


Municipality	L O C A L A G E N C Y	 Illinois Department of Transportation Preliminary Engineering Services Agreement For Motor Fuel Tax Funds	C O N S U L T A N T	Name Patrick Engineering, Inc.
Township				Address 4970 Varsitv Drive
County Lake County				City Lisle
Section 11-00121-10-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. 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 Washington Street

Route FAU 187 Length 0.97 Mi. 5140.00 FT (Structure No. _____)

Termini West of Hainesville Road to Haryan Way

Description:

Pavement Widening and Reconstruction for Washington Street from west of Hainesville Road to Haryan Way. Other work includes intersection improvements, traffic signal upgrades and drainage improvements.

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, 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 five (5) copies of the plans, special provisions, proposals and estimates. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at his actual cost for reproduction.
 - h. Furnish the LA with survey and drafts in quadruplicate 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.

Note: Four copies to be submitted to the Regional Engineer

- 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.
- (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 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 he will perform such work without expense to the LA, even though final payment has been received by him. He 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 him and will show his professional seal where such is required by law.

The LA Agrees,

1. To pay the ENGINEER as compensation for all services performed as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:
- a. A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
 - b. A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost

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

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

2. To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k of the ENGINEER AGREES at 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 his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under the paragraph 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge.

"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.

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 paragraphs 1a through 1g under 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 or higher as approved by the LA, based on the approved estimate of cost. **The total contract amount shall not exceed \$1,779,072.72.**
 - 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 paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for his actual costs plus _____ percent incurred up to the time he is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of THE LA AGREES.
5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of THE ENGINEER AGREES, after they have been approved by the DEPARTMENT, the LA will pay the ENGINEER for such changes on the basis of actual cost plus _____ percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of THE LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his 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 his 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 he/she 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 he/she 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 quadruplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

Lake County of the
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By _____

By _____

Clerk

Title _____

(Seal)

Executed by the ENGINEER:

PATRICK ENGINEERING INC

4970 VARSITY DRIVE

LISLE, IL 60532

ATTEST:

By Janod Abelli

By Paul M. Lopez

Title TRANSPORTATION MANAGER

Title VICE PRESIDENT

Approved
_____ Date
Department of Transportation
_____ Regional Engineer

GENERAL

1. The Phase II Plans will follow the recommended scope of work as described in the Phase I Project Development Report (PDR) prepared for this project and approved by the Lake County Division of Transportation (LCDOT) and the Illinois Department of Transportation (IDOT). The scope of work will include the reconstruction and widening of Washington Street to a five-lane roadway from west of Hainesville Road to Haryan Way.
2. The project will begin in 2013 and be completed no later than at a time to be determined by LCDOT for submission for the project letting.
3. The project will be designed using the English units system and English size borders and plan sheet paper will be used. Plan sheets will be developed in Microstation format using LCDOT CADD guidelines. Full and quarter size scaleable prints of the plans will be submitted to LCDOT. The plans will also be submitted in PDF format.
4. Calculations will be done by Patrick and Bollinger Lach & Associates (BLA), and submitted to LCDOT, on 8 1/2" x 11" paper, as well as PDF format.
5. The proposed cross section will include an urban cross section with curb & gutter at the outside edges of pavement and an underground storm sewer system. Retaining walls are also anticipated for certain portions of the roadway.
6. The limits of the improvement will be as follows:
 - a) Western limit - The western limit will be 1,500 feet west of the intersection of Washington Street at Hainesville Road, near Arbor Drive.
 - b) Eastern limit – The eastern limit will be near the Haryan Way intersection and will match into the previously constructed grade separation project along Washington Street.
7. The design will follow the guidelines set forth in the Illinois Department of Transportation's (IDOT's) *Bureau of Local Roads Manual*, the American Association of State Highway and Transportation Officials' (AASHTO's) *A Policy on Geometric Design of Highway and Streets (Green book)*, and LCDOT's Design Guidelines.
8. The project will be designed so as to be eligible for federal funds.
9. The project will involve coordination with:
 - a) LCDOT - plan reviews, resolution of issues
 - b) IDOT – plan reviews
 - c) Villages of Grayslake, Hainesville, and Round Lake Park - Improvements within their jurisdictions
 - d) Utility owners
 - e) Lake County Stormwater Management Commission

- f) U.S. Army Corps of Engineers
- g) IEPA
- h) CLCJAWA
- i) Lake County Public Works and North Shore Sanitary District – Sanitary sewer relocation

10. The Special Waste Preliminary Environmental Site Assessment (PESA) performed in Phase I indicated a Low Risk finding and there is no evidence of any Recognized Environmental Conditions (RECs) within the project area. Therefore, a Preliminary Site Investigation (PSI) is not required in Phase II.

ROADWAY

1. The roadway improvements will match the limits in the approved PDR. The western limit of the project is Sta. 50+61.58 and the eastern limit is approximate Sta. 103+00.00.
2. The roadway plan & profile drawings will be prepared at a scale of 1"=50'. The drawings will have three (3) windows depicting the existing view, proposed view and a profile. Intersection Details will be prepared at 1"=20'.
3. It is anticipated that the roadway will be reconstructed and the vertical profile will be modified.
4. Patrick has assumed that the mainline Washington Street will be reconstructed to the radius returns of the side streets and improvements along the side streets will be widening and resurfacing.
5. Roadway cross-sections will be developed at 100' intervals. Cross-sections will also be provided at all critical locations, including sidestreets and driveways.
6. Earthwork quantities will be calculated per construction stage.
7. Plan submittals will include Preliminary, Pre-Final, and Final sets.
8. A plan-in-hand field review will be held prior to the submittal at each milestone.
9. Contract Documents will be developed in accordance with the 2007 Standard Specifications consisting of the following:
 - a) Set-up Design Files (Base Sheets)
 - b) Cover Sheet
 - c) Index of Sheets and Highway Standards – Sheet Index and list of applicable IDOT and LCDOT Highway Standards
 - d) General Notes Sheet – Standard general notes and project specific notes will be developed for the contract package. Any commitments from the Phase I Report will be listed.

- e) Summary of Quantities – The summary of quantities sheets will be prepared at every submittal. The sheets will include pay item code number, description, unit and total quantity. The quantities will be broken down into separate funding type codes. The pay items shall be double spaced on the sheet.
- f) Typical Sections – Sheets will be necessary to show details and dimensions for existing roadway and proposed roadway typical sections. The HMA mixture design requirement chart and pavement design block shall be included in the typical sections (to be performed by BLA).
- g) Schedule of Quantities – The schedules will indicate the location of the item by station and quantity at each location for roadway items, roadway removal items, safety related items, and earthwork per stage. All items except for “Lump Sum” pay items will be considered for tabulation.
- h) Alignment and Ties – The alignment drawings will be prepared at a scale of 1" = 100', including benchmarks.
- i) Removals – Plan sheets with an existing conditions base at 1" = 50' will be included showing all items to be removed.
- j) Roadway Plan and Profiles – The roadway plan and profile drawings will have separate windows depicting a proposed view and a profile. The proposed view will be superimposed on the existing view and prepared at a scale of 1"=50'. The profile view will be at a horizontal scale of 1"=50' and a vertical scale of 1"=5'.
- k) Maintenance of Traffic (MOT) Plans – Detailed plans will be prepared showing the construction staging along Washington Street. Horizontal and vertical plan and profile details will be developed for the proposed temporary roadway runaround at the railroad grade separation. In addition, any necessary detour routes for temporary closures at the proposed railroad grade separation will be detailed as part of the MOT plans.
- l) Drainage and Utility Plans – The drainage design will be in accordance with the Drainage Report prepared in Phase I. Necessary drainage calculations will be prepared. The drainage & utility sheets will be developed using the plan drawings as a base and will show proposed storm sewers and structures. The plans will consist of two (2) windows depicting a proposed view and a profile. The horizontal scale of both windows will be 1"=50'. The vertical scale of the profile will be 1"=5'. The drainage profile will show the proposed storm sewer and portions of the existing storm sewer to remain and proposed ditch profiles.
- m) Drainage Schedules – Schedules will be provided for the proposed storm sewers and drainage structures. Additionally callouts with nominal

information will be provided on the drainage plan and profile sheets. Schedules of storm sewer and drainage structure removals will also be prepared if warranted.

- n) Pavement Marking Plans and Signing Plans – Final pavement marking and signing plans will be developed at a scale of 1" = 50' with 2 views per sheet with an accompanying schedule. It is assumed that all existing ground mounted guide signs will be replaced by LCDOT forces (design work to be performed by BLA).
- o) Intersection Details – Jointing plans will be prepared at all major intersections at a 1"=20' scale and will contain elevations at all edges of pavement, lane lines, and jointing locations (if PCC pavement is provided).
- p) Erosion and Sediment Control Plans – Plans will be developed per stage to identify measures used to provide temporary control systems to prevent erosion and sediment damages to the roadway, drainage system/waterways, and adjacent properties during construction. These plans will be prepared at a scale of 1"=50' and will consist of two proposed views. The items identified on the plans will be consistent with the Storm Water Pollution Prevention Plan (SWPPP) developed for the contract.
- q) Landscaping Plans – It is assumed that landscaping will consist of seeding and sodding along areas disturbed by construction, as well as the location of replacement trees where appropriate. The landscaping information will be depicted on the Pavement Marking and Signing Plans (to be performed by BLA).
- r) Traffic Signal Plans – BLA will prepare and provide the traffic signal plans for the improvements at the Washington Street and Hainesville Road intersection. BLA will also prepare the system interconnect plans along Washington Street, from Cedar Lake Road to Lake Street. See the attached scope of work from BLA for further information.
- s) Structural Plans – Structural Plans will be prepared as described in the following section entitled "Structural".
- t) Cross-Sections – Cross-Sections will be provided at a maximum of 50 foot intervals and at driveway locations showing the planned improvements. Cut, fill, and removal and disposal of unsuitable material areas and volumes will be provided for the length of the project.
- u) District 1 Detail Drawings – Applicable District One Standard Details will be researched and included in the contract documents.

- v) Contract Details – Project specific details are anticipated as part of this contract.
- 10. Special Provisions – Special provisions will be necessary to provide descriptions of work that are not covered by the Standard Specifications. Also included in this item is review and inclusion of applicable Recurring, BLR&S, District special provisions, LCDOT special provisions, and any project specific special provisions.
- 11. Estimate of Time – The expected duration of construction time will be determined and provided in tabular format.
- 12. Estimate of Cost – The anticipated cost of construction will be provided for each milestone submittal using the pay items and historical unit prices.
- 13. Quantity Calculation Book – Detailed breakdowns will be provided for every pay item and consolidated for use during construction. This deliverable will be provided at the final submittal.

SURVEY

- 1. No survey is expected to be performed as part of this project. All pickup survey will be performed as part of the grade separation contract to the east of this project.

LIGHTING

- 1. No lighting is expected to be prepared for this project.

TRAFFIC SIGNALS

- 1. Bollinger Lach and Associates (BLA) will prepare and provide the traffic signal plans for the improvements at the Washington Street and Hainesville Road intersection. BLA will also prepare the system interconnect plans along Washington Street, from Hainesville Road to Lake Street including verification and function with proposed signalized improvements extending west to Cedar Lake Road. Please see the attached scope of work from BLA for further information.

ENVIRONMENTAL

- 1. Huff & Huff Inc. will assist Patrick Engineering with wetland permitting, mitigation guidance, and preparation of a restoration and monitoring plan. All effort for environmental and permitting assistance required to be provided by Huff & Huff for this section of the improvement, has been included in Huff & Huff's proposal for the grade separation contract.

STRUCTURAL

Culvert Extension

1. The existing culvert underneath Washington Street at Highland Lake will be extended 15' to the North and 20' to the South to accommodate the proposed roadway cross slopes. Preliminary and final Plans, Specifications & Estimates (PS&E) will be prepared.
2. The opening of the proposed culvert will match the existing culvert opening dimensions.
3. The culvert end sections will be integrated into the retaining walls at this location.

Retaining Walls

Three retaining walls will be required, two near Highland Lake, and one along south side of Washington Street from Sta. 56+50 to Sta. 61+00.

A. Walls near Highland Lake

1. The total length of the proposed retaining walls is 800 feet (110' north side and 690' south side of Washington Street). The anticipated height of the proposed retaining walls varies from four to nine feet.
2. TS&L drawings will not be required. Preliminary and final Plans, Specifications & Estimates (PS&E) will be prepared.
3. For estimating the scope of work associated with the preparation of the final PS&E, it is assumed that the retaining walls will consist of a reinforced concrete "T-type" founded on spread footing, however, an evaluation of different designs (IRE, MSE, soldier pile) will be performed. Final Structure drawings will be prepared to show plan, elevation, section, bill of materials, and reinforcement bending diagrams. Aesthetic treatments will be investigated and incorporated into the proposed design.

B. Walls from Sta. 56+50 to Sta. 61+00

4. The total length of the proposed retaining walls is 450 feet (south side of Washington Street). The anticipated height of the proposed retaining wall varies from four to eight feet.
5. TS&L drawings will not be required. Preliminary and final Plans, Specifications & Estimates (PS&E) will be prepared.
6. For estimating the scope of work associated with the preparation of the final PS&E, it is assumed that these retaining walls will utilize the same wall type as the proposed walls near Highland Lake. Final Structure drawings will be prepared

to show plan, elevation, section, bill of materials, and reinforcement bending diagrams.

Junction Chambers

1. Depending on the final size and configuration of the oversized storm sewer pipes, junction chambers may be required in some locations. Patrick will budget for designing up to four junction chambers. Final Structure drawings will be prepared to show plan, elevation, section, bill of materials, and reinforcement bending diagrams.

Shop Drawing Review

Shop drawing review for all structural items listed above includes:

1. Verify general conformity with the design plans and specifications.
2. Check rebar bending diagrams.
3. Review vendor supplied components.

DRAINAGE

General

1. The Drainage Report and Hydraulic Reports prepared in Phase I will be used as the basis of design for the proposed drainage system.
2. As stated in the Survey scope above, when the Phase I engineering was performed, survey data was not available for certain offsite areas where proposed grading for detention and/or compensatory storage is now proposed. Existing grading for these areas was taken from plans for the existing basins. Upon completion of the pickup survey, the proposed grading in these areas may need to be modified. Where discrepancies are found to exist, appropriate adjustments will be made to the drainage plan and calculations.

Cross Road Culverts

3. Patrick will detail the extension of the pipe culvert crossing Washington Street at Highland Lake.

Stormwater Detention

4. Detention and floodplain compensatory storage volume will be excavated immediately west of the west lobe of the existing LCDOT stormwater

management facility south of Highland Lake. A grading plan will be developed for this work.

5. It is assumed that disturbed areas within this basin will be restored by seeding with standard IDOT seed mixtures.
6. The balance of required stormwater detention will be provided in oversized storm sewers as detailed in the Drainage Report.
7. Restrictors specified in the Drainage Report will be refined to reflect any revisions that occur during Phase II design that affect storm water runoff. Calculations will be prepared to verify that the 2-year peak discharge for the proposed conditions is not more than for the existing. However, minimum restrictor size will be per the Lake County Watershed Development Ordinance.

Storm Sewers

8. Patrick will perform inlet spacing calculations where new storm sewer is to be constructed.
9. Based on the inlet spacing, the main drain storm sewer design contained in the Drainage Report will be refined as needed. It is also recognized that minor adjustments to the proposed design may be needed to minimize utility conflicts.
10. Drainage structure sizes and types and rim and invert elevations will be specified.
11. Invert elevations and slopes for all proposed storm sewers will be specified.
12. Sufficient and appropriate information for up to two stormwater treatment structures (e.g. Stormceptor, Vortex, etc.) will be provided. Some elements of these structures may be design-build/manufacturer specific and will therefore, potentially not be specified.
13. Erosion control measures will be detailed at outfalls.

Swales and Ditches

14. Patrick will develop cross-sections for all swales and ditches within the right-of-way. It is assumed that cross-sections will be prepared at intervals of 100 feet.
15. Ditches will be checked for hydraulic capacity.
16. Where needed, Patrick will design ditch linings and other erosion control features within the ditches.

Compensatory Storage

17. There are Zone A floodplains that will be impacted by the proposed improvement. It is assumed that the 100-year and 10-year floodplain elevations used in the SMC Eagle Creek floodplain study will be acceptable to SMC for permitting.

18. Based on final roadway cross-sections, the floodplain fill calculations provided in the Drainage Report will be checked and refined as needed.
19. A grading plan will be developed for the floodplain compensatory storage areas as described above in the Stormwater Detention section.

Drainage Peer Review

20. BLA will perform a peer review of the above drainage calculations and plans prepared by Patrick prior to major milestone submittals. Patrick Engineering will document the reviews by BLA. BLA will also perform a peer review against LCSMC permit requirements to ensure necessary items identified in the Phase I Drainage Report are accounted for.

PERMITS

1. A U.S. Army Corps of Engineers Section (USACE) 404 permit will be required for impacts to jurisdictional wetlands (Waters of the US). It is anticipated that this project can be processed under Regional Permits 3, Transportation Projects, and 7, Temporary Impacts.
2. It is understood from correspondence with LCDOT that all wetland mitigation will be provided through wetland banking credits.
3. A Lake County SMC sign-off on the erosion and sediment control plan will be required as part of the USACE approval process.
4. A Village of Grayslake stormwater management permit may be required.
5. A Village of Hainesville stormwater management permit may be required.
6. A Lake County SMC stormwater management permit will be required.
7. As more than one acre will be disturbed, a Notice of Intent and Storm Water Pollution Prevention Plan (SWPPP) will be prepared and submitted to the IEPA for approval.
8. Permits related to sanitary sewer and water main relocations (see Utilities section for additional information).
9. Permit fees, where applicable, are not included.
10. BLA will provide permitting assistance, review and coordination assistance of the submittals for the ACOE (404 Joint Application), IEPA 401 Water Quality Certification, the Lake County Soil and Water Conservation District, Lake County Stormwater Management Commission, FEMA (CLOMR) submittal and the SWPPP. BLA will also identify the utility conflicts and proposed locations along the corridor and coordinate the relocation of such with the utility companies. BLA will identify areas in which permanent easements may be required for utility

relocation (if necessary); coordination with individual property owners related to these potential acquisitions are not included in this scope. Please refer to the scope of work from BLA for further information.

UTILITIES

1. Patrick Engineering and Bollinger-Lach will identify potential utility conflicts and notify the affected utility owners of these potential conflicts.
2. Sanitary Sewer Relocation:
 - a. There is sanitary sewer beneath the proposed pavement for the entire length of the project. Depending on how LCDOT ultimately elects to address this sewer (i.e. allow it to remain beneath pavement or require it to be relocated), the sewer may need to be relocated. Patrick will prepare the plans, specifications, quantities, schedules, and details including the evaluation of cross-sections to determine how the sanitary sewer will fit amongst the proposed roadway, storm sewer improvements, and other existing utilities in the corridor. Patrick will also prepare IEPA, Lake County Public Works, and North Shore Sanitary District (if required) permits for the relocation of the existing sewer. Patrick assumes that all utility relocations will be incorporated within the existing or proposed ROW and easements for the roadway project. If easements are required as part of the relocations, this can be performed as an additional service.
 - b. Finally there are two sanitary force mains beneath the proposed pavement – 4” east of Highland Lake and 6” west of Haryan Way. Depending on how LCDOT ultimately elects to address these force mains (i.e. allow them to remain beneath pavement or require them to be relocated), the force mains may need to be relocated. Patrick will prepare plans for the relocation as described above.
 - c. There is potential for sanitary sewer service lines to be impacted by the proposed improvements. Patrick will include pay items and specifications for adjusting sanitary sewer services.
3. Watermain Relocation (BLA): Based on the proposed improvements, there may be a need to relocate Village of Round Lake and CLCJAWA watermains. Please refer to the attached scope of work from BLA for further information.

GEOTECHNICAL

1. Geotechnical information is available for the proposed widening of Washington Street from the Phase I Soils Report. Geotechnical investigations for the culvert extension and the construction of retaining walls will be performed as necessary to supplement

the Phase I investigation. A nominal amount of additional effort is included in the Phase II scope for work above the level included in the Phase I contract.

2. A Structural Geotechnical Report will be prepared, with boring logs and analyses, related to the above mentioned structural improvements.

ROW NEGOTIATION AND ACQUISITION

Santacruz Associates will perform all necessary services to appraise, negotiate, and acquire the right-of-way required for this project. Please refer to the attached scope of work and manhours from Santacruz Associates for further information.

CONSTRUCTABILITY REVIEW

BLA will perform an independent review of the plans by the construction resident engineering staff to help identify any potential areas that could cause a delay during construction or require contract extra work during construction. The scope of work for plan constructability review is attached in the supporting documentation.

VALUE ENGINEERING

BLA will perform Value Engineering for the project with assistance from Patrick Engineering. The team includes staff from the following disciplines; transportation, construction, environmental, structural and drainage departments. This team along with LCDOT and IDOT (if desired) will review the plans in their current state and conduct a brainstorming event to determine/identify possible items to reduce project costs. BLA and Patrick will then perform conceptual design as necessary and evaluate the potential dollar values associated with each idea and prepare a written report to be submitted to LCDOT and IDOT.

MAINTAIN PROJECT WEBSITE

BLA will enhance and update the project website throughout the Phase II project. We anticipate updating the website four (4) times at the kick-off, Preliminary, Pre-Final, and Final Stages. BLA will prepare statements regarding critical items of the project in particular, Utility Coordination efforts, Railroad Coordination efforts, Tree Impact/Replantings and Wetland/Drainage Impact Statements. BLA will coordinate and make recommendations with Patrick Engineering and LCDOT on how to address with comments received through the website regarding project-related concerns.

DELIVERABLES AND COORDINATION

1. Deliverables
 - a) Preliminary Contract Plans
 - i) LCDOT - 1 full size copy, 6 quarter size copies, special provisions, and PDF of all
 - ii) IDOT Local Roads - 10 quarter size copies and special provisions
 - iii) IDOT Bureau of Bridges & Structures – 1 quarter size copy
 - iv) Hainesville, Grayslake, Round Lake Park - 1 quarter size copy each
 - v) Utilities – 1 full size copy each
 - b) Pre-Final Contract Plans
 - i) LCDOT - 1 full size copy, 6 quarter size copies, special provisions, and PDF of all
 - ii) IDOT Local Roads – 10 quarter size copies and special provisions
 - iii) IDOT Bureau of Bridges & Structures – 1 quarter size copy
 - iv) Hainesville, Grayslake, Round Lake Park - 1 quarter size copy each
 - v) Utilities – 1 full size copy each
 - c) Final Contract Plans
 - i) LCDOT - 3 full size copies, 6 quarter size copies, 1 full size mylar set, special provisions, PDF of all, and MicroStation files
 - ii) IDOT Local Roads - 10 quarter size copies and special provisions
 - iii) IDOT Bureau of Bridges & Structures – 1 quarter size copy
 - iv) Hainesville, Grayslake, Round Lake Park - 1 quarter size copy each
 - v) Utilities – 1 full size copy each
 - d) Final Quantity Calculations
 - i) LCDOT – 2 copies and PDF
 - e) Construction Cost Estimate
 - f) Construction Schedule/Estimate of Time
 - g) IDOT Bidding/Letting/Award Forms (PDF and Word/Excel)
2. The project will involve coordination with:
 - a) LCDOT - Project development and resolution issues. Copies of all correspondence will be submitted to the LCDOT.

- b) IDOT – Plan reviews and specific bureau review of improvements.
- c) Village of Grayslake - Extra work items and resolution of issues within their jurisdiction
- d) Village of Hainesville - Extra work items and resolution of issues within their jurisdiction
- e) Village of Round Lake Park – Extra work items and resolution of issues within their jurisdiction.
- f) U.S. Army Corps of Engineers
- g) Lake County Stormwater Management Commission
- h) Illinois Environmental Protection Agency
- i) All utility companies having facilities within the project limits
- j) Lake County Public Works
- k) North Shore Sanitary District
- l) Support for right-of-way negotiation services
- m) LCDOT website updates

POST-DESIGN SERVICES

1. Post-design services for tasks such as responding to inquiries and requests for information during construction and utility relocation reviews are included.
2. Review of shop drawings, as indicated in the Structural section above.

Phase II Contract Plans				
	<u>ITEM</u>	<u>Sheets</u>	<u>Manhours</u>	
1	Data Review and Value Engineering Study			
	Acquisition of documents/adjacent development plans/information		20	
	Review of documents/development plans/information exchange		40	
	Value Engineering Study - Assist BLA with Value Engineering Study		80	
		TOTAL DATA REVIEW SHEETS =	0	TOTAL MH'S = 140
				ESTIMATED DIRECT COSTS = \$ 40
	Materials and Reproduction (400 pages x \$0.10/page)		\$ 40	
2	Contract Plan Preparation	<u>Sheets</u>	<u>Manhours</u>	
	Title/Cover Sheet	1	16	
		Subtotal Sheets	1	Subtotal MH's 16
	Index of Sheets & State Standards	1	16	
		Subtotal Sheets	1	Subtotal MH's 16
	General Notes	1	16	
		Subtotal Sheets	1	Subtotal MH's 16
	Summary of Quantities	6	144	
		Subtotal Sheets	6	Subtotal MH's 144
	Schedule of Quantities (2 Roadway, 3 Earthwork, 4 Drainage)	9	216	
		Subtotal Sheets	9	Subtotal MH's 216
	Typical Sections	<u>Sheets</u>	<u>Manhours</u>	
	To be Done by BLA		6	
	Alignment and Ties	<u>Sheets</u>	<u>Manhours</u>	
	Alignment Plan 1"=100' (2 views/sheet)	2	60	
	Horizontal Alignment Control Points w/ties	2	60	
		Subtotal Sheets	4	Subtotal MH's 120
		<u>Length (ft.)</u>	<u>MHs</u>	
	Create Base Drawings (8 hours/plan sheet x 10 plan sheets)			
				Subtotal MH's 80
	Plan and Profile Sheets (Scale 1"=50')	<u>Sheets</u>	<u>Manhours</u>	
	Washington Street (5 mainline)	5	200	
	Hainesville Road	1	30	
	Quantity Calculations (Included in sheet manhours)		0	
	Clear Zone Analysis (IDOT Format)			
		Subtotal Sheets	6	Subtotal MH's 230
	Suggested Staging of Construction and Traffic Control		<u>Manhours</u>	
	Maintenance of Traffic Concept Study			
	Review Phase I MOT Concept		40	
				Subtotal MH's 40
	Maintenance of Traffic Plans (1"=50')	<u>Sheets</u>	<u>Manhours</u>	
	MOT Discussion	1	24	
	Typical Sections			

Phase II Contract Plans			
Washington Street - Stages 1, 2 & 3 (12 typicals)	6		144
Hainesville Road - Stages 1, 2, & 3 (6 typicals)	2		48
<u>Stage 1 Plans (2 views/sheet)</u>			
Washington Street	3		72
Hainesville Road	1		24
<u>Stage 1A Plans - Intersection Staging (2 views/sheet)</u>			
Washington Street	3		72
Hainesville Road	1		24
<u>Stage 2 Plans (2 views/sheet)</u>			
Washington Street	3		72
Hainesville Road	1		24
<u>Stage 2A Plans - Intersection Staging (2 views/sheet)</u>			
Washington Street	3		72
Hainesville Road	1		24
<u>Stage 3 Plans (2 views/sheet)</u>			
Washington Street	3		72
Hainesville Road	1		24
<u>Stage 3A Plans - Intersection Staging (2 views/sheet)</u>			
Washington Street	3		72
Hainesville Road	1		24
Quantity Calculations (Preliminary, Pre-Final & Final Submittals) (4 hrs/sheet) (included in sheet manhours)			
	Subtotal Sheets	33	Subtotal MH's 792
Erosion and Sediment Control Plans (Scale 1"=50') (2 views/sheet)			
	<u>Sheets</u>		<u>MHs</u>
Erosion Control General Notes	1		24
Washington Street (X 2 stages)	6		144
Hainesville Road (X 2 stages)	2		48
Erosion Control Details	2		48
Quantity Calculations (Included in sheet manhours)			
	Subtotal Sheets	11	Subtotal MH's 264
Drainage and Utilities Sheets (Scale 1"=50')			
	<u>Sheets</u>		<u>MHs</u>
Washington Street	5		200
Hainesville Road	1		40
Floodplain Compensatory Storage and Detention Area Grading Plan	1		36
Drainage Details	4		128
Utility Conflict Determination/Mitigation (Prelim & Prefinal Submittals)			60
Quantity Calculations (Included in sheet manhours)			
	Subtotal Sheets	11	Subtotal MH's 464
Sanitary Sewer Relocation Sheets (Scale 1"=50')			
	<u>Sheets</u>		<u>MHs</u>
Washington Street	4		144
Sanitary Details	2		64
Quantity Calculations (Included in sheet manhours)			
	Subtotal Sheets	6	Subtotal MH's 208
Water Main Relocation Sheets (Scale 1"=50')			
	<u>Sheets</u>		<u>MHs</u>
To be Done by BLA		6	
Drainage Calculations			
			<u>MHs</u>
Bridge & Culverts			
Review and check one (1) hydraulic report (HR) with two (2) crossings			8
Design energy dissipators at one culverts			8

Phase II Contract Plans				
	Perform hydraulic calculations for miscellaneous culverts			18
	Design energy dissipation/erosion control at miscellaneous culverts			12
	<u>Stormwater Detention</u>			
	Modify (6) 2-year and 100-year restrictors			48
	Review and check stage-storage calculations for (1) detention pond			12
	Refine storage capacity calculations for oversized storm sewers			60
	Design outlet structures for (1) detention basin			12
	<u>Storm Sewers</u>			
	Perform inlet spacing calculations			50
	Refine storm sewer calculations per final inlet locations			36
	Select manhole and catch basin locations and size structures			24
	Select and size stormwater treatment structures			40
	Design erosion control at outfalls			22
	<u>Swales and Ditches</u>			
	Design grading for ditches and swales (includes work in cross sections)			140
	Estimate cumulative discharges along ditches and swales			36
	Check hydraulic capacity of ditches and swales			28
	Design erosion control features where required			20
	<u>Floodplain Encroachment/Depressional Storage Fill/Wetland Hydrology</u>			
	Refine floodplain fill calculations			8
	Refine design of compensatory storage areas			12
	Refine depressional storage area fill calculations			8
	Refine design of depressional area compensatory storage areas			12
	Check and refine wetland hydrology calculations			0
				Subtotal MH's
				614
	<u>Plats of Highway</u>			<u>MHs</u>
	Check Plats for Consistency with Plans			40
	Revisions to ROW Based on Coordination			40
				Subtotal MH's
				80
	<u>Intersection Details (Scale 1" = 20')</u>	<u>Sheets</u>		<u>MHs</u>
	Hainesville Road	1		40
	Lakeside Drive	1		40
	Haryan Way	1		40
		Subtotal Sheets	3	Subtotal MH's
				120
	<u>Landscaping, Pavement Marking & Signing Plans (Scale 1"=50') (2 views/sheet)</u>	<u>Sheets</u>		<u>MHs</u>
	To be Done by BLA		9	
	<u>Miscellaneous Details</u>	<u>Sheets</u>		<u>MHs</u>
	<u>Modify IDOT Details</u> (Minor modifications - title block info, etc.)	12		36
		Subtotal Sheets	12	Subtotal MH's
				36
	<u>Consultant Details</u>			
	Miscellaneous Roadway Details	4		128
		Subtotal Sheets	4	Subtotal MH's
				128
	<u>Traffic Signal Plans</u>			<u>MHs</u>
	To be Done by BLA		14	0
	Review Traffic Signal Plans by Bollinger Lach for Consistency with Plans			20
	Check Traffic Signal Plans by Bollinger Lach (3 submittals)			40

Phase II Contract Plans							
						Subtotal MH's	60
Structural Plans				Sheets		MHs	
		Culvert Extention		2		40	
		Retaining Wall near Highland Lake		11		250	
		Retaining Wall Sta. 56+50 to Sta. 61+00		8		180	
		Shop Drawing Review		0		64	
		Junction Chambers (budget for 4)		5		120	
				Subtotal Sheets	26	Subtotal MH's	654
Soil Boring Plans				Sheets		MHs	
		Structural Geotechnical Report, Boring Logs and Analyses, Slurry Wall Layout		8		69	
				Subtotal Sheets	8	Subtotal MH's	69
Cross Sections (@ 50' intervals) (4 hrs/X-Section)				No. Sections		MHs	
		Washington Street		120		480	
		Hainesville Road		20		80	
		Half x-sections at driveways & cross streets		50		125	
		Quantity Calculations (Included in x-sections)				0	
				Total Cross-Sections	190		
				w/ 3 X-S's per sheet - Total Sheets	63	Subtotal MH's	685
Standard Drawings				Subtotal Sheets	60		
Special Provisions						MHs	
		Prepare Special Provisions (For Prelim, Prefinal & Final Submittals)				180	
						Subtotal MH's	180
Estimate of Time						MHs	
		Prepare BD220 & Bar Chart (For Prelim, Prefinal & Final Submittals)				60	
		Prepare Estimate of Cost				60	
						Subtotal MH's	120
IDOT Bidding/Letting/Award Forms						MH's	
		Preparation of Required IDOT Forms				40	
						Subtotal MH's	40
				TOTAL CONTRACT PLAN PREPARATION SHEETS =	300	TOTAL MH'S =	5392
						ESTIMATED DIRECT COSTS =	\$ 30,184
Materials and Reproduction							
Preliminary Submittal							
		200 sheets of specs	X 17 sets	X \$0.10 per sheet =		\$ 340	
		300 plots bond	X 1 set	X \$1.80 per sheet =		\$ 511	
		300 full size copies	X 10 sets	X \$1.80 per sheet =		\$ 5,112	
		300 plot 1/4 size	X 1 set	X \$0.40 per sheet =		\$ 114	
		300 copies 1/4 size	X 17 sets	X \$0.25 per sheet =		\$ 1,207	
Pre-Final Submittal							
		200 sheets of specs	X 17 sets	X \$0.10 per sheet =		\$ 340	
		300 plots bond	X 1 set	X \$1.80 per sheet =		\$ 540	
		300 copies full size	X 10 sets	X \$1.80 per sheet =		\$ 5,400	
		300 plot 1/4 size	X 1 set	X \$0.40 per sheet =		\$ 120	
		300 copies 1/4 size	X 17 sets	X \$0.25 per sheet =		\$ 1,275	

Phase II Contract Plans						
	Final Submittal					
	200 sheets of specs	X 8 sets	X \$0.10 per sheet =		\$	340
	300 plots bond	X 1 set	X \$1.80 per sheet =		\$	540
	300 copies full size	X 10 sets	X \$1.80 per sheet =		\$	5,400
	300 plot 1/4 size	X 1 set	X \$0.40 per sheet =		\$	120
	300 copies 1/4 size	X 17 sets	X \$0.25 per sheet =		\$	1,275
	300 mylars	X 1 set	X \$6.00 per sheet =		\$	1,800
	Drilling Direct Costs				\$	5,000
	Laboratory Services for Geotechnical Work				\$	750
3	Meetings / Field Checks/Coordination					
	IDOT/LCDOT Meetings			Meetings		MHs
	Kickoff Meeting (1 meeting - 4 people (PM, PE, Str, Drainage))			1		16
	Prepare Kickoff Meeting Minutes					4
	Preliminary Plan Review Meeting (1 meeting - 3 people (PM, PE, Drainage))			1		12
	Prepare Preliminary Plan Review Meeting Minutes					4
	Preliminary Plan Field Review with LCDOT Staff (3 people (PM, PE, Dr))			1		12
	Prepare Preliminary Field Review Meeting Minutes					4
	Pre-Final Plan Review Meeting (1 meeting - 3 people (PM, PE, Drainage))			1		12
	Prepare Pre-Final Plan Review Meeting Minutes					4
	Pre-Final Plan Field Review with LCDOT Staff (3 people (PM, PE, Drainage))			1		12
	Prepare Pre-Final Field Review Meeting Minutes					4
	Utility Review Meetings (4 meetings - 2 people (PM, PE))			4		32
	Prepare Utility Review Meeting Minutes					16
	Plan-in-Hand Field Review Meeting (1 meeting - 4 people (PM, PE, Dr, Str))			1		24
	Prepare Final Plan Review Meeting Minutes					4
	Progress Meetings w/ LCDOT (6 meetings - 2 people (PM, PE))			6		48
	Prepare Meeting Minutes					18
	Progress Meetings w/ TranSystems (12 meetings - 2 people (PM, PE))			12		96
	Prepare Meeting Minutes					24
	Traffic Signal Review Meetings (2 meetings - 2 people (Sig PM+ PE))			2		16
	Prepare Meeting Minutes					6
	Other Meetings					
	IDOT (2 meetings - 4 people (PM, PE, Dr, Str))			2		24
	Prepare Meeting Minutes					8
	Village of Grayslake (2 meetings - 3 people (PM, PE, Dr))			2		24
	Prepare Meeting Minutes					8
	Grayslake Park District (1 meeting - 2 people (PM, PE))			1		8
	Prepare Meeting Minutes					4
	Village of Hainesville (2 meetings - 3 people (PM, PE, Dr))			2		24
	Prepare Meeting Minutes					8
	Village of Round Lake Park (2 meetings - 3 people (PM, PE, Dr))			2		24
	Prepare Meeting Minutes					8
	Lake County SMC (2 meetings - 2 people (PM, PE))			2		16
	Prepare Meeting Minutes					8
	U.S. Army Corps of Engineers (2 meetings - 3 people (PM, PE, Dr))			2		24
	Prepare Meeting Minutes					8
	Lake County Public Works (2 meetings - 3 people (PM, PE, Dr))			2		24
	Prepare Meeting Minutes					8
	North Shore Sanitary District (1 meeting - 3 people (PM, PE, Dr))			1		12

Phase II Contract Plans			
	Prepare Meeting Minutes		4
	Field Checks	Field Checks	
	Videotape and photograph site	1	8
	Roadway	2	16
	Structural	1	8
	PESA Recon	1	8
	Drainage	2	32
	Traffic Signal	1	8
	Pre-Submittal Field Reviews (PE)		
	Preliminary Submittal	1	8
	Pre-Final Submittal	1	8
	Final Submittal	1	8
	Coordination		
	Subconsultants		80
	TranSystems		100
		Total Meetings / Field Checks	57
		TOTAL MEETINGS / FIELD CHECK / COORDINATION MH'S =	896
		ESTIMATED DIRECT COSTS =	\$ 2,800
	Photography		\$ 50
	Materials and Reproduction (500 pages x \$0.10/page)		\$ 50
	Vehicle Usage		
	60 vehicle days X \$45/day		\$ 2,700
4	Horizontal / Vertical Check		MHs
	Review centerline alignments developed in Phase I		20
	Review vertical profiles developed in Phase I		20
		TOTAL HORIZONTAL / VERTICAL CHECK MH'S =	40
		ESTIMATED DIRECT COSTS =	\$ 15
	Materials and Reproduction (150 pages x \$0.10/page)		\$ 15
5	Permits		MHs
	Grayslake WDO permit application package		32
	Prepare exhibits for Grayslake permit		28
	Hainesville WDO permit application package		36
	Prepare exhibits for Hainesville permit		32
	Prepare Lake County SMC WDO permit application package		36
	Prepare exhibits for SMC permit		32
	Joint Permit application package		44
	Prepare exhibits for Joint Permit		32
	Prepare Storm Water Pollution Prevention Plan		28
	Prepare NOI package for NPDES permit		16
	IEPA sanitary sewer permit application package		36
	Prepare exhibits for IEPA permit		24
	Lake County Public Works sanitary sewer permit application package		36
	Prepare exhibits for Lake County Public Works permit		24

Phase II Contract Plans				
SUMMARY OF WORKHOURS AND DIRECT COSTS			Workhours	Direct Costs
1	Data Review and Value Engineering Study		140	\$40
2	Contract Plan Preparation		5,392	\$30,184
3	Meetings / Field Checks/Coordination		896	\$2,800
4	Horizontal / Vertical Check		40	\$15
5	Permits		600	\$1,037
6	QA/QC		300	\$100
7	Post Contract Coordination		230	\$225
8	Administration and Management		400	\$100
TOTALS:			7,998	\$34,501

Structural Manhours

PS & E

Summary

	PLAN SHEETS	DESIGN HOURS	CHECK HOURS	PLAN PREP. HOURS	TOTAL HOURS
<u>Culvert Extension</u>	2	14	6	20	40
<u>Retaining Wall near Highland Lake</u>	11	116	28	106	250
<u>Retaining Wall near Railroad Grade Separation</u>	14	238	68	174	480
<u>Retaining Wall Sta. 56+50 to Sta. 61+00</u>	8	64	16	100	180
<u>Shop Drawing Review</u>					64
PSE TOTALS	35	432	118	400	1014

Culvert Extension

36" Pipe Culvert

	PLAN SHEETS	DESIGN HOURS	CHECK HOURS	PLAN PREP. HOURS	TOTAL HOURS
1. Culvert Plan and Details	1	12	6	18	36
2. Soil Boring Logs	1	2	0	2	4
PSE TOTALS	2	14	6	20	40

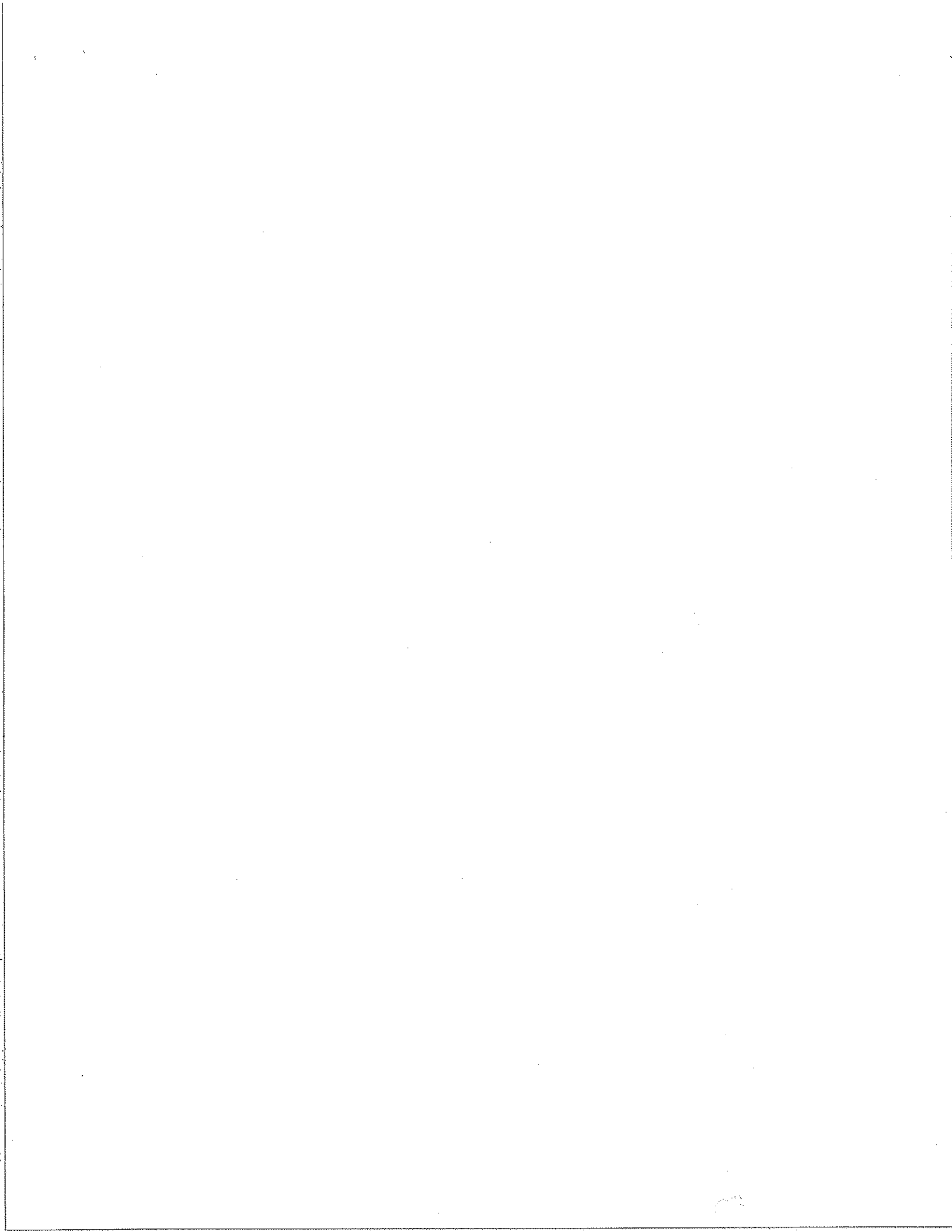
Retaining Walls

Retaining Wall near Highland Lake

	PLAN SHEETS	DESIGN HOURS	CHECK HOURS	PLAN PREP. HOURS	TOTAL HOURS
1. General Plan and Elevation	2	12	4	24	40
2. Wall Details	4	32	8	60	100
3. Wall Section, Bill-of-Materials and Bar Diagrams	2	16	4	16	36
4. Soil Boring Logs	3	8	0	4	12
5. Wall Type Study	0	40	10	0	50
6. Aesthetics	0	8	2	2	12
PSE TOTALS	11	116	28	106	250

Retaining Wall near Railroad Grade Separation

	PLAN SHEETS	DESIGN HOURS	CHECK HOURS	PLAN PREP. HOURS	TOTAL HOURS
1. General Plan and Elevation	2	24	8	24	56
2. Wall Details	7	72	20	80	172
3. Wall Section, Bill-of-Materials and Bar Diagrams	2	24	12	24	60
4. Soil Boring Logs	3	6	0	4	10
5. Type, Size, & Location Plan		32	8	40	80
6. Structural Geotechnical Report		32	8	0	40
7. Wall Type Study		40	10	0	50
8. Aesthetics		8	2	2	12
PSE TOTALS	14	238	68	174	480



**PAYROLL ESCALATION TABLE
FIXED RAISES**

FIRM NAME
PRIME/SUPPLEMENT

PATRICK ENGINEERING, INC.
PRIME

DATE 02/21/11

CONTRACT TERM
START DATE
RAISE DATE

48 MONTHS
3/1/2011
1/1/2012

OVERHEAD RATE 176.02%
COMPLEXITY FACTOR 0
% OF RAISE 5.00%

ESCALATION PER YEAR

2/1/2011 - 1/1/2012	10 48	20.83% 1.0865
1/2/2012 - 1/1/2013	12 48	26.25%
1/2/2013 - 1/1/2014	12 48	27.56%
1/2/2014 - 1/1/2015	12 48	28.94%
1/2/2015 - 3/1/2015	2 48	5.06%

The total escalation for this project would be:



Illinois Department of Transportation

Average Hourly Project Rates

FAU 1077 Washington Street
11-00121-10-WR

Consultant **PATRICK ENGINEERING, INC.**

Date **02/21/11**

County
Job No.
FB/Item

Sheet **1** OF **2**

Payroll Classification	Avg Hourly Rates	Total Project Rates			Data Review			Contract Plan Preparation			Meetings/Field Checks/Coord.			Horizontal/Vertical Check			Permits			
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	
Principal	70.00	300	3.75%	2.63																
Proj Mgr/Proj Mgr	57.10	2495	31.20%	17.81	15	10.71%	6.12	1200	22.26%	12.71	500	55.80%	31.86	20	50.00%	28.55	200	33.33%	19.03	
Object Eng 1 & 2	39.43	2225	27.82%	10.97	35	25.00%	9.86	1700	31.53%	12.43	200	22.32%	8.80	10	25.00%	9.86	200	33.33%	13.14	
Staff Eng 3	36.65	1726	21.58%	7.91	50	35.71%	13.09	1450	26.89%	9.86	96	10.71%	3.93	10	25.00%	9.16	100	16.67%	6.11	
Staff Eng 1	27.93	902	11.28%	3.15	40	28.57%	7.98	712	13.20%	3.69	50	5.58%	1.56				100	16.67%	4.66	
Ad/Tech	29.03	300	3.75%	1.09				300	5.56%	1.62										
Tech	51.66	0																		
Survey Proj Mgr	48.89	0																		
Staff Surveyor	23.26	0																		
Admin Asst/WP	24.22	50	0.63%	0.15																
TOTALS		7998	100%	\$43.71	140	100%	\$37.04	5392	100%	\$40.69	896	100%	\$50.05	40	100%	\$47.57	600	100%	\$42.94	

Bollinger, Lach & Associates

Phase II
Washington Street (Hainesville Road to Haryan Way)
Lake County
Section No.: 11-00121-10-WR

PROJECT SCOPE DESCRIPTION

The project scope will consist of assisting Patrick Engineering on the Phase II plans and specifications of the Washington Street corridor expansion at the start of widening improvements just west of Hainesville Road to Haryan Way in Lake County, Illinois for the LCDOT in the following ways:

Traffic Signal Plans and Interconnect: BLA will prepare and provide the traffic signal plans for the improvements at the Washington Street and Hainesville Road intersection. BLA will also prepare the system interconnect plans along Washington Street, from Cedar Lake Road to Lake Street. New conduit will be designed from Hainesville Road to Haryan Way and the interconnect will be proposed to be installed in the existing conduits run by others from Haryan Way to Lake Street and from Hainesville Road to Cedar Lake Road. The plans will include the details and pay items related to connecting to the Master Controllers at Cedar Lake Road, Hainesville Road and Lake Street. BLA is anticipating one temporary signal sheet, one temporary cable sheet, one proposed signal sheet, one proposed cable sheet, one street name sign sheet, two mast arm detail sheets, one temporary interconnect sheet, three proposed interconnect sheets (total 7,920 ft+/- long Interconnect) one interconnect schematic sheet, and two LCDOT details. We will prepare the plans, specifications and quantities per the LCDOT requirements including the use of video detection. BLA will also coordinate with the LCDOT Design staff regarding the details of the signal design. Design of independent electronic pedestrian crossing devices are not included in this scope.

Typical Sections: BLA will prepare the typical sections for the roadway improvements. We anticipate 2 existing typical section sheets, 4 proposed typical section sheets.

Drainage Peer Review: The detention, high water grade lines, compensatory storage, inlet spacing, lateral and longitudinal drainage structure design, etc. performed by Patrick Engineering will be reviewed and documented at the preliminary, pre-final and final stages. BLA will QC/QA against LCSMC permit requirements to ensure necessary items identified in the Phase I Location Drainage Study are accounted for.

Landscaping/Pavement Marking/Signing: BLA will prepare the landscaping, pavement marking and signing sheets for the improvements. We anticipate 7 pages of plans at a 50 scale and 2 additional sheets for details and notes for the widening portion from Hainesville Road to Haryan Way. The section from Haryan Way to Lake Street will need to be restriped to accommodate the 4 lane section, however no landscaping will be required through this section. We anticipate 6 pages of plans at a 50 scale for this section.

2/18/2011

Utility and Permit Coordination: BLA will provide permitting assistance, review and coordination assistance of the submittals for the preliminary, pre-final and final plan submittals, the storm water management permits and water and sanitary utility adjustments to the Village of Grayslake, Village of Hainesville, Lake County Public Works, Lake County Stormwater Management Commission, IEPA (for the NPDES permit) and the USACE. BLA will also identify the utility conflicts and proposed locations along the corridor and coordinate the relocation of such with the utility companies. BLA will identify areas in which permanent easements may be required for utility relocation (if necessary); coordination with individual property owners related to these potential acquisitions are not included in this scope. We anticipate submitting plan sets to the companies (such as Nicor, North Shore Gas, COMED, etc.) at each of the planned submittal times, attending utility coordination meetings at LCDOT and needing time to coordinate with the companies to answer questions and coordinate around issues/changes, between the submittals.

Potential Watermain Relocation: Based on the proposed improvements, there may be a need to relocate the Village of Round Lake Park watermain that runs along the north side of Washington street from 1,200' west to 2,100' east of Hainesville Road and the CLCJAWA watermain on the south side of Washington Street for the project limits. BLA will prepare the plans, specifications, quantities, schedules and details including the evaluation of cross sections to determine how the water mains will fit amongst the proposed roadway, storm sewer improvements and all other existing utilities in the corridor. BLA will also prepare IEPA and LCDOT permits for the relocation of the existing water mains, owned and operated by the Village of Round Lake Park and CLCJAWA. BLA has included time to meet with each of the operating agencies two times regarding materials of construction and desired locations and types of valves and connection points. BLA assumes that all utility relocations will be incorporated within the existing or proposed ROW for the roadway projects. If easements are required as part of the relocations, this can be performed as additional services.

Constructability Review: BLA will perform an independent review of the plans by the construction resident engineering staff to help identify any potential areas that could cause a delay during construction or require contract extra work during construction. The scope of work for plan constructability review will include:

- Site Visit
- Review of the plans for missing pay items.
- Perform a rough check of major plan quantities to ensure the magnitude of the quantity is correct.
- Review construction staging for practicality.
 - Utility staging
 - Sufficient temporary pavement.
 - Identify potential staging variations to allow work to proceed pending resolution of known ROW or utility conflicts.
- Check staging grade differentials at entries and cross streets.
- Constructability of retaining wall work and if any temporary easement are necessary.
- Need for Temporary Sheeting.
- Traffic control signing for side streets.

Bollinger, Lach & Assoc., Inc.
2/18/2011

- Review estimated probable cost for major contract items.
- Prepare a Review Report to provide to Patrick Engineering.

Value Engineering: BLA will perform Value Engineering for the project. The team will include staff from the following disciplines; transportation, construction, environmental, structural and drainage departments. This team along with Patrick Engineering, LCDOT and IDOT (if desired) will review the plans in their current state and conduct a brain storming event to determine/ identify possible items to reduce project costs. BLA will then perform conceptual design as necessary and evaluate the potential dollar values associated with each idea and prepare a written report to be submitted to Patrick Engineering, LCDOT and IDOT.

Maintain Project Website: BLA will enhance and update the project website throughout the Phase II project. We anticipate updating the website 4 times at the kick-off, Preliminary, Pre-Final and Final Stages. BLA will prepare statements regarding critical items of the project in particular, Utility Coordination efforts, Railroad Coordination efforts, Tree Impact/Replantings and Wetland/Drainage Impact Statements. BLA will coordinate and make recommendations with Patrick Engineering and LCDOT on how to address comments received through the website regarding project-related concerns.

Meeting/Field Checks/Coordination: See attached sheet for the detail break down of the items.

BLA Manhours
PROJECT: Washington Street (Hainesville Road to Haryan Way)
Section: 11-00121-10-WR

<u>ITEM</u>	<u># OF SHEETS</u>	<u>MH PER SHEET</u>	<u>TOTAL MH'S</u>
Traffic Signals Plans and Interconnect	14		294
LCDOT Coordination with Signal Department			24
Typical Sections			
Existing	2	8	16
Proposed	4	16	64
Drainage Peer Review			288
Landscaping/Pavement Marking/Signing	9	28	252
(Haryan Way to Lake St. striping only for 6 sheets)	6	16	96
Utility and Permit Coordination			
Village of Grayslake			40
Village of Hainesville			40
Lake County Public Works			40
Lake County Stormwater Management Commission			90
IEPA - NPDES Permit SWPPP			32
Utility Conflict Identification			148
Utility Coordination			152
Watermain Relocations			
Plans (For permitting, including cross section evaluations)			148
Specifications			38
Quantities (Scheduling)			40
Permits (LCDOT, IEPA, CLCJAWA, Round Lake Park)			68
Utility/Agency Meetings (4 mtgs @ 3 hrs @ 2 people)			24
Constructability Review			
Site Visit			8
Review of the plans for missing pay items.			16
Perform a rough check of major plan quantities to ensure the magnitude of the quantity is correct.			12
Review construction staging for practicality.			
Utility Staging			16
Sufficient temporary pavement.			12
Identify potential staging variations to allow work to proceed pending resolution of known ROW or utility conflicts.			12
Check staging grade differentials at entries and cross streets.			12
Retaining wall constructability/Eval the need for temp ease.			8
Need for Temporary Sheeting.			8
Traffic control signing for side streets.			8
Review estimated probable cost for major contract items.			16
Prepare a Review Report to provide to Patrick Engineering.			16
Sub-Total	35		2038

BLA Manhours
PROJECT: Washington Street (Hainesville Road to Haryan Way)
Section: 11-00121-10-WR

<u>ITEM</u>	<u># OF SHEETS</u>	<u>MH PER SHEET</u>	<u>TOTAL MH'S</u>
Value Engineering			
Initial Kick off Meeting (6 staff@2 hrs)			12
Review plans and reports (6 staff@16 hrs)			96
Brain Storming Meeting (6 staff@8hrs)			48
Evaluate Alternatives and Calculate Costs (6 staff @20hrs)			120
Admin - Prepare agenda, minutes and report			120
Maintain Project Website (4 updates)			140
Meeting/Field Checks/ Coordination			
Patrick Meetings (4 mtgs @ 4 hrs @ 2 people)			32
LCDOT Meetings (4 mtgs @ 4 hrs @ 2 people)			32
IDOT Meetings (1 mtgs @ 3hrs @ 2 people)			6
Utility Coordination Meetings (2 mtgs @ 2 hrs @ 2 people)			8
Field Checks (1 mtgs @ 4 hrs @ 1 person)			4
LCSMC Meetings (2 mtgs @ 3 hrs @ 2 people)			12
Permit Meetings (ACOE, USFW, etc) (2 mtgs @ 3 hrs @ 2 people)			12
Local Agency Meetings (Preliminary and Pre-Final)			
Village of Hainesville (2 mtgs @ 2 hrs @ 2 people)			8
Village of Grayslake (2 mtgs @ 2 hrs @ 2 people)			8
Avon Township (2 mtgs @ 2 hrs @ 2 people)			8
Sub-Total Page 2	0		666
Sub-Total from Page 1	35		2038
Administration/ Management			<u>108</u>
Total	35		2,812

BLA Direct Costs
PROJECT: Washington Street (Hainesville Road to Haryan Way)
Section: 11-00121-10-WR

	<u># of Sets</u>	<u>Size</u>	<u># of Sheets</u>	<u>Rate per Sheet</u>	<u>Total</u>
<u>Utility Coordination</u>					
Preliminary Plan Sets (1 Patrick, 1 LCDOT, 7 Utility Companies)	9	22"x34"	55	\$3.00	\$1,485.00
Pre-final Plan Sets (1 Patrick, 1 LCDOT, 7 Utility Companies)	9	22"x34"	55	\$3.00	\$1,485.00
Final Plan Sets (1 Patrick, 1 LCDOT, 7 Utility Companies)	9	Quarter	200	\$0.25	<u>\$450.00</u>
				Preliminary Total	\$3,420.00
<u>Permit Reports</u>					
SWPPP (1 Patrick, 4 LCDOT)	5	Report	1	\$80.00	<u>\$400.00</u>
				Final Total	\$400.00
<u>Watermain Relocation</u>					
Plans *	32	Quarter	12	\$0.25	\$96.00
Specifications *	32	8.5"x11"	50	\$0.10	\$160.00
Permit	8	8.5"x11"	5	\$0.10	<u>\$4.00</u>
				Final Total	\$260.00
* 2 Vil. of Round Lake Park, 2 CLCJAWA, 2 Patrick, 2 LCDOT = 8@3 submittals = 24+8 final permit (IEPA/CNRR)					
** 4 IEPA, 4 CNRR = 8					
<u>Constructability Report</u>					
Vehicles	3			\$48.00	\$144.00
Report (1 Patrick, 4 LCDOT, 1 IDOT)	6	Report	1	\$80.00	<u>\$480.00</u>
				Final Total	\$624.00
<u>Value Engineering Report</u>					
Vehicles	10			\$48.00	\$480.00
Report (1 Patrick, 4 LCDOT, 1 IDOT)	6	Report	1	\$80.00	<u>\$480.00</u>
				Final Total	\$960.00
<u>Maintain Website</u>					
Domain Name Extension	1	each	1	\$500.00	<u>\$500.00</u>
				Final Total	\$500.00
<u>Meetings/Field Checks/ Coordination</u>					
Vehicles	31			\$48.00	<u>\$1,488.00</u>
				Vehicles Total	\$1,488.00
Grand Total					\$7,652.00

AVERAGE HOURLY PROJECT RATES

FIRM Bollinger, Lach & Associates, Inc.
 PSB _____
 PRIME/SUPPLEMENT _____

DATE 02/18/11

SHEET 1 OF 2

PROJECT: Washington Street (Hainesville Road to Haryan Way)

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES						Typical Sections			Drainage Peer Review			Landscape/PM/Signing			Utility/Permit Coord.			
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	
Principal	70.00	98	3.49%	2.44	10	3.14%	2.20	2	2.50%	1.75	6	2.08%	1.46							
Director of Constructi	70.00	62	2.21%	1.55																
Resident Engineer II	42.23	62	2.21%	0.93																
Field Engineer II	29.33	26	0.93%	0.27																
Project Manager	40.71	852	30.34%	12.35	102	32.08%	13.06	20	25.00%	10.18	120	41.67%	16.96	68	19.54%	7.96	166	30.63%	12.47	
Project Engineer	31.87	972	34.62%	11.03	124	38.99%	12.43	32	40.00%	12.75	102	35.42%	11.29	132	37.93%	12.09	212	39.11%	12.46	
CADD Technician II	32.31	520	18.52%	5.98	82	25.79%	8.33	26	32.50%	10.50	60	20.83%	6.73	148	42.53%	13.74	62	11.44%	3.70	
Marketing Coordinatc	18.64	46	1.64%	0.31																
Director of Structural	48.07	46	1.64%	0.79																
Director of Environme	43.16	124	4.42%	1.91																
		0																		
		0																		
		0																		
		0																		
		0																		
		0																		
		0																		
		0																		
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		0																		
TOTALS		2808	100%	\$37.56	318	100.00%	\$36.02	80	100%	\$35.17	288	100%	\$36.44	348	100%	\$33.78	542	100%	\$37.94	

AVERAGE HOURLY PROJECT RATES

FIRM Bollinger, Lach & Associates, Inc.
PSB _____
PRIME/SUPPLEMENT _____

DATE 02/18/11

SHEET 2 **OF** 2

PROJECT: Washington Street (Hainesville Road to Haryan Way)

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Watermain Relocations			Constructability Review			Value Engineering			Maintain Project Website			Meetings/Field Ck/Coord			Administration		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Hours	% Part.	Hours	% Part.	Hours	% Part.	Hours	% Part.	Hours	% Part.
Principal	70.00	14	4.40%	3.08	6	4.17%	2.92	26	6.57%								10	9.62%	
Director of Construct	70.00				16	11.11%	7.78	46	11.62%										
Resident Engineer II	42.23				62	43.05%	18.18												
Field Engineer II	29.33				26	18.06%	5.30												
Project Manager	40.71	68	21.38%	8.71	14	9.72%	3.96	108	27.27%	11.10	28	20.00%	8.14	64	49.23%	20.04	94	90.38%	36.80
Project Engineer	31.87	134	42.14%	13.43	12	8.33%	2.66	92	23.23%	7.40	66	47.14%	15.02	66	50.77%	16.18			
CADD Technician II	32.31	102	32.08%	10.36	8	5.56%	1.79	32	8.08%	2.61									
Marketing Coordinat	18.64										46	32.86%	6.12						
Director of Structural	48.07							46	11.62%	5.58									
Director of Environm	43.16							46	11.62%	5.01									
TOTALS		318	100%	\$35.58	144	100%	\$42.58	396	100%	\$44.44	140	100%	\$29.29	130	100%	\$36.22	104	100%	\$43.53

Santacruz Associates Ltd.

Santacruz Associates

Land Acquisition Services for
Patrick Engineering, Inc.
Washington Street from Hainesville Road to Lake Street

SCOPE OF SERVICES

Santacruz Associates Ltd. ("SANTACRUZ") shall perform all necessary services to appraise, negotiate and acquire the right-of-way required for the construction of **Washington Street from Hainesville Road to Lake Street** (the "Project"). Said land acquisition services shall be provided by SANTACRUZ as a subcontractor to **Patrick Engineering, Inc. (Patrick)**, for the benefit of the **County of Lake (Lake County)**. All such services shall be performed in accordance with the policies of **Lake County**, and, where applicable, the Illinois Department of Transportation (IDOT) Land Acquisition Policies and Procedures Manual (the "Manual") and the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended (the "Act").

TECHNICAL APPROACH TO THE WORK

SANTACRUZ will act as the Land Acquisition Program Manager working with **Lake County** and **Patrick** to complete the land acquisition services, including the coordination of the appraisal, review appraisal, negotiation and land acquisition services, and, as requested, any specialty engineering services and relocation services. SANTACRUZ will review the construction plans for the Project with **Patrick** and **Lake County** to understand the nature and purpose of the project. The coordination of the services under this proposal shall be by J. Steve Santacruz, President of SANTACRUZ.

SANTACRUZ agrees to perform the services as set forth herein as well as furnish and deliver to **Lake County** all necessary documents, including recorded conveyance documents and other forms and documents required by **Lake County** to evidence the acquisition of the right-of-way or, in the alternative, the information necessary for **Lake County** to undertake eminent domain proceedings in order to acquire the right-of-way. More specifically, SANTACRUZ will provide the following services:

1. Estimation of right of way costs, as required by IDOT, for purposes of funding agreements for federal or state funds.
2. Appraisal of the right of way parcels, including, when applicable, appraisal of the whole property and any remainder of the property not acquired by **Lake County**.
3. When applicable, coordination of the acquisition of Specialty Engineering Reports ("Specialty Reports") with **Patrick** (as approved by **Lake County**). Specialty Reports review the existing and proposed conditions of the remaining property and estimate costs to cure or repair items left deficient, unusable or in disrepair as result of the acquisition of the right-of-way. Specialty Reports may be requested by the appraiser to assess any damages to the remainder of the property and to complete the appraisal for that parcel.

4. Review of the appraisals of the right of way parcels, and, when applicable, the appraisal of the whole property and any remainder of the property not acquired by **Lake County**.
5. Negotiation in order to facilitate the acquisition of the right of way parcels. If negotiations fail or are terminated for any other reason (e.g., missing property owner or title exceptions which cannot be removed), **SANTACRUZ** shall make a recommendation to **Lake County** to acquire the right-of-way by means of eminent domain proceedings.
6. Preparation of deeds, grants of easements, releases, affidavits, receipts and all other documents necessary to properly acquire the needed parcels and those documents necessary to clear title in accordance with the policies and procedures of **Lake County** (and **IDOT**, if applicable).
7. Recordation of deeds and other documents necessary to clear title in accordance with the policies and procedures of **Lake County** (and **IDOT**, if applicable).
8. Testimony in court by appraiser and/or review appraiser as an expert witness on behalf of **Lake County** during eminent domain trials to support the valuations resulting from the acquisition services being provided hereunder.
9. Testimony in court by negotiator as a witness on behalf of **Lake County** during eminent domain trials to detail the negotiation process and communications with the property owner concerning the right-of-way.
10. Preparation and maintenance of timely, accurate parcel data information as required by **Lake County** (and **IDOT**, if applicable).
11. When applicable, submission of all necessary documentation in order to obtain approval of the right-of-way acquisition process by **Lake County** and, if applicable, certification of the right-of-way acquisition process by **IDOT**.

SANTACRUZ will post the progress of the negotiation process on a parcel by parcel basis on its password protected Client-only access section of its website. Access will be provided to **Patrick** and **Lake County** so that they can obtain regular updates on the status of negotiations for each parcel. The website can be visited at www.Santacruz-Associates.com.

Estimation of Right of Way Costs

During the early planning stages of the Project at the request of **Patrick** and/or **Lake County**, **SANTACRUZ** will coordinate the preparation of the right-of-way cost estimates which are to be used in the funding agreement between **Lake County** and **IDOT**. The appraiser shall prepare an estimate based on market information without preparing appraisal reports. Said estimates will take potential damage to the remaining property into consideration. However, neither nor **SANTACRUZ** can provide any assurances to **Patrick** or **Lake County** that these estimates will provide the actual costs of acquisition.

Appraisals and Review Appraisals

SANTACRUZ will subcontract the appraisal and review appraisal work to appraisers which are on IDOT's approved list. The selection of the appraiser and review appraiser shall be subject to reasonable approval by **Lake County**. All appraisal and review appraisal work shall be in accordance with Chapter 2 of the Manual and the Act.

SANTACRUZ will review the plat of highway and the construction plans with the selected appraisers and review appraisers. Appraisal work shall commence within ten (10) business days from the date **Lake County** (and IDOT, if necessary) has approved the legals and plats and **Lake County** provides SANTACRUZ with a copy of the construction plans and with copies of the legal description, plat of highway and title commitment for each parcel of right-of-way to be acquired. SANTACRUZ shall make all reasonable efforts to have all appraisal services completed within the time frame provided by **Lake County**.

The appraiser shall make a detailed inspection of the properties and make such investigations and studies as are necessary to derive sound conclusions for the preparation of appraisal reports. In addition, the appraiser shall provide the comparable sales relied on by the appraiser to reach its conclusions on the value of the right-of-way parcels. All appraisals will be reviewed by the review appraiser assuring that all items affecting the value of the property are considered in the appraisal. The review appraiser will review the comparable sales as part of the review process. The review appraiser shall make a detailed inspection of the properties and make such investigations and studies as are necessary to derive sound conclusions for the preparation of appraisal reports.

All appraisals shall be prepared using the standardized IDOT forms in accordance with the Manual and the Act. SANTACRUZ shall provide **Lake County** with a copy of the appraisal prepared for each parcel and, if applicable, the comparable sales book as prepared by the appraiser. The review appraiser will complete the standardized IDOT Right of Way Appraisal Review Certification Form. A copy of said certification will be attached to each appraisal delivered by SANTACRUZ to **Lake County**.

It is understood by **Patrick** and **Lake County** that the appraiser may request a Specialty Engineering Report to estimate the cost to cure damages impacting the remainder of the property. In such cases, such damages require information and cost estimations beyond the expertise of the appraiser. The impacts may include the relocation of business signs, the re-striping of a parking lot, the re-configuration of a gas station, and other such items. At the election of **Patrick**, such Specialty Engineering Reports may be provided by **Patrick** or may be provided by SANTACRUZ through a consultant that specializes in producing specialty engineering reports. This proposal assumes no specialty engineering reports shall be required as part of this project. Any specialty engineering reports shall be pursuant to a separate work order issued by **Patrick** for which SANTACRUZ shall be entitled to additional compensation.

As requested by **Patrick** or **Lake County**, SANTACRUZ will furnish and deliver updated or revised appraisals or review appraisals resulting from a revision to the right of way or when necessary for condemnation. This proposal assumes no updated or revised appraisal or review appraisal reports shall be required as part of this project. Any updated or revised appraisal or

review appraisal reports shall be pursuant to a separate work order issued by **Patrick** for which **SANTACRUZ** shall be entitled to additional compensation.

If necessary and requested by **Patrick** or **Lake County**, the appraiser and/or review appraiser will assist **Lake County** and its legal counsel in any litigation necessary to acquire a right-of-way parcel through condemnation. **SANTACRUZ** will assure cooperation of the appraisers in trial preparation and providing testimony at depositions and trial as an expert witness on behalf of **Lake County**. Any trial preparation or testimony by the appraisers shall be pursuant to a separate work order issued by **Patrick** for which **SANTACRUZ** shall be entitled to additional compensation.

SANTACRUZ shall be entitled to the full compensation for any parcel for which appraisal and/or review services are commenced but not completed if a parcel is eliminated by **Patrick** or **Lake County** as a result of a redesign of the construction plans and cancellation of the Project.

Commencement and Completion Dates of Negotiation Activities

Unless otherwise instructed, **SANTACRUZ** will commence negotiation activities on a parcel within ten (10) business days after the plat of highway, legal descriptions, appraisals, and/or review appraisals, as the case maybe, have been approved by **Lake County** and **IDOT** (if required). Furthermore, **SANTACRUZ** shall use all reasonable efforts to complete all negotiation and acquisition activities on or before the deadline established by **Lake County** and, if applicable, **IDOT** to meet the letting schedule for the Project.

Negotiation and Acquisition Services

All negotiations and acquisition services shall be provided by **SANTACRUZ** in accordance with Chapters 3 and 4 of the Manual and the Act and the policies of **Lake County** and **IDOT**. **SANTACRUZ** will make an offer to each property owner in the amount of just compensation established by the appraisal process and approved by **Lake County**. **SANTACRUZ** will not have any authority to increase the amounts or include other consideration to be paid to a property owner in acquisition of a parcel unless specifically directed in writing by **Lake County**.

Upon receipt of a counter offer from a property owner, **SANTACRUZ** will review the counter offer and any documentation provided by the property owner to support the counter offer. **SANTACRUZ** will forward the counter offer to the representative(s) of **Lake County** assigned for the purpose of evaluating counter offers. **SANTACRUZ** will provide a recommendation concerning the counter offer including any reasons in support of the recommendation. **SANTACRUZ** will consult with the assigned representative(s) of **Lake County** with respect to its response to the counter offer. Upon acceptance by **Lake County** of any counter offer, **SANTACRUZ** will prepare the necessary documentation to be executed by **Lake County** to formalize the settlement approved by **Lake County**. If any counter offer is rejected by **Lake County**, **SANTACRUZ** will communicate this to the property owner in writing providing the reason for the rejection of the counter offer. Thereafter, **SANTACRUZ** will immediately commence further negotiations with the property owner in an effort to reach a settlement.

SANTACRUZ will review the plat of highway and appraisals for each parcel before the start of negotiations with a property owner to understand the valuation determined by the appraisal process and to appreciate the impact to the property resulting from the Project. SANTACRUZ 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 **Lake County**. SANTACRUZ will direct any questions to **Patrick** resulting from its review of the plans, plats, appraisals and title commitments so that SANTACRUZ is prepared for any issues raised by the property owner during negotiations.

To the extent that it has not already been done, before contacting the owner of a parcel, SANTACRUZ will prepare and send an introductory letter to the property owner. SANTACRUZ will also prepare an offer package for presentation to the owner at the first meeting. The offer package shall contain the offer, 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, and only after repeated efforts to contact the property owner, SANTACRUZ is unable to make contact with the property owner, SANTACRUZ will send the offer package by certified mail so that a receipt of delivery can be established. SANTACRUZ will contact the property owner to schedule a meeting to review the offer package and the construction plans.

SANTACRUZ will make repeated efforts to contact a property owner and will make all reasonable efforts to reach a settlement before recommending that **Lake County** commence condemnation proceedings. All contacts and efforts to make contact with the property owner shall be documented by SANTACRUZ.

If, during its discussions with the property owner, errors in the plans are discovered or the property owner requests design changes, SANTACRUZ will immediately notify **Patrick** and **Lake County** with this information. At any time during negotiations for situations involving design changes, errors in plans or for any other reason, if requested by **Patrick** or **Lake County**, SANTACRUZ will cease negotiations on certain parcels until corrected information or further instruction is provided to SANTACRUZ.

Upon successful negotiations with the property owner, SANTACRUZ will prepare all necessary conveyance documents in order to complete the acquisition and obtain title approval for the property. SANTACRUZ will have all conveyance documents and title clearance documents it deems necessary recorded with the County Recorder's office where the parcel is situated. SANTACRUZ will submit the completed parcel file to **Lake County** with original conveyance documents, title clearance documents, the Negotiator's Log, copies of all correspondence with the property owner, title commitments, plats, and all other documentation as required by **Lake County** and, if applicable, IDOT.

In the event that SANTACRUZ, 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 shall prepare and submit to **Lake County** a recommendation that **Lake County** proceed with condemnation in order to acquire the right of way needed from such parcel. SANTACRUZ will prepare and provide to **Lake County** a file which will include the Negotiator's Log, copies of all correspondence with the property owner, title commitments, plats, and all other documentation concerning such parcel that will be required by **Lake County**

to proceed with the filing of a condemnation lawsuit against the property owner. In the event that SANTACRUZ submits a parcel to **Lake County** with the recommendation that acquisition be completed by means of a condemnation action, SANTACRUZ will continue to make additional efforts to acquire the parcel through settlement until the actual filing date of the petition for condemnation.

SANTACRUZ will submit all conveyance documents and title clearance documents to the title company responsible for preparing the title commitments requesting that the documents be recorded and that the title company issue a title policy for all permanent acquisitions (as requested by **Lake County** or required by IDOT, if applicable).

If necessary and requested by **Lake County** or **Patrick**, SANTACRUZ will assist **Lake County** and its respective legal counsel in any litigation necessary to acquire a right-of-way parcel through condemnation. SANTACRUZ will cooperate in trial preparation and will provide testimony at depositions and trial as a witness on behalf of **Lake County** to attest to the negotiations being legally conducted in good faith and in accordance with the requirements of **Lake County**, IDOT, the Act and the Manual. Any trial preparation or testimony by SANTACRUZ shall be pursuant to a separate work order issued by **Patrick** for which SANTACRUZ shall be entitled to additional compensation.

SANTACRUZ will also complete and coordinate the Project Compliance Checklist required by the IDOT for right-of-way certification of the land acquisition process.

SANTACRUZ shall be entitled to the full compensation for any parcel for which negotiation and acquisition services once assigned by **Lake County** but not completed if a parcel is eliminated by **Patrick** or **Lake County** as a result of a redesign of the construction plans and cancellation of the Project.

Relocation Services

The Project does not involve the acquisition of an entire or a significant portion of a parcel which is improved with a residence or commercial enterprise where the party occupying the property will need to be relocated. Any relocation services provided by SANTACRUZ directly or indirectly through a subcontractor shall be pursuant to a separate work order issued by **Patrick** or **Lake County** for which SANTACRUZ shall be entitled to additional compensation.

PRIOR EXPERIENCE

SANTACRUZ specializes in negotiating and acquiring right-of-way for governmental agencies and private entities for use in roadway construction, the development of other public/private projects, and the installation of infrastructure fixtures and equipment. SANTACRUZ has been providing negotiations and land acquisition services for right of way purposes for over ten years. A resume of our company is attached to this Proposal listing references from past and current clients of SANTACRUZ. In addition, a list of our recent projects which include negotiations, acquisitions services and the coordination of appraisal functions, see attached Prior Experience.

COMPENSATION

SANTACRUZ shall be entitled to the compensation as shown on the attached schedule. Our cost proposal, based on fifty four (54) projected parcels of right-of-way, is as follows:

<u>APPRAISALS:</u>	\$126,800.00.
<u>REVIEW APPRAISALS:</u>	\$48,400.00.
<u>NEGOTIATIONS:</u>	\$129,600.00.

SANTACRUZ shall invoice Patrick 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 shall include \$500.00 per parcel for these charges. SANTACRUZ shall pay any such fees and charges in excess of the \$500.00 per parcel allowance for which SANTACRUZ shall be entitled to additional compensation in the amount of any such payments pursuant to a separate work order issued by Patrick.

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 \$331,800.00 as follows:

Land Acquisition Services	\$304,800.00
Direct Billable Expenses	\$27,000.00

CERTIFICATIONS AS BUSINESS ENTERPRISE (BEP), MINORITY BUSINESS ENTERPRISE (MBE) AND DISADVANTAGED BUSINESS ENTERPRISE (DBE)

SANTACRUZ is certified in the Business Enterprise Program with the State of Illinois – Department of Central Management Services. SANTACRUZ is also certified as a Disadvantaged Business Enterprise by the State of Illinois – Department of Transportation and a Minority Business Enterprise by Cook County and the City of Chicago. As SANTACRUZ will supervise 100% of the Negotiation and Acquisition services, Lake County should meet or exceed any minimal BEP/DBE/MBE utilization goals established for the Project.

COMPENSATION FOR SERVICES

Appraisal Services:

Appraisals (Non-complex)	\$2,100
Appraisals (Complex)	\$2,600
Appraisals (Difficult)	\$3,800

Review Appraisal Services:

Review Appraisals (Non-complex)	\$800
Review Appraisals (Complex)	\$1,000
Review Appraisals (Difficult)	\$1,400

Negotiation and Acquisition Services:

Negotiation and acquisition services for Right of Way including, without limitation, documentation of conveyance of property interest	\$2,400
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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