CITY		ENGINEER	
CITY OF JOPLIN 602 S. MAIN STREET JOPLIN, MO 64801		Name: Jacobs Engineering Group, Inc. Address: 501 North Broadway St. Louis, Missouri, 63101-2131	
Attention: DAVID K. HERTZBERG, PE TROY BOLANDER		Attention: Jeff Farah, PE Jeff.Farah@Jacobs.com	
Department: PUBLIC WORKS DEPARTMENT PLANNING & DEVELOPMENT DEPARTMENT		Phone: (314) 335-4038	Fax: (314) 335-5141
Phone: 417-624-0820, EXT 500	Fax: 417-625-4738		

AMENDMENT _5_ TO WORK AUTHORIZATION NUMBER __JCB DR-2 PAP 3-1
TO AGREEMENT FOR PROFESSIONAL ENGINEERING CONSULTING SERVICES

City and Engineer agree to amend their Agreement for Professional Engineering Consulting Services to include a scope of work and fees for engineering services, by adding the following terms to their Agreement.

1. **Services**. The City agrees to engage the services of the Engineer and the Engineer agrees to perform the services hereinafter set forth in connection with projects described in ***Exhibit A***.

2. **Addition to Services**. The City may add to the Engineer services or delete therefrom activities of a similar nature to those set forth in ***Exhibit A***, provided that the total cost of such work does not exceed the total cost allowance as specified in Paragraph 5 hereof. The Engineer shall undertake such changed activities only upon the direction of the City. All such directives and changes shall be in written form and prepared and approved by the City and shall be accepted and countersigned by the Engineer.

3. **Term**. The services of the Engineer shall commence as soon as practicable after the execution of this contract, unless otherwise directed in writing, and shall be undertaken and completed in such sequence as to assure their expeditious completion in the light of the purposes of the contract, but in any event, all of the services required hereunder shall be completed as set forth in the schedule for the project which is attached hereto as ***Exhibit A***.

4. **Costs not to Exceed**. The City of Joplin is limited by law with respect to the amount of money it can pay. Therefore, the City has established a fixed sum for this contract, which cannot be exceeded unless this contract is amended. The Engineer providing services hereunder shall be required to keep track of the amount of hours billable under this contract at all times; and any work in excess of the fixed sum shall not be eligible for payment. The Engineer shall notify the City if Engineer anticipates that the contract amount may be exceeded, in order to determine whether or not the City is prepared to increase the total compensation. The Engineer shall establish a billing system showing the amount of money remaining on the contract, which shall be shown in each monthly billing.

5. **Payment**.

a. **Conditioned upon acceptable performance.** The City agrees to pay the Engineer in accordance with the terms set forth in ***Exhibit A***, which shall constitute complete compensation for all services to be rendered under this contract; provided, that where payments are to be made periodically to Engineer for services rendered under this contract, the City expressly reserves the right to disapprove in whole or in part a request for payment where the services rendered during the period for which payment is claimed are not performed in a timely and satisfactory manner in accordance with the schedule and description of services set forth in ***Exhibit A***.

b. **Total compensation not to exceed.** It is expressly understood that in no event will the total additional compensation and reimbursement for the Scope of Work described in this Amendment be paid to the Engineer under the terms of Work

Authorization Number **JCB DR-2 PAP 3-1** exceed the sum of Thirty Six Thousand Seven Hundred Forty Seven 00/100 Dollars ($36,747.00).

6. **Insurance**. Without limiting any of the other obligations or liabilities of the Engineer, the Engineer shall secure and maintain at its own cost and expense, throughout the duration of this Contract and until the work is completed and accepted by the City of Joplin, insurance of such types and in such amounts as may be necessary to protect it and the interests of the City of Joplin against all hazards or risks of loss as hereunder specified or which may arise out of the performance of the Contract Documents. The form and limits of such insurance, together with the underwriter thereof in each case, are subject to approval by the City of Joplin. Regardless of such approval, it shall be the responsibility of the Engineer to maintain adequate insurance coverage at all times during the term of the Contract. Failure of the Engineer to maintain coverage shall not relieve it of any contractual responsibility or obligation or liability under the Contract Documents.

The certificates of insurance, including evidence of the required endorsements hereunder or the policies, shall be filed with the City at the time that this contract is signed by the Engineer. All insurance policies shall provide thirty (30) days written notice to be given by the insurance company in question prior to modification or cancellation of such insurance. Such notices shall be mailed, certified mail, return receipt requested, to:

City of Joplin - Public Works, 602 S. Main, Joplin, MO 64801; and

Such policies shall name the City as an additional insured with limits of liability not less than the sovereign immunity limits for Missouri public entities calculated by the Missouri Department of Insurance as of January 1 each calendar year and published annually in the Missouri Register pursuant to Section 537.610, RSMo.
(See, http://insurance.mo.gov/industry/sovimmunity.php).

As of January 1, 2018, the minimum coverage for the insurance referred to herein shall be as set out below:

a. Workers' Compensation....Statutory coverage per RSMo 287.010 et seq.
Employer's Liability..... $1,000,000.00

b. Commercial General Liability Insurance, including coverage for Contractual Liability and Independent Contractors Liability. Such coverage shall apply to bodily injury and property damage on an "Occurrence Form Basis" with limits of at least Two Million Eight Hundred Four Thousand Forty Six and no/100 Dollars ($2,804,046.00) for all claims arising out of a single accident or occurrence and at least Four Hundred Twenty Thousand Six Hundred Six and no/100 Dollars ($420,606.00) with respect to injuries and/or death of any one person in a single occurrence and an amount not less than at least $1,000,000 for all claims to property arising out of a single occurrence and at least $100,000 to any one owner with respect to damages to property. Engineer agrees that the proceeds of such insurance policy shall first be used to pay any award, damages, costs, and/or attorneys' fees incurred by or assessed against City, its employees, officers and agents, before payment of any award, damages, costs or attorneys fees of Engineer, its employees, officers or agents. Engineer agrees to cause its insurer to name City as an additional insured on such insurance policy, including the City as an additional insured for coverage under its products-completed operations hazard, and said policy shall be primary and noncontributory.

c. Automobile Liability Insurance covering bodily injury and property damage for owned, non-owned and hired vehicles, with limits of at least Two Million Eight Hundred Four Thousand Forty Six and no/100 Dollars ($2,804,046.00) for all claims arising out of a single accident or occurrence and at least Four Hundred Twenty Thousand Six Hundred Six and no/100 Dollars ($420,606.00) with respect to injuries and/or death of any one person in a single accident or occurrence.

d. Errors and Omissions Insurance. The Engineer shall maintain a professional liability insurance policy in the amount of $1,000,000.00. This policy shall remain in full force and effect for a period of one year after completion and acceptance by the City of the construction of the project.

e. Subcontracts. In case any or all of this work is sublet, the Engineer shall require the subcontractor to procure and maintain all insurance required in subparagraphs (A), (B) and (C) hereof and in like amounts. Engineer shall require any and all subcontractors with whom it enters into a contract to perform work on this project to protect the City of Joplin through insurance against applicable hazards or risks and shall, upon request of the City, provide evidence of such insurance.

f. Notice. The Engineer and/or subcontractor shall furnish the City prior to beginning the work satisfactory proof of carriage of all the insurance required by this contract, with the provision that policies shall not be canceled, modified or non-renewed without thirty (30) days written notice to the City of Joplin.

g. Legislative or Judicial Changes. In the event the scope or extent of the City's tort liability as a governmental entity as described in Section 537.600 through 537.650 RSMo is broadened or increased during the term of this agreement by legislative or judicial action, the City may require Engineer, upon 10 days written notice, to execute a contract addendum whereby the Engineer agrees to provide, at a price not exceeding Engineer's actual increased premium cost, additional liability insurance coverage as the City may require to protect the City from increased tort liability exposure as the result of such legislative or judicial action. Any such additional insurance coverage shall be evidenced by an appropriate certificate of insurance and shall take effect within the time set forth in the addendum.

7. All other terms and conditions of the original Agreement shall remain in effect.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals on the day and year herein stated.

REVIEWED FOR APPROVAL

_____

Name & Title of Staff Project Manager

CERTIFICATE OF DIRECTOR OF FINANCE

I certify that the expenditure contemplated by this document is within the purpose of the appropriation to which it is to be charged and that there is an unencumbered balance of appropriated and available funds to pay therefore.

_____

Leslie Haase, Director of Finance

APPROVED AS TO FORM

_____

Peter Edwards, City Attorney

Engineer: Jacobs Engineering Group, Inc.

By: _____

Printed Name: Mike McCarty

Title: Division Vice Preident

Date: 1-08-2018

CITY OF JOPLIN, MISSOURI

By: _____

David Hertzberg, P.E.
Public Works Director

Date: _____

By: _____

Troy Bolander
Director of Planning & Development

Date: _____

EXHIBIT A
ADDITIONAL ENGINEERING SERVICES
JACOBS INFRASTRUCTURE IMPROVEMENTS
JCB DR2 PAP3-1 - AMENDMENT #5A

The following Clarification of Services, Assumptions, and Exclusions further define the ENGINEERING SERVICES AGREEMENT for the above reference projects.

A. Scope of Additional Services

A1 - Design Services for the Mill & Overlay subproject: Jacobs will revise our construction bid documents for the Mill & Overlay subproject to include the following street improvement projects as alternate bid subprojects. Per the City's request these documents will be advertised in the order below:

1. Bid Alternative #1 - West 30th – Full Depth pavement replacement
2. Bid Alternative #2 - South Roosevelt & West 24th – Full Depth pavement replacement
3. Bid Alternative #3 - Adele – Mill/Overlay
4. Bid Alternative #4 - Tyler – Mill/Overlay
5. Bid Alternative #5 - Jefferson – Mill/Overlay
6. Bid Alternative #6 - West 22nd – Full Depth pavement replacement
7. Bid Alternative #7 - Mylinda Leah – Full Depth pavement replacement
8. Bid Alternative #8 - South Mina, south of 26th St. – Full Depth pavement replacement
9. Bid Alternative #9 - West 29th –Full Depth pavement replacement

A2 – Additional Monthly meetings between Jacobs project manager and the City and their CDBG program managers.

A3 – Revisions to Invoices: Revisions to the invoice format (converting some of the subprojects from LMI to Non-LMI).

B. Schedule of Services

The subject work will commence upon written Notice to Proceed (NTP)* from the City of Joplin and will be completed on or before February 1, 2018.

** due to schedule restraints, some if not all of this work has already begun.*

C. Compensation

Compensation for the engineering work defined here within Exhibit "A" shall be based upon the NOT TO EXCEED amount of **$16,421**.

Please see the table below for summary breakdown of this fee. Additional detail can be provided upon request.

CITY OF JOPLIN STATEMENT OF WORK - YELLOW AREA - WORK AUTHORIZATION #2, JCB DR2 PAP-3-1 11/07/17

REVISION 1 MOD/C.O. #5A Additional Services for Mill & Overlay Subproject - Engineering Design Man-hours / Fee

Additional Task	No. of dwgs	Hours Project Manager JACOBS	Hours Sr. Civil Engineer JACOBS	Hours Civil Engineer JACOBS	Hours Cost Estimator JACOBS	Hours Sr. Professional HRGREEN	Hours Professional HRGREEN	Hours Jr. Professional HRGREEN	Hours Total
Mill & Overlay - Full Depth Pavement Replacement (dwgs affected)									
Cover Sheet Update	1			1					1
Quantity Sheet	1			2					2
Title sheet	1			1					1
2a - typical sections	1			2					2
2b - summary of quantities	1			4					4
3 - key map	1			2					2
4 - project notes and Mina revision	1			2					2
5 - Mina revision	1			2					2
6 - 24th revision	1			2					2
7 - Mylinda Leah revision	1			2					2
8 - 29th revision	1			2					2
11 - Monroe revision	1			2					2
12 - Monroe revision	1			2					2
13 - Roosevelt revision	1			2					2
14 - Roosevelt and 24th revisions	1			2					2
17 - 25th and 24th revisions	1			2					2
20 - 25th revision	1			2					2
23 - 22nd revision	1			2					2
25 - Cunningham revision	1			2					2
26 - 29th and 30th revisions	1			2					2
27 - 29th and 30th revisions	1			2					2
28 - 22nd revision TBD	1			2					2
29 - McCoy and 21st revisions	1			2					2
Geotechnical Eng. - reevaluating the pavement Section per the City's new criterion (includes calculations, meetings and QC)			2						2
Revised OPCC (construction cost Estimate)					0				0
Additional mtgs pertaining to the change in the Mill/Overlay subproject (2 mtgs)			1	2					3
Quality control & re-sealing of dwgs			4						4
Modifying Bid Tab to show the alternative bid options									0
Project Management	0	4							4
Total - 21 sheets with plan sheet change	23	4	7	48	0	0	0	0	59
Additional Extra Services									
Deloitte/ PWc Monthly mtgs. (1 per month, Oct. 2016 to Oct. 2017): 12mo.'s @ 1 -1/2 hrs Each		18							18
S. McCoy Culvert - Straighten alignment South of 27th St. for developers		0				0	0	0	0
Updating Invoicing per new CGBG format		22							22
SubTotal for Final Design-Construction Documents	0	40	0	0	0	0	0	0	40
Directs - Travel (0 Trips; Hotel, Car Rental, Food) - 0 field visit									
Directs - Miscellaneous									$200
Totals per Discipline	Total Hours	44	7	48	0	0	0	0	99
	2017 Rate	210.06	149.59	123.57	210.06	186.00	154.00	106.00	
	Total fee	$9,243	$1,047	$5,931	$0	$0	$0	$0	
								Subconsultant - HRGreen	$0
								Jacobs Labor	$16,221
								Jacobs Expenses	$200
spoke with Dan, Doug, Brandon & rob on 10/26/17. went over this & they said they would get back with me on this.								TOTAL	$16,421
Mill & Overlay - Full Depth Pavement Replacement (dwgs affected)	$8,018.73								
Deloitte/ PWc Monthly mtgs. (1 per month, Oct. 2016 to Oct. 2017): 12mo.'s @ 1 -1/2 hrs Each	$3,781.08								
S. McCoy Culvert - Straighten alignment South of 27th St. for developers	$0.00								
Updating Invoicing per new CGBG format	$4,621.32								
	$16,421.13								

EXHIBIT A
ADDITIONAL ENGINEERING SERVICES
JACOBS INFRASTRUCTURE IMPROVEMENTS
JCB DR2 PAP3-1 - AMENDMENT #5B

The following Clarification of Services, Assumptions, and Exclusions further define the ENGINEERING SERVICES AGREEMENT for the above reference projects.

A. **Scope of Additional Services**

A1 - Redesign Services for the Sunset Drainage subproject: Jacobs will revise our construction bid documents for the Sunset Drainage subproject to address the modification to the proposed drainage system as described below. This modification is at the request of the City as the City has been forced to modify a portion of the original drainage system improvements as they could not come to an agreement for a drainage easement that was needed for the new drainage system.

Modify Sunset Drive Storm System Improvement Plans to Obviate the Need for New Easement.

Negotiations for a small additional permanent easement and small temporary grading easement along Sunset East Drive have been unsuccessful. Therefore, the City has chosen to alter the design of the sewer system improvements to obviate the need for new easement along Sunset East Drive. The Consultant shall redesign the following listed items so that the storm sewer improvements fit within existing easements.

The consultant shall modify the quantities, job special provisions, and drawing sheets 3, 5, 6, 10, 11, 12, 13, and 14 to reflect the changes listed below.

- Existing 30-inch and previously proposed 30-inch parallel pipes along the east side of Sunset East Drive will be combined as a single 4-ft by 3-ft reinforced concrete box aligned within the existing easement;
- The two proposed junction boxes will be redesigned for the RCB along the new alignment;
- The replacement of a driveway apron to accommodate the new vertical alignment of Sunset East Drive will be by saw cut within the existing easement rather than to existing construction joints.
- Grading in front of Lot 11 of Sunset Subdivision will be confined to the existing easements along Sunset East and Sunset South Drives.
- Quantities will be reevaluated.
- Job Special provisions will be modified to address the RCB, saw cut driveway apron, grading, and new construction limits.

B. **Assumptions**

The Jacobs team would like to include the following assumptions with this Modification:

- There will be only one review of the task with the City and/or the City affiliates and the review would be completed within one week.

C. **Schedule of Services**

The subject work will commence upon written Notice to Proceed (NTP) from the City of Joplin, however, not before January 7, 2017.

- 95% Submittal – 14 calendar days after the NTP

- 10% final - 7 calendar days after the NTP

D. **Compensation**

Compensation for the engineering work defined here within Exhibit "A" shall be based upon the NOT TO EXCEED amount of **$20,326**

Please see the table below for summary breakdown of this fee. Additional detail can be provided upon request.

CITY OF JOPLIN STATEMENT OF WORK - YELLOW AREA - WORK AUTHORIZATION #2, JCB DR2 PAP-3-1

MOD/C.O. #5B Additonal Services for Sunset Drainage Subproject - Engineering Design Manhours / Fee

		Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
		Project Manager JACOBS	Sr. Civil Engineer JACOBS	Civil Engineer JACOBS	Cost Estimator JACOBS	Project Manager HRGREEN	Sr. Professional HRGREEN	Professional HRGREEN	Jr. Professional HRGREEN	Sr. Technician HRGREEN	Administration HRGREEN	Total
Revision needed because drainage easement could not be attained for the original design	No. of Dwgs											
Mill & Overlay - Full Depth Pavement Replacement (dwgs effected)												
Pipe Modifications												0
Hydraulic analysis: size single pipe to replace two 30-inch pipes							3	2				5
Revise plan and profile sheets (sheet 3, 5, 6)							2			8		10
Revise grading plan and driveway plan and TCE and Permanent easement lines							2			4		6
Revise Job Special Provisions							2					2
Structural design of junction boxes 1 and 2												0
Structural redesign of rebar and wall thickness								16				16
Structural details								4		16		20
Revise quantity take-off							3			2		5
Revised OPCC (construction cost Estimate)					3							3
QC			1				4	8	4	2	1	20
Internal coordination & final drawing/spec assembly				4			2					6
City review Mtg.		2					2					4
Modifications to address City review Comments							4			4		8
Modifying Bid Tab - Front End docs				2								2
Project Management		12				4						16
Total	0	14	1	6	3	4	23.5292	30	4	36	1	123
Directs – Travel (1 Trips; Hotel, Car Rental, Food) - 1 field visit												
Directs – Miscellaneous												$100
	Total Hours	14	1	6	3	4	24	30	4	36	1	123
2017	JE Rate	$216.38	$154.08	$127.27	$216.38	$200.00	$200.00	$175.00	$120.00	$120.00	$74.00	
		$3,029	$154	$764	$649	$800	$4,706	$5,250	$480	$4,320	$74	$20,226
											Subconsultant	$15,630
											Jacobs Labor	$4,596
											Jacobs Expenses	$100
											TOTAL	$20,326