


Local Agency Lake County Division of Transportation	 <b>Illinois Department of Transportation</b>  <b>Preliminary Engineering Services Agreement For Federal Participation Phase II Engineering</b>	Consultant Christopher B. Burke Engineering, Ltd.
County Lake		Address 9575 W. Higgins Road, Suite 600
Section 04-00038-03-BT		City Rosemont
Project No.		State IL
Job No.		Zip Code 60018
Contact Name/Phone/E-mail Address Chuck Gleason/847-362-3950/ cgleason@co.lake.il.us		Contact Name/Phone/E-mail Address Jason G. Souden/847-823-0500/ jsouden@cbbel.com

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 PROJECT. Federal-aid funds allotted to the LA by the state of Illinois under the general supervision of the Illinois Department of Transportation (STATE) will be used entirely or in part to finance engineering services as described under AGREEMENT PROVISIONS.

#### Project Description

Name Deerfield Road Bike Trail Route \_\_\_\_\_ Length 0.30 mi. Structure No. \_\_\_\_\_

Termini at Des Plaines River

Description Phase II Engineering for construction of a Deerfield Road Bike Trail

#### Agreement Provisions

##### I. THE ENGINEER AGREES,

1. To perform or be responsible for the performance, in accordance with STATE approved design standards and policies, of engineering services for the LA for the proposed improvement herein described.
2. To attend any and all meetings and visit the site of the proposed improvement at any reasonable time when requested by representatives of the LA or STATE.
3. To complete the services herein described within 270 calendar days from the date of the Notice to Proceed from the LA, excluding from consideration periods of delay caused by circumstances beyond the control of the ENGINEER.
4. The classifications of the employees used in the work should be consistent with the employee classifications and estimated man-hours shown in EXHIBIT A. If higher-salaried personnel of the firm, including the Principal Engineer, perform services that are indicated in Exhibit A to be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the payroll rate for the work performed.
5. That the ENGINEER is qualified technically and is entirely conversant with the design standards and policies applicable for the PROJECT; and that the ENGINEER has sufficient properly trained, organized and experienced personnel to perform the services enumerated herein.
6. That the ENGINEER shall be responsible for the accuracy of the work and shall promptly make necessary revisions or corrections resulting from the ENGINEER's errors, omissions or negligent acts without additional compensation. Acceptance of work by the STATE will not relieve the ENGINEER of the responsibility to make subsequent correction of any such errors or omissions or for clarification of any ambiguities.
7. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by the ENGINEER and will affix the ENGINEER's professional seal when such seal is required by law. Plans for structures to be built as a part of the improvement will be prepared under the supervision of a registered structural engineer and will affix structural engineer seal when such seal is required by law. It will be the ENGINEER's responsibility to affix the proper seal as required by the Bureau of Local Roads and Streets manual published by the STATE.
8. That the ENGINEER will comply with applicable federal statutes, state of Illinois statutes, and local laws or ordinances of the LA.

9. The undersigned certifies neither the ENGINEER nor I have:
- a. employed or retained for commission, percentage, brokerage, contingent fee or other considerations, any firm or person (other than a bona fide employee working solely for me or the above ENGINEER) to solicit or secure this AGREEMENT,
  - b. agreed, as an express or implied condition for obtaining this AGREEMENT, to employ or retain the services of any firm or person in connection with carrying out the AGREEMENT or
  - c. paid, or agreed to pay any firm, organization or person (other than a bona fide employee working solely for me or the above ENGINEER) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out the AGREEMENT.
  - d. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency,
  - e. have not within a three-year period preceding the AGREEMENT been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property,
  - f. are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (e) and
  - g. have not within a three-year period preceding this AGREEMENT had one or more public transactions (Federal, State or local) terminated for cause or default.

10. To pay its subconsultants for satisfactory performance no later than 30 days from receipt of each payment from the LA.

11. To submit all invoices to the LA within one year of the completion of the work called for in this AGREEMENT or any subsequent Amendment or Supplement.

12. To submit BLR 05613, Engineering Payment Report, to the STATE upon completion of the project (Exhibit B).

13. Scope of Services to be provided by the ENGINEER:

- Make such detailed surveys as are necessary for the planning and design of the PROJECT.
- Make stream and flood plain hydraulic surveys and gather both existing bridge upstream and downstream high water data and flood flow histories.
- Prepare applications for U.S. Army Corps of Engineers Permit, Illinois Department of Natural Resources Office of Water Resources Permit and Illinois Environmental Protection Agency Section 404 Water Quality Certification.
- Design and/or approve cofferdams and superstructure shop drawings.
- Prepare Bridge Condition Report and Preliminary Bridge Design and Hydraulic Report, (including economic analysis of bridge or culvert types and high water effects on roadway overflows and bridge approaches).
- Prepare the necessary environmental and planning documents including the Project Development Report, Environmental Class of Action Determination or Environmental Assessment, State Clearinghouse, Substate Clearinghouse and all necessary environmental clearances.
- Make such soil surveys or subsurface investigations including borings and soil profiles as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations to be made in accordance with the current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Administrative Policies, Federal-Aid Procedures for Local Highway Improvements or any other applicable requirements of the STATE.
- Analyze and evaluate the soil surveys and structure borings to determine the roadway structural design and bridge foundation.
- Prepare preliminary roadway and drainage structure plans and meet with representatives of the LA and STATE at the site of the improvement for review of plans prior to the establishment of final vertical and horizontal alignment, location and size of drainage structures, and compliance with applicable design requirements and policies.
- 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.
- Complete the general and detailed plans, special provisions and estimate of cost. Contract plans shall be prepared in accordance with the guidelines contained in the Bureau of Local Roads and Streets manual. The special provisions and detailed estimate of cost shall be furnished in quadruplicate.
- Furnish the LA with survey and drafts in quadruplicate all necessary right-of-way dedications, construction easements and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.

## II. THE LA AGREES,

1. To furnish the ENGINEER all presently available survey data and information
2. To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT, on the basis of the following compensation formulas:

Cost Plus Fixed Fee  CPFF = 14.5%[DL + R(DL) + OH(DL) + IHDC], or  
 CPFF = 14.5%[DL + R(DL) + 1.4(DL) + IHDC], or  
 CPFF = 14.5%[(2.3 + R)DL + IHDC]

Where: DL = Direct Labor  
IHDC = In House Direct Costs  
OH = Consultant Firm's Actual Overhead Factor  
R = Complexity Factor

Specific Rate  (Pay per element)

Lump Sum  \_\_\_\_\_

3. To pay the ENGINEER using one of the following methods as required by 49 CFR part 26 and 605 ILCS 5/5-409:

With Retainage

- a) **For the first 50% of completed work**, and upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LA, monthly payments for the work performed shall be due and payable to the ENGINEER, such payments to be equal to 90% of the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- b) **After 50% of the work is completed**, and upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LA, monthly payments covering work performed shall be due and payable to the ENGINEER, such payments to be equal to 95% of the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- c) **Final Payment** – Upon approval of the work by the LA but not later than 60 days after the work is completed and reports have been made and accepted by the LA and the STATE, a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amounts of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

Without Retainage

- a) **For progressive payments** – Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LA, monthly payments for the work performed shall be due and payable to the ENGINEER, such payments to be equal to the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- b) **Final Payment** – Upon approval of the work by the LA but not later than 60 days after the work is completed and reports have been made and accepted by the LA and STATE, a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amounts of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

4. The recipient shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31U.S.C. 3801 et seq.).

## III. IT IS MUTALLY AGREED,

1. That no work shall be commenced by the ENGINEER prior to issuance by the LA of a written Notice to Proceed.
2. That tracings, plans, specifications, estimates, maps and other documents prepared by the ENGINEER in accordance with this AGREEMENT shall be delivered to and become the property of the LA and that basic survey notes, sketches, charts and other data prepared or obtained in accordance with this AGREEMENT shall be made available, upon request, to the LA or to the STATE, without restriction or limitation as to their use.

3. That all reports, plans, estimates and special provisions furnished by the ENGINEER shall be in accordance with the current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Administrative Policies, Federal-Aid Procedures for Local Highway Improvements or any other applicable requirements of the STATE, it being understood that all such furnished documents shall be approved by the LA and the STATE before final acceptance. During the performance of the engineering services herein provided for, the ENGINEER shall be responsible for any loss or damage to the documents herein enumerated while they are in the ENGINEER's possession and any such loss or damage shall be restored at the ENGINEER's expense.
4. That none of the services to be furnished by the ENGINEER shall be sublet, assigned or transferred to any other party or parties without written consent of the LA. The consent to sublet, assign or otherwise transfer any portion of the services to be furnished by the ENGINEER shall not be construed to relieve the ENGINEER of any responsibility for the fulfillment of this agreement.
5. To maintain, for a minimum of 3 years after the completion of the contract, adequate books, records and supporting documents to verify the amounts, recipients and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the contract shall be available for review and audit by the Auditor General and the STATE; and to provide full access to all relevant materials. Failure to maintain the books, records and supporting documents required by this section shall establish a presumption in favor of the STATE for the recovery of any funds paid by the STATE under the contract for which adequate books, records and supporting documentation are not available to support their purported disbursement.
6. The payment by the LA in accordance with numbered paragraph 3 of Section II will be considered payment in full for all services rendered in accordance with this AGREEMENT whether or not they be actually enumerated in this AGREEMENT.
7. That the ENGINEER shall be responsible for any and all damages to property or persons arising out of an error, omission and/or negligent act in the prosecution of the ENGINEER's work and shall indemnify and save harmless the LA, the STATE, and their officers, agents and employees from all suits, claims, actions or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.
8. 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 drawings, plats, surveys, reports, permits, agreements, soils and foundation analysis, provisions, specifications, partial and completed estimates and data, if any from soil survey and subsurface investigation with the understanding that all such material becomes the property of the LA. The LA will be responsible for reimbursement of all eligible expenses to date of the written notice of termination.
9. This certification is required by the Drug Free Workplace Act (30ILCS 580). The Drug Free Workplace Act requires that no grantee or contractor shall receive a grant or be considered for the purpose of being awarded a contract for the procurement of any property or service from the State unless that grantee or contractor will provide a drug free workplace. False certification or violation of the certification may result in sanctions including, but not limited to, suspension of contract or grant payments, termination of a contract or grant and debarment of the contracting or grant opportunities with the State for at least one (1) year but no more than five (5) years.

For the purpose of this certification, "grantee" or "contractor" means a corporation, partnership or other entity with twenty-five (25) or more employees at the time of issuing the grant, or a department, division or other unit thereof, directly responsible for the specific performance under a contract or grant of \$5,000 or more from the State, as defined in the Act.

The contractor/grantee certifies and agrees that it will provide a drug free workplace by:

- a. Publishing a statement:
  - (1) Notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance, including cannabis, is prohibited in the grantee's or contractor's workplace.
  - (2) Specifying the actions that will be taken against employees for violations of such prohibition.
  - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
    - (a) abide by the terms of the statement; and
    - (b) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- b. Establishing a drug free awareness program to inform employees about:
  - (1) The dangers of drug abuse in the workplace;
  - (2) The grantee's or contractor's policy of maintaining a drug free workplace;
  - (3) Any available drug counseling, rehabilitation and employee assistance program; and
  - (4) The penalties that may be imposed upon an employee for drug violations.
- c. Providing a copy of the statement required by subparagraph (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- d. Notifying the contracting or granting agency within ten (10) days after receiving notice under part (B) of paragraph (3) of subsection (a) above from an employee or otherwise receiving actual notice of such conviction.
- e. Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by,
- f. Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.
- g. Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

10. The ENGINEER or subconsultant shall not discriminate on the basis of race, color, national origin or sex in the performance of this AGREEMENT. The ENGINEER shall carry out applicable requirements of 49 CFR part 26 in the administration of DOT assisted contracts. Failure by the ENGINEER to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy as the LA deems appropriate.

**Agreement Summary**

Prime Consultant:	TIN Number	Agreement Amount
Christopher B. Burke Engineering, Ltd.	36-3468939	\$137,343.14
<b>Sub-Consultants:</b>		
ECS Illinois, LLC	20-1067717	\$ 11,000.00
DFI Bridge Corporation	26-2315676	\$ 6,000.00
	Sub-Consultant Total:	\$ 17,000.00
	Prime Consultant Total:	\$137,343.14
	Total for all Work:	\$154,343.14

Executed by the LA:

Lake County Board

(Municipality/Township/County)

ATTEST:

By: \_\_\_\_\_

By: \_\_\_\_\_

Clerk

Title: Chairman of County Board

(SEAL)

Executed by the ENGINEER:

ATTEST:

Christopher B. Burke Engineering, Ltd.

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: Executive Vice President

Title: President



**AVERAGE HOURLY PROJECT RATES**

Christopher B. Burke Engineering, Ltd.

Schaumburg

Deerfield Bike Path

FIRM  
Local Agency  
Section

Project  
Job No:

DATE 07/07/09

SHEET 1 OF 2

PAYROLL CLASSIFICATION	TOTAL PROJECT RATES			Task - 1 Kick-Off Meeting/Data Collection			Task - 2 Geotechnical Investigation			Task - 3 Plans and Legals			Task - 4 Preliminary Plans, Spec and Estimate			Task - 5 Forest Preserve 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
Principal	0																	
Engineer VI	61	5.61%	3.90	2	14.29%	9.95												
Engineer V	28	2.57%	1.50															
Engineer IV	148	13.60%	6.64	8	57.14%	27.90												
Engineer III	260	23.90%	8.92															
Engineer I/II	0																	
Env. Res. Spec. V	52	4.78%	2.80															
Env. Res. Spec. IV	40	3.68%	1.66															
Env. Res. Spec. III	0																	
Env. Res. Spec. II	0																	
Env. Res. Technician	0																	
Survey V	8	0.74%	0.50															
Survey IV	24	2.21%	1.09															
Survey III	0																	
Survey II	32	2.94%	0.95															
Survey I	16	1.47%	0.40															
Cad Manager	0																	
Asst. Cad Manager	40	3.68%	1.59															
Cad II	356	32.72%	13.25															
Cad I	0																	
Engineering Tech V	0																	
Engineering Tech IV	0																	
Engineering Tech III	0																	
Engineering Tech I/II	0																	
GIS Specialist III	4	0.37%	0.14	4	28.57%	10.57												
GIS Specialist I/II	0																	
Administrative	19	1.75%	0.48															
<b>TOTALS</b>	<b>1088</b>	<b>100%</b>	<b>\$43.81</b>	<b>14</b>	<b>100.00%</b>	<b>\$48.42</b>	<b>8</b>	<b>100%</b>	<b>\$51.94</b>	<b>82</b>	<b>100%</b>	<b>\$41.73</b>	<b>410</b>	<b>100%</b>	<b>\$43.62</b>	<b>32</b>	<b>100%</b>	<b>\$55.02</b>

PREPARED BY THE AGREEMENTS UNIT

Printed 7/7/2009 8:21 AM

**AVERAGE HOURLY PROJECT RATES**

FIRM Christopher B. Burke Engineering, Ltd.

Local Agency Schaumburg

Section Deerfield Bike Path

Project Deerfield Bike Path

Job No:                     

DATE 07/07/09

SHEET 2 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Task - 6 Utility Coordination			Task - 7 Hydraulic Modeling and Permitting			Task - 8 Wetland Delineation and Permitting			Task - 9 Pre-final Plans, Specs. And Estimate			Task - 10 Final Plans, Specifications and Estimates			Task - 11 Bid Documents		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00																		
Engineer VI	69.64	1	3.70%	2.58	4	2.67%	1.86	2	2.44%	1.70	8	5.71%	3.98	6	7.14%	4.97	4	10.81%	7.53
Engineer V	58.44				24	16.00%	9.35												
Engineer IV	48.82	4	14.81%	7.23	80	53.33%	19.91				24	17.14%	8.37	12	14.29%	6.97	8	21.62%	10.56
Engineer III	37.33										40	28.57%	10.67	32	38.10%	14.22	8	21.62%	8.07
Engineer I/II	29.63																		
Env. Res. Spec. V	58.50							20	24.39%	14.27									
Env. Res. Spec. IV	45.25							40	48.78%	22.07									
Env. Res. Spec. III	38.77																		
Env. Res. Spec. II	30.67																		
Env. Res. Technician	31.75																		
Survey V	68.50																		
Survey IV	49.25																		
Survey III	47.00																		
Survey II	32.14	16	59.26%	19.05															
Survey I	26.90																		
Cad Manager	48.00																		
Asst. Cad Manager	43.25																		
Cad II	40.48	4	14.81%	6.00	40	26.67%	10.79	16	19.51%	7.90	66	47.14%	19.08	32	38.10%	15.42	16	43.24%	17.50
Cad I	25.85																		
Engineering Tech V	60.00																		
Engineering Tech IV	46.17																		
Engineering Tech III	41.31																		
Engineering Tech I/II	22.83																		
GIS Specialist III	37.00																		
GIS Specialist I/II	18.50																		
Administrative	27.48	2	7.41%	2.04	2	1.33%	0.37	4	4.88%	1.34	2	1.43%	0.39	2	2.38%	0.65	1	2.70%	0.74
<b>TOTALS</b>		27	100%	\$36.89	150	100%	\$42.28	82	100%	\$47.28	140	100%	\$42.49	84	100%	\$42.24	37	100%	\$44.40

PREPARED BY THE AGREEMENTS UNIT

Printed 7/7/2009 8:21 AM



**AVERAGE HOURLY PROJECT RATES**

FIRM Christopher B. Burke Engineering, Ltd.

Local Agency \_\_\_\_\_  
Section \_\_\_\_\_  
Project \_\_\_\_\_  
Job No: \_\_\_\_\_

DATE 07/07/09

SHEET 3 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Task - 12 Shop Drawing Review			Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
		Hours	% Part.	Wgtd Avg															
Principal	70.00																		
Engineer VI	69.64	2	9.09%	6.33															
Engineer V	58.44	4	18.18%	10.63															
Engineer IV	48.82	16	72.73%	35.51															
Engineer III	37.33																		
Engineer I/II	29.63																		
Env. Res. Spec. V	58.50																		
Env. Res. Spec. IV	45.25																		
Env. Res. Spec. III	38.77																		
Env. Res. Spec. II	30.67																		
Env. Res. Technician	31.75																		
Survey V	68.50																		
Survey IV	49.25																		
Survey III	47.00																		
Survey II	32.14																		
Survey I	26.90																		
Cad Manager	48.00																		
Asst. Cad Manager	43.25																		
Cad II	40.48																		
Cad I	25.85																		
Engineering Tech V	60.00																		
Engineering Tech IV	46.17																		
Engineering Tech III	41.31																		
Engineering Tech I/II	22.83																		
GIS Specialist III																			
GIS Specialist I/II																			
Administrative																			
<b>TOTALS</b>		22	100%	\$52.46	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

PREPARED BY THE AGREEMENTS UNIT

# SCOPE OF WORK

## **PHASE II - FINAL ENGINEERING**

### **Task 1 – Kick-off Meeting/Data Collection**

CBBEL will attend a preliminary conference with LCDOT staff to discuss the goals and objectives of the project and to refine the scope. CBBEL will collect, examine, review and evaluate data to be utilized for the preparation of the Phase II Contract Documents utilizing FHWA/IDOT procedures. This data will include the following:

- Phase I Report.
- Utility Atlases.
- Adjacent Subdivision Plats and any other available information to identify existing right-of-way.
- Information on benchmarks to be utilized for vertical control for the project.
- Floodway/floodplain maps.
- Other State, County and LCDOT plans and maps.

Upon meeting with LCDOT and collecting and reviewing all existing data, CBBEL will attend the IDOT Phase II Kick-Off meeting to discuss project funding, scope and schedule.

### **Task 2 – Geotechnical Investigation**

CBBEL will retain ECS Illinois, LLC to complete a geotechnical investigation and prepare a report including path and foundation design recommendation. The subsurface investigation will include ten (10) borings and will meet the minimum requirements of the IDOT Geotechnical Manual.

A meeting will be held with CBBEL, ECS, and LCDOT to discuss the soil report. The following topics will be discussed in the meeting:

- Comparing the actual boring locations to the boring plan.
- What did the prime consultant learn about the project site from reviewing the subconsultant's soils report.
- How the soils report impacted the proposed design.
- Options considered, or available, to mitigate any poor soils.
- Constructability review of the recommended options for mitigation of poor soils.
- Need for additional borings or investigations.
- Need to have soils subconsultant present on site during construction.
- Action items for the next meeting, if required.

### **Task 3 – Plats and Legals**

Upon confirming the required right-of-way and easements that were identified in the Phase I Report, CBBEL will prepare plats and legal descriptions for the affected parcel. A separate plat of survey will be prepared for each parcel and each plat of survey will be referenced to an overall plat of highways. The centerline alignment and existing right-of-way previously established will be the basis for the development of the plats and legal descriptions.



# SCOPE OF WORK

Right-of-way acquisition shall be in accordance with Titles II and III of the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (Public Law 91-646) and any subsequent amendments. Transaction Screens in accordance with ASTM E 1528 will be prepared for each parcel, and if necessary, an environmental site assessment in accordance with ASTM E 1527 will be prepared.

We anticipate that one permanent right-of-way take and one permanent easement will be required from the Lake County Forest Preserve.

## **Task 4 – Preliminary Plans, Specifications and Cost Estimate**

On the basis of the approved PDR, CBBEL will prepare preliminary contract documents consisting of plans, specifications, estimate of time, status of utilities to be adjusted and an estimate of construction cost. The plans will be prepared in accordance with all LCDOT and IDOT design criteria for the appropriate road classification.

The preliminary plans will include the following sheets:

<u>No.</u>	<u>Sheet Title</u>
1	Cover Sheet
1	General Notes <ul style="list-style-type: none"><li>▪ Including LCDOT/IDOT standard notes and additional major notes to clarify project's intent and define incidental items</li></ul>
2	Alignment, Ties and Benchmarks sheet
1	Typical cross sections that are <ul style="list-style-type: none"><li>▪ Complete and comprehensive</li><li>▪ Extending from ROW to ROW</li><li>▪ Clearly describe improvement</li></ul>
1	Summary of Quantities
3	Path Plan and Profile sheets showing (3 panels) <ul style="list-style-type: none"><li>▪ Existing topography, drainage structures and sewers and other utilities</li><li>▪ Items to be removed or adjusted</li><li>▪ Existing property lines and street addresses</li><li>▪ Proposed horizontal and vertical alignment</li><li>▪ Proposed edge of pavement, shoulder, etc.</li><li>▪ Any proposed drainage and utility structures and pipe in plan and profile</li><li>▪ Existing utilities to remain in place</li></ul>
2	Landscaping Plans and Details
1	Compensatory Storage Grading Plan
6	Bridge Plans
4	Boardwalk Plans
3	Erosion Control Plans and Details
2	Construction Details
5	Cross Sections <ul style="list-style-type: none"><li>▪ Sufficient in number to approximate cuts and fills (50' intervals plus driveways)</li><li>▪ Sufficient in number to verify ROW/Easement needs</li><li>▪ Through driveways to determine proposed slopes and identify need for temporary construction easements</li><li>▪ Sufficient in number to delineate drainage patterns</li></ul>

32 TOTAL SHEET COUNT



# SCOPE OF WORK

CBBEL will use IDOT standard pay items or LCDOT standard special provisions where applicable. Otherwise, project-specific special provisions will be written as needed. Plans, special provisions, and the estimate of cost will be submitted to the LCDOT and IDOT for review.

CBBEL will also make any required submittals to IEPA to meet NPDES requirements.

## **Task 5 – Forest Preserve/Village Coordination**

This task will focus on communicating the construction documents and right-of-way takes with the Lake County Forest Preserve. CBBEL will provide exhibits for the Forest Preserve to discuss and coordinate the design with them. CBBEL will also coordinate potential utility relocations with the Village of Riverwoods.

## **Task 6 – Utility Coordination**

Upon notice to proceed, CBBEL will send a location map to all known utility companies requesting their atlases or plans of their facilities within the project limits. CBBEL will add the received information to the existing conditions plan and send it back to the utility companies for verification. CBBEL will then send preliminary plans with potential conflicts identified, and will set up meetings to discuss necessary utility relocations or plan adjustments. A set of pre-final plans will be submitted to utility companies for verification of facilities. Final plans will be sent in order for the utilities to design any necessary relocations.

## **Task 7 – Hydraulic Modeling & Permitting**

The proposed floodplain fill quantities for the path and boardwalk will be determined in accordance with the Lake County Watershed Development Ordinance (WDO), the required amount of incremental compensatory storage will be determined.

The proposed boardwalk and path will be analyzed in the Flood Insurance Study (FIS) hydraulic model of the Des Plaines River. The results will be required to verify that the proposed boardwalk and path meet the IDNR-OWR and SMC requirements for work in the floodplain and floodway.

Based on the work described above, CBBEL will prepare a Watershed Development Permit Application to SMC.

## **Task 8 – Wetland Delineation and Permitting**

A wetland delineation of the project site was previously completed in September 2006. This report must be updated to current standards. An investigation of the project site will be completed to delineate the limits of wetlands present. The wetland delineation will be completed based on the methodology established by the U.S. Army Corps of Engineers. Also during the site visit, wildlife and plant community qualities will be assessed. The limits of the wetland community will be field staked so that they can be located by others in relation to the project coordinate system.



# SCOPE OF WORK

CBBEL will be responsible for coordinating and attending a wetland boundary confirmation site visit with the appropriate County/Village Wetland Specialist.

The required exhibits, specifications, data and project information will be compiled and assembled for placement in permit application packages to Lake County SMC, U.S. Army Corps of Engineers and the Illinois Environmental Protection Agency. The Lake County SMC permit application will include an existing and proposed conditions BFE determination as required by the Ordinance. Per our discussions with SMC staff, compensatory storage calculations are not included in this task. We will coordinate development of documents with you and other project team members. This task may require meeting with the Lake County, Army Corps of Engineers, 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.

## **Task 9 – Pre-Final Plans, Specifications and Estimates**

Based on preliminary review by LCDOT and the permitting agencies, CBBEL will revise the plans, specifications and cost estimate for resubmittal to reviewing agencies.

## **Task 10 – Final Plans, Specifications and Estimates**

Upon meeting with the LCDOT staff and IDOT to review their comments on the pre-final submittal, CBBEL will revise and finalize the contract documents and cost estimate. During this task the exact letting date will be determined and an estimated construction schedule will be provided.

## **Task 11 – Bid Documents**

CBBEL will make the final revisions to the final submittal based on the LCDOT's and IDOT's final review comments. The requested number of copies of plans and specifications will be submitted to IDOT and the LCDOT. A final estimate of cost and estimate of required working days will also be submitted. In addition to printed copies, we will provide the plans, specifications and estimate to the LCDOT in electronic format. CBBEL will make application and obtain all required permits.

## **Task 12 – Shop Drawing Review**

CBBEL will review shop drawing submittals for the boardwalks, bridge superstructures, piers and supports. CBBEL will provide review comments to LCDOT staff.

N:\PROPOSALS\ADMIN\2009\LCDOT Deerfield Road Bike Path\Scope of Services.doc



Lake County Division of Transportation  
Deerfield Road Bike Path



**CHRISTOPHER B. BURKE ENGINEERING, LTD.**  
9575 West Higgins Road Suite 600 Rosemont, Illinois 60018 TEL (847) 823-0500 FAX(847) 823-0520



July 8, 2009

Lake County Division of Transportation  
600 West Winchester Road  
Libertyville, Illinois 60048-1381

Attention: Mr. Chuck Gleason

Subject: **Proposal for Phase II Engineering  
Deerfield Road Bike Path**

Dear Mr. Gleason:

Christopher B. Burke Engineering, Ltd. (CBBEL) is pleased to submit this proposal to provide Phase II engineering services for the Deerfield Road Bike Path.

The Phase II design will be based on the Phase I report that CBBEL is in the final stages of completing.

The contact person for this proposal is Mr. Michael E. Kerr, PE, Executive Vice President and Head of the Civil Engineering Department in our Rosemont, Illinois office. He may be reached at (847) 823-0500 to answer any questions regarding this proposal. Mr. Kerr has served as project manager for several Phase II trail projects and is very familiar with CMAQ funding procedures. In addition, he has a strong rapport with IDOT design staff as it relates to the design and permitting for this project.

Please note that the attached schedule which meets a March 2010 letting is extremely aggressive. This compressed schedule only allows a 2 week LCDOT review period for the preliminary submittal and a one week review period for pre-final and final submittals. It also assumes a 16 week permitting period. Any required ROW or easements will have to be obtained by LCDOT by January 2010 to meet the March 2010 letting.

We very much appreciate the opportunity to submit this proposal and look forward to continuing our working relationship with the Division of Transportation.

Sincerely,

Christopher B. Burke, PhD, PE, D.WRE  
President

