



Capital Business Case

Industrial Park Water Main Supplies

2023 Budget

Industrial Park Water Main supplies

Executive Summary

The Industrial Park Water System receives all potable water from the Town of Prescott. The water distribution system was commissioned in 1989 and services 27 residential and 13 commercial/industrial properties. Piping consists of cast iron, PVC and HDPE and ranges in size from 150 mm to 450 mm in diameter.

Business Need

In the event of a water emergency (i.e. water main break) we have limited supplies on hand to repair the 450mm, (18”), cast iron pipe. We currently have one clamp in stock to repair a circumferential type water main break. In the event we have a 450mm water main break that requires a section of pipework to be replaced, we do not have adequate supplies in stock to remediate. Supplies for the 450 mm water main are expensive with significant lead times. Edwardsburgh/Cardinal can request assistance from other municipalities through the On-Warn system for the loan of parts and supplies in the event of an emergency but there is no guarantee that assistance is available. The OnWarn system should be used as a last resort.

Crane Supply provided the following quotation and estimated delivery time in 2022.

Part	Quantity	Estimated Cost	Delivery Time
18” Hymax couplings (special order)	2	\$6140	12-18 weeks
18” PVC water main pipe	Minimum order (1- 20- foot length)	\$4350	2 weeks
18” Robar repair clamp	1	\$ 735.25	5-7 days

Supply chain shortages have made the cost, availability, and delivery times unpredictable.

Options or Solutions Analysis

Option 1: Purchase two Hymax couplings, one length of 18" PVC water main pipe and 1 repair clamp at an estimated total cost of \$12,684.53.

Option 2: Purchase two Hymax couplings and one length of 450 mm (18 inch) PVC pipe at an estimated total cost of \$ 10,490.

Option 3: Purchase two Hymax couplings at an estimated total cost of \$ 6140.

Option 4: Do not purchase spare supplies.

Financial and/or Non Financial Benefits

Having spare parts readily available will allow the water main emergency to be repaired quicker and return to service for all residential and industrial/commercial establishments. Financial loss to industry and municipality could be significant if the water distribution system were shut down for a significant amount of time.

Risk Analysis

The system receives all potable water through a non-looped system without storage such as a tower or reservoir. Not having adequate supplies on hand to repair a water main break could mean the system is down for a significant amount of time resulting in, inconvenience to dependent residents, potentially significant financial loss to Industry and a disruption of fire protection. The use of the On-Warn system should only be used as a last resort in emergencies.

Recommendation

Option 1: Purchase two Hymax couplings and one length of 450 mm PVC pipework.

Implementation Plan

Order supplies through Crane Supply

Documentation

Quotation attached.

Acceptance Sign-off

Lead Department

Prepared By: [Eric Wemerman, Chief Water/Sewer Operator

Date: 01-16-2023

Signature: *Eric Wemerman*

Approved By: Sean Nicholson, Treasurer

Date: 01-30-2023

Signature: *SN*

Approved By: Dave Grant, CAO

Date: 01-30-2023

Signature: *D. Grant*