

MEMORANDUM



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Page 1 of 3

To: Mr. Marcel Denommé
Vice President of Land Development
Lioness Developments Inc.

Date: November 9, 2018

JLR No.: 28440

CC: Ms. Christa Jones
Land Development Coordinator
Urbandale

From: Jordan Morrissette, M.Eng., P.Eng.

Re: 2723 Lancaster Road
Lioness Developments Inc.
Zoning By-Law Amendment
Servicing Brief

INTRODUCTION

Lioness Developments Inc. (Lioness) has retained the services of J.L. Richards & Associates Limited (JLR) to prepare a servicing brief in support of a Zoning By-law Amendment Application for the rezoning of the 0.68 ha property located at 2723 Lancaster Road in the City of Ottawa. This servicing brief outlines the proposed servicing strategy to accommodate the rezoning of the subject lands. This brief has been prepared in accordance with the latest City of Ottawa Design Guidelines and associated Technical Bulletins.

SITE DESCRIPTION AND BACKGROUND

The subject property is located at 2723 Lancaster Road within the urban limits of the City of Ottawa. The subject site consists of one building centred within the property limits with parking available on all four sides of the building. Existing Light Industrial and Heavy Industrial developments surround the subject site. Lancaster Road is located southwest of the building entrance and a CN railway track is located northeast of the building adjacent to one of the site parking areas.

Lioness desires to modify the existing use of the property to include a place of worship within the building while maintaining the exterior landscape of the property as is. The current zoning of the subject property is Light Industrial.

WATER SERVICING

No change to the existing water service for the subject property is proposed as part of the modifications to the existing building and rezoning from Light Industrial to Institutional. It is noted that no additional sprinkler systems or washrooms are being added within the existing building and the building is not being expanded.

Design water demands for the existing water system are assumed to be based on an allowance of 35,000 L/gross ha/d as per typical design guidelines with a peaking factor ranging from 2 to 4 times the average usage rate. Modifying the zoning to Institutional is not anticipated to increase the water demand because water demands for institutional usage are generally designed based on a lower allowance of 28,000 L/gross ha/d and lower peaking factor of 1.5. Therefore, based on design guidelines, the existing water system should be adequate for the water demands associated with a modification of the zoning to Institutional. Design guidelines for fire hydrant spacing remain the same.



Figure 1 – Location Plan

SANITARY SERVICING

No changes to the existing wastewater servicing for the subject property are proposed as part of the modifications to the existing building and rezoning from Light Industrial to Institutional.

It has been assumed that the existing sanitary sewers that service the subject property were designed for this site based on the Ministry of the Environment Guidelines for the Design of Sanitary Sewage Works (July 1985), which have similar design parameters to the First Edition of the City of Ottawa Sewer Design Guidelines (November 2004). With recent revisions to the wastewater design flow parameters for the design of sanitary sewers identified in Technical Bulletin ISTB-2018-01, rezoning the subject property to Institutional would result in a lower peak design flow (refer to the below comparison of peak design flows).

Light Industrial (Current Zoning)

- Peak design flow assumed to be based on the design value of 35,000 L/ha/day for Light Industrial developments as well as applicable design parameters in accordance with the Ministry of the Environment Guidelines for the Design of Sanitary Sewage Works (July 1985):
 - Site of ± 0.68 ha, 35,000 L/ha/day, peak factor 1.5 per City of Ottawa Design Guidelines
 - Average wastewater flow = 0.55 L/s (assuming 12 hour operation)
 - Peak Design Flow = 1.02 L/s industrial flow, including an infiltration flow of 0.28 L/s/ha

Institutional (Proposed Re-zoning)

- Peak flow calculations based on the design value of 28,000 L/ha/day for institutional developments as well as applicable design parameters in accordance with the City of Ottawa Sewer Design Guidelines (October 2012) and associated Technical Bulletins:
 - Site of ±0.68 ha, 28,000 L/ha/day, peak factor 1.5 per City of Ottawa Design Guidelines
 - Average wastewater flow = 0.44 L/s (assuming 12 hour operation)
 - Peak Design Flow = 0.89 L/s institutional flow, including an infiltration flow of 0.33 L/s/ha

Therefore, based on the above calculations, peak flows to the sanitary system are not expected to increase with a zoning modification from Light Industrial to Institutional.

It is also noted that no additional washrooms are proposed as part of the modifications to the existing building and, to our knowledge, no issues associated with the existing sanitary service for the subject property have been reported.

STORM SERVICING AND STORMWATER MANAGEMENT

All proposed modifications at 2723 Lancaster Road are to occur within the building footprint. No exterior site work modifications are proposed at this time and, to our knowledge, no issues associated with the existing storm service for the property have been reported. As such, no change to the existing storm servicing and onsite stormwater management is required.

CONCLUSION

No modification to the existing infrastructure is proposed as part of the zoning amendment application to 2723 Lancaster Road. Existing infrastructure should be adequate to accommodate a change from light industrial to institutional based on the following:

- The water demand and peak design wastewater flows for the subject site should not increase based on design guidelines.
- There are no proposed changes to the site that would affect storm servicing and stormwater management.

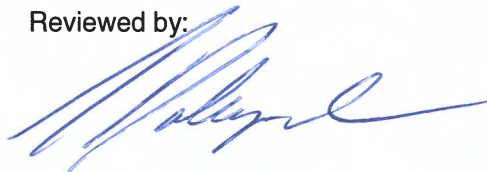
J.L. RICHARDS & ASSOCIATES LIMITED

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