



## Board of Aldermen Request for Action

**MEETING DATE:** 11/3/2026

**DEPARTMENT:** Public Works

**AGENDA ITEM:** Resolution 1646, Amendment No. 1 to the agreement with HDR for Design Services for the Wastewater Treatment Plant Expansion Phase 1.

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### REQUESTED BOARD ACTION

A motion to approve Resolution 1646, authorizing Amendment No. 1 to the agreement with HDR Engineering for design services for the Wastewater Treatment Plant Expansion Phase 1.

### SUMMARY

The City's wastewater treatment plant has a rated capacity of 1.125 million gallons per day (MGD), with current average daily flows of approximately 1.0 MGD. As previously discussed with the Board, anticipated growth, approved plats, and planned developments are expected to exceed the plant's existing capacity. To address future treatment needs, the City is pursuing an expansion of the facility, with Phase 1 anticipated to increase treatment capacity through the construction of a new sequencing batch reactor (SBR). The estimated construction cost is \$5.5 million.

At the January 20, 2026, Board work session, the Construction Manager at Risk (CMAR) delivery method was presented as the proposed approach for the wastewater treatment plant expansion project. Under this delivery method, the engineer first develops the design to approximately 20–30% completion, providing sufficient information to solicit qualifications and select a CMAR contractor. The selected CMAR then works with the City and engineer to evaluate constructability, scheduling, and costs. The CMAR also solicits subcontractor bids for project components, including electrical, mechanical, and civil work, and develops a Guaranteed Maximum Price (GMP) for the project. The City will have access to the subcontractor bids for review.

On March 3, 2026, the City entered into an agreement with HDR to complete the preliminary design of Phase 1, advancing the project to the 30% design stage. Amendment No. 1 will provide for completion of the remaining design, from 30% to 100%, to further define the project scope and support the project's progression toward construction.

The original agreement was for \$122,955. Amendment No. 1 for detailed design services is \$440,264, bringing the total agreement amount to \$563,219. HDR has also completed the facility plan for the wastewater treatment plant, which was submitted to the Missouri Department of Natural Resources (DNR) as part of the City's

State Revolving Fund (SRF) loan application. The SRF program provides low-interest financing for eligible public infrastructure projects.

### **PREVIOUS ACTION**

On March 3, 2026, the Board approved Resolution 1556, authorizing an agreement with HDR for preliminary design services for the Wastewater Treatment Plant Expansion Project.

Discussion of CMAR and need for plant expansion at work session January 20, 2026. This project is included in the CWWS Capital Improvement Plan.

### **POLICY ISSUE**

Maintaining infrastructure

### **FINANCIAL CONSIDERATIONS**

Design for this project is included in the CWWS CIP in FY2027.

### **ATTACHMENTS**

- |                                                                        |                                   |
|------------------------------------------------------------------------|-----------------------------------|
| <input type="checkbox"/> Ordinance                                     | <input type="checkbox"/> Contract |
| <input checked="" type="checkbox"/> Resolution                         | <input type="checkbox"/> Plans    |
| <input type="checkbox"/> Staff Report                                  | <input type="checkbox"/> Minutes  |
| <input checked="" type="checkbox"/> Other: Agreement / Amendment No. 1 |                                   |

## **RESOLUTION 1646**

### **A RESOLUTION AUTHORIZING AMENDMENT NO. 1 TO THE AGREEMENT WITH HDR ENGINEERING FOR DESIGN SERVICES FOR THE WASTEWATER TREATMENT PLANT EXPANSION PHASE 1**

**WHEREAS**, the City of Smithville owns and operates a wastewater treatment plant that is approaching its existing treatment capacity and will require expansion to accommodate anticipated community growth and future wastewater treatment needs; and

**WHEREAS**, on March 3, 2026, the Board of Aldermen approved Resolution 1556, authorizing an agreement with HDR Engineering for preliminary design services for Phase 1 of the Wastewater Treatment Plant Expansion Project in the amount of \$122,955; and

**WHEREAS**, the City intends to utilize the Construction Manager at Risk (CMAR) delivery method for the project, which requires further development of the design to support project planning, constructability reviews, scheduling, and cost evaluation; and

**WHEREAS**, HDR Engineering has submitted Amendment No. 1 to complete the detailed design from 30% to 100% for Phase 1 of the Wastewater Treatment Plant Expansion Project in the amount of \$440,264; and approval of Amendment No. 1 will increase the total agreement amount \$563,219; and

**WHEREAS**, funding for the design services is included in the Combined Water and Wastewater System Capital Improvement Plan for FY2027.

### **NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF SMITHVILLE, MISSOURI, AS FOLLOWS:**

**THAT** Amendment No. 1 to the agreement with HDR Engineering for design services for the Wastewater Treatment Plant Expansion Project – Phase 1, in the amount of \$440,264, is hereby approved, bringing the total agreement amount to \$563,219, substantially in the form attached hereto as **Exhibit A**, incorporated herein by reference as if fully set forth herein.

**FURTHER THAT** the Mayor is authorized to execute Amendment No. 1 and any related documents necessary to carry out the intent of this Resolution on behalf of the City.

**PASSED AND ADOPTED** by the Board of Aldermen and **APPROVED** by the Mayor of the City of Smithville, Missouri, this 3rd day of November, 2026.

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Damien Boley, Mayor

**ATTEST:**

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Linda Drummond, City Clerk

AMENDMENT 01 TO AGREEMENT  
FOR  
ENGINEERING SERVICES

WHEREAS:

HDR ENGINEERING, INC. ("HDR") entered into an Agreement on March 3rd, 2026, to perform engineering services for the City of Smithville, Missouri ("Owner") for the City of Smithville Wastewater Treatment Plant Phase 1 Improvements ("Project");

The Owner desires to amend this Agreement in order for HDR to perform services beyond those previously contemplated;

HDR shall amend the agreement to perform additional engineering services.

NOW, THEREFORE, HDR and Owner do hereby agree:

The Agreement and the terms and conditions therein shall remain unchanged other than those sections and exhibits listed below;

Section I. Scope of Services

Additional Engineering Services: Exhibit A of original Agreement shall be amended to include Exhibits A.1, A.2, A.3, A.4 & A.5 attached hereto.

Section IV: Compensation

Compensation for HDR's services for Additional Services described in this amendment shall be on the basis of Time and Materials with a not-to-exceed amount of \$440,264.00. See Exhibit A.5.

|                              |               |
|------------------------------|---------------|
| Original Agreement:          | \$ 122,955.00 |
| Amendment 1-Detailed Design: | \$ 440,264.00 |
| Total Fee:                   | \$ 563,219.00 |

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the day and year written below:

HDR ENGINEERING, INC. ("HDR")

CITY OF SMITHVILLE, MO ("OWNER")

By: 

By: \_\_\_\_\_

Name: Cory M. Imhoff

Name: Damien Boley

Title: Sr. Vice President

Title: Mayor

Date: 10/21/2026

Date: November 3, 2026

**Exhibit A shall be amended to include Exhibits A.1, A.2, A.3, A.4 & A.5**

**Exhibit A.1  
City of Smithville, MO  
Wastewater Treatment Plant - Phase 1 Improvements Amendment 1  
Scope of Services – Detailed Design**

**Task 3- Project Administration and Management**

1. Update project management plan.
2. Provide monthly invoice and progress report. The progress report shall include an updated schedule, summary of work completed, outstanding project issues, potential scope adjustments, and a comparison of work completed against the invoiced amount in an S Curve.
3. Provide project management and administration during the project.
4. Attend monthly virtual City coordination meetings

**Task 4 - 60% Design**

1. Conduct an internal design kickoff meeting with a focus on discipline coordination.
2. Complete and submit a 60% Design set of drawings and specifications.
3. Internal quality control will be completed by HDR.
4. Provide up to two (2) hard copies and an electronic copy for review. 60% design will include completed blower and SBR specifications and drawings.
5. Complete 5 geotechnical borings to facilitate the project structural design. Lab testing will be performed to classify soils and obtain geotechnical physical characteristics for soils and rocks that may include: Moisture content, dry unit weight, grain size analysis, Atterberg limits, unconfined compression for soils, standard Proctor, one-dimension consolidate test, three-point triaxial compression, and corrosivity tests.
6. Complete a survey (11 shots) of the existing structures to validate the developed hydraulic profile as well as survey the existing area currently receiving biosolids.
7. Address Client and QC comments.
8. Conduct an in-person 60% workshop to review the design and review any comments received.
9. Update EOPPC based on Class 2 (-10% to +15%) estimating guidelines per AACE International. Value engineering effort are included in the EOPCC task in the fee sheet.
10. Deliverables: Geotech Report, Survey Report, 60% plans, and 60% specifications.

**Task 5 – Final (100% and 90%) Design**

1. Complete and submit a 90% Design set of drawings and specifications including quality control. Provide up to two (2) hard copies and an electronic copy for review.
2. Conduct a virtual 90% workshop to review the design and review any comments received.
3. Address Client and QC comments.
4. Complete and submit a final 100% Design set of drawings and specifications. .
5. Finalize the EOPPC including anticipated O&M costs based on Class 1 (-5% to +20%) estimating guidelines per AACE International.
6. Deliverables: 90% plans and specifications, 100% plans and specifications.

**Task 6 – GMP Negotiations and CMAR Design Coordination**

1. Conduct design reviews with a focus on constructability and staying within the construction budget with CMAR at each major design deliverable.
2. Conduct a two-hour workshop prior to the development of the baseline cost model to establish level of detail, potential contingencies, potential bid packages, draft factors for package bid evaluation, and other factor to allow for collaborative GMP negotiations.
3. Review the baseline cost model developed at 60% by the CMAR.
4. Assist the City in reviewing and negotiating the two (2) GMP packages after the 90% design is complete.
5. Collaboratively develop a construction schedule with the CMAR and City taking into account project funding requirements.

## **Task 7 – SRF Coordination**

1. SRF coordination from CMAR on-boarding phase through bond closing for up to 10 hours over 3 months.

### **Assumptions**

1. City will provide comments within 2 weeks of receiving each design deliverable.
2. VE items will be refinements in the previous design and not complete modifications.
3. O&M costs are developed for a period of 20 years prior to replacement of the new asset including parametric costs for regular maintenance and power consumption. No additional chemical usage is anticipated by the new equipment.
4. Base contract has sufficient time for operating permit changes
5. Design Deliverables are based upon the scope developed in the Basis of Design Report: new SBR 4 including relevant junction and splitter structures, site electrical upgrades including a new feed and transformer, and truck filling station for sludge storage basin 2.
6. Preliminary Drawings and specifications lists were developed by HDR and in Exhibits A.2 and A.3.
7. Design Deliverable packages will be divided into long lead time equipment and balance of work in collaboration with the onboard CMAR.
8. Design on Work in the long lead time GMP maybe accelerated based upon the current lead times of equipment.
9. SRF coordination will be 12 hours per month for 7 months
10. Existing SCADA System and Control Panel can be utilized
11. No Construction Phase Services

## Exhibit A.2 - Drawing List

1. GENERAL (SERIES 00)
  - a. COVER SHEET
  - b. DRAWING INDEX
  - c. ABBREVIATIONS
  - d. SYMBOLS, PIPING SYSTEMS, AND EQUIPMENT IDENTIFICATION
  - e. CIVIL LEGEND
  - f. ELECTRICAL LEGEND
  - g. INSTRUMENTATION LEGEND
  - h. PROCESS FLOW SCHEMATIC
  - i. HYDRAULIC PROFILE
  - j. ELECTRICAL ONE-LINE
  - k. SYSTEM ARCHITECTURE DIAGRAM
  - l. HEADWORKS AND TRUCK FILL STATION P&IDS
  - m. SBR 4 VALVE VAULTS P&ID
  - n. SBR NO. 4 P&ID
2. STANDARD DETAILS (SERIES 02)
  - a. CIVIL STANDARD DETAILS
  - b. CIVIL STANDARD DETAILS
  - c. STRUCTURAL NOTES
  - d. STRUCTURAL STANDARD DETAILS
  - e. STRUCTURAL STANDARD DETAILS
  - f. STRUCTURAL STANDARD DETAILS
  - g. STRUCTURAL MISC. ELEVATED WALKWAYS DETAILS
  - h. PROCESS STANDARD DETAILS
  - i. PROCESS STANDARD DETAILS
  - j. ELECTRICAL STANDARD DETAILS
  - k. ELECTRICAL STANDARD DETAILS AND SCHEDULES
  - l. ELECTRICAL OVERALL GROUNDING DIAGRAM
  - m. ELECTRICAL AREA CLASSIFICATION AND LUMINAIRE SCHEDULES
  - n. INSTRUMENTATION STANDARD DETAILS
3. SITE WORK SERIES (10)
  - a. OVERALL SURVEY CONTROL AND DEMOLITION PLAN
  - b. SITE PLAN - OVERALL
  - c. EROSION CONTROL PLAN - OVERALL
  - d. GRADING PLAN - AREA 1
  - e. SITE PLAN - AREA 1
  - f. SITE - COORDINATE DATA SHEET
  - g. SITE PIPING
  - h. SITE PIPING - COORDINATE DATA SHEET
  - i. SITE ELECTRICAL
  - j. TRUCK FILLING
  - k. SITE ELECTRICAL - ENLARGED AREA
4. SBR NO. 4 (SERIES 52)
  - a. PERSPECTIVE VIEW
  - b. STRUCTURAL PLAN
  - c. STRUCTURAL SECTIONS
  - d. INFLUENT SPLITTER BOX PLAN AND SECTION
  - e. PROCESS PLAN
  - f. PROCESS SECTIONS

- g. PROCESS SECTIONS
- h. ELECTRICAL ONE LINE (SBR 4) POWER AND LIGHTING PANEL
- i. ELECTRICAL POWER AND LIGHTING PLAN
- j. CONTROL ONE LINE DIAGRAM
- 5. EFFLUENT VALVE VAULT NO 2 (SERIES 61)
  - a. DEMOLITION PLAN AND SECTION
  - b. UNIVERSAL PLANS
  - c. UNIVERSAL SECTIONS AND DETAILS

**Exhibit A.3 Technical Specifications List**

1. HDR standard front ends - SRF
2. Coordination with owners operations
3. Measurement and payment
4. Progress payment procedures
5. Substitution procedures
6. Construction progress schedule
7. Submittal procedures
8. Stormwater pollution prevention plan and permit
9. Testing and disinfecting hydraulic structures (formerly was testing of concrete structures for watertightness)
10. Code-required special inspections and procedures
11. Temporary controls
12. Common work results for equipment
13. Product delivery requirements
14. Product storage and handling requirements
15. Protection of the work and property
16. Openings and penetrations in construction
17. Cutting and patching
18. Cleaning
19. Checkout and start-up procedures
20. Closeout requirements
21. Operation and maintenance data
22. Demolition
23. Concrete testing and inspection
24. Formwork
25. Anchorage to concrete
26. Reinforcement
27. Concrete, materials and proportioning
28. Concrete mixing, placing, jointing, and curing
29. Concrete finishing and repair of surface defects
30. Precast and prestressed concrete
31. Metal fabrications
32. Welded aluminum railings
33. Fluid applied waterproofing
34. Joint sealants
35. Access doors
36. High performance industrial coatings
37. Identification devices
38. Signage
39. Common work results for electrical
40. Low-voltage electrical power conductors and cables
41. Grounding and bonding
42. Raceways and boxes for electrical systems
43. Electrical - exterior underground
44. Acceptance testing
45. Electrical control components
46. Low-voltage distribution transformers
47. Switchboards
48. Panelboards
49. Motor control equipment

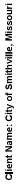
50. Wiring devices
51. Low-voltage circuit protective devices
52. Enclosed switches
53. Variable frequency drives - low voltage
54. Finish grading
55. Earth moving
56. Granular paving
57. Flexible paving
58. Concrete curb and gutter
59. Concrete sidewalk and steps
60. Chain link fence and gates
61. Seeding, sodding and landscaping
62. Stormwater gravity piping
63. Subdrainage
64. Pipe and pipe fittings - basic requirements
65. Pipe support systems
66. Pipe - ductile
67. Pipe - stainless steel
68. Pipe - plastic
69. Pipe - fiberglass
70. Common requirements for process and utility valves
71. Miscellaneous valves
72. Actuators for process valves and gates
73. Fabricated stainless steel slide gates
74. Gate valves
75. Plug valves
76. Ball valves
77. Butterfly valves
78. Check valves
79. Heat tracing cable
80. Pipe, duct and equipment insulation
81. Water control gates
82. Process control systems general requirements
83. Process control system testing
84. Surge protection devices for instrumentation and control equipment
85. Process control system input-output list
86. Process control descriptions
87. Computer system hardware and ancillaries
88. Programmable logic controllers
89. Network equipment
90. Telemetry systems
91. Control system equipment panels and racks
92. Uninterruptible power supply
93. Process control (hmi) software
94. Configuration of hmi software and reports
95. Flow instrumentation
96. Level instrumentation
97. Pressure instrumentation
98. Temperature instrumentation
99. Process liquid analytical measurement
100. Panel mounted instruments

- 101. Hoists, trolleys, monorails, and jib cranes
- 102. Rotary lobe blowers
- 103. Common work results for process liquid pumps
- 104. Pumping equipment - submersible end-suction sewage pumps
- 105. Sequencing Batch Reactor

#### **Exhibit A.4**

Upon receipt of written authorization to proceed. ENGINEER shall perform the services described in Exhibit A.1. Receipt of a signed agreement which shall serve as Engineer's Notice to Proceed.

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| Task 3 Project Management                            | Ongoing               |
| Task 4 60% Design                                    | 90 Days               |
| Task 5 Final Design                                  | 100 Days after Task 4 |
| Task 6 GMP Negotiations and CMAR Design Coordination | 200 Days              |
| Task 7 SRF Coordination                              | 200 Days              |



**Client Name:** City of Smithville, Missouri

## EXHIBIT A.5

[illegible]

**HDR Engineering, Inc.**  
**2026 Hourly Billing Rates**  
**Effective through 12/26/2026**

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.

| <b>Description</b>                                     | <b>Billing Rate/Hour</b> |
|--------------------------------------------------------|--------------------------|
| Senior Technical Specialist/Project Principal          | \$340                    |
| Technical Specialist/Senior Project Manager III        | \$325                    |
| Technical Specialist/Senior Project Manager II         | \$300                    |
| Technical Specialist/Senior Project Manager I          | \$285                    |
| Project/Design Manager V                               | \$265                    |
| Project/Design Manager IV                              | \$245                    |
| Project/Design Manager III                             | \$220                    |
| Project/Design Manager II                              | \$195                    |
| Project/Design Manager I                               | \$175                    |
| Engineer/Architect/Designer X                          | \$275                    |
| Engineer/Architect/Designer IX                         | \$260                    |
| Engineer/Architect/Designer VIII                       | \$240                    |
| Engineer/Architect/Designer VII                        | \$225                    |
| Engineer/Architect/Designer VI                         | \$210                    |
| Engineer/Architect/Designer V                          | \$190                    |
| Engineer/Architect/Designer IV                         | \$170                    |
| Engineer/Architect/Designer III                        | \$155                    |
| Engineer/Architect/Designer II                         | \$140                    |
| Engineer/Architect/Designer I                          | \$130                    |
| Cadd/BIM Manager II                                    | \$250                    |
| Model Manager II/Cadd/BIM Manager I                    | \$225                    |
| Model Manager I/Cadd/GIS Technician VII                | \$200                    |
| Cadd/GIS Technician VI                                 | \$185                    |
| Cadd/GIS Technician V                                  | \$170                    |
| Cadd/GIS Technician IV                                 | \$155                    |
| Cadd/GIS Technician III                                | \$140                    |
| Cadd/GIS Technician II                                 | \$120                    |
| 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       | \$150                    |
| Environmental/Water Quality Scientist/Modeler I        | \$120                    |
| Survey Manager                                         | \$225                    |
| Construction Manager II                                | \$250                    |
| Construction Manager I                                 | \$235                    |
| Survey Technician/Construction Inspector VI            | \$215                    |
| Survey Technician/Construction Inspector V             | \$180                    |
| Survey Technician/Construction Inspector IV            | \$160                    |
| Survey Technician/Construction Inspector III           | \$140                    |
| Survey Technician/Construction Inspector II            | \$125                    |
| Survey Technician/Construction Inspector I             | \$100                    |
| Public Involvement/Communications/Graphic Designer V   | \$250                    |
| 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 V                            | \$190                    |
| Engineering Support Staff IV                           | \$175                    |
| Engineering Support Staff III                          | \$150                    |
| Engineering Support Staff II                           | \$130                    |
| Engineering Support Staff I                            | \$110                    |
| Admin Assistant                                        | \$95                     |

**Direct Expenses**

|                          |                          |
|--------------------------|--------------------------|
| Personal Vehicle Mileage | CURRENT IRS RATE         |
| Fleet Vehicle Mileage    | *HDR CURRENT ANNUAL RATE |
| Printing                 | AT COST                  |
| Travel                   | AT COST                  |
| Subconsultants           | AT COST                  |

\*Fleet Vehicle Mileage - determined based on HDR current annual rate, effective 7/1/25, annual rate is 88 cents \*(subject to change)