



November 23, 2020
Our File: 220162

Via Email: pn@mccarch.com

MC Architects
870- 3rd Avenue East
Owen Sound, ON N4K 6K61

Attention: Mr. Paul Nicholson

Re: Sydenham Innovation Campus
Site Improvements – 1130 – 8th Ave. East
City of Owen Sound

Dear Paul,

As part of the site improvements being undertaken at the Grey County Innovation Campus, there are potential revisions to the sidewalks and drive aisles near the front of the building to allow for additional parking areas to be created as the school is converted to a new use. The proposed improvements may not necessarily be undertaken immediately but would be available to be undertaken as the use in the building increases and additional parking is required. As such, it was requested that GM BluePlan comment on the effect that the potential site improvements will have on stormwater runoff from the site.

The only area where revisions are proposed is to convert an area that is half asphalt and half sidewalk to new asphalt parking spaces which will improve the barrier free access and parking spaces in accordance with the current building code. The result is no change in the imperviousness of the site, and the conversion of 160 m² of area that is currently concrete sidewalk to asphalt. Another small revision involves providing a drainage swale along the edge of asphalt on the west part of the site to ensure all of the snow storage area is directed to the parking lot drainage system.

Through pre-consultation discussion with the City of Owen Sound, the initial plan was to reconstruct the entire parking lot area and to reduce the grassed islands. At that time, the City's SWM quantity/quality control requirements were the following:

1. Post-development peak flow levels to the off-site receiving drainage system for all storm events up to and including the 100 year design storm are not to exceed the existing 5 year design storm level;
2. The overland flow route for storms exceeding the capacity of the on-site SWM system must be shown; and,
3. On-site quality control for the stormwater flow is to achieve an 80% long term Total Suspended Solids (TSS) removal rate prior to release to the off-site receiving drainage system.

Given the minor change to the site, the first requirement seems excessive. Unless there is a known issue with the downstream storm sewer that requires all sites upstream to drastically reduce their peak flows under major storm events, I would kindly request this requirement to be revised to post-to-pre flows to be maintained for all storm events. We don't feel this minor revision to the parking lot should spur a full new stormwater management pond to reduce the 100 year peak flow from the site.

Comment 2 is fair and the overland spill routes from the site are shown on the Grading and Drainage Plan as being directly via the driveway entrance to the 8th Street East right-of-way.

While comment 3 is fair and is typical with most developments, once again it seems excessive given that the storm catchbasins in both parking lots have goss traps which were previously approved by the City under separate Stormwater Management Reports for each parking lot. To satisfy Comment 3 to today's standards of stormwater quality treatment, I would recommend an oil/grit separator to be installed in place of the manhole on the west side of the easterly driveway entrance. A treatment unit at that location would provide stormwater quality treatment for runoff from both parking lots prior to draining from the site. However, given the very minor increase in asphalt from sidewalk, and the high cost of the treatment units (\$30,000 to \$40,000) I would question whether this should be a requirement for such a small revision to the parking lot.

Overall, with the proposed site improvements, no change is expected in the quantity of stormwater draining from the site to the 8th Street East storm sewer, and stormwater quality is expected to be more or less unchanged although a small area is converted from sidewalk to asphalt. We kindly request the City to review the proposed site improvements on the attached plan and to reconsider the stormwater requirements for the site. Following reconsideration, if additional design is required, we would be more than happy to provide it. We wanted to provide the new proposed design before requesting the additional evaluation.

Should you require any further input please do not hesitate to contact me.

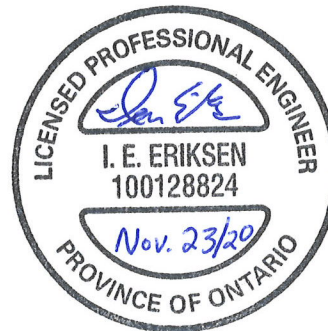
Yours truly,

GM BLUEPLAN ENGINEERING LIMITED

Per:



Ian E. Eriksen, P.Eng.
IEE/mr



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