
2008 BUDGET BRIEFING NOTE

Application of *Toronto Green Development Standard* to Major Capital Upgrades undertaken by Toronto Water

Issue/Background:

- The Toronto Green Development Standard provides an integrated set of targets, principles, and practices to guide the development of City-owned facilities and to encourage sustainable development amongst the private sector.
- Toronto Water's 2008-2017 Capital Program includes many new and retrofit projects that incorporate green development principles

Key Points:

- Ongoing retrofit projects such as the HVAC Rehabilitation and Upgrades at the F.J. Horgan Water Treatment Plant comply with green building standards by replacing aging and inefficient equipment with new units including high-efficiency motors, reducing energy demand and eliminating use of CFC-based refrigerants
- The following chart demonstrates how the Toronto Water Centre Renovations and the upcoming F.J. Horgan Water Treatment Plant expansion are incorporating green development standards

Environmental Driver	Toronto Water Centre Renovations	F. J. Horgan WTP Expansion
Better air quality	<ul style="list-style-type: none">• Construction activities are specified to control dust, noise, construction vehicular traffic and storm water issues• Site design supports cycling and pedestrian activity	<ul style="list-style-type: none">• Construction activities are specified to control dust, noise, construction vehicular traffic and storm water issues.• New water treatment building will incorporate green roof technology.• Continues to offer passive public access to property

Environmental Driver	Toronto Water Centre Renovations	F. J. Horgan WTP Expansion
Reduced greenhouse gas emissions and urban heat island effects/ Energy efficiency	<ul style="list-style-type: none">• Design maximized to take advantage of natural lighting where available.• Roller shades and lamination included on windows to reduce cooling needs	<ul style="list-style-type: none">• High energy efficiency motors are specified for new equipment and pumps• Skylight structures are being upgraded with improved R values and incorporation of argon gas – low E skylights
Improved water quality and water efficiency	<ul style="list-style-type: none">• High efficiency fixtures and appliances included• Low water use landscaping incorporated	<ul style="list-style-type: none">• High efficiency fixtures and appliances included• Existing treatment residuals outfall diverted from Lake Ontario to nearby Highland Creek WWTP for treatment
Less solid waste	<ul style="list-style-type: none">• Retrofit of existing facility allows for reuse of significant portion of base building and recycling of base materials	<ul style="list-style-type: none">• New building structures are designed using durable materials for lifespans in excess of 50 years
Protection of the urban forest and wildlife habitat/Reduced light pollution	<ul style="list-style-type: none">• Existing site trees protected during construction	<ul style="list-style-type: none">• Design has been revised to protect existing tree grove on property• Additional tree planting opportunities will be explored through continuation of participation in Tree Advocacy program

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Date: November 15, 2007