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April 1, 2019 **Reference Number:** 17161

Paulo Da Silva
Project Coordination, Land Division
Melrose Investments Inc.
145 Reynolds Street, Suite 400
Oakville, ON
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Dear Mr. Da Silva:

RE: Mayfield West Phase 2 - CaledonTerra - 21T-16007C – Town Comments 2nd Submission

We are pleased to submit LEA's response to the Town of Caledon comments dated February 13th, 2019, circulated via email dated March 8th, 2019. The comments (**Attachment 1**) pertain to the Transportation Impact Study (**Attachment 2**) that was submitted by LEA on October 14th, 2016. The latest draft plan is also included (**Attachment 3**). Below are the City comments in italics followed by LEA's response.

a) The study completed in 2016 and therefore the assumptions need to be updated. For example, page 7, the opening day is assumed to be in 2017.

LEA's Response:

Outlined below are the revised set of assumptions, based on the latest information available:

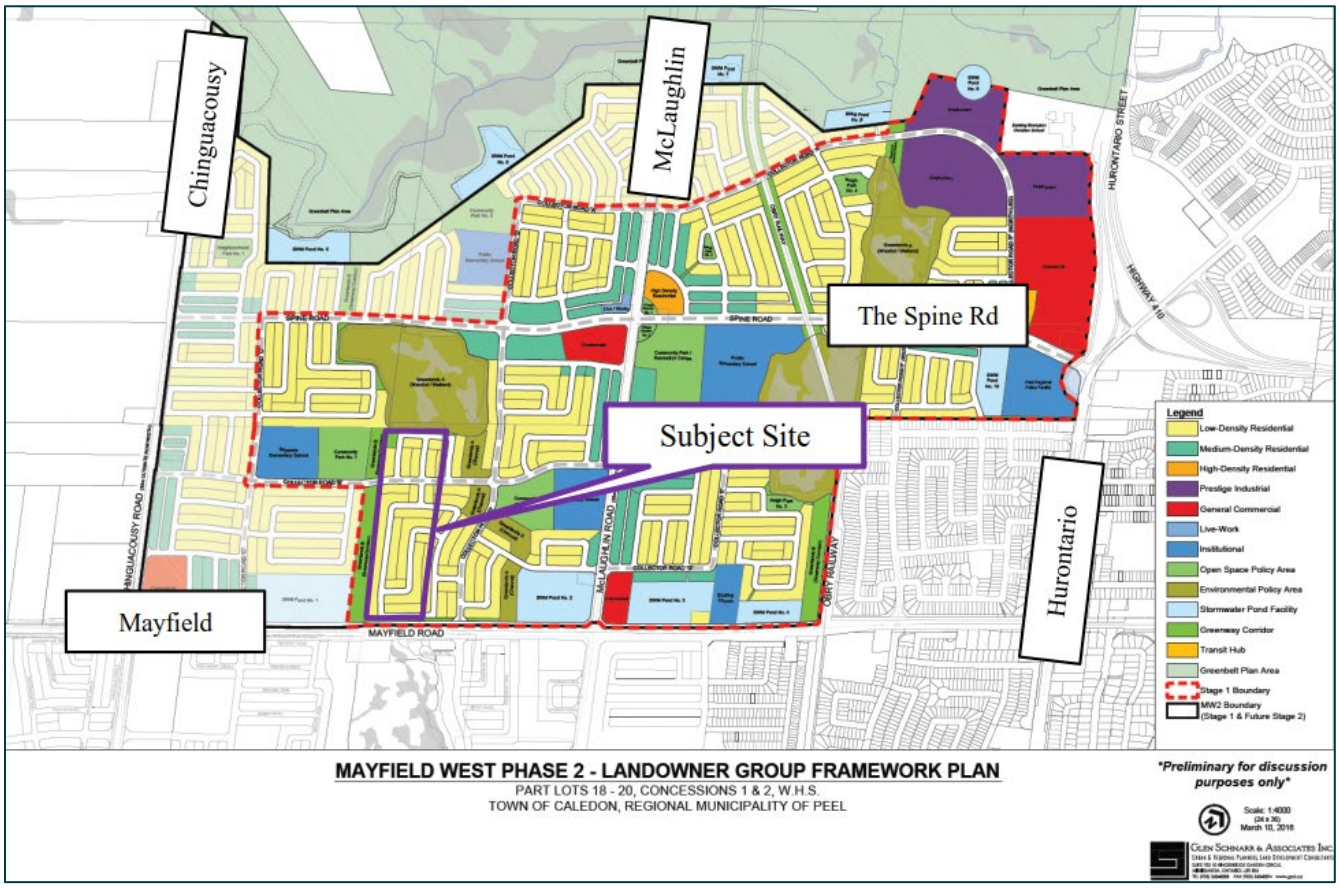
- Opening Day: 2022
- Stage 1 Full Build Out (FBO): 2025 (Residential) and 2027+ (Non-Residential)
- Mayfield Road Widening: 2022 (possibly 2023)
- Spine/Hurontario Connection: 2031

b) Additional discussion/sensitivity analysis on the impacts of the interchange and Mayfield Road Widening should be provided.

LEA's Response:

This comment has been addressed in the MW2 Phasing Analysis (**Attachment 4**) which was submitted by LEA on August 9th, 2018. The Phasing Analysis was prepared for the entire MW2 development, and represents a more appropriate scale for a discussion for how much Stage 1 development can proceed prior to the Mayfield Road Widening and the Spine Road / Hurontario interchange. As indicated in **Figure 1**, the subject site is located in the south west section of Stage 1, and does not have any direct connection to the Spine Road.

Figure 1: MW2 Framework Plan



The results indicate that 76% of the Stage 1 development can proceed prior to the Mayfield Road widening, and up to 90% of the Stage 1 development can proceed after the Mayfield Road widening and before construction of the Spine/Hurontario connection. The remaining 10% of Stage 1 is the regional commercial component, which cannot be supported until the Spine/Hurontario connection is completed. Full details of the MW2 Phasing Analysis can be found in **Attachment 4**.

c) Table 3.10 and 3.11: Few intersections within the study area will be operating with the Level of Service (LOS) F, even after the implementation of the improvements. Additional commentary/mitigation measures should be provided.

LEA's Response:

The intersections highlighted in the above comment are Hurontario Street & Mayfield Road (signalized) and McLaughlin Road & Old School Road (unsignalized). The intersection of McLaughlin Road & Old School Road is addressed in comment *h)* on page 7 of this memorandum.

The intersection of Hurontario Street & Mayfield Road was analyzed as part of the MW2 Phasing Analysis. The results of the analysis are detailed in **Table 1**. Full details of the MW2 Phasing Analysis can be found in **Attachment 4**.

Table 1: Hurontario Street & Mayfield Road – Phasing Analysis Alternatives 1-3

Alternative	AM Peak Hour		PM Peak Hour	
	V/C	LOS	V/C	LOS
Alternative 1 – 2024 w/ Mayfield Widening (100% FBO 2024)	0.83	D	1.34	F
Alternative 2 – 2026 w/ Mayfield Widening (65% FBO 2026)	0.78	D	1.30	F
Alternative 3 – 2024 w/o Mayfield Widening (80% FBO 2024)	0.91	D	0.80	D

Under Alternative 1, traffic volumes during the PM peak hour exceed available capacity at the intersection of Hurontario Street & Mayfield Road. As a result, it was concluded that Alternative 1 could not be supported. Under Alternative 2, operations improve at the intersection but traffic volumes continue to exceed capacity during the PM peak hour. The primary constraining movement is the southbound right, which has a V/C of 1.66 and an LOS of F. Including a channelized southbound right turn improves the overall intersection performance with a resulting V/C of 0.86 and LOS D. No capacity constraints are identified under Alternative 3, which tests the amount of supportable development prior to the Mayfield Road widening.

As a result, the analysis recommends that a channelized southbound right turn be constructed at the intersection of Hurontario Street & Mayfield Road in the absence of the Spine/Hurontario connection in order to improve overall intersection performance.

d) Section 4.2, Parking: there are discrepancies between the rates adopted by the study and what recommended in the MW2 TMP. Both Table 4.1, 4.2 and total overall parking requirement shall be updated accordingly, and the location of on-street parking should be identified on the draft plan of subdivision. (Similar to the Response Letter by LEA Consulting to On-Street Parking Issue and Proposed Parking Plan by PMG Planning Consultants in support of Files 21T-17001C & RZ-04)

LEA's Response:

Outlined below in **Table 2** and **Table 3** are the updated parking requirements for the proposed development, corresponding to *Table 4.1* and *Table 4.2* of the Caledon Terra TIS.

Table 2: Proposed Minimum Parking Standards for Residential Uses

Land Use Description	Existing Town of Caledon Zoning By-law 2006-50	TMP Proposed Minimum Parking Standard
Detached and Semi-Detached	2.00 spaces per unit	2.0 spaces per dwelling unit (on-site) 1.0 space per dwelling unit (on-street)

Table 3: Required Minimum Parking Requirement for the Proposed Development

Land Use Description	Number of Units	Parking Rate	Required Number of Parking Spaces
Single Detached	180.5	2.0 per unit (on-site) 1.0 per unit (on-street)	361 (on-site) 180.5 (on-street)
Total Overall Parking Requirement			361 (on-site) 180.5 (on-street)

A parking plan analysis was prepared for the Caledon Terra development by KLM Planning Partners Inc (**Attachment 5**), dated October 1st, 2018. The analysis was based on the latest on-street parking plan, dated September 11, 2018 (**Attachment 6).** As indicated in the parking plan analysis, 8.5 units within the proposed subdivision were excluded because they have frontage on roads on the adjacent plan of subdivision and will be dealt with as part of that plan of subdivision. For the remaining 171.5 units, parking provision varies based on frontage width. Units with a frontage width of 11.6m or greater will be provided with a two-car garage, and will therefore have an effective parking rate of 4.0 spaces per unit. There are a total of 122 units that fall within this category. For the remaining 49.5 units, parking will be provided through a combination of on-site and on-street spaces. As illustrated in the attached parking plan (**Attachment 6**), the number of on-street parking spaces exceeds what is recommended by the MW2 TMP. **Table 4** details the proposed parking provision.

Table 4: Proposed Parking Supply

Land Use Description	Units	On-Site Parking		On-Street Parking	
		Required	Provided	Required	Provided
Single Detached – Two Car Garage	122	244 spaces	488 spaces	N/A	
Single Detached – One Car Garage	49.5	100 spaces	100 spaces	50 spaces	88 spaces

e) The study needs to clarify the assumptions and information upon which the analysis was based, e.g., the timing of the interchange and Mayfield Road Widening.

LEA's Response:

As outlined above, the assumptions regarding the timing of the interchange and Mayfield Road widening are now out of date. The timing of the Spine/Hurontario interchange is now assumed to be completed by the year 2031. The Mayfield Road widening is now anticipated to be completed by the year 2022, with the possibility of it being delayed until the year 2023.

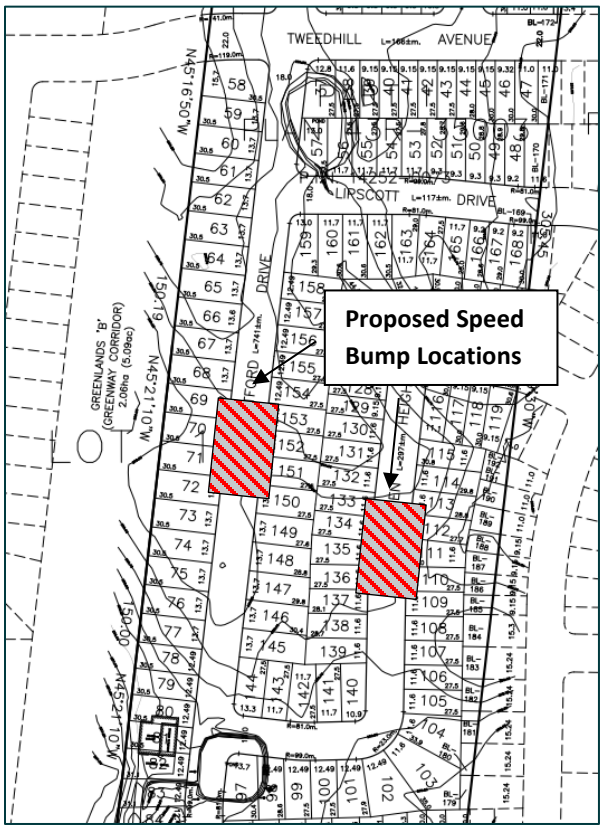
f) Section 4.3, Traffic Calming: Recommended Traffic calming measures are very generic which needs to be more specific for each roadways as per section 7.5 of MW2 Transportation Master Plan.

LEA's Response:

Based on our review of the latest draft plans for this subdivision (**Attachment 3**), the following traffic calming measures are recommended:

- Given the limited length of Tweedhill Avenue within the Caledon Terra subdivision boundaries, coordinate any recommended traffic calming measures with what is proposed for adjacent draft plans of subdivision to provide a consistent approach.
- Permit on-street parking on all local streets.
- "Traffic Calmed Neighbourhood" signage.
- Implement speed bumps at the following locations to limit the speed of vehicle traffic on local streets. The exact location of these speed bumps will be determined at a later date, but the approximate area is indicated in **Figure 2** below.

Figure 2: Proposed Speed Bump Locations



g) Section 5.1, Road Geometry: Additional Commentary on the sidewalk on the collector Roads should be provided.

LEA's Response:

This commentary pertains to Collector Roads B (Tweedhill Avenue) and D. The CDP typical collector road design without on-street parking is recommended for these roadways, as specified in Figure 6.6a on page 109 of the CDP (see **Figure 3** below). The 22-metre ROW includes 1.5m sidewalks on both sides of the street.

Figure 3: Typical Design of Collector Roads w/o On-Street Parking (Source: Figure 6.6a of the CDP)

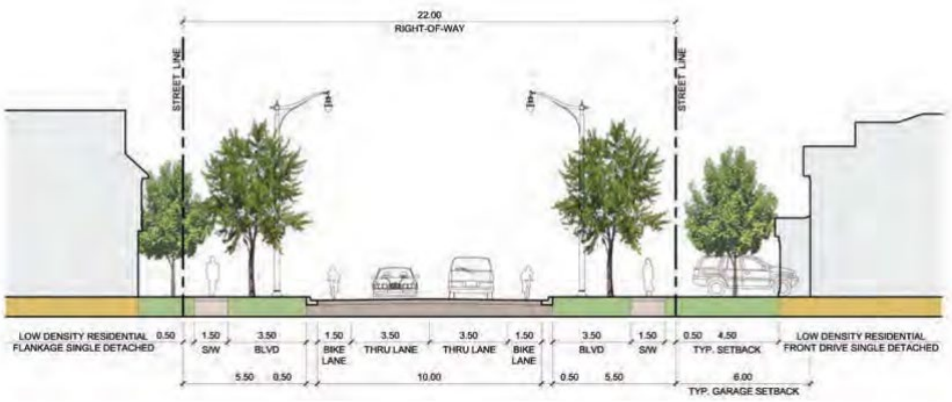


Figure 6.6a – Conceptual typical treatment for Collector Roads A, B, C, D, E, F (south) and G (22.0m ROW) with 2 thru lanes, on-street bike lanes, no on-street parking and street trees in grass boulevard.

h) Table 3.12: The intersection of McLaughlin Road and Old School Road still will be operating at LOS F. The study needs to review the potential of signalizing of this intersection to improve the LOS.

LEA's Response:

This intersection is now recommended for signalization in the MW2 TMP, and was modelled as signalized in the MW2 Phasing Analysis (**Attachment 4**). **Table 5** outlines the overall intersection performance under the three alternatives tested in the Phasing Analysis. The intersection operates at an acceptable level of service under all three alternatives. Full details of the MW2 Phasing Analysis can be found in **Attachment 4**.

Table 5: McLaughlin Road & Old School Road – Phasing Analysis Alternatives 1-3

Alternative	AM Peak Hour		PM Peak Hour	
	V/C	LOS	V/C	LOS
Alternative 1 – 2024 w/ Mayfield Widening (100% FBO 2024)	0.50	B	0.82	C
Alternative 2 – 2026 w/ Mayfield Widening (65% FBO 2026)	0.43	B	0.71	B
Alternative 3 – 2024 w/o Mayfield Widening (80% FBO 2024)	0.50	B	0.85	C

i) Transportation Division will provide additional comments e,g, on transit and/or cycling facilities in more details once the additional information from EA studies and detailed drawings become available.

LEA's Response:

No response needed at this time, LEA will provide commentary on transit and/or cycling facilities at a later date if required.

The following comments relate to the location-specific daylight triangle:

a) *Of the three connections of the local streets with the Spine Road, the middle intersection which is highlighted in Red is located in the proximity of the adjacent intersections (green). Given the presence of the Centre Turning Lane along Spine Road, there will be more traffic conflict points, as well as the potential of collisions related to turning maneuvers that conflict with the opposing traffic stream.*

b) *As previously mentioned, approval of the lower daylight triangle from what is described in the Table above is subject to the provision of extreme traffic calming measures at/approaching the intersections which are highlighted in Green by the developers, through the design exercise of the Spine Road and intersections to the Town's satisfaction. Therefore, under the proposed geometry of the Spine Road, Transportation Staff does not support decreasing of the daylight triangle, and the exception can be given once the developer provided the design concept and infrastructure-oriented extreme traffic calming measures to the Town's satisfaction. Upon Town's approval, this design concept and the corresponding reduced daylight triangle(s) will be reviewed and proceed to the detailed design and implementation, with a site-specific condition of draft plan approval prescribing that no pre-servicing of the lands can occur unless satisfactory arrangements are made regarding the matter, to the satisfaction of the Town. If the details of the traffic calming measures as identified in the subsequent planning and implementation stages did not align in principle with the proposed design concept, the daylight triangles would be required to convert back to the dimension stated in the table above.*

LEA's Response:

These comments do not pertain to the Caledon Terra development, as there is no connection to the Spine Road.

I trust the foregoing is helpful in addressing the Town's request for additional commentary pertaining to the Transportation Impact Study for the Caledon Terra subdivision within Mayfield West Phase 2. Should you have any questions regarding this letter, please do not hesitate to contact the undersigned at 289 846 5305.

Yours truly,

LEA CONSULTING LTD

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