

Proposed Change Order
City of Needles Well No. 11 Treatment Plant Upgrade Project



WATERWORKS
ENGINEERS

PCO NO.: 2 **DATE REQUESTED:** 3/5/2024
SUBJECT: Chemical Pump Upgrade and Chemical Tank Alarm Addition
FROM: Water Works Engineers
AUTHOR: Joe Riess

TO: City of Needles
Attn: Kathy Raasch
817 Third Street, Needles, CA 92363

760-326-5700 Ext. 130

WORK CHANGE REQUESTED:

1. Upgrade two (2) sodium hypochlorite metering pumps from Pulsafeeder pumps (100 psi max) to Prominent pumps (145 psi max).
2. Increase chemical tank size from 500 gal to 750 gal.
3. Provide local alarm panel in chemical room to alarm if sodium hypochlorite tank reaches a high level during chemical delivery.

JUSTIFICATION OR NEED FOR THE CHANGE:

1. During project scoping, the City indicated that they would prefer to match the chemical metering pump types used at other well sites for consistency of use and spare parts. These pumps are solenoid-driven diaphragm pumps manufactured by Pulsafeeder. During design, we were unable to find a Pulsafeeder pump that had the required capacity or pressure rating over 100 psi necessary for this project. As a result, we recommended using solenoid metering pumps by Prominent. The pumps identified have the capacity and pressure rating for this project and are also more robust and durable in design than the Pulsafeeder pumps. These pumps have a higher cost than the Pulsafeeder pumps.
2. The sodium hypochlorite tank was originally sized at 500 gal. During design development, it was determined that a 750 gal tank is more suitable for this project to meet chemical demands.
3. A local alarm panel is recommended to ensure that the tank is not overfilled and to eliminate the need for a tank overflow pipe which would require additional chemical containment in the existing building.

PROJECT IMPACT:

COST CHANGE, \$ \$11,028.75

TIME CHANGE, days 0

CONTRACTOR
Pacific Hydrotech Corporation

ENGINEER
Water Works Engineers, LLC

By: _____

By: _____

Date: _____

Date: 03/05/2024



December 15, 2023

City of Needles
817 3rd Street
Needles, CA 92363

Project: 1307 River Road - Well 11 Improvements

Reference: Chemical pump upgrade and chemical tank alarm addition

Dear Kathy,

Find for your review and approval the attached documents for the engineer requested upgrade of the Pulsafeeder chemical skid to the Prominent Pump Skid as well as the addition of a high level alarm device on the 750-gallon chemical tank. Installations to be completed within the existing project schedule.

Respectfully,

Eric Christensen
Pacific Hydrotech, Inc



Equipment Total Cost		\$	-
Material Total Cost		\$	11,028.75
Subcontracts Total Cost		\$	-
Labor Total Cost		\$	-
Subtotal		\$	11,028.75
Bond	0%	\$	-
Insurance	0%	\$	-
TOTAL COSTS		\$	11,028.75



July 28, 2023

Pacific Hydrotech Corporation
314 E. 3rd Street
Perris, CA 92570

Attention: Eric Christensen echristensen@pachydro.com

**REFERENCE: CITY OF NEEDLES, CA – WELL No. 11 TREATMENT PLANT UPGRADE
PACIFIC HYDROTECH PO# C2228-001 - JOB No. C2228
CHANGE ORDER 1B – EQUIPMENT UPGRADES WITH EXPLANATION
LOPREST JOB 33690**

Eric,

In response to your request for the change order explanation, may I offer the following:

- 1.) ~~The change order portion for the 145psi Reclaim Pump upgrade has been removed~~
- 2.) Cost adder for the suggested 145psi Prominent skid package breakdown is as follows:

Cost of 145psi Prominent skid:	\$21,375
Cost of original Pulsafeeder chem skid:	- \$13,320
	\$ <u>\$8,055.00 (PLUS TAX)</u>
- 3.) Cost adder for larger 750-gallon chem tank with alarm panel is as follows:

Cost for 750-gallon chem tank	\$8,310
Cost of original 500-gallon chem tank	- \$6,250
Alarm panel with engineering, labor & materials:	+ \$1,250
	\$ <u>\$3,310.00 (PLUS TAX)</u>

The job write-up has been revised to reflect the \$11,365.00, PLUS an additional \$880.79 tax (7.75%).

We have already submitted the above change order equipment, so we just an approval to keep things moving.

As usual, feel free to contact our office if you have any questions.

Regards,

Mike Borquez

Mike Borquez
Loprest Division of WRT