

AMENDMENT TO AGREEMENT
For
PROFESSIONAL ENGINEERING SERVICES
Between
THE CITY OF COLUMBIA, MISSOURI
And
HDR ENGINEERING, INC.

THIS AMENDMENT TO AGREEMENT (hereinafter "Amendment") by and between the City of Columbia, Missouri (hereinafter "City"), and **HDR Engineering, INC.** (hereinafter "Engineer"), is entered into on the date of the last signatory noted below (the "Effective Date"). City and Engineer are each individually referred to herein as a "Party" and collectively as the "Parties".

WHEREAS, on City and Engineer previously entered into an Agreement for Professional Engineering Services (hereinafter "Agreement") for design of upgrades to the **McBaine Water Treatment Plant**;

WHEREAS, City has need for additional services to be performed by Engineer including construction phase services and additional services set forth in Engineer's Construction Phase Services McBaine Water Treatment Plant Improvement Project dated March 19, 2024 (hereinafter "Amended Scope of Work") attached hereto and incorporated herein as Exhibit A-1; and

WHEREAS, City and Engineer desire to amend the Agreement's scope of work to include the additional work needed by City and to amend the period of service accordingly.

AMENDMENTS


NOW, THEREFORE, in consideration of the mutual covenants set out herein the Parties agree to amend the Agreement as follows:

1. Within paragraph 5.3 of the Agreement, "550 calendar days" is removed and replaced with "1,630 calendar days".
2. Within paragraph 6.1.1.6, "**shall not exceed \$2,966,080**" is removed and replaced with "**shall not exceed \$4,715,420**".
3. The Agreement is amended to include the Amended Scope of Work, Exhibit A-1, which is attached hereto and incorporated herein.
4. The terms and conditions of the Agreement are modified as specifically set forth herein. All other terms of the Agreement shall remain unchanged and in full force and effect.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment by their duly authorized representatives as of the date of the last signatory to this Amendment.

CITY OF COLUMBIA, MISSOURI

By: De'Carlton Seewood, City Manager 

Date: _____

ATTESTED BY:

Sheela Amin, City Clerk


APPROVED AS TO FORM:

Nancy Thompson, City Counselor/ek

CERTIFICATION: I hereby certify that the above expenditure is within the purpose of the appropriation to which it is charged, Account No. **27188331-604992 W0236**, and that there is an unencumbered balance to the credit of such appropriation sufficient to pay therefor.

By: _____
Matthew Lue, Director of Finance

HDR ENGINEERING, INC

By: Cory Imhoff 
Cory Imhoff, Senior Vice President

Date: Mar 21, 2024

ATTEST:

By: Patrick Young
Patrick Young (Mar 21, 2024 10:39 CDT)

Name: Patrick Young, Senior Vice President

AMENDMENT NO.1

EXHIBIT "A-1"

HDR (CONSULTANT'S) SCOPE OF SERVICES

CONSTRUCTION PHASE SERVICES MCBAINE WATER TREATMENT PLANT IMPROVEMENT PROJECT March 19, 2024

PROJECT DESCRIPTION, TASK LIST, AND SCOPE OF SERVICES

PROJECT DESCRIPTION

This Amendment No.1 covers additional work requested by Owner to provide construction phase services for the McBaine Water Treatment Plant Improvement Project.

TASK LIST

Task 1 –Project Management During Construction

1. Project Initiation
2. Internal Management Reviews
3. Monthly Invoices
4. QA/QC

Task 2 – Construction Administration

1. Pre-Construction Meeting
2. Review Payment Applications
3. Progress Meetings
4. Materials Testing and Inspections

Task 3 – Shop Drawings and Submittals

1. Schedule Reviews
2. Submittal Reviews
3. Vendor O&M Manual Reviews

Task 4 – Contract Interpretations

1. RFI's
2. Field Orders
3. Work Change Directives
4. Change proposal Requests
5. Change Orders

Task 5 - Inspections

1. Multi-Discipline Engineer Inspections
2. Residential Project Representative
3. Substantial Completion Inspections/Punch Lists
4. Final Completion Inspections/Punch Lists
5. Final Acceptance and Closeout
- 1.

Task 6 – Training and Commissioning

1. Training
2. Facility Commissioning

Task 7 – Record (As-Built) Drawings

1. As-built Drawing Production

The Owner has requested that the following construction phase service Tasks be excluded from this Amendment. They are outlined as Optional Services that would require a future Amendment for addition to the project.

OPTIONAL/FUTURE TASK LIST

Optional Task 8 – Plantwide Operation and Maintenance Manual

1. Plantwide Operation and Maintenance Manual
2. Review Meeting with City

Optional Task 9 – Follow Up Services

1. Follow up Services through 1-yr Maintenance Period

SCOPE OF SERVICES

Task 1 – Project Management during Construction

The Engineer will perform project management activities throughout the project.

1. Project Initiation and Internal Kickoff:

Engineer will prepare a Project Guide including our internal Project Management Plan and Quality Management Plan. These documents define a roadmap for project execution and include an internal budgeting plan, staffing plan, HDR safety plan, and schedule.

2. Internal Management Reviews:

Engineer will conduct monthly management team review meetings. Engineer will conduct a Process Approach and Resource Review. This is a review of our project approach and internal resource plan to support project delivery efficiencies and quality.

3. Monthly Invoices

Engineer's Project Manager (PM) and accounting staff will prepare monthly invoices, throughout the project construction schedule duration.

4. Quality Assurance/Quality Control

Engineer's Project Manager and Quality Control Manager will audit the projects staff utilizing Engineer's internal QA/QC procedures. Checks on performance and project duties described in the contract will be reviewed once a month. The Quality Manager will perform a monthly on-site QA/QC review of the project inspector's work, project direction, and project documentation.

Deliverables / Clarifications:

- Monthly Invoices (Up to 36, including post construction follow up services).

City responsibilities:

- Provide review and processing of invoices (Up to 36).

Task 2 – Construction Administration

Engineer will provide construction administration support activities throughout the project:

1. Pre-construction Meeting:

Engineer shall prepare the agenda for the pre-construction meeting, facilitate the meeting, and prepare and distribute meeting minutes. The preconstruction meeting shall include a discussion of the Contractor's tentative schedules, procedures for transmittal and review of the Contractor's submittals including operations & maintenance (O&M) manuals, processing payment applications, critical work sequencing, Contract modification procedures, record documents, and the Contractor's responsibilities for safety.

2. Review Payment Applications:

Engineer will review and process the Contractor's monthly payment requests (up to 26), and schedule updates, in coordination with the Resident Project Representative (RPR). Engineer will review the stored material and assist with payroll reviews. Engineer's review of the payment applications will consist of an independent mathematical check of the Contractor's payment request. In addition, Engineer will receive, review, and comment on the Contractor's preconstruction, monthly, and final photographs.

3. Progress Meetings:

Engineer's Project Manager will attend up to 12 meetings in person and up to 24 virtually. Engineer's process lead will attend up to 18 meetings in person and 24 virtually. Engineer's construction administrator will attend up to 24 meetings in person and 24 virtually, and will work with Contractor to prepare agendas and review minutes from the meetings.

4. Materials Testing and Inspections:

Engineer will review material tests and inspection reports conducted by others, including the following Special Inspections/Testing, and report on deficiencies identified:

- Concrete
- Soils
- Welding Steel
- Welding Precast Connections
- Asphaltic Concrete Pavement Testing

Deliverables / Clarifications:

- Pre-Construction meeting minutes.
- Engineer Reviewed Contractor's Payment Applications (up to 26).
- Review of Monthly Construction photos. (up to 24)
- Review Monthly progress meeting agendas and minutes. (up to 24)
- Review Bi-monthly meeting agendas and minutes. Virtual (up to 24)

- Testing and inspection reviews
- RPR will assemble a brief weekly summary on the Friday report, to be put into a monthly summary of project milestones.

City Responsibilities:

- Provide signatures for Contractor Construction Contracts.
- Attend pre-construction meeting and monthly progress meetings.
- Provide timely review and processing of applications for payment.

Task 3 – Shop Drawings and Submittals

Engineer will provide administrative and technical support for the administrative review of contractor's submittals.

1. Schedule Reviews:

Engineer will receive, review, and comment on the Contractor's initial and updated construction schedule, schedule of values, and schedule of submittals and advise the City as to acceptability. Engineer will review the Contractor's schedules, activity sequence, and construction progress monthly as applicable to City's ability to keep existing facilities in operation and to meet the overall project schedule.

2. Submittal Reviews:

Engineer will review each technical submittal for conformance with the contract documents. Submittals will be reviewed by the discipline(s) that were involved in the design. Some submittals will require review by multiple engineers. The submittal will be returned with an action based on the completeness of the submittal package. Engineer's review shall be for general conformity to the Contract Documents and shall not relieve the Contractor of any of its contractual responsibilities. The submittals will receive one of the following actions, as indicated in the project specifications. They are as follows:

- FURNISH AS SUBMITTED (APPROVED).
- FURNISH AS NOTED (APPROVED AS NOTED).
- REVISE AND RESUBMIT.
- REJECTED (NOT APPROVED).
- REVIEW NOT REQUIRED.

3. Vendor and Operations and Maintenance Reviews:

Engineer will review vendor operation and maintenance manuals for conformance with the contract documents. Submittals will be reviewed by the discipline(s) that were involved in the design. Each operation and maintenance manual will generally be reviewed for:

- Equipment Record sheets.
- Supplier's Field Service Reports.
- Written descriptions of safety considerations relating to operation and maintenance procedures for materials and equipment.

- Procedures for proper operation and maintenance of materials and Equipment furnished, including manufacturer's recommended personal protection equipment, apparatus, and devices not furnished under the Contract.
- Description of recommended safety-related training for personnel.
- Bills of material or parts lists.
- Drawing, product data Submittal, written results of source quality activities, and other Submittals, updated to indicate as-installed condition.
- Electrical Schematics, Diagrams, and Information.

Engineer's review of operation and maintenance data expressly does not extend to adequacy, completeness, and accuracy of safety data sheets or other safety and protection practices and procedures indicated in the operation and maintenance data. The submittal coordinator will review the comments and work with the reviewers to supply comments. The submittal will be returned with an action based on the completeness of the submittal package. The submittals will receive one of the following actions, as indicated in the project specifications. They are as follows:

- FURNISH AS SUBMITTED (APPROVED).
- FURNISH AS NOTED (APPROVED AS NOTED).
- REVISE AND RESUBMIT.
- REJECTED (NOT APPROVED).
- REVIEW NOT REQUIRED.

Deliverables / Clarifications:

- Schedule reviews (up to 24)
- Submittal Reviews and tracking (up to 350 including resubmittals). If additional submittals are logged, an amendment for additional services will be negotiated.
- Operation and Maintenance Manual Reviews (up to 50)
- Once approved by the Engineer, one (1) electronic copy of the final submittals, shop drawings, and O&M manuals will be provided to the City for their records.

Contractor Responsibilities:

- Contractor will provide timely and accurate shop drawing submittals in accordance with the Contract Documents.
- Provide hard copies of final approved Operation and Maintenance manual in the amount required per the Contract.

City Responsibilities:

- Timely input on questions that may arise on submittals.
- Timely selection and approval of material samples and color selections.

Task 4 – Contract Interpretations

Engineer will perform the following activities related to contract interpretations:

1. Requests For Interpretation (RFIs):

Contractor will prepare and transmit requests for interpretation to Engineer. After the Contractor submits RFIs, Engineer will track when RFIs were received, engineers responsible for review, when they were sent back to the Contractor, and when they were acknowledged by the Contractor.

2. Field Orders (FOs):

Field Orders, when required, will be initiated, and issued by Engineer. Field Orders authorize minor changes in the Work but do not change the Contract Price or Contract Times. Field Orders will be in the form of Engineers Joint Contract Documents Committee document EJCDC C-942, "Field Order". Engineer will prepare FOs; Engineer will track when FOs were issued, when they were responded to, and when they were acknowledged by the contractor.

3. Work Change Directives (WCDs):

Work Change Directives, when issued, order additions, deletions, or revisions to the Work. When issued, Contractor shall promptly implement the changes ordered in the associated work Change Directive. Work Change Directives do not change the Contract Price or Contract Times but are evidence that the parties to the Contract expect that the change ordered or documented by the Work Change Directive will be incorporated in subsequently issued Change Order following agreement by the parties as to the Work Change Directive's effect on the Contract Price, Contract Times, or both. Work Change Directives will be in the form of EJCDC C-940, "Work Change Directive". Engineer will prepare WCDs; Engineer will track when WCDs were issued, when they were responded to, and when they were incorporated into a Change Proposal Request (CPR).

4. Change Proposal Requests (CPRs):

Contractor will prepare and transmit written change proposal to Engineer when they believe a change in the Contract Price, Contract Times, both, or other change to the terms of the Contract is required; or to appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. Engineer will track when CPRs were received, when they were responded to, and when they were approved by the City for inclusion into a change order.

5. Change Orders (COs):

Change Orders will be recommended by Engineer (when required by the General Conditions and or updated by Supplementary Conditions) and will be signed by City and Contractor (subject to the General Conditions and or updated by Supplementary Conditions related to a party withholding its signature from a contractually-required Change Order), to authorize additions, deletions, or revisions to the Work, changes to the Contract Price, changes in the or Contract Times, changes to the terms of the Contract, or some combination. Change Orders will be in the form of EJCDC C-941, "Change Order" form. Changes in Contract Price or Contract Times which are agreed to by the parties, including undisputed sum or amount of time for Work performed in accordance with a Work Change Directive, will be incorporated into a Change Order (CO) from the CPRs approved by the

Engineer and City using standard EJCDC change order forms. Once approved by the City, Engineer will issue one hardcopy of the CO to KDHE for approval.

Deliverables / Clarifications:

- RFIs will be transmitted to the Contractor and City electronically. (up to 150). If additional submittals are logged, an amendment for additional services will be negotiated.
- Field Orders will be transmitted to the Contractor and City electronically. (up to 80)
- WCDs will be transmitted to the Contractor and City electronically. (up to 30)
- CPRs will be transmitted to the Contractor and City electronically. (up to 25)
- COs will be transmitted to the Contractor and City electronically. (up to 15)

City Responsibilities:

- Provide timely input on questions that may arise.
- Provide timely review and approval of WCDs.
- Provide timely reviews and approvals of CPRs.
- Provide timely review and approval of COs.

Task 5 – Inspections

1. Multi-Discipline Engineer Inspections:

Engineer will conduct up to four special onsite inspections with multiple disciplines during construction to review the progress of critical work with the RPR.

2. Residential Project Representative:

Engineer will provide part-time RPR to observe the progress of the construction, in accordance with the technical specifications of the contract documents, for conformance with the project drawings and documents. The RPR will be an HDR employee. RPR is City's agent at the site(s), will act as directed by and under the supervision of City, and will confer with City and Engineer regarding RPR's actions. RPR's dealings in matters pertaining to the on-site Work shall, in general, be with Contractor keeping Engineer advised as necessary. RPR's dealings with Subcontractor(s) shall only be through or with the full knowledge and approval of Contractor. The duties of the RPR are further outlined in Contract Documents and Project Manual, Division 00, Specification Section 01 73 01, Article 10.03-Engineer's Status during Construction-Resident Project Representative, and include:

- Onsite RPR three (3) days per week for the duration of construction starting 30 days after notice to proceed through substantial completion (up to 23 months).
- Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.
- Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including

Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.

- Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
- Serve as Engineer's liaison with Contractor, working principally through Contractor's authorized representative or designee, to assist in providing information regarding the provisions and intent of the Contract Documents.
- Assist Engineer in serving as City's liaison with Contractor when Contractor's operations affect City's on-site operations.
- Assist in obtaining from City additional details or information, when required for Contractor's proper execution of the Work.
- Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
- Conduct on-site observations of the Work to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
- Observe whether Work in place appears to be defective.
- Observe whether Work in place should be uncovered for observation, or requires special testing, inspection, or approval.
- Observe Contractor-arranged inspections required by Laws and Regulations, including but not limited to (1) code-required tests and special inspections, and (2) those performed by public or other agencies having jurisdiction over the Work.
- Observe specific tests, inspections, and other field quality control required by the Contract Documents and performed by Contractor, Subcontractor, Supplier, or by testing or laboratories retained by of them.
- Report to Engineer whenever RPR believes that a portion of the Work is unsatisfactory, faulty, or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of inspection or test required to be made; and advise Engineer of Work that RPR believes should be corrected or rejected or should be uncovered for observation or requires special testing or inspection.
- Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work.
- Review Applications for Payment with Contractor and advise Contractor regarding quantities or extent of the Work eligible for payment.
- Confirm that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate personnel and that Contractor maintains adequate records thereof; and observe, record, and report to Engineer appropriate details relative to the test procedures and start-ups.
- Keep a diary or logbook recording daily Contractor hours on the job site(s), weather conditions, data relative to questions of Work Directive Changes, Change Orders, or changed conditions, list of job site visitors, daily activities, decisions, observations in general and specific observations in more detail as in the case of observing testing procedures; and send copies to Engineer.
- Take daily pictures of construction progress for the daily reports.

- Participate in Engineer's visits regarding inspection for Substantial Completion.
- Assist in the augmenting or amending the punch list of items to be completed or corrected prior to final inspection.
- Participate in Engineer's visit to the Site, in the company of City and Contractor, regarding completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.
- Observe whether items on the final punch list have been completed or corrected.
- Periodically during the Work, review with Contractor the status of Contractor's record documents required by the Contract Documents and advise Contractor on whether such record documents appear to comply with the Contract's requirements for record documents. Review final record documents submitted by Contractor.

The RPR shall not be responsible for or required to:

- Find all, or any specific element of, defective Work, for which Contractor remains solely responsible.
- Authorize a deviation from the Contract Documents or substitution of materials, equipment (including "or-equal" items), or procedures or sequences indicated in the Contract Documents.
- Shall not accept Shop Drawings or Sample submittals from anyone other than Contractor.
- Exceed limitations of Engineer's authority as set forth in the Contract Documents.
- Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.
- Undertake any responsibility for any part of the Contractor, Subcontractor, or Suppliers safety or OSHA compliance.
- Advise on, issue directions relative to, or assume responsibility over any aspect of the means, methods, techniques, sequences, or procedures of construction.
- Advise on, issue directions regarding, or assume control over security protection, or safety practices, precautions, and programs in connection with the activities or operations of City or Contractor.
- Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
- Authorize City to occupy the Project in whole or in part.
- Assist Contractor in maintaining up-to-date copy of the red-line drawings to be used for Record Drawings.

3. Substantial Completion Inspection/Punchlist:

Engineer will conduct initial inspections with appropriate City, Contractor, and Engineer personnel to determine if a structure or system is substantially complete for the purposes of partial utilization or beneficial use and submit to the Contractor a list of observed items requiring completion or correction. Inspections will be for one day. Once the punch list items have been resolved, provide a letter to City recommending that Substantial Completion be granted.

Engineer will coordinate with Missouri Department of Natural Resources for their inspections, water quality verification requirements (such as disinfection reports), Statement of Work Completed, and authorization to place new and modified facilities into service.

4. Final Completion Inspection/Punchlist:

Upon notice from the Contractor that the Project is complete, Engineering team will review the construction work and prepare a punch-list of those items to be completed or corrected before final completion of the Project is confirmed and submit to the Contractor the list of observed items requiring completion or correction. Once the punch list items have been resolved, provide a letter to City recommending that Final Completion be granted.

5. Final Acceptance and Closeout:

When the contractor has indicated that completion or correction of the items of work on the substantial completion punch-list is completed, conduct a multi-discipline final inspection to determine if the Work has been completed. Provide a punch-list of items to be completed prior to making final payment. Confirm that the final paperwork is provided for final payment, including but not limited to: lien waivers, occupational permits, closeout of other permits, etc.

Deliverables / Clarifications:

- Special Multi-Discipline inspections: assumes 4 trips for Process, 3 trips for Mechanical, 4 trips for Electrical, 2 trips for I&C, 3 trips for Structural, and 3 trips for Architecture.
- Substantial Completion Inspection: assumes 8 engineers attend a one-day site inspection.
- Develop a punch-list of substantial completion items.
- Prepare a substantial completion document.
- Final Completion Inspection: assumes 8 engineers attend a partial day site inspection.
- Develop a final punch list.
- Prepare MDNR Statement of Work Completed
- Prepare a notice of final completion.
- RPR on-site services are anticipated for part time inspection 3 days a week for 24 months through Substantial Completion for the WTP. RPR will prepare and file Daily Reports. RPR will conduct Quarterly Labor Standards Interviews.

City / Contractor responsibilities:

- Participate in substantial and final completion punch lists and inspections.
- Timely approval of substantial and final completion certificates.

Task 6 – Training and Commissioning

1. Training:

Training will consist of providing overall plant operational training related to the overall operation of improvements. This will include two (1) full day training sessions to be conducted at the McBaine Water Treatment Plant. Review materials will include the process flow diagram, process & instrumentation diagrams, and process plan and section drawings. The scope and fee are based on the level of effort reflected in the fee spreadsheet for training.

2. Facility Commissioning:

Engineer will provide overall facility commissioning assistance, working with the Contractor and plant operations staff to conduct the functional, performance, and integrated systems tests. The scope and fee are based on the level of effort reflected in the fee spreadsheet for commissioning.

City Responsibilities:

Attend all equipment on-site start up and training activities with Contractor and Equipment Vendors. Engineers equipment startup and training assistance scope and fee has been removed at Owner's request..

Task 7 – Record (As-Built) Drawings

1. Record Drawings:

HDR will provide the City with one (1) set of record drawings. These record drawings will be based on the red line set of drawings provided by the Contractor as well as notes from the RPR, developed while the RPR is on-site. The BIM model, CADD drawings and PDFs of the plan sets will be provided to the City upon completion of the construction project.

Deliverables / Clarifications:

- There are approximately 314 Sheets in the construction drawings. Assumes 200 sheets require record drawing revisions at 1 CADD/BIM hours and 1 Engineer hour per sheet. All sheets require seal removal and "Record Drawing" stamps. A total of 400 hours has been estimated for this effort. If additional sheets or hours are required, an amendment for additional services will be negotiated.
- Provide two (2) sets of half-size paper copies of the draft record drawings for city review.
- Provide five (5) sets of half-size paper copies and one (1) electronic copy of the final record drawings.

Contractor Responsibilities:

- Record as-constructed contract drawing redlines and maintain onsite throughout construction.
- Providing a compiled, complete, accurate and easily understood set of the as-constructed contract drawing redlines to Engineer.

City Responsibilities:

- Review the draft record (as-constructed) drawings and provide comments to Engineer.

OPTIONAL/FUTURE SCOPE OF SERVICES

OPTIONAL Task 8 – Plantwide Operation and Maintenance Manual

1. Plantwide Operation and Maintenance Manual:

Engineer will prepare and compile a plantwide Operation and Maintenance Manual for city review. This will include sections describing the overall facilities, and individual facilities modified by the improvement project. This will not include sections describing existing individual facilities that are not significantly modified by this contract. A Draft of the manual in hard copy and electronic format will be provided to the City for their review and comment. Upon completion of the City review meeting and receipt of City review comments, a final version will be submitted to the City in hard copy and electronic formats for the record.

2. Review Meeting with City:

A review meeting will be scheduled with key discipline engineers and City staff to review the draft manual.

Deliverables / Clarifications:

- Two (2) hard copies and one electronic copy of the draft O&M Manual to City.
- Five (5) hard copies and an electronic copy of the final O&M Manuals to City.

City responsibilities:

- Attend an initial O&M manual meeting with Engineer to discuss current operations and provide existing documentation on the current operations.
- Attend O&M manual review meeting with Engineer to review draft O&M manual.
- Conduct timely review of the draft O&M Manual and provide comments to Engineer.

OPTIONAL Task 9 – Follow Up Services

Engineer will perform the following up services.:

- Provide Consulting services for a period of one year following the final completion of the project. Assist Owner with operational issues, troubleshooting, and Contractor warranty support coordination. Engineer will conduct multi-discipline quarterly visits for issues that may occur. The scope and fee are based on the level of effort reflected in the fee spreadsheet for follow-up services.
- Submit the Record Drawings to MDNR if required.
- The Engineer will conduct an inspection just prior to one year following the final completion of the project and coordinate resolution of deficiencies with the Contractor.

Deliverables / Clarifications:

- Services related to operation of new facilities (1 Year).

TIME OF PERFORMANCE:

- The estimated performance period is 730 calendar days from Construction Contractor Notice to Proceed to Substantial Completion and an additional 60 days (790 total) to Final Completion and project close out for the WTP.
- Optional Services - Follow up services will continue for 365 additional days after final construction completion.

Note: If any additional services not explicitly outlined within this scope, schedule, and fee are required or requested by the City, a future amendment will be mutually agreed upon for the additional scope, schedule, and fee as necessary. This may include but is not limited to, an increase in the defined document quantities outlined above, additional inspections, additional meetings, or additional effort in general to support City staff in the construction administration efforts for this project. Any extension in the Contractor's construction schedule would require an amendment to this contract.

Client Name - City of Columbia, Missouri

McBaine Water Treatment Plant Improvement Project
Scope and Fee Estimate - 3/19/2024

Staff Name	Bunch, D	Stober, J	Saffels, R	Kuttil, N	Say, M	Patrick, D	Matole, R	Koirla, A	Bachynska, Y	Konda, T	Townsend, R	Kuntz, J	Wiseman, D	Hopson, A	Rickert, J	Fallon, V	Shumpert, M	Cooper, B	Becker, A	Dineen, M	Dady, C	Steel, J	Boyd, T
	Technical Specialist II/Senior Project Manager III	Technical Specialist II/Senior Project Manager III	Technical Specialist II/Senior Project Manager III	Engineer/Architect/Designer VI	Project/Design Manager III	Engineer/Architect/Designer III	Project/Design Manager II	Engineer/Architect/Designer I	Engineer/Architect/Designer I	Engineer/Architect/Designer VIII	Technical Specialist I/Senior Project Manager II	Cadd/GIS Technician III	Technical Specialist I/Senior Project Manager II	Engineer/Architect/Designer V	Engineer/Architect/Designer VI	Engineer/Architect/Designer V	Engineer/Architect/Designer V	Cadd/GIS Technician III	Cadd/GIS Technician V	Engineer/Architect/Designer I	Engineer/Architect/Designer IV	Engineer/Architect/Designer I	Engineer/Architect/Designer V
Escalated Billing Rate (based on Project Schedule)	\$339	\$339	\$339	\$245	\$219	\$162	\$193	\$135	\$135	\$287	\$313	\$146	\$313	\$214	\$245	\$214	\$214	\$146	\$182	\$135	\$188	\$135	\$214
TASKS																							
Task 1 - Project Management During Construction																							
1 Project Initiation		4	12		24		12																
2 Internal Management Reviews	24		24		24		24																
3 Monthly Invoices			8				24																
4 Quality Assurance/Quality Control					48																		
Subtotal Hours	24	4	44	0	96	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Dollars	\$8,128	\$1,355	\$14,901	\$0	\$21,007	\$0	\$11,566	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Task 1																							
Task 2 - Construction Administration																							
1 Pre-Construction Meeting		8	8	16	8		8		8												8		
2 Review Payment Applications					26		48		48														
3 Progress Meetings			144		240		168																
4 Materials Testing and Inspections					24		24						20	24									
Subtotal Hours	0	8	152	16	298	0	248	0	56	0	0	0	20	24	0	0	0	0	0	0	8	0	0
Subtotal Dollars	\$0	\$2,709	\$51,475	\$3,918	\$65,208	\$0	\$47,807	\$0	\$7,586	\$0	\$0	\$0	\$6,252	\$5,127	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500	\$0	\$0
Total Task 2																							
Task 3 - Shop Drawings and Submittals																							
1 Schedule Reviews			2		8		36		36				1		1					1	1		1
2 Submittal Review				213			213		53				28	112	39	157	25	25	14	56	50	151	140
3 Vendor O&M Manual Reviews				16	16		16		16		16		5	5	10	10	4	4	5	5	16	16	40
Subtotal Hours	0	0	2	229	24	0	265	0	105	0	16	0	34	117	50	167	29	29	19	62	67	167	181
Subtotal Dollars	\$0	\$0	\$677	\$56,026	\$5,252	\$0	\$51,045	\$0	\$14,250	\$0	\$5,002	\$0	\$10,628	\$24,992	\$12,292	\$35,630	\$6,237	\$4,260	\$3,465	\$8,399	\$12,642	\$22,649	\$38,663
Total Task 3																							
Task 4 - Contract Interpretations																							
1 RFI's			10	20	20	30	30	20	20	20	30		12	48	17	67	11	11	6	24	22	65	90
2 Field Orders			8	16	16	24	24	16	16	16	24		10	38	13	54	9	9	5	19	17	52	72
3 Work Change Directives			3	6	6	9	9	6	6	6	9		4	14	5	20	3	3	2	7	6	19	27
4 Change Proposal Requests			3	7	7	10	10	7	7	7	10		4	16	6	22	4	4	2	8	7	22	30
5 Change Orders			2	4	4	6	6	4	4	4	6		2	10	3	13	2	2	1	5	4	13	18
Subtotal Hours	0	0	26	52	52	78	78	52	52	52	78	0	32	126	44	177	28	28	16	63	57	171	237
Subtotal Dollars	\$0	\$0	\$8,829	\$12,768	\$11,409	\$12,632	\$15,077	\$7,063	\$7,063	\$14,941	\$24,448	\$0	\$9,878	\$27,000	\$10,833	\$37,800	\$6,075	\$4,149	\$2,881	\$8,561	\$10,668	\$23,115	\$50,626
Total Task 4																							
Task 5 - Inspections																							
1 Multi-Discipline Engineer Inspections			32	96			32		32				8	16	36					36	32		16
2 Residential Project Representative																							
3 Substantial Completion Inspections/Punch Lists			16			12	16							12	16					12	12		12
4 Final Completion Inspections/Punch Lists					12	8	12							8	12					8	8		8
5 Final Acceptance and Closeout			8		16	4	16							4	4					4	4		4
Subtotal Hours	0	0	56	96	28	24	76	0	32	0	0	0	8	40	68	0	0	0	0	60	56	0	40
Subtotal Dollars	\$0	\$0	\$18,964	\$23,508	\$6,127	\$3,876	\$14,651	\$0	\$4,335	\$0	\$0	\$0	\$2,501	\$8,544	\$16,651	\$0	\$0	\$0	\$0	\$8,128	\$10,503	\$0	\$8,544
Total Task 5																							
Task 6 - Training and Commissioning																							
1 Training			16	20	24		32		24												8		8
2 Facility Commissioning			40	20	40	20	40				16												
Subtotal Hours	0	0	56	40	64	20	72	0	24	0	16	0	0	0	0	0	0	0	0	0	8	0	8
Subtotal Dollars	\$0	\$0	\$18,964	\$9,795	\$14,004	\$3,230	\$13,879	\$0	\$3,251	\$0	\$5,002	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500	\$0	\$1,709
Total Task 6																							
Task 7 - Record (As-Built) Drawings																							
1 As-built Drawing Production					48		12					200		20	30					20	50		20
Subtotal Hours	0	0	0	0	48	0	12	0	0	0	0	200	0	20	30	0	0	0	0	20	50	0	20
Subtotal Dollars	\$0	\$0	\$0	\$0	\$10,503	\$0	\$2,313	\$0	\$0	\$0	\$0	\$29,176	\$0	\$4,272	\$7,346	\$0	\$0	\$0	\$0	\$2,709	\$9,378	\$0	\$4,272
Total Task 7																							
OPTIONAL SERVICES																							
Task 8 - Plantwide Operation and Maintenance Manual (Optional)																							
1 Plantwide Operation and Maintenance Manual		8	20	12	20	60	20	4	60	12	8		4		4		4			12	24		24
2 Review Meeting with City		8	8		8	8	8		8											8		8	
Subtotal Hours	0	16	28	12	28	68	28	4	68	12	8	0	4	0	4	0	4	0	0	12	32	0	32
Subtotal Dollars	\$0	\$5,418	\$9,482	\$2,938	\$6,127	\$10,983	\$5,398	\$542	\$9,211	\$3,439	\$2,501	\$0	\$1,250	\$0	\$979	\$0	\$854	\$0	\$0	\$1,626	\$6,002	\$0	\$6,836
Total Task 8																							
Task 9 - Follow Up Services (Optional)																							
1 Follow up Services through 1-yr Maintenance Period			16		40	16	40						16		16					16	16		16
Subtotal Hours	0	0	16	0	40	16	40	0	0	0	0	0	16	0	16	0	0	0	0	16	16	0	16
Subtotal Dollars	\$0	\$0	\$5,418	\$0	\$8,753	\$2,584	\$7,711	\$0	\$0	\$0	\$0	\$0	\$5,002	\$0	\$3,918	\$0	\$0	\$0	\$0	\$2,167	\$3,001	\$0	\$3,418
Total Task 9																							
Total Hours	24	28	380	445	678	206	879	56	337	64	118	200	114	327	212	344	62	58	35	233	294	338	534
Total Billing Amount	\$8,128	\$9,482	\$128,711	\$108,952	\$148,391	\$33,305	\$169,447	\$7,605	\$45,696	\$18,379	\$36,952	\$29,176	\$35,511	\$69,936	\$52,020	\$73,431	\$13,167	\$8,409	\$6,346	\$31,589	\$55,195	\$45,764	\$114,068

Nofsinger, J	Davies, A	Campbell, J	Mix, M	Total HDR Hours	HDR Expenses	ES&S Allowance	Total
Engineering Support Staff I	Engineering Support Staff III	Engineering Support Staff III	Technician/Construction Inspector III				
\$109	\$172	\$172	\$146				
6	6	6		70			\$15,703
48	24	12		180			\$37,575
36	48			116			\$19,527
				48			\$10,503
90	78	18	0	414			
\$9,847	\$13,411	\$3,095	\$0		\$0	\$0	\$83,308
							\$83,308
				64	\$1,500		\$16,713
				122			\$21,444
				652	\$3,600		\$137,268
				92			\$21,257
0	0	0	0	830			
\$0	\$0	\$0	\$0		\$5,100	\$0	\$196,682
							\$196,682
				87			\$15,338
				1276.8		\$25,000	\$280,144
				200			\$41,628
0	0	0	0	1564			
\$0	\$0	\$0	\$0		\$0	\$25,000	\$337,110
							\$337,110
150				720		\$10,000	\$142,544
80				536		\$5,000	\$106,659
30				201		\$5,000	\$43,122
25				215		\$3,000	\$44,446
15				129		\$2,000	\$26,868
300	0	0	0	1801			
\$32,823	\$0	\$0	\$0		\$0	\$25,000	\$363,638
							\$363,638
				336	\$10,000		\$83,878
			2800	2800	\$73,000		\$481,464
				108	\$2,000		\$25,362
				76	\$2,000		\$17,172
				64	\$500		\$14,421
0	0	0	2800	3384			
\$0	\$0	\$0	\$408,464		\$87,500	\$0	\$622,296
							\$622,296
				132	\$2,000		\$30,197
				176	\$2,000		\$45,139
0	0	0	0	308			
\$0	\$0	\$0	\$0		\$4,000	\$0	\$75,335
							\$75,335
				400	\$1,000		\$70,970
0	0	0	0	400			
\$0	\$0	\$0	\$0		\$1,000	\$0	\$70,970
							\$70,970
	12			308			\$61,353
				64	\$1,000		\$15,296
0	12	0	0	372			
\$0	\$2,063	\$0	\$0		\$1,000	\$0	\$76,649
							\$76,649
				192	\$1,000		\$42,972
0	0	0	0	192			
\$0	\$0	\$0	\$0		\$1,000	\$0	\$42,972
							\$42,972
390	90	18	2,800	9,265			\$42,972
\$42,670	\$15,474	\$3,095	\$408,464		\$99,600	\$50,000	\$1,868,961

ESTIMATED BASE PROJECT FEE	\$1,749,340
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OPTIONAL SERVICES (TO BE AUTHORIZED BY AMENDMENT)	\$119,621
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Estimated Project Fee including Optional Services	\$1,868,961
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HDR Engineering, Inc.
2024 Hourly Billing Rates
Effective through 12/31/2024

Billing rates will be updated on an annual basis. Employees may move within categories at any time throughout the year based on any salary adjustments incurred by employees. The rates listed below do not include reimbursable expenses.

Description	Billing Rate/Hour
Technical Specialist II/Senior Project Manager III	\$325
Technical Specialist I/Senior Project Manager II	\$300
Senior Project Manager I	\$280
Project/Design Manager IV	\$235
Project/Design Manager III	\$210
Project/Design Manager II	\$185
Project/Design Manager I	\$165
Engineer/Architect/Designer VIII	\$275
Engineer/Architect/Designer VII	\$260
Engineer/Architect/Designer VI	\$235
Engineer/Architect/Designer V	\$205
Engineer/Architect/Designer IV	\$180
Engineer/Architect/Designer III	\$155
Engineer/Architect/Designer II	\$140
Engineer/Architect/Designer I	\$130
Cadd/BIM Manager	\$225
Model Manager/Cadd/GIS Technician VI	\$195
Cadd/GIS Technician V	\$175
Cadd/GIS Technician IV	\$155
Cadd/GIS Technician III	\$140
Cadd/GIS Technician II	\$115
Cadd/GIS Technician I	\$100
Environmental/Water Quality Scientist/Modeler V	\$250
Environmental/Water Quality Scientist/Modeler IV	\$210
Environmental/Water Quality Scientist/Modeler III	\$180
Environmental/Water Quality Scientist/Modeler II	\$140
Environmental/Water Quality Scientist/Modeler I	\$120
Survey Manager	\$190
Construction Manager	\$220
Survey Technician/Construction Inspector V	\$185
Survey Technician/Construction Inspector IV	\$160
Survey Technician/Construction Inspector III	\$140
Survey Technician/Construction Inspector II	\$120
Survey Technician/Construction Inspector I	\$100
Public Involvement/Communications/Graphic Designer IV	\$210
Public Involvement/Communications/Graphic Designer III	\$175
Public Involvement/Communications/Graphic Designer II	\$150
Public Involvement/Communications/Graphic Designer I	\$125
Engineering Support Staff III	\$165
Engineering Support Staff II	\$130
Engineering Support Staff I	\$105
Admin Assistant	\$90

Direct Expenses

Personal Vehicle Mileage	CURRENT IRS RATE
Fleet Vehicle Mileage	\$0.75/mile
Printing	AT COST
Travel	AT COST
Subconsultants	AT COST