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January 23, 2018

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 Draft LID Stormwater Management Guidance Manual Draft Version 2.0 – November 27, 2017

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 Draft #2 LID SWM Guidance Manual released for review on December 4, 2017.

We appreciate the opportunity to continue 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 recognize the changes that were made based on our previous letter, however it is unfortunate that the latest Draft document was released without a response to the previous comments provided by BILD/OHBA. We have therefore again included several important comments which were not addressed in Draft #2 of the document. We would greatly appreciate your reconsideration of these important items.

Please consider the following comments in the next iteration of the LID SWM Guidance Manual:

- Section 1.5.1.1 The Better Site Design section should include efficient landuse as a technique, to allow dual land uses by incorporating LIDs into right-of-ways, parks, schools, buffers, SWM facilities, parking lots and private lots, to minimize the need for additional land to achieve the runoff volume control targets. Dual landuse perfectly fits the criteria used in the Manual of being "cost effective". We suggest adding the following bullet to the list of Better site design techniques:
 - Dual land uses by placing LID in:
 - o Parks;
 - Right-of-ways;
 - o Parking lots;

- SWM pond blocks;
- Private residential lots; and
- o Environmental buffers.
- Section 3.2, first bullet– Pre-Development for New Development Definition It is inappropriate and unreasonable to consider the "pre-development" condition as "natural undisturbed" if the site is actually agricultural or some other form of developed condition. Similar to the "Linear Development and Retrofit" criteria, 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. Use of an "overcontrol" situation should be limited to areas with downstream constraints only (i.e. combined sewer system), not as a general guideline. We also note that based on the runoff volume control criteria, the definition of Pre-Development will not impact the sizing of LID facilities to achieve the required volume control. The calculation of water balance volumes would be impacted by the lower pre-development runoff coefficients; however, the proposed runoff control volume target will likely overcompensate for the water balance volume regardless. The major impact this new definition will have is with regard to quantity control for regulatory events (i.e. 100 year storm), which is not the focus of this LID Manual. This will result in considerably larger SWM pond blocks or underground storage facilities. We therefore reiterate that the proposed definition of Pre-Development being anything less than current conditions is not appropriate, it is not relevant to the objectives of the LID SWM Guidance Manual and it will result in unnecessarily oversized SWM quantity control infrastructure.
- Section 3.2, second bullet Pre-Development for Re-Development, Re-urbanization and Intensification Definition same comment as above currently 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 (i.e. combined sewer system), not as a general guideline.
- Section 3.3.3.2 Similar to the definition of "pre-development" and "re-development" it is inappropriate and likely very difficult to achieve the request for an entire site to meet the current runoff volume control targets as opposed to being limited to the expansion area. The associated cost and implications to an existing site could be prohibitive to the owner who is improving or expanding their property. Similar to the approach for Linear works which are only required to address the net change, we request that the word "entire" be replaced with "modified portion of the" to address this issue.
- **Table 5.1** Our previous requested modifications to this table were not incorporated. We again request your reconsideration of the following items:
 - o "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**. We note that the "Seaton" example of a "large" site is a 3000 ha development, which is suitable to the associated modelling approach. A 250

- 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. For example, a 1ha naturalized site would not be
 appropriate to utilize a "D" type model.
- Many smaller sites are adjacent to wetlands, cold-water 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.</p>

We recognize and appreciate the pre-amble to Table 5.1 suggests a practical approach to the model selection, however without reflecting the potential scenarios noted above, we remain concerned that the model selection process will default to the most onerous modelling approach as defined by the table when implemented by Provincial or Municipal staff in the future.

- Section 6.0 Climate Change The anticipated result of this chapter is that every development application will be supported by a Climate Change impact assessment. The document includes a very elaborate approach with many variables and uncertainties. A more direct approach is required for the practitioner and review agency staff to both prepare and evaluate the Climate Change impact assessment. There are numerous assumptions that are required for which more guidance will be required from the Province or the local municipality or Conservation Authority. The expectations associated with the impact study should be more clearly defined to ensure a consistent approach is taken. The incorporation of additional specific examples related to actual projects would be extremely helpful to clearly define the expectations of MOECC with regard to the scope of work that is anticipated. The examples should be completed in a format that would be the anticipated for submission to the MOECC. We would suggest incorporating examples such as:
 - 1ha infill high-rise site plan;
 - o 2 ha commercial site plan;
 - o 4 ha infill townhouse site plan; and
 - o 20ha greenfield residential subdivision outletting to a watercourse.
- Section 7.4.1- Frequently Asked Question #3 the need for an ECA for private lot infiltration trenches should be reconsidered. Private lots already include several LIDs such as disconnected roof drains, extra depth topsoil, shallow grassed swales etc. which do not require ECAs, but are part of overall treatment train stormwater solutions. Infiltration trenches would be just another form of private LID. The administrative process alone to have an ECA issued by the Ministry for every private lot with an infiltration LID would be extremely onerous. The likelihood that the ECA would

be transferred to future ownerships of private residential lots with LIDs is also extremely slim. We recommend that private lot LIDs should be added to the exemptions in O.Reg. 525/98, which currently excludes SWM infrastructure on private lots that outlet to a storm sewer.

- Section 10.3 For the same reasons that site plans <5ha utilizing the CVC/TRCA LID design guideline are exempt, any LIDs designed utilized in a plan of subdivision and designed in accordance with the confirmed methodologies identified in the CVC/TRCA LID guideline should also be exempt from compliance monitoring. These facilities have already been tested and proven to be effective if constructed properly. As a result, the LIDs should only be subject to certification that they have been built in accordance with the approved design drawings. The current approach would result in large capital expenditures to monitor a proven methodology.</p>
- Table 9.6.1 An annual O&M Report for LIDs on private residential lots will be extremely onerous for the lot owners and for whichever agency is anticipated to receive and review these reports. Similar to our comment on Section 7.4.1, LIDs on private residential lots should be excluded from this process. Likewise, the LC approach should not apply to LIDs on private residential lots, other than what is secured through the existing Subdivision Agreement process.

Section 10.5 – the suggested level of "Conventional SWM Monitoring Programs" is not consistent with current ECA conditions. SWM facilities designed in accordance with MOECC SWM Design Guidelines are assumed to meet water quality and quantity control requirements and do NOT require additional monitoring, provided they are built in accordance with the design specifications.

It would be very helpful if the next update of the LID SWM Guidance Manual could include a Track Changes version so the changes can be easily identified.

On behalf of BILD and OHBA, we appreciate the continued opportunity be part of the Stakeholder Review Group to provide constructive feedback on the proposed guidance documents based on the experience of our members. We would greatly appreciate the opportunity to discuss the above items in detail since they remain unaddressed from our previous comments on Draft #1 of the Guidance Manual.

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

Sincerely,

SCS Consulting Group Ltd.

Steve Schaefer, P. Eng.

Principal

sschaefer@scsconsultinggroup.com

c. Ms. Danielle Chin, BILD

Mr. Mike Collins-Williams, OHBA