

Consulting Engineers

July 12th, 2011

Corporation of the Municipality of Leamington
38 Erie Street North
Leamington, Ontario
N8H 2Z3

Attention: Lu-Ann Barreto, Drainage Superintendent

Dear Lu-Ann:

SUBJECT: STURGEON CREEK DRAIN
Changes in Assessment for 1560987 Ontario Limited
Parcel 650-02500
Municipality of Leamington, County of Essex
Project No. D-11-021

1.0 Authorization

In accordance with instructions received from you on June 28th, 2011, we have made all of the necessary investigations and determinations for the preparation of a report, in accordance with Section 65 of the "Drainage Act, R.S.O. 1990, Chapter D.17, as amended 2010". This report deals with adjustments to the Value of Outlet Liability within Parcel 650-02500 to reflect its utilization of the "Sturgeon Creek Drain" for an increase in total flow volumes from the parcel due to the existing and proposed greenhouse developments on the site.

Our appointment to deal with this request, where "the nature or extent of the use of a drainage works by land assessed for the drainage works is subsequently altered", is in accordance with and pursuant to Section 65.(3) of the "Drainage Act, R.S.O. 1990, Chapter D.17, as amended 2010". We have inserted herein a copy of Section 65 for reference purposes, labelled **Appendix "A"**. We have therefore performed all of the necessary research, investigations, and review of all pertinent documentation, etcetera for the carrying out of our study and we report thereon as follows.

2.0 Background

From work carried out on behalf of the owner, we have established those areas that have previously been and those areas that are to be developed that will result in increased total flow volumes to the "Sturgeon Creek Drain". Work on the parcel has already included preparation and approval of storm water management reports for the existing greenhouse developments and reports will be submitted to the Municipality for review and approval of new greenhouse developments on the site.

We have also obtained reference information from the Municipal Drainage Department for the affected portion of the drain,

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including the current governing by-law and report for the "Sturgeon Creek Drain", which is the April 30th, 2010 report by Ed Dries, P.Eng., and the assessment schedule that was revised August 9th, 2010 by the Court of Revision. We find that the lands affected by the proposed greenhouse development are approximately the parcel shown in the Dries report that was owned by 1560987 Ontario Limited, described as Part Lots 4 & 5, Concession 3, Geographic Township of Mersea.

3.0 Existing Drainage Conditions

From our review of the storm water management (SWM) work completed to date and currently being carried out on behalf of 1560987 Ontario Limited, we were able to establish the overall parcel areas affected by this study.

From our review of the latest engineer's report on the "Sturgeon Creek Drain", which is the April 30th, 2010 report by Ed Dries, P.Eng., we were able to determine which areas within the affected parcel are currently assessed to and utilize the "Sturgeon Creek Drain" as an outlet.

Based on the above research and investigations, we have prepared plans labeled herein as **Appendix "B"** which show:

1. the boundaries of the affected Parcel 650-02500
2. the existing and proposed greenhouse construction

Parcel 650-02500 currently comprises 14.900 hectares (36.82 acres) and is the original parcel. The parcel is presently assessed the following affected area to the "Sturgeon Creek Drain" in the current report:

- a) Parcel 650-02500 14.890 hectares (36.80 acres)

as confirmed by the April 30th, 2010 report and revised assessment schedule dated August 9th, 2010 for the "Sturgeon Creek Drain" prepared by Ed Dries, P.Eng.

4.0 Allowable Release Rates and Stormwater Management

The SWM report documentation already provided and to be provided by our office to the Municipality will show that storm water management (SWM) practices are being or are intended to be utilized for the existing and proposed greenhouse development on the parcel. Under no circumstance would the additional runoff volumes be permitted to drain into the "Sturgeon Creek Drain" unless storm water management is provided. The storm water

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management systems must ensure that the allowable release rate into the "Sturgeon Creek Drain" for the parcel does not exceed the 1:2 year storm pre-development runoff rate for the entire area to be connected. Under no circumstance should the Municipality consider allowing the increased total flow volumes into the "Sturgeon Creek Drain" unless this condition is met. Proper stormwater management facilities restricting the flows to the allowable release rate will ensure that the subsequent flows will have no adverse effect on the capacity of the "Sturgeon Creek Drain".

Storm water management reports must be prepared for any proposed greenhouse development taking the allowable release rate into consideration, and these should be submitted to the Municipality for review by the staff and approved by them and the Essex Region Conservation Authority (E.R.C.A.) before any work proceeds.

The flows from the greenhouse parcel will generally outlet at the south side near the southeasterly corner of Parcel 650-02500 close to the midpoint of the "Sturgeon Creek Drain". We also find that the use of SWM controls will reduce the peak flows in the drain and therefore the greenhouse development will not adversely impact on the downstream bridge structures and drain sections. Based on our findings, we believe that it is reasonable to allow for the increased total flow volumes from the existing and proposed greenhouse lands, provided that the necessary storm water management provisions are maintained for the existing greenhouse development and are made and maintained for proposed greenhouse expansions.

5.0 Subsequent Connection Charges

We find that the area being drained to the "Sturgeon Creek Drain" from the affected parcel will not be significantly increased as a result of the greenhouse development. Normally an increase in parcel area would result in buy-in charges to the affected parcel for the additional area being brought into the drain based on the remaining life of any recent work carried out on the Municipal drain. For this project we find, from our investigations with the Municipality, that the total area from the affected parcel now draining to the "Sturgeon Creek Drain" will be 14.900 hectares (36.82 acres) rather than the 14.89 hectares (39.79 acres) that was originally assessed for the parcel. Accordingly, there is no significant additional area that requires a subsequent connection to the drain and consequently no charges are required to the affected parcel for the area being brought into the drain. As noted above, the SWM controls restrict the outflow rate to the predevelopment rates from the original affected area of the parcel

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and therefore no adverse impact on flow rates in the drain will occur.

6.0 Assessment for Increased Flow Volumes

With implementation of a stormwater management system limiting the outflows into the "Sturgeon Creek Drain" to the pre-development flow rate, as outlined above, the increased total flow volumes from the affected parcel would have no adverse effect on the capacity of the "Sturgeon Creek Drain". Therefore, based on the above conditions, we find that the "Sturgeon Creek Drain" has the ability to accept the additional total flow volumes from within the affected parcel, and we are therefore prepared to recommend the approval of this greenhouse development.

If Leamington is prepared to approve the increased total flow volumes from the lands of 1560987 Ontario Limited into the "Sturgeon Creek Drain", an update to the assessments is to be established by the engineer and be charged entirely to the owners of the affected lands. Section 65.(3) of the "Drainage Act, R.S.O. 1990, Chapter D.17, as amended 2010" requires that *"where the nature or extent of the use of a drainage works by land assessed for the drainage works is subsequently altered, an engineer appointed by the Municipality for the purpose shall make an inspection and assess the land for a just proportion of the drainage works"*.

From our investigations of the Municipality's drainage files, we have determined that the drainage works for which the affected parcel must be assessed for a just proportion is the "Sturgeon Creek Drain".

The increased Outlet Liability charge to the owner of the affected parcel should be based on the increased total flow volumes from the already assessed portions to the "Sturgeon Creek Drain".

7.0 Assessment Adjustments for Increased Total Flow Volume

We find that the Parcel affected in the April 30th, 2010 report and revised assessment schedule dated August 9th, 2010 owned at the time by the party noted above, should have its "Outlet" and "Total Assessment" amounts adjusted to reflect the increased total flow volume that will result from the existing and proposed greenhouse development on the parcel. The "Benefit" for this parcel will remain unchanged from its portion of the value shown in the original 2010 report and 2010 revised assessment schedule.

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8.0 Future Maintenance Charges

Based on our review of the existing and proposed areas of greenhouse construction and hard surface areas that are there now and that are to be created by the development of the site, we find that the following adjustments should be made to the August 9th, 2010 revised assessment schedule for the Outlet and Total Assessment values:

<u>Description</u>	<u>Acres</u> <u>Aff'td</u>	<u>Original</u> <u>Value of</u> <u>Outlet</u>	<u>Original</u> <u>Total</u> <u>Assessment</u>	<u>Updated</u> <u>Value of</u> <u>Outlet</u>	<u>Updated</u> <u>Total</u> <u>Assessment</u>
<u>1560987 Ontario Limited</u>					
<u>(650-02500)</u>					
Pt. Lots 4 & 5, Con. 3	36.82	\$1,332.00	\$1,332.00	\$1,763.00	\$1,763.00
			UPDATED TOTAL ON AG LANDS	\$57,006.00	\$100,821.00
			UPDATED TOTAL ASSESSMENT	\$92,031.00	\$152,031.00

These changes only impact the values for the assessments in the Municipality of Leamington and the values for the Town of Kingsville remain unchanged. In accordance with Section 65.(3) of the "Drainage Act, R.S.O. 1990, Chapter D.17, as amended 2010", we recommend that the values in the August 9th, 2010 revised Schedule of Assessment which is included within the current governing by-law be amended for the current affected parcel to show the updated values as noted above.

Therefore, in accordance with Section 65.(3) of the "Drainage Act, R.S.O. 1990, Chapter D.17, as amended 2010", we recommend that the above noted updated values be collected from the affected parcel by the Municipality of Leamington on a pro-rata basis only when there is future maintenance or repairs of the "Sturgeon Creek Drain", pursuant to the "Drainage Act, R.S.O. 1990, Chapter D.17, as amended 2010".

9.0 Summary and Recommendations

As already established herein, we have conducted a drainage study of the "Sturgeon Creek Drain" and have determined that the increased total flow volumes for Parcel 650-02500 from development as greenhouse sites, as shown within **Appendix "B"**, shall not adversely affect the performance of said Municipal Drain as long as the Stormwater Management Facilities limit the

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total release rate allowed into said drain to the 1:2 year pre-development runoff.

The pre-development runoff coefficient to be utilized shall be 0.15 for these lands and shall be established in the future Storm Water Management Reports to be submitted to the Municipality of Leamington for their approval.

We have also established herein updated "Outlet" charges to be paid by the affected Parcel 650-02500, which is a representation of the increased total flow volumes from the developed site.

Based on all of the above, we would therefore recommend that the Municipality of Leamington approve the existing and proposed greenhouse development of Parcel 650-02500 into the "Sturgeon Creek Drain", as long as all of the above requirements and conditions are complied with. We further recommend that the costs for preparation of this report be assessed 100.0% to the affected Parcel 650-02500.

If you, or Council, have any questions regarding this "Changes in Assessment Report", please do not hesitate to contact us. It is our understanding that this report is to be approved at the earliest to allow for construction works to be carried out on the proposed greenhouse development.

We respectfully remain,

Yours very truly,

N. J. PERALTA ENGINEERING LTD.


Gerard Rood, P.Eng.

GR/gr

APPENDIX "A"

SPECIAL PROVISIONS

Changes in assessment

Subsequent subdivision of land

65. (1) If, after the final revision of an engineer's assessment of land for a drainage works, the land is divided by a change in ownership of any part, the clerk of the local municipality in which the land is situate shall instruct an engineer in writing to apportion the assessment among the parts into which the land was divided, taking into account the part of the land affected by the drainage works. 2010, c. 16, Sched. 1, s. 2 (26).

Agreement on share of assessment

(2) If the owners of the subdivided land mutually agree on the share of the drainage assessment that each should pay, they may enter into a written agreement and file it with the clerk of the local municipality and, if the agreement is approved by the council by resolution, no engineer need be instructed under subsection (1). 2010, c. 16, Sched. 1, s. 2 (26).

Subsequent connection to drainage works, etc.

(3) If an owner of land that is not assessed for a drainage works subsequently connects the land with the drainage works for the purpose of drainage, or if the nature or extent of the use of a drainage works by land assessed for the drainage works is subsequently altered, the clerk of the local municipality in which the land is situate shall instruct an engineer in writing to inspect the land and assess it for a just proportion of the drainage works, taking into account any compensation paid to the owner of the land in respect of the drainage works. 2010, c. 16, Sched. 1, s. 2 (26).

Subsequent disconnection from drainage works

(4) If an owner of land that is assessed for a drainage works subsequently disconnects the land from the drainage works, the clerk of the local municipality in which the land is situate shall instruct an engineer in writing to inspect the land and determine the amount by which the assessment of the land should change. 2010, c. 16, Sched. 1, s. 2 (26).

Restriction on connection or disconnection

(5) No person shall connect to or disconnect from drainage works without the approval of the council of the municipality. 2010, c. 16, Sched. 1, s. 2 (26).

Notice of instructions

(6) The clerk of the local municipality shall send a copy of the instructions mentioned in subsection (1), (3) or (4) to the owners of the affected lands as soon as reasonably possible. 2010, c. 16, Sched. 1, s. 2 (26).

Engineer's assessment

(7) An engineer who prepares an assessment pursuant to instructions received under subsection (1), (3) or (4) shall file the assessment with the clerk of the local municipality. 2010, c. 16, Sched. 1, s. 2 (26).

Notice of assessment

(8) The clerk of the local municipality shall attach the engineer's assessment to the original assessment and send a copy of both to the owners of the affected lands. 2010, c. 16, Sched. 1, s. 2 (26).

Assessment binding

(9) Subject to subsection (11), the engineer's assessment is binding on the assessed land. 2010, c. 16, Sched. 1, s. 2 (26).

Costs

(10) The costs of the assessment, including the fees of the engineer, shall be paid by the owners of the lands in the proportion fixed by the engineer or, on appeal, by the Tribunal, and subsection 61 (4) applies to these costs. 2010, c. 16, Sched. 1, s. 2 (26).

Appeal of assessment

(11) If the engineer's assessment is for an amount greater than \$500, the owner of the land may appeal to the Tribunal within 40 days after the date the clerk sends a copy of the assessment to the owner. 2010, c. 16, Sched. 1, s. 2 (26).

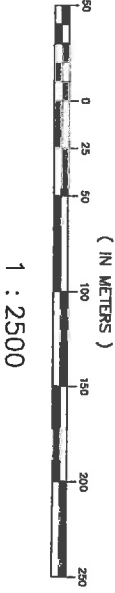
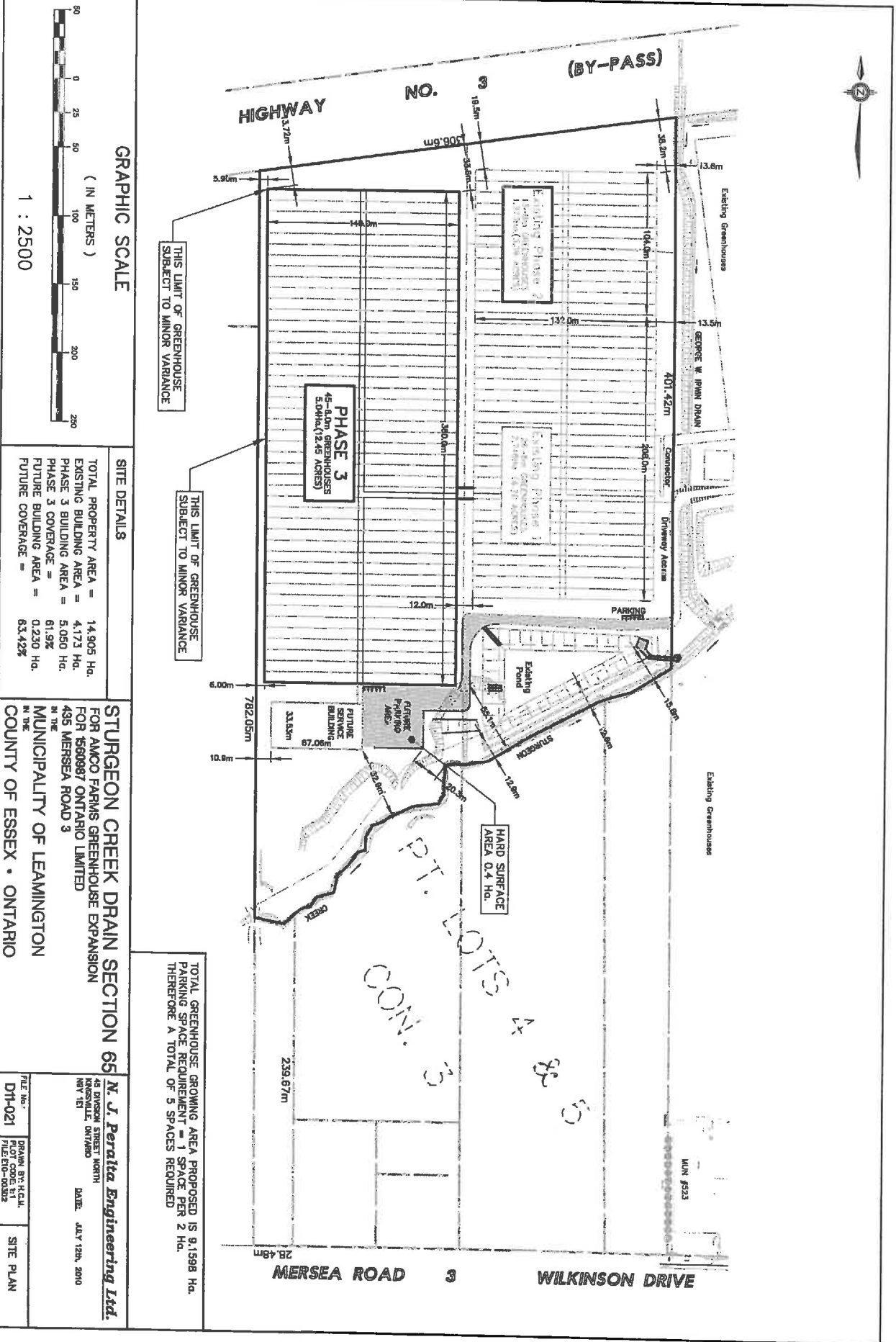
Use of amount collected

(12) Any amount collected under subsection (3) shall be credited to the account of the drainage works and shall be used only for the improvement, maintenance or repair of the whole or any part of the drainage works. 2010, c. 16, Sched. 1, s. 2 (26).

66. Repealed: 2010, c. 16, Sched. 1, s. 2 (26).

APPENDIX "B"

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SITE DETAILS

TOTAL PROPERTY AREA =	14,905 Ha.
EXISTING BUILDING AREA =	4,173 Ha.
PHASE 3 BUILDING AREA =	5,050 Ha.
PHASE 3 COVERAGE =	61.9%
FUTURE BUILDING AREA =	0,230 Ha.
FUTURE COVERAGE =	63.42%

STURGEON CREEK DRAIN SECTION 65
FOR AMCO FARMS GREENHOUSE EXPANSION
FOR 5660987 ONTARIO LIMITED
495 MERSEA ROAD 3
IN THE
MUNICIPALITY OF LEAMINGTON
IN THE
COUNTY OF ESSEX • ONTARIO

N. J. Peratka Engineering Ltd.
15 DUNDAS STREET NORTH
WINDSOR, ONTARIO
N9Y 1E1
DATE: JULY 12th, 2010

FILE NO.: D11-021
DRAWN BY: H.C.L.
PLOT CODE: 11
FILE: E10-0302

SITE PLAN

THIS LIMIT OF GREENHOUSE SUBJECT TO MINOR VARIANCE

THIS LIMIT OF GREENHOUSE SUBJECT TO MINOR VARIANCE

TOTAL GREENHOUSE GROWING AREA PROPOSED IS 9,1598 Ha.
PARKING SPACE REQUIREMENT = 1 SPACE PER 2 Ha.
THEREFORE A TOTAL OF 5 SPACES REQUIRED

CON. LOTS 4 & 5