, and Special Provisions

General Project Administration

In addition to the services outlined above, HDG will administer the performance of its own work throughout the term of the contract by providing the following services:

A. Communications

1. Schedule, create agendas and summarize the highlights of periodic meetings
2. Rehearse, attend and present at public forums identified
3. Collect and disseminate communications from other parties
4. Periodically inform your representative about our progress

B. Schedules

1. Create, periodically update and distribute the project schedule
2. Coordinate the activities of our staff and our consultants

C. Staffing

1. Select and assign staff members and consultants to appropriate tasks and services
2. Prepare and administer consultant agreements

D. File Maintenance

1. Establish and maintain appropriate correspondence, financial, drawing and data files
2. Obtain appropriate insurance certificates from consultants
3. Maintain appropriate time and expense records

Optional, Additional Services

Services or meetings not specified in this scope of services will be considered additional services. If circumstances arise during our performance of the outlined services that we believe require additional services, we will promptly notify you about the nature, extent and probable additional cost of the additional services, and perform only such additional services following your written authorization.

PAYROLL ESCALATION TABLE ANNIVERSARY RAISES

FIRM NAME
PRIME/SUPPLEMENT

Hitchcock Design Group

DATE 12/17/14

PTB NO.

CONTRACT TERM 12 MONTHS

START DATE 10/1/2014

RAISE DATE ANNIVERSARY

OVERHEAD RATE 159.23%

COMPLEXITY FACTOR 0

% OF RAISE 3.00%

ESCALATION PER YEAR

DETERMINE THE MID POINT OF THE AGREEMENT

6

CALCULATE THE ESCALATION FACTOR TO THE MIDPOINT OF THE CONTRACT

1.50%

The total escalation for this project would be: 1.50%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PTB NO.

Hitchcock Design Group **DATE**

12/17/14

ESCALATION FACTOR **1.50%**

[illegible]

COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

DF-824-034
REV 12/04

FIRM Hitchcock Design Group
PTB _____
PRIME/SUPPLEMENT _____

OVERHEAD RATE 1.5923
COMPLEXITY FACTOR 0

DATE 12/17/14

DBE DROP BOX	ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	Outside Direct Costs (F)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
	Review Existing Info	3	108.25	172.37	25.00	40.05				345.67	2.44%
	Review Data	3	108.25	172.37		40.05				320.67	2.27%
	Observe/Photograph Site	8	207.26	330.02	50.00	76.69				663.98	4.69%
	Prepare Base Maps	4	91.80	146.17		33.96				271.93	1.92%
	Landscape Program Memo	3	108.25	172.37		40.05				320.67	2.27%
	Landscape Plan	14	400.09	637.07	25.00	148.03				1,210.19	8.55%
	Preliminary Costs	10	308.30	490.90		114.07				913.27	6.45%
	Review with Team	8	317.53	505.61	50.00	117.49				990.63	7.00%
	Refine Plans	9	257.78	410.46		95.38				763.62	5.40%
	Color Rendering	9	234.11	372.77		86.62				693.50	4.90%
	Aesthetics Review Mtg	8	317.53	505.61	200.00	117.49				1,140.63	8.06%
	Finalize/Submit	4	103.63	165.01		38.34				306.99	2.17%
	Pre-Final Landscape Plan	18	515.56	820.92	25.00	190.76				1,552.24	10.97%
	Pre-Final Plant List	16	457.83	729.00		169.40				1,356.22	9.58%
	Pre-Final Special Provision	10	331.97	528.59		122.83				983.38	6.95%
	Provide Info to GHA	7	178.40	284.06	25.00	66.01				553.46	3.91%
	Finalize PS&E	10	262.98	418.74	50.00	97.30				829.01	5.86%
	Review Meeting	8	207.26	330.02	50.00	76.69				663.98	4.69%
	Provide Info to GHA	3	74.76	119.05	50.00	27.66				271.48	1.92%
		6									
	Subconsultant DL					0.00				0.00	0.00%
	TOTALS	161	4,591.54	7,311.10	550.00	1,698.87	0.00	0.00	0.00	14,151.50	100.00%

DBE 0.00%

DBE

PREPARED BY THE AGREEMENTS UNIT

Printed 12/17/2014 9:03 AM

SHEET 1 OF 5

Printed 12/17/2014 9:04 AM

AVERAGE HOURLY PROJECT RATES

FIRM	<u>Hitchcock Design Group</u>
PTB	<u></u>
PRIME/SUPPLEMENT	<u></u>

DATE 12/17/14

SHEET 2 **OF** 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Landscape Plan			Preliminary Costs			Review with Team			Refine Plans			Color Rendering			Aesthetics Review Mtg		
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Principal II	50.52	2	14.29%	7.22	2	20.00%	10.10	4	50.00%	25.26	1	11.11%	5.61	1	11.11%	5.61	4	50.00%	25.26
Associate I	28.87	4	28.57%	8.25	4	40.00%	11.55	4	50.00%	14.43	4	44.44%	12.83				4	50.00%	14.43
Jr Associate I	22.95	8	57.14%	13.11	4	40.00%	9.18				4	44.44%	10.20	8	88.89%	20.40			
TOTALS		14	100%	\$28.58	10	100%	\$30.83	8	100%	\$39.69	9	100%	\$28.64	9	100%	\$26.01	8	100%	\$39.69

AVERAGE HOURLY PROJECT RATES

FIRM	<u>Hitchcock Design Group</u>
PTB	<u></u>
PRIME/SUPPLEMENT	<u></u>

DATE 12/17/14

SHEET 3 **OF** 5

PAYROLL	AVG	Finalize/Submit																	
CLASSIFICATION	HOURLY RATES	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal II	50.52																		
Associate I	28.87	2	50.00%	14.43															
Jr Associate I	22.95	2	50.00%	11.47															
TOTALS		4	100%	\$25.91	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

SHEET 4 **OF** 5

Printed 12/17/2014 9:06 AM

SHEET 5 **OF** 5

Printed 12/17/2014 9:06 AM

Buffalo Grove Road Improvements
Hitchcock Design Group
Direct Cost Summary

ITEM	TOTAL DIRECT COST	MILEAGE				PRINTING			
		Trips	Miles/ Trip	Total Miles	Cost @ \$0.55/mi	No. of Sheets	Cost @ \$0.50/sht	Cost @ \$1.00/sht	Cost @ \$50.00/sht
Review existing information and requirements	\$ 25.00					50	\$ 25		
Review data									
Observe/Photograph Site	\$ 49.50	1	90	90	\$ 50				
Prepare Base Maps									
Landscape Program Memo									
Landscape Plan	\$ 25.00					25		\$ 25	
Preliminary Costs									
Review with Team	\$ 49.50	1	90	90	\$ 50			\$ -	
Refine Plans								\$ -	
Color Rendering									
Aesthetics Review Meeting	\$ 199.50	1	90	90	\$ 50	3			\$ 150
Finalize/Submit									
Pre-Final Landscape Plan	\$ 25.00					25		\$ 25	
Pre-Final Plant List									
Pre-Final Special Provisions									
Provide Info to GHA	\$ 25.00					25		\$ 25	
Finalize PS&E	\$ 50.00					50		\$ 50	
Review Meeting	\$ 49.50	1	90	90	\$ 50				
Provide Info to GHA	\$ 50.00					50		\$ 50	
Finalize									

TOTAL DIRECT COSTS	\$ 548.00
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Attachment 6

Santacruz Land Acquisitions

PROPOSAL FOR LAND ACQUISITION SERVICES

Lake County Division of
Transportation

Gewalt Hamilton Associates, Inc.



Buffalo Grove Road
from IL 22 to Deerfield Parkway

**Santacruz Land
Acquisitions** 

2650 Valor Drive • Glenview, IL 60026
www.santacruz-associates.com

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

1

EXECUTIVE SUMMARY

Having extensive experience with right of way projects, we understand the importance of keeping on schedule. On-time lettings gives 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 your acquisition of right of way:

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

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

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

Our solution is to assemble a team of industry leading right of way professionals that have 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 the LPA and Gewalt Hamilton Associates, Inc., Engineer for the LPA, (“Consultant”) to develop a land acquisition plan for the reconstruction of Buffalo Grove Road from IL 22 to Deerfield Parkway (the “Project”) to assure that the goals are met. Beginning with waiver valuations on the appraisal side, we look for ways to reduce the time on the acquisition cycle. 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.

All of these efficiencies lead to ways in which we 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, our team will suggest ways to minimize impacts and reduce costs in challenging acquisitions. We will also work with the LPA to minimize the condemnation referrals that impact the budget for this Project. By the same token, our team 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. Our team possesses that knowledge and has years of experience providing “expert witness” testimony in these matters.

Santacruz Land Acquisitions is made up of 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). In addition, we are familiar with IDOT’s land acquisition guidelines, policies and procedures.

WHY SANTACRUZ LAND ACQUISITIONS?

As you review our proposal, you will see that the team that Santacruz Land Acquisitions has assembled is versatile, experienced and qualified to deliver the full scope of the land acquisition needs for the LPA. What sets apart our team 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
- Extensive experience with complex valuations and acquisitions
- 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.

Our solution is to apply our team’s extensive collective decades of 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 BEP with Central Management Services, a DBE with IDOT and an MBE with Cook County and the City of Chicago.

TEAM ORGANIZATION

Santacruz Land Acquisitions has assembled a versatile team of professional right of way consultants with the experience to deliver successful land acquisition services and meet the letting dates of the project. J. Steve Santacruz, President of Santacruz Associates Ltd. d/b/a Santacruz Land Acquisitions will lead the team as Project Manager. The team brings a wealth of experience in land acquisition for governmental agencies and related real estate law and civil engineering disciplines to assure the proper handling of even the most complicated of acquisitions. Additionally, the key members of the Santacruz Land Acquisitions team have collaborated in the past on projects.

SUMMARY

With a long history of successful delivery of a variety of right of way projects on-time, within budget and to our client's satisfaction, we look forward to the opportunity to assist the LPA with its land acquisition needs

COMPENSATION

Santacruz Land Acquisitions shall be entitled to the compensation as shown on the attached schedule. Our cost proposal, based on **thirty-three (33)** projected parcels of right-of-way, is as follows:

<u>APPRAISALS:</u>	\$66,000.00
<u>NEGOTIATIONS:</u>	\$72,600.00

As directed, Santacruz Land Acquisitions shall invoice the LPA or Consultant for any fees and charges related to the acquisitions including, without limitation, (i) the cost of the later date title commitments, (ii) the cost of title insurance policies obtained on the parcels to be acquired, (iii) the cost of recording any necessary documents to complete the conveyance and obtain clear title, (iv) lender's fees related to the processing of any partial releases needed to provide clear title, and (v) land trustee processing fees. Santacruz Land Acquisitions shall include **\$350.00** per parcel for these charges. Santacruz Land Acquisitions shall pay any such fees and charges in excess of the **\$350.00** per parcel allowance for which Santacruz Land Acquisitions shall be entitled to additional compensation in the amount of any such payments pursuant to a separate work order issued.

Based on the projected total number of parcels of right-of-way to be acquired for the Project, the land acquisition negotiation services provided herein are offered a cost not to exceed of **\$150,150.00** as follows:

Land Acquisition Services	\$138,600.00
Direct Billable Expenses	\$11,550.00

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TECHNICAL APPROACH

Santacruz Land Acquisitions shall perform all necessary services in the preparation of appraisals and review appraisals and the negotiation of the acquisition of necessary properties required for the completion of the Project. All services shall be performed at the direction of the 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 the 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 the 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 the LPA.

Task 2: Kick-off Meeting

Santacruz Land Acquisitions will meet with the LPA and/or Consultant to discuss the Project, identify issues and develop any necessary strategies to assure the timely completion of the Project. At that time, we will identify the subconsultant that shall be assigned to the Project to perform the appraisal functions.

Task 3: Delivery and Review of Project Information

The 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, the LPA or Consultant will also provide us with a set of project plans, including, (i) plan and profile, (ii) drainage and utilities, (iii) pavement markings and (iv) cross sections.

Task 4: Introductory Notice to Owners

The assigned Appraiser will notify the property owner of the proposed taking and the beginning the valuation process of the property. The notice will invite the property owner to be present during the inspection by the appraiser.

Task 5: Appraisal / Waiver Valuation

All appraisal work shall be completed within the time frame provided by the LPA at the time the project is assigned.

The Appraiser will review the plat of highways and the construction plans to determine the type of appraisal to be used for each parcel. The Appraiser will recommend the type of appraisal, which type shall be approved by LCDOT. The types of appraisals to be used are the following:

- Waiver Valuation
- Non-complex – damages less than \$5,000
- Complex

The Appraiser shall make a detailed inspection of the properties and make such investigations and studies as are consistent with industry standard and necessary to derive sound conclusions for the preparation of appraisal reports.

All appraisals shall be prepared using the forms as provided or outlined by IDOT's land acquisition division. Santacruz Land Acquisitions shall furnish

and deliver four copies of the completed appraisal report for each parcel.

The Appraiser shall assist in analyzing and responding to valuation information provided by a property owner in support of a counter offer. At the request of the LPA or Consultant, Santacruz Land Acquisitions will furnish and deliver updated or revised appraisals resulting from a revision to the right of way or for condemnation purposes. Such requests will be pursuant to a separate work order.

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 the LPA so that it may complete the acquisition of the property through condemnation. In such case, at the request of the LPA or its trial counsel, the Appraiser assigned to appraise the parcel 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.

Task 7: Negotiation and Acquisition

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

The Negotiator will not have any authority to determine administrative settlements. The Negotiator will consult with the LPA for approval of any counter offers and upon acceptance by the 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 the Authority. Santacruz Land Acquisitions will direct any questions to the 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 the 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 the 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 the 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 the 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 the 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 the 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 the LPA so that it may complete the acquisition of the property through condemnation. In such case, at the request of the LPA or its trial counsel, the Review Appraiser assigned to appraise the parcel 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 nearly twenty years of right of way acquisition experience to lead this team as its project manager. Steve has worked on thousands of acquisition parcels for ISTHA, IDOT, Cook, Kane, Lake, and Will Counties. He has also worked for numerous township and municipalities. 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 experience in closing residential and commercial real estate transactions, and Jonathan Abplanalp, a District 1 fee negotiator.

Each of our team members, including subconsultants, has relevant experience working collaboratively with professionals of other disciplines and other agencies. They understand the importance of effective coordination throughout the land acquisition process.

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. Having developed its own proprietary database overlay, we have developed great efficiencies that allow us to handle hundreds of parcels at one time keeping deadlines organized for each of our different clients.

Our team brings an array of services and broad disciplines in real estate which gives us a distinct advantage in handling even the most complex of your land acquisition projects. In addition, our team of subconsultants are not new to each other as we have collaborated together on various other projects.

Our team 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.

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EXHIBITS

- a. Pricing Schedule
- b. References

Compensation for Services

Appraisal Services

Appraisals (non-complex)	\$1,600.00
Appraisals (complex)	\$2,400.00
Revision to appraisal due to change in ROW or plans	\$750.00 - \$1,200.00

Negotiation Services

Negotiation and acquisition services for Right of Way including, without limitation, documentation of conveyance of property interest	\$2,200.00
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Witness Services

Rate for each ½ day in pretrial conference or in court for Negotiator	\$1,000.00
Rate for each ½ day in pretrial conference or in court for Appraiser	\$1,000.00
Hourly rate for consultation not otherwise specifically provided for herein	\$250.00

Title Services (if applicable)

Later date commitment	\$50.00
+ Administrative fee	\$25.00
Title insurance policies	\$75.00
+ Additional costs of	\$3.50 per thousand
+ 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 fee	\$50.00
+ Administrative fee	\$25.00

REFERENCES

Sheila Derka

Illinois Department of Transportation
Land Acquisition Chief
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201 West Center Court
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Al Giertych

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**ATTACHMENT A TO GEWALT HAMILTON ASSOCIATES, INC.
PROFESSIONAL SERVICES AGREEMENT**

The delineated services provided by Gewalt Hamilton Associates, Inc., (GHA) under this Agreement will be performed as reasonably required in accordance with the generally accepted standards for civil engineering and surveying services as reflected in the contract for this project at the time when and the place where the services are performed.

The terms of this Agreement are subject to renegotiation if not accepted within 60 days of the date indicated on the contract. Requests for extension beyond 60 days should be made in writing prior to the expiration date. The fees and terms of the Agreement shall remain in full force and effect for one year from the date of acceptance of the Agreement, and shall be subject to revision at that time, or any time thereafter, if GHA gives written notice to the other party at least 60 days prior to the requested date of revision. In the event that the parties fail to agree on the new rates or other revisions, either party may terminate this Agreement by giving the other party 10 days written notice.

The Client's obligation to pay for the professional services provided is in no way dependent upon the Client's ability to obtain financing, rezoning, payment from a third party, approval of governmental or regulatory agencies or the Client's successful completion of the project.

The Client acknowledges GHA's plans and specifications, including field data, notes, calculations, and all documents or data on electronic media, as instruments of professional service. The plans and specifications prepared under this Agreement shall become the property of the Client upon completion of the services and payment in full of all monies due to GHA. However, GHA shall retain ownership rights over all electronic data and documents.

The Client agrees to waive any claim against GHA arising from any unauthorized reuse or modification of the plans and specifications or electronic data. The Client agrees, to the fullest extent permitted by law, to defend and indemnify and hold GHA harmless from any damage, liability or cost, including attorneys' fees and costs, arising from any reuse or modification of the plans, specifications, or electronic data by the Client or any person or entity which acquires or obtains the plans, specifications, or electronic data from or through the Client.

The client is aware that differences may exist between the electronic files delivered and the printed plans and specifications. In the event of a conflict between the signed and/or sealed printed plans and specifications prepared by GHA and electronic files, the signed and/or sealed printed plans and specifications shall govern.

The Americans with Disabilities Act (ADA) provides that it is a violation of the ADA to design and construct a facility for first occupancy later than January 26, 1993, that does not meet the accessibility and usability requirements of the ADA except where an entity can demonstrate that it is structurally impractical to meet such requirements. The Client acknowledges that the requirements of the ADA will be subject to various, and possibly contradictory interpretations. GHA, therefore, will use reasonable professional efforts to interpret applicable ADA requirements and other federal, state and local laws, rules, codes, ordinances, and regulations as they apply to the project. GHA, however cannot and does not warrant or guarantee that the Client's project will comply with interpretations of ADA requirements and/or requirements of other federal, state and local laws, rules, codes, ordinances, and regulations as they apply to the project.

If required by the contracted scope of services, GHA, shall prepare an opinion of probable construction costs, which shall be submitted to the Client for review. Since GHA has no control over the cost of labor, materials, or equipment, or over the contractor's methods of determining prices, or over competitive bidding or market conditions, opinions of probable costs, if called for by this Agreement as part of GHA's scope, shall be made on the basis of experience and qualifications applied to the program contemplated by the Agreement and information provided by Owner, and represent a reasonable judgment as a design professional familiar with the construction industry. However, GHA cannot and does not guarantee or warrant that proposals, bids, or the actual construction costs will not vary from opinions of probable cost prepared for the Client. If the Client wishes greater assurance as to the construction cost, Client agrees it will employ an independent cost estimator.

If required by the Scope of Services, GHA shall visit the project at defined intervals during construction to become generally familiar with the progress and quality of the contractors' work to determine if the work is proceeding in general conformance with the Contract Documents.

Client agrees that GHA does not have control of and is not responsible for construction means, methods, techniques, sequences or procedures, or for safety measures and programs including enforcement of Federal, State and County safety requirements, in connection with construction work performed by the Client's construction contractors. GHA is not responsible for the supervision of Client's construction contractors, subcontractors, materialmen, suppliers, or any of their employees, agents and representatives of such contractors; or responsible for any machinery, construction equipment, and tools used and employed by contractors and subcontractors in the project. GHA, Inc. has no authority or right to stop the work. In no event shall GHA be liable for the acts or omissions of Client's construction contractors, subcontractors, materialmen or suppliers, or any persons or entities performing any of the construction work, or for failure of any of them to carry out their work as called for by the Construction Documents.

Neither the professional activities of GHA, nor the presence of GHA or its employees and subconsultants (if any) at a construction site, shall relieve the Contractor or any other entity of their obligations, duties and responsibilities including but not limited to, construction means, methods, sequence, techniques, or procedures necessary for performing, superintending or coordinating all portions of the Work in accordance with the Contract Documents and any health or safety precautions required by any regulatory agencies or industry practice. GHA personnel have no authority or right to exercise any control or direction over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions. The Client agrees that the Contractor is solely responsible for jobsite safety, and warrants that this intent shall be included in the Client's agreement with the Contractor. The Client also agrees that the

Client, GHA, and GHA's personnel and consultants shall be defended/indemnified by the Contractor for all claims asserted against GHA which arise out of the Contractor's or its subcontractors' negligence, errors or omissions in their performance of their work, and shall also be named as an additional insured under the Contractor(s)'s general liability insurance policy.

It is acknowledged by both parties that GHA's scope of services does not include any services related to asbestos, mold, fungus or any other hazardous or toxic materials, contaminants or pollutants. In the event that GHA, or any other party encounters asbestos mold, fungus or any other hazardous or toxic materials, contaminants or pollutants at the job site, or it should become known in any way that such materials may be present at the jobsite or any adjacent areas that may affect the performance of GHA, GHA may, at its option and without liability for consequential or any other damages, suspend performance of its services on the project until the Client retains appropriate specialist consultants or contractors to identify, abate and/or remove the asbestos, mold, fungus or any other hazardous or toxic materials, contaminants or pollutants and further warrant that the jobsite is in full compliance with applicable laws and regulations.

If required by the scope of services, records drawings (or revised specifications) will be prepared, in part, on the basis of information compiled and furnished by others, the accuracy of which GHA may reasonably rely upon, GHA will not be responsible for any errors or omissions, which have been incorporated into this document due to information furnished by others.

When preparing civil engineering or surveying plans and drawings, information on existing underground utilities or soil conditions is provided from the best information available. This information may be obtained from visible surface evidence, utility company records or soil borings, and is not represented to be the exact location of these utilities or soils in the fields. Client agrees that GHA may reasonably rely on the accuracy of information furnished by third parties. Contractor is solely responsible for exact utility locations. Client shall not hold GHA responsible for Contractor's error/omission in the utility locations. Client agrees GHA is not responsible for additional costs, which result from utility conflicts or unforeseen conditions. If the Client wishes to obtain the services of a contractor to provide test holes and exact utility locations, GHA, may incorporate that information into the design and reasonably rely upon same. If not included in the scope of services, such work will be compensated as additional services.

The Client agrees to limit GHA's professional liability to the Client and to all construction contractors, or subcontractors on the project arising from GHA, Inc.'s alleged negligent acts, errors, or omissions, such that the total aggregate liability of GHA, Inc. to all those named shall not exceed \$50,000 or GHA's total fee for the services rendered on this project, whichever is greater. GHA, Inc. makes no warranties, either expressed or implied, including any warranty of habitability, merchantability or fitness for any particular purpose. In no event shall GHA be liable for any loss of profit or any consequential damages.

All claims, disputes, controversies or matters in question arising out of or relating to this Agreement or any breach thereof, including but not limited to disputes arising out of alleged design defects, breaches of contract, errors, omissions, or acts of professional negligence (collectively "disputes") shall be submitted to mediation before and as a condition precedent to any other remedy. Upon written request by either party to this Agreement for mediation of any dispute, the Client and GHA shall select by mutual agreement a neutral mediator. Such selection shall be made within ten (10) calendar days of the date of receipt by the other party of the written request for mediation. In the event of failure to reach such agreement or in any instance when the selected mediator is unable or unwilling to serve and a replacement mediator cannot be agreed upon by Client or GHA within ten (10) calendar days, a mediator shall be chosen as specified in the Construction Industry Mediation Rules of the American Arbitration Association then in effect. Mediation shall take place in Chicago, Illinois unless the Client and GHA agree otherwise. The fees of the mediator(s) and costs incurred by the mediator(s) shall be apportioned equally between the parties.

Either the Client or GHA may terminate this Agreement without penalty at any time with or without cause upon giving the other party ten (10) calendar days prior written notice. The Client shall, within thirty (30) calendar days of termination pay GHA for all services rendered and all costs incurred up to the date of termination, in accordance with compensation provisions to this Agreement. The Client shall also reimburse GHA termination expenses, including, but not limited to, those associated with demobilization, reassignment of personnel and space and equipment costs. Client shall not assign this Agreement without GHA's written consent.