


DRAFT

Municipality Lake County	L O C A L  A G E N C Y	 <b>Illinois Department of Transportation</b>  <b>Preliminary Engineering Services Agreement For Motor Fuel Tax Funds</b>	C O N S U L T A N T	Name Bloom Companies, LLC
Township				Address 600 W. Fulton St., Suite 701 City Chicago, IL 60661
County Lake County – Division of Transportation Section 13-00000-07-GM				State IL

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

**Section Description**

Name Fairfield Road and Lewis Avenue Retaining Wall Maintenance

Route Fairfield Road Length \_\_\_\_\_ Mi. 510 FT (Structure No. NA )

Route Lewis Avenue Length \_\_\_\_\_ Mi. 60 FT (Structure No. NA )

Termini Fairfield Road – 1<sup>st</sup> wall location: 2000' North of IL Rte 60. Second pair of walls: 1150' south of Townline Road

Termini Lewis Avenue – 400' south of Russell Road

Description:

Existing walls appear unstable – repair as needed. Also repair pavement, drainage, and guardrail, as needed

**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.  As necessary, 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.~~ Bloom will be assisted by **Lake County Stormwater Management Commission** with permit preparation. All permit application fees and agency review fees associated with permits to be paid directly by the DEPARTMENT.
  - 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 his 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, entitled Exhibit A.**

- (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 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~~

<del>Awarded Cost</del>	<del>Percentage Fees</del>	<del>(see note)</del>
<del>Under \$50,000</del>	<del>_____</del>	<del>%</del>

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

- 2. To pay for services rendered in accordance with this AGREEMENT at the actual cost of performing such work plus 180% 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 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.

**The Total Not-to-Exceed Contract Amount shall be \$167,400.**

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 180 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 180 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.

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#### **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:

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

ATTEST:

State of Illinois, acting by and through its

By \_\_\_\_\_

County Board

Clerk

By \_\_\_\_\_

(Seal)

Title \_\_\_\_\_

RECOMMENDED FOR EXECUTION

Paula J. Trigg  
Acting Director of Transportation/Acting County Engineer  
Lake County

Executed by the ENGINEER:

Bloom Companies, LLC  
Engineering Firm

600 W. Fulton Street, Suite 701  
Street Address

Chicago, IL 60661  
City, State

ATTEST:

By Judith B. Bulgin  
Title Senior Accountant

By Mehmet P. Maranipal  
Title PRESIDENT

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

## Exhibit A

### **Fairfield Road and Lewis Avenue Retaining Wall Maintenance**

The following scope of services has been developed from the Final Scoping Report, dated June 25, 2012, developed by the Lake County Division of Transportation for retaining wall and culvert repairs.

The retaining wall and culvert locations are:

- Fairfield Road (North location) – 1150' south of Townline Road. West side - 320' of wall. East side - 60' of wall. No culverts at this location. Concrete block walls.
- Fairfield Road (South location) – 2000' north of IL Rte 60. West side – 190' of wall. East side – no wall. There is a culvert running through the wall at this location. Concrete block walls.
- Lewis Avenue – 400' south of Russell Road. West side 60' of wall. East side – no wall. Possibility of culvert repair. Gabion walls.

The first part of the project is to develop a report describing the problems, recommended solutions, including cost estimates, identify impacts, initiate permit support actions, and prepare a concept plan. Repairs for retaining walls are expected to be either sheet pile or soldier pile with concrete form liners. Guardrail modifications, utility impacts, maintenance of traffic, and possible property owner involvement will also be discussed in the Report. Additional work is proposed opposite the Fairfield Road (south location) wall; an existing sheet pile wall is to be cut/torched below the pavement surface and the shoulder paved.

We anticipate working directly with the Lake County Division of Transportation (LCDOT) in the development of the project. We will also request the Lake County Stormwater Management Commission (LCSMC) to delineate wetlands and prepare associated reports with the delineation, to serve as our contact for wetlands and stormwater management permits, regardless of jurisdiction, and to be the provider of any offsite wetland or floodplain mitigation. Any cost for these services is assumed to be paid for directly by LCDOT.

### **SCOPE OF SERVICES**

The proposed scope of services follows:

1. Coordination and Data Collection – Specific tasks shall include:
  - a. Attend a kick-off strategy meeting with LCDOT staff and obtain any relevant outstanding data or plans LCDOT may have. Provide minutes of the meeting with a record of discussions and circulate to all participants.
  - b. Field review and photos of project area. This will cover the condition of the retaining wall, condition of adjoining pavement and shoulders, condition of guardrail, existing drainage structures and conditions, culvert conditions, existing other features that may affect design (such as speed limits, need for other repairs, lighting, etc.).
  - c. Utility Coordination – At the beginning of this project we will contact JULIE and other observed utilities to gather location information and identify potential

conflicts. This coordination will include introduction letters to the identified utilities explaining the project scope, letting date and construction schedule.

This coordination will continue as the project proceeds to identify and resolve conflicts in a timely, effective manner. We will send the TS&L and the preliminary PS&E to potentially affected utilities. Additional coordination will proceed as needed.

2. Survey - Topographic (by Dynasty) – Conduct a detailed topographic survey as necessary for the planning and design of the project in accordance with LCDOT Survey Procedures Attachment A. This does not include ROW determination; ROW limits and adjoining property owner data will be provided by the LCDOT or as shown on Lake County's GIS Interactive Online Program. To establish limits of guardrail need, grading limits, earthwork quantities, and factors affecting maintenance of traffic, we are proposing 900' of full topo survey with 50' cross-sections 60' either side of the centerline for Fairfield Road and additional roadway survey for 400'. For Fairfield Road south we are proposing 800' of full topo survey with 50' cross-sections 60' either side of the centerline for Fairfield Road and additional roadway survey for 400'. For Lewis Avenue we are proposing 600' of topo survey, 50' cross-sections 60' either side of the centerline and additional roadway survey for 400'. The survey will establish horizontal and vertical control sufficient to allow construction of the proposed repairs.
3. Geotechnical Investigation – This task will define the subsurface conditions and establish the foundation parameters to allow construction of the proposed repairs. These factors will include length of embedment for sheet pile or soldier pile walls, and allowable bearing strength if spread footings are considered. Specific tasks shall include:
  - a. Site, initiate and monitor soil borings. At Fairfield Road north we are proposing 4 borings on the west and 2 on the east side. At Fairfield Road south we are proposing 3 borings. At Lewis Avenue we are proposing 2 borings. All borings will be to 25' or deeper to competent soil strata, and of the same depth. All borings will be performed without the need for detours, using daytime lane closures and flaggers.
  - b. Determine soil and pavement characteristics through observation, field tests and laboratory tests. The field tests will consist of SPT, Rimac and Pocket Penetrometer tests. The laboratory tests will consist of Moisture Content, Atterberg Limit, and Grain Size distribution tests w/hydrometer as appropriate.
  - c. Produce soil boring logs and profiles along the retaining walls.
  - d. Subgrade recommendations, including locate and delineate approximate limits and depths of unsuitable materials within the limits of construction and proposed remediation.
  - e. Prepare Geotechnical Reports for Fairfield Road and Lewis Avenue Retaining Walls. The investigation and report will be prepared using IDOT standards as a guide.

4. Phase I - Type Size & Location Report – We will prepare a TS&L report with drawings for repairs at each location. We will consider aesthetics, cost, site conditions, overhead and underground utilities, environmental factors and constructability (e.g., impact to traffic) in the development of the TS&L and provide documentation of that with our submittal. The report with exhibits will be reviewed only by LCDOT. Once LCDOT has reviewed the report we are prepared to meet with LCDOT to discuss and resolve comments and then to proceed to design.

As part of this report we will assess what culvert repairs or replacements may be necessary. Permit requirements will also be established.

5. Environmental/Permitting – Bloom will secure the US ACOE section 404 permit with assistance from LCSMC, as necessary.

LCSMC will also be responsible for the wetland delineations with report. We will prepare any necessary exhibits to secure permits, including showing the delineated wetland limits on proposed plans and estimates of quantities for permitting. We will use the ECOCAT system to gather information on endangered species. We will also follow up with IDNR if further coordination is required. We will prepare and submit the materials for the Watershed Development Permit to LCSMC, as necessary.

While Cultural Permitting was noted in the Scoping Report, the project as proposed involves no right-of-way, easements or even adjacent structures. We anticipate no need for Cultural Resources coordination. Likewise, we anticipate no need for Special Waste permitting. During our field reviews or subsequent activities if we note anything that would invalidate these assumptions we will notify LCDOT to discuss and develop an appropriate course of action.

6. Plans Specifications and Estimates – With the wall type agreed upon and permit issues defined, we will proceed to prepare preliminary and final PS&E. A single PS&E package will be provided for Fairfield Road and Lewis Avenue. Preliminary PS&E will include all sheets in sufficient detail to establish all design parameters, an approximate cost estimate and list of required special provisions and to allow review by the County. The electronic copies of the final PS&E's will be provided in the format as described on attachment B "Electronic Bid Package Format and Submittal". The final plans will be one hard copy of the total bid package and an electronic copy. At this time our list of sheets for each projects includes:

- a. Cover Sheet (1)
- b. General Notes and Summary of Quantities (1)
- c. Schedule of Quantities (2)
- d. Boring Log (6)
- e. Alignment, Ties & Control (3)
- f. Traffic Control / Staging (4)
- g. Erosion Control & Landscaping (3)
- h. Plan & Profile (4)
- i. Wall Plan, Elevation and Section (12)

- j. Miscellaneous Project Specific Details (as needed-2±)
- k. Cross-Sections (11)
- l. IDOT and Lake County Standard and Details (as needed-30±)

7. Administration and Management – We will monitor our progress to ensure that we meet all LCDOT deadlines and maintain the quality of our deliverable. We will provide written monthly progress reports to LCDOT summarizing the status of the project as well as budgetary issues.



**DIRECT COSTS**

Wall Maintenance - Fairfield Road and Lewis Avenue

(All direct costs will be billed at actual costs)

	No. of Trips	\$60/ trip, including tolls	Printing	Delivery	Driller Costs & Traffic Control	Total Out of House Direct Costs
1. Coordination & Data Collection	3	\$180.00				\$180.00
2. Survey - Topographic						\$0.00
3. Geotechnical Investigation	6	\$360.00	\$50.00	\$30.00	\$18,000.00	\$18,440.00
4. Phase I - TS & L Report			\$50.00	\$30.00		\$80.00
5. Environmental/Permitting	2	\$120.00	\$10.00	\$30.00		\$160.00
6. P S & E	2	\$120.00	\$450.00	\$60.00		\$630.00
7. Admin & Management	2	\$120.00		\$30.00		\$150.00
<b>TOTAL</b>		<b>\$900.00</b>	<b>\$560.00</b>	<b>\$180.00</b>	<b>\$18,000.00</b>	<b>\$19,640.00</b>



FIRM NAME Bloom Companies, LLC  
 PRIME/SUPPLEMENT

Payroll Escalation Table  
 Fixed Raises  
 New Formula

DATE 07/26/12  
 PTB NO.

OVERHEAD RATE  
 COMPLEXITY FACTOR  
 % OF RAISE 3.00%

CONTRACT TERM 8 MONTHS  
 START DATE 12/31/2012  
 RAISE DATE 1/1/2013

ESCALATION PER YEAR

12/31/2012 - 1/1/2013	1/2/2013 - 9/1/2013		
0	8		
8	8		

= 1.0800  
 = 0.00%

= 103.00%

3.00%

The total escalation for this project would be:









## **SURVEY PROCEDURES** (Revised 4/21/08)

### **UNITS-COORDINATES**

The CONSULTANT will conduct all surveying, stationing, and preparation of required plans using English units of measure and the U.S. Survey Foot. State Plane Coordinates – Illinois East Zone, NAD 83 shall be obtained for all alignment and survey control points.

### **HORIZONTAL ALIGNMENT**

Unless otherwise specified in the services contract, the CONSULTANT is to provide the horizontal alignment. The CONSULTANT'S SURVEYOR will try to re-establish the original horizontal alignment as shown on the recorded R.O.W. plats. The CONSULTANT shall contact LCDOT's Land Surveyor to obtain R.O.W. plats and field notes and benchmarks before establishing the horizontal alignment and stationing. Notify LCDOT's Surveyor immediately if the alignment cannot be reproduced or if in the CONSULTANT'S opinion the existing alignment information is in error.

~~The CONSULTANT'S SURVEYOR, prior to construction, shall stake the PCs, Pls, PTs, and POTs so that LCDOT's Surveyor can locate them later for construction staking. The CONSULTANT'S SURVEYOR will provide four reference ties to all U.S. Public Land Survey Monuments located within the construction limits. The reference points should be located outside of the anticipated construction limits if practical, so that they can be used after construction to replace the monuments. The CONSULTANT shall record Monument Records for all Section and Quarter Section corners set or found within the construction limits.~~

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

An Alignment and Tie Sheet shall be provided as part of the final product. The Alignment and Tie sheet shall be signed and sealed by the CONSULTANT'S SURVEYOR. The station, offset and coordinates of the alignment points and survey control points shall be shown. It shall be noted whether the coordinates, stationing and distances are State Plane grid or ground surface. In the case that the information shown is ground surface distances, the State Plane Coordinates still must also be shown for all alignment points and survey control points in order that they can be located with GPS and so that the project can be referenced into our GIS maps. The coordinates may be

shown in a separate table. In either case the grid (combination) factor must also be shown.

### **VERTICAL ALIGNMENT**

Vertical control for the project shall be based on NGVD 29 or NAVD 88 benchmarks. Indicate on the plans which Datum is used. NGVD 29 Lake County Mapping Benchmarks are preferred (<http://gis.lakeco.org/maps/>). LCDOT's Land Surveyor may also be contacted for benchmarks that may be in the area. The controlling benchmarks and the site benchmarks shall be described on the plans. Site benchmarks are to be located at less than 1000-foot intervals with a minimum of two (2) on each project.

All benchmarks will be located on stable objects. LCDOT prefers these objects to be outside the construction site. Some acceptable benchmark examples are, spikes in poles, bolts on fire hydrant rings, and concrete foundations. LCDOT's surveyor can be contacted for benchmarks that may be in the area.

### **TOPOGRAPHY**

The CONSULTANT shall cut cross sections at 50-foot intervals in urban areas (100-foot intervals in rural areas) and at all points needing clarification. The cross section interval should be defined in the engineering services contract.

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

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

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

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

The collected survey data for the existing topography shall have a minimum of 3<sup>rd</sup> Order Accuracy horizontally with readings to the nearest 0.1 feet for vertical on gravel or ground and readings to the nearest 0.01 feet for vertical on all other surfaces.



## RAILROAD INSURANCE

~~The CONSULTANT will comply with the railroad's requirements when conducting a survey on the railroad's ROW. Usually this includes obtaining a permit, paying a fee, obtaining Railroad Protective Liability Insurance, notification of a flagman to be present near the rails during the survey operations and any other requirements of the railroad. The CONSULTANT is responsible for all of the foregoing requirements.~~

## DELIVERABLES

- I. Copies from the CONSULTANT'S field books, showing benchmarks, level circuits, & structure details, such as size and inverts etc.
- II. Base Drawing at 1:1. All the topographic information shall be plotted electronically. The data shall be recorded in a MICROSTATION .DGN format. All line work defining different elements shall be completed using LCDOT's CELL and LINE LIBRARIES (see attachment). ASCII files containing all point information as described below shall be included. Backup CD's or diskettes shall be provided.
- III. SUMMARY SHEETS showing:
  - (1) Point number
  - (2) Point identification by code and description
  - (3) Station
  - (4) Distance offset (right or left)
  - (5) Northing and Easting coordinate values
  - (6) "Z" elevations

\* Four computer printouts shall be provided:

1. List of points referenced by stations.
2. List of points referenced by sequential point numbering.
3. List of points sorted by point identification.
4. "ID" acronym explanation sheets.

An example showing the different printouts is shown on the next page.

**(LCDOT'S IDENTIFICATION CODES SHALL BE USED – see attachment)**

TYPICAL PRINT-OUT FORM (EXAMPLE)								
BY POINT NUMBERS								
POINT NUMBER	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DEFINITION CODE (1)	DESCRIPTION PD	MATERIAL CODE (1)
3331	104+23.306	-45.869	10313.993	20392.255	207.495	491.10	10 INCH TREE PINE	0
3332	104+50.475	-49.159	10323.810	20416.938	207.743	668	PAVEMENT EDGE	759
3333	104+69.987	-44.270	10261.604	20452.162	207.126	310	FL WGRATE	774
3334	103+93.865	+40.590	10297.779	20365.781	207.378	304.15	6 INCH TILE	836
BY STATION								
STATION	POINT NUMBER	OFFSET	NORTHING	EASTING	ELEVATION	DEFINITION CODE (1)	DESCRIPTION PD	MATERIAL CODE (1)
103+93.865	3334	+40.590	10297.779	20365.781	207.378	304.15	6 INCH TILE	836
104+23.306	3331	-45.869	10313.993	20392.255	207.495	491.10	10 INCH TREE PINE	0
104+50.475	3332	-49.159	10323.810	20416.938	207.743	668	PAVEMENT EDGE	759
104+69.987	3333	-44.270	10261.604	20452.162	207.126	310	FL WGRATE	774
BY POINT DESCRIPTION								
POINT NUMBER	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DEFINITION CODE (1)	DESCRIPTION PD	MATERIAL CODE (1)
3331	104+23.306	+40.590	10297.779	20365.781	207.378	304.15	6 INCH TREE PINE	0
3336	104+50.475	-45.869	10313.993	20392.255	207.495	491.10	10 INCH TREE PINE	0
2323	104+69.987	-49.159	10323.810	20416.938	207.743	668	6 INCH TREE OAK	0
2565	103+93.865	-44.270	10261.604	20452.162	207.126	310	5 INCH TREE OAK	0

(1) LCDOT CODES

LCDOT's Land Surveyor:

Steve Heuer, PLS  
600 West Winchester Road  
Libertyville, IL 60048  
(847) 377-7488



# Dynasty Group

Engineers & Surveyors

June 29, 2012

Mr. Mike Okrent  
Bloom Companies, LLC  
600 W. Fulton St., Suite 701  
Chicago, IL 60661

RE: Cost Proposal for Lake County DOT Retaining Wall Maintenance Projects  
Survey Services for Fairfield Road and Lewis Ave.

Dear Mr. Okrent:

Dynasty Group, Inc. is pleased to submit this cost proposal for the above referenced project. We have estimated a total budget of **\$22,450.07**. Please refer to the attached proposed scope of work and cost estimate for a breakdown of hours.

Should you have any questions or need additional information, please don't hesitate to contact us. Thank you for this opportunity and we look forward to working with you on this project.

Sincerely,

**DYNASTY GROUP, INC.**

Jesse Bruning, PE, PLS  
Senior Engineer

Attachments



**Scope of Work for Survey Services**  
**Lake County DOT – Fairfield Road and Lewis Ave.**  
**By**  
**Dynasty Group Inc.**

**June 29, 2012**

The scope of work of this project includes the following items:

**Project Limits:**

- Survey limits are defined as 500' North and South of the retaining walls described in the attached Project Scoping Report, as provided by Lake County DOT.
  - The limits of Fairfield Road are approximately 2500 linear feet.
  - The limits of Lewis Ave. are approximately 1100 linear feet.
  - Dynasty understands that the width of the survey limits are to be defined as the approximate right-of-way lines of Fairfield Road and Lewis Ave. In areas of dense tree cover the survey limits will extend to the brush line.

**Horizontal and Vertical Controls:**

- Horizontal control will use IL East State Plane Coordinates and will be derived from static GPS observations, unless specific horizontal control points are provided by Lake County DOT.
- Vertical control will be based on Lake County vertical benchmarks, as provided by Lake County GIS website.
- Vertical benchmarks will be established on site and recorded in the field book.

**Topographic and Cross-Section Survey:**

- Data collection will be performed with RTK GPS technology and conventional surveying methods.
- Pavement, shoulders and medians, with elevations reported to the nearest 0.01 feet.
- Cross section data at 50 foot intervals, any changes in grade, and at any change in thickness of the retaining wall(s).
- Locations of all visible utility features and roadway appurtenance, including overhead utilities and pavement markings.
- Heavily treed areas will be outlined, but individual tree locations/identification will not be included within the scope of this survey.
- Document below-rim details of sewer and water manhole structures including type and condition of structure and pipe direction, visible flow, size, material and invert elevation.
- Provide traffic control and coordinate with Lake County for lane/shoulder closures, if applicable.

**Centerline Alignment:**

- Existing alignment for Lewis Ave. will be determined using a "best fit" centerline based on pavement edge locations, in conjunction with any found monumentation and any provided plan alignment information. LCDOT stationing will be used. Consultant will coordinate with LCDOT's surveyor to develop the centerline alignment.
- Alignments will be tied to the project control network by providing station/offsets and witness ties to control points used for topographic survey.

Page 3  
Mr. Mike Okrent  
Re: Cost Proposal for Lake County  
DOT Projects - Survey Services for  
Retaining Wall Maintenance



**DTM/TIN Model:**

- A DTM TIN model will be created within Geopak utilizing the cross section and topographic information collected.

**Soil Boring Location and Wetland Delineation:**

- Dynasty Group will locate and provide coordinates for soil borings and wetlands flagging (to be performed by others), at the direction of Bloom Companies, LLC.

**Deliverables:**

- Microstation and Geopak format files utilizing Lake County DOT CADD standards.
- Copies of field book, including station/offset and witnesses for control points, as well as below-rim measurements and notes for utilities.
- ASCII point files of data collected.
- DTM Model of surveyed surfaces will be included.

Per our correspondence regarding this project, Dynasty Group understands that these services are not to include determination of the right-of-way limits of the roadway, or the preparation of a Plat of Highway. The proposed survey services will be performed in accordance to LCDOT Survey Procedures (Revised 4/21/08); however, limited to the above stated scope.



**COST ESTIMATE**

Format: CPFF  
Date: 6/29/2012

To: Bloom Companies  
600 W. Fulton St., Suite 701  
Chicago, IL 60661

Project: Survey Services for Retaining Wall Maintenance  
Lake County, IL

Attn: Mr. Mike Okrent

Complexity Factor(R): 0.00 Overhead: 145.05%

Project Tasks (attached scope of work)		Total		Fairfield Rd. (2500')		Lewis Ave. (1100')	
A. Labor Cost by Classification	Rate	Hours	Amount	Hours	Amount	Hours	Amount
Project Principal	64.75	3.0	194.25	2.0	129.50	1.0	64.75
Project Manager	49.97	12.0	599.64	8.0	399.76	4.0	199.88
Land Surveyor	46.80	0.0	0.00		0.00		0.00
Senior Engineer	42.55	24.0	1,021.20	16.0	680.80	8.0	340.40
Engineer	31.94	48.0	1,533.12	32.0	1,022.08	16.0	511.04
Junior Engineer	24.50	0.0	0.00		0.00		0.00
Sr. Technician/Sr. Crew Chief	38.00	72.0	2,736.00	48.0	1,824.00	24.0	912.00
Technician/Crew Chief	31.10	0.0	0.00		0.00		0.00
Junior Technician	24.33	72.0	1,751.76	48.0	1,167.84	24.0	583.92
Project Administrator	28.11	0.0	0.00		0.00		0.00
Administrative Assistant	19.25	0.0	0.00		0.00		0.00
<b>Total Direct Labor</b>		<b>231.0</b>	<b>7,835.97</b>	<b>154.0</b>	<b>5,223.98</b>	<b>77.0</b>	<b>2,611.99</b>
<b>B. Overhead &amp; Fringe Benefits (Approved by IDOT)</b>	<b>145.05%</b>		<b>11,366.07</b>		<b>7,577.38</b>		<b>3,788.69</b>
<b>C. In-House Direct Costs (per single unit)</b>	<b>Rate</b>	<b>Quantity</b>	<b>Amount</b>	<b>Quantity</b>	<b>Amount</b>	<b>Quantity</b>	<b>Amount</b>
Vehicle (per day)	45.00	9.0	405.00	6.0	270.00	3.0	135.00
Other		0.0	0.00		0.00		0.00
<b>Total In-House Direct Costs</b>		<b>9.0</b>	<b>405.00</b>	<b>6.0</b>	<b>270.00</b>	<b>3.0</b>	<b>135.00</b>
<b>D. Fixed Fee [insert formula, i.e. 0.145(A+B+R*A+C)]</b>	<b>0.1450</b>		<b>2,843.02</b>		<b>1,895.35</b>		<b>947.67</b>
<b>E. Other Direct Costs (attached quote)</b>	<b>Rate</b>	<b>Quantity</b>	<b>Amount</b>	<b>Quantity</b>	<b>Amount</b>	<b>Quantity</b>	<b>Amount</b>
Other		0.0	0.00		0.00		0.00
<b>Total In-House Direct Costs</b>		<b>0.0</b>	<b>0.00</b>	<b>0.0</b>	<b>0.00</b>	<b>0.0</b>	<b>0.00</b>
<b>TOTAL ESTIMATE</b>			<b>22,450.07</b>	<b>14,966.71</b>		<b>7,483.36</b>	

## **ELECTRONIC BID PACKAGE FORMAT AND SUBMITTAL**

To facilitate posting projects to the LCDOT web site, consultants shall provide electronic copies of the bid documents as follows:

1. A .pdf file of each individual plan sheet.
  - a. Each individual sheet file shall be printed to a .pdf file. Only sheets that require signatures and/or seals may be scanned. All plan sheets shall be printed to scale as full size - 22" x 34" (ANSI D). This facilitates the printing of half-size (11" x 17") sheets to scale.
  - b. The files shall be named as:
    - i. **A-ZZZZZ\$Sheet\_XXXX\_Title.pdf**
    - ii. A-ZZZZZ is the LCDOT CPMS Pin # assigned to the project. The "XXXX" in the file name shall be a sequential 4 digit number beginning at 0001. The numbers shall include all preceding 0's. The 0's are necessary to align the individual files in order on the web site.
    - iii. For example the cover sheet of the project (PIN # B-00300) would be B-00300\$Sheet\_0001\_Cover\_Sheet.pdf.
2. A .pdf file of the entire plan set.
  - a. The individual plan sheets shall be combined into a single file.
  - b. The file shall be named: **A-ZZZZZ\$Full\_Plan\_Set.pdf**.
  - c. A scanned copy of the cover sheet with County Engineer's signature will be added by LCDOT.
3. A compiled .pdf file of the final contract book (specifications).
  - a. The file shall be compiled from individual documents (word processing, spreadsheets, design standards/details, etc.) printed to .pdf files and individual files already in .pdf format. Only documents that cannot be transmitted electronically or that require signatures and/or seals may be scanned.
  - b. The file shall be named: **A-ZZZZZ\$Contract\_Specifications.pdf**.
  - c. A scanned copy of the cover page with County Engineer's signature will be added by LCDOT.
4. If a soils report for the project has been prepared, the consultant shall include a .pdf file named: **A-ZZZZZ\$Soils\_Report.pdf**.

The consultant shall provide the above files on a CD. LCDOT does not have an ftp site. If the consultant has an ftp site arrangements may be made to transfer the files.