

**Master City of San José Consultant Agreement
Approved Service Order
(Non-Capital Projects)**

Cover Page

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- 1a.** Intentionally Omitted **1b.** AC Contract No.: 33307
- 2.** Approved Service Order No. 1
- 3.** Consultant's Name: HydroScience Engineers, Inc. ("Consultant")
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- 4.** Project Name: Professional Engineering Services for Ammonia Pump Replacement Project ("Project")
- 5.** Project Location: San Jose-Santa Clara Regional Wastewater Facility ("RWF")
- 6.** The Consultant and the City will implement this Approved Service Order in accordance with the Master Agreement, this cover page and Attachments "A" (Tasks), "B" (Terms and Conditions), and "C" (Compensation Table), which are incorporated herein by references.
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7. Budget/Fiscal:

a. Current unencumbered amount in Master Agreement:	\$	2,499,999
b. Maximum Service Order Compensation for this Approved Service Order:	\$	97,990.00
c. New unencumbered balance in Master Agreement (7.a – 7.b):	\$	2,402,009

- d. **Appropriation Certification:** I certify that an unexpended appropriation in the amount of the Maximum Service Order Compensation is available in the following fund(s) and that such fund(s) will be encumbered to pay for this Approved Service Order.

Fund: 513 Appn: 0762 RC: 921700 Amount: \$97,990

Authorized Signer:

Renata Moreno

Email: renata.moreno@sanjoseca.gov
Date: 03/22/2023 GMT

8. Division Analyst Approval:

Sanjay Krishnaswamy

Email: sanjay.krishnaswamy@sanjoseca.gov
Date: 03/22/2023 GMT

9. Consultant Approval:

William Slenter

Email: bslenter@hydroscience.com
Date: 03/22/2023 GMT

10. Approval as to Form (City Attorney):

- Service Order Form Approved by the Office of the City Attorney
(Maximum Service Order Compensation is \$100,000 or less, and the provisions of the service order form are not altered.)
- Approved as to Form:

(Sr.) Deputy City Attorney

11. City Director Approval:

Ron Nickels

Email: ron.nickels@sanjoseca.gov
Date: 03/24/2023 GMT

Attachment A: Tasks

The Consultant shall provide the services and deliverables set forth in this **Attachment A**. The Consultant shall provide all services and deliverables required by this **Attachment A** to the satisfaction of the City's contract manager.

General Description of Project for which Consultant will Provide Services: Replace five (5) existing ammonia chemical dosing pumps with new pumps selected and sized to provide optimized dose control over the anticipated flow and dose range. Provide preliminary and final design services, engineering support to the bid phase, engineering services during construction, and engineering support of construction management. This Service Order covers final completion of the project design and the subsequent bidding and construction support services that were originally scoped under the 2018 Master Services Agreement and completed to 75% design prior to expiration of that Master Services Agreement on December 31, 2022. This Service Order incorporates expanded scope items (additional facility improvements) as described below.

Task No. 1: Final Design Completion

A. Services:

- a. Consultant shall advance the 75% design prepared under the previous Master Services Agreement to 100% design. Improvements addressed in this design shall be as follows:
 - i. Replace existing ammonia metering pumps with new pumps optimally sized for projected feed rates.
 - ii. Incorporate City Automation Guidelines into the specifications, and update HydroScience boilerplate specifications to make them compatible with the Automation Guidelines
 - iii. Incorporate Maintenance department stainless steel tubing and fittings standards.
 - iv. Updated work sequence and outage constraint specifications based on latest information from City.
 - v. Incorporate a Modbus link to the variable frequency drive (VFDs) for remote monitoring, in addition to the hard-wired input output (IO).
 - vi. Incorporate flowmeter bypasses to all flowmeter designs.
 - vii. Design new Distributed Control System Remote Input Output (DCS RIO) control panel and modification of design to accommodate Toshiba flow meters instead of ABB flow meters.
 - viii. Add separate flowmeter to Ammonia Pump #5, along with flow tube, transmitter, and display on the two existing backplanes
 - ix. Provide all five (5) replacement flowmeters with separate transmitters to be mounted on a backplane. Design the replacement of all existing transmitters on the existing backplane with new transmitters. Rearrange transmitters to improve the overall layout of cable trays, junction boxes, conduits (rigid and flex) and wire to conform to current RWF standards.
 - x. Develop a construction sequencing strategy for flowmeter and transmitter replacement work to facilitate constructability and minimize outage time.
 - xi. Incorporate independent disconnect switches for each transmitter.
 - xii. Incorporate additional elements into cost estimate updates.
 - xiii. Design coordination with City.

- b. The 100% design deliverable shall include the following:
 - i. Mechanical plans, sections, and details
 - ii. Electrical low voltage power distribution
 - iii. Control system drawings
 - iv. Piping and Instrumentation Diagrams (P&IDs)
 - v. City boilerplate Div 0 and 1 specifications customized to the needs of the project
 - vi. HydroScience technical specifications
 - vii. Construction sequencing and constraints requirements
 - viii. Updated Engineer's Opinion of Probable Construction Cost (EOPCC)
 - ix. Updated estimated construction schedule
 - c. The design scope is based on the following assumptions:
 - i. New pumps to be installed on existing pedestals.
 - ii. Structural design is limited to pipe support modifications and new equipment anchors (anchorage calcs provided by contractor as a deferred submittal).
 - iii. Existing tanks and containment facility will not be modified.
 - iv. Drawing backgrounds will consist primarily of existing as-builts and photographs.
 - v. A survey is not required.
 - vi. Permit fees by others.
 - vii. No further changes to the scope of improvements will be requested.
- B. Deliverable:** The Consultant will provide the following to the City's Contract Manager:
- a. Draft 100% plans, specifications, and updated cost estimate
 - b. Public Works, Engineering Services Division Structural Engineering & Code Inspections (SECI) responses to comments
 - c. Final bid-ready plans and specifications
- C. Completion Time:** The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:
- On or before the following date: May 1, 2023.
 - On or before ____ Business Days from _____.

Task No. 2: Bid and Construction Phase Support

A. Services:

- a. Consultant shall provide the following engineering services during bidding of the project:
 - i. Attend the pre-bid meeting
 - ii. Respond to technical questions from prospective bidders
 - iii. Prepare technical content for up to two addenda
 - iv. Assist the City with review of bids
 - v. Prepare a conformed set of plans and technical specifications

- b. Consultant shall provide the following engineering services during construction of the project:
 - i. Make up to three (3) site visits upon request of the City's project manager.
 - ii. Attend up to eight (8) construction meetings via Microsoft Teams.
 - iii. Review and respond to up to twenty (20) technical submittals plus ten (10) resubmittals.
 - iv. Review and respond to up to fifteen (15) RFIs.
 - v. Review and comment on up to four (4) contract change orders.
 - vi. Prepare record drawings based on markups provided by the Contractor.
- c. Assumptions:
 - i. City will advertise the project for bidding, conduct the pre-bid meeting, field all inquiries from prospective bidders, and lead the evaluation of bids and selection of an apparent low bidder.
 - ii. City will field and route all documentation to/from the contractor.
 - iii. City will provide construction management and inspection services.

B. Deliverable: The Consultant will provide the following to the City's Contract Manager:

- a. Request For Information (RFI) and submittal responses (.PDF)
- b. As-built drawings based on contractor markups (.PDF and .DWG).
- c. Input to punch list from final walkthrough

C. Completion Time: The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

- On or before the following date: December 31, 2024.
- On or before ____ Business Days from _____.

Attachment B: Terms and Conditions

1. **City's Contract Manager:** The City's contract manager for this Approved Service Order is:

Name: Jessica Zadeh	Phone No.: (408) 635-2037
Department: Environmental Services	Email: Jessica.Zadeh@sanjoseca.gov
Address: 700 Los Esteros Rd., San Jose, CA 95134	

2. **Consultant's Contract Manager and Other Staffing:** Identified below are the following: (a) the Consultant's contract manager for this Approved Service Order, and (b) the Consultant(s) and/or employee(s) of the Consultant who will be principally responsible for providing the services and deliverables. ***If an individual identified below does not have a current Form 700 on file with the City Clerk for a separate agreement with the City, and is required to file a Form 700, the Consultant must comply with the requirements of Subsection 17.2 of the Master Agreement, entitled "Filing Form 700."***

		<u>Required to File Form 700?</u>		
		Yes Already Filed (Date Filed)	Yes Need to File	No
<u>Consultant's Contract Manager</u>				
Name: Bill Slenter	Phone No.: 916-605-6633	2/2/23		
Address: 10569 Old Placerville Rd, Sacramento, CA 95827	Email: bslenter@hydroscience.com			
<u>Other Staffing</u>				
<u>Name:</u>	<u>Assignment:</u>	<u>Email:</u>		
1.				
2.				
3.				

3. Subconsultants: Whichever of the following is marked applies to this Approved Service Order:

- The Consultant can **not** use any subconsultants.
- The Consultant can use the following subconsultants to assist in providing the required services and deliverables:

<u>Subconsultant's Name</u>	<u>Area of Work</u>
1.	
2.	
3.	

4. Reimbursable Expenses: If the Compensation Table set forth in **Attachment C** of this Approved Service Order states that the City will reimburse the Consultant for expenses, then only the expenses identified in Subsection 10.5.3 of the Master Agreement are Reimbursable Expenses unless the following box is marked and additional reimbursable expenses are set forth:

- In addition to the expenses identified in Subsection 10.5.3 of the Master Agreement, the following expenses are Reimbursable Expenses:

<u>Additional Reimbursable Expense(s)</u>	<u>Mark-up</u>
1. _____	_____
2. _____	_____
3. _____	_____

Notwithstanding the foregoing, any additional reimbursable expense(s) set forth in the above table will be disregarded if the Compensation Table states that the City will *not* reimburse the Consultant for any expenses.

Attachment C: Compensation Table

The City will compensate the Consultant for providing the services and deliverables set forth in **Attachment A** in accordance this Compensation Table. This Compensation Table is subject to the terms and conditions set forth in the Master Agreement, including without limitation Section 10 of the Master Agreement.

Part 1 – Compensation for Services and Deliverables						
Column 1	Column 2		Column 3			Column 4
Task Nos. from Attachment A	Basis of Compensation		Invoice Period			Compensation
1	<input checked="" type="checkbox"/> Time & Materials	<input type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work	\$34,000
2	<input checked="" type="checkbox"/> Time & Materials	<input type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work	\$63,990
	<input type="checkbox"/> Time & Materials	<input type="checkbox"/> Fixed Fee	<input type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work	\$
	<input type="checkbox"/> Time & Materials	<input type="checkbox"/> Fixed Fee	<input type="checkbox"/> Monthly	<input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work	\$
Part 2 – Reimbursable Expenses						
<input checked="" type="checkbox"/> No expenses are separately reimbursable. The amount(s) in Column 4 of Part 1 include(s) payment for all expenses.			<input type="checkbox"/> Expenses are separately reimbursable in the maximum amount of:			\$
Part 3 – Subconsultant Costs						
<input checked="" type="checkbox"/> Subconsultant costs are not separately compensable. The amount(s) in Column 4 of Part 1 include(s) subconsultant costs.			<input type="checkbox"/> Subconsultant costs are separately compensable in the maximum amount of:			\$
Maximum Service Order Compensation (sum of Parts 1 through 3):						\$97,990