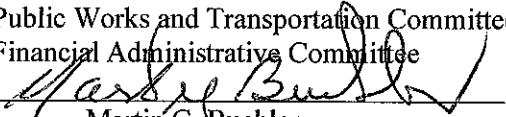




Martin G. Buehler, P.E.  
Director of Transportation/County Engineer

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

River Rd at Roberts Rd, Intersection Improvement: 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:** IDOT Change Order No. 1  
Section No. 07-00086-08-CH

Joint Committee action item approving IDOT Change Order No. 1 consisting of an increase of \$38,751.67 for additions to the Phase I Engineering services for River Road at Roberts Road, designated as Section No. 07-00086-08-CH.

- River Road at Roberts Road, Intersection Project, Phase I Engineering Services: IDOT Change Order No. 1
- Change Orders need to be approved by the standing committees for cumulative net increases over 10%.
- The River Rd at Roberts Rd intersection improvement project is a federally funded Phase I study.
- The Phase I contract is with Bollinger, Lach & Associates, Inc., in the amount of \$233,147.40.
- It has been determined that extent of the flood plain at the intersection requires the extension of the project limits on the south leg so that the new pavement on the River Rd approach leg will be 1-foot above the floodplain elevation.
- Additional engineering services are necessary to extend the project limits.
- IDOT approval for the Phase I will be required.

Summary:

Original awarded contract:	\$233,147.40
Change Order No. 1:	\$ 38,751.67
Sum of all changes:	\$ 38,751.67

ILLINOIS DEPARTMENT OF TRANSPORTATION

Request for Approval  
of Change in Consultant Contract

Date: 06/03/2009

Local Agency: LAKE COUNTY

Request: No. 1

Name: River Road at Roberts Road Phase I  
Engineering

To: Department of Transportation  
LCDOT/SCHAUMBURG

Section: 07-00086-08-CH

Consultant: Bollinger, Lach & Associates, Inc.

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

The estimated work is listed below

Original contract amount for services described:	\$233,147.40
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Sum of all previous contract change orders:	\$0.00
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Item #	Description	Additions	Deductions
1	Extending the limits south on River Road to achieve the design of constructing the new road elevation 1-foot above floodplain.	\$38,751.67	
<b>TOTALS</b>		\$38,751.67	\$0.00
<b>NET CHANGE</b>		\$38,751.67	\$0.00

Net ADDITION change to date \$38,751.67 which is 16.62 % of the original contract amount for services described

State fully the nature and reason for change:

Please see attached.

Revised contract amount for services described:	\$271,899.07
--	--------------

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.

Project Engineer [Signature] Date 5-27-09

Design Engineer [Signature] Date 5-27-09

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

APPROVED

DEPARTMENT OF TRANSPORTATION

Approved \_\_\_\_\_

Regional Engineer

County Engineer

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

BLR13210 LCDOT Adaptation

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

CONSULTING  
ENGINEERS  
SCIENTISTS  
& LAND  
SURVEYORS



**Bollinger, Lach & Associates, Inc.**

2100 Huntington Drive North, Suite A • Algonquin, IL 60107  
847 854 7799 • Fax 847 854 7798 • www.bollingerlach.com

- ITASCA
- ALGONGUIN
- CHICAGO
- INDIANAPOLIS
- SOUTH BEND
- LAKE GENEVA

May 7, 2009

SENT VIA E-MAIL  
CGleason@lakecountvil.gov

Mr. Chuck Gleason  
Senior Civil Engineer  
Lake County Division of Transportation  
600 W. Winchester Road  
Libertyville, IL 60048

Re: River and Roberts Road Intersection  
Raising River Road Profile  
Lake Barrington, Illinois

Dear Mr. Gleason:

Bollinger, Lach & Associates, Inc. (BLA) has completed the topographic survey and reviewed the flood insurance maps for the River-Roberts intersection project. Upon reviewing this data we have concluded that the existing floodplain does inundate the River Road up to elevation 737.00 from approximately Station 90+00 to 92+00. The floodplain does not cross the centerline of River Road, but does inundate the road by 11.5' at the worst point.

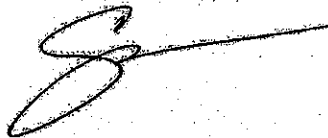
Per our conversations, you indicated that LCDOT would be interested in raising the River Road profile to accomplish the roadway being a minimum of 1' above the floodplain. Therefore, we have prepared a Preliminary Supplemental Agreement for you to review for BLA to provide these services. This assumes that BLA would be extending the project limits along River Road approximately 600' to the south (based on the 2' contour maps available on the website).

Please be advised that this is listed as *preliminary* as we have not received information from the Geotechnical Engineer at this point.

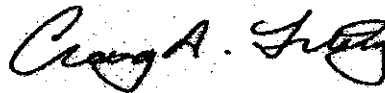
Thank you for entrusting this work to BOLLINGER, LACH & ASSOCIATES, INC. We look forward to continuing to work with you on this project. Please feel free to call with any comments or question.

Sincerely,

**BOLLINGER, LACH & ASSOCIATES, INC.**



Cynthia R. Flower, P.E.  
Project Manager



Craig Lukowicz, P.E.  
Executive Vice President



**AVERAGE HOURLY PROJECT RATES**

FIRM Bollinger, Lach & Associates, Inc.

PSB

PRIME/SUPPLEMENT

DATE 05/07/09

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES		TOTAL PROJECT RATES						Surveys			Environmental Data			Urban Drainage Study			Alternate Geometric Studies			Soil, Pavement and Retain								
	Hours	%	Hours	Wgtd Avg	%	Hours	Wgtd Avg	%	Hours	Wgtd Avg	%	Hours	Wgtd Avg	%	Hours	Wgtd Avg	%	Hours	Wgtd Avg	%	Hours	Wgtd Avg	%						
																								Part	Part	Part	Part	Part	Part
Principal	4	1.25%	4	0.86																									
Project Manager	122	37.42%	15.46	2.85	16.90%	8	25.00%	10.33	4	4.17%	2.92	4	4.17%	2.92	2	2.06%	3.46	2	2.06%	3.46									
Project Engineer	95	29.48%	8.85																										
CADD Technician I	0																												
Director of Surveying	2	0.61%	0.29	1.51	0.45%																								
Project Surveyor	20	6.13%	2.79	15.46	34.46%	20	61.3%	15.46																					
Party Chief II	16	4.91%	1.50	8.41	27.59%	16	49.1%	8.41																					
Instrumentman	15	4.57%	0.78	4.41	13.18%	15	45.7%	4.41																					
Director of Structural	34	10.46%	4.86																										
Director of Environment	15	4.57%	2.07																										
TOTALS	326	100%	\$37.42	\$52.78	100.00%	32	\$38.93	\$38.93	32	100%	\$38.93	32	100%	\$38.93	32	100%	\$38.93	32	100%	\$38.93	32	100%	\$38.93	32	100%	\$38.93	32	100%	\$38.93

**AVERAGE HOURLY PROJECT RATES**

**FIRM** Bollinger, Lach & Associates, Inc.

**PSB**

**PRIME/SUPPLEMENT**

**DATE**

05/07/09

**SHEET**

2

**OF**

2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Quality Assurance/Quality Control		Quality Assurance/Quality Control		Quality Assurance/Quality Control		Quality Assurance/Quality Control		Quality Assurance/Quality Control		Quality Assurance/Quality Control		Quality Assurance/Quality Control		Quality Assurance/Quality Control		Quality Assurance/Quality Control		Quality Assurance/Quality Control		
		Hours	% Part.	Wgtd Avg.	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	2	25.00%	17.50																		
Project Manager	41.31	6	75.00%	30.98																		
Project Engineer	30.94																					
CADD Technician I	26.52																					
Director of Surveying	46.58																					
Project Surveyor	44.88																					
Party Chief I	30.60																					
Instrumentman	15.98																					
Director of Structural	46.58																					
Director of Environment	42.18																					
<b>TOTALS</b>		<b>8</b>	<b>100%</b>	<b>\$48.48</b>																		

Route: FAU 3704/River Road at Roberts Road  
Section: 07-00086-08-CH  
Project No.: CMM-9003(061)  
Job No.: P-91-513-08

**SUMMARY of  
WORK HOURS and DIRECT COSTS**

	<u>WORK HOURS</u>	<u>SUB</u>	<u>DIRECT COST</u>
Surveys	58		\$ 80.00
Environmental Data	32		\$ 80.00
Location Drainage Study	96		
Alternate Geometric Studies	96		
Soil, Pavement and Retaining Wall Alternative Analysis	40	\$ 5,000.00	
Quality Assurance/Quality Control	8		
	<hr/>		
TOTALS	330	\$ 5,000.00	\$ 160.00



**DETAILED WORKHOURS  
 AND DIRECT COST ESTIMATE**

**SUPPLEMENT FOR RAISING RIVER ROAD 1' ABOVE THE FLOODPLAIN**

**1 Surveys**

Topographic survey work for an additional 600' south of the existing project limits on River Road to elevation 740 minimum. Including collecting data on any wetland flags, trees exceeding 6" in diameter, utilities, pavement, shoulders, striping, ROW determination, etc. 34

Establish Centerline alignment of River Road for southern extension 8

Processing of Field Work and generation of Digital Terrain Model for cross sections 16

TOTAL WORKHOURS = 58  
 ESTIMATED DIRECT COSTS = \$80.00

**2 Environmental Data**

Wetland Delineation for River Road Extension 16

Modify the Wetland Evaluation Documents for the extended area and update the report accordingly 16

TOTAL WORKHOURS = 32  
 ESTIMATED DIRECT COSTS = \$80.00

**3 Location Drainage Study**

Update report and drainage area to include River Road Extension including evaluating additional, floodplain impacts 40

1,000' of revised cross sections and re-analyze the Roberts Road cross sections for additional compensatory storage 16

With the Compensatory Storage Volume 10 times what was originally required, additional time will be needed to investigate alternative options as to where this volume can be compensated. Time is not included herein to prepare topographic surveys of the alternatives, but rather used County 2' contour maps to make recommendations. 40

TOTAL WORKHOURS = 96  
 ESTIMATED DIRECT COSTS =

**4 Alternate Geometric Studies \*\***

Prepare additional plan and profile sheet including geometric coordination with project to south 24

Profile studies to maintain 1' of vertical separation with the floodplain 24

Cross-Section Studies (including test cross-sections in critical areas and final cross-sections at every 100') 24

Develop and Update Preliminary Construction Cost Estimate 24

TOTAL WORKHOURS = 96  
 ESTIMATED DIRECT COSTS =

Route: FAU 3704/River Road at Roberts Road  
Section: 07-00086-08-CH  
Project No.: CMM-9003(061)  
Job No.: P-91-513-08

## DETAILED WORKHOURS AND DIRECT COST ESTIMATE

### 5 Soil, Pavement and Retaining Wall Alternative Analysis

Sub

Review additional area within soils report and review cross sections and retaining wall options 20

Extension of Elevation views and Typical Sections of walls and soil stabilization alternatives 20

Geotechnical Soils Analysis

TOTAL WORKHOURS =	40	0	
ESTIMATED DIRECT COSTS = \$	-	\$5,000.00	<i>Estimated</i>

### 6 Quality Assurance/Quality Control

TOTAL WORKHOURS =	8	
ESTIMATED DIRECT COSTS = \$	-	

Route: FAU 3704/River Road at Roberts Road  
Section: 07-00086-08-CH  
Project No.: CMM-9003(061)  
Job No.: P-91-513-08

### DETAILED DIRECT COSTS

#### SUPPLEMENT FOR RAISING RIVER ROAD 1' ABOVE THE FLOODPLAIN

	No. of Pages	Quantity	Rate	Extended Cost
<b>1 SURVEYS</b>				
Vehicle Days		2	\$40.00	\$80.00
<b>2 ENVIRONMENTAL DATA</b>				
Vehicle Days		2	\$40.00	\$80.00
			Subtotal =	\$80.00