



900 Magazine Rd.
Petersburg, VA 23803
Office: (804) 861-0111
Fax: (804) 861-3254

SOUTH CENTRAL WASTEWATER AUTHORITY Board of Directors Meeting

DATE: July 18, 2024

TIME: 2:00 pm

LOCATION: **South Central Wastewater Authority**
Board Room, Administration Building
900 Magazine Road
Petersburg, VA 23803

AGENDA

1. Call to Order/Roll Call
2. Approval of Minutes: Minutes of the Board Meeting held on May 16, 2024 (Exhibit A, Pages 2 to 4)
3. Public Comment (Exhibit B, Page 5)
4. Executive Director's Report:
 - Nutrient Reduction Project Update (Exhibit C, Page 6 to 30)
 - Status Report (Exhibit D, Pages 31 to 33)
 - Financials (Exhibit E, Pages 34 to 36)
5. Items from Counsel
6. Closed Meeting
 - a. 2.2-3711 Sections #7 and #8 – Legal Advice from Counsel
7. Other items from Board Members/Staff Not on Agenda
8. Adjourn

BOARD OF DIRECTORS MEETING
South Central Wastewater Authority
May 16th, 2024, at 2:00 p.m.
Location: Appomattox River Water Authority
21300 Chesdin Rd. South Chesterfield VA 23803

MEMBERS PRESENT:

Doug Smith, Chairman (Colonial Heights)
Joseph Casey, (Chesterfield)
March Altman, (Petersburg)
Jeff Stoke, (Prince George)

STAFF PRESENT:

Robert B. Wilson, Executive Director, (ARWA & SCWWA)
James C. Gordon, Asst. Executive Director (ARWA & SCWWA)
Arthur Anderson, (McGuireWoods)
Melissa Wilkins, Business Manager/FOIA (ARWA & SCWWA)
Tiffanee Rondini, Administrative Assistant (ARWA & SCWWA)

ALTERNATES PRESENT:

Frank Haltom, Secretary/Treasurer (Alternate, Prince George)
Eddie Pearson, (Alternate, Dinwiddie)
George Hayes, (Alternate, Chesterfield)

ABSENT:

Todd Flippen, (Alternate, Colonial Heights)
Jerry Byerly, (Alternate Petersburg)
Matt Rembold, (Alternate, Chesterfield)
Kevin Massengill, Vice-Chairman (Dinwiddie)

The SCWWA meeting was called to order by Mr. Smith, Chairman, at 3:09 p.m.

1. Call to Order/Roll Call

The roll was called:

Participating members at the table were:

Doug Smith	Present
Eddie Pearson	Present
Joseph Casey	Present
Frank Haltom	Present
March Altman	Present

2. Approval of Minutes: Minutes of the Regular Meeting of the Board on March 21st, 2024

Upon a motion made by Mr. Altman and seconded by Dr. Casey the following resolution was adopted:

RESOLVED, that the Minutes of the Regular Meeting of the Board on March 21st, 2024, are hereby approved:

For: 5 Against: 0 Abstain: 0

3. Public Comment

There were no public comments.

4. Executive Director's Report:

- Nutrient Reduction Project Update**

Mr. Gordon stated that SCWWA will not require the \$30,626,407 in loan financing from VCWRLF (Virginia Clean Water Revolving Loan Fund) that was previously approved, and by withdrawing SCWWA's application, this will release SCWWA from the Build

America, Buy America, American Iron and Steel, and the Bipartisan Infrastructure Law requirements for our project. However, there will still be the requirement for the Davis-Bacon Act wages. Mr. Gordon stated the DEQ Director requested that the executed ENRCPP-05 ARPA Grant Agreement be returned to DEQ upon approval by the Board at the conclusion of the meeting.

Mr. Gordon stated that the City of Petersburg and SCWWA have agreed on a procedure to manage the ENRCPP-06 ARPA Grant Agreement (City of Petersburg's ARPA Grant for NRP). SCWWA will prepare the necessary grant reimbursement requests and forward them to the City of Petersburg for review and submittal to DEQ, DEQ will review and process the reimbursement check to the city and the city, in turn, will send a check to SCWWA.

Mr. Gordon reported that Phase 1 - Sludge Conditioning Building Improvements, should begin this summer. The contract for Phase 2 - Electrical Feed Distribution has been executed and the Certificate to Construct from DEQ has been issued. The Authority's engineering consultant continues to coordinate with Dominion Energy for the design to provide two new electrical services on site. Dominion will not start on the project without an approved site plan that the contractor is currently working through the process.

Mr. Gordon stated that Phase 3 - Lift Station, Filter Building, and Clarifier project was advertised on eVA and the SCWWA website on March 27th, 2024. A pre-bid meeting was held on April 18th and the bid opening was scheduled for May 8th. The bid opening has now been postponed to June 13, 2024.

The Authority's deadline to have all phases for construction bid and under contract is December 31, 2024. SCWWA is still on schedule to meet this deadline.

Mr. Gordon stated that bids for the rebid process of Phase 4 - Headworks were received and opened on April 18, 2024. The Authority received one bid from MEB General Contractors, Inc. in the amount of \$2,169,000 which is \$322,000 less than the original bid. This decrease is due to scope reductions made during the rebid process. Phase 4 does not qualify for any WQIF funding, so this phase will be funded by the ENRCPP-06 ARPA funds. Mr. Gordon stated that staff agrees with the engineer's recommendation to award Phase 4 to MEB General Contractors in the amount of \$2,169,000. Staff also request a 5% contingency in the amount of \$108,450.

Upon a motion made by Mr. Altman and seconded by Mr. Pearson the following resolution was adopted:

RESOLVED, that the Board authorizes the Executive Director and Business Manager to execute the ENRCPP-05 ARPA Grant as presented:

For: 5 Against: 0 Abstain: 0

Roll Call Vote:

Participating members at the table were:

Doug Smith	Aye
Eddie Pearson	Aye
Joseph Casey	Aye
Frank Haltom	Aye
March Altman	Aye

Upon a motion made by Mr. Haltom and seconded by Mr. Altman the following resolution was adopted:

RESOLVED, that the Board awards Phase 4 - Headworks and Primary Tank Improvements to MEB General Contractors Inc. in the amount of \$2,169,000 and authorizes the Executive Director to execute the necessary documents and further authorizes a contingency of 5%, an additional \$108,450. The Executive Director will be responsible for reporting back to the Board at project completion with a summary of total construction costs:

For: 5 Against: 0 Abstain: 0

Roll Call Vote:

Participating members at the table were:

Doug Smith	Aye
Eddie Pearson	Aye
Joseph Casey	Aye
Frank Haltom	Aye
March Altman	Aye

- **Status Update**
Mr. Gordon reviewed the status report included in the agenda package with the Board.
- **Financials**
Ms. Wilkins reported on the financials.

5. Items from Counsel

There were no items from Counsel.

6. Closed Session

There were no Closed Sessions.

7. Other Items from Board Members/Staff Not on Agenda

Ms. Wilkins stated Pamula Tavel from the SCWWA Administration team will be celebrating 42 years with the Authority and has announced her retirement. Ms. Wilkins stated she would be planning Ms. Tavel's retirement luncheon for the same day as the Board meeting on July 18th and if any members are able to attend, to let her know.

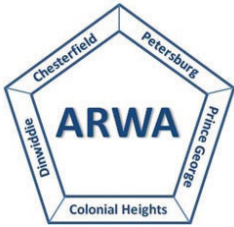
8. Adjourn

Mr. Smith stated, if there is no other business, and asked for a motion to adjourn.

Upon a motion by Mr. Altman and seconded by Mr. Pearson the meeting was adjourned at 3:25 p.m.

MINUTES APPROVED BY:

Frank Haltom/Secretary/Treasurer



APPOMATTOX RIVER WATER AUTHORITY
21300 Chesdin Road
Petersburg, VA 23803



SOUTH CENTRAL WASTEWATER AUTHORITY
900 Magazine Road
Petersburg, VA 23803

GUIDELINES FOR PUBLIC COMMENT AT SCWWA/ARWA BOARD OF DIRECTORS MEETINGS

If you wish to address the SCWWA/ARWA Board of Directors during the time allocated for public comment, please raise your hand or stand when the Chairman asks for public comments.

Members of the public requesting to speak will be recognized during the specific time designated on the meeting agenda for "Public Comment Period." Each person will be allowed to speak for up to three minutes.

When two or more individuals are present from the same group, it is recommended that the group designate a spokesperson to present its comments to the Board and the designated speaker can ask other members of the group to be recognized by raising their hand or standing. Each spokesperson for a group will be allowed to speak for up to five minutes.

During the Public Comment Period, the Board will attempt to hear all members of the public who wish to speak on a subject, but it must be recognized that on rare occasion presentations may have to be limited because of time constraints. If a previous speaker has articulated your position, it is recommended that you not fully repeat the comments and instead advise the Board of your agreement. The time allocated for speakers at public hearings are the same as for regular Board meeting, although the Board can allow exceptions at its discretion.

Speakers should keep in mind that Board of Directors meetings are formal proceedings and all comments are recorded on tape. For that reason, speakers are requested to speak from the podium and wait to be recognized by the Chairman. In order to give all speakers proper respect and courtesy, the Board requests that speakers follow the following guidelines:

- Wait at your seat until recognized by the Chairman;
- Come forward and state your full name and address. If speaking for a group, state your organizational affiliation;
- Address your comments to the Board as a whole;
- State your position clearly and succinctly and give facts and data to support your position;
- Summarize your key points and provide the Board with a written statement or supporting rationale, when possible;
- If you represent a group, you may ask others at the meeting to be recognized by raising their hand or standing;
- Be respectful and civil in all interactions at Board meetings;
- The Board may ask speakers questions or seek clarification, but recognize that Board meetings are not a forum for public debate; Board Members will not recognize comments made from the audience and ask that members of the audience not interrupt the comments of speakers and remain silent while others are speaking so that other members in the audience can hear the speaker;
- The Board will have the opportunity to address public comments after the Public Comment Period has been closed;
- At the request of the Chairman, the Executive Director may address public comments after the session has been closed as well; and
- As appropriate, staff will research questions by the public and respond through a report back to the Board at the next regular meeting of the full Board. It is suggested that citizens who have questions for the Board or staff submit those questions in advance of the meeting to permit the opportunity for some research before the meeting.



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Exhibit C

TO: South Central Wastewater Authority Board of Directors

FROM: Robert B. Wilson, Executive Director
James C. Gordon, Assistant Executive Director

DATE: July 18, 2024

SUBJECT: Nutrient Reduction Project Update

The following tasks have been performed since the May 16th board meeting:

- Project Funding
 - The SCWWA ARPA agreement was executed and submitted to DEQ on May 16th following Board authorization to execute ENRCPP-05.
 - DEQ was sent our FY25 and FY26 quarterly estimated cashflow for WQIF contract 440-S-20-03. The email also stated that SCWWA had an understanding that this contract will be amended when all the bids have been received.
- Phase 1 NRP Sludge Conditioning Building
 - The final electrical distribution submittal for the solid's conditioning building has been submitted. Staff and engineers are reviewing the submittal.
 - Change Order #1 (Attachment C-1) in the amount of \$11,645.06 has been executed. This change order is for the installation of a trench drain in front of the solids conditioning building electrical room and installing a new door sweep. The electrical room was enclosed during the last electrical upgrade, but a floor drain was in the center of the room. Staff is not able to cap the floor drain due to water flowing under the door and into the room from the main floor. The water and open drain have caused issues conditioning this room and PLC and electrical equipment are showing oxidation as a result of water entering the room.
 - Staff have had discussions with the vendor and legal counsel regarding delivery of the lime conveyance and mixing equipment. This will be discussed further in a closed session.
 - Tax exempt certification has been received for this project.
- Phase 2 NRP Electrical Feed and Distribution
 - Staff met with the Chesterfield County Site Plan Team to discuss Phase 2.

- The Purchase Order for the 1.5 MW and 2.0 MW Generator Sets with load banks has been issued to Caterpillar. The Authority purchased this equipment from the Sourcewell Cooperative Purchasing contract.
- Tax exemption certification has been received for this project.
- A preconstruction meeting was held on July 3rd.
- Staff requested a quote to install Woodward Easygen Generator Controls (Attachment C-2) instead of the Schneider m340 PLC ATO generator controls. The ARWA recently upgraded to this system and the SCWWA is currently having this installed on the existing electrical system. This would allow a common control system between both Authorities and would enable us to support each other with spare parts as needed. In addition, we were informed that the Schneider system is a proprietary system and SCWWA would need to contact them for any work related to the system. The Woodward Easygen system is an open architecture system and there are many local companies that can support this system.
- The proposed change order (PCO-01) to perform this work is \$262,168.23 for the generator controls and safety relays and a deduct of \$70,342.97 for the Schneider m340 system. The total cost for PCO-01 is \$191,825.26. The board approved a 5% contingency with this phase of the project in the amount of \$207,350. The amount of this change order would use 92.5% of the contingency.

The SCWWA requests an additional appropriation of \$191,825.26 for the Phase 2 NRP to cover the cost of PCO-01. Funds are available in the current project fund for this change order request.

- Phase 3 NRP Lift Station, Filter Building, and Clarifier

- The project consists of construction of an Intermediate Pump Station, Tertiary Effluent Filter Facility, new NPW Pump Station, Clarifier No. 5, RAS Pump Station No. 2, Site Piping including 30-inch to 60-inch diameter Wastewater Piping, Process Piping including Sodium Hypochlorite, Caustic, and Aluminum Sulfate, Junction Box 2, Filter Effluent Caustic Feed Facility, Electrical Power Supply and Distribution, and Instrumentation and Controls; and improvements and repairs to existing Clarifier No. 2, Clarifier No. 1, Clarifier No. 4, RAS 1 Electrical, Junction Box 3, and fiber optic improvements, and incidental related work.

The project was advertised on eVA and the SCWWA websites on March 27, 2024. A non-mandatory pre-bid meeting was held on April 18th and the bid opening was scheduled for May 8th. The bid opening was moved to June 13th to allow more time for contractors to bid

The Authority received two bids

- MEB General Contractors, Inc. \$88,277,000
- English Construction Company, Inc. \$99,245,000

Phase 3 NRP qualifies for ARPA (ENRCPP-05 and ENRCPP-06) and WQIF Funding. The WQIF percent eligible cost for this project is 100% for most of the work, 79.82%

for existing clarifier improvements, and 50% for the new clarifiers and RAS pumps station.

The estimate provided to DEQ for this phase of the NRP was \$75,613,067. The low bid received for this phase is 16.7% over the estimate. The project was discussed with our department managers and engineer. Staff requested our engineer to review the need for new Clarifier 5. The engineer's letter (Attachment C-3) states that the existing four clarifiers are sufficient for a peak daily flow rate of 52.6 mgd. The SCWWA Service Agreement does not allow for a peak daily flow rate that exceeds 52.6 mgd and requires members to provide a plan of action if they exceed 95% of their peak daily flow rate allocation for three consecutive months.

Based on the updated information and compliance with the SCAT regulations, it was decided to reduce the scope of the project and attempt to negotiate with the low bidder. Clarifier 5, corresponding RAS pump station 2, and incidental related work (pipeline, site work, etc.) were removed from the project. MEB General Contractors provided a deduct tally (attachment C-4) for the requested work. This has been reviewed by staff and the engineer. The engineer provided an award recommendation (attachment C-5) to award the Phase 3 NRP to MEB General Contractors as negotiated removing Clarifier 5 and RAS Pump Station 2 from the scope of work in the amount of \$58,356,000.

Staff concurs with the engineer's recommendation and recommend award of the Phase 3 NRP to MEB General Contractors in the amount of \$58,356,000. Staff also requests a 5% contingency in the amount of \$2,917,800. The amount requested is within the budget for this phase of the NRP.

- Phase 4 NRP Headworks and Primary Tank Improvements
 - A preconstruction meeting was held on July 3rd.
- Attachment C-6 is the updated expenditure analysis for the NRP.

Board Action Requested:

Staff requests the following actions for consideration:

1. Staff requests an additional appropriation of \$191,825.26 for the Phase 2 NRP to cover the cost of PCO-01 and authorization for the executive director to execute the necessary documents
2. Staff requests the Board award the Phase 3 NRP Lift Station and Filter Building as negotiated with the reduced scope of eliminating Clarifier 5, RAS Pump Station 2, and associated work to the low bidder, MEB General Contractors, in the amount of \$58,356,000 and authorize the executive director to execute the necessary documents. Staff also requests the Board authorize a contingency of 5%, an additional \$2,917,800, for this phase. The executive director will be responsible for reporting back to the Board at project completion with a summary of total construction costs.

Change Order No. 1

Date of Issuance: May 22, 2024	Effective Date: May 22, 2024
Owner: South Central Wastewater Authority	Owner's Contract No.:
Contractor: MEB General Contractors, Inc	Contractor's Project No.:
Engineer: WW Associates, Inc.	Engineer's Project No.: 223005.02
Project: SCWWA NRP Phase 1 Sludge Conditioning	Contract Name: SCWWA NRP Phase 1 Sludge Conditioning

The Contract is modified as follows upon execution of this Change Order:

Description: Installation of a Trench Drain along with associated DWV piping routed to the floor drain located in the electrical room, Dry packing concrete to match the existing floor, and installation of a new transition strip and door sweep on the door leading to the electrical room.

Attachments: MEBs PCO-01 Electrical Room Trench Drain dated March 8, 2024.

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price: \$ 10,183,700.00	Original Contract Times: December 4, 2023 NTP Substantial Completion: <u>November 23, 2025 (720 days)</u> Ready for Final Payment: <u>December 23, 2025 (750 days)</u> days or dates
[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: \$ N/A	[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: Substantial Completion: <u>N/A</u> Ready for Final Payment: _____ days
Contract Price prior to this Change Order: \$ 10,183,700.00	Contract Times prior to this Change Order: Substantial Completion: <u>November 23, 2025 (720 days)</u> Ready for Final Payment: <u>December 23, 2025 (750 days)</u> days or dates
Increase of this Change Order: \$ 11,645.06	[Increase] [Decrease] of this Change Order: Substantial Completion: <u>N/A</u> Ready for Final Payment: _____ days or dates
Contract Price incorporating this Change Order: \$ 10,195,345.06	Contract Times with all approved Change Orders: Substantial Completion: <u>November 23, 2025 (720 days)</u> Ready for Final Payment: <u>December 23, 2025 (750 days)</u> days or dates

RECOMMENDED: WW Associates, Inc.	ACCEPTED: SCWWA	ACCEPTED: MEB General Contractors Inc
By: <u>Herbert F. White P.E.</u> Engineer (if required)	By: <u>N. B. Wil</u> Owner (Authorized Signature)	By: <u>Bob Jones</u> Contractor (Authorized Signature)
Title: <u>President</u>	Title: <u>Executive Director</u>	Title: <u>Project Manager</u>
Date: <u>May 22, 2024</u>	Date: <u>6/5/2024</u>	Date: <u>6/3/24</u>

Approved by Funding Agency (if applicable)

By: _____ Date: _____

Title: _____



2382-B Lanier Road
Rockville, Virginia 23146
TEL 804.749.6000 FAX 804.749.6030

March 8, 2024

WW Associates
968 Olympia Drive, Suite 1
Charlottesville, VA 22911

Attention: Mr. Herbert F. White III, PE

RE: SCWWA Nutrient Reduction Project - Phase 1 Sludge Conditioning Improvements
Petersburg, VA
PCO-01 – Electrical Room Trench Drain

Mr. White,

MEB has prepared our proposal to install a trench drain in the Sludge Conditioning Building in front of the door leading into the electrical room. This proposal includes:

- Installing a Trench Drain along with the associated DWV piping routed to the floor drain located in the electrical room.
- Dry Packing Concrete to match the existing floor.
- Installing a new transition strip and door sweep on the door leading to the electrical room.

Please review the attached summary of our costs and give me a call with any questions regarding this proposal.

Sincerely,

MEB General Contractors, Inc.

Braden Johnson
Project Manager

cc: MEB File
John Thornton

GENERAL CONTRACTOR ESTIMATE FOR CHANGE ORDER

GC-1



Project Code: 23.011
 Agency: SCWWA
 Project: SCWWTP NRP P1

General Contractor: MEB
 Change Description: PCO-1 Electrical Room Trench Drain

GENERAL CONTRACTOR DIRECT COSTS											
Item No.	Scope Description	Quantity	Qty Units	Direct Labor				Direct Material		Direct Equipment	
				Direct Labor Hours Per Unit	Total Direct Labor Hours	Hourly Wage Rate, Excl. Taxes & Ins.	Total Labor Cost	Material Cost Per Unit	Total Material Cost	Equipment Cost Per Unit	Total Equipment Cost
A	B	C	D	E	F = C x E	G	H = F x G	I	J = C x I	K	L = C x K
1.01	MEB Labor				0.00		\$0.00		0.00		\$0.00
1.02	MEB Foreman - Sawcut and Demolish Existing Concrete	15.00	Hrs	1.00	15.00	\$77.88	\$1,168.20		0.00		\$0.00
1.03	MEB Labor - Sawcut and Demolish Existing Concrete	15.00	Hrs	1.00	15.00	\$44.28	\$664.20		0.00		\$0.00
1.03	MEB Foreman - Excavate and Remove Dirt from Trench	5.00	Hrs	1.00	5.00	\$77.88	\$389.40		0.00		\$0.00
1.04	MEB Labor - Excavate and Remove Dirt from Trench	5.00	Hrs	1.00	5.00	\$44.28	\$221.40		0.00		\$0.00
1.04	MEB Foreman - Install Trench Drain and Add. Drain Pipe	10.00	Hrs	1.00	10.00	\$77.88	\$778.80		0.00		\$0.00
1.04	MEB Labor - Install Trench Drain and Add. Drain Pipe	10.00	Hrs	1.00	10.00	\$44.28	\$442.80		0.00		\$0.00
1.05	MEB Foreman - Dry Pack Concrete to Match Existing Concrete	15.00	Hrs	1.00	15.00	\$77.88	\$1,168.20		0.00		\$0.00
1.05	MEB Labor - Dry Pack Concrete to Match Existing Concrete	15.00	Hrs	2.00	30.00	\$44.28	\$1,328.40		0.00		\$0.00
1.05	MEB Foreman - Install New Door Transition Strip & Door Sweep	5.00	Hrs	1.00	5.00	\$77.88	\$389.40		0.00		\$0.00
1.06	MEB Labor - Install New Door Transition Strip & Door Sweep	5.00	Hrs	1.00	5.00	\$44.28	\$221.40		0.00		\$0.00
1.07					0.00		\$0.00		0.00		\$0.00
1.08					0.00		\$0.00		0.00		\$0.00
1.09	Materials				0.00		\$0.00		0.00		\$0.00
1.10	Non Shrink Grout Bags	20.00	EA		0.00		\$0.00	30.00	600.00		\$0.00
1.11	Trench Drain	1.00	LS		0.00		\$0.00	1,455.80	1,455.80		\$0.00
1.12	Drain Pipe & Connection Materials	1.00	LS		0.00		\$0.00	200.00	200.00		\$0.00
1.13	New Door Transition Strip & Door Sweep	1.00	LS		0.00		\$0.00	100.00	100.00		\$0.00
1.14					0.00		\$0.00		0.00		\$0.00
1.15	Equipment				0.00		\$0.00		0.00		\$0.00
1.18	Chop Saw	1.00	LS		0.00		\$0.00		0.00	\$500.00	\$500.00
1.17	Grinder w/ Vacuum	1.00	LS		0.00		\$0.00		0.00	\$300.00	\$300.00
1.18					0.00		\$0.00		0.00		\$0.00
1.19	Subtotal from Estimate Continuation Sheets						\$0.00		\$0.00		\$0.00
1.97	Subtotal (S/T) Direct Costs:					Subtotal Labor	\$8,772.20	Subtotal Mat'l	\$2,355.80	Subtotal Equip.	\$800.00
1.98	Taxes/Insurance:			FICA, FUI, SUI, & Workmens' Comp. at	0.00%	% of Item 1.97H	\$0.00	Sales Tax @ 0%	\$0.00	Sales Tax @ 6%	\$48.00
1.99	Total Direct Costs					Total Labor	\$8,772.20	Total Mat'l	\$2,355.80	Total Equip.	\$848.00

SUBCONTRACT COSTS		
Item No.	Subcontractor Name (List totals from attached SC-1 forms)	Total Cost
A	B	C
2.01		
2.02		
2.03		
2.04		
2.05		
2.06		
2.07		
2.08		
2.09		
2.10		
2.11		
2.99	Total Subcontract Costs	\$0.00

SUMMARY		
Item No.	Description	Total Cost
3.01	Total Direct Labor Cost	Item 1.99H \$8,772.20
3.02	Total Direct Material Cost	Item 1.99J \$2,355.80
3.03	Total Equipment Cost	Item 1.99L \$848.00
3.04	Subtotal	3.01+3.02+3.03 \$9,976.00
3.05	Overhead and Profit	15% x Item 3.04 \$1,496.40
3.06	Subtotal	3.04+3.05 \$11,472.40
3.07	Subcontractor Cost	Item 2.99 \$0.00
3.08	GC Markup on Subcontractor	5% x Item 3.07 \$0.00
3.09	Subtotal	3.06+3.07+3.08 \$11,472.40
3.10	Insurance 0.5%	x Item 3.09 \$57.36
3.11	Subtotal	3.09 + 3.10 \$11,529.76
3.12	Additional Bond Cost-1% x Item 3.11	\$115.30
3.99	Total Change Order Cost	3.11+3.12 \$11,645.06

Submitted By
 Name: Braden Johnson
 Signature: _____
 Title: Project Manager
 Date: 3/8/2024
 I have reviewed the costs proposed and find them to be reasonable (as proposed) (as marked).
 A/E Signature: _____



Showroom Quotation

036 HAJOCA RICHMOND
 3000 COFER ROAD
 RICHMOND, VA 23224-7106
 804-231-5790

02/28/2024
 S033047543

Quote To:
 M E B GENERAL CONTRACTORS
 4016 HOLLAND BLVD
 CHESAPEAKE, VA 23323-1522

Ship To:
 M E B GENERAL CONTRACTORS
 2382 LANIER ROAD
 ROCKVILLE, VA 23146-2225

Customer#	Custom Order #	Release #	Sales Person	
4614	SCWWTP TRENCH DRAIN		Kevin Renn PC036	
Consultant	Ship Via	Terms	Expiration	Freight
Grant Splisgardt	OT OUR TRUCK	NET30.N	04/13/2024	Not Included

PN	Description	Qty	Unit Price	Ext Price
1460432	Dura Trench pre-engineered drain system (DTPF4-05E24SSA-MDSS08ZSA-GLSS4-NS R -4b) includes 4" wide presloped polyester fiber reinforced polymer concrete trench body, 12ga stainless steel stamped perforated grate - 5" wide x 24" long x 0.75" thick ,stainless grate locks (including bolt, washer as required, and 4" locking bar) - Note: this lock is not designed for traffic turning, braking, or longitudinal travel exceeding 20mph., stainless steel frame for 3/4" thick grates, 8' long z profile with rigid metal installation brackets. Drain pricing includes end plates and necessary hardware. Trench outlets via 4" PVC (sch 40) pipe out the bottom of the drain. Product ships fully assembled in 8' lengths (typical) with plywood in the top of the trench to keep the trench opening safe, grates clean, and concrete out during construction. SHALLOW INVERT = 4.5 in. DEEP INVERT = 4.7 in.	6	\$226.60	\$1,359.60
1099183	MAINLINE ML56-44RC 4 CI/PL X CI/PL FLEXIBLE REPAIR COUPLING W/SHEAR RING *TO CONNECT 4" PVC OUTLET ON TRENCH DRAIN TO NH CI**	1	\$13.79	\$13.79
			Subtotal:	\$1,373.39
			Sales Tax:	\$82.41
			Freight:	\$0.00
			Handling:	\$0.00
			Total:	\$1,455.80

Prices contained in this quote are the prices in effect at the time of quotation, and are subject to change at any time. Seller is not responsible for inaccurate quantity descriptions. Quantities should be checked against plans and specifications for accuracy. Seller is not responsible for delays not within our control. Returned goods must be unused and in their original packaging (which must be in resaleable condition). Special order material is non-cancellable. All returns must be approved by Seller and may be subject to freight, handling and restocking charges. All orders are subject to Seller's [Sales Order Terms and Conditions](#).



2382-B Lanier Road
Rockville, Virginia 23146
TEL 804.749.6000 FAX 804.749.6030

May 6th, 2024

WW Associates
3040 Avemore Square Place
Charlottesville, VA 22911

Attention: Mr. Herbert F. White III, PE

RE: SCWWA NRP Phase 2 Electrical Improvements Project
Petersburg, VA
PCO-01 – Easygen Controls

Mr. White,

Per your request, MEB has prepared a proposal to install Easygen controls in lieu of the specified controls for the above referenced project. Please review the attached summary of our costs below and the supporting documentation:

- Deduct for removing the original specified controls: **(\$70,342.97)**
- Change Option 1 as outlined in Rudy Hawkins Quote: \$262,168.23
- Change Option 2 as outlined in Rudy Hawkins Quote: \$186,139.21

MEB requests a 30-calendar day contract time extension for the change options listed above. Please give me a call with any questions regarding this proposal.

Sincerely,

MEB General Contractors, Inc.

A handwritten signature in blue ink, appearing to read 'Braden Johnson', is written over a white background.

Braden Johnson
Project Manager

cc: MEB File
John Thornton

GENERAL CONTRACTOR ESTIMATE FOR CHANGE ORDER

GC-1



Project Code: 24.003
 Agency: SCWWA
 Project: SCWWA NRP Phase 2

General Contractor: MEB
 Change Description: PCO-1 Easygen Controls Deduct

GENERAL CONTRACTOR DIRECT COSTS

Scope Description				Direct Labor				Direct Material		Direct Equipment		
Item No.	Description	Quantity	Qty Units	Direct Labor Hours Per Unit	Total Direct Labor Hours	Hourly Wage Rate, Excl. Taxes & Ins.	Total Labor Cost	Material Cost Per Unit	Total Material Cost	Equipment Cost Per Unit	Total Equipment Cost	
A	B	C	D	E	F = C x E	G	H = F x G	I	J = C x I	K	L = C x K	
1.01					0.00		\$0.00		0.00		\$0.00	
1.02					0.00		\$0.00		0.00		\$0.00	
1.03					0.00		\$0.00		0.00		\$0.00	
1.04					0.00		\$0.00		0.00		\$0.00	
1.05					0.00		\$0.00		0.00		\$0.00	
1.06					0.00		\$0.00		0.00		\$0.00	
1.06					0.00		\$0.00		0.00		\$0.00	
1.07					0.00		\$0.00		0.00		\$0.00	
1.08					0.00		\$0.00		0.00		\$0.00	
1.09					0.00		\$0.00		0.00		\$0.00	
1.10	Subtotal from Estimate Continuation Sheets						\$0.00		\$0.00		\$0.00	
1.97	Subtotal (S/T) Direct Costs:						\$0.00	Subtotal Mat'l	\$0.00	Subtotal Equip.	\$0.00	
1.98	Taxes/Insurance:					FICA, FUI, SUI, & Workmens' Comp. at	0.00%	% of Item 1.97H	Sales Tax @ 0%	\$0.00	Sales Tax @ 6%	\$0.00
1.99	Total Direct Costs						Total Labor	\$0.00	Total Mat'l	\$0.00	Total Equip.	\$0.00

SUBCONTRACT COSTS

Item No.	Subcontractor Name (List totals from attached SC-1 forms)	Total Cost
A	B	C
2.01	Rudy Hawkins - Deduct of original specified controls	(\$66,000.00)
2.02		
2.03		
2.04		
2.05		
2.06		
2.07		
2.08		
2.09		
2.10		
2.11		
2.99	Total Subcontract Costs	(\$66,000.00)

SUMMARY

Item No.	Description	Total Cost
3.01	Total Direct Labor Cost Item 1.99H	\$0.00
3.02	Total Direct Material Cost Item 1.99J	\$0.00
3.03	Total Equipment Cost Item 1.99L	\$0.00
3.04	Subtotal 3.01+3.02+3.03	\$0.00
3.05	Overhead and Profit 15% x Item 3.04	\$0.00
3.06	Subtotal 3.04+3.05	\$0.00
3.07	Subcontractor Cost Item 2.99	(\$66,000.00)
3.08	GC Markup on Subcontractor 5% x Item 3.07	(\$3,300.00)
3.09	Subtotal 3.06+3.07+3.08	(\$69,300.00)
3.10	Insurance 0.5% x Item 3.09	(\$346.50)
3.11	Subtotal 3.09 + 3.10	(\$69,646.50)
3.12	Additional Bond Cost-1% x Item 3.11	(\$696.47)
3.99	Total Change Order Cost 3.11+3.12	(\$70,342.97)

Submitted By

Name: _____ Braden Johnson

Signature: _____

Title: _____ Project Manager

Date: _____ 4/30/2024

I have reviewed the costs proposed and find them to be reasonable (as proposed) (as marked).

A/E Signature: _____

GENERAL CONTRACTOR ESTIMATE FOR CHANGE ORDER

GC-1



Project Code: 24.003
 Agency: SCWWA
 Project: SCWWA NRP Phase 2

General Contractor: MEB
 Change Description: PCO-1 Easygen Controls
 Change Option 1

GENERAL CONTRACTOR DIRECT COSTS

Scope Description				Direct Labor				Direct Material		Direct Equipment	
Item No.	Description	Quantity	Qty Units	Direct Labor Hours Per Unit	Total Direct Labor Hours	Hourly Wage Rate, Excl. Taxes & Ins.	Total Labor Cost	Material Cost Per Unit	Total Material Cost	Equipment Cost Per Unit	Total Equipment Cost
A	B	C	D	E	F = C x E	G	H = F x G	I	J = C x I	K	L = C x K
1.01					0.00		\$0.00		0.00		\$0.00
1.02					0.00		\$0.00		0.00		\$0.00
1.03					0.00		\$0.00		0.00		\$0.00
1.04					0.00		\$0.00		0.00		\$0.00
1.05					0.00		\$0.00		0.00		\$0.00
1.06					0.00		\$0.00		0.00		\$0.00
1.06					0.00		\$0.00		0.00		\$0.00
1.07					0.00		\$0.00		0.00		\$0.00
1.08					0.00		\$0.00		0.00		\$0.00
1.09					0.00		\$0.00		0.00		\$0.00
1.10	Subtotal from Estimate Continuation Sheets						\$0.00		\$0.00		\$0.00
1.97	Subtotal (S/T) Direct Costs:					Subtotal Labor	\$0.00	Subtotal Mat'l	\$0.00	Subtotal Equip.	\$0.00
1.98	Taxes/Insurance:			FICA, FUI, SUI, & Workmens' Comp. at	0.00%	% of Item 1.97H	\$0.00	Sales Tax @ 0%	\$0.00	Sales Tax @ 6%	\$0.00
1.99	Total Direct Costs					Total Labor	\$0.00	Total Mat'l	\$0.00	Total Equip.	\$0.00

SUBCONTRACT COSTS

Item No.	Subcontractor Name (List totals from attached SC-1 forms)	Total Cost
A	B	C
2.01	Rudy Hawkins - Change Option 1	\$245,982.00
2.02		
2.03		
2.04		
2.05		
2.06		
2.07		
2.08		
2.09		
2.10		
2.11		
2.99	Total Subcontract Costs	\$245,982.00

SUMMARY

Item No.	Description	Total Cost
3.01	Total Direct Labor Cost Item 1.99H	\$0.00
3.02	Total Direct Material Cost Item 1.99J	\$0.00
3.03	Total Equipment Cost Item 1.99L	\$0.00
3.04	Subtotal 3.01+3.02+3.03	\$0.00
3.05	Overhead and Profit 15% x Item 3.04	\$0.00
3.06	Subtotal 3.04+3.05	\$0.00
3.07	Subcontractor Cost Item 2.99	\$245,982.00
3.08	GC Markup on Subcontractor 5% x Item 3.07	\$12,299.10
3.09	Subtotal 3.06+3.07+3.08	\$258,281.10
3.10	Insurance 0.5% x Item 3.09	\$1,291.41
3.11	Subtotal 3.09 + 3.10	\$259,572.51
3.12	Additional Bond Cost-1% x Item 3.11	\$2,595.73
3.99	Total Change Order Cost 3.11+3.12	\$262,168.23

Submitted By

Name: Braden Johnson

Signature: _____

Title: Project Manager

Date: 4/30/2024

I have reviewed the costs proposed and find them to be reasonable (as proposed) (as marked).

A/E Signature: _____

GENERAL CONTRACTOR ESTIMATE FOR CHANGE ORDER

GC-1



Project Code: 24.003
Agency: SCWWA
Project: SCWWA NRP Phase 2

General Contractor: MEB
Change Description: PCO-1 Easygen Controls Change Option 2

GENERAL CONTRACTOR DIRECT COSTS

Scope Description				Direct Labor				Direct Material		Direct Equipment			
Item No.	Description	Quantity	Qty Units	Direct Labor Hours Per Unit	Total Direct Labor Hours	Hourly Wage Rate, Excl. Taxes & Ins.	Total Labor Cost	Material Cost Per Unit	Total Material Cost	Equipment Cost Per Unit	Total Equipment Cost		
A	B	C	D	E	F = C x E	G	H = F x G	I	J = C x I	K	L = C x K		
1.01					0.00		\$0.00		0.00		\$0.00		
1.02					0.00		\$0.00		0.00		\$0.00		
1.03					0.00		\$0.00		0.00		\$0.00		
1.04					0.00		\$0.00		0.00		\$0.00		
1.05					0.00		\$0.00		0.00		\$0.00		
1.06					0.00		\$0.00		0.00		\$0.00		
1.06					0.00		\$0.00		0.00		\$0.00		
1.07					0.00		\$0.00		0.00		\$0.00		
1.08					0.00		\$0.00		0.00		\$0.00		
1.09					0.00		\$0.00		0.00		\$0.00		
1.10	Subtotal from Estimate Continuation Sheets						\$0.00		\$0.00		\$0.00		
1.97	Subtotal (S/T) Direct Costs:						Subtotal Labor	\$0.00	Subtotal Mat'l	\$0.00	Subtotal Equip.	\$0.00	
1.98	Taxes/Insurance:					FICA, FUI, SUI, & Workmens' Comp. at	0.00%	% of Item 1.97H	\$0.00	Sales Tax @ 0%	\$0.00	Sales Tax @ 6%	\$0.00
1.99	Total Direct Costs						Total Labor	\$0.00	Total Mat'l	\$0.00	Total Equip.	\$0.00	

SUBCONTRACT COSTS

Item No.	Subcontractor Name (List totals from attached SC-1 forms)	Total Cost
A	B	C
2.01	Rudy Hawkins - Change Option 1	\$174,647.00
2.02		
2.03		
2.04		
2.05		
2.06		
2.07		
2.08		
2.09		
2.10		
2.11		
2.99	Total Subcontract Costs	\$174,647.00

SUMMARY

Item No.	Description	Total Cost
3.01	Total Direct Labor Cost	Item 1.99H \$0.00
3.02	Total Direct Material Cost	Item 1.99J \$0.00
3.03	Total Equipment Cost	Item 1.99L \$0.00
3.04	Subtotal	3.01+3.02+3.03 \$0.00
3.05	Overhead and Profit	15% x Item 3.04 \$0.00
3.06	Subtotal	3.04+3.05 \$0.00
3.07	Subcontractor Cost	Item 2.99 \$174,647.00
3.08	GC Markup on Subcontractor	5% x Item 3.07 \$8,732.35
3.09	Subtotal	3.06+3.07+3.08 \$183,379.35
3.10	Insurance 0.5%	x Item 3.09 \$916.90
3.11	Subtotal	3.09 + 3.10 \$184,296.25
3.12	Additional Bond Cost-1% x Item 3.11	\$1,842.96
3.99	Total Change Order Cost	3.11+3.12 \$186,139.21

Submitted By

Name: _____ Braden Johnson
 Signature: _____
 Title: _____ Project Manager
 Date: _____ 4/30/2024
 I have reviewed the costs proposed and find them to be reasonable (as proposed) (as marked).
 A/E Signature: _____

April 29, 2024

B-0429241DY

MEB General Contractors
2382 Lanier Road
Rockville, Virginia 23146

ATTN: Don Wade

REF: SCWWTP Phase 2
DYB 2319-1
Change Order 1

Dear Mr. Wade:

We are pleased to submit for your consideration and approval a Lump Sum Bid Price to furnish material and labor for items listed below. Any item not specifically included below is excluded

Deletion of Auto Throw Over furnished by Square D for EB1 and EB3 **(\$66,000.00)**

Option 1

Furnish and Install Easygen, controller Utility protective relay and a generator protective relay per attached quote for EB1 and E **\$245,982.00**

Option 2

Furnish and Install Easygen controller **\$174,647.00**

A decision would need to be made prior to ordering the switchboards for EB1 and EB3

Our Bid Price is based on working Monday – Thursday Ten (10) Hours per day.

No Overtime is included in our Bid Price.

All work on this project will be installed in accordance with the National Electrical Code and all wire for this project will be copper.

Exclusions:

1. The cost of any drawings as required by Building Official in order to obtain an electrical permit.
2. All cutting, painting and patching as required to install Electrical Work on Project.
3. Liquidated Damages
4. Extended General Conditions
5. Additional 3rd party testing
6. Shop drawings and submittals

Terms:

Our terms are net 30 days from date of Invoice. On a Project over 30 days in duration, Progress Billings will be submitted monthly to include Work in Place and Material Stored on Site.

We will honor this Quote for a period of thirty (30) days.

No work will begin on Project until a Purchase Order, or; an Executed Contract Modification is received by this Office.

Customer will pay all Legal Fees necessary to collect any Outstanding Invoices on Project

Sincerely,

David Yancey

David Yancey
Project Manager

Corporate Office

PO Box 3930
Chester, VA 23831
(804) 748-7200

Chester

600 West Hundred Road
Chester, VA 23836

Lynchburg

1019 Dillard Dr.
Forest, VA 24551
(434) 333-0220

North Carolina

2410 Presidential Drive
Durham, NC 27703
(919) 714-4990

RudyLHawkinsElectrical.com



Braden Johnson

From: David Yancey <dyancey@rudylhawkinselectrical.com>
Sent: Monday, April 29, 2024 4:02 PM
Subject: FW: SCWWA Phase 2

-----Original Message-----

From: Douglas Cameron
Sent: Monday, April 22, 2024 9:51 AM
To: David Yancey
Subject: RE: SCWWA Phase 2

David,

Good Morning! Per our conversation, attached is the revised quote removing the PLC ATO and using standard kirk key breakers. I left the breakers as electrically operated and wired out the terminals to instrument compartments above the breakers. I misspoke over the phone and the deduct is actually \$30k per switchboard. Please review the REV1 quote with drawings and let me know if you have any questions or concerns.

Thanks,

Doug Cameron
Key Account Manager
Power Products Division
North America Operations
Square D by Schneider Electric
M 804-712-5522
Customer Care 1-888-SquareD
MS Teams IM doug.cameron@se.com
E doug.cameron@se.com
2400 Old Brick Road
Suite 70
Glen Allen, VA 23060
United States

Download mySchneider app
24/7 support. Mobile catalog. Access to expert help.

*Please consider the environment before printing this e-mail

General

-----Original Message-----

From: David Yancey <dyancey@rudylhawkinselectrical.com>
Sent: Thursday, April 18, 2024 4:26 PM
To: Douglas Cameron <Doug.Cameron@se.com>
Subject:

[External email: Use caution with links and attachments]

Please, PRICE deducting the PLC for the auto throw over for E1 E3 at South Central David Yancey



April 22, 2024

Rudy Hawkins Electrical
600 W Hundred Rd
Chester, VA 23836
Attention: David Yancey

Subject: Proposal - Generator Controls and Protective Relaying Package for SCWWA Switchgear

Mr. Yancey,

Electric Power, Inc. is pleased to quote the following power system controls to both new switchgear lineups.

Easygen

The new Easygen XT's will synchronize, load and unload with a soft transfer that should mitigate voltage transients. Drives and UPS systems will not be affected during transfer. Alarming will be recorded in a historical format, and manually starting and stopping the gen-sets can be accomplished from pushbuttons on the Easygen screen. Diagnose minor problems before they become major via the window into the actual generator controller.



Modes of operation will include:

1. Stand-by – Should the utility power be lost, the generator will start automatically and supply loads.
2. Peak-Shave – The generator will start and be put online in parallel with the utility. Load control will hold a power level on the generator (can be set to a baseload level, import power level or export power level).
3. Storm Anticipation – The generator will be started and put online, and the load will be softly ramped off the utility. The Utility Circuit Breaker will open and the generator will supply loads.

With the addition of engine/gen-set monitoring by connecting to the J1939 data on the engine, all available engine data will be displayed on the Easygen. The Easygen will also serve up all pertinent engine data to the plant SCADA system. This data can be customized on the Easygen custom screens to the customer's requests.

Model numbers of the Easygens and other equipment chosen will be interchangeable with equipment at the ARWA site.



Generator Protective Relaying

It is recommended that Generator Protection is installed to protect the investment in this new generator. We propose using the SEL-700G for this task. The Generator circuit breakers will be protected with sync-check protection through the existing SEL-700G. This supervisory element will oversee automatic operations in case of component failure and protect against operator error. Logic will be added to this element to keep from closing a generator circuit breaker out of phase.

These SEL-700G relays will be integrated into the Generator Control System. Functions such as sync permissive, generator voltage and generator protective fault will be included in system annunciation and control. As with all SEL relays, historical analysis is comprehensive. Sequential Events Recording is invaluable for determining the cause and order of events. The in-depth oscillography is also available in the Event Recorder to view details at the time of the event, and leading up to the event.



Utility Feeder Protective Relaying

Utility Feeder Protection is recommended for connection of the Generator to the grid. We propose using the SEL-751 for this task. Whether a soft transfer or a Peak-Shave operation is taking place, this relay will satisfy utility requirements for reverse power and fast change in frequency. It will also back-up utility voltage sensing. This relay is capable of sensing negative sequence voltage that can damage drives and other equipment. These SEL-751 relays will be integrated into the Generator Control System. An undervoltage, overvoltage, or negative sequence overvoltage will back up the Easygen for sensing utility loss.



As with all SEL relays, historical analysis is comprehensive with Sequential Events Recording and oscillography available.



Electric Power, Inc.

**1351 WEST HUNDRED ROAD
CHESTER, VIRGINIA 23836**

Phone: (804) 778-7735

Fax: (804) 778-7278

Offer includes:

- 2x 8440-2084, Woodward Easy-Gen 3400-5/P1
- 2x 8446-1068, Remote Display Panel
- 2x SEL-700G Multifunction Generator Protection Relay
- 2x SEL-751 Multifunction Feeder Protection Relay
- Control Switch for “Standby, Peak-Shave, SAM”
- Installation of new Woodward control equipment
- Installation/integration of Generator Protection
- Installation/integration of Utility Protection
- Program settings, and provide settings database for SEL and Woodward equipment
- Custom, brushed stainless bezel plates where necessary
- Auto Start on Power Outage, Peak-Shave, Storm Anticipation Modes
- Acceptance Testing
- As-built drawings of switchgear, control panel, and integration
- All settings backups provided
- Support for the end-user to assist with integration to the in-house SCADA system
- 1 year warrantee for system operation/parts
- Lifetime warrantee for engineering/programming defects

Total Price:

\$223,620.00

Please contact us to discuss this switchgear package. We can offer a substantial discount (~7%) if both switchgear lineups can be left in our parking lot for the installation of this equipment and modification of the switchgear, prior to delivery to the jobsite.

We are excited to provide you with two reliable systems that are simple to operate and support you with our local service. This design is stackable with other stations; it will be ready to accept run/mode commands from a future Master Command Panel (Master Command Panel is not included in this proposal)

Best Regards,

Mark Redford, Project Engineer
Electric Power, Inc
Office: 804-778-7735
Cell: 804-314-2593
Email: mark@elecpr.com
Website: www.elecpr.com



April 22, 2024

Rudy Hawkins Electrical
600 W Hundred Rd
Chester, VA 23836
Attention: David Yancey

Subject: Proposal - Generator Controls and Protective Relaying Package for SCWWA Switchgear

Mr. Yancey,

Electric Power, Inc. is pleased to quote the following power system controls to both new switchgear lineups.

Easygen

The new Easygen XT's will synchronize, load and unload with a soft transfer that should mitigate voltage transients. Drives and UPS systems will not be affected during transfer. Alarming will be recorded in a historical format, and manually starting and stopping the gen-sets can be accomplished from pushbuttons on the Easygen screen. Diagnose minor problems before they become major via the window into the actual generator controller.



Modes of operation will include:

1. Stand-by – Should the utility power be lost, the generator will start automatically and supply loads.
2. Peak-Shave – The generator will start and be put online in parallel with the utility. Load control will hold a power level on the generator (can be set to a baseload level, import power level or export power level).
3. Storm Anticipation – The generator will be started and put online, and the load will be softly ramped off the utility. The Utility Circuit Breaker will open and the generator will supply loads.

With the addition of engine/gen-set monitoring by connecting to the J1939 data on the engine, all available engine data will be displayed on the Easygen. The Easygen will also serve up all pertinent engine data to the plant SCADA system. This data can be customized on the Easygen custom screens to the customer's requests.

Model numbers of the Easygens and other equipment chosen will be interchangeable with equipment at the ARWA site.



Electric Power, Inc.

**1351 WEST HUNDRED ROAD
CHESTER, VIRGINIA 23836**

Phone: (804) 778-7735

Fax: (804) 778-7278

Offer includes:

- 2x 8440-2084, Woodward Easy-Gen 3400-5/P1
- 2x 8446-1068, Remote Display Panel
- Control Switch for “Standby, Peak-Shave, SAM”
- Installation of new Woodward control equipment
- Program settings, and provide settings database for Woodward equipment
- Custom, brushed stainless bezel plates where necessary
- Auto Start on Power Outage, Peak-Shave, Storm Anticipation Modes
- Acceptance Testing
- As-built drawings of switchgear, control panel, and integration
- All settings backups provided
- Support for the end-user to assist with integration to the in-house SCADA system
- 1 year warrantee for system operation/parts
- Lifetime warrantee for engineering/programming defects

Total Price:

\$158,770.00

We are excited to provide you with two reliable systems that are simple to operate and support you with our local service. We will be able to provide a factory-quality installation at our shop. This design is stackable with other stations; it will be ready to accept run/mode commands from a future Master Command Panel (Master Command Panel is not included in this proposal)

Best Regards,

Mark Redford, Project Engineer
Electric Power, Inc
Office: 804-778-7735
Cell: 804-314-2593
Email: mark@elecpwr.com
Website: www.elecpwr.com



June 18, 2024

Mr. Robert B. Wilson, P.E.
Executive Director
South Central Wastewater Authority
900 Magazine Road
Petersburg, VA 23803
(VIA E-MAIL TRANSMITTAL)

Re: South Central Wastewater Authority
Nutrient Reduction Project
Phase 3 Improvements
Secondary Clarifier Design Criteria
Petersburg, Virginia
WWA Project No. 223005.00

Dear Mr. Wilson:

As requested, we have analyzed the design criteria used for the secondary clarifiers. Our calculations for the surface and solids loading rates are enclosed for your reference. We note that the SCWWA service agreements established a peak daily flow rate of 52.6 MGD. This 52.6 MGD flow rate is the historical peak daily flow rate used as the basis of design for the SCWWA wastewater treatment plant.

As indicated in our calculations, the four existing secondary clarifiers are considered adequate to treat this peak daily flow rate of 52.6 MGD based on the *Sewage Collection and Treatment Regulations* and Metcalf & Eddy standards. We therefore conclude that proposed Clarifier No. 5 can be eliminated from the NRP Phase 3 project without compromising effluent treatment standards.

We are available to discuss these calculations at your convenience. Should you have any questions, please feel free to call.

Sincerely,

WW Associates, Inc.



Herbert F. White III, P.E.
President

Enclosure

P.O. Box 4119 ■ Lynchburg, Virginia 24502
Telephone (434) 316-6080 ■ Fax (434) 436-1158

Lynchburg ■ Charlottesville

**SECONDARY CLARIFIER CALCULATIONS
SOUTH CENTRAL WASTEWATER AUTHORITY
PETERSBURG, VIRGINIA
SECONDARY CLARIFIER NOS. 1-4 ONLINE**

Known/Estimated Quantities

Diameter - Secondary Clarifier No. 1 (ft):	110
Diameter - Secondary Clarifier No. 2 (ft):	110
Diameter - Secondary Clarifier No. 3 (ft):	110
Diameter - Secondary Clarifier No. 4 (ft):	110
Total Surface Area - Clarifier Nos. 1-4 (ft ²):	38,013
Design Capacity (MGD):	23.0
Peak Daily Capacity (MGD):	52.6
Mixed Liquor Suspended Solids @ Design Capacity - MLSS _D (mg/L):	3,000
Mixed Liquor Suspended Solids @ Peak Capacity - MLSS _P (mg/L):	1,500

Table in Paragraph C(2) in 9VAC25-790-530 - Clarifiers in Virginia DEQ *Sewage Collection and Treatment Regulations* does not apply for BNR treatment processes using alum sludge.

Design Surface Loading Rate - V_s (GPD/ft²):	605	Range = 400-700 GPD/ft² -----> OK
Peak Surface Loading Rate - V_s (GPD/ft²):	1,384	Range = 1,000-1,600 GPD/ft² -----> OK
Design Solids Loading Rate - SLR (lb/hr/ft²):	0.631	Range = 0.6-1.25 lb/hr/ft² -----> OK
Peak Solids Loading Rate - SLR (lb/hr/ft²):	0.721	Less than Max. 1.8 lb/hr/ft² -----> OK

Notes:

1. Peak flow per SCWWA service agreement = 52.6 MGD.
2. Typical average surface loading rate range of 400-700 GPD/ft² for BNR treatment process with alum sludge per Metcalf & Eddy, *Wastewater Engineering - Treatment and Reuse, 4th Edition*.
3. Typical peak surface loading rate range of 1,000-1,600 GPD/ft² for BNR treatment process with alum sludge per Metcalf & Eddy, *Wastewater Engineering - Treatment and Reuse, 4th Edition*.
4. Typical average solids loading rate range of 0.6-1.25 lb/hr/ft² for other activated sludge treatment per Paragraph C(6) in 9VAC25-790-530 - Clarifiers in Virginia DEQ *Sewage Collection and Treatment Regulations*.
5. Typical average solids loading rate range of 1.0-1.5 lb/hr/ft² for BNR treatment process with alum sludge per Metcalf & Eddy, *Wastewater Engineering - Treatment and Reuse, 4th Edition*.
6. Peak hourly solids loading rate = 1.8 lb/hr/ft² for other activated sludge treatment per Paragraph C(6) in 9VAC25-790-530 - Clarifiers in Virginia DEQ *Sewage Collection and Treatment Regulations*.
7. MLSS at peak flow is diluted by stormwater I&I.
8. Post filtration is provided in addition to clarification for solids removal prior to final effluent discharge.

SCWWTP Phase 3		MEB General Contractors, Inc.
Potential Contract Summary		7/1/2024
Item	Description	Total
1	Total Project Bid	88,277,000
2	Delete RAS PS (Includes Applicable Steel Piles)	(7,981,000)
3	Delete Clarifier #5 (Includes Applicable Steel Piles)	(13,924,000)
4	Delete Existing Clarifier Mods	NA
5	Delete Yard Pipe Associated with RAS PS	(927,000)
6	Delete Yard Pipe Associated with Final Clarifier #5	(3,572,000)
7	Delete 60" FE and 60" SCE Unnecessary Bends <i>(Either/Or with Item 8)</i>	NA
8	Delete 42" ML Relocation <i>(Either/Or with Item 7)</i>	(747,000)
9	Delete 60" Future Piping at Disk Filter	(430,000)
10	Delete Yard Pipe Excavation Haul Off and Replace with Select Fill (Provide note that soil on site is acceptable for backfill)	(387,000)
11	Wood Piles in lieu of Steel Piles at Filter Building and Caustic Facility	(194,000)
12	Wood Piles in lieu of Steel Piles at Intermediate PS	(124,000)
13	Delete Steel Piles at Ductbanks and Yard Pipe	(699,000)
14	Delete Pump Discharge Pipe Insulation and Heat Trace at Exposed Piping at Intermediate PS	(264,000)
15	Delete 3 Each 60" 90's Pipe Insulation and Heat Trace at Exposed Piping at Disk Filter	(159,000)
16	Delete PLC20 Functions for Clarifier and RAS PS	(22,000)
17	Delete Clearing and Grubbing at Clarifier No. 5 Area	(32,000)
18	Delete Parking and Sidewalks at Clarifier No. 5	(7,000)
19	Delete Relocation of the 30" RAS Yard Pipe Line (If this Item is accepted both Items 7 and 8 Above can be Accepted)	NA
20	Delete New 8'x8' Square Precast Manhole next to New Junction Box 3	(96,000)
21	Delete Electrical Work at Existing RAS PS 1	NA (50,000)
22	Delete Concrete Footings Associated with Ductbanks and Yard Pipe	(356,000)
23	Add New Clarifier Equipment at Clarifiers 1 and 2	NA 1,344,000
Potential Total Contract		59,811,000 58,356,000

Proposed/NA
(1,724,000)
(367,000)
(1,083,000)
59,000
1,344,000



July 2, 2024

Mr. Robert B. Wilson, P.E.
Executive Director
South Central Wastewater Authority
900 Magazine Road
Petersburg, VA 23803

Re: SCWWA Nutrient Reduction Project
Phase 3 Improvements
WWA Project No. 223005.03

Dear Mr. Wilson:

Two bids were received and opened on June 13, 2024, at 2:00 pm for the referenced project. The bid tabulation and bid documentation is attached.

MEB General Contractors, Inc., was the low bidder with a total base bid in the amount of \$88,277,000.00. This bid was above the budget amount allocated for this project. During the bid evaluation, we conclude that elimination of Clarifier No. 5 and RAS pump station No. 2 was feasible without violation of regulations and design standards for this facility. We therefore have worked closely with MEB General Contractors to deduct the cost of these facilities and associated piping. A summary of these deducts are presented in the attached documents.

We therefore recommend the construction contract be awarded to MEB General Contractors, Inc. in the amount of \$ 58,356,000. Once existing piping locations are identified based on excavation and location, there may be an additional deduct to be realized.

We are available to administer this contract upon your authorization. Please feel free to contact us should you have any questions.

Sincerely,

WW Associates, Inc.

Herbert F. White III, P.E.
President

Enclosures: Bid Tabulation, Bid Documentation, Deduct documentation



900 Magazine Rd.
 Petersburg, VA 23803
 Office: (804) 861-0111
 Fax: (804) 861-3254

Exhibit D

TO: South Central Wastewater Authority Board of Directors

FROM: Robert B. Wilson, P.E., Executive Director
 James C. Gordon, Assistant Executive Director

DATE: July 18, 2024

SUBJECT: Status Report

This report hits the highlights and does not cover the day-to-day maintenance or preventive maintenance summaries.

The following is an update for plant operations.

➤ General

- The next Board of Directors Meeting is Thursday, September 19, 2024, at the South Central Wastewater Authority at 2:00 pm.
- Septage revenues were:

Month	Septage
May	\$13,939.75
June	\$7,530.83
- SCWWA’s annual total nitrogen (TN) waste load allocation (WLA) is 350,239 lbs. TN discharged through June 2024 was 199,267 lbs. We have a contract with Chesterfield to purchase 50,000 credits to cover any WLA overage.
- SCWWA’s annual total phosphorus (TP) WLA is 28,404 lbs. TP discharged through June 2024 was 14,329 lbs.
- Safety committee held a safety rodeo on June 28th. It was a very successful and informative event. Cameron Meeks was recognized for his safety suggestion related to LOTO
- The safety committee completed their monthly walk through and performed plant wide fire and tornado drills.
- Request for Proposal (RFP) #24-0812 for biosolids disposal services was distributed on June 3rd. The RFP was sent to several companies the SCWWA has worked with over the years, posted to the SCWWA website, and posted on the eVA. One RFI has been received and the response has been distributed. Bids will be opened on July 16th.
- The preaudit and audit are scheduled for the August 5th – August 16th.
- Pam Tavel is retiring on July 31st. An authority luncheon is scheduled for July 19th to recognize her for her 42+ years of service with the Authority.

➤ Operations

- Plant effluent met all permit requirements for May and June 2024.
- Average daily effluent flows were:

Month	Average Effluent Flow (mgd)	Total Monthly Precipitation (inches)
May	16.098	8.28
June	10.635	1.98

- RAS Pump Station is being run in hand due to Pump Building 5 MCC replacement.
- SCWWA hosted a license review course through VRWA.
- Operators completed their quarterly SOP training, backup generator training, and inclement weather training.
- Ron Majors and Clay Claiborne passed their test for the class 1 wastewater license and were promoted to Senior Operators.
- Rob Stevens passed his test for the class 2 wastewater license.
- Cameron Meeks and Jacob Lawson passed their class 3 wastewater license test.

➤ Maintenance

- Sodium Hypochlorite tank 5 had leaks in the bottom of the tank. Staff installed and re-piped a new storage tank. Tank 3 has a leak in the flange for the tank. A vendor has been contacted to attempt a repair for tank 3.
- Remote pH monitors have been installed at the East Bank and Main Pump Stations in Petersburg. These meters are now connected to our SCADA and historian database through a private connection. Staff will be installing one in the Colonial Heights Main Pump Station.
- Staff rebuilt primary pump 5 and Scum Pump.
- Staff repaired a leak in Clarifier 2 scum box.
- Clarifier 1 scum box valve was replaced by Southern Construction.
- Work continues to be performed on the Solids Gravity Belt Thickeners (GBTs) and Belt Filter Presses (BFPs). Staff is replacing the hydraulic lines and are preparing to rebuild the BFP with spare rollers and new bearings.

➤ SI-IT

- OT Firewall installation is moving forward
- Staff installed the new terminal server and are in the process of moving data and programs over.
- New wifi controller has been installed.
- New 360-degree camera for the warehouse has been ordered.
- Coordinating with Force Security to install a new gate entry system.

➤ Laboratory/Industrial Pretreatment

- Staff passed all Proficiency Tests (PTs).
- Industrial Pretreatment sampling completed for the first half of 2024
- CFS landfill draft permit renewal issued.
- PFAS survey distributed to all permitted industrial users on 6/7/2024. Most of the users have already replied.

➤ PB3 and PB5 MCC Replacement

- Motor Control Centers (MCC) have been received.

- The temporary power feed and VFD panel for manual operation of our RAS pumps during PB5 MCC has been installed.
- There are some buckets and starters in PB3 that are not sized properly, and the vendor is working on replacing them appropriately. We are awaiting delivery of the replacement buckets.

Exhibit E

Sum of Amount	Column Labels			
Row Labels	58000-1 · Nutrient Upgrade-Engineering	58000-2 · Nutrient Upgrade-Equipment	58000-3 · Nutrient Upgrade-Solids Handlin	Grand Total
Alfa Laval, Inc.			\$899,378.30	\$899,378.30
5734			\$94,671.40	\$94,671.40
5734			\$804,706.90	\$804,706.90
AQUALAW PLC	\$25,068.50			\$25,068.50
Aqua	\$17,874.50			\$17,874.50
Legal	\$7,194.00			\$7,194.00
City of Petersburg	\$2,250.00			\$2,250.00
City	\$2,250.00			\$2,250.00
Comcast Cable Communications			\$2,194.64	\$2,194.64
Cable			\$2,194.64	\$2,194.64
Electric Power Systems			\$2,400.00	\$2,400.00
5947			\$2,400.00	\$2,400.00
Endress+Hauser	\$3,037.77		\$51,802.03	\$54,839.80
5679	\$3,037.77			\$3,037.77
5914			\$51,802.03	\$51,802.03
Hazen & Sawyer	\$4,140,031.14			\$4,140,031.14
5376	\$3,304,369.00			\$3,304,369.00
5845	\$656,420.46			\$656,420.46
Rebid	\$179,241.68			\$179,241.68
McGuireWoods	\$67,318.85			\$67,318.85
Legal	\$67,318.85			\$67,318.85
McGuireWoods Consulting	\$25,789.98			\$25,789.98
5906	\$20,000.00			\$20,000.00
Legal	\$5,789.98			\$5,789.98
Schwing Bioset			\$409,564.00	\$409,564.00
5723			\$392,960.00	\$392,960.00
5723			\$16,604.00	\$16,604.00
Sherwood Logan			\$83,683.00	\$83,683.00
5725			\$83,683.00	\$83,683.00
W W Associates	\$1,309,035.00			\$1,309,035.00
5975	\$82,500.00			\$82,500.00
ENR	\$11,485.00			\$11,485.00
WW Eng	\$450.00			\$450.00
5975	\$595,500.00			\$595,500.00
5997	\$233,750.00			\$233,750.00
5997	\$41,250.00			\$41,250.00
5987	\$116,600.00			\$116,600.00
6095	\$202,500.00			\$202,500.00

6130	\$25,000.00			\$25,000.00
A & R Electric, Inc.	\$67,050.00	\$127,825.00		\$194,875.00
6105	\$67,050.00			\$67,050.00
5718		\$127,825.00		\$127,825.00
Airline Hydraulics		\$143,711.00		\$143,711.00
5793		\$143,711.00		\$143,711.00
MEB General Contractors, Inc.		\$140,600.00	\$496,897.50	\$637,497.50
6193			\$469,110.00	\$469,110.00
6319		\$140,600.00		\$140,600.00
6193			\$27,787.50	\$27,787.50
McGuireWoods	\$2,381.40			\$2,381.40
Legal	\$2,381.40			\$2,381.40
Grand Total	\$5,641,962.64	\$1,367,910.97	\$990,144.50	\$8,000,018.11

Vendor	PO #	Orginal Amount	YTD Expenditures	Remaining
A&R Electric	5718	\$ 207,764.00	\$ 127,825.00	\$ 79,939.00
A&R Electric	6105	\$ 67,050.00	\$ 67,050.00	\$ -
A&R Electric	6243	\$ 14,850.00	\$ -	\$ 14,850.00
A&R Electric	6301	\$ 18,000.00	\$ -	\$ 18,000.00
Alfa Laval	5734	\$ 946,714.00	\$ 899,378.30	\$ 47,335.70
Carter Machinery	6255	\$ 1,095,764.25	\$ -	\$ 1,095,764.25
EAT-N	5793	\$ 143,711.00	\$ 143,711.00	\$ -
Electric Power Systems	5947	\$ 3,600.00	\$ 2,400.00	\$ 1,200.00
Endress+Hauser	5679	\$ 3,037.77	\$ 3,037.77	\$ -
Endress+Hauser	5914	\$ 51,802.03	\$ 51,802.03	\$ -
Hazen & Sawyer	5376	\$ 3,316,735.00	\$ 3,304,369.00	\$ 12,366.00
Hazen & Sawyer	5845	\$ 656,420.46	\$ 656,420.46	\$ -
McGuireWoods Consultiang	5906	\$ 20,000.00	\$ 20,000.00	\$ -
MEB General Contractors	6193	\$ 10,195,345.06	\$ 496,897.50	\$ 9,698,447.56
MEB General Contractors	6319	\$ 4,147,000.00	\$ 140,600.00	\$ 4,006,400.00
Schwing Bioiset	5723	\$ 1,023,910.00	\$ 409,564.00	\$ 614,346.00
Sherwood Logan	5725	\$ 83,683.00	\$ 83,683.00	\$ -
WW Associates	5975	\$ 3,650,000.00	\$ 678,000.00	\$ 2,972,000.00
WW Associates	5987	\$ 205,000.00	\$ 116,600.00	\$ 88,400.00
WW Associates	5997	\$ 275,000.00	\$ 275,000.00	\$ -
WW Associates	6095	\$ 495,000.00	\$ 202,500.00	\$ 292,500.00
WW Associates	6130	\$ 25,000.00	\$ 25,000.00	\$ -
		\$ 26,645,386.57	\$ 7,703,838.06	\$ 18,941,548.51
Aqualaw PLC	Aqua	\$ -	\$ 25,068.50	\$ -
City of Petersburg	City	\$ -	\$ 2,250.00	\$ -
Comcast Cable	Cable	\$ -	\$ 2,194.64	\$ -
Hazen & Sawyer	Rebid	\$ -	\$ 179,241.68	\$ -
McGuireWoods	Legal	\$ -	\$ 69,700.25	\$ -
McGuireWoods Consulting	Legal	\$ -	\$ 5,789.98	\$ -
WW Associates	ENR	\$ -	\$ 11,485.00	\$ -
WW Associates	WW Eng	\$ -	\$ 450.00	\$ -
		\$ -	\$ 296,180.05	\$ -
		\$ 26,645,386.57	\$ 8,000,018.11	\$ 18,941,548.51