

November 7, 2024

MTE File No.: C53549-200

Eric Schneider, MCIP, RPP
Senior Planner, Development and Housing Approvals Division
City of Kitchener
200 King Street West
Kitchener, ON N2G 4V6
Email: eric.schneider@kitchener.ca

Dear Eric:

**RE: Applications for Official Plan Amendment and Zoning By-Law Amendment
4611 King Street East, Kitchener**

MTE Consultants Inc (MTE) was retained by LJM Developments (“LJM”) to provide a professional opinion on a proposed redevelopment for the property located at 4611 King Street East in Kitchener, Ontario (“Site”).

MTE understands that the proposed redevelopment would include mixed land use (residential and commercial). MTE further understands that on October 30th, 2024, LJM met with nearby residents to listen to their comments and concerns associated with the redevelopment plans.

Reportedly, residents were concerned that the construction of the proposed development would have adverse impacts on the water quality and/or water quantity with their potable water supply wells. MTE understands that the nearby residents currently depend on their wells for their household water supply and drinking water.

Based on a review of available Ministry of the Environment, Conservation and Parks (MECP) Water Well Information System records, there are 84 well records within 250 metres of the Site. The 84 well records are categorized as follows:

- 39 domestic water supply wells;
- 4 commercial water supply wells;
- 11 monitoring wells or test holes; and
- 30 as not used or unknown.

MTE notes the average depth of the domestic or commercial water supply wells is approximately 40 meters below ground surface (MBGS) with approximately 75% of water wells as being completed within the underlying bedrock aquifer. With the exception of well record 6501114 the average depth of a water supply well completed within the overburden was 37 mbgs, while the average depth to bedrock was noted to be approximately 40 mbgs. This indicates that those wells completed in the overburden likely obtain their water supply from an extensive aquifer, commonly referred to as the contact aquifer, which is located directly above the bedrock surface.

In order to understand and mitigate potential impacts to nearby water supply wells prior to Site Plan Approval, MTE will be retained by LJM to complete a Hydrogeological Investigation and associated subsurface investigations which will characterize the underlying soil stratigraphy, hydrogeology and water quality at the Site. These investigations will include a private water well survey which includes a door-to-door water well survey of residents within 250 m of the Site. This survey will allow MTE to characterize surrounding water supply wells (depth, water source, location, etc.) in context to the proposed redevelopment. Additionally, the door-to-door well survey will aid in confirming the presence and types of water wells identified by the MECF water well records and/or identify absence water wells that do not have a well record (e.g. dug wells).

The information obtained through the investigation will be used to assess concerns related to potential adverse effects to nearby residential water supply wells. In the event potential adverse effects are identified, MTE will work with LJM and nearby residents to develop a monitoring and mitigation plan to assess nearby residential water wells during redevelopment and mitigate potential negative impacts on water quality or quantity.

Should you have any questions, please do not hesitate to contact the undersigned.

Yours Truly,

MTE Consultants Inc.



Fraser Cummings, M.Sc., P.Geo

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