

CITY OF DELRAY BEACH

CONSULTING SERVICE AUTHORIZATION

DATE: 12/6/2016

SERVICE AUTHORIZATION NO. 12-26 FOR CONSULTING SERVICES

CITY P.O. NO. _____ CITY EXPENSE CODE: 442-5178-536-61 82

CITY PROJECT NO. _____ MATHEWS CONSULT. PROJECT NO. _____

TITLE: Master Lift Station No. 1 Rehabilitation

This Service Authorization, when executed, shall be incorporated in and shall become an integral part of the Contract.

TITLE: Agreement for General Consulting Engineering Services

I. PROJECT DESCRIPTION

The City of Delray Beach Master Lift Station No. 1 (MLS #1) is a triplex dry-pit pump station located between S.E. 5th Avenue and S.E. 6th Avenue just south of S.E. 4th Street. The station was last rehabilitated in 1994, and the facility, with its associated mechanical/electrical components, is nearing the end of its useful service life. The City desires to provide upgrades to MLS #1 as required to accommodate necessary renewal and replacement improvements as well as to provide capacity for future City growth and redevelopment.

The City contracted with Mathews Consulting, a Baxter and Woodman Company (MC), to evaluate the long-term capacity needs of the wastewater lift station based on current capacity needs and future anticipated growth for the Lift Station No. 1 service area. As a result of the study, the following upgrades were selected by the City for the station:

- Remove the existing concrete block buildings and replace the station with a submersible wetwell pump station. The existing station shall remain in operation during construction of new wetwell. After final piping tie-ins, the new station can be put into operation, and the existing station can be removed from service and demolished. This option presents minimal bypass pumping during construction.
- Construct new 12-foot diameter wetwell. Provide three (3) new submersible 100 HP pumps. The pumps are to be driven with soft start type starters.
- Additional manholes and gravity piping will be required to connect the existing collection system to the new wetwell. The site fencing and landscaping will be extended to enclose the new wetwell location, as required, to match current City Design standards.

- A stand-alone control panel sized to include the three starters. The control panel shall be constructed of NEMA 4X 316 Stainless Steel, 14 gauge with a welded seam. The enclosure shall include a neoprene gasket, 3-point latch with pad lockable hardware and a drip shield. The outer door shall be blank with all control components mounted on or projecting through a dead front hinged inner panel.
- All conduits to the wetwell shall be PVC Schedule 80 (where encased in a concrete envelope a minimum of 2" thick and no less than 24" of cover from the top of the conduit to grade.) Threaded rigid metal conduit shall be used for the last 24 inches of the underground run to emergence, in accordance with NEC article 505.
- The station control shall be based on a pressure transducer with backup floats. The RTU will be based on the Data Flow Systems.
- The design will include a new main disconnect switch, automatic transfer switch, a mini-power zone (step-down transformer and 120/240 panel) and a standby generator.
- The standby generator will be sized to support three (3) 100 HP pumps and approximately 20 kVA of miscellaneous loads. The generator will be housed in a skin tight type (non-walk-in) type enclosure adjacent to the station.
- The enclosure shall include an integral dual wall base mounted tank with secondary containment. The tank shall be sized to support the station for approximately 3 days and shall be sized at no less than 1000 gallons.

This consulting service authorization provides for surveying, engineering design, permitting, bidding and engineering services during construction of the proposed lift station improvements.

II. SCOPE OF SERVICES

Phase I – Study and Report Phase

Not Applicable.

Phase II – Preliminary Design Phase

Not Applicable.

Phase III – Final Design Phase

Consultant shall provide final design phase services in accordance with Article III.C of the Agreement for Engineering Services with the City, dated January 24, 2012.

Task 3.1 – Project Management: MC shall provide overall Project Management and coordination for the project.

Task 3.2 - Field Investigation: Field reconnaissance of the lift station site shall be performed, including photograph log walk-through. In addition, potential underground existing utilities will be identified.

Task 3.3 - Utility Coordination: Coordination with utility agencies (electric, phone, gas, and cable TV) shall be performed to collect record information. This Subtask includes reconciling apparent discrepancies between record information and existing photographic and field-verification information.

Task 3.4 – Survey: MC shall provide survey services consisting of field topography and horizontal locations for the pump station site. All existing facilities and utilities within the project area (design limits) will be referenced and will include the following:

1. Topography survey at 25-foot intervals and at major ground elevation changes to depict existing ground profile along the proposed project area. This shall be accomplished by collecting pertinent data which shall include the following:
 - a. Location of all visible fixed improvements within the project limits, including physical objects, roadway pavement, driveways, sidewalks, curb, trees, signs, fences, power poles, buildings (including finished floor elevations), and other encumbrances, including point of curvature and point of tangency.
 - b. Location of all known above and below ground existing utilities: FPL, AT&T, Cable TV, Natural Gas, Potable Water (pipe diameter, TOP, valves, fire hydrants, and meters), Force Mains (pipe diameter, TOP, and valves), Sanitary Sewer (pipe diameter, manhole inverts and direction, rim elevations, laterals, and clean-outs), Storm Sewers (pipe diameter, manhole inverts and direction, catch basins, and rim/grate elevations), and **all** other accessible structures and facility piping.
 - c. Identify platted rights-of-way (including bearing and distances for centerline), lot numbers, addresses, ownership lines (per property tax information provided by City), block numbers and dedicated easements.
 - d. Elevations within project area shall be indicated on a minimum 25-foot grid (based on NGVD 29 datum), and will indicate centerline grades, edge of pavement grades and shoulder grades, low points and all property or easement lines. Intermediate grades shall be indicated at all grade breaks, driveways and sidewalks.
 - e. Elevations to be referenced to an existing established City or County Benchmark.
2. The above topographical survey data will be prepared in AutoCAD (Version 2016) format at a scale of 1"=20'. The CAD drawing shall also include:
 - Location of utility pot holing.

Task 3.3 - Design Drawings: Consultant shall prepare construction drawings which shall include: cover sheet, general notes, civil plan drawings, mechanical, structural, electrical and instrumentation drawings, and detail sheets conforming to the requirements of the current City of Delray Beach Minimum Construction Standards. The drawing scale shall be 1" = 20' for plan and 1" = 2' for profile. Consultant shall prepare the engineering design elements on topographic survey information prepared by Consultant using AutoCAD Release 2013 format and available As-Built Drawings. Consultant shall coordinate with the City in order to design the proposed lift station modifications and upgrades in accordance with the requirements and design standards of the City. Drawings (two copies + PDF) shall be submitted for City review at 50%, 90% and 100% (Bid Set) design stages.

Task 3.4 - Specifications: Contract documents consisting of "front-end" documents and technical specifications shall be prepared and shall conform to City of Delray Beach Standards. Specifications (two copies + PDF) shall be submitted for City review at the 50%, 90% and 100% (Bid Set) design stages.

Task 3.5 - Cost Estimate: At the 50%, 90% and 100% stages, Consultant shall prepare a detailed opinion of probable construction cost based upon the level of design drawings and specifications approved by the City. The cost opinion shall reflect changes in general scope, extent or character of design requirements incorporated during the various design review stages. Opinion of probable construction cost (two copies + PDF) shall be submitted for City review at the 50%, 90% and 100% (Bidding) stages.

Task 3.6 - Meetings: Consultant shall attend kick-off meeting and two (2) design meetings with the City and provide written summary of the issues discussed.

Task 3.7 - QA/QC: Consultant shall provide internal QA/QC reviews on the 50%, 90% and 100% (Bid Set) Design Documents (e.g. drawings, specifications and cost estimates).

Task 3.8 - Final Deliverable: Consultant shall furnish two (2) sets of the 100% (Bid Set) design drawings and specifications to the City (Environmental Services Department). Additional deliverables shall be made to the Purchasing Department as listed under Phase IV below.

Phase IV – Bidding/Negotiation Phase

Consultant shall provide bidding phase services in accordance with Article III.D of the Agreement for Engineering Services with the City, dated January 24, 2012.

Task 4.1 - Bid Advertisement: Consultant shall assist City in advertising for and obtaining bids or negotiating proposals for construction (including materials, equipment and labor). It is anticipated that work shall be awarded under a single construction contract. The City shall receive and process deposits for bidding documents and shall maintain a record of prospective bidders to whom bidding documents have been issued.

Task 4.2 - BidSync Bid Submittal: Consultant shall furnish the bidding information to the City in electronic format to be used in conjunction with BidSync (<https://www.bidsync.com/>). This includes one (1) set of electronic PDF files of the drawings, specification and front-end documents.

Task 4.3 - Pre-Bid Conference: Consultant shall attend pre-bid conference.

Task 4.4 - Bid Clarification: Consultant shall provide clarification information to the City to issue in addenda format and shall provide supplemental information or clarification, as appropriate, to interpret, clarify, or expand the bidding documents to all prospective bidders during the bid period.

Task 4.5 - Contract Award: Consultant shall attend the bid opening, prepare bid tabulation sheets and assist City in evaluating bids and proposals, and in assembling and awarding contract for construction. Consultant shall submit to City a written recommendation concerning contract award.

Task 4.6 - Final Deliverable: After Contract Award, Consultant shall furnish to the City the As-Bid design drawings as follows: one (1) reproducible set, one (1) set of AutoCAD (Version 2013) files and one (1) set of pdf files in electronic format on CD. Consultant shall also provide one hard copy only of the Contract Documents (i.e. front-ends and technical specifications).

Phase V – Construction Administration Phase

Consultant shall provide construction phase services in accordance with Article III.E of the Agreement for Engineering Services with the City, dated January 24, 2012.

CONSULTANT shall serve as the City's engineering representative during the course of the estimated 270 days (9 months) construction period.

Task 5.1 - Preconstruction Conference: Consultant shall attend a preconstruction conference with representatives of City, Contractors and major subcontractors for the construction contract. Consultant shall prepare, in writing, agenda for the meeting and Consultant shall provide written meeting minutes.

Task 5.2 – Shop Drawing Review: Consultant shall receive, log, and review Shop Drawings and Product submittals for general conformance with the design intent and provisions of the Contract Documents. Review of up to 50 submittals (total, which includes submittals, and re-submittals, if required) is included in the budget. Consultant will review and return submittals to City and Contractor within 7 to 10 calendar days of receipt. MC shall maintain a shop drawing log indicating the dates of contractor submittals, rejections and approvals.

Task 5.3 – Monthly Meetings: Consultant shall attend monthly construction progress (up to 9) meetings to be held at the City of Delray Beach Utility Services Department. Consultant shall prepare agenda's and shall provide a written summary of the issues discussed.

Task 5.4 – Construction Clarifications: Consultant shall respond in writing to Contractor's Request for Information (RFI) regarding the design documents. Consultant shall issue interpretations and clarifications of the Contract Documents, along with associated support materials, as requested by the Contractor. These interpretations will be rendered and a response prepared and submitted to the Contractor within 3 calendar days.

Item 5.5 – Construction Changes: Prepare and negotiate Change Orders (CO) and Field Change Directives (FCD) during the 9-month construction period. For the purpose of this Work Order, it is assumed that up to five (5) CO's and four (4) FCD's will be prepared during the 11-month construction period.

Item 5.6 – Pay Estimate Review: Review monthly payment applications (total of 9) submitted in a format acceptable to the City. Consultant shall verify the quantities as represented on the pay request and make a recommendation to the City to proceed with the payment as requested, or as modified based on Consultant's review.

Item 5.7 – Construction Schedule Review: Consultant shall monitor the construction schedule monthly (total of 9) and report to the City conditions which may cause delay in completion.

Item 5.8 – Startup, Testing and Certificate of Construction Completion

Consultant shall provide startup and testing services for the project, including witnessing pipeline pressure testing, pump and system performance testing, electrical & controls testing, and other startups needed to demonstrate successful operation of the system. Consultant shall also witness the startup and testing of the pump station control strategy.

Consultant shall certify to the City based on the visible project features, Consultant's part-time inspections and City's inspections, and review of the testing reports, that the project was constructed in accordance with the plans and specifications.

Task 5.9 - Substantial and Final Inspections: Consultant shall conduct a substantial and final inspection with the City's construction management staff to determine if the project has been completed in accordance with the contract documents and if the construction contractor has fulfilled his obligations thereunder. A punch-list will be prepared for each inspection (substantial & final).

Item 5.10 – Review of Final Record Drawings and Final O&M Manuals

Consultant shall review the Contractor's electronic Record Drawings for completeness. Deviations from the Final Design Drawings will be compiled by the Contractor and electronically incorporated onto the drawing files. Two (2) sets of final signed and sealed Record drawings by a Florida Registered Surveyor (and the drawings in AutoCAD.dwg and .pdf formats) will then be submitted by the Contractor to the Consultant/City for review and approval. A minimum of one (1) hard copy and one (1) electronic version of approved Record Drawings will be submitted to the City upon completion of the project.

Consultant shall review the Contractor's Final O&M Manuals for completeness. Three (3) sets of final O&M manuals and one (1) PDF copy shall be submitted to the City upon completion of the project.

Phase VI – Resident Project Representative Phase

Consultant shall provide construction phase services in accordance with Article III.F of the Agreement for Engineering Services with the City, dated January 24, 2012.

Task 6.1 – Resident Project Representative: Consultant shall provide part-time (20 hours per week) inspections of the project during the construction of the work in a total period of not-to-exceed 270 calendar days. Activities performed under this task consist of furnishing an RPR during the construction of the project, to observe the quality of the construction work, and to determine, in general, if the construction of the proposed improvements can be certified. The RPR shall:

- Serve as Consultant's liaison with construction contractor, working principally through the contractor's construction manager and assist him in understanding the intent of the contract documents.
- Conduct on-site inspections of the work in progress to assist in determining if the work is proceeding in accordance with the contract documents and that completed work substantially conforms to the contract documents. Report, in writing, whenever Consultant believes that work is unsatisfactory, faulty or defective, or does not conform to the contract documents, or does not meet the requirements of inspections, tests or approval required to be made, or has been damaged prior to final payment.
- Accompany visiting inspectors representing public or regulatory agencies having jurisdiction over the project. Record, in writing, the outcome of these inspections and report same to City.
- Consider and evaluate construction contractor's suggestions for modifications in drawings or specifications and report them to City, in writing. Consultant shall make recommendation for action by the City.
- Observe all flushing and pressure testing of the pipe.
- City inspector shall assist the construction contractor in coordinating all required density testing, etc. as required by the Construction Documents. Consultant's inspector shall assist the City as required.
- Activities performed under this task consist of furnishing periodic inspections during the construction of the project, to observe the quality of the construction work, and to assure that the improvements can be certified to the City and PBCHD.

LIMITATIONS OF AUTHORITY

Except upon written instructions of Consultant, the RPR:

1. Shall not authorize any deviation from the Contract Documents or approve any substitute materials or equipment. Shall not exceed limitations on Consultant's authority as set forth in the Contract Documents. Shall not undertake any of the responsibilities of Contractor, Subcontractors, or expedite the Work.
2. Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents.
3. Shall not authorize Owner to occupy the Project in whole or in part.
4. Shall not participate in specialized field or laboratory tests.

Other – Permitting (PBCHD)

At the outset of the Design Phase, the Consultant shall meet with the appropriate permitting agencies to determine potential permitting requirements. Agencies anticipated to have jurisdiction over the project include: (1) Palm Beach County Health Department (PBCHD) for construction of the wastewater lift station modifications and upgrades.

Permit applications shall be completed as required for PBCHD. Associated permit application fees shall be determined by Consultant and paid by City.

- PBCHD Application for Construction of a Wastewater Collection/Transmission System.

In addition to preparing the permit applications for appropriate regulatory agencies, Consultant shall assist the City in consultations with the appropriate authorities. Consultation services shall include the following:

- Attend up to one (1) pre-application meeting with the staff of each of the regulatory agencies.
- Attend up to one (1) meeting with each of the regulatory agencies during review of the final permit applications.
- Respond to request(s) for additional information from each regulatory agency.

Other – Permitting – Site Plan Approval (SPRAB)

Consultant shall prepare and submit a Class I Site Plan Review application request, and prepare an amended Site Plan and a Landscape Plan. The application and plans will depict the desired improvements to reconfigure the lift station by placing most the infrastructure underground and screening that which will remain above ground. It is our understanding that these changes are subject to Site Plan Review and Appearance Board (SPRAB) approval. This proposal includes services to prepare a presentation and represent this application before the SPRAB.

Consultant services shall include the following:

- Attend one (1) meeting with the City's Utility Department, to discuss the project goals, review issues and engineering plans, discuss the requested amendment, and coordinate on tasks and process;
- Research of existing files on file with the City of Delray Beach relative to the history of subject site and obtain a copy of the latest approved Site Plan (if available);
- Review of the City's land use and property development requirements for this site in the Land Development Code;
- Attend one (1) pre-application meeting with representatives of the City of Delray Beach Planning Department to review the Class I Site Plan Review process and the proposed changes;
- Prepare one (1) update to the approved Site Plan of record, complying with the City's technical requirements, and suitable for submittal to the City;
- Prepare a Landscape Plan for reflecting proposed screening for the lift station and complying with code;
- Preparation of required owner documents, application and project information forms, and submittal letter, based on information provided by the Client;
- Preparation of required maps and aerials;
- Prepare and file the components of an application for a Class I Site Plan Review, including the following materials:
 - Development application (*to be signed by Property Owner*)
 - Project Fact Sheet
 - Owner's Consent (*to be signed by Property Owner*)
 - Title Certificate (*if required - prepared by others*)
 - Warranty deed and affidavit (*provided by Property Owner*)
 - Vicinity Map
 - Site Plan
 - Landscape Plan
 - Preliminary drainage and utility plans
 - Lighting plan with cut sheets and photometrics
 - Certified boundary survey with legal description, acreage calculation and other required information
- Preparation of one (1) amendment to the application, Site Plan and Landscape Plan in response to City of Delray Beach Technical Advisory Committee (TAC) review citing specific requirements of the City's Land Development Regulations; Coordination/review with City Planning Division staff and Client regarding the staff reports and recommendations for the project;
- Preparation of presentation graphics for representation of the project to SPRAB, including:
 - one (1) illustrative Site Plan
 - annotated aerial photograph
 - various graphics including a street level view and rendering of proposed improvements with screening
- Preparation of Power Point presentation, including coordination of graphics prepared by others;
- Attendance and representation for the application at one (1) Site Plan Review and Appearance Board (SPRAB).

Other – Electrical

Consultant shall furnish the services of a professional electrical engineer to provide electrical and process control (instrumentation) design services (construction plans, specifications and construction cost estimate) for the proposed improvements at the 50%, 90% and 100% design stages.

Electrical Subconsultant shall provide engineering services during bidding of the proposed improvements, which will include addressing questions and Requests for Information (RFI's) received by developing addendum document(s) for use by the City to issue to potential bidders. Addendum to provide corrections, supplemental information or clarification, as appropriate, to interpret, clarify, or expand the bidding documents.

Electrical Subconsultant shall provide engineering services during the construction phase, which will include electrical shop drawing review, providing electrical clarifications, periodic site visits/startup testing, and punch list inspections.

Other – Geotechnical

Consultant shall furnish the services of a professional geotechnical engineer to provide subsurface investigations of the project area that will include:

- Perform two (2) standard penetration test (SPT) boring to a depth of thirty (30) feet.
- Evaluate field data collected and provide geotechnical engineering evaluation report.

Other – Field Verification

Consultant shall furnish the services of a professional underground services company to provide underground field locations of affected existing utilities. The work shall consist of measuring and recording the approximate horizontal location of affected utilities within the project limits. It is anticipated that approximately five (5) utility locations will need to be pot-holed.

ASSUMPTIONS

Work described herein is based upon the assumptions listed below. If conditions differ from those assumed in a manner that will affect schedule of Scope of Work, Consultant shall advise City in writing of the magnitude of the required adjustments. Changes in completion schedule or compensation to Consultant will be negotiated with City.

1. City will provide Consultant record drawings of all available existing facilities and proposed facilities, which shall serve as the basis of design in this project. The information will be provided to Consultant within 5 calendar days of NTP.
2. City personnel will assist in field verification of affected existing City facilities. This includes marking in field (in a timely manner) existing water mains, sanitary sewers & laterals, force mains, reclaimed water mains and drainage in the field for the Surveyor.

3. Consultant assumes that all existing and proposed lift station alignment is within City of Delray Beach rights-of-way, City property or existing easements. It is assumed no additional easements are required for the project.
4. City is responsible for all permitting fees, including costs of public notification in local newspapers.
5. The Contract Documents will be prepared as a single contract. No pre-purchase of materials and/or equipment is presumed.
6. A single bidding effort for the project is assumed. Re-bidding of the project is considered Additional Services.
7. The City will prepare and provide to MC for review prior to bidding front-end documents in electronic format.
8. The design is to be based on the federal, state and local codes and standards in effect at the beginning of the project. Revisions required for compliance with any subsequent changes to those regulations is considered an Additional Services Item not currently included in this Authorization.
9. Consultant assumes that there are no contaminated soils or groundwater in the project area.
10. Material testing services are not included in this Service Authorization.
11. Construction duration is assumed to be 270 calendar days (9 months).
12. The Contractor shall be responsible for preparing project Record Drawings.
13. Part-time inspections are based on a maximum of 20 hrs/wk.
14. City personnel will provide daily inspections of the project for the time periods when Consultant's inspector is not on-site.
15. Assisting the City in the settlement of construction contract claims is considered Additional Services and is not included in this Service Authorization.
16. The Site Planning approval services assume the proposed development program modification will fall within thresholds that allow the project to be reviewed and approved under the Class I Site Plan Review process, and thereby permitted by the City of Delray to be approved by the SPRAB, for the desired improvements. Any deviation from this understanding, as determined by the City Staff, that requires additional services on the part of the Consultant, including the filing of additional application requests such as waivers or services related to alternate reviews by the Planning and Zoning Board or the City Commission, shall necessitate additional services as addressed elsewhere in this proposal.
17. Modifications to the Site Plan submitted materials as requested by the City, Client, other Consultants, or SPRAB, not required in order to meet the City's sufficiency requirements, or

additional TAC comments received after first resubmission, are not included herein and will be treated as additional services);

ADDITIONAL SERVICES

Consultant may provide additional engineering services that are not covered under this Service Authorization. These additional services may be required due to uncertainties discovered during implementation of the scope of services.

Services performed under this task will be on as-directed basis in accordance with a written Notice-to-Proceed from the City Manager. The Notice-to-Proceed issued shall contain the following information and requirements.

- A detailed description of the work to be undertaken.
- A budget establishing the amount of the fee to be paid in accordance with the Agreement.
- A time established for completion of the work.

III. TIME OF PERFORMANCE

The completion dates for this work will be as follows (starting at written notice-to-proceed). Refer to *Attachment A* for the project schedule.

<u>Engineering Services</u>	<u>Time per Phase</u>	<u>Cumulative Time</u>
Survey	21 days	21 days
Phase III – Final Design ⁽¹⁾		
• 50% Design Submittal	60 days	81 days
• City 50% Review	7 days	88 days
• 90% Design Submittal	45 days	133 days
• City 90% Review	7 days	140 days
• 100% Design Submittal	30 days	170 days
Permitting ⁽²⁾	30 days	170 days
Phase IV – Bidding/Award	90 days	260 days
Phase V – Construction Admin.	270 days	530 days

⁽¹⁾Geotechnical, Surveying, and Field Verification will be completed during Final Design Phase.

⁽²⁾Permitting will overlap with 100% design time frame.

* The schedule is based upon conducting a review meeting within 7 calendar days after the City receives the design submittal. All review comments shall be provided to Consultant within 7 calendar days after the City receives the submittal. An adjustment to the overall schedule will be required in case the review meeting takes longer to be conducted and/or obtaining comments takes longer to receive.

VI. COMPENSATION

The compensation for services provided shall be billed on an hourly basis plus reimbursable expenses for each phase of work in accordance with Article VII, Method II, up to the following not to exceed cost for each phase. Refer to **Attachment B** for budget summary.

<u>Engineering Services</u>	<u>Estimated Fees</u>
Phase III – Final Design Phase	\$ 32,984.69
Phase IV – Bidding Phase	\$ 4,087.56
Phase V – Construction Administration Phase	\$ 37,085.30
Phase VI – Resident Project Representative Phase	\$ 66,684.20
Permitting	\$ 17,321.60
Electrical	\$ 31,630.64
Geotechnical	\$ 5,856.38
Field Verification	\$ 2,336.38
Out-of-Pocket Expenses	\$ 2,000.00 ⁽¹⁾
TOTAL PROJECT COST	\$ 199,986.75

Notes:

⁽¹⁾ Out-of-Pocket Expenses include the following: printing/reproduction and postage.

DELIVERABLES

TASKS	DELIVERABLES	QUANTITY
2.2 Design Drawings	50% 90% 100%/Bid Set	<ul style="list-style-type: none"> • (1) 22x34, (1) 11x17, (1) PDF • (1) 22x34, (1) 11x17, (1) PDF • (1) 22x34, (1) 11x17, (1) PDF, (1) set AutoCad Files
2.3 Specifications	50% 90% 100%/Bid Set	<ul style="list-style-type: none"> • (2) Copies, (1) PDF • (2) Copies, (1) PDF • (2) Copies, (1) PDF, (1) set Word files
2.4 Cost Estimate	50% 90% 100%/Bid Set	<ul style="list-style-type: none"> • (2) Copies, (1) PDF • (2) Copies, (1) PDF • (2) Copies, (1) PDF
3. Bidding Services	Bidding Sets Addenda if required	<ul style="list-style-type: none"> • (1) Set PDF files • As required
4. Permitting Services	Permit Applications(PBCHD)	<ul style="list-style-type: none"> • (4) – Sets each Permit
5. Construction Services	City Sets (Drwgs + Specs) Contractor Sets (Drwgs + Specs)	<ul style="list-style-type: none"> • (3) – Sets (22" x 34"), (1) PDF • (4) – Sets (22" x 34"), (1) PDF • (2) – Sets (22" x 34"), Signed and Sealed

This Service Authorization is approved contingent upon the City's acceptance of and satisfaction of the completion of the services rendered in the previous phase whereas encompassed by the previous Service Authorization. If the City in its sole discretion is unsatisfied with the services provided in the previous phase or Service Authorization, the City may terminate the contract without incurring any further liability. The Consultant shall commence work upon City Commission approval and this Service Authorization to be included as part of the contract without any further notice to proceed.

Approve by:

CITY OF DELRAY BEACH:

Date:

Cary D. Glickstein, Mayor

Attest:

Approved as to Legal Sufficiency
and Form

MATHEWS CONSULTING, a
BAXTER & WOODMAN COMPANY

Date:

Rene L. Mathews, P.E., Vice President

Witness

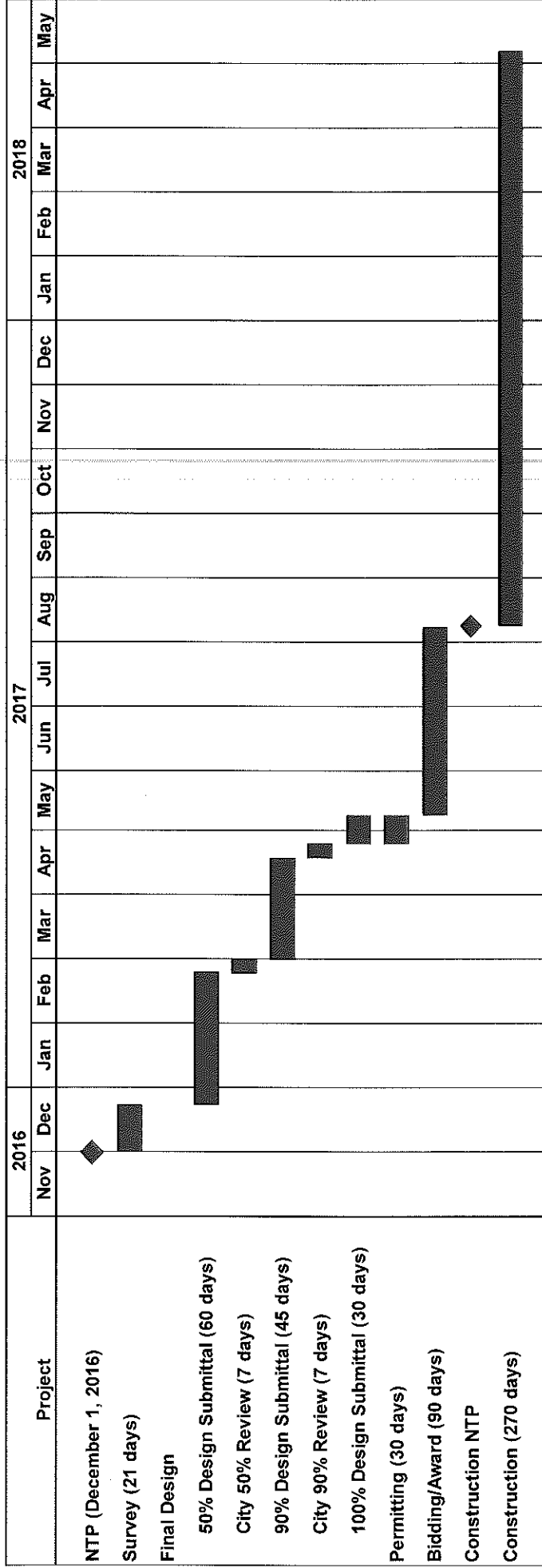
STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this 16 day of November, 2016 by Rene Mathews, Vice President of Mathews Consulting, a Baxter & Woodman Company, an Illinois corporation, on behalf of the corporation. He/She is (personally known to me) or (has produced identification), Florida Driver's License _____ and (did/did not) take an oath.



Courtney Marshall
Signature of person taking
Acknowledgement

Master Lift Station #1 - Design, Permitting, Bidding & CMS



ATTACHMENT B
City of Delray Beach Master Lift Station #1 Rehabilitation

Budget Summary

Phase No.	Task Description	Labor Classification and Hourly Rates								Sub-Consultant Services
		Principal Engineer \$166.40	Senior Engineer \$144.86	Engineer II \$118.84	Construction Manager \$118.22	Inspector \$89.15	Senior Eng. Technician \$115.13	Clerical \$70.58	Total Labor	
III	Final Design Phase									
3.1	Project Management		8						\$1,158.88	
3.2	Field Investigation			4					\$475.36	
3.3	Utility Coordination		2	4					\$765.08	
3.4	Survey		10				22		\$3,981.46	
3.5a	Design Drawings 50%	2	18	4			40		\$8,020.84	
3.5b	Design Drawings 90%	2	15	4			30		\$6,434.96	
3.5c	Design Drawings 100%	2	10	4			15		\$3,983.71	
3.6	Specifications (50%, 90%, 100%)	1	12						\$1,904.72	
3.7	Cost Estimate (50%, 90%, 100%)	2	10	4					\$2,256.76	
3.8	Meetings	3	10						\$1,947.80	
3.9	QA/QC	4			4				\$1,138.48	
3.10	Final Deliverable	1	2				4		\$916.64	
	Subtotal	17	97	24	4	0	111	0	\$32,984.69	
IV	Bidding Phase									
4.1	Bid Advertisement		2						\$289.72	
4.2	Demand Star Bid Submittal	1	2				4		\$916.64	
4.3	Pre-Bid Conference		4						\$579.44	
4.4	Bid Clarification	1	4						\$745.84	
4.5	Contract Award	1	2		4				\$929.00	
4.6	Final Deliverable	1					4		\$626.92	
	Subtotal	4	14	0	4	0	8	0	\$4,087.56	
V	Construction Management Services									
5.1	Preconstruction Conference		2		6				\$999.04	
5.2	Review Shop Drawings & Submittals		20		50			40	\$11,631.40	
5.3	Monthly Meetings & General Admin		4		45				\$5,899.34	
5.4	Construction Clarifications		6		24				\$3,708.44	
5.5	Construction Changes				24				\$2,837.28	
5.6	Pay Estimate Review				18				\$2,127.96	
5.7	Construction Schedule Review				18				\$2,127.96	
5.8	Startup, Testing & Certifications		6		16				\$2,760.68	
5.9	Substantial & Final Inspections		6		12				\$2,287.80	
5.1	Record Drawings & O&M Manuals		4		18				\$2,707.40	
	Subtotal	0	48	0	231	0	0	40	\$37,085.30	
VI	Resident Project Representative Phase									
6.1	RPR Services					748			\$66,684.20	
	Subtotal	0	0	0	0	748	0	0	\$66,684.20	
Other	Permitting - PBCHD	1	6						\$1,035.56	
	Permitting - Delray Site Plan (SPRAB) approval	1	10				8		\$2,536.04	\$12,500.00
	Electrical	1	8				2		\$1,555.54	\$27,341.00
	Geotechnical	1	2				2		\$686.38	\$4,700.00
	Field Verification	1	2				2		\$686.38	\$1,500.00
	Subtotal	5	28	0	0	0	14	0	\$6,499.90	\$46,041.00
	Labor Subtotal Hours	26	187	24	239	748	133	40	\$147,341.65	\$46,041.00
	Labor Subtotal Costs	\$4,326.40	\$27,088.82	\$2,852.16	\$28,254.58	\$66,684.20	\$15,312.29	\$2,823.20		
	Labor Total Costs	\$147,341.65								
	Subconsultant Costs Total	\$46,041.00								
	Subconsultant Multiplier	1.1								
	Subconsultant Total	\$50,645.10								
	Reimbursable Expenses	\$2,000.00								
	Project Total	\$199,986.75								