Lithos

July 10, 2023

Engineering & Construction
Services
North York Civic Centre
5100 Yonge Street, 4th Floor
Toronto, Ontario
M2N 5V7

Attention: Marija Ilic, Manager, Development Engineering – North York District

Dear Mr. Amato:

Re: Response to City Comments	
Official Plan/ Zoning By-Law Amendment Application No.:	**22 127125 NNY 16 OZ**
Date of Circulation:	**February 21, 2023**
Applicant:	**Goldberg Group**
Owner:	**48 Grenoble Drive Limited**
Location:	**48 Grenoble Drive**
Ward:	**16**
Existing Equivalent Population:	**20 persons**
Proposed Equivalent Population:	**990 persons**
Increase in Equivalent Population:	**970 persons**
Previous Reference:	**May 25, 2022**

The following Comment Response Letter was previously submitted on May 12, 2023. Comment responses have not been changed with the exception of the Appendices' names, for clarification purposes. As we have not yet received a Comment memo regarding the May resubmission, we have submitted this again for visibility.

We are in receipt of the City's engineering submission comments dated April 11, 2023 prepared for the above noted project.

We have reviewed your comments and provide the following responses itemized as per your April 11, 2023 letter:

ENGINEERING AND CONSTRUCTION SERVICES REQUIREMENTS

PART I – OFFICIAL PLAN AND ZONING BY-LAW AMENDMENT APPLICATION

A. REVISIONS AND ADDITIONAL INFORMATION FOR ZONING BY-LAW AMENDMENT

The Owner is required to amend and/or provide reports and/or Studies and/or Drawings to address the following comments and resubmit for the review and acceptance by the Executive Director of Engineering and Construction Services prior to the enactment of Zoning By-Law Amendment.

4. **Functional Servicing and Stormwater Management Report, dated February 13, 2023 prepared by Lithos Group Inc.;**

General Comments

4.1. It is noted that the SWM component of the FSR (Section 5.0) appears to contain identical contents as the separately submitted SWM report. In the future submission, the consulting engineer should revise accordingly to prepare a FSR that includes only the below information required for zoning by-law amendment, (i.e., sewer capacity, water pressure, flows and groundwater); and keep detailed SWM analysis in the separate SWM report. This should be done in order to avoid the City asking for changes during site plan control to the combined FSR & SWM report that had been accepted/partially accepted for zoning. Typically, specific stormwater management details do not need to be included in the FSR, as only high-level/summary-type information related to the existing sewer system and storm drainage information would need to be included. Section 5.0 and any other pertinent sections of the FSR, should be revised/modified/removed accordingly with only high-level/summary type information. If the FSR & SWM report remains as a combined report and continues to include specific details, such as proposed pipe sizes, lengths, flow control devices/orifice diameters, proposed treatment devices, water balance, calc.'s, etc., the report cannot be accepted for zoning until everything in the report is acceptable.

Following coordination with the City, the Functional Servicing and Stormwater Management Report (Stage 1) has been revised to include only ZBA-level information, regarding our stormwater management approach.

4.2. Be advised additional comments may be forthcoming upon review of the next submission.

Noted.

Public Parkland Dedication

4.3. Please append the PFR email confirmation of the servicing requirements in an Appendix within the FSR.

The related email correspondence has been included in Appendix B of the Functional Servicing and Stormwater Management Report (Stage 1).

Stormwater Management

4.4. From the Civil and Architectural plans provided, it appears as though a gravity drainage SWM system with SWM tank located on the P1 level may be possible. Please coordinate with the appropriate disciplines to explore gravity flow solutions. This may entail changes to the SWM tank footprint, tank base elevation(s) etc. It is preferable to eliminate the proposed pumped system, if possible. If a pumping system is deemed necessary, the gravity solutions considered must be explained along with the reasons as to why each solution was not feasible.

Following coordination with the City, exploration of a gravity- driven tank system approach will be completed under the next SPA resubmission.

Foundation Drainage

4.5. Please see the attached marked-up Servicing Report Groundwater Summary form and Hydrogeological Review Summary form. Please review and revise as required.

Servicing Report Groundwater Summary has been revised accordingly.

B. INFORMATION RELATING TO GROUNDWATER

a. Please put N/A, when items do not apply.

The Servicing Report Groundwater Summary has been revised to include N/A when items do not apply.

b. Clarify that GW is not going to the STM network.

Groundwater flow will not contribute into the allowable peak flow rate of 28.4 L/s for the municipal storm network, as it will not be discharged into the City's storm network under post –development conditions.

C. ON – SITE GROUNDWATER CONTAINMENT

c. water – tight?

Section C has been revised to state that the proposed development will be constructed watertight.

D. WATER TIGHT REQUIREMENTS

d. Add mechanical' s email to letter

The updated letter from Smith + Andersen, including their email address, has been attached at the end of the Servicing Report Groundwater Summary.

Attachment: Water – tight letter, prepared by Smith + Andersen, dated March 15th, 2022

e. Add email.

The updated letter from Smith + Andersen, including their email address, has been attached at the end of the Servicing Report Groundwater Summary.

Sanitary Servicing

4.6. Be advised, a completed model of basement flooding area 55 is now available for consultants to use to complete the downstream sanitary sewer analysis. The consultant is to use the model to revise the sanitary downstream analysis per the City's Sewer Capacity Assessment guidelines. The data release form is attached and must be completed and submitted to the Case Manager. Once Toronto Water accepts the completed form, the model files will be release and forwarded to the applicant. Please update the report with the appropriate tables/figures/profiles etc. based on the results of the model analysis.

We have been provided with the InfoWorks model for the subject property and a downstream sanitary sewer analysis has been prepared accordingly. Please refer to Section 8.0 and to the Downstream Capacity Analysis Report found in Appendix G, of the Functional Servicing and Stormwater Management Report (Stage 1).

4.7. Furthermore, the model must be updated to include populations and private water sanitary flows from the most recent completed projects and development applications, per the list below. Please note, the applicant is responsible to review and add any other developments which may not be captured in the list below.

Address of Dev App	City File Numbers
7, 11 Rochefort Dr	21 239141 NNY 15 OZ; 21 239143 NNY 15 SB; 23 120642 NNY 15 SA
789, 793 Don Mills Rd, & 10 Ferrand Dr	22 184087 NNY 16 OZ; 22 184086 NNY 16 SA
25 St Dennis Dr	15 261823 NNY 26 OZ; 19 105324 NNY 16 SB; 15 261828 NNY 26 SA
7 St Dennis Dr, 10 Grenoble Dr	22 187482 NNY 16 OZ; 22 188139 NNY 16 SB
200 Gateway Blvd	23 118816 NNY 16 OZ
48 Grenoble Dr	22 127125 NNY 16 OZ; 22 127124 NNY 16 SA
1185 Eglinton Ave E, 2 Sonic Way	08 111649 NNY 26 OZ; 15 159976 NNY 26 SA 15 159786 NNY 26 SA
770 Don Mills Rd & 805 Don Mills Rd	21 190984 NNY 16 OZ; 21 191003 NNY 16 SB 21 190993 NNY 16 OZ; 21 191009 NNY 16 SB

The Infoworks model has been prepared to include the most recent completed projects and development applications, including all future developments, identified through the City's Application Centre.

4.8. Be advised, MH5512534152 to MH5512534175 is the last collector sanitary sewer before the trunk connection, which occurs at City manhole asset ID #: MH5512534175. The analysis must go up to this point and stop at the trunk connection.

The downstream sanitary sewer capacity analysis through InfoWorks modeling has been prepared up to the manhole asset ID #MH5512534175. Please refer to Section 8.0 and to the Downstream Capacity Analysis Report found in Appendix G, of the Functional Servicing and Stormwater Management Report (Stage 1).

4.9. Please ensure all references to City infrastructure: maintenance hole IDs, pipe IDs etc. follow the City's asset ID numbering convention.

The downstream sanitary sewer capacity analysis through InfoWorks modeling has been prepared to ensure that all references to City infrastructure follow the City's asset ID numbering convention. Please refer to Section 8.0 and to the Downstream Capacity Analysis Report found in Appendix G, of the Functional Servicing and Stormwater Management Report (Stage 1).

4.10. It is noted that the size of the proposed sanitary sewer on Grenoble was revised to 375mm diameter. Please provide the calculations to show how the sizing of the proposed sanitary sewer on Grenoble Drive was sized.

Calculations for the sizing of the proposed 375mm diameter sanitary sewer on Grenoble Drive have been provided. Please refer to Appendix D of the Functional Servicing and Stormwater Management Report (Stage 1), for details.

4.11. Under Section 6.3, it is noted that the new sewer is sometimes referenced as 300mm diameter as opposed to 375mm diameter. Please review and revise for consistency.

Section 6.3 of the Functional Servicing and Stormwater Management Report (Stage 1) has been revised with the new sanitary sewer referenced as of 375mm diameter.

<u>Water Servicing and Fire Flow</u>

4.12. Determination of the required fire flow for the development is to be calculated in accordance with Fire Underwriters Survey (FUS) Water Supply for Public Fire Protection 1999. Be advised there are discrepancies with the calculations presented as they relate to the requirements of the FUS. Please see the following:

4.12.1. Be advised the FUS guideline defines fire-resistive construction as "any structure that is considered fully protected, having at least 3-hour rated structural members and floors. For example, reinforced concrete or protected steel." To support these assumptions, a certification letter from the Architect is required for the proposed building. The letter needs to clearly state the type of material proposed to construct the building and that the material is of fire-resistive construction per FUS Guidelines. Additionally, the letter needs to confirm and clearly state that "vertical openings and exterior vertical communications are properly protected (one hour rating)" if the short form calculation for A is to be used to calculate the Fire demand. If the architect is proposing fire-resistive construction, please append the letter to the FSR in the next submission.

Following coordination with the City, our water demand calculations have been revised to be in accordance with FUS 2020 Guidelines. Consequently, two letters from the architect, providing information about the fire resistance of the structural elements and vertical opening and exterior vertical communications (dated May 12th and May 9th, respectively), as well as a corresponding letter from Lithos Group, have been included in Appendix B of the Functional Servicing and Stormwater Management Report (Stage 1).

4.12.2. The accounting of the gross floor area used to determine the fire flow required appears to separate each tower and podium for individual analysis. Be advised that an account of the largest floor areas must consider the total floor areas which span through the east and west towers, and podium. Please revise the analysis in accordance with this and the other comments.

The water demand calculations have been revised to consider the total floor areas which span through the east and west tower, and podium. Please refer to Appendix E of the Functional Servicing and Stormwater Management Report (Stage 1), for details

4.12.3. Furthermore, the FUS calculations presented considers the combustibility contents warrant a 25% reduction. We disagree with this reduction value. Please review the City's the guidance found in the Design Criteria for sewers and watermain regarding the combustibility reduction and revise as necessary.

Fire demand calculations have been revised to include a 15% occupancy reduction for 'limited combustible contents', as per FUS 2020 Guidelines. Please refer to Appendix E of the Functional Servicing and Stormwater Management Report (Stage 1), for details.

4.12.4. Please confirm the construction material type with the architect and update the FUS calculations accordingly. Please provide a certification letter from the architect to confirm the building construction material type for the development.

A letter from the architect, confirming the non – combustible construction material type, as well as a corresponding letter prepared by Lithos Group, have been included in Appendix B of the Functional Servicing and Stormwater Management Report (Stage 1).

4.12.5. The letter provided by Smith + Andersen to confirm the design of the sprinkler systems of the development does not indicate that they will be fully supervised and automatic with flow valve alarm. Please revise the FUS calculations such that it conforms with the sprinkler system(s) proposed for the development.

The letter previously provided by Smith + Andersen, has been updated to confirm that an automatic sprinkler system with a flow valve alarm, complying with NFPA 13 standards. The subject letter can be found in Appendix B of the Functional Servicing and Stormwater Management Report (Stage 1). Consequently, our water demand calculations have been updated to include a sprinkler reduction of 30% in order to conform with the above noted letter. Please refer to Appendix E of the Functional Servicing and Stormwater Management Report (Stage 1), for details.

4.13. Please update the FSR in accordance with the changes to the plans.

Considering that the project plans have not been updated, no revisions changes to the FSR have occurred beyond those previously indicated. Updated Civil Engineering Drawings will be provided at the Site Plan Application Stage.

5. Be advised that a response letter from the consulting engineer should be provided in the next submission to indicate how all the engineering comments have been adequately addressed. The response letter must indicate HOW the comment was addressed – it is not adequate to simply indicate that plans and reports have been revised.

Noted.

Should you have any further questions, please feel free to contact the undersigned.

Yours truly,

LITHOS GROUP INC.

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