

Project Package #1
Hampton Roads Sanitation District
High Priority Inflow and Infiltration Reduction Program

This Project Package is approved and executed between Hampton Roads Sanitation District (“HRSD” or “Owner”) and Burns & McDonnell Engineering Co., Inc., a Missouri corporation (“Private Entity” or “Design-Builder”), and is governed by the Comprehensive Agreement dated October 31, 2025 (“Agreement”) and the General Conditions attached thereto, which is incorporated herein by reference. Owner and Private Entity are referred to individually as a “Party” and collectively as the “Parties.” Unless otherwise defined in this Project Package, all capitalized terms shall have the meanings as defined by the General Conditions.

I. Work to be performed:

- A. The Work to be performed for this Project Package is described in Exhibit A – Scope of Work.

II. Contract Price for the Project Package Price:

- A. The Contract Price for the Work to be performed within this Project Package is Fourteen Million, Three Hundred Eighteen Thousand Dollars (\$14,318,000.00). This value is established as a Cost Reimbursement Plus Fee Not-to-Exceed Amount and is subject to adjustments made in accordance with the Agreement.
 1. The Cost Reimbursement Plus Fee Not-to-Exceed Amount for the Project Package is comprised of the Cost of the Work plus the Private Entity’s Fee plus an Owner-controlled contingency as further described below:
 - a. The Cost of the Work for this Project Package is Thirteen Million Seven Hundred Eight Thousand Two Hundred Forty-Seven Dollars (\$13,708,247.00). The Cost of the Work includes the costs outlined in Paragraph 12.01.B of the General Conditions, as well as an Owner-controlled contingency as further described below:
 - i. For the items defined under Paragraph 12.01.B of the General Conditions, the sum is Thirteen Million Two Hundred Eight Thousand Two Hundred Forty-Seven Dollars (\$13,208,247.00).
 - ii. Reimbursement of travel expenses will be in accordance with Owner’s Guideline in Exhibit C.
 - iii. For purposes of Paragraph 12.01.B.1, the Cost of the Work for professional services provided by Private Entity will be based on hourly billing rates for direct employees of Private Entity as shown in Exhibit B.
 - b. The Private Entity’s Fee in the amount of Six Hundred Nine Thousand Seven Hundred Fifty-Three Dollars (\$609,753.00) based on:



- i. A seven (7) percent markup on all professional engineering services performed by Design Professional Subcontractors.
- c. An Owner-controlled contingency in the amount of Five Hundred Thousand Dollars (\$500,000.00) is included for Additional Services, if authorized by Owner.

III. Contract Times for the Project Package:

- A. Substantial Completion of the entire Work to be provided under this Project Package shall be achieved no later than 365 calendar days after the Effective Date of the Contract.
- B. Final Completion of the entire Work to be completed under this Project Package shall be achieved no later than 90 calendar days after Substantial Completion.

IV. Additional Insureds: The following persons shall be included as additional insureds on Private Entity's applicable policies of insurance:

- A. Operators: City of Chesapeake, VA; City of Suffolk, VA; City of Portsmouth, VA; York County, VA; City of Williamsburg, VA; James City Service Authority; and City of Norfolk, VA.
- B. Landowners of the Site with an existing private sewer system or a portion of a private sewer system that Private Entity will evaluate the condition of. A list of landowners identified by name and address will be added as Exhibit D to this Project Package by amendment.

V. Exhibits: The following Exhibits are incorporated herein by reference, as applicable:

- A. Exhibit "A" – Scope of Work
- B. Exhibit "B" – Engineering Fee Summary and Billing Rate Schedules
- C. Exhibit "C" – HRSD Guideline for Reimbursable Charges Related to Professional and Non-Professional Services Dated January 2025



IN WITNESS WHEREOF, the Parties have executed this Project Package as of the Effective Date of the Contract. The Project Package and all subsequent changes to the Project Package will be approved and executed using Owner's Enterprise Project Management (Unifier) system. Physical signatures (on the Project Package and future Change Orders) will not be required if accepted by Private Entity through the online system.

OWNER:

Hampton Roads Sanitation District

Bruce W. Husselbee

(Signature)

Bruce W. Husselbee, PhD, PE, BCEE, DBIA

(Printed Name)

Chief Engineer

(Title)

Date: October 31, 2025

PRIVATE ENTITY:

Burns & McDonnell Engineering Company, Inc.

A handwritten signature in blue ink, appearing to read 'BURNS & McDONNELL' followed by initials 'P.F.' and 'J.W.S.'

(Signature)

Paul Fischer

(Printed Name)

President and Chief Operation Officer

(Title)

Date: Oct. 27, 2025

EXHIBIT A

PROJECT PACKAGE NO. 1

SCOPE OF SERVICES

Private Entity: Burns & McDonnell Engineering Company, Inc.

Owner: Hampton Roads Sanitation District

Project: High-Priority Inflow and Infiltration Reduction Program Implementation (CIP NO. GN 020310)

I. GENERAL

The Hampton Roads Sanitation District (HRSD) is implementing a High Priority Inflow and Infiltration Reduction Program (Program) in accordance with a Federal Consent Decree and has selected Private Entity to design and construct high-priority inflow and infiltration reduction projects under the Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA). The Scope of Services defined herein will be performed under a Comprehensive Agreement pursuant to Virginia Code § 56-575.9:1.

- A.** The Program includes program management, professional engineering, construction, post-construction, and support services necessary to design and construct multiple sanitary sewer rehabilitation and replacement projects within gravity sanitary sewer systems, utilizing a design/build delivery method governed by an Interim Agreement and this Comprehensive Agreement. The program also includes post-construction flow monitoring and hydraulic modeling to determine the effectiveness of I/I and SSO reduction achieved and assisting HRSD with developing an Adaptive Management Plan.
- B.** The goal of this Program is to support the reduction of capacity-related sanitary sewer overflows (SSOs) within Locality catchments based on the results of flow monitoring and cost-effective analyses of inflow and infiltration (I/I) reduction by Private Entity. Work may be located on Locality-owned assets, HRSD-owned assets, and/or private assets/property, and may include but not be limited to manhole rehabilitation, cured-in-place pipe, lateral lining/replacement, spot fixes or the upsizing of gravity pipelines. HRSD's Regional Wet Weather Management Plan (RWWMP) identified nineteen high-priority projects where I&I reduction could be performed to cost-effectively reduce model-simulated sanitary sewer overflows (SSOs), and are included in Appendix 3 of the Sixth Amendment to the HRSD Consent Decree filed January 19, 2024. Substantial Completion of all sewer rehabilitation within these nineteen basins is required by December 31, 2028.

Based on work performed by the Private Entity during the Interim Agreement phase of the Program from October 1, 2024 to May 31, 2025, only three of these nineteen high priority projects remain in the list of priority projects proposed by Private Entity. Under the Interim Agreement, a Comprehensive I/I Reduction Plan was developed to assist in the selection of alternative project basins. Nine priority projects are proposed by Private Entity for further cost-effective analysis and subsequent sewer rehabilitation upon HRSD approval, and are located in York County, James City County, and the Cities of Portsmouth, Chesapeake, and Suffolk. Private Entity will continue to evaluate other potential alternate basins for future addition to this High Priority I/I Reduction Program or for inclusion in HRSD's future Adaptive Management Plan which is required to be submitted by HRSD to the regulatory agencies by March 31, 2030. HRSD will coordinate the identification and reduction of SSOs with its Locality partners.

- C. This Program is part of HRSD's Consent Decree with the United States Environmental Protection Agency (EPA) for Sanitary Sewer Overflows and associated RWWMP. The overall goal of the RWWMP is to reduce the model-predicted SSO volume in the 5-year peak flow event by 69 percent through a combination of I/I reduction projects and capacity improvements by December 31, 2040.
- D. Based on past flow monitoring and hydrologic modeling, the sanitary sewer systems in Hampton Roads are typically inflow-dominated and exhibit very rapid responses to rainfall. Capacity-related SSOs are typically also short-duration, predominantly occurring during or shortly after the peak rainfall.
- E. The primary work to be performed under this Contract No. 1 will include the continuation of programmatic activities, including program administration, collection system flow monitoring and data analyses, sewer system evaluation survey (SSES) data collection and analyses, and hydraulic modeling, I/I reduction cost-effective analyses and development of Preliminary I/I Reduction Program Plans for the priority project basins identified in the Comprehensive I/I Reduction Program Plan developed by Private Entity and approved by HRSD. Work will also include the evaluation of historical SSO data to identify additional alternate project basin basins, and the characterization and evaluation of private sewer systems on non-single family (NSF) private properties for NSF's within each priority project basin.
- F. Future Contracts will be executed under the Comprehensive Agreement to authorize Private Entity to perform design and construction work for each priority project basin after the cost-effective evaluation is completed under this Contract No. 1. Additional contracts will also be issued to provide continuation of program management services on an annual basis.
- G. Private Entity's program approach will combine SSES data previously collected by others with basin-specific data collected by Private Entity to evaluate multiple repair technologies and develop informed and cost-effective basin rehabilitation strategies. These strategies will be adapted with data-driven feedback from design and construction work packages during program implementation.

II. BASIC SCOPE OF SERVICES

The Basic Scope of Services to be provided by the Private Entity under this Contract No. 1 is described below and organized under the following Task Series:

TASK SERIES 100 – PROGRAMMATIC ACTIVITIES

TASK SERIES 200 – EXISTING DATA REVIEW AND FIELD INVESTIGATIONS

TASK SERIES 300 – TIME SERIES DATA ANALYSIS AND MODELING

TASK SERIES 400 – PRELIMINARY I/I REDUCTION PLANS

TASK SERIES 500 – PRIVATE I/I REDUCTION PROGRAM

TASK SERIES 600 – PROJECT DELIVERY

DESCRIPTION OF BASIC SCOPE OF SERVICES

The following is a description of the Work to be performed under this Contract No. 1 Scope of Services to assist HRSD in implementing its High Priority Inflow and Infiltration Reduction Program. These services will be performed throughout the lifecycle of the Comprehensive Agreement.

TASK SERIES 100 - PROGRAMMATIC ACTIVITIES

Task 101 Program Management and Mobilization

- a. Private Entity will provide a Program Manager responsible for oversight of all services performed by its team and be the primary liaison with HRSD management staff. Program Manager will provide strategic planning and manage day-to-day activities through a Deputy Program Manager, a Planning Coordinator, a Project Planning Lead, a SSES and GIS Data Manager, a Design Manager, and a Construction Manager.
- b. Prepare and execute subcontract agreements for work contracted to subconsultants and subcontractors agreements, and monitor the performance of subcontracted work. Flow down contract terms and conditions from Comprehensive Agreement with HRSD to Private Entity's Subcontractor Agreements as required or deemed appropriate.
- c. Lead and monitor Private Entity's program management services to achieve timely completion of activities and deliverables, including planning, engineering and preconstruction activities; project controls, tracking and trend analyses and dashboard reporting; quality control and quality assurance; and modeling projections of inflow and infiltration reduction to be achieved and presumed progress towards reducing baseline modeled SSOs by volume for the 5-year peak flow recurrence event.
- d. Identification and implementation of accounting structure and cost reporting, invoicing and program status reporting requirements for design and construction services utilizing HRSD's Unifier system, , in accordance with the requirements of the latest version of the applicable HRSD Design and Construction Standards. Prepare and submit monthly

invoices, and project status reports. Review and process monthly invoices received from subcontractors.

- e. Conduct monthly Program Progress meetings with HRSD staff and weekly leadership coordination meetings with HRSD project managers.
- f. Participate in quarterly HRSD SSO Reduction Team Meetings to discuss program status, performance and direction, and collaborate with Hazen and Sawyer, and Brown and Caldwell to leverage synergies and gain efficiencies from sharing I/I Reduction project approaches and outcomes.
- g. Maintain document management system for projects and the overall program. Work collaboratively with HRSD to deposit project record documents via Unifier throughout the project and program lifecycle. Maintain and provide standardized templates for program memos, letters, contract documents, change management documents, and signatory authority.
- h. Prepare a project contract for each project basin to proceed with detailed design following HRSD's approval of the Preliminary I/I Reduction Program Plan for each project basin. Prepare a project contract to support preconstruction activities in advance of constructing sewer rehabilitation work in the Port-02-04 basin that is designed by others. Amend design professional subcontracts to incorporate detailed design services for each assigned project basin.

Task 102 Program Execution Plan (PEP)

- a. Update the Program Execution Plan to incorporate design and construction processes and procedures and periodically thereafter as needed or approximately every 6 months to document changes in program policies, practices and procedures for which the Scope of Services to be performed under the Comprehensive Agreement will be implemented, monitored and closed out.
- b. Develop methodologies, technology tools, and techniques that will be used during program execution, and project management lifecycle process with HRSD decision points for each phase, including project planning and development, engineering, procurement, construction, commissioning and transfer to locality, and closeout, to execute projects in a consistent, standardized fashion.
- c. Develop and implement a quality assurance and quality control processes to be used during the design and construction phases of each proposed project.

Task 103 Program and Project Controls

- a. Provide program and project-level controls to develop, implement, monitor and manage the scope of work, costs, and schedule for program implementation.
- b. Provide and deploy a Procore software platform to track and monitor programmatic, design, and construction costs and the processing of subcontractor payment applications. Monitor and track scope of work, budget and schedule for individual projects and report status to HRSD program dashboard.

- c. Implement and maintain a program dashboard shared by HRSD and Private Entity to report the status of the scope of work, costs, and schedule for the overall program and each project contract once they are defined at the conclusion of preliminary design, during detailed design and construction of each project. Report on the status of sewer rehabilitation work planned in each Locality and the associated budget and cost of completed work.

Task 104 Stakeholder Engagement and Public Outreach

- a. Utilize the HRSD-approved 'Public Outreach Plan for engagement and notification of individual Localities and the public for project-level public outreach and program-level communications.
- b. Support HRSD as requested with the maintenance of the Program website and associated content.
- c. Assist HRSD as requested with implementing and maintaining an ongoing public information strategy to promote public support for the Program.
- d. Prepare and distribute informational materials and notifications to stakeholders and Localities as requested by HRSD.
- e. Participate in stakeholder meetings, and support HRSD's overall coordination of public involvement activities as requested. The timing of these meetings and support services will be mutually agreed upon.
- f. Provide an annual 12-month subscription to Social Pinpoint software platform to support public engagement as requested by HRSD.
- g. Assist HRSD with conducting up to five 1-on-1 meetings with each Locality to discuss their involvement during the design and construction phases of each project in their basin.

Task 105 HRSD Consent Decree Program Review

- a. Complete the review of the minimum required scope of all Consent Decree (CD) projects
- b. Complete the review of actual work completed and cost for each CD project, including Interim System Improvements and Rehabilitation Action Plan project.
- c. Complete review of other non-regulatory capacity-related HRSD projects that could have an impact on SSO volume.
- d. Summarize findings from subtasks a., b. and c. above and identify completed work that goes beyond Consent Decree requirements and impacts SSO volume reduction.
- e. Review HRSD Consent Decree and referenced RWWMP and supplement to the RWWMP to identify key elements related to modeling, SSO reductions, projects and other commitments and provide input into potential strategies for HRSD's continued regulatory compliance.
- f. Provide technical memorandum with findings from analysis of reported capacity-related wet weather SSOs in the Hampton Roads region from 2008 to 2025.

- g. Provide technical support of HRSD's regulatory strategies as described in HRSD's Integrated Management Plan 2.0.

TASK SERIES 200 - EXISTING DATA REVIEW AND FIELD INVESTIGATIONS

Task 201 Review Existing Data & Develop Data Collection Plans

- a. Evaluate historical SSO data reported by HRSD and the Localities to support the identification of additional alternate project basins for HRSD's consideration.
- b. Assess additional alternate project basins for I/I reduction that have potential for cost-effective I/I reduction using HRSD's existing RHM's and available flow data. Determine if there is a need for additional flow metering in these potential alternate basins. Flow monitoring to assess additional alternate basins will be performed as Additional Services.
- c. Review existing available data provided by HRSD for each additional alternate I/I reduction project basin and assess the quality and completeness of data to determine sewer system asset condition and system response to wet weather events. This may include:
 - o Asset data from GIS
 - o Model files
 - o Flow data and flow parameters
 - o SSES data (CCTV, smoke testing, manhole inspections)
 - o SSO Records
 - o Work done since RWWMP
 - o Pump Station Data
 - o Stormwater, flooding and drainage information, including public complaints
 - o Best available Lidar data/DEM
 - o Groundwater Monitoring
 - o Salinity Data contributing to SSOs
- d. Develop basin-specific data collection plan for each additional alternate project basin by identifying locations where additional flow, rainfall or SSES asset condition data is needed prior to defining the scope of I/I reduction work. Submit each basin-specific data collection plan to HRSD for review and approval.
- e. Determine locality permitting requirements, including, but not limited to, traffic control, water usage, waste disposal, and Locality notifications.

Task 202 Collection System Flow Monitoring

- a. Continue to maintain and monitor flow data from currently installed flow meters. For budgetary purposes the following quantities are assumed for flow monitoring:
 - i. Operation, analysis and maintenance of 85 meters through 12/31/25 and 60 meters through 8/31/26 @ \$1,800/ meter month plus 7% markup = \$1,926/meter month
 - ii. Flow meter replacement installations/month for O&M – 5 meters/month @ \$1,850/unit for installation plus 7% markup = \$1,979.50/unit and @ \$875/unit for removal plus 7% markup = \$936.25/unit
 - iii. RJN Clarity data platform hosting at \$5,000/month plus 7% markup = 5,350/month
 - iv. Additional Level-only meter installation – 6 total in each of 7 basins (42 total) @ \$800/unit plus 7% markup = \$856.00/unit
 - v. Level-only meter operation, analysis and maintenance (54 total) at \$600/ unit / month plus 7% markup = \$642/unit/month
 - vi. Level-only meter removal – 24 meters at \$500/unit plus 7% markup = \$535/unit
 - vii. Rain gauge maintenance – 12 total at \$875/unit/ month plus 7% markup = \$936.25/unit/month
 - viii. Rain gauge installation – 4units @ \$875/unit plus 7% markup = \$936.25/unit
 - ix. Rain gauge removal @ \$875/unit plus 7% markup = \$936.25/unit

The installation of flow meters in additional alternate basins will be performed as Additional Services.

- b. Develop a post-construction flow monitoring plan for each proposed project basin prior to performing any sewer rehabilitation work to evaluate I/I reduction resulting from planned work.

Task 203 Distributed Temperature Sensing (DTS)

- a. Conduct DTS monitoring for a period of up to two months in the areas tributary to the following project basin flow monitors:
 - o JCSA-LSA3-8-001: 5,300 LF of fiber cable
 - o YORK-003-002: 10,000 LF of fiber cable
 - o JCSA-LSA3-6-003: 8,400 LF of fiber cable
 - o YORK-006-002A: 5,500LF of fiber cable
- b. Perform DTS data analysis where applicable to identify sources of significant I/I and compare to previously collected SSES data in each area.
- c. Based on flow monitoring data for sufficiently large wet weather events (1-inch or more rainfall), determine the range of peak flow corresponding to each location of interest.

- d. Develop a Technical Memorandum covering the data collection, analysis, and findings for each monitored area. The TM is to include recommendations for possible staging of system rehabilitation and follow-up DTS monitoring to confirm I/I reduction achieved.
- e. Conduct up to four 1-hour workshops with HRSD to review DTS investigation findings for each project basin flow monitor identified above.

Task 204 SSES Data Collection and Processing

- a. Monitor field activities performed by Private Entity's subcontractors, including SSES work (CCTV, manhole inspections, smoke testing, DTS monitoring, flow monitoring and other related field activities). Provide one vehicle leased by Private Entity to conduct field monitoring activities.
- b. The following remaining quantities of SSES investigative work is budgeted to be performed under this Comprehensive Agreement in Port-10 and JCSA-LSA 5-4 combined:
 - o CCTV Sewer Inspection: 27,400 LF at \$3.25/LF plus 7% markup = \$3.48/LF
 - o Manhole Inspections: 105 manholes at \$170 each plus 7% markup = \$181.90 each
 - o Mainline Lamphole Inspections: 10 lampholes at \$225 each plus 7% markup = \$240.75 each
 - o Smoke Testing: 220,000 LF at \$0.97/LF plus 7% markup = \$1.04/LF
- c. Code structural defects identified from CCTV and manhole inspections following PACP and MACP procedures and process the data through the SewerAI platform and quality control processes for the follow quantities of sewer SSES data:
 - o CCTV Sewer Inspection PACP defect coding: 150,000LF at \$0.05/LF plus 7% markup = \$0.054/LF
 - o Manhole Inspections MACP defect coding: 200 manholes at \$45 each plus 7% markup = \$48.15 each

Task 205 GIS Data Updates and Management of System GIS Files

- a. Utilizing condition assessment data collected by Private Entity, update GIS system connectivity and append attribute tables.
- b. The GIS system connectivity will be updated to reflect GPS coordinates of located manholes, newly found manholes, manholes that do not exist and other misc. pipe connections that are not reflected in the existing GIS files.
- c. Asset attribute data that is collected via manhole inspections and CCTV inspections will be appended to the existing attribute tables.
- d. Compile SSES CCTV, manhole inspection, and smoke testing data collected by Private Entity within each Locality project area along with flow monitoring data and GIS update data and provide database files to HRSD for transmittal to each Locality as requested.

- e. Host and maintain geographic information system site (Project Delivery Subscription) with version control for GIS files used during planning, design and construction in each project area.

TASK SERIES 300 - TIME SERIES DATA ANALYSIS AND MODELING

Task 301 Regional Hydraulic Model Strategy Document and Workshop

- a. Continue collaboration with HRSD to support the maintenance of HRSD's current 2025 RHM and project-specific mini-models to support their use for this program, including:
 - o Any additional model updates that may be necessary within each project basin selected by HRSD necessary to support the use of RHM for cost-effective and post-construction analysis.
 - o Discuss hydrologic parameter modifications based on new data and share updated post-construction parameters when available for integration in the RHM.
 - o Continue collaboration on updating of HRSD's RHM with HRSD modeling staff.
- b. Finalize a Model Strategy and Protocol Document that outlines the existing status of models, coordination protocols, data management, version control, baseline SSO volume and locations, current SSO volume and locations, and the proposed overall modeling approach for this project. The strategy document will be finalized after completion of all cost-effective evaluations to incorporate what is learned about the RHM and project mini-models into the strategy.
- c. Conduct a Workshop with HRSD staff to review the Model Strategy and Protocol Document and gain consensus on approach and modeling responsibilities between the BMcD team and HRSD.

Task 302 Time Series Analysis and RTK Development

- a. Import all time-series data gathered as part of the program into flow analysis software, HazenQ, which is provided by Private Entity's subcontractor, Hazen and Sawyer.
- b. Review early data in HazenQ to identify and address any quality issues and perform ongoing data reviews if sufficient usable data is collected.
- c. As sufficient data are gathered, conduct detailed flow decomposition for the full-time series, including, but not limited to:
 - o Base sanitary flow
 - o GWI – This will be calculated seasonally or after significant changes in the overall GWI
 - o Rainfall analysis, including return periods for all events
 - o Total RDII and R-values for each event

- Ongoing development of RTK model parameters to match extended periods and will likely include multiple sets depending on season and antecedent conditions. Initial abstractions will be included, as necessary. It is assumed that the Groundwater Infiltration Module will not be utilized. This can be included if desired, but cannot be used in Mike+ for large hydraulic analyses.
- For level-only flow monitor sites, use HazenQ to develop diurnal patterns and plot against level data to identify locations of high I/I, including rapid response. This data may be used to add additional sensors upstream to further isolate the I/I contribution.
- d. Conduct ongoing reviews of R-values and RTKs to identify potential additional upstream locations or other field activities to identify sources and inform alternative analysis.
- e. Determine if any adjustments may be needed or desired to the inputs for the RHM and LHM based on the data analysis.
- f. Work with HRSD to select the RTKs to use for the development of basin mini-models, LHM, and RHM.

Task 303 Locality Hydraulic Model and Mini-Model Assessments

- a. Review LHM model parameters and compare them to available flow data analysis results to determine if mini-model refinements are needed.
- b. Update mini-models with new information collected during the program.
- c. Utilize the mini-models as necessary to support the overall goals of the program and the analyses of any sewer upsizing needed for alternative costing.

Task 304 Support Update of Regional Hydraulic Models

- a. Assist HRSD staff with updates necessary to use the RHM for the cost-effectiveness analysis per Task Series 300 and ongoing HRSD use. These updates may include:
 - Updating dry weather flow forecasts for future planning horizons using updated HRSD-provided populations growth information
 - Adding projects completed but not added to the model yet
 - Adding projects under construction
 - Revising PS operations if there are known changes
 - Revising hydrologic parameters where necessary
- b. Complete the preparation of flow monitoring plan to support a system-wide hydraulic model update with prioritization of flow monitoring needs to be addressed over a multi-year period. Flow monitor installation and maintenance for system-wide model updates will be provided as an Additional Service.
- c. Complete the development of a white paper outlining the vision, structure, and capabilities of a “Great Model” (GM) working collaboratively with HRSD staff. The GM discussed in white paper will focus on the characteristics of the hydraulic and hydrologic components of the models that would support the following primary HRSD objectives:

- Evaluate and optimize system hydraulics across diverse hydrologic and operational conditions.
- Serve as a tool for integrated planning and design of capital improvement projects.
- Support Consent Decree compliance and the associated RWWMP.
- Support Capacity Assurance Planning.
- Include more of the locality infrastructure where appropriate.
- Simplify the current modeling architecture while preserving accuracy.
- Incorporate critical drivers like seasonal variation and tidal influence.
- Support faster runtimes and/or “sub-models” to eliminate the need to run the entire RHM.
- Streamline the ongoing model updates and refinements.
- Provide a foundation for digital twin applications and real-time system management.

d. Assist HRSD with developing a system-wide model update plan based on the completed GM white paper for a comprehensive update and recalibration of HRSD’s models. This future update would be implemented after completion of all program I/I reduction projects are completed and support the development of an Adaptive Management Plan which is required to be submitted to the regulatory agencies in 2030.

TASK SERIES 400 - PRELIMINARY I/I REDUCTION PROGRAM PLANS

Task 401 Sewer Rehabilitation Cost-Effective Analysis Guidance Document

- a. Complete the development of a Cost-Effective Analysis Guidance Document that defines Private Entity’s methodology used for cost-effective analysis of JCSA-LSA-3-8, for use on all other project cost-effective analyses, including sewer rehabilitation and repair technologies for defects that are considered potential contributors to I/I and assessment of I/I reduction for alternate sewer rehabilitation strategies.
- b. Host a workshop with HRSD to present the Private Entity’s Cost-Effective Analysis Guidance Document and asset management software tool, including associated rehabilitation technologies and rehabilitation costs. Solicit feedback from HRSD staff and update the Cost-Effective Analysis Guidance Document to incorporate feedback.

Task 402 Condition Data Review and Rehabilitation Categorization

- a. Evaluate asset condition data and develop recommended methods for rehabilitation of sewer mains, manholes, private laterals, and stormwater disconnections for each proposed project basin. For budgeting purposes, this task is limited to condition data being collected for the nine currently proposed project basins.

Task 403 I/I Reduction Strategy Alternatives Development

- a. Develop a suite of applicable alternative I/I reduction strategies for the nine proposed project basins.
- b. Each alternative will be developed utilizing a mini-model developed by Private Entity to identify any additional local improvements needed to convey the peak flows and to develop a predicted post-construction hydrograph.
- c. Develop rehabilitation costs and local conveyance improvements costs for each alternative. The following describes alternatives that will be evaluated. All alternatives will consider the inclusion of non-single family private sewer systems and inflow sources pending the outcome of Task Series 500.

Level 1 – Inflow Only - Removal of inflow defects identified from SSES activities as well as other analyses such as interflow inflow. This work could include activities on private properties of interest (coordinated with Task Series 500).

Level 2 – Data Driven Level 1 plus addressing the pipes and manholes with defects that may allow infiltration to enter the collection system. For this approach to work, any pipe with a qualifying defect will be completely lined or replaced along with lining or replacement of the public portion of the lateral. Upstream and downstream manholes will also be sealed at the chimney, the pipe penetrations, observed defects, and joints that are not clearly watertight.

Level 3 – Comprehensive - Level 1 plus Level 2 for all pipes, manholes, and laterals (public) in a particular basin subcatchment.

Task 404 Cost-Effective Evaluation

- a. Develop equivalent storage costs to account for the additional flow reduction required to meet the target flow rates established in the original basin I/I Reduction Plans (from the RWWMP).
- b. Select the most cost-effective I/I reduction strategy alternative by summing the costs for I/I reduction, equivalent storage volume, and local capacity improvements for each alternative and select the lowest total cost alternative as the “Preliminary Preferred I/I Reduction Plan”.
- c. Confirm the predicted success of the preliminary preferred solution using the RHM.
 - o Run the RHM with all planned future HPP capacity improvements and the revised flow parameters from the “Preliminary Preferred I/I Reduction Strategy” within each HPP basin to calculate their combined impact on the targeted SSO volume reduction within each Treatment Plant Service Area (TPSA).
 - o Calculate the cost to eliminate any remaining SSO volume required to meet the TPSA SSO reduction target established by the RWWMP. This will be accomplished by using the cost of the RWWMP HPPs divided by the total SSO volume removed to determine a $\$/(\text{SSO gallon removed})$ in each TPSA.

- Compare the total cost to eliminate any remaining SSO volume to the total cost of the equivalent storage volume.
- If these total costs do not fall within a reasonable range of each other, then we will adjust the total cost of the equivalent storage and rerun our cost-effective analysis.
- Make necessary adjustments to generate the Preliminary I/I Reduction Program Plan for each Project.

Task 405 Preliminary I/I Reduction Program Plans

- a. Host up to nine workshops to present results of each project cost-effective evaluation and the most cost-effective alternative for inclusion into a Preliminary I/I Reduction Program Plan, and solicit feedback from HRSD staff.
- b. Develop a Preliminary I/I Reduction Program Plan to describe the proposed implementation of the alternative I/I reduction strategy selected by HRSD for each proposed project basin, including the proposed phased implementation schedule with interim milestones for the completion of detailed design, construction, and post-construction flow monitoring.
- c. Develop a preliminary design level total opinion of probable construction cost for each proposed project basins in accordance with Association for the Advancement of Cost Engineering (AACE) International Recommended Practice NO. 18R-97. The total opinion of probable construction cost shall be a Class 4 estimate consistent with AACE standards for inclusion in the Preliminary I/I Reduction Program Plan.
- d. Submit a draft Preliminary I/I Reduction Program Plan to HRSD for review and comment. Incorporate their review comments and submit a final plan for each project basin. Follow HRSD standard table of contents for PERs to the extent practicable.

TASK SERIES 500 - PRIVATE I/I REDUCTION PROGRAM

Previous planning activities completed under the Interim Agreement identified private properties of interest for further SSES and potential I/I rehabilitation. These properties were identified with a combination of public system SSES investigations, including DTS. The properties of interest include Non-Single Family (NSF) properties. This task will advance the Interim Agreement efforts by performing SSES on private sewer systems and private laterals on NSF properties of interest.

Task 501 Planning SSES on Private Sewer Systems

Plan SSES activities to investigate NSF private property I/I sources, including assisting HRSD with obtaining landowner signatures on HRSD Right-of-Entry agreements, conducting initial site visits and private system characterization investigations, and reporting initial findings.

Characterize the connectivity and condition of private sewer system assets on each NSF property, except those located within buildings.

- a. Assist HRSD in presenting its Right-of-Entry Agreement to landowners for them to sign prior to commencing system characterization work on their property.
- b. Contact NSF landowner(s) about proposed SSES investigations of private sewer systems connected to each Locality's sanitary sewer system by Private Entity and execution of Right-of-Entry Agreement by HRSD and landowner(s). Discuss the approximate limits of work with each landowner to confirm their willingness to grant HRSD a no-cost ROE agreement to enable completion of the work.

Task 502 Assessment of NSF Sewer Systems

- a. Perform SSES CCTV of private main and laterals, manhole inspections, dye water testing and smoke testing on each NSF property to assess the condition of private sewer system assets. For budgeting purposes, the following quantities are assumed:

CCTV: 83,000 LF at \$3.35/LF plus 7% markup = \$3.59/LF (with Sewer AI PACP coded defects)

MH Inspections: 370 Total at \$215 each plus 7% markup = \$230.05 (with Sewer AI MACP coded defects)

Dye Water Testing: 40 Tests at \$2,500 each plus 7% markup = \$2,675.00 each

Smoke Testing: 83,000 LF at \$0.97/LF plus 7% markup = \$1.04/LF

- b. Confirm the connectivity of private sewer system assets on each NSF property, except those located within buildings. For budgeting purposes, SSES subcontractors will characterize private sewer system on up to 350 NSF properties.
- c. Prepare report documenting findings from SSES data collection and analysis of the defect types identified on each NSF private property within each project basin.
- d. Perform cost-effective analysis of private sewer system defect repairs on each NSF as appropriate based on SSES investigation finding to identify the scope of rehabilitation work to be proposed for HRSD's consideration and approval. The development of preliminary I/I reduction design plans for NSFs properties within each priority project basin will be provided as Additional Services. For budgeting purposes, a 70 percent participation rate (based on previous experience with the HRSD pilot programs) is assumed for included NSF parcels, with a failure rate of 70 percent of participating assets. Consideration will be given to the cost-effectiveness of these sewer repairs based on presumed flow reduction from eliminated I/I sources.

TASK SERIES 600 - PROJECT DELIVERY

Task 601 Design and Preconstruction Processes and Procedures

- a. Develop programmatic document controls and administrative procedures for work that will be performed during the detailed design phase of each Locality project, including:
 - o Preparation of design process workflows that include HRSD decision points to obtain approval of the sewer rehabilitation work proposed
 - o Development of construction contract documents
 - o Confirmation of all Locality, HRPDC and HRSD design and construction standards applicable to the project(s) within each Locality
 - o Documentation of design correspondence with and submittals to HRSD and Locality representatives.
 - o Subcontractor constructability reviews
 - o Development of construction cost estimates
 - o Obtaining construction price proposals
 - o Developing the Cost of the Work for each Locality Project, and
 - o Role and responsibilities of HRSD and Locality representatives during design phase of each project
- b. Incorporate these design phase processes and procedures into the Program Execution Plan per Task 102.
- c. Determine permitting and temporary construction easement acquisition requirements to perform construction within the public right-of-way of each locality and applicable environmental permitting requirements.
- d. Develop programmatic document controls and administrative procedures for construction management work to be performed during the construction phase of each Locality project, including:
 - o Processing of subcontractor payment applications
 - o Processing of shop drawings and data submittals
 - o Development of preliminary project construction schedules
 - o Maintenance of project construction records
 - o Documentation of communications and correspondence between Private Entity and HRSD and Locality representatives
 - o Daily construction field reports during active construction
 - o Roles and responsibilities of resident project representative
 - o Monthly construction progress meetings
 - o Project closeout requirements
 - o Development and submittal of construction record drawings
 - o Role and responsibilities of HRSD and Locality representatives during the construction phase of each project.
- e. Incorporate these construction administration processes and procedures into the Program Execution Plan per Task 102.
- f. Establish protocols for testing and inspection of completed construction work for acceptance and commissioning prior to transfer to locality for operation and maintenance.

- g. Provide cost estimating and subcontractor procurement support services in advance of HRSD authorizing a project package for construction of sewer rehabilitation and replacement work in the Port-02-04 basin.
- h. Prepare plan for a field office in the Northshore area equipped with office equipment and accessories for construction staff to operate from in support of sewer rehabilitation work in Northshore project basins. Actual costs for office space lease and equipment will be included with the first construction contract.

III. ADDITIONAL SERVICES

HRSD may request the Private Entity to provide a wide range of staff resources to supplement and support HRSD Staff with implementation of its High Priority I/I Reduction Program. Any work requested by HRSD that is not stated in the Basic Scope of Services described above will be classified as Additional Services. Private Entity's contract maximum upper limit for compensation includes a total allowance amount of \$500,000 for Additional Services not yet authorized by HRSD that may be required throughout the course of the work. This allowance amount shall not be utilized by Private Entity unless specifically authorized in writing by HRSD to perform Additional Services. Additional Services will not be performed, nor is the Private Entity approved to utilize any of the allowance amount, unless HRSD provides written authorization to Private Entity that includes the scope of work and for each Additional Service to be performed and a maximum billing limit for compensation that has been mutually agreed upon. Additional Services may include, but are not limited to:

- a. Development of RTK values for locality pump station service basins that are not located in the priority project basins included in Comprehensive I/I Reduction Program Plan.
- b. Updating of Locality GIS System of Record files to correct sanitary sewer connectivity and/or location errors and discrepancies.
- c. Flow monitoring and data analysis for additional alternate basins or to support the update and recalibration of HRSD's system-wide hydraulic model.
- d. SSES investigation of additional alternate basins
- e. Support to acquire temporary and permanent easements
- f. Performance of Environmental Impact Assessments
- g. The development of preliminary design plans for NSFs within each priority project basin.
- h. Detailed design of sewer rehabilitation and replacement work for project basins held in reserve.

IV. OWNER RESPONSIBILITIES

Owner will furnish, or request from the Localities, the following items as required by the Basic Scope of Services, and not at the expense of the Private Entity:

- A.** The most recent available HRSD or Locality data associated with additional alternate project basins identified below:

Data:

- Collection system improvements (including rehabilitation) completed, 2011 to present
- Sanitary sewer evaluation survey (SSES) data, 2011 to present
- Stormwater / drainage GIS data
- Historical SSO data reported by HRSD and Localities from 2008 to 2025
- Collection system flow/level/velocity data, 2019 to present
- Pump station operational data, 2019 to present
 - Flow, level, or pressure data (for pressure data, please provide elevation of gauge relative to pumps)
 - Pump run times or status
 - Bypass pump information, 2019 to present
 - Temporarily or permanently installed
 - Time periods in active
 - Pump size/model and number installed

B. Hydraulic models for the alternate basins from each Locality, including collection system sensor network data to be used by Private Entity to support locality hydraulic model updates and refinements, as available

C. Coordination of Private Entity's work with each Locality, may include but not limited to:

- The commitments described in the Memorandum of Agreement between each Locality and Owner.
- Identification of additional work requested by Locality and paid for by Owner to be added to sewer rehabilitation work to be designed by Private Entity.
- Owner approval of Locality-funded infrastructure improvements as part of each project and Owner compensation directly to Private Entity for locality funded work, as agreed to by Owner and Locality in cost-share agreement, or similar.
- Communication of work planned within each proposed project basin to Locality representatives and confirmation of Locality-specific preferences, policies or guidelines for design and construction requirements and construction permitting requirements for work on public and private system sewers
- Locality consideration of substitute or “or equal” products used to rehabilitate sewers.
- Coordination of Locality involvement, including identification of all notifications of Locality that are required, during design and construction phase activities performed by Private Entity in each project basin.
- Public outreach and engagement of locality utility customers with support from Private Entity.
- Private Entity's work with other third-party contractors contracted directly with Locality and performing work within or immediately adjacent to HPIIRP project basins.
- Public infrastructure improvements recently completed or to be completed by Locality that could impact the sequencing, schedule, or cost of work performed by Private Entity.

- Submission of and timely completion of shop drawing and data review by each locality prior to commencement of related construction work
- Obtain access agreements, or similar, from Locality to enable Private Entity to perform work within locality utility easements within each HPIIRP project basin.
- Negotiate Right of Entry Agreement and temporary construction easements, as necessary, to perform work on NSF private property within each HPIIRP project basin.
- Resolution of pre-existing unforeseen subsurface conditions
- Locality operation and maintenance of all existing collection system assets including sewers, equipment, valves, lift stations and other locality system assets necessary to maintain reliable sanitary sewer service and for functional or performance testing required by Private Entity.
- Locality performance of CCTV condition assessments of rehabilitated sewers during the correction period of each HPIIRP to identify defects to be corrected by Contractor.
- Transmittal of documents and information prepared by Private Entity, including Preliminary I/I Reduction Program Plan, updated GIS files, construction documents, shop drawings and data, record drawings, etc.

D. Execution of cost-share agreement between each Locality and HRSD regarding the sewer rehabilitation work to be performed by Private Entity

E. The services of a Project Manager who obtains permission to enter and have knowledge of existing locality facilities

F. Maintenance and administration HRSD project management system (Unifier) and workflow planning, development and implementation of any new Unifier functionality, and training system users on the use of new functionality to meet program needs.

G. Review and approval of Private Entity submittals at Owner decision points established throughout the planning, engineering, and construction phases of each HPIIRP.

H. Acceptance and disposal of sanitary sewer debris at Owner's wastewater treatment facilities that is removed by Private Entity from underground facilities as part of the Work. All such sanitary sewer debris must be of a type and nature treatable at Owner's facility in the normal course of the facility's operation.

(End of Scope of Services)

EXHIBIT B

HRSD High Priority I/I Reduction Program
Contract #1 Programmatic Activities Under Comprehensive Agreement
Burns & McDonnell Engineering Fee Summary for 12-Month Period Ending 9/7/2026

9/15/2025

Task Number	Task Description	Total Hours	BMcD Total Labor Billings	Brown & Caldwell	Hazen	RJN Group	The Miles Agency	WRA	Dukes Root Control	Crotty Consulting	Subconsultant Markup (7%)	Total Subconsultants	Total Direct Expenses	Total	
100 -Programmatic Activities															
101	Program Management and Mobilization	5,734	\$1,669,680	\$203,334	\$339,230	\$144,000	\$0	\$28,384	\$0	\$18,000	\$51,306	\$784,255	\$9,069	\$2,463,004	
102	Program Execution Plan (PEP)	408	\$117,028	\$4,928	\$0	\$0	\$0	\$10,192	\$0	\$0	\$1,058	\$16,178	\$0	\$133,206	
103	Program and Project Controls	4,376	\$911,896	\$11,488	\$0	\$0	\$0	\$22,525	\$0	\$0	\$2,381	\$36,394	\$3,840	\$952,130	
104	Stakeholder Engagement and Public Outreach	1,574	\$355,046	\$14,400	\$0	\$6,000	\$50,000	\$31,713	\$0	\$0	\$7,148	\$109,261	\$7,440	\$471,747	
105	HRSD Consent Decree Program Review	156	\$52,416	\$12,320	\$135,750	\$0	\$0	\$838	\$0	\$0	\$10,424	\$159,331	\$0	\$211,747	
100 Subtotal			12,248	\$3,106,066	\$246,470	\$474,980	\$150,000	\$50,000	\$93,652	\$0	\$18,000	\$72,317	\$1,105,420	\$20,349	\$4,231,835
200 -EXISTING DATA REVIEW AND FIELD INVESTIGATIONS															
201	Review Existing Data & Develop Data Collection Plans	96	\$30,184	\$0	\$81,550	\$0	\$0	\$14,362	\$0	\$0	\$6,714	\$102,625	\$0	\$132,805	
202	Collection System Flow Monitoring	121	\$36,330	\$0	\$98,810	\$2,234,150	\$0	\$0	\$0	\$0	\$163,307	\$2,496,267	\$0	\$2,532,597	
203	Distributed Temperature Sensing (DTS)	92	\$24,840	\$316,545	\$0	\$168,000	\$0	\$0	\$0	\$0	\$33,918	\$518,463	\$0	\$543,303	
204	SSES Data Collection and Processing	34	\$10,336	\$0	\$0	\$325,650	\$0	\$9,534	\$109,200	\$0	\$31,107	\$475,490	\$27,600	\$513,426	
205	GIS Data Updates and Management of System GIS Files	168	\$42,084	\$0	\$251,630	\$36,000	\$0	\$0	\$0	\$0	\$20,134	\$307,764	\$27,600	\$377,448	
200 Subtotal			511	\$143,774	\$316,545	\$431,990	\$2,763,800	\$0	\$23,895	\$109,200	\$0	\$255,180	\$3,900,610	\$55,200	\$4,099,584
300 -TIME SERIES DATA ANALYSIS AND MODELING															
301	Regional Hydraulic Model Strategy Document and Workshop	160	\$52,920	\$86,448	\$47,850	\$0	\$0	\$0	\$0	\$0	\$9,401	\$143,699	\$1,640	\$198,259	
302	Time Series Analysis and RTK Development	56	\$18,504	\$63,200	\$924,770	\$0	\$0	\$0	\$0	\$0	\$69,158	\$1,057,128	\$0	\$1,075,632	
303	Local Hydraulic Model and Mini-Model Assessments	64	\$21,144	\$234,280	\$147,860	\$0	\$0	\$0	\$0	\$0	\$26,750	\$408,890	\$0	\$430,034	
304	Support Update of Regional Hydraulic Model	276	\$91,224	\$116,888	\$133,660	\$0	\$0	\$0	\$0	\$0	\$17,538	\$268,086	\$0	\$359,312	
300 Subtotal			556	\$183,792	\$500,816	\$1,254,140	\$0	\$0	\$0	\$0	\$0	\$122,847	\$1,877,803	\$1,640	\$2,063,235
400 -PRELIMINARY I/I REDUCTION PROGRAM PLANS															
401	Sewer Rehabilitation Cost-Effective Analysis Guidance Document	116	\$31,756	\$7,264	\$10,410	\$0	\$0	\$18,697	\$0	\$0	\$2,546	\$38,917	\$1,640	\$72,313	
402	Condition Data Review and Rehabilitation Categorization	572	\$133,108	\$101,104	\$77,240	\$0	\$0	\$32,136	\$0	\$0	\$14,734	\$225,213	\$0	\$358,323	
403	I/I Reduction Strategy Alternatives Development	542	\$142,930	\$213,896	\$224,760	\$0	\$0	\$33,600	\$0	\$0	\$33,058	\$505,314	\$0	\$648,244	
404	Cost-Effective Evaluation	604	\$166,836	\$150,264	\$224,760	\$0	\$0	\$25,276	\$0	\$0	\$28,021	\$428,321	\$0	\$595,157	
405	Preliminary I/I Reduction Program Plans	888	\$237,850	\$84,710	\$82,000	\$0	\$0	\$40,586	\$0	\$0	\$14,511	\$221,807	\$0	\$459,657	
400 Subtotal			2,722	\$712,480	\$557,238	\$619,170	\$0	\$0	\$150,295	\$0	\$0	\$92,869	\$1,419,572	\$1,640	\$2,133,692
500 -PRIVATE I/I REDUCTION PROGRAM															
501	Planning SSES on Private Sewer Systems	56	\$13,256	\$81,280	\$0	\$0	\$0	\$0	\$0	\$0	\$5,690	\$86,970	\$0	\$100,226	
502	Assessment of NSF Sewer Systems	381	\$95,626	\$210,944	\$0	\$261,310	\$0	\$0	\$332,700	\$0	\$56,347	\$861,301	\$0	\$956,927	
500 Subtotal			437	\$108,882	\$292,224	\$0	\$261,310	\$0	\$0	\$332,700	\$0	\$62,036	\$948,270	\$0	\$1,057,152
600 -PROJECT DELIVERY															
601	Design and Preconstruction Processes and Procedures	536	\$158,388	\$9,382	\$34,080	\$0	\$0	\$20,869	\$0	\$0	\$4,503	\$68,834	\$5,280	\$232,502	
600 Subtotal			536	\$158,388	\$9,382	\$34,080	\$0	\$0	\$20,869	\$0	\$0	\$4,503	\$68,834	\$5,280	\$232,502
Subtotal Task Series 100 - 600			17,010	\$4,413,382	\$1,922,675	\$2,814,360	\$3,175,110	\$50,000	\$288,711	\$441,900	\$18,000	\$609,753	\$9,320,509	\$84,109	\$13,818,000
Additional Services - Owner's Contingency															\$500,000
Program Total															\$14,318,000

Burns & McDonnell

Schedule of Hourly Rates and Expenses

<u>Position Classification</u>	<u>Hourly Billing Rate</u>
Technician 6*	\$103.00
Assistant 7*	\$124.00
Project Specialist*	\$126.00
Project Controls Support*	\$151.00
Assistant 8*	\$166.00
Project Administrator*	\$168.00
Senior Project Specialist*	\$173.00
Public Outreach Specialist*	\$195.00
Assistant 9*	\$197.00
Staff 10*	\$222.00
Staff 11*	\$243.00
Project Finance	\$267.00
Senior 12	\$273.00
Senior 13	\$294.00
Associate 14	\$304.00
Associate 15	\$321.00
Associate 16	\$330.00
Associate 17	\$336.00

NOTES:

1. Position classifications listed above refer to the firm's internal classification system for employee compensation. For example, "Associate", "Senior", etc., refer to such positions as "Associate Engineer", "Senior Architect", etc.
2. For any nonexempt personnel in positions marked with an asterisk (*), overtime will be billed at 1.5 times the hourly labor billing rates shown.
3. Monthly invoices will be submitted for payment covering services and expenses during the preceding month. Invoices are due upon receipt. A late payment charge of 1.5% per month will be added to all amounts not paid within 30 days after receipt of the invoice.
4. The services of contract/agency and/or any personnel of a Burns & McDonnell subsidiary, such as Burns & McDonnell India (BMI), or affiliate shall be billed to Owner according to the rate sheet as if such personnel is a direct employee of Burns & McDonnell.
5. The rates shown above are effective for services through October 1, 2026, and are subject to revision thereafter.
6. Reimbursement of direct expenses associated with the performance of Professional and Non-Professional Services will be based on the actual costs incurred for airfare, rental car, lodging, meals, reproduction of deliverables, taxi service, special equipment and supplies, partnering facilitator services, mobilization of staff to the project area, and daily Per Diem established for construction field staff assigned full-time to the project. Consideration will be given to the maximum allowable amount for each type of direct expense as indicated in the latest version of the Owner's annual published guideline for reimbursable expenses.

301 Bendix Road, Suite 400
Virginia Beach, VA 23452-1385

T: 757.518.2400



September 8, 2025

John Pruss
Burns & McDonnell
Via email

Subject: Rates for HRSD PPEA I/I Comprehensive Agreement

Please find the hourly rates for Brown and Caldwell staff categories for the HRSD PPEA I/I Comprehensive Agreement Year 1 (Sept 2025 – Sept 2026). These rates have been escalated in line with the Consumer Price Index (CPI) of 2.7% and we would expect subsequent annual increases corresponding to the CPI.

Category	Rate
Vice President	\$338.00
Managing Engineer	\$308.00
Sr Principal	\$256.00
Principal	\$246.00
Sr Associate	\$236.00
Supervisor	\$195.00
Associate	\$174.00
Sr Analyst	\$143.00
Sr Staff	\$154.00
Staff	\$143.00
Project Analyst	\$102.00
Admin	\$92.00

Respectfully,

A handwritten signature in black ink, appearing to read "Christopher Wilson".

Christopher Wilson
Local Leader
Brown and Caldwell

HRSD High Priority Inflow & Infiltration Reduction Program

Hazen and Sawyer Categorical Rates (through September 7, 2026)

Job Title	Level	Hourly Rate
Vice President	17	\$347
Associate Vice President	16	\$336
Senior Associate	15	\$305
Associate	14	\$284
Sr. Principal Engineer	13	\$242
Principal Engineer	12	\$179
Principal GIS Analyst/Scientist	11	\$179
Assistant Engineer II	10	\$168
Sr. Principal Designer	9	\$168
Assistant Engineer I	8	\$147
Principal Designer	7	\$126
Office Support	6	\$91

The Miles Agency 2025 Billing Rate Schedule

Job Title	Rate/Hr
Sr Community Engagement Specialist	\$ 300
Community Engagement Specialist	\$ 150
Jr Community Engagement Specialist	\$ 120

RJN Group, Inc.
2026 Compensation Schedule

Position Classification	Level	2025 Rate (1)	2026 Rate (2)
Project Director	17	\$ 340.00	\$ 357.00
Sr. Project Manager	16	\$ 300.00	\$ 315.00
Technology Specialist	15	\$ 275.00	\$ 289.00
Technical Advisor	14	\$ 225.00	\$ 237.00
Practice Leader	13	\$ 200.00	\$ 210.00
Project Manager	13	\$ 185.00	\$ 195.00
Senior Project Engineer	12	\$ 165.00	\$ 174.00
Field Manager	11	\$ 145.00	\$ 153.00
Project Engineer	11	\$ 145.00	\$ 153.00
Sr. Apps Engineer	11	\$ 145.00	\$ 153.00
Staff Engineer	10	\$ 140.00	\$ 147.00
GIS Technician	9	\$ 130.00	\$ 137.00
Construction Manager	9	\$ 130.00	\$ 137.00
Software Apps Engineer	8	\$ 120.00	\$ 126.00
Engineering Technician	8	\$ 120.00	\$ 126.00
Senior GIS Analyst	8	\$ 120.00	\$ 126.00
Senior Designer	8	\$ 120.00	\$ 126.00
Graduate Engineer	8	\$ 120.00	\$ 126.00
Administrative Manager	7	\$ 105.00	\$ 111.00
Senior Resident Project Rep.	7	\$ 105.00	\$ 111.00
Senior Field Manager	7	\$ 105.00	\$ 111.00
Info System Analyst	7	\$ 105.00	\$ 111.00
Lead Info Sys Specialist	7	\$ 105.00	\$ 111.00
Lead GIS Analyst	6	\$ 95.00	\$ 100.00
Field Technician	6	\$ 95.00	\$ 100.00
Senior Data Analyst	6	\$ 95.00	\$ 100.00
Info. System Specialist	6	\$ 95.00	\$ 100.00
Sr. Project Accountant	6	\$ 95.00	\$ 100.00

(1) 2025 Rates are effective 9/1/2024 - 8/31/2025

(2) 2026 Rates are effective 9/1/2025 - 8/31/2026

WRA ENGINEERING
TECHNICAL WAGE RANGES BY CLASSIFICATION

Effective July 27, 2025

Position	Rates
Senior Vice President	\$ 267.75
Vice President	\$ 245.41
Associate-Vice President	\$ 229.60
Associate	\$ 209.48
Senior Project Engineer II	\$ 192.86
Senior Project Engineer I	\$ 181.36
Senior Project Construction Engineer	\$ 185.51
Senior Project Architect II	\$ 191.51
Senior Project Architect I	\$ 162.64
Senior Project Landscape Architect	\$ 147.90
Senior Project Interior Designer	\$ 202.73
Senior Project Designer II	\$ 185.97
Senior Project Designer I	\$ 191.00
Senior Project Planner II	\$ 172.46
Senior Project Environmental Planner/Scientist II	\$ 163.20
Senior Project Environmental Planner/Scientist I	\$ 166.54
Senior Construction Manager II	\$ 177.86
Senior Construction Manager I	\$ 167.66
Project Engineer	\$ 150.40
Project Architect	\$ 138.21
Project Designer II	\$ 177.56
Project Designer I	\$ 157.77
Project GIS Specialist	\$ 171.36
Project Planner	\$ 152.69
Project Environmental Planner/Scientist	\$ 131.07
Project Geologist	\$ 142.49
Construction Manager II	\$ 145.58
Construction Manager I	\$ 124.95
Design Engineer	\$ 137.14
Construction Engineer	\$ 120.82
Senior Environmental Scientist/Planner	\$ 124.95
Senior GIS Specialist	\$ 152.36
Engineer	\$ 111.00
Architect	\$ 101.06
Data Analyst	\$ 98.18
Interior Designer	\$ 108.38
Landscape Architect	\$ 98.81
Environmental Planner/Scientist	\$ 92.74
Geologist	\$ 91.80
Safety Specialist	\$ 127.50
Real Estate Specialist	\$ 136.68
Planner	\$ 109.42
Senior Designer	\$ 138.82
Designer	\$ 108.22
CADD Technicians	\$ 97.16
Drafter / Draftsperson	\$ 110.29
Resident Engineer I	\$ 115.67
Inspector	\$ 93.05
Party Chief	\$ 124.01
Survey Technician II	\$ 96.59
Survey Technician I	\$ 70.89
Technical Specialist I	\$ 228.66
Security Analyst/Specialist	\$ 189.72

HRSD GUIDELINE
Reimbursable Charges Related to
Professional and Non-Professional Services
Guideline



Adopted: January 2013

Revised: January 2025

Page 1 of 3

EXHIBIT 3

1.0 Purpose and Need

These guidelines are established to provide staff with benchmarks for certain reimbursable costs that are typically negotiated as part of Professional and Non-Professional Services. HRSD typically negotiates Lump Sum Contracts for services associated with Capital Improvement Program projects and other similar work requiring assistance from consulting firms. These projects typically include some level of reimbursable costs that once negotiated are billed by the consultants as deliverables are completed for the project. For other less quantifiable projects a not-to-exceed budget is established. Using this contract format, the consultant provides monthly billing based on actual costs for both labor and other direct expenses. It is important that HRSD has a benchmark or internal guidance document for certain direct expenses that limits allowable reimbursable charges to HRSD and also fairly compensates consultants for their costs as part of their work.

2.0 Definitions

None specified.

3.0 Guiding Principles

Table 1 establishes guidelines for allowable direct expenses associated with Professional and Non-Professional Services. The limits shown in Table 1 are for general guidance only. The actual costs for the items listed will vary and could be significantly different.

4.0 Procedures

Consultants should invoice for the actual cost incurred but, if an actual cost exceeds the amount listed in Table 1, the consultant should provide documentation with the invoice on why the actual cost exceeded the recommended limit. Good judgment must always be used by HRSD staff and the consultants working for our organization when considering project-related costs. Table 1 includes only those items that are typically negotiated for Professional and Non-Professional Services. Other items not included in Table 1 should be negotiated as needed on a case-by-case basis. The costs listed are based on typical costs in the Hampton Roads Area. Reimbursable costs that occur outside this region will likely be different.

HRSD GUIDELINE
Reimbursable Charges Related to
Professional and Non-Professional Services
Guideline



Adopted: January 2013

Revised: January 2025

Page 2 of 3

5.0 Responsibility and Authority

The Engineering Division will review this document annually for necessary changes to the guidelines or the limits shown in Table 1.

HRSD GUIDELINE***Reimbursable Charges Related to
Professional and Non-Professional Services
Guideline***

Adopted: January 2013

Revised: January 2025

Page 3 of 3

Table 1
Limits for Certain Reimbursable Items - Related to Professional and Non-Professional Services

Item	Unit	Max. Allowable Cost*	Comments	Metric used to set cost
Airfare	Roundtrip	\$700	<ul style="list-style-type: none"> - Coach seating - Compared same flight itineraries using multiple airlines 	Sunday – Friday travel to Chicago O'Hare Delta \$346-\$592 United \$375-\$603 American Airlines \$349-\$632 Southwest* \$560-\$707 Sunday-Friday travel to Charlotte, NC (non-stop) \$615-\$845 *Includes 2 checked bags
Airport Parking	Per Day	\$12	<ul style="list-style-type: none"> - Long Term or Economy Lots 	Norfolk \$12 Newport News \$10
Car Rental	Per Day	\$80	<ul style="list-style-type: none"> - Standard Class Vehicle - Compared same trip information using multiple rental agencies - Sunday-Friday Airport pickup and drop-off. 	Hertz \$53 Enterprise \$66 Budget \$80
Hotel	Per night	\$210	<ul style="list-style-type: none"> - Standard room - Based on the season 	Fairfield Inn \$102-\$191 Comfort Inn \$81-\$160 Hampton Inn & Suites \$102-\$189 GSA \$110-210
Mileage Rate	Per mile	\$0.70	<ul style="list-style-type: none"> - IRS Guidance 	IRS Rate currently \$0.70 per mile
Meals	Per Day Per Meal	\$68 \$28	<ul style="list-style-type: none"> - Meals & Incidentals 	GSA: Breakfast \$16 Lunch \$19 Dinner \$28 Incidentals \$ 5 Total: \$68
Taxi Service	\$6.00 initial cost + \$2.10 per mile + \$0.30 per minute (waiting fee)	\$51	21.2 miles from Norfolk International Airport to the Atlantic Plant	Taxigator Rates in Virginia Beach

*Note: If actual costs exceed limit, the consultant and/or HRSD Project Manager must document reason for overage.