

### **Board of Aldermen Request for Action**

MEETING DATE: 8/20/2024 DEPARTMENT: Public Works

AGENDA ITEM: Res 1396 - Authorizing the Mayor to sign an agreement with GBA

#### **REQUESTED BOARD ACTION:**

Motion to approve Resolution 1396, authorizing the Mayor to sign an agreement with GBA for engineering services for a roundabout at the intersection of East First Street and North Bridge Street and authorizing GBA to proceed with Phase A.

#### **SUMMARY:**

The City's Capital Improvement Plan includes the construction of a roundabout at the intersection of East First Street and North Bridge Street. The City received partial funding from the Mid-America Regional Council in the amount of \$896,000. The estimated construction cost is nearing \$3 million. The anticipated bid letting is August 2027. Staff will request additional funding as plans progress and estimates are updated.

During the Board retreat it was discussed that the City should have the plans developed, "shovel ready". As opportunities present, the City would be ready to accept additional funding.

The project will also include a sidewalk North on Bridge Street to Second Street and over to Highway 169 and improved ADA access.

The agreement with GBA has two phases:

Phase A – including survey, environmental and some preliminary engineering for an amount of \$102,266.89.

Phase B - including all other tasks necessary to complete the plans, bidding and construction engineering services in an amount of \$337,816.25.

The 2024 CIP has \$250,000 for engineering of this project. The Board action only authorizes Phase A to keep within the currently adopted 2024 budget. Phase B will be presented in the proposed 2025 CIP Budget.

#### **PREVIOUS ACTION:**

None

#### **POLICY OBJECTIVE:**

Transportation Safety, mobility, continunity of operations

#### FINANCIAL CONSIDERATIONS:

Funding for Phase A is available in the 2024 Capital Improvement Plan

ATTACHMENTS:	
Ordinance	
⊠ Resolution	☐ Plans
☐ Staff Report	☐ Minutes
☑ Other: Drawing	

#### **RESOLUTION 1396**

# RESOLUTION AUTHORIZING THE MAYOR TO SIGN AN AGREEMENT WITH GBA FOR ENGINEERING SERVICES FOR A ROUNDABOUT AT THE INTERSECTION OF EAST FIRST STREET AND NORTH BRIDGE STREET AND AUTHORIZING GBA TO PROCEED WITH PHASE A.

**WHEREAS**, the City desires to make improvements to the intersection at East First Street and North Bridge Street and construct a roundabout; and

**WHEREAS**, the City has received partial funding from the Mid-America Regional Council through the Surface Transportation Program; and

WHEREAS, construction funding is available in Federal Fiscal year 2028; and

**WHEREAS**, GBA is a pre-qualified engineering firm capable to provide engineering and design services for this project; and

**NOW, THEREFORE**, Be it resolved by the City of Smithville Missouri, authorizing the Mayor is to sign an agreement with GBA for engineering services for a roundabout at East First Street and North Bridge Street in a total amount of \$ 440,084.14 and authorization to proceed with Phase A of the contract in an amount of \$102,266.89.

**PASSED AND ADOPTED** by the Board of Aldermen and APPROVED by the Mayor of the City of Smithville, Missouri, this 20<sup>th</sup> of August, 2024.

Damien Boley, Mayor	_
ATTEST:	
Linda Drummond, City Clerk	

#### Exhibit III

#### PROFESSIONAL ENGINEERING SERVICES AGREEMENT

This is an Agreement (hereafter referred to as the "Agreement" or "Contract") by and between City of Smithville, MO ("City") located at 107 W. Main Street, Smithville, MO 64089 and George Butler Associates, Inc. ("Consultant" or "Engineer") a Corporation registered to do business in the State of Missouri located at 9801 Renner Blvd, Lenexa, KS 66219.

WITNESSETH:

WHEREAS the City desires to procure engineering services pertaining to the Bridge Street Roundabout Improvements and the City is desirous of retaining a consulting engineer/architect for such works; and

WHEREAS the Engineer is qualified by experience and training and is willing to perform the engineering/architectural services necessary to said work.

WHEREAS the City issued RFQ 23-13 On-Call Professional Services, a copy of which is attached hereto as **Exhibit A**.

WHEREAS the Engineer provided a response on November 7<sup>th</sup>, 2023, a copy of which is attached hereto as **Exhibit C**, with the qualifications and scope of services as identified therein.

WHEREAS the Consultant was deemed by the City as the company most qualified to work on this project.

WHEREAS upon consultation between the parties it was agree that the Consultant would provide the services as set forth in **Exhibit B** which is attached hereto and incorporated as if more fully set forth verbatim.

NOW THEREFORE, in consideration of the mutual covenants and promises contained herein the parties agree as follows:

- 1. <u>CONTRACT DOCUMENTS</u>: The Agreement between the parties shall consist of this Agreement, Exhibit A, B and C. The Parties further agree that this Agreement is a memorialization and a supplement to Exhibits A, B and C attached hereto. In the event of a conflict in the interpretation of the contract/Agreement documents, the parties agree that the terms within the Agreement documents shall be construed or given binding effect in the following order:
  - a) This Agreement; and then
  - b) Exhibit A; and then
  - c) Exhibit B; and then
  - d) Exhibit C.
- 2. GENERAL SCOPE OF THE WORK: Consultant shall furnish all of the labor and materials and perform all of the work set out in Exhibit B and incorporated in this Agreement, to the same extent and effect as if fully set out herein. The scope of work is split into two parts, Phase A, which includes Project Administration, Survey and Environmental Services, and Phase B, which includes Project Administration, Roadway, Traffic, Hydrology & Hydraulics, and Construction Period Services.

- 3. <u>CONTRACT/AGREEMENT PRICE</u>: The total price for all work, materials, and labor to be furnished and performed by the Consultant shall not exceed \$440,084.14. This sum is comprised of Phase A in the amount of \$102,266.89, and Phase B of \$337,817.25. Other than as set forth in paragraph 11, this price is a fixed fee and shall not increase for any reason including but not limited to convenience of the City, unknown site conditions, delays, weather or other Consultant claims. Consultant may submit monthly invoices to the City Director of Public Works (or such other person as designated by the City) detailing the hours of services provided and the percentage of the project completed. Upon verification by the City that the invoice does not exceed the percentage of the project completed, the City will pay said invoice within thirty (30) days. The City will not make any payments for invoiced amounts which exceed the percentage of completed project.
- **4.** <u>TIME</u>: Time is of the essence of this Agreement. The work to be performed hereunder shall be commenced as soon as reasonably possible after the execution of this Agreement and is subject to authorized adjustments. The work contemplated by this agreement shall be completed by the Engineer within 4 years of the Notice to Proceed on this Agreement or by the 17th day of November, 2028.
- **5.** <u>NOTICES</u> Any Notice as set forth herein must be served by Federal Express or similar overnight delivery service or by certified mail, return receipt requested, addressed to the party and shall be deemed given as of the deposit in the U. S. Mails or with overnight delivery service. Notice to the City shall be sent to the Director of Public Works and the City Administrator, City of Smithville, 107 W. Main Street Smithville MO 64089. Notice to Consultant shall be sent to the Consultant at 9801 Renner Blvd, Lenexa, KS 66219. Either party may designate such other Person and/or delivery address from time to time by written Notice.
- **6. INDEPENDENT CONTRACTOR**: The Consultant warrants and represents to the City that it is fully experienced and properly qualified as an expert to perform the services provided for herein and that it is properly equipped organized and financed to perform such services. The Consultant shall finance its own operations and shall operate as an Independent Contractor and not as an agent of the City and shall indemnify and hold the City free and harmless from all liabilities, costs, and charges by reason of any act, omission or representation of the Engineer or of its subcontractors, agents, and employees, including costs and attorney's fees.

Consultant shall at all times cause all its workers, laborers, employees, independent contractors and subcontractors and agents and employees of such persons to be fully covered with Worker's Compensation insurance at the amounts required by law. The Consultant will indemnify and hold the City harmless for all damages and liabilities, including attorney's fees and costs for injuries to its employees, agents, servants, and/or subcontractors, for failure to obtain and maintain worker's compensation insurance or failure to provide a safe place to work, and Consultant will also be responsible to ensure that its subcontractors carry workers compensation insurance.

The Consultant will also conduct the services in such a manner as to keep members of the public safe and represents and warrants that it has General Liability insurance in a sum no less than \$2,000,000.00. The Engineer will provide the City with a Certificate of Insurance evidencing the same and naming the City as "additional named insured" and will indemnify and save the City harmless from all liability and costs, including attorney's fees claimed by any person who claims an injury as a result of the work. All insurance coverage must be written by companies that have an A.M. Best's rating of "A-VII" or better or as specifically approved by the City and are licensed or approved by the State of Missouri to do business in Missouri.

Regardless of any approval by the City, it is the responsibility of the Engineer to always maintain the required insurance coverage in force; its failure to do so will not relieve it of any agreement, obligation

or responsibility. In the event of the Engineer 's failure to maintain the required insurance in effect, the City may order the Engineer to immediately terminate its work until the breach has been cured or terminate this Contract.

- 7. <u>COMPLIANCE AND REQUIREMENTS</u>: All work, labor and materials to be furnished and performed by the Engineer shall be to the satisfaction of the City Director of Public Works (or such other person as designated by the City) acting on behalf of the City, and payment shall be made only for such work and materials as are accepted in writing by the City Director of Public Works (or such other person as designated by the City) provided, however, that the City shall not arbitrarily withhold acceptance of such work and materials or payment so long as the Engineer makes satisfactory progress and performs all of its obligations in accordance with or pursuant to all the terms and conditions of this Agreement.
- **8.** <u>CORRECTION OF DEFAULTS</u>: The Engineer will, at the request of the City Director of Public Works (or such other person as designated by the City), correct any defects to the materials or workmanship, and neither final payment by the City nor the final acceptance by the City of the work and materials shall relieve Engineer from responsibility for any defect in materials and workmanship.
- **9.** <u>ASSIGNMENT</u>: The Engineer shall not assign this Agreement or any amount payable hereunder without the prior written consent of the City. The Engineer shall upon request of the City, disclose to the City the names, addresses and owners of all subcontractors or other persons with whom it intends to contract with or hereafter contracts in connection with the performance of this Agreement.
- 10. <u>CONFLICTS OF INTEREST</u>: The Engineer warrants and represents that neither the Engineer nor its officers, directors, agents, employees, or subcontractors are related within the second degree of affinity or consanguinity with any elected officials or employees of the City.

The Engineer will not offer, give, or agree to give any employee or former employee of the City, anything of a pecuniary value for or because of:

- a. Any official action taken, or to be taken, or which could be taken; or
- b. A legal duty performed or to be performed, or which could be performed; or
- c. A legal duty violated, or to be violated, or which could be violated by such employee or former employee.

No regular employee or elected or appointed member of the City shall be permitted to obtain any benefit of this Contract, or to obtain any benefit that may accrue there from.

- 11. <u>EXTRAS</u>: No claim for payment (more than the amount set forth in this Agreement for extra services or materials of any kind shall be made by the Engineer or shall be paid by the City unless the same is performed or furnished pursuant to a written agreement executed by the City and the Engineer.
- 12. <u>COMPLIANCE WITH LAW</u>: This Agreement is entered into subject to the federal, state, and local laws, charters, ordinances, and regulations. The Engineer shall comply with all federal, state and local laws, ordinances and regulations and shall ensure all such compliance with regard to its subcontractors, including but not limited to the Americans with Disabilities Act and the Equal Employment Opportunity Law. Engineer shall secure all occupational and professional licenses and permits from public and private sources necessary for the performance of the services contemplated by this Agreement as well as the placement and/or use of any equipment at the location specified.
- **13.** <u>AFFIDAVIT OF WORK AUTHORIZATION AND DOCUMENTATION</u>: Pursuant to 285.530 R.S.Mo, the Engineer must affirm its enrollment and participation in a federal work authorization

program with respect to the employees proposed to work in connection with the services requested herein by

- submitting a completed, notarized copy of EXHIBIT 1, AFFIDAVIT OF WORK AUTHORIZATION and
- providing documentation affirming the bidder's enrollment and participation in a federal work authorization program (see below) with respect to the employees proposed to work in connection with the services requested herein.
- E-Verify is an example of a federal work authorization program. Acceptable enrollment and participation documentation consists of the following two pages of the E-Verify Memorandum of Understanding (MOU): 1) a valid, completed copy of the first page identifying the bidder and 2) a valid copy of the signature page completed and signed by the bidder, the Social Security Administration, and the Department of Homeland Security Verification Division.
- 14. <u>UNITED STATES GOODS</u>: Engineer agrees and understands that any manufactured goods or commodities used or supplied in the performance of the Agreement, or any subcontract thereto shall be manufactured or produced in the United States unless exempt from such requirement pursuant to §34.353 R.S.MO.
- 15. <u>NOT A JOINT VENTURE</u>: Nothing contained in this Agreement shall be deemed to constitute the City and the Engineer as partners in a partnership or joint venture for any purpose whatsoever.
- **16. NON-LIABILITY OF CITY PERSONNEL**: Neither the Board of Alderpersons, Board Members, nor any other officer, official, employee, or agent of the City shall be *personally* responsible for any liability arising under or growing out of this Agreement or operations of the Engineer.
- 17. ENTIRE CONTRACT/AGREEMENT: This Agreement and the Exhibits attached hereto constitute the entire agreement between the parties. Terms not specifically set out herein and no verbal agreement or conversation with any officer, official, agent or employee of the City, either before or after the execution of the Agreement, shall affect, modify or add to the terms or obligations contained in this Agreement. Any such purported term, verbal agreement or conversation shall in no way be binding upon the City or the Engineer.
- 18. RECORDS: The Engineer shall maintain all records for inspection by City representatives during the Contract period and for three (3) years after the date of termination of the Contract. The Engineer agrees that the City Auditor, or any of his/her duly authorized representatives shall, until the expiration of three (3) years after final payment under this Contract, have access to and the right to examine any and all pertinent books, documents, papers and records of the Engineer involving the transactions related to this Agreement.
- 19. <u>SURVIVAL OF WARRANTIES</u>: All warranties and representations of the Consultant hereunder shall survive final payment and acceptance of the work.
- **20. APPLICABLE LAW**: the laws of the State of Missouri shall govern this contract. Any action regarding the consent or arising out of the terms and conditions shall be instituted and litigated in the courts of the State of Missouri, County of Clay and in no other. Consultant is validly registered to do business in Missouri. The parties submit to the jurisdiction of the courts of the State of Missouri and to venue in Clay County.

- **21. REMEDIES:** In addition to all other remedies at law or in equity, if Consultant shall fail to complete and/or meet any of its obligations under the terms of this Agreement, the City may, by giving the Consultant written Notice, cancel and terminate this Contract if the breach is not cured within Thirty (30) days after the sending of such Notice (unless otherwise set forth herein).
- **22.** <u>NONRESIDENT/FOREIGN CONTRACTORS</u>. The Consultant shall procure and maintain during the life of this contract:
  - **a.** A certificate from the Missouri Director of Revenue evidencing compliance with the transient employer financial assurance law, unless exempt pursuant to the provisions of Section 285.230 R.S.Mo.
- 23. <u>INTELLECTUAL PROPERTY RIGHTS:</u> Consultant shall pay all license, royalty or similar intellectual property fess or costs. Consultant shall hold City harmless and shall indemnify the City against all claims, damages, suits or losses for any and all infringements on any intellectual property rights of another (whether patents, copyrights, etc.) relating to or caused by the work of the Consultant.
- **24. CONTRACT LANGUAGE** The language of this Contract reflects negotiations between Consultant and City, each of whom have had the opportunity to modify the text. In the event of litigation or other dispute concerning the language of this Contract, general rules construing ambiguities against the drafter shall not apply. It is agreed that if more than one copy of this document may be executed and that the original filed with the City Clerk shall pursuant to §432.080 R.S. Mo be deemed to be the controlling original.
- **25.** CHANGE ORDERS: Change Orders which are approved by the Consultant and the City's designee in writing which do <u>not</u> increase the cost of the project may be utilized to make needed changes to the scope of the work and to manage minor changes necessary.
- 26. <u>CITY OWNERSHIP AND PROPRIETARY INFORMATION</u> The parties expressly agree that all data, documents, records, studies, or other information generated, created, found or otherwise completed by Engineer in the performance of Engineer's duties under the terms of this Agreement shall be considered as works for hire, and shall at all times be considered the proprietary information of and under the ownership of the City. All data, documents, records, studies, or other information generated, referred to above, shall be provided to the City by Consultant upon request so long as the City is not in default under other terms of this Agreement. City grants the Engineer the right to use all data, documents, records, studies, or other information generated, created, found, or otherwise completed by Engineer in the performance of Engineer's duties under the terms of this Agreement
- **27. TERMINATION**. The City reserves the right to terminate this Agreement by giving at least two (2) weeks prior written notice to the Consultant, without prejudice to any other rights or remedies of the City should the Consultant be in breach of this Agreement, be adjudged a bankrupt, or if Consultant should make a general assignment for the benefit of its creditors, or if a receiver should be appointed for Consultant, or if Consultant should persistently or repeatedly refuse or fail to supply enough properly skilled workmen for the work under the Agreement, or persistently disregard instructions of the City or fail to observe or perform any provisions of the Agreement.
- 28. <u>COMPLIANCE WITH LAW</u>. This Agreement and the goods and services rendered herein are subject to all federal laws, the Constitution of the State of Missouri, the Revised Statutes of Missouri. Any specific provision contained herein which is contrary to federal laws or the Constitution of the State of Missouri and the Revised Statues of Missouri shall be considered void without invalidating or otherwise affecting the remainder of the Agreement.

- **29. EFFECTIVE DATE:** The effective date of the Agreement shall be deemed to be when all the required signatures have been executed by the City and the Consultant.
- **30.** <u>WAIVER</u>: The waiver by either party of any term, covenant, or condition hereof shall not operate as a waiver of any subsequent breach of the same or any other term. No term, covenant, or condition of this Agreement can be waived except by the written consent of the City, and forbearance or indulgence by the City in any regard whatsoever shall not constitute a waiver of any term, covenant, or condition to be performed by Engineer to which the same may apply and, until complete performance by the Engineer of said term, covenant or condition, the City shall be entitled to invoke any remedy available to it under this Agreement or by law despite any such forbearance or indulgence.
- 31. <u>SEVERABILITY</u>: All of the provisions of this Agreement shall be severable. In the event that any provision of this Agreement is found by a court of competent jurisdiction to be unconstitutional or unlawful, the remaining provisions of this Agreement shall be valid unless the court finds the valid provisions of this Agreement are so essentially and inseparably connected with and so dependent upon the invalid provisions that it cannot be presumed that the parties to this Agreement could have included the valid provisions without invalid provisions; or unless the court finds that the valid provisions, standing alone, are incapable of being performed in accordance with the intentions of the parties.
- 32. <u>UNEMPLOYMENT INSURANCE AND TAXES</u>: The Engineer shall pay, at the Engineer 's own cost, all relevant taxes in connection with the work or materials to be performed, including but not limited to State and Federal, Unemployment and old age benefit taxes, sales and use taxes, income tax, withholding tax or other work or payroll related taxes. No payments to the Engineer will be approved unless the Engineer is current with tax payments to the City or unless satisfactory arrangements have been made for payment with the City.
- 33. FORCE MAJEURE: In the event that either party hereto shall be delayed or hindered in or prevented from the performance of any act required hereunder by reason of restrictive governmental laws or regulations, riots, insurrection, war, or other reason of a like nature not the fault of the party delayed in performing work or doing acts required under the terms of this Agreement, then the time allowed for performance of such act shall be extended by a period equivalent to the period of such delay.
- **34.** <u>CONDITION PRECEDENT:</u> This Agreement shall be null and void and of no effect unless and until the City has by Ordinance or Resolution passed by the City Board of Alderpersons, obtained the authority to enter into this Agreement.

**IN WITNESS WHEREOF**, the parties have set their hands and seals the date and year first above written. The parties represent that the signatories below have full authority and authorization to sign on behalf of the respective parties.

By:		
Mayor		
Name: Damien	Boley	
<b>ENGINEER:</b>		
By: Awon MFS	08/13/2024	
Title Principal		

THE CITY OF SMITHVILLE

EXISTING PROPOSED







## EXHIBIT B SCOPE OF SERVICES

## PROJECT BRIDGE STREET ROUNDABOUT IMPROVEMENTS

#### OWNER SMITHVILLE, MO

#### PROJECT DESCRIPTION

The City of Smithville, Missouri (OWNER) has identified the need for a single lane roundabout at the intersection of Bridge Street and 1<sup>st</sup> Street. The OWNER acquired the services of George Butler Associates, Inc. (ENGINEER) to produce construction drawings and documents for the project. The project consists of survey, environmental permitting services, a single lane roundabout, two lane roads with bike lanes, pedestrian facilities, sidewalk curb ramps, pavement markings, drainage and storm sewer design, traffic design, and bidding and construction period services. The project will also include the closure of Hilltop Street South of 2<sup>nd</sup> Street and the extension of 2<sup>nd</sup> Street to Bridge Street. The need for a possible shoofly detour will be evaluated during design.

#### **SCOPE OF SERVICES**

The basic Scope of Services for this Project is organized into the following major Tasks and Subtasks:

#### Phase A

Task 100 – Survey

Task 200 - Environmental

Task 300 – Preliminary Design

Subtask 1 – Preliminary Design Administration

#### Phase B

Task 300 – Preliminary Design

Subtask 2 – Preliminary Roadway Design

Subtask 3 – Preliminary Traffic Design

Subtask 4 – Preliminary H&H Design

Task 400 – Final Design

Subtask 1 – Final Design Administration

Subtask 2 – Final Roadway Design

Subtask 3 – Final Traffic Design

Subtask 4 – Final H&H Design

Task 500 – Bidding & Construction Phase Services

#### **Schedule of Project Milestones**

August 12, 2024 – Submit Scope/Fee to Smithville



August 20, 2024 – Scope/Fee approved by Smithville City Council August 21, 2024 – Notice to Proceed November/December 2024 – Survey Complete May 2025 – Preliminary/Right of Way Plan Submittal March 2027 – Final PS&E Submittal May 2027 – Final PS&E Approval August 2027 – Letting (Smithville FY27)

The detailed Scope of Services to be provided by the ENGINEER is as follows:

#### TASK 100: SURVEY

This task will include the following limited to:

- Perform research of right-of-way, section corners, property pins and horizontal and vertical control.
- Call in Missouri One-call tickets and locate utilities and invert storm and sanitary sewer structures within the project area. This task does not include utility potholing or geotechnical borings.
- Conduct a topographic survey of the project area of sufficient accuracy and detail to be used for Preliminary and Final Design of improvements.
- Prepare a MicroStation basemap which will include all above data
- The Project Drawings shall be created and provided using the following Coordinate System: State Plane Missouri West, Datum: NAD83, and the Units: US Feet. The completed and signed plans shall also be provided in a large-format, high quality resolution PDF format.
- Provide high resolution aerial imagery.

#### **TASK 200: ENVIRONMENTAL**

This task will include the following:

• Initiate and finalize MoDOT Request for Environmental Review and all other permits required to complete the MoDOT LPA process.

#### TASK 300: PRELIMINARY DESIGN

#### Subtask 1 – Preliminary Design Administration

This subtask will include the following:

 Project management services necessary throughout the project to successfully manage and complete the work, including project correspondence and consultation with OWNER staff; internal coordination meetings, supervision, and coordination of services; implementation of project scheduling and assignment of personnel resources; continuous monitoring of work progress; and maintenance of project controls.



- Coordinate a project kickoff meeting with the OWNER. The meeting will be used to
  discuss and review the scope of services, projected schedule, communication
  coordination, data requests, and existing conditions of the project site. The ENGINEER
  will prepare and distribute a meeting summary. Meeting will be held on-site.
- Conduct internal coordination meetings as necessary to successfully complete the project.
- Provide monthly invoices and project reports, and provide proper correspondence as necessary.
- Provide thorough quality control and quality assurance throughout the project.

#### Subtask 2 – Preliminary Roadway Design

This subtask will include the following:

- Plan production, including a title sheet, typical sections, plan and profile sheets, cross sections, and right of way taking sheets. Plan production and drafting for this project to be completed in OpenRoads Designer.
- Submit a design criteria memo, horizontal and vertical alignment design, MOT analysis, roadway geometrics design and review, curb ramp and driveway design, and production of a preliminary 3D model.
- Propose right of way and easement needs, and submit of right of way base files to the surveyor for review.
- Prepare preliminary roadway quantities and preliminary engineer's estimate.
- Submit preliminary plans to the City and MoDOT.
- Review and address comments from the City and MoDOT.

#### Subtask 3 - Preliminary Traffic Design

This subtask will include the following:

- Coordinate roundabout geometrics with the road group.
- Develop preliminary lighting layout, traffic control sequencing, detour layouts, pavement marking layouts, and signing layouts.
- Develop preliminary quantities and engineer's estimate.

#### Subtask 4 – Preliminary H&H Design

This subtask will include the following:

- Hydrologic and Hydraulic analysis of existing and proposed stormwater system, detention, and FEMA HEC RAS model.
- Design preliminary outlet protection, erosion control, draft floodplain development permit, and draft no rise certification.
- Produce preliminary storm sewer plan and profile sheets.
- Develop preliminary quantities and engineer's estimate.



#### TASK 400: FINAL DESIGN

#### **Subtask 1 – Final Design Administration**

This subtask will include the following:

- Project management services necessary throughout the project to successfully manage and complete the work, including project correspondence and consultation with OWNER staff; internal coordination meetings, supervision, and coordination of services; implementation of project scheduling and assignment of personnel resources; continuous monitoring of work progress; and maintenance of project controls.
- Coordinate and attend an on-site field check meeting.
- Conduct internal coordination meetings as necessary to successfully complete the project.
- Provide monthly invoices and project reports and provide proper correspondence as necessary.
- Provide thorough quality control and quality assurance throughout the project.

#### Subtask 2 – Final Roadway Design

This subtask will include the following:

- Plan production, including a title sheet, typical sections, general notes, quantity sheets, plan and profile sheets, intersection details, reference and coordinate point sheets, erosion control sheets, construction detail sheets, and cross sections.
- Final horizontal and vertical alignment design, final roadway geometric design and review, and production of a refined 3D model.
- Propose right of way and easement needs, and submit of right of way base files to the surveyor for review.
- Prepare final roadway quantities and final engineer's estimate.
- Submit final plans to the City and MoDOT.
- Review and address final comments from the City and MoDOT.
- Compile necessary MoDOT project manual documents.

#### Subtask 3 – Final Traffic Design

This subtask will include the following:

- Coordinate roundabout geometrics with the road group.
- Develop final lighting layout, traffic control sequencing, detour layouts, pavement marking layouts, and signing layouts.
- Plan production, including traffic control plans, detour plans, pavement marking and signing plans, and lighting plans.
- Develop final quantities and engineer's estimate.

#### Subtask 4 – Final H&H Design



This subtask will include the following:

- Finalize hydrologic and hydraulic analysis of existing and proposed stormwater system, detention, and FEMA HEC RAS model.
- Finalize outlet protection, erosion control, floodplain development permit, and no rise certification.
- Produce final storm sewer plan and profile sheets.
- Develop final quantities and engineer's estimate.

#### TASK 500: BIDDING AND CONSTRUCTION PHASE SERVICES

The ENGINEER will provide services to prepare the project to be bid for construction. This includes coordination with the city on schedule, contract, bonds, insurance, bid item descriptions, completing the bid form, and attending a pre-bid meeting. The ENGINEER will also provide services pre-construction and during construction to address questions to clarify the design, as needed, for the contractor. Lastly, the ENGINEER will prepare as-built drawings post construction.

#### **COMPENSATION AND SCHEDULE**

The ENGINEER fee will be \$102,266.89 at billing rates for Phase A and will be \$337,817.25 at billing rates for Phase B. The project is estimated to be let in August of 2027.