



BOARD OF DIRECTORS

Rod Smiley, President Raynette Gregory, Vice-President
Berkley Baker, Director Anthony Kalvans, Director Owen Davis, Director

SPECIAL MEETING AGENDA

Open Session 6:00 PM

601 12th Street San Miguel, CA Date: 06-06-2024

Cell Phones: As a courtesy to others, please silence your cell phone or pager during the meeting and engage in conversations outside the Boardroom.

Americans with Disabilities Act: If you need special assistance to participate in this meeting, please contact the CSD Clerk at (805) 467-3388. Notification 48 hours in advance will enable the CSD to make reasonable arrangements to ensure accessibility to this meeting.

Public Comment: Sign in sheet at podium for public comment. Comments are **limited to three minutes**, unless you have registered your organization with CSD Clerk prior to the meeting. If you wish to speak on an item not on the agenda, you may do so under item "Public Comment and Communications for items not on the agenda". Person(s) who wish to submit written correspondence, may do so at www.sanmiguelcsd.org. All correspondence is distributed to each Board Director and will become part of the record of that board meeting. Any member of the public may address the Board of Directors on items on the consent calendar.

Meeting Schedule: Regular Board of Director meetings are held on the fourth Thursday of each month at 6:00 P.M. Agendas are also posted at: www.sanmiguelcsd.org

Agendas: Agenda packets are available for public inspection 72 hours prior to the scheduled meeting at the Posting Board/ San Miguel CSD office, during normal business hours. Any agenda-related writings or documents provided to a majority of the Board of Directors after distribution of the agenda packet are available for public inspection at the same time.

1. **Call to Order**
2. **Roll Call**
3. **Approval of Special Meeting Agenda**
4. **Pledge of Allegiance**

5. **Public Comment and Communications for items not on the agenda** *Persons wishing to speak on a matter not on the agenda may be heard at this time; however, no action will be taken until placed on a future agenda. Speakers are **limited to three minutes**. Please sign in with name and address at podium.*

6. **Board Action Items**

1. Amendment #2 for Machado Wastewater Treatment Facility Design contract with Wallace Group Inc. for the Machado Wastewater Treatment Facility Expansion and Upgrade.

7. **Board Comment** *This section is intended as an opportunity for Board members to make brief announcements, request information from staff, request future agenda item(s) and/or report on their own activities related to District business. No action is to be taken until an item is placed on a future agenda.*

8. **Adjournment to Next Regular Meeting**

ATTEST:

STATE OF CALIFORNIA)
COUNTY OF SAN LUIS OBISPO) SS.
COMMUNITY OF SAN MIGUEL)

I, Tamara Parent, Board Clerk of San Miguel Community Services District, hereby certify that I caused the posting of this agenda at the SMCSO office.

Date:

Board of Directors Staff Report

June 6, 2024

AGENDA ITEM: 6.1

SUBJECT: Amendment #2 for Machado Wastewater Treatment Facility Design contract with Wallace Group Inc. for the Machado Wastewater Treatment Facility Expansion and Upgrade.

SUGGESTED ACTION: Review and approve amendment #2 in an amount NTE of \$410,300.00 to 10/5/22 Contract with Wallace Group Inc for the design of the Machado Wastewater Treatment Facility expansion and Upgrade.

DISCUSSION:

In October 2022, the Board approved a contract with Wallace Group for the design and engineering for the Machado Wastewater Treatment Facility expansion. Amendment #1 was approved in July of 2023, to account for initial changes to the design from the initial RFP to increase operability and to reduce future construction cost.

Throughout the design process the mindset has been to provide the best overall product for the best balance of initial cost, long term operability and future maintenance and replacement. Our design team was recently made aware of changes that could be made to the package plant to reduce the overall cost of the package plant, both in construction and operation, while still meeting all the requirements under the General Order Permits and necessary Water Board redundancy requirements.

Amendment #2 accounts for the additional design and engineering to; a) account for overages in design aspects above what was outlined in the initial RFP, b) changes necessary to complete engineering between the solar contractor, PGE and the District, c) changes to value engineer the package plant with Cloacina.

Amendment #2 is in the amount of \$410,300.00, however it is currently estimated that the cost associated with the package plant will be reduced by close to \$1.2 million and approximately \$125,000 in annual operational savings.

The planning portion of this project was awarded a planning grant, and recently awarded an amendment to the initial grant to cover the additional planning and design costs. The additional design costs are within the amended grant award, however there will still likely be other costs that are unknown at this time that may be paid 'out of pocket'.

FISCAL IMPACT:

Approval of amendment #2 will add an additional \$410,300.00 to the existing contract with Wallace Group.

A grant amendment had previously been submitted for additional design costs. That amendment has been approved and is currently being processed. The amendment will cover the majority of all costs associated with the planning and design of the WWTF expansion project.

PREPARED BY: Kelly Dodds

This is EXHIBIT E, consisting of 2 pages, referred to in and part of the Agreement between Owner and Engineer for Professional Services dated 10/5/2022.

AMENDMENT TO OWNER-ENGINEER AGREEMENT
Amendment No. 2

The Effective Date of this Amendment is: 6/6/2024

Background Data

Effective Date of Owner-Engineer Agreement: 10/05/2022

Owner: San Miguel Community Services District

Engineer: Wallace Group

Project: Machado WWTF Upgrade and Expansion Design

Nature of Amendment:

Additional Services to be performed by Engineer

Modifications to services of Engineer

Description of Modifications:

Wallace Group has been progressing through the Machado WWTF Improvements project design and is finalizing 90% plans, specifications, and engineer estimate milestone. Throughout the project there have been additional services performed by Wallace Group beyond the original scope based on new information and progress through the design process. Additionally, this amendment includes new tasks for percolation basin analysis for a 500-year storm as requested by USDA, a Stormwater Control Plan and O&M Plan as requested by the County, bid phase support, and design revisions to incorporate the Cloacina M9 package treatment system for an approximate \$1.2 million in construction cost savings and an annual O&M cost savings of \$125,000.

See attached documentation for updated scope and fee for out of scope and new scope items included in Amendment 2.

Agreement Summary:

Original agreement amount:	\$ 798,128
Net change for prior amendments:	\$ 43,136.50
This amendment amount:	\$ 410,300.00
Adjusted Agreement amount:	\$ 1,251,564.50

Change in time for services (days or date, as applicable): None

The foregoing Agreement Summary is for reference only and does not alter the terms of the Agreement, including those set forth in Exhibit C.

Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect.

OWNER:

ENGINEER:

San Miguel Community Services District

Wallace Group

By: _____

By: _____

Print name: Kelly Dodds

Print name: _____

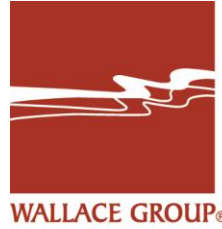
Title: General Manager

Title: _____

Date Signed: _____

Date Signed: _____

CONTRACT AMENDMENT



Project Name: Machado WWTF Upgrade & Expansion Design	CA No. 2
Client Name: San Miguel CSD	Project/Phase No. 0406-0031
Attention: Kelly Dodds	Date: May 22, 2024
Address: PO Box 180, San Miguel, CA, 93451	

Wallace Group requests the Client’s authorization to proceed with revisions to the contract agreement for the above referenced project as herein described. Approval below incorporates this document as a part of the original contract signed October 5, 2022. If approved, please return one signed original Contract Amendment to Wallace Group.

Description and Purpose of the Revisions

Wallace Group has been progressing through the Machado WWTF Improvements project design and is finalizing the 90% plans, specifications, and engineer estimate milestone. Throughout the project, there have been changes to the original scope based on information gathered through the design process as well as a recent major cost savings discovery related to the packaged treatment system.

Below is a summary of the additional scope items as related to each original design task per the original contract. These estimates have been calculated by reviewing past billings for out-of-scope work, as well as estimating the efforts required to bring the project to bid, including the out-of-scope tasks. Please note that the estimated fees associated with each Task are time and materials based and have been rounded to the nearest \$100 to simplify review. Any overestimated/unused budget will not be charged to the District.

New tasks required for the project have been indicated below as new. For example, San Luis Obispo County Public Works is requiring a Storm Water Control Plan and Operations and Maintenance Plan as part of the CUP amendment not originally envisioned for the project. This task is being added to satisfy that request. Another example is the recent discovery that moving to the latest packaged treatment system from Cloacina will save the District approximately \$1 million in construction costs and over \$100,000 annually in operations and maintenance. To accomplish this move to the newer system, additional civil, mechanical, and electrical engineering will be required and have been listed as new tasks below.

Scope of services included in this amendment are as follows:

Task 1 - Project Coordination and Management - \$2,500

- Additional meetings and project management due to extension of project schedule beyond 12 months as well as added design complexity. This includes meetings and project management beyond October 5, 2023. This does not include project management for Task 13. That is included in the Task 13 estimate, separately.
- Percolation basin coordination and management, including Avila and Associates, FEMA, County of SLO, internal coordination, additional survey coordination, etc. Percolation basins were not part of the original RFP scope but were necessary based on the water balance calculated by Wallace Group during the Design Criteria phase of the design project.
- Additional subconsultant coordination for added scope, including architectural, electrical, structural, and mechanical consultant contract updates for scope not previously included in the RFP, including percolation basins, microgrid, larger operations building, changes to structural engineering requirements, and vac truck dump station addition.
- Solar project and microgrid coordination and management, original project requirements did not include overall solar or microgrid system design and coordination.

CIVIL AND
TRANSPORTATION
ENGINEERING

CONSTRUCTION
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LANDSCAPE
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MECHANICAL
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PUBLIC WORKS
ADMINISTRATION

SURVEYING /
GIS SOLUTIONS

WATER RESOURCES

WALLACE GROUP
A California Corporation

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SAN LUIS OBISPO
CALIFORNIA 93401

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- SLO County permit submittal. Original scope did not include permitting through SLO County, it was understood that San Miguel CSD would self-perform building code review and permitting.

Task 1 Project Coord and Mgmt					
Subtask	Hours	Future Billing		Out of Scope	Total Estimate
		Billing Rate	Total Future Billing	Billing to Date	
Additional Meetings and PM	36	\$ 220.00	\$ 7,920.00	\$ -	\$ 7,920.00
Perc Basin Proj Mgmt	4	\$ 220.00	\$ 880.00	\$ 500.00	\$ 1,380.00
Subconsultant Coordination	4	\$ 220.00	\$ 880.00	\$ 672.00	\$ 1,552.00
Solar and Microgrid Proj Mgmt	2	\$ 220.00	\$ 440.00	\$ 453.00	\$ 893.00
SLO County Permitting	8	\$ 220.00	\$ 1,760.00		\$ 1,760.00
		Subtotal	\$ 11,880.00	\$ 1,625.00	\$ 13,505.00
				Original Budget	\$ 47,797.00
				Budget Remaining	\$ 11,000.00
				Estimated Out of Scope + Cost to Complete	\$ 13,505.00
				Total Task Contract Amendment	\$ 2,505.00

Task 3 - Pre-Selected Equipment Vendor Coordination - \$12,000

- Additional coordination and review of design submittals, 4 rounds of submittals with Cloacina including corrections, edits, clarification, and responses. Scope of Task 3 included coordination of equipment connections based on final submittal drawings. Added time spent on this task was due to multiple submittal rounds, coordination meetings, exhibits, corrections to Cloacina drawings and design strategy, and coordination with electrical and structural engineers. District and District Engineer would have typically reviewed submittals, but Wallace Group provided this service out of scope. This does not include coordination and review time of Cloacina submittals related to the design change to the M9 model. That time is estimated and included in Task 13 only.
- Change order assistance to District and District Engineer was provided out of scope by Wallace Group as required. It is expected that up to 4 more hours may be required for this work, but is anticipated to be absorbed by Task 1 Project Management hours already reflected in this contract amendment.
- Headworks design changes and coordination. Once Cloacina was chosen by the Design Team (District, District Engineer, Wallace Group) the design went through multiple iterations based on corrections required, which required additional time for Wallace Group to review and coordinate.
- Coordination of pad and layout changes due to headworks changes, with FRM, based on above headworks changed by Cloacina.

Task 3 Vendor Coordination					
Subtask	Hours	Future Billing		Out of Scope	Total Estimate
		Billing Rate	Total Future Billing	Billing to Date	
Submittal Review- Cloacina		\$ -	\$ -	\$ 10,040.50	\$ 10,040.50
Cloacina Change Orders		\$ -	\$ -	\$ 240.00	\$ 240.00
Headworks Design Changes		\$ -	\$ -	\$ 1,611.00	\$ 1,611.00
FRM Pad and Layout Changes		\$ -	\$ -	\$ 90.00	\$ 90.00
		Subtotal	\$ -	\$ 11,981.50	\$ 11,981.50
				Original Budget	\$ 5,872.00
				Budget Remaining	\$0.00
				Estimated Out of Scope + Cost to Complete	\$ 11,981.50
				Total Task Contract Amendment	\$ 11,981.50



Task 5 - Preliminary Design Report - \$32,500

Wallace Group initially interpreted this task as a support role to provide the information needed by Water Systems Consulting, as District Engineer, to author the Preliminary Design Report (PDR) that would be required by USDA for funding. Wallace Group intended for WSC to take the lead role for the PDR report creation, based on our interpretation of the Request for Proposal language.

During execution of the contract, the team realized that there was a difference between the Wallace Group proposal and the intent of the RFP. It was clarified at that time that it was the intent of the RFP that Wallace Group take the lead role authoring the Preliminary Design Report.

The original budget provided for this task by Wallace Group was \$9,872, which was in line with Wallace Group’s original understanding of the scope. At the time of contract, Wallace Group agreed to attempt to provide the PDR within the original budget.

However, the scope was more involved than expected and resulted in total fees of \$50,450.25, based on the above progression of this task, as requested by the District and District Engineer. There were several major rounds of comments provided by WSC and the District that Wallace Group incorporated into the PDR in the form of three major revisions to the report. It should be noted that this level of effort was required regardless of which firm provided the service, Wallace Group or WSC, or other. The District would have contracted for this task at this level of effort to satisfy the requirements of USDA.

Note: Wallace Group is reducing the total contract amendment fee for this task by 20% as a gesture of goodwill to share in the cost to the District and shareholders.

Task 5 Preliminary Design Report					
Subtask	Hours	Future Billing		Out of Scope	Total Estimate
		Billing Rate	Total Future Billing	Billing to Date	
Preliminary Design Report Lead Role		\$ -	\$ -	\$ 40,578.25	\$ 40,578.25
		Subtotal	\$ -	\$ 40,578.25	\$ 40,578.25
				Original Budget	\$ 9,872.00
				Budget Remaining	\$0.00
				Estimated Out of Scope + Cost to Complete	\$ 40,578.25
				20% Discount	\$ (8,115.65)
				Total Task Contract Amendment	\$ 32,462.60

Task 5.1 - Design Criteria - \$3,900

- Original scope assumed preliminary design data to be utilized for WWTF improvements project. Upon further review by Wallace Group, District, and District Engineer it was found that inflow data, wet weather data, emergency storage, and percolation basin disposal capacity needed to be further investigated.

Task 5.1 Design Criteria					
Subtask	Hours	Future Billing		Out of Scope	Total Estimate
		Billing Rate	Total Future Billing	Billing to Date	
Additional design criteria work		\$ -	\$ -	\$ 3,928.50	\$ 3,928.50
		Subtotal	\$ -	\$ 3,928.50	\$ 3,928.50
				Original Budget	\$ 6,160.00
				Budget Remaining	\$0.00
				Estimated Out of Scope + Cost to Complete	\$ 3,928.50
				Total Task Contract Amendment	\$ 3,928.50



Task 7.1 - Site Layout Plan - \$16,000

- Additional site plan iterations and truck turning analyses due to building footprint changes and expansion.
- Vac truck dump station layout.
- Floodplain delineation work for Avila and Associates for percolation basin addition.
- Buried influent equalization tank and headworks iterations based on deviation from original scope.
- Forcemain analysis based on future growth

Task 7.1 Site Layout Plan					
Subtask	Hours	Future Billing		Out of Scope	Total Estimate
		Billing Rate	Total Future Billing	Billing to Date	
Additional Layout Iterations		\$ 180.00	\$ -	\$ 7,540.75	\$ 7,540.75
Vacuum Truck Dump Station	16	\$ 180.00	\$ 2,880.00	\$ 1,001.00	\$ 3,881.00
Percolation Basin Layout	4	\$ 180.00	\$ 720.00		\$ 720.00
Buried Influent EQ and Headworks	8	\$ 180.00	\$ 1,440.00	\$ 2,396.00	\$ 3,836.00
		Subtotal	\$ 5,040.00	\$ 10,937.75	\$ 15,977.75
				Original Budget	\$ 33,776.00
				Budget Remaining	\$0.00
				Estimated Out of Scope + Cost to Complete	\$ 15,977.75
				Total Task Contract Amendment	\$ 15,977.75

Task 7.3 - Site Drainage & Surface Improvements - \$17,800

- Storm water basin design and reporting based on larger operations building and overall impervious area.
- Additional access roads for new percolation basins.
- Vac truck dump station grading.
- Additional grading and drainage design effort in CAD due to multiple site plan iterations as a result of architectural changes to building(s) and parking lot area, including trash enclosure, mattress enclosure, and E-waste enclosure, as well as gate additions.

Task 7.3 Site Drainage and Surface Improvements					
Subtask	Hours	Future Billing		Out of Scope	Total Estimate
		Billing Rate	Total Future Billing	Billing to Date	
Storm water design for larger office	4	\$ 180.00	\$ 720.00	\$ 1,237.50	\$ 1,957.50
Perc basin access road grading	4	\$ 180.00	\$ 720.00	\$ 6,480.00	\$ 7,200.00
Vac Truck Dump Station grading	36	\$ 180.00	\$ 6,480.00		\$ 6,480.00
Grading due to multiple iterations	8	\$ 180.00	\$ 1,440.00	\$ 720.00	\$ 2,160.00
		Subtotal	\$ 9,360.00	\$ 8,437.50	\$ 17,797.50
				Original Budget	\$ 73,464.00
				Budget Remaining	\$0.00
				Estimated Out of Scope + Cost to Complete	\$ 17,797.50
				Total Task Contract Amendment	\$ 17,797.50



Task 7.6 - Mechanical Piping Plan - \$55,000

- Additional design required for headworks inlet/outlet piping and buried working influent equalization basin.
- Influent equalization peak pond pump station design.
- Vac truck dump basin piping, grating, and pump station design.
- Additional time required interfacing with Cloacina on overall mechanical piping requirements.
- Percolation basin expansion, gravity splitter box design.

Task 7.6 Mechanical Piping Plan					
Subtask	Hours	Future Billing		Out of Scope	Total Estimate
		Billing Rate	Total Future Billing	Billing to Date	
Add'l design for headworks and EQ	24	\$ 180.00	\$ 4,320.00		\$ 4,320.00
Infl EQ peak pond pump station	10	\$ 180.00	\$ 1,800.00	\$ 2,216.25	\$ 4,016.25
Vac Truck Dump Basin piping, pump	8	\$ 180.00	\$ 1,440.00	\$ 4,138.00	\$ 5,578.00
Cloacina mechanical coordination	212	\$ 180.00	\$ 38,160.00		\$ 38,160.00
Perc basin expansion, splitter box	16	\$ 180.00	\$ 2,880.00		\$ 2,880.00
		Subtotal	\$ 48,600.00	\$ 6,354.25	\$ 54,954.25
				Original Budget	\$ 39,104.00
				Budget Remaining	\$0.00
				Estimated Out of Scope + Cost to Complete	\$ 54,954.25
				Total Task Contract Amendment	\$ 54,954.25

Task 8 - Electrical Engineering Design - \$41,400

- See attached subconsultant contract amendment from Otto Electrical
- Additional work out of scope for generator research, added solar coordination, micro grid design, etc.
- Includes subconsultant markup. Otto Electrical contract amendment CO1 (\$36,000 + 15% = \$41,400)
- This does not include electrical engineering time required for the design change to the Cloacina M9 system, that is included in Task 13.1 only.

Task 11 - Percolation Basin Analysis and 500yr Storm Mitigation Measures - \$12,000

- This task was added to track time spent creating the water balance analysis to determine buildout percolation area required.
- Additional design calculations for grading, access roads, piping, etc. related to the addition of future percolation basins.
- Future work includes analysis of 500yr storm on plant operations and draft technical memorandum to USDA to describe mitigation measures to impound influent and effluent to remain operational while percolation beds are inundated with floodwaters.

Task 11 Percolation Bed Analysis					
Subtask	Hours	Future Billing		Out of Scope	Total Estimate
		Billing Rate	Total Future Billing	Billing to Date	
Initial water balance and design		\$ 180.00	\$ -	\$ 5,476.75	\$ 5,476.75
500yr Storm Mitigation Plan	36	\$ 180.00	\$ 6,480.00		\$ 6,480.00
		Subtotal	\$ 6,480.00	\$ 5,476.75	\$ 11,956.75
				Original Budget	\$0.00
				Budget Remaining	\$0.00
				Estimated Out of Scope + Cost to Complete	\$ 11,956.75
				Total Task Contract Amendment	\$ 11,956.75



New Task 12 - Storm Water Control Plan and O&M Plan - \$15,000

Wallace Group had originally excluded a SWCP as part of the site drainage tasks based on our original understanding that the site was outside of the MS4 boundary. SLO County has subsequently requested this as part of the CUP Amendment permit currently being processed by Quest Planning, based on the site being within the MS4 boundary. As such, San Miguel CSD is required to submit a Stormwater Control Plan Application and preliminary Stormwater Control Plan to process the application. Wallace Group will prepare the application and plan for submittal to SLO County Public Works.

New Task 13 - Cloacina System Conversion and Site Plan Revisions - \$147,200

Wallace Group has identified a significant cost savings to the project based on a similar project being designed for Cal Poly San Luis Obispo. The original intent for the Machado WWTF project was to install (2) Cloacina model M250 membrane bioreactor systems, to provide a total treatment capacity of 0.500 mgd. Cloacina has made improvements to their product line since the start of the Machado project and have released their 4th generation product line. The new Cloacina model M9 membrane bioreactor is a single system, capable of 0.500 mgd treatment capacity. This will result in capital cost savings on the purchase of the MBR system, electrical supply, generator, yard piping, headworks, concrete equipment pads, and above ground mechanical piping. Operating costs will be significantly lower due to lower complexity of equipment and fewer serviceable components, resulting in labor and energy savings as well. A quick summary of the capital and operating costs savings is summarized below for justification for this change in design midway through the project.

M250 vs M9 comparison		
Estimated Capital Cost Savings		
MBR Purchase Price		\$ 933,000
Underground Construction		\$ 100,000
Above Ground Mechanical Piping		\$ 100,000
Concrete Equipment Pads		\$ 25,000
Electrical System Components		\$ 20,000
Generator Size		\$ 40,000
Total Estimated Capital Cost Savings		\$ 1,218,000
Estimated Annual Operations Cost Savings		
Consumables		\$ 450
Spare Parts		\$ 4,950
Equipment Replacement		\$ 63,060
Power		\$ 13,447
Labor		\$ 43,800
Total Estimated Annual Operations Costs Savings		\$ 125,707
Note - Operations Costs provided by Cloacina		

Scope for Wallace Group for Task 13 includes redesigning the site to incorporate the new M9 system footprint, points of connection, anchorage, and electrical interface points. Redesign includes underground yard piping, above ground mechanical piping, headworks layout, sludge dewatering press arrangement, UV disinfection skid arrangement, chemical storage, and several other key component redesigns. Estimated lead time is 9 weeks. Fee breakdown is below:



Subtask	Hours	Future Billing		Out of Scope	Total Estimate
		Billing Rate	Total Future Billing	Billing to Date	
Project Management, Submittals	80	\$ 220.00	\$ 17,600.00		\$ 17,600.00
Site Layout Plan	40	\$ 180.00	\$ 7,200.00		\$ 7,200.00
Grading and Drainage	80	\$ 180.00	\$ 14,400.00		\$ 14,400.00
Yard Piping Design	60	\$ 180.00	\$ 10,800.00		\$ 10,800.00
Mechanical Piping Design	540	\$ 180.00	\$ 97,200.00		\$ 97,200.00
		Subtotal	\$ 147,200.00	\$ -	\$ 147,200.00
				Original Budget	\$0.00
				Budget Remaining	\$0.00
				Estimated Out of Scope + Cost to Complete	\$ 147,200.00
				Total Task Contract Amendment	\$ 147,200.00

New Task 13.1 - Electrical Engineering Design Revisions - \$39,000

- See attached subconsultant contract amendment CO2 from Otto Electrical
- Revisions based on updated Cloacina M9 system include generator analysis, selection and re-design, electrical service analysis and re-design, and electrical site plan and details re-design.
- Includes subconsultant markup. Otto Electrical contract amendment CO2 (\$33,840 + 15% = \$38,916)

New Task 14 - Bid Phase Services - \$16,000

Wallace Group will provide bid phase support services during the bidding phases of the Machado WWTF Improvements Project. These services and corresponding fees are estimated based on a bid phase timeline of no more than 90 calendar days, from bid advertisement date to notice of award. Wallace Group will provide the following bid phase support services:

- Prepare Bid Advertisement. To be prepared by District/District Engineer
- Attend pre-bid meeting with District staff, prospective bidders - two (2) Wallace Group staff at four (4) hours total (these hours are based on travel to City of San Miguel). The District will coordinate time, date and location of meeting, and Wallace Group will prepare the meeting agenda and minutes for this meeting.
- Maintain Bidders' List. To be prepared and maintained by District/District Engineer
- Review and respond to Requests for Interpretation (RFIs). Wallace Group estimates responding to a total of 20 RFIs, averaging 0.5 hours per RFI response, with a budget of 20 professional hours which includes disseminating RFI responses to prospective bidders.
- Prepare Addenda to Bid Documents. Wallace Group has estimated up to 6 Addenda to be issued during the bid period, with an average of 4 hours professional time per Addenda, for a total of 24 hours budget which includes disseminating addenda and verifying receipt of addenda by prospective bidders.
- Conduct Bid Opening. Not included, District/District Engineer to conduct Bid Opening. Wallace Group will attend Bid Opening to review bids with District.
- Bid Tabulation. We will prepare a bid tabulation (in MS Excel) comparing all bid items with the Engineer's Opinion of Probable Construction Cost.
- Evaluate Bids for Responsiveness. Wallace Group will review the three lowest bids for responsiveness to the requirements of the bid documents and will prepare a brief memorandum summarizing the bids and any irregularities and recommending award to the lowest responsive bidder. We will prepare the Notice of Award for signature by the Client.



Revision(s) Represent:

- a change in previous instructions
- a change in Scope of Services
- other:

Revision(s) Fee:

- hourly (time & materials) \$410,300.00
- progress billing: \$
- not-to-exceed w/o authorization: \$

Revision(s) will be invoiced as:

- increase to an item within the existing contract
- a new item added to existing contract

**Issued by,
WALLACE GROUP, a California Corporation**

APPROVED BY CLIENT:

Karl E. Wagner, PE C66026
Principal/Director of Water Resources
612 Clarion Court
San Luis Obispo
California 93401
T 805 544-4011
F 805 544-4294
www.wallacegroup.us

Signature

Printed Name

Title

Date

January 3, 2024

Bryan Childress
Wallace Group
612 Clarion Court
San Luis Obispo, CA 93401

PROJECT: MACHADO WWTF – ADDITIONAL SCOPE CHANGE ORDER 1

SUMMARY

The RFP and preliminary engineering report did not discuss evaluating multiple generator options. In an effort to provide information on different generator options, sizing calculations had to be conducted for various types of backup generators, obtaining quotes for each, providing technical information on each type, and evaluating the risks and benefits for each type so the District could provide generator type and configuration preference. It was later indicated that natural gas services in the area were not going to be capable of providing sufficient flow rates to pursue natural gas options and limited the types of generators we could use.

During a meeting on October 13, 2023, the District indicated he was okay proceeding with a single diesel generator, and what is represented in the 60% design submitted on October 27, 2023. As part of this email chain, on October 30, 2023, the District shared a letter regarding the natural gas service and their preference to pursue a natural gas generator solution. A change to a natural gas generator requires additional design time to size a natural gas generator, develop operational scenarios for emergency backup, redesign the switchgear to allow for two generators to operate in parallel, and reconfigure electrical building and site electrical layouts for the change in generator.

In addition to the generator selection, the integration of the PV system designed by Forefront was not indicated in the RFP. To secure NEM 2.0 rate structure for the new PV system, several coordination meetings to determine appropriate approaches for new PV system integration into the system and an expedited timeline to ensure new service equipment is ready for PG&E before anticipated NEM 2.0 deadline of April 2025.

Due to the growing complexity of energy source on the new switchgear a micro grid solution is now required to properly manage and parallel the six energy sources (utility, two permanent generators, PV system, battery system, and portable generator) in on-grid and off-grid applications. A microgrid solution was not indicated in the RFP and requires additional engineering time to design a microgrid solution including switchgear, controls, operating scenarios, and parameters.

ELECTRICAL DESIGN SCOPE ADDITION

Generator Analysis, Selection, and Re-design

- Conduct multiple sizing calculations for different generator fuel types.
- Provide data, cost estimates, and operational analysis for multiple generator configurations.
- Re-size generators and re-design switchgear for multiple natural gas generators.
- Coordinate with District and design team for natural gas service to generators.

PV System Integration

- Coordination meetings with PV designers/installers, District, and Project Manager to determine PV integration approach and service application coordination.
- Design and specify electrical service equipment to allow for early District procurement.

- Provide engineering support for procurement and submittal review of new service equipment to receive service equipment before expected NEM 2.0 deadline of April 2025.
- Phase design for priority installation for new PG&E service to accommodate PV energization prior to WWTF completion.

Microgrid Options Exploration

- Coordination with equipment manufacturers and suppliers for equipment, controls, and interface solutions.
- Obtain cost and equipment lead time estimates from multiple vendors to assist with supplier selection for District procured equipment.

Microgrid Design

- Design power distribution system (switchgear) to allow parallel energy production from multiple distributed energy resources (DER) including utility, PV, battery energy storage system (BESS), and generators.
- Develop operating scenarios and parameters:
 - Normal – Grid-tied
 - Peak Shaving
 - Battery reserves
 - Emergency – Off-grid
 - Essential Load
 - High Priority Loads
 - Non-essential Loads
 - Load shedding
 - Maintenance
 - Generator maintenance
 - Portable generator availability
- Design microgrid solution to communicate and interact with all DERs.
- Develop specification for microgrid component, installation, integration, commission, operation, training, and support agreements.

DELIVERABLES:

1. Phased electrical service construction documents.
2. Drawings and specifications for District procured equipment.
3. Updated design documents for design changes starting at 90% design milestone.

ASSUMPTIONS AND EXCLUSION

1. Engineering support during construction is not included. This may be included in a separate agreement.

FEES

Generator Analysis, Selection, and Re-design (50 hours)	\$9,000
PV System Integration (60 hours)	\$10,800
Microgrid options exploration (30 hours)	\$5,400
Microgrid Design (60 hours)	\$10,800
Total Additional Scope Change Order	\$36,000

April 18, 2024

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PROJECT: MACHADO WWTF – ADDITIONAL SCOPE CHANGE ORDER 2

SUMMARY

The District would like to change the Cloacina MBR treatment system to a newer model that was not previously available. The new MBR system should result in a significant savings in construction costs. The new MBR system will require a near complete redesign of the electrical design of the treatment portion of the project. The operations building electrical is unaffected by this change. The electrical loads are significantly different from the originally designed approach and therefore require the service and generator to be resized and redesigned. The PG&E service application will need to be adjusted and additional coordination will need to be completed with PG&E.

ELECTRICAL DESIGN SCOPE ADDITION

Generator Analysis, Selection, and Re-design

- Sizing calculations for new MBR equipment, lift station, transfer pumps, and building essential loads.
- Coordinate with generator manufacturers for generator selection, specifications, and estimates.
- Generator layout and civil/structural coordination.
- Coordinate with District and design team for natural gas service to generator(s).
- The generator will be natural gas per previous direction from District.

Electrical Service Analysis and Re-design

- Develop new single line diagram for new Cloacina equipment such as MBR, UV disinfection system, headworks, and drying systems.
- New load assessment and associated load and voltage drop calculations.
- New service equipment layouts and elevation details.
- Coordination with PG&E for changes to original service application.

Electrical Site Plan and Details Re-design

- Redesign the following:
 - Site Electrical Plan
 - Site Lighting Plan
 - Site Grounding Plan
 - Enlarged Area Plans
 - Communication/Network diagrams
 - Conduit and Cables Schedules

DELIVERABLES:

1. Updated design documents for design changes starting at 90% design milestone.

ASSUMPTIONS AND EXCLUSION

1. Engineering support during construction is not included. This may be included in a separate agreement.

FEEES

Generator Analysis, Selection, and Re-design (40 hours)	\$7,200
Electrical Service Analysis and Re-design (48 hours)	\$8,640
Electrical Site Plan and Details Re-design (100 hours)	\$18,000
Total Additional Scope Change Order	\$33,840