



The Water Supply and Treatment Upgrades project is for design and construction of upgrades to water supply and treatment for the Village of Craven.

This project applied for and received approval through the Investing in Canada Infrastructure Program (ICIP) - Green Infrastructure Stream. This means the Village has funding partners for reimbursement at 73% to maximum of \$1,468,433.00 of total project direct costs related to the design and construction.

Although cost escalation and continued inflation is a reality for projects and households alike, this ICIP funding partnership provides a mechanism to enable the Village to proceed with the much-needed water treatment upgrades, minimizing direct costs to residents and rate payers. The two existing wells the Village owns and operates are beyond their service life. Replacement of or upgrades to the wells is critical to ensure the Village maintains a reliable source of water. If either one of the wells were to fail, the Village is high risk of losing their water source.

Wyatt Engineering (WE) was engaged as the Owner's Engineer for design and construction oversight. Upon project kickoff in the Spring of 2024, Wyatt Engineering became aware of Water Security Agency (WSA) Regulatory changes since the 2022 preliminary study was completed. These changes to Regulatory requirements resulted in two changes to the project.

1. Increased water study which added engineering scope of work, and increased risk of extending design timeline, pending results.

The project location now identified at risk for direct influence, it became necessary to conduct a Groundwater Under the Direct Influence of surface water (GUDI) assessment. The GUDI assessment is to consist of two sets of sampling: one in the spring (wet weather conditions) and one in the fall (dry weather conditions). The results of the GUDI assessment are required prior to completion of design development, as a GUDI positive system requires an increase of treatment process compared to a system which returns non-GUDI results.

2. The Village is now required to add and maintain an observation well in the vicinity which provides WSA additional information on the surrounding aquifer on a regular basis, meaning one existing well is to be converted instead of fully decommissioned.

The two new wells were designed, tendered, and constructed in 2024 in close proximity to the existing wells. Although seeing the new wells ahead of other new construction activities may seem out of sequence, with other construction activities not starting, the water samples drawn

from the two new wells are used to directly inform the rest of the design and treatment processes.

Another critical task to determine design requirements is the assessment of the existing Village owned infrastructure. The condition and capacity of both the well house and the water treatment facility were assessed by mechanical, electrical, structural and geotechnical throughout 2024. Results of water sampling and the infrastructure assessments have identified the need for additional pumps, electrical and associated equipment than originally planned.

The engineering team is very cognizant of cost control, we understand the importance of meeting the Village’s needs for water flows and treatment without incurring unreasonable cost increases. Although the delay in schedule is disappointing, there is still opportunity for the Village to have a full design and tender the project in 2025. Expecting construction to be completed before the end of 2026.

Schedule updates are shown in the table below.

Craven WTP Upgrades	Start Date	Planned End Date	Revised End Date March 27 2025
Well Drilling	September 2024	Oct. 31, 2024	Complete
Detailed Design	November 2024	March 2025	May 2025
Tendering	March 2025	April 2025	July 2025
Tender Period	March 13, 2025	April 3, 2025	June - July 2025
Construction	June 1, 2025	October 2025	Deadline December 2026
Well Pump House		1 month	
Water Treatment Plant		2-3 months	
Warranty Period	October 1, 2025	October 1, 2026	1 year

For any additional questions, please reach out by email to villageofcraven@sasktel.net.