Paquette-Whitson Municipal Drain

Presentation to the Hearing Committee October 3, 2012
by
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Whitson River

- Main natural watercourse draining westerly from Falconbridge through Hanmcr, Val Caron and Chelmsford

- 70 kms long – 324 square kilometre watershed

- ½ of the watershed is east of Val Caron

- 5 of the river’s 11 tributaries are east of Val Caron

- River has a very flat slope; 30 inches over 1,000 metres

- River has a relatively small cross-section with limited flow capacity

- Flooding has been common
Whitson River Historic Flooding

- In its natural state, Whitson River flooded annually and caused problems to farming pioneers
- Recent major floods include the Spring of 1985 and the Spring of 1998
- Normal summer water flow is minimal
- Spring melt flow increases up to 50 times
- Flooding along the Whitson River impacts future development and existing development
- Flood reduction measures are necessary
Tributary 8 A

- Tributary VIII A – a main tributary to the Whitson
- Large project drainage area, 725 hectares
- Former natural watercourse rerouted as past development occurred
- Not a maintained watercourse outlet
- Existing watercourse clogged
- Large Regional Storm Flood Plain south of Dominion Drive
- Existing watercourse cannot convey major storm flood water
- Several businesses and residential developments in progress or pending approval
- Potential flooding restricts development
Paquette-Whitson Municipal Drain

- A complex drainage project
- Proposed 3,000 metres of new and improved drainage channels
- Regional Storm drainage standard of design
- New drainage channel contains Regional Storm flood waters within banks
- 4:1 side slopes – low flow channel
- Will serve 1,300 plus, existing residences
- Will provide drainage outlet for 700 new homes and a large commercial complex
- Major developers: Dalron Construction Limited, Lifestyle Homes, Dominion Park Developments, Victoria National
- 30 hectare stormwater quantity and quality pond
- Estimated cost $7,282,885
## Project Cost Shares

- City cost share: $5,131,385
- Developer's cost share: $2,151,500

Total Project estimated cost: $7,282,885
Paquette-Whitson Municipal Drain

- 2 canal linked large ponds
- 3 stormwater treatment forebays
- Regional storm sized pond to reduce flows to Whitson River
- 5:1 grass side slopes
- Whitson River flood control structure to offload > 20 year storm flows
- Minimum depth 1 metre
- Stop log outflow control chamber
- Substantial recreational potential
- Proposed park-like surrounding lands
- New City centre piece
Drainage Act Process

- Numerous public drainage meetings
- Numerous discussions with developers to integrate the proposed drain to pending and future developments
- Discussions with the Department of Fisheries and Oceans (DFO) and Nickel District Conservation Authority (NDCA)
- Extensive pre-engineering analysis and surveys, geotechnical investigations – water table evaluations, engineering design plans and cost estimates
- Fair and balanced assessment to developer and City taxpayers
- February 2012 Engineer’s report
- July 10, 2012 City Council approval of Front Ending Finance Program for developers share of cost
- City to collect back developer’s share @ $2,500 per lot or lot equivalent
- October 3, 2012 Hearing Committee Recommendation