**APPENDIX**

**EXHIBIT A**

This Exhibit A is for professional engineering services by CDM Smith Inc. (ENGINEER) for Construction Administration and Observation Services for the City of Brevard's (CITY) Sewer Pump Station Rehabilitation and Replacement Project (Project).

## 1.0 PROJECT BACKGROUND AND DESCRIPTION

ENGINEER was retained by CITY under a previous agreement to provide final design, permitting, and bid phase services for improvements to existing wastewater pump stations as summarized below:

1. Fish Camp Pump Station
    a. Demolish existing submersible pumps, discharge piping and valves, controls, and instrumentation.
    b. Refurbish existing wet well with new coating system, and raise wet well top slab by 2-ft above the base flood elevation (BFE).
    c. Provide new, in-kind submersible pumps, discharge piping, and valves.
    d. Provide new control panel and instrumentation (flow meter and level indicators).
    e. Provide a new perimeter fence with locking gate.
    f. Provide new, outdoor, sound-attenuated, natural gas generator set with automatic transfer switch.
2. Gallimore Road Pump Station
    a. Demolish and abandon the existing pump station including equipment, controls, and infrastructure located above grade and 3-ft below grade. Remove utilities located 5-feet below grade, and backfill infrastructure located greater than 3-ft below grade.
    b. Provide a new, duplex, wet-pit submersible pump station with precast concrete wetwell, valve vault, and meter vault.
    c. Provide new electrical pad with canopy and equipment rack for a utility meter, power distribution panels, control panels, and telemetry equipment.
    d. Provide new discharge force main to convey pumped flow to an existing 10-inch force main located in the Gallimore Road Right-of-Way.
    e. Redirect existing force mains and gravity sewers to the new pump station site. It is assumed that new piping will be by open cut installation.
    f. Coordinate and provide new utility connection for electric power.
    g. Relocate and reconnect the 200-kW diesel generator from the existing Gallimore Road Pump Station to the new pump station location.

3. Wilson Road Pump Station

    a. Remove the existing trailer-mounted diesel generator and appurtenances.

    b. Provide a new, outdoor, sound-attenuated, natural gas generator set with automatic transfer switch. No upgrades to other existing electrical or control equipment is anticipated.

Under this Agreement, ENGINEER will provide support to the CITY during the construction phase of these improvements as further defined in the scope below. Tasks 100 through 600 were completed under the previous Agreement.

- Task 700 – Construction Contract Administration, Startup Services, Record Drawings, and Closeout
- Task 800 – Resident Project Representative Services
- Task 900 – Gallimore Road Pump Station Change to Variable Frequency Drives
- Task 1000 - Unspecified Additional Services

## 2.0 SCOPE OF SERVICES

The detailed scope of services for the basic services included under this Agreement (Tasks 700 through 900) follows:

The detailed scope of services for the basic services included under this Agreement follows:

### TASK 700 CONSTRUCTION CONTRACT ADMINISTRATION, STARTUP SERVICES, RECORD DRAWINGS, AND CLOSEOUT

The ENGINEER shall provide Contract Construction Administration services for the construction Project over an 18-month construction period (from Notice to Proceed to Final Completion). This Agreement would need to be amended to provide additional compensation should an increase in the 18-month construction period duration occur. It is assumed that conforming the documents following the bid phase will not be required.

#### 701 Definitions

"Work" means the entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

#### 702 General Administration of Construction Contract

ENGINEER shall consult with and advise CITY and act as CITY's representative as set forth herein. CITY's instructions to the Contractor(s) shall be issued through ENGINEER who shall have the

authority to act on behalf of CITY in dealings with Contractor to the extent provided in this Agreement.

This task will include the attendance, administration, and preparation of minutes of appropriate project meetings including:

- Pre-Construction Meeting (In-person)
- Monthly progress meetings (16 monthly progress meetings are estimated). It is assumed that up to 4 meetings will be virtual and 12 meetings will be held in-person at CITY facilities.

703 Visits to Site and Observation of Construction

ENGINEER shall make visits to the site at intervals appropriate to the stage of construction, or otherwise agreed to by ENGINEER in writing, to observe as an experienced and qualified design professional the progress and quality of the Work and to determine if the Work is proceeding in accordance with the Contract Documents. ENGINEER's inspections shall not be intended to involve work beyond the responsibility specifically assigned to ENGINEER in this Agreement and the Contract Documents.

On the basis of on-site inspections, ENGINEER shall keep the CITY informed of the progress and quality of the Work and shall alert the CITY to defects and deficiencies in the Work of the Contractor. ENGINEER shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences, or procedures of construction selected by Contractor or for safety and environmental programs and precautions incidental to the Work. ENGINEER shall not be responsible for the failure of the Contractor, his Subcontractors, or any other persons performing any of the Work to comply with laws, rules, regulations, ordinances, code, or orders, or for failure of any of them to carry out the Work in accordance with the Contract Documents except as otherwise expressly provided herein.

The purpose of ENGINEER's visits will be to enable ENGINEER to better carry out the duties and responsibilities assigned to and undertaken by ENGINEER during the Construction Phase, and, in addition, by the exercise of ENGINEER's efforts as an experienced and qualified design professional, to provide for CITY a greater degree of confidence that the completed work of Contractor will conform to the Contract Documents, and that the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents has been implemented and preserved by Contractor.

This scope assumes 4 site visits will be made by the electrical engineer and 1 site visit by the instrumentation engineer to verify proper installation and system startup. Each visit assumes 4 hours of onsite time. Visits will be conducted by a Professional Engineer to observe the work and prepare appropriate inspection reports.

Inspection reports will be generated for each site visit and shall record Contractor's hours on the job site, weather conditions, number and types of labor personnel onsite, equipment onsite,

equipment in use, work completed each day, data relative to questions of Work Change Directives, 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 test procedures. Site visits are budgeted as partial day visits, the above information will be gathered for the time the ENGINEER is onsite.

704 Defective Work

ENGINEER shall have authority to disapprove or reject Contractors' Work while it is in progress if ENGINEER believes that such Work does not conform to the Contract Documents or that it will prejudice the integrity of the design concept of the Project as reflected in the Contract Documents. ENGINEER shall have access to the Work at all times wherever it is in preparation or progress.

705 Shop Drawings

ENGINEER shall review and approve or take other appropriate action with respect to Shop Drawings, samples, and other data which Contractor is required to submit, but only for conformance with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents and in compliance with the information given in the Contract Documents. Means, methods, techniques, sequences, or procedures of construction or safety programs and precautions incident thereto will be reviewed, when appropriate, for information purposes only.

This task will include the evaluation of substitute materials and equipment proposed by the Contractor for acceptability. A total of 75 “A” submittals are assumed.

706 Clarifications and Interpretations: Field Orders

ENGINEER shall issue necessary clarifications and interpretations, including preparation of supplementary sketches and drawings if required, of the Contract Documents as appropriate to the orderly completion of the Work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. ENGINEER may issue Field Orders authorizing minor variations from the requirements of the Contract Documents. Field Orders shall not involve change in Contract Price or Time. A total of 2 Field Orders and 25 Requests for Information are assumed.

707 Change Orders and Work Change Directives

ENGINEER shall recommend Change Orders and Work Change Directives to CITY as appropriate, and shall prepare Change Orders and Work Change Directives as required. ENGINEER shall not issue such Change Orders and Work Change Directives until CITY has approved and accepted Contractor’s cost and schedule change to implement such Change Orders and Work Change Directives. A total of 2 Change Orders are assumed.

708 Inspections and Tests

ENGINEER shall make recommendations to CITY regarding the advisability of requiring special inspections or testing of the Work and have authority to receive and review all certificates of inspections, testing, and approvals required by laws, rules, regulations, ordinances, codes, orders, or the Contract Documents to determine generally that their content complies with the requirements of, and the results certified indicate compliance with, the Contract Documents. It is assumed that the CITY will procure and pay for all required specialty inspections and materials testing as required by the Contract Documents except where specified for the Contractor to provide such services. ENGINEER shall coordinate such work with the firm procured by the CITY as required during the project duration. ENGINEER will review reports prepared by the CITY'S firm for compliance with the design documents and take appropriate action to address deficiencies. Any third party construction materials testing/inspections required will be completed by the Contractor.

709 Applications for Payment

ENGINEER shall determine the amount owing to Contractor based on ENGINEER's observations and inspections at the site and the data comprising the Application for Payment, and the accompanying data and schedules, and recommend in writing payments to Contractor in such amounts. Such recommendations of payment will constitute a representation to CITY that the Work has progressed to the point indicated and that, to the best of ENGINEER's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. The issuance of a recommendation will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a recommendation for payment will not be a representation that the ENGINEER is responsible for construction means, methods, techniques, sequences, or procedures or has ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Price. In the case of unit price work, ENGINEER's recommendations of payment will include final determinations of quantities and classifications of such work (subject to any subsequent adjustments allowed by the Contract Documents). A total of 16 pay applications are assumed.

710 Contractor's Completion Documents

ENGINEER shall receive, review, and transmit to CITY with written comments maintenance and operating instructions, schedules, guarantees, certificates of insurance, marked-up record drawings (including shop drawings, samples and other pertinent data), bonds, certificates of inspection, and tests and approvals of equipment which are to be provided by Contractor in accordance with the Contract Documents. ENGINEER shall determine that their content complies with the requirements of the Contract Documents.

711 Substantial Completion

Following notice from Contractor that Contractor considers the entire work ready for its intended use, ENGINEER and CITY, accompanied by Contractor, shall conduct an inspection to determine if the work is substantially complete. If after considering any objections by the CITY,

ENGINEER considers the Work substantially complete, ENGINEER shall deliver a notice of substantial completion to CITY and Contractor.

712 Final Notice of Acceptability of Work

Prior to final payment to the Contractor, and in company with the CITY, ENGINEER shall visit the Project to observe any apparent defects in the completed work, assist CITY in consultations and discussions with Contractor concerning correction of such defects, and make recommendations as to replacement or correction of defective work.

ENGINEER shall conduct a final inspection to determine if the completed Work is acceptable to ENGINEER and CITY so that ENGINEER may recommend, in writing, final payment to Contractor and may give written notice to CITY and Contractor that the Work is acceptable, subject to any conditions therein expressed. Accompanying the recommendation for final payment, ENGINEER shall indicate that the work is acceptable to the best of ENGINEER's knowledge, information, and belief and based on the extent of the services performed and furnished by ENGINEER under this Agreement.

ENGINEER shall provide ENGINEER's certification that the work has been completed in accordance with CITY's approved plans and specifications.

Upon final acceptance of the work, ENGINEER will obtain from the Contractor the required closeout paperwork including Release and Waiver of Liens, Final Payment Affidavits, and warranty paperwork as appropriate.

713 Startup Services

ENGINEER, in conjunction with the appropriate equipment manufacturers, shall provide assistance in connection with the refining and adjusting of installed equipment and systems during the startup and commissioning of the new facilities. ENGINEER will utilize an Operations and Maintenance (O&M) Specialist to assist with this task. A total of six (6) 8-hour days onsite are assumed (2 days for Fish Camp Pump Station, 3 days for Gallimore Road Pump Station, and 1 day for the Wilson Road Pump Station).

714 Record Drawings and Closeout

ENGINEER shall prepare a set of reproducible record prints of Record Drawings showing those changes made during the construction process based on the marked-up prints, shop drawings, drawings, and other data furnished by the Contractor to ENGINEER. The record prints shall also incorporate the ENGINEER's observation of changes made during construction. These record drawings shall be prepared and delivered electronically in PDF format.

ENGINEER shall provide miscellaneous services as necessary in conjunction with Project closeout including submission of record drawings to permitting agencies for final certifications as necessary.

**TASK 800 RESIDENT PROJECT REPRESENTATIVE SERVICES**

Anticipated construction schedule is 510 days (17 months) to substantial completion and 540 days (18 months) to final completion. This Agreement includes one Resident Project Representative (RPR) (budgeted at 4 hours/week) over 14 months (60 weeks) active construction period for a total of 240 hours. This Agreement would need to be amended to provide additional compensation for RPR services should an increase in the estimated active construction period be required and the total hours be exceeded.

801 CITY and ENGINEER agree that representation at the site shall be provided. ENGINEER shall provide one RPR to assist ENGINEER in inspecting the progress and quality of the work of the Contractor. Project representation shall be on a part-time basis and is intended to be at a sufficient level to inspect the Contractor's Work and discharge its responsibilities under Task 700. ENGINEER shall notify CITY promptly if above level of field representation is insufficient to inspect work as defined by ENGINEER and CITY.

802 Such Project Representative shall be selected, employed, and directed by ENGINEER. The duties, responsibilities, and limitations of authority of such Project Representatives shall be described in the General Conditions of the Contract Documents and as detailed herein.

803 Through more extensive on-site inspections of the work in progress and field checks of materials and equipment by the RPR, ENGINEER shall use reasonable effort to provide further protection for CITY against defects and deficiencies in the work of Contractor. However, ENGINEER shall not, during such visits or as a result of such inspections of Contractor's work in progress, supervise, direct, or have control over Contractor's work, nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences, or procedures selected by Contractor, for safety procedures and programs incident to the work of Contractor, for any failure of Contractor to comply with laws, rules, regulations, ordinances, codes, or orders applicable to Contractor's performing and furnishing the work, or responsibility of construction for Contractor's failure to furnish and perform the Work in accordance with the Contract Documents except as expressly provided herein.

The duties and responsibilities of the RPR are limited to those of ENGINEER in ENGINEER's Agreement with the CITY and in the construction Contract Documents and are further limited and described as follows:

803.1 General

RPR is ENGINEER's agent at the site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR's actions. RPR's dealings in matters pertaining to the on-site work shall in general be with ENGINEER and Contractor, keeping CITY advised as necessary. RPR's dealing with Contractor's subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with CITY with the knowledge of and under the direction of ENGINEER.

803.2 Duties and Responsibilities of RPR

- Schedules: RPR shall review the progress schedule, schedule of Shop Drawing submittals, and schedule of values prepared by Contractor and consult with ENGINEER concerning acceptability.

- Conferences and Meetings: RPR shall attend meetings with Contractor such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings.

- Liaison: RPR shall serve as ENGINEER's liaison with Contractor, working principally through Contractor's superintendent, and assist in understanding the intent of Contract Documents; and assist ENGINEER in serving as CITY's liaison with Contractor when Contractor's operations affect CITY's on-site operations.

- RPR shall assist in obtaining from Owner additional details or information when required for proper execution of the Work.

803.3 Shop Drawings and Samples:

RPR shall advise ENGINEER and Contractor of the commencement of any Work requiring a Shop Drawing or Sample if the submittal has not been approved by ENGINEER.

803.4 Review of Work, Rejection of Defective Work, Inspections and Tests:

- RPR shall conduct on-site inspections of the Work in progress to assist ENGINEER in determining if the Work is proceeding in accordance with the Contract Documents.

- RPR shall report to ENGINEER whenever RPR believes that any Work will not produce a completed Project that conforms to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of Work that the RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

- RPR shall verify 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.

- RPR shall accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to ENGINEER.

- RPR shall coordinate and review the results of tests made by the independent soils and materials testing laboratory.

- Interpretation of Contract Documents: RPR shall report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by ENGINEER.

- Modifications: RPR shall consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to ENGINEER. Transmit to Contractor in writing decisions as issued by ENGINEER.

803.5 Records:

- RPR shall maintain orderly files for correspondence, reports of job conferences, Shop Drawings and Samples, reproductions of original Contract Documents including Work Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing submittals received from and delivered to Contractor, and other Project related documents.

- RPR shall prepare a daily report, keep a diary or log book, recording Contractor's hours on the job site, weather conditions, number and types of labor personnel onsite, equipment onsite, equipment in use, work completed each day, data relative to questions of Work Change Directives, 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 test procedures; and send copies to ENGINEER.

- RPR shall record names, addresses and telephone numbers of Contractors, subcontractors, and major suppliers of materials and equipment.

803.6 Reports:

- RPR shall furnish to ENGINEER periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.

- RPR shall consult with ENGINEER in advance of scheduled major tests, inspection, or start of important phases of the Work.

- RPR shall draft proposed Change Orders and Work Change Directives obtaining backup material from Contractor and recommend to ENGINEER Change Orders, Work Change Directives, and Field Orders.

- RPR shall report immediately to ENGINEER and CITY the occurrence of any accident.

803.7 Payment Requests:

RPR shall review Applications for Payment with Contractor for compliance with the established procedures for their submission and forward with recommendations to ENGINEER, noting particularly the relationship of the payment requests to the schedule of values, Work completed, and materials and equipment delivered at the site but not incorporated in the Work.

803.8 Certificates, Maintenance and Operation Manuals:

During the course of the Work, RPR shall verify that certificates, maintenance and operation manuals, and other data required to be assembled and furnished by Contractor are applicable to the

items actually installed and in accordance with the Contract Documents and have this material delivered to ENGINEER to review for forwarding to CITY prior to final payment for the Work.

803.9 Completion:

- Before ENGINEER issues a Certificate of Substantial Completion, RPR shall submit to Contractor a list of observed items requiring completion or correction.

- RPR shall observe whether Contractor has performed inspections required by laws, rules, regulations, ordinances, codes, or orders applicable to the Work including but not limited to those to be performed by public agencies having jurisdiction over the Work.

- RPR shall conduct a final inspection in the company of ENGINEER, CITY, and Contractor and prepare a final list of items to be completed or corrected.

- RPR shall observe whether items on final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance and issuance of the Notice of Acceptability of the Work.

804 Limitations of Authority by RPR:

- RPR shall not authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items) unless authorized by ENGINEER.

- RPR shall not exceed limitations of ENGINEER's authority as set forth in the Agreement or the Contract Documents.

- RPR shall not undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's superintendent.

- RPR shall not advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences, procedures of construction, or health and safety procedures unless such advice or directions are specifically required by the Contract Documents.

- RPR shall not accept Shop Drawing or sample submittals from anyone other than Contractor.

- RPR shall not authorize CITY to occupy the Project in whole or in part.

- RPR shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by ENGINEER.

805 When the RPR observes, or has knowledge of, a violation of OSHA or other established safety regulations, he shall notify the CONTRACTOR of such violation. If, to the best of the ENGINEER's knowledge and belief, the violation is not promptly corrected, the RPR shall notify the CITY and the OSHA enforcement agency. Notwithstanding the foregoing, the Contractor shall be responsible for compliance with all OSHA and safety rules and regulations.

**TASK 900 GALLIMORE ROAD PUMP STATION CHANGE TO VARIABLE FREQUENCY DRIVES**

During the bid phase of the project, the CITY requested that the pumps at the Gallimore Road Pump Station be changed from constant speed to have variable speed operational capability by adding variable frequency drives (VFDs) to this pump station. This required modification to the drawings and specifications and reissuance of the revised documents as part of an addenda during the bid phase.

**TASK 1000 UNSPECIFIED ADDITIONAL SERVICES**

During the Project, additional services not specified in this Scope of Work may be needed to support the completion of the work effort. Examples of additional services include additional RPR time beyond that defined above or design changes. These services will be performed by the ENGINEER as needed only after being authorized in writing by the CITY. ENGINEER will prepare a scope and fee and submit to the CITY for approval.

## 3.0 SCEHDULE AND COMPENSATION

The ENGINEER shall complete Project as follows:

- Substantial and Final Completion shall be completed within 17 and 18 months, respectively, from the Notice to Proceed Date.
- RPR services will be provided over an estimated 60 week active construction period.
- Record Drawings will be delivered to the CITY within 6 weeks of receipt of documents from the Contractor.

As compensation for the engineering services described in the Agreement and this Exhibit, the ENGINEER will be paid on a lump sum basis for tasks 700 and 900. Payments will be made monthly based on percentage of the work completed with the balance due at project completion. Task 800 will be paid on an hourly rate not to exceed basis based on the ENGINEER and subconsultant standard bill rates. Subconsultants will be invoiced at cost plus 10-percent markup. An estimated breakdown of cost by task is provided for informational purposes below.

| Task Number | Task Name | Payment Method | Total Cost |
|---|---|---|---|
| | | | |
| **700** | **Construction Contract Administration** | **Lump Sum** | **$321,000** |
| **800** | **Resident Project Representative Services** | **Hourly Rate** | **$31,000** |
| **900** | **Gallimore Road Pump Station Change to Variable Frequency Drives** | **Lump Sum** | **$10,000** |
| | **Total** | | **$362,000** |

## 4.0 CITY'S RESPONSIBILITIES

- Provide the specialty inspection and materials testing services from a qualified third-party company and assist the Engineer and RPR with the scheduling of these services as required during construction of the work.
- Timely review and input of deliverables and/or construction issues.
- Attendance at monthly construction progress meetings to assist with resolution of issues arising during construction.
- Construction observation/inspection/coordination with Contractor when ENGINEER's RPR is not onsite.
- Coordination with the public and property owners.
- CITY shall be responsible for, and ENGINEER may rely upon, the accuracy and completeness of all requirements, programs, instructions, reports, data, and other information furnished by CITY to ENGINEER pursuant to this Agreement. ENGINEER may use such requirements, programs, instructions, reports, data, and information in performing or furnishing services under this Agreement. ENGINEER's scope of work does not include verifying CITY Provided Information for accuracy or completeness. CITY may request an independent review of CITY Provided Information by ENGINEER pursuant to a mutually agreed amendment to this Agreement. ENGINEER shall be entitled to an adjustment in price and schedule to the extent that any corrective action in ENGINEER's Services arises out of inaccurate CITY Provided Information.

## 5.0 ASSUMPTIONS AND EXCLUSIONS

- As noted within the scope of work above.