

**DESIGN-BUILD FOR WATER SYSTEM GROUND STORAGE TANKS
AND RELATED IMPROVEMENTS
WORK ORDER NO. 5**

THIS WORK ORDER FOR CONSTRUCTION SERVICES ("Work Order" hereafter) is made on the ____ day of _____, 2021, between the **City of Lake Worth Beach**, a Florida municipal corporation located at 7 North Dixie Highway, Lake Worth Beach, Florida 33460 ("City" hereafter) and **Globaltech, Inc.**, a Florida corporation ("Contractor" hereafter).

1.0 Project Description:

The City desires the Contractor to provide design-build services and work as identified herein related to the rapid mix basin improvements, permeate piping improvements, and west raw water flow meter improvements at the Water Treatment Plant (WTP). The Project is more generally described as **Flash Mixer Improvements** (the "Project").

2.0 Scope

Under this Work Order, the Contractor will provide the City with design-build services for the Project as specified in the **Contractor's proposal attached hereto and incorporated herein as "Exhibit 1" Scope of Services and "Exhibit 2" Cost Breakdown.**

3.0 Schedule and Liquidated Damages

Substantial completion of all services and work under this Work Order shall be within **300 calendar days** from the Effective Date of this Work Order. Final completion of all services and work (and all punch-list items, if any) under this Work Order shall be within **345 calendar days** from the Effective Date of this Work Order. The Effective Date of this Work Order is the date following the parties' execution of this Work Order and the City's delivery of a Notice to Proceed to the Contractor via e-mail, facsimile, or other delivery forms as documented by the City. Substantial completion occurs when the services and work have progressed to the point where, in the City's opinion, the work is sufficiently complete in accordance with the Contract Documents and this Work Order, so that the Project can be utilized for the purposes for which it is intended. Final completion occurs when all services and work (including punch-list items) have been completed, and the Project becomes fully operational and accepted by the City.

Liquidated Damages. The City and Contractor recognize that time is of the essence under this Work Order and the Contract Documents and that the City will suffer financial loss if the services and work described in this Work Order. The Contract Documents are not completed within the times specified in this Work Order. The City and Contractor recognize, agree, and acknowledge that it would be impractical and extremely difficult to ascertain and fix the actual damages that the City would suffer in the event Contractor neglects, refuses, or otherwise fails to complete the services and work within the time specified. Accordingly, instead of requiring any such proof, the City and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay the City five hundred dollars (\$500.00) for each day that expires after the time specified in this Work Order.

4.0 Compensation and Direct Purchases

This Work Order is issued for a lump sum, not to exceed the amount of \$563,912.58 (Five Hundred Sixty-Three Thousand, Nine Hundred Twelve Dollars, and Fifty-Eight Cents). The attached Exhibit 2 identifies all costs and expenses included in the lump sum, not to exceed the amount.

The following Direct Purchases are to be made under this Work Order by the City:

To be determined at the 30% design milestone.

5.0 Project Manager

The Project Manager for the Contractor is Tyler Davis, P.E., phone: 561-997-6433; e-mail: tdavis@globaltechdb.com and, the Project Manager for the City is Julie Parham phone: 561-586-1798; email: jparham@lakeworthbeachfl.gov.

6.0 Progress Meetings

The Contractor shall schedule periodic progress review meetings with the City Project Manager as necessary, but every 30 days as a minimum.

7.0 Contractor's Representations

In order to induce the City to enter into this Work Order, the Contractor makes the following representations:

7.1 Contractor has familiarized itself with the nature and extent of the Design-Build criteria, Contract Documents including this Work Order, work, site, locality, and all local conditions and laws and regulations that in any manner may affect the cost, progress, performance, or furnishing of the work.

7.2 Contractor has obtained at its own expense and carefully studied, or assumes responsibility for obtaining and carefully studying, available soil investigations, explorations, and test reports which pertain to the subsurface conditions at or contiguous to the site or otherwise, may affect the cost, progress, performance or furnishing of the work as Contractor considers necessary for the performance or furnishing of the work at the stated work order price within the Work Order stated time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of the RFQ; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are deemed necessary by Contractor for such purposes unless specifically included in the Scope of Services.

7.3 Contractor has reviewed and checked all information and data shown or indicated in the Design-Build criteria and the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities prior to commencing work. If required, additional examinations, investigations, explorations, tests, reports, studies, or similar information or data in respect of said Underground Facilities are deemed necessary by the Contractor in order to perform and furnish the work under the cost shall be included in the Work Order price, within the Work Order time and in accordance with the other terms and conditions of the Contract Documents.

7.4 Contractor will correlate the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents.

7.5 Contractor has given the City's Contract Administrator written notice of all conflicts, errors, or discrepancies discovered in the Contract Documents. The written resolution thereof by City or its designee is acceptable to the Contractor.

8.0 Warranty

The Contractor warrants and guarantees to the City that all services and work provided under this Work Order will be in accordance with this Work Order and the other Contract Documents. The Contractor warrants that (a) all materials and parts supplied under this Work Order shall be free from defects for one (1) year from the final completion of all work (unless a longer manufacturer warranty applies); (b) all services and work performed under this Work Order will be free from defects for one (1) year from the final completion of all work and the Project shall be fully operational without unreasonable downtime or failures; and (c) that the services and work will conform to the requirements of the Contract Documents. Suppose at any time prior to the expiration of the one (1) year warranty period, the City discovers any failure or breach of the Contractor's warranties, or the Contractor discovers any failure or breach of the Contractor's warranties. In that case, the Contractor will, upon written notice from City or of its own accord, at the Contractor's sole cost and expense, promptly correct such failure or breach (which corrective action must include, without limitation, any necessary removal, disassembly, reinstallation, repair, replacement, reassembly, retesting, and/or re-inspection of any part or portion of the work and any other property damaged or affected by such failure, breach, or corrective action). The Contractor will remedy any such failure or breach, to the extent possible, to avoid unnecessary disruptions to the operations of the City or its systems. If the Contractor fails to initiate and diligently pursue corrective action within five (5) days of the Contractor's receipt of the City's notice or the Contractor's discovery of the same, the City may undertake such corrective action at the Contractor's expense.

9.0 Authorization

This Work Order is issued pursuant to the Design-Build Contract for Water System Ground Storage Tanks and Related Improvements between the City of Lake Worth Beach and the Contractor, dated December 5, 2017 ("Contract" hereafter). If there are any conflicts between the terms and conditions of this Work Order and the Contract, the Contract's terms and conditions shall prevail.

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SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF the parties hereto have made and executed this Agreement to the Construction Services on the day and year first above written.

CITY OF LAKE WORTH BEACH, FLORIDA

ATTEST:

By: _____
Deborah M. Andrea, City Clerk

By: _____
Betty Resch, Mayor

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

APPROVED FOR FINANCIAL
SUFFICIENCY

By: _____
Glen J. Torcivia, City Attorney
/mpa

By: _____
Bruce T. Miller, Financial Services Director

CONTRACTOR: Globaltech, Inc.

By: _____
Troy L. Lyn

[Corporate Seal]

Print Name: Troy L. Lyn, P.E.
Title: Executive Vice President

STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this 22nd day of April, 2021 by Troy L. Lyn, as Executive Vice President (title), of Globaltech, Inc. a Florida Corporation authorized to do business in the State of Florida, and who is personally known to me or who has produced the following _____ as identification.

422-7022-533.63-00



Rachael Stolpman
Print Name: Rachael Stolpman
My commission expires: June 7, 2021

"EXHIBIT 1"

Detailed Scope of Services Flash Mixer Improvements

1. Prepare engineering calculations, studies, drawings, and submittals as required to depict work and products, obtain building department permits, and prepare record drawings. Engineering services shall include the following:
 - a. Engineering project management activities to include project and progress meetings, permit applications, project correspondence, and status reports.
 - b. Issuance of purchase specifications and solicitation of vendor quotations.
 - c. Design rapid mix bypass piping and associated structural supports. Design to minimize disturbance of existing lead joint at rapid mix inlet.
 - d. Design improvements for the west raw water flow meter to include a duplex sump pump and a new transmitter for the existing venturi flow meter.
 - e. Design improvements for the degasified membrane permeate pipeline from the degasifiers to the north clearwell, including installing a control valve to prevent siphoning.
 - f. Prepare preliminary design to 30% level for:
 - i. Refining and presenting the project elements and costs for review with the City staff
 - ii. Finalize items for Owner direct purchase
 - iii. Finalize project schedule
 - g. Produce General and Structural drawings. Provide review sets to City at the 60% and 90% stage for review.
 - h. Adjust the GMP based on 60% review.
 - i. Prepare purchase specifications or orders covering specific items, including transmitter and 316SS piping, valve actuation.
 - j. Obtain Palm Beach County Health Department permits as required.
 - k. Obtain building department permits as required.
 - l. Prepare and review submittals and Requests for Information (RFIs) as needed.
 - m. Site visits to review construction progress and compliance.
 - n. Startup services as required.
 - o. Consolidated O&M manuals for vendor-supplied equipment as required.
 - p. Prepare record drawings.

The following specific construction activities and services will be performed:

By Divisions

Div 1 General Requirements

- A. Project management for all design-build activities, including project meetings, preparation of agendas and meeting minutes, management of crew and site resources, procurement oversight, coordination of activities with Owner's operations.
- B. Preparation of project progress schedules in Primavera P6 format with monthly updates.

Div 2 Sitework

- A. Mobilization.
- B. Construction facilities to include the staging area, storage container, sanitary toilet, and office container if needed.
- C. Waste management and hauling of demolition debris.
- D. If required, geotechnical and testing services are associated with site preparation, compaction, and soil densities and testing of structural concrete standard slump and cylinder compressive strength tests.

- E. Utility Locating Services and Ground Penetrating Radar for rapid mix bypass support area.
- F. Temporary utilities: water and electric power (originating source to be supplied by Owner).
- G. Improvements: Restoration of the area surrounding raw water piping for new rapid mix bypass piping.

Div 3 Concrete

- A. Installation of concrete column for rapid mix bypass piping support.

Div 5 Miscellaneous Metals

- A. Anchoring of pipe supports for degasified membrane permeates piping.

Div 9 Coatings and Finishes

- A. Rapid Mix Bypass Piping: Coat exterior of new piping to match raw water piping color.

Div 10 Specialties

- A. None anticipated.

Div 11 Equipment

- A. Duplex sump pump for the west raw water flow meter.

Div 15 Mechanical

- A. Provide ductile iron piping and valve modifications to raw water to install rapid mix bypass piping.
- B. Provide restraints for existing 18" raw water main for rapid mix bypass piping installation. Seven restrains assumed to be needed based upon visual inspection of above-grade piping.
- C. Provide stainless steel piping, valve, and valve actuator for permeate flow improvements.

Div 16/17 Electrical/I&C

- A. New DP transmitter for existing west flow meter venturi.
- B. Programming for valve actuator for permeate flow improvements.

Assumptions

- A. Installation of piping does not require dewatering.
- B. All permit fees are to be paid by the City.
- C. Raw water line for rapid mix bypass can be isolated and taken offline for 12 hours for work to be conducted.
- D. Hoses and isolation valves to extend lime slurry lines from the existing rapid mix basin to new bypass piping will be done by others.

"EXHIBIT 2"

Cost Breakdown

City of Lake Worth Beach
172106 LW WTP Flash Mixer Improvements

Assembly#	Description	Unit	Quantity	Cost	Ext. Cost	Ext. Price
Job: 172106 LW WTP Rapid Mix Improvements						
Bid Item: 1 General Requirements						
3	General Conditions	LOT				
	Submittal Labor	HR	20.0	101.00	2,020.00	2,020.00
	O&M Manual	HR	20.0	101.00	2,020.00	2,020.00
	Progress Meetings	HR	20.0	156.00	3,120.00	3,120.00
	Construction Scheduler	HR	30.0	94.00	2,820.00	2,820.00
	Construction PM 3	HR	150.	129.00	19,350.00	19,350.00
	Construction PM 1	HR	40.0	90.00	3,600.00	3,600.00
	Construction Superintendent	HR	200.	94.00	18,800.00	18,800.00
	Purchasing & Subcontract	HR	50.0	129.00	6,450.00	6,450.00
	Bldg Permits Application & Coordination	HR	8.00	101.00	808.00	808.00
	Construction Assistant	HR	40.0	90.00	3,600.00	3,600.00
Bid Item Totals:					62,588.00	62,588.00
Bid Item: 2 Sitework						
	Mob/Demob	LOT	1.00	7,080.60	7,080.60	9,488.00
1	Temporary Facilities	LOT				
	Trailer Pick up/Delivery	EA	2.00	400.00	800.00	984.40
	Container Rental	EA	4.00	200.00	800.00	984.40
	Sanitary	MONTH	4.00	120.00	480.00	590.64
	Job Site Office Supplies	LOT	1.00	500.00	500.00	615.25
	Waste Hauling	LOT	4.00	800.00	3,200.00	3,937.60
	Locates	LOT	1.00	2,500.00	2,500.00	2,750.00
	Startup Crew	CR-D	2.00	1,800.00	3,600.00	3,600.00

Takeoff Worksheet

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Continued...

Assembly#	Description	Unit	Quantity	Cost	Ext. Cost	Ext. Price
	Punch Out Crew	CR-D	2.00	1,800.00	3,600.00	3,600.00
	Restoration	LOT	1.00	4,000.00	4,000.00	4,922.00
				Bid Item Totals:	26,560.60	31,472.29
Bid Item:	3 Concrete					
	Rapid-Mix Bypass Pipe Support Concrete Pad Form & Materials	LOT	1.00	1,500.00	1,500.00	1,845.75
	Cast In Place Concrete (2 YD Plus Short Load Fee)	LOT	2.00	650.00	1,300.00	1,599.65
	Concrete Pump	LOT	2.00	700.00	1,400.00	1,722.70
	Testing Services	LOT	2.00	1,200.00	2,400.00	2,640.00
	5-Man Crew	CR-D	8.00	2,128.00	17,024.00	17,024.00
				Bid Item Totals:	23,624.00	24,832.10
Bid Item:	5 Metals					
	SS Unistrut 316 (DEEP)	Ea	6.00	120.00	720.00	885.96
	SS Unistrut Hardware	LOT	1.00	1,200.00	1,200.00	1,476.60
	SS Unistrut Pipe Clamp	LOT	1.00	950.00	950.00	1,168.98
	Pipe Support Systems	LOT	1.00	12,000.00	12,000.00	14,766.00
	Misc Metals & Fasteners	LOT	1.00	2,000.00	2,000.00	2,461.00
	Installation	CR-D	4.00	1,800.00	7,200.00	7,200.00
				Bid Item Totals:	24,070.00	27,958.54
Bid Item:	9 Finishes					
	Signs & Labels	LOT	1.00	500.00	500.00	615.25
	Coatings	LOT	1.00	950.00	950.00	1,168.98
	Misc Application Material	LOT	1.00	250.00	250.00	307.63
	Installation	CR-D	5.00	1,480.00	7,400.00	7,400.00
				Bid Item Totals:	9,100.00	9,491.86
Bid Item:	11 Equipment					
	Sump Pump & Accessories	Ea	1.00	2,500.00	2,500.00	3,076.25
	Installation	CR-D	1.00	1,480.00	1,480.00	1,480.00
	Flowmeter Transmitter & Accessories	EA	1.00	3,500.00	3,500.00	4,306.75

Takeoff Worksheet

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Continued...

Assembly#	Description	Unit	Quantity	Cost	Ext. Cost	Ext. Price
	Installation	CR-D	1.00	1,152.00	1,152.00	1,152.00
				Bid Item Totals:	8,632.00	10,015.00
Bid Item: 17 I&C	PLC & SCADA Programming	LOT	1.00	4,890.00	4,890.00	5,379.00
				Bid Item Totals:	4,890.00	5,379.00
Bid Item: 26 Electrical	Electrical Sub	LOT	1.00	18,500.00	18,500.00	20,350.00
	Electrical PM	HR	40.0	110.00	4,400.00	4,400.00
				Bid Item Totals:	22,900.00	24,750.00
Bid Item: 40 Process Interconnections	Flash Mixer Bypass Piping					
	DI pipe & Fittings	LOT	1.00	15,641.33	15,641.33	19,246.65
	Valves	LOT	1.00	10,295.52	10,295.52	12,668.64
	Restraint Joints	LOT	1.00	10,261.93	10,261.93	12,627.31
	Flange Kits & Misc Materials	LOT	1.00	4,659.60	4,659.60	5,733.64
	Installation	CR-D	15.0	1,343.28	20,149.25	27,000.00
	Permeate Flow Improvements					
	Remove Existing SS Pipe, Fittings & Valve	CR-D	2.00	1,588.06	3,176.12	4,256.00
	SS Pipe & Fittings	LOT	1.00	70,388.16	70,388.16	86,612.63
	24" BFV	EA	1.00	21,250.00	21,250.00	26,148.13
	Actuator & Startup	LOT	1.00	12,850.00	12,850.00	15,811.93
	Flange Kits & Misc Materials	LOT	1.00	3,555.64	3,555.64	4,375.21
	Field Welding & Cutting	CR-D	4.00	1,343.28	5,373.13	7,200.00
	PVC Pipe, Fittings & Valves	LOT	1.00	900.00	900.00	1,107.45
	Installation	CR-D	10.0	1,588.06	15,880.60	21,280.00
				Bid Item Totals:	194,381.28	244,067.59
Bid Item: 41 Material Processing & Handling	Compactor 5000-7000LB	WEEK	2.00	450.00	900.00	1,107.45
	Crane - 75 Ton	Hr	60.0	180.00	10,800.00	13,289.40

Takeoff Worksheet

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Continued...

Assembly#	Description	Unit	Quantity	Cost	Ext. Cost	Ext. Price
	Traversing Fork Lift	Month	2.00	4,850.00	9,700.00	11,935.85
	Mini Excavator	Month	1.00	2,200.00	2,200.00	2,707.10
	Scissor Lift	Month	2.00	1,200.00	2,400.00	2,953.20
	Misc Tools & Equipment	LOT	1.00	4,000.00	4,000.00	4,922.00
	Safety	HR	10.0	96.27	962.69	1,290.00
	Safety Equipment	LOT	1.00	500.00	500.00	615.25
	Equipment Fuel	GAL	75.0	6.90	517.50	595.13
	Equipment Pickup & Delivery	LOT	3.00	450.00	1,350.00	1,661.18
				Bid Item Totals:	33,330.19	41,076.56
Bid Item:	50 Engineering					
	Engineering	LOT	1.00	69,108.00	69,108.00	69,108.00
				Bid Item Totals:	69,108.00	69,108.00
Bid Item:	60 Bonds & Insurance					
	Bonds & Certifications	LOT	1.00	11,455.34	11,455.34	13,173.64
				Bid Item Totals:	11,455.34	13,173.64
				Grand Totals:	490,639.41	563,912.58

**Attachment A
Work Order #5
Flash Mixer Improvements**

	E6	E5	E4	E2	E1	CADD	Admin1	Total Labor	Subconsultant Services	Subconsultant
Contractual Labor Rates \$/Hr.	\$190.00	\$176.00	\$157.00	\$109.00	\$88.00	\$112.00	\$55.00			
Task 1 Flash Mixer Bypass Piping										
Project Coordination		4					2	\$814.00		
Site review and recommendation		2						\$352.00	\$2,500.00	WGI
Structural Design		4				4		\$1,152.00	\$4,200.00	WGI
Mechanical Design	2	12			8	16		\$4,988.00		
Subtotal Task 1	2	22	0	0	8	20	2	\$7,306.00	\$6,700.00	
Task 2 West RW Flow Meter										
Project Coordination	2	4					4	\$1,304.00		
DP transmitter		2	12		4			\$2,588.00		
Sump Pump Design		2	16		8	8		\$4,464.00		
Subtotal Task 2	2	8	28	0	12	8	4	\$8,356.00	\$0.00	
Task 3 Degasifier Permeate Flow Improvements										
Project Coordination	2	4					4	\$1,304.00		
Piping Modification	4	4		12		16		\$4,564.00		
Control Valve	4	4	12	8		4		\$4,668.00		
Programming			40	4				\$6,716.00		
Subtotal Task 3	10	12	52	24	0	20	4	\$17,252.00	\$0.00	
Task 4 DOH Permitting										
Project Coordination	2						4	\$600.00		
Permit Application	2	8			4	2	4	\$2,364.00		
Subtotal Task 4	4	8	0	0	4	2	4	\$2,964.00	\$0.00	
Task 5 Services During Construction										
Project Coordination	16						4	\$3,260.00		
Submittal Review/Coordination		16	8	8	8			\$5,648.00	\$4,200.00	WGI
Construction Site Visit		8	8	8	24			\$5,648.00		
Record Drawing		4	4		4	4		\$2,132.00		
Progress Meetings		16	2	2	8			\$4,052.00		
Subtotal Task 5	16	44	22	18	44	4	4	\$20,740.00	\$4,200.00	
Total	34	94	102	42	68	54	18	\$56,618.00	\$10,900.00	
Subconsultants									\$10,900.00	
Markup									\$1,090.00	
Total Subconsultant									\$11,990.00	
Reimbursable Expenses									\$500.00	
Total									\$69,168.00	