DRAFT

Municipality	LOCAL AGENCY	Illinois Department of Transportation	CONSULTANT	Name: Chirstopher B. Burke Engineering
Township				Address: 9575 West Higgins Road, Ste 600
County: Lake County – Division of Transportation		**Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds**		City: Rosemont, 60188
Section: 10-00098-19-RP				State: Illinois

THIS AGREEMENT is made and entered into this _____ day of March , 2014 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Non-Motor Fuel Tax Funds, allotted to the LA ~~by the State of Illinois~~, under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely ~~or in part~~ to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

Section Description

Name Peterson Road Reconstruction

Route CH20 Length 3.86 Mi. 20380.00 FT (Structure No. TBD)

Termini Peterson Road - IL Route 83 to 2800' W. of Alleghany Rd | Alleghany Rd - Peterson Rd to Hojem Lane

Description:
Phase II Engineering Services to prepare plans and specifications for the reconstruction of Peterson Road and Alleghany Road as well as the resurfacing of Alleghany Road.

Agreement Provisions

The Engineer Agrees,

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

j. ☒ Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.

k. ☐ Prepare the Project Development Report when required by the DEPARTMENT.

l. ☒ **Services as included and/or defined in the attached Scope of Services**.

2. That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies **of the LA** ~~of the DEPARTMENT~~. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA ~~and the DEPARTMENT~~.

3. To attend conferences at any reasonable time when requested to do so by representatives of the LA ~~or the Department~~.

4. In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that the ENGINEER will perform such work without expense to the LA, even though final payment has been received by the ENGINEER. The ENGINEER shall give immediate attention to these changes so there will be a minimum delay to the CONTRACTOR.

5. That basic survey notes and sketches, charts, computations and other data prepared or obtained by the ENGINEER pursuant to this AGREEMENT will be made available, upon request, to the LA ~~or the DEPARTMENT~~ without cost and without restriction or limitations as to their use.

6. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by the ENGINEER and will show the ENGINEER's professional seal where such is required by law.

The LA Agrees,

1. To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT according to the following method indicated by a check mark:

   a. ☐ A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.

   b. ☐ A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost

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

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

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

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

The Total Not-to-Exceed Contract Amount shall be $892,067.74

3. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after the services have been performed. ~~in accordance with the following schedule:~~

   a. ~~Upon completion of detailed plans, special provisions, proposals and estimate of cost - being the work required by section 1 of the ENGINEER AGREES - to the satisfaction of the LA and their approval by the DEPARTMENT~~, 90 ~~percent of the total fee~~ due under this AGREEMENT based on the approved ~~estimate of cost~~.

   b. Upon award ~~of the contract~~ for the improvement by the LA ~~and its approval by the DEPARTMENT~~, 100 percent of the total fee due under the AGREEMENT ~~based on the awarded contract cost~~, less any amounts paid under "a" ~~above~~.

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

4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in sections 1 and 3 of the ENGINEER AGREES and prior to the completion of such services, the LA shall reimburse the ENGINEER for the ENGINEER's actual costs plus 166 percent incurred up to the time the ENGINEER is notified in writing of such abandonment -"actual cost" being defined as in paragraph 2 of the LA AGREES.

5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of the ENGINEER AGREES, ~~after they have been approved by the DEPARTMENT~~, the LA will pay the ENGINEER for such changes on the basis of actual cost plus 166 percent to cover profit, overhead and readiness to serve -"actual cost" being defined as in paragraph 2 of the LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of the ENGINEER's responsibility to prepare a complete and adequate set of plans and specifications.

It is Mutually Agreed,

1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.

2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at the ENGINEER's last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with section 4 of the LA AGREES.

3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA ~~and their approval by the DEPARTMENT~~, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA ~~and the DEPARTMENT~~.

4. That the ENGINEER warrants that the ENGINEER has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that the ENGINEER's has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.

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

Executed by the LA:

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

ATTEST:

State of Illinois, acting by and through its

By _____

County Board

Lake County Clerk

By _____

(Seal)

Title Chairman of the County Board

RECOMMENDED FOR EXECUTION

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

Executed by the ENGINEER:

Christopher B. Burke Engineering, LTD.
Engineering Firm
9575 West Higgins Road, Suite 600
Street Address
Rosemont, Illinois 60018
City, State

ATTEST:

By _____

By _____

Title _____

Title _____

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

SCOPE OF SERVICES

Peterson Road at Alleghany Road

February 18, 2014

PHASE II – DESIGN ENGINEERING SERVICES

Christopher B. Burke Engineering, Ltd. (CBBEL) will perform Phase II Engineering Services for the improvement of Peterson Road at Alleghany Road. This project includes the reconstruction of Peterson Road from approximately Sta. 38+00 to Sta. 125+00 and the reconstruction of Alleghany Road from Peterson Road to Sta. 25+00. Alleghany Road will also be resurfaced from the end of reconstruction to the south radius return of Hojem Lane. The proposed typical section will be a suburban arterial having two through lanes in each direction separated by a 31' curbed median and outside shoulders with open ditch drainage. A multi-use path will also be included along the north ROW of Peterson Road. The length of the improvement is approximately 1.64 miles along Peterson Road and 2.22 miles along Alleghany Road. Construction is scheduled for the 2015 construction year. CBBEL will provide services for all permitting required for these improvements. A detailed scope of services is provided below.

Task 1 – Data Collection and Review

CBBEL will collect and review data to be utilized for the preparation of contract documents. This data will include the following:

- Survey Data - Adjacent subdivision plats, Lake County tax maps, and any other available information to identify existing right-of-way.
- Functional classifications of all roadways within the project limits.
- Wetland information including ADID wetland maps, National Wetland Inventory maps, Lake County soils maps, and any other information.
- Other state, county and village information including utility atlases, land use plans, ordinances, etc.

Task 2 – Pick-Up Survey

CBBEL understands the LCDOT Survey Department has completed the survey and created a single base map to be used for all Peterson Road and Alleghany Road improvements.

CBBEL will supplement the LCDOT topographic survey with additional pick-up topographic survey. The anticipated pick-up survey is within the resurfacing area of Alleghany Road and will be based on field observations of areas that are critical to the design.

Additionally, CBBEL will coordinate with Kinder Morgan to pick-up the ground elevations at any probe locations. This information will be used to accurately locate the Kinder Morgan gas pipeline in the areas of the proposed detention basins.

Task 3 – Geotechnical Investigation and Analysis

CBBEL understands that ECS has completed a geotechnical evaluation for the roadway reconstruction including soil borings, pavement cores, and infiltration testing. CBBEL will review this information and incorporate design recommendations into the proposed plans.

If a retaining wall is determined to be required, CBBEL will retain TSC to conduct a geotechnical investigation and complete a report for the potential of a structural retaining wall located on the north side of Peterson Road near the west end of the project in accordance with the IDOT Geotechnical Manual. The geotechnical investigation is anticipated to consist of performing a total of 9 structural soil borings to a depth of 50.

The Boring Program, laboratory Testing, and Engineering Report will be completed as outlined in TSC's attached Proposal.

Task 4 – Drainage Studies

CBBEL will review data to be collected in Task 1 and the topographic survey in Task 2.

The drainage work will include:

- Review and complete work previously completed by LCDOT
  - Preparation of the Existing Drainage Plan.
  - Evaluation of the existing drainage system.
  - Determination of tributary area to the project.
  - Evaluation of existing outfalls.
  - Identification of viable outfalls.
  - Determination of detention volumes based on Lake County ordinance.
  - Evaluation of preliminary locations of detention ponds determined by LCDOT.
  - Location of likely detention storage locations.
  - BFE determination previously submitted to LCSMC.
- Design of inlet spacing and storm sewers.
- Review and coordinate detention requirements with adjacent developments.
- Sizing detention pond and/or oversizing storm sewer conveyance system.
- Conducting culvert analysis.
- Verify capacity of proposed ditch conveyance system.
- Preparation of a narrative summarizing Existing and Proposed Drainage.
- Compiling a Drainage Schedule.

Task 5 – Coordination

Coordination with the Village of Grayslake will be required throughout the project to coordinate this project with other possible projects and developments. Design elements that will be for the Village (landscaped medians, sidewalk and path along Alleghany Road) will be sent to the Village at appropriate design stages for coordination. We anticipate that two coordination meetings will be required.

It is anticipated that the coordination with the Village of Grayslake will be required to include various casing pipes for future utility crossings. The size, location and specifications for these facilities designed by the consultant and will be incorporated in the construction documents.

CBBEL will coordinate with the Alter group to determine if a Temporary Construction Easement is a viable solution at the hill on the north side of Peterson Road near the west end of project. Grading options will be developed to gain concurrence.

The FAA will also require coordination with respect to Campbell Airport. CBBEL understands that coordination with the FAA has been started. CBBEL will continue this coordination. FAA Form 7460 will be updated for final conditions and construction activities.

CBBEL will coordinate with the Illinois Historic Preservation Agency to update the clearance that will expire on June 18, 2014. The updated coordination will include the area west of the project for the extension of the path to Bohm Park in Task 14.

Renderings and exhibits will be prepared for LCDOT to be posted to their website for key elements during the project development. These materials will be typical Phase I style exhibits and renderings. If possible, 3D renderings will be developed from the CADD software to be used for this project.

Task 6 – Preliminary Geometric Plans

CBBEL will review the preliminary geometry including cross sections and right-of-way analysis previously completed by LCDOT. Any suggested modifications will be coordinated with LCDOT prior to beginning Preliminary Plans, Specifications and Cost Estimate. The preliminary geometric plans will be fully developed with enough detail both horizontally and vertically to determine adherence to design criteria for the project. Working cross sections developed by LCDOT will be converted into Geopak software (Select Series 3) if possible, or recreate based on information from the LCDOT design and then reviewed for project adequatcy.

Task 7 – Corridor Landscaping

CBBEL is preparing options for the landscape development of the medians that occur within the project along Peterson Road and Alleghany Road. There will be approximately 7,700 lineal feet of landscaped median. CBBEL will develop a preliminary median landscaping plan and provide a planning level cost estimate to be presented to LCDOT and with approval, to Grayslake. The median landscaping plan for the Peterson Road at IL Route 83 project will provide a basis for the preliminary landscaping plan. Several iterations of preliminary planting configurations are anticipated before arriving at a preferred planting plan. Once, all parties are in agreement of the preferred preliminary plan and estimated costs, final landscaping plans will be developed for the contract plans and a final breakout cost will be determined for use in the Agreement between LCDOT and Grayslake.

Infiltration ditches are also anticipated for this project. CBBEL will use the general details from the Peterson Road at IL Route 83 project and the results of the infiltration testing completed by ECS as a basis for the design. Modifications and enhancements to the previous design will be investigated to provide additional improvements based on the bid results of the Peterson Road at IL Route 83 project and LCDOT goals.

Task 8 – Retaining Wall Structural Design

CBBEL will coordinate with LCDOT and Alter Group to determine if a Temporary Construction Easement (TCE) can be granted to regrade the hill on the north side of Peterson Road at the west end of the project. If a TCE is not viable and a structural retaining wall is required, CBBEL will develop a preliminary design including structure types and cost options. This information will be submitted to LCDOT for a determination of the preliminary preferred wall type. Once determined, a Type, Size and Location (TS&L) report will be prepared for the structural retaining wall for coordination with the Bureau+ of Bridges and Structures and a Structure Number will be assigned. Once the TS&L is approved, construction plans will be developed.

Task 9 – Traffic Maintenance Analysis

CBBEL will develop a preliminary maintenance of traffic staging concept that minimizes disruption to the traveling public while maintaining a satisfactory work zone for the contractor. It is anticipated that several iterations of the maintenance of traffic staging concept at the intersection of Peterson Road and Alleghany Road will be required developed to best meet the goals of Design, Traffic, Construction, and Administration. Once the preliminary maintenance of traffic staging plan has been agreed to by LCDOT, it will serve as the basis for the development of Maintenance of Traffic Plans.

Task 10 – Preliminary Plans, Specifications and Cost Estimate (60%)

Based on the approved Preliminary Geometric Plans in Task 8, CBBEL will prepare preliminary plans, specifications and an estimate of construction cost. Contract documents will be in accordance with Lake County standards and will be in English units.

In addition to the project specifications, the following drawings will be provided for preliminary review:

1 Sheet — Cover Sheet
- County format
- List of applicable LCDOT and State Highway Standards
- Project location map

1 Sheet — General Notes
- Include notes needed to clarify project's intent
- Index of sheets
- Commitments
- Utility Company and Village points of contact

2 Sheets — Summary of Quantities

10 Sheets — Schedules of Quantities (Submitted during Pre-Final)
- Schedules for all pay items will be included except lump sum and contingency items
- Schedules for traffic signal plans will follow standard LCDOT sheet layout

4 Sheets — Typical Sections
- Including existing and proposed utilities
- Covers main line and cross roads
- Extend from ROW to ROW line

5 Sheets — Alignment, Ties and Benchmarks
- Provides centerline alignment, horizontal and vertical control for the project
- Provides ties for the centerline alignment and control points.

22 Sheets — Roadway Plan and Profile Sheets (1"=20' horizontal, 1"=5' vertical)
- Existing and proposed plan view top, profile view bottom.
- Horizontal and vertical alignments

- Existing edges of pavement, medians, C&G, shoulders, driveways, lighting, signing, signals, guardrails, structures, etc.
- All existing storm sewers, cross road culverts, manholes, catch basins, inlets, headwalls, ditches, pump stations, etc.
- Station, offset, and elevation callouts to proposed elements.
- All known utilities plotted as accurately as possible including horizontal and vertical locations
- Identification, sizes and appurtenances on existing topography, proposed geometry, existing drainage, proposed drainage
- Edges of pavement, C&G, medians, driveways, sidewalks, retaining walls, structure locations, and identifications, etc.

8 Sheets Alleghany Road Resurfacing Plans

- Existing plan view top and bottom views
- Aerial images
- Existing edges of pavement and shoulders will be superimposed in CADD
- All existing culverts and drainage features will be drawn in based on field observation
- Guardrail evaluation and details

69 Sheets Maintenance of Traffic (1”=50’ plan sheets) 3 Stages

- Will show the traffic control and staging of the work that minimizes the disturbance to existing traffic patterns
- Cross-sections at critical area will be provided to determine limits of construction and staging constructability
- LCDOT TCP sheet with notes, speed limit, RWA locations, etc.
- Detour sheets

44 Sheets Erosion and Sediment Control Plans and Details (1”=50’ plan sheets)

- Will show erosion and sediment control for the main construction stages
- LCDOT ECP sheet with disturbed area, drainage basin map, notes, quantities, etc.

1 Sheet Intersection Details (1”=10’ plan sheets)

- Provide detailed horizontal and vertical control for the intersection of Peterson Road with Alleghany Road.

28 Sheets Pavement Marking and Landscaping Plans (1”=50’ plan sheets)

4 Sheets Median Landscaping Plans (1”=50’ plan sheets)

54 Sheets Traffic Signal Installation Plans – Peterson Road and Alleghany Road (1”=20’ plan sheets)

- Temporary Signal plan for all MOT stages
- Cable plan
- Phase designation diagram
- Emergency vehicle priority system plan.
- Video detection details and general notes

- Mast arm mounted street name signs
- Grounding details
- Schedule of quantities

6 Sheets Interconnect Plans (1"=50' plan sheets)
- Interconnect schematic plan along Peterson Road connecting IL Route 83 to IL Route 60 and connecting to the existing Peterson Road/Midlothian Road interconnect system.
- Schedule of quantities.

2 Sheets Detention Basin Grading Plans
- Existing and proposed contours
- Control structure details
- Incremental detention volume table

15 Sheets Retaining Wall Structural Plans (if required)

7 Sheets Construction Details (project specific)

70 Sheets Cross-Sections
- At a scale of 1" = 5'-0" horizontal and vertical
- At 50' intervals
- At all entrances to verify easement need and constructability (satisfactory grades)
- At all proposed drainage structures
- All known utilities plotted and proposed ditching sufficiently complete to allow identification of utility conflicts
- Existing topography including drainage within the ROW shown on the nearest cross section

6 Sheets IDOT D1 Standards

18 Sheets LCDOT Standards

20 Sheets IDOT Standards

Estimated 390 Total Sheets

An estimate of construction cost will be submitted for review along with the preliminary plans and specifications.

Task 11 – Wetland Permitting

CBBEL understands that LCSMC has completed a wetland delineation and will update the wetland delineation as required.

Permit Application Preparation and Submittals - The required exhibits, specifications, data and project information will be compiled and assembled in a permit application package to SMC and the U.S. Army Corps of Engineers (COE). We will coordinate development of documents with you and other project team members. This task may require meeting with SMC, the COE, Illinois Environmental Protection Agency, U.S. Fish and Wildlife Service, Illinois Department of

Natural Resources, and potentially other federal, state and local agencies to coordinate permitting activities. The EcoCAT natural resources review through Illinois Department of Natural Resources will be updated.

Agency Coordination - During the permit review process, follow-up meetings with the project team and regulatory agencies may be necessary to finalize the required information, submittals and documentation.

Task 12 – LCSMC Stormwater Calculations and Permit

A permit will be required from the Lake County Stormwater Management Commission (LCSMC). CBBEL will review and complete the stormwater management calculations associated with the existing and proposed conditions Base Flood Elevation (BFE) determinations, detention storage, compensatory storage, storm sewer systems, wetland hydrology, and culvert sizing. CBBEL will schedule pre-application meetings with the LCSMC prior to permit application submittals.

Task 13 – Utility Coordination

CBBEL understands that LCDOT has coordinated preliminary plans with all utility companies that own facilities within the project limits. CBBEL will compile the atlas information received and draft the information in CADD. Once the utilities have verified the location of their facilities, CBBEL will identify potential conflicts, and will set up meetings to discuss necessary utility relocations or plan adjustments. The scheduling of the necessary utility relocation work will also be reviewed in the coordination meetings. We anticipate six meetings with individual utility companies will be required.

Proposed utility relocations determined through coordination will be shown in plan view, profile view, and on cross sections in the Master Utility Plan set. Please note that the Master Utility Plan set is a continuously evolving document will most likely be complete until after final construction drawings are submitted for letting due to the typical timing of the receipt utility relocation plans.

Task 14 - Bike Path Extension Study

CBBEL will conduct a study to determine the most feasible way to extend the bike path west of the project limits to the Behm Homestead Park as requested by the Township. CBBEL will consider using Behm Park Lane as an on-street facility if a separate path cannot be located within the ROW determined for the roadway improvements. Consideration of the potential for overflow parking on-street affecting the path will also be considered. Feasible alternatives will be developed for the path location, with planning level costs established. Benefits and negative aspects of alternative designs will also be tabulated for review purposes. Once a preliminary concept is established and are reviewed by LCDOT, we anticipate meeting with the Township to get input on the design. If the design can be implemented without additional land acquisition, or land acquisition can be completed in a timely fashion, the path will be built as part of the construction documents. Staged construction strategies will be considered if land acquisition would impact the schedule. Meetings with impacted property owners will be conducted if necessary.

Task 15 – Pre-Final Plans, Specifications, and Cost Estimate (90%)
Based on comments provided by LCDOT and the permitting agencies, and coordination with utility companies, CBBEL will submit pre-final construction documents for review. CBBEL will write a separate disposition of comments to address each reviewing agency's preliminary comments.

Task 16 – Final Plans Specifications and Cost Estimate (100%)
CBBEL will finalize the contract documents based on the pre-final review. The requested number of copies of plans and specifications will be submitted to LCDOT. A final estimate of construction cost and estimate of required working days will also be submitted. Final bid documents shall be provided in LCDOT format for the Bid Package.

Task 17 – Phase III Support
CBBEL will provide assistance to LCDOT during the bid process. CBBEL will address from bidders and, if necessary, will compile an addendum to be issued to bidders. In addition CBBEL will provide shop drawing review for LCDOT during construction and will clarify design intent to the RE if questions arise.

Task 18 – QA/QC
The CBBEL QC/QA plan emphasizes an integrated project development process, with a guiding principal to ensure cost effective and practical infrastructure management that advocates a safe, constructible and cost effective design solution that minimizes change orders and schedule delays.

The QC/QA Manager, will perform a comprehensive evaluation of the following items throughout the design process.

- Scoping/field checks
- Submittals
- Design calculations
- Computer inputs/outputs
- Documentation of decisions and directives
- Pay items and quantity calculations
- Project records
- Compliance statements
- Pre-Final and Final Plan format and content

The Project Manager manages the overall project quality control's process and, through the QC/QA Manager, assigns qualified senior quality reviewers for pending deliverables as required.

Task 19 – Administration

This task will include overall project administration and work force planning/allocation.

This task also includes development of monthly progress reports, including an updated project schedule showing project progress, which will be submitted to LCDOT each month in conjunction with submittal of project invoices.

Illinois Department of Transportation

Payroll Escalation Table
Fixed Raises

FIRM NAME	Christopher B. Burke Engineering, Ltd.	**DATE**	02/18/14
PRIME/SUPPLEMENT		**PTB NO.**	

CONTRACT TERM	12	**MONTHS**	**OVERHEAD RATE**		130.82%
START DATE	3/15/2014		**COMPLEXITY FACTOR**		0
RAISE DATE	1/1/2015		**% OF RAISE**		3.00%

ESCALATION PER YEAR

3/15/2014 - 1/1/2015	1/2/2015 - 3/1/2015			
10	2			
12	12			
= 83.33%	17.17%			
= 1.0050				

The total escalation for this project would be: **0.50%**

BDE 025 (Rev. 11/06)

Payroll Rates

FIRM NAME Christopher B. Burke Engineering, Ltd. **DATE** 02/18/14
PRIME/SUPPLEMENT
PTB NO.

ESCALATION FACTOR **0.50%**

CLASSIFICATION	CURRENT RATE	ESCALATED RATE
Engineer VI	$70.00	$70.00
Engineer V	$59.56	$59.86
Engineer IV	$48.60	$48.84
Engineer III	$40.10	$40.30
Engineer I/II	$29.63	$29.78
Env Res Specialist V	$64.00	$64.32
Env Res Specialist IV	$48.25	$48.49
Env Res Specialist III	$36.66	$36.84
Env Res Technician	$32.75	$32.91
Landscape Architect	$48.00	$48.24
Survey V	$70.00	$70.00
Survey IV	$59.00	$57.00
Survey III	$50.50	$50.75
Survey II	$35.77	$35.95
Survey I	$25.45	$25.58
Survey Intern	$13.00	$13.07
CAD Manager	$52.13	$52.39
Asst. CAD Manager	$47.33	$47.57
CAD II	$42.47	$42.68
CAD I	$32.50	$32.66
Engineering Technician V	$59.00	$65.00
Engineering Technician IV	$43.00	$43.22
Engineering Technician III	$42.88	$43.09
Engineering Technician I/II	$35.85	$36.03
Engineering Intern	$13.00	$13.07
GSI Specialist III	$41.00	$41.21
GSI Specialist I/II	$24.00	$24.12
Administrative	$28.18	$28.32

LakeCounty
Division of Transportation

EXHIBIT A

Cost Estimate of Consultant Services (CPFF)

Firm	Christopher B. Burke Engineering, Ltd.	Date	02/18/14
Route	Peterson Rd at Alleghany Rd		
Section		Overhead Rate	**130.82%**
County	Lake		
Job No.	TBD	Complexity Factor	**0**
PTB & Item	N/A		

Item	Work Hours	Payroll	Overhead & Fringe Benefits	In-House Direct Costs *	Fixed Fee	Outside Direct Costs	Subs	Total (C+D+E+F+G+H)	% of Grand Total
Task 1 – Data Collection and Review	28	1,068.64	1,397.99		371.89	22.50		2,861.02	0.32%
Task 2 – Pick-Up Survey	96	3,928.12	5,138.77	113.00	1,383.37	80.00		10,643.26	1.19%
Task 3 – Geotechnical Investigation and Analysis	8	400.64	524.12		139.42		22,050.00	23,114.18	2.59%
Task 4 – Drainage Studies	120	4,268.08	5,583.50		1,485.29	22.50		11,359.37	1.27%
Task 5 – Coordination	128	6,110.24	7,993.42	113.00	2,142.75	80.00		16,439.40	1.84%
Task 6 – Preliminary Geometric Plans	60	3,196.44	4,181.58	56.50	1,120.55	88.00		8,643.08	0.97%
Task 7 – Corridor Landscaping	92	4,556.24	5,960.47		1,585.57	400.00		12,502.28	1.40%
Task 8 – Retaining Wall Structural Design	280	11,967.20	15,655.49		4,164.59	71.60		31,858.88	3.57%
Task 9 – Traffic Maintenance Analysis	180	8,232.60	10,769.89	56.50	2,873.14	40.00		21,972.12	2.46%
Task 10 – Preliminary PS&E	3200	144,744.00	189,354.10	56.50	50,379.10	245.00		384,778.71	43.13%
Task 11 – Wetland Permitting	108	4,256.52	5,568.38		1,481.27	40.80		11,346.97	1.27%
Task 12 – LCSMC Stormwater Calcs and Permit	272	12,188.72	15,945.28		4,241.67	90.80		32,466.48	3.64%
Task 13 – Utility Coordination	80	3,395.12	4,441.50		1,181.50	6,700.50		15,718.62	1.76%
Task 14 – Bike Path Extension Study	100	4,860.00	6,357.85	56.50	1,699.47	251.10		13,224.92	1.48%
Task 15 – Pre-Final PS&E	1600	72,372.00	94,677.05	56.50	25,193.65	677.00		192,976.20	21.63%
Task 16 – Final PS&E	560	25,336.10	33,144.69		8,816.96	1,552.99		68,850.74	7.72%
Task 17 – Phase III Support	120	5,713.60	7,474.53		1,988.33			15,176.46	1.70%
Task 18 – QA/QC	80	4,550.80	5,953.36		1,583.68			12,087.83	1.36%
Task 19 – Administration	36	2,276.64	2,978.30		792.27			6,047.21	0.68%
TOTALS	7148	323,421.70	423,100.27	508.50	112,624.48	10,362.79	22,050.00	892,067.74	100.00%

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

Avg Hrly: **45.25**

LakeCounty
Division of Transportation

EXHIBIT A

Average Hourly Project Rates

Route	Peterson Rd at Alleghany Rd
Section	
County	Lake
Job No.	TBD
PTB/Item	

Consultant Christopher B. Burke Engineering, Ltd. **Date** 02/18/14

Sheet 1 **OF** 4

Payroll Classification	Avg Hourly Rates	Total Project Rates			Task 1 – Data Collection and Re			Task 2 – Pick-Up Survey			Task 3 – Geotechnical Investig			Task 4 – Drainage Studies			Task 5 – Coordination		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer VI	70.00	100	1.40%	0.98															
Engineer V	59.86	898	12.56%	7.52	8	28.57%	17.10	8	8.33%	4.99	4	50.00%	29.93	16	13.33%	7.98	12	9.38%	5.61
Engineer IV	48.84	392	5.48%	2.68															
Engineer III	40.30	676	9.46%	3.81				8	8.33%	3.36	4	50.00%	20.15	16	13.33%	5.37	20	15.63%	6.30
Engineer I/II	29.78	678	9.49%	2.82	16	57.14%	17.02												
Env Res Specialist V	64.32	4	0.06%	0.04															
Env Res Specialist IV	48.49	20	0.28%	0.14															
Env Res Specialist III	36.84	40	0.56%	0.21															
Env Res Technician	32.91	40	0.56%	0.18															
Landscape Architect	48.24	364	5.09%	2.46													32	25.00%	12.06
Survey V	70.00	4	0.06%	0.04				4	4.17%	2.92									
Survey IV	57.00	0																	
Survey III	50.75	12	0.17%	0.09				12	12.50%	6.34									
Survey II	35.95	64	0.90%	0.32				24	25.00%	8.99									
Survey I	25.58	24	0.34%	0.09				24	25.00%	6.40									
Survey Intern	13.07	0																	
CAD Manager	52.39	598	8.37%	4.38										8	6.67%	3.49	32	25.00%	13.10
Asst. CAD Manager	47.57	626	8.76%	4.17				16	16.67%	7.93									
CAD II	42.68	1240	17.35%	7.40													32	25.00%	10.67
CAD I	32.66	0																	
Engineering Technician V	65.00	0																	
Engineering Technician IV	43.22	534	7.47%	3.23															
Engineering Technician III	43.09	682	9.54%	4.11										40	33.33%	14.36			
Engineering Technician I/II	36.03	0																	
Engineering Intern	13.07	40	0.56%	0.07										40	33.33%	4.36			
GSI Specialist III	41.21	40	0.56%	0.23															
GSI Specialist I/II	24.12	0																	
Administrative	28.32	72	1.01%	0.29	4	14.29%	4.05												
		0																	
		0																	
TOTALS		7148	100%	$45.25	28	100%	$38.17	96	100%	$40.92	8	100%	$50.08	120	100%	$35.57	128	100%	$47.74

LakeCounty
Division of Transportation

EXHIBIT A

Average Hourly Project Rates

Route	Peterson Rd at Alleghany Rd
Section	
County	Lake
Job No.	TBD
PTB/Item	

Consultant Christopher B. Burke Engineering, Ltd.

Date 02/18/14

Sheet 2 **OF** 4

Payroll Classification	Avg Hourly Rates	Task 6 – Preliminary Geometric			Task 7 – Corridor Landscaping			Task 8 – Retaining Wall Structu			Task 9 – Traffic Maintenance Ar			Task 10 – Preliminary PS&E			Task 11 – Wetland Permitting		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer VI	70.00													40	1.25%	0.88			
Engineer V	59.86	32	53.33%	31.93	8	8.70%	5.21	40	14.29%	8.55	60	33.33%	19.95	320	10.00%	5.99	4	3.70%	2.22
Engineer IV	48.84							40	14.29%	6.98				160	5.00%	2.44			
Engineer III	40.30							60	21.43%	8.64				240	7.50%	3.02			
Engineer I/II	29.78							60	21.43%	6.38	60	33.33%	9.93	320	10.00%	2.98			
Env Res Specialist V	64.32																4	3.70%	2.38
Env Res Specialist IV	48.49																20	18.52%	8.98
Env Res Specialist III	36.84																40	37.04%	13.64
Env Res Technician	32.91																40	37.04%	12.19
Landscape Architect	48.24				60	65.22%	31.46							160	5.00%	2.41			
Survey V	70.00																		
Survey IV	57.00																		
Survey III	50.75																		
Survey II	35.95																		
Survey I	25.58																		
Survey Intern	13.07																		
CAD Manager	52.39	8	13.33%	6.99	16	17.39%	9.11							320	10.00%	5.24			
Asst. CAD Manager	47.57										60	33.33%	15.86	320	10.00%	4.76			
CAD II	42.68							80	28.57%	12.19				640	20.00%	8.54			
CAD I	32.66																		
Engineering Technician V	65.00																		
Engineering Technician IV	43.22													320	10.00%	4.32			
Engineering Technician III	43.09	20	33.33%	14.36	8	8.70%	3.75							320	10.00%	4.31			
Engineering Technician I/II	36.03																		
Engineering Intern	13.07																		
GSI Specialist III	41.21																		
GSI Specialist I/II	24.12																		
Administrative	28.32													40	1.25%	0.35			
TOTALS		60	100%	$53.27	92	100%	$49.52	280	100%	$42.74	180	100%	$45.74	3200	100%	$45.23	108	100%	$39.41

LakeCounty
Division of Transportation

EXHIBIT A

Average Hourly Project Rates

Route	Peterson Rd at Alleghany Rd
Section	
County	Lake
Job No.	TBD
PTB/Item	

Consultant Christopher B. Burke Engineering, Ltd.

Date 02/18/14

Sheet 3 **OF** 4

Payroll Classification	Avg Hourly Rates	Task 12 – LCSMC Stormwater C			Task 13 – Utility Coordination			Task 14 – Bike Path Extension			Task 15 – Pre-Final PS&E			Task 16 – Final PS&E			Task 17 – Phase III Support		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer VI	70.00										20	1.25%	0.88	8	1.43%	1.00			
Engineer V	59.86	32	11.76%	7.04	16	20.00%	11.97	40	40.00%	23.94	160	10.00%	5.99	54	9.64%	5.77	40	33.33%	19.95
Engineer IV	48.84	40	14.71%	7.18							80	5.00%	2.44	32	5.71%	2.79			
Engineer III	40.30	80	29.41%	11.85				40	40.00%	16.12	120	7.50%	3.02	48	8.57%	3.45	40	33.33%	13.43
Engineer I/II	29.78				8	10.00%	2.98				160	10.00%	2.98	54	9.64%	2.87			
Env Res Specialist V	64.32																		
Env Res Specialist IV	48.49																		
Env Res Specialist III	36.84																		
Env Res Technician	32.91																		
Landscape Architect	48.24										80	5.00%	2.41	32	5.71%	2.76			
Survey V	70.00																		
Survey IV	57.00																		
Survey III	50.75																		
Survey II	35.95				40	50.00%	17.98												
Survey I	25.58																		
Survey Intern	13.07																		
CAD Manager	52.39										160	10.00%	5.24	54	9.64%	5.05			
Asst. CAD Manager	47.57				16	20.00%	9.51				160	10.00%	4.76	54	9.64%	4.59			
CAD II	42.68							20	20.00%	8.54	320	20.00%	8.54	108	19.29%	8.23	40	33.33%	14.23
CAD I	32.66																		
Engineering Technician V	65.00																		
Engineering Technician IV	43.22										160	10.00%	4.32	54	9.64%	4.17			
Engineering Technician III	43.09	80	29.41%	12.67							160	10.00%	4.31	54	9.64%	4.16			
Engineering Technician I/II	36.03																		
Engineering Intern	13.07																		
GSI Specialist III	41.21	40	14.71%	6.06															
GSI Specialist I/II	24.12																		
Administrative	28.32										20	1.25%	0.35	8	1.43%	0.40			
TOTALS		272	100%	$44.81	80	100%	$42.44	100	100%	$48.60	1600	100%	$45.23	560	100%	$45.24	120	100%	$47.61

LakeCounty
Division of Transportation

EXHIBIT A

Average Hourly Project Rates

Route	Peterson Rd at Alleghany Rd
Section	
County	Lake
Job No.	TBD
PTB/Item	

Consultant Christopher B. Burke Engineering, Ltd.

Date 02/18/14

Sheet 4 **OF** 4

Payroll Classification	Avg Hourly Rates	Task 18 – QA/QC Hours	% Part.	Wgtd Avg	Task 19 – Administration Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer VI	70.00	20	25.00%	17.50	12	33.33%	23.33												
Engineer V	59.86	20	25.00%	14.97	24	66.67%	39.91												
Engineer IV	48.84	40	50.00%	24.42															
Engineer III	40.30																		
Engineer I/II	29.78																		
Env Res Specialist V	64.32																		
Env Res Specialist IV	48.49																		
Env Res Specialist III	36.84																		
Env Res Technician	32.91																		
Landscape Architect	48.24																		
Survey V	70.00																		
Survey IV	57.00																		
Survey III	50.75																		
Survey II	35.95																		
Survey I	25.58																		
Survey Intern	13.07																		
CAD Manager	52.39																		
Asst. CAD Manager	47.57																		
CAD II	42.68																		
CAD I	32.66																		
Engineering Technician V	65.00																		
Engineering Technician IV	43.22																		
Engineering Technician III	43.09																		
Engineering Technician I/II	36.03																		
Engineering Intern	13.07																		
GSI Specialist III	41.21																		
GSI Specialist I/II	24.12																		
Administrative	28.32																		
TOTALS		80	100%	$56.89	36	100%	$63.24	0	0%	$0.00	0	0%	$0.00	0	0%	$0.00	0	0%	$0.00

EXHIBIT B

Direct Cost Estimate

Task	In-House		Outside																
	Mileage		Messenger/Fed Ex		Car Rental (I-Go)		81/2 x 11 B/W Copies		81/2 x 11 Color Stock		11x17 B/W copies		22 x 34 Mylar		22 x 34 Bond		22 x 34 Color		
	Miles @ 0.565	Cost	Each @ $25	Cost	$10/hr ($55/day Max)	Cost	Pages @ 0.09	Cost	Pages @ 0.10	Cost	Pages @ 0.15	Cost	Pages @ 10.50		Pages @ 0.96	Cost	Pages @ 20	Cost	
Task 1 – Data Collection and Review		$0.00		$0		$0.00	250	$22.50		$0.00		$0.00		$0.00		$0.00		$0	$22.50
Task 2 – Pick-Up Survey	200	$113.00		$0	8	$80.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0	$80.00
Task 3 – Geotechnical Investigation and Analysis		$0.00		$0		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0	$0.00
Task 4 – Drainage Studies		$0.00		$0		$0.00	250	$22.50		$0.00		$0.00		$0.00		$0.00		$0	$22.50
Task 5 –Village Coordination	200	$113.00		$0	8	$80.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0	$80.00
Task 6 – Preliminary Geometric Plans	100	$56.50		$0	4	$40.00		$0.00		$0.00		$0.00		$0.00	50	$48.00		$0	$88.00
Task 7 – Corridor Landscaping		$0.00		$0		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00	20	$400	$400.00
Task 8 – Retaining Wall Structural Design		$0.00	2	$50		$0.00	200	$18.00	6	$0.60	20	$3.00		$0.00		$0.00		$0	$71.60
Task 9 – Traffic Maintenance Analysis	100	$56.50		$0	4	$40.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0	$40.00
Task 10 – Preliminary PS&E	100	$56.50	1	$25	4	$40.00		$0.00		$0.00	1200	$180.00		$0.00		$0.00		$0	$245.00
Task 11 – Wetland Permitting		$0.00		$0		$0.00	200	$18.00	6	$0.60	20	$3.00		$0.00	20	$19.20		$0	$40.80
Task 12 – LCSMC Stormwater Calcs and Permit		$0.00	2	$50		$0.00	200	$18.00	6	$0.60	20	$3.00		$0.00	20	$19.20		$0	$90.80
Task 13 – Utility Coordination		$0.00		$0		$0.00	450	$40.50		$0.00	6000	$900.00		$0.00	6000	$5,760.00		$0	$6,700.50
Task 14 – Bike Path Extension Study	100	$56.50		$0	4	$40.00		$0.00		$0.00	10	$1.50		$0.00	10	$9.60	10	$200	$251.10
Task 15 – Pre-Final PS&E	100	$56.50	1	$25	4	$40.00	600	$54.00		$0.00	1800	$270.00		$0.00	300	$288.00		$0	$677.00
Task 16 – Final PS&E		$0.00	1	$25		$0.00	500	$45.00	12	$1.20	389	$58.35	100	$1,050.00	389	$373.44		$0	$1,552.99
Task 17 – QA/QC		$0.00		$0		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0	$0.00
Task 18 – Administration		$0.00		$0		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0	$0.00
TOTALS:	900	$508.50	7	$175.00	36	$360.00	2650	$238.50	30	$3.00	9459	$1,418.85	100	$1,050.00	6789	$6,517.44	30	$600.00	
																	Total=	$10,871.29	$10,362.79

TESTING SERVICE CORPORATION

Corporate Office

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

February 18, 2014

Mr. Martin Worman
Christopher B. Burke Engineering, Ltd.
9575 West Higgins Road Suite 600
Rosemont, IL 60018-4920

RE: P.N. 52,329
Geotechnical Exploration
Proposed Retaining Wall
Peterson Road West of Alleghany
Grayslake, IL

Dear Mr. Worman:

Testing Service Corporation (TSC) is pleased to submit this proposal to provide Geotechnical Engineering Services for the above captioned project. It responds to your email dated February 11, 2014. The objectives of the Geotechnical Study are to explore soil conditions and provide recommendations for foundation and pavement design in connection with the proposed improvements to Peterson Road.

Project Description:

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

- Peterson Road will be widened to four lanes with a possible bike path. Retaining wall will be needed in connection with Peterson Road cut into existing hill which is about 15 to 20 feet above existing roadway. The retaining wall likely be soldier pile or spread footings. The wall will extend about 600 lineal feet and will be located about a half mile west of Alleghany Road in Grayslake, IL (Lake County). The project will be funded by the County.

- It is TSC's understanding that CBBEL/Lake County will get permission for TSC access private property prior to work being performed.

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

Boring Program:

We are proposing to drill nine (9) soil borings extended to a depth of 50 feet as part of our Geotechnical Exploration. Total drilling footage on this basis is estimated to be about 450 lineal feet.

For the purposes of this proposal we have assumed that the boring locations will be accessible to conventional drilling equipment. In this regard, they should not be located in standing water, within wooded or landscaped areas, or on steeply sloping ground. No provisions have been made for

tree/brush clearing or other obstruction removal should borehole access be impeded. Landscape restoration or crop damage (if required) is also not included in the project budget.

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

Soil samples will primarily be obtained by split-spoon methods, with thin-walled tube also taken if conditions dictate. Sampling will be performed at 2½-foot intervals for the first 30 feet and not exceed 5-foot intervals below this level. A representative portion of the split-spoon samples will be placed in a glass jar with screw-type lid for transportation to our laboratory. Groundwater observations will also be made during and following completion of drilling operations, with any boreholes in pavement areas to be backfilled immediately and patched at the surface.

Laboratory Testing:

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

Engineering Report:

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

- General earthwork and construction considerations.
- Remedial work and/or treatment of unstable or unsuitable soil types.
- Fill placement and compaction for foundations and pavements.
- Foundation type, capacity and depth/elevation.
- Protective measures required for frost action.

Fees and Scope:

In accordance with the Cost Estimate attached, TSC is proposing a not-to-exceed budget amount of Twenty Two Thousand Fifty Dollars ($22,050.00) to provide the Geotechnical Exploration outlined above. Our proposal is based on the understanding that: the boring locations are accessible to a conventional truck or All-Terrain Vehicle (ATV) mounted drill; none of the borings will be located in standing water; and that the work can be performed during standard business hours. Our fee is further subject to this proposal being accepted by you on or before July 31, 2014.

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

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

Closure:

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

Mr. Martin Worman
Christopher B. Burke Engineering, Ltd.
9575 West Higgins Road Suite 600
Rosemont, IL 60018-4920
Tel: (847) 823-0500
Fax: (847) 823-0520
email: mworman@cbbel.com

If this proposal meets with your approval, please indicate your acceptance by signing one copy and returning it to our Carol Stream, Illinois office. When also completing the attached Project Data form, kindly indicate who is to receive copies of TSC's report and other related information.

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

Respectfully submitted,

TESTING SERVICE CORPORATION

Michael V. Machalinski, P.E.
Vice President

Prepared by,

Michael D. Billings
Vice President

MVM:MDB:kw

Enc: Cost Estimate
General Conditions
Project Data Sheet

Approved and accepted for _____ by:

_____
(NAME)

_____
(TITLE)

_____
(DATE)

COST ESTIMATE
Proposed Retaining Wall
Peterson Road West of Alleghany
Lake County, IL
TSC P.N. 52,329

	ITEM	UNITS	QTY	RATE	COST
STAKING AND UTILITY CLEARANCE					
1.1	Layout Person to Mark Boring Locations, Obtain Surface Elevations and/or Arrange for Clearance of Underground Utilities	Hour	8.0	110.00	$ 880.00
1.2	Permits, Bonds and Other Direct Charges	Cost + 10%	0	0.00	$ 0.00
DRILLING AND SAMPLING					
	DRILL RIG WITH 2-MAN CREW (Portal to Portal)				
2.1	Drill and Two Person Crew (Prevailing Wage)	Lump Sum	1.0	15,500.00	$ 15,500.00
LABORATORY TESTING					
3.1	Examine Samples to Describe by Textural System and Classify Using the Unified Soil Classification System	Each	144	4.00	$ 576.00
3.2	Water Content Determination (Includes Pocket Penetrometer Reading on Cohesive Samples)	Each	130	7.00	$ 910.00
3.3	Unconfined Compressive Strength of Cohesive Soils (or Torvane Shear Strength Measurement)	Each	36	14.00	$ 504.00
3.4	Dry Unit Weight Determination	Each	9	7.00	$ 63.00
3.5	Atterberg Limit Determinations	Each	3	100.00	$ 300.00
3.6	Sieve Analysis with Hydrometer	Each	3	130.00	$ 390.00
3.7	Loss-On-Ignition (Organic Content)	Each	1	45.00	$ 45.00
ENGINEERING SERVICES					
4.1	Prepare Geotechnical Report with Boring Logs and Location Plan	Lump Sum	1	2,400.00	$ 2,400.00
4.2	Geotechnical Engineer to Meet With Lake County to Coordinate Field Work	Lump Sum	1.0	480.00	$ 480.00
4.3	Senior Engineer to Consult or Attend Project Meetings	Hour	0.0	160.00	$ 0.00
				ESTIMATED TOTAL:	$ 22,048.00
				RECOMMENDED BUDGET:	$ 22,050.00

GENERAL CONDITIONS

Geotechnical and Construction Services

TESTING SERVICE CORPORATION

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

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

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

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

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

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

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to perform same shall not in any way operate or excuse any contractor from the performance of its work in accordance with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

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

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

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

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

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

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

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

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

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

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

Project Data Sheet

TESTING SERVICE CORPORATION

General Information:

Project Name: _____

Project Address: _____

City / State / Zip: _____

Project Manager: _____

E-Mail: _____

Telephone: _____

Fax: _____

Site Contact: _____

E-Mail: _____

Telephone: _____

Fax: _____

Send Invoice To:

Purchase Order Number: _____

Attention: _____

Company: _____

Address: _____

City / State / Zip: _____

E-Mail: _____

Telephone: _____

Fax: _____

Important Notes:

_____

_____

_____

_____

Completed By:

Signature: _____

Name: _____

Date: _____

Distribute Reports as Follows:

Name: _____

Company: _____

Address: _____

City / State / Zip: _____

E-Mail: _____

Telephone: _____

Fax: _____

Name: _____

Company: _____

Address: _____

City / State / Zip: _____

E-Mail: _____

Telephone: _____

Fax: _____

Name: _____

Company: _____

Address: _____

City / State / Zip: _____

E-Mail: _____

Telephone: _____

Fax: _____

Name: _____

Company: _____

Address: _____

City / State / Zip: _____

E-Mail: _____

Telephone: _____

Fax: _____

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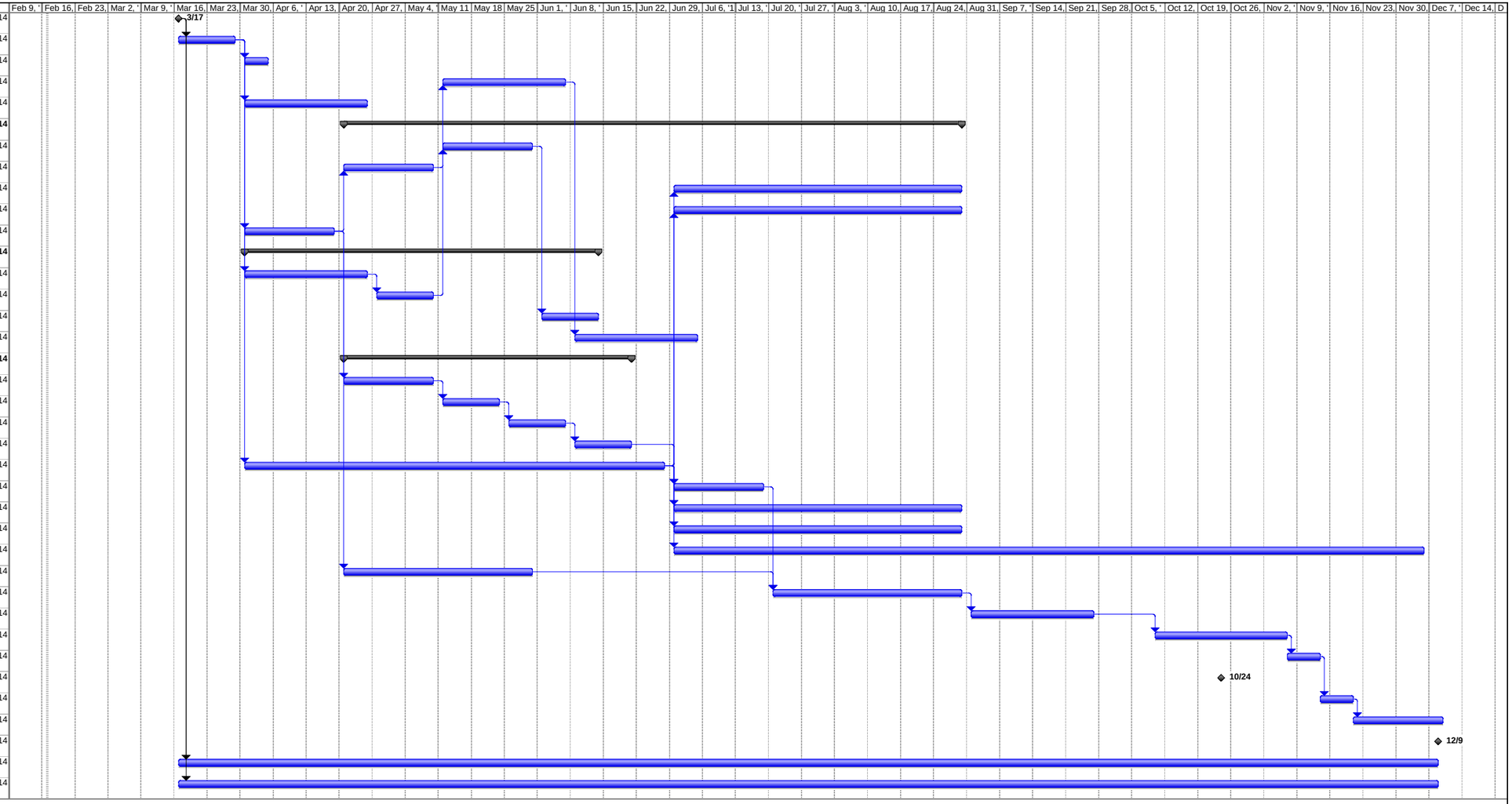
ID	Task Name	Duration	Start	Finish
1	Notice to Proceed	0 days	Mon 3/17/14	Mon 3/17/14
2	Data Collection and Review	10 days	Mon 3/17/14	Fri 3/28/14
3	Pick-Up Survey	5 days	Mon 3/31/14	Fri 4/4/14
4	Geotechnical Investigation and Analysis	20 days	Mon 5/12/14	Fri 6/6/14
5	Drainage Studies	20 days	Mon 3/31/14	Fri 4/25/14
6	**Agency Coordination**	**95 days**	**Mon 4/21/14**	**Fri 8/29/14**
7	Village of Grayslake Landscaping	15 days	Mon 5/12/14	Fri 5/30/14
8	Easement Coordination with Alter Group	15 days	Mon 4/21/14	Fri 5/9/14
9	FAA	45 days	Mon 6/30/14	Fri 8/29/14
10	Website Exhibits and Renderings	45 days	Mon 6/30/14	Fri 8/29/14
11	Preliminary Gemetric Plans	15 days	Mon 3/31/14	Fri 4/18/14
12	**Corridor Landscaping**	**55 days**	**Mon 3/31/14**	**Fri 6/13/14**
13	Prelimminary Median Landscaping Plan	20 days	Mon 3/31/14	Fri 4/25/14
14	LCDOT Review	10 days	Mon 4/28/14	Fri 5/9/14
15	Revised Median Landscaping Plan	10 days	Mon 6/2/14	Fri 6/13/14
16	Retainaning Wall Structural Design	20 days	Mon 6/9/14	Fri 7/4/14
17	**Traffic Management Analysis**	**45 days**	**Mon 4/21/14**	**Fri 6/20/14**
18	Concept Staging Plan	15 days	Mon 4/21/14	Fri 5/9/14
19	LCDOT Review	10 days	Mon 5/12/14	Fri 5/23/14
20	Revised Staging Plan	10 days	Mon 5/26/14	Fri 6/6/14
21	LCDOT Review	10 days	Mon 6/9/14	Fri 6/20/14
22	Prelim PS&E	65 days	Mon 3/31/14	Fri 6/27/14
23	LCDOT Review of Prelim PS&E	15 days	Mon 6/30/14	Fri 7/18/14
24	Wetland Permitting	45 days	Mon 6/30/14	Fri 8/29/14
25	LCSMC Stormwater Calculations and Permit	45 days	Mon 6/30/14	Fri 8/29/14
26	Utility Coordination	115 days	Mon 6/30/14	Fri 12/5/14
27	Bike path Extension Study	30 days	Mon 4/21/14	Fri 5/30/14
28	Pre-Final PS&E	30 days	Mon 7/21/14	Fri 8/29/14
29	LCDOT Review of Pre-Final PS&E	20 days	Mon 9/1/14	Fri 9/26/14
30	Final PS&E	20 days	Fri 10/10/14	Thu 11/6/14
31	LCDOT Final Review	5 days	Fri 11/7/14	Thu 11/13/14
32	Cost Estimate for Appropriation	0 days	Fri 10/24/14	Fri 10/24/14
33	Final Bid Package	5 days	Fri 11/14/14	Thu 11/20/14
34	Phase III Support	13 days	Fri 11/21/14	Tue 12/9/14
35	Letting	0 days	Tue 12/9/14	Tue 12/9/14
36	QA/QC	191 days	Mon 3/17/14	Mon 12/8/14
37	Administration	191 days	Mon 3/17/14	Mon 12/8/14



Project: Project1
Date: Mon 2/17/14

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline