

SUPPLEMENTAL ONE WORK ORDER

Date:	May 27, 2025
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1. PROJECT INFORMATION:

Project Title:	Solid Waste Truck Wash Replacement Design, Permitting and Construction Services
City Project Number:	23-0021-SW
City Plan Set Number:	2023019
Consultant Project Number:	0161-0047-2024-0578-00

2. SCOPE OF SERVICES:

The City of Clearwater Solid Waste Department (City) operates a truck washing facility at its Solid Waste Complex at 1701 N. Hercules Avenue, which is used to manually clean collection vehicles, transfer trailers, roll-off containers, and commercial compactors. Ardurra Group, Inc. (Consultant) was issued a Work Order to provide design, permitting and construction management services for upgrading the facility by adding one or two automated truck washing systems and up to two manual washing bays with new equipment similar to the existing equipment. The automated system is to be turn-key system designed, fabricated and installed by a truck wash manufacturer and both the manual and automated systems were to be open (not enclosed in a building) with chemical storage tanks and other equipment either adjacent to the system on a covered concrete pad or inside the existing truck wash building if possible. Lighting, ventilation and electrical systems inside the existing truck wash building will also be upgraded to meet current code requirements.

During the Pre-Design Phase, an extensive site planning effort was conducted to improve traffic flow while allowing space for future proposed site improvements. Elements not anticipated in the original scope were also added to the project, resulting in additional design and permitting efforts. These include:

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- Paving the southeast corner of the site and associated stormwater improvements design and permitting.
- Adding site lighting and security cameras.
- Metal roofs over both truck washes and associated concrete foundation design.
- An aluminum catwalk to provide access to the tops of trucks at the manual truck wash.
- Performing a cost analysis evaluating recycled and once-through water automated truck washes and the operating cost impacts of using reclaimed water.
- New water, reclaimed water and wastewater lines and associated permitting.
- A new electrical service to serve both truck washes.

The project was to be executed using the Construction Manager at Risk (CMAR) delivery method, using one of the City's prequalified CMAR firms. However, the CMAR's construction cost estimate based on the 75% complete design exceeded the City's CMAR contract cap of \$4 million. Therefore, the decision has been made to advertise the project for bids.

The design is currently 75% complete. This Supplemental Work Order provides additional compensation to the Consultant required to complete the design and permitting of the project to a level suitable for public bidding and to provide additional engineering services during bidding and construction of the project.

The scope of work is as follows. Tasks have been numbered to match or add to the original Work Order tasks.

I. PRE-DESIGN PHASE:

Task 1.1 Project Management, Data Collection and Meetings

Provide the following services, extending throughout the remaining duration of design and bidding services:

- Coordinate the activities and communications of the Consultant's staff and subconsultants with those of the City.
- Develop monthly status reports and invoices.
- Administer a quality assurance program covering the technical work of the project team.
- Assemble, maintain and submit the Project Catalogue.
- Attend a project reboot meeting to discuss comments on the 75% submittal and requirements to move forward with the project as Design-Bid-Build.

Task 1.3 Preliminary Engineering**1.3.5 Solar Evaluation**

Consultant will evaluate the feasibility of constructing solar panels on the roofs of both the manual and automated truck wash systems to power a portion of the wash systems. Tasks include:

- Coordinating with two solar vendors: Solarcraft and Sunwise to establish a Basis of Design.
- Coordinating with Duke Energy on interconnection requirements.
- Assessing how much power the solar panels will be able to generate and what equipment they will be capable of serving.
- Working with vendors to assess the size of the required battery system associated with the solar panels.
- Providing a Technical Memorandum summarizing findings on:
 - Design criteria for the solar array and battery systems.
 - Riser diagram of proposed solar system and interconnection to the truck wash electrical system.
 - Engineer's Opinion of Probable Construction Cost for the solar system and estimating its payback period.
- Meeting with the City once to discuss the evaluation and comments on the draft memorandum.

Design of the solar power system is not included in this scope of services and will require additional compensation should the City wish to implement the system based on the findings of the evaluation.

II. DESIGN PHASE:

The design will be advanced from the 75% complete to a 100% complete level, with additional detail added for public bidding of the project. N/S Corporation will remain the Basis of Design for the automated truck wash system, however the specifications will be open to "or equal" systems.

Task 2.1 Drawings

Consultant will advance the design drawings from 75% to 100% complete and add additional detail to the design to allow for public bidding. Drawings sheets include:

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General	
G0.00	Cover
G0.01	Index of Sheets, Abbreviations, Legend
G0.02	General Notes
G0.03	Manual Truck Wash Process Flow Diagram
Civil	
C1.00	Existing Project Site and Demolition Plan
C1.01	Ex. Manual Truck Wash Area Demolition Plan
C2.00	Proposed Site Plan
C2.01	Project Site Coordinate Control Plan
C2.02	Traffic Flow Plan
C3.00	Project Site Utility Plan
C4.01	Project Area Paving, Grading and Drainage
C8.00-C8.03	Miscellaneous Details
C8.04	Sand Oil Separator Details
C8.05	Stormwater Outfall Structure Modification Details
Structural	
S0.00 – S0.01	General Structural Notes
S1.01	Manual Wash Foundation and Slab Plan
S1.02	Catwalk Framing Plan
S1.03	Automated Wash Foundation and Slab Plan
S2.01	Catwalk Sections
S3.01	Concrete Sections and Details
S4.01	Catwalk Sections and Details
Mechanical	
D1.01	Manual Truck Wash Area Site Plan
D1.02	Overhead Piping Plan
D1.03	Manual Truck Wash Area Section
D1.04	Manual Truck Wash Bldg Floor Plan
D1.05	Manual Truck Wash Bldg Sections
D2.01	Automated Truck Wash Bldg Floor Plan
HVAC	
H0.00	Manual Truck Wash Bldg HVAC Notes and Legends
H1.00	Manual Truck Wash Bldg HVAC Plans
Plumbing	
P0.00	Manual Truck Wash Bldg Plumbing Notes, Legends and Specifications
P1.00	Manual Truck Wash Bldg Plumbing Floor Plans
P2.00-P3.00	Manual Truck Wash Bldg Plumbing Details
Electrical	

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E0.01	Electrical Legend
E0.02	Electrical Notes
E0.03	Proposed One-Line Diagram
E0.04	Electrical Overall Site Plan
E0.05	Security Camera Site Plan
E1.01	Enlarged Electrical View Manual Truck Wash Room
E1.02	Manual Truck Wash Room Demo Photos
E1.03	Enlarged Electrical View Manual Truck Wash Bay
E2.01	Enlarged Electrical View Automatic Truck Wash
E3.01	Proposed Electrical Schedules
E8.01-E8.02	Electrical Grounding Details
E8.03-E8.04	Electrical Standard Details

Task 2.2 Technical Specifications

Consultant will advance the technical specifications for the project to 100% complete including development of a specification for the automated wash system, a Bid Form, and additional detail regarding the security camera system and the automated truck wash keypad-City fuel accounting system interface. The specifications will be Section IVA, Project Specific Specifications, with Sections I – III being the City’s Standard Specifications.

Task 2.3 Review Submittals and Meetings

Design Documents and the Engineer’s Opinion of Probable Construction Cost will be submitted for review by the City at the 100% completion level.

Meetings will include a 100% design review meeting, a meeting with the City’s security camera system consultant and IT staff, and a meeting to confirm the automated truck wash keypad interface requirements with City’s fuel accounting system software.

Task 2.4 Permitting

Consultant will prepare the following application packages with supporting information, and respond to Requests for Additional Information (RAI) to obtain the following permits:

2.4.1 FDEP Environmental Resource Permit Modification

The existing ERP permit does not include the southeast area of the site, currently planned to be paved, as impervious area. Therefore, the permit needs to be modified to include the additional impervious area.

Consultant will prepare an application package for a minor modification to the permit and will respond to the FDEP's requests for additional information (RAI) to obtain the modification. Fees include \$1,000 for the permit fee.

2.4.2 City of Clearwater Building Department Approvals.

It has been determined that the project does not need to be submitted to the Development Review Committee for approvals. Rather, the project will need to be submitted and reviewed by the City's Building Department only.

Consultant will submit the project for review by the City Building Department through the online Accela system and address the Building Department comments so that the selected contractor can pull the building permits prior to the start of construction.

It is assumed that the Consultant will not be responsible for permit fees and that permit fees, if any, will be paid by internal transaction. The contractor will be responsible for fees and for subsequently obtaining the Building Permit and complying with associated requirements.

2.4.3 City of Clearwater Industrial Discharge Permitting.

The existing manual wash system discharges to the sanitary sewer system through a grease trap and the City's Industrial Discharge Coordinator (Public Utilities Department) has informed the Consultant that providing a grease trap/sand-oil separator on the automated truck wash system's waste discharge should be all that is required.

Consultant will prepare the sand-oil separator sizing calculations for submittal to the City's Industrial Discharge Coordinator along with the project drawings for review and comment. Formal review and approval of the design will be via the Building Department review process.

2.4.4 FDEP Potable Water System Construction General Permit.

The Consultant will prepare and submit an application package and respond to FDEP RAIs to obtain a general permit for the new water service connection on Hercules Avenue. Fees include the \$900 application fee.

2.4.5 FDEP Wastewater Collection System General Permit.

The Consultant will prepare and submit an application package and respond to FDEP RAIs to obtain a general permit for the new on-site wastewater collection system. Fees include the \$250 application fee.

2.4.6 Pinellas County Right-of-Way Use Permit.

The Consultant will prepare and submit an application package and respond to County RAIs to obtain a Right-of-Way Use permit for the new water service connection on N. Hercules Avenue (County Road 425). Fees include \$250 for the application fee, if required.

Task 2.5 Engineer's Opinion of Probable Construction Cost

Consultant will develop an Engineer's Opinion of Probable Construction Cost at the 100% completion level. The opinion will be a Class 1 estimate per AACE International.

III. BIDDING PHASE:**Task 3.1 Guaranteed Maximum Price (GMP) Review**

This task is no longer needed.

Task 3.2 Issued for Construction Drawings

Consultant will develop Issued for Construction drawings compiling changes made during the bidding process.

Task 3.3 Services During Bidding

Consultant will provide the following services to assist the City with obtaining bids:

- 3.3.1 Attend a pre-bid meeting.
- 3.3.2 Provide the City with responses to bidders questions for issuance of Addenda.
- 3.3.3 Review the bids received, prepare a Bid Tabulation, contact the low bidder's references, and provide the City with a Recommendation of Award.

IV. CONSTRUCTION PHASE:

Task 4.1 Construction Management

Consultant will provide construction management and observation services, assisting with overseeing the Contractor's work over an assumed 9-month (39 week) construction contract duration. Specific services include:

- 4.1.1 Consultant will attend a Preconstruction Meeting with the Contractor and City. The Consultant will prepare the agenda and meeting minutes.
- 4.1.2 Consultant will log and review up to forty-five (45) shop drawings from the Contractor including construction progress schedules and Shop Drawings and other miscellaneous submittals. Of these shop drawings, it is assumed that up to 25 will require a second review. The specifications will state that the cost of three or more reviews will be the responsibility of the Contractor.
- 4.1.3 Consultant will attend up to nine (9) construction progress meetings and site visits. The Consultant will prepare the meeting agenda and the meeting minutes.
- 4.1.4 Consultant will log and reply to the Contractor's Requests for Information (RFIs). For the purposes of this Work Order, up to fifteen (15) RFIs is assumed.
- 4.1.5 Consultant will review Owner Allowance Authorization requests submitted by the Contractor. For the purposes of this Work Order, up to three (3) Allowance Authorization requests is assumed.
- 4.1.6 Consultant will review quantities and sign the Contractor's applications for payment.
- 4.1.7 Consultant will provide assistance with final closeout including:
 - a. Witnessing startup of systems and equipment.
 - b. Coordinate, witness and document training by the system manufacturer.
 - c. Attending a Substantial Completion walkthrough.
 - d. Attending a final completion walkthrough and confirming that punchlist items have been completed.

- e. Reviewing the Contractor's As-Built surveys/drawings and developing Record Drawings.
 - f. Preparing and submitting certification packages for the three (3) FDEP permits and for the Pinellas County Right-of-Way Use permit.
- 4.1.8 Consultant will provide general Construction Management during an assumed 9-month (39 week) construction contract including:
- a. Maintaining routine contact and discussing construction progress and project developments with the Contractor.
 - b. Miscellaneous phone calls and emails and coordination with the City's Project Manager and other City staff, including assisting the City's Project Manager with miscellaneous minor project related questions and general consultation.
- 4.1.9 Consultant will visit the site to observe construction progress an average of up to eight (8) hours per week over an active 6-month field construction period (total of 208 hours). Critical aspects of the work to be observed include concrete pours and underground utility work. Field Observation Reports and progress photographs will be provided to the City on a weekly basis.

V. OWNER'S ALLOWANCE:

Fees include an Owner's Allowance to provide additional compensation for design, permitting or construction services not included in the above scope. Services will not be provided under the Owner's Allowance without prior approval of the City's Project Manager, subject to an agreed upon scope and budget.

3. PROJECT GOALS:

In addition to the documents required by project's permitting agencies to obtain permits, the following are Deliverables to the City:

- 100% Design Drawings (5 sets - 11 x 17 printouts and PDF), Technical Specifications and Cost Estimate in PDF format.
- Issued for Construction Documents: Two (2) electronically signed and sealed copies of the project drawings and technical specifications; one (1) thumb drive containing the project drawings in AutoCAD and PDF format and the technical specifications in

Word and PDF format.

- One (1) copy of each submitted permit application package and each RFI response will be provided to the City for its record.
- Meeting minutes in PDF format.
- Submittal review comments and RFI responses in PDF format.
- Construction Field Observation Reports (PDF) and progress photographs (JPG).
- Record Drawings: One electronically (1) signed and sealed copy of the PDF Record Drawings and one (1) thumb drive containing the Record Drawings in AutoCAD and PDF format.

4. FEES:

See Attachment A. This price includes all labor and expenses anticipated to be incurred by Ardurra for the completion of these tasks in accordance with Professional Services Method "A" – Hourly Rate –for an additional fee not to exceed **Two Hundred fifty One Thousand, Seven Hundred Forty-Eight Dollars (\$251,748.00), which includes an Owner's Allowance in the amount of \$28,000.**

5. SCHEDULE:

100% documents will be submitted 90 calendar days after the Reboot Meeting. Bid Documents will be submitted within 10 calendar days of the 100% design review meeting.

6. STAFF ASSIGNMENT:

The City's staff assignments to this project include:

Kervin St. Aime	Director, Solid Waste/General Services
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Samanatha Reilly	Project Manager
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The firm's staff assignments to this project include:

Chris Kuzler, P.E.	Principal, Project Manager and Chief Engineer
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Lara Bartholomew, P.E.	Senior Engineer
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Agata Ristow, P.E.	Chief Electrical Engineer
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Camryn Aguilar, E.I.	Project Engineer
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7. CORRESPONDENCE/REPORTING PROCEDURES:

Consultant's project correspondence shall be directed to Christopher F. Kuzler, P.E..

All City project correspondence shall be directed to Samantha Reilly (City Project Manager).

8. INVOICING/FUNDING PROCEDURES:

City Invoicing Code: 3247324-530100-C2411

For work performed, invoices shall be submitted monthly to:

**Attn: Jeffrey Kuhl
City of Clearwater Solid Waste
1701 N. Hercules Avenue
Clearwater, Florida 33765**

Contingency services will be billed as incurred only after written authorization provided by the City to proceed with those services.

9. INVOICING PROCEDURES:

At a minimum, in addition to the invoice amount(s) the following information shall be provided on all invoices submitted on the Work Order:

1. Purchase Order, Project and Invoice Numbers and Contract Amount.
2. The time period (begin and end date) covered by the invoice.
3. A short narrative summary of activities completed in the time period.
4. Contract billing method – Lump Sum or Hourly Rate.
5. If Lump Sum, the percent completion, amount due, previous amount earned and total earned to date for all tasks (direct costs, if any, shall be included in lump sum amount).
6. If Hourly Rate, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, the percent completion, total earned to date for each task and other direct costs (receipts will be required for any single item with a cost of \$50 or greater or cumulative monthly expenses greater than \$100).
7. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

10. CONSIDERATIONS:

Consultant acknowledges the following:

1. The Consultant named above is required to comply with Section 119.0701, Florida Statutes, where applicable.
2. All City directives shall be provided by the City Project Manager.

3. "Alternate equals" shall not be approved until City Project Manager agrees.
4. All submittals must be accompanied by evidence each has been internally checked for QA/QC before providing to City.
5. Consultants/Contractors are not permitted to use City-owned equipment (i.e. sampling equipment, etc.).
6. Documents posted on City website must ADA accessible.

11. ADDITIONAL CONSIDERATIONS:

All work orders should include considerations for the following:

1. Sea Level Rise and Flood Resilience, as applicable.
2. Submittal of a Critical Path Method (CPM) Schedule(s).
3. Submittal of a Project Catalog with the following items, as appropriate:
 - a. Data requests, assumptions, critical correspondence, meeting agenda, sign-in sheets, meeting minutes, document comment-response log(s), technical memorandum/reports, addenda, progress reports, regulatory correspondence, and other project-related documents.
 - b. If construction project, also include design plans, conformed plans, change orders, field orders, RFIs, work change directives, addenda, progress reports, shop drawing and progress submittals, as-builts, record drawings, and other project-related documents such as O&M manuals and warranty information.
 - c. At the conclusion of the project, Consultant will combine this information into a Project Catalog and submit to the City for review and comment.
4. Arc Flash labeling requirements:
 - a. All electrical designs and construction shall adhere to NFPA 70 E "Standard for Electrical Safety in the Workplace".

Updated calculations of Fault and Arc Flash, and provisions for new or updated Arc Flash equipment labeling shall be included in the contract documents.

12. SPECIAL CONSIDERATIONS:

- The City will manage and administer Owner Direct Purchase and Buyback options, if any.

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13. SIGNATURES:

PREPARED BY:



Christopher F. Kuzler, P.E.
Managing Principal
Ardurra Group, Inc.

5/27/25

Date

APPROVED BY:

Tara Kivett, P.E.
City Engineer
City of Clearwater

Date

ATTACHMENT "A"**CONSULTANT WORK ORDER – PROJECT FEES TABLE**

Solid Waste Truck Wash Replacement Design, Permitting and Construction Services
 Ardurra Group, Inc. 23-0021-SW City of Clearwater

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PROJECT FEES TABLE

Task	Description	Subconsultant Services	Labor	Total
I	Pre-Design Phase			
1.1	Project Management, Data Collection and Meetings		\$13,000	\$13,000
1.3	Preliminary Engineering		\$18,635	\$18,635
Pre-Design Phase Total:				\$31,635
II	Design Phase			
2.1	Drawings	\$5,930	\$57,152	\$63,082
2.2	Technical Specifications		\$21,148	\$21,148
2.3	Review Submittals and Meetings	\$250	\$6,713	\$6,963
2.4	Permitting		\$23,742	\$23,742
2.5	Opinion of Probable Construction Cost		\$6,870	\$6,870
Design Phase Total:				\$121,805
III	Bidding Phase			
3.2	Prepare Issued for Construction Documents		\$0	\$0
3.3	Services During Bidding	\$960	\$4,308	\$5,268
Bidding Phase Total:				\$5,268
IV	Construction Phase			
4.1	Construction Management	\$5,130	\$57,760	\$62,890
Construction Phase Total:				\$62,890
V	Owner's Allowance			
Owner's Allowance Total:				\$28,000
TOTAL:				\$249,598
6.0	Permit Fees			\$2,150
6.0	Other Direct Costs (prints, photocopies, postage, etc.) (Not applicable to lump sum Work Orders)			
GRAND TOTAL:				\$251,748

ATTACHMENT "B" (Include if applicable)

CONSULTANT WORK ORDER – CITY DELIVERABLES

Solid Waste Truck Wash Replacement Design, Permitting and Construction Services
Ardurra Group, Inc. 23-0021-SW City of Clearwater

CONSULTANT WORK ORDERITY DELIVERABLES

1. FORMAT:

The design plans shall be compiled utilizing the following methods:

1. City of Clearwater CAD standards.
2. Datum: Horizontal and Vertical datum shall be referenced to North American Vertical Datum of 1988 (vertical) and North American Datum of 1983/90 (horizontal). The unit of measurement shall be the United States Foot. Any deviation from this datum will not be accepted unless reviewed by City of Clearwater Engineering/Geographic Technology Division.

2. DELIVERABLES:

The design plans shall be produced on bond material, 24" x 36" at a scale of 1" = 20' unless approved otherwise. Upon completion the consultant shall deliver all drawing files in digital format with all project data in Autodesk Civil 3D file format.

NOTE: If approved deviation from Clearwater CAD standards is used, the Consultant shall include all necessary information to aid in manipulating the drawings including either PCP, CTB file or pen schedule for plotting. The drawing file shall include only authorized fonts, shapes, line types or other attributes contained in the standard release of Autodesk software. All block references and other references contained within the drawing file shall be included. Please address any questions regarding format to Mr. Thomas Mahony, at (727) 562-4762 or email address Thomas.Mahony@myClearwater.com.

All electronic files (including CAD and Specification files) must be delivered upon completion of project or with 100% plan submittal to City of Clearwater.