



AGREEMENT BETWEEN

CITY OF MARGATE

AND

CAROLLO ENGINEERS

FOR

**R.F.Q. 2017-017 DESIGN SERVICES FOR EAST WASTEWATER
TREATMENT PLANT UPGRADE ENGINEERING
FOR THE DEPARTMENT OF ENVIRONMENTAL AND ENGINEERING
SERVICES**

This is an Agreement between: The **City of Margate**, a municipal corporation in the State of Florida, hereinafter referred to as “**CITY**”,

AND

Carollo Engineers its successors and assigns, hereinafter referred to as “**ENGINEER**”.

WITNESSETH, in consideration of the mutual terms and conditions, promises, covenants and payments hereinafter set forth, CITY and ENGINEER agree as follows:

ARTICLE I

DEFINITIONS AND IDENTIFICATIONS

For the purposes of this Agreement and the various covenants, conditions, terms and provisions which follow, the DEFINITIONS and IDENTIFICATIONS set forth below are assumed to be true and correct and are agreed upon by the parties.

- 1.1 **AGREEMENT:** The written agreement between CITY and ENGINEER covering the Work to be performed including other Contract Documents that are attached to the Agreement and made a part thereof.
- 1.2 **CHANGE ORDER:** A written directive issued on or after the effective date of the Agreement by the CITY and ENGINEER ordering an addition, deletion or revision in the Scope of Work or change in the Contract Time or Contract Price.
- 1.3 **CITY:** The City of Margate, a State of Florida Municipal Corporation.
- 1.4 **CITY COMMISSION:** The City Commission of the City of Margate, Florida with whom ENGINEER has entered into an Agreement and for whom the Work is to be provided.
- 1.5 **CONTRACT ADMINISTRATOR:** Whenever the term Contract Administrator is used herein, it is intended to mean the City Manager of the City of Margate or his designee. In the administration of the contract, as contrasted with matters of policy, all parties may rely upon instructions made by the Contract Administrator.
- 1.6 **CONTRACTOR:** The person, firm, corporation or other entity that enters into an Agreement with the CITY to perform the construction works for the Project.
- 1.7 **ENGINEER:** Carollo Engineers is the ENGINEER selected to perform this Agreement.
- 1.8 **NOTICE TO PROCEED:** A written Notice given by the CITY to ENGINEER fixing the date on which the Contract Time will commence to run and on which ENGINEER shall start to perform ENGINEER'S obligations under the Contract Documents.
- 1.9 **PROJECT:** Refer to R.F.Q. 2017-017 - Design Engineering Services for East Wastewater Treatment Plant Upgrade Engineering Services for the Department of Environmental and Engineering Services

ARTICLE 2

PREAMBLE

In order to establish background, context and frame of reference for this Agreement and to generally express the objectives and intentions of the respective parties herein, the following statements representatives and explanations be accepted as predicates for the undertakings and commitments included within the provisions which follow and may be relied upon by the parties as essential elements of the mutual considerations upon which this Agreement is based.

- 2.1 CITY has secured funding through the approval of its annual operating budget for Work to be performed under this Agreement.
- 2.2 The City Commission of the City of Margate has met the requirements of the Consultants Competitive Negotiations Act, as contained in Section 287.055, Florida Statutes, and has selected Carollo Engineers to perform the services hereunder.
- 2.3 Negotiations pertaining to the services to be performed by the ENGINEER were undertaken between the ENGINEER and members of the Selection Committee and this Agreement incorporates the results of such negotiations.

ARTICLE 3

SCOPE OF SERVICES

- 3.1 The ENGINEER agrees that this is a non-exclusive agreement and the basic Services shall consist of the work set forth in the initial "Exhibit A - negotiated task order(s) based on the fee schedule in "Exhibit B - Hourly Rate Schedule" and the contract documents attached hereto and made a part hereof.
- 3.2 The ENGINEER agrees to meet with CITY at reasonable times and with reasonable notice.

ARTICLE 4

TIME FOR PERFORMANCE

- 4.1 The ENGINEER shall perform the services described in the contract documents and task orders based on the timeframes agreed upon for each task assigned.
- 4.2 Prior to beginning the performance of any services under this Agreement, ENGINEER must receive a written Notice to Proceed or Purchase Order from the CITY. The ENGINEER must receive the approval of the Contract Administrator or designee in writing prior to beginning the performance of services in any subsequent phase of this Agreement. Prior to granting approval for the ENGINEER to proceed to a subsequent phase, the Contract Administrator or designee may at his sole option require the ENGINEER to submit documents and drawings for this review and/or approval.
- 4.3 In the event ENGINEER is unable to complete the above services because of delays resulting from untimely review and approval by the CITY and other governmental authorities having jurisdiction over the Project, and such delays are not the fault of the ENGINEER, CITY may grant a reasonable extension of time for the completion of work. It shall be the responsibility of the ENGINEER to notify the CITY promptly in writing whenever a delay in approval by a governmental agency is anticipated or experienced, and to inform the CITY of all facts and details related to the delay.
- 4.4 The term of this agreement shall be for three years with no automatic renewals. Any necessary renewals (not to exceed two one year renewals) must be specifically addressed in the form of a formal extension providing both parties agree and all terms and conditions remain the same.

ARTICLE 5

COMPENSATION AND METHOD OF PAYMENT

- 5.1 CITY agrees to pay ENGINEER as compensation for its services under the terms of this Agreement a fee to be computed as per "Exhibit B", Carollo Engineers Project Fee Schedule and to reimburse ENGINEER for certain expenses as described below in ARTICLE 5, Section 5.3 entitled "REIMBURSABLES". The fee for the services to be performed by the ENGINEER including costs, expenses and fees, except reimbursable as described in ARTICLE 5, Section 5.3 entitled "REIMBURSABLES" is to be paid based upon a proposal submitted to the CITY.

The compensation to provide the consultant services including labor and indirect costs shall be for an agreed upon amount paid in accordance with the amounts as set forth in "Exhibit B" for each agreed upon task or phase. No changes to the fee schedule shall be permitted without the prior written approval of the Contract Administrator.

5.2 SALARY COSTS FOR ADDITIONAL SERVICES:

The term salary costs as used herein shall mean the hourly rates on "Exhibit B" attached hereto and made a part hereof including but not limited to principals, engineers, architects, draftsmen, clerks, plus costs which include sick leave, vacation, unemployment, excise and payroll taxes, contributions for social security, employment compensation, insurance, retirement benefits and medical and insurance benefits.

5.3 REIMBURSABLES:

5.3.1 Expenses in addition to those specifically stipulated in "Exhibit B" which are required by or of ENGINEER to deliver services set forth in this Agreement and which are in addition to those required by this Agreement.

5.3.2 A detailed statement of expenses must accompany any request for reimbursement. Expenses other than auto travel must be documented by copies of paid receipts, checks or other evidence of payment. Local travel to and from the job site will not be reimbursed.

5.4 METHOD OF BILLING AND PAYMENT:

5.4.1 Lump Sum Contracts: ENGINEER may submit bills at the completion and approval of each phase or task order or for partial completion of each phase on a pro-rata basis. However, requests for payment shall not be made more frequently than a monthly basis.

5.4.2 CITY agrees that it will make its best efforts to pay ENGINEER within thirty (30) calendar days of receipt of ENGINEER'S statement as provided above.

5.5 ADJUSTMENT OF CONTRACT PRICE:

If a Truth-in-Negotiation certificate was required for this contract, the firm agrees that the original contract price and additions thereto shall be adjusted to exclude any significant sums by which it is determined the contract price was increased due to inaccurate, incomplete, or noncurrent wage rates and other factual unit

costs. All such contract adjustments shall be made within one year following the end of the contract.

5.6 PAYMENT ADDRESS:

Payment will be made to the ENGINEER at:

Carollo Engineers
3440 Hollywood Boulevard
Suite 465
Hollywood, FL 33021

ARTICLE 6

ADDITIONAL SERVICES AND CHANGES IN SCOPE OF WORK

- 6.1 The CITY, without invalidating this Agreement, may request changes that would Increase, decrease, or otherwise modify the Scope of Services to be provided under this Agreement. Such changes must be contained in written amendment, executed by the parties thereto, with the same formality and of equal dignity prior to any deviation from the terms of this Agreement, including the initiation of any extra work.
- 6.2 Additional services beyond the programmed Scope of Work will be either an hourly additional service at a guaranteed maximum cost or lump sum additional service.
- 6.3 The City Commission prior to execution of such work shall approve all additional services and changes in the Scope of Work.
- 6.4 Notwithstanding the above paragraph, additional services which, individually or when cumulatively added to the amounts authorized pursuant to prior change orders for this project, increase the cost of the work to the CITY not in excess of ten percent (10%) or \$50,000 (whichever is lesser) may be approved by signed approval of the City Manager of the City of Margate.
- 6.5 No claim against CITY for extra work in furtherance of a Change Order shall be allowed unless prior approval pursuant to this Article has been obtained. Unless otherwise provided for, the Contract Price and Contract Time shall be changed only by a Change Order or written amendment approved by the City Commission.

ARTICLE 7

CITY'S RESPONSIBILITIES

- 7.1 Assist ENGINEER by placing at its disposal all available information pertinent to the "Project" including previous reports and any other data relative to design or construction of the "Project".
- 7.2 Furnish to ENGINEER, when available, such data as required for performance of ENGINEER'S basic services including core borings, probing, and subsurface explorations, hydraulic surveys, laboratory tests, and inspections of samples, materials and equipment, appropriate professional interpretations of all of the foregoing, environmental assessment and impact statements, property boundary, easements, rights-of-way, topographic and utility surveys; property descriptions; zoning, deed and other land use restrictions; and other special data or consultations unless such data is to be furnished by the ENGINEER.
- 7.3 Arrange for access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform its services.
- 7.4 Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by ENGINEER, obtain advice of an attorney, insurance counselor or other consultants as CITY deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of ENGINEER.
- 7.5 Give prompt written notice to ENGINEER whenever the CITY observes or otherwise becomes aware of any development that affects the scope or timing of ENGINEER'S services.

ARTICLE 8

MISCELLANEOUS

8.1 OWNERSHIP OF DOCUMENTS:

Drawings, specifications, designs, models, photographs, reports, surveys, and other data provided with this Agreement are and shall remain the property of the CITY whether the Project for which they are made is executed or not. However, this is not an assignment of any copyrights or other ownership rights that the ENGINEER maintains.

Any use for extensions of the project or for any other project without written verification or adaptation by the ENGINEER for the specific purpose intended will be at the CITY'S sole risk and without liability or legal exposure to the ENGINEER.

8.2 TERMINATION:

This Agreement may be terminated by either party for cause, or by the CITY for convenience, upon fourteen (14) calendar days written notice by the terminating party to the other party of such terminations in which event the ENGINEER shall be paid its compensation for services performed to the termination date including all reimbursable expenses then due to incurred to such date of termination. In the event that the ENGINEER abandons this Agreement or causes it to be terminated, he shall indemnify the CITY against all loss pertaining to this termination up to a maximum of 1.3 times the full contract fee amount. All finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared by ENGINEER shall become the property of the CITY and shall be delivered by ENGINEER to the CITY upon payment by the CITY for all services performed by the ENGINEER.

8.3 RECORDS:

ENGINEER shall keep such records and accounts and require any and all consultants and sub-contractors to keep records and accounts as may be necessary in order to record complete and correct entries as to personnel hours charged to this engagement and expenses for which ENGINEER expects to be reimbursed. Such books and records will be available at all reasonable times for examination and audit by CITY and shall be kept for a period of three (3) years after the completion of all work to be performed pursuant to this Agreement. Incomplete or incorrect entries in such books will be grounds for disallowance by CITY of any fee or expenses based upon such entries.

8.4 EQUAL OPPORTUNITY EMPLOYMENT:

ENGINEER agrees that it will not discriminate against any employee or applicant for employment for work under this Agreement because of race, color, religion, sex, age or national origin and will take affirmative steps to ensure that applicants are employed and employees are treated during employment without regard to race, color, religion, sex, age or national origin. This provision shall include, but not be limited to employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or their forms of compensation, and selection for training, including apprenticeship.

8.5 NO CONTINGENT FEE:

ENGINEER warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for ENGINEER to solicit or secure this Agreement and that it has not paid or agreed to pay any person, company, corporation, individual, or firm other than a bona fide employee working solely for ENGINEER any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement. For the breach or violation of this provision, the CITY shall have the right to terminate the Agreement without liability at its discretion, to deduct from the contract price, or otherwise recover, the full amount of such fee, commission, percentage, gift or consideration.

8.6 SUBCONTRACTORS:

In the event the ENGINEER, during the course of the work under this Agreement, requires the services of any subcontractors or other professional associates in connection with services covered by this Agreement, ENGINEER must secure the prior written approval of the Contract Administrator or his designee.

8.7 ASSIGNMENT:

This Agreement, or any interest herein, shall not be assigned, transferred or otherwise encumbered, under any circumstances, by ENGINEER, without the prior written consent of the CITY; however, the agreement shall run to the City of Margate and its successors.

8.8 INDEMNIFICATION:

8.8.1 ENGINEER agrees to pay on behalf of and defend CITY from any loss, cost, or expense claimed by third parties for property damage and bodily injury, including death, caused by the negligence or willful misconduct of ENGINEER, its employees, or agents including death in connection with services under this Agreement.

8.8.2 To the extent allowable by law, CITY agrees to indemnify and defend ENGINEER from any loss, cost or expense claimed by third parties for property damage and bodily injury, including death, caused by the negligence or willful misconduct of CITY, its employees, or agents in connection with the services under this Agreement.

8.8.3 If the negligence or willful misconduct of both the ENGINEER and CITY (or a person identified above for whom each is liable) is a cause of such damage or injury, the loss, cost, or expense shall be shared between the ENGINEER and CITY as provided by law.

8.8.4 Both parties agree that the CITY shall pay to the ENGINEER one hundred dollars (\$100.00) in consideration for the ENGINEER agreeing to indemnify the CITY as provided under this contract.

8.8.5 The above indemnity is a business understanding between the parties and applied to all different theories of recovery, including breach of contract or warranty, tort including negligence, strict or statutory liability, or any other cause of action. Parties mean the CITY and the ENGINEER and their officers, employees, agents, affiliates, and subcontractors.

8.8.6 The execution of this Agreement by ENGINEER shall obligate ENGINEER to comply with the foregoing indemnification provision, however, the collateral obligation of insuring this indemnity must be complied with as set forth below in Article 8.9.

8.9 INSURANCE:

ENGINEER shall provide, pay for, and maintain in force at all times during the services to be performed, such insurance, including Worker's Compensation Insurance, Employer's, and Professional Liability Insurance that will assure to CITY the protection contained in the foregoing indemnification undertaken by ENGINEER. The Comprehensive General Liability policy shall clearly identify the foregoing indemnification as insured under this section. United States treasury approved companies authorized to do business in the State of Florida shall issue such policy or policies. ENGINEER shall specifically name the CITY as additional insured under the Comprehensive General Liability insurance policy hereinafter described.

The Professional Liability policy or certificate shall reference this project by endorsement.

- (a) Professional Liability Insurance: The limits of liability provided by such policy shall be no less than five hundred thousand dollars (\$500,000) to assure the CITY the indemnification specified in Article 8.8.
- (b) Worker's Compensation Insurance to apply for all employees in compliance with the "Worker's Compensation Law" of the State of Florida and all applicable Federal laws. In addition, the policy must include:

Employers Liability with a limit of \$100,000 each accident.

Notice of Cancellation and/or Restriction - The policy must be endorsed to provide the CITY with thirty days (30 days) notice of cancellation and/or restriction.

- (c) Comprehensive General Liability with minimum limits of \$1,000,000 per

occurrence combined single limit for Bodily Injury Liability and Property Damage Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Comprehensive General Liability Policy, without restrictive endorsements, as filed by the Insurance Services Office and must include:

Premises and/or Operations

Independent Contractors

Broad Form Property Damage

Broad Form Contractual Coverage applicable to this specific Agreement including any hold harmless and/or indemnification agreement.

Personal Injury Coverage with Employee and Contractual Exclusions removed with minimum limits of coverage equal to those required for Bodily Injury Liability and Property Damage Liability.

The City of Margate is to be included as "Additional Insured" with respect to liability arising out of operations performed for CITY by or on behalf of ENGINEER or acts or omissions of ENGINEER in connection with such operation.

Notice of Cancellation and/or Restriction - The policy must be endorsed to provide CITY with thirty (30) days notice of cancellation and/or restriction.

- (d) Business Automobile Liability with minimum limits of \$1, 000,000 per Occurrence combines single limit for Bodily Injury Liability and Property Damage Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Business Automobile Liability Policy, without restrictive endorsements, as filed by the Insurance Services Office and must include:

Owned vehicles

Hired and non-owned vehicles

Employer's non-ownership

Notice of Cancellation and/or Restriction - The policy must be endorsed to provide CITY with thirty (30) days notice of cancellation and/or restriction.

- (e) ENGINEER shall provide to the CITY a Certificate of Insurance or a copy of all insurance policies required by Article 8.9 including any subsection hereunder. The CITY reserves the right to require a certified copy of such policies upon request. All endorsements and certificates shall state that

CITY shall be given thirty (30) days notice prior to expiration or cancellation of the policy.

8.10 REPRESENTATION:

8.10.1 It is recognized that questions in the day-to-day conduct of the Project will arise. The City Manager or an appointed designee shall act as the CITY'S representative/agent to whom all communication on the day-to-day conduct of the Project shall be addressed.

8.10.2 ENGINEER shall inform the City Manager (or designee) in writing of the representative of ENGINEER to whom matters involving the conduct of the Project shall be addressed.

8.11 ATTORNEYS FEES, JURISDICTION AND VENUE:

8.11.1 If the CITY incurs any expense in enforcing the terms of this Agreement whether suit be brought or not, ENGINEER agrees to pay all such costs and expenses including but not limited to court costs, interest, and reasonable attorney's fees if such claim is a result of an error or omission within the ENGINEER'S work.

8.11.2 The Law of the State of Florida shall govern the validity of this Agreement, its interpretation and performance and any other claims related to it. Venue shall be deemed to be agreed between the parties as to the court of Broward County, Florida.

8.11.3 Waiver of Jury Trial - CITY and ENGINEER hereby knowingly, irrevocably, voluntarily and intentionally waive any right either may have to a trial by jury in respect to any action, proceeding, lawsuit or counterclaim based upon the contract, arising out of, under, or in connection with the performance of the work, or any course of conduct, course of dealing, statements (whether verbal or written) or the actions or inactions of any party.

8.12 ALL PRIOR AGREEMENTS:

This document incorporates and includes all prior negotiations, correspondence, conversations, agreements or understandings applicable to the matters contained herein and the parties agree that there are no commitments, agreements or understandings concerning the subject matter of this Agreement that are not contained herein and the parties agree that there are no commitments. Agreements or understandings concerning the subject matter of this Agreement that are not contained in this document. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior representations or agreements whether oral or written.

It is further agreed that no modifications amendment or alteration in the terms or, conditions contained herein, shall be effective unless contained in written document executed with the same formality and of equal dignity herewith.

8.13 NOTICES

Whenever either party, desires to give notice unto the other, it must be given by written notice, sent by registered United States mail, with return receipt requested, addressed to the party for whom it is intended, at the place last specified, and the place for giving notice in compliance with the provisions of this paragraph For the present, the parties designate the following as the respective places for giving of notice, to-wit:

FOR CITY:

City Manager
City of Margate
5790 Margate Boulevard
Margate, FL 33063

FOR ENGINEER:

Ms. Elizabeth Fujikawa, P.E., BCEE, LEED AP
Vice President
Carollo Engineers
3440 Hollywood Boulevard
Suite 465
Hollywood, FL 33021

8.14 TRUTH-IN-NEGOTIATION CERTIFICATE

Signature of this Agreement by ENGINEER shall act as the execution of a truth-in-negotiation certificate stating that wage rates and other factual unit costs supporting the compensation of this Agreement are accurate, complete, and current at the time of contracting. Any additions to the original contract price changed on an hourly price shall be adjusted to exclude any significant sum by which the CITY determines the additions to the contract price were increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs. All such adjustment shall be made within one year following the end of this agreement.

8.15 CONSULTANT DELIVERABLES

1. Meeting Minutes and Notes – One (1) PDF copy distributed to all meeting attendees.
2. Sixty percent (60%) and Ninety percent (90%) drawings – one (1) half size (11 x 17) hard copies, one (1) PDF copy.
3. Sixty percent (60%) and Ninety percent (90%) specifications – one (1) bound hard copy, one (1) PDF copy.
4. Sixty percent (60%) comments response letters – one (1) PDF copy.
5. One hundred percent (100%) drawings – one (1) half size (11 X 17) hard copy signed & sealed by Licensed Florida Professional Engineer.
6. One hundred percent (100%) drawings – one (1) PDF copy.
7. One hundred percent (100%) specifications – one (1) signed and sealed bound hard copy.
8. One hundred percent (100%) specifications – one (1) PDF copy.
9. Margate Building Department preliminary review – one (1) half size (11 x 17) hard copy.
10. RFI responses – one (1) PDF copy.
11. Bid award evaluation and recommendation letter – one (1) PDF copy.
12. Shop drawing submittals review comments and approvals – one PDF copy.
13. Record Drawings – one (1) full size (24 x 36) signed and sealed hard copy.
14. Record Drawings – one (1) half size (11 x 17) signed and sealed hard copy.
15. Record Drawings – one (1) PDF copy.
16. Record Drawings – one (1) electronic copy (AutoCAD latest version in state plane coordinates).

8.16 NON-COLLUSIVE STATEMENT

By submitting this proposal, the Proposer affirms that this proposal is without previous understanding, agreement, or connection with any person, business, or corporation submitting a proposal for the same materials, supplies, service, or equipment, and that this proposal is in all respects fair, and without collusion or fraud (Refer to attached Non-Collusive Form).

ARTICLE 9

PUBLIC RECORDS

CONTRACTOR agrees to keep and maintain public records in CONTRACTOR's possession or control in connection with CONTRACTOR's performance under this Agreement. CONTRACTOR additionally agrees to comply specifically with the provisions of Section 119.0701, Florida Statutes. CONTRACTOR shall ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed, except as authorized by law, for the duration of the Agreement, and following completion of the Agreement until the records are transferred to the OWNER.

Upon request from the OWNER custodian of public records, CONTRACTOR shall provide the OWNER with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided by Chapter 119, Florida Statutes, or as otherwise provided by law.

Unless otherwise provided by law, any and all records, including but not limited to reports, surveys, and other data and documents provided or created in connection with this Agreement are and shall remain the property of the OWNER.

Upon completion of this Agreement or in the event of termination by either party, any and all public records relating to the Agreement in the possession of the CONTRACTOR shall be delivered by the CONTRACTOR to the CITY MANAGER, at no cost to the OWNER, within seven (7) days. All such records stored electronically by CONTRACTOR shall be delivered to the OWNER in a format that is compatible with the OWNER'S information technology systems. Once the public records have been delivered upon completion or termination of this Agreement, the CONTRACTOR shall destroy any and all duplicate public records that are exempt or confidential and exempt from public records disclosure requirements.

Any compensation due to CONTRACTOR shall be withheld until all records are received as provided herein.

CONTRACTOR's failure or refusal to comply with the provisions of this section shall result in the immediate termination of this Agreement by the OWNER.

Section 119.0701(2)(a), Florida Statutes

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS.

Custodian of Records: JOSEPH KAVANAGH, CITY CLERK

Mailing address: 5790 Margate Boulevard, Margate, FL 33063

Telephone number: 954-935-5325

Email: JJKAVANAGH@MARGATEFL.COM

WITNESS WHEREOF, the parties have made an executed Agreement on the respective dates under each signature; City of Margate through its City Commission signing by and through its Mayor and City Manager, authorized to execute same by City Commission the _____ day of _____, 2018, and Carollo Engineers signing by and through its representatives is duly authorized to execute same.

CITY OF MARGATE

Arlene R. Schwartz, Mayor

____ day of _____, 2018

Samuel A. May, City Manager

____ day of _____, 2018

ATTEST:

APPROVED AS TO FORM:

Joseph J. Kavanagh, City Clerk


____ day of _____, 2018

James A. Cherof, City Attorney

____ day of _____, 2018

ENGINEER

FOR CORPORATION:



President

6 day of MARCH 2018

(CORPORATE SEAL)





Secretary

5 day of MARCH 2018

**AGREEMENT BETWEEN CAROLLO ENGINEERS AND CITY FOR RFQ 2017-017 -
DESIGN SERVICES FOR EAST WASTEWATER TREATMENT PLANT UPGRADE
ENGINEERING FOR THE DEPARTMENT OF ENVIRONMENTAL AND
ENGINEERING SERVICES**

EXHIBIT A

DESIGN SERVICES FOR EAST WASTEWATER TREATMENT PLANT UPGRADE ENGINEERING

CITY OF MARGATE
OWNER

AND

CAROLLO ENGINEERS, INC.
ENGINEER

This Task Order is issued by the OWNER and accepted by ENGINEER pursuant to the mutual promises, covenants, and conditions contained in the Agreement between the above named parties dated the ____ day of _____, 2018, in connection with:

Professional design, bidding, and construction services for an aeration system upgrade for the East Wastewater Treatment Plant (Project).

1. ENGINEER'S SERVICES

The following describes the ENGINEER'S scope of work for the Project:

1.1. Project Understanding

The OWNER'S 7.9 mgd West Wastewater Treatment Plant (West WWTP), treats a majority of the flow from the City of Margate using a rotating biological contactor (RBC) secondary treatment process. The remaining wastewater flow from the City is treated by the East Wastewater Treatment Plant (East WWTP). Influent flow to the East WWTP passes through one drum screen and then into two parallel aeration basins equipped with surface aerators. Mixed liquor from the aeration basins flows by gravity to one secondary clarifier that was recently upgraded. Waste activated sludge from the secondary clarifier is pumped to one aerobic digester at the East WWTP for stabilization. Digester residuals are pumped to the West WWTP for dewatering. The OWNER desires to increase the treatment capacity of the 2.2-mgd East WWTP to 4.0 mgd by installing an integrated fixed film system (IFAS) within the existing aeration basin tankage. The OWNER has determined that no new treatment units such as a second influent screen, new secondary clarifier, or additional aerobic digester will be included in the Project. The West WWTP will provide backup treatment to the East WWTP if needed.

To implement the IFAS process, the approach to engineering is as follows:

1. Three manufacturers have been determined to be qualified to supply the IFAS system. The ENGINEER will prepare bid documents based around the design information supplied by one of these suppliers, Kruger, Inc. for the AnoxKaldnes K5 IFAS (Kruger) process, media, and equipment. Where practical, the bid documents will accommodate the approach used by the two alternative manufacturers.

2. The ENGINEER shall establish and specify IFAS supplier treatment performance, I&C integration approach, material and equipment quality requirements in a procurement specification in the bid documents.
3. The ENGINEER will design and specify IFAS support systems.
4. The construction contractor (Contractor) will be competitively selected to build the Project. The Contractor's bid will include one of the three qualified IFAS system suppliers to design and provide equipment for a complete, integrated IFAS system. The process design prior to construction procurement will be the responsibility of Kruger, and after procurement the responsibility of the IFAS supplier engaged by the selected Contractor.

The IFAS system drawings (process, media and equipment), aeration system (blowers, diffusers, controls, pipeline and appurtenances), IFAS system and plant-wide instrumentation and controls, and electrical work for these systems will be finalized by the IFAS supplier during the construction phase and will be sealed by a licensed professional engineer in Florida employed by or under contract with the IFAS system supplier. The ENGINEER will review the IFAS supplier's submittals for conformance with the bid documents.

1.2. Project Management

- 1.2.1. Provide concise monthly progress reports that summarize:
 - 1.2.1.1. Schedule status.
 - 1.2.1.2. Budget status.
 - 1.2.1.3. Project issues current and potential.
 - 1.2.1.4. Identify the means to address current or potential issues.

1.3. Process Design General Scope

- 1.3.1 The ENGINEER's coordination with the IFAS suppliers during the design phase will define and tailor the supplier's treatment process to meet the City's needs. In addition, coordination is required to determine the support system requirements for the IFAS system.

- 1.3.1.1 Activities conducted for definition and tailoring of the IFAS treatment process will include: collaboration with the IFAS suppliers on the City's treatment goals and needs (flow ranges, water quality, permit limits), coordinating the IFAS suppliers approach to integrate into the City's existing treatment process, and relaying and reaching consensus on minimum treatment and performance criteria (maximum oxygen uptake rates, maximum fill percentage for media, etc.) that will be specified.

- 1.3.1.2 Activities conducted for determination of support system requirements will include: identification of needed drum screen performance, optimization on location and number of divider walls, determination of aeration blower equipment size, type and number of units, assessment of impacts on solids production and determining interconnect between the East and West plant digesters.

- 1.3.2 The ENGINEER'S detailed design scope will consist of the following activities:

- 1.3.2.1 Review the designs proposed by the IFAS system suppliers versus the project objectives outlined in TM-1 for conformance with the technical specifications.
- 1.3.2.2 Development of construction staging constraints for installation and startup of the IFAS system.
- 1.3.2.3 Design of reconfiguration of influent piping to allow for sufficient straight length up and downstream of a new magnetic flow meter, plus relocation of the power and signal wiring.
- 1.3.2.4 Design of the replacement of the overhead mixed liquor line, assumed to allow the reuse of the existing concrete piers.
- 1.3.2.5 Design of an outdoor concrete slab for the new aeration blowers. To provide sound attenuation, the blowers are assumed to be in individual enclosures.
- 1.3.2.6 Design of air piping from the blowers to the IFAS supplier's air delivery system, consisting of medium bubble diffusers set on the basin floor.
- 1.3.2.7 Design of demolition drawings to show removal of existing surface aerators and electrical supply.
- 1.3.2.8 Design of a new influent drum screen by Lakeside with 3 mm openings to handle higher flows to improve screening performance suitable for the IFAS technology.
- 1.3.2.9 The instrumentation and control system for the IFAS and plant-wide systems will be described in a control specification that establishes the overall control concept for integration of the IFAS system into the treatment plant, instrument and control equipment quality, and instrumental and control submittal requirements. The Final Design of the instrumentation and control system shall be prepared by the IFAS supplier or Contractor during the construction phase and reviewed during shop drawing submittals. Interconnects with the OWNER'S data highway, SCADA, or other control system will be the responsibility of the Contractor.
- 1.3.2.10 Design of electric power supply for the blower system and rotary drum screen from a new larger power feeder from the existing east main electrical room to a new outdoor electrical switchboard.
- 1.3.2.11 Design of new divider walls in the aeration basins to meet IFAS system requirements.
- 1.3.2.12 Review of curves for RAS, WAS and sludge transfer pumps provided by the OWNER to assess pump head and flow capacities under the new operating conditions. If needed, upgrades and/or new pumps, will be specified for the new operating conditions and associated electrical supply will be designed.
- 1.3.2.13 Estimate sludge production rates from data developed by the IFAS vendor in response to design requirements determined during

preliminary design. This data will be used to verify the capacity of the existing East plant aerobic digester as presented in TM-1. As the diversion of West plant flows is desired, this will most likely require increased digester capacity.

- 1.3.2.14 Design of an interconnect between the East and West plant digesters. It is assumed that this interconnect can be made at the West treatment plant using the East digester line currently discharging to the West treatment plant thickeners.

1.4 The following information will be provided by the OWNER upon the Project Notice-to-Proceed.

- 1.4.1 Operation data specific to the East WWTP for the most recent 24 months and monthly DMRs for the most recent 24 months.
- 1.4.2 Any construction-related documents in the vicinity of the Project such as specifications, as-built drawings, and record drawings.
- 1.4.3 RAS, WAS, and transfer pump information including nameplate data and pump curves to support pump capacity analysis,
- 1.4.4 Existing structural, utility, geotechnical, and site condition information including GIS mapping and data.

1.5 Preliminary Design (30%)

1.5.1 Basic Engineering Information.

- 1.5.1.1 Undertake a one-day site visit by the ENGINEER to be concluded with a meeting with OWNER'S key personnel.
- 1.5.1.2 Review existing information on topography, site features, and underground utilities for sufficiency to support the design activities. A site survey and field locates of utilities will be provided as an optional task.
- 1.5.1.3 Review existing geotechnical information provided by the OWNER for sufficiency to support the design activities. A geotechnical evaluation will be provided as an optional task.
- 1.5.1.4 Conduct a structural assessment of the existing aeration basins for suitability to accept the new treatment processes.
- 1.5.1.5 Prepare technical specifications (Divisions 1 through 17) in the CSI 17 division format. Front-end documents including the invitation to bid, construction contract, general conditions, and supplemental conditions, shall be prepared by the OWNER.

1.5.2 Preliminary Design Technical Memorandum (PDTM). The purpose of the PDTM is to (1) gain OWNER approval of the project elements and confirm the design concept to be followed in the subsequent design efforts, and (2) form the technical information for permit applications. The PDTM consists of:

- 1.5.2.1 Narrative description of the recommended facilities.
- 1.5.2.2 Design criteria by discipline (site civil, structural, process mechanical, instrumentation and control, and electrical).
- 1.5.2.3 Identification of codes and guidelines governing the design.
- 1.5.2.4 Preliminary drawings consisting of:

- 1.5.2.4.1 Overall site plan.
- 1.5.2.4.2 Process flow diagram.
- 1.5.2.4.3 Plan view showing major equipment locations.
- 1.5.2.4.4 A control narrative and specification will be developed including the instrumentation and control system detailed design requirements of the IFAS system supplier and Contractor to be prepared and submitted by the Contractor during the shop drawing submittal and review process.
- 1.5.2.4.5 Electrical single line drawing for the new switchboard and power distribution system to the aeration blowers.
- 1.5.2.4.6 Design of lighting improvements for the aeration basins and lighting requirements for blower equipment area.
- 1.5.2.4.7 A section view of the new screen and screen channel
- 1.5.2.4.8 Aeration system and mechanical process drawings related to the IFAS system and aeration system will be provided by Kruger.
- 1.5.2.4.9 Schematic drawing depicting the interconnect between the East and West plant digesters.
- 1.5.2.4.10 The preliminary level of drawing and engineering development will vary by discipline.
- 1.5.2.5 Establish IFAS system design criteria, treatment performance requirements and testing, equipment and materials quality requirements, and IFAS supplier remediation requirements if performance is not demonstrated during a test period. The IFAS system procurement specification will define these requirements.
- 1.5.2.6 Establish bid requirements for the IFAS supplier including experience with facilities of similar size and larger, references, and documentation of meeting performance and quality requirements, a performance guarantee, and technical submittal requirements.
- 1.5.2.7 Prepare an outline of anticipated technical specifications, see listing of anticipated shop drawings that will correspond to the specifications.
- 1.5.2.8 Prepare a preliminary opinion of probable capital cost.
- 1.5.2.9 Prepare a preliminary construction schedule.
- 1.5.2.10 Submit the draft PDTM to the OWNER for OWNER review. (Five copies including half-size drawings with a CD containing drawings in PDF format and a narrative in MS Word format).
- 1.5.2.11 The OWNER shall provide review comments within fifteen calendar days from receipt of the documents. Review OWNER comments with the OWNER in a meeting and incorporate comments into the subsequent Intermediate Design.
- 1.5.2.12 Update the PDTM for submittal to permitting agencies.

1.6 Final Design (100%)

- 1.6.1 Prepare and submit the draft Final Design drawings and specifications for OWNER review.
 - 1.6.1.1 The following are the anticipated drawings:
 - 1.6.1.1.1 Overall site plan showing new site features.
 - 1.6.1.1.2 Structural design drawings showing locations and sizes of the new screen and screen channel, blower pads, interior

basins walls. The IFAS system support design and drawings will be provided by Kruger.

- 1.6.1.1.3 Process flow diagram based on information provided by Kruger.
- 1.6.1.1.4 Plan view of the new screen and screen channels.
- 1.6.1.1.5 Section views of the new screen and screen channels.
- 1.6.1.1.6 P&ID for the new screen.
- 1.6.1.1.7 West Plant Yard piping drawing for the interconnect between the East and West plant digesters.
- 1.6.1.1.8 Electrical single line drawing, including existing power source at the East plant main electrical room and new outdoor switchboard that will be used as a power source for new aeration blowers and located near the edge of the blower pad. The IFAS system supplier will design and provide power connections from the new outdoor switchboard to the IFAS system process, including ancillary outdoor electrical equipment (transformer and panelboard) required to provide control power and lighting to the new aeration system equipment and aeration basins.
- 1.6.1.1.9 Electrical site plan with new outdoor switchboard at the edge of the blower pad for the IFAS system Supplier to tap power source and connection points with IFAS system.
- 1.6.1.1.10 Ductbank schedules and pull box schedule up to the new outdoor switchboard, at the edge of the blower pad, for the IFAS system to tap power source and connection points.
- 1.6.1.1.11 Electrical and control specifications with general requirements and design criteria, for the IFAS system supplier to design, provide and deliver a complete power distribution, general purpose electrical outlets, lighting, controls and instrumentation for the new IFAS system and related improvements.
- 1.6.1.2 Specifications: IFAS system supplier experience requirements and design criteria, treatment performance requirements and testing, equipment and materials quality requirements, and IFAS supplier remediation requirements if performance is not demonstrated during a test period. (see listing of anticipated shop drawings that correlate to the specifications that will be prepared).
- 1.6.2 Update opinion of probable capital cost.
- 1.6.3 Update the construction schedule.
- 1.6.4 The OWNER shall provide review comments within fifteen calendar days from receipt of the documents.
- 1.6.5 Prepare and submit to the OWNER Final Design (100%) drawings and specifications for construction documents (Five half-size drawings and specifications with a CD containing drawings in PDF and Autocad format and Specifications in PDF format).

- 1.7 Permitting. The following permit applications will be prepared and revised as needed for approval:

- 1.7.1 Florida Department of Environmental Protection (FDEP) - "Form 2A Application for a Domestic Wastewater Facility Permit" that is required due to a modification or change in capacity at the East WWTP.
- 1.7.2 FDEP - "Notification of Completion of Construction for Wastewater Facilities or Activities." Completion of the services defined in Section 1.9 Engineering Services During Construction are necessary for the ENGINEER to perform this activity. .
- 1.7.3 FDEP - "Notification of Availability of Record Drawings and Final Operation and Maintenance Manuals." Completion of the services defined in Section 1.9 Engineering Services During Construction are necessary for the ENGINEER to perform this activity. Coordination with the Contractor on its work to obtain a City of Margate Building Permit will be handled by the OWNER.
- 1.7.4 A stormwater permit is not anticipated and therefore is not included in the Agreement.

1.8 Bidding Services. The following bidding services will be provided for one bid process:

- 1.8.1 Coordination with the OWNER'S purchasing department.
- 1.8.2 Submittal of final bid documents in PDF format to the OWNER for reproduction and distribution.
- 1.8.3 Review of the bid advertisement prepared by the OWNER.
- 1.8.4 Prepare responses to bidder questions.
- 1.8.5 Prepare up to two addendum documents.
- 1.8.6 Support the City's purchasing agent for review of bid packages and preparation of a comparison of bids to determine the lowest three qualified bidders.
- 1.8.7 Prepare a recommendation of award letter.
- 1.8.8 Prepare conformed Contract Documents.

1.9 Engineering Services During Construction

Engineering Services During Construction by the ENGINEER (ESDS) are to support the OWNER'S Project Manager. The OWNER'S Project Manager will be responsible for the day-to-day contract administration. The following are the ESDS to be provided by the ENGINEER:

- 1.9.1 Construction administration will be the responsibility of the OWNER as represented by the OWNER'S Project Manager. The ENGINEER shall support the OWNER'S Project Manager by attending monthly construction progress meetings. Eleven monthly progress meetings are included in the scope. The ENGINEER will lead the meetings and prepare minutes of the meetings.
- 1.9.2 Respond to technical aspects of Contractor Requests for Information (RFIs) as forwarded by the OWNER'S Project Manager. All other tasks associated with RFIs are the responsibility of the OWNER. The ENGINEER shall respond to an RFI within 10 calendar days of receipt of the RFI.
- 1.9.3 Review and comment on technical aspects of Contractor submittals as forwarded by the OWNER'S Project Manager:
 - 1.9.3.1 Provide responses to a submittal within 21 calendar days from receipt of the submittal and within 14 calendar days from receipt of a resubmittal.
 - 1.9.3.2 This scope of work assumes review of an estimated 44 submittals/resubmittals totaling 228 hours of review and processing time. The following submittals are anticipated:

Shop Drawings

Schedule of values

Schedule

IFAS general process

Positive Displacement Blowers

IFAS Media

IFAS Effluent Screens

In Basin Aeration Grid and Diffusers

Aeration Piping

Rotary Drum Screen

Screenings Washer/Compactor System

Epoxies

Epoxy Resin/Portland Cement Bonding Agent

Concrete Formwork

Concrete Reinforcement

Cast-in-Place Concrete

Concrete Finishes

Grouts

Structural Steel

Structural Aluminum

Mechanical Anchoring and Fastening to Concrete and Masonry

Pipe supports

Ductile Iron pipe

SS pipe (air)

Valves

Valve Operators

Control Systems: Panels, Enclosures, and Panel Components

Control Systems: Programmable Logic Controllers

Control Systems: Human Machine Interface Hardware (HMI)

Testing, Calibration, and Commissioning

Grounding and Bonding

Resistance Grounding Systems

Cables

Conduits

Boxes

Wiring Devices

Wire Connections

Cable Connections

Low Voltage Motors up to 500 Horsepower

Disconnect Switches

Motor Starters
Low Voltage Motor Control Centers
Panelboards
Transfer Switches
Field Electrical Acceptance Tests

- 1.9.4 Prepare technical aspects of change orders as requested by the RPR. Review technical aspects of a Contractor initiated change including providing a response to the OWNER'S Project Manager on the acceptability of a claim.
- 1.9.5 Support the OWNER'S Project Manager during site inspection as requested by the OWNER'S Project Manager. The ENGINEER shall be on site intermittently during the entire construction period through turnover of the facilities to the OWNER for an estimated period of 45 weeks. ENGINEER'S presence on site is based on an average of one day a week prior to the start of readiness testing and startup/performance testing. If the OWNER requests the ENGINEER to be on site more than one day a week, then additional time shall be paid for at the established hourly rates and expenses paid at actual cost. The following site inspection activities may be performed by the ENGINEER:
 - 1.9.5.1 Provide inspection of IFAS media, screens, divider walls, drum screen, blowers, piping, diffusers, actuators, I&C, and electrical system equipment installation.
 - 1.9.5.2 Address Contractor's compliance with the Contract Documents.
- 1.9.6 The ENGINEER shall not be responsible for: (1) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with construction of the Project; (2) the failure of the Contractor or, any subcontractor, vendor, or other Project participant, not under contract to the ENGINEER to fulfill contractual responsibilities to the OWNER or to comply with federal, state, or local laws, regulations, and codes; or (3) procuring permits, certificates, and licenses required for any construction.
- 1.9.7 Prepare an overall system O&M manual that consists of:
 - 1.9.7.1.1 Design criteria.
 - 1.9.7.1.2 Description of process and treatment goals.
 - 1.9.7.1.3 Equipment lists (new equipment).
 - 1.9.7.1.4 Standard operating procedures for startup, shutdown (normal and emergency), and normal operation.
 - 1.9.7.1.5 Preventive maintenance steps.
 - 1.9.7.1.6 Append IFAS, blower, and screen equipment supplier-provided O&M manuals.
- 1.9.8 Provide assistance to the OWNER'S Project Manager during commissioning and startup, including electrical and controls, as requested by the OWNER'S Project Manager. Services will include:
 - 1.9.8.1 Review and comment on the Contractor's draft startup and commissioning plan including a training plan for OWNER'S staff.
 - 1.9.8.2 Review Contractor's maintenance of plant operation plan.
 - 1.9.8.3 Be present on site during the IFAS system treatment readiness and performance testing periods. We have assumed that this startup will occur over a two week period and that staffing will consist of: split onsite time between the senior process lead and project engineer, and six days for electrical/I&C engineer.
 - 1.9.8.4 Advise the OWNER on acceptability of the IFAS system performance.

- 1.9.9 Provide assistance to the OWNER'S Project Manager on record drawing preparation as requested by the OWNER'S Project Manager consisting of review of record drawings prepared by the Contractor for completeness and compliance with the Contract Documents and communicate any record drawing deficiencies to the OWNER'S Project Manager for Contractor correction. A total of 42 hours are allocated for record drawing preparation.
- 1.9.10 Optional Reimbursable Services:
 - 1.9.10.1 Surveying or Utilities Locate Services: In the event a site survey or locate of underground utilities is required: \$10,000.
 - 1.9.10.2 Geotechnical Evaluation: In the event geotechnical information is needed: \$15,000.

2 TIME OF PERFORMANCE

- 2.3 Preliminary Design Technical Memorandum submittal to OWNER: 90 calendar days from Notice to Proceed (NTP).
- 2.4 Final Design submittal to OWNER: 180 calendar days from NTP.
- 2.5 Bidding Services: According to OWNER'S schedule.
- 2.6 Construction Management Services: According to OWNER'S schedule, but for budgeting purpose estimated to be 11 months.

3 PAYMENT

- 3.3 Compensation for the design, permitting and bidding services: OWNER agrees to pay the ENGINEER monthly on a lump sum basis a total amount not to exceed \$279,528.
- 3.4 Compensation for engineering services during construction: OWNER agrees to pay the ENGINEER based on actual time spent and invoiced monthly per the unit rates provided in the attached price worksheet, with a budgeted amount of \$192,095.
- 3.5 Compensation for optional reimbursable tasks will be based on Cost plus 10% markup. Total allowance budgeted amount of \$25,000.

EFFECTIVE DATE

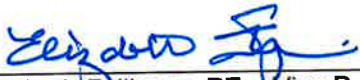
This agreement is effective as of the ____ day of ____, 2018.

IN WITNESS WHEREOF, duly authorized representatives of the OWNER and of the ENGINEER have executed this Agreement ____ evidencing its issuance by OWNER and acceptance by ENGINEER.

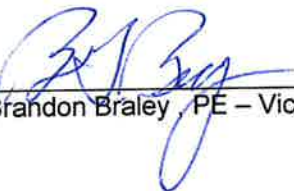
CAROLLO ENGINEERS, INC.

OWNER

Accepted this _____ day of _____, 2018

By: 
Elizabeth Fujikawa, PE – Vice President

By: _____
Officer

By: 
Brandon Braley, PE – Vice President

By: _____
Officer

EXHIBIT B - PROJECT FEE SCHEDULE

City of Margate - East WWTP Aeration System Upgrade

2/19/18

Task	Project Lead	Project Manager	Project Engineer	Senior Technical Specialist - Process	Engineer - Process	CAD Designer - Process	Senior Engineer - Structural	CAD Designer - Structural	Senior Electrical I&C Engineer	CAD Designer - Electrical	Admin. Support	Task Totals
	\$ 237.00	\$ 237.00	\$ 145.02	\$ 227.00	\$ 142.00	\$ 95.00	\$ 196.00	\$ 95.00	\$ 150.00	\$ 85.00	\$ 74.00	
DESIGN, BID, PERMIT SERVICES												
Preliminary Design (30%)												
Hours	4	79	264	128	40	104	36	20	48	16	24	763
Labor Cost	\$ 948	\$ 18,770	\$ 38,285	\$ 29,056	\$ 5,680	\$ 9,880	\$ 7,056	\$ 1,900	\$ 7,200	\$ 1,360	\$ 1,776	\$ 121,911
Final Design (100%)												
Hours	4	58	176	50	40	184	88	28	97	103	44	872
Labor Cost	\$ 948	\$ 13,770	\$ 25,523	\$ 11,350	\$ 5,680	\$ 17,480	\$ 17,248	\$ 2,660	\$ 14,567	\$ 8,770	\$ 3,256	\$ 121,252
Permitting												
Hours		2	34	0	0	0	0	0	0	0	4	40
Labor Cost	\$ -	\$ 474	\$ 4,931	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 296	\$ 5,701
Bidding Services												
Hours	0	9	14	12	0	4	2	2	3	2	5	53
Labor Cost	\$ -	\$ 2,133	\$ 2,030	\$ 2,724	\$ -	\$ 380	\$ 392	\$ 190	\$ 450	\$ 170	\$ 370	\$ 8,839
Labor subtotal	\$ 257,703											
Expenses	\$ 21,825											
Design, Bid, Permit Services Total Cost	\$ 279,528											
CONSTRUCTION SERVICES												
Engineering Services During Construction												
Hours	0	99	279	248	20	16	52	0	270	12	0	996
Labor Cost	\$ -	\$ 23,463	\$ 40,460	\$ 56,296	\$ 2,840	\$ 1,520	\$ 10,192	\$ -	\$ 40,500	\$ 1,020	\$ -	\$ 176,291
Labor subtotal	\$ 176,291											
Expenses	\$ 15,804											
Construction Services Total Cost	\$ 192,095											
Project Subtotal	\$ 471,623											
Optional Reimbursable Tasks	\$ 25,000											
Project Total	\$ 496,623											
Position Totals	8	247	767	438	100	308	178	50	418	133	77	2,725
Labor Totals	\$ 1,896	\$ 58,610	\$ 111,229	\$ 99,426	\$ 14,200	\$ 29,260	\$ 34,888	\$ 4,750	\$ 62,717	\$ 11,320	\$ 5,698	\$ 433,994
	\$ 1,896	\$ 58,610	\$ 111,229	\$ 99,426	\$ 14,200	\$ 29,260	\$ 34,888	\$ 4,750	\$ 62,717	\$ 11,320	\$ 5,698	\$ 433,994

Expenses

Ground transportation	\$ 5,014
Air travel	\$ 2,100
Lodging	\$ 1,080
Meals and incidentals	\$ 768
Printing--Submittals	\$ 3,240
PECE	25,428
Project Expenses total	\$ 37,630