

To:	City of Sandpoint Holly Ellis, Deven Hull	From:	Stantec Nick Smith, Danielle Philbrick
Project	2002003233 – Sandpoint WWTP Screw Press Upgrade	Date:	August 19, 2025

Reference: Screw Press Sole Source Pre-Procurement Justification - FINAL

1 Introduction

Stantec has been contracted by the City of Sandpoint (City) for the preliminary design of the screw press upgrades to the existing Solids Handling Building. The upper floor of the existing building consists of two belt presses, process piping, HVAC equipment, and electrical equipment. The City has decided to replace the existing belt presses with two new screw presses. The preliminary design will include replacement of the belt presses with screw presses, electrical upgrades, HVAC upgrades, and structural evaluation of the existing building. It is assumed the existing sludge pumps and polymer systems are sufficient for the upgrades. As part of the design, a confirmation of the equipment type and timing is important to provide as accurate of a design and as efficient of an installation as practical.

The City has expressed interest in a sole sourced pre-procurement of the screw presses. The type of pre-procurement would be from Huber Technology Inc. for the Q-Press 440.2 or 620.2. The following information identifies the reasoning behind the request to sole source this equipment.

2 Driving Forces for Pre-Procurement

There are several driving forces for pre-procurement of the screw presses.

1. **Space Limitations** - There are space limitations within the existing Solids Handling Building. The existing building has two roof hatches above the belt press room with one above each belt press for installation and removal of the belt presses and other related equipment. Each hatch is about 18'-8" in length and 10'-1" in width. Upon initial review, the roof hatches are adequate for crane installation of the Huber Q-press 440.2 or 620.2. Screw presses provided by some other manufacturers are significantly larger and pose of risk of installation through the existing roof hatches. Screw presses provided by other manufacturers may not fit through the existing hatches and may not fit in the existing Solids Handling building. In order to utilize the existing Solids Handling building and roof hatches, pre-procurement is recommended to ensure the equipment fits within the buildings footprint. There are significant costs associations if the existing Solids Handling building is not utilized and a new building or retrofit building is required.

Reference: Screw press Pre-Procurement

2. **Pilot Test Performed** - The City requested pilot testing from several screw press manufactures to determine if the new screw press technology was effective for dewatering the WWTP's sludge. The only manufacturer to perform a pilot test was Huber Technology Inc. Q-Press 440.2, the other manufactures declined. The results demonstrated successful performance for dewatering the sludge produced by the plant. Based on the pilot test, the Huber Q-press is proven technology for the Sandpoint WWTP versus other unknown manufacturers.
3. **Screw Press Weight** - The exact weight of the existing belt presses are unknown at this point in the analysis, but due to their size it is assumed the weight of the belt presses is greater than that of the Huber Q-press 440.2 or 620.2. Screw presses provided from other manufacturers are larger and thus weigh more. If additional weight is added to the existing Solids Handling building there may be cost associations with additional structural work that would be needed for the existing Solids Handling building.
4. **Design Efficiency and Schedule** - An additional advantage of pre-procurement is design efficiency and maintenance of schedule. Due to the imminent failure risk of the existing belt press units, the City is highly interested in getting them replaced with a reliable dewatering system as soon as is practical. With sole source pre-procurement, the Huber Q-press 440.2 or 620.2 would be the basis of design, which limits the need for redesign in terms of process piping connection, electrical design, and HVAC needs. Pre-procurement will allow for the City to purchase the equipment prior to design completion and start the submittal review and delivery process prior to (or shortly after) hiring a construction contractor. The existing belt presses are nearing their end of life. There is significant rusting on the existing belt presses and the City has expressed concern for failure of the belt presses. Pre-procurement can maintain the schedule to avoid a period of time without a functioning dewatering system.
5. **Design Collaboration** – When the specific equipment is known, design efficiencies and quality can be improved due to the known equipment with variability eliminated.

3 Risks of Pre-Procurement

1. **City Owned Equipment** – The contractor would not be responsible for faulty equipment or products provided by Huber. The procurement would be encouraged to request Huber provide extended warranty's that cover the expected construction/installation period.

4 Engineer's Recommendation

Based on the information presented in the sections above, it is Stantec's recommendation that the City of Sandpoint pre-procure the Huber Q-press 440.2 or 620.2 as soon as practical and as a sole source procurement as explained above.