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NextEng Consulting Group Inc.

July 25, 2024

Representative Holdings Inc. c/o David Horwood 242 Main Street East, Hamilton, ON L8N 1H5

### Re: Transportation Study Addendum 117 Forest Avenue and 175 Catharine Street South City of Hamilton Our Project No. NT-16-103

NexTrans Consulting Engineers (A Division of NextEng Consulting Group Inc.) was retained by Representative Holdings Inc. (The Client) to undertake a Transportation Study Addendum to address the City's comments for the proposed Zoning By-law Amendment application and site plan application. The subject sites are located at municipal addresses 117 Forest Avenue and 175 Catharine Street South, in the City of Hamilton.

NexTrans has prepared a Transportation Impact Study dated October 2023 in support of the proposed development application mentioned above. The City of Hamilton has provided comments dated April 22, 2024 (**Appendix A**).

The purpose of this Addendum is to address the City's comments and provide additional information as requested by staff.

## 1.0 COMMENTS AND RESPONSES

As indicated, the following comments have been received from the City of Hamilton and appropriate responses are provided, along with technical analysis provided in this Addendum Study:

 Transportation Planning approves of the Transportation Assessment (TA) submitted in support of the proposed 248 unit development without any additional revisions required. It shall be noted that any revisions to the site plan to include additional residential units shall require an updated TA in order to reflect the proposed modifications to the site plan moving forward.

**Response:** Noted. No further action is required at this time as no further revisions are provided.

2. Considering the increase in density being proposed within the subject lands, Transportation Planning shall require a provision of funds to the amount of \$10,000 for the purpose of installing future traffic calming measures within the surrounding area of the proposed development, subject to the satisfaction and approval of the Manager, Transportation Planning. At a time when the Applicant is prepared to provide the required funds, Transportation Planning will correspond with the Transportation Operations & Maintenance department to provide an account number for the funds to be deposited accordingly.

Response: Noted. This fund will be provided at the appropriate stage of the proposed development.

 Transportation Planning requires short-term and long-term bicycle parking to be provided as per the requirements of the City of Hamilton Comprehensive Zoning By-law 05-200, Section 5: Parking. All short-term and long-term bicycle parking shall be clearly indicated, illustrated and the total number of spaces shall be numbered on the site plan accordingly.



**<u>Response</u>**: Noted. Bicycle parking requirements have been clearly indicated in the revised site plan and Section 2 of this Addendum Study.

- 4. Transportation Planning recommends additional Transportation Demand Management (TDM) measures to be provided:
  - Provision of preloaded Presto/Transit passes with the purchase of an individual residential unit;

**<u>Response</u>**: As indicated in the October 2023 Transportation Impact Study, the proposed development has excellent access to the public transit and only located approximately 400 m (or less than 6-minute walk) to the Hamilton GO Train Station and transit terminal. The proposed development is also located within a few minutes walk to bus stops for HSR Bus Routes 22, 23, 24, 25, 26, 27. Therefore, the future residents who choose to live in this building will be most like take transit instead of driving given the easy access to public transit. On this basis, no additional transit incentives are required from the proposed development.

• Reducing the number of passenger vehicle parking stalls provided to the minimum required through the City of Hamilton Comprehensive Zoning By-Law 05-200, Section 5: Parking;

**<u>Response</u>**: Noted. NexTrans recommends that the proposed development reduce the number of vehicle parking supply where appropriate.

• Unbundled the cost of an individual parking stall from the cost of a residential unit; and

Response: Noted and the proposed development will comply with this comment.

• Provision of Electric Vehicle (EV) charging stalls within the underground parking area.

**Response**: Noted and have been provided in the revised site plan.

5. The existing right-of-way at the subject property along Catharine Street South and Forest Avenue is approximately ±20.0 metres. Transportation Planning does not require right-of-way dedications to be provided as the existing right-of-way width meets the requirements of the Council Approved Urban Official Plan: Chapter C - City Wide Systems and Designations, 4.5 Road Network Functional Classification, 4.5.2. Local Roads (Catharine Street South and Forest Avenue) are to be 20.117 metres.

**<u>Response</u>**: Noted. No further action is required at this time as no further revisions are provided.

6. Catharine Street South & Forest Avenue are both Local Roads. The Applicant is to dedicate a 4.57 metres x 4.57 metres Daylighting Triangle to the right-of-way, as per the Council Approved Urban Official Plan: Chapter C - City Wide Systems and Designations 4.5 Road Network Functional Classification; Daylighting Triangles 4.5.7.

**<u>Response</u>**: Noted. This requirement has been addressed in the revised site plan.



### Figure 1 – Proposed Daylight Triangle at Catharine Street S/Forest Avenue



 Catharine Street South & Young Street are both Local Roads. The Applicant is to dedicate a 4.57 metres x 4.57 metres Daylighting Triangle to the right-of-way, as per the Council Approved Urban Official Plan: Chapter C - City Wide Systems and Designations 4.5 Road Network Functional Classification; Daylighting Triangles 4.5.7.

Response: Noted. This requirement has been addressed in the revised site plan.

8. The required 4.57 metres x 4.57 metres Daylighting Triangle at the intersections of Catharine Street South & Forest Avenue, and Catharine Street South & Young Street have not been indicated or illustrated on the site plan. The site plan is to be revised in order to clearly indicated, illustrate and dimension the required 4.57 metres x 4.57 metres Daylighting Triangles accordingly.

Response: Noted. This requirement has been addressed in the revised site plan.

9. The existing easterly driveway access to Young Street has been indicated as being 'retrofitted' in order to allow for 'one inbound and one outbound lane (approximately 3± m each)'1 according to the submitted TA. Additional details are required indicating the proposed movements via the existing eastern driveway access that is proposed to lead to the underground parking from Young Street as illustrated in Figure 1. This existing driveway access is narrow and is currently non-conforming to city standards in order to facilitate two-way movements (the existing eastern Young Street driveway access is approximately 4.8± metres in width).

Response: Noted. This requirement has been addressed in the revised site plan.

10. Transportation Planning notes that for two-way operation onto municipal road, the driveway access width(s) must be 7.5 metres at the ultimate property line and curve radii minimum 7.0 metres. All proposed driveway accesses that are affected by the modifications to the subject lands shall conform to this requirement.

**<u>Response</u>**: Under a normal condition, this would be an ideal design. However, it should be noted that this is an infill development on a physically constrained site. Furthermore, the majority of he existing private driveways along Catharine Street S, Young Street and Forest Avenue have less than 7.5 or 7.0 m width.

Based on our experience, a 6.0 m driveway width is sufficient and will help slowdown vehicle when turning in and out of the site, which will reduce the possibility of hitting pedestrians or cyclists that use the sidewalk. With larger driveway width, drivers will turn in and out of the site much faster, which will increase the possibility of collision with pedestrians and cyclists that are crossing the driveway.

Under this urban condition and downtown Hamilton context, we recommend that all private driveway should be 6.0 m to reduce vehicle turning speed and reduce the possibility for collision with pedestrians and cyclists.

11. A minimum of 3.0 metres x 3.0 metres visibility triangles should be provided for each driveway access. They must be illustrated, dimensioned and identified on the site plan. Visibility triangles are between the driveway limits and the ultimate property line (right-of-way limit) and no object or mature vegetation can exceed a height of 0.6 metres above the corresponding perpendicular centreline elevation of the adjacent street.

Notwithstanding and without setting precedent, Transportation Planning will accept reduced visibility triangle dimensions however the Applicant shall consider visibility restrictions when designing the at-grade features of the subject lands in the areas where a typical 3.0 metre x 3.0 metre visibility triangle would be located, as illustrated in Figure 2.

**<u>Response</u>**: Noted. Instead of providing 3m x 3m daylight triangles, the proposed development will provide clearance zones with no streetscaping with vegetation that is greater than 0.6 m high. Figure 2 illustrates the proposed clearance zones for the proposed site accesses.





#### Figure 2 – Proposed Access Clearance Zones on Forest Avenue

 Transportation Planning has no objections regarding the proposed multiple driveway access points to Forest Avenue, as it will allow for easier waste collection, emergency access, and general circulation at-grade internal to the subject lands.

Response: Noted. This requirement has been addressed in the revised site plan.

13. The proposed 'Covered Ramp to Underground Concrete Terrace' is too narrower to allow for two-way movements based on approximate dimensions measured from the most recent site plan submitted as illustrated in Figure 3. A minimum internal aisle width of 6.0 metres is required in order to facilitate the two-way movement of vehicles. The site plan shall be revised in order to provide the minimum of 6.0 metre drive aisle width accordingly.

<u>**Response**</u>: It should be noted that this is an existing ramp that is currently servicing the existing building underground parking. It is our understanding that it is not possible to modify or widen this existing ramp. Vehicle turning movement diagrams are provided in this Letter to demonstrate the maneuverability of the passenger vehicles in and out of the ramp. These movements are illustrated in **Figures 5A** and **5B**.

14. Transportation Planning accepts proposed turning movement templates provided in the TA. If the sites internal circulation is revised, revised turning templates will be required to verify turning requirements for waste collection and emergency vehicles.

Response: Noted. No further action is required at this time.

## 2.0 BICYCLE PARKING REQUIREMENTS

Zoning By-law No. 05-200 Sections 5.7 c) and 5.7 e) (Consolidated as of September, 2019) has been reviewed and applied in the analysis. **Table 1** summarizes the bicycle parking requirements based on the above Zoning By-law requirements.

Land Use	No. of Unit/GFA	Long-Term Spaces	Short-Term Spaces	Total
Residential	248 units	0.5 spaces/dwelling unit 124 spaces	5 spaces	129 spaces

### Table 1 – Zoning By-law No. 05-200 Bicycle Parking Requirement



Based on the current Zoning By-law requirement, the proposed development requires 129 bicycle parking spaces (5 short-term and 124 long-term). The proposed development will provide a total of 124 long-term and 5 short-term spaces, for a total of 129 bicycle parking spaces. This meets the Zoning By-law requirement and this provision will encourage future residents to use active mode of transportation to and from the proposed development.

The proposed bicycle parking is labeled in Figures 3 and 4 below.



Figure 3 – Proposed Bicycle Parking Spaces

Figure 4 – Proposed Bicycle Parking Spaces





# 3.0 VEHICLE TURNING MOVEMENTS

As indicated, the proposed development will utilize the existing ramp that is currently has an access onto Young Street. Given that this is an existing ramp that is currently servicing the existing building underground parking, it is our understanding that it is not possible to modify or widen this existing ramp. Vehicle turning movement diagrams are provided in this Letter to demonstrate the maneuverability of the passenger vehicles in and out of the ramp. These movements are illustrated in **Figures 5A** and **5B**.

# 4.0 CONCLUSIONS

As indicated in the previous Transportation Impact Study dated October 2023 and this Addendum Study, this is an infill development on a constrained site. Based on the previous analysis and additional analysis/information provided in this Addendum Study, it is concluded that all of the City's comments have been addressed, on the basis of the site constraints and context.

We trust the enclosed sufficiently addresses your needs. Should you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

**Nextrans Consulting Engineers** A Division of NextEng Consulting Group Inc.

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