

ILLINOIS DEPARTMENT OF TRANSPORTATION

Request for Approval
of Change in Consultant Contract

Date: 5/30/2017

Local Agency: LAKE COUNTY

Request: No. 2

Name: Cedar Lake Road Reconstruction

To: Lake County Division of Transportation

Section: 08-00065-02-RS

Consultant: Crawford, Murphy & Tilly

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

The estimated work is listed below

Original contract amount for services described:	\$543,160.20
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Sum of all previous contract change orders:	\$170,108.25
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Item #	Description	Additions	Deductions
1	Additional work performed on the Forest Preserve Site including additional design, project schedule considerations, LCFPD seeding specification revisions, coordination and reviews by LCFPD and preparation of temporary license agreement exhibits.	\$11,684.35	
TOTALS		\$11,684.35	\$0.00
NET CHANGE		\$11,684.35	\$0.00

Net ADDITION change to date \$181,792.60 which is 33.47 % of the original contract amount for services described

State fully the nature and reason for change:

Revised contract amount for services described:	\$724,952.80
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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.

 x The undersigned determined that the circumstances which necessitated this change were not reasonably foreseeable at the time the contract was signed.

 The undersigned determined that the circumstances which necessitated this change were not within the contemplation of the contract as signed.

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

Project Manager/Engineer _____ Date _____

Department Head _____ Date _____

Chief Accounting Specialist _____ Date _____

Approved _____ Date _____

County Engineer

EXHIBIT “A”

Supplement #2 CMT Phase II Scope of Services Cedar Lake Road – IL 120 to Nippersink Road Project

SUPPLEMENT #2 – Detailed Scope of Additional Engineering Service

Exhibit A: SUPPLEMENTAL SCOPE OF SERVICES

Lake County Division of Transportation Project Scope Description to Provide Phase II (Design) Services for Cedar Lake Road – IL Route 120 to Nippersink Road

1. **Data Collection:** NO OUT OF SCOPE/ADDITIONAL WORK
2. **Field and Land Surveys (State Plane):** NO OUT OF SCOPE/ADDITIONAL WORK
3. **Pump Station Alternative Analysis:** NO OUT OF SCOPE/ADDITIONAL WORK
4. **RV Sales/Service Facility Improvements (Forest Preserve Property)**
 - a. Additional Landscaping and Erosion Control Design: Original scope was developed assuming only a temporary cover crop and temporary erosion control blanket would be placed throughout the RV site following grading. This initial assumption was evident in the meeting minutes with the Lake County Forest Preserve District (LCFPD) on August 26, 2015. The final landscaping and erosion control became much more complex, and required additional design, sheet preparation, and LCFPD coordination/reviews. This line item covers the design and sheet preparation, while line items 4.c. & 4.d cover the additional LCFPD Specifications and additional LCFPD coordination/reviews.
 - b. Additional Project Schedule Considerations Related to LCFPD Work: Multiple construction schedules were developed to account for schedule restrictions related to LCFPD work. Specifically, the schedule restrictions were related to the planting schedules of specific seed mixtures, tree planting schedules, staff availability for building removal, and migratory bird species activity restrictions. Anticipated construction schedules were submitted to LCDOT on 11/21/2016, 11/29/2016, and 1/23/2017. The 1/23/2017 submittal included three separate schedules to account for different potential letting/construction start dates.
 - c. Additional LCFPD Specifications:
 - 1) Seeding, Special II (Basic Prairie)/Maintenance Mowing/Prairie Weed Control
 - 2) Seeding Special III (Low-Maintenance Turf)
 - 3) Trees (Special)
 - d. Additional coordination/reviews by LCFPD for the plans, specifications, and quantities at Nippersink Forest Preserve, specifically with respect to the erosion control, native seeding, tree planting, and special contractor qualifications/schedule requirements within the site.
 - e. Temporary License Agreement Exhibits: These exhibits were requested to allow pre-contract tree removal work to occur on LCFPD property. Submitted original exhibits on 2/13/2017 and updated exhibits on 2/14/2017, 2/20/2017, 2/21/2017, and 2/24/2017.

5. **Geotechnical Investigations/Reports:** NO OUT OF SCOPE/ADDITIONAL WORK
6. **Intersection Design Study/IDOT Detour Plans Coordination:** NO OUT OF SCOPE/ADDITIONAL WORK
7. **Preliminary Structural Plans:** NO OUT OF SCOPE/ADDITIONAL WORK
8. **Prefinal & Final Structural Plans:** NO OUT OF SCOPE/ADDITIONAL WORK
9. **Roadway Plans:** NO OUT OF SCOPE/ADDITIONAL WORK
10. **Specifications and Quantities:** NO OUT OF SCOPE/ADDITIONAL WORK
11. **Environmental/Permitting:** NO OUT OF SCOPE/ADDITIONAL WORK
12. **Soil Erosion and Sediment Control:** NO OUT OF SCOPE/ADDITIONAL WORK
13. **Right of Way Services:** NO OUT OF SCOPE/ADDITIONAL WORK
14. **Design Services During Construction:** NO OUT OF SCOPE/ADDITIONAL WORK
15. **Progress Meetings/Field Meetings/Field Checks/Coordination:** NO OUT OF SCOPE/ADDITIONAL WORK
16. **Quality Management Plan:** NO OUT OF SCOPE/ADDITIONAL WORK
17. **Administration/Project Management:** NO OUT OF SCOPE/ADDITIONAL WORK

EXHIBIT “B”

CMT Cost Estimate of Consultant Services (CECS)

EXHIBIT "B" - Supplement #2

Route: Cedar Lake Road - Phase II
 Local Agency: Lake County Division of Transportation
 Section No.: 08-00065-02-RS

*Firm's **approved rates** on file with DOT'S
 Bureau of Accounting and Auditing:

Overhead Rate (OH) 164.09%
 Complexity Factor '® 0.00
 Calendar Days 212

Method of Compensation:

Cost Plus Fixed Fee 1 ☒ 14.5%[DL + R(DL) + OH(DL) + IHDC]
 Cost Plus Fixed Fee 2 ☐ 14.5%[DL + R(DL) + 1.4(DL) + IHDC]
 Cost Plus Fixed Fee 3 ☐ 14.5%[(2.3 + R)DL + IHDC]

Cost Estimate of Consultant's Services in Dollars

Element of Work	Man-Hours	Payroll Rate	Payroll Costs (DL)	Overhead*	Services by others	In-House Direct Costs (IHDC)	Profit	Total	% of Grand Total
Phase II Tasks									
1 Data Collection	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
2 Field Surveys	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
3 Pump Station Alt Analysis/Surveys/Des	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
4 RV Sales/Service Facility Improvements	118.0	\$32.75	\$3,864.09	\$6,340.58	\$0.00	\$0.00	\$1,479.68	\$11,684.35	100.00%
5 Geotechnical Investigations	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
6 Intersection Design Study	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
7 Preliminary Structural Plans (Culvert)	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
8 Prefinal & Final Structural Plans	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
9 Roadway Plans	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
10 Specifications & Quantities	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
11 Environmental/Permitting	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
12 Soil Erosion and Sediment Control	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
13 Right of Way Services	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
14 Design Services During Bid/Constructio	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
Project Management Tasks									
15 Meetings and Coordination	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
16 Quality Assurance Plan	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
17 Project Administration	0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
Total Out of Scope Effort	118.0	\$32.75	\$3,864.09	\$6,340.58	\$0.00	\$0.00	\$1,479.68	\$11,684.35	100.00%

Total Supplement #2 Request: **\$11,684.35**

**SUPPLEMENT 2: Cedar Lake Road - Phase II
 II 120 to Nippersink Road
 Lake County Division of Transportation**

Man Hour Estimate for Consulting Services (Total Project)

Crawford, Murphy, and Tilly, Inc.

Summary of Man Hours

Item		CMT Total Hours
Phase II Tasks		
1	Data Collection	0.0
2	Field Surveys	0.0
3	Pump Station Alt Analysis/Surveys/Design	0.0
4	RV Sales/Service Facility Improvements	118.0
5	Geotechnical Investigations	0.0
6	Intersection Design Study	0.0
7	Preliminary Structural Plans (Culvert)	0.0
8	Prefinal & Final Structural Plans	0.0
9	Roadway Plans	0.0
10	Specifications & Quantities	0.0
11	Environmental/Permitting	0.0
12	Soil Erosion and Sediment Control	0.0
13	Right of Way Services	0.0
14	Design Services During Bid/Construction	0.0
Project Management Tasks		
15	Meetings and Coordination	0.0
16	Quality Assurance Plan	0.0
17	Project Administration	0.0
Total Project Hours:		118.0

		CMT Hours
1	Data Collection	
	NO OUT OF SCOPE/ADDITIONAL WORK	0
	Sub - total	0
2	Field Surveys	
	NO OUT OF SCOPE/ADDITIONAL WORK	0
	Sub - total	0
3	Pump Station Alt Analysis/Surveys/Design	
	NO OUT OF SCOPE/ADDITIONAL WORK	0
	Sub - total	0
4	RV Sales/Service Facility Improvements	
4.a	Additional Landscaping and Erosion Control Design	24
4.b	Additional Project Schedule Considerations Related to LCFPD Work	36
4.c	Additional LCFPD Specifications	20
4.d	Additional Coordination/Reviews by LCFPD	28
4.e	Temporary License Agreement Exhibits	10
	Sub - total	118
5	Geotechnical Investigations/Reports	
	NO OUT OF SCOPE/ADDITIONAL WORK	0
	Sub - total	0
6	Intersection Design Study/IDOT Detour Plans Coordination	
	NO OUT OF SCOPE/ADDITIONAL WORK	0
	Sub - total	0

**SUPPLEMENT 2: Cedar Lake Road - Phase II
II 120 to Nippersink Road
Lake County Division of Transportation**

Man Hour Estimate for Consulting Services (Total Project)

Crawford, Murphy, and Tilly, Inc.

7	Preliminary Structural Plans		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0
8	Prefinal & Final Structural Plans		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0
9	Roadway Plans		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0
10	Specifications & Quantities		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0
11	Environmental/Permitting		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0
12	Soil Erosion and Sediment Control		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0
13	Right of Way Services		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0
14	Design Services During Bid/Construction		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0
15	Meetings and Coordination		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0
16	Quality Assurance Plan		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0
17	Project Administration		
	NO OUT OF SCOPE/ADDITIONAL WORK	0	
	Sub - total		0

**SUPPLEMENT 2: Cedar Lake Road - Phase II
II 120 to Nippersink Road
Lake County Division of Transportation
Estimate of Direct Costs
Crawford, Murphy, and Tilly, Inc.**

1	Data Collection		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
2	Field Surveys		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
3	Pump Station Alt Analysis/Surveys/Design		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
4	RV Sales/Service Facility Improvements		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
5	Geotechnical Investigations		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
6	Intersection Design Study		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
7	Preliminary Structural Plans (Culvert)		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
8	Prefinal & Final Structural Plans		
a	No Direct Costs		
	Sub - total		\$0.00

**SUPPLEMENT 2: Cedar Lake Road - Phase II
II 120 to Nippersink Road
Lake County Division of Transportation**

Estimate of Direct Costs

9	Roadway Plans		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
10	Specifications & Quantities		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
11	Environmental/Permitting		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
12	Soil Erosion and Sediment Control		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
13	Right of Way Services		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
14	Design Services During Bid/Construction		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
15	Meetings and Coordination		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
16	Quality Assurance Plan		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00
17	Project Administration		
a	No Direct Costs	\$0.00	
	Sub - total		\$0.00

SHEET **1** **OF** **4**

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Data Collection			Field Surveys			Pump Station Alt Analysis/S			RV Sales/Service Facility Improve			Geotechnical Investigations		
		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	0																	
Senior Project Engineer	60.81	0																	
Project Engineer	47.29	8	6.78%	3.21									8	6.78%	3.21				
Senior Engineer	36.87	36	30.51%	11.25									36	30.51%	11.25				
Senior Technical Manager	40.62	0																	
Engineer	29.17	74	62.71%	18.29									74	62.71%	18.29				
Planner	23.17	0																	
Registered Land Surveyor	42.25	0																	
Senior Technician	36.00	0																	
Technician II	27.21	0																	
Technician I	21.09	0																	
Clerical	21.40	0																	
TOTALS		118	100%	\$32.75	0	0.00%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	118	100%	\$32.75	0	0%	\$0.00

AVERAGE HOURLY PROJECT RATES

FIRM Crawford, Murphy & Tilly, Inc.

PSB

PRIME/SUPPLEMENT

DATE 05/30/17

SHEET 2 OF 4

PAYROLL	AVG	Intersection Design Study			Preliminary Structural Plans			Prefinal & Final Structural Plans			Roadway Plans			Specifications & Quantities		
CLASSIFICATION	HOURLY RATES	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00															
Senior Project Engineer	60.81															
Project Engineer	47.29															
Senior Engineer	36.87															
Senior Technical Manager	40.62															
Engineer	29.17															
Planner	23.17															
Registered Land Surveyor	42.25															
Senior Technician	36.00															
Technician II	27.21															
Technician I	21.09															
Clerical	21.40															
TOTALS		0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

AVERAGE HOURLY PROJECT RATES

FIRM	<u>Crawford, Murphy & Tilly, Inc.</u>
PSB	<u> </u>
PRIME/SUPPLEMENT	<u> </u>

DATE 05/30/17

SHEET 3 **OF** 4

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Environmental/Permitting			Soil Erosion and Sediment Control			Right of Way Services			Design Services During Bid/Co			Meetings and Coordination		
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Principal	70.00															
Senior Project Engineer	60.81															
Project Engineer	47.29															
Senior Engineer	36.87															
Senior Technical Manager	40.62															
Engineer	29.17															
Planner	23.17															
Registered Land Surveyor	42.25															
Senior Technician	36.00															
Technician II	27.21															
Technician I	21.09															
Clerical	21.40															
TOTALS		0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

AVERAGE HOURLY PROJECT RATES

FIRM	Crawford, Murphy & Tilly, Inc.
PSB	
PRIME/SUPPLEMENT	

DATE 05/30/17

SHEET **4** **OF** **4**

PAYROLL	AVG	Quality Assurance Plan			Project Administration											
CLASSIFICATION	HOURLY RATES	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00															
Senior Project Engineer	60.81															
Project Engineer	47.29															
Senior Engineer	36.87															
Senior Technical Manager	40.62															
Engineer	29.17															
Planner	23.17															
Registered Land Surveyor	42.25															
Senior Technician	36.00															
Technician II	27.21															
Technician I	21.09															
Clerical	21.40															
TOTALS		0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

**SUPPLEMENT 2: Cedar Lake Road - Phase II
II 120 to Nippersink Road
Lake County Division of Transportation**

Development of Project Hourly Rates (IDOT Method)

Crawford, Murphy, and Tilly, Inc.

Item	2015 Actual Rate	2016 Projected @ 3.0% Increase	2017 Projected @ 3.0% Increase	2018 Projected @ 3.0% Increase	2019 Projected @ 3.0% Increase	2020 Projected @ 3.0% Increase
Average Hourly Rate as a Percent of 2015 Rate	100.0%	103.0%	106.1%	109.3%	112.6%	115.9%
Estimated Months of Contract in Given Year	0	4	3	0	0	0
% of Project Duration	0.00%	57.14%	42.86%	0.00%	0.00%	0.00%
Extension	0.000	0.589	0.455	0.000	0.000	0.000
Weighted Project Hourly Rate Multiplier	Note: Salary Adjustments are Given on January 1 of Each Year					1.0432

Project Duration: September 1, 2016 to March 31, 2016=

7 months

SUPPLEMENT 2: Cedar Lake Road - Phase II
Lake County Division of Transportation

**Computation of Prorated
Project Hourly Rates**

Crawford, Murphy, and Tilly, Inc.

Classification	Actual 2015 Average Hourly Rate	Weighted Hourly Rate Multiplier	Project Hourly Rates *
Principal	\$70.00	1.0432	\$70.00
Senior Project Engineer	\$58.29	1.0432	\$60.81
Project Engineer	\$45.33	1.0432	\$47.29
Senior Engineer	\$35.34	1.0432	\$36.87
Senior Technical Manager	\$38.94	1.0432	\$40.62
Engineer	\$27.96	1.0432	\$29.17
Planner	\$22.21	1.0432	\$23.17
Registered Land Surveyor	\$40.50	1.0432	\$42.25
Senior Technician	\$34.51	1.0432	\$36.00
Technician II	\$26.08	1.0432	\$27.21
Technician I	\$20.22	1.0432	\$21.09
Clerical	\$20.51	1.0432	\$21.40

* Rates to be applied to all project work tasks