

Highlights of Draft Changes to LSRCA SWM Technical Guidelines

Board of Directors

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Background

- Research has shown traditional SH2O not working
 - Increased flood risk, poor performance of ponds
 - Maintenance not occurring – cost issues
- Established a Stormwater Working Group in 2014
 - MOECC, Municipalities, BILD, CA's
- Developed Draft Model Site Control & Stormwater By-Laws and Technical Guidelines – full consensus
- Last Step – Detailed Revised LSRCA Technical Guidelines

Summary of Proposed Changes

- Better Site Design
- Quantity Control Requirements
- Quality Control Requirements
- Water Quality LID Credit
- Hydrogeology
- Summary of Benefits
- Implementation

Better Site Design

- In developing an effective Stormwater Management approach for any project, Better Site Design Techniques are to be used.
- Better Site Design involves techniques applied early in the design process to preserve natural areas, reduce impervious cover, distribute runoff and use pervious areas to more effectively treat stormwater runoff.



Quantity Control – Volume

- For new, nonlinear developments > than 0.5 hectares new impervious surface 25 mm of rainfall stormwater will be captured and controlled
- Redevelopments shall capture and retain / treat on site the runoff from a 25 mm rainfall event from the new and/or fully reconstructed impervious surfaces
- Volume credit will be considered where applicable
 - Further discussions with MOECC occurring

Quantity Control - Volume

- Linear development volume control
- The runoff from a 12.5 mm event from the fully reconstructed impervious surface area.
- The runoff from a 25 mm event from the net increase in impervious area on the site.
- Transition strategy through December 31, 2017

LID Quality Credit

- A water quality credit may be provided for LID treatment
- The types of LIDs that would be eligible for this credit are infiltration systems (trenches / galleries) and filtration systems (bioswales / rain gardens / enhanced swales).
- This credit will be based on the amount of impervious area an LID that has been sized to treat the volume of runoff from a 25 mm rainfall event.

Flexible Treatment Options

- If full compliance is not possible, the proponent must document the reason. If site constraints or restrictions limit the full treatment goal:
 - Alternative #1: Achieve at least 12.5 mm volume reduction from all impervious surfaces.
 - Alternative #2: Achieve volume reduction to the maximum extent practicable (minimum 5 mm) from all impervious surfaces.
 - Alternative #3: Mitigation equivalent to the performance of 25 mm of volume reduction off site.

Hydrogeology - Groundwater Recharge

- Refers to relevant legislative requirements (e.g. ORM, LSPP, SPP, etc.) and definitions
- Outlines specific technical requirements but refers to other guidelines for more information:
 - CA Hydrogeological Assessment Guidelines (2013) and
 - MOEE Hydrogeological Technical Information Requirements for Land Development Applications (1995)
- Emphasis on LID measures and additional technical requirements needed to meet water balance objectives.

Benefits & So What !

- Improved engineering submissions
- Consistent with bi-national approaches
- Reduced overall value of asset for LID controls
- Reduced maintenance costs
- Increased developable area = increased DCs and tax base
- Improved water quality to Lake Simcoe & tributaries
- Mimic natural hydrologic cycle
- Climate change resiliency
- Reduction in flood risk in urban areas
- Better integrated into park and landscape design

Implementation

- Draft Version sent via email to >70 separate people or groups
- Several municipalities, two CAs, consultants, MOECC, BILD and one OGS company commented.
- Municipal / Consultant / Developer Information Sessions held on March 31st and April 5th
- Focused meetings with BILD, York and Barrie
- BOD approval June 2016
- Implementation Date of September 1, 2016