

**Memorandum
Public Works Department**



To: City Manager
Subject: LTCP – Relocation of Outfall 007 & Separation of Outfall 006 Basin
Date: June 27, 2017
Number: 2017-080

Attached is a proposed contract amendment to the agreement with Symbiont for additional engineering services related to construction inspection services for the Relocation of Outfall 007 & Separation of Outfall 006 Basin projects. These projects are part of the Long Term Control Plan and the USEPA Consent Decree.

The Relocation of Outfall 007 project is to relocate Overflow Outlet 007 from its current location within Blackhawk State Park (intersection of 24th Street and Blackhawk Road) and relocate it to a new location on the Rock River near 49th Avenue and 8th Street. The partial separation of the CSO 006 Basin will include the installation of storm sewers, catch basins, water mains and roadway pavements to reduce the amount of surface runoff entering the combined sewer system, thereby allowing for the closure of the CSO Outfall 006.

The scope of work to be covered by this proposal is to include construction inspection services for these projects. Symbiont proposes to provide these engineering services at their standard hourly rates for an estimated cost of \$465,300.00.

Recommendation

The Public Works Department recommends that the City Council approve the Engineering Services proposal from Symbiont in the amount of \$465,300.00 and authorize the City Manager to execute the contract documents.

Vendor: Symbiont
Proposal Amount: \$465,300.00

Fund: 506 Wastewater Operation & Maintenance \$350,000.00
Department: 618 Utilities Service
Cost Center: 341 Wastewater Mill Street Plant
Object Code: 56501 Engineering Services
Project 2741 LTCP- Relocation of Outfall 007

Fund: 506 Wastewater Operation & Maintenance \$115,300.00
Department: 619 Utilities Maintenance
Cost Center: 346 Wastewater Collection Maintenance
Object Code: 56501 Engineering Services
Project 2742 LTCP- Separation of Outfall 006 Basin

Requisition Number: R006672

Submitted by: Larry Cook, Interim Public Works Director
Michael J. Kane, P.E., City Engineer

Approved by: Randall D. Tweet, City Manager



Mr. Mike Kane, P.E.
City Engineer
City of Rock Island
1309 Mill Street
Rock Island, IL 61201-3261

June 19, 2017

**RE: Proposal for Engineering Services During Construction
Relocation of Outfall 007
Separation of Outfall 006 Basin
Rock Island, Illinois
Symbiont Proposal No. 34884**

Dear Mr. Kane:

Symbiont is pleased to submit this proposal to the City of Rock Island (City) Public Works Department to provide engineering services during construction for the last two projects in the City's Combined Sewer Overflow (CSO) Long Term Control Plan (LTCP) – Relocation of Outfall 007 and Separation of the Outfall 006 Basin. This is a proposal amendment to the existing project design contract between the City and Symbiont which indicated that Symbiont would develop a separate scope of work and amend the existing design contract for engineering services during construction for each project.

PROJECT UNDERSTANDING AND APPROACH

Symbiont completed separate detailed designs for each project so that the City can enter into separate agreements with a single general contractor for the construction of all the improvements included within each project. We understand that the City desires to award a contract to the low, responsive bidder for each project immediately following Illinois Environmental Protection Agency (IEPA) review and approval of the bid results, and issuance of an SRF loan. Site construction activities would begin immediately for each project following notice-to-proceed. The outfall 006 project has substantial completion date of November 15, 2017 while the outfall 007 project has a substantial completion date of March 15, 2018. The contractor on each project must achieve final completion within 60 days of the respective substantial completion date.

The following paragraphs outline the specific engineering services that will be performed in support of each project during the various construction tasks. As previously discussed, Symbiont will submit separate proposals to the City for startup services, programming and applications engineering, and O&M manual preparation for the outfall 007 project.

SCOPE OF WORK

Project Meetings

Symbiont's project manager, assistant project manager, and lead project engineer will attend separate preconstruction meetings for each project with the respective contractor and City personnel prior to the beginning of construction activities. It is assumed that the separate meetings will be held on the same day.

When necessary, Symbiont's Project Manager and design staff will attend biweekly progress meetings to be held by the general contractor. Attendance at these meeting will allow the design team to stay informed of current construction issues and the schedule status and may be combined with the site visits by design engineers described below.

Based on the proposed construction schedules for final completion of each project, Symbiont's proposal assumes attendance at 22 progress meetings for the outfall 007 project and 12 meetings for the outfall 006 project. We assume that the progress meetings will be held on the same day of the week with one meeting in the morning and the other in the afternoon.

Visits to Site by Design Engineers

Representatives of the various design disciplines utilized by Symbiont in preparing the contract documents, will make visits to the site at intervals appropriate to the various stages of construction. Such visits will be conducted, when necessary, to observe, as an experienced and qualified design professional, the progress and quality of the various aspects of the contractors' work. Based on information obtained during such visits and observations, Symbiont will endeavor to determine whether, in general, if the work is proceeding in accordance with the contract documents.

During such visits, Symbiont will not, as a result of such observations of contractors' work in progress, supervise, direct, or have control over contractor's work, nor shall Symbiont have authority over, or responsibility for, the means, methods, techniques, sequences, or procedures of construction selected by contractors; for safety precautions and programs incident to the work of contractors; or for any failure of contractors to comply with laws, rules, regulations, ordinances, codes, or orders applicable to contractors' furnishing and performing the work.

Observations made during the site visits will be communicated to the contractor and to the City via a field trip report to be issued as soon as possible after the site visit.

Defective Work and Follow-Up

During site visits and on the basis of on-site observations, Symbiont will have authority to disapprove of or reject contractors' work while it is in progress if Symbiont believes that such work will not produce a completed project that conforms with the contract documents,

or that the work will impact the integrity of the design concept of the completed project functioning as a whole as indicated in the contract documents. Symbiont will address disapprovals or rejections of contractors' work to the contractor through the use of a written defective work description. For budgeting purposes, Symbiont has assumed 2 instances of preparing contractor notices requiring 8 hours of document preparation per instance for each project.

Clarifications, Interpretations, and Field Orders

Symbiont will issue necessary clarifications and interpretations of the contract documents, when 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. As specified in the contract documents, all requests for information (RFI) will be submitted and responded to via Symbiont's Procore project management software.

Symbiont may also issue field orders authorizing minor variations from the requirements of the contract documents, where no contractual dollar amount or schedule adjustments are required, as a means of documenting project changes for record purposes. Symbiont will communicate with the general contractor on a regular basis to confirm the intent of the design. The effort required to respond to contractor RFI requests will be addressed by Symbiont and our sub consultants, as appropriate.

Submittal Review

Symbiont will review and comment on product certifications, shop drawings, and other data that contractors are required to submit. Submittal reviews will be for conformance with the information given in the contract documents and for compatibility with the design concept of the completed project as a functioning whole as indicated in the contract documents. Such reviews and review comments will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto. Symbiont's proposed level of effort is based on 75 submittals for outfall 006 and 175 submittals for outfall 007, with the majority of the submittals successfully reviewed and returned to the Contractor in the original submittal.

As specified in the contract documents, submittals will be transmitted and responded to via Symbiont's Procore project management software. The contractor, City staff, and field inspection staff will have access to the submittal log and submittals through their respective Procore log ins.

Substitutes

Symbiont will evaluate and determine the acceptability of substitute or "or-equal" materials proposed by subcontractors for conformance with the contract document requirements. Substitution requests will be evaluated as part of the shop drawing review process. Symbiont has assumed a maximum of 2 substitutes at an average of 3 hours per substitute for outfall 006 and 5 substitutes at an average of 3 hours per substitute for outfall 007.

Applications for Payment

Based on Symbiont's on-site observations as experienced and qualified design professionals and on review of Applications for Payment and the accompanying data and schedules, Symbiont shall review the Contractors' Applications for Payments and recommend amounts to be paid. Such recommendations of payment will be in writing and will constitute Symbiont's representation to the City, based on such observations and review, that, to the best of Symbiont's knowledge, information and belief the work has progressed to the point indicated, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of such work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation), and the conditions precedent to Contractors' being entitled to such payment appear to have been fulfilled in so far as it is Symbiont's responsibility to observe the work. In the case of unit price work, Symbiont'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).

By recommending any payment, Symbiont shall not thereby be deemed to have represented that on-site observations made to check the quality or quantity of Contractors' work as it is performed and furnished have been exhaustive, extended to every aspect of the work in progress, or involved detailed inspections of the work beyond the responsibilities specifically assigned to Symbiont in this Agreement and the Contract Documents.

For the outfall 007 project, Symbiont will work with the Missman inspector to verify that the contractor's applications for payment are consistent with the progress of the work. For the outfall 006 project, Symbiont will review the unit price schedule of values table completed by the City's inspector.

Change Order Review

Symbiont will review change order and contractor claims along with the City to evaluate the technical and commercial merits of contractor and/or City initiated change orders. We will evaluate and make recommendations regarding the merit of proposed changes. We will provide an independent cost estimate and recommendations relative to the cost of the change as submitted by the contractor for negotiating purposes. Specification and/or drawing revisions will be provided to the City such that formal change orders can be executed with the contractor. Symbiont will prepare short-form change orders for concurrence by City personnel and execution with the Contractor. The budget for change order and claims review efforts includes 20 hours of engineering support for outfall 006 and 40 hours for outfall 007.

Contractors' Completion Documents

Symbiont will receive from the General Contractor, review, and transmit back to the General Contractor with written comments: maintenance and operating manuals, schedules, certificates of inspection, tests and approvals which are to be assembled by contractors in accordance with the contract documents to obtain final payment. Symbiont's review of such documents is limited to determine that in general the content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the contract documents. The General Contractor will be responsible for tracking the completion and submittal of all testing, inspection and similar documentation.

Review of the General Contractor's progress will be monitored as part of the biweekly progress meetings. Symbiont will incorporate the final certificates of proper installation into the manufacturers O&M manuals as part of the overall project O&M manual. To accomplish the on-site reviews associated with the equipment certificates of proper installation, Symbiont anticipates that we can perform these services during the site meeting and technical inspection site visits. Symbiont will receive O&M materials and forward them to the City when reviewed.

Substantial Completion

Following notice from the General Contractor that they consider the entire work ready for its intended use, Symbiont, the City of Rock Island, and the General Contractor shall conduct an inspection to determine if the work is substantially complete. To perform substantial completion reviews, Symbiont assumes different discipline engineers will be required including civil, structural, mechanical, controls, and electrical engineers. If, after this inspection, Symbiont considers the work substantially complete, Symbiont will prepare a certificate of substantial completion for signature by the City and Contractor.

Following substantial completion inspection, Symbiont will prepare a draft punch list of items to be completed and distribute it to all inspection participants. Symbiont will prepare a Substantial Completion Package that includes the following:

- Contractor's Request for Substantial Completion Inspection
- Substantial Completion Inspection Report
- Punch List
- Statement regarding responsibilities pending final completion concerning security, maintenance, and insurance
- Statement regarding warranties and guarantees
- Certificates of Substantial Completion
- Request for Reduction of Retainer

Based on the design sequence of construction, Symbiont anticipates two substantial completion reviews and inspections will be executed. The first will occur upon completion

of the storage tank, pump station, and sewer modifications. The second will occur upon completion of the parking lot, bioswales, and miscellaneous items.

Contract Completion and Closeout

Symbiont along with the City and the General Contractor will conduct a final inspection to determine if the completed work of the contractor is acceptable so that Symbiont may recommend, in writing, final payment for the contractor. To perform final completion reviews, Symbiont assumes different discipline engineers will be required including civil, structural, mechanical, controls, and electrical engineers.

Accompanying the recommendation for final payment, Symbiont will also provide documentation that, to the best of Symbiont's knowledge and information, the contract has been satisfied and is ready for final payment.

Symbiont will provide a Final Completion Package that includes the following:

- Final Completion Certificate
- Final Pay Application
- Documentation of Maintenance Bond
- Waiver of Public Improvements Lien
- Consent of Surety to Final Payment

Record Drawings

During construction progress meetings and construction site visits Symbiont, in conjunction with the Missman site inspectors, will monitor the Contractor's record drawings markups. Following completion of the construction work, Symbiont will prepare an electronic set of record drawings showing record information received from the General Contractor, change order modifications, field orders and other record documents furnished by the General Contractor to Symbiont, which were annotated by the General Contractor to show all changes made during construction.

Symbiont shall not be responsible for the acts or omissions of any Contractor, or of any subcontractor, any supplier, or for any other person or organization performing or furnishing any of the work. Symbiont shall not be responsible for Contractors' failure to perform or furnish the work in accordance with the Contract Documents. Upon preparation of the record drawings and review by the City, Symbiont will provide the City with electronic files of all the drawings.

Construction Observation

Symbiont, through Missman, will provide qualified technical personnel for the purpose of observing and recording construction details, including equipment, materials, workers, weather, contractors, progress, and other information for future reference for the outfall 007 project only. Symbiont understands that City of Rock Island staff will inspect the outfall 006 project. The outfall 007 observation services will include the following:

- Observe and document progress and quality of the executed work and determine, in general, if the work is proceeding in accordance with the Contract Documents
- Prepare reports if the Contractor finds conflict, error, or discrepancy in the Contract Documents to enable written clarification or interpretation to be issued
- Document any special conditions, material deliveries, number of workers, and arrival and departure of equipment
- Attend bi-weekly progress meetings
- Take notes and measurements for record drawings and keep a photo log
- Record weather
- Record opening and closing of roads and detours, traffic control deficiencies
- Note suspension of work, resumption of work, time spent on disputed items, or delays
- Record presence of testing personnel on site
- Note any accidents or injuries
- Note time of placing/removing erosion controls and any deficiencies

The following services will not be performed as part of the observation services:

- Surveying and/or construction layout
- Construction materials testing
- Title research or expert testimony
- Engineering services and/or coordination regarding archaeological, environmental, or historic issues
- Soils investigations, geotechnical or environmental reports or studies
- Erosion control monitoring or reporting

All daily reports, diaries, and photography will be recorded on Symbiont's Procore project management site for real time review by the City.

The construction observation level of effort is based on part time staffing at an average of 6 hours per day for a Monday – Friday work week from July 17, 2017 through March 31, 2018. Missman's inspector will have a dedicated construction vehicle and will work out of their main office in Rock Island.

Permit and Loan Coordination

As part of the City's SRF loan with IEPA for each project, various documents and information will need to be coordinated with IEPA. Symbiont will assist the City with transmitting to IEPA pay applications, change orders, and record drawings. Symbiont will also assist with contractor coordination for Illinois DOT and IA Interstate Railroad construction permits.

Project Management

Symbiont will provide project management to coordinate the above scope of work with the project team, City staff, construction contractors, and outside stakeholders.

EXCLUSIONS

This proposal does not include programming and instrumentation and control inspection services, startup assistance services, training, or O&M manual development. These services will be required for the outfall 007 project and will be provided under a separate contract amendment after the construction process has begun so the scope of services can be better tailored to the specific construction sequence and duration.

FEE AND SCHEDULE

Symbiont proposes to perform the engineering services during construction described herein on a time-and-materials basis as follows.

Engineering Services During Construction	\$134,600.00
Construction Observation Services	\$330,700.00
TOTAL	\$465,300.00

All services will be billed on a time and materials basis according to the rate schedule in effect when the work is completed.

The construction phase for these projects is anticipated to begin in July 2017 with the outfall 006 project scheduled for completion by the end of this year while the outfall 007 project is scheduled for completion in March of 2018.

PROJECT TEAM

Symbiont plans to maintain the same team of highly qualified personnel that designed each of the projects for the engineering services during construction phase and will sub-contract with Missman to assist with daily field observations and inspection for the outfall 007 project.

TERMS AND CONDITIONS

Symbiont Standard Terms and Conditions of Agreement, as previously executed for the project design contract dated November 14, 2014, apply to this contract amendment. Please indicate your acceptance of this proposal by having an authorized representative sign below and return one copy to Symbiont.

Symbiont appreciates the opportunity to provide the City with the above engineering services. Please call at your earliest convenience if you have any questions regarding this proposal.

Sincerely,

SYMBIONT®



Brian A. Till, P.E.
Project Manager

SYMBIONT®



Patrick W. Carnahan, P.E.
Vice President

PROPOSAL NO. 34884 ACCEPTED BY:

CLIENT: _____

SIGNATURE: _____

TITLE: _____

DATE: _____

Symbiont considers the project approach, design, pricing, data, and other business considerations contained in this proposal to be proprietary and confidential business information to be used solely for the purpose of evaluating the proposal. This document and the information contained herein shall not be used for any purpose other than as stated above and shall not be used, duplicated, or disclosed to any other party without Symbiont's prior written consent.