

20-C-00008; DLTWTF Master Plan Improvements Design-Build

PUBLIC ANNOUNCEMENT IN COMPLIANCE WITH REQUIREMENTS OF SECTION 287.055, FLORIDA STATUTES (CONSULTANTS' COMPETITIVE NEGOTIATION ACT)

APPLICABLE LAW, EXECUTIVE ORDERS, RULES, REGULATIONS, AND THE CITY'S STANDARD PROCEDURES. A NOTICE OF INTENT TO AWARD SHALL BE POSTED, IF AT ALL,
ON THE CITY'S WEBSITE ACCESSIBLE BY UTILIZING THIS WEBSITE LINK: www.tampagov.net/contract-administration/programs/architectural-engineering-construction-and-related-rfgs.

RFQ - 20-C-00008: The City of Tampa Water Department desires to obtain Design-Build Services for various projects identified within the Master Plan developed for the David L. Tippin Water Treatment Facility (DLTWTF) located at 7125 N. 30th Street.

Services will be provided under a contract with negotiated fixed fees for the assessment of the needs for the rehabilitation and improvement projects, selection and evaluation of design alternatives and requirements, development of construction sequencing and project phasing needed to maintain plant operations and reduce construction cost, final design, permitting, project management, overhead, profit, and development of a quaranteed maximum price with appropriate surety bonds. Services will also include, but not limited to, engineering investigations, site planning, cost estimating, advertising and administration of subcontracts, start-up, preparation of O&M manuals, training, and all related work required for a complete project.

The successful Design-Build Firm will provide a Team that has successfully completed projects of similar size and complexity, has the resources to simultaneously design and construct multiple projects, and has the experience and knowledge of the requirements to complete treatment plant projects while maintaining 24/7 treatment plant operations. The scope of the design-build contract will include the rehabilitation of existing facilities and construction of new facilities identified in the design criteria package, which is based on the recommendations provided in the DLTWTF Master Plan (July 2018). Each recommended improvement listed will be evaluated and updated prior to implementation.

Proposed budget is estimated at \$300,000,000

Background: The DLTWTF was originally constructed between 1924 and 1926. It has been expanded over the years and now produces about 80 mgd of potable water for the customers of the Tampa Water Department (population of about 625,000; 135,000 service locations). The plant is permitted to produce 82 mgd (average daily flow) and 120 mgd (peak flow). The primary source of water for the plant is the Hillsborough River. The treatment plant utilizes three parallel coagulation, flocculation, and sedimentation treatment trains. Two trains employ conventional rapid mix, flocculation, and sedimentation processes. The third train utilizes the Actiflo process. Ferric sulfate is used as the coagulant; it is supplemented with a polymer. The primary disinfectant is ozone. Disinfected water is filtered through mixed bed filters before chlorine and ammonia are added for a secondary disinfectant.

A pre-submittal conference will be held at 10:00 A.M. Tuesday, December 3, 2019, in the DLTWTF Conference Center (Maintenance Building), 7125 N. 30th Street, Tampa, FL 33610. The only site visit/walk-through will follow the meeting. Firms must email names, cell phone numbers and companies represented for all attendees a

minimum of 24 hours in advance to obtain security clearance to WPSecurity@tampagov.net. Attendance is not mandatory.

The Master Plan Volumes 1 and 2 are posted at https://www.tampagov.net/water/water-department-master-plans.

Additional material may be found at demandstar.com and at: www.tampagov.net/contract-administration/programs/architecturalengineering-construction-and-related-rfgs

Questions may be directed to Jim Greiner, P.E., Contract Administration, City of Tampa, (813) 274-8598, or E-Mail jim.greiner@tampagov.net.

An individual or entity ("Firm") responding to this RFO must provide evidence of any required licenses, certificates, or registrations with its submission or within 10 days thereof in order to be considered. The City shall own all ideas, documents, plans, and materials developed as a result of this solicitation and Firm is informed same shall be subject to reuse in accordance with Section 287.055(10), Florida Statutes. Firm (i) confirms it has read and is familiar with Section 119.071(3), Florida Statutes regarding certain building plans, blueprints, schematic drawings, which depict the internal layout and structural elements of a building, facility, or other structure owned or operated by the City or other agency that are per said section exempt from Section 119.07(1), Florida Statutes and Section 24(a), Art. I of the Florida Constitution ("Exempt Plans") and (ii) agrees Firm shall remain in compliance with same, including maintaining the exempt status of such Exempt Plans for so long as they are held by Firm or otherwise in its possession. The City may cancel, withdraw, or modify this RFQ at any time and reserves the right to reject any or all responses and to waive irregularities, formalities, and informalities as it determines in the City's best interest.

Firms desiring to provide these services to the City must submit a single electronic file in searchable PDF format, Smaller than 5MB, that includes the attached RFQ Transmittal Memorandum completed as appropriate, a Letter of Interest addressed to Brad L, Baird, P.E., Chairman, and referring to this RFQ by number, together with a Statement of Qualifications and any supplemental material allowing evaluation for further consideration (short-listing) based upon the following criteria/point system: Successful Comparable Project Experience, (30 pts); Municipal Water Treatment Plant Experience (25 pts); Workload and Availability (5 pts); Past Performance/Low amount of City Work (5 pts); Standard Form #A305 (5 pts); Planned WMBE/SLBE Solicitation & Utilization, Form MBD 10 & 20 (20 pts); Workforce Development (10 pts).

The PDF file must be E-Mailed to ContractAdministration@tampagov.net BEFORE 2 P.M., Thursday January 9, 2020. As a courtesy, the City will endeavor provide an email acknowledgement usually sent within a few days after submission receipt (submissions received on the day of the deadline may not be acknowledged before the deadline or at all). It is Firm's responsibility to confirm its submission (PDF file) has been received.

## RFQ TRANSMITTAL MEMORANDUM FOR A SUBMITTAL TO THE CITY OF TAMPA, FLORIDA

TRANSMITTAL DATE:				
RFQ NO. & TITLE:				
TO:	O: Brad L. Baird, P. E., Chairman Selection & Certification Committee (CCNA) c/o Contract Administration Department via <a href="mailto:contractAdministration@tampagov.net">ContractAdministration@tampagov.net</a> 306 East Jackson Street, 4th Floor North, Tampa, Florida 33602			
SUBMITTER ("Firm") NAME:		•		
FEDERAL TAX ID#:				
FIRM TYPE:	☐ Individual/Sole Proprietor☐ Limited Liability Company	☐ Joint Venture (JV)* ☐ Other:	☐ Partnership (PN)*	☐ Corporation
FIRM CONTACT NAME:		EMAIL:	PH	HONE:
CERTIFICATIONS:	Firm is licensed, permitted, and c License/registration/certification i	certified as required to do busino(s):	•	_No
	Per §287.133, Fla. Stat., individu "affiliate") placed on the convicte submit a bid, proposal, or reply (' entity, may not submit a Respons building or public work, may not sawarded or perform work as a co entity; and may not transact busi §287.017, Fla. Stat. for CATEGO Neither Firm nor its affiliates have	d vendor list ("List") following a "Response") on a contract to p se on a contract with a public of submit a Response for leases ontractor, supplier, subcontract ness with any public entity in of DRY TWO for a period of 36 m	a conviction for public entity provide any goods or service entity for the repair or construction of real property to a public tor, or consultant under a cexcess of the threshold amounths from the date of place.	r crimes may not es to a public truction of a public entity, and may not be ontract with any public bunt provided in
	Firm's own initial application for $\epsilon$ in Chapter 12, Article VI, Tampa and will not be used as a basis for	Code (responses, whether "Ye	es" or "No", are for informat	lar to those contained tional purposes only
	Firm shall comply with all applica 522, Tampa Code). The City's Cl benefit or profit out of any award financial interest in effecting any receives any such benefit or interest.	harter & Ethics Code prohibit a or obligation entered into with such award or obligation. If Fi	any City employee from rec the City, or from having ar rm is successful, it shall en	eiving any substantial ny direct or indirect sure no City employee
	Firm is not in arrears and is not in	n default upon any obligation t	o the City of Tampa: 🔲 Ye	s   🔲 No
	Firm agrees that if the City of Tall practices with regard to this subr right to debar Firm and deem inv	niṫtal, in addition to any other r	remedy it may exercise, the	City will have the
	Data or material Firm asserts to lin a separate, single electronic se "Confidential Material", which ide exempt from public disclosure, a then Firm waives any possible or	earchable PDF file labeled with entifies the data/material to be nd the specific Florida statute	n the above RFQ number a protected, states the reaso allowing such exemption (ii	and the phrase ns the date/material is f "No" or otherwise,
FAILURE TO COM	IPLETE THE ABOVE MAY RESU	ILT IN FIRM'S SUBMITTAL B	EING DECLARED NON-R	ESPONSIVE
[5	Authorized SEAL]	d Signature (wet): Printed Name: Title: Sole Prop Pres	s □Sr VP □Gen Ptnr □	LLC Auth.Mbr/Mgr
STATE OF COUNTY OF The forgoing instrument w  the entity. He/She is person	ras sworn (or affirmed) before n of onally known to me or produ	ne this day of either in his/her individ	dual capacity or where F	20 by irm is an entity as
,,	y y ma or produc	5(		
[NOTARY S	SEAL]	Printed Name: My Commission Expires:	Notary Public, St	ate of mission No:

<sup>\*</sup> With submittal or within 10 days thereafter, Firm must provide a signed copy of the complete agreement between all JV/PN members indicating respective roles, responsibilities, and levels of participation.

Point	Points Pursuant to Designated Industry Category:					
	(Refer to MBD Form 70 and Form 50-GFE Outreach)  Evaluation Criteria Point Values					
A.	Underutilized WMBE Firms participating as the Prime Contractor (City of Tampa Certified Only)	20				
В.	City of Tampa Certified SLBE firms participating as the Prime Contractor, which include City of Tampa Certified WMBE/SLBE sub-(contractor, consultant) participation	5 - 15				
C.	Non-City of Tampa Certified WMBE/SLBE Prime Contractor with meaningful sub-(contractor, consultant) participation by City Certified Underutilized WMBE and/or SLBE firms	1 - 15				
D.	* External agency WMBE/SLBE/DBE certifications recognized by City of Tampa for designated RFP, RFQ, RFI solicitations	0 – 7				
NOTE: The maximum points available for WMBE and/or SLBE participation will not exceed twenty (20)						

Points are determined as follows (Requires Form 50-GFE):

- A. A maximum of twenty (20) rating points <u>may</u> be awarded when the Proposer is a City of Tampa Certified WMBE firm deemed underutilized within the Industry category established by the RFP.
- B. A maximum of fifteen (15) rating points <u>may</u> be awarded when the Proposer is a City of Tampa certified SLBE with meaningful participation by City certified WMBE/SLBE subcontractors/consultants.
- C. One to Fifteen (1-15) rating points <u>may</u> be awarded when the <u>Proposer is not</u> a City of Tampa certified WMBE/SLBE prime contractor but utilizes either Underutilized WMBE and/or SLBE certified firm(s) as sub-contractors/consultants and assigned to perform meaningful segments of the <u>contractual services detailed herein</u> and documented on the enclosed MBD Form 10-20.
- D. A maximum of seven (7) "discretionary" rating points <u>may</u> be awarded when the Proposer provides WMBE/SLBE participation from an external agency recognized by the City. Discretionary points may be awarded for ancillary participation (see definition). The point values for ancillary participation may be subordinate to weighted values outlined in categories A, B and C above.
- **NOTE:** \*WMBE participation is narrowly-tailored (per policy) to target <u>underutilization</u> of affected groups in specific trade/industry categories. Any WMBE/SLBE achievement that was not designated on MBD Form 70 is considered ancillary. Ancillary participation may be counted with overall participation and credited to your rating points when underutilization criteria are met.

The maximum number of points available for WMBE and/or SLBE participation will not exceed a total of twenty (20) points.

#### **Equal Business Opportunity Evaluation Weighted Points: CCNA Proposal Guidelines**

Under CCNA solicitations, proposers must submit to preconstruction Good Faith Efforts (GFE) requirements covering the inclusion of City of Tampa certified WMBE, SLBE firms. Such inclusion shall be clearly addressed and documented utilizing Forms MBD 10, 20 & 50. Proof of certification shall include copies of current certification certificates. This applies to **ALL** Phase 1 preconstruction design services.

Points awarded during the shortlist selection process will be more heavily weighted predominantly on the design side (this does not preclude identification of phase 2 projections of construction participation which follow in the future, i.e. GMPs). In order to ensure the maximum points, a proposer must clearly **identify and quantify** its planned participation. Finally, additional favorable consideration will be granted to the firm(s) that beyond all others provide(s) the highest and most binding participation.

#### **GMP Exhibit**

#### Tampa's Equal Business Opportunity Program Procedures for GMP Contracts

- The City of Tampa's Equal Business Opportunity Program (EBO) requires setting a construction subcontract goal on each GMP under the CM /or D-Build delivery system.
- Prior to the time construction subcontract goals are set, the Construction Manager (CM)
  or the Design-Builder (D-B) provides information on subcontract packages planned for
  the construction phase(s) and their sequencing.

(Ref: use Detailed GMP Estimate and MBD Form-80 PTW)

- The CM (or D-B) participates in a meeting wherein the City will establish narrowly-tailored project goals for SLBE and/or W/MBE subcontractor participation on the project. (Ref: use MBD Form-70)
- For each subcontracting package to be bid, the CM (or D-B) confirms with the MBD Office, the City's minimum contact list of available SLBE and/or W/MBE firms to be solicited. Note: strategic, extensive outreach is the CM/DB's responsibility (i.e. GFECP) (Ref: use Minimum Contact List provided w/final Project EBO Determination Goal)
- The CM (or D-B) documents the notification of **all** potential subcontractors, including the SLBE or W/MBE firms identified above, i.e. minimum contact list of certified firms. (**Ref:** use **DMI 10-20 for construction phase Solicitation/Utilization outcomes**)
- The CM (or D-B) receives, opens, and tabulates subcontract bid results. The City, including representatives of the managing department and the MBD Office, may be present for the bid openings or to review the bids submitted.

  (Ref: use MBD Form-50 GFECP outreach w/documentation)
- The CM (or D-B) provides to the City, a tabulation of all bids received and its determination of the lowest responsive/responsible bidder. If bids received exceed contracted Guaranteed Maximum Price, CM (or D-B) advises City as to how they will proceed. If re-bidding is selected, notification at least equal to the original solicitation will occur. (Ref: Reaffirm EBO Outreach)
- As all subcontracts are executed, final copies are provided to the City. Where participation is achieved via sub-subcontractors and/or suppliers, the CM (or D-B) provides the City and MBD with copy of executed agreement or purchase order as documentation. (Ref: use MBD Form-40 LOIs execute "Letters-of-Intent")
- During construction, monitoring activities may including but may not be limited to, subcontractor payment reports to be submitted with pay requests, prior approval by the MBD Office and the managing departments, of any replacement of SLBE or W/MBE subcontractors, and a report of final amounts paid to all subcontractors.

(Ref: use #1-DMI 30 Form w/Pay Applications; #2-Prime & Subs must log into Diversity Mgt. Compliance System to report payment activity)



Good Faith Effort Compliance Plan Guidelines
for Women/Minority Business Enterprise\Small Local Business Enterprise Participation
City of Tampa - Equal Business Opportunity Program
(MBD Form 50 - detailed instructions on page 2 of 2)

Con	ntract Name	Bid Date
Bido	dder/Proposer	
Sign	gnature Title	Date
Nam	me Title	
The	e Compliance Plan with attachments is a true account of Good Faith Efforts (GFE) made to a ecified for Women/Minority Business Enterprises/Small Local Business Enterprises (WMBE/	chieve the participation goals as
□ Th	The WMBE/SLBE participation <u>Goal is Met or Exceeded</u> . See DMI Forms 10 and 20 v bcontractors <u>solicited</u> and <u>all</u> subcontractors <u>to-be-utilized</u> .	which accurately report <u>all</u>
step	The WMBE/SLBE participation Goal is Not Achieved. The following list is an overviews already performed. Furthermore, it is understood that these GFE requirements a aluation based on the veracity and demonstrable degree of documentation provided (Check applicable boxes below. Must enclose supporting documents according to the control of the control o	re weighted in the compliance I with the bid/proposal:
(1)	Solicited through reasonable and available means the interest of WMBE/SLBEs that have the capability to perform the solicit this interest within sufficient time to allow the WMBE/SLBEs to respond. The Bidder or Proposer must take approinterested WMBE/SLBEs.   See DMI report forms for subcontractors solicited.   See enclose efforts.   Qualifying Remarks:	work of the contract. The Bidder or Proposer mus opriate steps to follow up initial solicitations with
(2)	Provided interested WMBE/SLBEs with adequate, specific scope information about the plans, specifications, and require timely manner to assist them in responding to the requested-scope identified by bidder/proposer for the solicitation.   used.   Qualifying Remarks:	
(3)	Negotiated in good faith with interested WMBE/SLBEs that have submitted bids (e.g. adjusted quantities or scale). Doc addresses, and telephone numbers of WMBE/SLBEs that were solicited; the date of each such solicitation; a descriptio and specifications for the work selected for subcontracting; and evidence as to why agreements could not be reached v costs involved in soliciting and using subcontractors is not a sufficient reason for a bidder/proposer's failure to meet goa are reasonable. Bidders are not required to accept excessive quotes in order to meet the goal.  DMI Utilized Forms for sub-(contractor/consultant) reflect genuine negotiations  The and negotiations are limited to clarifications of scope/specifications and qualifications.  Qualifying Remarks:	n of the information provided regarding the plans with WMBE/SLBEs to perform the work. Additional als or achieve participation, as long as such costs his project is an RFQ/RFP in nature
(4)	Not rejecting WMBE/SLBEs as being unqualified without justification based on a thorough investigation of their capabili membership in specific groups, organizations / associations and political or social affiliations are not legitimate causes for Not applicable.   See attached justification for rejection of a subcontractor's bid or particular section.	for rejecting or not soliciting bids to meet the goals
(5)	Made scope(s) of work available to WMBE/SLBE subcontractors and suppliers; and, segmented portions of the work or WMBE/SLBE subcontractors and suppliers, so as to facilitate meeting the goal.   Sub-Contractors were allow work or trade without restriction to a pre-determined portion.   See enclosed comments	wed to bid on their own choice of
(6)	Made good faith efforts, despite the ability or desire of Bidder/Proposer to perform the work of a contract with its own fo to self-perform the work of a contract must demonstrate good faith efforts if the goal has not been met.   Sub-Cont submitting bids/proposals and were solicited on work typically self-performed by the prime.	ractors were not prohibited from
(7)	Segmented portions of the work to be performed by WMBE/SLBEs in order to increase the likelihood that the goals will breaking out contract work items into economically feasible units (quantities/scale) to facilitate WMBE/SLBE participatic prefer to perform these work items with its own forces.   Sub-Contractors were allowed to bid on their restriction to a pre-determined portion.   Sub-Contractors were not prohibited from susplicited on work typically self-performed by the prime.   See enclosed comments.	on, even when the Bidder/Proposer might otherwise own choice of work or trade without
(8)	Made efforts to assist interested WMBE/SLBEs in obtaining bonding, lines of credit, or insurance as required by the city   See enclosed documentation on initiatives undertaken and methods to accomplish.	or contractor.  □ Qualifying Remarks:
(9)	Made efforts to assist interested WMBE/SLBEs in obtaining necessary equipment, supplies, materials, or related assist acceptable mentor-protégé program.   □ See enclosed documentation of initiatives and/or agreem	
(10)	Effectively used the services of the City and other organizations that provide assistance in the recruitment and placeme   See enclosed documentation.   The following services were used:	ent of WMBE/SLBEs.
Note	te: Provide any unsolicited information that will support the Bid/RFP Compliance Evaluation. 🗆 <b>Nan</b>	ned Documents Are:



# Participation Plan: Guidance for Complying with Good Faith Efforts Outreach (page 2 of 2)

- 1. All firms on the WMBE/SLBE Goal Setting List must be solicited and documentation provided for email, fax, letters, phone calls, and other methods of outreach/communication with the listed firms. The DMI Solicited and DMI-Utilized forms must be completed for all firms solicited or utilized. Other opportunities for subcontracting may be explored by consulting the City of Tampa MBD Office and/or researching the online Diversity Management Business System Directory for Tampa certified WMBE/SLBE firms.
- 2. Solicitation of WMBE/SLBEs, via written or electronic notification, should provide specific information on the services needed, where plans can be reviewed and assistance offered in obtaining these, if required. Solicitations should be sent a minimum of a week (i.e. 5 business days or more) before the bid/proposal date. Actual copies of the bidder's solicitation containing their scope specific instructions should be provided.
- 3. With any quotes received, a follow-up should be made when needed to confirm detail scope of work. For any WMBE/SLBE low quotes rejected, an explanation Shall be provided detailing negotiation efforts.
- 4. If a low bid WMBE/SLBE is rejected or deemed unqualified the contractor must provide an explanation and supporting documentation for this decision.
- 5. Prime Shall break down portions of work into economical feasible opportunities for subcontracting. The WMBE/SLBE directory may be useful in identifying additional subcontracting opportunities and firms not listed in the "WMBE/SLBE Goal Setting Firms List."
- 6. Contractor Shall not preclude WMBE/SLBEs from bidding on any part of work, even if the Contractor may desire to self-perform the work.
- 7. Contractor Shall avoid relying solely on subcontracting out work-scope where WMBE/SLBE availability is not sufficient to attain the pre-determined subcontract goal set for the Bid or when targeted sub-consultant participation is stated within the RFP/RFQ.
- 8. In its solicitations, the Bidder should offer assistance to WMBE/SLBEs in obtaining bonding, insurance, et cetera, if required of subcontractors by the City or Prime Contractor.
- 9. In its solicitation, the Bidder should offer assistance in obtaining equipment for a specific job to WMBE/SLBEs, if needed.
- 10. Contractor should use the services offered by such agencies as the City of Tampa Minority and Small Business Development Office, Hillsborough County Entrepreneur Collaborative Center, Hillsborough County Economic Development Department's MBE/SBE Program and the NAACP Empowerment Center to name a few for the recruitment and placement of WMBEs/SLBEs.



# Failure to Complete, Sign and Submit Both Forms 10 & 20 SHALL render the Bid or Proposal Non-Responsive

# Page 1 of 4 – DMI Solicited/Utilized Schedules City of Tampa – Schedule of All Solicited Sub-(Contractors/Consultants/Suppliers) (FORM MBD-10)

Contract No.:	Contract Name:					
Company Nai	me:	Address:				
Federal ID:	me:	-ax:	Ema	il:		
Check applica [ ] No Firms [ ] No Firms [ ] See attack	able box(es). Detailed Instructions for complet were contacted or solicited for this contract were contacted because: hed list of additional Firms solicited and all MBD-10 must list ALL subcontractors solicited inc	ting this forr ct. I suppleme	m are on page 2 o	of 4. (List must o		
NIGP Code Categor	ies: Buildings = 909, General = 912, Heavy = 913, Trades = 914	1, Architects = 90	06, Engineers & Surveyo	ors = 925, Supplie	r = 912-77	
S = SLBE W=WMBE O = Neither Federal ID	Company Name Address Phone, Fax, Email		Type of Ownership (F=Female M=Male) BF BM = African Am. HF HM = Hispanic AF AM = Asian Am. NF NM = Native Am.	Trade or Services NIGP Code (listed	Contact Method L=Letter F=Fax E=Email	Quote or Response Received Y/N
			CF CM = Caucasian	above)	P=Phone	1714
	Failure to Com	plete	, Sign	and S	Subi	mit
	this form with					
	Shall render th	e Bi	dN -			
It is hereby ce opportunities o	ertified that the information provided is an accura n this contract.	ate and true	account of contac	ts and solicita	ations for s	ub-contracting
Signed:	Name/Ti	itle:		ſ	Date:	
<u>Failur</u>	Name/Ti e to Complete, Sign and Submit Both Forms 10			or Proposal N	lon-Respo	<u>nsive</u>
Forms must be included with Bid / Proposal						



## Page 2 of 4 – DMI Solicited/Utilized

# Instructions for completing The Sub-(Contractors/Consultants/ Suppliers) Solicited Form (Form MBD-10)

<u>This form must be submitted with all bids or proposals</u>. <u>All</u> subcontractors (regardless of ownership or size) solicited and subcontractors from whom unsolicited quotations were received must be included on this form. The instructions that follow correspond to the headings on the form required to be completed. <u>Note:</u> Ability or desire to self-perform all work shall not exempt the prime from Good Faith Efforts to achieve participation.

- Contract No. This is the number assigned by the City of Tampa for the bid or proposal.
- Contract Name. This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- Contractor Name. The name of your business and/or doing business as (dba) if applicable.
- Address. The physical address of your business.
- **Federal ID.** FIN. A number assigned to your business for tax reporting purposes.
- **Phone.** Telephone number to contact business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- No Firms were contacted or solicited for this contract. Checking the box indicates that a pre-determined <a href="Subcontract Goal or Participation Plan Requirement was not set">Subcontract Goal or Participation Plan Requirement was not set</a> by the City resulting in your business not using subcontractors and will self-perform all work. If during the performance of the contract you employ subcontractors, the City must pre-approve subcontractors. Use of the "Sub-(Contractors/Consultants/Suppliers) Payments" form (MBD Form-30) must be submitted with every pay application and invoice. <a href="Note: Certified SLBE or WMBE firms">Note: Certified SLBE or WMBE firms</a> bidding as Primes <a href="mailto:are not exempt">are not exempt</a> from outreach and solicitation of subcontractors.
- No Firms were contacted because. Provide brief explanation why no firms were contacted or solicited.
- See attached documents. Check box, if after you have completed the DMI Form in its entirety, you need more space to list additional firms and/or if you have supplemental information/documentation relating to the form. All DMI data not submitted on the MBD Form-10 must be in the same format and have all requested data from MBD Form-10 included.

The following instructions are for information of any and all subcontractors solicited.

- "S" = SLBE, "W" = WMBE. Enter "S" for firms Certified by the City as Small Local Business Enterprises and/or "W" for firms Certified by the City as either Women/Minority Business Enterprise; "O" = Non-certified others.
- **Federal ID.** FIN. A number assigned to a business for tax reporting purposes. This information is critical in proper identification and payment of the contractor/subcontractor.
- Company Name, Address, Phone & Fax. Provide company information for verification of payments.
- **Type of Ownership.** Indicate the Ethnicity and Gender of the owner of the subcontracting business.
- **Trade, Services, or Materials** indicate the trade, service, or materials provided by the subcontractor. NIGP codes aka "National Institute of Governmental Purchasing" are listed at top section of document.
- Contact Method L=letter, F=fax, E=Email, P=Phone. Indicate with letter the method(s) of soliciting for bid.
- Quote or Resp. (response) Rec'd (received) Y/N. Indicate "Y" Yes if you received a quotation or if you received a response to your solicitation. Indicate "N" No if you received no response to your solicitation from the subcontractor. Must keep records: log, ledger, documentation, etc. that can validate/verify.

If additional information is required or you have questions, please contact the Equal Business Opportunity Program - Minority and Small Business Development Office at (813) 274-5522.



## Failure to Complete, Sign and Submit Both Forms 10 & 20 SHALL render the Bid or Proposal Non-Responsive

# Page 3 of 4 – DMI Solicited/Utilized Schedules City of Tampa – Schedule of All To-Be-Utilized Sub-(Contractors/Consultants/Suppliers) (FORM MBD-20)

Contract No.:	Contract Name:					
Company Nai	me:	Address:				
Federal ID:	ompany Name:Address: ederal ID: Phone: Fax: Email:					
[ ] See attact Note: Form [ ] No Subcot [ ] No Firms	able box(es). Detailed Instructions for or hed list of additional Firms Utilized a MBD-20 must list ALL subcontractors To-E ontracting/consulting (of any kind) ware listed to be utilized because:	and all supplen Be-Utilized includi ill be performe	nental informatio ing Non-minority/sm d on this contrac	n (List mus all businesse t.	<u>s</u>	,
	Categories: Buildings = 909, General = 912, Heavy =		· ·	,		
S = SLBE W=WMBE O =Neither Federal ID	nter "S" for firms Certified as Small Local Business Enterpr Company Name Address Phone, Fax, Email	ises, "W" for firms Certi	fied as Women/Minority Bu Type of Ownership (F=Female M=Male) BF BM = African Am. HF HM = Hispanic Am. AF AM = Asian Am. NF NM = Native Am. CF CM = Caucasian	siness Enterprise Trade, Services, or Materials NIGP Code Listed above	*O" for Other No \$ Amount of Quote. Letter of Intent (LOI) if available	Percent of Scope or Contract %
	Failure to Co	mnlet	e Sion	and	Suh	mit
	this form wi					
	Shall render t					
<b>Total SLBE Ut</b>	ocontract / Supplier Utilization \$ ilization \$ Itilization \$ Utilization of Total Bid/Proposal Amt.			of Total Bio	d/Proposal <i>A</i>	.mt%
	fied that the following information is a true and					
Signed:	N	ame/Title:	IALL randor the Did.	ou Duon oo - Lh	Date:	140



#### Page 4 of 4 DMI – Solicited/Utilized

# Instructions for completing The Sub-(Contractors/Consultants/ Suppliers) to be Utilized Form (Form MBD-20)

<u>This form must be submitted with all bids or proposals.</u> All subcontractors (regardless of ownership or size) projected to be utilized must be included on this form. Note: Ability or desire to self-perform all work shall not exempt the prime from Good Faith Efforts to achieve participation.

**Contract No.** This is the number assigned by the City of Tampa for the bid or proposal.

- Contract Name. This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- Contractor Name. The name of your business and/or doing business as (dba) if applicable.
- Address. The physical address of your business.
- **Federal ID.** FIN. A number assigned to your business for tax reporting purposes.
- **Phone.** Telephone number to contact business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- No Subcontracting/consulting (of any kind) will be performed on this contract. Checking box indicates your business will not use subcontractors when no Subcontract Goal or Participation Plan Requirement was set by the City, but will self-perform all work. When subcontractors are utilized during the performance of the contract, the "Sub-(Contractors/Consultants/Suppliers) Payments" form (MBD Form-30) must be submitted with every pay application and invoice. Note: certified SLBE or WMBE firms bidding as Primes are not exempt from outreach and solicitation of subcontractors, including completion and submitting Form-10 and Form-20.
- **No Firms listed To-Be-Utilized.** Check box; provide brief explanation why no firms were retained when a goal or participation plan requirement was set on the contract. Note: mandatory compliance with Good Faith Effort outreach (GFECP) requirements applies (MBD Form-50) and supporting documentation must accompany the bid.
- See attached documents. Check box, if after completing the DMI Form in its entirety, you need more space to list additional firms and/or if you have supplemental information/documentation relating to the scope/value/percent utilization of subcontractors. Reproduce copies of MBD-20 and attach. All data not submitted on duplicate forms must be in the same format and content as specified in these instructions.

#### The following instructions are for information of Any and All subcontractors To Be Utilized.

- **Federal ID.** FIN. A number assigned to a business for tax reporting purposes. This information is critical in proper identification of the subcontractor.
- "S" = SLBE, "W" = WMBE. Enter "S" for firms Certified by the City as Small Local Business Enterprises and/or "W" for firms Certified by the City as Women/Minority Business Enterprise; "O" = Non-certified others.
- Company Name, Address, Phone & Fax. Provide company information for verification of payments.
- **Type of Ownership.** Indicate the Ethnicity and Gender of the owner of the subcontracting business.
- Trade, Services, or Materials (NIGP code if Known) Indicate the trade, service, or material provided by the subcontractor. Abbreviated list of NIGP is available at <a href="http://www.tampagov.net/mbd">http://www.tampagov.net/mbd</a> "Information Resources".
- Amount of Quote, Letters of Intent (required for both SLBEs and WMBEs).
- **Percent of Work/Contract.** Indicate the percent of the total contract price the subcontract(s) represent. For CCNA only (i.e. Consultant A/E Services) you must indicate subcontracts as percent of total scope/contract.
- **Total Subcontract/Supplier Utilization.** Provide total dollar amount of all subcontractors/suppliers projected to be used for the contract. (Dollar amounts may be optional in CCNA depending on solicitation format).
- **Total SLBE Utilization.** Provide total dollar amount for all projected SLBE subcontractors/Suppliers used for this contract. (Dollar amounts may be optional in CCNA proposals depending on the solicitation format).
- **Total WMBE Utilization.** Provide total dollar amount for all projected WMBE subcontractors/Suppliers used for this contract. (Dollar amounts may be optional in CCNA proposals depending on the solicitation format).
- **Percent SLBE Utilization.** Total amount allocated to SLBEs divided by the total bid/proposal amount.
- Percent WMBE Utilization. Total amount allocated to WMBEs divided by the total bid/proposal amount.

If additional information is required or you have questions, please contact the Equal Business Opportunity Program - Minority and Small Business Development Office at (813) 274-5522.

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# **Procurement Guidelines**

# To Implement

# **Minority & Small Business Participation**

## **Underutilized WMBE Primes by Industry Category**

	Construction	Construction- Related	Professional	Non-Professional	Goods
EMENT	Black	Asian	Black	Black	Black
PROCURE	Hispanic	Native Am.	Hispanic	Asian	Hispanic
AL PR	Native Am.	Woman	Asian	Native Am.	Asian
FORM	Woman		Native Am.		Native Am.
			Woman		Woman

# **Underutilized WMBE Sub-Contractors / Sub-Consultants**

	Construction	Construction- Related	Professional	Non-Professional	Goods
	Black	Black	Black	Black	Black
WORK		Asian	Hispanic	Asian	Asian
SUB \		Native Am.	Asian	Native Am.	Native Am.
		Woman	Native Am.		Woman
			Woman		

#### **Policy**

The Guidelines apply to formal procurements and solicitations. WMBE participation will be narrowly-tailored.

#### <u>Index</u>

- Black = Black/African-American Business Enterprise
- Hispanic = Hispanic Business Enterprise
- Asian = Asian Business Enterprise
- Native Am. = Native American Business Enterprise
- Woman = Woman Business Enterprise (Caucasian)

#### **Industry Categories**

<u>Construction</u> is defined as: new construction, renovation, restoration, maintenance of public improvements and underground utilities. <u>Construction-Related Services</u> are defined as: architecture, professional engineering, landscape architecture, design build, construction management services, or registered surveying and mapping.

<u>Professional Services</u> are defined as: attorney, accountant, medical doctor, veterinarian, miscellaneous consultant, etc. <u>Non-Professional Services</u> are defined as: lawn maintenance, painting, janitorial, printing, hauling, security guard, etc. <u>Goods</u> are defined as: all supplies, materials, pipes, equipment, machinery, appliances, and other commodities.

#### MBD Form-70



# RFQ: 20-C-00008 DESIGN-BUILD SERVICES for the David L. Tippin Water Treatment Facility Master Plan Improvements



# **DESIGN CRITERIA PACKAGE**

PREPARED BY:

SEUNG PARK, P.E. – CHIEF ENGINEER Water Department Design Criteria Professional RFQ: 20-C-00008

David L. Tippin Water Treatment Facility Master Plan Improvements

Design Criteria Package

#### CITY OF TAMPA NOVEMBER 2019

#### 1. Purpose

The City of Tampa has prepared this Design Criteria Package for RFQ: 20-C-00008 Design-Build Services related to the David L. Tippin Water Treatment Facility (DLTWTF) Master Plan Improvements. The DLTWTF master plan prepared in July 2018 was developed to identify improvements and general scopes of work needed at the treatment plant. Although a list of the master plan recommended improvements, general scopes of work, and preliminary completion sequence are provided below, the master plan will only be used as a guideline and the recommended improvements listed will be evaluated and finalized prior to implementation. Other improvements may be added to the project and identified improvements may be removed from the project depending on changes in priorities, available funding and the Department's needs. The firm will be assigned improvements based the completion sequences; however this sequence may be modified based changes in priorities, available funding, and construction phasing that the Department or the Design-Build team may identify. It is the City's intent that the improvements be accomplished through a design-build approach and be completed through the development and execution of multiple Guaranteed Maximum Price (GMP) proposals. The City may, at its option, directly purchase certain products for use on this contract.

#### 1.1 The scope shall include, but not be limited to the following:

- Evaluation and updating of master plan recommended improvements
- Comprehensive design services to include:
  - o Evaluation and development of design requirements and alternatives
  - Development of design plans and construction documents for the selected improvements and associated components
- Coordinating, applying for and obtaining regulatory permits
- Preparing plans and estimates for construction permits to be obtained by the City
- Preconstruction services with development of Guaranteed Maximum Price (GMP) for the construction of selected improvements and associated components
- Development of construction sequencing and project phasing needed to maintain plant operations and reduce construction cost
- Installation and construction for the complete and working operations of the selected improvements and associated components
- Maintaining operations during construction
- Engineering services during construction to include: attending meetings, responding to Requests for Information (RFI), reviewing submittals, and commissioning services
- Start-up and testing
- Development of Operation and Maintenance Manuals
- Training staff in the operation of the selected improvements

Estimated Total Budget is \$300,000,000.

1.2 This document provides the criteria for the design and construction of the improvements at the DLTWTF. The intent is to list the minimum design-build criteria necessary for achieving these improvements.

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David L. Tippin Water Treatment Facility Master Plan Improvements

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1.3 This package is not a specification or prescriptive checklist and is not intended to replace the professional judgment by a competent licensed professional engineer after coordination with the end-user and stakeholders of the City of Tampa.

1.4 A master plan for the DLTWTF was prepared in July 2018 and will be used as a guide for the improvements at the DLTWTF. Although a list of the master plan recommended improvements, general scopes of work, and preliminary completion sequence are provided below, other improvements may be added to the project and identified improvements may be removed from the project depending on changes in priorities, available funding and the Department's needs. Each recommended improvement listed will be further evaluated and finalized prior to implementation. The number of GMP proposals and improvements included in each proposal will depend on available funding, priorities, construction sequences that are developed during the project, and other factors that may be needed to meet the project goals and objectives.

#### 2. Background – Treatment System

The David L. Tippin Water Treatment Facility was originally constructed between 1924 and 1926 with the capacity to produce 8 MGD of potable water to serve a population of about 74,000. It has expanded over the years and now produces approximately 80 MGD of potable water for customers within the Tampa Water Department (TWD) service area (population of about 620,000; 135,000 service locations). The current water use permit allows the plant to withdraw 82 MGD (average daily flow) and 120 MGD (peak flow) for treatment. The primary source of water for the plant is the Hillsborough River.

The facility utilizes three parallel treatment trains consisting of coagulation, flocculation, and sedimentation processes. Two trains employ conventional rapid mix, flocculation, and sedimentation; the third train utilizes the Actiflo process (see Figure 1 – David L. Tippin Water Treatment Facility Flow Diagram, DLTWTF Master Plan). Ferric sulfate, supplemented with a polymer, is used as the coagulant. The primary disinfectant is ozone. Disinfected water is filtered through dual media bed filters before chlorine and ammonia are added for secondary disinfection.

Finished water is pumped from the clearwells. The target discharge pressure is 70 psi, which is set to maintain a minimum distribution system pressure of 40 psi. The distribution system contains three re-pump stations (RPS) in the DLTWTF pressure zone. RPS are located relatively remote to the DLTWTF and provide the system with the ability to boost pressures during peak periods. Pumping capacity from DLTWTF combined with the capacities from the Northwest, West Tampa, and Palma Ceia RPS yield a pressure zone firm capacity of 160 MGD within the DLTWTF pressure zone.

## David L. Tippin Water Treatment Facility Master Plan Improvements Design Criteria Package

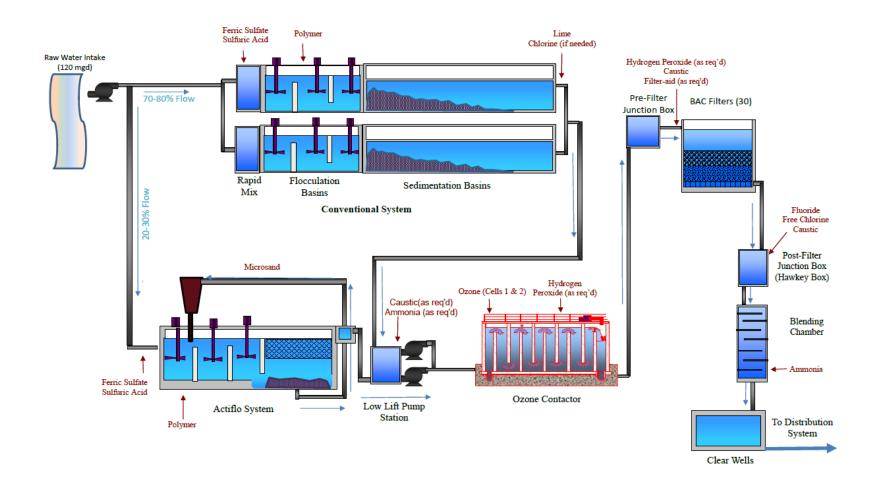


Figure 1 – David L. Tippin Water Treatment Facility Flow Diagram, DLTWTF Master Plan

RFQ: 20-C-00008 David L. Tippin Water Treatment Facility Master Plan Improvements Design Criteria Package

#### 3. Design

Improvements described herein are based on preliminary findings and recommendations provided in The David L. Tippin Water Treatment Facility Master Plan (July 2018). Each recommended improvement listed will be further evaluated and updated prior to implementation and final scopes of work will be determined through the design process. All designs shall give consideration to existing operation and maintenance of the treatment facility; however, TWD desires to consider alternatives to the existing system in evaluating and finalizing the recommended improvements in the master plan. All designs shall incorporate necessary components, temporary facilities, and construction sequencing to maintain 24-hour operation of the treatment facility and minimize unavoidable plant downtime.

Project objectives are to:

- Eliminate or repair deteriorating assets
- Add operational flexibility
- Add operational redundancy of components
- Increase efficiency
- Prepare for future growth
- Provide facilities that are easy to maintain and operate
- 3.1 The design shall be based on providing improvements that will effectively optimize performance capabilities and improve water production and quality at the DLTWTF. It is imperative that the design team and preparer of the construction documents fully consider the existing conditions and the future needs of the Department. The Firm shall fully understand the operational requirements, permitting, site logistics, and all related requirements to design these improvements accordingly.
- 3.2 The Firm shall provide final plans and as-builts in AutoCAD Civil 3D or Rivet and PDF formats.
- 3.3 The project shall include but may not be limited to the improvements and the general scopes of work provided below. The selected Firm will first review and update the David L. Tippin Water Treatment Facility Master Plan by evaluating changing conditions and requirements since the completion of the master plan. Each recommended master plan improvements will be further evaluated and updated prior to implementation. The Firm will also include evaluation of alternatives to the existing system and assessment of support facilities such as need for new buildings, office space, parking, drainage system, SCADA systems, and laboratory facilities in the master plan update. Temporary facilities needed to maintain plant operations will need to be provided as necessary for each improvement.

Design Criteria Package

#### 3.3.1 Intake Improvements and Raw Water Pump Station Upgrades

The recommended improvements from the master plan include replacement of the intake bar rack, grass rake structures, hopper, raw water pumps No. 1 through 9, check valves for pumps No. 6 through 9, new reduced voltage starters for pumps No. 6 and No. 7, and a new masonry building to house the new electrical equipment for the new pumps. The new bar rack should be stainless steel and of the same bar spacing size. The grass rake system should be supplied with a new automated rake equipment, hopper, and rail system. Additionally, the existing screenings collection channel that services the mechanical rotating screens should be modified to allow screenings to flow in the southwest direction where a dumpster can be placed for collection. This project will also include reassessment of the three mechanical rotating screens at the intake and replacement of the screens, if required. This project impacts the entire raw water system, combining two systems into one which requires a holistic design approach. These modifications need to be conducted during periods of low flow and times during minimal algal issues to minimize impacts to raw water pumps and treatment systems. The new masonry building should be completed before completion of the pump change out in order to house the electrical equipment once the pumps are installed. The final design should consider pump type, future flow demands, and required head incorporating future pretreatment process. Although the master plan recommended the improvements listed above, TWD desires to consider feasibility of an alternative intake system such as an infiltration gallery or collector well as a first task. Additionally, TWD desires to include a new boat storage facility and a new floating dock system prior to proceeding with the recommended improvements from the master plan.

#### 3.3.2 Ozone Improvements 1 & 2

The master plan recommended ozone improvements are combined into one project. The scope includes a new ozone system with a higher firm capacity to meet 6,700 pounds per day (lb/day) demand at 140 million gallons per day (mgd), with the replacement of the generators, PSUs, shells, and PSU HVAC systems. New LOX storage, vaporizers and associated system will be included to address demand at 140 mgd, if ozone product gas concentration is 5 percent. If the design is for 6,700 lb/day at 10 percent, then additional LOX may not be needed (to be confirmed during final design). Additional scope items include the following:

- Replace ozone diffusers with gasketless type.
- Replace ozone chillers No. 1 and No. 2.
- Replace ozone destruct units including inlet valves and actuators, as well as the Watloo single loop controllers for the preheaters
- Clean steel with power tools and wire brush, and repaint corroded steel members on LOX vaporizers and tanks, and repair spalled concrete in area.
- Replace by-pass vapor cooling system with new if not already completed.
- Re-mount lightning rods atop ozone contractor to safer location.
- Replace the ozone nitrogen boost system equipment and the ozone destruct system off gas blowers if required.
- Inspect condition of two 60-inch lines into ozone contactors.

Although the master plan recommended the improvements listed above, TWD desires to consider feasibility of utilizing side stream injection in lieu of diffusers.

#### 3.3.3 Yard Piping Inspection and Improvements

The master plan recommended inspection of all buried yard piping onsite, including CCTV, manhole, and lift station inspection. Once inspection activities are completed, the selected FIRM

#### David L. Tippin Water Treatment Facility Master Plan Improvements

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shall identify and proceed with cleaning, rehabilitation, or replacement in accordance with the inspection results.

#### 3.3.4 Facility Expansion

The recommended improvements from the master plan include ion exchange pre-treatment process, retrofit of the existing conventional flocculation/sedimentation basins along with minor restoration of the Actiflo® system, new filters and modifications to the existing filters including filtered water flume repair, and solids handling improvements. This project is large and complex, with multiple components that must be carefully sequenced to maintain existing operations and allow smooth startup of the new systems. Pilot testing should be conducted during rainy and dry seasons to refine the optimized treatment strategy to be considered in full-scale design. The project elements from the master plan are identified below:

- Ion exchange pre-treatment pilot study.
- Demolition of Basins 1-4 for locating new ion exchange system.
- Ion exchange system.
- Conventional System
  - Rapid mix improvements
    - o New rapid mixers
    - o Structural modifications to rapid mix area to reduce flash mix volume
  - Replace conventional flocculators with new, in addition to 2 more mixers per train.
  - Structural reconfiguration of the flocculation stages.
  - Replace effluent launders with plate settlers, pending the results of pilot and (likely) full-scale testing demonstrating their need. If plate settlers are not required, then a new ported wall should replace the existing effluent launders.
  - Add 1' concrete to Basins 5 and 6 to increase capacity. The additional foot of concrete for Basins 5 and 6 may not be required if operation of the low lift pump station remains at acceptable elevations from the hydraulic evaluation.
  - New Conventional basin sludge collection mechanisms (i.e. chain and flight, superscraper, etc.). The selected FIRM should determine the most appropriate sludge collection mechanism based on anticipated solids loadings, the type of effluent collection and discussions with the Plant staff.
- Actiflo<sup>TM</sup> System
  - Replace tube settlers with new.
  - Reinstall coagulation tank mixers in Actiflo<sup>TM</sup>.
  - Wirebrush and recoat Actiflo<sup>TM</sup> sand silo and tank where coating failure has occurred within structure.
  - Evaluate condition of Actiflo<sup>TM</sup> Maturation Tank Mixer No. 1 blade to determine replacement.
  - Pressure inject Sikadur35 into crack in top slab of Actiflo<sup>TM</sup> Train No. 2 structure.
  - Replacement butterfly valve and shaft with new (or different type) in Low Lift Pump Station.
- Pre-Filtration
  - Bypass existing carbonation basins and modify junction box (new weir) to encourage more flow through Path 3 to the filters.
  - Inspect piping between ozone and pre-filter junction box and clear build up as needed.

#### David L. Tippin Water Treatment Facility Master Plan Improvements

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• Inspect condition of settled water junction box gates and replace with new if required.

#### Filtration

- Evaluate the number of required new filters in pilot and full scale testing after implementation of upstream and downstream hydraulic improvements.
- Install new filters (master plan identified a total of 22) with supporting backwash pumps and air scour blowers.
- Inspect condition of Filter Underdrain IMS Caps to determine if replacement is needed.
- Raise filter troughs 1 foot and replace media in existing filters with matching GAC and Sand. Pilot and full scale testing on filter capabilities with process and hydraulic improvements should be realized before implementation of these improvements.
- Replace filter gallery exhaust fans.
- Consider replacement of tilting disc valve with alternative valve for filter backwash pumps.
- Survey and conduct interior investigation of this flume to determine extent of concentrate deterioration and determination of access limitations for repairs.
- Reline/Repair filtered water flume.
- Pressure inject Sikadur 35 into crack in top slab of settled water junction box.
- Sand/water blast and repaint filtration system piping located in filter gallery.
- Inspect condition of settled water junction box gates and replace with new if required.

#### Solids Handling

- Evaluate influent, effluent, supernatant flows to confirm sizing and number of new gravity thickeners and clarifier. The number of new filters should also be understood before implementation. Master Plan identified 2 new gravity thickeners, 1 clarifier, and 1 surge tank.
- Evaluate condition of existing surge tank recirculating water jets with consideration of torque, efficiency, noise and any corrosion.
- Install submersible mixers for suspension of solids in surge tank.
- New sludge pumps with new wetwell for existing Actiflo<sup>TM</sup> system.
- Increase height of junction box 4 to prevent overflow.
- Sand blast and recoat steel rake arms systems and replace select members for gravity thickeners and hardware that are significantly corroded and unable to restore by sand blasting.
- Sand/water blast and repaint exterior of above ground sludge piping onsite.
- Rebuild gearboxes and/or motors for GT No. 1 and No. 2 clarifier mechanisms.
- Replace surge tank valves with new.

#### 3.3.5 Electrical Transformer Upgrades

The recommended improvements from the master plan include replacing the 240 V transformers with the standard wye configuration with 120/208V, 3 phase, 4 wire for selected transformers plant wide with the exception of TRA03-1 and TRC03-1 being replaced under a separate project.

#### 3.3.6 Clearwell Expansion

The recommended improvement from the master plan calls for a new 4.5 million gallon clearwell for additional treated water storage capacity in order to meet future demands. The project scope and design are expected to be relatively simple with greenfield construction.

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#### 3.3.7 Buildings Improvements

The recommended improvements from the master plan include upgrades to a number of building systems, as follows:

- Replace MCC-S and lightning transformer within building.
- Replace main panel PP1 and outdated light fixtures with LED in lab building.
- Evaluate condition of gravity thickener sludge gates and replace if required.
- Renovate Utility Building Lavatory.
- Renovate lab building lavatory and potable water system.
- Material Storage Building: Replace electrical systems.
- Material Storage Building: Replace Exhaust Fans.
- Demolition of Maintenance Building Smoke Stack.
- Replace exhaust fans in High Service/Lower Floor Room Building.

#### 3.3.8 Chemical Systems Upgrades

The recommended improvements from the master plan include upgrades to various chemical systems, as follows:

- Re-design or Repair/rehabilitate existing dry polymer feed system.
  - o Re-evaluate structural condition of FRP tanks and replace (if needed) Polymer
- Tanks No. 1 and No. 2 and Dry Polymer Bins No. 1 and No. 2, Polymer Pumps, and Polymer Mixers.
- Patch areas where concrete spalling has occurred in Sulfuric Acid Unloading and Containment area.
- Replace chlorine booster pump, hydrogen peroxide feed pumps, polymer water booster pump with new.
- Replace steel anchor bolts at concrete pad for Ferric Tanks 1-3.
- Demolish and remove carbon silo.
- Sandblast and repaint ferric tanks 1 and 3, and replace steel anchor bolts.

#### 3.3.9 Actiflo<sup>TM</sup> System Improvements

The recommended improvements from the master plan include:

- Evaluate condition of Actiflo<sup>TM</sup> Maturation Tank Mixer No. 2 blade to determine replacement. Replace motor and supporting appurtenances.
- Replace Hydrocyclone Structures No. 1 and No. 2 with new.
- Evaluate condition of Actiflo<sup>TM</sup> Injection Tank Mixer No. 2 blade to determine replacement.
  - o Replace motor and supporting appurtenances, and rebuild or replace gearbox.

#### 3.3.10 Low Lift Pump Station Upgrades

The recommended improvements from the master plan include replacing all the low lift pumps in addition to replacement of VFDs (Pump No. 1 and No. 4) and auto-transformers (Pumps No. 2 and No. 3), while also addressing structural crack repairs.

#### 4. Project Sequence

Listed below is the preliminary sequence for the completion of the improvements included in the project. The selected FIRM will initially be assigned improvements based on this completion sequence; however, this sequence may be modified based on changes in priorities, available funding,

#### David L. Tippin Water Treatment Facility Master Plan Improvements

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and construction phasing that the FIRM may identify to reduce construction cost and to maintain plant operations.

Year	Project	Task
1	DLTWTF Master Plan Update	Master Plan Update
1	Intake Improvements and Raw Water Pump Station Upgrades	Feasibility
2	Intake Improvements and Raw Water Pump Station Upgrades	Basis of Design Report
3	Intake Improvements and Raw Water Pump Station Upgrades	Design/GMP
4	Intake Improvements and Raw Water Pump Station Upgrades	Begin Construction
1	Ozone Improvements 1 & 2	Feasibility/Basis of Design Report
2	Ozone Improvements 1 & 2	Design/GMP
3	Ozone Improvements 1 & 2	Begin Construction
2	Yard Piping Inspection and Improvements	Design/GMP
2	Yard Piping Inspection and Improvements	Begin Construction
1	Facility Expansion	Pilot Study
2	Facility Expansion	Basis of Design Report
3	Facility Expansion	Design/GMP
4	Facility Expansion	Begin Construction
2	Electrical Transformer Upgrades	Design/GMP
2	Electrical Transformer Upgrades	Begin Construction
7	Clearwell Expansion	Design/GMP
8	Clearwell Expansion	Begin Construction
6	Building Improvements	Begin Construction
7	Chemical Systems Upgrades	Design/GMP
8	Chemical Systems Upgrades	Begin Construction
8	Actiflo <sup>TM</sup> System Improvements	Design/GMP
9	Actiflo <sup>TM</sup> System Improvements	Begin Construction
8	Low Lift Pump Station Upgrades	Basis of Design Report
8	Low Lift Pump Station Upgrades	Design/GMP
9	Low Lift Pump Station Upgrades	Begin Construction

#### **5. Project Scope Requirements**

The selected FIRM shall complete the following:

#### 5.1 Evaluation

City will provide all available as-built drawings and related data as available for the existing system equipment and locations, as related to the selected improvements and associated components, respectively. The selected Firm will:

• Verify accuracy of all supplied drawings, verbiage and other information

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# David L. Tippin Water Treatment Facility Master Plan Improvements

**Design Criteria Package** 

- Review previously approved system specifications, for the respective systems/facilities
- Review existing conditions and project constraints
- Meet with Water Department staff as needed for design coordination
- Review 2018 DLTWTF Master Plan
- Review 2018 Potable Water System Master Plan
- Meet with Water Department staff to evaluate changing conditions and Master Plan requirements after 2018
- Update DLTWTF Master Plan
- Evaluate similar systems

Findings from the evaluations of the above are to be presented in a Basis of Design Report (BODR) for most of the improvement projects. The BODR shall include 3D renderings, detailed recommendations, construction sequencing for each selected improvement and associated components.

#### 5.2 Design

#### 5.2.1. Material & equipment specifications

Specified materials and equipment shall be of superior quality, state-of-the art and manufactured for extensive service life with minimum operation and maintenance requirements. The new systems shall be specified to have as many common parts with the existing facilities to remain as possible to minimize required parts inventory. Specifying lesser materials solely for purposes of cost savings and increasing profit margins shall be considered unacceptable to the City. All materials and workmanship shall have a minimum 1 year warranty period from the date of final acceptance by the City. Any required warranty work shall be performed at no cost to the City. A list of spare parts shall be provided by the Firm.

When available and applicable, material specifications utilized by the City of Tampa shall be used by the contractor. The Firm shall be responsible for preparing a complete set of material and construction specifications consistent with any existing City of Tampa specifications. Approved final specifications shall be provided to the City in MS Word and pdf formats.

#### 5.2.2 Drawings

The FIRM shall prepare and submit layout, detail and shop drawings to ensure proper construction, assembly, and installation of the work using those materials and equipment as approved by the City, to be installed in accordance with manufacturer requirements.

These drawings shall accurately and distinctly present the following:

• All working and erection dimensions

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# David L. Tippin Water Treatment Facility Master Plan Improvements

Design Criteria Package

- Arrangement and sectional views
- Necessary details, including complete information for making connections between the work under this project and existing/proposed future work
- Kinds of materials and finishes
- Parts listed and descriptions
- Demolition sequencing (removal of materials, equipment, electrical controls, etc.)

All drawings shall be produced in 3D (i.e. AutoCAD Civil 3D or Rivet as compatible for rendering) and shall be accurately georeferenced. Drawings shall meet the current TWD Drafting standards.

- 5.3 Plant Coordination of Operations: The improvements shall be designed as to minimize impacts to plant operations during planned construction.
- 5.4 Construction Plans GMP Proposal Development
  - All construction plans and specifications shall be of superior quality and extremely detailed
  - Plans shall be based on field conditions observed by the FIRM
  - Construction plans and specifications shall be prepared at 60%, 90% and 100% phases.
  - Tampa Water Department staff will review the 60% and 90% plans and provide comments to guide necessary revisions. Opting out of the 90% review will be at the discretion of the Tampa Water Department based on quality of the 60% plans submittal
  - Development of GMP proposal

The FIRM shall be prepared to provide at a minimum the following submittals:

- Hardcopies of all plans necessary for permitting & construction
- Electronically signed & sealed final plans for construction permitting
- 3 sets of plans for review at each phase of design
- 5 hardcopy sets of signed and sealed as-builts
- Disk containing approved as-built drawings in AutoCAD Civil 3D format and PDF versions (one as unsigned-and-sealed and one as digitally signed-and-sealed) prior to final acceptance by the City and project close out
- 5.5 Required Meetings: The Firm shall attend meetings with City staff at specified phases of the project, including but not limited to design, permitting, preparation of GMP, and construction.

#### 5.6 Permitting

City to provide all existing permit information that may require modification as a result of the proposed improvements.

All required actions for regulatory permitting shall be in compliance with all laws, rules, codes,

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## **David L. Tippin Water Treatment Facility Master Plan Improvements**

Design Criteria Package

ordinances, statutes, etc. including but not limited to supplying signed and sealed copies of plans, completing and submitting applications, payment of fees, responding to requests for additional information, attending meetings with regulatory agencies (as needed), submitting permit clearance application for completion, etc. shall be the responsibility of the Firm. All fees and costs associated with regulatory permitting shall be the responsibility of the Firm.

All required actions for construction permitting shall be in compliance with all laws, rules, codes, ordinances, statutes, etc. including but not limited to supplying electronically signed and sealed copies of plans, responding to requests for additional information, attending meetings with City of Tampa Construction Services Division (CSD) as needed, submitting certifications of completion, etc. shall be the responsibility of the Firm. The City will complete and submit the applications for construction permitting to CSD; in addition to paying all associated fees and costs.

#### 5.7 Construction

Construction sequencing shall be closely coordinated with and approved by the City before commencing. The Firm will be responsible for providing detailed construction sequences and schedules.

#### 5.7.1 Programming, Instrumentation and Control

All control wiring, equipment installation, programming, control narrative, etc. necessary to operate the new systems remotely & automatically shall be the responsibility of the Firm. The programming style shall be consistent with the existing style in place.

5.7.2 Startup Services: The Firm shall provide complete startup services by an engineer licensed in the state of Florida.

#### 5.7.3 Performance testing

The Firm shall conduct a performance test prior to final acceptance. Determining the parameters of the performance test shall be negotiated during the design process and be approved by the Tampa Water Department prior to final plans approval.

- 5.7.4 Restoration: The Firm shall be responsible for restoring the site to original condition or better.
- 5.7.5 Operation and Maintenance Manuals: Operation and maintenance manuals specific to the installed equipment shall be developed and provided to the TWD. Detailed operating procedures need to be prepared and provided to the TWD.

#### 5.8 Training

Training shall be provided to TWD staff by the Firm on the proper operation and maintenance of the installed equipment. Separate sessions are required for Maintenance Group and the Operations Group. Each session shall be tailored to cover relevant topics for each work group.

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Each session shall be video recorded and the Firm shall supply a disc with video recording for each session.

#### **6. FIRM Requirements**

#### 6.1 Construction

The contractor utilized for this Project shall have the suitable personnel and equipment, resources, financial stability and experience to accomplish the Project objectives.

The Firm will be responsible for primary construction management activities and general project oversight with consistent coordination with the City during the design and construction portions of the project. Construction management activities will include, but not be limited to:

- Identification of the designated staging location(s) with respect to Project need.
- Preparation of a general Quality-Control Plan to be submitted in format(s) acceptable to the City, in which personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out the Firm's quality-assurance and quality-control responsibilities will be identified.
- Engagement of qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for the Project.
- Development of Firm procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- Development and inclusion of a comprehensive schedule of work requiring testing or inspection, including the following:
  - Firm-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Firm-elected tests and inspections.
  - o Owner-required tests include soil density, concrete for all structural or structurally related work.
  - O Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- Maintaining testing and inspection reports including log of approved and rejected results, including work the City has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.
- Development and implementation of a safety plan for the protection of the Firm and City employees during construction activities.

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The engineer(s) of record for the various disciplines in this Project must have suitable resources and experience to accomplish the Project objectives.

#### 7. Coordination with the City

Representatives from the City of Tampa Water and Contract Administration Departments shall be copied on all written communications with the City and regulatory permitting agencies. These representatives shall also be made aware of communication with other staff or entities that may affect the outcome of achieving the Project objectives.

#### 8. Workforce Development

A description of a Workforce Development Program should include any ongoing or developing programs such as apprenticeship, mentoring or on-the-job training. The Program description should include any efforts toward fostering a strong and talented workforce in Tampa, promoting an increase of school attendance and graduation rates, defining pathways through higher education, technical certification programs and career readiness. It should also mention any workforce incentives, championing local businesses and removing barriers to access. The Program description should also include contracting and subcontracting trades, and engineering, architectural, geotechnical and public engagement opportunities.