


Local Public Agency Village of Orland Park	LOCAL AGENCY	 Illinois Department of Transportation Preliminary Engineering Services Agreement For Federal Participation Supplemental Agreement No. 2 Zero Dollar Change	CONSULTANT	Consultant Christopher B. Burke Engineering Ltd.
County Cook				Address 9575 W. Higgins Road, Suite 600
Section 14-00072-00-WR				City Rosemont
Project No. M-4003 (269)				State IL
Job No. P-91-180-14				Zip Code 60018
Contact Name/Phone/E-mail Address S. Khurshid Hoda, CPP Director Program/Eng. /708-295-4276 khoda@orlandpark.org				Contact Name/Phone/E-mail Address Michael Matkovic, PE Vice President / 847-823-0500 mmatkovic@cbbel.com

THIS AGREEMENT is made and entered into this _____ day of _____, _____ between the above Local Public Agency (LPA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the PROJECT. Federal-aid funds allotted to the LPA 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 143rd Street Route FAU 1600 Length 1.64 Structure No. _____
Termini Wolf Road to Southwest Highway

Description This supplemental agreement includes a zero dollar change to reallocate structural T,S&L work by Christopher B. Burke Engineering; retaining wall feasibility study work by subconsultant Bowman, Barrett & Associates; geotechnical investigations by subconsultant Wang Engineering; streetscape studies by subconsultant The Lakota Group to Christopher B Burke Engineering for extra level of effort for traffic studies, crash analysis update, location drainage studies, alternative geometric studies, intersection design studies, environmental studies and project administration, and to subconsultant Huff & Huff, Inc. for traffic noise report update.

Agreement Provisions

I. THE ENGINEER AGREES,

- To perform or be responsible for the performance, in accordance with STATE approved design standards and policies, of engineering services for the LPA for the proposed improvement herein described.
- To attend any and all meetings and visit the site of the proposed improvement at any reasonable time when requested by representatives of the LPA or STATE.
- To complete the services herein described within 360 calendar days from the date of the Notice to Proceed from the LPA, excluding from consideration periods of delay caused by circumstances beyond the control of the ENGINEER.
- 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.
- 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.
- 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.
- 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.
- That the ENGINEER will comply with applicable federal statutes, state of Illinois statutes, and local laws or ordinances of the LPA.

9. The undersigned certifies neither the ENGINEER nor I have:
- 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,
 - 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
 - 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.
 - are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency,
 - 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,
 - 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
 - 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 LPA.
11. To submit all invoices to the LPA 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 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 LPA 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 LPA 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 LPA 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 LPA, 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 LPA, 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 LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA 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 LPA, 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 LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA and STATE, a sum o 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.).
5. To certify by execution of this AGREEMENT that the selection of the ENGINEER was performed in accordance with the Local Government Professional Services Selection Act 50 ILCS 510, the Brooks Act 40USC 11, and Procurement, Management, and Administration of Engineering and Design related Services (23 CFR part 172). Exhibit C is required to be completed with this agreement.

III. IT IS MUTALLY AGREED,

1. That no work shall be commenced by the ENGINEER prior to issuance by the LPA 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 LPA 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 LPA 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 LPA 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 LPA. 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 LPA 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 LPA, 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 LPA 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 LPA 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 LPA. The LPA 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 LPA deems appropriate.
11. When the ENGINEER is requested to complete work outside the scope of the original AGREEMENT, a supplemental AGREEMENT will be required. Supplements will also be required for the addition or removal of subconsultants, direct costs, the use of previously unspecified staff, and other material changes to the original AGREEMENT.

Agreement Summary

Prime Consultant:	TIN Number	Agreement Amount
Christopher B. Burke Engineering, Ltd.	36-3468939	\$159,239.60
Sub-Consultants:	TIN Number	Agreement Amount
Huff & Huff, Inc.	36-3044842	\$12,623.15
Bowman, Barrett & Associates, Inc.	36-3680375	(\$27,871.25)
Wang Engineering, Inc.	36-3191909	(\$93,836.70)
The Lakota Group	36-3885664	(\$50,154.80)
Sub-Consultant Total:		(\$159,239.60)
Prime Consultant Total:		\$159,239.60
Total for all Work:		\$0.00

Executed by the LPA:

Village of Orland Park

(Municipality/Township/County)

ATTEST:

By: _____

By: _____

Clerk

Title: _____

(SEAL)

Executed by the ENGINEER:

ATTEST:

Michael Kerr - Christopher B. Burke Engineering Ltd.

By: Sherry Sporina

By: [Signature]

Title: Notary Public

Title: Executive Vice President

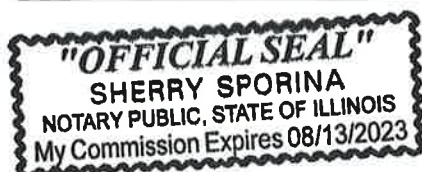


Exhibit A - Preliminary Engineering - Supplement Agreement No. 2 - Aero Dollar Reallocation

Cost Estimate of Consultant Service

FIRM	Christopher B. Burke Engineering, Ltd.
Local Agency	Orland Park
Section	14-00072-00-WR
Project	143rd Street
Job No:	

OVERHEAD RATE	130.82%
COMPLEXITY FACTOR	0

DATE 10/07/19

Cost Plus Fixed Fee 1	14.50% [DL+R(DL) +OH(DL)+IHDC]
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ITEM	MANHOURS	PAYROLL	OVERHEAD & FRINGE BENF (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	Outside Direct Costs (F)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(B-G)	
3. Traffic Data Collection and Analysis	20	771.21	1,008.90		268.38				2,048.49	n/a
4. Crash Analysis Report	50	1,928.03	2,522.24		670.95				5,121.22	n/a
5. Location Drainage Study	125	5,652.82	7,395.02		1,967.18				15,015.02	n/a
6. Retaining Wall Analysis/T,S&L Drawings	-106	-4,756.48	-6,222.43		-1,655.26		-27,871.25		-40,505.41	n/a
7. Alternate Geometric Studies and Streetscape Studies within the Old Orland/Downtown Area	872	34,710.16	45,407.83		12,079.14		-40,114.80		52,082.33	n/a
9. Intersection Design Studies	186	9,021.46	11,801.87		3,139.47				23,962.80	n/a
10. Railroad Coordination	16	777.60	1,017.26		270.60				2,065.46	n/a
12. Prepare Environmental Studies	192	8,026.96	10,500.87		2,793.38		12,623.15		33,944.36	n/a
14. Forest Preserve Coordination		0.00	0.00		0.00		-5,020.00		-5,020.00	n/a
15. Public Involvement/Meetings		0.00	0.00		0.00		-5,020.00		-5,020.00	n/a
16. Geotechnical Investigation		0.00	0.00		0.00		-93,836.70		-93,836.70	n/a
17. Project administration and Quality Control/Assurance	68	3,818.40	4,995.23		1,328.80				10,142.43	n/a
TOTALS	1423	59,950.16	78,426.79	0.00	20,862.65	0.00	-159,239.60	0.00	0.00	0.00%

Prime Consultant

Name	Christopher B. Burke Engineering, Ltd.
Address	9575 W. Higgins Road, Rosemont, IL 60018
Telephone	847-823-0500
TIN Number	36-3468939

Project Information

Local Agency	Village of Orland Park
Section Number	14-00072-00-WR
Project Number	M-4003 (289)
Job Number	P-91-180-14

This form is to verify the amount paid to the Sub-consultant on the above captioned contract. Under penalty of law for perjury or falsification, the undersigned certifies that work was executed by the Sub-consultant for the amount listed below.

Sub-Consultant Name	TIN Number	Actual Payment from Prime
Huff & Huff, Inc.	36-3044842	
	Sub-Consultant Total:	
	Prime Consultant Total:	
	Total for all Work Completed:	

Signature and title of Prime Consultant

Date _____

Note: The Department of Transportation is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under state and federal law. Disclosure of this information is REQUIRED and shall be deemed as concurring with the payment amount specified above.

For information about IDOTs collection and use of confidential information review the department's [Identity Protection Policy](#).



LOCAL PUBLIC AGENCY

Local Public Agency		County	Section Number
Village Orland Park		Cook	14-00072-00-WR
Fund Type	ITEP, SRTS, HSIP Number(s)	MPO Name	MPO TIP Number
STP		CMAQ	06-00-0042

☐ Construction on State Letting ☐ Construction Local Letting ☐ Day Labor ☐ Local Administered Engineering ☐ Right-of-Way

Construction

Engineering

Right of Way

Job Number	Project Number	Job Number	Project Number	Job Number	Project Number
		P-91-180-14	M-4003(269)		

This Agreement is made and entered into between the above local public agency, hereinafter referred to as the "LPA" and the State of Illinois, acting by and through its Department of Transportation, hereinafter referred to as "STATE". The **STATE** and **LPA** jointly propose to improve the designated location as described below. The improvement shall be consulted in accordance with plans prepared by, or on behalf of the **LPA** and approved by the **STATE** using the **STATE's** policies and procedures approved and/or required by the Federal Highway Administration, hereinafter referred to as "FHWA".

LOCATION

Local Street/Road Name	Key Route	Length	Stationing	
143rd Street (IL Route 7)	FAU 1600	1.64 mi	From	To
			1.00	2.64

Location Termini

Wolf Road to Southwest Highway

Current Jurisdiction	Existing Structure Number(s)	Add Location
IDOT	N/A	Remove

LOCAL PUBLIC AGENCY APPROPRIATION

For Amendments Increasing the LPA share: By execution of this Amendment, the LPA attests that additional moneys have been appropriated or reserved by resolution or ordinance to fund the additional share of **LPA** project costs. A copy of the resolution or ordinance is attached as an addendum (**required for increases to state-let contracts only**).

ADDENDA

Additional information and/or stipulations are hereby attached and identified below as being a part of this agreement.

<input checked="" type="checkbox"/>	1.	Location Map
<input checked="" type="checkbox"/>	2.	Division of Cost
<input checked="" type="checkbox"/>	3.	Attachment A - Supplemental Scope
<input type="checkbox"/>		

Add Row

BE IT MUTUALLY AGREED that all remaining provisions of the original agreement not altered by the amendment shall remain in full force and effect and the amendment shall be binding upon the inure to the benefit of the parties hereto, their successor and assigns.

The **LPA** further agrees as a condition of payment, that it accepts and will comply with the application provisions set forth in this amendment and all addenda indicated above.

APPROVED

Local Public Agency

Name of Official (Print or Type Name)

Title of Official

Signature

Date

The above signature certifies the agency's Tin number is
366006035 conducting business as a Governmental Entity.

Duns Number 010609261

APPROVED

State of Illinois
Department of Transportation

Omer Osman P.E., Acting Secretary

Date

By:

Director of Planning & Programming

Date

Director of Planning & Programming

Date

Philip C. Kaufmann, Chief Counsel

Date

Chief Fiscal Officer (CFO)

Date

NOTE: if the LPA signature is by an APPOINTED official, a resolution authorizing said appointed official to execute this agreement is required.

ADDENDA NUMBER 2

Local Public Agency	County	Section Number
Village Orland Park	Cook	14-00072-00-WR

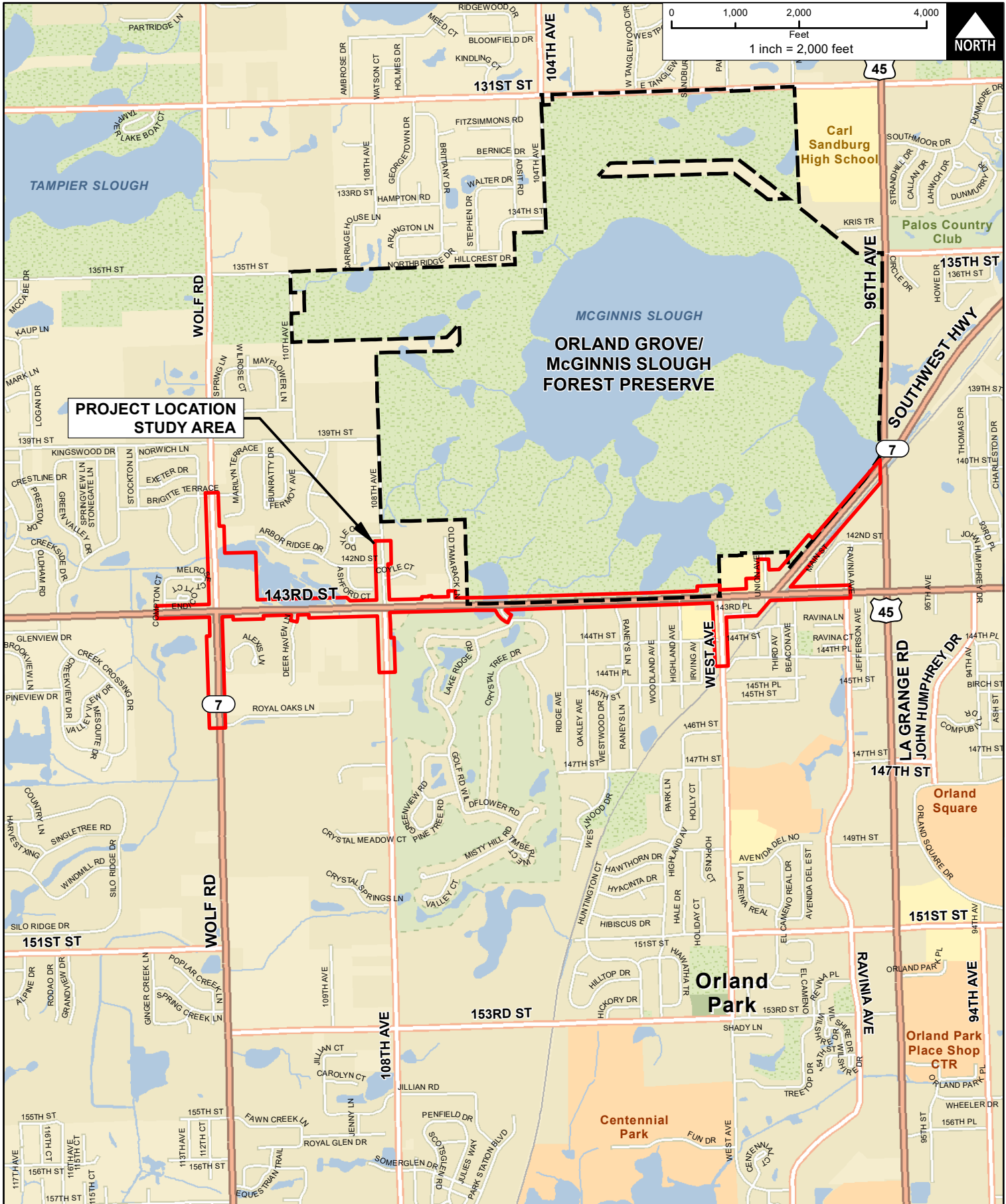
Construction		Engineering		Right of Way	
Job Number	Project Number	Job Number	Project Number	Job Number	Project Number
		P-91-180-14	M-4003(269)		

DIVISION OF COST											
		Federal Funds			State Funds			Local Public Agency			
	Type of Work	Fund Type	Amount	%	Fund Type	Amount	%	Fund Type	Amount	%	Totals
-	Preliminary Engineering	STU	\$0.00	0%					\$0.00	0%	\$0.00
-											
-											
-											
-											
-											
-											
-											
-											
-											
-											
-											
Total			\$0.00		Total			Total	\$0.00		\$0.00
Add											

If funding is not a percentage of the total place an asterisk (*) in the space provided for the percentage and explain below:

Zero dollar reallocation

NOTE: The costs shown in the Division of Cost table are approximate and subject to change. The final **LPA** share is dependent on the final Federal and State participation. The actual costs will be used in the final division of cost for billing and reimbursement.



CLIENT:



**VILLAGE OF
ORLAND PARK**

TITLE:

PROJECT LOCATION MAP

PROJ. NO. 140381

DATE: 08/09/2019

SHEET 1 OF 1

ATTACHMENT:



CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600 · Rosemont, Illinois 60018 · (847) 823-0500

DSGN.		SCALE:	1:24,000
DWN.	DRW	AUTHOR:	DWALTERS
CHKD.		PLOT DATE:	8/12/2019
FILE:	Location Map Attachment A		

A

Cost Estimate of Consultant Service

FIRM	Christopher B. Burke Engineering, Ltd.
Local Agency	Orland Park
Section	14-00072-00-WR
Project	143rd Street
Job No:	

Cost Plus Fixed Fee 1	14.50% [DL+R(DL) +OH(DL)+IHDC]
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AVERAGE HOURLY PROJECT RATES

FIRM Christopher B. Burke Engineering, Ltd.
Local Agency Orland Park
Section 14-00072-00-WR
Project 143rd Street
Job No: _____

DATE 10/07/19

SHEET 1 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			3. Traffic Data Collection a			4. Crash Analysis Report			5. Location Drainage Study			6. Retaining Wall Analysis/			7. Alternate Geometric Stud		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer VI	70.00	60	4.22%	2.96				2	4.00%	2.80	2	1.60%	1.12	-2	1.89%	1.32	8	0.92%	0.64
Engineer V	59.56	-6	-0.42%	-0.25							6	4.80%	2.86	-20	18.87%	11.24	8	0.92%	0.55
Engineer IV	48.60	384	27.02%	13.13	5	25.00%	12.15	8	16.00%	7.78	32	25.60%	12.44				180	20.64%	10.03
Engineer III	40.10	410	28.85%	11.57	8	40.00%	16.04	20	40.00%	16.04	53	42.40%	17.00	-60	56.60%	22.70	300	34.40%	13.80
Engineer I/II	29.63	275	19.35%	5.73	7	35.00%	10.37	20	40.00%	11.85							248	28.44%	8.43
Env Res Specialist V	64.00	0																	
Env Res Specialist IV	48.25	54	3.80%	1.83															
Env Res Specialist III	36.66	26	1.83%	0.67															
Env Res Technician	32.75	0																	
Landscape Architect	48.50	0																	
Survey V	70.00	0																	
Survey IV	59.00	0																	
Survey III	50.50	0																	
Survey II	35.77	0																	
Survey I	25.45	0																	
Survey Intern		0																	
CAD Manager	52.13	142	9.99%	5.21							12	9.60%	5.00				88	10.09%	5.26
Asst. CAD Manager	47.33	0																	
CAD II	42.47	-4	-0.28%	-0.12							20	16.00%	6.80	-24	22.64%	9.62			
CAD I	32.50	0																	
Engineering Technician	59.00	0																	
Engineering Technician	43.00	0																	
Engineering Technician	42.88	0																	
Engineering Technician	35.85	0																	
GSI Specialist III	41.00	0																	
GSI Specialist I/II	24.00	80	5.63%	1.35													40	4.59%	1.10
Engineering Intern	13.50	0																	
Administrative	28.18	0																	
TOTALS		1421	100%	\$42.09	20	100.00%	\$38.56	50	100%	\$38.47	125	100%	\$45.22	-106	100%	\$44.87	872	100%	\$39.81

AVERAGE HOURLY PROJECT RATES

FIRM Christopher B. Burke Engineering, Ltd.
Local Agency Orland Park
Section 14-00072-00-WR
Project 143rd Street
Job No: _____

DATE 10/07/19

SHEET 2 **OF** 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	9. Intersection Design Studies			10. Railroad Coordination			12. Prepare Environmental Stu			14. Forest Preserve Coordinat			15. Public Involvement/Meeting			16. Geotechnical Investigation		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer VI	70.00	24	12.90%	9.03				4	2.08%	1.46									
Engineer V	59.56																		
Engineer IV	48.60	40	21.51%	10.45	16	100.00%	48.60	59	30.73%	14.93									
Engineer III	40.10	80	43.01%	17.25				9	4.69%	1.88									
Engineer I/II	29.63																		
Env Res Specialist V	64.00																		
Env Res Specialist IV	48.25							54	28.13%	13.57									
Env Res Specialist II	36.66							26	13.54%	4.96									
Env Res Technician	32.75																		
Landscape Architect	48.50																		
Survey V	70.00																		
Survey IV	59.00																		
Survey III	50.50																		
Survey II	35.77																		
Survey I	25.45																		
Survey Intern																			
CAD Manager	52.13	42	22.58%	11.77															
Asst. CAD Manager	47.33																		
CAD II	42.47																		
CAD I	32.50																		
Engineering Technici	59.00																		
Engineering Technici	43.00																		
Engineering Technici	42.88																		
Engineering Technici	35.85																		
GSI Specialist III	41.00																		
GSI Specialist I/II	24.00							40	20.83%	5.00									
Engineering Intern	13.50																		
Administrative	28.18																		
TOTALS		186	100%	\$48.50	16	100%	\$48.60	192	100%	\$41.81	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

AVERAGE HOURLY PROJECT RATES

FIRM Christopher B. Burke Engineering, Ltd.
Local Agency Orland Park
Section 14-00072-00-WR
Project 143rd Street
Job No: _____

DATE 10/07/19

SHEET 3 **OF** 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	17. Project administration and																	
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer VI	70.00	24	35.29%	24.71															
Engineer V	59.56																		
Engineer IV	48.60	44	64.71%	31.45															
Engineer III	40.10																		
Engineer I/II	29.63																		
Env Res Specialist V	64.00																		
Env Res Specialist IV	48.25																		
Env Res Specialist III	36.66																		
Env Res Technician	32.75																		
Landscape Architect	48.50																		
Survey V	70.00																		
Survey IV	59.00																		
Survey III	50.50																		
Survey II	35.77																		
Survey I	25.45																		
Survey Intern																			
CAD Manager	52.13																		
Asst. CAD Manager	47.33																		
CAD II	42.47																		
CAD I	32.50																		
Engineering Technician	59.00																		
Engineering Technician	43.00																		
Engineering Technician	42.88																		
Engineering Technician	35.85																		
GSI Specialist III	41.00																		
GSI Specialist I/II	24.00																		
Engineering Intern	13.50																		
Administrative	28.18																		
TOTALS		68	100%	\$56.15	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

ATTACHMENT A

143rd Street (IL Rt 7): Wolf Road to Southwest Highway Reconstruction Village of Orland Park

Phase I Engineering and Environmental Study 2nd Supplemental Agreement – Scope of Work Narrative November 2019

This zero-balance supplement compensates for additional level of effort that is required to complete Phase I Engineering and Environmental Studies for 143rd Street from Wolf Road to Southwest Highway. As the study has progressed there are numerous areas that are no longer required and will be reallocated to compensate for tasks that have required an additional level of effort not included within the original scope of work (2014) or 1st Supplemental Agreement (2016). This 2nd Supplemental Agreement does not increase the upper limit of the contract and re-allocates scope of work for Christopher B. Burke Engineering (Work Tasks 6), sub consultant Bowman, Barrett & Associates (Work Task 6), sub consultant Wang Engineering (Work Task 16) and sub consultant The Lakota Group (Work Tasks 7, 14 & 15) to supplement additional level of effort for Christopher B. Burke Engineering (Work Tasks 3, 4, 5, 7, 9, 10, 12 & 17) and sub consultant Huff & Huff (Work Tasks 12).

The below supplement scope of work reflects the outcome from recent IDOT coordination to defer a portion of the geotechnical investigations and all retaining wall Type, Size & Location (T,S & L) Drawings to Phase II Engineering (Retaining wall type evaluation must be performed in Phase I). From the latest roadway design, there are 28 total retaining walls, which have increased during design revisions to minimize impacts and accommodate detailed drainage design. A total of 11 walls have a height over 7-feet, which by IDOT Bureau of Local Roads policy, require a Structural Geotechnical Report (SGR) and structural T, S & L Drawings. The prior scope of work included geotechnical and T, S & L for 3 walls over 7-feet. Therefore, scope of work for Task 6 – Retaining Wall Analysis / T,S &L Drawings and Task 16 Geotechnical Investigations will be reduced or eliminated.

Other additional level of effort is for an update for 2050 traffic projects, crash analysis update, drainage design modifications, alternative geometric design modifications per IDOT request, Southwest Highway traffic signal layout and phasing plan per IDOT request, ICC/IDOT/Railroad coordination for Southwest Highway intersection design, environmental studies (EPFO surveys, Section 106 coordination, Traffic Noise Modal Update), and project administration.

Christopher B. Burke Engineering will be entering into a separate locally funded 3rd Supplemental Agreement with the Village of Orland Park to compensate for other additional level of effort that is required to complete Phase I Engineering and Environmental Studies for this project (Work Tasks 7, 9, 12, 15, 16 & 17).

Work Task 3 – Traffic Data Collection and Analysis

This task will include coordination with CMAP to obtain 2050 traffic projections per the October 2018 adopted On To 2050 Plan, which created an updated travel demand model. These traffic projections will be used to update the peak design hourly volumes that are utilized in intersection design studies (IDS), traffic noise analysis, and air quality analysis. A summary design hourly volume exhibit will be prepared.

Work Task 4 – Crash Analysis Report

This task includes one crash analysis update for the most recent 5 years of crash data (2013 – 2017). The current crash analysis report is for years 2012-2016. The crash analysis report and findings will be included in the Project Development Report.

Work Task 5 – Location Drainage Study

This task includes drainage design modifications to the proposed drainage system to address a change in IDOT design methodology and direction for this project. In March 2019 the Illinois State Water Survey released an update to Bulletin 70, which provides rainfall frequency data utilized in design of the roadway storm sewer system, culverts, ditches, detention facilities, and compensatory storage facilities. An additional level of effort is required to address IDOT's requested drainage design modifications and updates to address the newly released Bulletin 70.

Work Task 6 – Retaining Wall Analysis/T, S & L Drawings

Per IDOT District 1 coordination, the scope for this task will be modified to remove Type, Size & Location (T,S & L) drawings for retaining walls over 7-feet in exposed height from the scope of work and deferred to Phase II Engineering. The retaining wall feasibility study performed by subconsultant Bowman, Barrett & Associates will be removed from the scope of work. The remaining scope under this task will be redefined to include a Retaining Wall Type Study Memorandum prepared by CBBEL for 11 walls over 7-feet in exposed height to determine the appropriate wall types. A portion of the existing CBBEL scope will be reallocated and all of the Bowman, Barrett & Associates scope will be reallocated to other tasks that require an additional level of effort to complete Phase I Engineering.

The prior scope of work included T,S & L drawings for three walls. The current roadway design has a total of 28 retaining walls, with 11 over 7-feet exposed height. Per IDOT District Bureau of Local Roads Manual, all walls over 7-feet exposed height require a soil Geotechnical Report (SGR) and structural T,S & L drawing in Phase I Engineering. Due to the circumstances of this project, IDOT District 1 has allowed all T, S & L drawings for retaining walls to be deferred to Phase II Engineering. The geotechnical investigations performed by subconsultant Wang Engineering has been modified (Refer to Task 16).

Work Task 7 – Alternate Geometric Studies and Streetscape Studies within the Old Orland / Downtown Area

This task includes alternative geometric studies and geometric design of the preferred alternative.

Alternative Geometric Design

Further intersection alternative geometric design is required two locations:

1. 143rd Street / Southwest Highway / Union Street intersection & Metra Parking Impact Mitigation/Ultimate Plan – Further alternative evaluation for optimizing the design of Southwest Highway at the 143rd Street intersection is included in this task. Five alignment shift options will be evaluated via critical sections for Southwest Highway approaching 143rd Street with consideration of future development plans at the Southwest Highway/143rd Street intersection, avoidance of Forest Preserve District property along the west side of Southwest Highway, existing 18-foot tall retaining wall, and future expansion of the Southwest Highway Metra Commuter Lot. Two of the alignment shift options will have concept geometry developed and summary memorandum prepared. Due to the existing proximity of the existing Metra Commuter Lot to the existing Southwest Highway curb (9-foot separation), it is anticipated that the front row of parking adjacent to Southwest Highway will be impacted due to roadway widening. As such, mitigation of

parking stalls will be required as part of this project due to existing agreements between Metra and the Village of Orland Park. The replacement of impacted parking will be compatible with the future ultimate Southwest Highway Metra Commuter Lot expansion. Coordination regarding the ongoing development at the 143rd Street at Southwest Highway intersection is included in this task.

2. 143rd Street at Wolf Road Intersection – The current design assumed symmetrical widening about the existing roadway centerline. Two alignment shift alternatives of 143rd Street and Wolf Road will be evaluated and developed to look at impact avoidance and minimization to the Yunker School House (Historic property) as the southeast corner of the intersection. Coordination of the preferred intersection alternative will occur with the Village Planning Commission and IDOT under Task 12. The approved intersection design will be incorporated into the preferred alternative geometric design and 143rd Street and Wolf Road intersection design study (Task 9).

Alternative geometric designs will be evaluated at 28 retaining wall locations to determine feasibility of removing walls and minimizing the height for walls that must remain. This sub-task includes plan view design and cross section design evaluation.

Two design coordination meetings with IDOT Bureau of Programming and Bureau of Traffic are included for coordination of the roadway design for IL Route 7 (Southwest Highway, 143 Street, and Wolf Road), which they have jurisdiction over.

Preferred Alternative Geometric Design Update

This sub-task includes updates to the geometric design of the preferred alternative, which includes horizontal alignment design, vertical alignment design, plan and profile sheets (40 scale), typical sections, and cross sections. Sub design iterations are included for cross section design modifications for drainage.

Areas of the project that required updates include:

- Wolf Road and 143rd Street Intersection - the preferred geometric design was identified in the sub-task #2 above, which was the result of impact minimization of the Yunker School House. This includes 2,800 feet along Wolf Road and 2,000 feet along 143rd Street. The realignment along 143rd Street extends from Compton Court to Deer Haven Lane (2,000 feet). The realignment of Wolf Road extends 1,400 feet north and south of 143rd Street (2,800 feet).
- Design update to provide 5-feet behind all retaining walls along IL Route 7 (Southwest Highway, 143rd Street, and Wolf Road) for future maintenance purposes. This design request was made by IDOT. To accommodate this design change request, the typical section will be modified from a 17-foot wide median to 12-foot wide median between Deer Haven Lane and Ridge Avenue; 108th Street intersections will be omitted from this change (3,200 feet). This design change also required new curb ramp details at 22 locations.

Work Task 9 – Intersection Design Studies

This task includes revisions to the intersection design study (IDS) at the 143rd Street at Wolf Road intersection due to changes of the preferred geometric roadway design at the intersection to minimize impacts to the Yunker School House (potential National Historic Register Places. Previously an IDS had been finalized for the preferred geometric design at this intersection.

The IDS's will be prepared at a scale of 1" = 50' and will include the following:

- Preliminary intersection geometry and labeling (2 sheets)
- Signal layout
- Design and general notes

- Auto Turn design vehicle layout (2 sheets)
- Profile (3 sheets)
- ADA curb ramp details (8; 4 sheets)

IDOT design policy changed January 1, 2019 regarding design vehicles (necessitated from new State Law). All streets that intersect a State highway/route/roadway must accommodate a WB-65 (Multi Unit Truck) design vehicle (with encroachment). Additional auto-turn analysis will be performed, and additional IDS sheets prepared for the IDSs at Southwest Highway/Union Street, West Avenue, Crystal Tree, 108th Avenue, and Wolf Road. Geometric changes will be made accordingly so the WB-65 truck does not encroachment (jump) the curb but allow encroachment into adjacent travel lanes. IDS plan sheets will be revised accordingly.

From coordination with IDOT and the ICC, a detailed traffic signal layout and phasing plan will be prepared for the 143rd Street / Southwest Highway / Union Street intersection, which is adjacent to the 143rd Street/Norfolk Southern Railroad crossing. This is required due to the unique intersection design and proximity to existing railroad crossing. This level of detail is typically required during Phase II Engineering, but is being requested by IDOT to confirm the proposed intersection design and signal phasing reflected in the IDS is feasible. It is assumed that no significant geometric design changes will result from the detailed traffic signal layout and phasing plan.

The revised IDS's will be submitted to IDOT for review. Any review comments by IDOT will be incorporated into the final IDS's and submitted to IDOT for approval.

It has been confirmed with IDOT that the IDSs for the entire project can utilize 2040 design hourly volumes.

Work Task 10 – Railroad Coordination

This task includes coordination with the ICC, IDOT Railroad Unit, IDOT Bureau of Traffic, IDOT Bureau of Programming, Metra and Norfolk Southern Railroad regarding the existing railroad crossing of 143rd Street just east of Southwest Highway. An additional level of effort is required for this task due to the design complexity of the 143rd Street / Southwest Highway / Union Street intersection and proximity to the existing railroad crossing. Two meetings are included in this task (IDOT/ICC & Metra).

Work Task 12 – Prepare Environmental Studies

This task includes additional Section 106 coordination for 13 historic properties within the project study limits. Seven historical properties have proposed property acquisition and individual exhibits will be prepared for each property for coordination with the Orland Park Planning Commission, IDOT BDE Cultural Resources Unit and IDNR State Historic Preservation Officer (SHPO). With Orland Park being a Certified Local Government with the SHPO, preparation of materials for four meetings the designated preservation review commission (Village Planning Commission) to present effects of this project on the identified historic properties. Input from the Village Planning Commission and IDOT on impacts to historic properties will be utilized to make geometric design adjustments (Task 7 and Task 9) to minimize or avoid impacts. From this coordination it was determined that the existing curb line should be held adjacent to Yunker School House along 143rd Street and Wolf Road, which requires an alignment shift of Wolf Road 11-feet to the west and 143rd Street 10-feet to the south. It is anticipated that no significant design changes will be required along 143rd Street within the Old Odland Historic District. The location of historic properties are predominantly located within the Old Orland Local Historic District between West Avenue and Southwest Highway intersections and the Wolf Road intersection.

An Easter Prairie Fringed Orchid survey is required for 4 wetland complexes within the project study limits that have an FQI over 20.0 according to US Fish and Wildlife Service requirements. A summary report will be prepared and submitted to IDOT for review and approval.

The Traffic Noise Report and noise analysis will be updated for extended project limits and to incorporate the October 2018 released 2050 CMAP traffic projections. This includes modification to the existing traffic noise model, 2050 no-build model, and 2050 build model. The project limits were extended along Wolf Road (north and south) and Southwest Highway. Additional Common Noise Environments will be added to the modal and field work conducted to incorporate in the noise modal. Updating to 2050 traffic projections are required per IDOT and FHWA. With the project extension north along Wolf Road, it is anticipated that noise mitigation may meet reasonable and feasible requirements for the sub-development along the west side of Wolf Road north of 143rd Street where roadway widening is occurring in close proximity to multi-unit residences. As such, various noise mitigation (i.e. noise wall) scenarios (location and height) will be evaluated, a hold a noise forum meeting will be held, and noise solicitation (i.e. vote) held. Sub consultant Huff & Huff will perform this sub task. CBBEL will assist with the Noise Forum meeting.

The Preliminary Environmental Site Assessment (PESA) will be updated to include portions of the project that were extended along the north leg of Wolf Road and 108th Street. This will be performed by sub consultant Huff & Huff.

Work Task 14 – Forest Preserve Coordination

The scope of work for subconsultant The Lakota Group for this task is no longer required for completion of Phase I Engineering and will be reallocated to CBBEL for other tasks that require an additional level of effort to complete Phase I Engineering. CBBEL is performing all Forest Preserve District of Cook County coordination.

Work Task 15 – Public Involvement/Meetings

The scope of work for subconsultant The Lakota group for this task is no longer required for completion of Phase I Engineering and will be reallocated to CBBEL for other tasks that require an additional level of effort to complete Phase I Engineering. CBBEL is performing all Public Involvement activities.

Work Task 16 – Geotechnical Investigations

The scope of work for subconsultant Wang Engineering for this task will be reallocated to CBBEL for other tasks that require an additional level of effort to complete Phase I Engineering. Required geotechnical investigations will be performed under a separate locally funded 3rd Supplemental Agreement with the Village of Orland Park to compensate level of effort that is required to complete Phase I Engineering for this task.

Per IDOT District 1 coordination, the scope for this task will be modified to perform necessary geotechnical investigations to determine the retaining wall type (over 7-feet in exposed height). Geotechnical investigations will be performed for 11 walls from the scope of work and deferred to Phase II Engineering. The retaining wall feasibility study performed by subconsultant Bowman, Barrett & Associates will be removed from the scope of work. The remaining scope under this task will be redefined A Retaining Wall Type Study Memorandum will be prepared by CBBEL for 10 walls over 7-feet in exposed height to determine the appropriate wall types. A portion of the existing CBBEL scope will be reallocated and all of the Bowman, Barrett & Associates scope will be reallocated to CBBEL to perform other necessary tasks for Phase I completion.

The prior scope of work included T,S & L drawings for three walls. The current roadway design has a total of 28 retaining walls, with 10 over 7-feet exposed height. Per IDOT District Bureau of Local Roads Manual, all walls over 7-feet exposed height require a soil Geotechnical Report (SGR) and structural T,S & L drawing in Phase I Engineering. Due to the circumstances of this project, IDOT District 1 has allowed all T, S & L drawings for retaining walls to be deferred to Phase II Engineering. The geotechnical investigations performed by Subconsultant Wang Engineering has been modified (Refer to Task 16).

Work Task 17 – Project Administration and Quality Control / Assurance

This task includes overall project administration and management. Due to the extended project schedule and associated coordination with the supplemental scope of work, an extra level of project administration and QA/QC is required for completion of Phase I Engineering. The Task assumes Phase I Design Approval by April 2020.

Project administration includes managing the day to day work effort on the project to ensure an efficient project development process including work force allocations, and schedule oversight to ensure project milestones are being met.

Specific work tasks will include:

- General project management/administration including staff resource allocation, task/schedule oversight, quality reviews, etc.
- Prepare monthly progress reports including a copy of the overall project schedule (9 months).
- Attend quarterly project status meetings with the Village as determined to be necessary (3 meetings).
- QA Reviews

Task (refer to detailed scope of work document for further explanation)	CBBEL		Subconsultants - Work Hours			
	Units	Work Hours	Bowman, Barrett & Assoc.	Wang Eng.	Lakota Group	Huff & Huff, Inc.
3 Traffic Data Collection and Analysis						
a CMAP Design Year 2050 Request		4				
b Development of year 2050 design hourly volumes and and summary exhibit.		16				
	SUBTOTAL:	20	0	0	0	0
4 Crash Analysis Report						
a Update Crash Analysis Report for the latest 5 years (2013 - 2017)		50				
	SUBTOTAL:	50	0	0	0	0
5 Location Drainage Study						
a Drainage design update to address IDOT design modifications and Bulletin 70 update.		125				
	SUBTOTAL:	125	0	0	0	0
6 Retaining Wall Analysis / T,S&L Drawings						
a Retaining Wall T,S&L Drawings		-106				
b Retaining Wall Feasibility Study			-228			
	SUBTOTAL:	-106	-228	0	0	0
7 Alternative Geometric Studies and Streetscape Studies within the Old Orland/Downtown Area						
a Wolf Road intersection design alternatives to minimize impacts to Yunker School House	2 alignment shift alternatives x 56 hours; other minor geometric element evaluation; address comments	92				
b Southwest Highway intersection design alternatives & Metra Parking Lot impact/mitigation evaluation; summary memo	5 critical sections (10 hrs each); 2 concepts development (24 hours each); memo (40 hrs)	130				
c Retaining wall elimination/minimization evaluation	28 walls x 4 hrs per wall	112				
d Wolf Road at 143rd Street preferred alternative geometric design update (4,800 feet)	4 sheets x 32 hrs/sht	128				
e 143rd Street (Deer Haven Lane to Ridge Avenue; omitting 108th Avenue) change from 17' wide median to 12' wide median. (3,200')	3 sheets x 32 hrs/sht	96				
f 22 curb ramp details associated with item e	8 hrs/ramp	176				
k Retaining wall elimination/minimization evaluation	28 walls x 4 hrs per wall	112				
m IDOT design coordination meetings	2 mtgs x 3 ppl x 4 hrs	26				
n Streetscape concept alternative level of effort elimination for concept streetscape enhancement development by subconsultant The Lakota Group					-320	
	SUBTOTAL:	872	0	0	-320	0
9 Intersection Design Studies						
a Wolf Road at 143rd Street IDS Revisions		106				
b WB-65 auto turn update and new IDS sheets & associated existing sheet updates	5 intersections x 8 hrs/per	40				
c 143rd Street/Southwest Highway / Union Street detailed traffic signal layout and phasing plan		40				
	SUBTOTAL:	186	0	0	0	0
10 Railroad Coordination						
a Railroad Coordination	12 hrs x 3 Int	4				
b Coordination Meetings with IDOT/ICC & Metra	2 mtgs x 2 ppl x 3 hrs	12				
	SUBTOTAL:	16	0	0	0	0

Task (refer to detailed scope of work document for further explanation)		CBBEL		Subconsultants - Work Hours			
		Units	Work Hours	Bowman, Barrett & Assoc.	Wang Eng.	Lakota Group	Huff & Huff, Inc.
12	Prepare Environmental Studies						
a	Section 106 / Cultural Coordination for 13 listed properties	13 properties; 7 properties requiring exhibits; coordination	108				
b	Eastern Prairie Fringed Orchid Surveys & Report		80				
c	Traffic Noise Report and analysis update for existing noise modal, 2050 no-build modal, and 2050 build modal.		4				64
d	PESA for extended project limits						12
f	Traffic Noise Forum						10
	SUBTOTAL:		192	0	0	0	86
14	Forest Preserve Coordination						
a	Forest Preserve Coordination level of effort elimination (Lakota Group)		0			-40	
	SUBTOTAL:		0	0	0	-40	0
15	Public Involvement / Meetings						
a	Public Involvement / Meetings level of effort elimination (Lakota Group)					-40	
	SUBTOTAL:		0	0	0	-40	0
16	Geotechnical Investigations						
a	Geotechnical Investigations				-881		
	SUBTOTAL:		0	0	-881	0	0
17	Project Administration and Quality Control / Assurance						
a	Project Management and Administration		23				
b	Monthly Progress Reports	1 hrs x 9 months	9				
	Project Status Meetings (LCDOT, IDOT as required)	3 mtgs x 2 ppl x 4 hours	24				
c	Quality Assurance Reviews		12				
	SUBTOTAL:		68	0	0	0	0
	SUBTOTAL:		1423	-228	-881	-400	86



A Subsidiary of GZA

GEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION
MANAGEMENT

915 Harger Road
Suite 330
Oak Brook, IL 60523
T: 630.684.9100
F: 630.684.9120
www.huffnhuff.com
www.gza.com



September 23, 2019

via email: mhuffman@cbbel.com

Mr. Matthew J. Huffman, P.E., M.ASCE
Project Manager – Phase I Engineering Department
Christopher B. Burke Engineering, Ltd.
9675 W. Higgins Road, Suite 600
Rosemont, IL 60018

**Re: 143rd Street Supplement
Orland Park, Cook County, Illinois
Proposal No. 81.PT00033.20**

Dear Mr. Huffman:

Huff & Huff, Inc., (H&H) a subsidiary of GZA GeoEnvironmental, Inc. is pleased to submit this supplemental proposal to Christopher B. Burke Engineering, Ltd. (Client) to conduct a noise study for the proposed improvements to 143rd Street between Wolf Road and Southwest Highway in Orland Park, Cook County, Illinois. Client has requested a supplemental scope and fee to account for changes in IDOT Noise Policy and changes in project parameters from the time of the original scope.

This supplemental proposal presents our project approach, the scope of services, cost, and schedule for completing the project.

1. SCOPE OF SERVICES

Task 1 – Field Review/Noise Monitoring

Up to seventeen additional representative receptor locations need to be added from the original scope to meet the updated IDOT requirements and expectations, as well as to accommodate tweaks to project construction limits. This resulted in an additional four monitoring locations needed to satisfy the IDOT requirement of validating 25% to 50% of the representative receptor locations.

Task 2 – Noise Model Update

Project traffic data has been updated for the year 2050. This traffic update will require additional traffic data preparation to replace the previously developed data. In addition, noise modeling for the existing (2019) and No-Build (2050) conditions needs to be updated to account for traffic changes.

There is a need to analyze noise levels for existing (2019), No-Build (2050), and Build (2050) conditions at more representative receptors than originally scoped. Noise modeling needs to be conducted for up to 25 representative receptors (8 representative receptors in the original scope). Several of the additional receptors added due to project limit tweaks have an increased likelihood for needing detailed abatement analyses.



Task 3 – Noise Report

The noise report will need to be revised due to the additional receptors, monitoring locations, and new traffic data. The abatement analysis section will need to be substantially elaborated on to detail the additional studies completed. A full revised traffic noise report will document the results of the study.

Task 4 – PESA

Based on the added project limits and completion of PESAs by the Illinois State Geological Survey (ISGS) for areas of the project corridor under IDOT jurisdiction that have not covered the entire project corridor, it will be necessary to complete additional PESA activities. Specifically, the PESA is proposed to include coverage of local roads portions of the project corridor not already included in the ISGS/IDOT PESA(s) as part of this supplement request including:

- 1) 108th Avenue – including areas extending approximately 600 feet north and 700 feet south of the 143rd Street (IL Route 7) ROW;
- 2) West Avenue – including an area extending approximately 1,000 feet south of the 143rd Street (IL Route 7) ROW; and
- 3) 143rd Street – including an area of 143rd Street approximately 1,000 feet east of Southwest Highway (IL Route 7) ROW.

H&H anticipates that sites of concern identified by the previously completed IDOT PESAs will also be acknowledged within the PESA completed as part of this supplement request. Though the areas are discontinuous, it is anticipated that each of the areas will be addressed within a single PESA Report. The scope of the PESA is summarized below.

The process will follow general protocols contained within:

- A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation (IDOT) Highway Projects (Erdmann et al., 2012)
- ASTM International (ASTM) standard 1527-13
- The IDOTs Bureau of Design and Environment (BDE) Procedure Memorandum Number 10-07, *Special Waste Procedures*. This memo was incorporated into Chapter 27-3 of the IDOT BDE Manual in June 2012.
- IDOT Bureau of Local Roads and Streets (BLRS) Manual, Chapter 20-12, Special Waste, July 2013.
- Public Act 96-1416
- Clean Construction or Demolition Debris Fill Operations (CCDD) and Uncontaminated Soil Fill Operations: Amendments to 35 Illinois Administrative Code 1100. Effective on August 27, 2012.

A. Historical Research

The site's historical land use/ownership record will be developed from standard historical sources. Historic aerial photographs will be reviewed to identify land use over time and potential areas of environmental concern, such as areas of surface disturbance and outside storage.

B. Site Evaluation

Current environmental features and conditions of sites adjacent to the right-of-way/project area will be evaluated. A site walkover of potential right-of-way/project areas designated for excavation and/or acquisition will be conducted for first-hand evaluation of current environmental conditions within the project limits. The of the features and conditions listed



above will be investigated and, as appropriate, documented in photographs. The land-use and housekeeping practices of adjacent properties also will be evaluated in accordance with ASTM protocols.

C. Records Review

A records review will be conducted to determine potential environmental concerns within the study area. It will include a search of standard state and federal environmental record databases in accordance with the specifications of ASTM standards. This search is based on the outline of the study area. Based on the discontinuous arrangement of the PESA areas, three databases are anticipated.

Specifically, H&H will search each database to identify any potential sources requiring further investigation. As appropriate, Freedom of Information Act (FOIA) requests will be filed with the IEPA to obtain additional data pertaining to identified sites.

D. Report Preparation

One report summarizing the results of the evaluation will be prepared. The following information will be included in this report:

- a) The project location and description
- b) Historical uses of corridor.
- c) The area geology and hydrology.
- d) The environmental status of sites adjacent to the corridor regarding chemical use and storage, underground and aboveground storage tanks, solid waste, special waste, and hazardous waste, and PCBs.
- e) An analysis of the site inspection.
- f) A summary of the findings regarding environmental concerns. This will include IDOT's BDE Manual Chapter 27-3, Special Waste Procedures, and identification of Potentially Impacted Properties (PIPs) per Subpart F, Section 1100, 35 IAC, related to Clean Construction or Demolition Debris management.

Task 7 – Noise Forum

This new task includes time to prepare for and attend a public noise forum. Noise forums are held to provide detailed information to the benefitted receptors to assist them in making an informed decision on their votes on the barrier.

2. LEVEL OF EFFORT AND SCHEDULE

Noise modeling and reporting will be completed within 4 weeks of the receipt of all necessary project data. PESA activities will be completed within 6 weeks of being given the notice to proceed.

3. TERMS AND CONDITIONS

CONDITIONS OF ENGAGEMENT

The conditions of engagement are to be consistent with the original contract associated with this project, SUBCONSULTANT SERVICES AGREEMENT BETWEEN CHRISTOPHER B BURKE ENGINEERING, LTD. AND Huff & Huff, Inc., dated March 21, 2016 and executed by on March 22, 2016.



ACCEPTANCE

This agreement may be accepted by signing in the appropriate space below and returning one complete copy to H&H. Issuance of a Purchase Order implicitly acknowledges acceptance of this proposal. This proposal is valid for a period of 30 days from the date of issue. We appreciate the opportunity to submit this proposal. Please feel free to contact the undersigned at (630) 684-9100 with any questions.

Very truly yours,
Huff & Huff, Inc.

Jeremy J. Reynolds, P.G.
Associate Principal
Attachments: Terms and Conditions

This Supplemental Proposal for Services and Schedule of Fees for Professional Services are hereby accepted and executed by a duly authorized signatory, who by execution hereof, warrants that he/she has full authority to act for, in the name, and on behalf of CHRISTOPHER B. BURKE ENGINEERING, LTD., consistent with the originally executed contract cited above as dated March 21, 2016.

By: _____

Title: _____

Printed/Typed Name: _____

Date: _____

**Cost Estimate of
Consultant Services
(CPFF)**

Firm	Huff & Huff, Inc.
Route	143rd
Section	Wolf to Southwest Highway
County	Cook
Job No.	
PTB & Item	

Date 9/23/2019

Overhead Rate 174.01%

Complexity Factor 0

Item	Manhours	Payroll	Overhead & Fringe Benefits	In-House Direct Costs	Fixed Fee	Outside Direct Costs	Services By Others	Total	% of Grand Total
Field Review/Noise Monitoring	2	97.40	169.49	0.00	38.70	0.00	0.00	305.59	2.42%
Noise Model Update	40	1,878.69	3,269.10	0.00	746.43	0.00	0.00	5,894.21	46.69%
Noise Report	22	1,007.70	1,753.50	0.00	400.38	0.00	0.00	3,161.58	25.05%
PESA	12	469.03	816.16	34.52	191.36	400.00	0.00	1,911.07	15.14%
Noise Forum	10	430.51	749.14	0.00	171.05	0.00	0.00	1,350.70	10.70%
TOTALS	86	3,883.33	6,757.39	34.52	1,547.91	400.00	0.00	12,623.15	100.00%

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]
Specific Rate	
Lump Sum	

Average Hourly Project Rates

Route 143rd
Section Wolf to Southwest Highway
County Cook
Job No.
PTB/Item

Consultant Huff & Huff, Inc.

Date 9/23/2019

Sheet 1 OF 1

Payroll Classification	Avg Hourly Rates	Total Project Rates			Field Review/Noise Monitoring			Noise Model Update			Noise Report			PESA			Noise Forum		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Senior Principal	70.00	0																	
Principal	70.00	0																	
Associate Principal II	70.00	0																	
Associate Principal I	62.79	2	2.33%	1.46							1	4.55%	2.85	1	8.33%	5.23			
Senior Consultant	69.61	0																	
Senior Geotechnical Consultant	64.96	0																	
Senior Project Manager III	60.88	0																	
Senior Project Manager II	46.76	0																	
Senior Project Manager I	45.23	38	44.19%	19.99				20	50.00%	22.62	10	45.45%	20.56				8	80.00%	36.19
Senior Landscape Architect	52.87	0																	
Senior Planning PM	51.61	0																	
Senior Geologist PM	47.45	2	2.33%	1.10										2	16.67%	7.91			
Senior Technical Specialist	46.26	0																	
Senior Scientist PM II	48.70	30	34.88%	16.99	2	100.00%	48.70	20	50.00%	24.35	8	36.36%	17.71						
Senior Scientist PM I	45.73	0																	
Senior Technical Scientist	43.47	0																	
Senior CADD Specialist	34.33	5	5.81%	2.00							3	13.64%	4.68				2	20.00%	6.87
Technical Graphics Technician	23.40	0																	
Scientist PM II	43.96	0																	
Scientist PM I	35.19	0																	
Engineer PM I	39.53	0																	
Planning PM	37.17	0																	
Architect PM	40.29	0																	
Assistant PM Engineer I	35.22	8	9.30%	3.28										8	66.67%	23.48			
Engineer I	36.15	0																	
Scientist EI	30.51	0																	
Scientist E2	25.03	0																	
Administrative Managers	42.15	0																	
Senior Administrative Assistant	29.60	1	1.16%	0.34										1	8.33%	2.47			
		0																	
TOTALS		86	100%	\$45.16	2	100%	\$48.70	40	100%	\$46.97	22	100%	\$45.80	12	100%	\$39.09	10	100%	\$43.05

BDE 436 (Rev. 02/02/17)