

AN ORDINANCE OF THE CITY OF OSAGE BEACH, MISSOURI, AUTHORIZING THE MAYOR TO EXECUTE CONTRACT AEOB18-005 WITH BARTLETT & WEST, INC. FOR THE MACE ROAD PHASE 2 IMPROVEMENTS.

BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF OSAGE BEACH, MISSOURI, AS FOLLOWS, WIT:

Section 1. The Board of Aldermen hereby authorizes the Mayor to execute on behalf of the City a contract with Bartlett & West, Inc. substantially the same under the terms set forth in the form attached hereto as ("Exhibit A").

Total expenditures or liability authorized under this contract shall not exceed Two Hundred Thirteen Thousand Dollars (\$213,000.00).

Section 2. The City Administrator is hereby authorized to take such further actions as are necessary to carry out the intent of this Ordinance and Contract.

Section 3. This Ordinance shall be in full force and effect from date of passage and approval by the Mayor.

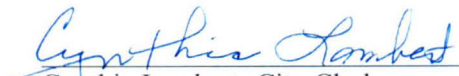
READ FIRST TIME: February 15, 2018 READ SECOND TIME: March 1, 2018

I hereby certify that Ordinance No. 18.07 was duly passed on March 1, 2018, by the Board of Aldermen of the City of Osage Beach. The votes thereon were as follows:

Ayes:	6	Nays:	0
Abstain:	0	Absent:	0

This Ordinance is hereby transmitted to the Mayor for his signature.

March 2, 2018
Date


Cynthia Lambert, City Clerk

Approved as to form:


Edward B. Rucker, City Attorney

I hereby approve Ordinance No. 18.07.

March 5, 2018
Date

ATTEST:

John Olivarri
John Olivarri, Mayor

Cynthia Lambert
Cynthia Lambert, City Clerk

AGREEMENT FOR PROFESSIONAL ENGINEERING CONSULTING SERVICES

THIS AGREEMENT, made and entered into this 6th day of March, **2018** by and between the City of Osage Beach Missouri hereinafter referred to as "City" and **Bartlett & West, Inc.**, hereinafter referred to as "Engineer."

WITNESSETH:

WHEREAS, City requires the services of Engineer in connection with the following improvement: **Mace Road Improvements**; and,

WHEREAS, City desires to enter into an Agreement with Engineer to perform Consulting services as aforementioned; and,

WHEREAS, Engineer represents that the firm is equipped, competent, and able to undertake such an assignment;

NOW, THEREFORE, in consideration of the mutual covenants and considerations herein contained, IT IS HEREBY AGREED by the parties hereto as follows:

ARTICLE I – SCOPE OF SERVICE TO BE PROVIDED BY THE ENGINEER:

Engineer, upon receipt of written notice from the City that this Agreement has been approved, will furnish the necessary engineering and related services as stipulated in the attached proposal from the Engineer in Exhibit A, attached, dated **February 2, 2018**, page 1 through page 8.

ARTICLE II - ADDITIONAL SERVICES:

The City reserves the right to request additional work, based on changed or unforeseen conditions which require changes and work beyond the scope of this Agreement. In this event, a Supplement to this Agreement shall be executed prior to performing the additional changed work or incurring any additional cost therefor. Any change in compensation will be covered in the Supplement.

ARTICLE III - SCOPE OF SERVICES TO BE PROVIDED BY THE CITY:

The City agrees to furnish information and have work done without cost to the Engineer as follows:

1. Make available to the Engineer existing records, maps, plans, and other data possessed by City when such are necessary, advisable or helpful to the Engineer in the completion of his work under this Agreement. The City shall furnish a copy of property ownership information from City tax records.

2. Provide all necessary title work, deeds, plats, etc. as required for the completion of the project and the preparation of the right-of-way and easement plans and descriptions.
3. Provide Standard City forms and/or standard plans as required including contractual sections for bid document.
4. Pay publishing costs for advertisements of notices, public hearings, request for bids, and other similar items. Pay for all permits and licenses that may be required by local, state or federal authorities. Secure the necessary land, easements and right-of-way required for the project.
5. Designate a representative who will serve as their primary point of contact and who will be authorized to act for and on behalf of the City throughout completion of the services covered by this Agreement.
6. Examine all studies and drafts developed by the Engineer, obtain reviews by other agencies involved and render decisions thereon in a prompt manner so as not to delay the Engineer.

ARTICLE IV - PERIOD OF SERVICE:

The Engineer will commence work within two (2) weeks after receiving Notice to Proceed from the City. The service duration is assumed to be 30 months, unless terminated sooner.

ARTICLE V - PROGRESS SCHEDULE:

The contracting parties agree that time is of the essence. Each month the Engineer shall submit a Progress Report to the City. The Progress Report will be in the form of either a bar graph or a Critical Path Method (CPM) Schedule. It shall include scheduled periods for each of the elements into which the Engineer's work is divided. Each work element shall be assigned a percentage of the total work upon which progress can be computed for interim payments. The total percentage completed shall be shown. The schedule periods shall also include a time allowance for review and approvals by the City. (Assume three (3) weeks review time for City on each submittal).

ARTICLE VI - COVENANT AGAINST CONTINGENT FEES:

The Engineer warrants that it has not employed or retained any company or person, other than a bona fide employee working for the Engineer, to solicit or secure this Agreement and that he has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the City shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the Agreement the price or consideration or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee plus reasonable attorney's fees.

ARTICLE VII - SUBLETTING ASSIGNMENT:

No portion of the work covered by this Agreement, except as provided herein, shall be sublet or transferred without the written consent of the City. The subletting of the work shall in no way relieve the Engineer of its primary responsibility for the quality and performance of the work.

ARTICLE VIII - PROFESSIONAL ENDORSEMENT:

All plans, specifications and other documents shall be endorsed by the Engineer and shall reflect the name and seal of the Professional Engineer endorsing the work.

ARTICLE IX – STANDARD OF CARE

Engineer shall exercise the same degree of care, skill, and diligence in the performance of the Services as is ordinarily possessed and exercised by a professional engineer under similar circumstances.

If, during the two year period following completion of the Services under the applicable Request for Services, it is shown there is an error in the Services caused by Engineer's failure to meet such standards, Engineer shall re-perform, at no additional cost to the City, such Services as may be necessary to remedy such error.

Engineer shall have no liability for defects in the Services attributable solely to Engineer's reliance upon or use of data, design criteria, drawings, specifications, or other information furnished by the City or third parties retained by the City.

ARTICLE X – INDEMNIFICATION

Engineer shall indemnify and hold the City harmless from any and all claims, liabilities, damages, and costs (including reasonable attorney's fees directly related thereto) for bodily injury to or death of any person and for damage to or destruction of property if and to the extent caused by the negligence or willful misconduct of Engineer.

ARTICLE XI – INSURANCE

Engineer shall purchase and maintain such insurance as will protect itself against loss from its alleged or actual liability to satisfy those claims which are set forth below and which may arise out of or result from Engineer's operations under the Agreement, whether such operations be by itself or by anyone for whose acts it may be liable:

Workers' Compensation and/or all other social insurance in accordance with the statutory requirements of the state, province, or country having jurisdiction over Engineer's employees who are engaged in the Services, with Employer's Liability with a limit of One Hundred Thousand Dollars (\$100,000) each accident.

Commercial General Bodily Injury and Property Damage Liability insurance, and Automobile Liability insurance including owned, non--owned, or hired vehicles, each in a combined single limit of One Million Dollars (\$1,000,000) each occurrence for bodily injury and property damage liability. Such policies shall include Contractual Liability coverage. Engineer agrees to name the City as Additional Insured on such policies, but only to the extent of Engineer's negligence under this Agreement and only to the extent of the insurance limits specified herein.

Commercial General Bodily Injury and Property Damage Liability insurance, and Automobile Liability insurance including owned, non--owned, or hired vehicles, each in a combined single limit of One Million Dollars (\$1,000,000) each occurrence for bodily injury and property damage liability. Such policies shall include Contractual Liability coverage. Engineer agrees to name the City as Additional Insured on such policies, but only to the extent of Engineer's negligence under this Agreement and only to the extent of the insurance limits specified herein.

Professional Liability insurance with limits of \$2,000,000 in the aggregate covering Engineer against all sums, which Engineer may become legally obligated to pay on account of any professional liability arising out of the performance of this Agreement.

Engineer agrees to provide the City with certificates of insurance evidencing the above described coverage prior to the start of Services, and annually thereafter, if required by the City. Such certificates shall provide that the applicable insurance policies have been endorsed to provide a minimum of thirty days advance notice to the City in the event of cancellation, non-renewal, or reduction in limits by endorsement.

ARTICLE IX - MISCELLANEOUS PROVISIONS:

The following miscellaneous provisions are agreed to by both parties to this Agreement.

1. Inspection of Documents.
The Engineer shall maintain all records, survey notes, design documents, cost and accounting records, construction records and other records pertaining to this Agreement and to the project covered by this Agreement, for a period of not less than three (3) years following final payment. An authorized representative of the City shall have access to the records for inspection, during regular working hours at the Engineer's place of business.
2. Conferences, Visits to Site, Inspection of Work.

A representative of the City shall have the privilege of inspecting and reviewing the work being done by the Engineer and consulting with its staff at any time. Conferences are to be held at the request of the City or the Engineer.

3. Accuracy of Work. The Engineer shall be responsible for the accuracy of the work and shall promptly make necessary revisions or corrections resulting from errors and omissions on the part of the Engineer without additional compensation. Acceptance of the work by the City will not relieve the Engineer of the responsibility for subsequent correction of any such errors and the clarification of any ambiguities during construction. The Engineer shall give immediate attention to these revisions or corrections so there will be a minimum of delay to the project or to the contractor.
4. Relationship with Others. The Engineer shall cooperate fully with engineers on adjacent projects, municipalities, local government officials, public utility companies, and others as may be directed by the City. This shall include attendance at meetings, discussions and hearings, as may be requested by the City; furnishing plans and other data as may be requested from time to time by the City, and compliance with all directives issued by the City.
5. Ownership of Documents. Plans, electronic data, and maps and specifications prepared under this Agreement shall be delivered to and become the property of the City upon termination or completion of work. Basic survey notes, design computations and other data prepared under this Agreement shall be made available to the City upon request. All such information produced under this Agreement shall be available for use by the City without restriction or limitation on its use. If the City incorporates any portion of the work into a project other than that for which it was performed, the City shall save the Engineer harmless from any claims and liabilities resulting from such use.
6. Termination. Engineer or the City may terminate this Agreement by giving written notice to the other party. Termination of this Agreement shall not constitute a waiver of the rights or obligations which City or Engineer may be entitled to receive or be obligated to perform under this Agreement. Should this Agreement terminate, all books, brochures, flier, lists, and all other City materials must be delivered and returned by the Engineer to the City within 15 calendar days of the demand of the City.

If the Agreement is terminated due to the Engineer's service being unsatisfactory in the judgment of the City, or if the Engineer fails to prosecute the work with due diligence, the City may procure completion of the work in such manner as it deems to be in the best interest of the City. The Engineer will be responsible for any excess cost in addition to that provided for in this agreement or any damages the City may sustain by reason of the termination of this Agreement due to unsatisfactory performance or prosecution.

7. Successors and Assigns. The City and the Engineer each bind themselves, their successors, executors, administrators, and assigns to the other party to this Agreement, and to the successors, executors, administrators, and assigns of such other party in respect to all covenants of this Agreement.
8. Compliance with Laws. The Engineer shall keep itself fully informed of all existing and current regulations of the City, State, and Federal laws which in any way limit or control the actions or operations of those engaged upon the work, or affecting the materials supplied to or by them. It shall at all times observe and comply with all ordinance, laws, and regulations, and shall protect and indemnify the City against any claims or liability arising from or based on any violations of the same.

The subcontractor shall not discriminate against any qualified person because of her or his race, color, national origin, religion, age, sex or handicap in recruitment and recruitment advertising, employment, upgrading, promotion, demotion or transfer, lay-off or termination, rates of pay or other forms of compensation, other terms of conditions of employment and selection for training including apprenticeship.

The subcontractor will permit, on reasonable notice and at reasonable times, the CRO to visit its premises, inspect and copy thereon its business records, survey its work forces and interview its employees, as may be necessary to verify compliance with this chapter and implementation of the affirmative action plan of the Subcontractor. The subcontractor further agrees to furnish such future information as may be reasonably required of it within ten (10) working day of the date it is requested in writing by the CRO.

10. Nondiscrimination. The Engineer, with regard to the work performed by it after award and prior to completion of the contract work, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors. The Engineer will comply with Title VI of the Civil Rights Act of 1964, as amended. More specifically, the Engineer will comply with the regulations of the Department of Transportation relative to nondiscrimination in federally assisted programs of the Department of Transportation, as contained in 49 CFR 21 through Appendix H and 23 CFR 710.405(b), which are herein incorporated by reference and made a part of this agreement. In all solicitations either by competitive bidding or negotiation made by the Engineer for work to be performed under subcontract, including procurement of materials or equipment, each potential subcontractor or supplier shall be notified of the Engineer's obligations under this Agreement and the regulations relative to nondiscrimination on the grounds of color, race or national origin.

11. Independent Contractor. The Engineer shall work as an independent contractor and not as an employee of the City. The Engineer shall be subject to the direction of the City only as to the result to be accomplished and not as to the means and methods for accomplishing the result. The Engineer shall report all earnings received hereunder as gross income, and be responsible for its own Federal, State, and City withholding taxes and all other taxes, and operate its business independent of the business of the City except as required by this Agreement.
12. Severability. If any covenant or other provision of this Agreement is invalid, or incapable of being enforced, by reasons of any rule of law or public policy, all other conditions and provision of this Agreement shall nevertheless remain in full force and effect and no covenant or provision shall be deemed dependent upon any other covenant or provision unless as expressed herein.
13. Incorporation. This Agreement along with the Engineer's attached proposal and fee breakdown, incorporates the entire understanding and agreement of the parties.
14. Time of Essence. Timely performance of all duties provided herein is the essence of this Agreement.
15. Decisions Under this Agreement. The City will determine the acceptability of work performed under this Agreement, and will decide all questions which may arise concerning the project. The City's decision shall be final and conclusive.

ARTICLE XI - PAYMENTS TO THE ENGINEER:

For the engineering services performed by Engineer under this Agreement and as full compensation therefor, and for all expenditures made and all expenses incurred by Engineer in connection with this Agreement, except as otherwise expressly provided herein, subject to conformance with all provisions of this Agreement, City will pay Engineer as follows:

1. City will pay a not-to-exceed **Lump Sum** fee of **\$213,000.00**, as compensation for Engineer's services and expenses as set forth in the Engineer's attached Proposal and Rate Schedule.
2. Upon successful completion of each task outlined in the proposal, the Engineer will present an invoice to the City, and said invoice shall be approved by The Director of Public Works who will recommend payment to the Engineer.

ARTICLE XII – ENCLOSURES & ATTACHMENTS

Engineer's Proposal to Provide Engineering Services and Current Rate Schedule.

IN WITNESS WHEREOF, the City of Osage Beach, Missouri, has caused these presents to be executed in its behalf by its duly authorized agent; and the Engineer has hereunto set it hand and seal.

Execution hereof is authorized by Ordinance No. 16-07.

Approved by:


John Olivarri
Mayor

Attest:


City Clerk Cynthia Lambert

By:


Engineer

Approved to form this 6th day of March, 20 18


City Attorney Edward Rucker

EXHIBIT A
SCOPE OF SERVICES
FOR
Mace Road Intersection and Roadway Improvements – Phase 2
February 2, 2018
PROJECT NO. 19090.001

GENERAL BACKGROUND

The project area is generally described as Mace Road from Aver Road on the west to Osage Beach Parkway on the east. The project's purpose is to upgrade Mace Road from a ditched roadway to a curb and guttered roadway with an enclosed stormwater system. The intersection with Orvill Drive will also be reconstructed. Mace Road will be rehabilitated leading up to Osage Beach Parkway, but no reconstruction of Osage Beach Parkway is expected with this project. It is expected that all reconstruction will include curb and gutter. There will also be a sidewalk constructed on one side of Mace Road the entire length of the project. It is expected that the sidewalk will be on the north side to tie into the Phase 1 improvements. To minimize Right-of-Way impacts and overall costs, the roadway will be reconstructed as much as reasonable on the current alignment. Stormwater design will be included in the project, but no water quality improvement or detention features included in the design.

Services will include topographic and boundary survey, the production of preliminary and final plans, development of legal descriptions for the easement acquisitions, utility coordination, and limited assistance during bidding and construction. Construction administration and observation services are not included in this scope of services.

1. Data Collection and Survey

- 1.1. The ENGINEER shall collect data and information used in performing the project duties including the following tasks:
 - 1.1.1. Request, obtain, review existing subdivision plats and street plans from Camden County.
- 1.2. The ENGINEER shall perform the field survey of existing topography and boundary surveys to create project base mapping including the following tasks:
 - 1.2.1. Research of existing survey deeds and horizontal and vertical control points.
 - 1.2.2. Set project horizontal and vertical control/bench marks. Project control will be set using GPS technology.
 - 1.2.3. Field locate and survey existing property corners.
 - 1.2.4. Field survey existing topographic features, including pavement edges, drainage structures, retaining walls, landscaping, private entrances and other features to develop the project mapping.
 - 1.2.5. Field locate visible existing utilities in the project area. Includes call for field locates to MO One-Call and survey of marked underground utilities. Does not guarantee that utilities accurately locate their facilities or even attempt to do so.
 - 1.2.6. Establish existing Right-of-Way and adjacent property lines from plats, warranty deeds, recorded surveys (assumes 34 tracts).

- 1.2.7. Develop project base mapping from field surveys and boundary surveys for property lines.

2. Preliminary Plans

- 2.1. Develop roadway alignment/profile for Mace Road from Aver Road to Osage Beach Parkway.
- 2.2. Develop roadway alignment/profile for Orvill Drive within 100' of Mace Road.
- 2.3. Develop intersection geometry at Mace Road at Orvill Drive
- 2.4. Develop sidewalk geometry and curb ramp details.
- 2.5. Determine conceptual grading.
- 2.6. Conduct drainage design including drainage areas, hydrologic calculations using Rational Method and hydraulic calculations using Manning's Equation.
- 2.7. Develop preliminary driveway profiles for 45 driveways to review grading and drainage.
- 2.8. Construction drawings will be prepared on 22" x 34" size sheets. The scale shall be as determined to be appropriate but will likely be 1"=20'. The preliminary submittal is anticipated to include:
 - 2.8.1. Cover Sheet
 - 2.8.2. General Notes/Typical Sections
 - 2.8.3. Plan/Profile Sheets (assumes 6 sheets at 20 scale)
 - 2.8.4. Drive Profile Sheets (assumes 4 sheets)
 - 2.8.5. Storm Sewer Profile Sheets (assumes 5 sheets)
 - 2.8.6. Cross Sections (assumes 7 sheets).
- 2.9. Prepare preliminary plans cost estimate.
- 2.10. Conduct 2 preliminary design review meetings with City staff during course of preliminary design.
- 2.11. Submit the preliminary plans and cost estimates to the City for review.
- 2.12. Conduct preliminary design coordination and meeting with utility companies.
- ~~2.13. Conduct preliminary design coordination with emergency services~~
- 2.14. Preparation of permanent and temporary easement and Right-of-Way documents (legal descriptions) (assumes 34 tracts). City to insert legal descriptions on their easement forms.
- 2.15. Preparation of Land Disturbance Permit
- 2.16. No traffic analysis or impact study is included in this scope of work.
- 2.17. No public meetings are included in this scope of work.
- 2.18. No council meetings are included in this scope of work.

3. Utility Relocation

- 3.1. Develop proposed alignment and profile for sanitary force main between Aver Road and Osage Beach Parkway
- 3.2. Develop proposed alignment and profile for water line between Aver Road and Osage Beach Parkway
- 3.3. Coordinate utility crossings with storm sewer for proposed reconstruction.
- 3.4. Construction plans for the proposed improvements. Drawings will be prepared on 22" x 34" size sheets. The scale shall be as determined to be appropriate but will likely be 1"=40'. The submittal is not intended to be used as a bid set, but rather as a guide for City crews to construct improvements. Sheets anticipated to include:
 - 3.4.1. Sanitary Sewer Profile Sheet (assumes 3 sheets at 40 scale)
 - 3.4.2. Water Line Profile Sheet (assumes 3 sheets at 40 scale)

- 3.4.3. Electrical Relocation Plan Sheet for City owned electric services (assumes 3 sheets at 40 scale)
- 3.5. Develop utility conflict plans showing the existing facilities and the proposed improvements to facilitate discussions with utility companies. It is assumed that no additional sheets will be created, but that existing sheets will be modified to show the utilities in more clarity.
- 3.6. Submit the plans to the City for review.
- 3.7. Make final changes to plans based on City staff comments.
- 3.8. No additional utility relocation plans will be developed as part of this scope of services.

4. Final Plans

- 4.1. Develop final plans based on review comments from City staff regarding preliminary plans. Final plans to consist of:
 - 4.1.1. Cover Sheet
 - 4.1.2. General Notes/Standard Details
 - 4.1.3. Coordinate/Control Points Sheet
 - 4.1.4. Plan/Profile Sheets (assumes 6 sheets at 20 scale)
 - 4.1.5. Drive Profile Sheets (assumes 4 sheet)
 - 4.1.6. Storm Sewer Profile Sheets (assumes 5 sheets)
 - 4.1.7. Intersection Detail Sheets
 - 4.1.8. Driveway Detail Sheets (assumes 7 sheets)
 - 4.1.9. Retaining Wall Plan/Profile Sheets (assumes 3 sheets at 20 scale)
 - 4.1.10. Pavement Marking and Signing Plan
 - 4.1.11. Lighting Plan
 - 4.1.12. Traffic Control Plan (assumes 1 sheet). Phasing plan not included.
 - 4.1.13. Erosion and Sediment Control Sheets (assumes 3 sheets)
 - 4.1.14. Cross Sections (assumes 15 sheets)
 - 4.1.15. No landscaping plan is included in this scope of work.
 - 4.1.16. No water quality plan is included in this scope of work.
- 4.2. Compute final quantities, develop bid form and prepare Engineer's Estimate for project.
- 4.3. Develop any project specific technical specifications (JSPs) to be utilized along with MoDOT Standard Specifications for the project. The City will provide specific details for some items (storm inlets, etc.). The City to provide complete front end documents to be combined with the JSPs.
- 4.4. Submit the final plans, bid forms and Engineer's Estimates to the City for review.
- 4.5. Conduct a final utility coordination with the City and provide intities.
- 4.6. Conduct 1 final design review meeting with City staff during course of final design.
- 4.7. Make final changes to plans, technical special provisions, bid form and Engineer's Estimate based on City staff comments. Sign and Seal.

5. Project Management and Coordination

- 5.1. No additional meetings are included in this scope of services.
- 5.2. QA/QC
 - 5.2.1. Perform periodic reviews of project for quality assurance purposes. Perform a quality control review of the project deliverables at each submittal stage.
 - 5.2.2. Perform a field check of proposed construction improvements.
- 5.3. Administration and Coordination:

- 5.3.1. Perform duties necessary for administration of project contract and subconsultant contracts. Prepare and administer project expenses and invoicing to City.
- 5.3.2. General communication with City. This includes email updates, phone conversations, and general correspondence approximately twice a month during the course of the project.
- 5.3.3. Prepare and update project progress schedule monthly.

6. Bidding Phase Services

- 6.1. Prepare Plans and Specifications for bidding (assumes 10 sets).
- 6.2. Attend prebid meeting at City office. Compile and distribute meeting minutes.
- 6.3. Contractor correspondence during bidding.
- 6.4. Addendum preparation (assumes 1 addendum).
- 6.5. City to conduct bid opening, prepare bid tabulation, make contractor recommendation, and review shop drawings.
- 6.6. No additional meetings are included in this scope of services.

7. Construction Phase Services

- 7.1. Attend preconstruction meeting at City office. City to Compile and distribute meeting minutes.
- 7.2. No additional meetings or site visits are included in this scope of services.
- 7.3. Answer questions during construction (assumes 8 calls).

8. Additional Services

- 8.1. No additional services are included in this scope of services.

Exclusions:

- 1. SHPO clearance
- 2. Threatened and Endangered Species clearance
- 3. Geotechnical services
- 4. Archeological services
- 5. Meetings beyond those stated in the scope of work
- 6. ~~Design of utility relocations including water, sewer, electric, etc.~~
- 7. Construction Observation
- 8. Investigating conflicting property corners or re-establishing them

PROJECT FEE ESTIMATING SHEET

Design Phase Services - Mace Road Intersection and Roadway Improvements - Phase 2
Osage Beach, Camden County, Missouri

										Total		\$ 213,000.00
Tasks	Staff Hours							Labor Costs	Other Direct Costs		Total Fee	Subtotal Fee
	Eng. IX	Eng. VI	Eng. II	Eng. Tech IV	Surv. VII	Surv. Tech IV	Admin. II		Item	Cost		
	\$190.00	\$148.00	\$108.00	\$105.00	\$135.00	\$85.00	\$74.00					
TOTALS	8	188	758	518	142	192	4	\$201,384.00		\$11,616.00	\$213,000.00	
1. Data Collection and Survey												\$30,118.00
1.1 The ENGINEER shall collect data and information used in performing the project duties including the following tasks:												
1.1.1 Request, obtain, review existing subdivision plats and street plans from Camden County.					4			\$540.00		\$0.00	\$540.00	
1.2 The ENGINEER shall perform the field survey of existing topography and boundary surveys to create project base mapping including the following tasks:												
1.2.1 Research of existing survey deeds and horizontal and vertical control points.					8			\$1,080.00	Mileage and Prints	\$95.00	\$1,175.00	
1.2.2 Set project horizontal and vertical control/bench marks. Project control will be set using GPS technology.					10	10		\$2,200.00	Equipment, Mileage	\$545.00	\$2,745.00	
1.2.3 Field locate and survey existing property corners.					10	30		\$3,900.00	Equipment, Mileage	\$1,045.00	\$4,945.00	
1.2.4 Field survey existing topographic features, including pavement edges, drainage structures, retaining walls, landscaping, private entrances and other features to develop the project mapping.					24	40		\$6,640.00	Equipment, Mileage	\$1,645.00	\$8,285.00	
1.2.5 Field locate visible existing utilities in the project area. Includes call for field locates to MO One-Call and survey of marked underground utilities. Does not guarantee that utilities accurately locate their facilities or even attempt to do so.					12	16		\$2,980.00	Equipment, Mileage	\$745.00	\$3,725.00	
1.2.6 Establish existing Right-of-Way and adjacent property lines from plats, warranty deeds, recorded surveys (assumes 34 tracts). No easement negotiations included.					32	12		\$5,340.00	Equipment, Mileage	\$1,145.00	\$6,485.00	
1.2.7 Develop project base mapping from field surveys and boundary surveys for property lines.						24		\$2,040.00	CAD, Prints	\$178.00	\$2,218.00	
2. Preliminary Plans												\$89,446.50
2.1 Develop roadway alignment/profile for Mace Road from Aver Road to Osage Beach Parkway.		6	32	16				\$6,024.00	CAD, Prints	\$234.00	\$6,258.00	
2.2 Develop roadway alignment/profile for Orvill Drive within 100' of Mace Road.		1	8	6				\$1,642.00	CAD, Prints	\$80.00	\$1,722.00	
2.3 Develop intersection geometry at Mace Road at Orvill Drive and Mace Road at Osage Beach Parkway.		2	16					\$2,024.00	CAD, Prints	\$66.00	\$2,090.00	
2.4 Develop sidewalk geometry and curb ramp details.		2	6	12				\$2,204.00	CAD, Prints	\$115.00	\$2,319.00	
2.5 Determine conceptual grading.		4	40	16				\$6,592.00	CAD, Prints	\$262.00	\$6,854.00	
2.6 Conduct drainage design including drainage areas, hydrologic calculations using Rational Method and hydraulic calculations using Manning's Equation.		8	40					\$5,504.00	Prints	\$50.00	\$5,554.00	
2.7 Develop preliminary driveway profiles for 45 driveways to review grading and drainage.		4	40	20				\$7,012.00	CAD, Prints	\$290.00	\$7,302.00	
2.8 Develop preliminary plans for the proposed improvements. Construction drawings will be prepared on 22" x 34" size sheets. The scale shall be as determined to be appropriate but will likely be 1"=20'. The preliminary submittal is anticipated to include:								\$0.00	CAD, Prints	\$10.00	\$10.00	
2.8.1 Cover Sheet			1	1				\$213.00	CAD, Prints	\$20.50	\$233.50	
2.8.2 General Notes/Typical Sections		1	4	6				\$1,210.00	CAD, Prints	\$66.00	\$1,276.00	
2.8.3 Plan/Profile Sheets (assumes 6 sheets at 20 scale)		8	40	40				\$9,704.00	CAD, Prints	\$430.00	\$10,134.00	
2.8.4 Drive Profile Sheets (assumes 4 sheets)		8	40	32				\$8,864.00	CAD, Prints	\$374.00	\$9,238.00	
2.8.5 Storm Sewer Profile Sheets (assumes 5 sheets)		6	32	24				\$6,864.00	CAD, Prints	\$290.00	\$7,154.00	
2.8.6 Cross Sections (assumes 15 sheets)		6	40	32				\$8,568.00	CAD, Prints	\$374.00	\$8,942.00	
2.9 Prepare preliminary plans cost estimate.		1	12	8				\$2,284.00			\$2,284.00	

Tasks	Staff Hours							Labor Costs	Other Direct Costs		Total Fee	Subtotal Fee
	Eng. IX	Eng. VI	Eng. II	Eng. Tech IV	Surv. VII	Surv. Tech IV	Admin. II		Item	Cost		
	\$190.00	\$148.00	\$108.00	\$105.00	\$135.00	\$85.00	\$74.00					
2.10 Conduct 2 preliminary design review meetings with City staff during course of preliminary design.		8	12					\$2,480.00	Prints	\$10.00	\$2,490.00	
2.11 Submit the preliminary plans and cost estimates to the City for review.		1	2					\$364.00	Prints	\$30.00	\$394.00	
2.12 Conduct preliminary design coordination and hold meeting with utility companies.		6	12					\$2,184.00			\$2,184.00	
2.13 Conduct preliminary design coordination with emergency services								\$0.00	Prints	\$0.00	\$0.00	
2.14 Preparation of permanent and temporary easement and Right-of-Way documents (legal descriptions) as well as develop exhibits (assumes 34 tracts). City to insert legal descriptions on their easement forms.		4	12		40	60		\$12,388.00	Prints	\$10.00	\$12,398.00	
2.15 Preparation of Land Disturbance Permit.		1	4					\$580.00	Prints	\$30.00	\$610.00	
2.16 No traffic analysis or impact study is included in this scope of work.								\$0.00	Prints	\$0.00	\$0.00	
2.17 No public meetings are included in this scope of work.								\$0.00	Prints	\$0.00	\$0.00	
2.18 No council meetings are included in this scope of work.								\$0.00	Prints	\$0.00	\$0.00	
3. Utility Relocation												\$5,756.00
3.1 Develop proposed alignment and profile for sanitary force main between Aver Road and Osage Beach Parkway			4					\$432.00			\$432.00	
3.2 Develop proposed alignment and profile for water line between Aver Road and Osage Beach Parkway			4					\$432.00			\$432.00	
3.3 Coordinate utility crossings with storm sewer for proposed reconstruction.			1					\$108.00			\$108.00	
3.4 Develop plans for the proposed improvements. Drawings will be prepared on 22" x 34" size sheets. The scale shall be as determined to be appropriate but will likely be 1"=40'. The submittal is not intended to be used as a bid set, but rather as a guide for City crews to construct improvements. Sheets anticipated to include:								\$0.00			\$0.00	
3.4.1 Sanitary Sewer Profile Sheet (assumes 3 sheets at 40 scale)		1	2	8				\$1,204.00	Prints	\$10.00	\$1,214.00	
3.4.2 Water Line Profile Sheet (assumes 3 sheets at 40 scale)		1	2	8				\$1,204.00	Prints	\$10.00	\$1,214.00	
3.4.3 Electrical Relocation Plan Sheet for City owned electric services (assumes 3 sheets at 40 scale)		1	2	8				\$1,204.00	Prints	\$10.00	\$1,214.00	
3.5 Develop utility conflict plans showing the existing facilities and the proposed improvements to facilitate discussions with utility companies. It is assumed that no additional sheets will be created, but that existing sheets will be modified to show the utilities in more clarity.			1	2				\$318.00			\$318.00	
3.6 Submit the plans to the City for review.		1						\$148.00	Prints	\$30.00	\$178.00	
3.7 Make final changes to plans based on City staff comments.			2	4				\$636.00	Prints	\$10.00	\$646.00	
3.8 No additional utility relocation plans will be developed as part of this scope of services.								\$0.00			\$0.00	
4. Final Plans												\$68,961.50
4.1 Develop final plans based on review comments from City staff regarding preliminary plans. Final plans to consist of:												
4.1.1 Cover Sheet			1	1				\$213.00	CAD, Prints	\$20.50	\$233.50	
4.1.2 General Notes/Standard Details		1	2	4				\$784.00	CAD, Prints	\$45.00	\$829.00	
4.1.3 Coordinate/Control Points Sheet			2	8	2			\$1,326.00	CAD, Prints	\$73.00	\$1,399.00	
4.1.4 Plan/Profile Sheets (assumes 6 sheets at 20 scale)		2	24	32				\$6,248.00	CAD, Prints	\$318.00	\$6,566.00	
4.1.5 Drive Profile Sheets (assumes 4 sheets)		2	16	12				\$3,284.00	CAD, Prints	\$150.00	\$3,434.00	
4.1.6 Storm Sewer Profile Sheets (assumes 5 sheets)		2	16	24				\$4,544.00	CAD, Prints	\$234.00	\$4,778.00	
4.1.7 Intersection Detail Sheets		1	16	2				\$2,086.00	CAD, Prints	\$80.00	\$2,166.00	
4.1.8 Driveway Detail Sheets (assumes 7 sheets)		2	24	32				\$6,248.00	CAD, Prints	\$318.00	\$6,566.00	
4.1.9 Retaining Wall Plan/Profile Sheets (assumes 3 sheets at 20 scale)		2	12	16				\$3,272.00	CAD, Prints	\$164.00	\$3,436.00	
4.1.10 Pavement Marking and Signing Plan		1	6	16				\$2,476.00	CAD, Prints	\$143.00	\$2,619.00	
4.1.11 Lighting Plan		8	32	40				\$8,840.00	CAD, Prints	\$402.00	\$9,242.00	
4.1.12 Traffic Control Plan (assumes 1 sheet)		2	4	8				\$1,568.00	CAD, Prints	\$80.00	\$1,648.00	
4.1.13 Erosion and Sediment Control Sheets (assumes 3 sheets)		1	6	8				\$1,636.00	CAD, Prints	\$87.00	\$1,723.00	
4.1.14 Cross Sections (assumes 15 sheets)		4	40					\$4,912.00	CAD, Prints	\$150.00	\$5,062.00	
4.1.15 No landscaping plan is included in this scope of work.								\$0.00			\$0.00	
4.1.16 No water quality plan is included in this scope of work.								\$0.00			\$0.00	

Tasks		Staff Hours							Labor Costs	Other Direct Costs		Total Fee	Subtotal Fee
		Eng. IX	Eng. VI	Eng. II	Eng. Tech IV	Surv. VII	Surv. Tech IV	Admin. II		Item	Cost		
		\$190.00	\$148.00	\$108.00	\$105.00	\$135.00	\$85.00	\$74.00					
4.2	Compute final quantities, develop bid form and prepare Engineer's Estimate for project.		2	12	12				\$2,852.00	Prints	\$50.00	\$2,902.00	
4.3	Develop any project specific technical specifications (JSPs) to be utilized along with MoDOT Standard Specifications for the project. The City will provide specific details for some items (storm inlets, etc.). The City to provide complete front end documents to be combined with the JSPs.		4	20					\$2,752.00	Prints	\$20.00	\$2,772.00	
4.4	Submit the final plans, bid forms and Engineer's Estimates to the City for review.		1	2	2				\$574.00	Prints, Mileage	\$50.00	\$624.00	
4.5	Conduct a final design coordination meeting with utility companies.		8	16	12				\$4,172.00	CAD, Prints	\$190.00	\$4,362.00	
4.6	Conduct 1 final design review meeting with City staff during course of final design.		6	8	2				\$1,962.00	Prints, Mileage	\$50.00	\$2,012.00	
4.7	Make final changes to plans, technical special provisions, bid form and Engineer's Estimate based on City staff comments. Sign and Seal.		4	32	24				\$6,568.00	Prints	\$20.00	\$6,588.00	
5. Project Management and Coordination													\$10,758.00
5.1	No additional meetings are included in this scope of services.								\$0.00			\$0.00	
5.2	QA/QC								\$0.00			\$0.00	
5.2.1	Perform periodic reviews of project for quality assurance purposes. Perform a quality control review of the project deliverables at each submittal stage.	8			8				\$2,360.00	Prints	\$20.00	\$2,380.00	
5.2.2	Perform a field check of proposed construction improvements.		8	8					\$2,048.00	Prints	\$20.00	\$2,068.00	
5.3	Administration and Coordination:											\$0.00	
5.3.1	Perform duties necessary for administration of project contract and subconsultant contracts. Prepare and administer project expenses and invoicing to City.		4					4	\$888.00	Prints	\$30.00	\$918.00	
5.3.2	General communication with City. This includes email updates, phone conversations, and general correspondence approximately twice a month during the course of the project.		8	8					\$2,048.00			\$2,048.00	
5.3.3	Prepare and update project progress schedule monthly.		8	20					\$3,344.00			\$3,344.00	
6. Bidding Phase Services													\$5,270.00
6.1	Prepare Plans and Specifications for bidding (assumes 10 sets).		2	4	8				\$1,568.00	Prints	\$500.00	\$2,068.00	
6.2	Attend prebid meeting at City office. Compile and distribute meeting minutes.		6	2					\$1,104.00	Prints, Mileage	\$50.00	\$1,154.00	
6.3	Contractor correspondence during bidding.		4	2					\$808.00			\$808.00	
6.4	Addendum preparation (assumes 1 addendum).		2	4	4				\$1,148.00	CAD, Prints	\$92.00	\$1,240.00	
6.5	City to conduct bid opening, prepare bid tabulation, make contractor recommendation, and review shop drawings.								\$0.00	CAD, Prints	\$0.00	\$0.00	
6.6	No additional meetings are included in this scope of services.								\$0.00	Prints, Mileage	\$0.00	\$0.00	
7. Construction Phase Services													\$2,690.00
7.1	Attend preconstruction meeting at City office. City to Compile and distribute meeting minutes.		4						\$592.00	Prints, Mileage	\$50.00	\$642.00	
7.2	No additional meetings or site visits are included in this scope of services.								\$0.00			\$0.00	
7.3	Answer questions during construction (assumes 8 calls).		8	8					\$2,048.00			\$2,048.00	
8. Additional Services													\$0.00
8.1	No additional services are included in this scope of services.								\$0.00			\$0.00	

BARTLETT & WEST, INC.
2018 SCHEDULE OF HOURLY CHARGES
Effective January 1, 2018

Engineer/Arch/Landscape Arch XI	\$225.00	Right-of-Way Technician VI	\$118.00
Engineer/Arch/Landscape Arch X	205.00	Right-of-Way Technician V	109.00
Engineer/Arch/Landscape Arch IX	190.00	Right-of-Way Technician IV	99.00
Engineer/Arch/Landscape Arch VIII	175.00	Right-of-Way Technician III	90.00
Engineer/Arch/Landscape Arch VII	161.00	Right-of-Way Technician II	79.00
Engineer/Arch/Landscape Arch VI	148.00	Right-of-Way Technician I	68.00
Engineer/Arch/Landscape Arch V	138.00		
Engineer/Arch/Landscape Arch IV	129.00	GIS Coordinator IX	\$225.00
Engineer/Arch/Landscape Arch III	118.00	GIS Coordinator VIII	208.00
Engineer/Arch/Landscape Arch II	108.00	GIS Coordinator VII	198.00
Engineer/Arch/Landscape Arch I	98.00	GIS Coordinator VI	184.00
		GIS Coordinator V	174.00
		GIS Coordinator IV	158.00
Engineering Technician XI	\$165.00	GIS Coordinator III	145.00
Engineering Technician X	140.00	GIS Coordinator II	130.00
Engineering Technician IX	127.00	GIS Coordinator I	120.00
Engineering Technician VIII	114.00		
Engineering Technician VII	105.00	GIS Developer/DBA V	\$160.00
Engineering Technician VI	97.00	GIS Developer/DBA IV	150.00
Engineering Technician V	90.00	GIS Developer/DBA III	140.00
Engineering Technician IV	83.00	GIS Developer/DBA II	130.00
Engineering Technician III	70.00	GIS Developer/DBA I	120.00
Engineering Technician II	60.00		
Engineering Technician I	50.00	GIS Analyst V	\$130.00
		GIS Analyst IV	120.00
Surveyor X	\$180.00	GIS Analyst III	110.00
Surveyor IX	165.00	GIS Analyst II	100.00
Surveyor VIII	150.00	GIS Analyst I	90.00
Surveyor VII	135.00		
Surveyor VI	123.00	GIS Technician IV	\$90.00
Surveyor V	110.00	GIS Technician III	80.00
Surveyor IV	98.00	GIS Technician II	70.00
Surveyor III	88.00	GIS Technician I	60.00
Surveyor II	77.00		
Surveyor I	67.00	Project Coordinator VII	\$208.00
		Project Coordinator VI	180.00
Survey Technician VIII	\$123.00	Project Coordinator V	165.00
Survey Technician VII	109.00	Project Coordinator IV	140.00
Survey Technician VI	98.00	Project Coordinator III	125.00
Survey Technician V	85.00	Project Coordinator II	115.00
Survey Technician IV	75.00	Project Coordinator I	103.00
Survey Technician III	66.00		
Survey Technician II	58.00	Systems Analyst	\$160.00
Survey Technician I	53.00	Systems Administrator	120.00
		Systems Technician	80.00
Construction Eng. Tech IX	\$155.00		
Construction Eng. Tech VIII	145.00	Administrator VI	\$125.00
Construction Eng. Tech VII	130.00	Administrator V	110.00
Construction Eng. Tech VI	118.00	Administrator IV	97.00
Construction Eng. Tech V	108.00	Administrator III	82.00
Construction Eng. Tech IV	99.00	Administrator II	74.00
Construction Eng. Tech III	87.00	Administrator I	66.00
Construction Eng. Tech II	77.00		
Construction Eng. Tech I	68.00	Administrative Technician V	\$72.00
		Administrative Technician IV	65.00
Right-of-Way Specialist IV	\$208.00	Administrative Technician III	58.00
Right-of-Way Specialist III	165.00	Administrative Technician II	53.00
Right-of-Way Specialist II	143.00	Administrative Technician I	47.00
Right-of-Way Specialist I	127.00		