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MEMORANDUM

Monday, June 27, 2022

TO: Rav Soomal, Vice President of Operations, Ridge North America FROM: Blake Lawson, P.Eng, Civil Engineer, Lawson Engineering Ltd.

SUBJECT: Okanagan Gondola Site Servicing (Water & Sanitary)

Dear Mr. Rav Soomal,

Further to our previous Site Servicing and Site Access Memorandum issued October 27th, 2021, Lawson Engineering Ltd. (LEL) has prepared the following revised memorandum as it relates to the potential site servicing strategy for the proposed development. This memorandum has been revised following the receipt and review of the Water Feasibility Assessment prepared by Western Water Associates Ltd dated March 15th, 2022, as well as the Sewage Dispersal System Assessment prepared by DeansTech Consulting Ltd dated April 8th, 2022.

As noted in the previous memorandum, one element of the *RDNO Application for Zoning Amendment* is to provide comment on the proposed services. Based on the water and sewer assessments noted above, LEL has been asked to provide an updated description of the proposed high-level servicing concepts for this development:

- 1. Water Supply Based on the Water Feasibility Assessment prepared by Western Water Associates Ltd dated March 15th, 2022, the conditions for developing an onsite groundwater supply system to provide water supply service to the development is considered marginally feasible due to the insitu bedrock conditions present onsite. Although the future well yield is unknown, it remains the intent of the developer to supply the development with private onsite water systems. These systems may be independent for each individual building (or physical area). It is expected that multiple wells at different locations will be required to satisfy the water demand for the site, with additional water sources also likely required to maintain these demands over the longer-term horizon. Water sources including the capture of rainwater for storage and reuse, as well as connection to an existing offsite water source (if available) for fire protection and irrigation, are two sources being considered to help compliment the onsite water supply strategy. Water from the supply wells at each location would be pump to on-site storage (such as an aboveground storage tank) and fed to the local water system as need. This will be required to facilitate operational demands as they vary through the day and during peak times if suspected long term sustainable well yields prove insufficient.
- 2. Sewer Disposal It remains the intent of the developer to provide the development with private onsite wastewater disposal systems. These systems will be independent for each individual building (or physical area). Based on the Sewage Dispersal System Assessment prepared by DeansTech Consulting Ltd dated April 8th, 2022, the existing ground conditions consist of morainal material deposited by glacial ice, a mixture of boulders, sand, silt, and clay. The soils encountered onsite have a moderately coarse texture and is considered well drained. It is expected that the soil types observed within the existing site are considered suitable for ground dispersal of treated sewage



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wastewater, with an expected soil permeability in the range of 550-2000 mm/day. Septic dispersal field locations onsite will need to be coordinated with the potential well locations as per DTC's preliminary assessment.

As noted, this memorandum is intended to highlight the intent for site servicing at an initial concept level only. LEL notes that further studies and detailed review will be required to develop the final site servicing concepts as the development design progresses, and situated in locations of acceptable terrain.

If you have any questions or concerns, please feel free to contact the undersigned.

Best Regards,

Lawson Engineering Ltd.

BUUU

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