



"RE-BUILDING THE CITY'S WATER SYSTEMS FOR THE 21ST CENTURY"

Sewerage & Water Board OF NEW ORLEANS

625 ST. JOSEPH STREET
NEW ORLEANS, LA 70165 • 504-529-2837 OR 52-WATER
www.swbno.org

Addendum No. 1

Date: 11/1/2024

Your reference is directed to the Request for Proposal for 2024-SWB-97 Grid Control System (GCS) for the Sewerage and Water Board of New Orleans proposals that are due on November 12, 2024, at 11:00 a.m. (CST).

This addendum provides for the following:

1. SWBNO – Pre-bid Meeting held October 22nd, 2024 at 11:00AM Presentation Slides
 - a. [See Attached \(Pages 3-37\)](#)
2. SWBNO – Pre-bid Meeting held October 22nd, 2024 at 11:00AM Attendance Sheet
 - a. [See Attached \(Pages 38-39\)](#)
3. Updated EDBP Participation Summary Sheet and Affidavit (Required)
 - a. [See Attached \(Pages 40-41\)](#)
4. Added Specifications - Section 01 50 00, Temporary Facilities and Controls, ADDED in its entirety.
 - a. [See Attached \(Pages 42-51\)](#)
5. Extended bid period
 - a. Request for Proposal Bid Advertisement:
 - i. **REMOVE** Language:
"Inquiries and/or Requests for Clarification are due to Connor Metcalf, on **November 4, 2024**, no later than 5:00 pm CST via in writing or email to cmetcalf@swbno.org. All responses will be posted on or before **November 8, 2024**."

Proposals will be received by the Sewerage and Water Board of New Orleans Procurement Department by **November 12, 2024 at 11:00 am** local time. For submission instructions, see proposal documents."
 - ii. **REPLACE** Language With:
"Inquiries and/or Requests for Clarification are due to Connor Metcalf, on **November 26, 2024**, no later than 5:00 pm CST via in writing or email to cmetcalf@swbno.org. All responses will be posted on or before **November 29, 2024**."

Proposals will be received by the Sewerage and Water Board of New Orleans Procurement Department by **December 3, 2024 at 11:00 am** local time. For submission instructions, see proposal documents."

b. SECTION 1.12 RFP Schedule Summary

i. Table 1. Anticipated RFP Schedule Summary has been **ADJUSTED** to the following:

Event	Date	Local Time
RFP Release	October 14, 2024	
Non -Mandatory Pre-Proposal Meeting	October 22, 2024	10:00am
Deadline for SWBNO receipt of written questions from prospective proposers	November 26, 2024	5:00pm
Responses to questions/clarification	November 29, 2024	5:00pm
Proposal due date and time	December 03, 2024	11:00am
Evaluation Committee meeting, open to public	TBD	TBD
Award of Contract(s)	TBD	TBD

6. Appendix B – GCS IMPLEMENTATION PLAN SCOPING TABLES

a. **REMOVE** the following row in the Generation/Source Assets(GSA) Table

Generation/Source Asset	PDCS	GSA Part	GSA_3	GSA_4	GSA_5	GSA_6	GSA_7	GSA_8
CWPPH-4-EMV25-STG-04	Y	3						

b. **REPLACE** With:

Generation/Source Asset	PDCS	GSA Part	GSA_3	GSA_4	GSA_5	GSA_6	GSA_7	GSA_8
CWPPH-4-EMV25-STG-04	N	-						

7. Responses to Questions

a. [Attachment - GCS_Add1Attach1_BidQuestionsV0.pdf \(Pages 52-56\)](#)

8. Appendix D – SWBNO GRID CONTROL SYSTEM FEED Study – Errata

- a. On page 30 of the Grid Control System FEED Study (Appendix D) Current Operations list sixth (6th) bullet shall be revised to state that STG-4 has been previously load tested to 18.5MW.
- b. On page 30 of the Grid Control System FEED Study (Appendix D) Current Operations list seventh (7th) bullet shall be revised to state that STG-5 has been previously load tested to 17.5MW.
- c. On Page 30 of the Grid Control System FEED Study (Appendix D), Future Operations list 2nd bullet shall be revised to state that ‘STG-4 will be decommissioned at the end of 2025, following commissioning of the new substation, frequency changers, and new CTG-7’.

The above revisions shall be incorporated in and take precedence over any conflicting part of the original proposal documents. This addendum is hereby officially made a part of the referenced proposal.

Receipt of this addendum shall be acknowledged by inserting its number and date in the space provided in the Form of Proposal.

This addendum consists of fifty-six (56) pages.

*** END OF ADDENDUM ***

Sewerage and Water Board of New Orleans West Power Complex at Carrollton Water Plant Installation and Implementation of a Grid Control System (GCS)

Pre-Bid Meeting – October 22, 2024
Solicitation No. 2024-SWB-97



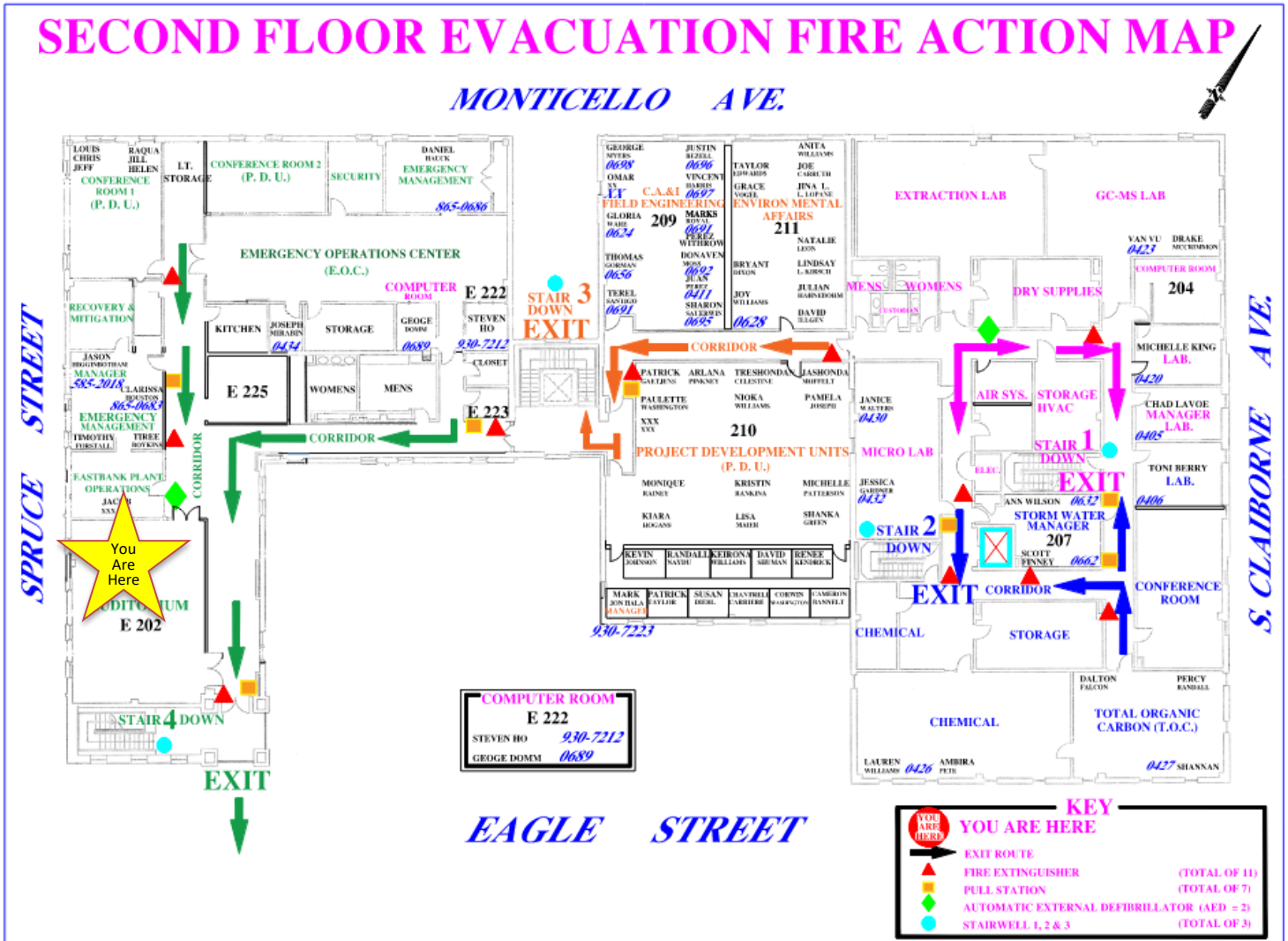
Jacobs



Agenda

- Safety Moment
- Procurement Discussion
- DBE Discussion
- Key Bid Information
- Project Overview
 - Introduction of Team
 - Scope of Work
- Project Details
- Wrap Up
 - Questions
 - Site Walk

Safety Moment



Procurement Discussion



Jacobs



DBE Discussion



Jacobs



Key Bid Information

- Bid Schedule
 - Last Day for Questions: November 4, 2024 – 5pm CST
 - Final Responses Posted: November 8, 2024
 - Bid Opening Date: November 12, 2024 – 11am CST
 - Substantial Completion: NTP + 18 Months

- Bid Reminders
 - Read Instructions and Follow Exactly
 - DBE Requirements
 - Signature Requirements
 - Bid Form Requirements

Project Overview



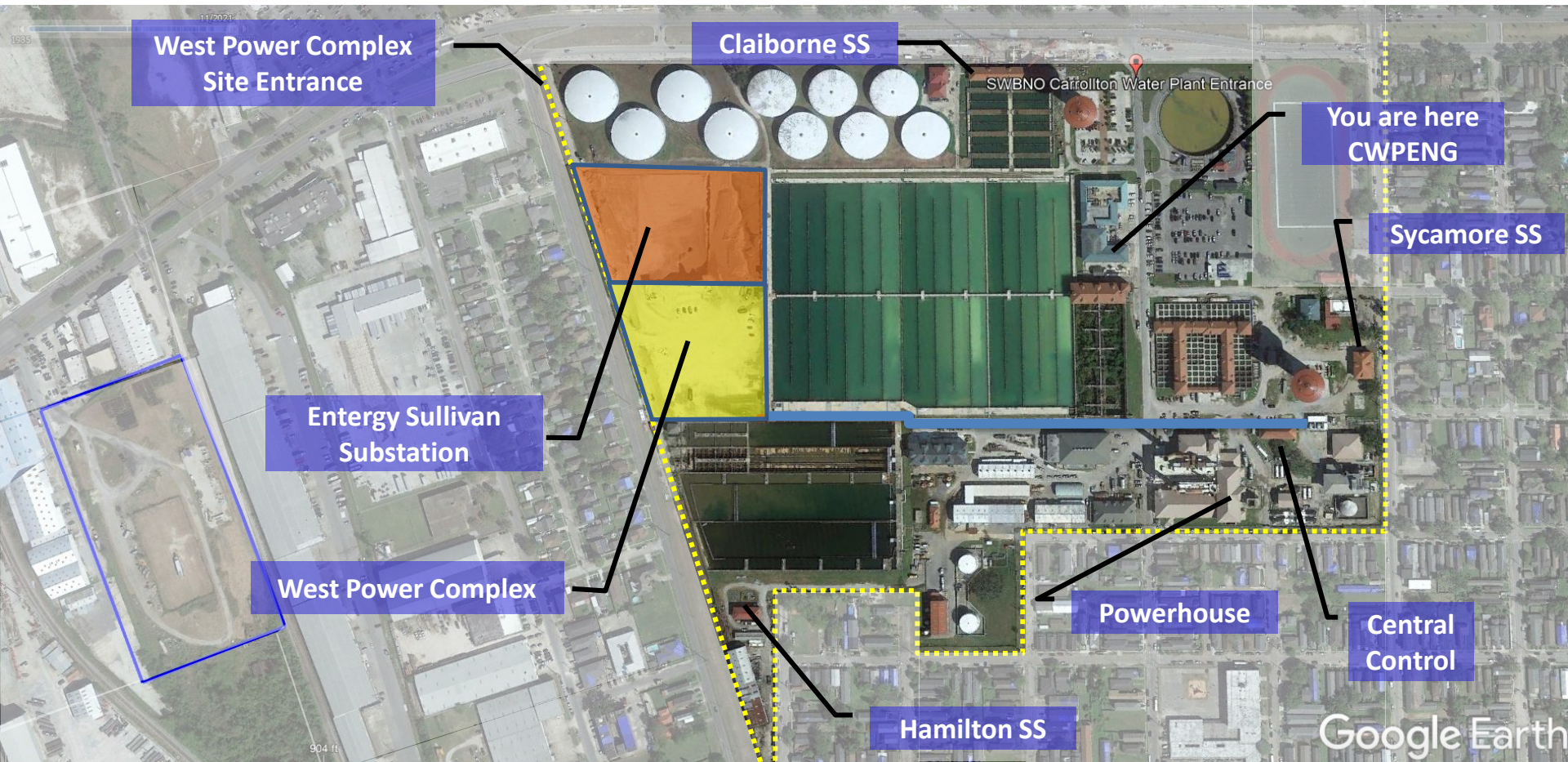
Jacobs



Introduction of Team

- Sewerage and Water Board
 - Chief Engineer – Chris Bergeron
 - Project Manager – Adam Solino
 - Project Support Lead – Celso Antunez
 - Purchasing – Connor Metcalf
- POWER Engineers
 - Project Manager – Joe Bondank
 - Project Engineer – Sean Buffington
 - Technical Leads – Chris Dimaano, Robert Whipple
- Jacobs Engineering
 - Project Manager – Roy Snover
 - Technical Leads – York Brogden, Amy Cox

Carrollton Water Treatment Plant



Scope of Work – Purpose

Provide a Grid Control System (GCS) for industrial and power generation applications, including configuration of system to meet SWBNO specific needs and integration/deployment of new system, as well as furnishing, installation, and commissioning of required hardware and software for the GCS.

GCS Objectives

- Effectively manage generation and loads on both the 25Hz and 60Hz portions of the SWBNO system
- Provide automated control of generation, distribution, and load assets, with an option for manual or mixed modes of operation
- Provide high-speed load shedding
- Provide a high performance, redundant, expandable system to meet SWBNO reliability needs

Scope of Work – Overview

- All hardware required to interface with existing PDCS
- All communications networking
- Provide required all input/output (IO) points
- All software, programming, and settings required to implement the GCS functionality on the SWBNO and GCS hardware
- Configuration documentation including control narratives, control logics, Human Machine Interface(HMI) graphics, and etcetera for a fully functional GCS.
- Automated system reports including but not limited to: Shift reports, Configuration, reports, Asset reports, Alarm/Event reports

Scope of Work – Overview

Detailed technical requirements are defined in technical specifications in Appendix C and as listed below.

Specification requirements shall be RFP requirements.

40 94 23.PDCS PDCS ELECTRICAL CONTROL SYSTEM
40 94 24.PDCS PDCS HUMAN MACHINE INTERFACE
40 94 25.PDCS PDCS DATA EXCHANGE INTERFACE
40 94 26.PDCS PDCS GRID CONTROL SYSTEM

Scope of Work – GCS Requirements



The GCS application will consist of the following essential features:

Generation control (GenCS) during islanded condition and parallel operation with the grid.

- Automatic generation control (AGC)
- Voltage control system (VCS)
- Island control system (ICS)

Load shedding

- Contingency-based load shedding (CLS)
- Underfrequency-based load shedding (UFLS)
- Progressive overload shedding (PLS)

Black start and load restoration

Autosynchronization between different electrical islands

Islanding and decoupling

Generator exercise mode

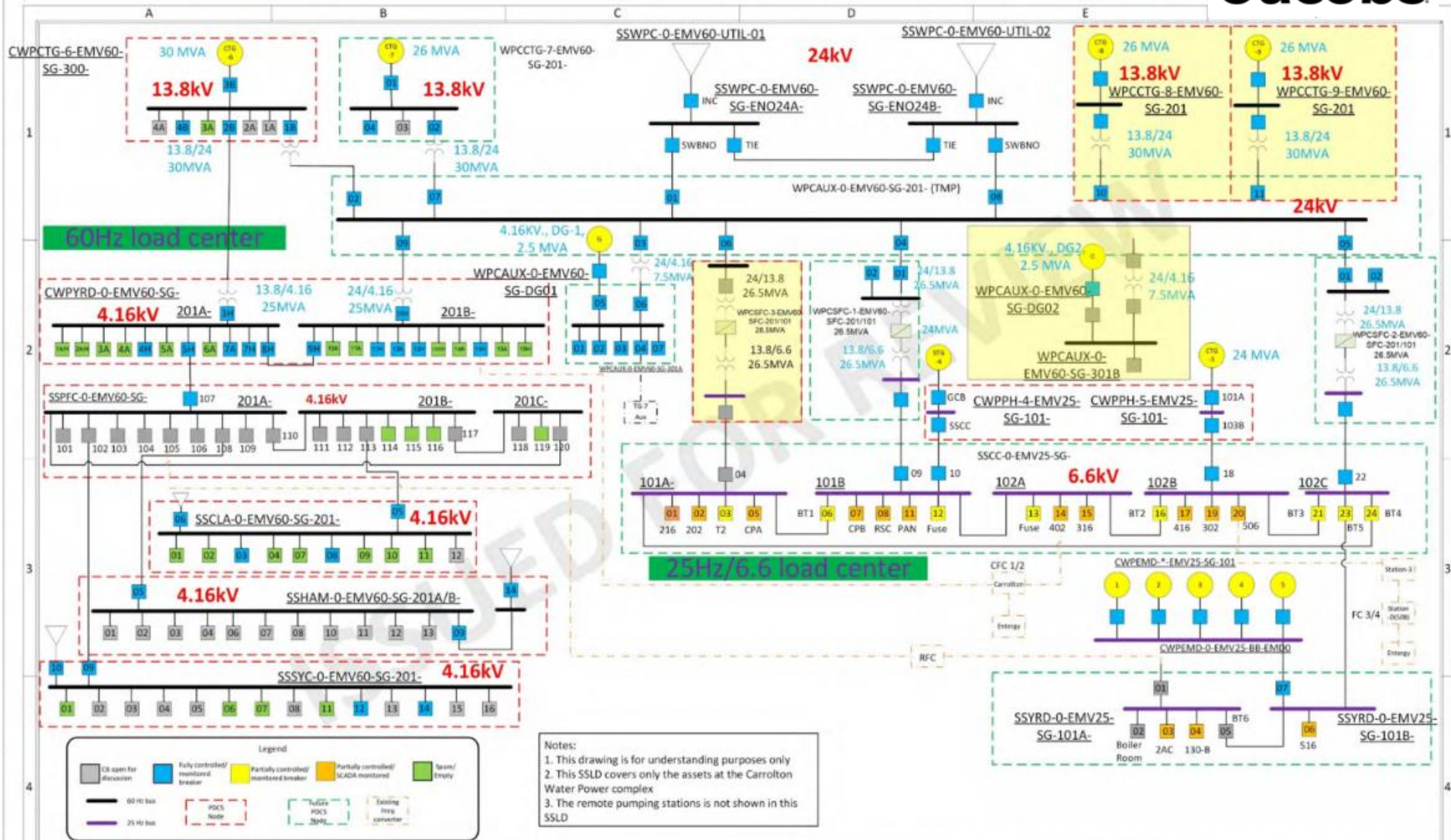
Unit commitment (UC)

Scope of Work – Implementation

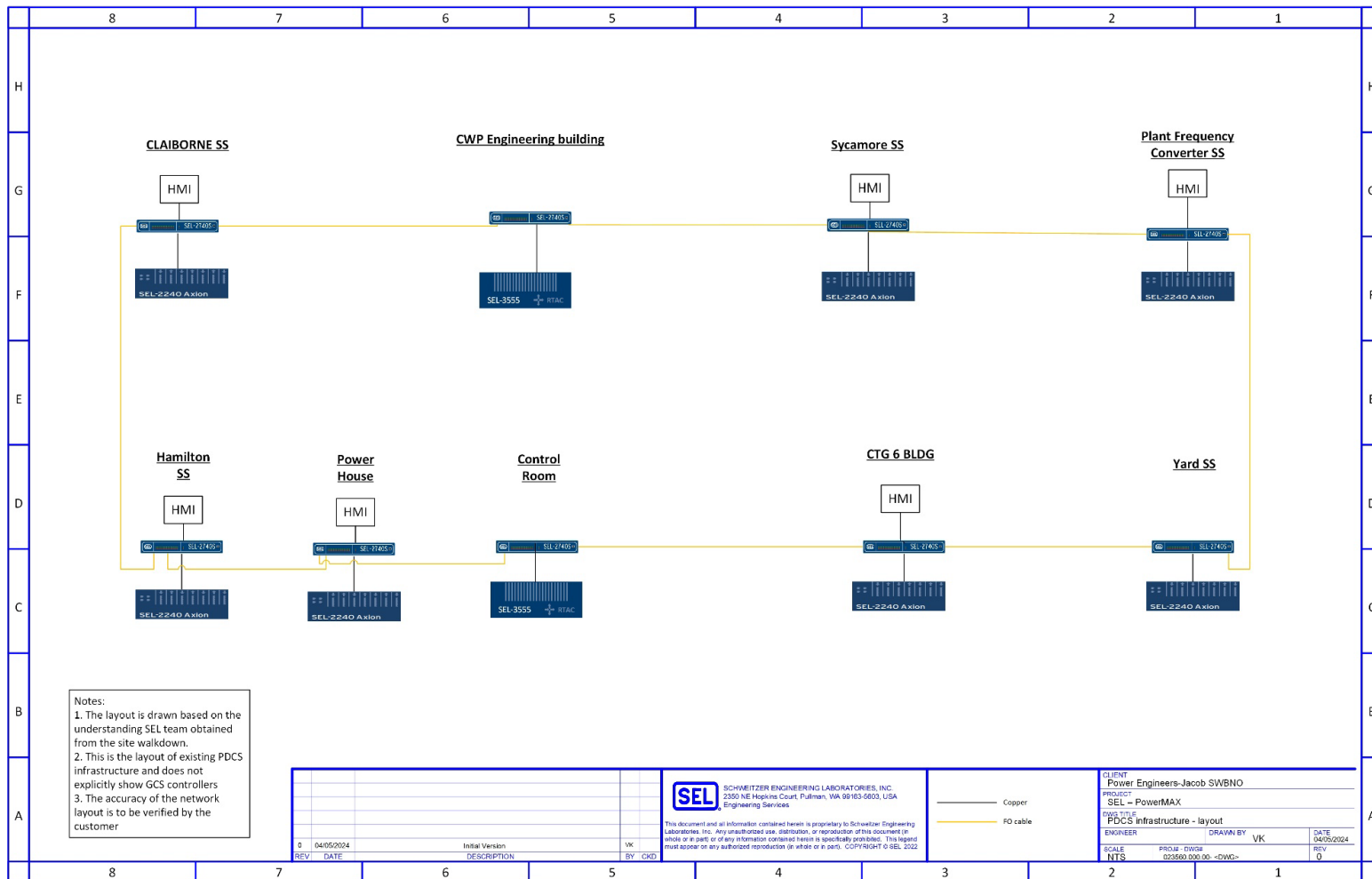
GCS Supplier will need to consider the following aspects of the SWBNO system:

- The SWBNO network includes generators and loads of various ages and designs.
 - GCS scope includes transient stability analysis study(s) as required before implementing control logic.
 - Hardware in the Loop (HIL) test to be performed by GCS supplier to validate performance before implementation
- GCS will expand on the existing PDCS network.
 - Close coordination between SWBNO and GCS Supplier is expected and required
 - GCS Supplier may replace hardware where required, with SWBNO approval
 - GCS Supplier will need to coordinate required I/O points on existing equipment with SWBNO
- Cybersecurity is critical to the SWBNO infrastructure
 - Security shall be considered throughout the GCS Supplier design process
 - Specifications and standards shall be met as called out in the RFP

Scope of Work – Simplified One-Line



Existing Infrastructure – PDCS Network Layout



Existing Infrastructure – PDCS Main Nodes

Central Control

- Virtualized PDCS Servers
- 3 workstations
- 29 IEDs

Eng. Bldg

- Virtualized PDCS Servers
- 3 workstations

WPC-AUX Elec. (Under Construction)

- Virtualized PDCS Servers
- 3 workstations

Plant Freq. Changer (PFC)

- 1 IED

SYC. SS

- 2 IEDs

6.6kV Yard Switchgear

- 16 IEDs

CLA. SS

- 2 IEDs

HAM. SS

- 3 IEDs

CTG6

- 6 IEDs

Power House

- 2 IEDs

WPC-PDC 24kV Switchgear (Under Construction)

- 8 IEDs

Existing Infrastructure – PDCS Equipment Nodes



PDCS Control Cabinet



PDCS Field Interface IO

RFP Components

- RFP Document
- Appendix A – One-Line
- Appendix B – Scoping Tables
- Appendix C – Specifications
- Appendix D – FEED Study
- Appendix E – Sample Contract

RFP Components – Scoping Tables



SCOPE Part	SCOPE Group	SCOPE Description
Part 0	GCS Common Platform	Base GCS software deployment Base GCS hardware additions to PDCS Base GCS integration into PDCS HMI; 'common' HMI 'templates' Testing of all Part provided modifications
	GCS Generation Coordination and Control	Develop 'template' Generator 'app' Develop 'template' Generator PDCS HMI interface/graphics
	GCS Distribution Coordination and Control	Develop 'template' Distribution Coordination/Control 'app' Develop 'template' Distribution PDCS HMI interface/graphics
	GCS Load Management	Develop 'template' Load tables/'app' Develop 'template' Load PDCS HMI interface/graphics
	GCS Reporting	Develop 'template' reports
	Non-GCS Services	Review of existing PDCS configuration
Part 1	GCS Common Platform	Testing of all Part provided modifications
	GCS Generation Coordination and Control	Configure Part Generation/Source assets per template app
	GCS Distribution Coordination and Control	Configure Part Distribution Coordination/Control assets per template app
	GCS Load Management	Configure Part Load tables/app per template
	GCS Reporting	Configure Part reports per template
	Non-GCS Services	20EA x 30step 'predefined PDCS switching sequences'

RFP Components – Scoping Tables



<i>PART</i>	<i>PART ID</i>	<i>Part Total</i>	<i>Generation/Source Assets (GSA)</i>	<i>Distribution Control Points (DCP)</i>	<i>Load Control Points (LCP)</i>	<i>Utility Interface Control Points (UICP)</i>	<i>Independent Networks (INDN)</i>	<i>TBD</i>
Implementation TOTAL:			23	38	32	10	33	
Part 0	0	0	0	0	0	0	0	
Part 1	1	39	3	13	10	1	12	
Part 2	2	11	1	6	3	0	1	
Part 3	3	30	3	6	11	3	7	
Future Parts	F	56	16	13	8	6	13	

RFP Components – Scoping Tables



APC_0	APC_1	APC_2	APC_3	APC_4	APC_5	APC_6	APC_7	APC_8
Generation/Source Asset	PDCS	GSA Part	DCP Part	LCP Part	UICP Part	INDN Part	APC_7	APC_8
CWPCTG-6-EMV60-CTG-06		1	--	--	--	--		
CWPCTG-6-EMV60-SG-300		--	1	1	--	1		
CWPEMD-0-EMV60-BB-200		--	F	--	--	--		
CWPEMD-1-EMV60-EMD-01		F	--	--	--	F		
CWPEMD-1-EMV60-SG-201		--	F	--	--	--		
CWPEMD-2-EMV60-EMD-02		F	--	--	--	F		
CWPEMD-2-EMV60-SG-201		--	F	--	--	--		
CWPEMD-3-EMV60-EMD-03		F	--	--	--	F		
CWPEMD-3-EMV60-SG-201		--	F	--	--	--		

Project Details



Jacobs



Coordination

See Specification 01 31 13, Project Coordination:

1. Other work that is either directly or indirectly related to scheduled performance of the Work under these Contract Documents, listed henceforth, is anticipated to be performed at Site by others.
 - a. C1415 WPC Foundations and Underground Utilities Installation.
 - b. C1417 SFC Procurement.
 - c. C1418 Utility Rack Construction.
 - d. C1420 Phase 1 Installation and Commissioning.
 - e. C1426 Black Start Generator Procurement.
 - f. C1427 Package Auxiliary Electrical Equipment Procurement.
 - g. C1429 Construction of Operations Center.
 - h. C1430 Switchgear Procurement.
 - i. C1432 Sanitary and Electrical Utility Tie-Ins Installation Outside of C-7 Basin.
 - j. C1434 Aboveground Construction and Plant Commissioning.
 - k. C1435 Cable Supply and Management.
 - l. C1438 CTG7 Procurement.
 - m. C1440 GSU Procurement.
 - n. C1443 Claiborne Water Supply Tie-in
 - o. C1459 Claiborne Stormwater Outfall Tie-in
 - p. Entergy Substation (in the C8 basin, by Entergy).
2. Coordinate the Work of these Contract Documents with work of other contracts as specified in General Conditions.

Construction Considerations

Working Hours/Days – Monday through Friday. Saturday, Sunday, and Holidays with Owner’s written consent. See General Conditions Article 6.02.

- Overtime work by Contractor necessitating Resident Project Representative to work overtime may be at cost to contractor.

Site Access and Parking – Subject to SWB security protocols while onsite. Only construction vehicles with company logo/designation are allowed in the plant with the permission of the Owner. Contractor responsible for securing offsite facilities for parking and transportation to and from.

Temporary Facilities – Power for Contractor’s office and construction, internet, phone, sanitary, and water services are the Contractor’s responsibility.

Construction Considerations

Maintenance of Plant Operations (MOPO) – Takes precedence and is not to be interrupted. (Section 01 11 01 3.01 and 01 31 13 1.06)

- *Provide 14 days advance written request for approval of need to shut down or interrupt a process or facility.*
- *Power outages will be considered upon 48 hours written request.*
- *Contractor shall stop work and relinquish area in question in case of a SWB process emergency.*

Safety – Contractor's responsibility including Site Specific Safety Plan, Job Hazard Analyses, Reporting, Coordination with Owner Safety Requirements (Electrical Safety Clearance, LOTO, Safety Orientation Notice).

Protection of Work and Property – See various requirements in Section 01 50 00, Temporary Facilities and Controls (i.e., coordination / minimizing disruptions to adjacent processes, site security, barricades and lighting, and dewatering)

Construction Considerations



Good Housekeeping and Cleaning During Construction – Maintain site in a neat and order condition with equipment, tools, and materials stored in designated areas and with no loose trash at day's end. SWBNO may issue a stand down as necessary to address repeated safety issues or poor housekeeping. (General Conditions 6.11.B, Section 01 50 00, 3.09)

Communication

- Formal Documentation via Procore
 - Submittals
 - Request for Information (RFI)
 - Instruction to Contractor (ITC)
 - Safety Notice
 - Deficiency Notice
 - Daily Log

Informal Communication via Email

Copy to 174602@powereng.com

Begin Subject Line with 'GCS'

ANY INFORMAL DIRECTION OR DECISIONS RECEIVED DIRECTLY FROM OWNER ARE TO BE DOCUMENTED BY CONTRACTOR AND SUBMITTED TO CMO FOR FORMAL APPROVAL.



Schedule Requirements

- Preliminary Schedule (10 days after NTP)
 - Proposed software and personnel
- Schedule Workshop
- 3-week look ahead, weekly
- Recovery schedule (if needed)
- Monthly Progress Update, Items Required With Pay App
 - By the 10th of each month
 - Progressed baseline
 - Critical path
 - Narrative Report – network logic updates

Schedule Content

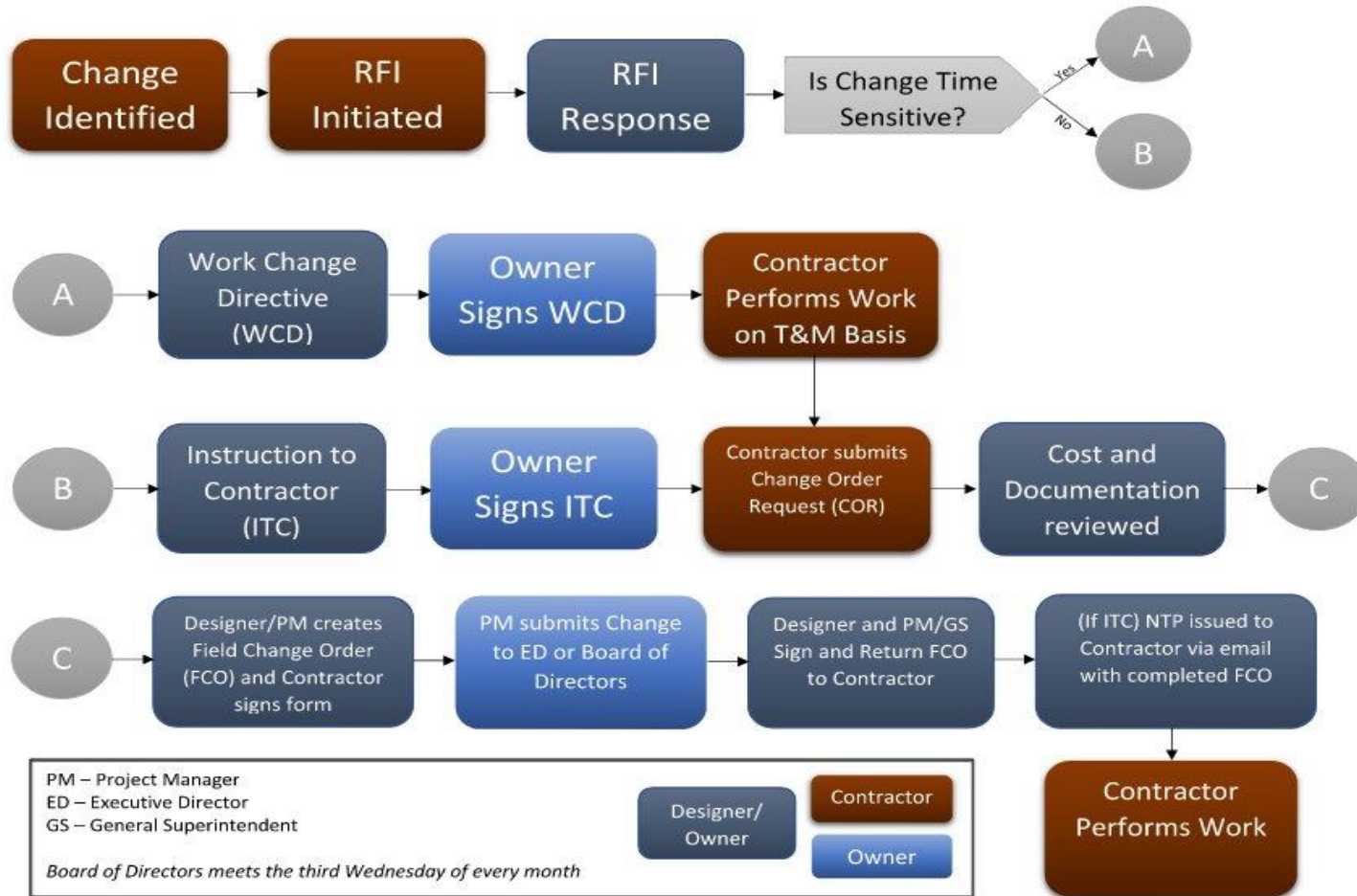


Monthly Pay Application Process via Procore

Responsible Party	Timing	Description
Contractor	On or before the 10 th of the following month	Submit Pay App documentation to CM
CM Team	10 days after Contractor submittal	Review/approve and send to Contractor for signature, then send to Owner no later than 10 days after contractor submittal. Non-compliant Pay Application submittals will be rejected and the clock restarted.
SWBNO Procurement	45 days after receipt	Payment Issued to Contractor

- Required documents – checklist – submit with every pay-app
 - Monthly updated schedule – progressed baseline, critical path and narrative
 - Daily reports up to date and approved
 - 2-week look ahead schedule
 - As-builts up to date and approved
 - Evidence of current insurance
 - Prevailing wage rate requirements
 - DBE subcontractor payments current
 - Certified Payroll
 - Backup for uninstalled materials
 - Current submittal log

Change Process



Project Closeout



- Documentation, including field redlines of contract drawings, should be submitted throughout the project
- Punchlist with estimated cost
- Final Pay App
- Retainage

Forthcoming Addendums & Site Visit



- Forthcoming Addendums
 - FEED Study Corrections
- Non-Mandatory Site Visit
 - Tuesday October 22 @ 1:00 PM

Wrap up

Questions?



Jacobs



Please write legibly



SEWERAGE & WATER BOARD OF NEW ORLEANS ATTENDANCE SHEET

<u>PROJECT:</u> Pre-Proposal Meeting: 2024-SWB-97 Grid Control System (GCS)		<u>MEETING DATE:</u> October 22, 2024. <u>8:30 A.M.</u>
<u>PLACE/ROOM:</u> Carrollton Water Plant Rm. E202		<u>FACILITATOR:</u> Connor Metcalf, Procurement Analyst
NAME	COMPANY	EMAIL
Connor Metcalf	SWBNO	Cmetcalf@Swbno.org
Kevin Smith	SWBNO	ksmith6@swbno.org
Angel Johnson	SWBNO	ajohnson4@swbno.org
Adam Solino	SWBNO	asolino@swbno.org
Steven Halford	GE Vernova	steven.halford@GE.com
Amy Cox	Jacobs	Amy.cox@jacobs.com
Irma Plummer	SWBNO	irplummer@swbno.org
Chris Bergeron	SWBNO	cbergeron@swbno.org
Patrick Kline	Enginuity Global	patrick.kline@enginuityglobal.com
Peter Laperouse	Enginuity Global	Peter.Laperouse@enginuityglobal.com
Butch Pinkham	GE Vernova	Butch.Pinkham@gevernova.com

Please write legibly



SEWERAGE & WATER BOARD OF NEW ORLEANS ATTENDANCE SHEET

<u>PROJECT:</u> Pre-Proposal Meeting: 2024-SWB-97 Grid Control System (GCS)		<u>MEETING DATE:</u> October 22, 2024. <u>8:30 A.M.</u>
<u>PLACE/ROOM:</u> Carrollton Water Plant Rm. E202		<u>FACILITATOR:</u> Connor Metcalf, Procurement Analyst
NAME	COMPANY	EMAIL
Celco Antunez	SWBNO	cantunez@swbno.org
Sean Buffington	Power Engineers	Sean.buffington@powereng.com
Chris Dimaand	Power Engineers	christopher.dimaand@powereng.com
Robert Whipple	Power Engineers	robert.whipple@powereng.com
York Brogden	Jacobs	york.brogden@jacobs.com
Tim McNabb	McCullough Eng Services	tim.mcnabb@mccullougheng.com
Shane McCullough	McCullough Eng Services	shane@mccullougheng.com
Devin Smith	McCullough Eng Services	devin.smith@mccullougheng.com

ECONOMICALLY DISADVANTAGED BUSINESS PARTICIPATION SUMMARY SHEET

Minimum Percentage Goal Participation for this Contract is ____%

Contract Name and Number # _____

Name and Address of Disadvantaged Business Enterprise Company	Name of Contact Person	Scope of Work to be Performed	Dollar Amount of work to be performed	Percentage of Dollar Amount to Total Bid Price

THIS FORM MUST BE COMPLETED AND SUBMITTED AT THE TIME OF BID/PROPOSAL SUBMISSION. FAILURE TO SUBMIT A COMPLETED FORM WILL RENDER THE BID/PROPOSAL NON-RESPONSIVE.

NOTE: Signature required even if judged **NOT APPLICABLE** by the **BIDDER**

Prime Representative Name: _____

Prime Signature: _____

Prime Company's Name: _____

Date: _____

Prime Address: _____

E-mail: _____

Telephone Number: _____

ACKNOWLEDGEMENT

PRIME CONTRACTOR AND DBE SUBCONTRACTOR

Solicitation: _____

This form acknowledges that the

Prime _____

and

DBE Subcontractor _____ Certification: _____ SLDBE or _____ LAUCP

have agreed to the following terms of service:

Scope of Work:

Please note: Scope of work should describe the agreed upon terms between the Prime and DBE.

DBE Percentage of Total Contract: _____

Dollar Amount of DBE Work: \$_____

By signing this acknowledgement, the Prime Contractor and DBE Subcontractor affirm that it will perform the Scope of Work for the estimated total dollar value stated. Both parties hereby certify that the information contained herein is true and correct.

FAILURE TO SUBMIT THIS FORM COMPLETED WITH SIGNATURES WILL RENDER BID/PROPOSAL NON-RESPONSIVE.

PRIME CONTRACTOR:

Printed Name: _____

Signature: _____

Date: _____

DBE SUBCONTRACTOR:

Printed Name: _____

Signature: _____

Date: _____

SECTION 01 50 00
TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American Nursery and Landscape Association (ANLA): American Standards for Nursery Stock.
2. Federal Emergency Management Agency (FEMA).
3. National Fire Prevention Association (NFPA): 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations.
4. Telecommunications Industry Association (TIA): 568-C, Commercial Building Telecommunications Cabling Standard.
5. U.S. Department of Agriculture (USDA): Urban Hydrology for Small Watersheds.
6. U.S. Weather Bureau: Rainfall-Frequency Atlas of the U.S. for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years.

1.02 SUBMITTALS

A. Informational Submittals: Copies of permits and approvals for construction as required by Laws and Regulations and governing agencies.

1.03 MOBILIZATION

A. Mobilization shall include, but not be limited to, these principal items:

1. Obtaining required permits.
2. Moving Contractor's field office and equipment required for first month operations onto Site.
3. Installing temporary construction power, wiring, and lighting facilities.
4. Providing onsite communication facilities, including telephones.
5. Providing onsite sanitary facilities and potable water facilities as specified and as required by Laws and Regulations, and governing agencies.
6. Arranging for and erection of Contractor's work and storage yard.
7. Posting OSHA required notices and establishing safety programs and procedures.
8. Having Contractor's superintendent at Site full time.

B. Areas are limited for Contractor's temporary facilities and material/equipment laydown. Contractor shall propose areas for such use, for review and approval by the Owner.

1.04 PROTECTION OF WORK AND PROPERTY

- A. Comply with Owner's safety rules while on Owner's property.
- B. Take all necessary precautions for the safety of, and provide necessary protection to prevent damage, injury, or loss to Owner's property.
- C. Keep Owner informed of incidents, accidents, and related claims.
- D. Use of Explosives: No blasting or use of explosives will be allowed onsite.

PART 2 PRODUCTS

2.01 ENGINEER'S FIELD OFFICES

- A. Provided By Others.

2.02 PROJECT SIGN

- A. Provided By Others.

PART 3 EXECUTION

3.01 ENGINEER'S FIELD OFFICE

- A. By Others.

3.02 TEMPORARY UTILITIES

- A. Power:
 - 1. Make arrangements to obtain and pay for electrical power used until final payment and acceptance by Owner, unless otherwise recommended by Engineer at Substantial Completion.
 - 2. Cost of electric power will be borne by Contractor.
 - 3. Refer to equipment manufacturer's data included in Reference Documents for any specific requirements for temporary power.
- B. Lighting: Provide temporary lighting to meet applicable safety requirements to allow erection, application, or installation of materials and equipment, and observation or inspection of the Work.

C. Heating, Cooling, and Ventilating:

1. Provide as required to maintain adequate environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for storage and installation of materials, and to protect materials, equipment, and finishes from damage because of temperature or humidity during all times. Costs for temporary heat and cooling shall be borne by Contractor.
2. Provide adequate forced air ventilation of enclosed areas to cure installed materials, to dispense humidity, and to prevent hazardous accumulations of dust, fumes, vapors, or gases.
3. Pay costs of installation, maintenance, operation, removal, and fuel consumed.
4. Permanent natural gas piping shall not be used for temporary heating units or any other reason.

D. Water:

1. Water used by the Contractor at the jobsite will be furnished by the Owner at no cost to the Contractor. The Contractor shall review the "Sewerage and Water Board of New Orleans Hydrant Meter Installation for non-potable (Standard) and Potable (Special Festival) Water Use' Policy and Procedure. These documents are available on the Sewerage and Water Board's Web site.
2. Contractor shall be responsible for the provision of water from location identified by Owner, electricity as noted above, drainage, sanitary sewage disposal, gas, compressed air, and any other utility service required to perform the Work of the Contract.

E. Sanitary and Personnel Facilities:

1. Provide and maintain facilities for Contractor's employees, Subcontractors, and other onsite employers' employees. Service, clean, and maintain facilities and enclosures.
2. Use of Owner's existing sanitary facilities by construction personnel will not be allowed.

F. Telephone Service:

1. Contractor: Arrange and provide onsite telephone service for use during construction. Pay costs of installation and monthly bills.
2. No incoming calls allowed to Owner's plant telephone system.

G. Fire Protection: Furnish and maintain on Site adequate firefighting equipment capable of extinguishing incipient fires. Comply with applicable parts of NFPA 241.

3.03 PROTECTION OF WORK AND PROPERTY

A. General:

1. Perform Work within right-of-way and easements in a systematic manner that minimizes inconvenience to property owners and the public.
2. No residence or business shall be cut off from vehicular traffic for a period exceeding 4 hours, unless special arrangements have been made.
3. Maintain in continuous service existing oil and gas pipelines, underground power, telephone or communication cable, water mains, irrigation lines, sewers, poles and overhead power, and other utilities encountered along and within lines of the Work, unless other arrangements satisfactory to owners of said utilities have been made.
4. Where completion of the Work requires temporary or permanent removal or relocation of existing utility, coordinate activities with owner of said utility and perform work to their satisfaction.
5. Protect, shore, brace, support, and maintain underground pipes, conduits, drains, and other underground utility construction uncovered or otherwise affected by construction operations.
6. Keep fire hydrants and water control valves free from obstruction and available for use at all times.
7. In areas where Contractor's operations are adjacent to or near a utility, such as gas, telephone, television, electric power, water, sewer, or irrigation system, and such operations may cause damage or inconvenience, suspend operations until arrangements necessary for protection have been made by Contractor.
8. Notify property owners and utility offices that may be affected by construction operation at least 2 days in advance: Before exposing a utility, obtain utility owner's permission. Should service of utility be interrupted due to Contractor's operation, notify proper authority immediately. Cooperate with said authority in restoring service as promptly as possible and bear costs incurred.
9. Do not impair operation of existing sewer system. Prevent construction material, pavement, concrete, earth, volatile and corrosive wastes, and other debris from entering sewers, pump stations, or other sewer structures.
10. Maintain original Site drainage wherever possible.

- B. Site Security: Provide and maintain temporary security fences as necessary to protect the Work and Contractor-furnished products not yet installed.

C. Barricades and Lights:

1. Provide as required by the State Vehicle Code and in sufficient quantity to safeguard public and the Work.
2. Provide as necessary to prevent unauthorized entry to construction areas and affected roads, streets, and alleyways, inside and outside of fenced area, and as required to ensure public safety and the safety of Contractor's employees, other employer's employees, and others who may be affected by the Work.
3. Provide to protect existing facilities and adjacent properties from potential damage.
4. Locate to enable access by facility operators and property owners.
5. Protect streets, roads, highways, and other public thoroughfares that are closed to traffic by effective barricades with acceptable warning signs.
6. Locate barricades at the nearest intersecting public thoroughfare on each side of blocked section.
7. Illuminate barricades and obstructions with warning lights from sunset to sunrise.

D. Trees and Plantings:

1. Protect from damage and preserve trees, shrubs, and other plants outside limits of the Work and within limits of the Work, which are designated on the Drawings to remain undisturbed.
 - a. Where practical, tunnel beneath trees when on or near line of trench.
 - b. Employ hand excavation as necessary to prevent tree injury.
 - c. Do not stockpile materials or permit traffic within drip lines of trees.
 - d. Provide and maintain temporary barricades around trees.
 - e. Water vegetation as necessary to maintain health.
 - f. Cover temporarily exposed roots with wet burlap, and keep burlap moist until soil is replaced around roots.
 - g. No trees, except those specifically shown on the Drawings to be removed, shall be removed without written approval of Engineer.
 - h. Dispose of removed trees in a legal manner off the Site.
2. Balling and burlapping of trees indicated for replacement shall conform to recommended specifications set forth in the American Standards for Nursery Stock, published by American Nursery and Landscape Association. Balls shall be firm and intact and made-balls will not be accepted. Handle ball and burlap trees by ball and not by top.
3. In event of damage to bark, trunks, limbs, or roots of plants that are not designated for removal, treat damage by corrective pruning, bark tracing, application of a heavy coating of tree paint, and other accepted horticultural and tree surgery practices.
4. Replace each plant that dies as a result of construction activities.

- E. Existing Structures:
 - 1. Where Contractor contemplates removal of small structures such as mailboxes, signposts, and culverts that interfere with Contractor's operations, obtain approval of property owner and Engineer.
 - 2. Move mailboxes to temporary locations accessible to postal service.
 - 3. Replace items removed in their original location and a condition equal to or better than original.

- F. Finished Construction: Protect finished floors and concrete floors exposed as well as those covered with composition tile or other applied surfacing.

- G. Waterways: Keep ditches, culverts, and natural drainages continuously free of construction materials and debris.

- H. Dewatering: Construct, maintain, and operate cofferdams, channels, flume drains, sumps, pumps, or other temporary diversion and protection works. Furnish materials required, install, maintain, and operate necessary pumping and other equipment for the environmentally safe removal and disposal of water from the various parts of the Work. Maintain foundations and parts of the Work free from water. Contractor shall carefully plan dewatering based on the known groundwater elevation and soil characteristics.
 - 1. Groundwater table is two feet below grade. During and after rain events, surface water will be present and water table may extend to grade.
 - 2. For soil characteristics, refer to "Professional Geotechnical Services Sewerage and Water Board of New Orleans, Carrollton Water Treatment Plant, C-7 and C-8 Basin Demolition, Phase I and II: Engineering Report, New Orleans, Louisiana, April 12, 2018," prepared by Eustis Engineering, LLC.

- I. Endangered and Threatened Species:
 - 1. Take precautions necessary and prudent to protect native endangered and threatened flora and fauna.
 - 2. Notify Engineer of construction activities that might threaten endangered and threatened species or their habitats.
 - 3. Engineer will mark areas known as habitats of endangered and threatened species prior to commencement of onsite activities.
 - 4. Additional areas will be marked by Engineer as other habitats of endangered and threatened species become known during construction.

3.04 TEMPORARY CONTROLS

A. Air Pollution Control:

1. Minimize air pollution from construction operations.
2. Burning of waste materials, rubbish, or other debris will not be permitted on or adjacent to Site.
3. Conduct operations of dumping rock and of carrying rock away in trucks to cause a minimum of dust. Give unpaved streets, roads, detours, or haul roads used in construction area a dust-preventive treatment or periodically water to prevent dust. Strictly adhere to applicable environmental regulations for dust prevention.
4. Provide and maintain temporary dust-tight partitions, bulkheads, or other protective devices during construction to permit normal operation of existing facilities. Construct partitions of plywood, insulating board, plastic sheets, or similar material. Construct partitions in such a manner that dust and dirt from demolition and cutting will not enter other parts of existing building or facilities. Remove temporary partitions as soon as need no longer exists.

B. Noise Control:

1. Provide acoustical barriers so noise emanating from tools or equipment will not exceed legal noise levels.
2. Noise Control Plan: Propose plan to mitigate construction noise and to comply with noise control ordinances, including method of construction, equipment to be used, and acoustical treatments.

C. Water Pollution Control:

1. Divert sanitary sewage and nonstorm waste flow interfering with construction and requiring diversion to sanitary sewers. Do not cause or permit action to occur which would cause an overflow to existing waterway.
2. Prior to commencing excavation and construction, obtain Engineer's agreement with detailed plans showing procedures intended to handle and dispose of sewage, groundwater, and dewatering pump discharges.
3. Comply with Section 01 57 13, Temporary Erosion and Sedimentation Control, for stormwater flow and surface runoff.
4. Do not dispose of volatile wastes such as mineral spirits, oil, chemicals, or paint thinner in storm or sanitary drains. Disposal of wastes into streams or waterways is prohibited. Provide acceptable containers for collection and disposal of waste materials, debris, and rubbish.

- D. Erosion, Sediment, and Flood Control: Provide, maintain, and operate temporary facilities as specified in Section 01 57 13, Temporary Erosion and Sedimentation Control, to control erosion and sediment releases, and to protect the Work and existing facilities from flooding during construction period.

3.05 STORAGE YARDS AND BUILDINGS

- A. Coordinate requirements with Section 01 61 00, Common Product Requirements.
- B. Temporary Storage Yards: Construct temporary storage yards for storage of products that are not subject to damage by weather conditions.
- C. Temporary Storage Buildings:
 - 1. Provide environmental control systems that meet recommendations of manufacturers of equipment and materials stored.
 - 2. Arrange or partition to provide security of contents and ready access for inspection and inventory.
 - 3. Store combustible materials (paints, solvents, fuels) in a well-ventilated and remote building meeting safety standards.

3.06 ACCESS ROADS AND DETOURS

- A. Construct access roads as shown and within easements, rights-of-way, or Project limits. Utilize existing roads where possible. If necessary to provide new access routes, alignments for new routes shall be approved by Engineer.
- B. Maintain drainage ways. Install and maintain culverts to allow water to flow beneath access roads. Provide corrosion-resistant culvert pipe of adequate strength to resist construction loads.
- C. Provide gravel, crushed rock, or other stabilization material to permit access by all motor vehicles at all times.
- D. Maintain road grade and crown to eliminate potholes, rutting, and other irregularities that restrict access.
- E. Coordinate with Engineer detours and other operations affecting traffic and access. Provide at least 72 hours' notice to Engineer of operations that will alter access to Site.
- F. Upon completion of construction, restore ground surface disturbed by access road construction to original grade. Replace damaged or broken culverts with new culvert pipe of same diameter and material.

3.07 PARKING AREAS

- A. Control vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, Owner's operations or construction operations.
- B. Provide parking facilities for personnel working on Project. No employee or equipment parking will be permitted on Owner's existing paved areas, or anywhere else on Owner's facility, except as specifically designated for Contractor's use. Owner reserves the right to reduce or limit access to previously designated areas.

3.08 VEHICULAR TRAFFIC

- A. Vehicular traffic allowed on site will be limited to Contractor management.
- B. Comply with Laws and Regulations regarding closing or restricting use of public streets or highways. No public or private road shall be closed, except by written permission of proper authority. Ensure the least possible obstruction to traffic and normal commercial pursuits.
- C. Conduct the Work to interfere as little as possible with public travel, whether vehicular or pedestrian.
- D. Whenever it is necessary to cross, close, or obstruct roads, driveways, and walks, whether public or private, provide and maintain suitable and safe bridges, detours, or other temporary expedients for accommodation of public and private travel.
- E. Notify fire department and police department before closing street or portion thereof. Notify said departments when streets are again passable for emergency vehicles. Do not block off emergency vehicle access to consecutive arterial crossings or dead-end streets, in excess of 300 linear feet, without written permission from fire department. Conduct operations with the least interference to fire equipment access, and at no time prevent such access. Furnish Contractor's night emergency telephone numbers to police department.

3.09 CLEANING DURING CONSTRUCTION

- A. In accordance with General Conditions, as may be specified in other Specification sections, and as required herein.
- B. Wet down exterior surfaces prior to sweeping to prevent blowing of dust and debris. At least weekly, sweep floors (basins, tunnels, platforms, walkways, roof surfaces), and pick up and dispose of debris.

SWBNO

- C. Site shall be maintained in a neat and orderly condition with equipment, tools, and materials stored in designated areas and with no loose trash at day's end. Provide approved containers for collection and disposal of waste materials, debris, and rubbish. At least weekly, dispose of such waste materials, debris, and rubbish offsite.
- D. At least weekly, brush sweep entry drive, roadways, and other streets and walkways affected by the Work and where adjacent to the Work.

END OF SECTION

Solicitation 2024-SWB-97 – Grid Control System (GCS)

Questions and Responses During Bidding

Version 0, Dated: October 28, 2024 [Questions 1-22]

BIDDER QUESTION #1	Do we have any leeway with regards to the SEL components that are specified in the spec?
RESPONSE #1	Bidders may propose vendor hardware of any reputable OEM provided that it meets the RFP requirements and is capable of the required integration into the existing PDCS system. The proposed hardware capabilities will be evaluated as part of the RFP award process.
BIDDER QUESTION #2	Should the FEED Study be used as a part of the design specification for the GCS or is the FEED study only to be used as a “reference”?
RESPONSE #2	Reference only, the requirements are as defined in the RFP.
BIDDER QUESTION #3	Please confirm is the ECS (Electrical Control System) is existing or to be included with the GCS system deliverable.
RESPONSE #3	The ECS system is existing as defined in the RFP. Any augmentations to the ECS to achieve the RFP objectives are the responsibility of the Supplier.
BIDDER QUESTION #4	Will the GCS supplier be responsible for installation, wiring and testing of any newly identified and required I/O devices, fiber/ethernet cabling, controllers, control racks, etc?
RESPONSE #4	Yes.

<p>BIDDER QUESTION #14</p> <p>RESPONSE #14</p>	<p>Please confirm desired network redundancy; PRP, RSTP, or HSTP. Or if network redundancy will be performed by others.</p> <p>The PDCS network is a mesh that is based on software-defined network (SDN) pre-defined network paths. The network redundancy is based on hardware redundancy within the SDN pre-defined network paths. The IED network redundancy is moderately dependent on the selected IED, but a majority of existing IED's are SEL 751 that support PRP as well as other dual-ethernet port solutions.</p>
<p>BIDDER QUESTION #15</p> <p>RESPONSE #15</p>	<p>Will GCU supplier or Others be responsible for any IED settings changed required for successful operations of GCU and LS system.</p> <p>The GCS supplier will be responsible for any IED settings changes required for successful operation of GCS.</p>
<p>BIDDER QUESTION #16</p> <p>RESPONSE #16</p>	<p>Will GCS commissioning testing be done during normal business hours or off hours?</p> <p>The Supplier shall assume GCS commissioning testing will generally be performed during normal business hours, noting the RFP defined 'continuation of operations' requirements. It is emphasized in many locations in the RFP that the SWBNO is a 24/7/365 operation and that extensive coordination will be required to perform system testing.</p>
<p>BIDDER QUESTION #17</p> <p>RESPONSE #17</p>	<p>Do the existing generator have auto-synchronizers installed and operational?</p> <p>Yes.</p>
<p>BIDDER QUESTION #18</p> <p>RESPONSE #18</p>	<p>Please describe the existing method of generator synchronization.</p> <p>All generators, rotating or virtual (SFC's), have auto-synchronization to their 'generator bus'. Any interconnection beyond that 'generator bus' is, at this time, manual synchronization to that other source.</p>
<p>BIDDER QUESTION #19</p> <p>RESPONSE #19</p>	<p>Are the 24Hz RFC to be replaced by 25Hz SFC's?</p> <p>The existing 24-hz RFCs will be retired in the future</p>
<p>BIDDER QUESTION #20</p> <p>RESPONSE #20</p>	<p>What is the Overtime rate for Customer staff, if afterhours support is needed during installation and SAT.</p> <p>Customer operations staff supporting the installation and SAT would not be the liability of the Supplier.</p>

BIDDER QUESTION #21	The phrase of "Ethernet/IP" is referenced in the RFP document, please confirm or define if this is the Allen-Bradley protocol, or just a reference to IP based communications over ethernet connectivity.
RESPONSE #21	This is a generic term and not Vendor specific.
BIDDER QUESTION #22	Can we have a 3 week extension for the bid?
RESPONSE #22	An extension to the bid period has been considered and we will extend the bidding period to December 3, 2024. Please refer to Addendum 1 for additional details.