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: Nicholas Heatherly, P.E., C.F.M. nheather@joplinmo.org		Attention: Jeff Farah, P.E. SENIOR PROJECT MANAGER	
Department: Public Works		Phone: 314-335-4038	Fax: 314-335-5141
Phone: 417-624-0820 X 500	Fax: 417-625-4738		

WORK AUTHORIZATION NUMBER JCB-DR2-PAP3-1
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 **WORK AUTHORIZATION NUMBER JCB-DR2-PAP3-1** ***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 **WORK AUTHORIZATION NUMBER JCB-DR2-PAP3-1 WORK AUTHORIZATION NUMBER JCB-DR2-PAP3-1** ***Exhibit A***. ***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 **WORK AUTHORIZATION NUMBER JCB-DR2-PAP3-1** ***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 **WORK AUTHORIZATION NUMBER JCB-DR2-PAP3-1** ***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 **WORK AUTHORIZATION NUMBER JCB-DR2-PAP3-1** ***Exhibit A***.

b. **Total compensation not to exceed**. It is expressly understood that in no event will the total compensation and reimbursement to be paid to the Engineer under the terms of this work Authorization Number **JCB-DR2-PAP3-1** exceed the sum of **Six Hundred Thirty Nine Thousand Nine Hundred and Seventy Six and 00/100 Dollars ($639,976).**

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 cancellation or non-renewal 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

All policies except for the professional liability policy 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, 2015, 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 Seven Hundred Thirty Four Thousand Five Hundred Sixty Seven and no/100 Dollars ($2,734,567.00) for all claims arising out of a single accident or occurrence and at least Four Hundred Ten Thousand One Hundred Eighty Five and no/100 Dollars ($410,185.00) 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 Seven Hundred Thirty Four Thousand Five Hundred Sixty Seven and no/100 Dollars ($2,734,567.00)for all claims arising out of a single accident or occurrence and at least Four Hundred Ten Thousand One Hundred Eighty Five and no/100 Dollars ($410,185.00) 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 on both a per-claim and an aggregate basis. 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

_____

Dan Johnson, P.E. Stormwater 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: Renee' Ross, P.E.

Title: Manager of Operation

Date: 1/27/2016

CITY OF JOPLIN, MISSOURI

By: _____

Nicholas A. Heatherly, P.E.
Public Works Director

Date: _____

Work Authorization JCB– DR2–PAP3-1
Exhibit A

Project Name / Description : Work Authorization **JCB-DR2-PAP3-1**
Consultant: Jacobs Engineering Group, Inc.

Engineering Service Agreement

Article 1 of the Agreement is supplemented to include the following agreement of the parties. Engineer shall provide Basic and Additional Services for the following projects as set forth below:

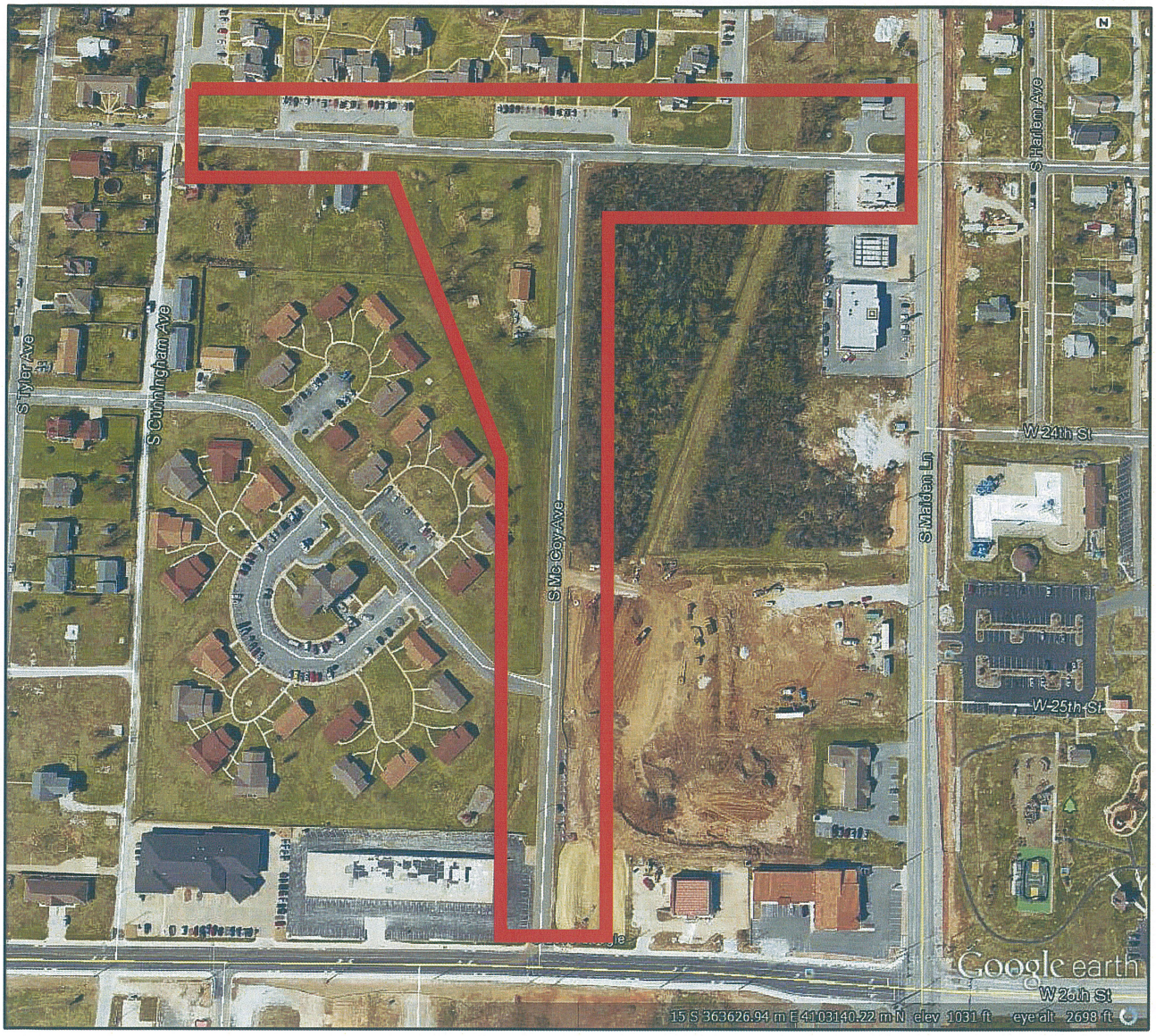
Oliver Drainage Ditch Improvements – Between Oliver Ave. and Cunningham Ave., south of 26th St. - Stormwater Improvements with incidental Street/Land Acquisition Improvements
(this project was initiated in work authorization #1)

McCoy Ave. Stormwater Improvements – Between 23rd and 26th Streets
Stormwater Improvements with incidental Street/Sidewalk/Land Acquisition Improvements
(this project was initiated in work authorization #1)

Sunset Subdivision Drainage Improvements – Sunset South Dr. and Sunset East Dr.
Stormwater Improvements with incidental Street/Land Acquisition Improvements

Mill and Overlay Street Improvements – 18 separate streets widespread through the Yellow Area
Street Improvements

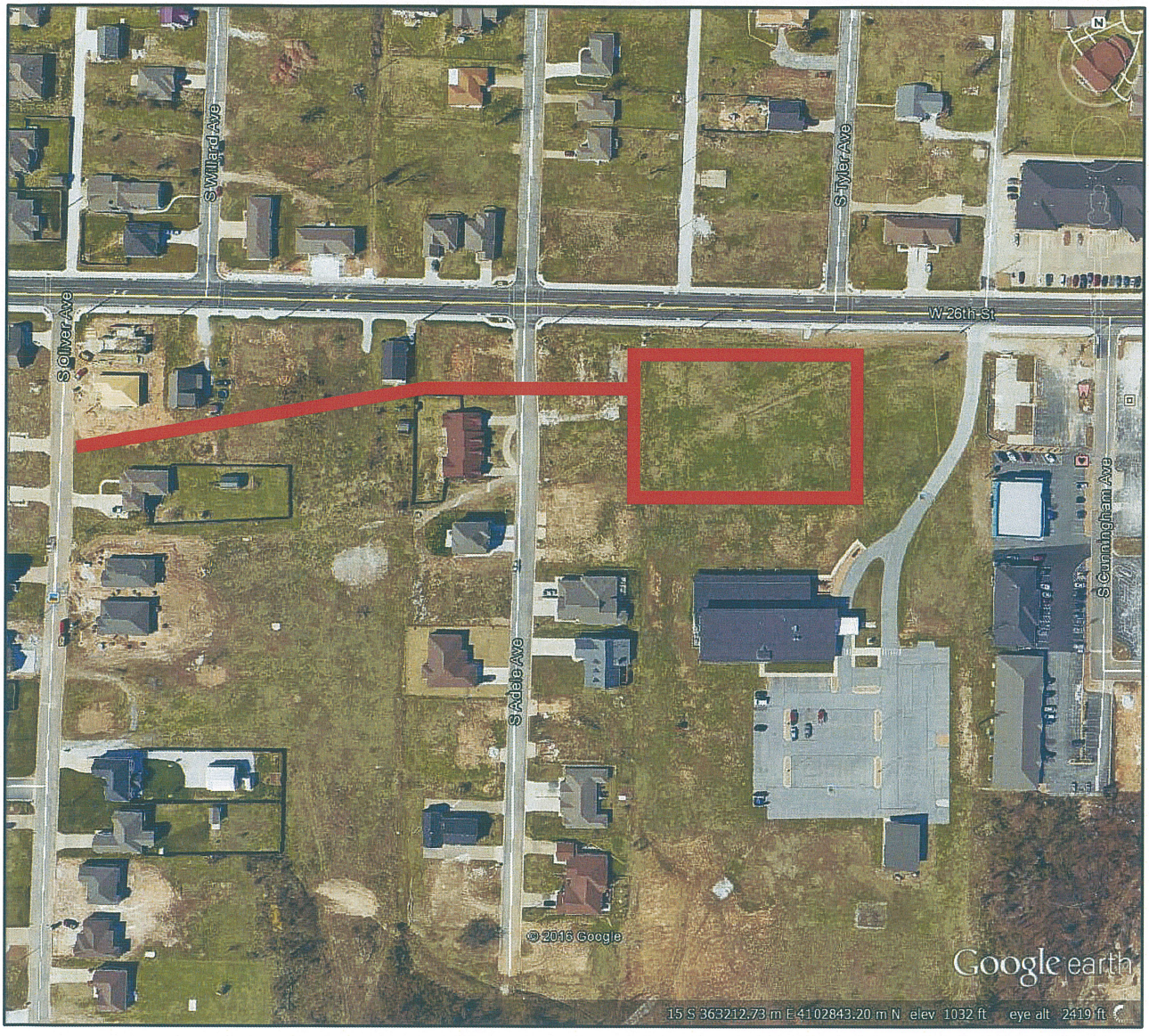
WORK AUTHORIZATION
JCB-DR2-PAP3-1
STORM WATER PROJECTS
MCCOY AVENUE



N

JACOBS
501 NORTH BROADWAY
ST. LOUIS, MISSOURI 63102
TEL 314-335-4000 FAX 314-335-5012

WORK AUTHORIZATION
JCB-DR2-PAP3-1
STORM WATER PROJECTS
OLIVER DRAINAGE DITCH



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JACOBS
501 NORTH BROADWAY
ST. LOUIS, MISSOURI 63102
TEL 314-335-4000 FAX 314-335-5012

WORK AUTHORIZATION
JCB-DR2-PAP3-1
STORM WATER PROJECTS
SUNSET DRIVE



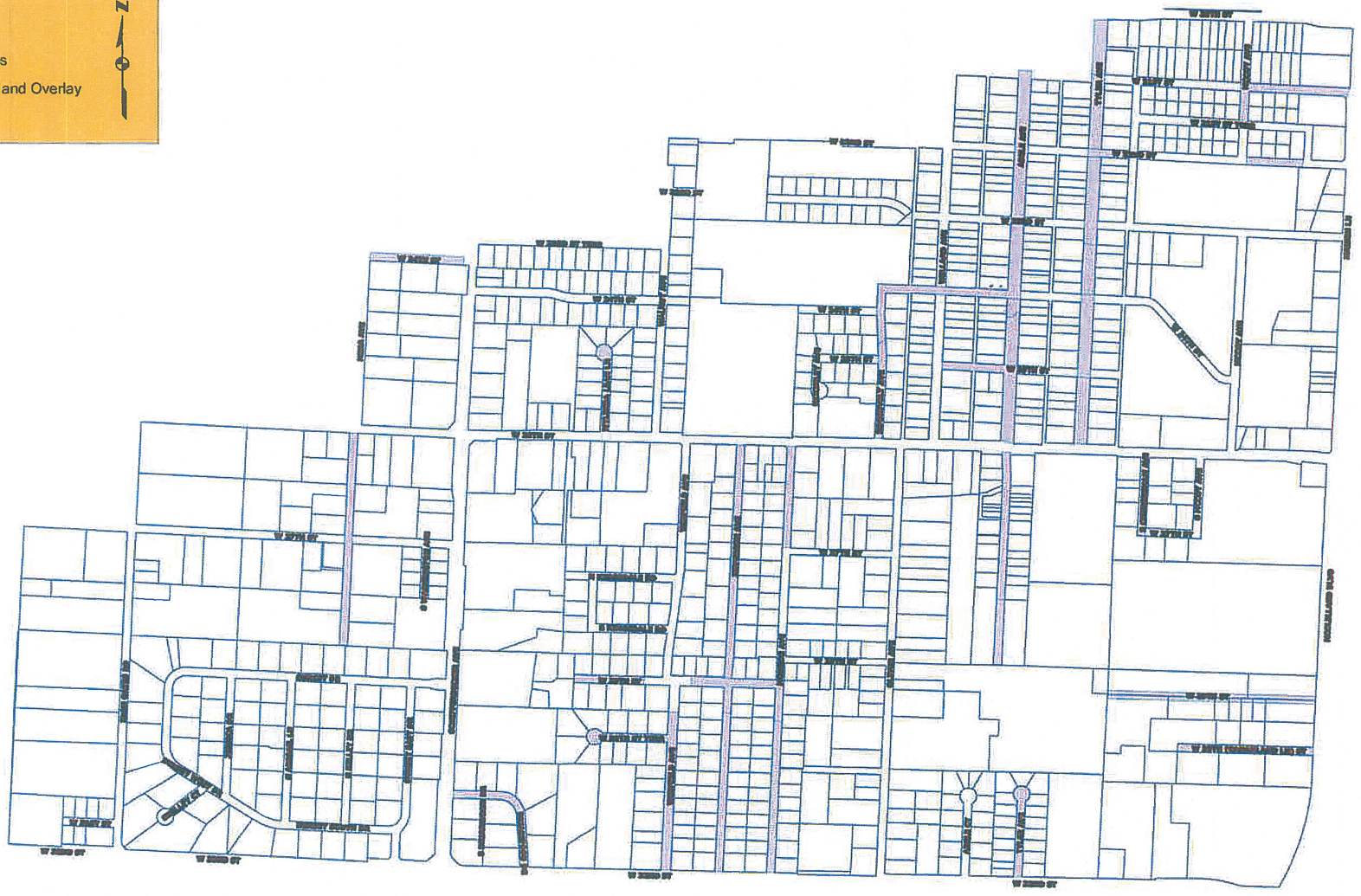
N

JACOBS
501 NORTH BROADWAY
ST. LOUIS, MISSOURI 63102
TEL 314-335-4000 FAX 314-335-5012

FULL SIZE 22x34: 1 inch = 300 feet
HALF SIZE: 11x17 1 inch = 600 feet

Legend
- Parcels
- 2" Mill and Overlay

N



CITY OF Joplin	CITY OF JOPLIN, MISSOURI DEPT OF PUBLIC WORKS DIVISION OF ENGINEERING	HRGREEN WWW.HRGREEN.COM ADDRESS: 16020 SWINGLEY RIDGE ROAD SUITE 205, ST. LOUIS, MO 63017 PH 636-519-0900 FAX 636-519-0906	JACOBS HRG HRGreen	YELLOW STUDY AREA 2014 STUDY MILL & OVERLAY PROJECTS	EXHIBIT 13-A	SHEET 1 of 1

Introduction

The City of Joplin (CITY) is continuing their infrastructure recovery program to mitigate roadway and drainage problems that have been adversely impacted by the 2011 F5 tornado. The program will be funded from CDGB-DR funds allocated in the second Action Plan of the *Joplin Phase II Recovery Plan.*

The scope of engineering services identified herewith describe professional services related to four (4) specific infrastructure improvement projects that the CITY has defined as qualified projects for CDBG-DR funding. These projects are located within the City's "Yellow Area" which defines the boundary limits of work within this contract. Three of the four defined projects are related to storm water improvements and the remaining project consists of street rehabilitations (mill and overlay) throughout selected areas of the Yellow Area.

Scope of Work

The CITY identified these four projects, in part, on the preliminary studies that the Jacobs Team (Engineer/CONSULTANT) had previously performed for the CITY as part of the first work authorization package relevant to the CDBG-DR funding. The projects are part of several infrastructure projects approved by the City council as CDBG-DR qualified. These four (4) specific projects are identified as:

Storm Water Improvements:

- * Oliver Drainage Ditch – between Oliver Ave. and Cunningham Ave. (south of 26th St.).
- * McCoy Avenue Stormwater Improvements - between 23rd and 26th Streets.
- Sunset Subdivision Drainage Improvements – Sunset South Dr. and Sunset East Dr.

* The CONSULTANT has completed the preliminary design on these two projects under the first work authorization.

Street Improvements:

- Mill and Overlay Street Improvements – Consisting of 18 separate Streets widespread through the Yellow Area.

The Oliver drainage ditch and the McCoy Ave. stormwater improvements are both located within the LMI zone while the Sunset subdivision project is not located in the LMI zone (non-LMI). The mill and overlay street projects are split between the LMI and the non-LMI zones (10 LMI and 8 non-LMI).

Due to the funding restraints for these projects and the federally mandated completion date in 2019, the CITY and the CONSULTANT have agreed to bundle these four projects into one comprehensive bid package that will ultimately be awarded to one (1) prime Contractor. The contract documents (construction plans, specifications and the quantity take-offs) will be individually developed for each subproject. The Contractor will bid on one complete package (containing all four subprojects) with one set of front end documents and one bid tab. This bid tab will separately itemize the quantity take-offs for each of the four subprojects, helping the CITY monitor their LMI versus non-LMI allocations.

The engineering services provided for each of these four subprojects consist of engineering design services (development of construction plans and specifications), including construction procurement assistance. The CONSULTANT's services also include the preparation of property acquisition documents as needed for easements and ROW taking. This task also includes assisting the CITY with the property negotiations.

Compensation

Compensation for the work defined here within Exhibit "A" shall be based upon the NOT TO EXCEED amount of **$639,976** for the design and construction procurement assistance services. Construction support services are excluded from this work authorization.

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

The CONSULTANT's services shall follow the scope of services outlined within the City's standard "Engineering Service Agreement" as identified herewith.

Project Name/Description JCB-DR2-PAP3-1
Consultant Jacobs Engineering Group Inc.

Engineering Services Agreement

Article 1 of the Agreement is supplemented to include the following agreement of the parties.

Engineer shall provide Basic and Additional Services as set forth below.

PART 1 – BASIC SERVICES *All deliverables referred to in the agreement shall also be provided in an electronic format to be specified by the City.*

A1.01 *Conceptual Phase*

A. Engineer shall:

1. Consult with Owner to define and clarify Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations, and identify available data, information, reports, facilities plans, and site evaluations.

   If Owner has already identified one or more potential solutions to meet its Project requirements, then proceed with the study and evaluation of such potential solutions. Options will be discussed and agreed to by Engineer at scoping meeting.

2. Identify potential solution(s) to meet Owner's Project requirements, as needed.

3. Study and evaluate the potential solution(s) to meet Owner's Project requirements.

4. Visit the Site, or potential Project sites, to review existing conditions and facilities, unless such visits are not necessary or applicable to meeting the objectives of the Study and Report Phase.

5. Advise Owner of any need for Owner to obtain, furnish, or otherwise make available to Engineer additional Project-related data and information, for Engineer's use in the study and evaluation of potential solution(s) to Owner's Project requirements, and preparation of a related report.

6. After consultation with Owner, recommend to Owner the solution(s) which in Engineer's judgment meet Owner's requirements for the Project.

7. Identify, consult with, and analyze requirements of governmental authorities having jurisdiction to approve the portions of the Project to be designed or specified by Engineer, including but not limited to mitigating measures identified in an environmental assessment for the Project.

8. Prepare a conceptual report (the "Report") which will, as appropriate, contain schematic layouts, sketches, and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved, and

Engineer's recommended solution(s). For each recommended solution Engineer will provide the following, which will be separately itemized: opinion of probable Construction Cost; proposed allowances for contingencies; the estimated total costs of design, professional, and related services to be provided by Engineer and its Consultants; and, on the basis of information furnished by Owner, a tabulation of other items and services included within the definition of Total Project Costs.

9. Advise Owner of any need for Owner to provide data or services of the types described in Exhibit B, for use in Project design, or in preparation for Contractor selection and construction.

10. When mutually agreed, assist Owner in evaluating the possible use of building information modeling; civil integrated management; geotechnical baselining of subsurface site conditions; innovative design, contracting, or procurement strategies; or other strategies, technologies, or techniques for assisting in the design, construction, and operation of Owner's facilities. The subject matter of this paragraph shall be referred to in Exhibit A and B as "Project Strategies, Technologies, and Techniques."

11. If requested to do so by Owner, assist Owner in identifying opportunities for enhancing the sustainability of the Project, and pursuant to Owner's instructions plan for the inclusion of sustainable features in the design.

12. Develop a scope of work and survey limits for any topographic and other surveys necessary for design.

13. Perform or provide the following other Study and Report Phase tasks or deliverables:

14. Furnish 6 review copies of the Report and any other Study and Report Phase deliverables to Owner by the due date and review by phone or in person with Owner.

15. Revise the Report and any other Study and Report Phase deliverables in response to Owner's comments, as appropriate, and furnish 6 copies of the revised Report and any other Study and Report Phase deliverables to the Owner by the agreed upon due date.

B. Engineer's services under the Study and Report Phase will be considered complete on the date when Engineer has delivered to Owner the revised Report and any other Study and Report Phase deliverables.

C. Billing/Payment Processing Options

1. Request for payment may be submitted at appropriate intervals during the contract. Application for payment must include a detailed breakdown of deliverables completed as well as specific tasks or percentages of specific tasks completed. Payment schedule will be at the approval of the city.

2. Deliverables option as determined by engineering staff on a project by project basis. Example: 30 percent – Preliminary plans, 60 percent Right of Way plans, 90 percent Final plans and bid documents, 100 percent project completion.

A1.02 Preliminary Design Phase - (30 percent plans)

A. Proceed with Preliminary Design Phase after the completion of the Conceptual phase which includes: Acceptance by Owner of the Conceptual Report and any other Study and Report Phase deliverables; selection by Owner of a recommended solution; issuance by Owner of any instructions for use of Project Strategies, Technologies, and Techniques, or for inclusion of sustainable features in the design, and Indication by Owner of any specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by Owner.

1. Prepare Preliminary Design Phase documents consisting of final design criteria, preliminary drawings, outline specifications, and written descriptions of the Project.

2. Include on plans, property lines, structure locations, ownership names and contact information.

3. In preparing the Preliminary Design Phase documents, use any specific applicable Project Strategies, Technologies, and Techniques authorized by Owner during or following the Study and Conceptual Phase, and include sustainable features, as appropriate, pursuant to Owner's instructions.

4. Provide necessary field surveys, topographic and utility mapping for Engineer's design purposes. Comply with the scope of work and procedure for the identification and mapping of existing utilities as defined by Section A1.03 "Utility Requirements" and Section A1.04 "Survey Services"

5. Visit the Site as needed to prepare the Preliminary Design Phase documents.

6. Advise Owner if additional reports, data, information, or services of the types described are necessary and assist Owner in obtaining such reports, data, information, or services.

7. Continue to assist Owner with Project Strategies, Technologies, and Techniques that Owner has chosen to implement.

8. Based on the information contained in the Preliminary Design Phase documents, prepare a revised opinion of probable Construction Cost, and assist Owner in tabulating the various cost categories which comprise Total Project Costs.

9. Obtain and review Owner's instructions regarding Owner's procurement of construction services (including instructions regarding advertisements for bids, instructions to bidders, and requests for proposals, as applicable), Owner's construction contract practices and requirements, insurance and bonding requirements, electronic transmittals during construction, and other information necessary for the finalization of Owner's bidding-related documents (or requests for proposals or other construction procurement documents), and Construction Contract Documents. Also obtain and review copies of Owner's design and construction standards, Owner's standard forms, general conditions, supplementary conditions, text, and related documents or content for Engineer

to include in the draft bidding-related documents (or requests for proposals or other construction procurement documents), and in the draft Construction Contract Documents, when applicable.

10. Development communication plan for project: considering the use of door hangers, letters, public meetings, changeable message boards.

11. Furnish 6 review copies of the Preliminary Design Phase documents, opinion of probable Construction Cost, and any other Preliminary Design Phase deliverables to Owner by established due date, and review them with Owner. Owner shall submit to Engineer any comments regarding the furnished items.

12. Revise the Preliminary Design Phase documents, opinion of probable Construction Cost, and any other Preliminary Design Phase deliverables in response to Owner's comments, as appropriate, and furnish to Owner 6 copies of the revised Preliminary Design Phase documents, revised opinion of probable Construction Cost, and any other deliverables by the specified due date.

13. Engineer's services under the Preliminary Design Phase will be considered complete on the date when Engineer has delivered to Owner the revised Preliminary Design Phase documents, revised opinion of probable Construction Cost, and any other Preliminary Design Phase deliverables.

A1.03 *Utility Requirements*

A. Make notification to utilities during conceptual phase of preliminary design process. Communication to be made in a specific, documented format. (As detailed in item D).

B. Based on specific utility feedback, and field observation, identify potential high expense utility relocation issues.

C. Prepare and present plan for city review, detailing significant utility conflicts, proposed pothole locations, and associated costs for verifying existing utilities. Potholing process to include horizontal and vertical alignment and depth details. Details will be included in 30 percent plan completion, final right of way plans, and final construction plans. Necessary corrective action to address incomplete or inaccurate details may be subject to errors and omissions insurance claim.

D. Submit utility report at 30 percent submittal and close out of project. Utility report to include representatives contacted, meeting dates, and a summary of discussions, requests, observations and/or concerns. (See City of Joplin utility notification form)

A1.04 Surveying Services – General

A. Control Survey

All horizontal control for the project will be based on the Missouri State Plane Coordinate System of 1983, West Zone.
All vertical control for the project will be based on the North American Vertical Datum of 1988 (NAVD 88) provided by NOAA's National Geodetic Survey (NGS).

Control points and temporary bench marks will be set inter-visible and in strategic locations along the project route so as to be conveniently used during all phases of the project, including construction.

B. Engineering Survey
Provide topographic engineering survey for the length of the project to facilitate design. Provide a survey of all existing surface and sub-surface utilities in the project corridor.

C. Property Boundary Survey/Right-of-way Survey/Easements
Provide a boundary survey or surveys to locate the existing Right-of-Way/Easements for the length of the project, the adjacent property lines of the parcels along the project, and all existing easements of record encumbering each property that will affect the project. Consultant will be responsible for ordering title work for each parcel along the project route and procuring existing right-of-way documents and/or right-of-way plans.

D. Right-of-way and Easement Description Preparation
Upon final approval of the Right-of-Way/Project Plans consultant will provide descriptions and exhibit drawings for all property right acquisitions including, but not limited to: right-of-way takings, permanent easements and temporary easements.

E. Right-of-way and Easement Staking

During the property negotiation phase of the project it may be necessary to stake the proposed right-of-way and/or easement locations to assist the right-of-way agent. Upon request, the consultant will temporarily stake the proposed right-of-way/easement locations with wooden lathe to allow the property owner to visually inspect the location of such.

Pre-Construction Phase – On projects that will require the relocation of existing utilities prior to the award of the construction contract the consultant shall temporarily stake the location of the Right-of-Way and/or easements at points predetermined by Owner. This service will be provided one (1) time as a part of the contract. Any additional staking, if required by utility contractors due to the destruction of the temporary stakes, will be done at the advertised hourly rate and billed back to the utility contractor who is found to be responsible for removing the original stakes.

F. Existing United States Public Land Survey System Corners

All existing USPLSS corners that may/will be removed or altered as a result of this project must be referenced and re-established according to 20 CSR 2030-17.020 and 20 CSR 2030-17.030.

G. Survey Records

Consultant shall provide to Owner originals or copies of all survey records relevant to the project. These records shall include, but are not limited to: survey notes, research records, computations, calculations and drawings.

H. Other Services

Services not covered by A through F that are determined in the scoping meeting to be necessary for completion of the project.

A1.05 Right of Way Plan Phase – 60 percent plans

A. Determine parcels and parcel ownership information to be included on right of way plans.

B. Determine parcel size.

C. Prepare R.O.W. plan tabulation sheet.

D. Prepare R.O.W. plan sheets showing easement and right of way takings.

E. Furnish 6 review copies of the Right of Way Plan Phase documents, opinion of probable Right of Way Cost, and any other Right of Way Plan Phase deliverables to Owner by established due date, and review them with Owner. Owner shall submit to Engineer any comments regarding the furnished items.

F. Revise the Right of Way Plan Phase documents, opinion of probable Right of Way Cost, and any other Right of Way Plan Phase deliverables in response to Owner's comments, as appropriate, and furnish to Owner 6 copies of the revised Right of Way Plan Phase documents, revised opinion of probable Right of Way Cost, and any other deliverables by the specified due date.

G. Engineer's services under the Right of Way Plan Phase will be considered complete on the date when Engineer has delivered to Owner the revised Right of Way Plan Phase documents, revised opinion of probable Right of Way Cost, and any other Right of Way Plan Phase deliverables.

A1.06 Final Design Phase

A. After acceptance by Owner of the Preliminary Design Phase documents, revised opinion of probable Construction Cost as determined in the Preliminary Design Phase, and/or any other Right of Way plan documents, subject to any Owner-directed modifications or changes in the scope, extent, character, or design requirements of or for the Project, and upon written authorization from Owner, Engineer shall:

1. Prepare final Drawings and Specifications indicating the scope, extent, and character of the Work to be performed and furnished by Contractor.

2. Visit the Site as needed to assist in preparing the final Drawings and Specifications.

3. Provide technical criteria, written descriptions, and design data for Owner's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design; assist Owner in consultations with such authorities; and revise the Drawings and Specifications in response to directives from such authorities, as appropriate.

4. Advise Owner of any recommended adjustments to the opinion of probable Construction Cost.

5. After consultation with Owner, include in the Construction Contract Documents any specific protocols for the transmittal of Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website. Any such protocols shall be applicable to transmittals between and among Owner, Engineer, and Contractor during the Construction Phase and Post-Construction Phase, and unless agreed otherwise shall supersede any conflicting protocols previously established for transmittals between Owner and Engineer.

6. Assist Owner in assembling known reports and drawings of Site conditions, and in identifying the technical data contained in such reports and drawings upon which bidders or other prospective contractors may rely.

7. In addition to preparing the final Drawings and Specifications, assemble drafts of other Construction Contract Documents based on specific instructions and contract forms, text, or content received from Owner.

8. Prepare or assemble draft bidding-related documents (or requests for proposals or other construction procurement documents), based on the specific bidding or procurement-related instructions and forms, text, or content received from Owner.

9. Contract shall include contractor provided changeable message signs to communication construction information.

10. Furnish for review by Owner, its legal counsel, and other advisors, 6 copies of the final drawings and Specifications, assembled drafts of other construction Contract Documents, the draft bidding-related documents (or requests for proposals or other construction procurement documents), and any other final design Phase deliverables, by the established due date, with the Final Design Phase, and review them with Owner. Owner shall submit to Engineer any comments regarding the furnished items, and any instructions for revisions.

B. Engineer's services under the Final Design Phase will be considered complete on the date when Engineer has delivered to Owner the final Drawings and Specifications, other assembled Construction Contract Documents, bidding-related documents (or requests for

proposals or other construction procurement documents), and any other Final Design Phase deliverables.

C. In the event that the Work designed or specified by Engineer is to be performed or furnished under more than one prime contract, or if Engineer's services are to be separately sequenced with the work of one or more prime Contractors (such as in the case of fast-tracking), Owner and Engineer shall, prior to commencement of the Final Design Phase, develop a schedule for performance of Engineer's services during the Final Design, Bidding or Negotiating, Construction, and Post-Construction Phases in order to sequence and coordinate properly such services as are applicable to the work under such separate prime contracts.

A1.07 Bidding Phase

A. After acceptance by Owner of the final Drawings and Specifications, other Construction Contract Documents, bidding-related documents (or requests for proposals or other construction procurement documents), and the most recent opinion of probable Construction Cost as determined in the Final Design Phase, and upon written authorization by Owner to proceed, Engineer shall:

1. Advertise for and obtain bids or proposals for the Work, assist Owner in issuing assembled design, contract, and bidding-related documents (or requests for proposals or other construction procurement documents) to prospective contractors, and where applicable, maintain a record of prospective contractors to which documents have been issued, attend pre-bid conferences, if any, and receive and process contractor deposits or charges for the issued documents.

2. Prepare and issue Addenda as appropriate to clarify, correct, or change the issued documents.

3. Provide information or assistance needed by Owner in the course of any review of proposals with prospective contractors.

4. If Federal funding is involved, set up prequalification's for contractor. This includes researching all applicable debarment & qualified contractor's lists & providing this documentation in the project file

5. Consult with Owner as to the qualifications of subcontractors, suppliers, and other individuals and entities proposed by prospective contractors, for those portions of the Work as to which review of qualifications is required by the issued documents.

6. If the issued documents require, the Engineer shall evaluate and determine the acceptability of "or equals" and substitute materials and equipment proposed by prospective contractors, provided that such proposals are allowed by the bidding-related documents

7. Attend the bid opening, prepare bid tabulation sheets to meet Owner's schedule, and assist Owner in evaluating bids, assembling final contracts for the Work for

execution by Owner and Contractor, and in issuing notices of award of such contracts.

B. The Bidding Phase will be considered complete upon commencement of the Construction Phase.

A1.08 Construction Phase $0.00

A. Upon successful completion of the Bidding and Negotiating Phase, and upon written authorization from Owner, Engineer shall:

1. *General Administration of Construction Contract:* Consult with Owner and act as Owner's representative as provided in the Construction Contract. The extent and limitations of the duties, responsibilities, and authority of Engineer shall be as assigned below. All of Owner's instructions to Contractor will be issued through Engineer, which shall have authority to act on behalf of Owner in dealings with Contractor to the extent provided in this Agreement and the Construction Contract except as otherwise provided in writing.

2. *Resident Project Representative (RPR):* Provide the services of an RPR at the Site to assist the Engineer (unless provided by the city), and to provide more extensive observation of Contractor's work. Duties, responsibilities, and authority of the RPR are as set forth. The furnishing of such RPR's services will not limit, extend, or modify Engineer's responsibilities or authority except as expressly set forth

3. *Selection of Independent Testing Laboratory:* Assist Owner in the selection of an independent testing laboratory to perform the services identified.

4. *Pre-Construction Conference:* Participate in a pre-construction conference prior to commencement of Work at the Site.

5. *Electronic Transmittal Protocols:* Consultant shall follow City of Joplin protocols shown below.

6. *Original Documents:* If requested by Owner to do so, maintain and safeguard during the Construction Phase at least one original printed record version of the Construction Contract Documents, including Drawings and Specifications signed and sealed by Engineer and other design professionals in accordance with applicable Laws and Regulations. Throughout the Construction Phase, make such original printed record version of the Construction Contract Documents available to Contractor and Owner for review.

7. *Schedules:* Receive, review, and determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.

8. *Baselines and Benchmarks:* As appropriate, establish baselines and benchmarks for locating the Work which in Engineer's judgment are necessary to enable Contractor to proceed.

pg. 9

9. *Visits to Site and Observation of Construction:* In connection with observations of Contractor's Work while it is in progress:

   a) Make visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary, to observe as an experienced and qualified design professional the progress of Contractor's executed Work. Such visits and observations by Engineer, and the Resident Project Representative, if any, are not intended to be exhaustive or to extend to every aspect of the Work or to involve detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement and the Construction Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment, as assisted by the Resident Project Representative, if any. Based on information obtained during such visits and observations, Engineer will determine in general if the Work is proceeding in accordance with the Construction Contract Documents, and Engineer shall keep Owner informed of the progress of the Work.

   b) The purpose of Engineer's visits to the Site, and representation by the Resident Project Representative, if any, at the Site, will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to provide for Owner a greater degree of confidence that the completed Work will conform in general to the Construction Contract Documents and that Contractor has implemented and maintained the integrity of the design concept of the completed Project as a functioning whole as indicated in the Construction Contract Documents. Engineer shall not, during such visits or as a result of such observations of the Work, supervise, direct, or have control over the Work, nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to any Constructor's work in progress, for the coordination of the Constructors' work or schedules, nor for any failure of any Constructor to comply with Laws and Regulations applicable to furnishing and performing of its work. Accordingly, Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish or perform the Work, or any portion of the Work, in accordance with the Construction Contract Documents.

10. *Defective Work:* Reject Work if, on the basis of Engineer's observations, Engineer believes that such Work is defective under the terms and standards set forth in the Construction Contract Documents. Provide recommendations to Owner regarding whether Contractor should correct such Work or remove and replace such Work, or whether Owner should consider accepting such Work as provided in the Construction Contract Documents.

11. *Compatibility with Design Concept:* If Engineer has express knowledge that a specific part of the Work that is not defective under the terms and standards set forth in the Construction Contract Documents is nonetheless not compatible with

the design concept of the completed Project as a functioning whole, then inform Owner of such incompatibility, and provide recommendations for addressing such Work.

12. *Clarifications and Interpretations:* Accept from Contractor and Owner submittal of all matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. With reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Construction Contract Documents.

13. *Field Orders:* Subject to any limitations in the Construction Contract Documents, Engineer may prepare and issue Field Orders requiring minor changes in the Work.

14. *Change Orders and Work Change Directives:* Recommend Change Orders and Work Change Directives to Owner, as appropriate, and prepare Change Orders and Work Change Directives as required.

    a) Identify discrepancy
    b) Contractor submits pricing
    c) Cost analysis by Project Manager
    d) Submit Conceptual Plan to MoDOT and FHWA, if applicable
    e) Receive conceptual approval from both agencies and give contract Notice to Proceed
    f) Change in work complete, submit official change Order with Justification and copy of conceptual to MoDOT and FHWA if applicable (justification provided by City Project Manager)
    g) After signatures on Change order are complete, notify the contractor.

15. *Differing Site Conditions:* Respond to any notice from Contractor of differing site conditions, including conditions relating to underground facilities such as utilities, and hazardous environmental conditions. Promptly conduct reviews and prepare findings, conclusions, and recommendations for Owner's use.

16. *Shop Drawings, Samples, and Other Submittals:* Review and approve or take other appropriate action with respect to Shop Drawings, Samples, and other required Contractor submittals, but only for conformance with the information given in the Construction Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the Construction Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Engineer shall meet any Contractor's submittal schedule that Engineer has accepted.

17. *Substitutes and "Or-equal":* Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor.

18. *Inspections and Tests:*

a) Receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Construction Contract Documents. Engineer's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Construction Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Construction Contract Documents. Engineer shall be entitled to rely on the results of such inspections and tests.

b) As deemed reasonably necessary, request that Contractor uncover Work that is to be inspected, tested, or approved.

c) Pursuant to the terms of the Construction Contract, require special inspections or testing of the Work, whether or not the Work is fabricated, installed, or completed.

19. *Change Proposals and Claims:*

a) Review and respond to Change Proposals. Review each duly submitted Change Proposal from Contractor and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer will not resolve the Change Proposal.

b) Provide information or data to Owner regarding engineering or technical matters pertaining to Claims.

20. *Applications for Payment:* Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:

a) Determine the amounts that Engineer recommends Contractor be paid. Recommend reductions in payment (set-offs) based on the provisions for set-offs stated in the Construction Contract. Such recommendations of payment will be in writing and will constitute Engineer's representation to Owner, based on such observations and review, that, to the best of Engineer's knowledge, information and belief, Contractor's Work has progressed to the point indicated, the Work is generally in accordance with the Construction Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Construction Contract Documents, and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work. In the case of unit price Work, Engineer's recommendations of payment will include final determinations of quantities and classifications of the Work (subject to any subsequent adjustments allowed by the Construction Contract Documents).

b) By recommending payment, Engineer shall not thereby be deemed to have represented that observations made by Engineer to check the quality or quantity of Contractor's Work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement.

21. *Contractor's Completion Documents:* Receive from Contractor, review, and transmit to Owner maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Construction Contract Documents, certificates of inspection, tests and approvals, and Shop Drawings, Samples, and other data. Receive from Contractor, review, and transmit to Owner the annotated record documents which are to be assembled by Contractor in accordance with the Construction Contract Documents to obtain final payment. The extent of Engineer's review of record documents shall be to check that Contractor has submitted all pages.

22. *Substantial Completion:* Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with Owner and Contractor, visit the Site to review the Work and determine the status of completion. Follow the procedures in the Construction Contract regarding the preliminary certificate of Substantial Completion, punch list of items to be completed, Owner's objections, notice to Contractor, and issuance of a final certificate of Substantial Completion. Assist Owner regarding any remaining engineering or technical matters affecting Owner's use or occupancy of the Work following Substantial Completion.

23. *Other Tasks:* Perform or provide the following other Construction Phase tasks or deliverables:

24. *Final Notice of Acceptability of the Work:* Conduct a final visit to the Project to determine if the Work is complete and acceptable so that Engineer may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, Engineer shall also provide a notice to Owner and Contractor in the form of the acceptance identified in MoDOT's LPA Manual, that the Work is acceptable (subject to the provisions of the Notice and Paragraph A1.05.A.21.b) to the best of Engineer's knowledge, information, and belief, and based on the extent of the services provided by Engineer under this Agreement.

25. *Standards for Certain Construction-Phase Decisions:* Engineer will render decisions regarding the requirements of the Construction Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth in the Construction Contract for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

B. *Duration of Construction Phase:* The Construction Phase will commence with the execution of the first Construction Contract for the Project or any part thereof and will terminate upon written recommendation by Engineer for final payment to Contractors. If the Project involves more than one prime contract, then Construction Phase services may be rendered

at different times in respect to the separate contracts. Engineer shall be entitled to an equitable increase in compensation if Construction Phase services (including Resident Project Representative services, if any) are required after the original date for

completion and readiness for final payment of Contractor as set forth in the Construction Contract.

A1.09 Post-Construction Phase

A. Upon written authorization from Owner during the Post-Construction Phase, Engineer shall:

1. Together with Owner, visit the Project to observe any apparent defects in the Work, make recommendations as to replacement or correction of defective Work, if any, or the need to repair of any damage to the Site or adjacent areas, and assist Owner in consultations and discussions with Contractor concerning correction of any such defective Work and any needed repairs.

2. Together with Owner, visit the Project within one month before the end of the Construction Contract's correction period to ascertain whether any portion of the Work or the repair of any damage to the Site or adjacent areas is defective and therefore subject to correction by Contractor.

3. Full payment of the final invoice will not be considered until the consultant has electronically furnished the following documents:

a) The city's semi-final inspection letter stating the date of semi-final inspection and listing those who were present.
b) The city's final acceptance letter showing the number of working days or calendar days charged, completion date and the amount of liquidated damages, if any.
c) A final list of acceptance testers used on the project and a certification stating:

"The results of the tests or acceptance samples indicate that material incorporated in the construction work and the construction operations controlled by sampling and testing were in reasonably close conformity with the approved plans and specifications, and such results compare favorably with the results of independent assurance sampling and testing." Any deviations from the specifications must be explained along with the reason for acceptance.

"All field tests were performed in conformity with the governing specifications and the results were in reasonably close conformity with the specifications." Explain any deviations and why the work was accepted.

"The project was constructed substantially in conformity with the plans and specifications for the project."

d) Contractor certification and city recommendation:

Showing the final DBE participation on the project including the DBEs used, the type of work performed, and the dollar amount paid to each DBE.

The city's recommendation regarding the contractor's fulfillment of the DBE requirements. The consultant shall also provide written documentation from each DBE that they were paid in full for the work identified in the Contractor DBE Certification. Examples of documentation from DBEs may include a letter, e-mail, lien waiver or copies of reimbursement checks. If DBE goals were not met, include documentation as to why.

e) Final Invoice

f) Final Detailed Estimate of Quantities

g) Contractor's Affidavit Regarding Settlement of Claims

h) Final Change Order (if needed)

i) Affidavit (Compliance with Prevailing Wage Law)

j) These documents are to be received within 60 days of the Final Inspection date. Final Reimbursement will be processed once all close out documentation has been reviewed and accepted.

B. The Post-Construction Phase services may commence during the Construction Phase and, if not otherwise modified, will terminate twelve months after the commencement of the Construction Contract's correction period.

PART 2 – ADDITIONAL SERVICES

A2.01 *Additional Services Requiring Owner's Written Authorization*

A. If authorized in writing by Owner, Engineer shall provide Additional Services of the types listed below. These services are not included as part of Basic Services and will be paid for by Owner as indicated.

1. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans, or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.

2. Undertaking investigations and studies including, but not limited to:

a. Detailed consideration of operations, maintenance, and overhead expenses.

PART 2 – ADDITIONAL SERIVCES

Right of Way Negotiation/Acquisition Services

The Consultant shall be responsible for the following acquisition activities under the Scope of Services for this request. All Right of Way acquisition activities will comply with HUD Uniform Relocation Act, City of Joplin, MoDot and LPA Guidelines unless otherwise indicated.

1. Project Timeline: Coordinate timeline with city staff
2. Right of Way Cost Estimates
3. Titlework/Titlework Updates: Acquire/update title search for each parcel.
4. Preparation/Review of Legal Instruments: Prepare legal documents using standard right-of-way and easement forms.
5. Preparation of Individual Parcel Files: set up and maintain right-of-way acquisition file for each parcel. Send appropriate notices to property owners as requested by funding source and city policy. Prepare detailed Negotiator's Report for each property to include owner information, all contacts, attempted contacts, or other related activity.
6. Appraisals, Updates: Arrange for appraisals and appraisal updates as required. Appraisal formats to be used (value analysis, value finding, short form, detailed appraisal) will be coordinated with city staff.
7. Appraisal Review: Arrange for appraisals review when appraisals are conducted.
8. Acquisition: Contact owners and arrange on site or office meetings to review project or compensation details. Obtain signatures and provide notary services for each required document after agreement has been reached.
9. Preparation of compensation packet – for appropriate city review and payment: Review counter offers, special requests or conditions with city staff.
10. Closings: Obtain signatures and provide notary services for each required document after agreement has been reached. Forward signed documents to city staff. Deliver payment to property owner. Forward file to city staff if agreement cannot be reached with property owner.
11. Project Status Reports: Provide status updates during scheduled project coordination meetings and as requested by city staff.
12. Final File Disposition: Submit electronic copy of Individual Parcel Files to city.
13. Review and understand right of way and engineering construction plans.
14. Attend public meetings on proposed projects at the request of city staff.
15. Set up and maintain right of way acquisition file for each parcel.

16. Send appropriate notices to property owners as required by funding source and city policy.

17. Prepare legal documents using standard right-of-way and easement forms.

18. Review appraisal information and send certified letter of offer to each property owner.

19. Contact owners and arrange on site or office meetings to review project or compensation details.

20. Prepare a detailed Negotiation's Report for each property. Report will include owner information, all contacts, attempted contacts, or other related activity.

21. Review counter offers, special requests or conditions with project manager.

22. Once an agreement has been reached, consultant will obtain signatures and provide notary services for each required document.

23. Signed documents will be forwarded to city staff for appropriate approval, payment processing, and recording.

24. Deliver payment to property owner.

25. In instances that an agreement cannot be reached, file will be forwarded to city staff for review by legal department.

26. Attend commissioners viewing, testify in court during condemnation proceedings as directed by legal department.

27. Payment for right of way negotiation services shall be separated into three deliverables as follows:

    1. All services for the preparation of all deed documents, the initial contact with the property owner and the delivery of the first offer upon receipt or proof. Payment will not be made until services have been rendered for properties within the project phases. The consultant may include a not to exceed amount for these services.

    2. All services related to negotiation, preparation reports, and evaluations of counter offers from seller, preparation of counter offers from city and closing proceedings. Payment will not be made until after close or at such time that it is determined that a reasonable agreement cannot be made with the property owner. This determination will be made by the Public Works Director of the City of Joplin. This will be paid on a per monthly basis. The consultant shall document time and expenses for the specific property before payment will be made. The consultant shall estimate the time needed for negotiation based on previous experience and include a not to exceed amount for these services.

    3. Payment for all services related to condemnation proceedings. This shall include preparation of viewing package and any testimony required. This shall be paid on a monthly basis based upon documented time and expenses. The consultant shall allow for

time based upon previous experience and an allowance for such proceeding should be included.

28. The Consultant shall be responsible for the following acquisition activities under the Scope of Services for this request. All Right of Way acquisition activities will comply with MoDot and LPA Guidelines unless otherwise indicated.

    a. Pre-Qualification of Consultant Employees/Subcontractors

Exclusion

The following services are EXCLUDED from the CONSULTANT'S scope of services. Each can be added, per the authorization of the CITY.

- The development of detailed traffic control plans (provided by Contractor).
- The development of erosion control plans (provided by Contractor).
- Construction support services (to be included in future work authorization).
- Overall program management and/or project management for any work outside of the "Yellow Area" CDBG-DR scope of services defined here within this Exhibit A.
- Overall design oversight of other consultants, including, but not limited to design reviews of other consultants and/or contractors.
- All participation in CITY council meetings have been excluded from this scope of services.
- Excluding the one (1) public open house meeting for the showing of all four projects, there is no additional time included within this proposal for public hearings or support for public input to the project.
- Subsurface utility exploration.
- Permit Applications, including permit fees.
- This scope of work does not include the payment of deposits, fees, surcharges, escrows or so forth of any kind including, but not limited to, review and permit fees. This proposal assumes that any payments of that nature will be the responsibility of CITY.
- Printing of mylar plan sets.
- The design for relocation of existing utilities (except storm sewer and sanitary sewer) is not included within this scope. No fee has been allocated for the cost of design of any of relocation of telephone, fiber optic, water, gas, power, or other utilities other than storm or sewer as indicated. Coordination with utility companies is included within this scope of services.
- Traffic signal design warrants for, or any other related traffic signal work is not included in this proposal.
- The scope of work assumes wetland/soil mitigation and archeological/historical/cultural exploration will not be required.
- Right of way acquisition services other than those plans specifically outlined in this proposal.
- Wetland Mitigation / Soil Mitigation Plan.
- Archeological / Historical / Cultural Exploration.
- Retaining wall design.
- Box culvert design.

- Landscaping design.
- Street lighting design.
- Redesign of work following the 100% design & bidding phase. The CITY has stated that they have a fixed budget for these four (4) subprojects though the completion of construction (Total In Costs, TIC). If the construction bids are initially higher than the allotted budgets, then the CITY may have to consider redesigning the subproject(s). The fee for this redesign is hard to estimate at this time and thus, is not included within this proposal.

Assumptions

The following assumptions have been made during the preparation of this Exhibit "A":

- LIDAR information for the "Yellow Area" will be provided to the CONSULTANT by the City prior to the start of work.
- The City's reviews will be completed within a 2 week period.
- CITY and CONSULTANT recognize that the actual time required for regulatory agency and utility service provider review and approval of construction documents is unknown and is beyond the control of either the CITY and/or CONSULTANT. CITY and CONSULTANT recognize that if extended periods of time are required for review, it may have an adverse effect on the progress of the work.
- The scope of work assumes that CITY will provide construction contract agreement forms, the general and supplementary conditions to the construction contract, bid forms, invitations to bid, instructions to bidders, and any other appropriate documents for incorporation into the construction documents.

Qualifications

The following qualifications are noted for clarification of the scope of services presented within Exhibit A.

- The following geotechnical field investigation work has been estimated for this work;
    - 3 boreholes for the Sunset subdivision storm water improvement subproject
    - 54 pavement core samples (over 18 streets) for the mill and overlay subproject.
    - 10 potholes cores for utility verification.
- The preparation of necessary documentation and paperwork required to get right of way and/or easements recorded is limited to 21 parcels.
- Negotiation with property owners for easements and ROW is limited to 8 hours per parcel before the process for condemnation or redesign is triggered. We have estimated 25 parcels. Eight (8) for each the Sunset and McCoy drainage projects and 9 for the Oliver drainage project.
- Work related to condemnation of specific parcels is limited to attend commissioners viewing, testify in court during condemnation proceedings as directed by legal department. - Limit 40 hours at $120/hr.
- ROW & Easement Staking – We have assumed 1 day (each) staking for Sunset, Oliver and McCoy drainage projects - 3 days total.

CITY OF JOPLIN - CDBG-DR INFRASTRUCTURE IMPROVEMENTS
WORK AUTHORIZATION JCB-DR2-PAP3-1
YELLOW AREA
Jacobs

DESIGN SERVICES **for the Period 4/1/16 - 9/30/16**

Task	Oliver Ditch Stormwater Improvements (Non-LMI)	McCoy Ave. - Stormwater Improvements (LMI)	Mill & Overlay Improvements (LMI)	Mill & Overlay Improvements (Non-LMI)	Sunset Drainage Improvements (Non-LMI)	Extra Services per City's Std. Eng. Service Agreement	Total
DESIGN	$73,342	$84,430	$62,119	$59,286	$132,579	$107,675	
* Construction Procurement							$32,559
Environment Assessment	$0	$2,551	$2,526	$2,526	$0		
ROW Acquisition and Utility Relocations	$20,340	$27,627	$0	$0	$26,416	$6,000	
design subtotal	$93,682	$114,608	$64,645	$61,812	$158,995	$113,675	$607,417
TOTAL DESIGN SERVICES							**$639,976**

Design includes all expenses, including surveys & geotechincal services

* Construction Procurement services apply to all subprojects

CITY OF JOPLIN MISSOURI

Jacobs Infrastructure Improvements Project Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1704	**Public Infrastructure Improvements (Jacobs)**	**708 days**	**Fri 4/15/16**	**Wed 1/23/19**	
1705	**Mill & Overlay Projects**	**708 days**	**Fri 4/15/16**	**Wed 1/23/19**	
1706	Project Start	0 days	Fri 4/15/16	Fri 4/15/16	
1707	**Design**	**110 days**	**Fri 4/15/16**	**Mon 9/19/16**	
1708	Project Initiation	0 days	Fri 4/15/16	Fri 4/15/16	1706
1709	Survey	20 days	Fri 4/15/16	Thu 5/12/16	1708
1710	Schematic Design	0 days	Thu 5/12/16	Thu 5/12/16	1709
1711	30% Design Review	20 days	Fri 5/13/16	Fri 6/10/16	1710
1712	Design Development	25 days	Mon 6/13/16	Fri 7/15/16	1711
1713	60% Design Review	5 days	Mon 7/18/16	Fri 7/22/16	1712
1714	Construction Document Development	35 days	Mon 7/25/16	Mon 9/12/16	1713
1715	City Design QA/QC	5 days	Tue 9/13/16	Mon 9/19/16	1714
1716	100% Design Complete	0 days	Mon 9/19/16	Mon 9/19/16	1715
1717	**Environmental Assessment**	**142 days**	**Mon 6/13/16**	**Thu 12/29/16**	
1718	Conduct Environmental Assessment	90 days	Mon 6/13/16	Mon 10/17/16	1711
1719	Prepare Floodplain Review	0 days	Mon 10/17/16	Mon 10/17/16	1718FF
1720	Publish Final Notice of Activity Occuring in a Floodplain	0 days	Mon 10/17/16	Mon 10/17/16	1719
1721	Public Commend Period for Floodplain Review	0 days	Mon 10/17/16	Mon 10/17/16	1720
1722	Address Comments on 8-Step Process	0 days	Mon 10/17/16	Mon 10/17/16	1721
1723	Finalize Environmental Assessment	5 days	Tue 10/18/16	Mon 10/24/16	1722
1724	Prepare/Review Public Notice (FONSI, NOI, RROF)	5 days	Tue 10/25/16	Mon 10/31/16	1723
1725	Publish Public Notice (FONSI, NOI, RROF)	1 day	Tue 11/1/16	Tue 11/1/16	1724
1726	Public Notice Comment Period (NOI/RROF)	15 edays	Tue 11/1/16	Wed 11/16/16	1725
1727	Prepare/Submit RROF to HUD	5 days	Thu 11/17/16	Wed 11/23/16	1726
1728	HUD Approval of RROF	15 edays	Wed 11/23/16	Thu 12/8/16	1727
1729	Address HUD Comments	15 days	Fri 12/9/16	Thu 12/29/16	1728
1730	FONSI/NOI/RROF Complete	0 days	Thu 12/29/16	Thu 12/29/16	1729
1731	Environmental Assessment Complete	0 days	Thu 12/29/16	Thu 12/29/16	1730
1732	**R/W Acquisition and Utility Relocation**	**0 days**	**Thu 12/29/16**	**Thu 12/29/16**	
1733	R/W and Easement Acquisition	0 days	Thu 12/29/16	Thu 12/29/16	1728,1716,1731
1734	Utility Relocations	0 days	Thu 12/29/16	Thu 12/29/16	1733
1735	**Construction Procurement**	**341 days**	**Fri 12/9/16**	**Fri 4/6/18**	
1736	Prepare and Review RFP	15 days	Fri 12/9/16	Thu 12/29/16	1734FF
1737	City Legal Review RFP	7 days	Fri 12/30/16	Mon 1/9/17	1736
1738	Publish RFP (paper and online)	1 day	Tue 1/10/17	Tue 1/10/17	1730,1737
1739	RFP Response Time	21 edays	Tue 1/10/17	Tue 1/31/17	1738
1740	Public Opening	0 days	Tue 1/31/17	Tue 1/31/17	1739
1741	Bid Review	10 days	Wed 2/1/17	Tue 2/14/17	1740
1742	Bid Selection	0 days	Tue 2/14/17	Tue 2/14/17	1741
1743	City Legal Review	7 days	Wed 2/15/17	Thu 2/23/17	1742
1744	City Council Approval of Firm	1 hr	Mon 3/5/18	Mon 3/5/18	2905
1745	Execute Contract and Issue Notice to Proceed	25 days	Mon 3/5/18	Fri 4/6/18	1744
1746	**Construction**	**160 days**	**Mon 4/9/18**	**Tue 11/20/18**	
1747	Construction	160 days	Mon 4/9/18	Tue 11/20/18	1745
1748	Project Closeout	40 days	Wed 11/21/18	Wed 1/23/19	1747
1749	**Oliver Ditch**	**708 days**	**Fri 4/15/16**	**Wed 1/23/19**	
1750	Project Start	0 days	Fri 4/15/16	Fri 4/15/16	
1751	**Design**	**105 days**	**Fri 4/15/16**	**Mon 9/12/16**	
1752	Project Initiation	0 days	Fri 4/15/16	Fri 4/15/16	1750
1753	Survey	20 days	Fri 4/15/16	Thu 5/12/16	1752
1754	Schematic Design	20 days	Fri 5/13/16	Fri 6/10/16	1753
1755	30% Design Review	5 days	Mon 6/13/16	Fri 6/17/16	1754
1756	Design Development	20 days	Mon 6/20/16	Fri 7/15/16	1755
1757	60% Design Review	5 days	Mon 7/18/16	Fri 7/22/16	1756

CITY OF JOPLIN MISSOURI

Jacobs Infrastructure Improvements Project Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1758	Construction Document Development	30 days	Mon 7/25/16	Fri 9/2/16	1757
1759	City Design QA/QC	5 days	Tue 9/6/16	Mon 9/12/16	1758
1760	100% Design Complete	0 days	Mon 9/12/16	Mon 9/12/16	1759
1761	**Environmental Assessment**	**143 days**	**Mon 6/20/16**	**Fri 1/6/17**	
1762	Conduct Environmental Assessment	90 days	Mon 6/20/16	Mon 10/24/16	1755
1763	Prepare Floodplain Review	0 days	Mon 10/24/16	Mon 10/24/16	1762FF
1764	Publish Final Notice of Activity Occuring in a Floodplain	0 days	Mon 10/24/16	Mon 10/24/16	1763
1765	Public Commend Period for Floodplain Review	0 days	Mon 10/24/16	Mon 10/24/16	1764
1766	Address Comments on 8-Step Process	0 days	Mon 10/24/16	Mon 10/24/16	1765
1767	Finalize Environmental Assessment	5 days	Tue 10/25/16	Mon 10/31/16	1766
1768	Prepare/Review Public Notice (FONSI, NOI, RROF)	5 days	Tue 11/1/16	Mon 11/7/16	1767
1769	Publish Public Notice (FONSI, NOI, RROF)	1 day	Tue 11/8/16	Tue 11/8/16	1768
1770	Public Notice Comment Period (NOI/RROF)	15 edays	Tue 11/8/16	Wed 11/23/16	1769
1771	Prepare/Submit RROF to HUD	5 days	Fri 11/25/16	Thu 12/1/16	1770
1772	HUD Approval of RROF	15 edays	Thu 12/1/16	Fri 12/16/16	1771
1773	Address HUD Comments	15 days	Mon 12/19/16	Fri 1/6/17	1772
1774	FONSI/NOI/RROF Complete	0 days	Fri 1/6/17	Fri 1/6/17	1773
1775	Environmental Assessment Complete	0 days	Fri 1/6/17	Fri 1/6/17	1774
1776	**R/W Acquisition and Utility Relocation**	**240 days**	**Mon 12/19/16**	**Tue 11/21/17**	
1777	R/W and Easement Acquisition	160 days	Mon 12/19/16	Mon 7/31/17	1772,1760
1778	Utility Relocations	80 days	Tue 8/1/17	Tue 11/21/17	1777,1775
1779	**Construction Procurement**	**95 days**	**Wed 11/22/17**	**Fri 4/6/18**	
1780	Prepare and Review RFP	15 days	Wed 11/22/17	Thu 12/14/17	1778
1781	City Legal Review RFP	7 days	Fri 12/15/17	Tue 12/26/17	1780
1782	Publish RFP (paper and online)	1 day	Wed 12/27/17	Wed 12/27/17	1774,1781
1783	RFP Response Time	21 edays	Wed 12/27/17	Wed 1/17/18	1782
1784	Public Opening	0 days	Wed 1/17/18	Wed 1/17/18	1783
1785	Bid Review	10 days	Thu 1/18/18	Wed 1/31/18	1784
1786	Bid Selection	0 days	Wed 1/31/18	Wed 1/31/18	1785
1787	City Legal Review	7 days	Thu 2/1/18	Fri 2/9/18	1786
1788	City Council Approval of Firm	1 hr	Mon 3/5/18	Mon 3/5/18	2905
1789	Execute Contract and Issue Notice to Proceed	25 days	Mon 3/5/18	Fri 4/6/18	1788
1790	**Construction**	**160 days**	**Mon 4/9/18**	**Tue 11/20/18**	
1791	Construction	160 days	Mon 4/9/18	Tue 11/20/18	1789
1792	Project Closeout	40 days	Wed 11/21/18	Wed 1/23/19	1791
1793	**Sunset Drainage**	**708 days**	**Fri 4/15/16**	**Wed 1/23/19**	
1794	Project Start	0 days	Fri 4/15/16	Fri 4/15/16	
1795	**Design**	**120 days**	**Fri 4/15/16**	**Mon 10/3/16**	
1796	Project Initiation	0 days	Fri 4/15/16	Fri 4/15/16	1794
1797	Survey	20 days	Fri 4/15/16	Thu 5/12/16	1796
1798	Schematic Design	25 days	Fri 5/13/16	Fri 6/17/16	1797
1799	30% Design Review	5 days	Mon 6/20/16	Fri 6/24/16	1798
1800	Design Development	25 days	Mon 6/27/16	Fri 7/29/16	1799
1801	60% Design Review	5 days	Mon 8/1/16	Fri 8/5/16	1800
1802	Construction Document Development	35 days	Mon 8/8/16	Mon 9/26/16	1801
1803	City Design QA/QC	5 days	Tue 9/27/16	Mon 10/3/16	1802
1804	100% Design Complete	0 days	Mon 10/3/16	Mon 10/3/16	1803
1805	**Environmental Assessment**	**142 days**	**Mon 6/27/16**	**Thu 1/12/17**	
1806	Conduct Environmental Assessment	90 days	Mon 6/27/16	Mon 10/31/16	1799
1807	Prepare Floodplain Review	0 days	Mon 10/31/16	Mon 10/31/16	1806FF
1808	Publish Final Notice of Activity Occuring in a Floodplain	0 days	Mon 10/31/16	Mon 10/31/16	1807
1809	Public Commend Period for Floodplain Review	0 days	Mon 10/31/16	Mon 10/31/16	1808
1810	Address Comments on 8-Step Process	0 days	Mon 10/31/16	Mon 10/31/16	1809
1811	Finalize Environmental Assessment	5 days	Tue 11/1/16	Mon 11/7/16	1810

CITY OF JOPLIN MISSOURI

Jacobs Infrastructure Improvements Project Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1812	Prepare/Review Public Notice (FONSI, NOI, RROF)	5 days	Tue 11/8/16	Mon 11/14/16	1811
1813	Publish Public Notice (FONSI, NOI, RROF)	1 day	Tue 11/15/16	Tue 11/15/16	1812
1814	Public Notice Comment Period (NOI/RROF)	15 edays	Tue 11/15/16	Wed 11/30/16	1813
1815	Prepare/Submit RROF to HUD	5 days	Thu 12/1/16	Wed 12/7/16	1814
1816	HUD Approval of RROF	15 edays	Wed 12/7/16	Thu 12/22/16	1815
1817	Address HUD Comments	15 days	Fri 12/23/16	Thu 1/12/17	1816
1818	FONSI/NOI/RROF Complete	0 days	Thu 1/12/17	Thu 1/12/17	1817
1819	Environmental Assessment Complete	0 days	Thu 1/12/17	Thu 1/12/17	1818
1820	**R/W Acquisition and Utility Relocation**	**240 days**	**Fri 12/23/16**	**Wed 11/29/17**	
1821	R/W and Easement Acquisition	160 days	Fri 12/23/16	Fri 8/4/17	1816,1804
1822	Utility Relocations	80 days	Mon 8/7/17	Wed 11/29/17	1821,1819
1823	**Construction Procurement**	**91 days**	**Thu 11/30/17**	**Fri 4/6/18**	
1824	Prepare and Review RFP	15 days	Thu 11/30/17	Wed 12/20/17	1822
1825	City Legal Review RFP	7 days	Thu 12/21/17	Mon 1/1/18	1824
1826	Publish RFP (paper and online)	1 day	Tue 1/2/18	Tue 1/2/18	1818,1825
1827	RFP Response Time	21 edays	Tue 1/2/18	Tue 1/23/18	1826
1828	Public Opening	0 days	Tue 1/23/18	Tue 1/23/18	1827
1829	Bid Review	10 days	Wed 1/24/18	Tue 2/6/18	1828
1830	Bid Selection	0 days	Tue 2/6/18	Tue 2/6/18	1829
1831	City Legal Review	7 days	Wed 2/7/18	Thu 2/15/18	1830
1832	City Council Approval of Firm	1 hr	Mon 3/5/18	Mon 3/5/18	2905
1833	Execute Contract and Issue Notice to Proceed	25 days	Mon 3/5/18	Fri 4/6/18	1832
1834	**Construction**	**160 days**	**Mon 4/9/18**	**Tue 11/20/18**	
1835	Construction	160 days	Mon 4/9/18	Tue 11/20/18	1833
1836	Project Closeout	40 days	Wed 11/21/18	Wed 1/23/19	1835
1837	**McCoy Drainage**	**708 days**	**Fri 4/15/16**	**Wed 1/23/19**	
1838	Project Start	0 days	Fri 4/15/16	Fri 4/15/16	
1839	**Design**	**120 days**	**Fri 4/15/16**	**Mon 10/3/16**	
1840	Project Initiation	0 days	Fri 4/15/16	Fri 4/15/16	1838
1841	Survey	20 days	Fri 4/15/16	Thu 5/12/16	1840
1842	Schematic Design	25 days	Fri 5/13/16	Fri 6/17/16	1841
1843	30% Design Review	5 days	Mon 6/20/16	Fri 6/24/16	1842
1844	Design Development	25 days	Mon 6/27/16	Fri 7/29/16	1843
1845	60% Design Review	5 days	Mon 8/1/16	Fri 8/5/16	1844
1846	Construction Document Development	35 days	Mon 8/8/16	Mon 9/26/16	1845
1847	City Design QA/QC	5 days	Tue 9/27/16	Mon 10/3/16	1846
1848	100% Design Complete	0 days	Mon 10/3/16	Mon 10/3/16	1847
1849	**Environmental Assessment**	**142 days**	**Mon 6/27/16**	**Thu 1/12/17**	
1850	Conduct Environmental Assessment	90 days	Mon 6/27/16	Mon 10/31/16	1843
1851	Prepare Floodplain Review	0 days	Mon 10/31/16	Mon 10/31/16	1850FF
1852	Publish Final Notice of Activity Occuring in a Floodplain	0 days	Mon 10/31/16	Mon 10/31/16	1851
1853	Public Commend Period for Floodplain Review	0 days	Mon 10/31/16	Mon 10/31/16	1852
1854	Address Comments on 8-Step Process	0 days	Mon 10/31/16	Mon 10/31/16	1853
1855	Finalize Environmental Assessment	5 days	Tue 11/1/16	Mon 11/7/16	1854
1856	Prepare/Review Public Notice (FONSI, NOI, RROF)	5 days	Tue 11/8/16	Mon 11/14/16	1855
1857	Publish Public Notice (FONSI, NOI, RROF)	1 day	Tue 11/15/16	Tue 11/15/16	1856
1858	Public Notice Comment Period (NOI/RROF)	15 edays	Tue 11/15/16	Wed 11/30/16	1857
1859	Prepare/Submit RROF to HUD	5 days	Thu 12/1/16	Wed 12/7/16	1858
1860	HUD Approval of RROF	15 edays	Wed 12/7/16	Thu 12/22/16	1859
1861	Address HUD Comments	15 days	Fri 12/23/16	Thu 1/12/17	1860
1862	FONSI/NOI/RROF Complete	0 days	Thu 1/12/17	Thu 1/12/17	1861
1863	Environmental Assessment Complete	0 days	Thu 1/12/17	Thu 1/12/17	1862
1864	**R/W Acquisition and Utility Relocation**	**240 days**	**Fri 12/23/16**	**Wed 11/29/17**	
1865	R/W and Easement Acquisition	160 days	Fri 12/23/16	Fri 8/4/17	1860

Jacobs Infrastructure Improvements Project Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1866	Utility Relocations	80 days	Mon 8/7/17	Wed 11/29/17	1865,1848,1863
1867	**Construction Procurement**	**91 days**	**Thu 11/30/17**	**Fri 4/6/18**	
1868	Prepare and Review RFP	15 days	Thu 11/30/17	Wed 12/20/17	1866
1869	City Legal Review RFP	7 days	Thu 12/21/17	Mon 1/1/18	1868
1870	Publish RFP (paper and online)	1 day	Tue 1/2/18	Tue 1/2/18	1862,1869
1871	RFP Response Time	21 edays	Tue 1/2/18	Tue 1/23/18	1870
1872	Public Opening	0 days	Tue 1/23/18	Tue 1/23/18	1871
1873	Bid Review	10 days	Wed 1/24/18	Tue 2/6/18	1872
1874	Bid Selection	0 days	Tue 2/6/18	Tue 2/6/18	1873
1875	City Legal Review	7 days	Wed 2/7/18	Thu 2/15/18	1874
1876	City Council Approval of Firm	1 hr	Mon 3/5/18	Mon 3/5/18	2905
1877	Execute Contract and Issue Notice to Proceed	25 days	Mon 3/5/18	Fri 4/6/18	1876
1878	**Construction**	**160 days**	**Mon 4/9/18**	**Tue 11/20/18**	
1879	Construction	160 days	Mon 4/9/18	Tue 11/20/18	1877
1880	Project Closeout	40 days	Wed 11/21/18	Wed 1/23/19	1879

HRGreen

November 11, 2015

Mr. Jeff Farah P.E., P.Eng
Senior Project Manager
JACOBS
One Financial Plaza
501 North Broadway
Saint Louis, Missouri 63102

RE: Contract Rates by Classification
Joplin Disaster Relief Project

Dear Mr. Farah,

HR Green, Inc. is pleased to be taking part in the ongoing disaster relief efforts in the City of Joplin, and pleased to be working with JACOBS to complete construction documents for the "Yellow Area" of the tornado zone. Accordingly, we would like to present the contract rates to be used by HR Green staff for the second work order of the project:

	Rate from 1/1/16 thru 12/31/16 (per hour)	Rate from 1/1/17 thru 12/31/17 (per hour)
Classification		
Principal:	$239.00	$246.00
Senior Professional:	$186.00	$192.00
Professional:	$154.00	$159.00
Junior Professional:	$106.00	$109.00
Senior CAD Technician:	$111.00	$114.00
Technician:	$91.00	$94.00
Administrative:	$69.00	$71.00

Should you have any questions about the information contained herein, please don't hesitate to contact me directly at (636) 812.4209, by cell phone at (314) 974.0229, or by email at jdohrmann@hrgreen.com.

Sincerely,
HR GREEN INC.

Jason S. Dohrmann, PE
Regional Director – Transportation / St. Louis Site Leader

HRGreen.com
Phone 636.519.0990 Fax 636.519.0996 Toll Free 800.728.7805
16020 Swingley Ridge Road, Suite 120, Chesterfield, Missouri 63017