

**Grant Program:** Infrastructure Stimulus Fund

**Project Summary: Watermain Replacements - Thornhill**

**Project Components:**

- Clarke Avenue Wm. Replacement – Yonge Street to Sprucewood Drive - \$3.15M
- Elgin Mills Wm. Replacement – Dudley to Johnson Street - \$2.1M
- Pinevale Road; Steeles Avenue Wm. Replacement – Old English Lane to Valloncliffe - \$1.2M
- Laureleaf; Valloncliffe; Elgin/Alcaine; Harris Way; Willowbrook Wm. Replacement - 1.75m
- Grandview Avenue Wm . Replacement – Yonge Street to Steeles Avenue - \$3.9M

**Cost:** Total cost \$12.1M

**Timeline:** Design can be completed within 6-9 months including approval from MOE. If design process is started this summer for this project, work can be tendered early Spring 2010 and construction completed before or by March 31, 2011. Work under this project is not in the 2009 budget.

**Budget:** Town will provide and advance the budget required for this project upon approval of the funding.

**Benefits:**

This project will result in a significant economic impact within the region resulting from an estimated 136 jobs created and stimulating spending in other sectors. Numerous environmental social and other benefits are derived from this project namely:

- Improvement of water quality
- Reduce or minimize risks of water system contamination resulting from watermain breaks
- Flow and capacity improvement for domestic and fire demand
- Reduce maintenance costs and provide better customer service by reducing service interruption.
- Increased reliability of service resulting in better customer service
- Reduce water loss and spills into the environment
- Preserve and protect the natural and sensitive environment
- Reduce impact to traffic and surface disturbances from repairs of broken watermain

**Project Background:**

Markham has 75 km. of cast iron watermain. These watermains were installed from the early fifties till early seventies. Although their estimated lifecycle is 90 years, a lot of these watermains are showing structural failures due to external and internal corrosion. There have been many watermain breaks on cast iron watermain caused by external corrosion. At the same

time internal corrosion on these watermain results in reduced water quality delivered to the residents. External corrosion protection does not effectively work on cast iron pipes.

A long term plan has been developed to start replacing cast iron watermain starting in 2011. With the proposal to replace the sanitary sewers on several streets in the Thorhill area, it would be advantageous to replace the aging watermain on those streets at the same time. This project proposal addresses approx. 6000 m. of watermain for replacement in those areas to gain the cost savings and reduce traffic and social impact of construction. Two additional internal staff will be hired for this project namely one project manager and one inspector. Town will also hire consultant and contractors to deliver this program. Estimated number of jobs created under this project is 136.

<b>Project</b>	<b>Cost</b>	<b>Internal Jobs Created</b>	<b>External Jobs Created</b>
Watermain Replacement	\$ 12.1 M	2	134