

**Coral Springs
Improvement District**

Agenda

December 20, 2021



Coral Springs Improvement District

December 13, 2021

Board of Supervisors
Coral Springs Improvement District

Dear Board Members:

The regular meeting of the Board of Supervisors of the Coral Springs Improvement District will be held Monday, December 20, 2021, at 4:00 p.m. at the District Offices, 10300 NW 11th Manor, Coral Springs, Florida. In order to comply with CDC guidelines on social distancing due to Covid-19, members of the public can attend via conference call by dialing 1-646-838-1601, meeting ID 891429262#. Following is the advance agenda for the meeting.

1. Call to Order
2. Approval of the Minutes of the November 15, 2021 Meeting
3. Audience Comments
4. Financials for November 2021
5. Consideration of Amendment to Shenandoah Contract 2016-01 to Allow for an Additional Larger Tank During the 2021/2022 Contract Period
6. Consideration of a Request by Staff for Board Approval of a Contract with Waco Filters Corp for the Purchase of Cartridge Filters, Piggybacking Off the Terms of the Contract with Palm Beach County Including Any Renewals or Extensions
7. Consideration of Staff Request to Ratify Change Order #1 to the Envirowaste Contract (Staff Agreed to the Change Order due to the Urgent Nature of Work. The Change Order Entails Installing Three Liners in Basin 16 to Resolve the Misalignments and Sinkholes. Envirowaste was Already Mobilized in the Area.)
8. Consideration of Request by Staff for Board Approval of a Contract with Water Systems Optimization (WSO) to Conduct a Water Loss Control Master Plan for the District in the Amount of \$132,640, Piggybacking Off the Metropolitan Government of Nashville and Davidson County Contract for Leak Detection Program
9. Consideration of Work Authorizations
 - A. Work Authorization #194 for House Bill 53 Needs Assessment for a Total Cost of \$19,888
 - B. Work Authorization #198 for Site 7 Canal Bank Stabilization Design and Site 8 Canal Bank Stabilization Design and Construction for a Total Cost of \$422,552
 - C. Work Authorization #199 for Pump Stations 1&2 – LP Gas Tank Replacement for a Total Cost of \$108,971
 - D. Work Authorization #200 for Pump Stations 1&2 – Trash Rack Bracket Replacement for a Total Cost of \$108,593
10. Engineer's Report



Coral Springs Improvement District

11. Staff Reports
 - A. Manager – Ken Cassel
 - B. Department Reports
 - Operations – David McIntosh
 - Utilities Update – Joe Stephens
 - Utility Billing Customer Service Report – Dave Berringer
 - Water – Christian McShea
 - Wastewater – Tom Kedrierski
 - Stormwater – Shawn Frankenhauser
 - Field – Curt Dwiggin
 - Maintenance Report – Pedro Vasquez
 - Human Resources – Jan Zilmer
 - Motion to Accept Department Reports
 - C. Attorney
12. Supervisors' Requests
13. Adjournment

Any supporting documents not included in the agenda package will be distributed at the meeting. If you have any questions prior to the meeting, please contact me.

Sincerely,

Kenneth Cassel/sd
District Manager

cc: District Staff
Terry Lewis
Seth Behn
Rick Olson
Beverley Servé
Stephen Bloom

Second Order of Business

**MINUTES OF MEETING
CORAL SPRINGS
IMPROVEMENT DISTRICT**

The regular meeting of the Board of Supervisors of the Coral Springs Improvement District was held Monday, November 15, 2021 at 4:00 p.m. at the District Office at 10300 NW 11th Manor, Coral Springs, Florida.

Present and constituting a quorum were:

Martin Shank	President
Len Okyn	Vice President

Also present were:

Ken Cassel	District Manager (Via Telephone)
Terry Lewis	District Attorney (Via Telephone)
David McIntosh	Director of Operations
Joe Stephens	Director of Utilities
David Shuman	District Engineer (Via Telephone)
Jan Zilmer	Human Resources (Via Telephone)
Shawn Frankenhauser	Stormwater Department (Via Telephone)
Curt Dwiggin	Field Department (Via Telephone)
Christian McShea	Water Department (Via Telephone)
Tom Kedrierski	Wastewater Department (Via Telephone)
David Berringer	Utility Billing and Customer Service
Pedro Vazquez	Maintenance Department (Via Telephone)
Glen Hanks	Glen Hanks Consulting Engineers (Via Telephone)

The following is a summary of the discussions and actions taken. Due to malfunction of the recording device some portions are transcribed based on notes taken at the meeting.

FIRST ORDER OF BUSINESS

Call to Order

Mr. Cassel called the meeting to order at 4:06 p.m. and called the roll.

SECOND ORDER OF BUSINESS

**Approval of the Minutes of the
October 18, 2021 Meeting**

There being no questions or comments,

On MOTION by Mr. Okyn seconded by Dr. Shank, with all in favor, the minutes of the October 18, 2021 meeting were approved.

THIRD ORDER OF BUSINESS

Audience Comments

There being none, the next item followed.

FOURTH ORDER OF BUSINESS

Consideration of Resolution 2022-1, Amending the General Fund Budget

Ms. Rubio provided an overview of the budget amendments, which is a yearly housekeeping item.

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor Resolution 2022-1, Amending the General Fund Budget, was adopted.

FIFTH ORDER OF BUSINESS

Consideration of Resolution 2022-2, Amending the Water and Sewer Budget

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, Resolution 2022-2, Amending the Water and Sewer Budget was adopted.

SIXTH ORDER OF BUSINESS

Consideration of Permit #2021-10, Cypress Run Plaza Outparcel for Popeye's Restaurant -Glen Hanks

Mr. Hanks reviewed the permit application and recommended approval with the conditions listed in his report, along with the two additions listed below.

- All drainage installations within wellfield protection zones shall be inspected by CSID personnel prior to backfilling.
- Weeps are prohibited in wellfield protection zones. Seal any and all existing weeps.

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, permit #2021-10, Cypress Run Plaza Outparcel for Popeye's Restaurant was approved with the modifications outlined above.

Consideration of Resolution 2022-3, Local Mitigation Strategy

- Mr. Cassel requested the Board amend the agenda to consider Resolution 2021-3, supporting and adopting the Broward County Multipurpose Jurisdiction Local Litigation Strategy.

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, Resolution 2022-3, adopting the Broward County Multipurpose Jurisdiction Local Litigation Strategy, was adopted.

SEVENTH ORDER OF BUSINESS

Consideration of Permit #2021-13 for Underground Fiber Installation at 1725 N. University Drive -Shawn Frankenhauser/Curt Dwiggin

Mr. Frankenhauser reviewed the work associated with the fiber installation project and recommended approval with the condition bore logs are provided.

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, Permit #2021-13 for underground fiber Installation at 1725 N. University Drive was approved.

EIGHTH ORDER OF BUSINESS

Consideration of Encroachment Agreement for 9864 NW 13th Court - Shawn Frankenhauser/Curt Dwiggin

This item was tabled to next meeting.

NINTH ORDER OF BUSINESS

Consideration of a Request by Staff for Board to Approve the Second Optional One-year Renewal of Phillips and Jordan Contract as the Primary Contractor to Provide Disaster Debris Removal and Disposal Services for the District for the Period January 1, 2022 to December 31, 2022, Authorizing the District Manager to Authorize and Sign for Additional Renewal. *The initial term of the contract was from June 19, 2017 to December 31, 2020 and allows for three optional one-year renewals.* - Shawn Frankenhause

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor the second optional one-year renewal of the Phillips and Jordan contract as the primary contractor to provide disaster debris removal and disposal services for the period January 1, 2022 to December 31, 2022, authorizing the District Manager to authorize and sign for additional renewal was approved.

TENTH ORDER OF BUSINESS

Consideration of a Request by Staff for Board to Approve the Second Optional One-year Renewal of Arbor Tree and Land Contract as the Alternate Contractor to Provide Disaster Debris Removal and Disposal Services for the District for the Period January 1, 2022 to December 31, 2022, Authorizing the District Manager to Authorize and Sign for Additional Renewal. *The initial term of the contract was from June 19, 2017 to December 31, 2020 and allows for three optional one-year renewals.* - Shawn Frankenhauser

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, the second optional one-year renewal of the Arbor Tree and Land contract as the alternate contractor to provide disaster debris removal and disposal services for the District for the period January 1, 2022 to December 31, 2022, authorizing the District Manager to authorize and sign for additional renewal was approved.

ELEVENTH ORDER OF BUSINESS

Consideration of AECOM's Change Order #1 to the 2020 Limited Site Assessment Agreement Reducing the Original Contract Value of \$8,460 by \$811.20, Resulting in a Final Contract Value of \$7,648.80 - Joe Stephens

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, AECOM's Change Order #1 to the 2020 Limited Site Assessment Agreement was approved.

TWELFTH ORDER OF BUSINESS

Consideration of the Purchase of a Portable Generator for Field Department from Doosan Portable Power in the Sum of \$42,119, Piggybacking Off the Florida Sheriffs Contract: FSA20-VEL28.0 - Curt Dwiggins

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, the purchase of a portable generator for the Field Department from Doosan Portable Power in the Sum of \$42,119, Piggybacking Off the Florida Sheriffs Contract: FSA20-VEL28.0 was approved.

THIRTEENTH ORDER OF BUSINESS

Ratification of Vehicle Purchases (These vehicles had to be ordered before the Board meeting due to procurement issues and the early closing of the fleet ordering period by the suppliers)

- A. Staff Request for Ratification of the Purchase of a Ford Explor for the Water Plant Piggybacking off the Broward Sheriff's Contract (FSA20-VEL28.0 - Pursuit, Administrative and Other Vehicles) - Christian McShea**

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, the Purchase off a Ford Explor for the water plant piggybacking off the Broward Sheriff's Contract was ratified.

- B. Staff Request for Ratification of the Purchase of a Chevy Equinox for the Billing Department Piggybacking off the Broward Sherriff's Contract (FSA20- VEL23.8 - Pursuit, Administrative and Other Vehicles) - David Berringer**

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, the purchase of a Chevy Equinox for the Billing Department piggybacking off the Broward Sheriff's Contract was ratified.

C. Staff Request for Ratification of the Purchase of a Ford F250 for the Field Department Piggybacking off the Broward Sheriffs Contract (FSA20-VEL28.0 - Pursuit, Administrative and Other Vehicles)- Curt Dwiggins

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, the purchase of a Ford F250 for the Field Department piggybacking off the Broward Sheriffs Contract was ratified.

FOURTEENTH ORDER OF BUSINESS Consideration of Work Authorizations

A. Work Authorization #195 for Well 8 Control Panel Replacement at a Total Cost of \$120,926

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, Work Authorization #195 for Well 8 Control Panel Replacement at a Total Cost of \$120,926 was approved.

B. Work Authorization #196 for CSID DIW Building Service Change for a Total Cost of \$56,366.40

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, Work Authorization #196 for CSID DIW Building Service Change for a Total Cost of \$56,366.40 was approved.

C. Work Authorization #197 for High Service Building Valve Replacement for a Total Cost of \$205,428

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, Work Authorization #197 for High Service Building Valve Replacement for a Total Cost of \$205,428 was approved.

D. Amendment #1 to Work Authorization #190 Returning Unspent Allowance of \$5,000

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, Amendment #1 to Work Authorization #190 Returning Unspent Allowance of \$5,000 was approved.

FIFTEENTH ORDER OF BUSINESS

Engineer's Report

A. Monthly Summary Report

Mr. Olson reviewed his report, a copy of which is attached hereto and made a part of the public record.

B. Amendment #2 with Globaltech Adding E-Verify and Public Records Verbiage as Required by Statute

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, Amendment #2 with Globaltech Adding E-Verify and Public Records Verbiage as Required by Statute was approved.

SIXTEENTH ORDER OF BUSINESS

Staff Reports

A. Manager - Ken Cassel

Mr. Cassel reported staff is working with the City on tree removal mitigation costs.

B. Department Reports

• Operations – David McIntosh

Mr. McIntosh discussed cyber security policies.

• Utilities Update – Joe Stephens

Mr. Stephens provided his report and responded to questions.

• Utility Billing Customer Service Report – Dave Berringer

Mr. Berringer reviewed his report, a copy of which is attached hereto and made part of the public record.

• Water – Christian McShea

Mr. McShea reviewed his report, a copy of which is attached hereto and made part of the public record. He also reported the following:

- Two operators earned a higher license. An announcement to be made at the holiday party.
- CSID will be awarded the most improved plant award for 2021 from the A.W.A.

- **Wastewater – Tom Kedrierski**

Mr. Kedrierski reviewed his report, a copy of which is attached hereto and made part of the public record.

- **Stormwater – Shawn Frankenhauser**

Mr. Frankenhauser reviewed his report, a copy of which is attached hereto and made part of the public record.

- **Field – Curt Dwiggin**

Mr. Dwiggin reviewed his report, a copy of which is attached hereto and made part of the public record.

- **Maintenance Report – Pedro Vasquez**

Mr. Vasquez reviewed his report, a copy of which is attached hereto and made part of the public record.

- **Human Resources – Jan Zilmer**

Mr. Zilmer reported the following:

- Three more pay periods left in the year so employees must take their personal days or lose them.
- The District is now fully staffed.
- Courses deadline is December 8, 2021.

- **Motion to Accept Department Reports**

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor, the Department Reports were accepted.

A. Attorney

- Mr. Lewis updated the Board on the CSID’s past circuit court case against the City.

- There are two options the Board can take against the City in relation to the vegetation litigation requirements.
- Mr. Lewis will be on vacation and will not be attending the December meeting.

SEVENTEENTH ORDER OF BUSINESS Supervisors' Requests

The Board thanked the employees and wished them a Happy Thanksgiving.

EIGHTEENTH ORDER OF BUSINESS Adjournment

There being no further business,

On MOTION by Mr. Okyn seconded by Dr. Shank with all in favor the meeting was adjourned.

Kenneth Cassel
Assistant Secretary

Dr. Martin Shank
President

Fourth Order of Business



CORAL SPRINGS IMPROVEMENT DISTRICT

FINANCIAL REPORTING – MEETING DECEMBER 20, 2021

**CORAL SPRINGS IMPROVEMENT DISTRICT
GENERAL FUND
SUMMARY REPORT**

For the Period Ending November 30, 2021

	ADOPTED BUDGET FY 2021/2022	PRORATED BUDGET THRU 11/30/2021	ACTUAL 2 MONTHS ENDING 11/30/2021	VARIANCE FAVORABLE (UNFAVORABLE)
REVENUES				
TOTAL REVENUES	\$8,242,100	\$343,385	\$344,509	\$1,124
EXPENDITURES & RESERVES				
TOTAL EXPENDITURES	7,542,100	315,087	202,798	112,289
TOTAL RESERVES	700,000	116,667	-	116,667
TOTAL EXPENDITURES & RESERVES	\$8,242,100	\$431,754	\$202,798	\$228,956
EXCESS REVENUES OVER (UNDER) EXPENDITURES & RESERVES			\$141,711	
FUND BALANCE BEGINNING			\$10,927,544	
FUND BALANCE ENDING			\$11,069,255	

**CORAL SPRINGS IMPROVEMENT DISTRICT
WATER & SEWER FUND
SUMMARY REPORT**

For the Period Ending November 30, 2021

	ADOPTED BUDGET FY 2021/2022	PRORATED BUDGET THRU 11/30/2021	ACTUAL 2 MONTHS ENDING 11/30/2021	VARIANCE FAVORABLE (UNFAVORABLE)
REVENUES				
TOTAL REVENUES	\$16,729,989	\$2,344,258	\$2,350,266	\$6,008
EXPENDITURES				
TOTAL ADMINISTRATIVE	2,582,880	422,669	335,421	87,248
TOTAL PLANT	7,919,893	1,289,713	816,530	473,183
TOTAL FIELD	3,124,073	508,871	241,241	267,630
TOTAL EXPENDITURES	\$13,626,846	\$2,221,253	\$1,393,192	\$828,061
AVAILABLE FOR DEBT SERVICE			\$957,074	
Total Debt Service			\$470,170	
Excess Revenues (Expenses)			\$486,904	
Net Assets Beginning			\$41,260,565	
Net Assets Ending			\$41,747,469	

CORAL SPRINGS IMPROVEMENT DISTRICT

CHECK REGISTERS - GENERAL FUND

NOVEMBER 2021

FUND	CHECK DATE	CHECK No.	AMOUNT
General Fund	11/01/2021 thru 11/30/2021	#12073- #12092	\$102,194.06
Total			\$102,194.06

CHECK REGISTERS - WATER & SEWER

NOVEMBER 2021

FUND	CHECK DATE	CHECK No.	AMOUNT
Water and Sewer	11/01/2021 thru 11/30/2021	#200397 - #200544	\$448,945.45
Total			\$448,945.45

Fifth Order of Business



1888 NW 22nd Street
(954) 975-0098

Pipe Inspection & Restoration Specialist

Pompano Beach, FL, 33069
shenandoahus.com

DATE: December 10, 2021
SUBMITTED TO: Coral Springs Improvement District
STREET: 10300 NW 11 Manor
CITY, STATE & ZIP: Coral Springs, FL 33071
PHONE: (954) 796-6627
FAX:
EMAIL: joes@csidfl.org
JOB NAME: Plant Surge Tank Cleaning 2021
ATTENTION: Joe Stephens Tom Kedrieski
954-275-9735 / David McIntosh

PROPOSAL #P23977

We propose to furnish a crew and all necessary equipment to clean Surge Tank 110 ft. in diameter with about 6" of grit and rags with 4 man crew with flex. We estimate to remove 200 cubic yards of debris off site. at the above mentioned job location. This work will be performed at our following hourly and/or unit prices:

Jet Vac Truck (Tandem Axle) includes pickup, 4 men crew , fuel	(at \$4,500.00 Per Day)	10 day(s)	\$45,000.00
Disposal	(at \$360.00 Per Truck Load)	20 truck load(s)	\$7,200.00
Flex Hose 6"	(at \$3.00 Per L.F.)	600 L.F.	\$1,800.00
Estimated Total:			\$54,000.00

NOTE: This proposal includes removal of all loose debris from the structures only. Pipe/s not included. (excluding hazardous waste), if non-hazardous contaminated liquids or soils are encountered, such as oil, gas, fuel, hydraulic oil, etc., the customer will be required to have the material analyzed, by an approved lab, then approved by a disposal facility, prior to Shenandoah transporting and disposing of the material, additional cost for specialty hauling and disposal will be applied to the invoice, along with documented receipt.. However, we are not responsible for problems occurring during or after cleaning due to pre-existing condition, original installation or design.

This proposal may be withdrawn if not accepted within 30 days. Payment terms net 30 days.
(If we encounter an Insurance compliance fee requirement, this fee will be invoiced in addition to the above rates.)

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Price above is only an estimate of foreseen conditions. Unforeseen conditions can affect the amount of time to complete the work, therefore increasing or decreasing estimate. All agreements are contingent upon strikes, accidents or delays beyond our control. Unless noted above engineering, permits, testing and bonds are not included in the pricing. Owner is to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workman's Compensation Insurance. Parties to this proposal/contract expressly waive all tort claims against each other and limit their remedies to breach of contract.

SIGNATURE:

SHENANDOAH GENERAL CONSTRUCTION CO.
Jose Vera

TITLE
Estimator

DATE
12/10/2021

ACCEPTANCE OF PROPOSAL / SIGN & RETURN

The above prices, specification and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified.

SIGNATURE: _____

COMPANY NAME:
REPRESENTATIVE:

DATE:
TITLE:

Sixth Order of Business



14802 NW 107th Avenue – Suite #4
Hialeah Gardens, FL 33018

Coral Springs Improvement District
10300 NW 100th Manor
Coral Springs, FL 33071

Date: 12-8-2021

RE: Piggyback Palm Beach County Term Contract #21077

Dear Sirs,

This letter will confirm that Waco Filter Corporation is prepared to extend pricing, terms and conditions contained within the above referenced contract with Palm Beach County to the Coral Springs Improvement District for purchase and delivery of Cartridge Filters.

Kindest Regards,

Debbie Starr

Debbie Starr,
Account Manager



Waco Filters Corporation agrees to provide Coral Springs Improvement District the opportunity to provide Cartridge Filters. Waco Filters Corporation further agrees that will also comply with the requirements below in the administration of this contract with the Coral Springs Improvement District. Further Waco Filters Corporation agrees that it is our obligation to obtain affidavits from any subcontractors to ensure that the subs are in compliance with E-Verify.

The CONTRACTOR and its subcontractors warrant compliance with all federal immigration laws and regulations that relate to their employees. The CONTRACTOR agrees and acknowledges that the OWNER is a public employer subject to the E-Verify requirements as set forth in Section 448.095, Florida Statutes, and that the provisions of Section 448.095, Florida Statutes apply to this Agreement. If the OWNER has a good faith belief that the CONTRACTOR has knowingly hired, recruited or referred an alien who is not authorized to work by the immigration laws or the Attorney General of the United States for employment under this Agreement, the OWNER shall terminate this Agreement. If the OWNER has a good faith belief that a subcontractor performing work under this Agreement knowingly hired, recruited or referred an alien who is not duly authorized to work by the immigration laws or the Attorney General of the United States for employment under this Agreement, the OWNER shall promptly notify the CONTRACTOR and order the CONTRACTOR to immediately terminate the contract with the subcontractor. The CONTRACTOR shall be liable for any additional costs incurred by the OWNER as a result of the termination of a contract based on CONTRACTOR'S failure to comply with E-Verify requirements evidenced herein.

IF THE CONTRACTOR HAS ANY QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES TO THE CONTRACTORS DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, THE CONTRACTOR SHOULD CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT

Sandra Demarco

210 N. University Drive, Suite 702 Coral Springs, FL 33071

(O) 954.603.0033, Ext. 40532

Email: PublicRecords@inframark.com

Patricia Juday
Signature

12.9.2021
Date

Seventh Order of Business

ENVIROWASTE SERVICES GROUP, INC.

SPECIFIC WORK ORDER
BETWEEN

ENVIROWASTE SERVICES GROUP, INC.
(THE "CONSULTANT")

AND

CORAL SPRINGS IMPROVEMENT DISTRICT
3 Sectionals Installation Project

Site: NW 5th Court & 97th Lane

Attn: Curt Dwiggin & Joe Stephens
P/D #2774

The parties to this Specific Work Order are parties to this Professional Services dated December 8th, 2021 (the "Agreement"). The parties hereto agree that all of the terms and conditions set forth in the Agreement are in full force and effect and incorporated herein by reference. The terms and conditions of the Agreement shall govern and control over any inconsistent terms or conditions contained in this Specific Work Order except as to the scope of work to be performed and the fees for such work which are set forth herein and which shall control. Capitalized terms used in this Specific Work Order that are not otherwise defined herein shall have the meanings ascribed to them in the Agreement.

RE: Proposal to Perform Sewer Cleaning & Video Taping, Furnish & Install #3, 8" Diameter Cured in Place Pipe Liner up to 8 feet in length as per Broward County - Bid #OPN2118843B1- Gravity Sewer Main Point Repairs.

Line Item Number	Description	Unit of Measure	Pipe Size	Quantity	Unit Price	Extended Price
1.2	Group 1: Sewer Cleaning and Video Taping	LF	8"	397.5	\$4.00	\$1,590.00
1.33	Group 1: Furnish & Install 8" Diameter Cured In Place Pipe Liner up to 8' in length.	EA	8"	3	\$3,000.00	\$9,000.00
TOTAL						\$10,590.00

*CSID shall provide any & all major MOT, anything beyond cones & advanced warning signs.

**CSID shall provide a place to dump the solids & the liquids shall be de-canted back into the system.

***Sectionals shall be installed at 208.70', 390.30' & 396.20'.

SERVICE CHARGE: IF ANY PAYMENT DUE HEREUNDER OR PURSUANT TO ANY SPECIFIC WORK ORDER IS NOT RECEIVED BY THE CONSULTANT WITHIN THIRTY (30) DAYS AFTER ITS DUE DATE, A SERVICE CHARGE IN THE AMOUNT OF ONE AND ONE-HALF PERCENT (1.5%) OF THE UNPAID BALANCE WILL BE CHARGED TO THE CLIENT (THE "SERVICE CHARGE"). THE SERVICE CHARGE SHALL BE APPLIED MONTHLY AND ANY PREVIOUSLY UNPAID SERVICE CHARGE WILL BE ADDED TO THE UNPAID BALANCE. The Client hereby authorizes the Consultant to commence the work (commencement date) required under this Specific Work Order on _____, **IN WITNESS WHEREOF**, the parties have duly executed this Specific Work Order as of the day and year first above written. The fees, cost or prices for the work proposed shall expire thirty (30) days from the date first above written.

GENERAL TERMS AND CONDITIONS

General Conditions: These general conditions are incorporated by reference into the proposal and are part of the Agreement under which services are to be performed by EWSG for the Customer. EWSG will always follow Customer's instructions both verbal and written.

Customer Provided Labor: Where the Customer provides labor for EWSG, the Customer will indemnify EWSG for liability, loss or expense for work related injuries to those laborers not provided by EWSG. The Customer agrees to waive all rights to subrogation against EWSG arising out of the work in the Agreement.

Customers Responsibilities: Customer will provide mechanical services. Operation and control of Customer's equipment is the Customer's responsibility. If EWSG cannot continue its work due to circumstance caused or allowed by Customer and of which EWSG was not apprised prior to starting the work, an hourly fee will be charged.

Damage Limitations: Under no circumstances will EWSG be responsible for indirect, incidental or consequential damages. EWSG also is not responsible for the rendering of or failure to render architectural, engineering or surveying professional services.

Pre-existing Conditions: EWSG will not be responsible for liability, loss or expense (including damage caused by the backup of basement sewers or the use of fire hydrants) where the primary cause of the claim or damage is pre-existing conditions including faulty, inadequate or defective design, construction, maintenance or repair of property or contamination of the subsurface where the condition existed prior to the start of EWSG's work. Customer is responsible for loss of service equipment caused by the pre-existing conditions on the job site.



Environmental Conditions: The debris is represented to EWSG to be non-hazardous, requiring no manifesting or special permitting. The Customer will be responsible for any additional costs or claims associated with treatment, storage, disposal of the removed debris, or breach of the above representation, at any time during or after the completion of this project.

Indemnification: The Customer and EWSG will each indemnify the other in proportion to relative fault for liability, loss and expense incurred by the other party resulting from a negligent act or omission in performance of work under this Agreement. The Customer also will indemnify EWSG for liability, loss and expense resulting from EWSG's services if EWSG is acting at the direction or instruction of the Customer, or where the primary cause of any damages is due to information provided by the Customer.

Credit Policy: Regular Terms.... Customers shall be required to remit payment to EWSG within 10 days of customer receiving payment for EWSG's completion of job and scope of work for this project and or PO.

Sectional Installation: Customer acknowledges the installation of a Sectional Liner for the purpose of rehabilitating a damaged pipeline does not guarantee additional repair work will not be required even with proper installation. Should it be determined additional repair work will be required EWSG will provide additional services as agreed upon with the Customer. Such costs for additional services will be born by the customer and agreed upon in writing prior to the initiation of additional work.

Entire Agreement: This proposal together with any written documents which may be incorporated by specific reference herein constitutes the entire agreement between the parties and supersedes all previous communications between them, either oral or written. The waiver by EWSG of any term, condition or provision herein stated shall not be construed to be a waiver of any other term, condition or provision hereof.

"CLIENT"

Handwritten: Joe Stephens
BY

Handwritten: Utility Director
TITLE

Handwritten: 12/9/21
DATED

"CONSULTANT"

ENVIROWASTE SERVICES GROUP, INC,
A Florida Corporation

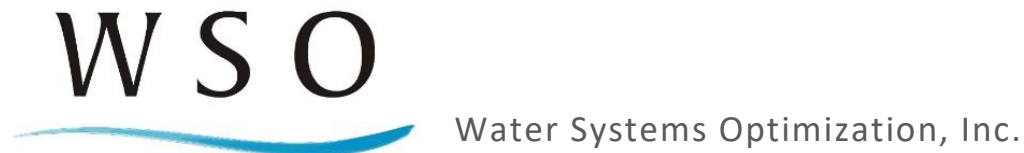
Handwritten: Martin Whitt
EnviroWaste Services Group, Inc

Handwritten: Business Development Manager
TITLE

Handwritten: 12/08/21
DATE



Eighth Order of Business



Proposal

Water Loss Control Master Plan

Coral Springs Improvement District – October 2021

Water Loss Control Master Plan

PREPARED FOR

Coral Springs Improvement District

Attn: Joe Stephens
Utility Director

PREPARED BY

Water Systems Optimization, Inc. (WSO)

1410 Donelson Pike #A1, Nashville, TN 37217

1.2.1	Pioneering New Methodologies	6
1.2.2	Galvanizing Regional Cooperation	7
1.2.3	Leading the Conversation	8
<u>1.3</u>	Key Personnel.....	9
1.3.1	Reinhard Sturm – CEO (Project Director)	10
1.3.2	Jessica Jagdeo – Project Manager and Analyst.....	11
1.3.3	Madeline E. Gorchels – Data Analyst (Project Analyst)	12
1.3.4	Kevin Burgers, P.E. – Source Meter Specialist	13
2	Water Loss Control Mater Plan - Tasks.....	14
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Transmittal Letter

October, 2021

Dear Mr. Stephens,

Water Systems Optimization, Inc. (WSO) is pleased to submit this proposal for developing a Water Loss Control Master Plan for Coral Springs Improvement District (CSID).

The WSO project team wholeheartedly believes that we are uniquely positioned to provide the industry's best water loss control expertise to CSID. As our proposal details, WSO's work to date demonstrates expertise and dedication. In fact, **non-revenue water management is the sole focus of WSO's services.**

WSO's water loss leadership has been recognized by many industry stakeholders, ranging from the California Department of Water Resources to the Water Research Foundation to numerous water utility managers throughout the country. The drinking water community trusts WSO to define best practices, implement proven interventions against water loss, and pioneer new methodologies.

This document serves as our proposal following discussions between CSID and WSO. WSO intends that all the required information is supplied and will happily provide any further clarification as needed. Please do not hesitate to contact us at the phone and email details below.

Sincerely,



Reinhard Sturm
CEO/President – WSO

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1 Qualifications & Experience

Water Systems Optimization (WSO) was formed in 2002 and is the North American industry leader in water loss management. WSO's history demonstrates expertise and dedication. In fact, **water loss management is the sole focus of WSO's services**. WSO's water loss pre-eminence has been recognized by many industry stakeholders, ranging from the California Department of Water Resources to the Water Research Foundation to numerous water utility managers throughout the country. **The drinking water community trusts WSO to define best practices, implement proven interventions against water loss, and pioneer new methodologies.**

1.1 Defining Best Practices

Research institutes and professional drinking water associations overwhelmingly select WSO to review industry standards, evaluate the integration of new technologies with water loss management, and propose cutting-edge analysis and field studies that support distribution system efficiency.

As an endorsement of WSO's expertise, WSO was chosen to be the lead firm on most Water Research Foundation water loss control studies, including:

- *Leakage Management Technologies* (project 2928)
- *Evaluating Water Loss and Planning Loss Reduction Strategies* (project 2811)
- *Real Loss Component Analysis: A Tool for Economic Water Loss Control* (project 4372A)
- *Water Audits in the United States: A Review of Water Losses and Data Validity* (project 4372B)
- *Establishing Water Utility Guidance and Methodology for Water Audit Validation* (project 4639)

WSO's Water Research Foundation publications have been recognized as definitive guides to water loss management. Notably, the American Water Works Association recommends that utilities employ WSO's Real Loss Component Analysis model when developing water loss control programs, and the California Department of Water Resources requires annual water audit validations to follow the methodology presented in project 4639.

1.2 Implementing Proven Interventions Against Water Loss

WSO has worked with more than 60 utilities nationwide to compile and validate detailed water audits. With most of these partners, WSO has moved beyond water loss analysis to establish water loss control programs that save water and money. WSO is particularly proud to have spearheaded the following projects:

■ Los Angeles Department of Water and Power

Full water loss control program offerings and facilitation of the award-winning Water Loss Task Force committee.

■ San Antonio Water System

Pull water loss control program offerings and continued technical assistance with implementation of water loss recovery and data improvements.

■ City of Phoenix

Detailed AWWA water audit, Component Analysis of Real and Apparent Losses, recommendation of data management improvements, and water loss control recommendations.

■ City of Sacramento

District metered area installation and management.

■ City of Santa Cruz

Full water loss control program offerings, source meter testing procedure development, and ongoing technical assistance now entering a fourth year.

■ Nashville Metro Water Services (MWS) Leak Detection Survey Services

WSO has been selected by Nashville MWS for 3 consecutive 5-year contracts to perform leak detection on their 3,000 miles water distribution system and perform temporary District Metered Areas (DMAs) to assist with leakage estimates and work prioritization. Under the current contract (2015 – 2020), WSO has surveyed over 11,000 miles of main and located an estimated 12,500 gpm of leakage.

■ Guam Waterworks Authority (GWA)

Full water loss control strategy development including establishing three pilot district metered areas where non-revenue water was reduced by about 40% on average.

In each project, WSO established a nuanced understanding of each system’s unique water loss profile, an appreciation for the strengths and uncertainties of each utility’s data sources, and customized action plans that concretely improve system management and financial viability. In addition to developing comprehensive water loss control strategies, WSO has experience with implementing these strategies to reduce water loss.

1.2.1 Pioneering New Methodologies

WSO frequently works with water utilities and their stakeholders to improve water distribution efficiency. Recently, WSO was selected to pioneer ground-breaking water loss control programs, such as:

■ California Water Loss Technical Assistance Program (Water Loss TAP)

WSO was hired by the California-Nevada Section of the American Water Works Association to lead the largest water audit training and validation program ever offered. Through the Water Loss TAP, WSO taught best-practice methods to and level 1 validated the water audits of all 450 retail urban water suppliers in California, as required by Senate Bill 555.

■ Hawaii Water Audit Validation Effort (WAVE)

the Commission on Water Resource Management (CWRM) of Hawaii hired WSO in 2016 to implement a water audit training and validation program for compliance with Act 169. In the WAVE, WSO works with four county water agencies that each operate numerous discrete water systems and all privately owned systems on the Hawaiian Islands.

■ California Energy Utility Partnerships

WSO led pilot programs (with Southern California Edison, San Diego Gas & Electric, and Southern California Gas Company) that quantified energy savings embedded in leakage recovery. WSO has since been recruited to advise ongoing discussions about energy efficiency as it relates to water loss control.

■ NRWManager

WSO developed a web-based holistic Non-Revenue Water (NRW) and Water Network management application with full integration of all water utility data such as network flow, network pressure, water level in reservoirs, water quality parameters, customer billing data and GIS layers. The solution provides instant access to all data, anywhere, anytime, on desktop PCs, laptops, tablets and smart phones. It also provides automated intelligent reporting of NRW levels and other Key Performance Indicators (KPIs).

■ Leak Scenario Builder

WSO has developed a multi-agent simulation to systematically explore leakage control strategies for water distribution systems. Our modeling approach seeks to provide actionable recommendations to conserve water and save money while acknowledging uncertainty. We calibrate the leak scenario builder with system-specific data to provide insight into three core elements of leakage management: estimating impact on loss rates, anticipating required level of effort, and evaluating cost effectiveness.

1.2.2 Galvanizing Regional Cooperation

Water loss management is most effective when neighbouring agencies and stakeholders act in concert toward a shared goal. However, regional water loss collaboration was not often explored in California to meet efficiency standards while harnessing economies of scale and managing shared assets. To promote budding regional efforts, WSO has coordinated regional water loss control programs by providing educational seminars, technical assistance, and evaluation and standard setting. WSO's recent regional programs include:

■ **Municipal Water District of Orange County (MWDOC) Water Loss Control Work Group**

WSO and MWDOC have partnered to offer a five-year water loss control program to MWDOC's 31 member agencies. WSO and MWDOC member agencies are evaluating water losses, confirming analytic results with field investigation, designing customized water loss control strategies, and implementing cost-justified interventions. Through the program, Orange County agencies are building an ambitious regional culture of efficiency.

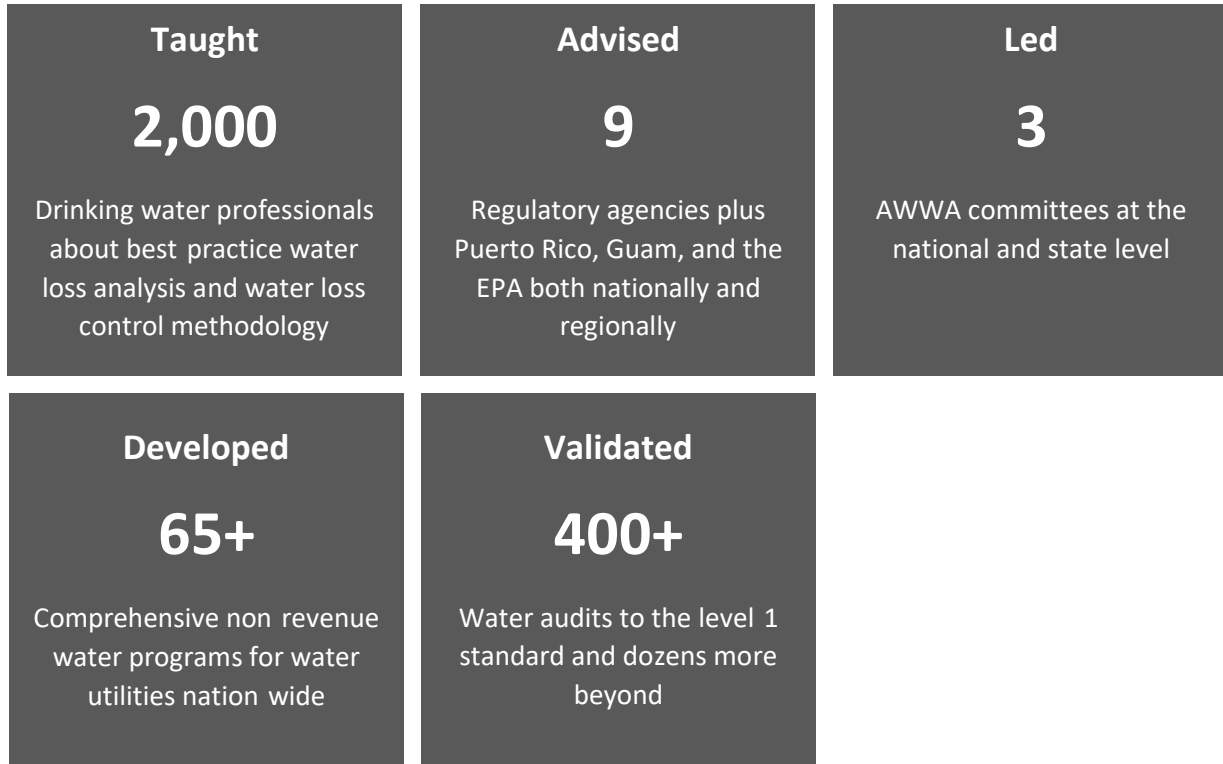
Furthermore, WSO and the MWDOC group have produced a ground-breaking customer meter test dataset and established case studies for water loss monitoring and regulation in California. Over the last year, WSO supported MWDOC in the development of a regional water loss control department that offers water audit validation, customer meter testing, leak detection, and field pressure logging to its member agencies.

■ **California Water Service Water Loss Program**

WSO and California Water Service have partnered to streamline the company's water loss understanding and water loss reduction strategy. WSO's water loss recommendations will contribute to California Water Service's goal of preparing its 25 districts for SB555 compliance and the implementation of Executive Order B-37-16.

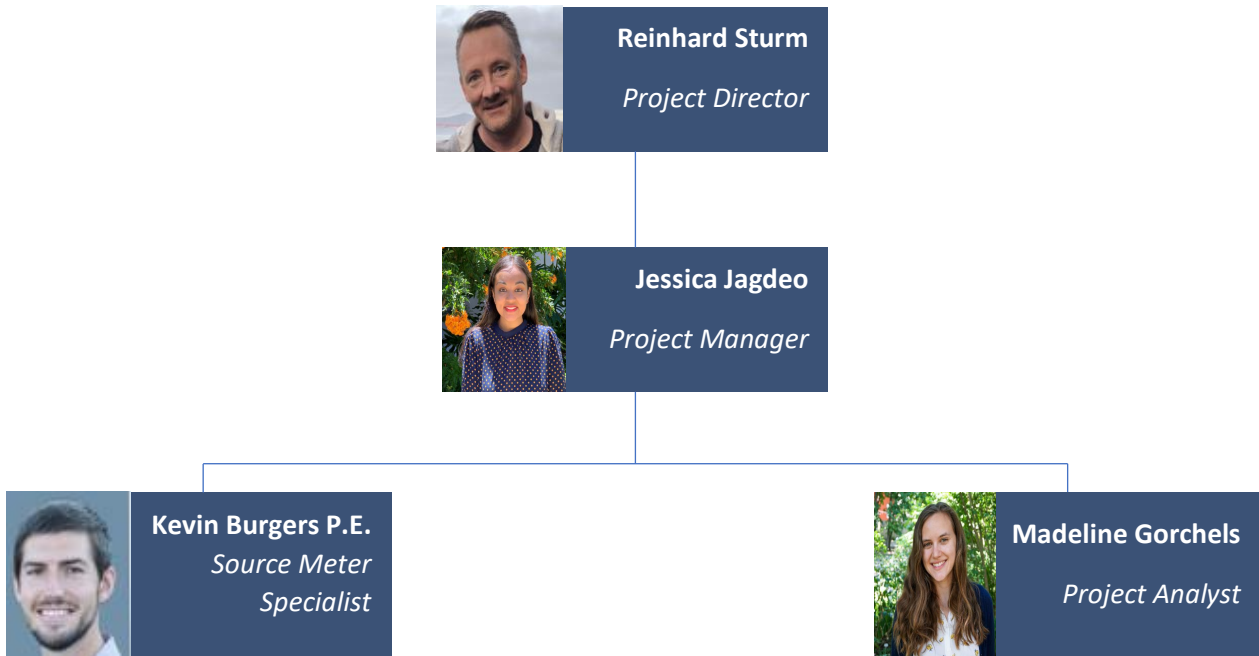
1.2.3 Leading the Conversation

WSO guides the drinking water industry toward informed water loss management by working with a host of involved agencies and professionals, from distribution system operators to the chair of California’s State Water Resources Control Board. Through outreach, professional service, and water loss control projects in California and across the United States, WSO has:



1.3 Key Personnel

The WSO team is a diverse mix of professionals fully dedicated to nonrevenue water management following established AWWA best practices. The proposed team represents decades of water loss experience in a wide range of topics including water auditing and validation, leakage component analysis, supply metering and accuracy testing, data collection/field work, large data set management, and cost-benefit analysis. Resumes of all members are included in the following pages.



1.3.1 Reinhard Sturm – CEO (Project Director)



As WSO’s CEO and president, Reinhard has worked on water loss control projects throughout the world, and for the past fifteen years he has been involved in some of the most impactful water loss reduction projects in the United States. Reinhard was the lead researcher and author on Water Research Foundation project 2928: Leakage Management Technologies. Water Research Foundation (WRF) 2928 provided North American water utilities with detailed best-practice guidance on the latest leakage management tools and strategies, including district metered areas and advanced pressure optimization.

Education
*University of Vienna,
 Master of Environmental
 Engineering*

**20 Years of Water Loss
 Consulting Experience**

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Since WRF 2928, Reinhard has served as principal or co-principal investigator on all WRF-funded water loss control publications, including Real Loss Component Analysis: A Tool for Economic Water Loss Control (4372A), Water Audits in the United States: A Review of Water Losses and Data Validity (4372B), and Establishing Water Utility Guidance and Methodology for Water Audit Validation (4639). Reinhard’s authorial credits aren’t isolated to WRF, however – he also co-authored McGraw-Hill’s professional manual Water Loss Control (2nd ed.) and has published more than 20 papers on various water loss topics.

Reinhard is actively involved in the International Water Association’s Water Loss Specialist Group and the American Water Works Association’s (AWWA) Water Loss Control Committee (WLCC). Reinhard also chairs the AWWA WLCC Real Losses Subcommittee. Through this leadership, Reinhard has contributed to AWWA Free Water Audit Software and manual M36 improvements, where Reinhard spearheaded an update to M36’s real loss chapters.

1.3.2 Jessica Jagdeo – Project Manager and Analyst



Jessica Jagdeo, is a project manager and analyst at WSO, assisting in analysis and management of water loss projects in collaboration with water utilities & agencies. Jessica, has compiled numerous water audits, examined customer meter test results, analyzed the components of real loss, and conducted detailed investigations of billing data to determine water consumption for water agencies.

Prior to joining WSO, Jessica studied Water Resources Management and Environmental Data Science at the University of California, Santa Barbara’s Bren School of Environmental Science & Management. During her studies, Jessica and a group of colleagues consulted with the City of Santa Barbara Public Works Department to estimate the climate-driven effects of precipitation and other environmental variables on the City’s water supply up to the year 2058. The group modeled future estimates of the Santa Ynez Watershed's discharge using the Soil & Water Assessment Tool and Cal-Adapt's anticipated future climate-drive changes in temperature and precipitation. Jessica was responsible for organizing, analyzing, and visualizing water supply and bathymetric data to assess the current state of the water supply and estimate the effects of sedimentation. This project produced a range of potential variations in water supply under different climate scenarios for the City of Santa Barbara to use in their upcoming Urban Water Management Plan.

Education

University of California, at Santa Barbara

Master of Environmental Science and Management (2020)

University of Florida, at Gainesville

B.S. in Geology (2018)

2 Years of Water Loss Consulting Experience

Contact Information:

jessica.jagdeo@wso.us
321-277-3494

1.3.3 Madeline E. Gorchels – Data Analyst (Project Analyst)



Madeline E. Gorchels is a data analyst at WSO, assisting in analysis and management of water loss projects in collaboration with water utilities & agencies. As a water loss analyst, she has examined customer meter test results, analyzed custom input submissions for the California SWRCB water loss control economic model, and investigated billing data to determine water consumption for California & Texas agencies.

Prior to joining WSO, Madeline studied Water Resources Management and Environmental Data Science at the University of California, Santa Barbara’s Bren School of Environmental Science & Management. During her studies, Madeline and a group of colleagues consulted with the Pacific Institute to quantify the multiple benefits of distributed rainwater capture in the City of Austin, TX. The group modeled impacts on water consumption, energy use, and urban heat island for different infrastructure implementation scenarios. Madeline led modeling on potential energy reductions from reduced potable water demand and quantified potential urban heat island mitigation through remote sensing. Her research was included in two publications put out by the Pacific Institute in 2020.

Before entering the water loss control field, Madeline performed data analysis for research on aquatic zooplankton and viruses at Wellesley College, Oregon State University, and Portland State University.

Education

University of California, at Santa Barbara

Master of Environmental Science and Management (2020)

Wellesley College

B.A. in Biological Sciences Minor in Geosciences (2016)

1 Years of Water Loss Consulting Experience

Contact Information:
madeline.gorchels@wso.us
 541-829-0409

1.3.4 Kevin Burgers, P.E. – Source Meter Specialist



Kevin has eight years of experience with WSO testing and analyzing water distribution systems and is the project manager of the ongoing leakage management project in Nashville, TN. The Nashville leakage management project has included setting up and measuring 215 temporary District Metered Areas, performing leak detection on approximately 18,000 miles of main, and analyzing consumption profiles on approximately 300 large customer meters over the past 6 years. Kevin has also been responsible for compiling an AWWA Water Audit for Nashville and testing the production meters at both Water Treatment Plants annually.

Education

*University of Washington,
 BS Civil Engineering, 2011*

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*1410 Donelson Pike,
 Suite A-1
 Nashville, TN 37217*

Professional Affiliations & Licenses

*AWWA (GA & KY/TN)
 GAWP
 P.E. (TN, HI, FL, TX)*

8 Years of Experience

Kevin has extensive experience with production meter testing. Over the last 5 years, Kevin has conducted over 100 source meters tests across the United States on pipes ranging from 8”-48” in diameter. Kevin has also given multiple presentations on conducting meter tests and incorporating the results into AWWA Water Audit software.

Kevin has been responsible for preparing or validating AWWA water audits for over 50 utilities in the past 3 years. Kevin also has experience conducting pressure surveys, analyzing large customer consumption data, measuring DMA and managing leak detection projects for utilities across the United States. Kevin is a professional engineer registered in Florida, Hawaii, Tennessee and Texas.

2 Water Loss Control Mater Plan - Tasks

TASK 1 - Source Metering Accuracy Assessment and Test Plan Development

Source meters record the volume of water supplied into the distribution system, and real loss is derived by subtracting authorized use and apparent loss from water supplied. Therefore, all real loss performance indicators, and therefore real loss intervention strategies based on those indicators, are dependent on the accuracy of source meters.

Sub-Tasks:

1. **Source meter testing and calibration practices review:** WSO will review and discuss the protocols and documentation related to source meter testing and calibration practices employed at each source metering site (own source, import meter and export meter).
2. **Source meter calibration & test result analysis:** WSO will analyze any available source meter calibration and testing documentation for the last three years.
3. **Development of source meter testing approaches:** WSO’s review will focus on identifying appropriate testing methodologies for representative source metering sites. Where the current set up does not allow for meter tests to be conducted, WSO will provide recommendations for what needs to be done by CSID to make these meters testable. This effort will take into consideration the cost for such capital investments and the overall impact each currently non-testable meter has on CSID’s water audit results. This task will include a site visit by Kevin Burgers – WSO’s source meter specialist to inspect source meters and to conduct comparative meter tests where feasible.
4. **High frequency flow analysis (source meters):** WSO will analyze production data for CSID’s water audit boundary meters at the highest temporal resolution available to identify potential data gaps, the proportion of flow recorded outside each meter’s designed specifications and compare archived flow data with summary volumes (see task below). Though this work often deals in very large datasets across many meters, WSO's scripting techniques give us the ability to complete complex analyses efficiently.
5. **Analysis & summary of historical source meter reading archive:** WSO will analyze historical archives of source meter readings to ensure data integrity, compare to volumes derived from raw SCADA data, and derive the entries for water supplied in the water audit.

WSO has scripted significant components of sophisticated water loss analyses, like source meter flow analysis, billing data analysis, and customer meter test result analysis using the statistical programming language, R.

TASK 2 – Detailed Billing Data Analysis

Detailed "raw" meter reading and billing data analysis: To assess how the meter reading to bill process is implemented in practice, WSO proposes to analyze underlying customer meter reading and billing data. This analysis intends to assess the integrity of raw billing data and to evaluate how consistently billing best practices are applied before summarizing usage volumes for the water audit.

Analyses include but are not limited to:

- Duplicate records
- Negative use volumes
- Large suspicious use volumes
- Comparing raw totalizer reads to listed consumption volumes
- Data completeness - count of records per meter and per month
- Prevalence and impact of adjustments and estimates
- Identification of likely stuck meters
- Meter right sizing - the average use per day for each meter size group, including comparison to similar results from past WSO analyses with other agencies
- Prorating customer meter use to better approximate the volume and timing of use to align with production meter readings for water loss analysis
- Detailed review of estimation process used by CSID for its non-metered authorized consumption
- Final derivation of billed metered authorized consumption for the baseline water audit

TASK 3 - Customer Meter Accuracy Assessment

Apparent losses are missed opportunities to record and bill for otherwise authorized uses; either the water was stolen, the customer meter under-registered the volume delivered, or there were data handling errors while processing the meter reading. Reducing these types of losses results in increased revenue since more volume of authorized use is recorded and ultimately billed for. As such, apparent losses can have a significant impact on utility revenues. The sub-tasks described below outline WSO's approach to appreciate CSID's past efforts to analyze and minimize apparent losses and potential recommendations to augment those efforts.

Sub-Tasks

1. **Customer meter testing practices review:** WSO will review any procedures and documentation for selecting, transporting, and testing small and large customer meters.
2. **Customer meter test result analysis:** If past test data is not available or is not of sufficient sample size, WSO will instead develop recommendations for CSID to begin or augment their customer meter testing efforts. If available, WSO will analyze datasets containing small and large customer meter test results for both old and new meters. WSO's analysis of small customer meter test results will focus on:
 - Quantifying uncertainty for the water audit entry for customer metering inaccuracy.

- Identifying statistically meaningful differences between sub-populations of meters.
- Modeling accuracy based on other available data such as meter age or total lifetime throughput.
- Assessing the impact potential under-registration from intermediate meters has on CSID’s apparent losses and the accuracy of the calculated real loss performance.

Large customer meter test results will be analyzed to assess the risk of inaccuracy for each meter, or as a group depending on the amount and quality of data available.

3. **Customer meter replacement practices review:** WSO will review current customer meter replacement practices for small and large customer meters. Review may include written documents describing strategy for each size group in addition to conference calls to discuss how replacement strategies have been developed and implemented.
4. **Optimum testing frequency for each individual large customer meter:** by applying a least-cost of ownership model that balances the costs of potential under-registration with the costs of testing and repair WSO will develop an optimum testing frequency for each large customer meter (4inch and larger).

TASK 4 - Assessment of Real Loss Management Activities

Real losses are physical losses of water from the distribution system through leaks. The sub-tasks below detail how WSO will understand CSID’s current experiences with system leakage. This understanding will inform recommendations to manage those losses in cost-effective ways going forward.

Sub-Tasks:

1. **Repair data review & analysis:** WSO will review available leak repair data including forms filled out by field staff to document leaks. WSO will use the data processing scripts we have developed to assess the integrity of repair data. The repair data review will include:
 - Identifying missing fields or data gaps that hinder valuable repair data analysis
 - Assessing break frequencies for different infrastructure types
 - Evaluating raw data integrity (i.e. duplicates and entry errors)
 - GIS heatmapping analysis to identify system regions with higher or lower break frequencies

2. **Proactive leak detection activity analysis & inventory:** WSO will review relevant information collected from CSID’s programs to evaluate proactive leak detection strategies. WSO has extensive experience planning and implementing manual acoustic leak detection and automated leak detection pilot efforts for our clients. WSO will assess CSID’s current methods to proactively identify leaks, catalog them, and make recommendations for augmenting those efforts in the future. The development of new water loss control technologies has accelerated significantly over the past five years and WSO has been a trusted advisor for providing unbiased and data driven evaluations on the feasibility of various technologies for agencies’ water loss strategies.

WSO’s leak detection and water loss specialists have hard won lessons to share with CSID from more than 50,000 miles of manual acoustic leak detection and automated leak detection pilot activities.

- 3. **Pressure data collection, reduction, and stabilization:** WSO will review available pressure data collection efforts, and suggest additional data collection where needed, to assess opportunities for pressure management; either careful pressure optimization, or transient identification and mitigation.
- 4. **Review of pipe and service line replacement analyses and practices:** WSO will review past pipeline and service connection replacement rates to identify limitations of each approach and identify opportunities for integration into the overall water loss control master plan.

TASK 5 - Financial Background

It is important to understand key financial parameters used to model real and apparent loss recovery to better establish the bounds of a realistic water loss control master plan.

Sub-Tasks:

- 1. **Derive value of real losses:** WSO will derive the variable production cost (VPC) to value real losses. The variable production cost typically includes at a minimum the cost of electricity for pumping, chemicals for treatment, and any imported water purchases. In addition, CSID may elect to include wear and tear on dynamic assets (depreciation) and/or pending expansions of supply in the valuation of real losses.
- 2. **Derive value of apparent losses:** Appropriately valuing apparent losses is an important pre-requisite to modeling the return on investment of apparent loss recovery efforts. WSO will derive the customer retail unit cost for the water audit based on CSID’s water rates.

TASK 6 - Water Audit Compilation & Historical Analysis

Reviewing past water audit results will help WSO assess the scale of opportunity for loss recovery. WSO’s review of trends and variance in water loss performance will also provide insight the reliability of raw data used to populate past audits. Accurate and precise water audit results are pre-requisites for reliable measurements of real and apparent loss and will directly inform water loss control planning and savings evaluation. Reliable water audit performance indicators are especially important given CSID’s regulatory framework.

Sub-Tasks:

1. **Historical water audit performance analysis:** WSO will summarize available past water audits or water loss assessments for CSID to observe long-term trends and variability in water loss key performance indicators. In this review, WSO will:

- focus on assessing historical performance indicator variability
- discuss CSID’s understanding of any notable context or qualifications for past results, documenting known uncertainties and issues

2. **Water audit performance comparison with similar agencies:** WSO has been compiling and analyzing water audits for California, Tennessee, Texas, and Hawaii water utilities for the last 5 years. WSO was the lead analytical team for all compiled water audits reviewed during the California Water Loss Technical Assistance Program (Water Loss TAP). In addition, WSO authored the Water Research Foundation (WRF) project, "Water Audits in the United States: A Review of Water Losses and Data Validity", that presented summary analysis for hundreds of additional water audits. WSO's vast experience compiling and analyzing thousands of water audits provides an unmatched reference to compare CSID’s performance.

WSO has analyzed thousands of water audits nationwide using sophisticated scripting techniques. These databases and analyses provide an unmatched point of reference to contextualize CSID’s current water loss performance.

3. **Water audit compilation:** WSO will compile a detailed water audit to serve as the baseline understanding for system loss rates. This water audit will be developed using data collected from the prior Tasks of this proposal. Additional data required to compile the water audit includes:

- Any available documents that may provide insight into the annual volumes of unbilled or unmetered uses such as system flushing, firefighting, estimated customer use, etc.
- Descriptive characteristics for the system including the miles of mains and count of service connections.

TASK 7 - Target Development

Equipped with data for and detailed understanding of CSID’s non-revenue water activities and current loss performance, WSO will develop a range of realistic water loss performance targets for CSID to work towards. WSO has developed next-generation modeling approaches to evaluate the potential for cost-effective loss recovery. These approaches build upon established industry best-practices to expand modeling capabilities in critical ways for modern utilities.

Non-revenue water includes three broad categories of water use efficiency: real losses, apparent losses, and unbilled authorized use. WSO proposes to tackle each component of non-revenue water independently before aggregating to derive a single overall target for non-revenue water system wide.

Economic Level of Real Loss Derivation – Leak Simulation

To address the ever-evolving and extensive landscape of leak detection technologies, and expand upon industry standard real loss modeling techniques, WSO has developed a multi agent-leak simulation model. This leak simulation allows for complex analysis of real loss recovery efforts and can assist agencies in prioritizing leak detection technologies for water loss recovery and identifying realistic ranges for real loss performance targets. At its core, the simulation is a digital representation of a water system that allows analysts and system managers to systematically explore potential leakage reduction strategies before making more significant investments in the real world. The leak simulation model has the following capabilities:

WSO has experience integrating Artificial Intelligence (AI) technologies in the leak simulation model, like for example Fracta modeling outputs.

- Estimate future system-wide loss rates under varying assumptions for leakage characteristics and loss recovery efforts that can be compared with performance goals. The following real loss management strategies are currently implemented in the simulation stand-alone or in combination, but other custom strategies can also be developed:
 - Manual acoustic leak detection
 - Automated acoustic noise loggers
 - Satellite leak detection
 - Pressure management
 - Main replacement
- Evaluate the cost-benefit of leakage control strategies under varying assumptions for fundamental leakage characteristics.
- Consider sub-system level infrastructure characteristics and their impact on loss rates and cost effectiveness including pipe-segment level data for likelihood and consequence of failure.
- Provide an intuitive visualization of the water distribution system that shows how leakage control strategies are implemented and their resulting impact on individual leaks and system-level leakage rates. This intuitive visualization helps build consensus with non-technical stakeholders and avoids the simulation feeling like a black box.

Sub-Tasks:

1. **Calibrate the simulation using available data:** WSO will use available leak repair and system data to calibrate the leak simulation. Calibration may also consider pipe-segment level likelihood and consequence of failure data from other modeling efforts conducted by CSID for their mains replacement program.
2. **Run iterative “experiments” to evaluate real loss recovery scenarios:** Once the simulation is calibrated to represent CSID’s water distribution system, WSO will systematically explore real loss recovery strategies, their cost effectiveness, and their impact on system-wide loss rates. The results of these experiments on a digital representation of the system will guide optimal program design and realistic targets.
3. **Draft final real loss target report:** The results of all modeling activities will be presented in a comprehensive report that includes intuitive visualizations of the optimum real loss targets for CSID, including budget estimates, timelines and goal monitoring matrixes.

Economic Level of Apparent Loss Derivation

WSO will assess a realistic and cost-justified target for apparent losses based on the detailed billing data analysis and customer meter test result and replacement management analyses completed during “**Error! Reference source not found.**”

Sub-Tasks:

1. **Large customer meter minimum cost of ownership model implementation:** WSO will apply a least cost of ownership model to each individual large customer meter. This model balances the cost of testing and repair with the potential cost of under-registration. One critical output from this model is the estimated economically tolerable rate of large customer meter under-registration which can be used to inform the apparent loss target.
2. **Small customer meter replacement assessment:** WSO will assess scenarios where certain groups of small customer meters are replaced, or where the replacement rate is modified, and estimate the impact on system-wide apparent losses. Scenarios where a positive return on investment is projected will serve as the basis for the target apparent loss for small customer meters.

Economic Level of Unbilled Authorized Use Derivation

Some operational uses may present opportunities to improve efficiency and reduce non-revenue water.

Sub-Task:

1. **Inventory unbilled authorized uses and evaluate necessity:** WSO will inventory all relevant unbilled authorized uses at CSID water including but not limited to system flushing, firefighting,

street sweeping, sewer flushing, reservoir cleaning and maintenance, district facility use, special customers, etc. Together with CSID Water staff, WSO will review each inventories use to evaluate its necessity and any opportunities to reduce use while still safely meeting operational goals.

2. **Quantify total volume of justified unbilled authorized uses to establish target:** After reviewing and inventorying unbilled authorized uses, WSO will aggregate the total rate of justified use including a contingency for special cases to help inform the overall non-revenue water target.

TASK 8 – Water Loss Control Master Plan Development

After understanding CSID’s loss profile and appreciating its past water loss control endeavors, WSO will support CSID in charting out its future water loss activity. WSO will carefully draft the water loss control master plan, elicit and incorporate feedback, and finalize the strategy. The plan will justify investments and map the trajectory of CSID’s water loss projects.

Sub-Tasks:

1. **Define realistic water loss activity portfolio and associated costs/benefits:** WSO will develop a portfolio of water loss activities to help prioritize efforts included in the master plan. The portfolio will include descriptions of strengths, weaknesses, expected costs and benefits. By outlining options in a consistent format, WSO and CSID will be better positioned to have informed discussions about prioritizing projects in the water loss master plan.
2. **Develop budget and staffing projections:** WSO will develop a budget and staffing projection to support the non-revenue water management activities recommended in the master plan.
3. **Master plan draft:** WSO will synthesize all relevant information gathered during the previous tasks into a single cohesive water loss master planning document. The master plan will galvanize consensus around a shared set of goals to carry momentum into successful program implementation.
4. **Master plan review NRW team workshop:** Before finalizing the master plan, WSO will coordinate a workshop with the NRW team to collect feedback and discuss the program design. Ensuring that the implementing leadership team has opportunity to refine the program will help build internal buyin and shape a more realistic suite of activity.
5. **Final master plan delivery:** After the workshop and all relevent feedback has been collected from CSID staff, WSO will finalize the master planning document and share it with CSID.

The NRW management plan will galvanize consensus around a shared set of goals to carry momentum into successful program implementation.

TASK 9 – Final Report

The results of all tasks will be summarized in a succinct final report including recommendations for next steps, prioritization of activities and timelines for implementation of next steps.

TASK 10 – Detailed Leak Detection Survey of CSID Distribution System

Alongside the prior tasks WSO will conduct a detailed leak detection survey to identify unsurfaced leakage and help the CSID recover water. The following subtasks outline our approach to a comprehensive leak detection survey.

Leak Detection Kick Off Meeting

To clarify the goals of the leak detection survey and establish protocols of communication and documentation, WSO recommends we convene for a kick off meeting. We will review our survey plan and outline our approach in reporting the survey findings.

Leak Detection Survey

Over the course of the survey, WSO’s leak detection technicians will use acoustic monitoring equipment to sound each and every appurtenance in District’s system (all service connections, hydrants, and valves) covering all 122 miles of distribution network. This is called a *comprehensive leak detection survey*, and it aims to identify all un-surfacing leakage detectable by sound.

Leakage Findings Reporting

For each leak finding, WSO will document the location of the leak and provide detailed description in a “leak report”. WSO will also provide a cloud-based leak detection tracking tool through which all findings are reported. At the end of the survey, WSO will provide a technical memo that summarizes the leak detection results and estimate the savings anticipated upon repair (though WSO will identify ongoing leaks, the District will be responsible for their eventual repair).

3 Proposed Timeline



A proposed timeline for this project can be found below based on WSO’s experience with similar projects.

TASK	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
<i>Task 1 - Source Meter Accuracy Assessment and Test Plan Development</i>	■	■							
<i>Task 2: Detailed Billing Data Analysis</i>		■	■	■					
<i>Task 3: Customer Meter Accuracy Assessment</i>			■	■	■				
<i>Task 4: Assessment of Real Loss Management Activities</i>				■	■				
<i>Task 5: Financial Background</i>					■	■			
<i>Task 6: Water Audit Compilation & Historical Analysis</i>						■	■	■	
<i>Task 7: Target Development</i>							■	■	■
<i>Task 8: Water Loss Control Master Plan Development</i>								■	■
<i>Task 9: Final Report</i>									■
<i>Task 10: Detailed Leak Detection Survey</i>				■	■				



4 Proposed Budget

The total project budget is a not to exceed budget of \$132,640.

	STURM	JAGDEO	BURGERS	GORCHELS	Leak Detection	
<i>Position</i>	Project Director	Project Manager	Source Meter Specialist	Data Analyst	Survey	
<i>Rate/hr</i>	\$260.00	\$160.00	\$180.00	\$120.00	\$300.00	
					per mile surveyed	VALUE/TASK
<i>Task 1 - Source Meter Accuracy Assessment and Test Plan Development</i>	8	8	60	24		\$17,040.00
<i>Task 2: Detailed Billing Data Analysis</i>	6	12	0	24		\$6,360.00
<i>Task 3: Customer Meter Accuracy Assessment</i>	8	16	0	24		\$7,520.00
<i>Task 4: Assessment of Real Loss Management Activities</i>	10	20	8	40		\$12,040.00
<i>Task 5: Financial Background</i>	10	8	0	8		\$4,840.00
<i>Task 6: Water Audit Compilation & Historical Analysis</i>	4	8	4	24		\$5,920.00
<i>Task 7: Target Development</i>	24	30	0	40		\$15,840.00
<i>Task 8: Water Loss Control Master Plan Development</i>	16	20	0	24		\$10,240.00
<i>Task 9: Final Report</i>	8	16	4	24		\$8,240.00
<i>Task 10: Detailed Leak Detection Survey</i>					122	\$36,600.00
Grand Total Hours	94	138	76	232		
Grand Total Cost for Direct Labor	\$24,440.00	\$22,080.00	\$13,680.00	\$27,840.00	\$36,600.00	\$124,640.00
Total Cost Task 1 Through 9	\$88,040.00					
Total Cost for Task 10: Detailed Leak Detection	\$36,600.00					
Estimate for Expenses	\$8,000.00					
Total Costs	\$132,640.00					

Signatures:

Water Systems Optimization an E Source Company

By: 

Name: Reinhard Sturm

Title: SVP

Date: 12/9/2021

Coral Springs Improvement District

By:

Name:

Title:

Date:



Water Systems Optimization, Inc.
 1410 Donelson Pike, Suite A-1
 Nashville, TN 37217
 Telephone: (615) 457-3790 Fax: (615) 457-3794


Water Systems Optimization, Inc. an E Source Company agrees to provide Coral Springs Improvement District the opportunity to piggyback off of their contract with the Metropolitan Government of Nashville for developing a water loss control master plan contract # 6485959. WSO, Inc. an E Source Company further agrees that will also comply with the requirements below in the administration of this contract with the Coral Springs Improvement District. Further WSO, Inc. an E Source Company agrees that it is our obligation to obtain affidavits from any subcontractors to ensure that the subs are in compliance with E-Verify.

The CONTRACTOR and its subcontractors warrant compliance with all federal immigration laws and regulations that relate to their employees. The CONTRACTOR agrees and acknowledges that the OWNER is a public employer subject to the E-Verify requirements as set forth in Section 448.095, Florida Statutes, and that the provisions of Section 448.095, Florida Statutes apply to this Agreement. If the OWNER has a good faith belief that the CONTRACTOR has knowingly hired, recruited or referred an alien who is not authorized to work by the immigration laws or the Attorney General of the United States for employment under this Agreement, the OWNER shall terminate this Agreement. If the OWNER has a good faith belief that a subcontractor performing work under this Agreement knowingly hired, recruited or referred an alien who is not duly authorized to work by the immigration laws or the Attorney General of the United States for employment under this Agreement, the OWNER shall promptly notify the CONTRACTOR and order the CONTRACTOR to immediately terminate the contract with the subcontractor. The CONTRACTOR shall be liable for any additional costs incurred by the OWNER as a result of the termination of a contract based on CONTRACTOR'S failure to comply with E-Verify requirements evidenced herein.

IF THE CONTRACTOR HAS ANY QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES TO THE CONTRACTORS DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, THE CONTRACTOR SHOULD CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT
Sandra Demarco
210 N. University Drive, Suite 702 Coral Springs, FL 33071
(O) 954.603.0033, Ext. 40532
Email: PublicRecords@inframark.com

Title: SVP

Name: (Print) Reinhrd Sturm



 Signature

12/8/2021

Date

NINTH ORDER OF BUSINESS

9A

WORK AUTHORIZATION

CSID WA #194
Globaltech No. 151334

Pursuant to the provisions contained in the "Contract for Professional Engineering Consulting and Design-Build Services on a Continuing Contract Basis " between the CORAL SPRINGS IMPROVEMENT DISTRICT, hereinafter referred to as "OWNER", and Globaltech, Inc., hereinafter referred to as "FIRM", dated July 1, 2012 (hereinafter referred to as "AGREEMENT"), this Work Authorization authorizes the FIRM to provide services under the terms and conditions set forth herein and in the AGREEMENT, which is incorporated herein by reference as though set forth in full.

The OWNER desires engineering services related to the House Bill 53 Needs Assessment hereinafter referred to as the "Specific Project".

Section 1 – Terms

The FIRM shall be defined as an individual, corporation or contractor having a direct contract with the OWNER or with any other subcontractor in the performance of a part of the work contracted for under the terms of this Work Authorization with the OWNER.

Section 2 – Scope of Work

The FIRM shall provide the following services in accordance with the applicable section(s) of the AGREEMENT:

Background

The Florida State Legislature 2021 House Bill 53 mandates that wastewater and stormwater entities submit a 20-year needs assessment to the Office of Economic and Demographic Research (OEDR) for their analysis and reporting. The assessment must be submitted to Broward County by June 30, 2022. Broward County will then compile the reports and submit them to

the OEDR by July 31, 2022. A revised Needs Assessment must be submitted to the OEDR every 5-years thereafter.

The scope of this project is to assist the OWNER with completion and submission of the initial Needs Assessment for the wastewater and stormwater systems. Systems includes everything associated wastewater and stormwater facilities including, but not limited to treatment facilities, operations buildings, structures, mechanical equipment, piping/valving, electrical systems, instrumentation, and controls. The OEDR is currently developing a template for use for completing the Needs Assessment. It is assumed that the template will be available for use for completion of the initial Needs Assessment.

Wastewater System Needs Assessment

Engineering services will be provided to assist OWNER in completing and submitting Wastewater System Needs Assessment. specific services and assessment requirements include the following:

- Meet with staff to review the parameters of the assessment and to review the overall project activities and schedule.
- Conduct site visits to confirm accuracy of wastewater system components description and condition. No subsurface or below water inspections will be performed.
- Attend progress and coordination meetings as necessary.
- Provide a detailed description of the facilities used to provide wastewater services.
- Review and record the number of current and projected connections and residents served calculated in 5-year increments. The OWNER will provide the number of current and projected connections and residents served.

- Review and record the current and projected service area for wastewater services. The OWNER will provide the service area maps.
- Assist OWNER with developing projected cost for providing wastewater services calculated in 5-year increments.
- Provide an estimated remaining useful life of each associated facility or its major components.
- Review and record the most recent 5-year history of annual contributions to, expenditures from, and balances of any capital account for maintenance or expansion of any facility or its major components. The OWNER will provide this information.
- Review and record CSID's plan to fund the maintenance or expansion of any facility or its major components. The plan must include historical and estimated future revenues and expenditures with an evaluation of how CSID expects to close any projected funding gap. FIRM will work with OWNER's staff to perform this review.
- Compile and submit Wastewater System Needs Assessment to the OEDR on OWNER's behalf.

Stormwater System Needs Assessment

Engineering services will be provided to assist OWNER in completing and submitting Stormwater System Needs Assessment. specific services and assessment requirements include the following:

- Conduct site visits to confirm accuracy of stormwater system components description and condition. No subsurface or below water inspections will be performed.
- Attend progress and coordination meetings as necessary, in coordination with the wastewater system meetings.
- Provide a detailed description of the facilities used to provide stormwater services.

- Review and record the number of current and projected residents served by the stormwater system calculated in 5-year increments. The OWNER will provide the number of residents served.
- Review and record the current and projected service area for stormwater management program/system. The OWNER will provide the service area maps.
- In conjunction with the OWNER provide the current and projected cost of providing stormwater services calculated in 5-year increments.
- Provide an estimated remaining useful life of each associated facility or its major components.
- Review and record the most recent 5-year history of annual contributions to, expenditures from, and balances of any capital account for maintenance or expansion of any facility or its major components. The OWNER will provide this information.
- Review and record CSID's plan to fund the maintenance or expansion of any facility or its major components. The plan must include historical and estimated future revenues and expenditures with an evaluation of how CSID expects to close any projected funding gap. The OWNER will provide the information required to perform this review.
- Compile and submit Stormwater System Needs Assessment to the OEDR on OWNER's behalf.

The OEDR template shall be used in preparing the Needs Assessments. FIRM will assist the OWNER in submitting the Needs Assessment. Both electronic and two hard copies of the final Needs Assessment is to be provided to the OWNER.

Assumptions

Assumptions for the project are as follows:

- OEDR will provide a template for the Needs Assessment.

- OWNER will make available all existing records and information relevant to the project as may be required to coordinate and complete this scope of services.
- OWNER will assist in the completion of the Needs Assessments and described in the Scope of Services.
- OWNER will provide the service area maps and the financial information as described in the Scope of Services.
- FIRM will not conduct a funding analysis or rate projection to meet the funding requirements of identified improvements.
- For Stormwater Utility, OWNER’s responsibilities are limited to culverts, canals and pump stations.

Section 3 – Location

The services to be performed by the FIRM shall be on the following site or sites: **Globaltech Office, CSID WWTP and CSID Service Area.**

Section 4 – Deliverables

The FIRM will provide the following Deliverables to OWNER:

- Completed Wastewater and Stormwater Systems Needs Assessments

Section 5 – Time of Performance

Project will commence after execution of this Work Authorization. The FIRM and OWNER agree to the following schedule:

Task	Time Elapsed to Subtask Completion
Notice to Proceed (NTP)	0 Days
Data Gathering and Review	60 Days after NTP
Preliminary Needs Assessments	90 Days after NTP
OWNER Review	14 Days after Submission
Final Needs Assessments	120 Days after NTP
Submit Needs Assessments	120 Days after NTP

Section 6 – Method and Amount of Compensation

1. The FIRM shall be paid by the OWNER in accordance with the Florida Prompt Payment Act Florida Statute 218.70-79 and in accordance with the payment method as set forth in Section 6 of the AGREEMENT. The calculations shall begin using the date the invoice was received.
2. Total job price: **\$19,888**. Price does not include an allowance.
3. The cost for the above scope of services is a lump sum (LS). The LS is based on the materials, methods, and assumptions presented in the scope of services. The LS shall not be greater than the stated amount unless there is an approved increase in the scope of services.
4. A Budget Summary for the above LS is provided in Attachment A.

Section 7 – Application for Progress Payment

1. Not Applicable

Section 8 – Responsibilities

FIRM shall provide all of the labor and equipment necessary to perform the job or services contracted for at the expense of the FIRM. Property of any kind that may be on the premises, which are the site of the performance of this contract, during the performance of this Work Authorization, shall be at the sole risk of the FIRM.

8.1 The OWNER hereby designates Joe Stephens as the OWNER's representative.

8.2 In addition to applicable provisions of Section 2 of the AGREEMENT, the OWNER will:

- Provide copies of existing drawings and equipment cut sheets if requested by FIRM
- Pay for any required permit fees

The FIRM acknowledges and understands that it is an independent contractor in its relationship with the OWNER. FIRM hereby designates Julia Backlund as the FIRM's representative.

Section 9 – Insurance

The FIRM shall provide certificate of insurance to the OWNER setting forth the type and amount of insurance carried by the FIRM and conforming to the minimum requirements set forth in the AGREEMENT.

Section 10 – Level of Service

The OWNER shall have the right to terminate said Agreement by giving the FIRM thirty (30) days written notice if the service that is being provided is not maintained at levels necessary to provide the required service. The OWNER will determine in its sole judgment what constitutes a satisfactory level of service.

Section 11 – Indemnification

The FIRM shall indemnify and hold harmless the Owner and its officers and employees as set forth in Section 11 of the Agreement.

IN WITNESS WHEREOF, this Work Authorization, consisting of eight (8) pages and Attachment A has been caused fully executed on behalf of the FIRM by its duly authorized officer, and the OWNER has the same to be duly name and, in its behalf, effective as of the date herein above written.

CORAL SPRINGS IMPROVEMENT DISTRICT

Signature of Witness

Signature of President

Printed name of Witness

Dr. Marty Shank
Printed Name of President

Date

Approved as to form and legality

District Counsel

ENGINEER

State of Florida
County of Palm Beach

Globaltech, Inc.
Company

The foregoing instrument was acknowledged before me on this

 day of , 2021 by

Signature

who is personally known to me OR produced _____ as identification.

David Schuman, P.E., Vice President of Engineering
Name and Title (typed or printed)

December 20, 2021
Date

Signature of Notary

Attachment A

Compensation Summary

ATTACHMENT A

151360 CSID - House Bill 53 Needs Assessment

Engineering and Design Budget Summary

Task	Task Description	E6	E4	E2	E1	CAD	Adm 3	Adm 1	Total Labor
		\$180.00	\$155.00	\$108.00	\$88.00	\$108.00	\$77.00	\$52.00	
1	Project Development								
	Coordination	8		4					
	Subtotal Task 1	8	0	4	0	0	0	0	\$ 1,872
2	Engineering and Project Management								
	Project Management	4		16			4		
	Collection System Analysis	4		12	4		1	3	
	WW Treatment Facility Analysis	8		16	4		4		
	WW Disposal System Analysis	4		8	4			4	
	Stormwater System Analysis	16		24	4				
	Project Closeout			4			1	2	
	Subtotal Task 2	36	0	80	16	0	10	9	17,766
	Labor Subtotal Hours	44	0	84	16		10	9	
	Labor Subtotal	\$7,920	\$0	\$9,072	\$1,408		\$770	\$468	
	Labor Total								\$ 19,638
	Field Expenses								\$ 250
	TOTAL								\$ 19,888

9B

WORK AUTHORIZATION

CSID WA No. 198

Globaltech No. 151340

Pursuant to the provisions contained in the "Contract for Professional Engineering Consulting and Design-Build Services on a Continuing Contract Basis " between the CORAL SPRINGS IMPROVEMENT DISTRICT, hereinafter referred to as "OWNER", and Globaltech, Inc., hereinafter referred to as "FIRM", dated July 1, 2012 (hereinafter referred to as "AGREEMENT"), this Work Authorization authorizes the FIRM to provide services under the terms and conditions set forth herein and in the AGREEMENT, which is incorporated herein by reference as though set forth in full.

The OWNER desires design-build services related to Site No. 7 & 8 Canal Bank Stabilization Design and Construction, hereinafter referred to as the "Specific Project".

Site 7 – Four (4) properties located on NW 100th Drive
(1625, 1637, 1659, and 1693)

Site 8 – One (1) property located on NW 100th Drive (1591)

Section 1 – Terms

The FIRM shall be defined as an individual, corporation or contractor having a direct contract with the OWNER or with any other subcontractor in the performance of a part of the work contracted for under the terms of this Work Authorization with the OWNER.

Section 2 – Scope of Work

The OWNER desires design-build services related to the Sites 7 & 8 - Canal Bank Stabilization Construction herinafter referred to as the "Specific Project".

Sites 7 & 8 are located adjacent to each other on opposite sides of NW 16th Street. These sites were first assessed in 2017 as part of WA-123. At that time, underwater diver inspections and boundary surveys were performed to assist in assessing and prioritizing the two sites. Remediation designs are being prepared for Sites 7 and 8 as part of WA-198, however, improvements will only be implemented at Site 8 at this time. The FIRM will provide the following services in accordance with the AGREEMENT:

Task 1 – Project Coordination

1. Prepare project schedule.
2. Conduct Kick-Off meeting with the OWNER to review the project scope and sequencing.
3. Coordinate with the OWNER and adjacent, impacted property owners as to the extent of work and duration.
4. Coordinate Maintenance of Traffic (MOT) issues with the City of Coral Springs.
5. Attend monthly Board Meetings to provide project updates.
6. Conduct progress meetings with Subcontractor and Owner. Review project progress against master schedule and review record information collected and deviations from project design.
7. Collect post-construction photographs and video of each of the sites following Final Completion inspection.
8. Following final submission of the record drawings, the Engineer of Record will issue a Construction Certification Letter stating that the project was completed in substantial accordance with the plans.

Task 2 – Canal Bank Stabilization Engineering and Design

Based on the information previously collected (during WA-123) FIRM will prepare construction plans with details and specification notes to implement

a stone rip-rap canal bank stabilization at Sites 7 and 8. It is assumed that all work will be conducted from within the canal. The construction plans will be executed to a level necessary to complete work (sufficient to be executed by the FIRM) and will include the following sheets (11 total sheets):

- Cover Sheet (1 sheet)
- General Notes and Legend (1 sheet)
- Typical Section Sheets (1 sheets)
- Plan Sheets (2 sheets)
- Cross Section Sheets (4 sheets)
- Detail Sheets (1 sheets)
- Pollution Prevention Plan Sheets (1 sheets)

Draft drawings will be submitted and reviewed with OWNER to highlight impacted properties, vegetation to be removed and the extent of the canal bank improvements. Following a review meeting with OWNER, FIRM will Finalize drawings.

FIRM will develop supplemental specifications to clarify the work activities and sequence of work. Specifications will be incorporated on the construction plans to help guide construction activities.

Task 3 – Construction Management / Services During Construction

1. Coordinate with the OWNER and adjacent, impacted property owners as to the extent of work and duration.
2. Collect pre-construction video and photographs of the construction areas and the adjacent properties.
3. Coordinate traffic issues with the City of Coral Springs. This task will include development of Maintenance of Traffic Plan and easement access along NW 16th Street.
4. Conduct weekly meetings with OWNER to provide updates on project progress.
5. Attend monthly Board Meetings to provide project updates.

6. Assess technical submittals for materials and methods provided by Contractor. Review submittals with OWNER and make recommendations for modifications and/or revisions.
7. Conduct periodic inspections of construction activities enforcing the conditions of the design.
8. Collect and monitor material quantities. Report deviations in material quantities to OWNER.
9. Review elevations and limits of construction establishing the finished base, grade and top of slope.
10. Conduct progress meetings with Subcontractor and Owner. Review project progress against master schedule and review record information collected and deviations from project design.
11. Conduct Substantial Completion inspection and meetings at the completion at the three properties. Develop punch-list items in association with OWNER for Subcontractor to address prior to Final Completion at each site.
12. Conduct Final Completion inspection meeting and site walk through with OWNER and Subcontractor at each of the three properties.
13. Collect post-construction photographs and video of each of the sites following Final Completion inspection.
14. Perform post-construction inspection of irrigation systems with property owners. Post inspection report will be review and signed by property owner.
15. Review and comment / approve Subcontractor's pay request prior to submittal OWNER.
16. Review the as-built survey prepared by Subcontractor and provide comments and/or recommended corrections. This will assure the Engineer of Record that all aspects of the project were constructed in substantial conformance to the Plans and Specifications. Once the final as-built survey has been submitted, Engineer will prepare record drawings for OWNER's documentation.

17. Following final submission of the record drawings, the Engineer of Record will issue a Construction Certification Letter stating that the project was completed in substantial accordance with the plans.

Task 4 – Construction of Proposed Improvements

Construction Services will include all work necessary to implement Canal Bank Stabilization for the single property that make up Site 8. Specific activities will include the following:

1. Establish construction base line survey for the implementation of specific improvements at each of the three properties sites.
2. Locate existing utilities within easement right-of-way.
3. Collect pre-construction walk-through and photographic documentation.
4. Test run and document status of homeowner's irrigation systems. This task will include sign-off of property owner as to the performance of the irrigation system.
5. Mobilize equipment and materials necessary to perform work.
6. Implement MOT along NW 20th Drive.
7. Establish staging areas within the L-108 Canal (on south side of NW 16th Street). Construct temporary ramp to access canal.
8. Remove guard rail (as required) and establish temporary barricades.
9. Install floating silt barriers within the canal to limit construction runoff into the canals at both ends of construction activities.
10. Remove homeowner's irrigation intake piping. Lock out irrigation system pumps.
11. Mobilize barges and construction equipment into canal.
12. Remove and dispose of landscaping encroaching into canal right-of-way and construction zone.
13. Establish design grade of canal banks as per design by removing organic materials along canal bank. Verify grades and elevations using

field GPS survey equipment. Dispose of organic material at an off-site location.

14. Place rip-rap stone per design. During the placement of rip-rap stone, divers will be in the canal to insure proper placement.
15. Install and anchor geotextile per design.
16. Place and compact top soil per design.
17. Extend private irrigation intake lines into the canal and finish per design.
18. Install sod St. Augustine sod to match existing.
19. Collect final elevations using a licensed land surveyor. Final elevations will be compared to design drawings.
20. Clean and restore construction sites prior to Substantial Completion Inspection.
21. De-mobilize and remove all equipment from Site 8 staging area and Owner's facilities prior to final inspection.

Additional Construction Activities:

1. Prepare staging area at the intersection of the L-108 Canal and NW 16th Street. Geotextile fabric will be used to segregate rock from existing sod. Following completion of work, remove rock pad, restore grade and re-sod to match original conditions. Access ramp will be left following construction activities on the north side of NW 16th Street.
2. Install temporary fencing between staging area and private residence by staging area.
3. A flag person will be on site during working hours to direct traffic near and around construction vehicles during mobilization and equipment and material deliveries.
4. Roadway will be kept clean of construction materials.

5. Following completion of construction, the roadway will be cleaned, guard railing will be replaced, and the staging area restored to original condition.

Assumptions

Assumptions for the project are as follows:

- An allowance of \$25,000 is included with this project. Allowance is only to be accessed with OWNER's written approval. Unused portion of allowance to be credited back to OWNER. Allowance is in place for use at the OWNER's discretion for additional work or for unforeseen conditions.
- Working hours will be Monday through Friday from approximately 8:00 AM until 6:00 PM.
- Work at Site 8 will begin no earlier than March 1, 2022.
- Subcontractor's price includes up to 1,800 tons of rip-rap bedding material. In the event that a quantity less than this amount is used, OWNER will be reimbursed at the rate of \$36.30 / ton for unused material (material + placement)
- Subcontractor to provide sanitary facilities at job site in the vicinity of the staging area.
- Permits will not be required for work performed within the CSID right-of-way. Vegetation removal permits will not be required.
- Disturbed irrigation systems will be returned to their existing conditions. Property Owner will be requested to demonstrate system operation and sign status summary prior to construction disturbance.
- Structural repair to adjacent facilities not due to canal bank stabilization activities is beyond the scope of this project. No decks, docks or other structures will be disturbed or replaced under this work authorization.
- A 4-week construction duration, including mobilization and demobilization is assumed.

Section 3 – Location

The services to be performed by the FIRM shall be at Site 8 and will include the following property:

- 1591 NW 100th Drive (Site 8)

Section 4 – Deliverables

The FIRM will provide the following Deliverables to OWNER:

- Draft and Final Engineering Drawings of Design Improvements
- Pre- and post-construction video and still pictures of adjacent properties
- Submittals for materials to be used in the restoration process (rock geotextile fabric, No. 1 DOT coarse aggregate (rip-rap), and sod).
- Canal bank improvements
- Lien releases from all subcontractors
- Record Drawings of Improvements
- Construction Certification

Section 5 – Time of Performance

Project will commence after execution of this Work Authorization and a Notice to Proceed is issued by OWNER. The FIRM and OWNER agree to the following schedule:

Task	Time Elapsed from NTP
Notice to Proceed (NTP)	0 Days
Design	60 Days
Mobilization	90 Days
Substantial completion	120Days
Final Completion	135 Days
Submission of Record Drawings and Certificate of Completion	150 Days

Section 6 – Method and Amount of Compensation

1. The FIRM shall be paid by the OWNER in accordance with the Florida's Prompt Payment Act Florida Statute 218.70-79 and in accordance with the payment method as set forth in Section 6 of the AGREEMENT. The calculations shall begin using the date the invoice was received.
2. Total job price: **\$422,552**. Price includes bonding and a construction allowance of \$25,000.
3. On the terms contained in the FIRM's said proposal for the doing of said work and the said award therefore, and the specifications herein specifically referred to and made a part of this contract.
4. The cost for the above scope of services is a lump sum (LS). The LS is based on the materials, methods, and assumptions presented in the scope of services and may be adjusted based on final detail design and alternative selections or omissions. The LS shall not be greater than the stated amount unless there is an approved increase in the scope of services.
5. A Budget Summary for the above LS is provided in Attachment A.

Section 7 – Application for Progress Payment

1. Unless otherwise prescribed by law, at the end of each month, the FIRM shall submit to the OWNER for review, an Application for Progress Payment filled out and signed by the FIRM covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the AGREEMENT.
2. The Application for Progress Payment shall identify the amount of the FIRM Total Earnings to Date based upon value of original contract Work performed to date as approved by fully executed Change Orders.
3. Payment shall be based upon percentage of work completed based upon the approved schedule of values. Retainage in the amount of 10% will be withheld on the calculated value of any work, with the exception of stored materials which may be paid at the supplier's invoiced cost. At FIRM's request, after 50% completion of the work has been achieved, the OWNER

will implement a reduction in retainage to 5% of all future pay requests. If retainage is reduced, FIRM may not withhold more than 5% retainage from subcontractors or suppliers and will be required to certify compliance with F.S. 218.70 *et seq* on each subsequent pay application. Notwithstanding the foregoing, in no instance can the amount retained be less than the value of OWNER's good faith claims plus the value of the work the OWNER determines remains to be put in place or required to be performed as remedial activities. For the purposes of this section, 50% completion shall be that point in time when OWNER determines that half of the Work required by the Contract has been completed. In no event shall the Work be determined to be 50% completed before the OWNER has paid 50% of the Contract amount and 50% of the Contract time has expired. The amount of previous Pay Estimate payments shall then be subtracted to equal the Balance Due during the Pay Estimate period.

4. When the OWNER determines the Work to be Substantially Complete, the OWNER may reduce the retainage to five percent (5%) of the dollar value of all Work satisfactorily completed to date, provided that the FIRM is making satisfactory progress toward Final Completion of the Work, that in the opinion of both the Engineer and the OWNER there is no specific cause for a greater retainage, and the FIRM obtains the written consent of the Surety Companies furnishing the required Public Construction Bond on consent forms provided by the OWNER. The OWNER may reinstate the retainage up to ten percent (10%) if the OWNER determines, at its discretion or the Engineer's discretion, that the FIRM is not making satisfactory progress toward final completion of the Work or where there is other specific cause for such withholding.
5. Partial payment may be made for the delivered cost of stored materials planned for incorporation into the Work, provided such materials meet the requirements of this Contract, the Contract Drawings, and the Specifications, and are delivered and suitably stored at the project site, or at another location acceptable to the OWNER. Such material must be

- stored in a secure manor acceptable to the OWNER, and in accordance with the manufacturer's recommendations.
6. The delivered cost of such stored or stockpiled materials may be included in any subsequent application for payment provided the FIRM meets the following conditions:
 - a. An applicable purchase order or supplier's invoice is provided listing the materials in detail, the cost of each item, and identifies this specific contract by name.
 - b. The materials are fully insured against loss or damage (from whatever source) or disappearance prior to incorporation into the Work.
 - c. Stored materials approved for payment by the OWNER shall not be removed from the designated storage area except for incorporation into the Work.
 - d. Evidence that the FIRM has verified quantity and quality of the materials delivered (verified packing list).
 7. It is further agreed between the parties that the transfer of title and the OWNER's payment for any stored or stockpiled materials pursuant to these General Conditions, and any applicable provisions of the Supplementary General Conditions, shall in no way relieve the FIRM of the responsibility of ensuring the correctness of those materials and for furnishing and placing such materials in accordance with the requirements of this Contract, the Contract Drawings, the Technical Specifications, and any approved changes thereto.
 8. The following monthly Application for Progress Payment shall be accompanied by Bills of Sale, copies of paid invoices, releases of lien, or other documentation warranting that the FIRM has received the stored materials and equipment free and clear of all liens, charges, security interests, and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence that the stored materials and equipment are covered by appropriate property insurance

and other arrangements to protect the OWNER's interest therein, all of which shall be satisfactory to the OWNER.

9. The FIRM shall warrant and guarantee that title to all Work, materials, and equipment covered by an Application for Progress Payment, whether incorporated in the Work or not, will pass to the OWNER no later than the time of Final Payment free and clear of all liens or other encumbrances.
10. The Engineer shall, within ten (10) days after receipt of each Application for Progress Payment, either indicate in writing a recommendation of payment and present the Application to the OWNER, or return the Application to the FIRM indicating in writing the Engineer's reasons for refusing to recommend payment. In the latter case, the FIRM may make the necessary corrections and resubmit the Application. Twenty (20) days after presentation of the application for progress payment to the OWNER with the Engineer's recommendation, the amount approved will (subject to the provisions of the following Paragraph) become due and when due will be paid by the OWNER to the FIRM.
In the event any dispute with respect to any payment or pay request cannot be resolved between the Contractor and Owner's project staff, Contractor may, in accordance with the alternative dispute resolution requirements of Florida Statute section 218.72, *et seq*, demand in writing a meeting with and review by the OWNER'S (agency) director. In the absence of the agency director, a deputy director may conduct the meeting and review. Such meeting and review shall occur within ten (10) business days of receipt by OWNER of FIRM's written demand. The OWNER's manager, shall issue a written decision on the dispute within ten (10) business days of such meeting. This decision shall be deemed the OWNER's final decision for the purposes of the Local Government Prompt Payment Act.
11. The OWNER may refuse to make payment of the full amount recommended by the Engineer because claims have been made against

the OWNER on account of the FIRM's performance of the Work, or because Liens have been filed in connection with the Work, or there are other items entitling the OWNER to a credit against the amount recommended, but the OWNER must give the FIRM written notice within twenty (20) business days after the date on which the invoice is stamped as received (with a copy to the Engineer) which specifies the invoice deficiency and any action necessary to make the invoice complete and proper.

Section 8 – Responsibilities

The FIRM shall, under no circumstance, look to the OWNER to provide any labor or equipment for the FIRM. The FIRM shall provide all of the labor and equipment necessary to perform the job or services contracted for at the expense of the FIRM. Property of any kind that may be on the premises, which are the site of the performance of this contract, during the performance of this Work Authorization, shall be at the sole risk of the FIRM.

- 8.1** The OWNER hereby designates Shawn Frankenhauser as the OWNER's representative.
- 8.2** In addition to applicable provisions of Section 2 of the AGREEMENT, the OWNER will:
 - Provide copies of existing drawings and equipment cut sheets if requested by FIRM

The FIRM acknowledges and understands that it is an independent contractor in its relationship with the OWNER. The FIRM hereby designates Rick Olson, P.E. as the FIRM's representative.

Section 9 – Insurance

The FIRM shall provide certificate of insurance to the OWNER setting forth the type and amount of insurance carried by the FIRM and conforming to the minimum requirements set forth in the AGREEMENT.

Section 10 – Level of Service

The OWNER shall have the right to terminate said Agreement by giving the FIRM thirty (30) days written notice if the service that is being provided is not maintained at levels necessary to provide the required service. The OWNER will determine in its sole judgment what constitutes a satisfactory level of service.

Section 11 – Indemnification

The Firm shall indemnify and hold harmless the Owner and its officers and employees as set forth in Section 11 of the Agreement.

IN WITNESS WHEREOF, this Work Authorization, consisting of fifteen (15) pages and Attachment A has been caused fully executed on behalf of the FIRM by its duly authorized officer, and the OWNER has the same to be duly name and in its behalf, effective as of the date herein above written.

CORAL SPRINGS IMPROVEMENT DISTRICT

Signature of Witness

Signature of President

Printed name of Witness

Dr. Marty Shank
Printed Name of President

Date
Approved as to form and legality

District Counsel

State of Florida
County of Palm Beach
The foregoing instrument was
acknowledged before me on this

ENGINEER
Globaltech, Inc.
Company

____ day of _____, 2021 by

who is personally known to me OR
produced _____
as identification.

Signature
Troy Lyn, P.E., Vice President
Name and Title (typed or printed)

Signature of Notary

December 20, 2021
Date

Attachment A

Budget Summary

Takeoff Worksheet
 Coral Springs Improvement District
 151340 - CSID Site 7 & 8 Design & Site 8 Construction

			Unit	Quantity	Ext. Price
Task	1	Engineering Design & Support			\$ 47,028.00
Task	2	Construction - Canal Bank Stabilization at Site 8			
		MOB / DEMOB	LOT		\$ 49,500.00
		General Conditions	LOT		\$ 49,500.00
		Temporary Facilities	LOT		\$ 5,500.00
		Maintenance of Traffic	LOT		\$ 11,317.90
		Guad Rail Removal & Replacement	LOT		\$ 8,250.00
		Shore Shaping (Equipment & Labor)	LOT		\$ 96,250.00
		Survey / Record Drawings	LOT		\$ 4,950.00
			LOT		\$ -
		Landscaping Removal & Disposal	LOT		\$ 2,750.00
		Installation of Temporary Fences	LOT		\$ 5,500.00
		GPS Equipment & Support	LOT		\$ 3,300.00
		Testing Services	LOT		\$ 550.00
		Bedding Material (4610 Tons DOT #1 Stone)	1800	\$25.30	\$ 45,540.00
		Bedding Material Placement	1800	\$11.00	\$ 19,800.00
		Geotextile Fabric & Placement	LOT		\$ 2,062.50
		Top Soil	LOT		\$ 4,950.00
		Sod	LOT		\$ 5,940.00
		Floating Turbidity Barriers	LOT		\$ 7,700.00
		Irrigation System Inspection & Repair	LOT		\$ 1,100.00
		Site Restoration along NW 20th Drive	LOT		\$ 18,700.00
		Bid Item Total			\$ 343,160.40
Bid Item	25	Allowance			
		Construction Allowance			\$ 25,000.00
		Bid Item Total			\$ 25,000.00
Bid Item	60	Bond			
		Bond			\$ 7,363.21
		Bid Item Total			\$ 7,363.21
		Grand Total:			\$ 422,552.00

ATTACHMENT A

WA#198 - Site 7 and 8 Canal Bank Stabilization Design

Engineering and Design Budget Summary

Task	Task Description	Officer	E6	E4	CADD	Adm 3	Adm 1	Total Labor	*Sub-Consultant Services	Sub-Consultants
		\$210.00	\$180.00	\$155.00	\$108.00	\$77.00	\$52.00			
1	Project Coordination									
	Project Management		12			2	6			
	Subconsultant Agreements / Coordination		4				2		0	
	Staging Area and MOT Coordination		8							
									0	
	Subtotal Task 1	0	24	0	0	2	8	\$ 4,890	0	
2	Engineering and Design									
	Design Concept and Slope Stability Analysis		24		4		2		0	
	Design Preparation		32		100					
	Cleint Review Meeting		4				2		0	
	Design Modificaitons		4		8		2			
	Data Review		6						0	
	Subtotal Task 2	0	70	0	112	0	6	25,008	0	
3	Services During Construcion (Site 8)									
	Coordination with Adjacenmt Home Owners		12		2		2		0	
	Periodic Site Inspections		60		0					
	Cleint Meetings		8				2		0	
	Project Closeout / Record Drawings		6		8	2	4			
	Subtotal Task 3	0	86	0	10	2	8	\$ 17,130	0	
	Labor Subtotal Hours	0	180	0	122	4	22			
	Labor Subtotal	\$0	\$32,400	\$0	\$13,176	\$308	\$1,144			
	Labor Total							\$ 47,028		
	Subconsultant Labor Total								0	
	Subconsultant Multiplier								1.10	
	Subcontract Total								0	
	TOTAL								\$ 47,028	

9C

WORK AUTHORIZATION 199

No. GT-151358

Pursuant to the provisions contained in the "Contract for Professional Engineering Consulting and Design-Build Services on a Continuing Contract Basis " between the CORAL SPRINGS IMPROVEMENT DISTRICT, hereinafter referred to as "OWNER", and Globaltech, Inc., hereinafter referred to as "FIRM", dated July 1, 2012 (hereinafter referred to as "AGREEMENT"), this Work Authorization, executed this ____ day of _____ 2021, authorizes the FIRM to provide services under the terms and conditions set forth herein and in the AGREEMENT, which is incorporated herein by reference as though set forth in full.

The OWNER desires design-build services related to Pump Stations 1 & 2 – LP Gas Tank Replacement, hereinafter referred to as the "Specific Project".

Section 1 – Terms

The FIRM shall be defined as an individual, corporation or contractor having a direct contract with the OWNER or with any other subcontractor in the performance of a part of the work contracted for under the terms of this Work Authorization with the OWNER.

Section 2 – Scope of Work

The FIRM will provide the following services in accordance with Sections 1 and 2 of the AGREEMENT:

Pump Stations 1 & 2 have engine driven pumps that are fueled by liquid petroleum fuel. In their current configuration, both stations have three (3) 1,000-gallon tanks which are capable of providing approximately 5 days of run-time for the pumps. It is the OWNER's desire to add an additional three tanks to each site effectively doubling the quantity of fuel stored and the available run-times of the pumps

In addition, the three existing storage tanks at PS-1 are approximately 24 years old and should be replaced. This will require that they be excavated, removed and replaced with new tanks in the same location. The tanks at PS-2 were previously replaced in 2014.

Task 1 – Project Development / Data Gathering and Review

FIRM will review existing drawings and meet with subcontractor and OWNER to develop a replacement approach. The approach will be based on existing drawings, field inspections (previously conducted) and approval by OWNER.

Task 2 – Project Management and Coordination

FIRM shall perform the following:

1. Site visits to determine equipment needed and logistics for improvements and inspection of OWNER provided equipment.
2. Conduct a limited Boundary Survey of Pump Stations 1 & 2 to satisfy permitting requirements (Specific Purpose Survey).
3. Prepare subcontract with tank replacement contractor.
4. Review shop drawings and installation materials.
5. Review permits submitted by Subcontractor to the City of Coral Springs Building Department.
6. Document removal and replacement LP Tanks.
7. Schedule and conduct meetings, inspections, and testing with OWNER's staff, as needed.
8. Conduct periodic site inspections during field activities to document removal and replacement of LP Tanks.
9. Prepare project closeout documentation including releases of Liens from Subcontractor, permit closeout and Final Certificate of Completion.

Task 3 – Construction of Improvements

The following work is proposed for the construction improvements and will be repeated at both Pump Stations 1 & 2:

- Prepare shop drawings for tanks, slabs, tie-down cables and piping.
- Prepare permit applications for tank installations using survey conducted in Task 2.
- Conduct utility location inspection prior to excavations.
- Excavate locations for proposed tanks on the east side of the equalization lagoon.
- Install new ballast slabs, tanks and tie downs for three new 1,000-gallon tanks.
- Backfill tank excavations.
- Install steel piping tying the three new tanks in series. Install valving, release valves, and additional appurtenances within the access dome above the tanks as required by code.
- Prepared excavation for tank piping. Cut asphalt drive way providing minimum damage to the existing pavement. Core exterior pump station wall on the East side of the building to bring the gas line into the pump station.
- Install new isolation valve and pressure release on both the interior and exterior of the building.
- Tie the new piping into the exiting manifolded fuel line that feeds the three motors.
- Backfill and compact pipe trenches.
- Backfill the area above the tanks.
- Install 6 steel bollards in locations to protect tank dome.

At Pump Station 1 (PS-1) the three existing tanks will also need to be removed and replaced. In addition to the work previously detailed, the following tasks will also need to be conducted at PS-1:

- Conduct utility locates above the existing tank installation.
- Excavate the three existing tanks exposing the piping and the entire tank profile.
- Remove the existing tanks. Photo-document the existing tanks highlighting the fabrication name plate, and observed damage and the overall condition of the exterior of the tank.
- Load, remove and discard the tanks from the PS-1 Site.
- Install three new 1,000-gallon tanks in the same locations as the tanks that were removed. Install new tie-down cabling.
- Install new steel piping tying the three new tanks in series. Install isolation valves, release valves, and additional appurtenances within the access dome above the tanks as required by code.
- Run new piping to the exterior of the pump station building. Tie new piping to existing piping as it enters the pump station building.
- Restore site.

Assumptions

Assumptions for the project are as follows:

1. Permits will be submitted to the City of Coral Springs Building Department.
2. Permit application will include new site survey, locations of the existing and proposed tanks and piping, and shop drawings for the new tanks and piping.
3. Permit fee will be paid by FIRM using dedicated Permit Fee Allowance.
4. FIRM will replace 4 existing pressure relief valves (2 at each station where piping enters the pump station building).
5. Record drawings will not be prepared.
6. O&M Manuals will be provided for the new tanks.
7. Fuel will not be provided by FIRM.

8. Debris generated during the replacement of the tanks will be removed by FIRM.
9. FIRM will provide sanitary facilities located OUTSIDE the pump station fence enclosure.
10. OWNER to repair asphalt above trench cut.
11. OWNER will remove and dispose of all trees in conflict with the proposed tank gallery.
12. OWNER will re-sod the disturbed areas above the new tank locations.
13. A General Construction Allowance of \$5,000 is included to cover additional work if needed. The allowance will only be accessed with prior written authorization by OWNER.
14. A Permit Allowance of \$1,500 will be available for use by FIRM to pay for permitting fees. Unspent Permit Allowance will be returned to OWNER.

Section 3 – Location

The services to be performed by the FIRM shall be on the following site or sites:

Stormwater Pump Stations 1 and 2

Section 4 – Deliverables

The FIRM will provide the following Deliverables to OWNER:

- Nine (9) new 1,000-gallon LP Fuel tanks and piping
- New isolation valves on the inside and outside of pump station building.
- Replacement release valves (4).
- O&M Manual for new tanks.

Section 5 - Time of Performance

Project will commence after execution of this Work Authorization and a Notice to Proceed is issued by OWNER. The FIRM and OWNER agree to the following schedule:

Task	Time Elapsed to Subtask Completion
Notice to Proceed (NTP)	0 Days
Subcontracting	2 weeks following NTP
Data Gathering / Survey	6 weeks following NTP
Permitting	10 weeks following NTP
Procurement	12 weeks following NTP
Construction	16 weeks following NTP
Closeout	18 weeks following NTP

Section 6 - Method and Amount of Compensation

1. The FIRM shall be paid by the OWNER in accordance with the Florida’s Prompt Payment Act Florida Statute 218.70-79 and in accordance with the payment method as set forth in Section 6 of the AGREEMENT. The calculations shall begin using the date the invoice was received.
2. Total job price: **\$108,971**. (Construction cost + allowance). The Base Price includes a general construction allowance of \$5,000 and permitting allowance of \$1,500.
3. On the terms contained in the FIRM’s said proposal for the doing of said work and the said award therefore, and the specifications herein specifically referred to and made a part of this contract.
4. The cost for the above scope of services is a Lump Sum Price (LSP). The LSP is based on the materials, methods, and assumptions presented in the scope of services and may be adjusted downward based on final detail design and alternative selections or omissions. The LSP shall not be greater than the stated amount unless there is an approved increase in the scope of services. The final stipulated sum (adjusted LSP) submitted herein shall be an amount to be billed on the basis of “percent complete” and stored materials turned over to the OWNER.

5. A Budget Summary for the above lump sum fee is provided in **Attachment A.**

Section 7 – Application for Progress Payment

1. Unless otherwise prescribed by law, at the end of each month, the FIRM shall submit to the OWNER for review, an Application for Progress Payment filled out and signed by the FIRM covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the AGREEMENT.
2. The Application for Progress Payment shall identify the amount of the FIRM Total Earnings to Date based upon value of original contract Work performed to date as approved by fully executed Change Orders.
3. Payment shall be based upon percentage of work completed based upon the approved schedule of values. Retainage in the amount of 10% will be withheld on the calculated value of any work, with the exception of stored materials which may be paid at the supplier's invoiced cost. At FIRM's request, after 50% completion of the work has been achieved, the OWNER will implement a reduction in retainage to 5% of all future pay requests. If retainage is reduced, FIRM may not withhold more than 5% retainage from subcontractors or suppliers and will be required to certify compliance with F.S. 218.70 *et seq* on each subsequent pay application. Notwithstanding the foregoing, in no instance can the amount retained be less than the value of OWNER's good faith claims plus the value of the work the OWNER determines remains to be put in place or required to be performed as remedial activities. For the purposes of this section, 50% completion shall be that point in time when OWNER determines that half of the Work required by the Contract has been completed. In no event shall the Work be determined to be 50% completed before the OWNER has paid 50% of the Contract amount and 50% of the Contract time has expired. The amount of previous Pay Estimate payments shall then be subtracted to equal the Balance Due during the Pay Estimate period.

4. When the OWNER determines the Work to be Substantially Complete, the OWNER may reduce the retainage to five percent (5%) of the dollar value of all Work satisfactorily completed to date, provided that the FIRM is making satisfactory progress toward Final Completion of the Work, that in the opinion of the OWNER there is no specific cause for a greater retainage, and the FIRM obtains the written consent of the Surety Companies furnishing the required Public Construction Bond on consent forms provided by the OWNER. The OWNER may reinstate the retainage up to ten percent (10%) if the OWNER determines, that the FIRM is not making satisfactory progress toward final completion of the Work or where there is other specific cause for such withholding.
5. Partial payment may be made for the delivered cost of stored materials planned for incorporation into the Work, provided such materials meet the requirements of this Contract, the Contract Drawings, and the Specifications, and are delivered and suitably stored at the project site, or at another location acceptable to the OWNER. Such material must be stored in a secure manor acceptable to the OWNER, and in accordance with the manufacturer's recommendations.
6. The delivered cost of such stored or stockpiled materials may be included in any subsequent application for payment provided the FIRM meets the following conditions:
 - a. An applicable purchase order or supplier's invoice is provided listing the materials in detail, the cost of each item, and identifies this specific contract by name.
 - b. The materials are fully insured against loss or damage (from whatever source) or disappearance prior to incorporation into the Work.
 - c. Stored materials approved for payment by the OWNER shall not be removed from the designated storage area except for incorporation into the Work.

- d. Evidence that the FIRM has verified quantity and quality of the materials delivered (verified packing list).
7. It is further agreed between the parties that the transfer of title and the OWNER's payment for any stored or stockpiled materials pursuant to these General Conditions, and any applicable provisions of the Supplementary General Conditions, shall in no way relieve the FIRM of the responsibility of ensuring the correctness of those materials and for furnishing and placing such materials in accordance with the requirements of this Contract, the Contract Drawings, the Technical Specifications, and any approved changes thereto.
8. The following monthly Application for Progress Payment shall be accompanied by Bills of Sale, copies of paid invoices, releases of lien, or other documentation warranting that the FIRM has received the stored materials and equipment free and clear of all liens, charges, security interests, and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence that the stored materials and equipment are covered by appropriate property insurance and other arrangements to protect the OWNER's interest therein, all of which shall be satisfactory to the OWNER.
9. The FIRM shall warrant and guarantee that title to all Work, materials, and equipment covered by an Application for Progress Payment, whether incorporated in the Work or not, will pass to the OWNER no later than the time of Final Payment free and clear of all liens or other encumbrances.
10. In the event any dispute with respect to any payment or pay request cannot be resolved between the FIRM and OWNER's project staff, FIRM may, in accordance with the alternative dispute resolution requirements of Florida Statute section 218.72, *et seq*, demand in writing a meeting with and review by the OWNER'S (agency) director. In the absence of the agency director, a deputy director may conduct the meeting and review. Such meeting and review shall occur within ten (10) business days of receipt by OWNER of FIRM's written demand. The OWNER's manager shall issue a written

decision on the dispute within ten (10) business days of such meeting. This decision shall be deemed the OWNER's final decision for the purposes of the Local Government Prompt Payment Act.

Section 8 – Responsibilities

The FIRM shall, under no circumstance, look to the OWNER to provide any labor or equipment for the FIRM. The FIRM and its Subcontractors shall provide all of the labor and equipment necessary to perform the job or services contracted for at the expense of the FIRM. Property of any kind that may be on the premises, which are the site of the performance of this contract, during the performance of this Work Authorization, shall be at the sole risk of the FIRM.

8.1 The OWNER hereby designates Shawn Frankenhauser as the OWNER's representative.

The FIRM acknowledges and understands that it is an independent contractor in its relationship with the OWNER. The FIRM hereby designates Rick Olson, P.E. as the FIRM's representative.

Section 9 – Insurance

The FIRM shall provide certificate of insurance to the OWNER setting forth the type and amount of insurance carried by the FIRM and conforming to the minimum requirements set forth in the AGREEMENT.

Section 10 – Level of Service

The OWNER shall have the right to terminate said Agreement by giving the FIRM thirty (30) days written notice if the service that is being provided is not maintained at levels necessary to provide the required service. The OWNER will determine in its sole judgment what constitutes a satisfactory level of service.

Section 11 – Indemnification

The Firm shall indemnify and hold harmless the Owner and its officers and employees as set forth in Section 11 of the Agreement.

IN WITNESS WHEREOF, this Work Authorization, consisting of twelve (12) pages and Attachment A has been caused fully executed on behalf of the FIRM by its duly authorized officer, and the OWNER has the same to be duly name and in its behalf, effective as of the date herein above written.

(SEAL)

CORAL SPRINGS IMPROVEMENT DISTRICT

ATTEST:

President

Printed name of Witness

Printed name

Date

Approved as to form and legality

Printed name of Witness

District Counsel

Printed name of Witness

State of Florida
County of Palm Beach

ENGINEER

Globaltech Inc.
Company

The foregoing instrument was acknowledged before me on this

 day of , 2021 by

Signature

who is personally known to me OR produced _____ as identification.

Troy L. Lyn, Vice President

Name and title (typed or printed)

Signature of Notary

December 20, 2021
Date

Attachment A

Budget Summary

ATTACHMENT A
151358 CSID - PS 1 & 2 LP Fuel Tank Installation
Construction Budget

			At Markup
Project Management			\$ 18,450.00
Survey			\$ 10,640.00
Sungas Petroleum Services			
	Installation of 6 new LP Tanks & Piping		\$ 49,593.60
	Removal and Replacement of 3 LP Tanks at PS 1		\$ 15,590.40
	Pressure Relief Valve Replacement (4)	4 252	\$ 1,008.00
	Sales Tax		\$ 4,633.44
General Conditions			\$ 2,124.88
Sanitary Facilities			\$ 430.68
General Construction Allowance			\$ 5,000.00
Permitting Allowance			\$ 1,500.00
Total			\$ 108,971.00

ATTACHMENT A

151358 CSID - PS 1 & 2 LP Fuel Tank Installation

Engineering and Design Budget Summary

Task	Task Description	E6	E4	E2	E1	CAD	Adm 3	Adm 1	Total Labor
		\$180.00	\$155.00	\$108.00	\$88.00	\$108.00	\$77.00	\$52.00	
1	Project Development								
	Site Visits with OWNER	6							
	Meetings with subcontractors	8					2		
	Development of Construction Approach	6							
	Subtotal Task 1	20	0	0	0	0	2	0	\$ 3,754
2	Project Management & Coordination								
	Project Management	12					2	4	
	Subcontract Preparation	4						2	
	Coordination and Review of Survey	4			8				
	Subcontract Management	8						2	
	Shop Drawing Review	2			2			2	
	Summary Report	4			8			2	
	Project Closeout	4					2	2	
	Subtotal Task 2	38	0	0	18	0	4	14	9,460
3	Constuction								
	Periodic Site Inspections	24			80			8	
	Subtotal Task 2	24	0	0	80	0	0	8	4,736
	Labor Subtotal Hours	82	0	0	98	0	6	22	
	Labor Subtotal	\$14,760	\$0	\$0	\$8,624	\$0	\$462	\$1,144	
	Labor Total								\$ 17,950
	Field Expenses								\$ 500
	TOTAL								\$ 18,450

9D

WORK AUTHORIZATION 200

No. GT-151341

Pursuant to the provisions contained in the "Contract for Professional Engineering Consulting and Design-Build Services on a Continuing Contract Basis " between the CORAL SPRINGS IMPROVEMENT DISTRICT, hereinafter referred to as "OWNER", and Globaltech, Inc., hereinafter referred to as "FIRM", dated July 1, 2012 (hereinafter referred to as "AGREEMENT"), this Work Authorization, executed this ____ day of _____ 2021, authorizes the FIRM to provide services under the terms and conditions set forth herein and in the AGREEMENT, which is incorporated herein by reference as though set forth in full.

The OWNER desires design-build services related to Pump Stations 1 & 2 – Trash Rack Bracket Replacement, hereinafter referred to as the "Specific Project".

Section 1 – Terms

The FIRM shall be defined as an individual, corporation or contractor having a direct contract with the OWNER or with any other subcontractor in the performance of a part of the work contracted for under the terms of this Work Authorization with the OWNER.

Section 2 – Scope of Work

The FIRM will provide the following services in accordance with Sections 1 and 2 of the AGREEMENT:

Pump Stations 1 & 2 have a series of wooden slats that serve as a coarse filter to prevent large debris from entering the stormwater pumps. The slats are held in place by three sets of brackets which are mounted on the adjacent concrete piers. Over the past 50 years, the steel brackets have corroded and several of the hoops holding the slats in place have fallen off. It is the OWNER's desire to remove and replace the steel brackets so that proper maintenance of the slats can be performed and to protect the pumps.

Task 1 – Project Development / Data Gathering and Review

The FIRM will review existing drawings and meet with subcontractors to develop a repair approach. The approach will be based on existing drawings, field inspections (previously conducted) and approval by OWNER.

Task 2 – Engineering and Project Management

FIRM shall perform the following:

1. Site visits to determine equipment needed and logistics for improvements and inspection of OWNER provided equipment.
2. Prepare subcontract with underwater dive contractor. Review liability insurance and underwater construction rider.
3. Prepare fabrication detail and specifications.
4. Coordinate material and equipment purchase and fabrication.
5. Schedule and conduct meetings, inspections, and testing with OWNER's staff, as needed.
6. Conduct periodic site inspections during field activities.
7. Prepare project closeout documentation.

Task 3 – Construction of Improvements

The following work is proposed for the construction of this project:

Replacement of Steel Brackets

- Coordinate pump station shut down with OWNER
- Install turbidity barrier in canal to prevent construction debris from migrating upstream in the canal.
- Remove wooden slats and leave for OWNER's disposal.
- Remove existing underwater brackets cutting bolts with a torch and grinder.
- Install new stainless steel all-thread bolts through concrete pier.

- Bolt new angles in place using stainless steel hardware.
- Install new carbon steel brackets onto the end of the angles. Adjust to provide proper spacing and geometry for slats.
- Install anodes for mid and lower supports located below the water line.
- Remove top bracket above water surface.
- Epoxy in place new bolts for brackets
- Install new carbon steel angles and brackets above water line.
- Assist owner with installing slats into new brackets / hoops.
- Clean up all debris and return site to original condition.

Assumptions

Assumptions for the project are as follows:

1. No permitting will be required.
2. Design drawings will not be prepared – fabrication will be based upon original design drawings obtained from OWNER and prepared by Gee & Jenson Circa 1971.
3. Installation of new trash rack brackets will require removing wooden timbers from two pump bays at a time. This work will be scheduled and coordinated with CSID's surface water maintenance department.
4. During work underwater construction activities, all electrical and mechanical system associated with the pump stations shall be locked out and tagged out by CSID staff and witnessed by a representative of FIRM.
5. Work anticipated to be complete in four (4) days. Contingency day in FIRM's proposal will be eliminated.
6. OWNER will provide and install silt barrier at site prior to beginning work. This line item will be removed from FIRM's proposal.
7. Record drawings will not be prepared.

8. O&M Manuals will not be prepared for trash rack brackets.
9. Debris generated during the removal and replacement of the brackets and angels will be removed and disposed of by FIRM.
10. OWNER will periodically remove large floating debris from canal to keep work area clean and clear.
11. An allowance of \$10,000 is included to cover additional work if needed. The allowance will only be accessed with prior written authorization by OWNER.

Section 3 – Location

The services to be performed by the FIRM shall be on the following site or sites:

Stormwater Pump Stations 1 and 2

Section 4 – Deliverables

The FIRM will provide the following Deliverables to OWNER:

- New brackets and mounting hardware.

Section 5 - Time of Performance

Project will commence after execution of this Work Authorization and a Notice to Proceed is issued by OWNER. The FIRM and OWNER agree to the following schedule:

Task	Time Elapsed to Subtask Completion
Notice to Proceed (NTP)	0 Days
Subcontracting	4 weeks following NTP
Procurement / Fabrication	8 weeks following NTP
Construction	12 weeks following NTP
Closeout	14 weeks following NTP

Section 6 - Method and Amount of Compensation

1. The FIRM shall be paid by the OWNER in accordance with the Florida's Prompt Payment Act Florida Statute 218.70-79 and in accordance with the payment method as set forth in Section 6 of the AGREEMENT. The calculations shall begin using the date the invoice was received.
2. Total job price: **\$108,593**. (Construction cost + allowance). The Base Price includes and allowance of \$10,000.
3. On the terms contained in the FIRM's said proposal for the doing of said work and the said award therefore, and the specifications herein specifically referred to and made a part of this contract.
4. The cost for the above scope of services is a Lump Sum Price (LSP). The LSP is based on the materials, methods, and assumptions presented in the scope of services and may be adjusted downward based on final detail design and alternative selections or omissions. The LSP shall not be greater than the stated amount unless there is an approved increase in the scope of services. The final stipulated sum (adjusted LSP) submitted herein shall be an amount to be billed on the basis of "percent complete" and stored materials turned over to the OWNER.
5. A Budget Summary for the above lump sum fee is provided in **Attachment A**.

Section 7 – Application for Progress Payment

1. Unless otherwise prescribed by law, at the end of each month, the FIRM shall submit to the OWNER for review, an Application for Progress Payment filled out and signed by the FIRM covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the AGREEMENT.
2. The Application for Progress Payment shall identify the amount of the FIRM Total Earnings to Date based upon value of original contract Work performed to date as approved by fully executed Change Orders.

3. Payment shall be based upon percentage of work completed based upon the approved schedule of values. Retainage in the amount of 10% will be withheld on the calculated value of any work, with the exception of stored materials which may be paid at the supplier's invoiced cost. At FIRM's request, after 50% completion of the work has been achieved, the OWNER will implement a reduction in retainage to 5% of all future pay requests. If retainage is reduced, FIRM may not withhold more than 5% retainage from subcontractors or suppliers and will be required to certify compliance with F.S. 218.70 *et seq* on each subsequent pay application. Notwithstanding the foregoing, in no instance can the amount retained be less than the value of OWNER's good faith claims plus the value of the work the OWNER determines remains to be put in place or required to be performed as remedial activities. For the purposes of this section, 50% completion shall be that point in time when OWNER determines that half of the Work required by the Contract has been completed. In no event shall the Work be determined to be 50% completed before the OWNER has paid 50% of the Contract amount and 50% of the Contract time has expired. The amount of previous Pay Estimate payments shall then be subtracted to equal the Balance Due during the Pay Estimate period.
4. When the OWNER determines the Work to be Substantially Complete, the OWNER may reduce the retainage to five percent (5%) of the dollar value of all Work satisfactorily completed to date, provided that the FIRM is making satisfactory progress toward Final Completion of the Work, that in the opinion of the OWNER there is no specific cause for a greater retainage, and the FIRM obtains the written consent of the Surety Companies furnishing the required Public Construction Bond on consent forms provided by the OWNER. The OWNER may reinstate the retainage up to ten percent (10%) if the OWNER determines, that the FIRM is not making satisfactory progress toward final completion of the Work or where there is other specific cause for such withholding.

5. Partial payment may be made for the delivered cost of stored materials planned for incorporation into the Work, provided such materials meet the requirements of this Contract, the Contract Drawings, and the Specifications, and are delivered and suitably stored at the project site, or at another location acceptable to the OWNER. Such material must be stored in a secure manor acceptable to the OWNER, and in accordance with the manufacturer's recommendations.
6. The delivered cost of such stored or stockpiled materials may be included in any subsequent application for payment provided the FIRM meets the following conditions:
 - a. An applicable purchase order or supplier's invoice is provided listing the materials in detail, the cost of each item, and identifies this specific contract by name.
 - b. The materials are fully insured against loss or damage (from whatever source) or disappearance prior to incorporation into the Work.
 - c. Stored materials approved for payment by the OWNER shall not be removed from the designated storage area except for incorporation into the Work.
 - d. Evidence that the FIRM has verified quantity and quality of the materials delivered (verified packing list).
7. It is further agreed between the parties that the transfer of title and the OWNER's payment for any stored or stockpiled materials pursuant to these General Conditions, and any applicable provisions of the Supplementary General Conditions, shall in no way relieve the FIRM of the responsibility of ensuring the correctness of those materials and for furnishing and placing such materials in accordance with the requirements of this Contract, the Contract Drawings, the Technical Specifications, and any approved changes thereto.
8. The following monthly Application for Progress Payment shall be accompanied by Bills of Sale, copies of paid invoices, releases of lien, or

- other documentation warranting that the FIRM has received the stored materials and equipment free and clear of all liens, charges, security interests, and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence that the stored materials and equipment are covered by appropriate property insurance and other arrangements to protect the OWNER's interest therein, all of which shall be satisfactory to the OWNER.
9. The FIRM shall warrant and guarantee that title to all Work, materials, and equipment covered by an Application for Progress Payment, whether incorporated in the Work or not, will pass to the OWNER no later than the time of Final Payment free and clear of all liens or other encumbrances.
 10. In the event any dispute with respect to any payment or pay request cannot be resolved between the FIRM and OWNER's project staff, FIRM may, in accordance with the alternative dispute resolution requirements of Florida Statute section 218.72, *et seq*, demand in writing a meeting with and review by the OWNER'S (agency) director. In the absence of the agency director, a deputy director may conduct the meeting and review. Such meeting and review shall occur within ten (10) business days of receipt by OWNER of FIRM's written demand. The OWNER's manager shall issue a written decision on the dispute within ten (10) business days of such meeting. This decision shall be deemed the OWNER's final decision for the purposes of the Local Government Prompt Payment Act.

Section 8 – Responsibilities

The FIRM shall, under no circumstance, look to the OWNER to provide any labor or equipment for the FIRM. The FIRM and its Subcontractors shall provide all of the labor and equipment necessary to perform the job or services contracted for at the expense of the FIRM. Property of any kind that may be on the premises, which are the site of the performance of this contract, during the performance of this Work Authorization, shall be at the sole risk of the FIRM.

8.1 The OWNER hereby designates Shawn Frankenhauser as the OWNER's representative.

The FIRM acknowledges and understands that it is an independent contractor in its relationship with the OWNER. The FIRM hereby designates Rick Olson, P.E. as the FIRM's representative.

Section 9 – Insurance

The FIRM shall provide certificate of insurance to the OWNER setting forth the type and amount of insurance carried by the FIRM and conforming to the minimum requirements set forth in the AGREEMENT.

Section 10 – Level of Service

The OWNER shall have the right to terminate said Agreement by giving the FIRM thirty (30) days written notice if the service that is being provided is not maintained at levels necessary to provide the required service. The OWNER will determine in its sole judgment what constitutes a satisfactory level of service.

Section 11 – Indemnification

The Firm shall indemnify and hold harmless the Owner and its officers and employees as set forth in Section 11 of the Agreement.

IN WITNESS WHEREOF, this Work Authorization, consisting of ten (10) pages and Attachment A has been caused fully executed on behalf of the FIRM by its duly authorized officer, and the OWNER has the same to be duly name and in its behalf, effective as of the date herein above written.

(SEAL)

CORAL SPRINGS IMPROVEMENT DISTRICT

ATTEST:

President

Printed name of Witness

Printed name

Date

Approved as to form and legality

Printed name of Witness

District Counsel

Printed name of Witness

State of Florida
County of Palm Beach

ENGINEER

Globaltech Inc.
Company

The foregoing instrument was acknowledged before me on this

 day of , 2021 by

Signature

who is personally known to me OR produced _____ as identification.

Troy L. Lyn, Vice President

Name and title (typed or printed)

Signature of Notary

December 20, 2021
Date

Attachment A

Budget Summary

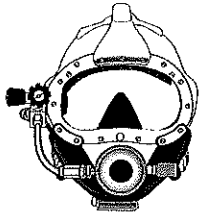


Takeoff Worksheet

12/07/21

**Coral Springs Improvement Dist
151341 CSID PS 1 & 2 Trash Rack Bracket Replacement**

Assembly#	Part#	Description	Unit	Quantity	Ext. Price
Job: 151341 CSID PS 1 & 2 Trash Rack Bracket Replacement					
Bid Item: 1 PS 1 & 2 Trash Rack Bracket Replaceme					
		General Condition	LOT	1.00	3,350.00
		Engineering	LOT	1.00	21,419.00
		Sanitary	MONTH	1.00	430.68
		Industrial Divers	LOT	1.00	39,123.84
		Rack Support	LOT	1.00	34,269.43
		Allowance	LOT	1.00	10,000.00
				Bid Item Totals:	108,593.00
				Grand Totals:	108,593.00



INDUSTRIAL DIVERS CORP.

2901 SW 3rd Ave STE #5
 Fort Lauderdale, FL 33315
 (954) 523-2906 Office (954) 525-6521 Fax
 idc-office@att.net

Proposal

Date	Submitted by
8/26/2021	A. Delgado

Name / Address
Globaltech, Inc. 6001 Broken Sound Parkway NW Suite 610 Boca Raton, FL 33487

Project Address
Rick Olson 561-997-6433 Office 954-647-9530 Cell rolson@globaltechdb.com

Project Name / Job No.	Terms
CSID – Pump Station #1 & #2	Net 30

Description	Qty	Rate	Total
<p>Coral Springs Improvement District - Pump Stations #1 & #2 Vegetative Trash Rack Bracket Replacement</p> <p>Industrial Divers Corporation (IDC) will provide a three diver team surface supplied with communications equipped diving helmets for a diver and standby diver.</p> <p>Rates: (Non-Prevailing Wage Determination)</p> <ul style="list-style-type: none"> • 3 Diver Team Straight Time: \$2,650.00/day "door to door" Monday - Friday 0700 hrs. to 1700 hrs. • 3 Diver Team Overtime: \$3,250.00/day "door to door" weekends, holidays and night shift 1800 - 0400 hrs. <p>Equipment:</p> <p>Hydraulic powered underwater tools: grinders, hammer drills, jack hammers, and variable speed reversible drill, with portable hydraulic power pack, and 200' of duplex hydraulic hose @ \$350.00/day.</p> <p>18' flatbed crane truck (33,000lbs GVW), 4 Ton capacity crane with 60' stick @ \$600.00/ day</p> <p>Closed Circuit video system with lights and/or HD Camera with lights for HD video and digital still photos @ \$250.00/ day</p> <p>Underwater cutting and welding gear with a D.C. welding machine @ \$350.00/day</p> <p>Consumable Materials:</p>			

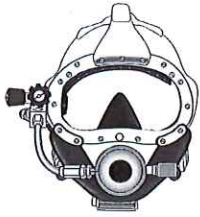
Total

The above terms and conditions are hereby accepted. A finance charge of 1 1/2% per month which is an annual percentage rate of 18% is charged. Purchaser shall be liable for all the cost of collection including reasonable attorney's fee.

Signature

Print Name & Title

Date



INDUSTRIAL DIVERS CORP.

2901 SW 3rd Ave STE #5
 Fort Lauderdale, FL 33315
 (954) 523-2906 Office (954) 525-6521 Fax
 idc-office@att.net

Proposal	
Date	Submitted by
8/26/2021	A. Delgado

Name / Address
Globaltech, Inc. 6001 Broken Sound Parkway NW Suite 610 Boca Raton, FL 33487

Project Address
Rick Olson 561-997-6433 Office 954-647-9530 Cell rolson@globaltechdb.com

Project Name / Job No.	Terms
CSID – Pump Station #1 & #2	Net 30

Description	Qty	Rate	Total
<ul style="list-style-type: none"> • U/W Cutting Rods \$4.00 each • Oxygen for burning: \$60.00/bottle • U/W Welding Rods \$40.00/lb. • Hydraulic cement \$60.00/100 lbs. • Ultrabond anchor epoxy \$40./22 oz cartridge • Two part epoxy splash zone \$100.00/gallon 			
Project Estimate:			
Trash Rack Bracket Replacement Pump Station #1			
• 3 Diver Team: 4 days @ \$2,650.00/day	4	2,650.00	10,600.00
• Hydraulic powered underwater tools: 4 days @ \$350.00/day.	4	350.00	1,400.00
18' flatbed crane truck (33,000lbs GVW), 4 Ton capacity crane with 60' stick: 5 days @ \$600.00/ day	4	600.00	2,400.00
• Underwater cutting & welding gear with a D.C. welding machine: \$350.00/day	4	350.00	1,400.00
• Underwater Cutting Rods: \$4.00/each	24	4.00	96.00
• Oxygen for Cutting: \$60.00/bottle	1	60.00	60.00
• Closed Circuit video system: 1 day @ \$250.00/day	1	250.00	250.00
• Floating Turbidity Barrier: \$125.00/ day	4	125.00	500.00
• Ultrabond anchor epoxy \$40./22 oz cartridge	4	40.00	160.00
• Stainless Steel All Thread: 28' @ \$25.00/ foot	28	25.00	700.00
• Stainless Steel Nuts, Washers, and Lock Washers: \$400.00/ Pump Satiation	1	400.00	400.00
Contingency Day			
• 3 Diver Team: 1 day @ \$2,650.00/day	1	2,650.00	2,650.00
• Hydraulic powered underwater tools: 1 day @ \$350.00/day.	1	350.00	350.00

DELETE
DELETE
DELETE

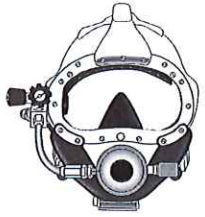
Total

The above terms and conditions are hereby accepted. A finance charge of 1 1/2% per month which is an annual percentage rate of 18% is charged. Purchaser shall be liable for all the cost of collection including reasonable attorney's fee.

Signature

Print Name & Title

Date



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2901 SW 3rd Ave STE #5
 Fort Lauderdale, FL 33315
 (954) 523-2906 Office (954) 525-6521 Fax
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Proposal	
Date	Submitted by
8/26/2021	A. Delgado

Name / Address
Globaltech, Inc. 6001 Broken Sound Parkway NW Suite 610 Boca Raton, FL 33487

Project Address
Rick Olson 561-997-6433 Office 954-647-9530 Cell rolson@globaltechdb.com

Project Name / Job No.	Terms
CSID – Pump Station #1 & #2	Net 30

Description	Qty	Rate	Total	
18' flatbed crane truck (33,000lbs GVW), 4 Ton capacity crane with 60' stick: 1 day @ \$600.00/ day	1	600.00	600.00	DELETE
• Floating Turbidity Barrier: \$125.00/ day	1	125.00	125.00	DELETE
Trash Rack Bracket Replacement Pump Station #2				
• 3 Diver Team: 4 days @ \$2,650.00/day	4	2,650.00	10,600.00	
• Hydraulic powered underwater tools: 5 days @ \$350.00/day.	4	350.00	1,400.00	
• 18' flatbed crane truck (33,000lbs GVW), 4 Ton capacity crane with 60' stick: 4 days @ \$600.00/ day	4	600.00	2,400.00	
• Underwater cutting & welding gear with a D.C. welding machine: \$350.00/day	4 ✓	350.00	350.00	\$1,400
• Underwater Cutting Rods: \$4.00/each	24	4.00	96.00	
• Oxygen for Cutting: \$60.00/bottle	1	60.00	60.00	
• Closed Circuit video system: 1 day @ \$250.00/day		250.00	250.00	
• Floating Turbidity Barrier: \$125.00/ day	4	125.00	500.00	DELETE
• Ultrabond anchor epoxy \$40./22 oz cartridge	4	40.00	160.00	
• Stainless Steel All Thread: 28' @ \$25.00/ foot	28	25.00	700.00	
• Stainless Steel Nuts, Washers, and Lock Washers: \$400.00/ Pump Satiation	1	400.00	400.00	
Contingency Day				
• 3 Diver Team: 1 day @ \$2,650.00/day	1	2,650.00	2,650.00	DELETE
• Hydraulic powered underwater tools: 5 days @ \$350.00/day.	1	350.00	350.00	DELETE
• 18' flatbed crane truck (33,000lbs GVW), 4 Ton capacity crane with 60' stick: 1 day @ \$600.00/ day	1	600.00	600.00	DELETE
• Floating Turbidity Barrier: \$125.00/ day	1	125.00	125.00	DELETE
Proposal e-mailed to Rick Olson <rolson@globaltechdb.com>				

The above terms and conditions are hereby accepted. A finance charge of 1 1/2% per month which is an annual percentage rate of 18% is charged. Purchaser shall be liable for all the cost of collection including reasonable attorney's fee.

Total	\$42,332.00
--------------	------------------------

\$34,932

Signature _____

Print Name & Title _____

Date _____

G&G Industrial Services, Inc.

5910 SW 43rd Street
Davie, FL 33314

Proposal

September 26, 2021

Job Name: CSID Pump Station 1 and 2 improvements

Customer name: Globaltech, Inc.
Attn: Mr. Rick Olson P.E.

It is our pleasure to present the follow proposed services.

Pump Station 1 and 2 Vegetation Rack supports

Item	Amount
Supply only (16) Carbon Steel top side wall brackets	\$2,400.00
Supply only (16) Carbon Steel Mid side wall brackets	\$4,400.00
Supply only (16) Carbon Steel lower side wall brackets	\$5,600.00
Supply only (24) Carbon Steel horizontal supports	\$15,450.00

Included:

Shop drawings
Anodes for Mid and lower supports

Not included:

Painting
Installation
Vertical Wood

Thank you for considering us for this project.

Sincerely,

Greg Bisogno
G&G Industrial Services, Inc.

TENTH ORDER OF BUSINESS

Globaltech, Inc.
CSID Engineer's Report
December 20, 2021

PROJECTS UNDER CONTRACT

WA#168 – Membrane Train Flush Valve Addition / Backflow preventer elimination– In Progress

- Approved by Board – 11/18/19
- Amendment to complete Trains 1 & 3 approved by Board – 10/18/21
- Materials should be delivered by mid-January
- Construction should take approximately one week
- Estimated substantial completion by end of January 2022.

WA#182 – AWIA Risk Assessment and Emergency Response Plan - In Progress

- Approved by Board – 10/19/20
- Submitted Executive Summary and Risk and Resilience Assessment – 6/21/21
- Submit certificate of completion to EPA for RRA – 6/21/21
- Submitted certificate of completion to EPA for ERP – 12/10/21
- Final submittal – 12/17/21
- Estimated project completion – 12/31/21

WA#183 – Above Ground Fuel Storage Tanks & Dispensing System – Substantially Complete

- Approved by Board – 11/16/20
- Pump replaced on unleaded fuel tank 12/06/21
- Addressing level sensor and emergency disconnect.
- Project should be complete in January 2022

WA#184 – HSP 7 Day Tank Replacement – Substantially Complete

- Approved by Board – 1/25/21
- Issued subcontract to Cypress Construction Group
- Project substantially complete – 5/27/21
- Meeting with inspector to re-visit electrical issues
- Project should be complete in January 2022

WA#187 – 500KW Emergency Generator – In Progress

- Approved by Board – 5/17/21
- Project kick-off meeting 6/10/21
- Signed purchase order for generator – 6/10/21
- Received revised submittals – scheduling a review meeting with staff – 10/13/21
- Released generator for production
- Preparing preliminary electrical drawings
- Estimated project completion – October 2022

WA#188 – Atlantic Blvd. 4-inch Sleeve – Substantially Complete

- Approved by Board – 12/21/20
- Sleeve installed 10/05/21
- Preparing bore log, record drawings, permit close-out
- Estimated project completion – 12/31/21

**CSID Engineer's Report
December 20, 2021**

ACTIVE PROJECTS (Cont.)

WA#192 – Canal Right-of-Way Tree Inventory – On Hold

- Approved by Board – 9/20/21
- Waiting on direction from CSID
- Estimated completion – 20 weeks from notice to begin work

WA#193 – WWTP Operating Permit Renewal and Reuse Study – In Progress

- Approved by Board – 9/20/21
- Met with staff to conduct facility audit
- Draft to be submitted 12/08/21
- Comments receive from CSID
- Submitted draft to DEP by 12/17/21
- Permit should be renewed in January 2022

WA#195 – PW8 VFD – In Progress

- Approved by Board – 11/15/21
- Conducted kick off meeting
- Issued Purchase Orders and Subcontracts
- Estimated project completion – May 2022

WA#196 - DIW Building Breaker Replacement – In Progress

- Approved by Board – 11/15/21
- Conducted kick off meeting
- Issued Purchase Orders and Subcontracts
- Coordinating work and site visit with FPL
- Estimated project completion – June 2022

WA#197 – Distribution Line Valve Replacement –In Progress

- Approved by Board – 11/15/21
- Conducted internal kick off meeting – 12/08/21
- Scheduling excavation above valves to confirm sizes and materials
- New valves will be ordered in January
- Estimated project completion – May 2022

December 20, 2021

Work Authorizations Under Development

WA#191 – Replace Blowers 4 & 5 – Under review

WA#194 – HB53 Compliance – On current Board Agenda

WA#198 – Canal Sites 7 & 8 Design and Stabilization – on current Board Agenda

WA#199 – LP Fuel Tank Installation – under development (12/20/21 Board)

WA#200 – PS 1 & 2 Trash Rack Bracket Replacement – under development

WA#XX – Generator Storage Building – under development

WA#XX – Site 16 Canal Bank Assessment and Design – under development