## NATIONWIDE SYSTEM INTEGRATION Providing solutions since 1962

CONTROL INSTRUMENTS, INC.

5253 OAKDALE ROAD • SMYRNA, GEORGIA 30082 MAILING ADDRESS: 4480H SOUTH COBB DRIVE • PMB 301 • SMYRNA, GA 30080-6984 PHONE: 404/351-1085 • FAX: 404/794-5784 • EMAIL: admin@c2iinc.com

FLORIDA OPERATIONS OFFICE:

23 S. DILLINGHAM AVENUE, STE. A KISSIMMEE, FL 34741

PHONE: 404/351-1085

FIELD OFFICES: Georgia

Florida Tennessee

## **QUALIFICATION PROPOSAL FOR** SCADA UPGRADES FOR EAST WTP, **EAST WWTP & WEST WWTP**

RFQ 2024-005 CITY OF MARGATE, FLORIDA

DATE: MARCH 14, 2024

REFERENCE: RFQ 2024 MARGATE FL OWNER: CITY OF MARGATE, FL.

PREPARED BY: CONTROL INSTRUMENTS, INC.





























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# CONTROL INSTRUMENTS INC.

## MARGATE FLORIDA SCADA QUALIFICATON PROPOSAL



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#### MARGATE FLORIDA SCADA QUALIFICATON PROPOSAL





#### 1. Letter of Transmittal

City of Margate Purchasing Division 5790 Margate Boulevard Margate, FL 33063

SUBJECT: Qualification Proposal Design/Build SCADA Upgrade RFQ 2024-005

We are pleased to have the opportunity to provide you with our qualification for SCADA upgrades.

C2i previously provided the SCADA system at Margate and supported a service contract for many years

C2i has provided and commissioned over 1,050 SCADA systems since our beginning in 1962.

We are a CSIA Certified Systems Integrator.

We maintain a UL508A and UL698 certifications for our manufacturing facility. C2i is factory authorized and certified to install commission and maintain all SCADA hardware and software proposed for this project, and all control systems work on this project will be overseen by a Licensed Professional Engineer in the State of Florida.

We are confident we have the resources, skills, experience, and certifications to professionally support City of Margate with all of the SCADA services required to upgrade the three treatment facilities.

This project team's technical lead Tom Economos was a part of the team who installed much of the hardware and software being upgraded, and as such, we believe our team provides the Owner a significant advantage over others that will provide added efficiency and mitigate risk.

This proposal provides detailed information on our company, project team, our experience with the proposed industry-standard Dell Computers, Modicon PLC hardware and VTSCADA SCADA software in accordance with the RFP requirements.

We would be honored to serve again as the City of Margate as a SCADA provider.

SUBMITTING ORGANIZATION: Control Instruments, Inc. (C2i)

5253 Oakdale Road. SE | Smyrna, GA 30082

AUTHORIZING OFFICER CONTACT: Name: Mark Healey, President

Tracy Bumpers, Vice President

Phone: (404) 351-1085 FAX: (404) 794-5784

We would be happy to review, provide clarifications or additional information as required. Please feel free to contact us anytime.

Sincerely,

Mark Healey

Mark Healey | President Control Instruments, Inc. | C2i 5253 Oakdale Road. SE | Smyrna, GA 30082

O: (404) 351-1085

mhealey@c2iinc.com www.c2iinc.com

## MARGATE FLORIDA SCADA QUALIFICATON PROPOSAL





## 2. Bid Forms

2.1. Proposal Form – Cover Sheet

(See next page)

#### **ACKNOWLEDGEMENT FORM**

## ADDENDUM NO. 1

#### **RFQ NO. 2024-005**

I acknowledge receipt of Addendum No. 1 for RFQ No. 2024-005. This addendum contains six (6) pages. Please include the original of this form in your qualifications submission.

Company Name: Control Instrume	ents, Inc
Address: 5253 Oakdale Rd., Sn	
Name of Signer Mark G. Healey	
(please print) Signature: Male M 1004	<sub>Date:</sub> 3/12/24
Telephone: 404-351-1085	

Please fax your completed form to (954) 935-5258 or e-mail to <a href="mailto:purchase@margatefl.com">purchase@margatefl.com</a>.

<u>Kelly McGilvray</u> Kelly McGilvray Buyer II

Wednesday, March 6, 2024

NOTE: The original of this form must be included with your qualifications submission.

N/A

## WHEN OFFEROR IS AN INDIVIDUAL

IN WITNESS WHEREOF, the Offeror here of, 20	to has executed this Proposal Form this	day
	5	
	By: Signature of Individual	
Witness	Printed Name of Individual	
Witness	Business Address	
	City/State/Zip	
	Business Phone Number	
State of		
County of		
The foregoing instrument was acknowledged to by	ged before me on this day of (Name), who is personally known to me	, e by
means of physical presence or identification and who did (did not) take an	(Name), who is personally known to me online notarization or who has produced oath.	as
WITNESS my hand and official seal.		
NOTARY PUBLIC	_	
(Name of Notary Public: Print, Stamp, or type as Commissioned)	_	

OR TRADE NAME	N/A	<u>US</u>
IN WITNESS WHEREOF, the O of,	fferor hereto has executed this Proposal Form this 20	_ day
	Printed Name of Firm	
	By: Signature of Owner	
Witness	Printed Name of Individual	
Witness	Business Address	
	City/State/Zip	
	Business Phone Number	
State of		
County of		
by	cknowledged before me this day of	ans of
WITNESS my hand and official s	seal.	
NOTARY PUBLIC		
(Name of Notary Public: Print, Son type as Commissioned)	tamp,	

2024-005

WHEN OFFEROR IS A PARTNERSHIP	N/A
IN WITNESS WHEREOF, the Offeror hereto of, 20	o has executed this Proposal Form this day
	Printed Name of Partnership
Ву	: Signature of General or Managing Partner
	Signature of General or Managing Partner
Witness	Printed Name of partner
Witness	Business Address
	City/State/Zip
	Business Phone Number
State of	State of Registration
County of	
The foregoing instrument was acknowledge by	d before me this day of, 20,(Name),(Title) of(Name of Company) who is personally known to or online notarization or who has produced
	in oath.
WITNESS my hand and official seal.	
NOTARY PUBLIC	-
(Name of Notary Public: Print, Stamp, or type as Commissioned)	-

2024-005

## WHEN OFFEROR IS A CORPORATION

IN WITNESS WHEREOF, the Offeror he day of March, 20 24 .	ereto has executed this Proposal Form this 12th
	Control Instruments, Inc. Printed Name of Corporation
SEAL (CORPORATE SERL)	Printed State of Incorporation  By:
ATTEST:  By Carlle E Jul  Secretary	5253 Oakdale Road Address of Corporation Smyrna, GA 30082 City/State/Zip 404-351-1085 Business Phone Number
State of Georgia	Business Phone Number
County of Cobb	
20 24 , by Mark G. Healey Control Instruments, Inc.	edged before me this 12th day of March (Name), President (Title) of (Company Name) on behalf of the me by means of x physical presence or online
WITNESS my hand and official seal.  NOTARY PUBLIC	entification and who did (did not) take an oath.  NADAMONAME  EXPIRES  EORGIA
(Name of Notary Public: Print, Stamo) or type as Commissioned)	PUBLIC OUNT TO THE COUNTY OF T

## OFFEROR'S QUALIFICATION STATEMENT

The undersigned certifies under oath the truth and correctness of all statements and of all answers to questions made hereinafter:

SUBMITTED TO:

City of Margate (Purchasing Division)

ADDRESS:

5790 Margate Boulevard Margate, Florida 33063

SUBMITTED BY: Control Instruments, Inc.

NAME: Mark G. Healey

ADDRESS: 5253 Oakdale Road, Smyrna, GA 30082

PRINCIPAL OFFICE: 5253 Oakdale Road, Smyrna, GA 30082

Other

1. State the true, exact, correct, and complete name of the partnership, corporation, trade or fictitious name under which you do business and the address of the place of business. (Attach corporate documents from the State of Florida (sunbiz.org) to this statement.)

The correct name of the Offeror is: Control Instruments, Inc.

The address of the principal place of business is: 5253 Oakdale Road, Smyrna, GA 30082

- 2. If Offeror is a corporation, answer the following:
  - a. Date of Incorporation: 6/27/79
  - b. State of Incorporation: Georgia
  - c. President's name: Mark G. Healey
  - d. Vice President's name: Stacy Bumpers
  - e. Secretary's name: Karron E. Sikes
  - f. Treasurer's name: N/A

	D.	Name and address of Resident Agent: Mark G. Healey
		If Offeror is an individual or a partnership, answer the following:
	a.	Date of organization:
	b.	Name, address and ownership units of all partners:
	C.	State whether general or limited partnership:
4.		ror is other than an individual, corporation or partnership, describe the
	organi	zation and give the name and address of principals:
5.	If Offe	ror is operating under a fictitious name, submit evidence of compliance with the
J,		a Fictitious Name Statute.

2024-005 25

How many years has your organization been in business under its present business name? 45 years
a. Under what other former names has your organization operated?  Ralph Healey & Associates (1962 - 1979)
Indicate registration, license numbers or certificate numbers for the businesses or professions which are the subject of this RFQ. Please attach certificate of competency and/or state registration.  Federal ID #580964405  Florida Business Certificate #F97000002546, exp. 12/31/24  Georgia Business Registration #H906298 updated January 2024  Florida PE 91305 exp. 2/28/25 - Shady Al-Zubi

8. Have you ever failed to complete any work awarded to you? If so, state when, where and why? No

THE OFFEROR ACKNOWLEDGES AND UNDERSTANDS THAT THE INFORMATION CONTAINED IN RESPONSE TO THIS QUALIFICATIONS STATEMENT SHALL BE RELIED UPON BY OWNER IN AWARDING THE AGREEMENT AND SUCH INFORMATION IS WARRANTED BY OFFEROR TO BE TRUE. THE DISCOVERY OF ANY OMISSION OR MISSTATEMENT THAT MATERIALLY AFFECTS THE OFFEROR'S QUALIFICATIONS TO PERFORM UNDER THE CONTRACT SHALL CAUSE THE OWNER TO REJECT THE PROPOSAL, AND IF AFTER THE AWARD TO CANCEL AND TERMINATE THE AWARD AND/OR AGREEMENT.

Mark MARSH	
(Signature)	
State of County of Georgia	
The foregoing instrument was acknowledged before me this 12th 2024, by Mark G. Healey, who is means of physical presence or online notarization as identification and who did (did not) take an oath.	naroanally known to ma hy
WITNESS my hand and official seal.	
Silale	
NOTARY RUBL'IC TO TARY OF TARY	

(Name of Notable Public Print, Stamp, or Type as Commestioned)

#### DRUG-FREE WORKPLACE PROGRAM FORM RFQ NO. 2024-005

In accordance with Section 287.087, State of Florida Statutes, preference shall be given to businesses with Drug-free Workplace Programs. Whenever two or more bids which are equal with respect to price, quality, and service are received for the procurement of commodities or contractual service, a bid received from a business that certifies that it has implemented a Drug-free Workplace Program shall be given preference in the award process. In the event that none of the tied vendors have a Drug-free Workplace program in effect, the City reserves the right to make final Decisions in the City's best interest. In order to have a Drug-free Workplace Program, a business shall:

- 1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2. Inform employees about the dangers of drug abuse in the Workplace, the business's policy of maintaining a drug-free Workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
- 3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4. In the statement specified in subsection (1), notify employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contenders to, any violation of Chapter 893 or of any controlled substance law of the United States of any State, for a violation occurring in the Workplace no later than five (5) days after such conviction.
- 5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is convicted.
- 6. Make a good faith effort to continue to maintain a drug-free Workplace through implementation. If bidder's company has a Drug-free Workplace Program, so certify below:

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

SIGNATURE OF BIDDER:_	Mark M. Hally	DATE: 3/12/24

2024-005

#### COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT

Bidder certifies that all material, equipment, etc. contained in this bid meets all O.S.H.A. requirements. Bidder further certifies that if he/she is the successful bidder, and the material, equipment, etc., delivered is subsequently found to be deficient in any O.S.H.A. requirement in effect on date of delivery, all costs necessary to bring the material, equipment, etc. into compliance with the aforementioned requirements shall be borne by the bidder.

#### OCCUPATIONAL HEALTH AND SAFETY - SAFETY DATA SHEET REQUIRED:

In compliance with Chapter 442, Florida Statutes, any item delivered from a contract resulting from this bid must be accompanied by a SAFETY DATA SHEET (SDS). The SDS must include the following information:

- A. The chemical name and the common name of the toxic substance.
- B. The hazards or other risks in the use of the toxic substances, including:
  - 1. The potential for fire, explosion, corrosivity and reactivity;
  - 2. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and
  - The primary routes of entry and symptoms of overexposure.
- C. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of or exposure to the toxic substances, including appropriate emergency treatment in case of overexposure.
- D. The emergency procedure for spills, fire, disposal and first aid.
- E. A description in lay terms of the known specific potential health risks posed by the toxic substances intended to alert any person reading this information.
- F. The year and month, if available, that the information was compiled and the name, address and emergency telephone number of the manufacturer responsible for preparing the information.

OSHA Forms 300, 300A attached

SIGNATURE: Mark Mark DATE: 3/12/24	SIGNATURE:	Mark M Holy	DATE: 3/12/24	
------------------------------------	------------	-------------	---------------	--

2024-005

## NON-COLLUSIVE AFFIDAVIT FOR RFQ NO. 2024-005

State of Georgia	
County of Cobb )	
Mark G. Healey bei	ing first duly sworn, deposes and says
that:	
He/she is the Mark G. Healey Representative or Agent) of Control Instruments, Inc. attached Proposal;	_, (Owner, Partner, Officer_ _, the Offeror that has submitted the
He/she is fully informed regarding the preparagraph Proposal and of all pertinent circumstances regard	
Such Proposal is genuine and is not a collusive o	r sham Proposal;
Neither the said Offeror nor any of its representatives, employees or parties in interest colluded, conspired, connived or agreed, direct firm, or person to submit a collusive or sham Province the attached Proposal has been subconnection with such Work; or have in any magreement or collusion, or communication, or person to fix the price or prices in the attached fix any overhead, profit, or cost elements of the any other Offeror, or to secure through any unlawful agreement any advantage against (Reproposed Work;	t, including this affiant, have in any way try or indirectly, with any other Offeror roposal in connection with the Work for mitted; or to refrain from bidding in anner, directly or indirectly, sought by conference with any Offeror, firm, or Proposal or of any other Offeror, or to Proposal price or the Proposal price or collusion, conspiracy, connivance, or ecipient), or any person interested in the
The price or prices quoted in the attached Protainted by any collusion, conspiracy, connivance the Offeror or any other of its agents, represe in interest, including this affiant.	e, or unlawful agreement on the part o
Signed, sealed and delivered in the presence of:  Witness	By Mark 4 Haly
Witness	Mark G. Healey Printed Name
encentral del describito de 1.00 de 1	President
	Title

## ACKNOWLEDGMENT NON-COLLUSIVE AFFIDAVIT FOR RFQ NO. 2024-005

County of	
On this theday of, 20 the State of Florida, personally appeared	, before me, the undersigned Notary Public of
	and
(Name(s) of individual(s) who appeared be	fore notary)
whose name(s) is/are Subscribed to within that he/she/they executed it.	n the instrument, and he/she/they acknowledge
WITNESS my hand And Official Seal	NOTARY PUBLIC, STATE OF FLORIDA
NOTARY PUBLIC SEAL OF OFFICE	(Name of Notary Public: Print, Stamp, or Type of Commissioned)
	☐ DID take an oath or ☐ DID NOT take an oath

#### **Scrutinized Company Certification**

I hereby swear or affirm that as of the date below this company is not listed on a Scrutinized Companies list created pursuant to 215.4725, 215.473, or 287.135, Florida Statutes. Pursuant to 287.135, Florida Statutes I further affirm that:

- This company is not participating in a boycott of Israel such that it is not refusing to deal, terminating business activities, or taking other actions to limit commercial relations with Israel, or persons or entities doing business in Israel or in Israelicontrolled territories, in a discriminatory manner.
- 2. This Company does not appear on the Scrutinized Companies with Activities in Sudan List where the State Board of Administration has established the following criteria:
  - Have a material business relationship with the government of Sudan or a government created project involving oil related, mineral extraction, or power generation activities, or
  - b. Have a material business relationship involving the supply of military equipment, or
  - c. Impart minimal benefit to disadvantaged citizens that are typically located in the geographic periphery of Sudan, or
  - d. Have been complicit in the genocidal campaign in Darfur.
- 3. This Company does not appear on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List where the State Board of Administration has established the following criteria:
  - Have a material business relationship with the government of Iran or a government-created project involving oil related or mineral extraction activities, or
  - b. Have made material investments with the effect of significantly enhancing Iran's petroleum sector.
- 4. This Company is not engaged in business operations in Cuba or Syria.

VENDOR/COMPANY NAME: CONTROL INST	RUMENTS, INC.
SIGNATURE: Mack M LAS Dy	
PRINTED NAME: Mark G. Healey	
TITLE: President	DATE: March 12, 2024

The scrutinized company list is maintained by the State Board of Administration and available at

http://www.sbafla.com/

2024-005

#### CITY OF MARGATE E-VERIFY FORM

Project Name:	SCADA Upgrades for East WTP, East WWTP & West WWTP	
Project No.:	RFQ 2024-005	

#### Definitions:

ACKNOWLEDGEMENT

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

- a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and
- b) All persons (including subvendors/subconsultants/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Margate; and
- c) Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. Any challenge to termination under this provision must be filed in the Circuit Court no later than 20 calendar days after the date of termination. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination and shall be liable for any additional costs incurred by the City as a result of the termination.

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Authorized Signature: Mark G. Healey

Title President

Date: March 12, 2024

Date: March 12, 2024
Phone: 404-351-1085

Email: mhealey@c2iinc.com

Website: www.c2iinc.com

COMPANY CONTACT INFORMATION

2024-005

Company Name: Control Instruments, Inc.

#### TRUTH IN NEGOTIATIONS CERTIFICATE

#### RFQ 2024-005

Pursuant to Section 287.055, Florida Statutes, and the Truth in Negotiations Act (TINA) for any lump-sum or cost plus a fixed fee professional services contract over the threshold amount provided in Section 287.017, Florida Statutes, CATEGORY FOUR, the CITY requires the DESIGN BUILDER to execute this Truth In Negotiations Certificate as part of the Contract Documents.

The DESIGN BUILDER hereby certifies, covenants, and warrants that wage rates and other factual unit costs supporting the compensation for this project's agreement are accurate, complete and current at the time of contracting. Any additions to the original Contract Price charged on an hourly price shall be adjusted to exclude any significant sums, by which the CITY determines the additions to the Contract Price were increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs. Any such adjustments shall be made within one year following the end of this Agreement.

The hereby undersigned representative submits this certificate that they are an authorized representative of the DESIGN BUILDER who may legally bind the proposer and attest to the accuracy of the information:

	Authorized Signature
	Mark G. Healey
	Printed Name
	President
	Title
	Control Instruments, Inc,
	Name of Entity/Corporation
STATE OF Georgia	
COUNTY OF Cobb	
The foregoing instrument was acknowledged to notarization on this 12th day of March	before me by means of $\underline{X}$ physical presence or $\underline{\hspace{0.5cm}}$ online $\underline{\hspace{0.5cm}}$ , 20 $\underline{\hspace{0.5cm}}$ 24 , by
Mark G. Healey (name	of person whose signature is being notarized) as the
President (title) of	Control Instruments, Inc, (name of
அல்பூல் corporation, personally known to me as desc	cribed hereinx, or produced a
(type of identificati	ion) as identification, and who did/did not take an oath.
A Well	My Commission Expires
Notary Public	WILLIAM ADAM
	NOTARY SEAL ABOVE OTARY
	EXPIRES
	NOTARY SEAL ABOVE OTARY  EXPIRES  GEORGIA  May 4, 2024  PUBLIC  PUBLIC  POKEE COMMITTEE  POKEE COMMITTEE  MAY 1, 2024
	May 4, 2024
	PUBLIC
	WILLIAM OKEE COMMING
	488698888

WITNESS WHEREOF, the plates under each signatur through its Mayor and City of by and through its' represen	e; City of Margate to Manager, authorized	nrough its City Commis d to execute same by	ssion signing by and City Commission the
	CITY OF MA	ARGATE	
Tommy Ruzzano, Mayor		Cale Curtis, City Ma	nager
day of	, 20	day of	, 20
ATTEST:		APPROVED AS TO	FORM:
Jennifer M. Johnson, City	Clerk	David N. Tolces, City	y Attorney
day of	20	day of	, 20

## **DESIGN BUILDER**

FOR CORPORATION:

Mark G Healey

President

Karron E. Sikes

Secretary

CORPORATE SEAL)

RPORT
IND

SEAL

1979

1979

AGREEMENT BETWEEN CITY OF MARGATE AND DESIGN BUILDER FOR RFQ 2023-005 SCADA UPGRADES

	ARCHI	TECT-ENGINEE	R QUAL	IFICATION	ONS			1. SOLICITATION	NUME	BER (If any)	
		lf a firm has branch o		GENERAL mplete for e				h office seekin			
2a. FIRM (or	Branch Office) NA	AME						3. YEAR ESTABL	ISHED	4. UNIQUE	ENTITY IDENTIFIER
2b. STREET								a. TYPE	5. O	I WNERSH	IP
2c. CITY				2d. STA	TE 2e. ZIP	CODE		b. SMALL BUSINE	SS ST	ATUS	
6a. POINT O	F CONTACT NAM	IE AND TITLE						7. NAME OF FIRM			anch Office)
6b. TELEPHO	ONE NUMBER	[6	οc. EMAIL ΑΓ	DRESS							,
		8a. FORMER FIRM	NAME(S) (II	any)		8t	. YEA	AR ESTABLISHED	8c.	UNIQUE EI	NTITY IDENTIFIER
	9. EM	PLOYEES BY DISCIPL						ROFILE OF FIRI AVERAGE REVI			ST 5 YEARS
a. Function Code	ŀ	o. Discipline	c. Number (1) FIRM	of Employees (2) BRANCH	. 🛮			b. Experience	е		c. Revenue Index Number (see below)
	Other Employ	/ees									
	·	Total									
(Insert retal	RVICES REVE FOR LAST venue index n	GE PROFESSIONAL NUES OF FIRM 3 YEARS umber shown at right)	2. \$1 - 3. \$2 - 4. \$5	ss than \$10 00,000 to le 50,000 to le 00,000 to le	0,000 ss than \$2 ss than \$5 ss than \$1	50,00 00,00 millio	00 00 on	7. \$5 milli 8. \$10 mi 9. \$25 mi	on to on to Ilion t Ilion t	less than less than to less than to less than	
c. Total W	Vork		,	million to le				10. \$50 mi	iiiOII C	or greater	
				egoing is a							
a. SIGNATUR	RE								b.	DATE	
c. NAME AND	) TITLE										

PROJECT NAME:	DATE COMPLETED:
Lagrange GA WWTP	PROJECT DURATION: In Progress
GENERAL CONTRACTOR NAME:	GENERAL CONTRACTOR ADDRESS:
C2i	N/A
GENERAL CONTRACTOR CONTACT PERSON:  C2i - Tracy Bumpers	GENERAL CONTRACTOR CONTACT PHONE NO. (Office and mobile number): N/A
OWNER NAME:	OWNER ADDRESS:
City of Lagrange, GA	N/A
OWNER CONTACT PERSON:	OWNER CONTACT PHONE NO. (Office and mobile number):
Patrick Bowie	N/A
DESIGN FIRM NAME:	DESIGN FIRM ADDRESS:
Paul Krebs	N/A
DESIGN FIRM CONTACT PERSON:  Scott Lee	DESIGN FIRM CONTACT PHONE NO. (Office and mobile number):  O 205-987-7411 C 205-999-1031
BRIEF DESCRIPTION OF THE SYSTEM:	SCADA Upgrade
INITIAL PROJECT SUBCONTRACT COST:	
CHANGE ORDER COSTS FOR SUBCONTRACT:	N/A
FINAL PROJECT SUBCONTRACT COST:	N/A
COMMENTS OR EXCEPTIONS:	N/A
BRIEF APPLICATION SOFTWARE DESCRIPTION:	WWTP & WW Lift Station SCADA
COMPUTER-BASED SCADA SYSTEM HARDWARE MANUFACTURER PLATFORM:	Dell
COMPUTER-BASED SCADA SYSTEM SOFTWARE MANUFACTURER PLATFORM:	VTScada

PLC BASED CONTROL SYSTEM MANUFACTURER AND PLATFORM:	Allen Bradley
NETWORK EQUIPMENT MANUFACTURER AND PLATFORM:	Ethernet, Allen Bradley Stratix
APPROXIMATE NUMBER OF PLCs:	5
APPROXIMATE NUMBER OF INPUT AND OUTPUT SIGNALS:	CONTRACTED COST OF THE PCIS SYSTEM:
ANALOG: 120	BASE AMOUNT: \$475,614
DIGITAL: 800	CHANGE ORDERS: 0
FIELDBUS: 0	TOTAL: \$475,614
COMMENTS OR EXCEPTIONS:	

PROJECT NAME:	DATE COMPLETED:
Milledgeville WTP/WWTP SCADA Upgrades	PROJECT DURATION:
GENERAL CONTRACTOR NAME:	GENERAL CONTRACTOR ADDRESS:
C2i	N/A
GENERAL CONTRACTOR CONTACT PERSON: C2i - Tracy Bumpers	GENERAL CONTRACTOR CONTACT PHONE NO. (Office and mobile number): N/A
OWNER NAME:	OWNER ADDRESS:
City of Milledgeville	OWNER() (BB) (EB)
OWNER CONTACT PERSON:  Mike Burch	OWNER CONTACT PHONE NO. (Office and mobile number): 478-234-3647
DESIGN FIRM NAME:	DESIGN FIRM ADDRESS:
Turnipseed Engineers	N/A
DESIGN FIRM CONTACT PERSON:  Kenneth Green P.E.	DESIGN FIRM CONTACT PHONE NO. (Office and mobile number):  O 706-803-8800 C 706-799-4893
BRIEF DESCRIPTION OF THE SYSTEM:	Water/Wastewater SCADA
INITIAL PROJECT SUBCONTRACT COST:	None
CHANGE ORDER COSTS FOR SUBCONTRACT:	None
FINAL PROJECT SUBCONTRACT COST:	In Progress
COMMENTS OR EXCEPTIONS:	None
BRIEF APPLICATION SOFTWARE DESCRIPTION:	VT SCADA Dual Server Premium
COMPUTER-BASED SCADA SYSTEM HARDWARE MANUFACTURER PLATFORM:	Dell
COMPUTER-BASED SCADA SYSTEM SOFTWARE MANUFACTURER PLATFORM:	VT Scada

PLC BASED CONTROL SYSTEM MANUFACTURER AND PLATFORM:	Allen Bradley
NETWORK EQUIPMENT MANUFACTURER AND PLATFORM:	Ethernet, Tosibox WAN
APPROXIMATE NUMBER OF PLCs:	24
APPROXIMATE NUMBER OF INPUT AND OUTPUT SIGNALS:	CONTRACTED COST OF THE PCIS SYSTEM:
ANALOG: 100	BASE AMOUNT: \$983,875
DIGITAL: 500	CHANGE ORDERS: 0
FIELDBUS: 0	TOTAL: \$983,875
COMMENTS OR EXCEPTIONS:	

PROJECT NAME:	DATE COMPLETED: On Going
Cornish Creek WTF	PROJECT DURATION:
GENERAL CONTRACTOR NAME: C2i	GENERAL CONTRACTOR ADDRESS:
GENERAL CONTRACTOR CONTACT PERSON: C2i - Mark Healey	GENERAL CONTRACTOR CONTACT PHONE NO. (Office and mobile number):
OWNER NAME:	OWNER ADDRESS:
Newton County Water Resourses	
OWNER CONTACT PERSON:  Bob Snipes	OWNER CONTACT PHONE NO. (Office and mobile number): 770-784-2125 ext 121
DESIGN FIRM NAME:	DESIGN FIRM ADDRESS:
Zile Engineering	
DESIGN FIRM CONTACT PERSON:  John Zile	DESIGN FIRM CONTACT PHONE NO. (Office and mobile number):  678-707-6017
	078-707-0017
BRIEF DESCRIPTION OF THE SYSTEM:	PLC Replacement
INITIAL PROJECT SUBCONTRACT COST:	N/A
CHANGE ORDER COSTS FOR SUBCONTRACT:	N/A
FINAL PROJECT SUBCONTRACT COST:	
COMMENTS OR EXCEPTIONS:	N/A
BRIEF APPLICATION SOFTWARE DESCRIPTION:	
COMPUTER-BASED SCADA SYSTEM HARDWARE MANUFACTURER PLATFORM:	N/A
COMPUTER-BASED SCADA SYSTEM SOFTWARE MANUFACTURER PLATFORM:	iFix

PLC BASED CONTROL SYSTEM MANUFACTURER AND PLATFORM:	Modicon
NETWORK EQUIPMENT MANUFACTURER AND PLATFORM:	N/A
APPROXIMATE NUMBER OF PLCs:	9
APPROXIMATE NUMBER OF INPUT AND OUTPUT SIGNALS:	CONTRACTED COST OF THE PCIS SYSTEM:
ANALOG:	BASE AMOUNT: \$223,690
DIGITAL:	CHANGE ORDERS: \$3,484
FIELDBUS:	TOTAL: \$227,174
COMMENTS OR EXCEPTIONS:	

PROJECT NAME:	DATE COMPLETED: On Going
Bee Ridge WRF Expansion & Conversion to AWT	PROJECT DURATION:
GENERAL CONTRACTOR NAME:	GENERAL CONTRACTOR ADDRESS:
Garney Construction	N/A
GENERAL CONTRACTOR CONTACT PERSON: Mark Abram	GENERAL CONTRACTOR CONTACT PHONE NO. (Office and mobile number): 407-414-7543
OWNER NAME:	OWNER ADDRESS:
Sarasota County	N/A
OWNER CONTACT PERSON:  Multiple - See Carollo	OWNER CONTACT PHONE NO. (Office and mobile number):
	N/A
DESIGN FIRM NAME:	DESIGN FIRM ADDRESS:
Carollo	N/A
DESIGN FIRM CONTACT PERSON:	DESIGN FIRM CONTACT PHONE NO. (Office and mobile number):
Brett Lee	O 720-922-2406
BRIEF DESCRIPTION OF THE SYSTEM:	Major Plant WWTP Expansion
INITIAL PROJECT SUBCONTRACT COST:	N/A
CHANGE ORDER COSTS FOR SUBCONTRACT:	N/A
FINAL PROJECT SUBCONTRACT COST:	
COMMENTS OR EXCEPTIONS:	N/A
BRIEF APPLICATION SOFTWARE DESCRIPTION:	
COMPUTER-BASED SCADA SYSTEM HARDWARE MANUFACTURER PLATFORM:	Dell
COMPUTER-BASED SCADA SYSTEM SOFTWARE MANUFACTURER PLATFORM:	Wonderware System Platform

PLC BASED CONTROL SYSTEM MANUFACTURER AND PLATFORM:	Allen Bradley
NETWORK EQUIPMENT MANUFACTURER AND PLATFORM:	Cisco
APPROXIMATE NUMBER OF PLCs:	8
APPROXIMATE NUMBER OF INPUT AND OUTPUT SIGNALS:	CONTRACTED COST OF THE PCIS SYSTEM:
ANALOG:	BASE AMOUNT: \$4,053,435
DIGITAL:	CHANGE ORDERS: \$30,170
FIELDBUS:	TOTAL: \$4,083,605
COMMENTS OR EXCEPTIONS:	

PROJECT NAME:	DATE COMPLETED: On Going
Palm Coast WWTF #2 Expansion	PROJECT DURATION:
GENERAL CONTRACTOR NAME:	GENERAL CONTRACTOR ADDRESS:
RJ Sullivan	N/A
GENERAL CONTRACTOR CONTACT PERSON:	GENERAL CONTRACTOR CONTACT PHONE NO. (Office and mobile number):
OWNER NAME:	OWNER ADDRESS:
Palm Coast	N/A
OWNER CONTACT PERSON:	OWNER CONTACT PHONE NO. (Office and mobile number):
Unknown	N/A
DESIGN FIRM NAME:	DESIGN FIRM ADDRESS:
Bailey c/o CPH	N/A
DESIGN FIRM CONTACT PERSON:	DESIGN FIRM CONTACT PHONE NO. (Office and mobile number):
Steve Bailey	561-252-1304
BRIEF DESCRIPTION OF THE SYSTEM:	Plant Expansion
INITIAL PROJECT SUBCONTRACT COST:	N/A
CHANGE ORDER COSTS FOR SUBCONTRACT:	N/A
FINAL PROJECT SUBCONTRACT COST:	N/A
COMMENTS OR EXCEPTIONS:	N/A
BRIEF APPLICATION SOFTWARE DESCRIPTION:	
COMPUTER-BASED SCADA SYSTEM HARDWARE MANUFACTURER PLATFORM:	N/A
COMPUTER-BASED SCADA SYSTEM SOFTWARE MANUFACTURER PLATFORM:	Rockwell

PLC BASED CONTROL SYSTEM MANUFACTURER AND PLATFORM:	Allen Bradley	
NETWORK EQUIPMENT MANUFACTURER AND PLATFORM:	N/A	
APPROXIMATE NUMBER OF PLCs:	8	
APPROXIMATE NUMBER OF INPUT AND OUTPUT SIGNALS:	CONTRACTED COST OF THE PCIS SYSTEM:	
ANALOG:	BASE AMOUNT: \$811,000	
DIGITAL:	CHANGE ORDERS: 0	
FIELDBUS:	TOTAL: \$811,000	
COMMENTS OR EXCEPTIONS:		

## **Sterling Seacrest Pritchard**

2500 Cumberland Parkway SE Suite 400 Atlanta, GA 30339

678.424.6500 office 678.424.6527 fax

www.sterlingseacrest.com

Re: Control Instruments, Inc. - Surety Reference Letter

To Whom It May Concern:

Atlantic Specialty Insurance Company has had the privilege of providing surety bonds for Control Instruments, Inc. for the past three years. During our relationship, we have had the opportunity to observe outstanding performance. We consider Control Instruments, Inc. to be one of our most valued surety clients. In our opinion, the company is properly equipped, capably staffed, and well financed. It has been our privilege to extend surety credit on numerous projects with a willingness to consider single projects in excess of \$5,000,000 within an aggregate program of \$15,000,000. During our relationship, we have never had any claim activity of any kind. Atlantic Specialty Insurance Company has always responded favorably to any bond request made by Control Instruments, Inc. and we are confident they can complete whatever project they choose to undertake.

Subject to a satisfactory underwriting review and proper review of contract details, Atlantic Specialty Insurance Company anticipates no problem in being able to continue to provide for the surety needs of Control Instruments, Inc. in whatever instances they might require. Any arrangement for bonds is a matter between Atlantic Specialty Insurance Company and Control Instruments, Inc. and we assume no liability to third parties if for any reason bonds are not executed.

Atlantic Specialty Insurance Company has a Best Rating of "A+" "Superior" and a Treasury Limit of \$81,790,000 as reported in the July 1, 2022 edition of the Federal Register.

We appreciate having the opportunity to share with you our experience with this fine company and urge you to give them every possible consideration.

Sincerely,

Brian M. Perry Attorney in Fact

## **Sterling Seacrest Pritchard**

2500 Cumberland Parkway SE Suite 400 Atlanta, GA 30339

678.424.6500 office 678.424.6527 fax

www.sterlingseacrest.com

February 20, 2024

RE: Control Instruments, Inc. **Experience Mod Ratings** 

To Whom It May Concern,

Please be advised that the above insured's Workers Compensation experience ratings are as follows:

Mod Effective Dates	Mod
10/17/2023	1.00
10/17/2022	1.00
10/17/2021	.89
10/17/2020	.88

If you have any questions, please let me know.

Sincerely,

Mary Ward

Mary Ward Client Service Executive 770-635-4014

# OSHA's Form 300 (Rev. 01/2004)

# Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year	2023	
II S Doi	artmont	of Labor

#### U.S. Department of Labor

Occupational Safety and Health Administration

u must record information about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment			Form ap	proved OMB no. 1218-0176
yond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related				
uries and illnesses that meet any of the specific recording criteria listed in 29 CFR 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an ury and illness incident report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA	Establish	ment name	Control Instrum	nents, Inc.
ice for help.				
	City	Smyrna	State	GA

	Identify the person			Describe the	case	Classi	ify the case	9									
(A) Case No.	(B) Employee's Name	(C) Job Title (e.g., Welder)	(D) Date of injury or onset of	(E) Where the event occurred (e.g. Loading dock north end)		the mos		box for each c		Enter the nu days the inju worker was:	ured or ill	Check th	e "injur		nn or cho	oose one	e type of
			illness (mo./day)		forearm from acetylene torch)	Death	Days away from work	Job transfer	ed at work  Other recordable cases	Away From Work (days)	On job transfer or restriction (days)	) Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	ul other illness
						(G)	(H)	(I)	(J)	(K)	(L)	' <b>⊆</b> ' (1)	ග් (2)	ٽٽ (3)	ظ (4)	± (5)	(6)
						(0)	(/	(.)	(0)	(11)	(-)	(.,	(-)	(0)	(.,	(0)	(0)
	No injuries occur	red.															
	,																
					Page totals	0	0	0	0	0	0	0	0	0	0	0	0

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

Page

1 of 1

Public reporting burden for this collection of information is estimated to average 14 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact: US Department of Labor, OSHA Office of Statistics, Room N-3644, 200 Constitution Ave, NW, Washington, DC 20210. Do not send the completed forms to this office.

U	U	U	U	U	U
Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
(1)	(2)	(2)	(4)	(5)	(6)





## STATE OF FLORIDA

# **BOARD OF PROFESSIONAL ENGINEERS**

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

# **AL-ZUBI, SHADY**

613 SCARBOROUGH PASS RD ORLANDO FL 32835

**LICENSE NUMBER: PE91305** 

**EXPIRATION DATE: FEBRUARY 28, 2025** 

Always verify licenses online at MyFloridaLicense.com



Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

# OSHA's Form 300A (Rev. 01/2004)

# **Summary of Work-Related Injuries and Illnesses**



U.S. Department of Labor

Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases			
Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
(G)	(H)	(I)	(J)
Number of Days			
Total number of days away from work		Total number of days of job transfer or restriction	
0		0	
(K)	•	(L)	•
Injury and Illness T	ypes		
Total number of (M)			
(1) Injury	0	(4) Poisoning	0
(2) Skin Disorder	0	(5) Hearing Loss	0
(3) Respiratory Condition	0	(6) All Other Illnesses	0

#### Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Public reporting burden for this collection of information is estimated to average 58 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact: US Department of Labor, OSHA Office of Statistics, Room N-3644, 200 Constitution Ave, NW, Washington, DC 20210. Do not send the completed forms to this office.

Esta	ablishment infor	mation			
	Your establishment	t name Control Instrument	ts, Inc.		
	Street 5253 Oakda	ale Road			
	City Smyrna		State	GA	Zip 30082
	Industry description System Inte	n (e.g., Manufacture of moto egration	r truck trailers)		
	Standard Industrial	Classification (SIC), if know	n (e.g., SIC 3715)		
	36	6 2 5 / 5084			
ЭR		lustrial Classification (NAICS		3212)	
	23	3 8 2 1	0		
Ξmp	oloyment inform	ation			
	Annual average nur Total hours worked year	mber of employees _ by all employees last	24 49,920		
igr	n here Knowingly falsifyir	ng this document may resi	ult in a fine.		
	I certify that I have complete.	examined this document an	d that to the best of	my knowledge the entries a	re true, accurate, and
	Wes Wood Con	npany executive			Safety Manager Title
	404-351-1085	Phone			1/2/2024 Date

# CONTROL INSTRIMENTS INC.

# MARGATE FLORIDA SCADA QUALIFICATON PROPOSAL



# 2.2. Insurance Certificate

(See next page)



## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 10/16/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

		ertificate does not confer rights t							require an endorsement	. A ST	aternent on
	DUCE					CONTAC NAME:					
		g Seacrest Pritchard, Inc.							FAX (A/C, No):	670 42	4 6527
		Sumberland Pkwy					o, Ext): 678-424		(A/C, No):	010-424	+-0327
	ite 4 anta	.00 i GA 30339			ļ	ADDRE	ss: mward@:		RDING COVERAGE		NAIC#
						INCLIDE	RA: Amerisui	. ,			23396
INSU	RFD				CONTINS-01						19488
		I Instruments, Inc.						UKE INSUK	ANCE COMPANY		19400
		Dakdale Road SE				INSURE					
Sm	iyrna	a GA 30082-5217				INSURE					
						INSURE					
					NUMBER OF TOTAL	INSURE	RF:		DE://0/01/14/DED		
					NUMBER: 2143491417	/F DEE	N ICCUED TO		REVISION NUMBER:	IE DOL	IOV DEDIOD
		S TO CERTIFY THAT THE POLICIES ATED. NOTWITHSTANDING ANY RE									
CI	ERTI	FICATE MAY BE ISSUED OR MAY	PERT	AIN,	THE INSURANCE AFFORDI	ED BY	THE POLICIES	S DESCRIBEI			
		JSIONS AND CONDITIONS OF SUCH		CIES.  SUBR		BEEN F			Г		
INSR LTR		TYPE OF INSURANCE	INSD	WVD	POLICY NUMBER			POLICY EXP (MM/DD/YYYY)	LIMIT	S	
Α	X	COMMERCIAL GENERAL LIABILITY			CPP21131500		10/17/2023	10/17/2024	EACH OCCURRENCE DAMAGE TO RENTED	\$ 1,000	,000
		CLAIMS-MADE X OCCUR							PREMISES (Ea occurrence)	\$ 300,0	00
									MED EXP (Any one person)	\$ 10,00	0
									PERSONAL & ADV INJURY	\$ 1,000	,000
	GEN	N'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$2,000	,000
		POLICY X PRO- X LOC							PRODUCTS - COMP/OP AGG	\$ 2,000	,000
		OTHER:								\$	
В	AU1	TOMOBILE LIABILITY			CA21131490		10/17/2023	10/17/2024	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000	,000
	Χ	ANY AUTO							BODILY INJURY (Per person)	\$	
		OWNED SCHEDULED AUTOS							BODILY INJURY (Per accident)	\$	
		HIRED NON-OWNED AUTOS ONLY							PROPERTY DAMAGE (Per accident)	\$	
	Χ	H&NO Autos								\$	
Α	Х	UMBRELLA LIAB X OCCUR			CU21131510		10/17/2023	10/17/2024	EACH OCCURRENCE	\$ 5,000	,000
		EXCESS LIAB CLAIMS-MADE							AGGREGATE	\$5,000	.000
		DED X RETENTION \$ 0								\$	<u> </u>
Α		RKERS COMPENSATION			WC21131520		10/17/2023	10/17/2024	X PER OTH-	<u> </u>	
		PROPRIETOR/PARTNER/EXECUTIVE Y/N							E.L. EACH ACCIDENT	\$ 1,000	
	OFF	ICER/MEMBER EXCLUDED?	N/A						E.L. DISEASE - EA EMPLOYEE		
	If yes	s, describe under CRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT	\$ 1,000	
Α	Con	tractor's Equipment			CPP21131500		10/17/2023	10/17/2024	Lease/Rent Eqpt	\$10,0	000
		\$1,000 deductible allation \$5,000 deduct							Installation Floater	\$1,30	0,000
DES	CRIPT	TION OF OPERATIONS / LOCATIONS / VEHIC	_ES (A	CORD	101. Additional Remarks Schedu	le. may be	attached if more	e space is requir	ed)		
			(-		, , , , , , , , , , , , , , , , , , , ,				,		
CE	KTIF	FICATE HOLDER				CANC	ELLATION				
						SHO	III D ANY OF T	THE ABOVE D	ESCRIBED POLICIES BE CA	ANCELL	ED BEFORE
						THE	EXPIRATION	N DATE TH	EREOF, NOTICE WILL E		
						ACC	ORDANCE WI	TH THE POLIC	Y PROVISIONS.		
		Sample									
						AUTHO	RIZED REPRESEI	NIATIVÉ			

AGENCY CUSTOMER ID:	
LOC #:	



ACORD <sup>®</sup> ADDITIONAL	. REMA	RKS SCHEDULE	Page	_ of
AGENCY		NAMED INSURED		
Sterling Seacrest Pritchard		Control Instruments, Inc.		
POLICY NUMBER				
CARRIER	NAIC CODE	-		
		EFFECTIVE DATE:		
ADDITIONAL REMARKS				
THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD	D FORM.			
FORM NUMBER: 25 FORM TITLE: Certificate of Liability		otes		
The following policy forms/endorsements apply:  General Liability:				
Advantage Blanket Additional Insured Endorsement CG7124 0613 Advantage General Liability Extension Endorsement CG7070 0508 Primary Non-Contributory Coverage When Required By WrittenContract Notice of Cancellation, Nonrenewal or Material Change - Third Party IL7		3		
Automobile Liability: Advantage Commercial Automobile Broad Form Endorsement CA71 Designated Insured-Primary Non-Contributory Coverage When Require Waiver of Transfer of Rights of Recovery Against Others to Us CA0444 Notice of Cancellation, Nonrenewal or Material Change - Third Par	ed by Insured 4 1013			
Workers Compenation: Waiver of Our Right to Recover From Others Endorsement WC000313 Notice of Cancellation or Nonrenewal - Third Party WC990645				
Umbrella: Follow form subject to policy terms, conditions, endorsements. Commercial Liability Umbrella Coverage Form CU0001 0413 Waiver of Transfer of Rights of Recovery Against Others to Us (Waiver Primary/Non-Contributory Coverage When Required by Written Agreen Notice of Cancellation, Nonrenewal or Material Change - Third Party IL:	nent, CU7467			





# 3. Qualifications

Million dollar
Bonding capacity

60

Continuous years
In operation since 1962

1050

Projects implemented In Water & Wastewater

#### 3.1. About C2i

Headquartered just outside of Atlanta, in Smyrna, GA, Control Instruments Inc. (C2i) was established in 1962. For over half a century we've been providing innovative, cost-effective design solutions that help our customers maximize the efficiency and productivity of their operations. We have worked extensively designing total systems solutions for municipal water and wastewater treatment facilities, as well as a host of general industrial applications. Our total in-house capability ensures complete control from initial concept development through system implementation. We integrate our resources in design, manufacturing, testing, evaluation, and start-up to guarantee that the completed system will perform to design specifications.



## 3.1.1. Engineering

At C2i we provide control systems engineering for a wide array of applications and solutions. From municipal water and wastewater plants, to airport fueling systems, to custom solutions for a variety of applications, Control Instruments Inc. works with you to offer the premier integration solution.

We maintain a close relationship with the client throughout the design stage, which ensures that the system will meet the customer's needs in the most cost-efficient manner. Our complete in-house engineering and design capability allows us to tailor systems to specific applications. C2i has implemented over 1,050 control systems utilizing a variety of hardware and software, and has participated in millions of dollars worth of design-build solutions. Project engineers objectively evaluate a project, develop the strategy, and select the appropriate equipment to get the job done right.



#### 3.1.2. Panel Fabrication

In our continual effort to put our customers first, we've made providing the highest quality manufacturing standards a top priority. Our 10,000 square-foot engineering office and adjacent 16,000 square-foot manufacturing facility allows us to carefully manage each aspect of system design and fabrication. We integrate our resources in design, manufacturing, testing, evaluation, and start-up to ensure that the completed system will perform to design specifications.







In addition to being a CSIA certified integrator, and are a certified and *regularly inspected* UL 508A MTR and UL 698 panel shop. Though special equipment is engineered into systems which must bear the UL 508,UL 508A MTR or UL 698 label, *every panel* delivered by C2i is built to UL 508, UL 508A MTR and NEMA standards. The UL 698 is an intrinsically safe panel rating which UL has qualified C2i to manufacture. We maintain an ongoing and constantly improving quality control regimen.



#### 3.1.3. Instrument Supply & Calibration

We take pride in our efforts to ensure the quality of the products we use and the systems we supply.

We have you covered from replacing and calibrating a single instrument, to providing and calibrating all instrumentation for a large new treatment plant. Equipment is selected on the basis of its suitability to the application, taking into account the environment, severity of duty, and requirements for interfacing with other equipment.

Ease of maintenance, availability of parts and service, and past experience with the types of equipment involved are major considerations.



#### 3.1.4. Maintenance & Startup Services

Our commitment to our customers does not stop at commissioning.

#### C2i's field service group is certified and trained to perform:

- ✓ ON-SITE RADIO PROPAGATION SURVEYS
- ✓ CALIBRATION AND STARTUP OF A BROAD RANGE OF INSTRUMENTS
- ✓ FIBER OPTIC INSTALLATION, TERMINATION AND TESTING NPDES PERMIT CALIBRATIONS
- ✓ PANEL REPLACEMENT/MODIFICATIONS

We offer customized support plans and service contracts that provide 24-hour/7-day support for all instrumentation, SCADA and IT systems. We appreciate the importance of quickly and efficiently providing service to our customers to minimize system/component downtime.

C2i operates *six separate service locations* to provide the best support possible - *we are there when you need us!* We are committed to building and growing our relationship with you long after project completion.







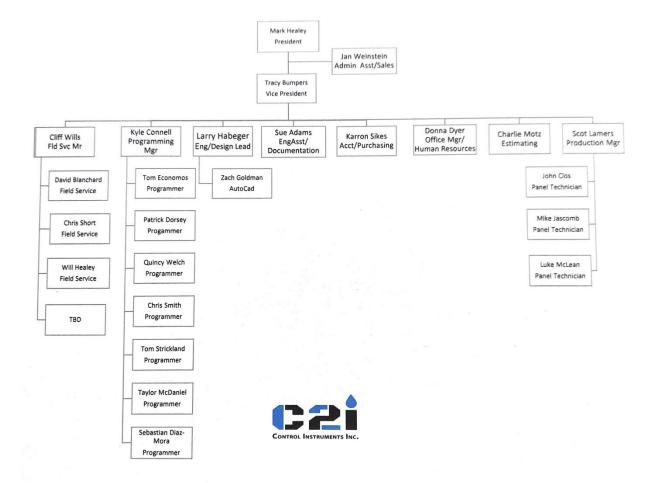
#### 3.1.5. Company Organization

C2i is a full service systems integrator that was established in 1962, and has been in continuous operation ever since. Predominantly active in the municipal water/wastewater market.

C2i has provided over 1,050 integrated control systems in the water and wastewater marketplace. Early projects were relay-logic-based systems whereas those of more recent vintage are PLC/HMI-based systems.

C2i continues to train its engineering staff and to hire qualified engineers to ensure that our customers receive the latest technology in PLC-based SCADA systems.

Below is the C2i organization Chart.



# CONTROL INSTRIMENTS INC.

# MARGATE FLORIDA SCADA QUALIFICATON PROPOSAL



# 3.1.6. Factory Testing Facilities

As required, C2i has facilities to stage a factory acceptance test for the control system at our local office. During this test, the C2i shall demonstrate the complete operation of the control system including field I/O simulation and network connections.

C2i utilizes project hardware and software and tests to an approved testing plan and procedure. Unwitnessed tests are completed prior to owners and consulting engineers being scheduled for witnessed factory testing. Factory testing can be completed in-person with all interested parties, or via MS Teams live virtual environment, or a combination of both to accommodate all as needed.







# **3.2.** Project Experience and References

#### 3.2.1. Introduction

The following reference projects are representative of C2i's core work, and demonstrate our experience executing a very similar scope of work to this project. These reference projects all required understanding the constraints of plant operation, and upgrading a SCADA system while keeping the plants running 24/7/365.

Of particular experience note is the fact C2i installed and programmed the existing Margate WTP and WWTP, and our Lead Engineer on the project was a part of the project team that originally installed and commissioned the currently operating WRF PLC subsystem.

As requested, the following references each include name of the organization for which the services were provided, a brief description of those services, date completed, whether or not the project was completed on schedule, total project cost, and whether the project was completed under or over budget; include a name and address of a contact person.

#### 3.2.2. WRF SCADA Upgrades, Cobb County, GA

Proj No. / Name	(815) WRF SCADA Upgrades
Location	Cobb County, GA
SCADA System Description	WRF SCADA System including new workstations, servers, PLC
	panels, instruments, integration & commissioning.
HMI SCADA Software	Siemens WINCC HMI Software
Programmable Logic Controllers	Siemens S700 PLC
Contract Amount:	\$3,981,000
Completion Date	2012
Budget /Schedule at Completion	On budget and schedule including desired changes
Reference	Rich Whitman – Cobb Co. Water – 770-419-5326

#### 3.2.3. WRF Modifications and Expansion, Franklin, TN

Project No./Name	(1046) Franklin WRF Modifications and Expansion Project
Location	Franklin, TN
SCADA System Description	SCADA system upgrade including field and panel instrumentation
	and programming.
HMI SCADA Software	VT SCADA
Programmable Logic Controllers	Rockwell/AB Compact Logix
Contract Amount:	\$1,877,995.00
Est. Completion Date	July 202322
Reference	Michele Hatcher – Dir. W/WW Mgmt- 615-794-4554





# 3.2.4. Stormwater SCADA Upgrade, Savannah, GA

Project No./Name	(1064) Savannah Stormwater SCADA Upgrade
Location	Savannah, GA
SCADA System Description	SCADA modifications to several pump station panels, including VT
	SCADA software, and field equipment.
HMI SCADA Software	VT SCADA
Programmable Logic Controllers	Rockwell/AB Compact Logix
Contract Amount:	\$1,414,287.00
Est. Completion Date	Sept 2024
Reference	Paul Mamalakis – Chatham Engineering – 912-238-2400

# 3.2.5. Wesley Center WWTP Expansion, Pasco County, FL

Proj No. / Name	(1001) Wesley Center WWTP Expansion
Location	Pasco County, FL
SCADA System Description	WWTP SCADA System additions & modifications to existing PLC
	control, new PLC panels, instruments, integration &
	commissioning.
HMI SCADA Software	Wonderware System Platform/Studio5000
Programmable Logic Controllers	Rockwell/AB Compact Logix
Contract Amount:	\$714,488.00
Completion Date	2020
Budget /Schedule at Completion	On budget and schedule including desired changes
Reference	Joe Herline – Pasco County – 727-992-7910

# 3.2.6. WTP Expansion – City of Venice, FL

Proj No. / Name	(910) Water Treatment Plant Expansion – City of Venice
Location	City of Venice, FL
SCADA System Description	C2i provided the original WTP I & C system in 2013 and recently upgraded the Wonderware HMI, workstations, and thin client remotes.
HMI SCADA Software	Wonderware InTouch / Studio5000
Programmable Logic Controllers	Rockwell/AB Control Logix
Contract Amount:	\$64,952
Completion Date	2021
Budget /Schedule at Completion	On budget and schedule.
Reference	William (Jim) Anderson – City of Venice – 941-232-2594





# 3.2.7. WTP Improvements, Okeechobee, FL

Project No./Name	(1024) WTP Improvements
Location	Okeechobee, FL
SCADA System Description	WTP SCADA System modifications, new HSP PLC control panel,
	control panel modifications, field instruments, Ethernet/IP
	communication for control of VFDs, integration & commissioning.
HMI SCADA Software	GE Proficy iFIX
Programmable Logic Controllers	Rockwell/AB Control Logix
Contract Amount:	\$238,756.00
Completion Date	2021
Reference	Kevin Rogers – City of Okeechobee – 863-763-3239

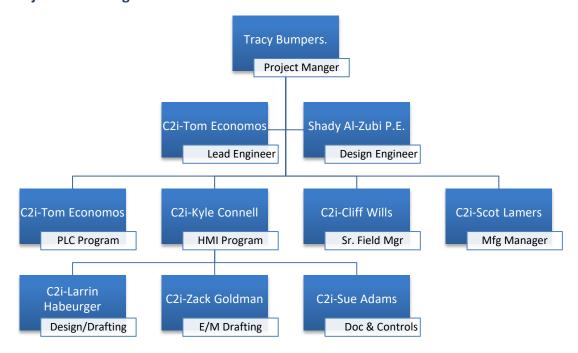




# 3.3. Project Team and Organization

The proposed project team covers independent professional detailed design review, project management, engineering leadership familiar with existing installation, senior panel design/drafting, senior programming experts in networking, VTSCADA, TI505/545 PLC programming, and Rockwell PLC programming. We believe all skill-sets required on this project are solidly covered by this team. Brief descriptions of their experience and skills are shown immediately below this diagram

#### 3.3.1. Project Team Diagram



#### 3.3.2. Control Instruments, Inc.

C2i key team members are introduced below with primary responsibilities, and resumes follow.

**Tracy Bumpers, Project Manager** - As Project Manager, Tracy brings over 20 years project management, controls system engineering, implementation and commissioning experience. Wes has led project teams to successfully execute over 100 water & wastewater instrumentation and controls projects. <u>Tracy will assure the project and all tasks are completed on-time in accordance with contract agreements and expectations.</u>

**Thomas Economos, Lead Project Engineer & PLC Programming** – Tom brings over 30 years' experience in implementing water and wastewater SCADA projects. As Lead Engineer, Tom oversees all HW & SW detailed design and implementation. Tom has over 25 years' experience in Modicon PLC programming and commissioning experience. <u>Tom will lead the panel modification design effort and convert the existing PLC programs</u>





**Sue Adams, Project Controls Manager** - As Project Controls Manager, Sue brings over 10 years' project controls experience to the project team and is responsible for monitoring and reporting the financial and schedule performance of the project to the Project Director, Project Manager and project team. Sue assists in tracking contract deliverables and budgets. <u>Sue will manage the delivery of all project documentation</u>.

**Kyle Connell, Senior Engineer, HMI Lead** – Kyle brings over 12 years' experience in implementing and commissioning water and wastewater instrumentation and controls projects. Kyle has received advanced training on Wonderware, Rockwell HMI & PLC and VTSCADA software, leads the HMI Graphics & Database development group for the company, and is responsible for C2i HMI standards development and maintenance. *Kyle will lead the HMI Graphic, Database and Reports development, then factory testing, and field commissioning of same for this project.* 

**Larrin Habeger, Senior Systems Engineer** – Larrin brings over 30 years' project engineering, electrical design and drafting experience to the team. Utilizing AutoCAD Electrical, Larrin's focus is on bringing the highest quality drawings to our clients using state of the art practices and tools. Larrin manages the design group and handles most new panel mechanical and electrical designs working closely with the project engineer. *Larrin will be responsible for detailed electrical and mechanical design and drafting of PLC panel modifications, and panel record drawings for this project.* 

**Cliff Wills, Field Service Manager** – Cliff brings over 20 years' experience in trouble-shooting all types of complete electronic, mechanical, and electrical systems. Cliff will manage all field service tasks and will be a familiar face for C2i onsite. <u>Cliff will lead the field side of the PLC panel mods and system cut-overs verifying status of all equipment and coordinating with Owner's operations to assure all equipment continues to run throughout cut-over to new control system.</u>

#### 3.3.3. Smart Energy

**Shady Al-Zubi P.E.** Ph.D.— *Design Review & Professional Electrical Consulting* — Shady has work on many water/wastewater facilities throughout Florida and bring extensive experience in control systems to this project team. Shady is very familiar with similar SCADA upgrades. Shady will serve as design review and electrical controls consulting engineer for this project. *Shady Al-Zubi will review all design submittals, visit sites to address field conditions, review cut-over plans, system operation during factory and final demonstrate and closeout, and review record drawings against as-installed control system.* 

# C2i

# MARGATE FLORIDA SCADA QUALIFICATON PROPOSAL

# csia

# 3.3.4. Prime Contractor – HW & SW Integration - Control Instruments, Inc.



5253 Oakdale Road. SE | Smyrna, GA 30082

C2i will provide all detailed design, system integration, HMI & PLC programming, factory testing, field commissioning and demonstration testing, and owner training.

#### 3.3.5. Design Review & Professional Engineering Consultant – Smart Energy

Smart Energy will provide design review and design engineering oversite for this project. Smart Energy will review all team design submittals, visit sites to address field conditions, review system operation during factory and final demonstrate and closeout, and review record documentation against as-installed SCADA system.





# 3.4. Project Team – Key Staff Resumes

We have included resumes for the following Key Project Team members:

- 1. Shady Al-Zubi, P.E, Ph.D.– Smart Energy Design Engineering Review
- 2. Tracy Bumpers C2i Project Manager
- 3. Tom Economos C2i Lead Project Engineer & PLC Programming
- 4. Sue Adams C2i Project Controls Manager
- 5. Kyle Connell C2i Lead HMI & Network Engineer
- 6. Cliff Wills C2i Field Service Manager





#### 3.4.1. Design Review Engineer – Smart Energy. Shady Al-Zubi , P.E.Ph.D

## Shady Al-Zubi, P.E. Ph. D

Project Design Director / Design Review Engineer

#### **Professional Record**

Dr. Shady Al-Zubi is an experienced SCADA Automation and Professional Controls Systems Engineer qualified to design and build complex automated and networked industrial control systems.

Dr. Al-Zubi brings over 23 years of industrial and controls engineering experience in various industries in automation and control systems into municipal systems, water and wastewater treatment, and collection systems. Dr. Al-Zubi's responsibilities encompass all aspects of engineering design, construction, smart technologies implementation including Artificial Intelligence, Machine Learning for design optimization, and O&M cost savings.

#### Experience:

Dr. Al-Zubi has acquired depth of experience in intelligent electrical controls, industrial automation, instrumentation, SCADA industrial communication and networks, cybersecurity working in various projects with the private and public sector. Dr. Al-Zubi was the lead engineer responsible for engineering the instrumentation and controls systems integration for the following projects:

- Port Orange WRF and Controls Upgrades Port Orange, Florida
- NRWWTP Reclaim and Solids Upgrades Broward County, Florida
- Hollywood Wastewater Treatment Plant Hollywood, Florida
- Miramar East Water Treatment Plant Miramar, Florida
- NASA Langley Research Center NFT Controls Upgrades

Hampton, Virginia

• Toledo North Truck Assembly Plant Upgrades Toledo, Ohio



SHADY A-ZUBI, P,E, PH D.

#### **AREAS OF EXPERTISE**

Electrical Controls, Smart Industrial Automation, Instrumentation, Advanced Industrial Communications and OT Networks, Cybersecurity, AI, IIOT, Virtualization, SCADA for Industrial, Environmental, Municipal and Renewable Energy Commercial Projects

#### **EDUCATION**

PhD in Control Systems Engineering Oakland University, Michigan, 2017 MSc in Control Systems Engineering Oakland University, Michigan, 2004

#### LICENSES/CERTIFICATION

BSc in Electrical, Electronics and Communications Engineering, JUST, 2001 Professional Engineer – Florida 91305 ISA-62443 Cybersecurity Fundamentals Specialist, 2021, Florida

#### **PROFESSIONAL ACTIVITIES**

International Society for Automation (ISA) Institute of Electrical and Electronics Engineers





#### 3.4.2. Project Manager – Tracy Bumpers

# Samuel "Tracy" Bumpers

**Senior Project Manager** 

#### **EXPERIENCE SUMMARY**

Over 25 years' executive leadership, project management and control system engineering experience for mission critical control systems and municipal water and wastewater utilities with focus on system design, project management, scheduling, and project documentation. Tracy has successfully led, managed and engineered over 50 process automation and control projects in his career.

#### PROJECT ROLE

Tracy will provide day-to-day management of project scope and resources, as well as coordinate closely with the customer to make certain their needs and expectations are met. Tracy will assure the project and all tasks are completed in accordance with agreements and on-time.

#### SIMILAR PROJECTS

Gwinnett County Department of Water Resources SCADA (Multiple Projects), GA Lake Lanier serves as Gwinnett County's water source. To access this raw water, the County operates and maintains two separate intake and pump facilities. The raw water is then processed at one of the county's two water filter plants: the 150 MGD Lanier Filter Plant, and the 75 MGD Shoal Creek Filter Plant for a combined total of 225 MGD of water production capacity. The county also operates and maintains 10 water storage tanks and 14 booster pump stations. Beginning with the original Lanier Filter Plant PLC replacement, Tracy successfully engineered and managed 15+ individual process control system upgrade projects at both filter plants and booster/storage facilities.

#### Cobb County - Marietta Water Authority SCADA (Multiple Projects), GA

Tracy served as the executive in charge of a multi-disciplined project team that managed and engineered the SCADA System upgrades for the Quarles Water Treatment Plant, Quarles Raw Water Pump Station, Wyckoff Water Treatment Plant, Wyckoff Raw Water Pump Station, Hickory Log Creek Dam and Pump Station, and remote distribution sites. The team provided SCADA,



#### **TRACY BUMPERS**

#### **AREAS OF EXPERTISE**

Executive Management, Project Management, Control System Design, Implementation & Support

#### **EDUCATION**

B.S. Electrical Engineering Technology (High Honors), Kennesaw State University

Executive Leadership University of Vienna Vienna Austria

#### **SERVICE**

US Navy Weapons Systems Electronics Operation Desert Storm Honorable Discharge

HMI, and historical database modifications, PLC configuration, programming, instrumentation, and improved reporting capabilities to integrate and automate the new equipment and processes into the plant's new SCADA and Historian Systems. The system enhancements modernized the plant's water treatment technology, decreased plant downtime due to maintenance tasks, and enabled more efficient operation of the facility.





# 3.4.3. Project Controls – Sue Adams

#### **Sue Adams**

**Project Controller** 

#### **EXPERIENCE SUMMARY**

Over 15 years' experience with engineering company as Document Control Specialist and Project Control Administrator.

#### **PROJECT ROLE**

As Project Controls Manager, Sue is responsible for monitoring and reporting the financial and schedule performance of the project to the Project Manager and project team. Working to the contract requirements and C2i engineering standards, Sue will also manage the delivery of all project documentation.

#### **SIMILAR PROJECTS**

In her role, Sue touches all C2i Projects.



#### **SUE ADAMS**

#### **AREAS OF EXPERTISE**

Controls Systems Design, Project Management and Documentation Control, Support and Maintenance Project Financial Controls

#### **EDUCATION**

DeKalb Community College MS Outlook Training MS Excel Training Oracle/Primavera Construction Mgmt.

#### **LICENSES**

Adobe/Word/Excel training courses.

#### **CERTIFICATIONS**

OSHA Safety Certified Certified First Aid CPR/AED NOTARY for State of Georgia





#### 3.4.4. Senior Engineer, PLC Lead - Tom Economos

#### **Thomas Economos**

**Senior Project Engineer** 

#### **EXPERIENCE SUMMARY**

Over thirty years of experience in engineering and development of industrial and municipal control systems, including over 60 water/wastewater projects.

#### PROJECT ROLE

Tom will provide technical leadership for the project including all hardware & software design, implementation, testing, and commissioning. Tom is a seasoned engineering professional with years of programming experience with both Texas Instruments 505/545/555 PLCs, Rockwell Compact Logix PLCs which will be central to this projects' success.

Tom 30 years' experience a technical lead implementation and commissioning water and wastewater SCADA projects will assure clear and accurate project design and execution. Tom's specific experience with the President Street WRF and existing TI PLC programming will enable efficient and accurate software upgrade and field cut-over to the new SCADA system. Tom will work closely with Wes, Kyle, Cliff, and the WRF staff to produce a quality upgrade, mitigate all risks, and keep the WRF running efficiently throughout the SCADA update project.

#### SIMILAR PROJECTS

#### **Cobb County Water System – South Cobb WRF Plant Expansion**

Provided customer replacement PLC's and servers. This 3+ million SCADA upgraded consisted of approximately 10 new PLC and a completely new HMI packaged. Migrated from an iFix system to a Siemens HMI.

#### **Dekalb County – Snapfinger WWTP**

90 million plant expansion consisting of all new SCADA system. Allen Bradley PLC's communicating to vendor panels and VFD's. Provided new fiber, redundant servers.



#### **TOM ECONOMOS**

#### **AREAS OF EXPERTISE**

PLC Programming: TI 505/545/555 Siemens S700 Rockwell/Allen-Bradley Compact Logix, Control Logix, SLC-500, PLC5, RSLogix5000 Modicon Quantum, Micro, Momentum, SCADAPack.

HMI Programming VT Scada, GE iFIX, Rockwell Factory Talk, Panelview, Wonderware HMI

#### **EDUCATION**

Associate degree in Electrical Technology.
US Navy Cryptanalysis

#### **CERTIFICATIONS**

VT SCADA Advanced Rockwell RSLogix 5000 iFIX MHI/SCADA





#### 3.4.5. Senior Engineer, HMI Lead – Kyle Connell

## **Kyle Connell**

**Senior HMI Engineer** 

#### **EXPERIENCE SUMMARY**

Over 10 years of experience in engineering and development of industrial and municipal control systems, including over 40 water/wastewater projects. Technical support and troubleshooting of existing systems. Programming and Configuration (HMI/OIT SW), computer systems, local and wide area networks. Design and development of Supervisory Control and Data Acquisition (SCADA) systems in the municipal water and wastewater marketplace

#### **PROJECT ROLE**

Kyle has received advanced training on VT SCADA, networking, and Rockwell PLC programming and will lead all SCADA HMI graphics / database / alarm notification and reports production. As Senior HMI Engineer working closely with Wes, Tom, Cliff and the customer Kyle will assure a successful detailed design, implementation, factory test and system commissioning. In addition to leading software project production, Kyle is also responsible for software standards development and maintenance for C2i.

#### SIMILAR PROJECTS

#### Lewisburg, TN Wastewater Plant SCADA Upgrade

Provided customer with multiple upgrade path options with cost breakdowns, enabling the end user to be more involved with the creation of their system. Upgraded iFix SCADA to VTSCADA while maintaining customer's unique requirements and needs. Provided new computer hardware and configuration.

Kingsport, TN Wastewater Plant & Collection SCADA System Plant, and collection system designed together to create two systems that operate separately or in unison. Created in VTScada to take advantage of advanced development practices to provide enhanced analytical data for the 95 remote collection sites using VTScada as the master poll connected via a Virtual Private Network.

**Dublin, GA Water SCADA Upgrade** Used VTScada to replace a Lookout system. Using VTScada as the polling master to bring in the tank levels from

the RTUs and data from a secondary plant back to the main operations building. Fully utilizing thin clients through the city network to grant SCADA access (monitoring) for the operators at any city facility enabling ease of use for the water system's historical data.



#### **KYLE CONNELL**

#### **AREAS OF EXPERTISE**

SCADA System Design and Development, Technical Support, and Troubleshooting

#### **EDUCATION**

DeVry University Bachelor's in Computer Science

#### **CERTIFICATIONS**

Software Experience: 3DS Max, GIMP, XL Reporter, WIN-911 HMI Software Experience: ArchestrA System Platform (Wonderware, Wonderware Historian), iFix, Maple Systems EZ-WarePlus, FactoryTalk View, RSView

#### **COMMUNITY**

Faith Missionary, Temple Website Support Youth Education VBS Teacher





#### 3.4.6. Field Services Manager - Cliff Wills

#### **Cliff Wills**

**Field Services Manager** 

#### **EXPERIENCE SUMMARY**

22 years' experience with the US Navy as a Flight Engineer and management of processes and programs. Experience with PLC controls and instrumentation, as well as installation and maintenance of motors, pumps, lighting fixtures, generators, circuit breakers and transformers.

#### **PROJECT ROLE**

Cliff brings over 26 years' experience in trouble-shooting all types of complete electronic, mechanical, and electrical systems. Cliff's career in the US Navy included leading upwards of 50 men in operations and maintenance of a fleet of complex aircraft. While in the private sector for 6 years, Cliff has commissioned and maintained wide variety instrumentation on multiple projects. Cliff will manage all field service tasks, and will be a familiar face for C2i onsite.

Using our WRIKE task management software Cliff will assist in work-breakdown and resource management of all task orders, and bring on additional technical servicemen as required to get the work done in the field. Cliff will also participate in field activities and coordination meetings and assure accurate As-Installed drawings are produced and properly distributed.

#### SIMILAR PROJECTS

**Franklin, TN - WWTP Upgrade** replaced Wonderware and SLC-500 PLCs Plant PLC/IO subsystem with VTScada and new Rockwell Compact Logix PLCs. Work included PLC program conversion, VTScada HMI Graphics and database development, field instruments calibration, SCADA system factory and field testing and commissioning.

Carroll County, GA - Water SCADA Distribution Upgrade - replaced

Wonderware with new VTScada HMI Software which communicated via new Verizon Private VLAN using cellular modems to multiple remote sites including booster pump stations, elevated tanks, pressure reducing valve. Work also include automation of WTP High Service Pumping and Raw Water Pumping.



#### **CLIFF WILLS**

#### **AREAS OF EXPERTISE**

Controls Systems Design, Project Management and Documentation Control, Support and Maintenance

#### **EDUCATION**

Associate degree in Electrical Technology. Aviation Electrician and Advanced Avionics, US NAVY

#### **LICENSES**

FCC License w/radar endorsement Fiber optic repair certification.

#### COMMUNITY

YMCA Assistant Coach Girls Soccer

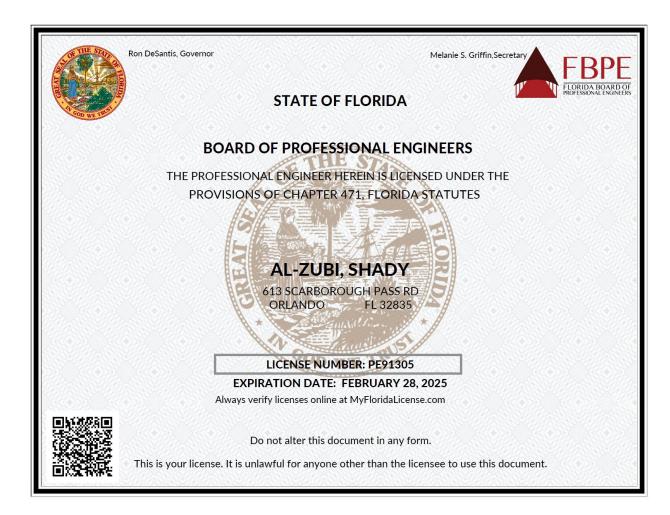




# 3.5. Licenses and Certifications

# 3.5.1. Professional Engineering – State of Florida

All C2i HMI, PLC and Programming work is overseen by a Professional Engineer licensed in the State of Florida.







#### 3.5.2. UL508A & UL698A Certification

Though some projects require, and special equipment is engineered into systems which must bear the UL 508, UL 508A MTR or UL 698 label, each panel delivered by C2i is built to UL 508, UL 508A MTR and NEMA standards whether specified by the consultant or not. The UL 698 is an intrinsically safe panel rating which UL has certified C2i to manufacture. C2i provides rigorous testing for each of its systems prior to shipment whether specified or not. C2i is a certified and regularly inspected UL 508A MTR and UL 698 panel shop.



**UL 508A** is the UL standard for the construction of Industrial Control Panels. This document gives guidelines to panel builders on various issues including proper component selection, wiring methods and calculation of short circuit current ratings.

**UL 698A** is the UL specification for the design and fabrication of intrinsically safe control panels.

#### 3.5.3. Schneider – Recognized System Integrator Certification

C2i has provided hundreds of systems for water and wastewater utilities that utilize Schneider/Modicon Programmable Logic Controllers. C2i's staff undergo regular training to achieve and maintain advanced certifications with all major controls hardware and software manufacturers.



#### 3.5.4. VTSCADA Integrator Certification

C2i has provided hundreds of systems for water and wastewater utilities that utilized HMI SCADA software and programmable logic controllers, along with LAN, radio and cellular based networks. C2i is *VTScada Advanced Certified Solutions Provider* and trained and authorized to provide, program, commission, and support Trihedral VTScada software products.







#### 3.5.5. CSIA Certification

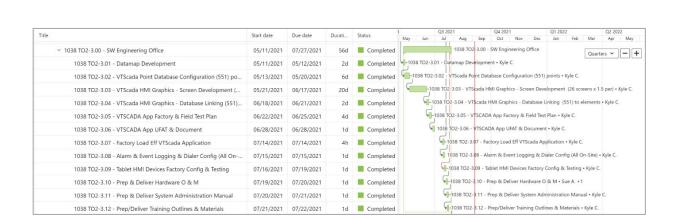
C2i is a Control System Integrator Association *CSIA Certified Integrator*, and as such, has adopted CSIA Best Practices methodologies for project management and project delivery.

- CSIA Certification indicates that an integrator complies with CSIA's Best Practices in the following areas of their business:
  - o General Management
  - o Human Resources Management
  - o Financial Management
  - o Marketing, Business Development and Sales Management
  - Project Management
  - System Development Lifecycle
  - Supporting Activities
  - o Quality Assurance Management
  - Service and Support
- An audit is required every three years to assure continued compliance
- CSIA Certification removes the burden from the client of auditing the business practices of the system integrator.
- CSIA Certification program for control system integrators is like requiring licenses for doctors, certification for accountants, and encourages professionalism and accountability thus reducing the risk of project failure, and increasing the probability of success.

#### 3.5.6. WRIKE – Project Management System Trained

C2i has adopted WRIKE Software by CISCO as our primary project and resource management tool, which helps us manage all tasks and resources for all projects and demand services. C2i is confident we have the project management, engineering, and services resources available and tools in place to execute your work on schedule. software.











#### 3.5.7. Project Schedule of Values, Task Invoicing

For professional services contracts, Task or Work Orders are broken down into tasks required to produce deliverables. All major tasks for all Work Orders are shown in both the WRIKE Task Management software and the Professional Service Work Breakdown (or project schedule of values).

Each week, all C2i resources complete their timesheets within the WRIKE software – charging time against the project tasks they are assigned to, and they work on and progressed during the week. Engineers also update the status of the task to complete when complete – flagging the task for billing at the end of the current month. Typically between the 20 th and 25th of the month, the Project Manager prepares the invoice for the customer. The invoice includes a minimum of the following:

- 1. C2i Accounting System Invoice
- 2. Professional Services Work Breakdown / SOV showing work complete current month.
- 3. WRIKE Gantt chart scheduled updated to show project overall progress, Work Order Progress, and Task progress. Labor hours in line with actual progress are invoiced for, as well as any specific deliverables. Below is a typical Schedule of Values on a Task-based Professional Services Contract.
- 4. Labor hours in line with actual progress are invoiced for, as well as any specific deliverables. Below is a typical Schedule of Values on a Task-based Professional Services Contract.

ROJECT	Effingham County SCADA Services	PRO	OFESSIONAL SER	VICES WORK BRE	AKDOWN			Pa	y Application No.	6
ONTRACT #	20-105-005			- /- /					Period Starting	
USTOMER: 2i Proj#	Effingham Board of Commissioners c/o EOM 1038		Contract Date:	6/2/2020	Print Date/Time:	8/26/21 3	:47 PM		Period Ending Project Manager	8/31/202 Wood
Task-Item	Description	Schedule	Qty/Days	Rate	Value	Completed	Complete This	Completed To	Work Remaining	% Comp
_	BASE CONTRACT - Purchased Hardware and Software	_	Qty			Previously	Period	Date		
0.01	Dell Workstation - Precison 3630 Tower w/ 24 in Monitor	7/25/2021	2	\$ 3,818.00	\$ 7,636,00	\$ 7,636.00	٠.	\$ 7,636.00	\$ -	100.09
0.02	Dell 43 in Monitor and wall mount bracket	7/25/2021	1	\$ 1,000.00	\$ 1,000.00		š -	\$ 1.000.00	š -	100.09
0,03	Uninterruptible power supply (UPS) – Model APC	8/25/2021	2		\$ 700.00	Š -	\$ 700.00	\$ 700.00	š -	100.09
0.04	Printer - Lexmark CS521dn	8/25/2021	1		\$ 1.000.00	š -		\$ 1.000.00	š -	100.09
0.05	Tablet - Microsoft Surface Pro X w/ Win Pro 10, celluar & WiFi	7/25/2021	2	\$ 2,250.00	\$ 4,500.00	\$ 2,250.00	\$ 2,250.00	\$ 4,500.00	\$ -	100.09
0.06	VTSCADA Dev SW / Runtime 3k Tag w/ Alarm Package for W/S	7/25/2021	1	\$ 8,000.00		\$ 8,000.00	\$ -	\$ 8,000.00	\$ -	100.09
0.07	VTSCADA Runtime SW 5K Tag w/ Alarm Package for W/S	7/25/2021	1	\$ 5,480.00			\$ -	\$ 5,480.00	\$ -	100.0
0.08	VTSCADA SW - Client License Read Only for Tablets	7/25/2021	2				\$ -	\$ 3,000.00	\$ -	100.09
0.09	Sales Taxes on Materials	7/25/2021	1	\$ 525.00	\$ 525.00		\$ -	\$ 525.00	\$ -	100.09
0.10	Engineering Labor to Load SCADA SW on New Workstations	7/25/2021	2	\$ 760.00	\$ 1,520.00	\$ 1,520.00	\$ -	\$ 1,520.00	\$ -	
	Subtotal Base Contract				\$ 33,361.00	\$ 29,411.00	\$ 3,950.00	\$ 33,361.00	\$ -	100.09
	TASK ORDER -1 SCADA Survey, Inventory, Condition Report		Days							
1.01	Prepare / Deliver HW/SW Inventory Plan Proposal	1/25/2021	0.5		\$ 760.00	\$ 760.00	\$ -	\$ 760.00	ş -	100.09
1.02	Receive / Enter / Work Plan Task Order-1 Site Visit 1 - SCADA HW/SW Inventory & Citech App Copy	1/25/2021	0.5	\$ 760.00 \$ 1,000.00	y 000100		\$ -	\$ 380.00 \$ 3,000.00	\$ -	100.0
1.03	Site Visit 2 - SCADA Review / Confirm Inventory Report	1/25/2021	3	\$ 1,000.00	\$ 3,000.00		ş -	\$ 3,000.00	\$ -	100.0
1.05	Prepare / Deliver - Citech SCADA Back-Up	1/25/2021	1				\$ -	\$ 760.00	š -	100.0
1.06	Prepare / Deliver - SCADA Network Diagram	1/25/2021	1				š -	\$ 760.00	š -	100.0
1.07	Prepare / Deliver - Citech Conversion To VTSCADA Proposal	3/25/2021	2	\$ 760.00	\$ 1,520.00		\$ -	\$ 1,520.00		100.0
1.08	Prepare / Deliver - Controls Equipment Condition Report	3/25/2021	2				\$ -	\$ 1,520.00	š -	100.0
1.00	Subtotal Task Order - 1		13.5	, , , , ,			š -	\$ 11,700.00	Š -	100.0
	TASK ORDER - 2 VTSCADA Software Integration & Commissioning		Days		<del>,</del>	,,	•	<del>,</del>	•	
	OFFICE SERVICES		Days							
2.01	PM - Prepare Project Plan	3/25/2021	1	\$ 760.00	\$ 760.00	\$ 760.00	s -	\$ 760.00	5 -	100.0
2.02	PM - Kick-Off Meeting Onsite	3/25/2021	2	\$ 760.00	\$ 1,520.00	\$ 1,520.00	š -	\$ 1,520.00	š -	100.0
2.03	PM - Prep/Deliver Effluent Pump Station Proposal (TO-3)	6/25/2021	2	\$ 760.00	\$ 1,520.00	\$ 1,520.00	ś -	\$ 1,520.00	š -	100.0
2.04	PM - Plan / Coord Installtion Onsite	7/25/2021	2	\$ 760.00	\$ 2,128.00	\$ 2,128.00	\$ -	\$ 2,128.00	\$ -	100.0
2.05	PM - Proj Meeting & Work Scoping Onsite 8/5 & 8/6	8/25/2021	2	\$ 760.00	\$ 1,520.00	\$ -	\$ 1,520.00	\$ 1,520.00	\$ -	100.0
2.06	PM - Headworks and Eff FM Proposal Preparation	8/25/2021	2	\$ 760.00	\$ 1,520.00	\$ -	\$ 1,520.00	\$ 1,520.00	\$ -	100.0
2.07	Project Management	8/25/2021	3			\$ -	\$ -	\$ -	\$ 2,280.00	
2.08	Datamap Development	6/25/2021	2	\$ 760.00	\$ 1,520.00		\$ -	\$ 1,520.00	\$ -	100.0
2.09	VTScada Point Database Configuration (551) points	6/25/2021	6	\$ 760.00	\$ 4,560.00		\$ -	\$ 4,560.00	\$ -	100.0
2.10	VTScada HMI Graphics - Screen Development (26 screens x 1.5 per)	6/25/2021	20	\$ 760.00			\$ -	\$ 15,200.00	\$ -	100.0
2.11	VTScada HMI Graphics - Database Linking (551) to elements	6/25/2021	6	\$ 760.00	\$ 4,560.00	\$ 4,560.00	\$ -	\$ 4,560.00	\$ -	100.0
2.12	Alarm & Event Logging & Dialer Configuration and Testing (150 Points)	7/25/2021	1	\$ 760.00	\$ 760.00	\$ 760.00	ş -	\$ 760.00	\$ -	100.0
2.13	Tablet HMI Devices Factory Configuration & Testing	7/25/2021	2	\$ 760.00	\$ 1,520.00		\$ 760.00	\$ 1,520.00	\$ -	100.0
2.14	Factory & Field Test Plan	6/25/2021	1	\$ 760.00	\$ 760.00 \$ 3.040.00	\$ 760.00 \$ 3.040.00	\$ -	\$ 760.00 \$ 3.040.00	\$ -	100.0
2.15	Unwitnessed FAT & Documentation Prep & Deliver As-Installed Hardware O & M	6/25/2021 7/25/2021	4 2				\$ - \$ -	\$ 3,040.00 \$ 1,520.00	\$ -	100.0
2.17	Prep & Deliver System Administration Manual	8/25/2021	2	\$ 760.00			\$ 1,520.00			100.0
2.17	Prep/Deliver Training Agenda	8/25/2021	1		\$ 760.00			\$ 760.00		100.0
2.10	ONSITE SERVICES	0/25/2021		\$ 760.00	\$ 760.00	, .	\$ 760.00	\$ 760.00	, .	100.0
2.19	Computer HW Set-up and Configuration	7/25/2021	1	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	s -	\$ 1,000.00	٠.	100.0
2.20	Functional Demonstration (Simulated IO)	7/25/2021	3	\$ 1,000.00	\$ 3,000,00	\$ 3,000.00	ς .	\$ 3,000.00	š -	100.0
2.21	LAN Communications Configuration	7/25/2021	1	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	š -	\$ 1,000.00	5 -	100.0
2.22	SCADA IO Status and Alarm Inputs Verification	7/25/2021	3	\$ 1,000.00			\$ -	\$ 3,000.00	\$ -	100.0
2.23	Operator Data Entry and Remote Control Verification	7/25/2021	2	\$ 1,000.00			\$ -	\$ 2,000.00	\$ -	100.0
2.24	Alarm Dialer Communications Config and Testing	8/25/2021	2	\$ 1,000.00				\$ 2,000.00	\$ -	100.0
2.25	Remote Devices Configuration & Thin Client Install	8/25/2021	1	\$ 1,000.00	\$ 1,000.00	\$ -	\$ 1,000.00	\$ 1,000.00	\$ -	100.0
2.26	Punchlist Items	8/25/2021	2			\$ -	\$ -	\$ -	\$ 2,000.00	
2.27	System Performance Demonstration (30 days) Techical Support	8/25/2021	5		\$ 5,000.00	\$ -	\$ 5,000.00		\$ -	100.0
2.28	Operator Training	8/25/2021	1		\$ 1,000.00	\$ 1,000.00	\$ -	\$ 1,000.00	\$ -	100.0
2.29	System Administrator Training	8/25/2021	1		\$ 1,000.00	ş -	\$ 1,000.00		\$ -	100.0
2.30	Contingency & Changes	8/25/2021	3.5			\$ -	\$ -	\$ -	\$ 3,500.00	
2.30.1	Report Development Onsite - Complete 8/5/21  Subtatal Task Onder	8/25/2021	1.5	\$ 1,000.00	\$ 1,500.00		\$ 1,500.00 \$ 15.580.00		\$ 7.780.00	100.0
	Subtotal Task Order - 2					\$ 50,608.00 Completed	\$ 15,580.00 Complete This	\$ 66,188.00 Completed To	* 1,100.00	89.59
	PROJECT SUMMARY				Value	Previously	Period	Date	Work Remaining	% Con
	TOTAL - BASE CONTRACT + Task Orders 1 & 2				\$ 119,029.00	\$ 91,719.00	¢ 10 520 00	\$ 111,249.00	\$ 7,780.00	93.5





# 4. Scope of Work

# 4.1. Project Understanding & Overall Design Aspects

The current Margate WTP and WWTP SCADA system was upgraded by C2i in 2007.

The plants utilize Modicon PLC's with the exception of the Hypochlorite system, which has an Allen Bradley PLC.

All the PLC's installed at the East WTP, West WTP and the West WWTP are to be upgraded with the Modicon M340 PLC.

New process control narratives are to be provided for each PLC in the specified manner.

The Carollo SCADA design criteria package dated October 2023 provides a listing of the PLC's and the scope of work for each individual control panel (reference Table 2 and Table 3) C2i will follow this as our basis of design.

Both the WTP and WWTP have redundant servers running Wonderware software. The licenses are listed in Table 1 of the Carollo design criteria package.

The Wonderware HMI will be replaced with redundant 50K VT SCADA package at the East WTP and the West WWTP. A single 100K VT SCADA package will be provided at the West WWTP.

New graphics will be developed based on the "High Performance" style.

The servers are described in the Carollo package on Page 33-34 and listed on the C2i Scope of Work.

A new fiber optic cabling system will be provided for both the East and West treatment plants. The fiber will be single mode 18-fiber insalled in new concrete encased duct banks.





# 4.2. C2i Scope of Work

PROJECT: MARGATE SCADA UPGRADES – RFQ D/B

WEST WWTP SERVER 2 BACKUP / WTP BACKUP & RECOVERY SERVER

OWNER: CITY OF MARGATE, FLORIDA

ENGINEER: CAROLLO

#### Servers:

East WTP Server 1/Server Virtual Machines /VT SCADA Primary WTP Application Server/Domain Controller.

East WTP Server 2/Server Virtual Machines/VT SCADA Secondary WTP Application Server/Domain Controller/WTP Change Management/Backup Client Server.

West WTP Server 1/Server Virtual Machines /VT SCADA Primary WTP Application Server/Domain Controller.

West WTP Server 2/Server Virtual Machines/VT SCADA Secondary WTP Application Server/Domain Controller/WTP Change Management/Backup Client Server.

Environmental Server 1/Central SCADA Server/WWTP Plant Location/Server Virtual Machines/VTSCADA WTP/WWTP Application Servers/XL Reporter Server/Change Management Server.

Environmental Server 2/Central Management Server/Server Virtual Machines/Active Directory Server/Windows Server Update Servers with Anti Virus/Network Monitoring Servers/Firewall Management Server/V Center Server.

Network Timer Server (rack mount) – 17730-4.

#### **Server Software**

One	(1)	Lot software (VT SCADA) on above servers.
OHE	(11)	LUL SUILWAIE IVI SCADAI UII ADUVE SEIVEIS.

Two (2) WTP SCADA servers – 50,000 tags set up redundant.

Two (2) WWTP SCADA HMI servers – 50,000 tag set up redundant.

Two (2) Central SCADA server at West WWTP – 100,000 tags.

One (1) Lot Historian licenses as required.

Six (6) KMV extender (1 each above server).





Six 6) Master (CISCO) switches.

Tag: Pair for Water Treatment Plant

Pair for Wastewater Treatment Plant

Pair for Environmental Servers

VM licenses shall be provided as required on servers.

XL Reporter licenses shall be provided as required on servers.

Use of **EXISTING** dream reports will be continued, but no new licenses will be provided.

Backup/recover license will be provided for server dedicated to this function (WTP and WWTP Primary/Backup servers).

One (1) Lot network domain controller software shall be provided as required.

#### Workstations

Two (2) Workstations.

Tag: (2) Engineering'

One (1) Lot software:

- VT SCADA Runtime licenses for above workstations
- (2) Copies Microsoft Office on engineering workstations
- (2) Copies XL Reporter on engineering workstations

#### PLC's

Twenty (20) Replace existing PLC's (in following enclosures):

Water Treatment Plant:

Tag:	CP-1000	Control Room
	CP-1001	Electrical Room
	CP-1002	Transfer Pumps
	CP-1003	High Service Pumps
	CP-1005	Hypochlorite
	CP-1006	Lime Silo 1
	CP-1007	Lime Silo 2
	CP-1010	Switchgear
	CP-1011	Blowdown Water #1
	CP-1012	Blowdown Water #2
	CP-2009	East WWTP PLC

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Wastewater:

Tag: CP-2000 Main PLC
CP-2001 Headworks
CP-2002 RBC
CP-2003 Clarifiers
CP-2004 Chlorine

CP-2005 Sanifaire/Blowers
CP-2006 Sludge Dewatering
CP-2007 A/B JetAir/Digester
CP-2008 Generator Bldg.

One (1) Copy on new Modicon programming software (Eco Structure Control Expert Unity Pro).

One (1) Lot of spares as specified.

Twenty (20) Operator interfaces shall be provided at each above panel with VT SCADA RT license.

Twenty (20) VT SCADA Runtime licenses (OIT) (1 each PLC enclosure).

Twenty (20) UPS (1 each above panel) in separate enclosure.

Twenty (20) Ethernet switches (1 per panel for fiber or CAT6 Ethernet).

Note: Each switch is in dedicated enclosure with redundant 24VDC power supplies.

The following training shall be provided:

Table 1 – Water Treatment					
Course Title	Minimum Course Length (hours per session)	Personnel (Estimated Number of Students)	Minimum Number of Sessions		
System Overview	2	10	1		
Operator Training - Basic	2	10	1		
Operator Training - Advanced	2	10	1		
CIS (Computer) Equipment Maintenance	2	5	1		
HMI Software	2	10	1		
Historian System Training	1	10	1		
Reports Training	2	10	1		
PLC Hardware	1	5	1		
PLC Software	2	5	1		
Network Equipment	2	5	1		
Follow-Up Training	4	10	1		





Table 2 – Waste Water Treatment					
Course Title	Minimum Course Length (hours per session)	Personnel (Estimated Number of Students)	Minimum Number of Sessions		
System Overview	4	10	1		
Operator Training - Basic	4	10	1		
Operator Training - Advanced	4	10	1		
CIS (Computer) Equipment Maintenance	2	5	1		
HMI Software	2	10	1		
Historian System Training	1	10	1		
Reports Training	2	10	1		
PLC Hardware	1	5	1		
PLC Software	2	5	1		
Network Equipment	2	5	1		
Follow-Up Training	4	10	1		





# 4.3. Project Deliverables

The proposed SCADA system upgrade at Margate WTP and WWTPs includes the following:

#### 4.3.1. Project Administration, Planning and Detailed Design

- 1. Providing performance and payment bonds as required.
- 2. Providing detailed comprehensive Project Plan including list & content of submittals, Schedule of Values and MS Project Schedule, with review meeting.
- 3. Providing HMI & PLC software project design standards & work summary submittal with review meeting.
- 4. Providing Computer Hardware, PLC Hardware Purchased Software and System configuration design submittal and review meeting.
- 5. Providing PLC Panel Hardware and Modification Drawings submittal and review per PLC / Process Area below.
- 6. Providing VTSCADA HMI Graphics & database design submittal and workshop / review meeting.
- 7. Providing HMI Graphics and Database submittal
- 8. Providing PLC program conversion and Controls Narrative Submittal
- 9. Providing HMI & PLC programming & configuration for alarm / event logging, trends and operations reports, alarm annunciation and remote notification (alarm dial-out, texting, and email alarm notifications).
- 10. Providing Factory and Field Testing Plans submittal and review.
- 11. Providing Unwitnessed FAT and Witnessed FAT of all HW and SW at C2i.
- 12. Providing PLC Cut-Over Plans submittal and review per PLC / Process Area .
- 13. Providing site installation, networking and commissioning of new servers, operator workstations, engineering and management workstations, and remote access for authorized remote users.
- 14. Providing onsite review of cut-over plans and site installation (cut-over) of new PLC hardware, networking and application programs for each PLC / process area per table above.
- 15. Providing As-Installed record documentation for PLC panel modifications, PLC programs, HMI System configuration complete.
- 16. Providing coordination of messaging as required between existing PLCs and new PLCs.
- 17. Providing coordination for Owner-programming of new VLAN on existing Juniper network switches to accommodate new PLC subsystem.
- 18. Providing Training Plan and Schedule submittal and review.
- 19. Providing training onsite for operators, engineering and SCADA managers.
- 20. Providing (1) One year material and labor warranty on all provided materials and services.





#### 4.3.2. Design, Programming & Testing Submittal List

The following is the proposed list of detailed design submittals: <u>Please note the Owner and Smart Energy</u> will review all submittals.

No.	Submittal Name	Schedule Date	Status
1	Project Plan	TBD	
2	Computer & PLC Hardware & Purchased Software	TBD	
3	HMI & PLC Software project Programming Standards	TBD	
4	PLC Panel Hardware & Modification Drawings	TBD	
5	VTSCADA HMI Graphics & Database Design Submittal	TBD	
6	Converted PLC Program and Control Narrative Submittal	TBD	
8	Factory and Field Testing Plans submittal	TBD	
9	PLC Cut-Over Plans submittal	TBD	
10	Operator and Maintenance Training Plan	TBD	
11	As-Built Drawings, O & Ms and Record Program Documents	TBD	

## 4.3.3. Design, Programming & Testing Submittals Content

#### 4.3.3.1 Project Plan & Schedule

The purpose of the **Project Plan** is to communicate a plan of project execution and describe methods of detailing work and tracking progress. The project plan includes overview of project scope, list of detailed design submittals, introduction to project team, a list of deliverables (SOV), a preliminary project schedule, and list of planned coordination meetings.

Task Mode	Task Name	Duration
<b>■</b>	Savannah Montgomery SWPS Controls Upgrade Project	223 days
<b>=</b> >	Notice To Proceed	0 days
->	Pre-Construction Activities	72 days
->	Project KOM	1 day
->	SCADA Software Upgrade Proposal	33 days
-	SCADA Software Upgrade Review / Approval	38 days

#### 4.3.3.2 Computer Hardware and Purchased Software

The purpose of the **Computer Hardware & Purchased Software Submittal** is to confirm detailed design and application of specified equipment prior to procurement, installation, and commissioning. This submittal shall include Site Bill of Material, Instrument ISA Datasheet, Manufacturer's Literature, and System Configuration Drawing.



#### 4.3.3.3 HMI & PLC Project Programming Standards

The purpose of the **HMI & PLC Project Programming Standards Submittal** is develop a project standard to which all programming will adhere to. This submittal will include Point Tagging, HMI Graphics & database design, PLC programming approach, control narrative format, network configuration and identification, and identification of Owner and Project Team key resources for coordination of all programming.

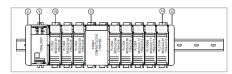






#### 4.3.3.4 Control Panel Hardware and Drawings

The purpose of the Control Panel Drawings and Hardware Submittal is to confirm detailed design and application of specified equipment, prior to procurement, installation, and commissioning. This submittal shall include PLC and Misc. Panel Modification Hardware Bill of Material, Material ISA Datasheets, Manufacture's Literature, and existing Panel Modification drawings.



#### 4.3.3.5 Converted PLC Program & Control Narrative

The purpose of the PLC Program & Control Narrative Submittal is to provide a Structured Control Narrative description of SCADA operation as a basis for all further submittals, final programming, factory testing, commissioning, and site acceptance testing. The submittal will consist of a copy of the converted PLC program and a detailed narrative discussion of process monitoring and controls derived from the PLC program and will describe all monitoring and control required.



#### 4.3.3.6 HMI Graphics, DB and Reports Design

The purpose of the HMI Graphics, DB and Reports Submittal is to provide for review clear definition & content of the HMI SCADA graphical screens, IO, and reports. This content of this submittal will be the operator's interface to the control system and will consist of Process Graphic Screens, IO Database Listing, Trending Screens, and Reports.



#### 4.3.3.7 Factory & Site Acceptance Test Plan Submittal

The purpose of the Factory & Site Acceptance Test Plan Submittal is to provide the Engineer an opportunity to review and comment on the FAT/SAT Plan. The FAT/SAT Plan, PLC program, as other SCADA software configuration, will follow the approved Control System Narrative. The FAT/SAT Plan submittal will utilize the approved Control Narrative and provide check-off and sign-off forms for record. C2i will provide this submittal for Engineer and Owner's review and approval. This submittal will consist of a Structured Control Narrative and Check-off / Sign-off Forms.



#### 4.3.3.8 PLC Cut-Over Plan Submittal

The purpose of the PLC Cut-Over Plan Submittal is to provide the Engineer and Owner an opportunity to review and comment on the individual PLC cut-overs. The submittal will be used to review the constraints of operations during cut-over, the schedule of the cut-over, and temporary operating plans & contingencies.

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#### 4.3.3.9 Operations & Maintenance Manuals Submittal

The purpose of the **O & M Submittal** is to provide the Engineer and Owner an opportunity to review the final O & M Manuals. This submit will include the Field Instruments O&M, the Computer Hardware & SCADA Software O&M, and the Panel Drawings & Hardware O&M.

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#### 4.3.3.10 Training Plan Submittal

The purpose of the **Training Plan Submittal** is to provide outlines, course descriptions and goals of all training to be provided. This submittal will include Operator Training Plan, Maintenance Training Plan, and Preliminary Training Schedule.

#### 4.3.3.11 As-Built Drawings, O & M's and Record Program Documents

The purpose of the As-Built, **O & M's & Record Program Documents submittal will provide the** Engineer and Owner an opportunity to review the final O & M documentation. This submit will include the PLC panel modification drawings, panel hardware O&M, the computer hardware & purchased software O&M, and copies of all application programming and commentary.





#### 4.3.4. Programmable Logic Controllers Design Review Meetings

- 4.3.4.1 Meeting 1 WTP Control Strategy Design Workshop
- 4.3.4.2 Meeting 2 WTP Control Strategy Design Workshop
- 4.3.4.3 Meeting 3 WTP Control Strategy Review
- 4.3.4.4 Meeting 4 WTP Control Strategy Review
- 4.3.4.5 Meeting 5 WTP Control Strategy Construction Review
- 4.3.4.6 Meeting 6 WWTP Control Strategy Review
- 4.3.4.7 Meeting 7 WTP and WWTP PLC code

# 4.3.5. HMI Design Review Meetings

- 4.3.5.1 Meeting 1 WTP SCADA HMI Graphics Design Workshop
- 4.3.5.2 Meeting 2 WWTP SCADA HMI Graphics Design Workshop
- 4.3.5.3 Meeting 3 WTP SCADA HMI Graphics Design Workshop
- 4.3.5.4 Meeting 4 WWTP SCADA HMI Graphics Design Workshop
- 4.3.5.5 Meeting 5 WTP and WWTP SCADA System reporting Workshop

#### 4.3.6. Control Narrative Design Meetings

- 4.3.6.1 Meeting 1 WTP Process Control Workshop #1
- 4.3.6.2 Meeting 2 WTP Process Control Workshop # 2
- 4.3.6.3 Meeting 3 WWTP Process Control Workshop #1
- 4.3.6.4 Meeting 4 WWTP Process Control Workshop #2

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# 4.2.7 Installation and Site Commissioning

Our scope of commissioning work includes:

- 1. Providing installation and commissioning new computer servers, etc. as shown in the approved system configuration drawing and related submittals.
- 2. Providing installation and commissioning new PLC hardware in existing enclosures in accordance with approved design documentation.
- 3. Providing installation and commissioning new HMI Graphics, database, alarm notification system, reports and misc. HMI configuration as required.