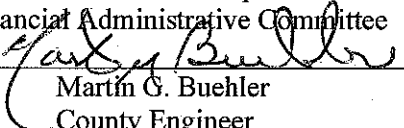




Martin G. Buehler, P.E.
Director of Transportation/County Engineer

600 West Winchester Road
Libertyville, Illinois 60048-1381
Phone (847) 377-7400
Fax (847) 362-5290

Deerfield Road Bike Path (Des Plaines River Trail to Thornmeadow Road), Phase I Engineering
LCDOT Change Order No. 1

TO: Public Works and Transportation Committee
Financial Administrative Committee
FROM: 
Martin G. Buehler
County Engineer

Committee Action Meeting Date
DATE: June 3, 2009
DATE: June 3, 2009
SUBJECT: Change Order No. 1
Section No. 04-00038-03-BT

Joint Committee action item approving Change Order No. 1 consisting of an increase of \$27,116.45 for additions to the Phase I Engineering services for Deerfield Road Bike Path Over the Des Plaines River, designated as Section No. 04-00038-03-BT.

- Deerfield Road Bike Path (Des Plaines River Trail to Thornmeadow Road), Phase I Engineering Services: LCDOT Change Order No. 1
- Change Orders need to be approved by the standing committees for cumulative net increases over 10%.
- The Deerfield Road project is under contract with Christopher B. Burke Engineering, Ltd., in the amount of \$122,633.19.
- Additional engineering services are being requested based on the extra level of engineering and coordination effort required to achieve project concurrence from all of the involved regulatory and/or review agencies.
- Data Collection: The original plans were to design a bike path on embankment; however, determining that there was no site available for the proposed volume of compensatory storage, a boardwalk design with a unique "diamond pier type" foundation is being reviewed. With the new design, compensatory storage is still needed but at a much lower volume. An additional tree survey on the west side of the river to determine a suitable location for this comp storage is required.
- Floodplain Studies and Hydraulic Report: Since we looked at several different alternatives, from the original scope, additional work is necessary to determine logical locations for compensatory storage. As the preferred alternative was chosen, a concept design for an on-site compensatory storage site needs to be developed and coordinated with LCFPD and LCSMC.
- Coordination: Based on the above project development issues and additional alternatives, substantial additional coordination is required with LCDOT, IDOT, FHWA, LCSMC, and USACOE, in the form of phone conferences and formal meetings, to secure overall project concurrence.
- Phase I Report: With the work effort required to complete Phase I Engineering for this project, including the greater number of alternatives developed and evaluated, preparation of the Phase I report will be more complex than originally anticipated and will require multiple content and exhibit revisions for submittal to IDOT.

Summary:

Original awarded contract:	\$122,633.19
Change Order No. 1:	\$ 27,116.45
Sum of all changes:	\$ 27,116.45

ILLINOIS DEPARTMENT OF TRANSPORTATION

Request for Approval
of Change in Consultant Contract

Date: 06/03/2009

Local Agency: LAKE COUNTY

Request: No. 1

Name: Deerfield Rd. Bike Path at the Des
Plaines River, Phase I

To: Department of Transportation
LCDOT/SCHAUMBURG

Section: 04-00038-03-BT

Consultant: Christopher B. Burke Engineering, Ltd.

I recommend that an addition be made to the above consultant contract.

The estimated work is listed below

Original contract amount for services described:	\$122,633.19
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Sum of all previous contract change orders:	\$0.00
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Item #	Description	Additions	Deductions
1	Additional engineering services are being requested based on the extra level of engineering and coordination effort required to achieve project concurrence from all of the involved regulatory and/or review agencies.	\$27,116.45	
TOTALS		\$27,116.45	\$0.00
NET CHANGE		\$27,116.45	\$0.00

Net ADDITION change to date \$27,116.45 which is 22.11 % of the original contract amount for services described

State fully the nature and reason for change:

Revised contract amount for services described:	\$149,749.64
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Please see attached.

When the net increase or decrease in the cost of the contract is \$10,000 or more or the time of completion is increased or decreased by 30 days or more, one of the following statements shall be checked.

The undersigned has determined that the circumstances that necessitate this change were not reasonably foreseeable at the time the contract was signed.

The undersigned has determined that the circumstances that necessitate this change are germane to the original contract.

The undersigned has determined that this change is in the best interest of the local agency and is authorized by law.

APPROVED

DEPARTMENT OF TRANSPORTATION

Approved _____

Regional Engineer

County Engineer

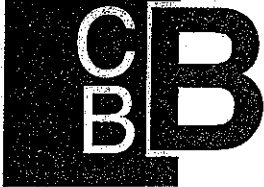
On Behalf of IDOT pursuant to Agreement
of Understanding dated January 22, 2003

Project Engineer [Signature] Date 5-27-09

Design Engineer Paula Trigg Date 5-27-09

Approval Recommended [Signature] Date 5-28-09
County Engineer

BLR13210 LCDOT Adaptation
Submit 3 copies of this form to Regional Engineer (4 copies for road district)



CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 West Higgins Road Suite 600 Rosemont, Illinois 60018 TEL (847) 823-0500 FAX(847) 823-0522



April 16, 2009

Ms. Paula J. Trigg, PE
Director of Planning and Programming
Lake County Division of Transportation
600 West Winchester Road
Libertyville, Illinois 60048-1381

Subject: Phase I Engineering Supplemental Agreement Request
Deerfield Road Bike Path
Section #04-00038-03-BT
(CBBEL #06-0377)

Dear Ms. Trigg:

In follow up to previous discussions, and in reference to the attached Cost Estimate of Consultant Services (CECS) summary forms, we are requesting a supplement to the Phase I Engineering agreement in the amount of \$27,116.45 for the subject project. This would increase the upper limit of compensation for Phase I Engineering from \$122,633.19 to \$149,749.64.

This supplemental agreement is being requested based on the extra level of engineering and coordination effort that has been required to achieve project concurrence from all of the involved regulatory and/or review agencies in order to complete Phase I engineering. This work has been completed with submittal of the Project Development Report (PDR) to IDOT this past month, with Phase I Design Approval pending. No additional Phase I engineering work is anticipated to be required for this project.

Following is a description of the main project tasks that required an extra level of effort to complete Phase I engineering:

1. Data Collection

The assumption going into the project was that any needed compensatory storage could be provided at adjacent LCFPD compensatory storage sites. However, after the alternatives development and review process, in which it was determined that a bike path on embankment along the south side of Deerfield Road (other than bridge section) was preferred, it was determined that there were no suitable on-site or adjacent compensatory storage sites. In addition, based on the Botanic Survey completed for this project by IDOT, there was concern with the potential overall

biological resource impacts due to the project. On this basis, various additional alternatives incorporating a boardwalk design were investigated for suitability with the unique topographic and environmental project features. As part of this task, various boardwalk foundation systems were researched from a permanent as well as constructability perspective to minimize overall construction impacts as a result of this project. The end result was a boardwalk design utilizing a "diamond pier type" foundation system that can be constructed with minimal footprint impacts as compared to traditional construction methods. In addition, after identification of the preferred on-site compensatory storage location and concurrence from LCSMC and LCFPD, a tree survey was performed for this new site, identifying the type, size and location of all trees greater than 1" in diameter per LCFPD criteria. Whereas the current contract included 43 work hours for data collection at a cost of \$4,321.52, the actual overall level of effort required to complete this task on the above basis was 129 work hours at a cost of \$11,691.12.

5. Floodplain Studies and Hydraulic Report

As noted in Task 1 above, additional project alternatives needed to be explored to minimize the amount of fill placed in the floodplain with this project. This included field meetings with LCSMC on off-site suitability and coordination with LCFPD regarding on-site suitability. Various scenarios were explored in this regard based on the additional alternatives that were investigated to minimize the amount of fill in the floodplain. Ultimately, with identification of Alternate 2.2b (Boardwalk with four span bridge) as the preferred alternate, a concept design for an on-site compensatory storage site was developed and coordinated with LCFPD and LCSMC. Whereas the current contract included 140 work hours for Floodplain Studies and preparation of the Preliminary Bridge Design and Hydraulic Report (PBDHR) at a cost of \$15,084.29, the actual level of effort required to complete this task on the above basis was 262 work hours at a cost of \$22,425.66.

8. Coordination

Based on the above project development issues and additional alternatives development required to address these issues, substantial additional coordination was required with LCDOT, IDOT, FHWA, LCFPD, LCSMC, and USACOE, in the form of phone conferences and formal meetings, to secure overall project concurrence. Whereas the current contract included 80 work hours for project coordination at a cost of \$10,551.79, the actual level of effort required to complete this task was 132.25 work hours at a cost of \$14,185.87.

10. Phase I Report

Based on the above additional work effort required to complete Phase I Engineering for this project, including the greater number of alternatives developed and evaluated, preparation of the Phase I Report has been more complex than original anticipated and has required multiple content and exhibit revisions for submittal to IDOT. Whereas the current contract included 150 work hours for delivery (ie.; preparation, submittal, revisions) of the Phase I Report at a cost of \$18,228.93, the actual required level of effort to complete this task was 322.25 work hours at a cost of \$29,640.75.

Attached for your reference and further use are the following Cost Estimate of Consultant Services (CECS) summary forms depicting the above required additional level of effort and costs for completion of Phase I Engineering:

- A. Current Agreement
- B. Actual Cost to Date / New Total

Please review this information and advise us of any comments you may have or your concurrence. If you have any further questions or require additional information, please contact me at 847/823-0500.

Sincerely,



Michael J. Matkovic, PE
Vice President
Phase I Department Head

Attachments

cc: Chuck Gleason, LCDOT Project Manager
CBBEL File

NALCDOT\06377Admin\ML1_Supplement Request_2009_Revised 041409.doc

**COST ESTIMATE OF CONSULTANT SERVICES
A. CURRENT AGREEMENT**

ROUTE: Deerfield Road Bike Path
 PROJECT: _____
 SECTION: 04-00038-03-BT
 COUNTY: LAKE
 JOB NO.: CBBEL 06-0377

CONSULTANT: CHRISTOPHER B. BURKE ENG. LTD.

DATE: 7/17/2009

OVERHEAD RATE: 36.51%

COMPLEXITY FACTOR 0

ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENEFIT (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	SERVICES BY OTHERS (F)	TOTAL (G)	% OF GRAND TOTAL (H)
PHASE I SERVICES								
1. DATA COLLECTION AND REVIEW	43	\$1,526.64	\$2,084.02	\$156.60	\$554.28		\$4,321.52	3.52%
2. SURVEY	250	\$9,030.74	\$12,327.86		\$3,142.70		\$24,501.30	19.98%
3. MOSAICS	30	\$1,258.60	\$1,718.11	\$205.60	\$468.27		\$3,650.78	2.98%
4. WETLAND ASSESSMENT	186	\$6,882.53	\$9,395.34		\$2,395.11		\$18,672.98	15.23%
5. FLOODPLAIN STUDIES AND HYDRAULIC REPORT	140	\$5,559.80	\$7,589.68		\$1,934.81		\$15,084.29	12.30%
6. PRELIMINARY GEOMETRY	176	\$6,893.66	\$9,410.54	\$348.00	\$2,450.18		\$19,102.38	15.58%
7. BRIDGE ALTERNATIVES	49	\$1,919.82	\$2,620.75		\$668.09		\$5,208.66	4.25%
8. COORDINATION	80	\$3,889.20	\$5,309.15		\$1,353.44		\$10,551.79	8.60%
9. PUBLIC INVOLVEMENT	26	\$1,051.09	\$1,434.84	\$400.00	\$424.63		\$3,310.56	2.70%
10. PHASE I REPORT	150	\$6,413.59	\$8,755.19	\$722.00	\$2,338.15		\$18,228.93	14.86%
TOTALS	1120	\$44,425.67	\$60,645.48	\$1,832.40	\$15,729.66	\$0.00	\$122,633.19	100.00%

**COST ESTIMATE OF CONSULTANT SERVICES
B. ACTUAL TO DATE / NEW TOTAL**

ROUTE: Deerfield Road Bike Path
 PROJECT: _____
 SECTION: 04-00038-03-BT
 COUNTY: LAKE
 JOB NO.: CBBL 06-0377

CONSULTANT: CHRISTOPHER B. BURKE ENG. LTD.

DATE: 4/17/2009

OVERHEAD RATE: 136.51%

COMPLEXITY FACTOR 0

PHASE/SERVICES	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENEFIT (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	SERVICES BY OTHERS (F)	TOTAL (G)	% OF GRAND TOTAL (H)
1. DATA COLLECTION AND REVIEW	126.00	\$4,239.08	\$5,786.78	\$190.06	\$1,475.20		\$11,691.12	7.81%
2. SURVEY	283.25	\$8,689.38	\$11,861.87		\$3,023.90		\$23,575.15	15.74%
3. MOSAICS	51.00	\$1,320.50	\$1,802.62	\$28.80	\$459.53		\$3,611.45	2.41%
4. WETLAND ASSESSMENT	134.00	\$6,795.94	\$9,277.14	\$271.97	\$2,364.98		\$18,710.03	12.49%
5. FLOODPLAIN STUDIES AND HYDRAULIC REPORT	262.00	\$8,124.20	\$11,090.36	\$383.88	\$2,827.22		\$22,425.66	14.98%
6. PRELIMINARY GEOMETRY	282.50	\$7,355.25	\$10,040.64	\$548.55	\$2,559.63		\$20,504.07	13.69%
7. BRIDGE ALTERNATIVES	47.00	\$1,866.63	\$2,548.14		\$649.59		\$5,064.36	3.38%
8. COORDINATION	132.25	\$5,220.69	\$7,126.77	\$21.60	\$1,816.81		\$14,185.87	9.47%
9. PUBLIC INVOLVEMENT	5.00	\$125.75	\$171.67		\$43.76		\$341.18	0.23%
10. PHASE I REPORT	322.25	\$10,499.00	\$14,332.18	\$1,156.92	\$3,653.65		\$29,640.75	19.79%
TOTALS	1668.25	\$54,236.42	\$74,038.17	\$2,600.78	\$18,874.27		\$149,749.64	100.00%