



July 5, 2018

The Green Organic Dutchman Holdings Ltd.
PO Box 81025, Fiddler's Green
Ancaster, ON L9G 4X1

Attention: Marc Cernovitch

Dear Sir

**Subject: Addendum Letter Regarding Development Restrictions
1915 Jerseyville Road Facility**

WSP Canada Inc. (WSP) was retained by The Green Organic Dutchman Holdings Ltd. (TGOD) to provide various environmental consulting services related to their proposed greenhouse operations at 1915 Jerseyville Road West, Ancaster, Ontario (Site). The currently approved Site Plan development includes the construction of two buildings with a total building footprint of approximately 14,600 m²; however, TGOD may consider future expansion to the facility. In the case that additional development is proposed at the Site in the future, TGOD will be required to obtain necessary planning approvals for the development.

BACKGROUND

We understand that the currently-approved zoning for the Site by the City of Hamilton permits a maximum lot coverage of 20% and restricts individual buildings to a maximum area of 2,000 m². We understand that TGOD would like to amend these restrictions to allow for potential future development or alterations to the facility operation. In that case, additional studies under the Planning Act would be required prior to approval of any additional development beyond that which is currently approved. These studies are typical of development applications and the studies normally occur at the Site Plan stage.

We understand that under the current City of Hamilton zoning allowances, a greenhouse facility is permitted to a maximum lot coverage of 70%. Based on our studies to date, WSP is unaware of any technical reason to limit the maximum lot coverage to less than 70%.

WSP STUDIES COMPLETED FOR SITE PLAN APPROVED DEVELOPMENT

WSP was retained by TGOD to provide environmental consulting services, including geotechnical, hydrogeological and surface water services. A brief description of the studies that WSP have completed to date, as well a brief discussion regarding any future expansion to the property in terms of that area of study, is provided below.

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GEOTECHNICAL CONSIDERATIONS

WSP conducted a geotechnical investigation for the currently-approved development and the results were presented in the Supplemental Geotechnical Investigation report (August 15, 2017). The investigation included the advancement of boreholes within the proposed development area to determine the design requirements for the buildings, ponds and parking/roadway areas. Acceptable soil conditions to accommodate the building, roads and infrastructure were encountered across the Site. Any proposed future expansion would require an additional focused geotechnical investigation be completed to assess the subsurface conditions in other areas of the Site.

Based on the geotechnical investigation completed, there does not appear to be any geotechnical reason why the property would not be able to physically support a maximum lot coverage of 70%.

A copy of the geotechnical report was provided to the City of Hamilton.

ON-SITE WASTEWATER TREATMENT CONSIDERATIONS

WSP completed the design for the on-site waste water treatment (septic) system for the currently-approved facility, which is presented in our OBC Sewage System Design Report (November 28, 2017). The system was designed and approved for the domestic sewage flows from the employees at the Site, since no process wastewater from the greenhouse is designed to enter the sewage system. The current septic system was designed for a total of 90 employees. The required septic field for the current facility is approximately 1/10 ha. There is likely adequate space to accommodate significantly larger wastewater flows given that the total site area exceeds 34 ha.

Any future development at the Site would require further sewage system design calculations and studies to be completed. The results of the septic design report completed by WSP in 2017 do not suggest any reason why the property could not sufficiently process additional sewage which may be created by future development at the Site. We note that at flows greater than 10,000 L/day, the system is designed and approved under a Ministry of Environment and Climate Change process as opposed to the Ontario Building Code (OBC) process for the current system.

A copy of the OBC Sewage System Design Report (November 28, 2017) was provided to the City of Hamilton.

HYDROGEOLOGICAL CONSIDERATIONS

WSP completed a Hydrogeological Study (Phase 1) in 2017 on the existing dug well on the property. The results of the study found that the dug well may be able to provide a water supply to a portion of the development, but recommended that an additional water supply well be installed at the Site. A new bedrock supply well was drilled and WSP completed hydraulic testing of the new well. The results of the testing were presented in a Hydrogeological Study (Phase 3), prepared by WSP in 2017. The study found that the new well can supply the currently-approved development with a sufficient volume of water for operation. The study also found that impacts from the groundwater withdrawal for the Site will not negatively impact surrounding supply wells.

The completed hydrogeological study report were completed to ensure that the bedrock supply well has sufficient supply to meet the currently-approved facility's water demands and that pumping the required volume of water from the well will not negatively impact the supply to any surrounding water wells. Future development at the Site will require additional water supply, which may require additional wells to be drilled at the Site, or an alternate water source to be determined. As presented in the Hydrogeological Report, a total of 40,792 L was pumped from the bedrock well over 24 hours and the observed drawdown at the bedrock well after 24 hours of pumping was 4.95 m, which represented 11% of available drawdown. The conservatively calculated



well yield was estimated to be 60,200 L/day, which was much greater than the maximum estimated water requirements for the Site of 40,000 L/day. As such, the hydrogeological studies completed indicate that there is additional capacity available in the current bedrock well beyond the currently-approved facility's requirements. We note that at daily water taking volumes of greater than 50,000 L/day, the facility will require a Permit to Take Water issued by the Ministry of the Environment and Climate Change. Additional hydrogeological studies will be required to be conducted on the existing bedrock well, or on additional new wells, to support future development to determine an appropriate water source to meet the needs of the future development. These would be completed at Site Plan stage. At this time, we do not see any hydrogeological reason to limit the Site development area or building sizes.

The hydrogeological reports were provided to the City of Hamilton for review. WSP review comments from Cambium Inc., the City of Hamilton's hydrogeological consultant, dated October 12, 2017 and December 18, 2017 and WSP provided a response letter to the December 2017 comments, dated January 12, 2018. All review comments received from the City of Hamilton as part of the planning process have, therefore, been addressed to the City's satisfaction. In addition, we note that the previous technical comments from the City of Hamilton (Cambium Inc.) are not related to lot coverage or building size.

SURFACE WATER DISCHARGE CONSIDERATIONS

WSP prepared a Surface Water Assessment Study (October 2017) as a pre-consultation document prior to an application for an Environmental Compliance Approval (ECA) from the Ministry of the Environment and Climate Change (MOECC). The ECA will be required to obtain approval to discharge process water into a surface water receiver which flows across the Site (Big Creek). The facility will obtain irrigation water for the greenhouse from a deep bedrock supply well. The well water will be treated with a reverse-osmosis system prior to use for irrigation. The discharge water from the reverse-osmosis system is proposed to be discharged to Big Creek.

The ECA application process is currently ongoing. The preliminary report completed in October 2017 indicates that Big Creek has sufficient assimilative capacity to accept the discharge from the Site. However, it is possible that if future greenhouse buildings were constructed at the Site, the creek may not have the capacity to handle additional discharge. As such, an alternative discharge location may be required for future Site expansion. Alternatives, including off-site disposal at a licenced facility, would be investigated in future studies at the Site Plan stage to support expansion. Including offsite disposal at a licenced facility. At this time, we do not see any surface water discharge related reason to limit the Site development area or building sizes.

A copy of the Surface Water Assessment Study report was provided to the MOECC for their review. A pre-consultation meeting was held in November 2017. During the meeting, comments and further action was agreed upon by all parties and additional longer term testing is ongoing. The formal application for the ECA is anticipated to be submitted in July 2018. With this additional length of the study period, no concerns are anticipated to complete the ECA approvals process.

SUMMARY

WSP has completed several environmental engineering studies in support of the development of the greenhouse facility at the Site, including geotechnical, hydrogeological and surface water studies. The studies and designs were completed for the currently-approved Site Plan development, including the construction of two (2) buildings, with a total building footprint of approximately 14,600 m². The studies completed are typical studies required for greenhouse development application. Any comments received on the studies by the City were addressed and there are no outstanding concerns. No comments regarding these studies which were received from the City were related to lot coverage or building size.



Any future expansion proposed at the Site would require that the engineering studies previously conducted be redone or revised for the proposed development. These studies are normally completed at the Site Plan stage. We do not see any technical reason why the property cannot support a maximum lot coverage of 70%. From a technical perspective, the geotechnical, hydrogeological and surface water requirements of the marijuana greenhouse facility are the same as any other greenhouse facility, and it should be treated as such.

We trust this provides the information you require.

Yours truly,
WSP Canada Inc.

A handwritten signature in blue ink that reads "Kevin Fitzpatrick". The signature is written in a cursive style and is set against a light yellow rectangular background.

Kevin Fitzpatrick, P.Eng.
Senior Project Engineer, Environment

Encl.:
WSP ref.: 171-01850-01