

PROFESSIONAL SERVICES AGREEMENT

PROJECT: 26363-20260727-HigginbottomTrail-CityofJonesboroAR

BFW Project #:26363

Client Information

Client: City of Jonesboro, AR

Address: 300 S Church St Jonesboro, AR 72401

Contact: Craig Light, City Engineer

Telephone: 870/932-2438 Fax:

Billing Contact: Tracey Cooper

Email: tcooper@jonesboroar.gov Telephone: 870-932-2438

Consultant Information

Consultant: Bacon Farmer Workman Engineering & Testing, Inc.

Address: 2301 McCracken Blvd., Paducah, KY 42001

Contact:

Telephone: 270-443-1995 Fax:

Project Description: Surveying, Design Services and Preparation of Plans for Trail Project

☒ SCOPE OF SERVICES (See Attachment)

☒ SCHEDULE (See Attachment)

COMPENSATION

- ☐ LUMP SUM Compensation for these services shall be a Lump Sum of \$_____
- ☐ TIME AND MATERIALS Billing will be hourly per our rate schedule. See attached proposal.
- ☐ BACON FARMER WORKMAN ENGINEERING & TESTING, INC.'s Direct Job Wages times a factor of: _____
- ☐ List of BACON FARMER WORKMAN ENGINEERING & TESTING, INC.'s Hourly Rates.
- ☒ COST PLUS FIXED FEE. Compensation for these services shall be BACON FARMER WORKMAN ENGINEERING & TESTING, INC. Cost plus a fixed professional fee, including Reimbursable Expenses times a factor of: (see attached fee estimate) plus Subconsultant Expenses times a factor of: N/A and per BACON FARMER WORKMAN ENGINEERING & TESTING, INC. 's attached Definitions. The estimated compensation for services is \$ 118,747.93 plus a fixed fee of \$13,091.84 for a total of \$ 131,839.77.

Direct Job Wages or Hourly Rates for Time and Materials or Cost-Plus Fixed Fee contracts are subject to change to reflect adjustments in BACON FARMER WORKMAN ENGINEERING & TESTING, INC. salary levels.

In the event services beyond those specified in the Scope of Services and not included in the compensation above are required, BACON FARMER WORKMAN ENGINEERING & TESTING, INC. shall submit a fee estimate for such services and a contract modification shall be negotiated and approved by the Client prior to any effort being expended on such services.

SCHEDULE OF PAYMENTS: BACON FARMER WORKMAN ENGINEERING & TESTING, INC. shall be paid monthly on the basis of invoices submitted. These invoices will be for the portion of the agreed upon compensation earned by BACON FARMER WORKMAN ENGINEERING & TESTING, INC. during that month. (Cost plus Fixed Fee will be for costs incurred during the invoice period plus the portion of the agreed upon fixed fee earned by BACON FARMER WORKMAN ENGINEERING & TESTING, INC. during that month. **(Lump Sum will be based on percent of effort completed as estimated by BACON FARMER WORKMAN ENGINEERING & TESTING, INC.)** BACON FARMER WORKMAN ENGINEERING & TESTING, INC. shall be paid for all invoices within 30 days of submittal. In the event the Client disputes the invoice or any portion thereof, the undisputed portion shall be paid to BACON FARMER WORKMAN ENGINEERING & TESTING, INC. based on contractual terms. Invoices not in dispute and unpaid after 30 days shall accrue interest at the rate of 1.5% per month (or the maximum percentage allowed by law, whichever is the lesser). See Standard Conditions for invoices unpaid after 60 days.

EXECUTION: Execution of this document by duly authorized representatives of BACON FARMER WORKMAN ENGINEERING & TESTING, INC. and Client, including BACON FARMER WORKMAN ENGINEERING & TESTING, INC. 's Standard Conditions (reverse side) and any attachments, Additional Provisions as indicated, and addenda, represents the entire Agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended or modified by written instrument, but such instrument is valid only upon signature by both parties. Neither BACON FARMER WORKMAN ENGINEERING & TESTING, INC. nor Client shall assign, transfer, or encumber any rights, duties, or interests accruing from this Agreement without the express prior written consent of the other.

Client: City of Jonesboro, AR

By: Harold Copenhaver

Signature:

Title: Mayor

Date:

Consultant: BACON FARMER WORKMAN ENGINEERING & TESTING, INC.

By:

Signature:

Title:

Date:

**BACON FARMER WORKMAN ENGINEERING & TESTING, INC.
STANDARD CONDITIONS**

1. SERVICES. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. shall provide professional services in accordance with the agreed upon scope of services.

2. EXECUTION. This Agreement becomes effective upon signatures by authorized representatives of the Client and BACON FARMER WORKMAN ENGINEERING & TESTING, INC. and upon receipt by BACON FARMER WORKMAN ENGINEERING & TESTING, INC. of a signed original or facsimile transmittal. If facsimile transmittal is initially sent to BACON FARMER WORKMAN ENGINEERING & TESTING, INC. Client will provide BACON FARMER WORKMAN ENGINEERING & TESTING, INC. with a signed original for record as soon as practicable.

3. INITIATION. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. is authorized to proceed with services upon receipt of an executed Agreement or written Notice to Proceed.

4. COMPLETION/TERMINATION. This Agreement shall remain in force until completion and acceptance of the services or until terminated by mutual agreement. This contract may be terminated by the Client and/or BACON FARMER WORKMAN ENGINEERING & TESTING, INC. upon 10 days written notice. In the event of such termination, BACON FARMER WORKMAN ENGINEERING & TESTING, INC. will be paid the portion of the compensation (and fixed fee, if applicable) for services performed in accordance with the scope of services under the terms of this Agreement to the date of termination together with all costs arising out of such termination.

Continuing Service Agreements shall be reviewed annually for rates and shall remain in force until terminated in writing by either party, or otherwise stipulated contractually.

5. STANDARD OF CARE. Services provided by BACON FARMER WORKMAN ENGINEERING & TESTING, INC. under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. makes no warranty or guaranty, either express or implied.

6. INDEPENDENT CONSULTANT. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. is and shall be at all times during the term of this Agreement an independent consultant and not an employee or agent of the Client.

7. COMPLIANCE WITH LAWS. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. will endeavor to

comply with Federal, State, and local laws and ordinances applicable to the services to be provided under this Agreement.

8. COLLECTION COSTS. In the event legal action is necessary to enforce the payment provisions of this Agreement if Client fails to make payment within sixty (60) days of the invoice date, BACON FARMER WORKMAN ENGINEERING & TESTING, INC. shall be entitled to collect from the Client any judgment or settlement sums due, reasonable attorneys' fees, court costs and expenses incurred by BACON FARMER WORKMAN ENGINEERING & TESTING, INC. in connection therewith and, in addition, the reasonable value of BACON FARMER WORKMAN ENGINEERING & TESTING, INC.'s time and expenses spent in connection with such collection action, computed at BACON FARMER WORKMAN ENGINEERING & TESTING, INC.'s prevailing fee schedule and expense policies.

9. OWNERSHIP OF DOCUMENTS. Drawings, specifications, reports, programs, manuals, or other documents, including all documents on electronic media, prepared under this Agreement are instruments of service and are, and shall remain, the property of BACON FARMER WORKMAN ENGINEERING & TESTING, INC. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. will retain all common law, statutory, and other reserved rights, including the copyright thereto. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. shall not be held liable for reuse of documents or modifications thereof by the Client or its representatives for any purpose other than the original intent of this Agreement, without written authorization of and appropriate compensation to BACON FARMER WORKMAN ENGINEERING & TESTING, INC.

10. SITE VISITS/OBSERVATION. If included in the Scope of Services, BACON FARMER WORKMAN ENGINEERING & TESTING, INC. shall visit the project and/or construction site at appropriate intervals to become generally familiar with the progress, quality of work (contractors' work), and to determine if the work is proceeding in general accordance with the Contract Documents. Visits to the project site and observations made by BACON FARMER WORKMAN ENGINEERING & TESTING, INC. as part of services during construction under Agreement shall not make BACON FARMER WORKMAN ENGINEERING & TESTING, INC. responsible for, nor relieve the construction contractor(s) of the obligation to conduct comprehensive monitoring of the work sufficient to ensure conformance with the intent of the Contract Documents, and shall not make BACON FARMER WORKMAN ENGINEERING & TESTING, INC. responsible for, nor relieve the construction contractor(s) of the full responsibility for all construction means, methods, techniques, sequences, and procedures necessary for coordinating and completing all portions of the work under the construction contract(s) and for all safety precautions incidental thereto.

11. EQUAL OPPORTUNITY EMPLOYMENT. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. will comply with federal regulations pertaining to Equal Opportunity Employment. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. is in compliance with applicable local, state, and federal regulations concerning minority hiring. It is BACON FARMER WORKMAN ENGINEERING & TESTING, INC. 's policy to ensure that applicants and employees are treated equally without regard to race, creed, sex, age, color, religion, veteran status, ancestry, citizenship status, national origin, marital status, sexual orientation, or disability. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. expressly assures all employees, applicants for employment, and the community of its continuous commitment to equal opportunity and fair employment practices.

BACON FARMER WORKMAN ENGINEERING & TESTING, INC. 's equal opportunity employment policy applies to all phases of employment, including recruiting, hiring, job assignment, supervision, training, upgrading, transfer, compensation, benefits, promotion, education, recreation, layoff and termination.

12. INSURANCE. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. will provide a certificate of insurance upon request.

13. INDEMNIFICATION/HOLD HARMLESS. BACON FARMER WORKMAN ENGINEERING & TESTING, INC. shall indemnify and hold harmless the Client and its employees from any liability, settlements, loss, or costs (including reasonable attorneys' fees and costs of defense) to the extent caused by BACON FARMER WORKMAN ENGINEERING & TESTING, INC. 's negligent acts, errors, or omissions in services provided pursuant to this Agreement. Provided, however, that if any such liability, settlements, loss, or costs result from the concurrent negligence of BACON FARMER WORKMAN ENGINEERING & TESTING, INC. and the Client, this indemnification applies only to the extent of the negligence of BACON FARMER WORKMAN ENGINEERING & TESTING, INC.

14. LIMITATION OF LIABILITY. In recognition of the relative risks and benefits of the project to both the Client and BACON FARMER WORKMAN ENGINEERING & TESTING, INC., the risks have been allocated such that the Client agrees, to the fullest extent permitted by law, to limit the liability of BACON FARMER WORKMAN ENGINEERING & TESTING, INC. and its subconsultants to the Client and to all construction contractors and subcontractors on the project for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, so that the total aggregate liability of BACON FARMER WORKMAN ENGINEERING & TESTING, INC. and its subconsultants to all those named shall not exceed \$50,000 or the amount of BACON FARMER WORKMAN ENGINEERING & TESTING, INC. 's total fee paid by the Client for services under this Agreement, whichever is the greater. Such claims and causes include, but are not limited to negligence, professional errors or omissions, strict liability, breach of contract or warranty.

15. DISPUTES. Any action for claims arising out of or relating to this Agreement and/or respective services shall be governed by the laws of the State of Arkansas. Venue shall be in Craighead County Circuit Court. Mediation is an express condition precedent to the filing of any legal action. Unless the parties agree otherwise, the mediation shall be conducted pursuant to the Construction Mediation Rules of the American Arbitration Association.

16. ATTORNEY FEES. Should there be any suit or action instituted to enforce any right granted in this contract, the substantially prevailing party shall be entitled to recover its costs, disbursements, and reasonable attorney fees from the other party. The party who is awarded a net recovery against the other shall be deemed the substantially prevailing party unless such other party has previously made a bona fide offer of payment in settlement and the amount of recovery is the same or less than the amount offered in settlement. Reasonable attorney fees may be recovered regardless of the forum in which the dispute is heard, including an appeal.

SCOPE OF SERVICES

Scope	
Preliminary Survey	N/A
Survey	X
Prel. Geotech Report	X
Foundation Investigation	X
Staking of Sounding Locations	X
Preliminary Bridge Design	X
Final Bridge PSE	X
Preliminary Roadway Design	X
ROW Plans	X
Final Roadway PSE	X
RR Coordination	N/A
Utility Coordination	By City
Environmental Services	By ARDOT

The consultant shall perform the following services, all in accordance with standard practice and the following:

AASHTO “A Policy on Geometric Design of Highways and Streets” (latest version)

AASHTO “Roadside Design Guide” (latest version)

AASHTO “LRFD Design methods” (latest version)

AASHTO “Highway Drainage Guidelines” (latest version)

“Manual on Uniform Traffic Control Devices” (latest version)

“Highway Capacity Manual” (latest version)

The scope of this project includes the development of plans for a soft surface trail and a pedestrian stream crossing near the southern end of the project along with some landscape enhancements (benches, trees, etc.) along the trail.

I Administration

CONSULTANT shall participate in the following as part of the Administration tasks:

1. Attend and document milestone project meetings with the City. Meetings will be held virtually except for the project kick off and final design field check meetings.
2. Correspondence (emails, letters, meeting minutes, phone calls)
3. Set up the project and conduct Kick-Off Meeting.
4. Coordination with subconsultants.
5. Provide monthly progress reports and invoices and review subconsultants invoices and reports.
6. Provide exhibits, sketches, and back-up data to City on an as-needed basis.

II Utility Coordination Support Services

1. The CONSULTANT shall provide the City with information as needed for proper utility clearance.
2. The CONSULTANT shall incorporate utility information necessary for conceptual plans, preliminary plans, and final plans. Items that may need to be addressed include underground and overhead conflicts.
 - a. Show the existing utility facilities and plan of adjustments for proposed utilities facilities in the contract plans. (Plan sheets, cross sections, culvert sections)
3. The CONSULTANT shall support the City during the relocation of each impacted utility on the project during design and construction.

III Geotechnical Investigations

The project will require a pedestrian bridge to tie the proposed trail to Crestfield Drive.

The CONSULTANT will be responsible for all geotechnical work necessary for the project.

The CONSULTANT shall provide a Geotechnical Report, signed and sealed by a Professional Engineer or Registered Geologist licensed in Arkansas. Items to be addressed are:

- Soil types and geologic formations to be encountered across the project
- Excavation classification
- Grading Recommendations
- Slope Recommendations
- Unsuitable materials (if encountered)
- Settlement Investigation (if needed)
- Foundation recommendations for the proposed pedestrian bridge at Crestfield Drive.

The CONSULTANT shall advance a minimum of two (2) borings to a depth of 30 feet. Borings may be advanced by continuous flight auger, SPT sampling methods using a calibrated automatic hammer, CPT, or other approved exploration methods.

The CONSULTANT shall provide sufficient laboratory testing to provide the required engineering properties. All testing shall be completed by an AASHTO Resource certified laboratory.

The CONSULTANT shall provide, at a minimum, the following information on their boring logs:

- N value of blows per foot
- N60 value of blows per foot (corrected for the energy efficiency of the auto-hammer)
- Energy efficiency of the auto hammer
- Drilling equipment identification
- Boring locations (Coordinates and Elevations with datums)
- Laboratory test results (if not possible, test results should be provided within the report)

Standard penetration testing (SPT) and split-barrel sampling shall be performed in accordance with ASTM D1586 using an automatic hammer in accordance with section 7.4.1 Method A. The automatic hammers shall be calibrated in accordance with manufacturer's recommendations and ASTM D4633 at least every 2 years or sooner as required therein. The calibration report shall be prepared in accordance with ASTM D4633 and shall be signed and stamped by a professional engineer. During field exploration, the automatic hammer shall be run in accordance with manufacturer's recommendations and in accordance with the settings and rates that were used during the hammer calibration.

The CONSULTANT shall provide, at a minimum, a Geologist Registrant In Training (GRIT) or an Engineer Intern (EI) to log the borings in the field. The engineer or geologist shall have at least 2 years of experience logging boreholes. Logs shall be reported in gINT format. The City will provide preferred gINT templates when requested. At final submittal, please provide a copy of the electronic gINT file, in addition to the final report deliverables.

The CONSULTANT will be responsible for attaining all necessary permits to perform the work.

The CONSULTANT will be responsible for contacting Arkansas 811 (One-Call) before drilling begins.

The CONSULTANT will be responsible for providing the staking for boring locations.

The CONSULTANT will be responsible for providing all traffic control, if necessary, and shall coordinate with City staff.

IV Preliminary Roadway Design

The CONSULTANT'S attention is directed to the ARDOT Roadway Design Plan Development Guidelines and Local Public Agency Project Manual for general guidelines and requirements for preliminary design.

- (A) Upon approval of design criteria by the City, the CONSULTANT shall undertake the following to develop the preliminary design phase:

- a. Prepare preliminary plans.
 - i. The City shall furnish the CONSULTANT traffic information for the construction and design years to be used in the preliminary plans.
 - ii. The City shall furnish the CONSULTANT the latest accident data and traffic information used to calculate the project accident rate, if applicable.
 - iii. The CONSULTANT shall submit the preliminary plans to the City for review and approval as shown in Exhibit IV.
- b. The preliminary plans shall be prepared in accordance with the applicable sections of the Local Public Agency Project Manual, as to what shall be shown thereon, including proposed design features.
- c. The CONSULTANT may have to review preliminary cross sections sufficiently to make a cost comparison between using retaining walls versus acquiring additional right of way for all proposed wall locations.
- d. The CONSULTANT shall prepare the construction estimate. The City shall prepare the right of way estimate based on the right of way requirements furnished by the CONSULTANT.
- e. The preliminary plans shall be submitted to the City for review and approval. A letter of transmittal shall be provided with the preliminary plan submittal. The City shall furnish the template for the letter of transmittal. A detailed and itemized preliminary roadway construction cost estimate shall also be submitted with the preliminary plans.
- f. The preliminary plans shall include the tentative additional easement and right of way limits, property lines and ownerships, section lines, township and ranges, any U.S. Surveys, city limits, and a general outline of the construction staging, critical design items and other items as outlined in the Local Public Agency Project Manual.
- g. Typical sections shall indicate pavement type for new roadways, along with descriptions of the existing roadway types remaining in place.

(B) A Preliminary Field Check will be arranged by the CONSULTANT with the City to discuss design features in the project area.

(C) The CONSULTANT shall provide the City with information for proper environmental and cultural clearance. Items that may need to be addressed include historical buildings, archaeological sites, historic bridges, conversion of farmland, endangered species, wetlands, parklands and historical sites.

(D) The CONSULTANT shall prepare and submit the Bridge Survey Report, Bridge Survey Sheets, and Bridge Survey Checklist.

- (E) The CONSULTANT shall set horizontal and vertical control for the project and provide the City the combined adjustment factor. All control furnished by the CONSULTANT shall use current datums and adjustments.
- (F) The CONSULTANT shall provide all land boundary work and legal descriptions to the City for review and approval prior to right of way plans submittal.
- (G) The City shall provide the pavement design and general Job Special Provisions related to the project including any special design elements.
- (H) A public meeting is not anticipated for this project
- (I) Identify at the earliest opportunity, the title reports to be ordered by the CONSULTANT. This will be coordinated during the preliminary design phase of the project.

V Preliminary Bridge Design

- (A) Perform the geometric analysis and hydraulic analysis at the proposed bridge site necessary to develop a Preliminary Bridge Layout.
- (B) The structure type and size (if applicable) shall be based on roadway alignments, geometric analysis, hydraulic analysis (if applicable), spill slope requirements, roadway overpass clearances, grades and/or clear zone requirements.
- (C) For this project, a pedestrian bridge is assumed as the method of stream crossing.
- (D) All requirements of the Federal Emergency Management Agency's National Flood Insurance Program shall be met.
- (E) Discharges will be estimated using USGS Regression Equations, FEMA FIS reports, and/or available stream gauge data (if applicable).
- (F) A hydraulic model acceptable to the engineer shall be utilized for stream crossings. A 1D or 2D hydraulic analysis shall be used, as required by the City, to model the natural, existing, and proposed conditions.
- (G) Scour calculations shall be performed in accordance with FHWA Hydraulic Engineering Circular No. 18 (if applicable).
- (H) The results of the hydrologic, hydraulic and scour analysis shall be documented in the Bridge Hydraulic and Scour Report (if applicable).

- (I) All requirements outlined in the Local Public Agency Project Manual shall be met. The CONSULTANT shall submit any design exceptions as necessary.
- (J) If applicable, provide to the City information to complete the following: Completed Floodplain Development Permit Application, FEMA flood hazard map showing the project location, and a "No-Rise Certificate" certified by a professional engineer registered in Arkansas.
- (K) Provide an electronic copy of the final hydraulic models to the City.
- (L) Plans submitted during the preliminary design phase may be a PDF file and submitted electronically.

VI Section 404 Corps of Engineers Permit (if applicable)

The CONSULTANT shall provide the following information necessary to allow City staff to apply for any required Section 404 Corps of Engineer Permits. If the permit is required due to bridge construction, the application data shall be submitted with the Preliminary Bridge Layout. All information should be provided to the City who will forward the information to ARDOT.

- (A) Provide the amount and type of excavation and material that will be used in streams, lakes, and wetlands below the Corps of Engineers' ordinary high water line (OHL) elevations.
- (B) Provide location and quantities of permanent berms and spill fills below OHL.
 - a. Earth fill, rock blanket (square feet and cubic yards)
 - b. Rock blanket along right descending bank and left descending bank (linear feet)
 - c. Rock ditch (square feet)
- (C) Provide location, excavation and size of pier below OHL.
 - a. Excavation (cubic yards)
 - b. Pier (square feet)
- (D) Provide channel realignment data.
 - a. Existing channel length of section to be modified (feet)
 - b. Average channel width of section to be modified (feet)
 - c. Realigned section, length and width (feet)
- (E) Provide temporary fill amounts in wetlands or below OHL in streams.
 - a. Earth fill (square feet and cubic yards)
 - b. Class C (square feet and cubic yards)
- (F) Provide information about temporary fills and shoring.
 - a. Location of temporary fills and shoring
 - b. Source of material
 - c. Final disposition of removed materials
- (G) Provide information about temporary culverts.
 - a. Number of culverts
 - b. Size (inches)

- c. Length (feet)
- (H) Provide information on channel cleanout – excavation below OHL.
 - a. Cleanout upstream and downstream of structure (linear feet)
 - b. Total quantity of material to be removed below OHL (square feet and cubic yards)
- (I) Provide 8 ½-inch by 11-inch copies of any plan or profile sheets required for the permit application.
- (J) Provide bridge elevation and plan views with OHL indicated.

VII Right of Way Design

- (A) The CONSULTANT shall prepare right of way plans, which may be separate drawings from those used for design and construction details. The right of way plans shall show alignment, geometric design, removal of improvements, drainage facilities, property lines and ownership, sub-division lot lines, other land survey information, street lines and existing right of way and easements. The CONSULTANT should also include any plan details, which will require additional right of way or permanent, temporary or utility easements during the construction phase of the project such as bypasses, temporary erosion control, etc. Right of way plans include title sheet, typical sections, profile sheets, and cross sections of the roadway, entrances and side roads. Areas of new right of way, permanent easements and/or temporary easements required from each individual property owner may be shown in tabular form on the respective sheets.
 - a. The CONSULTANT shall finalize any previous review of the roadway cross sections sufficiently to determine the feasibility of constructing retaining walls versus obtaining additional right of way. This final review shall consist of construction estimates versus right of way estimates.
 - b. Upon completion of the estimates by City and CONSULTANT, the CONSULTANT shall recommend to the City a choice at the various locations which warrant consideration of the alternate retaining wall versus right of way solutions. The City shall make the final determination of purchasing right of way, or constructing retaining walls.
- (B) Right of way plans shall be submitted to the City for review and approval. The right of way plans shall be at the same scale as the construction plans. The right of way plans shall include any design details that will control the width of right of way and necessary easements.
 - a. New right of way lines and all easements shall be dimensioned by station and offset distance from the centerline, or crossroad centerlines, if necessary. Bearings and distances on the right of way lines may be required.
 - b. The following minimum design features shall be included on the right of way plans:

- i. Title sheet with appropriate project limits, access note and traffic data completed.
- ii. Typical Sections
- iii. Cross sections at 100' intervals, including additional sections at each entrance with new and existing entrance grades.
- iv. Construction limits (slope lines); drainage facilities; entrances and their reference location, width and type along with their existing and future grade percentage; property owners, with areas of new right of way, easements and remaining property; centerline bearing, ties to legal land corners from centerline stations with notation for corner witness by a registered land surveyor; existing utility locations and easements, including replacement utility easements; horizontal curvature information; and proper right of way symbolization for new right of way (access control) and easements, including areas which may be required to accommodate temporary erosion control.
- v. Township, Range, Section and/or U.S. Survey information broken down to $\frac{1}{4}$ $\frac{1}{4}$ section line level on each plan sheet near the title block or appropriate survey/section line.

(C) The CONSULTANT shall provide an updated detailed and itemized construction estimate for the Right of Way design stage.

(D) The City shall review, approve and certify the right of way plans as completed by the CONSULTANT. The CONSULTANT shall provide one (1) electronic set of fully signed and sealed right of way plans, for the City's use.

(E) The CONSULTANT shall provide title insurance information for all parcels with new right of way acquisition and the last deed of record for any parcel with easements.

(F) The City will prepare right of way appraisals and secure the necessary right of way by negotiation or condemnation, if necessary, for construction of this project.

(G) The CONSULTANT shall be responsible for staking and re-staking tentative right of way on individual properties during right of way negotiation and acquisition phase of the project. An initial staking of all proposed ROW is to be performed in a single site visit, and any necessary re-staking to be performed in one additional site visits. The CONSULTANT shall also set permanent monuments as shown on the recordable land survey.

(H) The CONSULTANT shall be responsible for making all revisions to the right of way and construction plans due to negotiations with the property owners in an effort to acquire right of way.

(I) The CONSULTANT shall write, sign and seal deed descriptions for all right of way acquisitions and submit to City.

- (J) The CONSULTANT will provide the City with information for proper environmental and cultural clearance. Items that may need to be addressed include historical buildings, archaeological sites, historic bridges, conversion of farmland, endangered species, wetlands, parklands and historical sites.

VIII Final Roadway Design

- (A) The City will secure execution of municipal agreements with the cities and/or county agreements. A copy of the executed agreements will be furnished to the CONSULTANT for his information. The CONSULTANT shall conform to all design provisions of these agreements.
- (B) A final design field check shall be held with CONSULTANT and City representatives prior to completing final design plan quantities. The CONSULTANT shall make any necessary revisions to the final plans as determined by this design field check.
- (C) The CONSULTANT shall prepare detailed temporary erosion control plans for review and approval before inclusion in the final design plans.
- (D) The CONSULTANT shall prepare computations for all design plan quantities. All plan quantities shall be shown on the Quantity Sheets, by construction stage, if applicable. The format for these sheets shall be furnished by the City. Specialty items may have separate sheets for quantity tabulations.
- (E) The CONSULTANT shall prepare for review and approval by the City all General Job Special Provisions. A brief reason for the deviation from the standard plans and specifications should also be provided. The CONSULTANT shall prepare only Job Special Provisions related to design elements shown in the plans.
- (F) The following list shall be considered the minimum requirements for a complete set of Final Design Plans.
- a. Title Sheet
 - b. Typical Sections
 - c. Quantity Sheets
 - d. Plan Sheets at 1"=50' horizontal (or different scale as determined by Project Manager for clarity). Plan sheets shall include all necessary adjustments to signing and proposed pavement marking.
 - e. Profile Sheets at 1"=50' horizontal and 1"=10' vertical
 - f. Culvert Sections at 1"=10', if needed

- g. Special Sheets for geometrics, referenced points, grading plan, traffic control plan, temporary erosion control plan and any other sheets for special design features.
 - h. Earthwork Quantities, Cross Sections at 25' intervals, 1"=10' (1:100), horizontal and vertical, including entrance sections with existing and proposed grades
 - i. Tabulation of Quantity Sheets
 - j. Job Special Provisions in electronic format readable in City's current word processor
 - k. File with the bid items and quantities as generated by City's Estimate Program
 - l. Construction Workday Study
 - m. Transportation Management Plan
 - n. Final Plans Checklist
- (G) Additional plans and information may be required to complete the Final Design Plans. With the submittal of the Final Design the CONSULTANT shall also provide the City a statement that an internal quality control check has been conducted and to the best of the CONSULTANT'S knowledge the final design plans are free of gross errors, misleading or confusing typos, and includes adequate information to construct the project.
- (H) The CONSULTANT shall prepare all plans through the use of a Computer Aided Drafting (CAD) program. The CONSULTANT shall conform to City requirements.
- (I) The CONSULTANT shall furnish the City the following completed sheets and documents, as applicable, for each separate construction project included in this contract, as follows:
- a. Final Design Plans showing profile grades, geometric data, alignment data, etc.
 - b. One (1) electronic copy of the location sketch for City Approval submitted in electronic format.
 - c. Draft copy of the job special provisions related to design elements for review. After corrections, the job special provisions shall be furnished in electronic format utilizing the City's latest word processing program.
 - d. One (1) legible electronic copy of engineering calculations and analysis.
 - e. One (1) electronic copy of a complete summary of quantities and estimate of construction costs.
 - f. One (1) electronic copy of Electronic Design Data.
 - g. One (1) electronic copy of a workday study showing the estimated number of workdays required to construct each project.
 - h. The CONSULTANT shall provide a 3D model of the project exported from Geopak Open Roads Designer software for the City's use.

IX Final Bridge Design

Furnish to the City fully checked design plans, job special provisions, design computations, and quantity computations for the structure(s). The CONSULTANT is expected to make the City aware of more economical design alternatives that may become apparent during the preparation of the final design.

- (A) The plans shall be complete and shall cover all parts of the structure they represent. The degree of detail shall be comparable to that furnished on typical plans prepared by the City. High resolution final signed and sealed plans, will be submitted in PDF format. Final signed and sealed plans shall be in pdf full size (34" x 22") format.
- (B) All construction changes made to the plans during construction of the project shall also be submitted electronically in PDF and ORD format.
- (C) The job special provisions shall be complete and describe all design features, construction procedures, or material requirements in the plans that are deviations from the latest edition of the ARDOT Guidelines and Manuals. The job special provisions shall include a table of contents sheet that is signed and sealed by a professional engineer registered in Arkansas. The signed and sealed job special provisions shall also be submitted in PDF format. Job Special Provisions shall also be submitted in Microsoft Word format.
- (D) The design computations and plans shall be acceptable to and will become the property of the City. The CONSULTANT shall submit design computations in PDF format. The files shall be transferred in a manner acceptable to City. The design computations shall contain an index file, with electronic links to the files contained within. Submittals shall include a set of design computations for each bridge. The design computations shall not be combined with the ORD or the PDF submittals.

X Construction Support

- (A) The CONSULTANT shall be available to the City to discuss and interpret plans and specifications during the bidding and construction phase of the project as determined necessary by the Engineer.
- (B) The CONSULTANT shall be available to provide Shop Drawing review of CONTRACTOR submittals pertaining to essential structural components and review any contractor's Value Engineering Proposals.
- (C) The CONSULTANT may be required to attend a pre-construction meeting, and a post construction meeting via TEAMS.
- (D) If issues arise during construction, there will be a direct line of communication established between the City and the CONSULTANT. The CONSULTANT will immediately inform the City of any recommendations or clarifications.

SERVICES PROVIDED BY THE CITY

The City will furnish to the Consultant without charge the following information:

- A. General design criteria.
- B. Available standard detail sheets in Microstation format.
- C. Traffic and accident data.
- D. Pavement Design Selection
- E. All necessary environmental/cultural services
- F. Right of way and easement acquisition.
- G. Coordinate all utility relocations with utility companies.
- H. Information on where to terminate the trail at a future trailhead near the N terminus of the project.

The Consultant shall proceed with the final design and detail plans in accordance with the data approved or furnished by the City which will meet with the general standards adopted by AASHTO and approved by the City.

Job No. J9P3808
Project Description: See below

EXHIBIT III
SHEET 1 OF 2

FEE SUMMARY - ESTIMATED COST PLUS FIXED FEE

Date: 7/19/2026

Job No.: TBD

Proj. Desc.: Jonesboro, AR Higginbottom Trail

BFW FEE ONLY (See below for subconsultants and their fee and tasks)

<u>Preliminary Plans</u>	<u>No. of Hours</u>		<u>Rate per Hour</u>		<u>Total</u>
Project Manager	28.0	Hours @	\$82.43	=	\$2,308.04
Professional Land Surveyor	20.0	Hours @	\$56.88	=	\$1,137.60
Instrument Man	40.0	Hours @	\$39.38	=	\$1,575.20
Landscape Architect	20.0	Hours @	\$40.39	=	\$807.80
Project Engineer	40.0	Hours @	\$78.06	=	\$3,122.40
Geotechnical Engineer	24.0	Hours @	\$72.55	=	\$1,741.20
Driller Lead	24.0	Hours @	\$30.35	=	\$728.40
Project Manager Bridge	20.0	Hours @	\$82.43	=	\$1,648.60
Staff Engineer Bridge	40.0	Hours @	\$42.57	=	\$1,702.80
Staff Engineer Hydraulics	40.0	Hours @	\$42.57	=	\$1,702.80
Administrative	4.0	Hours @	\$48.44	=	\$193.76
Subtotal	300.0				\$16,668.60

<u>RW Plans</u>	<u>No. of Hours</u>		<u>Rate per Hour</u>		<u>Total</u>
Project Manager	24.0	Hours @	\$82.43	=	\$1,978.32
Professional Land Surveyor	40.0	Hours @	\$56.88	=	\$2,275.20
Instrument Man	0.0	Hours @	\$39.38	=	\$0.00
Landscape Architect	12.0	Hours @	\$40.39	=	\$484.68
Project Engineer	40.0	Hours @	\$78.06	=	\$3,122.40
Geotechnical Engineer	0.0	Hours @	\$72.55	=	\$0.00
Driller Lead	0.0	Hours @	\$30.35	=	\$0.00
Project Manager Bridge	0.0	Hours @	\$82.43	=	\$0.00
Staff Engineer Bridge	0.0	Hours @	\$42.57	=	\$0.00
Staff Engineer Hydraulics	0.0	Hours @	\$42.57	=	\$0.00
Administrative	8.0	Hours @	\$48.44	=	\$387.52
Subtotal	124.0				\$8,248.12

<u>Final Plans</u>	<u>No. of Hours</u>		<u>Rate per Hour</u>		<u>Total</u>
Project Manager	24.0	Hours @	\$82.43	=	\$1,978.32
Professional Land Surveyor	4.0	Hours @	\$56.88	=	\$227.52
Instrument Man	0.0	Hours @	\$39.38	=	\$0.00
Landscape Architect	20.0	Hours @	\$40.39	=	\$807.80
Project Engineer	80.0	Hours @	\$78.06	=	\$6,244.80
Geotechnical Engineer	0.0	Hours @	\$72.55	=	\$0.00
Driller Lead	0.0	Hours @	\$30.35	=	\$0.00
Project Manager Bridge	28.0	Hours @	\$82.43	=	\$2,308.04
Staff Engineer Bridge	40.0	Hours @	\$42.57	=	\$1,702.80
Staff Engineer Hydraulics	24.0	Hours @	\$42.57	=	\$1,021.68
Administrative	4.0	Hours @	\$48.44	=	\$193.76
Subtotal	224.0				\$14,484.72

<u>No. of Hours</u>	<u>Rate per Hour</u>	<u>Total</u>
---------------------	----------------------	--------------

Job No. J9P3808
Project Description: See below

EXHIBIT III
SHEET 2 OF 2

FEE SUMMARY - ESTIMATED COST PLUS FIXED FEE

Date: 7/19/2026

Job No.: TBD

Proj. Desc.: Jonesboro, AR Higginbottom Trail

BFW FEE ONLY (See below for subconsultants and their fee and tasks)

<u>MANHOUR SUMMARY BY CLASSIFICATION</u>	<u>No. of Hours</u>	
Project Manager	76.0	Hours
Professional Land Surveyor	64.0	Hours
Instrument Man	40.0	Hours
Landscape Architect	52.0	Hours
Project Engineer	160.0	Hours
Geotechnical Engineer	24.0	Hours
Driller Lead	24.0	Hours
Project Manager Bridge	48.0	Hours
Staff Engineer Bridge	80.0	Hours
Staff Engineer Hydraulics	64.0	Hours
Administrative	16.0	Hours
Total Hours	648.0	Hours

Total Direct Salary Costs		\$39,401.44
Overhead on Salary Costs	176.89%	\$69,697.21
Subtotal (Salary + Overhead)		\$109,098.65
Fixed Fee	12.00%	\$13,091.84
FCCM (Salary only)	1.79%	\$705.29

Subconsultants

<u>Name</u>	<u>Fee</u>

Subconsultant Total

Subconsultant % of Total (Goal = N/A) **0.00%**

BFW Direct Expenses

<u>Description</u>	<u>Amount</u>	<u>Unit</u>	<u>Unit Cost</u>		<u>Total</u>
Mileage to Meetings/Site	900.00	miles @	\$0.67	=	\$603.00
Meals	16.00	meal @	\$20.00	=	\$320.00
Geotech Drilling Services	1.00	Lump Sum	\$6,000.00		\$6,000.00
Geotech Lab Services	1.00	Lump Sum	\$1,000.00		\$1,000.00
Survey Supplies	1.00	Lump Sum	\$1,000.00		\$1,000.00
Printing of check prints & calcs	300.00	pages @	\$0.07	=	\$21.00

BFW Direct Expenses Total \$8,944.00

TOTAL ESTIMATED ENGINEERING FEE = \$131,839.77

EXHIBIT IV

PERIOD OF SERVICE

The Consultant shall make submittals in accordance with the schedule described below:

Task	Date
Letting	June 2027
PSE	April 2027
100% Review Plans	March 2027
Final Env/Cult Clear	March 2027
ROW Plans/ROW RES	January 2027
Preliminary Bridge Layout	November 2026
Preliminary Roadway Plans	November 2026
NTP	August 2026

Construction support as needed post award – Anticipated for 10 months

PERIOD OF SERVICE – The total period of service including construction services is expected to be completed by June 2028.