BILD

Ontario Home Builders' Association

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Mr. John Antoszek, P. Eng.
Pollution Control Engineer Advisor
Water Standards Section, Standards Development Branch
Ministry of the Environment and Climate Change
40 St. Clair Ave. W., 9th Floor
Toronto, ON, M4V1M2

Dear Mr. Antoszek:

Re: **MOECC Low Impact Development Stormwater Management Guidance Document: Comments on the Draft Runoff Volume Control Targets for Ontario, Chapter 5 – Model Selection Framework and Chapter 3 – Climate Change and LID**

We are writing on behalf of the Building Industry and Land Development Association (BILD) and the Ontario Home Builders' Association (OHBA) with a combined response from our membership to the MOECC's three following draft documents released for review, which are the initial components of the Ministry's Low Impact Development Stormwater Management Guidance Document:

- Runoff Volume Control Targets for Ontario, Final Report, October 27, 2016
- Chapter 5 – Model Selection, November 2016
- Draft Chapter 3 – Climate Change and Low Impact Development (LID), January 9, 2017

We appreciate the opportunity to be included in the Stakeholder Review Group and we look forward to continued cooperation with MOECC and the Stakeholder Group to facilitate the successful completion of the LID SWM Guidance Document.

We note that a separate letter with comments has been provided by Stantec on January 16, 2017. We concur with all of the points noted in their letter. We appreciate your consideration of our previous comments dated July 15, 2016, with regard to the initial draft reports. We have provided the following additional comments on the second draft of the reports:

Runoff Volume Control Targets, Final Report, October 27, 2016:

We recognize and appreciate the modifications that have been incorporated into the updated report based on the initial comments, including:

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- Recognition of natural runoff volumes,
- Recognition of the quality and limited quantity control characteristics of the volume control approach, and
- The Control Hierarchy approach was adopted to provide alternatives for sites with constraints.

While the above modifications provided a significant improvement to the implementation of the Runoff Control approach, we would appreciate your further review and consideration of several remaining comments on the latest version of the document.

The primary themes of concern include:

- **Implementation of a grandfathering approach for sites with approved or significantly advanced planning status, subwatershed studies, master environmental servicing plans, draft plan or site plan applications, etc.**

- **Implementation of efficient landuse as criteria to differentiate between the appropriate Runoff Control Alternatives. The implementation of runoff controls should not result in additional land requirements if a cooperative approach can be taken by municipalities, conservation authorities and MOECC through dual use of facilities such as parks, rights-of-way, buffers, private lots, parking lots, etc.**

- **Modification of the Pre-Development definition for Development and Re-Development to be consistent with the Linear Development and Retrofit, which correspond to the "current condition" as opposed to "undisturbed forest" or "least urbanized condition".**

- **Removal of the criteria which excludes sites that are within 500 m of a watercourse from being eligible for Flexible Treatment options since the site constraints requiring the flexible treatment apply equally to all sites.**

Please consider the following comments in the next iteration of the Runoff Volume Control guidance document:

- **Section 4.1**, Control Hierarchy #1 – a statement is required to allow runoff of some of the RCV_T if it is required to match the existing condition water balance.

- **Section 4.1**– third bullet from the bottom (bottom of page 104) – This point should acknowledge that the LID storage volume can also contribute to the required "erosion control" volume (as presented in the January 16, 2017 meeting at MOECC), in addition to quality and quantity control.

- **Section 4.2** – Impervious Area or Surface definition– "compacted urban soils and gravels" should be considered as a "pervious" surface – recognizing there is limited infiltration ability, or clarification should be provided that this applies only to "existing" conditions as opposed to new development conditions.

- **Section 4.2** – Pre-Development for New Development Definition – It is inappropriate and unreasonable to consider the "pre-development" condition as "undisturbed forest" if the site is actually agricultural or some other form of developed condition. The pre-development condition should always reflect the "current" condition of the site at the time of the development application. Utilization of an undisturbed forest condition would result in significant upfront and long term infrastructure cost implications for the municipalities or private landowners.

- **Section 4.2** – Pre-Development for Re-Development, Re-urbanization and Intensification Definition – same comment as above – existing conditions should be recognized, as opposed a maximum runoff coefficient of 0.3. Use of an "overcontrol" situation should be limited to areas with downstream constraints only, not as a general guideline.

- **Section 4.3.1** – The inclusion of most building additions in the Runoff Control Criteria is understood based on increased stormwater runoff, however the implementation of the approach should be considered to simplify the related approval process for applications such as a single home addition.

- **Section 4.3.1.1** – The final sentence should be modified as follows to reflect the objective of maintaining the existing contribution to surface runoff: The site shall be required to maintain the minimum pre-development "surface water runoff" balance. A full "water balance" is not a reasonable objective since it includes evaporation and transpiration.

- **Section 4.3.1.6** – We maintain that sites within 500 m of a watercourse should not be treated any differently than sites greater than 500 m from a watercourse. If a site less than 500 m from a watercourse has the associated constraints identified in Section 4.3.5.1 (shallow bedrock, high groundwater etc.) it should not be excluded from the Flexible Treatment Options since there is no other municipal or Provincial policy or criteria that treats these two situations differently. As noted in our previous comments, the majority of greenfield development sites are located within 500 m of a watercourse. The majority of infill sites outlet to an existing storm sewer system which has no downstream treatment and therefore currently outlets to a watercourse uncontrolled, regardless of whether or not it is 500 m or more from a watercourse. The level of treatment for every site should be consistent, regardless of the proximity to a watercourse. The Flexible Treatment Options have been incorporated for valid reasons, which should apply equally to all sites.

- A volume control exemption consideration should be given to sites that directly abut a lake since the rationale behind the volume control requirements would not equally apply in this situation.

- Two of our previous comments still under review by MOECC include:

    - **Grandfathering** of sites which have active applications, subwatershed studies, master environmental servicing studies, stormwater management studies, etc. The proposed volume control guidelines should only apply to new applications which have not been subject to a previous planning or environmental evaluation process.
    - Although not specifically part of this document, methods available to achieve the required water volume reductions must be considered. A large portion of proposed development sites will be in private ownership. MOECC's recognition of **private LIDs** must be addressed in

future documents. Without the recognition of private LIDs in a residential or institutional/commercial/industrial development, the runoff control volume targets cannot be efficiently achieved.

- We understand that this document was created to act as a guidance document, however there appears to be some uncertainty as to which agency will have authority to implement the document. Discussions at our meeting on January 16, 2017 at MOECC suggested that it will be the municipality who has the authority to review and approve the runoff volume control approach taken by a proponent. The document should **clarify which agency has authority to implement the guidelines**.

- As discussed at our meeting on January 16, 2017, it would be beneficial to include several **"Ontario" based examples** of actual sites for linear infrastructure, ICI site plan, high rise site plan, infill small lot residential and a residential subdivision to demonstrate examples of the infrastructure and landuses required to achieve the proposed runoff volume control targets. This will demonstrate the cooperative approach required to achieve the volume objective while maintaining an efficient use of land.

Draft - Chapter 5 – Model Selection Framework

We understand from the discussion at the January 16, 2017 Stakeholder Review Group meeting that this document is intended to provide general guidance for the appropriate modelling tool to be used for various applications and that it is not intended to create an overly onerous situation for evaluation of LID infrastructure.

We continue note, however, that further direction is required within the text to clarify that the appropriate modelling approach is to be determined through consultation with the applicable agency (typically the municipality or conservation authority) based on guidance from this document. Specifically, the criteria listed in Table 5.3.2 requires a preface which identifies that this is a guidance document which provides considerations for various situations but that any one criteria alone will not force a specific type of modelling approach to be used. Without clarification of the expectations, this document will lead to extremely onerous modelling requirements being requested by various agencies for typical development applications that will far exceed the reasonable requirements for the site and the technical ability of the majority of engineering consultants and review agency staff.

To help clarify this approach we again request your consideration to incorporate the following changes into Table 5.3.2:

- "Large" sites should reflect a major urban expansion, which is typically larger than a "concession block" which is in the order of 2 km x 2 km. Therefore, it would be more appropriate to use 450 ha as a guideline
- Fully naturalized sites are recommended as only a "D" type modelling. Based on the size of the naturalized area and the size of the site itself, the appropriate model type could range from an "A" to "D" type model.

- Many smaller sites are adjacent to wetlands, coldwater streams, streams with measured baseflow contribution (BFI>0.5), or ecologically significant groundwater recharge areas. This should not result in an automatic default to a "C" or "D" type modelling scenario subject to a full review of the overall potential implications. A "B" type modelling options should be included.
- Many sites in Ontario have groundwater depths <4 m. These situations are typically addressed through various measures including filling, use of filtration vs. infiltration LIDs, etc. The modelling scenarios for the average development would be adequately served with a "B" type modelling scenario. We request that the recommended class of modelling category be updated to include type "B" for this scenario.

- **Section 5.3.1** – clarification is still required with regard to which agency decides on the appropriate modelling approach, recommended by a consultant. We recognize that the intention is to leave this open for interpretation, however some clarity is required since it would be unreasonable to consult with the municipality, conservation authority and MOECC for every application. It appeared based on our discussion on January 16, 2017 that the municipality will likely be the ultimate decision maker, at least for small to medium sites and it would be helpful to include this suggestion in the guideline. Large projects would typically have a formal Terms of Reference prepared which would have input from at least the municipality and conservation authority.

Chapter 3 – Climate Change and LID

As discussed at the Stakeholder Review Group meeting on January 16, 2017, we understand that this document was prepared as an information document to raise awareness of the potential implications of climate change, as opposed to a prescriptive document, outlining specific design requirements.

While this is a helpful document, in that it provides awareness of potential implications of climate change in Ontario, it has the potential to create significant confusion on what the implications should be to items such as volume control or peak flow control from typical development sites. If this document is to form part of the LID manual, there should be some co-relation to the responsible agency to authorize or mandate the required climate change measures. As discussed at our meeting on January 16, 2017, the responsibility for this appears to lie with the municipalities. Clarification of this point is important to avoid conflicting comments that may arise from applications that are reviewed by several levels of government agencies.

The general concern is that a document of this nature will set an expectation for a level of review related to potential climate change issues which are not readily definable. The average small/medium site will not have the resources to undertake an extensive review of downstream infrastructure or natural features and the related impact for the broad range of potential changes that could be expected over an extended period of time as climate change evolves. Further guidance should be provided with regard to the intention for the use of this document as it relates to individual applications to avoid unanticipated expectations of a rigorous environmental and infrastructure evaluation for every application.

On behalf of BILD and OHBA, we appreciate the opportunity be part of the Stakeholder Review Group to provide constructive feedback on the proposed guidance documents based on the experience of our members.

Please call the undersigned if you have any questions regarding the above comments.

Sincerely,

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